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Outdoor Unit Installation Guidelines

Introduction

This document provides information on selecting and installing an Outdoor Unit (ODU) mount. These guidelines must be followed when installing the OmniTRACS® Mobile Communication Terminal (MCT) Outdoor Unit mount and the OmniTRACS® Integrated Mobile Communication Terminal (IMCT) Outdoor Unit mount. These requirements are applicable to every ODU installation and are designed to ensure proper installation of all mounts, to save time, and to minimize mistakes.

Note

The specific installation procedure is dependent upon which ODU mount is being used to attach the ODU to the vehicle. For specific mount installation instructions, refer to the instructions for the type of mount you are installing.

In order to understand all parts of the MCT or IMCT installation, refer to the MCT and Accessory Installation Guide (80-30170), the IMCT and Accessory Installation Guide (80-30432), and the Outdoor Unit Mount Installation Guide (80-8466). These manuals, plus this document, provide the information needed to install an MCT or an IMCT.

Note

It is recommended that installation personnel complete the appropriate QUALCOMM training courses prior to installing an MCT or an IMCT.

Survey the truck

This is a good idea for all parts of the MCT and IMCT installation. Formulating a plan and deciding where each part of the MCT or IMCT is going to fit makes installation smooth and error free.

Surveying the truck means walking around and looking over the truck and then deciding which mount is appropriate and where to install the mount on the truck. It is important to determine if the mount and truck are compatible. Selecting the proper mount ensures there is a minimal amount of vibration and the ODU has the best possible look, or line-of-sight, angle to the satellite.

It is also important to understand that each mount is designed for a specific truck or a truck with a specific airdam or sleeper. All of the following factors should be considered before installing an ODU mount.

- Truck manufacturer
- Style of truck
- Type of airdam
- Type of sleeper
- Type and placement of exhaust stack(s)
- Type of trailer being pulled, including consideration of side skirts
What to consider before installing an ODU mount

- Drill holes only when necessary.
  Many of the ODU mounts are designed to take advantage of existing hardware on a truck. It is recommended to use existing bracketry whenever possible rather than drill into a truck.
- Use silicon (RTV) sealant.
  On some trucks, drilling holes cannot be avoided in order to install a mount. If holes must be drilled into a truck, always use RTV sealant around the holes.
- Install mounts to solid/firm fixtures.
  When installing an ODU mount, attach the mount to existing metal on the truck.
- Because of excessive vibration DO NOT attach a mount to the headache rack of a vehicle.

Consult with the owner prior to any installation

This is especially true for trucks that are owner/operated. After formulating a plan for your installation, inform the owner of your plan. Some owner/operators are very particular about where parts are going to be installed. It is always a good idea to have reasons why you are installing a part in a specific area.

Outdoor Unit Installation Information

Currently, there are three versions of the ODU. The original version, MCN 10-2221-1, has the IF and REF cable connectors on the bottom of the unit. The newer version, MCN 10-4150-2, has the IF and REF connectors on the side of the unit. The ACU, MCN 10-30085-X, has a single connector located on the side of the unit. Figure 1 shows both versions of the ODU and the ACU.

Figure 1.

Both the ODU and the ACU are mounted on the outside of the vehicle, usually on the roof of the cab under the air dam. The specific mount used depends on the make, model, and year of the vehicle, as well as the type of air dam (if any) and the type of trailer being hauled. Consult with QUALCOMM field service personnel to determine the appropriate mount for a particular vehicle.
Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of this document could degrade the performance of the MCT/IMCT.

Outdoor Unit Line-of-Sight Requirements

The ODU requires an unobstructed line-of-sight view to the satellite which is 12° above the ODU’s horizontal plane. Figure 2 illustrates this 12° angle and provides the maximum allowable height of objects located at various distances from the ODU centerline. An obstruction height of 2-1/2 inches for every 12 inches away from the ODU centerline is acceptable.

Figure 2.

![Diagram showing line-of-sight requirements and allowable heights](image)

Normally, the satellite signal can pass through a single layer of glass, fiberglass, and plastic with minimal signal loss. However, other obstructions above the 12° angle may degrade performance or completely block the satellite signal. Commonly encountered obstructions on vehicles include metal wing airdams, air conditioning units, exhaust stacks, and multiple layers of glass, fiberglass, and plastic. The height of the trailer the vehicle will be hauling must also be taken into consideration. Use the same formula to verify that the trailer, when hooked up to the vehicle, does not extend above the 12° angle.

Note

If the vehicle has a sliding fifth wheel, make sure the trailer is fully forward when checking for acceptable clearance.

Outdoor Unit Installation Guidelines

Wherever possible, mount the ODU under an airdam because it provides protection from adverse weather conditions, wind, buffeting, and hazards such as tree limbs. However, many airdam components are known to block the satellite signal, including metal and wood bracing, metallic paints, lead-based paints, and even some company logo decals that contain metallic properties.

The presence of these components below the 12° “look” angle is acceptable, but care should be taken to avoid installing the ODU in an area where the signal could be...
blocked. Also, avoid areas where there are excessive thicknesses or multiple layers of fiberglass or plastic above the 12° angle. These are known to degrade the satellite signal.

If there is any question about whether components in the airdam might interfere with the satellite signal, it is best to measure signal loss. This can be done after all the MCT or IMCT components, except the ODU mount, have been installed and connected.

First, connect the ODU cable and turn on the vehicle ignition. Then, hold the ODU in place outside the airdam and check the M0 value (this value represents the strength of the signal being received from the Datasat communications satellite). This value should be at or near the value listed in Figure 3 for your geographic location and your type of antenna. (To check whether you have a CP antenna, look for a “CP” sticker on the ODU.)

**Note**

The M0 value check should be accomplished in accordance with the System Verification Procedure section of the MCT Installation Guide, 80-30170 and the IMCT Installation Guide, 80-30432.

*Figure 3.*

![Figure 3](newmovalues.png)

![Figure 3](newmovalues.png)
Next, hold the ODU under the airdam where it will be when the ODU mount is installed and check to see if the M0 value is reduced significantly. This value should be within 2.0 of the value measured outside the airdam. With the ODU still beneath the airdam, move the vehicle around the yard to check for signal loss from all directions. If there is a greater than 2.0 difference in the signal strength from any angle, contact the QWBS Customer Support Network Hotline at (800) 541-7490 for assistance.

• Never paint the ODU.

**Caution**

Painting the ODU degrades the performance of the MCT and voids the ODU warranty. If returned to the factory for maintenance, a painted ODU will be treated as “customer damaged” material.

• **QUALCOMM does not install or allow installations of ODUs on headache racks.** If an ODU is mounted on the headache rack there is no shock cushioning. The resultant vibration may cause the ODU to malfunction and may damage it to the point where it is beyond repair.

**Caution**

Attaching the ODU to the headache rack may void the I/MCT installation warranty.

• The ODU should be installed so that it does not extend above the approved maximum legal height limit of 13 feet 6 inches.

• Wherever possible, the ODU should be mounted over the center of the cab as far forward as possible. If the ODU cannot be installed on the center of the cab, it should be installed on the driver’s side of the vehicle. This decreases the likelihood that trees hanging over the road could damage the ODU.

• To decrease the amount of debris that may collect on the unit, the ODU should be installed so that the bolt holding the metal band around the dome faces the rear of the vehicle.

• Only stainless steel bolts should be used to secure the ODU to the mount. Normally, bolts greater than 3/4” in length should not be used. However, if longer bolts are needed, such as when the ODU is being attached to a fiberglass shelf with a plywood base, use 14-20 UNC stainless steel, grade 5 or better. Maximum ODU bolt penetration is 1/2.”

• The bolts used to attach the ODU to the mount should not be over-torqued. The torque specification for these bolts is 60 inch/pounds (not foot/pounds). Do not use pneumatic tools for tightening these bolts.

• The ODU cable minimum bend radius is 3.” Do not coil the cable tighter than a 6” diameter loop. Also, be careful when routing the cable to avoid any tight bends or kinks in the cables.

**Caution**

Tight bends or kinks in the ODU coaxial cable could damage the cable and adversely affect the high frequency signal path.
• Be sure to leave a service loop in the ODU cable where it attaches to the ODU. This service loop, also called a “drip” loop, prevents accumulated moisture from running down the cables into the ODU connectors. Figure 4 illustrates two methods of service loop installation, one for each version of the ODU.

Figure 4.

- The ODU cable should be routed outside the vehicle and must be protected with the supplied ribbed conduit and held tight against the vehicle to prevent any unnecessary movement. Secure the cable to the vehicle with UV-resistant cable ties installed every 12–18" along the cable length.
- Route the ODU cable at least 12 inches away from the vehicle exhaust system to avoid exposing the cable to extremely high temperatures.
- Any excess ODU cable should be neatly coiled up and stored inside the vehicle near the Comm Unit. Do not leave coiled cable hanging freely from the ODU or Comm Unit connectors. This puts excessive strain on the connectors.
- On cabover vehicles, ensure that the cables are routed so they are not stressed or pinched when the cab is tilted forward.
- Weatherproofing the ODU connectors.

Hand-moldable plastic Coax-Seal must be used to weatherproof the ODU connectors once the cables are installed and connected. Apply the Coax-Seal by first winding a strip around each connector and then molding it by hand into a waterproof seal, as shown in Figure 5. Make sure the connectors are completely covered.

Figure 5.
If the connectors are protected by weather resistant boots, make sure the boots completely cover the connectors, as shown in Figure 6. Verify the “O” rings are in good condition.

If the connectors are sealed with Coax-Seal, make sure the seal is weatherproof and completely covers the connectors, as shown in Figure 6. If you replace the ODU or cables, replace the Coax-Seal.

Figure 6.
Whenever any holes are drilled in the vehicle exterior, seal the holes using silicone sealant (RTV). This includes the self-tapping screws used to secure cable ties. The sealant should be applied so it slightly overlaps the edges of the holes, as shown in Figure 7. This will ensure a good seal when the screw or bolt is installed in the hole.

Figure 7.

Tip

For help during installation, contact the QWBS Customer Support Network Hotline for assistance. The toll-free telephone number is (800) 541-7490. The Hotline is staffed 24 hours a day, seven days a week, including holidays.
# Quick Design Reference

## Ford/Sterling

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## Freightliner

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<td>AMA-46</td>
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<tr>
<td>Adjustable Mount</td>
<td>AMA-48</td>
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<tr>
<td>1992 Conventional Integral Sleeper</td>
<td>AMA-53</td>
</tr>
<tr>
<td>1992–94 Conventional Stack Bunk with Full Airdam</td>
<td>AMA-54</td>
</tr>
<tr>
<td>1995 Conventional Able Body Sleeper with Airdam</td>
<td>AMA-85</td>
</tr>
<tr>
<td>Conventional Mid-Rise Sleeper* with Side Skirts (Driver-side Application)</td>
<td>AMA-86</td>
</tr>
<tr>
<td>FLD Condos, Century Class Condos, and Argosy Condo</td>
<td>AMA-113</td>
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<tr>
<td>FLD-120 Condo with BAC PAC</td>
<td>AMA-126</td>
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<tr>
<td>Conventional Condo, AA Sleeper</td>
<td>AMA-139</td>
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* Additional restrictions, recommendations or notes detailed in chapter

## International (Navistar)

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1990 Navistar COE Stack Bunk (Hi-Rise 9700)</td>
<td>AMA-30</td>
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<tr>
<td>1993 Navistar Conventional</td>
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<tr>
<td>1992–94 International Conventional with Full Airdam</td>
<td>AMA-52</td>
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<tr>
<td>International COE with Flat Roof, Full Airdam, and existing Horizontal Rectangular Tube</td>
<td>AMA-58</td>
</tr>
<tr>
<td>1995 International Conventional Low Roof Pro Sleeper without Airdam</td>
<td>AMA-62</td>
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### International (Navistar)

<table>
<thead>
<tr>
<th>Model Description</th>
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<tbody>
<tr>
<td>International Conventional High Rise Pro Sleeper</td>
<td>AMA-71</td>
</tr>
<tr>
<td>1995 International Conventional High Rise Pro Sleeper with Drip Rails, without Airdam</td>
<td>AMA-76</td>
</tr>
<tr>
<td>International 8200 Conventional with Air Fairing and Side Extenders*</td>
<td>AMA-82</td>
</tr>
<tr>
<td>1995 International Conventional Low Rise Pro Sleeper with Drip Rails, without Airdam*</td>
<td>AMA-83</td>
</tr>
<tr>
<td>International FedEx 9600 COE Day Cab without Airdam</td>
<td>AMA-105</td>
</tr>
<tr>
<td>International Sky Rise (Driver- or Passenger-side Application)</td>
<td>AMA-112</td>
</tr>
<tr>
<td>1997 International 8100 Conventional Day Cab</td>
<td>AMA-210</td>
</tr>
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</table>

* Additional restrictions, recommendations or notes detailed in chapter

### Kenworth

<table>
<thead>
<tr>
<th>Model Description</th>
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<tbody>
<tr>
<td>COE and Conventional Aerodyne Sleeper with Spoiler*</td>
<td>AMA-18</td>
</tr>
<tr>
<td>T600 Aerodyne2 Conventional</td>
<td>AMA-41</td>
</tr>
<tr>
<td>1995 T603 Conventional High Rise Sleeper</td>
<td>AMA-59</td>
</tr>
<tr>
<td>Aerodyne with Shelf Replacement Bracket</td>
<td>AMA-66</td>
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<tr>
<td>T600/800 AeroCab Flattop Sleeper with Side Skirts* (Passenger-side Application)</td>
<td>AMA-84</td>
</tr>
<tr>
<td>Conventional Aerodyne Sleeper with Spoiler*</td>
<td>AMA-90</td>
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<tr>
<td>T400, T450, T600, T603, T800, and W900 72” Aerodyne and 60” Modular Aerodyne, all model years*</td>
<td>AMA-91</td>
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<tr>
<td>74” Studio Sleeper Aerodyne, all model years*</td>
<td>AMA-92</td>
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<tr>
<td>T600/603 AeroCab Flattop Sleeper with Side Skirts* (Driver-side Application)</td>
<td>AMA-93</td>
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<td>T600/603 AeroCab Flat Top Sleeper with Side Skirts* (Passenger-side Application)</td>
<td>AMA-94</td>
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<td>T600 AeroCab with Shelf Bracket</td>
<td>AMA-98</td>
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<tr>
<td>T2000 Conventional with Full Airdam</td>
<td>AMA-99</td>
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<tr>
<td>T2000 Conventional without Airdam</td>
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<td>T600/800 AeroCab Flattop Sleeper with Side Skirts* (Driver-side Application)</td>
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## Kenworth

<table>
<thead>
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<th>Model</th>
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<tr>
<td>2000 T2000 Conventional with Side Skirts and Full Airdam</td>
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<tr>
<td>Adjustable Mount—OEM Use Only</td>
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<tr>
<td>* Additional restrictions, recommendations or notes detailed in chapter</td>
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## Mack

<table>
<thead>
<tr>
<th>Model</th>
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<tbody>
<tr>
<td>R Model</td>
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<tr>
<td>1992 CH 316 Model Stack Bunk</td>
<td>38</td>
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<tr>
<td>CH Model Stand-up Sleeper</td>
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<tr>
<td>1993 CH 316 Model Stack Bunk</td>
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<td>CH Model Stack Bunk</td>
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<tr>
<td>R and CH Models</td>
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<td>1994 CH Model Stand-up Sleeper—OEM Use Only</td>
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<td>1994 CH Model Stack Bunk—OEM Use Only</td>
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<tr>
<td>Cabover or Conventional—OEM Use Only</td>
<td>128</td>
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<tr>
<td>CH Model Day Cab with Full Airdam and W-Bracing</td>
<td>130</td>
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<td>* Additional restrictions, recommendations or notes detailed in chapter</td>
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## Peterbilt

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<tr>
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<tr>
<td>70” Stack Bunk Sleeper with Side Skirts</td>
<td>27</td>
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<tr>
<td>Conventional with Whale Tail Airdam</td>
<td>67</td>
</tr>
<tr>
<td>Conventional 377/379 with Side Skirts and 63” Mid-Roof Sleeper*</td>
<td>81</td>
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<tr>
<td>(Driver-side Application)</td>
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<tr>
<td>Low Roof Sleeper (cab-high)</td>
<td>116</td>
</tr>
<tr>
<td>* Additional restrictions, recommendations or notes detailed in chapter</td>
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### Volvo/White GMC/White GMC

<table>
<thead>
<tr>
<th>Description</th>
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<tr>
<td>Conventional with 3-piece Full Airdam</td>
<td>AMA-11</td>
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<tr>
<td>Conventional with Rain Gutter and without Airdam</td>
<td>AMA-24</td>
</tr>
<tr>
<td>CL “Penthouse” Stand-up Sleeper with Airdam</td>
<td>AMA-33</td>
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<tr>
<td>Stand-up Sleeper</td>
<td>AMA-35</td>
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<tr>
<td>Stand-up Sleeper</td>
<td>AMA-49</td>
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<tr>
<td>WG Model</td>
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<td>1994–95 ES Model Conventional Integral Sleeper</td>
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<td>1997–2004 VNL-610 Mid-Roof Integral Sleeper</td>
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<td>VNL-770 Condo</td>
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<tr>
<td>42T Conventional Day Cab with Airdam</td>
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* Additional restrictions, recommendations or notes detailed in chapter

### General

<table>
<thead>
<tr>
<th>Description</th>
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<tr>
<td>COE and Conventional with Clamshell Airdam</td>
<td>AMA-2</td>
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<tr>
<td>COE, Conventional, and Straight Truck without Airdam</td>
<td>AMA-4</td>
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<tr>
<td>COE and Conventional with Full Airdam</td>
<td>AMA-21</td>
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<tr>
<td>COE and Conventional with Full Airdam*</td>
<td>AMA-26</td>
</tr>
<tr>
<td>Adjustable Mount</td>
<td>AMA-29</td>
</tr>
<tr>
<td>Truck with Clamshell Airdam</td>
<td>AMA-31</td>
</tr>
<tr>
<td>Auto Carrier Truck with offset vertical mast</td>
<td>AMA-55</td>
</tr>
<tr>
<td>Auto Carrier Truck with simple vertical mast</td>
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<td>Van or Vehicle with Flat Surface</td>
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<tr>
<td>Auto Carrier Truck</td>
<td>AMA-74</td>
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<tr>
<td>COE and Conventional with Full Airdam*</td>
<td>AMA-80</td>
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<tr>
<td>Truck and Van with Cargo Box</td>
<td>AMA-95</td>
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<tr>
<td>COE and Conventional without Airdam</td>
<td>AMA-110</td>
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AMA-10 replaces
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<th>General (Continued)</th>
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<tr>
<td>COE and Conventional—includes Retrofit instructions</td>
<td>AMA-310</td>
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<tr>
<td>COE and Conventional</td>
<td>AMA-410</td>
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<td>* Additional restrictions, recommendations or notes detailed in chapter</td>
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</table>
AMA-2

Designed for Cabover and Conventional w/ Clamshell Airdams
# Introduction

This document provides the guidelines and an installation procedure to follow when installing the AMA-2 Outdoor Unit mount (MCN 10-2267-2) on a cabover or conventional truck with clamshell airdam. An assembly drawing of the AMA-2 and an accompanying parts list are provided in these instructions.

The AMA-2 has four adjustable legs which are attached to the existing airdam mounting brackets or clamshell rails.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.

## Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

---

## Installation Guidelines

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline.</td>
<td>5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</td>
</tr>
<tr>
<td>2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.</td>
<td>6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible performance.</td>
<td>7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.</td>
<td></td>
</tr>
</tbody>
</table>
Installation Procedure

The following steps apply to every AMA-2 installation. Perform these steps in the order listed below. Installation of the AMA-2 is divided into the following groups:

1. Pre-Assemble the Octagonal Mounting Plate
2. Attach the AMA-2 Legs
3. Drill Clearance Holes
4. Attach the Cross Braces
5. Drill Clearance Holes in the Octagonal Mounting Plate
6. Install the 3/8” Bolts

Help
For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-2, be sure to review the Installation Guidelines provided on page 2-2.

Step 1. Pre-assemble Octagonal Mounting Plate

1. Attach each of the four angle mounting brackets (item 2) to the octagonal mounting plate (item 1) using a single 3/8” bolt installed up through the plate. The side of the angle bracket with the three holes fits up against the plate. Tighten the bolts snugly, but loose enough to rotate the bracket.
Step 2. Attach the AMA-2 Legs

1. Select suitable locations on the airdam mounting brackets or clamshell rails to attach each of the four AMA-2 legs (item 4). If necessary, drill clearance holes for the 3/8” bolts.

2. Bend the feet of the smaller 1” diameter legs so that the mounts legs converge at the top. Use a vise grip or other suitable tool prior to installing the legs.

3. Attach the four 1” diameter legs to the existing airdam mounting brackets or the clamshell rails using 3/8” bolts. Slide larger 1-1/4” diameter legs down over them so that the mount legs converge at the spot where the octagonal mounting plate is to be attached. Bolt the 1-1/4” diameter tubes to the mounting plate angle brackets using 3/8” bolts.

**Note**

When attaching the larger diameter legs to the angle mounting brackets, the feet of the legs should not be bent.

Always attach the mount legs to the existing airdam mounting brackets or clamshell rails.

**Caution**

Always install the smaller diameter legs on the bottom. If the larger diameter legs are installed on the bottom they will fill up with rain water and rust from the inside.

4. After all four legs are attached to the octagonal mounting plate, verify that the mounting plate is as high as possible while still allowing room for the Outdoor Unit (when installing the mount under an airdam). Also, make sure the mounting plate is level when the truck is level and the legs are symmetrical (of relatively equal lengths and equal angles).
Step 3. Drill Clearance Holes

1. Once a suitable location for the mount is found, place a vice grips on each of the smaller legs just below the end of the larger legs. This holds the mount in place while the bolts are tightened and the cross braces are put into position.

2. Tighten the bolts attaching the legs to the angle brackets and the angle brackets to the octagonal mounting plate.

3. Drill two clearance holes for 5/16” bolts in each of the legs. These holes should be three to four inches apart and positioned at 90° angles from one another. Also, make sure that the holes pass through both tubes. Install a 5/16” bolt in each hole.

Step 4. Attach the Cross Braces

1. Install the cross braces (items 3 and 4) approximately half way between the octagonal mounting plate and the cab roof. They should be level and should touch where they cross each other. The cross braces can be held in position on the AMA-2 legs by vice grips while clearance holes for the 5/16” bolts are drilled in each of the legs.

2. Secure the cross braces to the AMA-2 legs using 5/16” bolts in each of the legs (see “Drill Clearance Holes”). Install a 5/16” bolt in each hole.

3. Install the adjustable hose clamp (item 5) where the two cross bars come together.
Step 5. Drill Clearance Holes in Octagonal Mounting Plate

1. Once the legs and cross braces are secured, drill eight clearance holes for the 3/8" bolts up through the bottom of the octagonal mounting plate using the two outside holes of each angle mounting bracket as guides.

Step 6. Install the 3/8" Bolts

1. Remove the center bolts holding the angle brackets to the mounting plate and install the 3/8" bolts down through the top of the octagonal mounting plate. The bolts must be installed as shown. If they are installed up through the bottom of the mounting plate they interfere with the Outdoor Unit installation.

2. Once the AMA-2 is completely assembled, verify that all of the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-2 Outdoor Unit Mount.
## Parts List: MCN 10-2267-1 (AMA-2)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty,</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
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</thead>
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<tr>
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<td>50-2270-1</td>
<td>1</td>
<td>Octagonal Mounting Plate</td>
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<tr>
<td>2</td>
<td>50-2269-2</td>
<td>4</td>
<td>Angle Mounting Bracket</td>
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<tr>
<td>3</td>
<td>50-2271-40</td>
<td>6</td>
<td>Diag Adjustable Leg</td>
<td>1.00</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>50-2272-40</td>
<td>6</td>
<td>Diag Adjustable Leg</td>
<td>1.25</td>
<td>6</td>
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<td>5</td>
<td>557-02079-0000</td>
<td>1</td>
<td>Hose Adjustable Clamp</td>
<td>40 SS</td>
<td>10-5</td>
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<tr>
<td>6</td>
<td>552-02069-1250</td>
<td>21</td>
<td>Hex Head Bolt</td>
<td>3/8-16UNC-2A x 1.250</td>
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<td>7</td>
<td>552-02068-2250</td>
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<td>Hex Head Bolt</td>
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<tr>
<td>8</td>
<td>556-02074-0375</td>
<td>39</td>
<td>Flat Washer</td>
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<tr>
<td>9</td>
<td>556-02074-0312</td>
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<td>Flat Washer</td>
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<td>10</td>
<td>554-02072-0375</td>
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<td>Nylon Lock Nut</td>
<td>3/8-16UNC Regular</td>
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<td>554-02072-0312</td>
<td>19</td>
<td>Nylon Lock Nut</td>
<td>5/16-18UNC Regular</td>
<td>10-17</td>
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Note: Items 5 through 11 are contained in antenna mounting kit 65-2910-2. Each hardware item contains spare parts.
AMA-4

Designed for Straight, Cabover and Conventional w/ No Airdams

Outdoor Unit Mount Installation Guide

Rear View
## Introduction

This document provides the guidelines and an installation procedure to follow when installing the AMA-4 Outdoor Unit mount (MCN 10-2452-1) on your straight, cabover, or conventional truck with no airdam. An assembly drawing of the AMA-4 and an accompanying parts list are provided in these instructions.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.

### Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

### Note

Special attention is needed to insure a water tight seal when installing this mount. The best approach is to create a silicon seal on both the inside and outside of the holes drilled into the truck/sleeper roof. Bolts should be installed from the inside with the nuts on the outside. If the bolts are installed from the outside, the extra bolt length may not allow you to reinstall the headliner.

## Installation Guidelines

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline.</td>
</tr>
<tr>
<td>2.</td>
<td>In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.</td>
</tr>
<tr>
<td>3.</td>
<td>Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible performance.</td>
</tr>
<tr>
<td>4.</td>
<td>The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.</td>
</tr>
<tr>
<td>5.</td>
<td>Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</td>
</tr>
<tr>
<td>6.</td>
<td>If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make sharp turns or go up a ramp.</td>
</tr>
<tr>
<td>7.</td>
<td>If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
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</table>
Installation Procedures

The following steps apply to every AMA-4 installation. Perform these steps in the order listed below. Installation of the AMA-4 is divided into the following groups:

1. Determine Method of Installation
2. Positioning the Mount
3. Attach the Angle Brackets
4. Pull Down Headliner
5. Drill Mounting Holes
6. Attach the Mount

Help
For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-4, be sure to review the Installation Guidelines provided on page 4-2.

Step 1. Determine the Method of Installation

1. There are two methods that can be used to install the AMA-4.

2. The first method involves installing the mount on the front of the box or on the rear side of the vehicle cab or sleeper.

Note
When using this method, the two outboard edges can be trimmed to remove the sharp corners.

3. The second method, or “top hat” method involves installing the AMA-4 on the top of the vehicle cab or sleeper.
Step 2. Positioning the Mount

1. When you install the AMA-4 on the rear of the vehicle, it can be positioned on either side. The driver’s side is recommended to avoid contact with tree branches and other road hazards. Do not position the mount in the center of the vehicle because it could come in contact with the corner of the trailer when executing sharp turns.

2. The AMA-4 should be installed on a flat surface. If a flat surface is not available, the mount should be positioned so that when it is firmly secured to the vehicle, there is no distortion to the vehicle cab or sleeper (the surface should maintain its original shape).

3. Make sure that the top of the antenna mounting bracket (item 3) is level when the truck is level.

Step 3. Attach the Angle Brackets

1. Attach the angle brackets (item 2 of the parts list) to the antenna mounting bracket (item 3).

2. Secure the pieces using the 3/8” bolts, washers, and nuts.

Step 4. Pull Down Headliner

1. When installing the AMA-4 on the rear of the vehicle cab or sleeper, be sure to pull down the interior headliner on the opposite side of where the mount is to be installed. This prevents any damage to the headliner and allows access to the holes.
Step 5. Drill Mounting Holes

1. After determining the proper location for the mount, use the four outer holes in the angle brackets (item 2) as a template to mark the hole locations on the vehicle.

2. Drill the mounting holes.

Step 6. Attach the Mount

1. Attach the mount. Make sure all holes made in the vehicle surface are sealed with silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

2. Insert the two rubber mounting pads (item 1) between the angle brackets (item 2) and the cab or sleeper. Apply RTV sealant to both sides of the rubber pads.

3. Be sure to use the plywood backing panel (item 4) on the inside of the vehicle. It may be trimmed or cut into smaller pieces to allow it to fit between any roof stiffeners. However, the backing panel(s) should have as large a surface area as possible.

Caution

If the plywood backing is not used, the mount vibration incurred while driving could damage the cab or sleeper over time.

4. Use the larger diameter washers (item 8) on the inside of the vehicle and against the plywood backing.

Note

When bolting the mount to the vehicle, note the space inside the vehicle cab between the headliner and the surface of the vehicle cab or sleeper. It may be necessary to install the bolt heads inside the vehicle and install the nuts outside the vehicle with the mount.

This completes the installation of the AMA-4 Outdoor Unit mount.
## Parts List: MCN 10-2452-1 (AMA-4)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty, Size</th>
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<td>50-2477-2</td>
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<td>Rubber Mounting Pad</td>
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<td>2</td>
<td>50-2478-1</td>
<td>2</td>
<td>12 inch Angle Bracket</td>
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<td>3</td>
<td>50-2491-1</td>
<td>1</td>
<td>Box Mount Bracket UB4</td>
<td>9</td>
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<td>4</td>
<td>50-2555-1</td>
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<td>Plywood Backing Panel</td>
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<td>5</td>
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<td>5</td>
<td>Hex Head Bolt 3/8-16UNC x 1.250</td>
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<td>6</td>
<td>552-02069-2000</td>
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<td>Hex Head Bolt 3/8-16UNC x 2.00</td>
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<tr>
<td>7</td>
<td>556-02074-0375</td>
<td>13</td>
<td>Flat Washer 3/8 (1x 7/16 x 5/64)</td>
<td>9</td>
</tr>
<tr>
<td>8</td>
<td>556-02281-0007</td>
<td>5</td>
<td>Flat Washer 7/16 1.812 x .453 x .109</td>
<td>11</td>
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<td>9</td>
<td>554-02072-0375</td>
<td>9</td>
<td>Lock Nylon Nut 3/8-16UNC Regular</td>
<td>13</td>
</tr>
</tbody>
</table>

Note: Items 4 through 9 are contained in antenna mounting kit 65-2910-4. Each hardware item includes spare parts.
Designed for Cabover and Conventional w/ No Airdams

Outdoor Unit Mount Installation Guide
# Introduction

This document provides the guidelines and an installation procedure to follow when installing the AMA-10 Outdoor Unit mount (MCN 10-2457-1) on your cabover or conventional truck with no airdam. An assembly drawing of the AMA-10 and an accompanying parts list are provided in these instructions.

**Important**

The instructions for mount installations provided in this guide, assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized Qualcomm representative has identified the mount type to be used on the vehicle. Qualcomm strongly recommends that you obtain installation training from Qualcomm for first time installations and/or new mount types and/or vehicle types prior to installation.

## Note

**Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.**

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

Special attention is needed to insure a water tight seal when installing this mount. The best approach is to create a silicon seal on both the inside and outside of the holes drilled into the truck/sleeper roof. Bolts should be installed from the inside with the nuts on the outside. If the bolts are installed from the outside, the extra bolt length may not allow you to reinstall the headliner.

## Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline.

2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make sharp turns or go up a ramp.

7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

**Note**

Do not use impact wrenches or other air-pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation kits. Over-torquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.

Use hand tools to tighten these parts.
## Installation Procedure

The following steps apply to every AMA-10 installation. Perform these steps in the order listed below. Installation of the AMA-10 is divided into the following groups:

1. Position the Mount
2. Pull Down the Headliner
3. Cut and Drill the Plywood Backing Panel
4. Prepare the Outside and Inside Roof Surfaces
5. Create Silicon Seal Inside and Outside
6. Install the Plywood Backing Plates and Roof Gaskets
7. Install the Mount

**Help**

For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

**Note**

Before installing the AMA-10, be sure to review the Installation Guidelines provided on page 10-2.

Special attention is needed to insure a water tight seal when installing this mount. The best approach is to create a silicon seal on both the inside and the outside of the holes drilled into the truck/sleeper roof. Bolts should be installed from the inside with the nuts on the outside. If the bolts are installed from the outside, the extra bolt length may not allow reinstallation of the headliner.

## Step 1. Position the Mount

1. Position the mount near the vehicle center line and place it as far forward as possible to ensure that the Outdoor Unit has a clear 360° line-of-sight view of the satellite even with the trailer attached.

2. Place the mount on a flat surface. If no flat surface is available, the mount should be positioned so that no distortion to the roof occurs (the roof should maintain its original shape) when it is firmly secured to the vehicle.

3. The AMA-10 must be level when the truck is level. Two 3/8” rubber grommets (item 4) are provided for use in leveling the mount if necessary.
**Step 2. Pull down the Headliner**

1. Prior to drilling the holes, the vehicle headliner should be dropped. This prevents damage to the headliner when drilling and also provides access to the holes.

**Step 3. Cut and Drill the Plywood Backing Panel**

1. Cut the plywood backing panel (item 3) into four smaller pieces (about 4" X 4" square).
2. Drill a 3/8” bolt hole in each of the now cut squares. The ideal position for the hole is centered in the square.

*Note*

Some trucks have roof stiffeners that may prevent the plywood backing panels from being centered on the roof hole, depending on where the roof holes are made in relation to the roof stiffeners.

3. Pre-place the plywood squares on the inside of the roof where the four mount holes have already been drilled. Determine if the required holes need to be off center due to obstructions such as roof stiffeners.
4. Mark the plywood backing plates and drill 3/8” holes outside the truck.
5. Install a 3/8” x 2” bolt with a large fender washer (provided) into each plywood backing plate and set these aside.

**Step 4. Prepare Outside and Inside Roof Surfaces**

1. Clean the outside roof surface so it is free of dirt and grease. Scrape any adhesives used on the inside of the roof so a smooth surface is obtained.

**Step 5. Create Silicon Seal Inside and Outside**

1. Place a 1/2” thick bead of silicon sealant around each bolt as it protrudes from the plywood backing plates. Use a liberal amount of silicon.
2. On the outside of the roof, place a 1/2” bead of silicon around each of the four holes drilled for the mount. Again, use a liberal amount of silicon.

**Step 6. Install the Plywood Backing Plates and Roof Gaskets**

1. This step requires two people.
2. Insert the plywood backing plates with protruding 3/8” bolts through the roof holes from the inside.
3. On the outside, as each bolt is inserted through each hole, press the rubber mounting pad (item 1) on to each bolt. Be sure the gasket orientation is such that it lies under the entire mount flange and not from flange to flange. Do these one at a time.

*Note*

The rubber grommets (item 4) provided are used if the roof surface is not flat.
### Step 7. Install the Mount

1. Once all four plywood backing plates and gaskets are in place, lower the AMA-10 onto the four bolts.

2. Attach washer and nuts to each bolt. Tighten the nuts evenly as they draw the mount to the roof. Tighten until the rubber gasket starts to squeeze out from under the mount.

This completes the installation of the AMA-10 Outdoor Unit mount.
**Parts List: MCN 10-2457-1 (AMA-10)**

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<td>552-02069-2750</td>
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<td>Bolt, Hex Head</td>
<td>3/8-16UNC X 2.00 ZINC</td>
<td>11-7</td>
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<tr>
<td>7</td>
<td>552-02074-0375</td>
<td>5</td>
<td>Washer, Flat ZINC/STEEL</td>
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<td>8</td>
<td>552-02081-0007</td>
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<td>Washer, Flat</td>
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Note: Items 5 through 9 are contained in kit 65-2910-10
Item 4 is only used when the roof surface is flat.
Each hardware item includes spare parts.
AM A-11

Designed for Volvo/White Conventional (3-piece Full Airdam)

Outdoor Unit Mount Installation Guide

Rear view

3 Piece Full Airdam

2 Places

4 Places

24 Places

OmniTRACS
**Introduction**

This document provides the guidelines and an installation procedure to follow when you install the AMA-11 Outdoor Unit mount (MCN 10-2458-1) on your Volvo White (conventional with 3 piece, full airdam). An assembly drawing of the AMA-11 and an accompanying parts list are provided in these instructions.

**Important**

The instructions for mount installations provided in this guide, assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized Qualcomm representative has identified the mount type to be used on the vehicle. Qualcomm strongly recommends that you obtain installation training from Qualcomm for first time installations and/or new mount types and/or vehicle types prior to installation.

- The AMA-11 is designed specifically for the Volvo White (conventional with 3 piece, full airdam). It is installed on the seams between the airdam sections.

**Note**

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

An alternative mount is the AMA-33, which requires that holes be drilled into the sleeper roof.

---

**Installation Guidelines**

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline.

2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13' 6".

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.
Installation Procedure

The following steps apply to every AMA-11 installation. Perform these steps in the order listed below. Installation of the AMA-11 is broken down into the following groups:

1. Attach Corner Gussets to Airdam Attachment Bracket
2. Attach Side Rails
3. Attach Antenna Mounting Plate
4. Attach the Mount

Help
For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-11, be sure to review the Installation Guidelines provided on page 11-2.

Step 1. Attach Corner Gussets to Airdam Attachment Bracket

1. Attach a corner gusset (item 2) to the ends of each airdam attachment bracket (item 4). Do not tighten the bolts completely. This enables you to maneuver the mount once you place it under the airdam.
Step 2. Attach Side Rails

1. Attach the side rails (item 3) to the ends of each corner gusset. Do not tighten the bolts completely. This enables you to maneuver the mount once you place it under the airdam.

Step 3. Attach Antenna Mounting Plate

1. Attach the antenna mounting plate (item 1) between the two rail sides.
### Step 4. Attach the Mount

<table>
<thead>
<tr>
<th>Diagram</th>
<th>Text</th>
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<tbody>
<tr>
<td><img src="image" alt="Diagram" /></td>
<td><img src="image" alt="Diagram" /></td>
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</tbody>
</table>

1. Align the assembled unit under the airdam and between the seams. Ensure that the mount is level when the truck is level.

2. The second hole from the left (see diagram) is used to line up the mount. This hole is larger than the other holes and is used to hang the mount from the existing airdam bolt.

3. Lift the mount to the approximate location between the airdam seams. If the mount is level, it is obvious which bolt in the airdam is to be used.

4. Remove the existing hardware from the line up hole and from the hole directly across from it in the other seam.

5. Slip the mount into place. Ensure the airdam attachment brackets (item 4) fit squarely between the airdam seams, then reattach the removed bolts.

6. Drill holes in the airdam seam for the remaining 3 bolts (provided) on both seams that the mount is between.

7. Tighten the bolts holding the mount together.

8. After the AMA-11 installation is completed, verify that all the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

**CAUTION**

Tightening the mount should not put stress on the airdam. If stress starts to occur, remove the mount and use the AMA-33 ODU mount.

This completes the installation of the AMA-11 Outdoor Unit mount.
### Parts List: MCN 10-2458-1 (AMA-11)

<table>
<thead>
<tr>
<th>Item No.</th>
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<td>Airdam Attachment Bracket</td>
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<td>3</td>
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<td>7</td>
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<td>Flat Washer</td>
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<td>Nylon Lock Nut</td>
<td>3/8-16 UNC</td>
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</tbody>
</table>

**Note:** Items 5 through 8 are contained in antenna mounting kit 65-2910-11. Each hardware item includes spare parts.
Designed for Freightliner COE Stack Bunk

AMA-13 Outdoor Unit Mount Installation Guide
Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-13 Outdoor Unit mount (MCN 10-2460-1) on your Freightliner Cabover Engine (COE) with stack bunk truck. An assembly drawing of the AMA-13 and an accompanying parts list are provided in these instructions.

Important

The instructions for mount installations provided in this guide, assume familiarity with the operation and use of the OmniTRACS equipment and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle. QUALCOMM strongly recommends that you obtain training from QUALCOMM for first time installations and/or new mount types and/or vehicle types prior to installation.

• The AMA-13 is designed specifically for the Freightliner COE with stack bunk truck. It is installed on the driver’s side in the area above the air horn and sleeper window.

Note

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call QWBS Customer Support at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

The AMA-48 Outdoor Unit mount may also be used for Freightliner COE with stack bunk trucks.
Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call Customer Support.

2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13' 6".

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

**Note**
Do not use impact wrenches or other air-pressured tools to tighten the nuts and bolts in your MCT/IMCT Installation kits. Over-torquing the MCT/IMCT hardware results in stripped nuts and potentially time-consuming and expensive repairs.

Use hand tools to tighten these parts.

---

Installation Procedure

1. Attach the Angle Mounting Brackets

2. Pulldown the Headliner

3. Drill Mounting Holes

4. Attach the Mount

**Help**
For help during installation, call Customer Support for assistance. The toll-free telephone number is (800) 541-7490. Customer Support is staffed 24 hours a day, seven days a week (including holidays).

**Note**
Prior to installing the AMA-10, be sure to review the Installation Guidelines provided on page 13-2.
Step 1. Attach the Angle Mounting Brackets

1. Attach one angle bracket (item 2 of the parts list) to each side at the top of the antenna mounting bracket (item 1), using the provided 3/8" bolts, washers, and nuts.

2. Attach an angle mounting bracket to each of the angle mounting brackets you just attached in Step 1. Do not tighten the bolts completely.

Step 2. Pulldown the Headliner

1. Prior to drilling any holes, pull down the headliner and map light (if applicable) inside the sleeper on the driver's side above the bunk window. This prevents damage to the headliner and allows access to the holes. If there is foam insulation behind the headliner, pull this down too.
### Step 3. Drill Mounting Holes

1. Drill the first hole from inside the sleeper. Find the metal bracket that holds the map light in place after pulling down the headliner and map light. This bracket should have an oval hole in the middle. Drill the first hole in the center of this bracket.

2. Go to the outside of the truck and find a suitable location for the antenna mounting bracket using the hole you just drilled as a placement spot for the upper right side of the mount. Make sure that the mount is level when the truck is level.

3. Use the already attached angle bracket on the left side of the mount as a template to mark the hole to be drilled opposite the hole you just drilled. Use the three holes at the bottom of the antenna mounting bracket as a template to mark three spots in the area above the bunk window on the driver’s side.

![Diagram of Outdoor Unit Mount Installation](image)

### Step 4. Attach the Mount

1. After drilling the holes, clean the outside and inside surface where the mount is to be attached so it is free of dirt and grease. Scrape any adhesives used on the inside of the sleeper so a smooth surface is obtained.

2. Attach the bracket to the sleeper using the 3/8” bolts. Be sure to use silicon (RTV) sealant around each of the rubber mounting pads, both inside and outside the sleeper.

3. Before completing the installation, ensure that the rubber mounting pads are attached properly.

On the outside of the truck and at the bottom of the antenna mounting bracket, the long rubber mounting pad with three holes should be inserted between the antenna mounting bracket and the sleeper in the area just above the bunk window. The rectangular shaped rubber mounting pads should be inserted between the angle brackets and the sleeper. Five round rubber mounting pads should also be inserted on the inside of the sleeper for each bolt.

This completes the installation of the AMA-13 Outdoor Unit mount.
### Parts List: MCN: 10-2460-1 (AMA-13)

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<td>Hex Head Bolt</td>
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<tr>
<td>8</td>
<td>556-02074-0375</td>
<td>13</td>
<td>Flat Washer</td>
<td>3/8 (1 X 7/16 X 5/64)</td>
<td>11-9</td>
</tr>
<tr>
<td>9</td>
<td>556-02281-0007</td>
<td>5</td>
<td>Flat Washer</td>
<td>7/16 1.812 X .453 X 109</td>
<td>11-11</td>
</tr>
<tr>
<td>10</td>
<td>554-02072-0375</td>
<td>9</td>
<td>Nylon Lock Nut</td>
<td>3/8-16 UNC</td>
<td>11-13</td>
</tr>
</tbody>
</table>

Note: Items 6 through 10 are contained in antenna mounting kit 65-2910-13.
Each hardware item includes spare parts.
*Note: This design is specific to the factory installed fairing only. The AMA-90 may be used instead.
### Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-18 Outdoor Unit mount (MCN 10-2900-1) on your Kenworth cabover or conventional truck with Aerodyne sleeper and spoiler. An assembly drawing of the AMA-18 and an accompanying parts list are provided in these instructions.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.

**Note**

This mount is designed specifically for the factory-installed fairing. Check illustration to ensure proper application of this mount.

**Caution**

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

### Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline.

2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to fix the vehicle. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

6. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.
Installation Procedure

The following steps apply to every AMA-18 installation. Perform these steps in the order listed below. Installation of the AMA-18 is divided into the following groups:

1. Remove Bolts from Wing Airdam
2. Attach the Antenna Support Bracket
3. Attach the Antenna Support Channel
4. Attach the Antenna Mounting Bracket

Help
For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-18, be sure to review the Installation Guidelines provided on page 18-2.

Step 1. Remove Bolts from Wing Airdam

1. Remove the two rear bolts on either side of the wing airdam and make sure that the holes in the antenna support channel (item 7) line up with those in the airdam. If necessary, enlarge the holes in the airdam mounting brackets to accommodate 5/16” bolts.

Note
If the curvature of the sleeper roof prevents the antenna support channel from sitting flush against the airdam, incorporate spacers into the installation procedure.
Step 2. Attach the Antenna Support Bracket

1. Attach the antenna support bracket (item 1) to the forward airdam mounting bracket using the existing bolt pattern. Place the antenna support bracket into position under the airdam and determine which two bolt holes are to be used.

2. Remove these two bolts from the airdam mounting bracket and place the antenna support bracket back into position. Using an awl or other suitable tool, mark locations for the two bolt clearance holes on the forward edge of the antenna support bracket.

3. Drill the two 5/16” bolt clearance holes in the forward edge of the antenna support bracket, and if necessary, enlarge the holes in the airdam mounting bracket to accommodate the 5/16” bolts.

4. Bolt the antenna support bracket into place on the forward airdam mounting bracket using 5/16” bolts, washers, and nuts.

Step 3. Attach the Antenna Support Channel

1. Once the antenna support bracket is installed, place the antenna support channel into position, but do not bolt it into place. Using an awl or other suitable tool, mark the locations for the two bolt clearance holes on the channel where it attaches to the antenna support bracket.

2. Drill the two 5/16” bolt clearance holes in the antenna support channel.

3. Install the antenna support channel by bolting it to the rear air dam mounting brackets and the antenna support bracket using 5/16” bolts, washers, and nuts.
### Step 4. Attach the Antenna Mounting Bracket

1. Bolt the antenna mounting bracket (item 5) to the antenna support channel using 5/16” bolts, washers, and nuts.

2. Once the AMA-18 is completely assembled, verify that all the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-18 Outdoor Unit mount.
### Parts List: MCN 10-2900-1 (AMA-18)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty.</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-3055-1</td>
<td>1</td>
<td>Antenna Support Bracket</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>50-3056-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>50-3057-1</td>
<td>1</td>
<td>Antenna Support Channel</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>552-02068-1250</td>
<td>13</td>
<td>Hex Head Bolt</td>
<td>5/16-18UNC-2A X 1.25</td>
<td>9-5</td>
</tr>
<tr>
<td>5</td>
<td>556-02074-0312</td>
<td>25</td>
<td>Flat Washer</td>
<td>5/16 (7/8 X 3/8 X 5/64)</td>
<td>9-7</td>
</tr>
<tr>
<td>6</td>
<td>554-02072-0312</td>
<td>13</td>
<td>Nylon Lock Nut</td>
<td>5/16-18UNC</td>
<td>9-9</td>
</tr>
</tbody>
</table>

**Note:** Items 4 through 6 are contained in antenna mounting kit 65-2910-18. Each hardware item includes spare parts.
Designed for COE/Conventional w/Full Airdams

AMA-21

Outdoor Unit Mount Installation Guide

Rear View

14 places (2)

4 places (2)

2 places

2 places

6 places (2)

2

1

3

4

5

6

7

(2)

8

10

12

8

10

12

8

10

12

9

11

4 places

(2)

2

OmniTRACS
## Introduction

This document provides the guidelines and an installation procedure to follow when installing the AMA-21 Outdoor Unit mount (MCN 10-2902-1) on a cabover or conventional truck with full airdam. An assembly drawing of the AMA-21 and an accompanying parts list are provided in these instructions.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.

## Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

## Installation Guidelines

<table>
<thead>
<tr>
<th>1. Unpack the mount hardware and verify that all the parts listed on the parts list provided in this document are present. If a part is missing, call the Customer Service Hotline.</th>
<th>5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.</td>
<td>6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.</td>
<td>7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.</td>
<td></td>
</tr>
</tbody>
</table>
Installation Procedure

The following steps apply to every AMA-21 installation. Perform these steps in the order listed below. Installation of the AMA-21 is divided into the following groups:

1. Attach the Horizontal Channel
2. Attach the Vertical Channel
3. Attach the Antenna Mounting Bracket
4. Attach the Antenna Mounting Plate
5. Attach the AMA-21 Legs
6. Drill Clearance Holes

Help
For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-21, be sure to review the Installation Guidelines provided on page 21-2.

Step 1. Attach the Horizontal Channel

1. Use the holes at the ends of the horizontal channel (item 4 of the parts list) as a template to mark four clearance holes.
2. Verify that the horizontal channel is level prior to drilling the holes.
3. When the proper location is determined, drill four clearance holes for 3/8” bolts in the forward airdam mounting brackets.

Note
If necessary, the end of the horizontal channel may be trimmed to fit between the airdam mounting brackets.

4. Attach the horizontal channel to the airdam mounting brackets using 3/8” bolts, washers, and nuts.
Step 2. Attach the Vertical Channel

1. Attach the base of the vertical channel (item 3) to the horizontal channel using 3/8" bolts, washers, and nuts.

Step 3. Attach the Antenna Mounting Bracket

1. Attach the antenna mounting bracket (item 2) to the upper end of the vertical channel with 3/8" bolts, washers, and nuts.

Step 4. Attach the Antenna Mounting Plate

1. Attach the antenna mounting plate (item 1) by sliding it into the antenna mounting bracket and lining up the bolt holes in the two pieces so that the top of the mounting plate is level when the vehicle is level. If necessary, additional 3/8" clearance holes can be drilled in the sides of the mounting plate.

2. After the antenna mounting plate is level, secure it to the antenna mounting bracket using 3/8" bolts, washers, and nuts. This assembled part is now called the top hat.
Step 5. Attach the AMA-21 Legs

1. Select suitable locations on the rear airdam mounting brackets to attach each of the AMA-21 legs. Often the legs can be secured to the brackets using the same bolts that secure the airdam to the brackets. If existing bolts cannot be used, additional holes must be drilled in the airdam brackets.

**Caution**

Always secure the AMA-21 legs to the existing airdam mounting brackets. Never attach the legs to the roof of the cab. Attaching the AMA-21 legs directly to the roof of the cab could damage it over time.

2. Bend the feet of the smaller 1” diameter legs so that the mount legs converge at the antenna mounting bracket. This should be done using a vise or other suitable tool prior to installing the legs. Also, bend the feet of the larger diameter legs so they are flush against the sides of the antenna mounting bracket when they are bolted into place.

3. Attach the smaller 1” diameter legs to the rear airdam mounting brackets using 3/8” bolts.

4. Slide the larger 1-1/4” diameter legs over the smaller legs and bolt the feet of the larger legs to the antenna mounting plate using 3/8” bolts.

**Caution**

Always install the smaller diameter legs on the bottom. If the larger diameter legs are installed on the bottom they fill up with rain water and rust from the inside.
### Step 6. Drill Clearance Holes

<table>
<thead>
<tr>
<th>Diagram of AMA-21 unit with bolts and washers labeled.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5/16” Bolts, washers, nuts</strong></td>
</tr>
</tbody>
</table>

1. Drill two clearance holes for the 5/16” bolts in each of the legs. These holes should be three to four inches apart and positioned at 90° angles from one another. Make sure the holes pass through both tubes.

2. Install the 5/16” bolts in each hole.

3. Once the AMA-21 is completely assembled, verify that all of the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-21 Outdoor Unit mount.
### Parts List: MCN 10-2902-1 (AMA-21)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-3595-2</td>
<td>1</td>
<td>Antenna Mounting Plate</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>50-3595-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>50-3208-1</td>
<td>1</td>
<td>Antenna Support Vertical Channel</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>50-3207-1</td>
<td>1</td>
<td>Antenna Support Horizontal Channel</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>50-2487-40</td>
<td>2</td>
<td>Adjustable Steel Leg</td>
<td>1.25</td>
<td>12</td>
</tr>
<tr>
<td>6</td>
<td>50-2488-40</td>
<td>2</td>
<td>Adjustable Steel Leg</td>
<td>1.00</td>
<td>11</td>
</tr>
<tr>
<td>7</td>
<td>552-02068-2250</td>
<td>5</td>
<td>Hex Head Bolt</td>
<td>5/16-18UNC-2A X 2.25</td>
<td>14-8</td>
</tr>
<tr>
<td>8</td>
<td>552-02069-1250</td>
<td>21</td>
<td>Hex Head Bolt</td>
<td>3/8-16UNC X 1.25</td>
<td>14-6</td>
</tr>
<tr>
<td>9</td>
<td>556-02074-0312</td>
<td>9</td>
<td>Flat Washer</td>
<td>5/16 (9/16 X 3/8 X 5/64)</td>
<td>14-12</td>
</tr>
<tr>
<td>10</td>
<td>556-02074-0375</td>
<td>41</td>
<td>Flat Washer</td>
<td>3/8 (1 X 7/16 X 5/64)</td>
<td>14-10</td>
</tr>
<tr>
<td>11</td>
<td>554-02072-0312</td>
<td>5</td>
<td>Nylon Lock Nut</td>
<td>5/16-18UNC</td>
<td>14-16</td>
</tr>
<tr>
<td>12</td>
<td>554-02072-0375</td>
<td>21</td>
<td>Nylon Lock Nut</td>
<td>3/8-16UNC</td>
<td>14-14</td>
</tr>
</tbody>
</table>

**Note:** Items 7 through 12 are contained in antenna mounting kit 65-2910-21. Each hardware item includes spare parts.
AMA-24

Outdoor Unit Mount Installation Guide

Designed for Volvo/White w/ Rain Gutter and No Airdam

Rear View

- Place 1
- 2 places
- Place 3
- 4 places
### Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-24 Outdoor Unit mount (MCN 10-3214-1) on your Volvo/White truck with rain gutter and no airdam. An assembly drawing of the AMA-24 and an accompanying parts list are provided in these instructions.

The AMA-24 is designed specifically for the Volvo/White truck with rain gutter and no airdam. It is installed over the roof of the sleeper and attached on the rain gutter.

Prior to installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.

**Caution**

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

### Installation Guidelines

<table>
<thead>
<tr>
<th>1. Unpack the mount hardware and verify that all the parts listed on the first page of this document are present. If a part is missing, call the Customer Service Hotline.</th>
<th>5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.</td>
<td>6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.</td>
<td>7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp</td>
</tr>
<tr>
<td>4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.</td>
<td></td>
</tr>
</tbody>
</table>
Installation Procedure

The following steps apply to every AMA-24 installation. Perform these steps in the order listed below. Installation of the AMA-24 is broken down into the following groups:

1. Attach the Rack Clamping Bracket
2. Attach the Mount

Help
For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-24, be sure to review the Installation Guidelines provided on page 24-2.

Step 1. Attach the Rack Clamping Bracket

1. Attach the rack clamping bracket (item 2 in the parts list) to both ends of the antenna mounting rack (item 1).
### Step 2. Attach the Mount

1. Attach the mount to the roof of the sleeper. Ensure that the mount is level when the truck is level.

2. When a suitable location is found, tighten the bolts of the rack clamping bracket so that it grips the outside of the rain gutter of the sleeper.

3. After the AMA-24 installation is completed, verify that all the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-24 Outdoor Unit mount.
## Parts List: MCN 10-3214-1 (AMA-24)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-3585-1</td>
<td>1</td>
<td>Antenna Mounting Rack</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>50-3871-1</td>
<td>2</td>
<td>Rack Clamping Bracket</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>554-02072-0375</td>
<td>4</td>
<td>Nylon Lock Nut</td>
<td>3/8-16UNC</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>556-02074-0375</td>
<td>4</td>
<td>Flat Washer</td>
<td>3/8 (1 X 7/16 X 5/64)</td>
<td>7</td>
</tr>
</tbody>
</table>
*Note: Metal gussets holding the rear of the airdam to the sleeper are required for this mount. This mount can not be used if the metal gussets are not present.
### Introduction

This document provides the guidelines and an installation procedure to follow when installing the AMA-26 Outdoor Unit mount (MCN 10-3370-1) on your cabover or conventional truck with full airdam (must be attached to sleeper with metal gussets). An assembly drawing of the AMA-26 and an accompanying parts list are provided in these instructions.

**Important**

The instructions for mount installations provided in this guide, assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle. QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first time installations and/or new mount types and/or vehicle types prior to installation.

**Note**

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

### Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline.

2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13' 6".

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.
## Installation Procedure

The following steps apply to every AMA-26 installation. Perform these steps in the order listed below. Installation of the AMA-26 is divided into the following groups:

1. Determine the Method of Installation
2. Install the Horizontal Channel
3. Attach the Vertical Channel
4. Attach the Antenna Mounting Bracket
5. Attach the Antenna Mounting Plate
6. Attach the AMA-26 Legs
7. Drill Clearance Holes

### Help

For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

### Note

Before installing the AMA-26, be sure to review the Installation Guidelines provided on page 26-2.
### Step 1. Determine the Method of Installation

1. The AMA-26 is a channel type mount that is typically installed using one of two methods. The first method, or “rear channel” method, involves installing the mount horizontal channel between the rear airdam mounting brackets. This is the most common method of installation.

2. The second method, or “front channel” method, involves installing the mount horizontal channel between the forward airdam mounting brackets. This method is less common because the front airdam mounting brackets often do not support this type of installation.

3. Determine which airdam mounting brackets are to be used for the AMA-26 horizontal channel installation (front or rear) and measure the distance between them.

4. Trim the end of the horizontal channel (item 4) that is not predrilled to fit this distance, and then drill two bolt clearance holes in the end of the channel. The size of the clearance holes depends upon the size of the bolts that are used to secure the horizontal channel to the brackets. The channel can often be secured to the brackets using the same bolts that secure the airdam to the brackets. If this is the case, match the existing bolt pattern when drilling the clearance holes in the end of the bracket. If the existing bolts cannot be used, additional clearance holes must be drilled in the airdam brackets.

---

**Diagram:**

- Rear View
- Rear View

---
Step 2. Install the Horizontal Channel

1. Install the horizontal channel (item 4 in the parts list) between the two airdam mounting brackets using the appropriate bolt hardware. These bolts are not supplied with the mount.

2. Verify that the horizontal channel is level.

Note
If necessary, the end of the horizontal channel may be trimmed to fit between the airdam mounting brackets.

Step 3. Attach the Vertical Channel

1. Select the four predrilled holes closest to the center of the horizontal channel and attach the base of the vertical channel (item 3) to the horizontal channel using 3/8” bolts, washers, and nuts.
Step 4. Attach the Antenna Mounting Bracket

1. Select the four predrilled holes in the vertical channel to attach the antenna mounting bracket (item 2).

2. Verify the selected holes are as high as possible on the vertical channel while still allowing a minimum 1" clearance between the Outdoor Unit and any part of the airdam. Generally, an 8" space between the top of the antenna mounting plane and the underside of the airdam provides adequate Outdoor Unit clearance, but you must allow for the curvature of the airdam.

Step 5. Attach the Antenna Mounting Bracket

1. Attach the antenna mounting bracket (item 1) by sliding it into the other antenna mounting bracket and lining up the bolt holes in the two pieces so that the flat surface is level when the vehicle is level. If necessary, additional 3/8" clearance holes can be drilled in the sides of the mounting brackets.

2. After the antenna mounting bracket is level, secure it to the other bracket using 3/8" bolts, washers, and nuts. This assembled part is now called the top hat.
Step 6. Attach the AMA-26 Legs

1. Select suitable forward airdam brackets to attach each of the AMA-26 legs.

Caution
Always secure the AMA-26 legs to the existing airdam mounting brackets. Never attach the legs to the roof of the cab. Attaching the AMA-26 legs directly to the roof of the cab could damage it over time.

2. Bend the feet of the smaller 1" diameter legs so when bolted to the forward brackets, the legs converge toward the antenna mounting bracket.

3. Attach the smaller 1" diameter legs to the forward airdam mounting brackets.

4. Slide the larger 1-1/4" diameter legs over the smaller legs and bolt the feet of the larger legs to the antenna mounting plate using 3/8" bolts, washers, and nuts.

Caution
Always install the smaller diameter legs on the bottom. If the larger diameter legs are installed on the bottom they fill up with rain water and rust from the inside.

Step 7. Drill Clearance Holes

1. Drill two clearance holes for the 5/16” bolts in each of the legs. These holes should be three to four inches apart and positioned at 90° angles from one another. Make sure the holes pass through both tubes.

2. Install the 5/16” bolts, washers, and nuts in each hole.

3. Once the AMA-26 is completely assembled, verify that all of the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-26 Outdoor Unit mount.
### Parts List: MCN 10-3370-1 (AMA-26)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty.</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-3595-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>50-3595-2</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>50-6401-1</td>
<td>1</td>
<td>Antenna Support Vertical Channel</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>50-3414-1</td>
<td>1</td>
<td>Antenna Support Horizontal Channel</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>50-2487-40</td>
<td>2</td>
<td>Adjustable Steel Leg</td>
<td>1.25 Diameter</td>
<td>13</td>
</tr>
<tr>
<td>6</td>
<td>50-2488-40</td>
<td>2</td>
<td>Adjustable Steel Leg</td>
<td>1.00 Diameter</td>
<td>14</td>
</tr>
<tr>
<td>7</td>
<td>552-02068-2250</td>
<td>5</td>
<td>Hex Head Bolt</td>
<td>5/16-18UNC-2A X 2.25</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>552-02069-1250</td>
<td>15</td>
<td>Hex Head Bolt</td>
<td>3/8-16UNC X 1.250</td>
<td>6</td>
</tr>
<tr>
<td>9</td>
<td>556-02074-0312</td>
<td>9</td>
<td>Flat Washer</td>
<td>5/16 (97/8 X 3/8 X 5/64)</td>
<td>9</td>
</tr>
<tr>
<td>10</td>
<td>556-02074-0375</td>
<td>39</td>
<td>Flat Washer</td>
<td>3/8 (1 X 7/16 X 5/64)</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>554-02072-0312</td>
<td>5</td>
<td>Nylon Lock Nut</td>
<td>5/16-18UNC</td>
<td>13</td>
</tr>
<tr>
<td>12</td>
<td>554-02072-0375</td>
<td>20</td>
<td>Nylon Lock Nut</td>
<td>3/8-16UNC</td>
<td>14</td>
</tr>
<tr>
<td>13</td>
<td>552-02069-2000</td>
<td>5</td>
<td>Hex Head Bolt</td>
<td>3/8-16UNC</td>
<td>17</td>
</tr>
</tbody>
</table>

Note: Items 7 through 13 are contained in antenna mounting kit 65-2910-26.
Designed for Peterbilt 70” Stack Bunk Sleeper w/ Side Skirts

Outdoor Unit Mount Installation Guide
### Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-27 Outdoor Unit mount (MCN 10-33552-1) on your Peterbilt 70" Sleeper. An assembly drawing of the AMA-27 and an accompanying parts list are provided in these instructions.

The AMA-27 is designed specifically for the Peterbilt conventional truck with stand-up Aero/Enhanced 70" sleeper. It is installed on the driver’s side between the upper part of the side skirt and the back of the sleeper.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call Customer Support at (800) 541-7490.

### Note

To use this mount, the truck must have side skirts. The side skirt provides the hardware to mount the AMA-27 to the truck. If the truck does not have side skirts, use the AMA-29 Outdoor Unit Mount.

### Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

### Installation Guidelines

<table>
<thead>
<tr>
<th>1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call Customer Support.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13' 6&quot;.</td>
</tr>
<tr>
<td>3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.</td>
</tr>
<tr>
<td>4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.</td>
</tr>
<tr>
<td>5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</td>
</tr>
<tr>
<td>6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
</tbody>
</table>
Installation Procedure

The following steps apply to every AMA-27 installation. Perform these steps in the order listed below. Installation of the AMA-27 is divided into the following groups:

1. Install the Flush Mounting Plate
2. Assemble the Top Hat
3. Attach the Top Hat to the Flush Mounting Plate

Help
For help during installation, call QWBS Customer Support for assistance. The toll-free telephone number is (800) 541-7490, Customer Support is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-27, be sure to review the Installation Guidelines provided on page 27-2.

Step 1. Install the Flush Mounting Plate

1. Remove enough bolts connecting the side skirt on the driver’s side to the sleeper at the top so that you are able to pull the side skirt back from the sleeper, without removing it.

2. Insert the flush mounting plate (item 9 of the parts list) between the sleeper and side skirt and reinsert the top bolt so that the plate hangs from the top of the sleeper.

3. Level the flush mounting plate and use the existing holes on the left side of the side skirt as guides to mark the hole locations on the flush mounting plate.

4. Remove the flush mounting plate and drill clearance holes on the left side of the plate, in the locations marked in step 3, for the 3/8” side skirt mounting bolts.

5. Apply a bead of silicon adhesive to the sleeper where the right side and the bottom of the flush mounting plate rests. (About 8 inches up and across should be sufficient.) This seals, adheres, and dampens the right side and bottom of the flush mounting plate which is not attached by bolts.

6. Insert the flush mounting plate between the side skirt and sleeper again using the top bolt so it hangs from the top of the sleeper. Be sure that the flush mounting plate is level and then attach the remaining bolts.

Note
Allow the silicon to set for at least 2 hours before allowing the truck on the road.
Step 2. Assemble the Top Hat

1. Assemble the top hat by sliding the antenna mounting plate (item 1) into the antenna mounting bracket (item 2) and lining up the holes in the two pieces so that the top of the mounting plate is level when the vehicle is level.

2. After the antenna mounting plate is level, secure it to the antenna mounting bracket using 3/8" bolts, washers, and nuts.

Step 3. Attach the Top Hat to the Flush Mounting Plate

1. Slide the top hat onto the four studs protruding from the flush mounting plate using the four nuts and washers (5/16) provided. Be sure that it is level when the truck is level.

2. After the AMA-27 installation is completed, verify that all of the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-27 Outdoor Unit mount.
### Parts List: MCN 10-3552-1 (AMA-27)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty.</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-3595-2</td>
<td>1</td>
<td>Antenna Mounting Plate</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>50-3595-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>552-02069-1250</td>
<td>11</td>
<td>Hex Head Bolt</td>
<td>3/8-16UNC-2A x 1.250</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>554-02072-0312</td>
<td>5</td>
<td>Nylon Lock Nut</td>
<td>5/16-18UNC regular</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>554-02072-0375</td>
<td>11</td>
<td>Nylon Lock Nut</td>
<td>3/8-16UNC regular</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>556-02074-0312</td>
<td>5</td>
<td>Flat Washer</td>
<td>5/16 (7/8 x 3/8 x 5/64)</td>
<td>9</td>
</tr>
<tr>
<td>7</td>
<td>556-02074-0375</td>
<td>15</td>
<td>Flat Washer</td>
<td>3/8 (1x 7/16 x 5/64)</td>
<td>11</td>
</tr>
<tr>
<td>8</td>
<td>556-02281-0007</td>
<td>7</td>
<td>Flat Washer</td>
<td>#7/16 (1.812 x .453 x 109)</td>
<td>13</td>
</tr>
<tr>
<td>9</td>
<td>50-3553-51</td>
<td>1</td>
<td>Plate</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Note: Items 3 through 8 are contained in antenna mounting kit 65-2910-27. Item 8 may or may not be used depending on the installation. Item 9 contains 4 flush mounted studs. Extra hardware items are included to accommodate for different installations.
AMA-29 Outdoor Unit Mount Installation Guide

Designed as an Adjustable Mount

- COE Install Example
- Straight Truck Install Example

Note: When a plywood panel is included with a QUALCOMM mount, it must be used for backing support and a silicone sealant must be used to glue the panel in place.
# Introduction

This document provides the guidelines and installation procedure to follow when installing the AMA-29 Outdoor Unit Mount (MCN 10-3667-1). An assembly drawing of the AMA-29 and Parts List are provided in these instructions.

**Important**

The instructions for mount installations provided in this guide assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle. QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first time installations and/or new mount types and/or vehicle types prior to installation.

---

**Note**

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Support Network Hotline at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

---

## Installation Guidelines

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Unpack the mount hardware and verify that all the parts listed on the Parts List are present. If a part is missing, call the Customer Support Network Hotline.</td>
</tr>
<tr>
<td>2.</td>
<td>In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13' 6&quot;.</td>
</tr>
<tr>
<td>3.</td>
<td>Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.</td>
</tr>
<tr>
<td>4.</td>
<td>The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.</td>
</tr>
<tr>
<td>5.</td>
<td>Make sure all holes made in the vehicle surface are sealed with a silicone sealant (RTV) to prevent leakage. This includes the self-tapping screws used to secure cable ties.</td>
</tr>
<tr>
<td>6.</td>
<td>If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward, the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>7.</td>
<td>If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>Installation Procedure</td>
<td></td>
</tr>
<tr>
<td>-------------------------</td>
<td></td>
</tr>
<tr>
<td>The following steps apply to every AMA-29 installation. Perform these steps in the order listed below. Detailed instructions appear on the following pages.</td>
<td></td>
</tr>
<tr>
<td>1. Determine the Method of Installation.</td>
<td></td>
</tr>
<tr>
<td>2. Position the Mount.</td>
<td></td>
</tr>
<tr>
<td>3. Assemble the Top Hat.</td>
<td></td>
</tr>
<tr>
<td>4. Pull Down the Headliner.</td>
<td></td>
</tr>
<tr>
<td>5. Drill the Mounting Holes.</td>
<td></td>
</tr>
<tr>
<td>6. Attach the Mount.</td>
<td></td>
</tr>
</tbody>
</table>

**Help**

For help during installation, call the Customer Support Network Hotline at (800) 541-7490. The Hotline is staffed 24 hours a day, 7 days a week (including holidays).

**Note**

Before installing the AMA-29, be sure to review the Installation Guidelines provided on page 29-2.
## Step 1. Determine the Method of Installation

<table>
<thead>
<tr>
<th>Diagram</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="COE Install Example" /></td>
<td>COE Install Example</td>
</tr>
<tr>
<td><img src="image2.png" alt="Rear View" /></td>
<td>Rear View</td>
</tr>
<tr>
<td><img src="image3.png" alt="Straight Truck Install Example" /></td>
<td>Straight Truck Install Example</td>
</tr>
</tbody>
</table>

There are two methods that can be used to install the AMA-29.

1. The first method involves installing the mount on the rear side of the vehicle cab or sleeper.

2. The second method involves installing the AMA-29 on the front of a straight truck cargo box type structure.
### Step 2. Position the Mount

**WARNING**
When installing the AMA-29, a plywood panel must be used for backing support and RTV must be used to glue the panel in place.

QUALCOMM requires the size of the plywood be larger than the size of the mount footprint.

<table>
<thead>
<tr>
<th></th>
<th>Sleeper</th>
<th>Trailer Swing Area</th>
<th>Trailer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

1. When you install the AMA-29 on the rear wall of the vehicle, it can be positioned on either side. (The driver's side is recommended to avoid contact with tree branches and other road hazards.)

If you must use the center of the rear wall because of dual stacks,

**EITHER**

The trailer must clear the mount when making sharp turns and there must be only slightly more flexibility in the center of the wall than in the corners when pressure is exerted.

**OR**

The trailer must clear the mount when making sharp turns and there must be an internal support structure, such as stringers, so the mount has something to straddle or be bolted on to.

If either set of the above criteria is present this mount may be installed; if neither set of criteria is present, do not use this mount.

2. The AMA-29 should be installed on a flat surface. If a flat surface is not available, the mount should be positioned so that when it is firmly secured to the vehicle, there is no distortion to the vehicle cab or sleeper (the surface should maintain its original shape).

3. Make sure the top of the antenna mounting bracket (item 2) is level when the truck is level.
### Step 3. Assemble the Top Hat

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>![5° Forward tilt](5° Forward tilt)</td>
<td>![5° aft tilt](5° aft tilt)</td>
</tr>
</tbody>
</table>

1. Install the antenna mounting bracket (item 2) by sliding it into the antenna mounting bracket (item 1).
2. Secure the two pieces using the shorter 3/8” bolts. This assembled part is now called the top hat.

**Note**
The top of the antenna mounting plate must be level when the truck is level. The mount is designed to compensate for forward or aft raise in the mounting surface. The antenna mounting plate has a slot allowing its surface to be level, regardless of the angle of the mounting bracket.

### Step 4. Pull Down Headliner

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. When installing the AMA-29 on the rear of the vehicle cab or sleeper, be sure to pull down the interior headliner on the opposite side from where the mount is to be installed. This prevents any damage to the headliner and allows access to the holes.

### Step 5. Drill Mounting Holes

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. After determining the proper location for the mount, use the four outer holes in the antenna mounting bracket (item 1) as a template to mark the hole locations on the vehicle.
2. Drill the mounting holes.
### Step 6. Attach the Mount

1. Attach the mount by using the plywood backing panel (item 3) on the inside of the vehicle. It may be trimmed or cut into smaller pieces to allow it to fit between any roof stiffeners. However, the backing panel(s) should have as large a surface area as possible. Use silicone sealant (RTV) to glue the plywood panel into place against the back of the cab wall.

**CAUTION**

If the plywood backing is not used, the mount vibration incurred while driving could damage the cab or sleeper over time.

2. When bolting the mount to the vehicle, note the space inside the vehicle cab between the headliner and the surface of the vehicle cab or sleeper. It may be necessary to install the bolt heads inside the vehicle and install the nuts outside the vehicle with the mount.

3. Make sure all holes made in the vehicle surface are sealed with silicone sealant (RTV) to prevent leakage. This includes the self-tapping screws used to secure cable ties.

This completes the installation of the AMA-29 Outdoor Unit mount.
### Parts List: MCN 10-3667-1 (AMA-29)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-3595-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>50-3595-2</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>50-2555-1</td>
<td>1</td>
<td>Plywood Backing Panel</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>552-02069-1250</td>
<td>5</td>
<td>Hex Head Bolt</td>
<td>3/8-16UNC-2A X 1.250</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>552-02069-2000</td>
<td>5</td>
<td>Hex Head Bolt</td>
<td>3/8-16UNC-2A X 2.00</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>554-02072-0375</td>
<td>9</td>
<td>Nylon Lock Nut</td>
<td>3/8-16UNC Regular</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>556-02074-0375</td>
<td>17</td>
<td>Flat Washer</td>
<td>3/8 (1x 7/16 x 5/64)</td>
<td>8</td>
</tr>
<tr>
<td>8</td>
<td>556-02281-0007</td>
<td>5</td>
<td>Flat Washer</td>
<td>7/16 1.812 x .453 x .109</td>
<td>10</td>
</tr>
</tbody>
</table>

Note: Items 4 through 8 are included in antenna mounting kit 65-2910-29. Each hardware item contains spare parts. Item 8 may or may not be used depending on the installation.
Designed for 1990 Navistar COE Stack Bunk (Hi-Rise) 9700

Outdoor Unit Mount Installation Guide

AMA-30

Side View

Rear View

8 places

14 places

8 places

2 places

2

3

4

5

6

7

8

9

10
### Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-30 Outdoor Unit mount (MCN 10-3934-1) on your 1990 or newer Navistar COE Stack Bunk (Hi-Rise) 9700 with side skirts. An assembly drawing of the AMA-30 and an accompanying parts list are provided in these instructions.

The AMA-30 is designed specifically for the 1990 or newer Navistar COE Stack Bunk (Hi-Rise) 9700. It is installed on the driver’s side between the upper part of the side skirt and the back of the sleeper.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.

### Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

### Installation Guidelines

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline.</td>
</tr>
<tr>
<td>2.</td>
<td>In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.</td>
</tr>
<tr>
<td>3.</td>
<td>Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.</td>
</tr>
<tr>
<td>4.</td>
<td>The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.</td>
</tr>
<tr>
<td>5.</td>
<td>Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</td>
</tr>
<tr>
<td>6.</td>
<td>If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>7.</td>
<td>If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
</tbody>
</table>
**Installation Procedure**

The following steps apply to every AMA-30 installation. Perform these steps in the order listed below. Installation of the AMA-30 is divided into the following groups:

1. Assemble the Top Hat
2. Attach the Bracket Mounting Plate
3. Attach the Mount

**Help**

For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

**Note**

Before installing the AMA-30, be sure to review the Installation Guidelines provided on page 30-2.

**Step 1. Assemble the Top Hat**

1. Install the antenna mounting plate (item 3 of the parts list) by sliding it into the antenna mounting bracket (item 4) and lining up the holes in the two pieces so that the top of the mounting plate is level when the vehicle is level.

2. After the antenna mounting plate is level, secure it to the antenna mounting bracket using 3/8” bolts, washers, and nuts. This assembled part is now called the top hat.
Step 2. Attach the Bracket Mounting Plate

1. Attach the top hat to the bracket mounting plate (item 1).

Step 3. Attach the Mount

1. Remove the two bolts that attach the boomerang bracket to the back of the sleeper.

2. Remove the two top bolts that attach the upper bunk seat belt bracket. Do not remove the two bottom bolts. This bracket is an existing part of the truck.

3. Attach the plate mounting spacer (item 2) in the slot of the boomerang bracket.

4. Attach the top hat and bracket mounting plate to the back of the sleeper, against the boomerang bracket and the mounting plate above. Use the 5/16-18 bolts (item 8) to attach the bottom of the top hat and bracket mounting plate to the boomerang bracket. Be sure that the top hat is level when the truck is level.

5. After the AMA-30 installation is completed, verify that all of the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-30 Outdoor Unit mount.
### Parts List: MCN 10-3934-1 (AMA-30)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty.</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
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<tr>
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<td>50-3936-1</td>
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<td>2</td>
<td>50-3937-1</td>
<td>1</td>
<td>Plate Mounting Spacer</td>
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<td>3</td>
<td>50-3938-1</td>
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<td>4</td>
<td>50-3595-2</td>
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<td>Antenna Mounting Bracket</td>
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<td>8</td>
</tr>
<tr>
<td>5</td>
<td>552-02069-1250</td>
<td>9</td>
<td>Hex Head Bolt</td>
<td>3/8-16 UNC X 1.250</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>554-02072-0375</td>
<td>9</td>
<td>Lock Nylon Nut</td>
<td>3/8-16 UNC</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>556-02074-0375</td>
<td>17</td>
<td>Flat Washer</td>
<td>3/8 (1 X 7/16 X 5/64)</td>
<td>6</td>
</tr>
<tr>
<td>8</td>
<td>552-02068-2000</td>
<td>3</td>
<td>Hex Head Bolt</td>
<td>5/16-18 UNC-2A X 2.00</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>556-02074-0312</td>
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<td>10</td>
<td>556-01187-0312</td>
<td>3</td>
<td>Lock-spring Cres. Washer</td>
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<td>12</td>
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Note: Item 6 through 10 are contained in antenna mounting kit 65-2910-30.
Each hardware item includes 1 spare part.
Item 7 may contain 3 extra parts depending on the installation.
AMA-31

Outdoor Unit Mount Installation Guide

Designed for Trucks w/ Clamshell Airdams

19 places

2 places

1

2

3

6

5

4

8

9

10

19 places

(2)
<table>
<thead>
<tr>
<th>Introduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>This document provides the guidelines and an installation procedure to follow when installing the AMA-31 Outdoor Unit mount (MCN 10-3813-1) on your straight, cabover, or conventional truck with a clamshell airdam. An assembly drawing of the AMA-31 and an accompanying parts list are provided in these instructions.</td>
</tr>
</tbody>
</table>

Prior to installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.

<table>
<thead>
<tr>
<th>Caution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Installation Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong> Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline.</td>
</tr>
</tbody>
</table>

| **2.** In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”. |

| **3.** Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance. |

| **4.** The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties. |

| **5.** Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties. |

| **6.** If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp. |

| **7.** If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp. |
Installation Procedure

The following steps apply to every AMA-31 installation. Perform these steps in the order listed below. Installation of the AMA-31 is divided into the following groups:

1. Assemble the Top Hat
2. Attach the Vertical Support
3. Attach the Front Leg
4. Attach the Rear Leg
5. Attach the Mount
6. Drill Clearance Hole

Help
For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-31, be sure to review the Installation Guidelines provided on page 31-2.

---

**Step 1. Assemble the Top Hat**

1. Install the antenna mounting plate (item 1 of the parts list) by sliding it into the antenna mounting bracket (item 2).

2. Secure the two pieces using the shorter 3/8” bolts, washers, and nuts. This assembled part is now called the top hat.
Step 2. Attach the Vertical Support

1. Attach the vertical support (item 4) to the top hat using the 3/8” bolts, washers, and nuts.

Step 3. Attach the Front Leg

1. Attach the front leg (item 5) to the top hat and vertical support leg using the 3/8” bolts, washers, and nuts.

2. Attach the leg mounting brackets (item 7) to the front leg and vertical support using the 3/8” bolts, washers, and nuts.
### Step 4. Attach the Rear Leg

1. Attach the rear leg (item 3) to the top hat using a 3/8" bolt, washer, and nut.
2. Attach the angle mounting bracket (item 6) to the rear leg using a 3/8" bolt, washer, and nut.

![Diagram of Rear Leg Attachment](image)

### Step 5. Attach the Mount

1. Select the appropriate location for the AMA-31 and secure the angle and leg mounting brackets to the clamshell rails using 3/8" bolts, washers, and nuts.

![Diagram of Mount Attachment](image)
### Step 6. Drill Clearance Hole

1. Using the vacant hole in the rear leg as guide, drill a 3/8” bolt clearance hole in the back of the top hat and install a 3/8” bolt, washer, and nut.

2. Once the AMA-31 installation is completed, verify that all of the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-31 Outdoor Unit mount.
# Parts List: MCN 10-3813-1 (AMA-31)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-3595-2</td>
<td>1</td>
<td>Antenna Mounting Plate</td>
<td>3</td>
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<tr>
<td>2</td>
<td>50-3595-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>50-3814-1</td>
<td>1</td>
<td>Rear Leg</td>
<td>7</td>
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<tr>
<td>4</td>
<td>50-3815-1</td>
<td>1</td>
<td>Vertical Support</td>
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</tr>
<tr>
<td>5</td>
<td>50-3816-1</td>
<td>1</td>
<td>Front Leg</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>50-3817-1</td>
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<td>Angle Mounting Bracket</td>
<td>13</td>
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</tr>
<tr>
<td>7</td>
<td>50-3819-1</td>
<td>2</td>
<td>Leg Mounting Bracket</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>552-02069-1500</td>
<td>19</td>
<td>Hex Head Bolt</td>
<td>3/8-16 UNC-2A X 1.500</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>556-02074-0375</td>
<td>38</td>
<td>Flat Washer</td>
<td>3/8 (1x 7/16 x 5/64)</td>
<td>6</td>
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<tr>
<td>10</td>
<td>554-02072-0375</td>
<td>19</td>
<td>Nylon Lock Nut</td>
<td>3/8-16 UNC Regular</td>
<td>4</td>
</tr>
</tbody>
</table>

Note: Items 8 through 10 are contained in antenna mounting kit 65-2910-31.
AMA-33

Designed for Volvo/White CL w/ “Penthouse” Standup Sleeper and Airdam

Outdoor Unit Mount Installation Guide

Diagram showing the installation guide with various labeled points:
- 3 places
- 2 places
- 5 places
- 11, 12, 13
- 19 places
- 2 places
- 7
- 6
- 4
- (2)
- 8
- 9
- 10
- 12
- 13

OmniTRACS
### Introduction

This document provides the guidelines and an installation procedure to follow when installing the AMA-33 Outdoor Unit mount (MCN 10-4050-1) on your Volvo/White CL with “Penthouse” Stand-up Sleeper. An assembly drawing of the AMA-33 and an accompanying parts list are provided in these instructions.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.

### Caution
Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

<table>
<thead>
<tr>
<th>Installation Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline.</td>
</tr>
<tr>
<td>2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.</td>
</tr>
<tr>
<td>3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.</td>
</tr>
<tr>
<td>4. Cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using UV resistant cable ties.</td>
</tr>
<tr>
<td>5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</td>
</tr>
<tr>
<td>6. If the vehicle has a “sliding” fifth wheel, this should be taken into consideration when determining the location of the mount. Make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when executing sharp turns or going up ramps.</td>
</tr>
<tr>
<td>7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when executing sharp turns or going up ramps.</td>
</tr>
</tbody>
</table>
## Installation Procedure

The following steps apply to every AMA-33 installation. Perform these steps in the order listed below. Installation of the AMA-33 is divided into the following groups:

1. Assemble the Top Hat
2. Attach the Vertical Support
3. Attach the Front Leg
4. Attach the Rear Leg
5. Attach the Horizontal Support
6. Attach the Mount
7. Drill Additional Clearance Holes

### Help

For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

### Note

Before installing the AMA-31, be sure to review the Installation Guidelines provided on page 33-2.
**Step 1. Assemble the Top Hat**

1. Install the antenna mounting plate (item 1 of the parts list) by sliding it into the antenna mounting bracket (item 2).

2. Secure the two pieces using the shorter 3/8” bolts, washers, and nuts. This assembled part is now called the top hat.

**Step 2. Attach the Vertical Support**

1. Attach the vertical support (item 6) to the top hat using the shorter 3/8” bolts, washers, and nuts.
Step 3. Attach the Front Leg

1. Attach the front leg (item 7) to the top hat and vertical support leg using the 3/8” bolts, washers, and nuts.

2. Attach the two leg mounting brackets (item 4) to the front leg and vertical support using the 3/8” bolts, washers, and nuts.

Step 4. Attach the Rear Leg

1. Attach the rear leg (item 5) to the top hat using a single 3/8” bolt, washer, and nut.

2. Attach the angle mounting bracket (item 3) to the rear leg using a 3/8” bolt, washer, and nut.
Step 5. Attach the Horizontal Support

1. Attach the horizontal support (item 8) to the leg mounting brackets (item 4) that you attached in Step 3.

Step 6. Attach the Mount

1. Place the assembled AMA-33 on top of the vehicle sleeper. The rear legs should sit approximately 6” from the back of the sleeper and there should be an even amount of space between the mount legs and the sides of the air dam.

2. Using the holes in the angle brackets as guides, drill five bolt clearance holes in the vehicle roof.

3. Install the longer 3/8” bolts (item 11) and backing plates (item 9) in the order shown.

Note
Be sure to use RTV sealant around the holes prior to installing the bolts.
Step 7. Drill Additional Clearance Holes

1. Once the mount is secured to the roof of the sleeper, drill the remaining three bolt clearance holes in the rear leg and horizontal angle bracket and install a 3/8” bolt in each.

2. Once the AMA-33 installation is completed, verify that all of the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-33 Outdoor Unit mount.
### Parts List: MCN 10-4050-1 (AMA-33)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>50-3595-2</td>
<td>1</td>
<td>Antenna Mounting Plate</td>
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<td>3</td>
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<td>50-3595-1</td>
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<td>3</td>
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<td>Backing Plate</td>
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<td>20</td>
<td>Hex Head Bolt</td>
<td>3/8-16UNC-2A X 1.250</td>
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<tr>
<td>11</td>
<td>552-02069-1500</td>
<td>6</td>
<td>Hex Head Bolt</td>
<td>3/8-16UNC-2A X 1.500</td>
<td>7</td>
</tr>
<tr>
<td>12</td>
<td>556-02074-0375</td>
<td>50</td>
<td>Flat Washer</td>
<td>3/8 (1x 7/16 x 5/64)</td>
<td>9</td>
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<tr>
<td>130</td>
<td>554-02072-0375</td>
<td>25</td>
<td>Nylon Lock Nut</td>
<td>3/8-16UNC Regular</td>
<td>15</td>
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</table>

**Note:** Items 9 through 13 are contained in antenna mounting kit 65-2910-33. Each hardware item includes spare parts.
Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-35 Outdoor Unit mount (MCN 10-4158-1) on your Volvo/White with stand-up sleeper. An assembly drawing of the AMA-35 and an accompanying parts list are provided in these instructions.

The AMA-35 is designed specifically for the Volvo/White with stand-up sleeper. It is installed on the driver’s side between the upper part of the side skirt and the back of the sleeper.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.

Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

Note

An alternative mount for this truck is the AMA-29. Using the AMA-29 requires you to drill holes into the truck. Refer to the AMA-29 Installation Guidelines.  

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline.

2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.
Installation Procedure

The following steps apply to every AMA-35 installation. Perform these steps in the order listed below. Installation of the AMA-35 is divided into the following groups:

1. Attach the Vertical Mast Roof Bracket
2. Attach the Vertical Mast Mounting Brackets
3. Position the Mount
4. Assemble the Top Hat
5. Attach the Top Hat

Help
For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-35, be sure to review the Installation Guidelines provided on page 35-2.

Step 1. Attach the Vertical Mast Roof Bracket

1. Attach the vertical mast roof bracket (item 5) to the vertical mast (item 3) and diagonal angle support (item 4).
Step 2. Attach the Vertical Mast Mounting Brackets

1. Attach a vertical mast mounting bracket (items 6 and 7) to the end of the vertical mast (item 3) and diagonal angle support (item 4).
Step 3. Position the Mount

1. Place the assembled mount so that the top of the mount rests on the top ledge of the side skirt and the feet of the mount rest on the boomerang bracket of the side skirt. The AMA-35 should be positioned so that when the mount is firmly secured to the vehicle, no distortion to the vehicle sleeper occurs (the surface should maintain its original shape).

2. Once the proper location for the mount is determined, use the two unused holes of the vertical mast roof bracket (item 5) as a template for drilling the two holes in the top ledge of the side skirt. Do not drill into the roof of the sleeper.

3. Use the unused holes of the two vertical mast mounting brackets as templates for drilling the four holes in the boomerang bracket of the side skirt.

4. After drilling all holes, attach the assembled bracket to the truck using the 3/8” bolts, washers, and nuts provided.

Step 4. Assemble the Top Hat

1. Install the antenna mounting plate (item 2) by sliding it into the antenna mounting bracket (item 1) and lining up the holes in the two pieces so that the top of the mounting plate is level when the vehicle is level.

2. After the antenna mounting plate is level, secure it to the antenna mounting bracket using 3/8” bolts, washers, and nuts. This assembled part is called the top hat.
Step 5. Attach the Top Hat

1. Use the pre-drilled holes to attach the top hat to the vertical mast. Ensure that it is level when the truck is level.

2. There are no holes in the top hat that can be used as a template to drill holes into the diagonal angle support. Again, make sure that the top hat is level when the truck is level and drill 2 holes through the top hat and diagonal angle support.

3. Attach the top hat to the diagonal angle support with the provided hardware.

4. After the AMA-35 installation is completed, verify that all of the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.
# Parts List: MCN 10-4158-1 (AMA-35)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty.</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
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<tbody>
<tr>
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<td>Antenna mounting bracket</td>
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</tr>
<tr>
<td>6</td>
<td>50-4194-1</td>
<td>1</td>
<td>Vertical Mast Mounting Bracket</td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>7</td>
<td>50-4194-2</td>
<td>1</td>
<td>Vertical Mast Mounting Bracket</td>
<td></td>
<td>19</td>
</tr>
<tr>
<td>8</td>
<td>552-02069-1250</td>
<td>15</td>
<td>Hex Head Bolt</td>
<td>3/8-16 UNC X 1.250</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>556-02074-0375</td>
<td>29</td>
<td>Flat Washer</td>
<td>3/8 (1 X 7/16 X 5/64)</td>
<td>10</td>
</tr>
<tr>
<td>10</td>
<td>554-02072-0375</td>
<td>15</td>
<td>Nylon Lock Nut</td>
<td>3/8-16UNC</td>
<td>15</td>
</tr>
</tbody>
</table>

Note: Items 8 thru 10 are contained in antenna mounting kit 65-2910-35. Each Hardware Item Includes 1 Spare Part.
AMA-37

Designed for Mack R Model

Note: This mount similar to the AMA-60. May be suitable for other rain gutter applications - rain gutter MUST be suitable for support.
# Introduction

This document provides the guidelines and an installation procedure to follow when installing the AMA-37 Outdoor Unit mount (MCN 10-4160-1) on your R Model Mack truck. An assembly drawing of the AMA-37 and an accompanying parts list are provided in these instructions.

The AMA-37 is designed specifically for the R Model Mack truck. It is installed over the roof of the cab and attached on the rain gutter.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.

## Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit

---

## Installation Guidelines

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Unpack the mount hardware and verify that all the parts listed on the parts list provided in this document are present. If a part is missing, call the Customer Service Hotline.</td>
</tr>
<tr>
<td>2.</td>
<td>In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13' 6&quot;.</td>
</tr>
<tr>
<td>3.</td>
<td>Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.</td>
</tr>
<tr>
<td>4.</td>
<td>The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.</td>
</tr>
<tr>
<td>5.</td>
<td>Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</td>
</tr>
<tr>
<td>6.</td>
<td>If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>7.</td>
<td>If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
</tbody>
</table>
Installation Procedure

The following steps apply to every AMA-37 installation. Perform these steps in the order listed below. Installation of the AMA-37 is divided into the following groups:

1. Attach the Adjustment Plates

2. Attach the Mount

Help

For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note

Before installing the AMA-37, be sure to review the Installation Guidelines provided on page 37-2.

Step 1. Attach the Adjustment Plates

1. Attach the adjustment plates (item 1 in the parts list) to each side of the antenna mounting bracket (item 2), using the stud pins (item 5), cam nuts (item 3), and nylon lock nuts (item 2).
Step 2. Attach the Mount

1. Attach the mount to the roof of the cab (in the corner on the driver's side). Ensure that the mount is level when the truck is level.

2. When a suitable location is found, tighten the stud pins connected to the adjustment plates so that it grips the outside of the rain gutter of the sleeper.

3. After the AMA-37 installation is completed, verify that all the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-37.
### Parts List: MCN 10-4160-1 (AMA-37)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-4044-2</td>
<td>2</td>
<td>Adjustment Plate</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>554-02072-0375</td>
<td>5</td>
<td>Nylon Lock Nut</td>
<td>3/8-16 UNC</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>50-4046-1</td>
<td>4</td>
<td>Cam Nut</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>50-6484-51</td>
<td>1</td>
<td>Bracket</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>650-08370-1250</td>
<td>4</td>
<td>Stud Pin</td>
<td>3/8-16 X 1.250</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: Items 2 and 3 are contained in antenna mounting kit 65-2910-37. Items 4 and 5 are contained in antenna mounting kit 50-6484-1. Item 2 contains 1 spare part.
### Introduction

This document provides the guidelines and an installation procedure to follow when installing the AMA-47 Outdoor Unit mount (MCN 10-4161-1) on your 1992 Model CH Mack Stack Bunk truck. An assembly drawing of the AMA-38 and an accompanying parts list are provided in these instructions.

The AMA-38 is designed specifically for the 1992 Model CH Mack Stack Bunk truck. It is installed on the driver’s side between the upper part of the side skirt and the back of the sleeper.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.

**Caution**

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

### Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline.

2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.
Installation Procedure

The following steps apply to every AMA-38 installation. Perform these steps in the order listed below. Installation of the AMA-38 is divided into the following groups:

1. Install the Flush Mounting Plate
2. Assemble the Top Hat
3. Attach the Top Hat to the Flush Mounting Plate

Help
For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-38, be sure to review the Installation Guidelines provided on pg 38-2.

Step 1. Install the Flush Mounting Plate

1. Remove enough bolts attaching the side skirt on the driver’s side to the sleeper at the top so that you are able to pull the side skirt back from the sleeper, without removing it.

2. Insert the flush mounting plate (item 4 in the parts list) between the sleeper and side skirt and reinsert the top and side bolts so that the plate hangs from the top of the sleeper.

3. Ensure that the flush mounting plate is level when the truck is level.

4. Apply a bead of silicon (RTV) adhesive to the sleeper where the right side and the bottom of the flush mounting plate rests. (About 8 inches up and across should be sufficient.) This seals, adheres, and dampens the right side of the flush mounting plate which is not attached by bolts.

5. Insert the remaining bolts.
Step 2. Assemble the Top Hat

1. Assemble the top hat by sliding the antenna mounting plate (item 2) into the antenna mounting bracket (item 3) and lining up the holes in the two pieces so that the top of the mounting plate is level when the vehicle is level.

2. After the antenna mounting plate is level, secure it to the antenna mounting bracket using 3/8” bolts, washers, and nuts.

Step 3. Attach the Top Hat to the Flush Mounting Plate

1. Slide the top hat onto the four studs protruding from the flush mounting plate using the four nuts and washers provided. Be sure that it is level when the truck is level.

2. After the AMA-38 installation is completed, verify that all of the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-38 Outdoor Unit mount.
## Parts List: MCN 10-4161-1 (AMA-38)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-2699-1</td>
<td>2</td>
<td>Rubber Mounting Pad</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>50-2592-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>50-2555-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>392-02158-0003</td>
<td>1</td>
<td>Flush Mounting Plate</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>552-02069-2000</td>
<td>5</td>
<td>Hex Head Bolt</td>
<td>3/8-16UNC-2A x 1.250</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>552-02069-2750</td>
<td>9</td>
<td>Nylon Lock Nut</td>
<td>3/8-16UNC regular</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>552-02074-0375</td>
<td>21</td>
<td>Flat Washer</td>
<td>3/8 (1x 7/16 x 5/64)</td>
<td>6</td>
</tr>
</tbody>
</table>

**Note:**
- Item 1 may not be used depending on the installation.
- Item 4 contains 4 flush mounted studs.
- Items 5 through 7 are contained in antenna mounting kit 65-2910-38.
- Each hardware item includes spare parts.
*Note: The assembly drawing (above) show the mount from the inside vantage point.
# Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-41 Outdoor Unit mount (MCN 10-4164-1) on your Kenworth T 600 conventional truck with Aerodyne 2 sleeper. An assembly drawing of the AMA-41 and an accompanying parts list are provided in these instructions.

The AMA-41 is designed specifically for the Kenworth T 600 conventional truck. It is installed on the driver’s side in the area between the upper part of the side skirt and the back of the sleeper.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call QWBS Customer Support at (800) 541-7490.

## Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

## Note

To use this mount, the truck must have side skirts and an airdam. The side skirt provides the attachment points (boomerang brackets) and hardware to mount the AMA-41 to the truck. If the truck does not have side skirts or an airdam, use the AMA-10 Outdoor Unit mount.

# Installation Guidelines

<table>
<thead>
<tr>
<th>1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call Customer Support.</th>
<th>5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”</td>
<td>6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.</td>
<td>7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.</td>
<td></td>
</tr>
</tbody>
</table>
Installation Procedure

The following steps apply to every AMA-41 installation. Perform these steps in the order listed below. Installation of the AMA-41 is divided into the following groups:

1. Assemble the Top Hat
2. Attach the Vertical Support Bracket and Vertical Angle Support
3. Attach the Top Hat
4. Attach the Diagonal Support Leg
5. Remove Tinnerman and Bolt from Airdam Bracket
6. Attach the Angle Mounting Bracket
7. Attach the Diagonal Forward Leg

Help
For help during installation, call Customer Support for assistance. The toll-free telephone number is (800) 541-7490, and Customer Support is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-41, be sure to review the Installation Guidelines provided on page 41-2.

Step 1. Assemble the Top Hat

1. Install the antenna mounting plate (item 2 on the parts list) by sliding it into the antenna mounting bracket (item 3) and lining up the holes in the two pieces so that the top of the mounting plate is level when the vehicle is level.

2. After the antenna mounting plate is level, secure it to the antenna mounting bracket using 3/8" bolts, washers, and nuts. This assembled part is now called the top hat.
Step 2. Attach the Vertical Support Bracket and Vertical Angle Support

1. Use the vertical support bracket (item 9) as a template to drill mounting holes into the boomerang bracket of the truck.

2. After drilling the holes, attach both the vertical support bracket and the vertical angle support (item 5) to the boomerang bracket using the 3/8" bolts, washers, and nuts.

Step 3. Attach the Top Hat

1. Attach the top hat to the vertical angle support (item 5) using the 3/8" bolts, washers, and nuts. Be sure that when the Outdoor Unit is attached there is at least a 1" height clearance to the airdam.
Step 4. Attach the Diagonal Support Leg

1. Remove enough bolts connecting the rail bar so that you can attach the horizontal angle support (item 7) under the grab bar. You should be able to use the existing hardware to attach the horizontal angle support.

2. Attach one end of the diagonal support leg (item 4) to the horizontal support bracket (item 8).

3. Attach the other end of the diagonal support leg (item 4) to the back of the top hat.

4. Find a suitable location to mount the other end of the diagonal support leg to the horizontal angle support (item 7).

5. Use the end of the horizontal support bracket (item 8) as a template to drill a mounting hole into the horizontal angle support (item 7).

6. Attach the horizontal support bracket (item 8) to the horizontal angle support (item 7).

7. Ensure the mount is level when the truck is level.
Step 5. Remove Tinnerman and Bolt from Airdam Bracket

1. Find the airdam bracket that attaches the airdam to the top of the sleeper on the driver's side. From outside the truck, you can see the two bolts just above the sleeper window.

2. Remove the tinnerman. You have to climb up above the sleeper and under the airdam. Use a small head screw driver or dowel by sliding the head under the top of the tinnerman and pulling up.

3. Remove the bolt that is closest to the rear of the truck.

Step 6. Attach the Angle Mounting Bracket

1. Attach an angle mounting bracket (item 1) to the bracket that you just removed the bolt and tinnerman from. Use a new 3/8" bolt, washer, and nut, which are provided.
Step 7. Attach the Diagonal Forward Leg

1. Attach an angle mounting bracket (item 1) to the to the top hat.

2. Attach one end of the diagonal forward leg (item 6) to the angle mounting bracket (item 1) you just attached to the bracket that attaches the airdam and sleeper roof (see Attach the Angle Bracket above).

3. Attach the other end of the diagonal forward leg (item 6) to the angle mounting bracket (item 1) you attached to top hat.

**Note**

The diagonal forward leg (item 6) may have to be cut for it to fit.

4. After the AMA-41 is completely assembled, verify that all the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-41 Outdoor Unit mount.
### Parts List: MCN 10-4164-1 (AMA-41)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-2269-1</td>
<td>2</td>
<td>Angle Mounting Bracket</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>50-3595-1</td>
<td>1</td>
<td>Antenna Mounting Plate</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>50-3595-2</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>50-6793-1</td>
<td>1</td>
<td>Diagonal Support Leg</td>
<td>55.37</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>50-6794-1</td>
<td>1</td>
<td>Vertical Angle Support</td>
<td>44.75</td>
<td>12</td>
</tr>
<tr>
<td>6</td>
<td>50-6795-1</td>
<td>1</td>
<td>Diagonal Forward Leg</td>
<td>44.75</td>
<td>14</td>
</tr>
<tr>
<td>7</td>
<td>50-6796-1</td>
<td>1</td>
<td>Horizontal Angle Support</td>
<td>43.37</td>
<td>16</td>
</tr>
<tr>
<td>8</td>
<td>50-6797-1</td>
<td>1</td>
<td>Horizontal Support Bracket</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>9</td>
<td>50-6798-1</td>
<td>1</td>
<td>Vertical Support Bracket</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>10</td>
<td>552-02069-1250</td>
<td>15</td>
<td>Hex Head Bolt</td>
<td>3/8-16 UNC X 1.250</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>554-02072-0375</td>
<td>15</td>
<td>Nylon Lock Nut</td>
<td>3/8-16 UNC</td>
<td>6</td>
</tr>
<tr>
<td>12</td>
<td>556-02074-0375</td>
<td>29</td>
<td>Flat Washer</td>
<td>3/8 (1 X 7/16 X 5/64)</td>
<td>8</td>
</tr>
<tr>
<td>13</td>
<td>556-02281-0007</td>
<td>3</td>
<td>Flat Washer</td>
<td>7/16 1.812X.453X109</td>
<td>10</td>
</tr>
<tr>
<td>14</td>
<td>552-02068-1000</td>
<td>6</td>
<td>Hex Head Bolt</td>
<td>5/16-18NC-2AX1.00</td>
<td>12</td>
</tr>
<tr>
<td>15</td>
<td>554-02072-0312</td>
<td>6</td>
<td>Nylon Lock Nut</td>
<td>5/16-18UNC</td>
<td>14</td>
</tr>
<tr>
<td>16</td>
<td>556-02074-0312</td>
<td>11</td>
<td>Flat Washer</td>
<td>5/16 (7/8 /x 3.8)</td>
<td>16</td>
</tr>
</tbody>
</table>

**Note:**
- Items 10 through 16 are contained in antenna mounting kit 65-2910-41.
- Each hardware item includes spare parts.
- Item 13 may or may not be used depending on the installation.
AMA-42

Outdoor Unit Mount Installation Guide

Designed for Mack CH Model w/ Standup Sleeper

Side View

Rear View

14 places

28 places

14 places

45.12°
# Introduction

This document provides the guidelines and an installation procedure to follow when installing the AMA-42 Outdoor Unit mount (MCN 10-4165-1) on your Model CH Mack truck with standup sleeper. An assembly drawing of the AMA-42 and an accompanying parts list are provided in these instructions.

The AMA-42 is designed specifically for the Model CH Mack truck with standup sleeper. It is installed on the driver’s side between the upper part of the side skirt and the back of the sleeper.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call QWBS Customer Support at (800) 541-7490.

**Caution**

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

---

## Installation Guidelines

1. **Unpack the mount hardware and verify that all the parts listed on the parts list provided in this document are present.** If a part is missing, call Customer Support.

2. **In general, the higher the Outdoor Unit the better the MCT performance.** However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.

3. **Install the mount so that the Outdoor Unit is level when the vehicle is level.** This ensures the best possible performance.

4. **The cables leading from the antenna may be routed outside, down the back of the sleeper.** Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. **Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage.** This includes the self-tapping screws used to secure cable ties.

6. **If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.**

7. **If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.**

**Note**

Do not use impact wrenches or other air-pressured tools to tighten the nuts and bolts in your MCT/IMCT Installation kits. Over-torquing the MCT/IMCT hardware results in stripped nuts and potentially time-consuming and expensive repairs.

Use hand tools to tighten these parts.
Installation Procedure

The following steps apply to every AMA-42 installation. Perform these steps in the order listed below. Installation of the AMA-42 is divided into the following groups:

1. Assemble the Top Hat
2. Mount Top Hat to Vertical Mounting Plate
3. Mount Horizontal Support to Vertical Mounting Plate
4. Mount Diagonal Support Tube to Vertical Mounting Plate
5. Attach Mount to Vehicle

Help
For help during installation, call Customer Support for assistance. The toll-free telephone number is (800) 541-7490, and Customer Support is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-42, be sure to review the Installation Guidelines provided on page 42-2.

Step 1. Assemble the Top Hat

1. Install the antenna mounting plate by sliding it into the antenna mounting bracket and lining up the holes in the two pieces so that the top of the mounting plate is level when the vehicle is level.

2. After the antenna mounting bracket is level, secure it to the antenna mounting bracket using 3/8" bolts, washers, and nuts. This assembled part is now called the top hat.
Step 2. Mount Top Hat to Vertical Mounting Plate

1. Mount the top hat to the vertical mounting plate (item 4) using 3/8" bolts, washers, and nuts.

Step 3. Mount Horizontal Support to Vertical Mounting Plate

1. Mount the horizontal support (item 3) to the vertical mounting plate (item 4) using a 3/8" bolt, washers, and nut.

Step 4. Mount Diagonal Support Tube to Horizontal Support

1. Mount the diagonal support tube (item 5) to the horizontal support (item 3) using a 3/8" bolt, washers, and nut.
### Step 5. Attach Mount To Vehicle

1. Attach the assembled mount to the truck using the top ledge of the sleeper and side skirt as attachment points. On the top ledge, use the 3/8-16 X 1.500 bolts (item 9).

2. Verify that all bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-42 Outdoor Unit Mount.
## Parts List: MCN 10-4165-1 (AMA-42)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-3595-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>50-3595-2</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>50-6981-1</td>
<td>1</td>
<td>Horizontal Support</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>50-6982-1</td>
<td>1</td>
<td>Vertical Mounting Plate</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>50-6983-1</td>
<td>1</td>
<td>Diagonal Support Tube</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>6</td>
<td>50-6984-1</td>
<td>1</td>
<td>Plate Mounting Bracket</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>7</td>
<td>50-6986-1</td>
<td>1</td>
<td>Backing Plate</td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>8</td>
<td>552-02069-1250</td>
<td>15</td>
<td>Hex Head Bolt</td>
<td>3/8-16UNC-2A x 1.250</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>552-02069-1500</td>
<td>4</td>
<td>Hex Head Bolt</td>
<td>3/8-16UNC-2A x 1.500</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>556-02074-0375</td>
<td>35</td>
<td>Flat Washer</td>
<td>3/8 (1x 7/16 x 5/64)</td>
<td>5</td>
</tr>
<tr>
<td>11</td>
<td>554-02072-0375</td>
<td>18</td>
<td>Nylon Lock Nut</td>
<td>3/8-16UNC regular</td>
<td>7</td>
</tr>
</tbody>
</table>

Note: Items 8 through 11 are contained in antenna mounting kit 65-2910-42. Each hardware item includes spare parts.
AMA-45

Designed for 1993 Navistar Conventional

Outdoor Unit Mount Installation Guide

Side View

Rear View

Diagram with parts numbered 1 to 8:
- 1
- 2
- 3: 2 places
- 4
- 5
- 6
- 7: 2 places
- 8

(2)
**Introduction**

This document provides the guidelines and an installation procedure to follow when you install the AMA-45 Outdoor Unit mount (MCN 10-4168-1) on your 1993 Navistar conventional truck.

An assembly drawing of the AMA-45 and an accompanying parts list are provided in these instructions. The AMA-45 is designed specifically for the 1993 Navistar conventional truck. It is installed on the boomerang bracket on the driver's side against the side skirt and the back of the sleeper.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.

---

<table>
<thead>
<tr>
<th>Caution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>To use this mount, the truck must have side skirts. The side skirt provides the attachment points (boomerang bracket) and hardware to mount the AMA-45 to the truck.</td>
</tr>
</tbody>
</table>

---

**Installation Guidelines**

| 1. | Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline. |
| 2. | In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6". |
| 3. | Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance. |
| 4. | The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties. |
| 5. | Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties. |
| 6. | If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp. |
| 7. | If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp. |
Installation Procedure

The following steps apply to every AMA-45 installation. Perform these steps in the order listed below. Installation of the AMA-45 is divided into the following groups:

1. Insert Spacers
2. Attach the Mount

Help
For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-45, be sure to review the Installation Guidelines provided on page 45-2.

Step 1. Insert Spacers

1. Remove the bolts that attach the boomerang bracket to the back of the sleeper and side skirt on the driver's side.

2. Place the spacers (items 2 and 3) in the gutter of the boomerang bracket.
### Step 2. Attach the Mount

1. Attach the antenna mounting bracket to the back of the sleeper and side skirt. Be sure that the mount is level when the truck is level.

2. After the AMA-45 installation is completed, verify that all the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-45.
## Parts List: MCN 10-4168-1 (AMA-45)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-6759-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>50-6761-1</td>
<td>1</td>
<td>Spacer</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>50-6761-2</td>
<td>2</td>
<td>Spacer</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>552-02068-2250</td>
<td>3</td>
<td>Hex Head Bolt</td>
<td>5/16-18 UNC-2A x 2.25</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>552-02068-1500</td>
<td>2</td>
<td>Hex Head Bolt</td>
<td>5/16-18 UNC-2A x 1.50</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>556-01187-0312</td>
<td>3</td>
<td>Lock-Spring Cres Washer</td>
<td>.3125</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>556-02074-0312</td>
<td>4</td>
<td>Flat Washer</td>
<td>5/16(7/8 x 3/8 x 5/64)</td>
<td>8</td>
</tr>
<tr>
<td>8</td>
<td>554-02072-0312</td>
<td>2</td>
<td>Nylon Lock Nut</td>
<td>5/16-18 UNC</td>
<td>10</td>
</tr>
</tbody>
</table>

**Note:** Items 4 and 8 are contained in antenn mounting kit 65-2910-45. Each hardware item includes spare parts.
Designed for 1993 Freightliner w/ 70” Hi-Rise Sleeper w/ Side Skirts
### Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-46 Outdoor Unit mount (MCN 10-4169-1) on your 1993 or newer Freightliner truck with 70" raised-roof (Hi-Rise) sleeper and side skirts. An assembly drawing of the AMA-46 and an accompanying parts list are provided in these instructions.

The AMA-46 is designed specifically for the 1993 or newer Freightliner truck with 70" raised-roof (Hi-Rise) sleeper and side skirts. It is installed on the driver’s side between the upper part of the side skirt and the back of the sleeper.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.

### Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

### Note

An alternative mount is the AMA-29 or AMA-48. The AMA-46 requires side skirts while the AMA-29 and AMA-48 do not.

### Installation Guidelines

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline.</td>
</tr>
<tr>
<td>2.</td>
<td>In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13' 6&quot;.</td>
</tr>
<tr>
<td>3.</td>
<td>Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.</td>
</tr>
<tr>
<td>4.</td>
<td>The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.</td>
</tr>
<tr>
<td>5.</td>
<td>Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</td>
</tr>
<tr>
<td>6.</td>
<td>If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>7.</td>
<td>If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
</tbody>
</table>
Installation Procedure

The following steps apply to every AMA-46 installation. Perform these steps in the order listed below. Installation of the AMA-46 is divided into the following groups:

1. Attach the Vertical Mounting Bracket
2. Attach the Support Bracket
3. Remove the Speaker and Back Panel
4. Drill Mounting Holes
5. Attach the Mount

Help
For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-46, be sure to review the Installation Guidelines provided on page 46-2.

Step 1. Attach the Vertical Mounting Bracket

1. Attach the vertical mounting bracket (item 2) to the side of the antenna mounting plate (item 1) using the 3/8” bolts, washers, and nuts.

Note
On some trucks, it may be necessary to Attach the vertical mounting bracket (item 2) on the inside of the antenna mounting plate (item 1). Only use this method if the assembled mount does not fit flush against the back of the sleeper and side skirt.
### Step 2. Attach the Support Bracket

1. Attach the support bracket (item 3) to the bottom of the antenna mounting plate (item 1).

**Note**

On some trucks, it may be necessary to redrill the holes on the antenna mounting bracket so that the support bracket can sit flush against the side skirt. Or, you can add large fender washers or rubber mounting gaskets to bridge the gap between the mount and side skirt.

![Diagram of support bracket and antenna mounting plate](image)

### Step 3. Remove the Speaker and Back Panel

1. Before drilling any holes, go inside the sleeper and remove the speaker mounted in the corner and the rear back panel. This prevents damage to the speaker and allows access to the AMA-46 mounting holes.

![Diagram of cab interior and back panel](image)
### Step 4. Drill Mounting Holes

1. Find the hole where the speaker was removed and drill the first mounting hole in the middle of this hole. This hole is used for the top hole on the support bracket (item 3).

2. On the outside of the truck, align the assembled bracket against the back of the sleeper and side skirt. Ensure the mount is level when the truck is level.

3. Using the holes from the vertical mounting bracket and the support bracket as a template, mark the hole locations and then drill three holes in the sleeper and two holes in the side skirt for the 3/8” mounting bolts.

### Step 5. Attach the Mount

1. Attach the AMA-46 to the back of the sleeper and side skirt. Two people are required at this point. One to hold the bolt on the inside of the sleeper and the other to attach the washer and nut.

2. When bolting the mount to the vehicle, note the space inside the vehicle cab and the upholstery. It may be necessary to install the bolt heads inside the vehicle and install the nuts outside the vehicle with the mount.

3. Apply RTV sealant around the inside and outside of the holes to prevent the possibility of leakage into the sleeper.

**Note**

If the support bracket (item 3) does not fit flush against the side skirt, it may be necessary to redrill the holes on the antenna mounting bracket so that the support bracket can sit flush against the side skirt. Or, you can add large fender washers or rubber mounting gaskets to bridge the gap between the mount and side skirt.

4. After the AMA-46 installation is completed, verify that all of the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-46 Outdoor Unit mount.
### Parts List: MCN 10-4169-1 (AMA-46)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-6769-1</td>
<td>1</td>
<td>Antenna Mounting Plate</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>50-6768-1</td>
<td>1</td>
<td>Vertical Mounting Bracket</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>50-6770-1</td>
<td>1</td>
<td>Support Bracket</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>552-02069-1250</td>
<td>10</td>
<td>Hex Head Bolt</td>
<td>3/8-16 UNC X 1.250</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>554-02072-0375</td>
<td>10</td>
<td>Nylon Lock Nut</td>
<td>3/8-16 UNC</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>556-02074-0375</td>
<td>19</td>
<td>Flat Washer</td>
<td>3/8 (1 X 7/16 X 5/64)</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>556-02282-0007</td>
<td>4</td>
<td>Flat Washer</td>
<td>7/16 1.812X.453X109</td>
<td>8</td>
</tr>
</tbody>
</table>

Note: Items 4 through 7 are contained in antenna mounting kit 65-2910-46. Each Hardware Item Includes Spare Parts.
AMA-47

Designed for 1993 Mack CH 316 Model Stack Bunk

Side View

Rear View

4 places

4 places

8 places

Omnitracs
### Introduction

This document provides the guidelines and an installation procedure to follow when installing the AMA-47 Outdoor Unit mount (MCN 10-4170-1) on your 1993 Model CH 316 Mack Stack Bunk truck. An assembly drawing of the AMA-47 and an accompanying parts list are provided in these instructions.

The AMA-47 is designed specifically for the 1993 Model CH 316 Mack Stack Bunk truck. It is installed on the driver’s side between the upper part of the side skirt and the back of the sleeper.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.

### Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

### Installation Guidelines

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline.</td>
</tr>
<tr>
<td>2.</td>
<td>In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.</td>
</tr>
<tr>
<td>3.</td>
<td>Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.</td>
</tr>
<tr>
<td>4.</td>
<td>The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.</td>
</tr>
<tr>
<td>5.</td>
<td>Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</td>
</tr>
<tr>
<td>6.</td>
<td>If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>7.</td>
<td>If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
</tbody>
</table>
Installation Procedure

The following steps apply to every AMA-47 installation. Perform these steps in the order listed below. Installation of the AMA-47 is divided into the following groups:

1. Install the Flush Mounting Plate
2. Assemble the Top Hat
3. Attach the Top Hat to the Flush Mounting Plate

Help
For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-47, be sure to review the Installation Guidelines provided on page 47-2.

Step 1. Install the Flush Mounting Plate

1. Remove enough bolts connecting the side skirt on the driver’s side to the sleeper at the top so that you are able to pull the side skirt back from the sleeper, without removing it.

2. Insert the flush mounting plate (item 3 of the parts list) between the sleeper and side skirt and reinsert the top and side bolts so that the plate hangs from the top of the sleeper.

3. Ensure that the flush mounting plate is level when the truck is level.

4. Apply a bead of silicon (RTV) adhesive to the sleeper where the right side and the bottom of the flush mounting plate rests. (About 8 inches up and across should be sufficient.) This seals, adheres, and dampens the right side of the flush mounting plate which is not attached by bolts.

5. Insert the remaining bolts.

Note
Allow the silicon to set for at least 2 hours before allowing the truck on the road.
Step 2. Assemble the Top Hat

1. Assemble the top hat by sliding the antenna mounting plate (item 1) into the antenna mounting bracket (item 2) and lining up the holes in the two pieces so that the top of the mounting plate is level when the vehicle is level.

2. After the antenna mounting plate is level, secure it to the antenna mounting bracket using 3/8” bolts, washers, and nuts.

Step 3. Attach the Top Hat to the Flush Mounting Plate

1. Slide the top hat onto the four studs protruding from the flush mounting plate using the four nuts and washers (5/16) provided. Be sure that it is level when the truck is level.

2. After the AMA-47 installation is completed, verify that all of the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-47 Outdoor Unit mount.
Parts List: MCN 10-4170-1 (AMA-47)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-6788-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>50-3595-2</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>50-6789-51</td>
<td>1</td>
<td>Flush Mounting Plate</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>552-02069-1250</td>
<td>5</td>
<td>Hex Head Bolt</td>
<td>3/8-16 UNC-2A x 1.250</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>554-02072-0312</td>
<td>5</td>
<td>Nylon Lock Nut</td>
<td>5/16-18 UNC regular</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>554-02072-0375</td>
<td>5</td>
<td>Nylon Lock Nut</td>
<td>3/8-16 UNC regular</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>556-02074-0312</td>
<td>5</td>
<td>Flat Washer</td>
<td>5/16 (7/8 x 3/8 x 5/64)</td>
<td>8</td>
</tr>
<tr>
<td>8</td>
<td>556-02074-0375</td>
<td>9</td>
<td>Flat Washer</td>
<td>3/8 (1 x 7/16 x 5/64)</td>
<td>10</td>
</tr>
</tbody>
</table>

Note: Items 4 through 8 are contained in antenna mounting kit 65-2910-47.

Item 3 contains 4 flush mounted studs.

Each hardware item includes spare parts.

QUALCOMM Incorporated, 6455 Lusk Boulevard, San Diego, CA 92121-2779
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Note: When a plywood panel is included with a QUALCOMM mount, it must be used for backing support and a silicone sealant must be used to glue the panel in place.
**Introduction**

This document provides the guidelines and an installation procedure to follow when installing the AMA-48 Outdoor Unit mount (MCN 10-4171-1). An assembly drawing of the AMA-48 and an accompanying parts list are provided in these instructions.

**Important**

The instructions for mount installations provided in this guide, assume familiarity with the operation and use of the OmniTRACS equipment and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle. QUALCOMM strongly recommends that you obtain training from QUALCOMM for first time installations and/or new mount types and/or vehicle types prior to installation.

**Note**

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call QWBS Customer Support at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

**Installation Guidelines**

1. Unpack the mount hardware and verify that all the parts listed on the Parts List are present. If a part is missing, call the Customer Support Network Hotline.

2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6.”

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicone sealant (RTV) to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward, the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.
**Installation Procedure**

The following steps apply to every AMA-48 installation. Perform these steps in the order listed below.

1. Assemble the Top Hat.
2. Position the Mount.
3. Remove the Speaker and Back Panel.
4. Drill the Mounting Holes.
5. Attach the Mount.

**Help**

For help during installation, call Customer Support at (800) 541-7490. Customer Support is staffed 24 hours a day, 7 days a week (including holidays).

**Note**

Before installing the AMA-48, be sure to review the Installation Guidelines provided on page 48-2.

---

**Step 1. Assemble the Top Hat**

1. Assemble the top hat by sliding the antenna mounting bracket (item 2) into the other antenna mounting bracket (item 1).

2. Secure the two pieces using the shorter 3/8" bolts, washers, and nuts. This assembled part is now called the top hat.
## Step 2. Positioning the Mount

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>When you install the AMA-48 on the rear wall of the vehicle, it can be positioned on either side. (The driver’s side is recommended to avoid contact with tree branches and other road hazards.) If you must use the center of the rear wall because of dual stacks, <strong>EITHER</strong> The trailer must clear the mount when making sharp turns <strong>and</strong> there must be only slightly more flexibility in the center of the wall than in the corners when pressure is exerted. <strong>OR</strong> The trailer must clear the mount when making sharp turns <strong>and</strong> there must be an internal support structure, such as stringers, so the mount has something to straddle or be bolted on to. If <strong>either</strong> set of the above criteria is present this mount may be installed; if <strong>neither</strong> set of criteria is present, do not use this mount.</td>
</tr>
<tr>
<td>2.</td>
<td>The AMA-48 should be installed on a flat surface. If a flat surface is not available, the mount should be positioned so that when it is firmly secured to the vehicle, there is no distortion to the vehicle cab or sleeper (the surface should maintain its original shape).</td>
</tr>
<tr>
<td>3.</td>
<td>Make sure the top of the antenna mounting bracket (item 2) is level when the truck is level.</td>
</tr>
</tbody>
</table>

### WARNING
When installing the AMA-48, a plywood panel must be used for backing support and RTV should be used to glue the panel in place.

QUALCOMM requires the size of the plywood be larger than the size of the mount footprint.

---
### Step 3. Remove the Speaker and Back Panel

1. Before drilling any holes, go inside the sleeper and remove the speaker mounted in the corner and the rear back panel. This prevents damage to the speaker and allows access to the AMA-48 mounting holes.

### Step 4. Drill Mounting Holes

1. Find the hole where the speaker was removed and drill the first mounting hole in the middle of this hole. This hole is used for the top hole on the mounting bracket (item 1).

2. On the outside of the truck, align the assembled bracket against the back of the sleeper and side skirt. Ensure the mount is level when the truck is level.

3. Using the holes from the antenna mounting bracket (item 1) as a template, mark the hole locations and then drill four holes in the sleeper.
Step 5. Attach the Mount

1. Attach the mount by using the plywood backing panel on the inside of the vehicle. It may be trimmed or cut into smaller pieces to allow it to fit between any roof stiffeners. However, the backing panel(s) should have as large a surface area as possible. Use silicone sealant (RTV) to glue the plywood panel into place against the back of the cab wall.

**CAUTION**

If the plywood backing is not used, the mount vibration incurred while driving could damage the cab or sleeper over time.

2. When bolting the mount to the vehicle, note the space inside the vehicle cab between the headliner and the surface of the vehicle cab or sleeper. It may be necessary to install the bolt heads inside the vehicle and install the nuts outside the vehicle with the mount.

3. Make sure all holes made in the vehicle surface are sealed with silicone sealant (RTV) to prevent leakage. This includes the self-tapping screws used to secure cable ties.

This completes the installation of the AMA-48 Outdoor Unit mount.
## Parts List: MCN 10-4171-1 (AMA-48)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-3595-2</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>50-6966-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>50-2555-1</td>
<td>1</td>
<td>Plywood Panel Backing</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>552-02069-1250</td>
<td>5</td>
<td>Hex Head Bolt</td>
<td>3/8-16UNC-2A x 1.250</td>
<td>12</td>
</tr>
<tr>
<td>5</td>
<td>552-02069-2000</td>
<td>5</td>
<td>Hex Head Bolt</td>
<td>3/8-16UNC-2A x 2.00</td>
<td>14</td>
</tr>
<tr>
<td>6</td>
<td>554-02072-0375</td>
<td>9</td>
<td>Nylon Lock Nut</td>
<td>3/8-16UNC Regular</td>
<td>16</td>
</tr>
<tr>
<td>7</td>
<td>556-02074-0375</td>
<td>13</td>
<td>Flat Washer</td>
<td>3/8 (1x 7/16 x 5/64)</td>
<td>18</td>
</tr>
<tr>
<td>8</td>
<td>556-02281-0007</td>
<td>5</td>
<td>Flat Washer</td>
<td>7/16 1.812 x .453 x .109</td>
<td>20</td>
</tr>
</tbody>
</table>

Note: Each Hardware Item Includes Spare Parts.
AMA-49 Outdoor Unit Mount Installation Guide

Designed for Volvo/White w/ Standup Sleeper

Side View

Rear View

14 Places

2 Places

2

5

1

7

(2)

8

9

3

10

(2)

11

12

4

(2)

6

OmniTRACS MOBILE COMMUNICATIONS SYSTEM
Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-49 Outdoor Unit mount (MCN 10-4172-1) on your Volvo/White with stand-up sleeper. An assembly drawing of the AMA-49 and an accompanying parts list are provided in these instructions.

The AMA-49 is designed specifically for the Volvo/White with stand-up sleeper. It is installed on the driver’s side between the upper part of the side skirt and the back of the sleeper.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call Customer Support at (800) 541-7490.

Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

Note

An alternative mount for this truck is the AMA-29. Using the AMA-29 requires you to drill holes into the truck. Refer to the AMA-29 Installation Guide (80-6270-29).

Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call Customer Support.

2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.
**Installation Procedure**

The following steps apply to every AMA-49 installation. Perform these steps in the order listed below. Installation of the AMA-49 is divided into the following groups:

1. Attach the Vertical Mast Roof Bracket
2. Attach the Vertical Mast Mounting Brackets
3. Position the Mount
4. Assemble the Top Hat
5. Attach the Top Hat

**Help**

For help during installation, call QWBS Customer Support for assistance. The toll-free telephone number is (800) 541-7490, and Customer Support is staffed 24 hours a day, 7 days a week (including holidays).

**Note**

Before installing the AMA-49, be sure to review the Installation Guidelines provided on page 49-2.

**Step 1. Attach the Vertical Mast Roof Bracket**

1. Attach the vertical mast roof bracket (item 5) to the vertical mast (item 3) and diagonal angle support (item 4).
### Step 2. Attach the Vertical Mast Mounting Brackets

| 1. Attach a vertical mast mounting bracket (item 6) to the end of the vertical mast (item 3) and diagonal angle support (item 4). |

![Diagram of vertical mast mounting bracket installation](image-url)
Step 3. Position the Mount

1. Place the assembled mount so that the top of the mount rests on the top ledge of the side skirt and the feet of the mount rest on the boomerang bracket of the side skirt. The AMA-49 should be positioned so that when the mount is firmly secured to the vehicle, no distortion to the vehicle sleeper occurs (the surface should maintain its original shape).

2. Once the proper location for the mount is determined, use the two unused holes of the vertical mast roof bracket (item 5) as a template for drilling the two holes in the top ledge of the side skirt. Do not drill into the roof of the sleeper.

3. Use the unused holes of the vertical mast mounting bracket (item 6) as a template for drilling holes in the boomerang bracket of the side skirt. You may be able to drill three holes if there is enough space.

4. After drilling all holes, attach the assembled bracket to the truck using the 5/16” bolts, washers, and nuts provided.

Note

Huck bolts may be substituted at the base in place of the bolts, washers, and nuts if available (only on the mounting bracket (item 6) to the boomerang bracket).
Step 4. Assemble the Top Hat

1. Install the antenna mounting plate (item 2) by sliding it into the antenna mounting bracket (item 1) and lining up the holes in the two pieces so that the top of the mounting plate is level when the vehicle is level.

2. After the antenna mounting plate is level, secure it to the antenna mounting bracket using 3/8” bolts, washers, and nuts. This assembled part is called the top hat.

Step 5. Attach the Top Hat

1. Use the pre-drilled holes to attach the top hat to the vertical mast. Ensure that it is level when the truck is level.

2. There are no holes in the top hat that can be used as a template to drill holes into the diagonal angle support. Again, make sure that the top hat is level when the truck is level and drill 2 holes through the top hat and diagonal angle support.

3. Attach the top hat to the diagonal angle support with the provided hardware.

4. After the AMA-49 installation is completed, verify that all of the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.
## Parts List: MCN 10-4172-1 (AMA-49)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-3595-1</td>
<td>1</td>
<td>Antenna mounting bracket</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>50-3595-2</td>
<td>1</td>
<td>Antenna mounting bracket</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>50-6968-1</td>
<td>1</td>
<td>Vertical Mast</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>50-6969-1</td>
<td>1</td>
<td>Diagonal Angle Support</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>50-6971-1</td>
<td>1</td>
<td>Vertical Mast Roof Bracket</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>6</td>
<td>50-6972-1</td>
<td>1</td>
<td>Vertical Mast Mounting Bracket</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>7</td>
<td>552-02069-1250</td>
<td>15</td>
<td>Hex Head Bolt</td>
<td>3/8-16 UNC x 1.250</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>556-02074-0375</td>
<td>29</td>
<td>Flat Washer</td>
<td>3/8 (1 x 7/16 x 5/64)</td>
<td>10</td>
</tr>
<tr>
<td>9</td>
<td>554-02072-0375</td>
<td>15</td>
<td>Nylon Lock Nut</td>
<td>3/8-16 UNC</td>
<td>15</td>
</tr>
<tr>
<td>10</td>
<td>552-02068-1000</td>
<td>3</td>
<td>Hex Head Bolt</td>
<td>5/16-18 UNC-2A x 1.00</td>
<td>20</td>
</tr>
<tr>
<td>11</td>
<td>556-02074-0312</td>
<td>5</td>
<td>Flat Washer</td>
<td>5/16(7/8 x 3/8 x 5/64)</td>
<td>25</td>
</tr>
<tr>
<td>12</td>
<td>554-02072-0312</td>
<td>3</td>
<td>Nylon Lock Nut</td>
<td>5/16-18 UNC</td>
<td>30</td>
</tr>
</tbody>
</table>

Items 7 through 12 are contained in antenna mounting kit 65-2910-49.
Each hardware item included spare parts.
Pop rivets may be substituted for items 10, 11, and 12 if available.
AMA-50
Outdoor Unit Mount Installation Guide

Designed Mack Model CH w/ Stack Bunk

Side View

Rear View

14 places
11
28 places
12
14 places

9
5
12
3
14 places

6
7

3 places
10
11
12
(2)

36.87"
# Introduction

This document provides the guidelines and an installation procedure to follow when installing the AMA-50 Outdoor Unit mount (MCN 10-4173-1) on your Model CH Mack truck with Stack Bunk. An assembly drawing of the AMA-50 and an accompanying parts list are provided in these instructions.

The AMA-50 is designed specifically for the 1994 Model CH Mack truck with Stack Bunk. It is installed on the driver’s side between the upper part of the side skirt and the back of the sleeper.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call QWBS Customer Support at (800) 541-7490.

**Caution**

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

# Installation Guidelines

<table>
<thead>
<tr>
<th>1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call Customer Support.</th>
<th>5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.</td>
<td>6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible performance.</td>
<td>7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.</td>
<td></td>
</tr>
</tbody>
</table>
## Installation Procedure

The following steps apply to every AMA-50 installation. Perform these steps in the order listed below. Installation of the AMA-50 is divided into the following groups:

1. Assemble the Top Hat
2. Attach the Top Hat to the Vertical Mounting Plate
3. Attach the Horizontal Support to the Vertical Mounting Plate
4. Attach the Diagonal Support Tube to the Vertical Mounting Plate
5. Attach Mount to Vehicle

**Help**

For help during installation, call Customer Support for assistance. The toll-free telephone number is (800) 541-7490, and Customer Support is staffed 24 hours a day, 7 days a week (including holidays).

**Note**

Before installing the AMA-50, be sure to review the Installation Guidelines provided on page 50-2.

## Step 1. Assemble the Top Hat

1. Slide the antenna mounting plate (item 1) into the antenna mounting bracket (item 2) and line up the holes in the two pieces so that the top of the mounting plate is level when the vehicle is level.

2. After the antenna mounting plate is level, secure it to the antenna mounting bracket using 3/8” bolts, washers, and nuts. This assembled part is now called the top hat.
Step 2. Attach the Top Hat to the Vertical Mounting Plate

1. Attach the top hat to the vertical mounting plate (item 4) using 3/8" bolts, washers, and nuts.

Step 3. Attach the Horizontal Support to the Vertical Mounting Plate

1. Mount the horizontal support (item 3) to the vertical mounting plate (item 4) using 3/8" bolt, washers, and nut.

Step 4. Attach the Diagonal Support Tube to Horizontal Support

1. Attach the diagonal support tube (item 5) to the horizontal support using 3/8" bolt, washers, and nut.
Step 5. Attach Mount To Vehicle

1. Attach the assembled mount to the truck using the top ledge of the sleeper and side skirt as attachment points. On the top ledge, use the 3/8-16 X 1.500 bolts (item 10).

2. Verify that all bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-50 Outdoor Unit mount.
### Parts List: MCN 10-4173-1 (AMA-50)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-3595-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>50-3595-2</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>50-6977-1</td>
<td>1</td>
<td>Horizontal Support</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>50-6978-1</td>
<td>1</td>
<td>Vertical Mounting Plate</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>50-6979-1</td>
<td>1</td>
<td>Diagonal Support Tube</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>6</td>
<td>50-6980-1</td>
<td>1</td>
<td>Angle Extension Bracket</td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>7</td>
<td>50-6984-1</td>
<td>1</td>
<td>Plate Mounting Bracket</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>8</td>
<td>50-6986-1</td>
<td>1</td>
<td>Backing Plate</td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>9</td>
<td>552-02069-1250</td>
<td>15</td>
<td>Hex Head Bolt</td>
<td>3/8-16 UNC-2A x 1.250</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>552-02069-1500</td>
<td>4</td>
<td>Hex Head Bolt</td>
<td>3/8-16 UNC-2A x 1.500</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>556-02074-0375</td>
<td>35</td>
<td>Flat Washer</td>
<td>3/8 (1x 7/16 x 5/64)</td>
<td>5</td>
</tr>
<tr>
<td>12</td>
<td>554-02072-0375</td>
<td>18</td>
<td>Nylon Lock Nut</td>
<td>3/8-16 UNC regular</td>
<td>7</td>
</tr>
</tbody>
</table>

**Note:** Items 9 through 12 are contained in antenna mounting kit 65-2910-50. Each hardware item includes spare parts.
AMA-52

Outdoor Unit Mount Installation Guide

Designed for 1992 - 94 International Conventional w/ Full Air Dam

Side View

Rear View

Diagram showing installation details, labeled with numbers and screws.
## Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-52 Outdoor Unit mount (MCN 10-4175-1) on your 1992 - 94 International conventional truck with full airdam. An assembly drawing of the AMA-52 and an accompanying parts list are provided in these instructions.

The AMA-52 is designed specifically for the 1992 - 94 International conventional truck with full airdam. It is installed on the driver’s side between the upper part of the side skirt and the back of the sleeper.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.

### Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

## Installation Guidelines

<table>
<thead>
<tr>
<th>Step</th>
<th>Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline.</td>
</tr>
<tr>
<td>2.</td>
<td>In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.</td>
</tr>
<tr>
<td>3.</td>
<td>Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.</td>
</tr>
<tr>
<td>4.</td>
<td>The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.</td>
</tr>
<tr>
<td>5.</td>
<td>Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</td>
</tr>
<tr>
<td>6.</td>
<td>If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>7.</td>
<td>If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
</tbody>
</table>
Installation Procedure

The following steps apply to every AMA-52 installation. Perform these steps in the order listed below. Installation of the AMA-52 is divided into the following groups:

1. Install the Flush Mounting Plate
2. Assemble the Top Hat
3. Attach the Top Hat to the Flush Mounting Plate

Help
For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-52, be sure to review the Installation Guidelines provided on page 52-2.

Step 1. Install the Flush Mounting Plate

1. Remove enough bolts connecting the side skirt on the driver’s side to the sleeper at the top so that you are able to pull the side skirt back from the sleeper, without removing it.

2. Insert the flush mounting plate (item 2 of the parts list) between the sleeper and side skirt and reinsert the top bolt so that the plate hangs from the top of the sleeper.

3. Level the flush mounting plate and use the existing holes on the left side of the side skirt as guides to mark the hole locations on the flush mounting plate.

4. Remove the flush mounting plate and drill clearance holes on the left side of the plate, in the locations marked in step 3, for the 3/8” side skirt mounting bolts.

5. Insert the flush mounting plate between the side skirt and sleeper again using the top bolt so it hangs from the top of the sleeper. Be sure that the flush mounting plate is level and then attach the remaining bolts.
**Step 2. Assemble the Top Hat**

1. Assemble the top hat by sliding the antenna mounting plate (item 1) into the antenna mounting bracket (item 3) and lining up the holes in the two pieces so that the top of the mounting plate is level when the vehicle is level.

2. After the antenna mounting plate is level, secure it to the antenna mounting bracket using 3/8” bolts, washers, and nuts.

![Antenna Mounting Bracket (item 1) and Antenna Mounting Plate (item 3)](image)

**Step 3. Attach the Top Hat to the Flush Mounting Plate**

1. Slide the top hat onto the four studs protruding from the flush mounting plate using the four nuts and washers (5/16) provided. Be sure that it is level when the truck is level.

2. After the AMA-52 installation is completed, verify that all of the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-52 Outdoor Unit mount.
### Parts List: MCN 10-4175-1 (AMA-52)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-3595-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>50-8531-1</td>
<td>1</td>
<td>Flush Mounting Plate</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>50-3595-2</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>552-02069-1250</td>
<td>5</td>
<td>Hex Head Bolt</td>
<td>3/8-16 UNC-2A x 1.250</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>554-02072-0312</td>
<td>5</td>
<td>Nylon Lock Nut</td>
<td>5/16-18 UNC</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>554-02072-0375</td>
<td>5</td>
<td>Nylon Lock Nut</td>
<td>3/8-16 UNC regular</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>556-02074-0312</td>
<td>5</td>
<td>7/8 Flat Washer</td>
<td>5/16 (7/8 X 3/8 X)</td>
<td>8</td>
</tr>
<tr>
<td>8</td>
<td>556-02074-0375</td>
<td>9</td>
<td>1 X 7 Flat Washer</td>
<td>3/8 (1 X 7/16 X 5)</td>
<td>10</td>
</tr>
</tbody>
</table>

**Note:** Items 4 through 8 are contained in antenna mounting kit 65-2910-52. Each hardware item includes spare parts.
Designed for 1992 Freightliner Conventional with Integral Sleeper
Introduction

This document provides the guidelines and installation procedure to follow when installing the AMA-53 Outdoor Unit mount (MCN 10-4176-1) on your 1992 or newer Freightliner conventional truck with integral sleeper and full airdam.

To use this mount, the truck must have side skirts. The side skirts provide the hardware to mount the AMA-53 to the truck. It must be installed on the driver’s side of the sleeper between the upper part of the side skirt and the back of the sleeper.

An assembly drawing of the AMA-53 and an accompanying Parts List are provided in these instructions.

Important

The instructions for mount installations provided in this guide, assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle.

QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first-time installations and/or new mount types and/or vehicle types prior to installation.

Note

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call the OmniTRACS Customer Support 24-hour Hotline at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

If the mount you are installing requires the use of a sealant, special attention is needed to ensure a watertight seal. The best approach is to create a silicon seal on the inside and outside of the holes drilled into the truck/sleeper roof. Bolts should be installed from the inside with the nuts on the outside. (If the bolts are installed from the outside, the extra bolt length may not allow you to reinstall the headliner.)

Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Support Hotline.

2. In general, the higher the Outdoor Unit the better the MCT/IMCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.

3. Install the mount so the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls a refrigerated trailer or dry van, this mount should NOT be used.

8. Do not use impact wrenches or other air-pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation Kits. Use hand tools to tighten these parts. Over-torquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.
<table>
<thead>
<tr>
<th>Installation Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>The following steps apply to every AMA-53 installation. Perform these steps in the order listed below.</td>
</tr>
<tr>
<td>1. Install the flush mounting plate</td>
</tr>
<tr>
<td>2. Assemble the top hat.</td>
</tr>
<tr>
<td>3. Attach the top hat to the flush mounting plate.</td>
</tr>
</tbody>
</table>

**Help**
For help during installation, call the QUALCOMM Customer Support Hotline at (800) 541-7490. The Hotline is staffed 24 hours a day, 7 days a week (including holidays).

**Note**
Before installing the AMA-53, be sure to review the Installation Guidelines provided on page 53-2.

<table>
<thead>
<tr>
<th>Step 1. Install the flush mounting plate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Remove enough of the bolts connecting the side skirt on the driver’s side to the sleeper at the top so you are able to pull the side skirt back from the sleeper without removing it.</td>
</tr>
<tr>
<td>2. Place the flush mounting plate between the sleeper and side skirt. Drill a mounting hole through the flush mounting plate so you can hang it from the top of the airdam.</td>
</tr>
<tr>
<td>3. Level the flush mounting plate. Use the existing holes on the left side and top of the side skirt to mark the hole locations on the flush mounting plate. Mark enough holes so the flush mounting plate is secured firmly.</td>
</tr>
<tr>
<td>4. Remove the flush mounting. Drill clearance holes on the left side and top of the plate in the locations marked in step 3 for the 3/8” side skirt mounting bolts.</td>
</tr>
<tr>
<td>5. Insert the flush mounting plate between the side skirt and sleeper again using a bolt so it hangs from the top of the sleeper. Make sure the flush mounting plate is level and then attach the remaining bolts.</td>
</tr>
</tbody>
</table>
This completes the installation of the AMA-53 Outdoor Unit mount.
### Parts List: MCN 10-4176-1 (AMA-53)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-8532-1</td>
<td>1</td>
<td>Flush Mounting Plate</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>50-3595-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>50-3595-2</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>552-02069-1250</td>
<td>13</td>
<td>Hex Head Bolt</td>
<td>3/8-16UNC-2A x 1.250</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>554-02072-0375</td>
<td>13</td>
<td>Nylon Locknut</td>
<td>3/8-16UNC regular</td>
<td>12</td>
</tr>
<tr>
<td>6</td>
<td>556-02074-0375</td>
<td>25</td>
<td>Flatwasher</td>
<td>3/8 (1 x 7/16 x 5/64)</td>
<td>14</td>
</tr>
</tbody>
</table>

Each hardware item includes spare parts.
AMA-54

Designed for 1992 - 94 Freightliner Conventional Stack Bunk w/ Full Airdam

Outdoor Unit Mount Installation Guide

Side View

Rear View

8 places

(2)
Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-54 Outdoor Unit mount (MCN 10-4177-1) on your 1992-94 Freightliner conventional truck, stack bunk with full air-dam. An assembly drawing of the AMA-54 and an accompanying parts list are provided in these instructions.

The AMA-54 is designed specifically for the 1992-94 Freightliner conventional truck, stack bunk with full air-dam. It is installed on the driver’s side between the upper part of the side skirt and the back of the sleeper.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.

Note

To use this mount, the truck must have side skirts. The side skirt provides the hardware to mount the AMA-54 to the truck.

Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline.

2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.
## Installation Procedure

<table>
<thead>
<tr>
<th>The following steps apply to every AMA-54 installation. Perform these steps in the order listed below. Installation of the AMA-54 is divided into the following groups:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Install the Flush Mounting Plate</td>
</tr>
<tr>
<td>2. Assemble the Top Hat</td>
</tr>
<tr>
<td>3. Attach the Top Hat to the Flush Mounting Plate</td>
</tr>
</tbody>
</table>

### Help

For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

### Note

Before installing the AMA-54, be sure to review the Installation Guidelines provided on page 54-2.
### Step 1. Install the Flush Mounting Plate

1. Remove enough bolts connecting the side skirt on the driver’s side to the sleeper at the top so that you are able to pull the side skirt back from the sleeper, without removing it.

2. Insert the flush mounting plate (item 1 of the parts list) between the sleeper and side skirt. Drill a mounting hole through the flush mounting plate so that you can hang it from the top of the airdam.

3. Level the flush mounting plate and use the existing holes on the left side and top of the side skirt as guides to mark the hole locations on the flush mounting plate. Mark enough holes so that the flush mounting plate is secured firmly.

4. Remove the flush mounting plate and drill clearance holes on the left side and top of the plate, in the locations marked in step 3, for the 3/8” side skirt mounting bolts.

5. Insert the flush mounting plate between the side skirt and sleeper again using a bolt so it hangs from the top of the sleeper. Be sure that the flush mounting plate is level and then attach the remaining bolts.

### Step 2. Assemble the Top Hat

1. Assemble the top hat by sliding the antenna mounting plate (item 2) into the antenna mounting bracket (item 3) and lining up the holes in the two pieces so that the top of the mounting plate is level when the vehicle is level.

2. After the antenna mounting plate is level, secure it to the antenna mounting bracket using 3/8” bolts, washers, and nuts.
Step 3. Attach the Top Hat to the Flush Mounting Plate

1. Attach the top hat to the flush mounting plate using the bolts, washers, and nuts provided. Be sure that it is level when the truck is level.

2. After the AMA-54 installation is completed, verify that all of the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-54 Outdoor Unit mount.

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-8533-1</td>
<td>1</td>
<td>Flush Mounting Plate</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>50-3595-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>50-3595-2</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>552-02069-1250</td>
<td>13</td>
<td>Hex Head Bolt</td>
<td>3/8-16UNC-2A x 1.250</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>554-02072-0375</td>
<td>13</td>
<td>Nylon Lock Nut</td>
<td>3/8-16UNC regular</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>556-02074-0375</td>
<td>25</td>
<td>1 x 7 Flat Washer</td>
<td>3/8 (1 x 7/16 x 5)</td>
<td>10</td>
</tr>
</tbody>
</table>

Note: Items 4 through 6 are contained in antenna mounting kit 65-2910-54. Each hardware item includes spare parts.
AMA-55
Outdoor Unit Mount Installation Guide

Designed for Auto/Car Carrier Truck Models

Note: Installation of the AMA-55 requires a certified welder.
Introduction

This document provides the guidelines and installation procedure to follow when installing the AMA-55 Outdoor Unit Mount (MCN 50-8534-1) on an Auto/Car Carrier truck model. An assembly drawing of the AMA-55 and Parts List are provided in these instructions.

Important

The instructions for mount installations provided in this guide assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle. QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first-time installations and/or new mount types and/or vehicle types prior to installation.

Note

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call the QUALCOMM Customer Support 24-Hour Hotline at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

Special attention is needed to ensure a watertight seal when installing this mount. The best approach is to create a silicon seal on the inside and outside of the holes drilled into the truck/sleeper roof. Bolts should be installed from the inside with the nuts on the outside. (If the bolts are installed from the outside, the extra bolt length may not allow you to reinstall the headliner.)

Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the Parts List at the end of this document are present. If a part is missing, call the Customer Support Hotline.

2. In general, the higher the Outdoor Unit the better the IMCT/MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6.”

3. Install the mount so the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls a refrigerated trailer or dry van, make sure the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

Note

Do not use impact wrenches or other air pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation Kits. **Use hand tools to tighten these parts.** Overtorquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.
Pre-installation Considerations and Cautions

The AMA-55 is designed with an offset in its vertical mast to allow enough lateral room for vehicle clearance, if needed. Before installing this mount, consider the following:

1. The types of vehicles the auto/car carrier will be carrying.

2. How the vehicles will be loaded and unloaded and how much clearance is necessary, e.g., consider locating the mount at the opposite end of the rack from where the vehicles are loaded and unloaded to avoid any vehicle clearance issues.

3. Do not exceed Department of Transportation maximum vehicle width requirements.

4. The cable run (from antenna to tractor cab) and how this could impact the moving parts on the rack.

5. How the OmniTRACS system works, specifically, how system performance may be impacted by where and how the antenna is mounted in relation to the vehicles on the rack.

6. A certified welder is required to ensure that proper welds and appropriate procedures are followed when installing this mount.

Installation Procedures

The following steps apply to every AMA-55 installation. Perform these steps in the order listed.

1. Determine where to install the mount.

2. Verify the mount location for the cable run.

3. Weld the mast to the carrier rack.

Help

For help during installation, call the QUALCOMM Customer Support 24-Hour Hotline for assistance at (800) 541-7490. The Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note

Before installing the AMA-55, be sure to review the Installation Guidelines provided on page 55-2.
**Step 1. Determine where to install the mount**

1. Talk with the driver of the vehicle to determine what type of vehicles are generally carried and what the loading/unloading requirements are.
2. Determine the articulation of the auto/car carrier rack.
3. Request input from Field Engineering regarding any system performance requirements.

**Step 2. Verify the mount location for the cable run**

1. Determine your cable length.
2. Verify that the mount location can accommodate the desired cable run from the antenna to its termination within the tractor interior’s electrical system.
Step 3. Weld the mast to the carrier rack

1. Use a certified welder to weld the mast to the auto/car carrier rack.

This completes the installation of the AMA-55 Outdoor Unit Mount.

### Parts List: MCN 50-8534-1 (AMA-55)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-8534-1</td>
<td>1</td>
<td>Antenna Mast</td>
<td></td>
<td>5</td>
</tr>
</tbody>
</table>
Note: Installation of the AMA-56 requires a certified welder.
### Introduction

This document provides the guidelines and installation procedure to follow when installing the AMA-56 Outdoor Unit Mount (MCN 50-8535-1) on an Auto/Car Carrier truck model. An assembly drawing of the AMA-56 and Parts List are provided in these instructions.

**Important**

The instructions for mount installations provided in this guide assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle. QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first-time installations and/or new mount types and/or vehicle types prior to installation.

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### Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the Parts List at the end of this document are present. If a part is missing, call the Customer Support Hotline.

2. In general, the higher the Outdoor Unit the better the IMCT/MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6.”

3. Install the mount so the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls a refrigerated trailer or dry van, make sure the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

**Note**

Do not use impact wrenches or other air pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation Kits. **Use hand tools to tighten these parts.** Overtorquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.
**Pre-installation Considerations and Cautions**

The AMA-56 is designed with a simple vertical mast to allow enough lateral room for vehicle clearance, if needed. Before installing this mount, consider the following:

1. The types of vehicles the auto/car carrier will be carrying.
2. How the vehicles will be loaded and unloaded and how much clearance is necessary, e.g., consider locating the mount at the opposite end of the rack from where the vehicles are loaded and unloaded to avoid any vehicle clearance issues.
3. Do not exceed Department of Transportation maximum vehicle width requirements.
4. The cable run (from antenna to tractor cab) and how this could impact the moving parts on the rack.
5. How the OmniTRACS system works, specifically, how system performance may be impacted by where and how the antenna is mounted in relation to the vehicles on the rack.
6. A certified welder is required to ensure that proper welds and appropriate procedures are followed when installing this mount.

**Installation Procedures**

The following steps apply to every AMA-56 installation. Perform these steps in the order listed.

1. Determine where to install the mount.
2. Verify the mount location for the cable run.
3. Weld the mast to the carrier rack.

**Help**

For help during installation, call the QUALCOMM Customer Support 24-Hour Hotline for assistance at (800) 541-7490. The Hotline is staffed 24 hours a day, 7 days a week (including holidays).

**Note**

Before installing the AMA-56, be sure to review the Installation Guidelines provided on page 56-2.
Step 1. Determine where to install the mount

1. Talk with the driver of the vehicle to determine what type of vehicles are generally carried and what the loading/unloading requirements are.
2. Determine the articulation of the auto/car carrier rack.
3. Request input from Field Engineering regarding any system performance requirements.

Step 2. Verify the mount location for the cable run

1. Determine your cable length.
2. Verify that the mount location can accommodate the desired cable run from the antenna to its termination within the tractor interior’s electrical system.
Step 3. Weld the mast to the carrier rack

1. Use a certified welder to weld the mast to the auto/car carrier rack.

This completes the installation of the AMA-56 Outdoor Unit Mount.

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-8535-1</td>
<td>1</td>
<td>Antenna Mast</td>
<td></td>
<td>5</td>
</tr>
</tbody>
</table>
Designed for International COE with Flat Roof and Full Airdam with Existing Horizontal Rectangular Tube

Outdoor Unit Mount Installation Guide
Introduction

This document provides the guidelines and installation procedure to follow when installing the AMA-58 Outdoor Unit mount (MCN 10-4181-1) on your International cabover with flat roof and full airdam with existing horizontal channel.

This mount is a modification of the AMA-58 and does not include the horizontal channel as part of the mount. An assembly drawing of the AMA-58 and an accompanying Parts List are provided in these instructions.

Note
Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

Important
The instructions for mount installations provided in this guide, assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle.

QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first-time installations and/or new mount types and/or vehicle types prior to installation.

<table>
<thead>
<tr>
<th>Installation Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Support Hotline.</td>
</tr>
<tr>
<td>2. In general, the higher the Outdoor Unit the better the MCT/IMCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6.”</td>
</tr>
<tr>
<td>3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.</td>
</tr>
<tr>
<td>4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.</td>
</tr>
<tr>
<td>5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</td>
</tr>
<tr>
<td>6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
</tbody>
</table>
Installation Procedure

The following steps apply to every AMA-58 installation. Perform these steps in the order listed.

1. Assemble the top hat.
2. Attach the vertical channel.
3. Drill the clearance holes.
4. Attach the vertical channel to the existing horizontal channel.
5. Attach the AMA-58 legs.
6. Drill the clearance holes.

Help
For help during installation, call the QUALCOMM Customer Support Hotline at (800) 541-7490. The Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-58, be sure to review the Installation Guidelines provided on page 58-2.

Step 1. Assemble the top hat

1. Assemble the top hat by sliding the antenna mounting plate (item 1) into the antenna mounting bracket (item 2) and lining up the holes in the two pieces so the top of the mounting plate is level when the vehicle is level.

2. After the antenna mounting plate is level, secure it to the antenna mounting bracket using 3/8” bolts, washers, and nuts.
Step 2. Attach the vertical channel

1. Attach the vertical channel (item 3) to the back of the top hat using 3/8" bolts, washers, and nuts.

![Diagram of vertical channel attachment](image1)

Step 3. Drill the clearance holes

1. Drill 1" clearance holes in the top of the existing horizontal channel. This enables you to access the hardware used to attach the vertical channel (item 3) to the existing horizontal channel.

![Diagram of clearance holes](image2)

Step 4. Attach the vertical channel to the existing horizontal channel

1. Attach the vertical channel (item 3) to the existing horizontal channel using 3/8" bolts, washers, and nuts. Use the clearance holes you drilled in step 3 to access the hardware.

![Diagram of vertical channel attachment to horizontal channel](image3)
Step 5. Attach the AMA-58 legs

1. Select suitable forward airdam brackets to attach each of the AMA-58 legs.

Caution
Always secure the AMA-58 legs to the existing airdam mounting brackets. Never attach the legs to the roof of the cab. Attaching the AMA-58 legs directly to the roof of the cab could damage it over time.

2. Bend the feet of the smaller 1" diameter legs so that when bolted to the forward brackets, the legs converge toward the antenna mounting bracket.

3. Attach the smaller 1" diameter legs to the forward airdam mounting bracket.

4. Slide the larger 1-1/4" diameter legs over the smaller legs and bolt the feet of the larger legs to the antenna mounting plate using 3/8" bolts, washers, and nuts.

Caution
Always install the smaller diameter legs on the bottom. If the larger diameter legs are installed on the bottom they could fill up with rain water and rust from the inside.

Step 6. Drill the clearance holes

1. Drill two clearance holes in each of the legs for the 5/16" bolts. These holes should be 3–4 inches apart and positioned at 90° angles from one another. Make sure the holes pass through both tubes.

2. Install the 5/16" bolts, washers, and nuts in each hole.

3. Once the AMA-58 is completely assembled, verify that all of the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-58 Outdoor Unit mount.
## Parts List: MCN 10-4181-1 (AMA-58)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-3595-1</td>
<td>1</td>
<td>Antenna Mounting Plate</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>50-3595-2</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>50-6401-1</td>
<td>1</td>
<td>Vertical Antenna Support Channel</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>50-2487-40</td>
<td>2</td>
<td>Adjustable Steel Leg</td>
<td>1.25</td>
<td>13</td>
</tr>
<tr>
<td>5</td>
<td>50-2488-40</td>
<td>2</td>
<td>Adjustable Steel Leg</td>
<td>1.00</td>
<td>14</td>
</tr>
<tr>
<td>6</td>
<td>552-02068-2250</td>
<td>5</td>
<td>Hex Head Bolt</td>
<td>5/16-18 UNC-2A x 2.25</td>
<td>21</td>
</tr>
<tr>
<td>7</td>
<td>552-02069-1250</td>
<td>15</td>
<td>Hex Head Bolt</td>
<td>3/8-16 UNC x 1.250</td>
<td>23</td>
</tr>
<tr>
<td>8</td>
<td>556-02074-0312</td>
<td>9</td>
<td>Flat Washer</td>
<td>5/16 (9-7/8 x 3/8 x 5/64)</td>
<td>25</td>
</tr>
<tr>
<td>9</td>
<td>556-02074-0375</td>
<td>29</td>
<td>Flat Washer</td>
<td>3/8 (1 X 7/16 x 5/64)</td>
<td>27</td>
</tr>
<tr>
<td>10</td>
<td>554-02072-0312</td>
<td>5</td>
<td>Nylon Lock Nut</td>
<td>5/16-18 UNC</td>
<td>29</td>
</tr>
<tr>
<td>11</td>
<td>554-02072-0375</td>
<td>15</td>
<td>Nylon Lock Nut</td>
<td>3/8-16 UNC</td>
<td>31</td>
</tr>
</tbody>
</table>

Each hardware item may contain spare parts depending on the specific install.
*Note: The air dam must have support brackets similar to the one pictured.
# Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-59 Outdoor Unit mount (MCN 10-4182-1) on your 1995 Kenworth T603 Conventional Truck with high rise sleeper. The AMA-59 is designed specifically for the 1995 Kenworth T603 Conventional Truck with high rise sleeper. It is installed on the driver’s side in the area between the upper part of the side skirt and the back of the sleeper.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.

## Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

## Note

To use this mount, the truck must have side skirts and an airdam. The side skirt provides the attachment points (boomerang brackets) and hardware to mount the AMA-59 to the truck. The truck must also have a grab bar against the sleeper that is used as an additional attachment point. If the truck does not have side skirts or an airdam, use the AMA-10 Outdoor Unit mount.

# Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline.

2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.
Installation Procedure

The following steps apply to every AMA-59 installation. Perform these steps in the order listed below. Installation of the AMA-59 is divided into the following groups:

1. Assemble the Top Hat
2. Attach the Vertical Support Bracket and Vertical Angle Support
3. Attach the Top Hat
4. Disconnect the Rail “Grab” Bar
5. Attach the Diagonal Support Leg
6. Remove Tinnerman and Bolt from Airdam Bracket
7. Attach the Angle Mounting Bracket
8. Attach the Angle Mounting Bracket to the Top Hat

Help
For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-59, be sure to review the Installation Guidelines provided on page 59-2.

Step 1. Assemble the Top Hat

1. Install the antenna mounting plate (item 2 on the parts list) by sliding it into the antenna mounting bracket (item 3) and lining up the holes in the two pieces so that the top of the mounting plate is level when the vehicle is level.

2. After the antenna mounting plate is level, secure it to the antenna mounting bracket using 3/8” bolts, washers, and nuts. This assembled part is now called the top hat.
Step 2. Attach the Vertical Support Bracket and Vertical Angle Support

1. Use the vertical support bracket (item 7) as a template to drill mounting holes into the boomerang bracket of the truck.

2. After drilling the holes, attach both the vertical support bracket and the vertical angle support (item 5) to the boomerang bracket using the 3/8” bolts, washers, and nuts.

Step 3. Attach the Top Hat

1. Attach the top hat to the vertical angle support (item 5) using the 3/8” bolts, washers, and nuts. Be sure that when the Outdoor Unit is attached there is at least a 1” height clearance to the airdam.
**Step 4. Disconnect the Rail “Grab” Bar**

1. Remove the bolt on the driver's side connecting the rail “grab” bar.

**Step 5. Attach the Diagonal Support Leg**

1. Attach one end of the diagonal support leg (item 4) to the back of the top hat.

2. Attach the other end of the diagonal support leg (item 4) to the end of the grab bar.

3. Ensure the mount is level when the truck is level.
Step 6. Remove Tinnerman and Bolt from Airdam Bracket

1. Find the airdam bracket that attaches the airdam to the top of the sleeper on the driver's side. From outside the truck, you can see the two bolts just above the sleeper window.

2. Remove the tinnerman. You have to climb up above the sleeper and under the airdam. Use a small head screw driver or dowel by sliding the head under the top of the tinnerman and pulling up.

3. Remove the bolt that is closest to the rear of the truck.

---

Step 7. Attach the Angle Mounting Bracket

1. Attach the angle mounting bracket (item 1) to the bracket that you just removed the bolt and tinnerman from. Use a new 3/8” bolt, washer, and nut, which are provided.
### Step 8. Attach the Angle Mounting Bracket to the Top Hat

1. Attach an angle mounting bracket (item 1) to the top hat.

2. Attach one end of the diagonal forward leg (item 6) to the angle mounting bracket (item 1) you just attached to the bracket that attaches the airdam and sleeper roof (see Attach the Angle Bracket above).

3. Attach the other end of the diagonal forward leg (item 6) to the angle mounting bracket (item 1) you attached to top hat.

**Note**

The diagonal forward leg (item 6) may have to be cut for it to fit.

4. After the AMA-59 is completely assembled, verify that all the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-59 Outdoor Unit mount.
### Parts List: MCN 10-4182-1 (AMA-59)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-2269-2</td>
<td>2</td>
<td>Angle Mounting Bracket</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>50-3595-1</td>
<td>1</td>
<td>Antenna Mounting Plate</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>50-3595-2</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>8</td>
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<tr>
<td>4</td>
<td>50-8536-1</td>
<td>1</td>
<td>Diagonal Support Leg</td>
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<tr>
<td>5</td>
<td>50-8537-1</td>
<td>1</td>
<td>Vertical Angle Support</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>6</td>
<td>50-8538-1</td>
<td>1</td>
<td>Diagonal Forward Leg</td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>7</td>
<td>50-8539-1</td>
<td>1</td>
<td>Vertical Support Bracket</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>8</td>
<td>552-02068-1000</td>
<td>6</td>
<td>Hex Head Bolt</td>
<td>5/16-18 UNC-2A X 1.00</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>552-02069-1250</td>
<td>15</td>
<td>Hex Head Bolt</td>
<td>3/8-16 UNC X 1.250</td>
<td>6</td>
</tr>
<tr>
<td>10</td>
<td>554-02072-0312</td>
<td>6</td>
<td>Nylon Lock Nut</td>
<td>5/16-18 UNC</td>
<td>8</td>
</tr>
<tr>
<td>11</td>
<td>554-02072-0375</td>
<td>15</td>
<td>Nylon Lock Nut</td>
<td>3/8-16 UNC</td>
<td>9</td>
</tr>
<tr>
<td>12</td>
<td>556-02074-0312</td>
<td>11</td>
<td>Flat Washer</td>
<td>5/16 (7/8 X 3.8)</td>
<td>13</td>
</tr>
<tr>
<td>13</td>
<td>556-02074-0375</td>
<td>29</td>
<td>Flat Washer</td>
<td>3/8 (1 X 7/16 X 5/64)</td>
<td>14</td>
</tr>
<tr>
<td>14</td>
<td>556-02281-0007</td>
<td>3</td>
<td>Flat Washer</td>
<td>7/16 1.812X.453X109</td>
<td>16</td>
</tr>
</tbody>
</table>

Note: Items 8 through 14 are contained in antenna mounting kit 65-2910-59.
Each hardware item includes spare parts.
Item 14 may or may not be used depending on the installation.
AMA-60

Designed for the Mack R and CH Model and Volvo/White WG Trucks

*Note: This mount is similar to the AMA-37. This mount may be suitable for other rain gutter applications - the rain gutter MUST be suitable for support.
# Introduction

This document provides the guidelines and an installation procedure to follow when installing the AMA-60 Outdoor Unit mount (MCN 10-4183-1) on your Mack Model R and CH or Volvo/White WG trucks. An assembly drawing of the AMA-60 and an accompanying parts list are provided in these instructions.

The AMA-60 is designed specifically for the Mack Model R and CH or Volvo/White WG trucks. It is installed over the roof of the cab and connected on the rain gutter.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.

## Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit.

---

## Installation Guidelines

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Unpack the mount hardware and verify that all the parts listed on the parts list provided in this document are present. If a part is missing, call the Customer Service Hotline.</td>
</tr>
<tr>
<td>2.</td>
<td>In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.</td>
</tr>
<tr>
<td>3.</td>
<td>Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.</td>
</tr>
<tr>
<td>4.</td>
<td>The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.</td>
</tr>
<tr>
<td>5.</td>
<td>Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</td>
</tr>
<tr>
<td>6.</td>
<td>If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>7.</td>
<td>If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
</tbody>
</table>
## Installation Procedure

The following steps apply to every AMA-60 installation. Perform these steps in the order listed below. Installation of the AMA-60 is divided into the following groups:

1. Attach the Adjustment Plates
2. Attach the Mount

### Help

For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

### Note

Before installing the AMA-60, be sure to review the Installation Guidelines provided on page 60-2.

### Step 1. Attach the Adjustment Plates

1. Attach the adjustment plates (item 1 in the parts list) to each side of the antenna mounting bracket (item 4), using the studs on each side, cam nuts (item 3), and nylon lock nuts (item 2).
Step 2. Attach the Mount

1. Attach the mount to the roof of the cab (in the corner on the driver's side). Ensure that the mount is level when the truck is level.

2. When a suitable location is found, tighten the lock nuts so that the adjustment plates grip the outside of the rain gutter of the sleeper.

3. After the AMA-60 installation is completed, verify that all the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-60.
## Parts List: MCN 10-4183-1 (AMA-60)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-4044-2</td>
<td>2</td>
<td>Adjustment Plate</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>554-02072-0375</td>
<td>5</td>
<td>Nylon Lock Nut</td>
<td>3/8-16 UNC</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>50-4046-1</td>
<td>4</td>
<td>Cam Nut</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>50-6484-51</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

Note: Items 2 and 3 are contained in antenna mounting kit 65-2910-60.  
Item 4 is contained in antenna mounting kit 50-6484-1.  
Item 4 contains 4 flush mounted studs.  
Item 2 contains 1 spare part.
Designed for 1994-95 Volvo/White Model ES Conventional w/ Integral Sleeper

* Use of this mount is RESTRICTED to tractors hauling flatbeds and tankers only. NOT to be used on trucks hauling vans, refrigerated or dry.
Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-61 Outdoor Unit mount (MCN 10-8472-1) on your 1994 Volvo/White Model conventional truck with Integral Cab. An assembly drawing of the AMA-61 and an accompanying parts list are provided in these instructions.

Important
The instructions for mount installations provided in this guide, assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized Qualcomm representative has identified the mount type to be used on the vehicle. Qualcomm strongly recommends that you obtain installation training from Qualcomm for first time installations and/or new mount types and/or vehicle types prior to installation.

- The AMA-61 is designed specifically for the 1994 Volvo/White conventional truck with Integral Cab. It is installed on the driver’s side in the area between the upper part of the side skirt and the back of the sleeper.

Note
Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

To use this mount, the truck must have side skirts and an airdam. The side skirt provides the attachment points (boomerang brackets) and hardware to mount the AMA-61 to the truck.
## Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline.

2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

**Note**

Do not use impact wrenches or other air-pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation kits. Over-torquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.

Use hand tools to tighten these parts.
## Installation Procedure

The following steps apply to every AMA-61 installation. Perform these steps in the order listed below. Installation of the AMA-61 is divided into the following groups:

1. Place the Antenna Mounting Mast Against the Boomerang Brackets
2. Attach the Diagonal Support Bracket
3. Mark and Drill Mounting Holes for the Top Mast Mounting Bracket
4. Mark and Drill Mounting Holes for the Bottom Mast Mounting Bracket
5. Attach the Antenna Mounting Mast

**Help**

For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

**Note**

Before installing the AMA-61, be sure to review the Installation Guidelines provided on page 61-2.
**Step 1. Place the Antenna Mounting Mast Against the Boomerang Brackets**

1. Place the antenna mounting mast (item 1 of the parts list) against the boomerang brackets attached to the back of the sleeper.

2. Ensure the antenna mounting mast is vertical when it rests against the boomerang brackets.

*Note*

You may need another person to help with the next step.

3. Mark where the antenna mounting mast rests against both the top and bottom boomerang brackets.

---

**Step 2. Attach the Diagonal Support Bracket**

1. Attach the diagonal support bracket (item 2) to the mast mounting bracket (item 3) using 3/8” bolts, washers, and nuts.
### Step 3. Mark and Drill Mounting Holes for the Top Mast Mounting Bracket

1. Place the top mast mounting bracket (item 3) and the attached diagonal support bracket (item 2) at the bottom of the top boomerang bracket.

2. Line this part up with the marks you made of the antenna mounting mast (item 1) earlier in step 1.

3. Drill the mounting holes.

4. Attach the top mounting bracket (item 3) and the attached diagonal support bracket (item 2) to bottom of the top boomerang bracket using 3/8” bolts, washers, and nuts.

### Step 4. Mark and Drill Mounting Holes for the Bottom Mast Mounting Bracket

1. Place the bottom mast mounting bracket (item 4) on top of the bottom boomerang bracket.

2. Line this part up with the marks you made of the antenna mounting mast (item 1) earlier in step 1.

3. Drill the mounting holes.

4. Attach the bottom mounting bracket (item 4) to the top of the bottom boomerang bracket using 3/8” bolts, washers, and nuts.
### Step 5. Attach the Antenna Mounting Mast

1. Place the antenna mounting mast (item 1) between the top and bottom mast mounting brackets you attached in steps 4 and 5.

2. Ensure the antenna mounting mast is vertical and the top is level when the truck is level.

3. Attach the antenna mounting mast using 3/8” bolts, washers, and nuts.

4. Once the AMA-61 is completely assembled, verify that all bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-61 Outdoor Unit mount.
### Parts List: MCN 10-8472-1 (AMA-61)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-8659-1</td>
<td>1</td>
<td>Antenna Mounting Mast</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>50-8660-1</td>
<td>1</td>
<td>Diagonal Support Bracket</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>50-8661-1</td>
<td>1</td>
<td>Mast Mounting Bracket</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>50-8661-2</td>
<td>1</td>
<td>Mast Mounting Bracket</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>552-02069-1250</td>
<td>11</td>
<td>Hex Head Bolt</td>
<td>3/8-16 UNC</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>556-02074-0375</td>
<td>21</td>
<td>Flat Washer</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>7</td>
<td>554-02072-0375</td>
<td>11</td>
<td>Nylon Lock Nut</td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

Note: Items 5 through 7 are contained in antenna mounting kit 65-2910-61.
Extra hardware items are included.
Designed for 1995 International Conventional w/ Low Roof Pro Sleeper and No Airdam

Side View

Rear View

2 places

Existing Part

2 places

2 places

2 places

2 places

4 places

5 places

5 places
### Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-62 Outdoor Unit mount (MCN 10-8473-1) on your 1995 International conventional truck with Low-Roof Pro Sleeper and no airdam.

An assembly drawing of the AMA-62 and an accompanying parts list are provided in these instructions. The AMA-62 is designed specifically for the 1994 International conventional truck with Low Roof Pro Sleeper and no airdam. It is installed on the boomerang bracket on the driver's side against the side skirt and the back of the sleeper.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.

<table>
<thead>
<tr>
<th>Caution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>To use this mount, the truck must have side skirts. The side skirt provides the attachment points (boomerang bracket) and hardware to mount the AMA-62 to the truck.</td>
</tr>
</tbody>
</table>

### Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline.

2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13' 6”.

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.
Installation Procedure

The following steps apply to every AMA-62 installation. Perform these steps in the order listed below. Installation of the AMA-62 is divided into the following groups:

1. Insert Spacers
2. Attach the Mount

Help

For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note

Before installing the AMA-62, be sure to review the Installation Guidelines provided on page 62-2.
Step 1. Insert Spacers

1. Remove the bolts that attach the boomerang bracket to the back of the sleeper and side skirt on the driver's side.

2. Place the spacers (item 1 of the parts list) in the gutter of the boomerang bracket.
### Step 2. Attach the Mount

1. Attach the antenna mounting bracket to the back of the sleeper and side skirt. Be sure that the mount is level when the truck is level.

2. After the AMA-62 installation is completed, verify that all the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-62.
# Parts List: MCN 10-8473-1 (AMA-62)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-8662-1</td>
<td>2</td>
<td>Mounting Bracket Spacer</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>50-8663-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>552-02068-1000</td>
<td>3</td>
<td>Hex Head Bolt</td>
<td>5/16-18 X 1.00</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>550-02068-2000</td>
<td>3</td>
<td>Hex Head Bolt</td>
<td>5/16-18 X 2.00</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>556-02074-0312</td>
<td>5</td>
<td>Flat Washer</td>
<td>5/16 (7/8 X 3/8 X 5/64)</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>554-02072-0312</td>
<td>5</td>
<td>Nylon Lock Nut</td>
<td>5/16-18</td>
<td>7</td>
</tr>
</tbody>
</table>

Note: Items 3 through 6 are contained in antenna mounting kit 65-2910-62. Each hardware item contains spare parts. Item 6 may or may not be used depending on the installation.
AMA-66

Outdoor Unit Mount Installation Guide

Designed for Kenworth Aerodyne (Shelf Replacement Bracket)

Side View

Rear View

2 places

12 places

11 places

1

2

3

4

5

6

(2)
# Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-66 Outdoor Unit mount (MCN 10-8477-1) on your Kenworth Conventional Truck with Aerodyne sleeper (shelf replacement bracket). An assembly drawing of the AMA-66 and an accompanying parts list are provided in these instructions.

The AMA-66 is designed specifically for the 1992-94 Kenworth Conventional Truck with Aerodyne sleeper (shelf replacement bracket). It is installed on the opening of the ODU shelf located on the back of the airdam.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call QWBS Customer Support at (800) 541-7490.

## Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

# Installation Guidelines

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call Customer Support.</td>
</tr>
<tr>
<td>2.</td>
<td>In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13' 6&quot;.</td>
</tr>
<tr>
<td>3.</td>
<td>Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.</td>
</tr>
<tr>
<td>4.</td>
<td>The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.</td>
</tr>
<tr>
<td>5.</td>
<td>Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</td>
</tr>
<tr>
<td>6.</td>
<td>If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>7.</td>
<td>If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
</tbody>
</table>
Installation Procedure

The following steps apply to every AMA-66 installation. Perform these steps in the order listed below. Installation of the AMA-66 is divided into the following groups:

1. Assemble the Top Hat
2. Attach the Bracket Mounting Plate
3. Attach the Top Hat

Help
For help during installation, call Customer Support for assistance. The toll-free telephone number is (800) 541-7490, and Customer Support is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-66, be sure to review the Installation Guidelines provided on page 66-2.

Step 1. Assemble the Top Hat

1. Install the antenna mounting plate (item 2 on the parts list) by sliding it into the antenna mounting bracket (item 3) and lining up the holes in the two pieces so that the top of the antenna mounting plate is level when the vehicle is level.

2. After the antenna mounting plate is level, secure it to the antenna mounting bracket using 3/8" bolts, washers, and nuts. This assembled part is now called the top hat.
### Step 2. Attach the Bracket Mounting Plate

<table>
<thead>
<tr>
<th>Step</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Place the bracket mounting plate (item 1) against the rear of the airdam shelf.</td>
</tr>
<tr>
<td>2.</td>
<td>Ensure that the bracket mounting plate is level when the truck is level.</td>
</tr>
<tr>
<td>3.</td>
<td>Mark the mounting holes of the bracket mounting plate on the airdam shelf.</td>
</tr>
<tr>
<td>4.</td>
<td>Drill the mounting holes.</td>
</tr>
<tr>
<td>5.</td>
<td>Attach the bracket mounting plate (item 1) to the rear of the airdam shelf using the 3/8&quot; bolts, washers, and nuts. Use the 7/16&quot; fender washers on the top, backside of the airdam shelf mounting holes.</td>
</tr>
</tbody>
</table>

![Bracket mounting plate diagram](image)

### Step 3. Attach the Top Hat

<table>
<thead>
<tr>
<th>Step</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Attach the top hat to the bracket mounting plate (item 1) using the 3/8&quot; bolts, washers, and nuts provided.</td>
</tr>
<tr>
<td>2.</td>
<td>Use the 7/16&quot; fender washers (item 7) on the top mounting holes of the bracket mounting plate (item 1) and airdam shelf. Place the fender washers on the inside of the shelf.</td>
</tr>
<tr>
<td>3.</td>
<td>After the AMA-66 is completely assembled, verify that all the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.</td>
</tr>
</tbody>
</table>

This completes the installation of the AMA-66 Outdoor Unit mount.
### Parts List: MCN 10-8477-1 (AMA-66)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-8657-1</td>
<td>1</td>
<td>Bracket Mounting Plate</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>50-8658-1</td>
<td>1</td>
<td>Antenna Mounting Plate</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>50-3595-2</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>552-02069-1250</td>
<td>13</td>
<td>Hex Head Bolt</td>
<td>3/8-16 x .250</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>554-02072-0375</td>
<td>13</td>
<td>Nylon Lock Nut</td>
<td>3/8-16</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>665-02074-0375</td>
<td>23</td>
<td>Flat Washer</td>
<td>3/8 (1 x 7/16 x 5/64)</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>556-02281-0007</td>
<td>3</td>
<td>Fender Washer</td>
<td>7/16 (1.812 x .453 x .109)</td>
<td>7</td>
</tr>
</tbody>
</table>

Note: Items 4 through 7 are contained in antenna mounting kit 65-2910-66. Each hardware item contains spare parts.
AMA-67

Outdoor Unit Mount Installation Guide

Designed for Peterbilt Conventional w/ Whale Tail Airdam

Side View

Rear View

5 Places

1

3

2

9 places

17 places

11 places

2 Places

6

7

4

8

5

OmniTRACS®
MOBILE COMMUNICATIONS SYSTEM
Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-67 Outdoor Unit mount (MCN 10-8478-1) on your Peterbilt conventional truck with a Whale Tail Airdam. An assembly drawing of the AMA-67 and an accompanying parts list are provided in these instructions.

The AMA-67 is designed specifically for the Peterbilt conventional truck with a Whale Tail Airdam. It is installed on the driver’s side in the back of the whale tail airdam.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call Customer Support at (800) 541-7490.

Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call Customer Support.

2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.
Installation Procedure

The following steps apply to every AMA-67 installation. Perform these steps in the order listed below. Installation of the AMA-67 is divided into the following groups:

1. Attach the Bracket Mounting Plate
2. Assemble the Top Hat
3. Attach the Top Hat

Help
For help during installation, call Customer Support for assistance. The toll-free telephone number is (800) 541-7490, and Customer Support is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-67, be sure to review the Installation Guidelines provided on page 67-2.

Step 1. Attach the Bracket Mounting Plate

1. Place the bracket mounting plate (item 1 of the parts list) against the driver's side corner of the whale tail.

2. Ensure that the bracket mounting plate is level when the truck is level.

3. Mark the mounting holes of the bracket mounting plate on the whale tail.

4. Drill the mounting holes.

5. Attach the bracket mounting plate (item 1) to the whale tail airdam using only the three (3) top holes. Use the 3/8” bolts, washers, and nuts. Use the 7/16” fender washers on the backside of the whale tail airdam.
### Step 2. Assemble the Top Hat

1. Install the antenna mounting plate (item 2) by sliding it into the antenna mounting bracket (item 3) and lining up the holes in the two pieces so that the top of the antenna mounting plate is level when the vehicle is level.

2. After the antenna mounting plate is level, secure it to the antenna mounting bracket using 3/8” bolts, washers, and nuts. This assembled part is now called the top hat.

### Step 3. Cut and Drill the Plywood Backing Panel

1. Attach the top hat to the bracket mounting plate using the 3/8” bolts, washers, and nuts provided.

2. Use two (2) 3/8” X 1.50 bolts (item 5) on the left hand side that attaches the top hat to the mounting bracket plate and whale tail airdam.

3. Ensure that the top hat is level when the truck is level.

4. After the AMA-67 is completely assembled, verify that all the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-67 Outdoor Unit mount.
### Parts List: MCN 10-8478-1 (AMA-67)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-8656-1</td>
<td>1</td>
<td>Bracket Mounting Plate</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>50-3595-1</td>
<td>1</td>
<td>Antenna Mounting Plate</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>50-3595-2</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>552-02069-1250</td>
<td>10</td>
<td>Hex Head Bolt</td>
<td>3/8-16 x 1.25</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>552-02069-1500</td>
<td>3</td>
<td>Hex Head Bolt</td>
<td>3/8-16 x 1.50</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>554-02072-0375</td>
<td>12</td>
<td>Nylon Lock Nut</td>
<td>3/8-16</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>665-02074-0375</td>
<td>18</td>
<td>Flat Washer</td>
<td>3/8 (1 x 7/16 x 5/64)</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>556-02281-0007</td>
<td>6</td>
<td>Fender Washer</td>
<td>7/16 (1.812 x .453 x .109)</td>
<td>9</td>
</tr>
</tbody>
</table>

Note: Items 4 through 7 are contained in antenna mounting kit 65-2910-67. Each hardware item contains spare parts.
Designed for International Conventional with High Rise Pro Sleeper

*Note*: This mount replaces the crossbar that connects the side skirt to the back of the sleeper.
Introduction

This document provides the guidelines and installation procedure to follow when installing the AMA-71 Outdoor Unit mount (MCN 10-8482-1) on your International conventional truck with Hi-Rise Pro Sleeper.

To use this mount, the truck must have side skirts. The side skirts provide the attachment points (boomerang bracket) and hardware to mount the AMA-71 to the truck. It must be installed on the driver’s side of the sleeper against the side skirt and the back of the sleeper. This mount replaces the crossbar that connects the side skirt to the back of the sleeper.

An assembly drawing of the AMA-71 and an accompanying Parts List are provided in these instructions.

Important

The instructions for mount installations provided in this guide, assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle. QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first-time installations and/or new mount types and/or vehicle types prior to installation.

Note

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call Customer Support at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

If the mount you are installing requires the use of a sealant, special attention is needed to ensure a watertight seal. The best approach is to create a silicone seal on the inside and outside of the holes drilled into the truck/sleeper roof. Bolts should be installed from the inside with the nuts on the outside. (If the bolts are installed from the outside, the extra bolt length may not allow you to reinstall the headliner.)

Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call Customer Support.

2. In general, the higher the Outdoor Unit the better the MCT/IMCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.

3. Install the mount so the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicone (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls a refrigerated trailer or dry van, this mount should NOT be used.

8. Do not use impact wrenches or other air-pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation Kits. Use hand tools to tighten these parts. Over-torquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.
Installation Procedure

The following steps apply to every AMA-71 installation. Perform these steps in the order listed below.

1. Attach the plate mounting bracket.
2. Disconnect the crossbar.
3. Position the mount.
4. Attach the mount.

Help
For help during installation, call QUALCOMM Customer Support at (800) 541-7490. Customer Support is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-71, be sure to review the Installation Guidelines provided on page 71-2.

Step 1. Attach the plate mounting bracket

1. Attach the plate mounting bracket (item 1 of the Parts List) to the antenna mounting plate (item 2) using 3/8" bolts, washers, and nuts.
Step 2. Remove the crossbar

1. Remove the crossbar that attaches the side skirt to the back of the airdam.

Step 3. Position the mount

1. Position the mount against the side skirt and back of airdam.

2. Ensure that the mount is level when the truck is level.

3. Use the mounting holes of the bracket as a template for drilling holes in the side skirt and airdam.
### Step 4. Attach the mount

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Attach the assembled mount in place of the cross-bar.</td>
</tr>
<tr>
<td>2.</td>
<td>You must drill a mounting hole in the back of the airdam to attach the left side of the plate mounting bracket (item 1). A fender washer (item 6) should also be used.</td>
</tr>
<tr>
<td>3.</td>
<td>After the AMA-71 installation is completed, verify that all of the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.</td>
</tr>
</tbody>
</table>

This completes the installation of the AMA-71 Outdoor Unit mount.
### Parts List: MCN 10-8482-1 (AMA-71)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-8676-1</td>
<td>1</td>
<td>Plate Mounting Bracket</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>50-8675-1</td>
<td>1</td>
<td>Antenna Mounting Plate</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>552-02069-1250</td>
<td>7</td>
<td>Hex Head Bolt</td>
<td>3/8-1.25</td>
<td>11</td>
</tr>
<tr>
<td>4</td>
<td>554-02072-0375</td>
<td>7</td>
<td>Nylon Lock Nut</td>
<td>3/8-16 UNC</td>
<td>13</td>
</tr>
<tr>
<td>5</td>
<td>556-02074-0375</td>
<td>13</td>
<td>Flat Washer</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>6</td>
<td>556-02281-0007</td>
<td>2</td>
<td>Fender Washer</td>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>

Extra hardware items are included.
AMMA-73

Designed for Vans or Vehicles with Flat Surfaces

Side View

Rear View

3 places

1

2 places

2

Plate goes on top of box roof

Plate goes on inside of box roof

(2)
## Introduction

This document provides the guidelines and an installation procedure to follow when installing the AMA-73 Outdoor Unit mount (MCN 10-8484-1) on your van or vehicle with a flat surface. An assembly drawing of the AMA-73 and an accompanying parts list are provided in these instructions.

The AMA-73 is designed specifically for vans or vehicles with a flat surface. It is installed over the roof of the cargo box behind the cab of the truck.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.

**Caution**

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

## Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list provided in this document are present. If a part is missing, call the Customer Service Hotline.

2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the front of the cargo box. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

**Note**

Do not use impact wrenches or other air-pressured tools to tighten the nuts and bolts in your MCT/IMCT Installation kits. Over-torquing the MCT/IMCT hardware results in stripped nuts and potentially time-consuming and expensive repairs.

Use hand tools to tighten these parts.
Installation Procedure

The following steps apply to every AMA-73 installation. Perform these steps in the order listed below. Installation of the AMA-73 is divided into the following groups:

1. Find Suitable Location and Mark Holes
2. Attach the ODU to the Antenna Mounting Bracket
3. Attach the Mount

Help
For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-73, be sure to review the Installation Guidelines provided on page 73-2.

Step 1. Determine a Suitable Location and Mark Holes

1. Find a suitable location for the mount. Typically, the best place is in the middle of the cargo box, near the front, closest to the truck cab.

2. Use the antenna mounting bracket (item 1 of the parts list) as a template and mark the mounting holes on the surface. Ensure that the mount is level when the truck is level.

3. Drill the 3/8” mounting holes.
Step 2. Attach the ODU to the Antenna Mounting Bracket

1. Attach the ODU to the antenna mounting bracket (item 1).

Step 3. Attach the Mount

1. There are two (2) backing plates. One goes on the inside of the cargo box. The other backing plate lies flush on top of the cargo box and under the antenna mounting bracket (item 1).

2. Attach the mount to the roof of the cargo box using the 3/8” bolts, washers, and nuts. Ensure that the mount is level when the truck is level.

Note
Some applications may require a longer bolt. The 3/8” bolt is the only size supported.

3. Be sure to use silicon (RTV) sealant around each of the holes to prevent leaks.

4. After the AMA-73 installation is completed, verify that all the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-73.
### Parts List: MCN 10-8484-1 (AMA-73)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-8716-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>50-8717-1</td>
<td>2</td>
<td>Backing Plate</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>552-02069-1250</td>
<td>4</td>
<td>Hex Head Bolt</td>
<td>3/8-16 UNC</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>556-02074-0375</td>
<td>7</td>
<td>Flat Washer</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>554-02072-0375</td>
<td>4</td>
<td>Nylon Lock Nut</td>
<td>3/8-16 UNC</td>
<td>8</td>
</tr>
</tbody>
</table>

**Note:** Items 3 through 5 are contained in antenna mounting kit 65-2910-73.

Each hardware item includes spae parts.

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## Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-74 Outdoor Unit (ODU) mount (MCN 10-8485-1).

An assembly drawing of the AMA-74 and an accompanying parts list are provided in these instructions. It is installed on an Auto Carrier truck.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420-1, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.

### Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the ODU warranty.

## Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline.

2. In general, the higher the ODU the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13' 6”.

3. Install the mount so that the ODU is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the cargo area, and to the cab of the vehicle. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. Only ODUs (10-4150-X) with the TNC connectors facing the side can be used with this mount.

### Note

Do not use impact wrenches or other air-pressured tools to tighten the nuts and bolts in your MCT/IMCT Installation kits. Over-torquing the MCT/IMCT hardware results in stripped nuts and potentially time-consuming and expensive repairs.

Use hand tools to tighten these parts.
Installation Procedure

The following steps apply to every AMA-74 installation. Perform these steps in the order listed below. Installation of the AMA-74 is divided into the following groups:

1. Mark Mounting Holes for the Antenna Mounting Plate
2. Attach the ODU to the Antenna Mounting Plate
3. Attach the Antenna Mounting Plate
4. Attach Angle Mounting Brackets to the Impact Shield
5. Attach the Impact Shield to the Antenna Mounting Plate
6. Secure the Impact Shield

Help
For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-74, be sure to review the Installation Guidelines provided on page 74-2.
**Step 1. Mark Mounting Holes for the Antenna Mounting Plate**

1. Lay the antenna mounting plate (item 1 of the parts list) on the driver’s side roof of the vehicle.
2. Use the holes of the antenna mounting plate as a template to mark the mounting hole locations.
3. Drill the 3/8” mounting holes.
4. Do not Attach the antenna mounting plate (item 1).

---

**Step 2. Attach the ODU to the Antenna Mounting Plate**

1. Attach the ODU to the antenna mounting plate (item 1).

**Note**

Only ODUs (10-4150-X) with the TNC connectors facing the side can be used with this mount. Ensure the TNC connectors are facing to the rear of the vehicle.
### Step 3. Attach the Antenna Mounting Plate

1. Use the 3/8 X 1.25” bolts along with the 3/8” washers and nuts to attach the antenna mounting plate/ODU to the front of the roof.

![Antenna Mounting Plate](image)

### Step 4. Attach Angle Mounting Brackets to the Impact Shield

1. Attach the angle mounting brackets (item 4) to each end of the impact shield (item 4) using the 3/8 X 1.25” bolts and 3/8” washers and nuts.

**Note**

Do not tighten the bolts completely until the next step. This allows you to adjust the mount if necessary.

![Angle Mounting Brackets](image)
Step 5. Attach the Impact Shield to the Antenna Mounting Plate

1. Attach the impact shield (item 4) to the antenna mounting plate (item 1).

2. Be sure to use the backing plate (item 3) under the roof of the vehicle and at the back of the mount. The longer 3/8 X 1.5" bolts should be used here.
Step 6. Secure the Impact Shield

1. After the AMA-74 installation is completed, verify that all of the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-74 Outdoor Unit mount.
### Parts List: MCN 10-8485-1 (AMA-74)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-8722-1</td>
<td>1</td>
<td>Antenna Mounting Plate</td>
<td></td>
<td>2</td>
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<tr>
<td>2</td>
<td>50-8723-1</td>
<td>2</td>
<td>Angle Mounting Bracket</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>50-8724-1</td>
<td>1</td>
<td>Backing Plate</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>50-8725-1</td>
<td>1</td>
<td>Impact Shield</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>552-02069-1500</td>
<td>3</td>
<td>Hex Head Bolt</td>
<td>3/8-16 UNC-2A x 1.500</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>552-02069-1250</td>
<td>7</td>
<td>Hex Head Bolt</td>
<td>3/8-16 UNC-2A x 1.250</td>
<td>7</td>
</tr>
<tr>
<td>7</td>
<td>554-02072-0375</td>
<td>9</td>
<td>Nylon Lock Nut</td>
<td>3/8-16 UNC</td>
<td>9</td>
</tr>
<tr>
<td>8</td>
<td>556-02074-0375</td>
<td>17</td>
<td>Flat Washer</td>
<td></td>
<td>11</td>
</tr>
</tbody>
</table>

Note: Items 5 through 8 are contained in antenna mounting kit 65-2910-74. Each hardware item contains spare parts.
AMA-76

Outdoor Unit Mount Installation Guide

Designed for 1995 International Conventional w/ High Rise Pro Sleeper, Drip Rails, and No Air Dam
## Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-76 Outdoor Unit mount (MCN 10-8487-1) on your 1995 International conventional truck with Hi-Rise Pro Sleeper, drip rails, and no air dam.

An assembly drawing of the AMA-76 and an accompanying parts list are provided in these instructions. The AMA-76 is designed specifically for the 1995 International conventional truck with Hi-Rise Pro Sleeper, drip rails, and no air dam. It is installed on the driver's side against the back of the sleeper and utilizes the drip rails.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420-1, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.

### Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

### Note

To use this mount, the truck must have drip rails around the sleeper.

This mount does not work with trucks that have side skirts.

## Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline.

2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13' 6".

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

### Note

Do not use impact wrenches or other air-pressured tools to tighten the nuts and bolts in your MCT/IMCT Installation kits. Over-torquing the MCT/IMCT hardware results in stripped nuts and potentially time-consuming and expensive repairs.

Use hand tools to tighten these parts.
Installation Procedure

The following steps apply to every AMA-76 installation. Perform these steps in the order listed below. Installation of the AMA-76 is divided into the following groups:

1. Assemble the Top Hat
2. Disconnect the Cross Bar
3. Position the Mount
4. Attach the Mount

Help
For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-76, be sure to review the Installation Guidelines provided on page 76-2.

Step 1. Assemble the Top Hat

1. Attach the antenna mounting plate (item 1 of the parts list) to the antenna mounting bracket (item 2) using 3/8” bolts, washers, and nuts.
### Step 2. Attach the Backing Plate to the Diagonal Support Tube

<table>
<thead>
<tr>
<th>Backing Plate (item 7)</th>
<th>Diagonal Support Tube (item 5)</th>
</tr>
</thead>
</table>

1. Attach the backing plate (item 7) to the diagonal support tube (item 5) using the 3/8” hardware provided.

### Step 3. Attach the Adjustable Stud Plate and Adjustment Plate to the Diagonal Support Tube

<table>
<thead>
<tr>
<th>Diagonal Support Tube (item 5)</th>
<th>Adjustable Stud Plate (item 6)</th>
<th>Adjustment Plate (item 3)</th>
</tr>
</thead>
</table>

1. Attach the adjustable stud plate (item 6) to the diagonal support tube (item 5). Do not secure the parts with hardware at this time.

2. Attach the adjustment plate (item 3) to the adjustable stud plate (item 6) and diagonal support tube (item 5).

3. Ensure that the bottom of the adjustable stud plate (item 6) is in the channel of the drip rail.

**Note**

Ensure the adjustment plate (item 3) is on the outside of the drip rail.

4. Secure the adjustment plate (item 3) to the adjustable stud plate (item 6) and diagonal support tube using two (2) cam nuts and the 3/8” hardware provided.
Step 4. Attach the Top Hat and Vertical Mounting Plate to the Backing Plate

1. Attach the vertical mounting plate (item 4) to the backing plate (item 7).

2. Attach top hat (assembled in step 1) to the vertical mounting plate (item 4) and the backing plate (item 7) using 3/8” hardware.

**Note**
Make sure the bottom of the vertical mounting plate (item 4) rests in the channel of the drip rail. Also, ensure the bottom of the vertical mounting plate does not rest into the radius of the corner.

---

Step 5. Attach the Adjustment Plate

1. Attach the adjustment plate (item 8) to the bottom of the vertical mounting plate (item 4) using two (2) cam nuts and 3/8” nuts.

**Note**
Ensure the adjustment plate (item 3) is on the outside of the drip rail.

This completes the installation of the AMA-76 Outdoor Unit mount.
## Parts List: MCN 10-8487-1 (AMA-76)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-3595-2</td>
<td>1</td>
<td>Antenna Mounting Plate</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>50-3595-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>50-30074-1</td>
<td>1</td>
<td>Adjustment Plate</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>50-30075-1</td>
<td>1</td>
<td>Vertical Mounting Plate</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>50-30076-1</td>
<td>1</td>
<td>Diagonal Support Tube</td>
<td></td>
<td>10</td>
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<tr>
<td>6</td>
<td>50-30077-1</td>
<td>1</td>
<td>Adjustable Stud Plate</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>7</td>
<td>50-30078-1</td>
<td>1</td>
<td>Backing Plate</td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>8</td>
<td>50-30079-1</td>
<td>1</td>
<td>Adjustment Plate</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>9</td>
<td>552-02069-1250</td>
<td>6</td>
<td>Hex Head Bolt</td>
<td>3/8-16 UNC x 1.250</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>554-02072-0375</td>
<td>15</td>
<td>Nylon Lock Nut</td>
<td>3/8-16 UNC</td>
<td>7</td>
</tr>
<tr>
<td>11</td>
<td>556-02074-0375</td>
<td>16</td>
<td>Flat Washer</td>
<td>3/8 (1 x 7/16 x 5/64)</td>
<td>9</td>
</tr>
<tr>
<td>12</td>
<td>50-4046-1</td>
<td>4</td>
<td>Cam Nut</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Note: Items 7 through 12 are contained in antenna mounting kit 65-2910-76.
AMA-80

Outdoor Unit Mount Installation Guide

Designed for COE and Conventional w/ Full Air Dams*

*Note: This mount is designed for air dams that are fastened to roof of the truck or sleeper using "L-shaped" brackets w/ side air dam support brackets. If gussey plates hold airdam to sleeper, use AMA-26.
## Introduction

This document provides the guidelines and an installation procedure to follow when installing the AMA-10 Outdoor Unit mount (MCN 10-22457-1) on your vehicle. An assembly drawing of the AMA-10 and an accompanying parts list are provided below.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Custer Service Hotline at (800) 541-7490.

## Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

## Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline.

2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13' 6”.

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties and convoluted tubing.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn.
Installation Procedure

The following steps apply to every AMA-80 installation. Perform these steps in the order listed below. Installation of the AMA-80 is divided into the following groups:

1. Attach the Channel Mounting Bracket and Backing Plate
2. Install the Antenna Support Horizontal Channel
3. Attach the Vertical Channel
4. Attach the Antenna Mounting Bracket
5. Attach the Antenna Mounting Plate
6. Attach the AMA-80 Adjustable Legs
7. Drill Clearance Holes

Help
For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-80, be sure to review the Installation Guidelines provided on page 80-2.

Step 1. Attach the Channel Mounting Bracket and Backing Plate

1. Attach the channel mounting bracket (item 8 in the parts list) and the backing plate (item 7) to the airdam bracket using 3/8” 2A X 1.5 bolts (item 15) and 3/8” washers and nuts.

Note
Do not tighten the hardware completely. This allows you to make adjustments later.
Step 2. Install the Antenna Support Horizontal Channel

1. Install the antenna support horizontal channel (item 4) between the two channel mounting brackets using the 3/8” bolts, washers, and nuts.

2. Verify that the antenna support horizontal channel is level.

Note
If necessary, the end of the antenna support horizontal channel may be trimmed to fit between the channel mounting brackets.

---

Step 3. Attach the Vertical Channel

1. Select the four predrilled holes closest to the center of the horizontal channel and Attach the base of the vertical channel (item 3) to the antenna support horizontal channel (item 4) using 3/8” bolts, washers, and nuts.
**Step 4. Attach the Antenna Mounting Bracket**

1. Select the four predrilled holes in the antenna support vertical channel (item 3) to Attach the antenna mounting bracket (item 2).

2. Verify the selected holes are as high as possible on the vertical channel while still allowing a minimum 1” clearance between the Outdoor Unit and any part of the air dam. Generally, an 8” space between the top of the antenna mounting plate and the underside of the air dam provides adequate Outdoor Unit clearance, but you must allow for the curvature of the air dam.

**Step 5. Attach the Antenna Mounting Plate**

1. Attach the antenna mounting plate (item 1) by sliding it into the antenna mounting bracket (item 2) and lining up the bolt holes in the two pieces so that the top of the mounting plate is level when the vehicle is level. If necessary, additional 3/8” clearance holes can be drilled in the sides of the mounting plate.

2. After the antenna mounting plate is level, secure it to the antenna mounting bracket using 3/8” bolts, washers, and nuts. This assembled part is now called the top hat.
**Step 6. Attach the AMA-80 Adjustable Legs**

1. Select suitable forward air dam brackets to attach each of the AMA-80 adjustable legs.

**Caution**
Always secure the AMA-80 adjustable legs to the existing air dam mounting brackets. Never attach the legs to the roof of the cab. Attaching the AMA-80 adjustable legs directly to the roof of the cab could damage it over time.

2. Bend the feet of the smaller 1” diameter legs so when bolted to the forward brackets, the legs converge toward the antenna mounting bracket.

3. Attach the smaller 1” diameter legs to the forward air dam mounting brackets.

4. Slide the larger 1-1/4” diameter legs over the smaller legs and bolt the feet of the larger legs to the antenna mounting plate using 3/8” bolts, washers, and nuts.

**Caution**
Always install the smaller diameter legs on the bottom. If the larger diameter legs are installed on the bottom they fill up with rain water and rust from the inside.

---

**Step 7. Drill Clearance Holes**

1. Drill two clearance holes for the 5/16” bolts in each of the legs. These holes should be three to four inches apart and positioned at 90° angles from one another. Make sure the holes pass through both tubes.

2. Install the 5/16” bolts, washers, and nuts in each hole.

3. Once the AMA-80 is completely assembled, verify that all of the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-80 Outdoor Unit mount.
### Parts List: MCN 10-8690-1 (AMA-80)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
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<tbody>
<tr>
<td>1</td>
<td>50-3595-2</td>
<td>1</td>
<td>Antenna Mounting Plate</td>
<td></td>
<td>5</td>
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<td>2</td>
<td>50-3595-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
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<td>3</td>
</tr>
<tr>
<td>3</td>
<td>50-6401-1</td>
<td>1</td>
<td>Antenna Support Vertical Channel</td>
<td></td>
<td>7</td>
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<td>4</td>
<td>50-3414-1</td>
<td>1</td>
<td>Antenna Support Horizontal Channel</td>
<td>23</td>
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<tr>
<td>5</td>
<td>50-2487-40</td>
<td>2</td>
<td>Adjustable Steel Leg</td>
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<td>13</td>
</tr>
<tr>
<td>6</td>
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<td>Adjustable Steel Leg</td>
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<td>7</td>
<td>50-30057-1</td>
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<td>Backing Plate</td>
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<td>8</td>
<td>50-30058-1</td>
<td>2</td>
<td>Channel Mounting Bracket</td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>9</td>
<td>552-02068-2250</td>
<td>5</td>
<td>Hex Head Bolt</td>
<td>5/16-18 UNC-2A x 2.25</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>552-02069-1250</td>
<td>21</td>
<td>Hex Head Bolt</td>
<td>3/8-16 UNC x 1.250</td>
<td>6</td>
</tr>
<tr>
<td>11</td>
<td>556-02074-0312</td>
<td>9</td>
<td>Flat Washer</td>
<td>5/16 (9/78 x 3/8 x 5/64)</td>
<td>9</td>
</tr>
<tr>
<td>12</td>
<td>556-02074-0375</td>
<td>49</td>
<td>Flat Washer</td>
<td>3/8 (1 x 7/16 x 5/64)</td>
<td>10</td>
</tr>
<tr>
<td>13</td>
<td>554-02072-0312</td>
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<td>Nylon Lock Nut</td>
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<td>14</td>
</tr>
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<td>15</td>
<td>552-02069-1500</td>
<td>5</td>
<td>Hex Head Bolt</td>
<td>3/8 x 1.5</td>
<td>16</td>
</tr>
</tbody>
</table>

**Note:** Items 9 through 15 are contained in antenna mounting kit 65-2910-80. Extra hardware items are included.
Designed for Peterbilt 377/379 Conventional w/ Side Skirts and 63" Mid-Roof Sleeper* (Driver-side Application)

*Note: Use of this mount is RESTRICTED to tractors hauling flatbeds and tankers only; NOT to be used on trucks hauling vans, refrigerated or dry.
Introduction

This document provides the guidelines and an installation procedure to follow when installing the AMA-81 outdoor unit mount (MCN 10-8691-1) on the Peterbilt 377/379 conventional truck with side skirts and 63" mid-roof sleeper. An assembly drawing of the AMA-81 and an accompanying parts list are provided in these instructions.

Important

The instructions for mount installations provided in this guide, assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle. QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first-time installations and/or new mount types and/or vehicle types prior to installation.

Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call Customer Support.

2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13' 6".

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties and protected by convoluted tubing.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls refrigerated trailers or dry van, this mount should NOT be used.

Note

Do not use impact wrenches or other air-pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation kits. Over-torquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.

Use hand tools to tighten these parts.
Installation Procedure

The following steps apply to every AMA-81 installation. Perform these steps in the order listed below. Installation of the AMA-81 is divided into the following groups:

1. Attach the Support Bracket

2. Place Antenna Mounting Mast/Support Bracket Against Rivet Line

3. Slide the Nut Plates Behind the Boomerang Brackets

4. Mark and Drill Mounting Holes on the Boomerang Brackets

5. Attach the Antenna Mounting Mast at the Rivet Line

6. Attach the Antenna Mounting Mast at the Boomerang Brackets

For help during installation, call QUALCOMM Customer Support for assistance. The toll-free telephone number is (800) 541-7490, and Customer Support is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-81, be sure to review the Installation Guidelines provided on page 81-2.

Step 1. Attach the Support Bracket

1. Attach the support bracket to the antenna mounting mast using a 3/8" bolt, washer, and nut.
Step 2. Place Antenna Mounting Mast/Support Bracket Against Rivet Line

1. Prior to drilling any holes, the vehicle rear-wall liner should be dropped. This prevents damage to the headliner when drilling and also provides access to the holes from the inside of the sleeper.

2. Place the antenna mounting mast and the attached support bracket against the rivet line of the sleeper.

3. Mark the rivets that align with the mounting holes of the support bracket.

4. Drill out the marked rivets.

5. Drill the 5/16" mounting holes.

Step 3. Mark and Drill Mounting Holes on the Boomerang Brackets

1. Ensure the antenna mounting mast is vertical when it rests against the boomerang brackets.

2. Mark where the antenna mounting mast rests against both the top and bottom boomerang brackets.

3. Remove the antenna mounting mast from the rivet line (attached in Step 2).

4. Drill the 3/8" mounting holes, as marked on the boomerang brackets.
Step 4. Attach the Antenna Mounting Mast at the Rivet Line

1. Attach the antenna mounting mast/support bracket to the rivet line of the sleeper using the 5/16" bolts, washers, and nuts.

Note
1/4" huck rivets may be used instead of the 5/16" hardware. However, huck rivets are NOT provided with this mounting kit.

2. Be sure to use silicon (RTV) sealant around each of the mounting holes, both inside and outside the sleeper.

3. Ensure the antenna mounting mast is vertical and the top is level when the truck is level.

Step 5. Attach the Antenna Mounting Mast at the Boomerang Brackets

1. Slide each nut plate (item 2) behind each boomerang bracket.

2. Attach the antenna mounting mast to the boomerang brackets and nut plates using the 3/8" bolts and washers.

3. Ensure the antenna mounting mast is vertical and the top is level when the truck is level.

4. Once the AMA-81 is completely assembled, verify that all bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-81 Outdoor Unit Mount.
# Parts List: MCN 10-8691-1 (AMA-81)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-30082-1</td>
<td>1</td>
<td>Antenna Mounting Mast</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>50-30083-1</td>
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<td>Nut Plate</td>
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<td>4</td>
</tr>
<tr>
<td>3</td>
<td>50-30084-1</td>
<td>1</td>
<td>Support Bracket</td>
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<td>6</td>
</tr>
<tr>
<td>4</td>
<td>552-02069-1250</td>
<td>6</td>
<td>Hex Head Bolt</td>
<td>3/8-16 UNC</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>552-02068-1250</td>
<td>3</td>
<td>Hex Head Bolt</td>
<td>5/16-18 UNC</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>556-02074-0375</td>
<td>7</td>
<td>Flat Washer Zinc/Steel</td>
<td>3/8 (1 x 7/16 x 5/64)</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>556-02074-0312</td>
<td>5</td>
<td>Flat Washer Zinc/Steel</td>
<td>5/16 (7/8 x 3/8 x 5/64)</td>
<td>8</td>
</tr>
<tr>
<td>8</td>
<td>554-02072-0375</td>
<td>2</td>
<td>Nylon Lock Nut</td>
<td>3/8-16 UNC</td>
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<tr>
<td>9</td>
<td>554-02072-0312</td>
<td>3</td>
<td>Nylon Lock Nut</td>
<td>5/16-18 UNC</td>
<td>12</td>
</tr>
</tbody>
</table>

Note: Items 4 through 9 are contained in antenna mounting kit 65-2910-81. Extra hardware items are included.
*Note: For this mount application, the airdam MUST have support brackets similar to the one pictured above.
### Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-82 Outdoor Unit mount (MCN 10-8692-1) on the Navistar Conventional truck with full aluminum air fairing and side extenders. An assembly drawing of the AMA-82 and an accompanying parts list are provided in these instructions.

The AMA-82 is designed specifically for the Navistar Conventional truck with full aluminum air fairing and side extenders. It is installed on the driver’s side and connected to the air fairing support brackets.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call QWBS Customer Support at (800) 541-7490.

### Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

### Note

To use this mount, the truck must have a full air dam and support brackets.

### Installation Guidelines

<table>
<thead>
<tr>
<th>1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call Customer Support.</th>
<th>6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.</td>
<td>7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.</td>
<td><strong>Note</strong> Do not use impact wrenches or other air-pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation kits. Over-torquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.</td>
</tr>
<tr>
<td>4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties and convoluted tubing.</td>
<td>Use hand tools to tighten these parts.</td>
</tr>
<tr>
<td>5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</td>
<td></td>
</tr>
</tbody>
</table>
### Installation Procedure

The following steps apply to every AMA-82 installation. Perform these steps in the order listed below. Installation of the AMA-82 is divided into the following groups:

1. Attach the Diagonal Roof Support
2. Attach the Diagonal Plate Support to the Vertical Mounting Plate
3. Attach the Angle Mounting Bracket to the Diagonal Plate Support
4. Attach the Angle Mounting Bracket to the Diagonal Roof Support
5. Mark and Drill Mounting Holes through the Air dam
6. Assemble the Top Hat
7. Attach the Top Hat to the Vertical Mounting Plate

**Help**

For help during installation, call Customer Support. The toll-free telephone number is (800) 541-7490, and Customer Support is staffed 24 hours a day, 7 days a week (including holidays).

**Note**

Before installing the AMA-82, be sure to review the Installation Guidelines provided on page 82-2.
**Step 1. Attach the Diagonal Roof Support**

1. Remove the existing diagonal roof support.
2. Attach the diagonal extension bracket (item 6 of the parts list) to the existing roof bracket.
3. Attach the diagonal roof support (item 3) to the top air dam bracket.
4. Attach the diagonal roof support (item 3) to the diagonal extension bracket (attached in step 2) using 3/8” bolts, washers, and nuts.

**Step 2. Attach the Angle Mounting Bracket to the Diagonal Plate Support**

1. Attach the vertical mounting plate (item 4) to the diagonal plate support (item 5) using the 3/8” bolt, washers, and nut.
Step 3. Attach the Angle Mounting Bracket to the Diagonal Plate Support

1. Attach the angle mounting bracket (item 7) to the diagonal plate support (item 5) using the 3/8" bolt, washers, and nut.

Step 4. Attach the Angle Mounting Bracket to the Diagonal Roof Support

1. Remove any existing bolts on top of the air dam and align the vertical mounting plate (item 4) with mounting holes.

2. Attach the angle mounting bracket (item 7) to the diagonal roof support (item 3) using the 3/8" bolt, washers, and nut.
Step 5. Mark and Drill Mounting Holes through the Air Fairing

1. Ensure that the mounting holes of the vertical mounting plate (item 4) line up with the holes of the air dam.

2. Redrill any existing holes to 3/8".

3. Attach the vertical mounting plate (item 4) to the top of the air dam using 3/8" bolts, washers, and nuts.

Step 6. Assemble the Top Hat

1. Install the antenna mounting plate (item 2) by sliding it into the antenna mounting bracket (item 1).

2. Secure the two pieces using the 3/8" bolts, washers, and nuts. This assembled part is now called the top hat.
Step 7. Attach the Top Hat to the Vertical Mounting Plate

1. Attach the top hat to the vertical mounting plate (item 4) using the 3/8” bolts, washers, and nuts.

2. Ensure the top hat is vertical and top is level when the truck is level.

3. Once the AMA-82 is completely assembled, verify that all bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-82 Outdoor Unit Mount.
### Parts List: MCN 10-10-8692-1 (AMA-82)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-3595-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
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<td>4</td>
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<tr>
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<td>50-30161-1</td>
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<td>Diagonal Roof Support</td>
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<td>Vertical Mounting Plate</td>
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<td>9</td>
<td>554-02072-0375</td>
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<td>Nylon Lock Nut</td>
<td>3/8-16 UNC</td>
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<td>7</td>
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</table>

Note: Items 8 through 10 are contained in antenna mounting kit 65-2910-82. Extra hardware items are included.
AMA-83

Designed for 1995 International Conventional w/ Low Rise Pro Sleeper, Drip Rails, and No Airdam*

Side View

Rear View

Diagram with numbered parts:
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9

Legend:
- 4 places
- 2 places

OmniTRACS
Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-83 Outdoor Unit mount (MCN 10-8693-1) on your 1995 International conventional truck with Low-Rise Sleeper, drip rails, and no air dam. An assembly drawing of the AMA-83 and an accompanying parts list are provided in these instructions.

The AMA-83 is designed specifically for the 1995 International conventional truck with Low-Rise Pro Sleeper, drip rails, and no air dam. It is installed on the driver’s side against the back of the sleeper and uses the drip rails for support.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call the OmniTRACS Customer Service Hotline at (800) 541-7490.

Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

Note

To use this mount, the truck must have drip rails around the sleeper.

This mount does not work with trucks that have side skirts.

Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline.

2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties and convoluted tubing.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

Note

Do not use impact wrenches or other air-pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation kits. Over-torquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.

Use hand tools to tighten these parts.
### Installation Procedure

The following steps apply to every AMA-83 installation. Perform these steps in the order listed below. Installation of the AMA-83 is divided into the following groups:

1. Assemble the Top Hat
2. Attach the Adjustment Plates to the Vertical Mounting Plate
3. Place Mount on Truck
4. Attach the Top Hat to the Vertical Mounting Plate

For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

**Note**

Before installing the AMA-83, be sure to review the Installation Guidelines provided on page 83-2.

---

### Step 1. Assemble the Top Hat

1. Install the antenna mounting plate (item 1) by sliding it into the antenna mounting bracket (item 2).

2. Secure the two pieces using the 3/8” bolts, washers, and nuts. This assembled part is now called the top hat.
Step 2. Attach the Adjustment Plates to the Vertical Mounting Plate

1. Attach the longer adjustment plate (item 7) to the vertical mounting plate (item 3) using the cam nuts and 3/8” nuts provided.

2. Attach the other adjustment plate (item 4) to the vertical mounting plate (item 3) using the cam nuts and 3/8” nuts provided.

Step 3. Place Mount on Truck

1. Place the mount on the back of the sleeper, on the driver’s side, and between the drip rails.

2. Tighten the cam nuts so the adjustment plates fit tightly against the drip rails.

3. Lock the cam nuts in place using the 3/8” nuts.

Note
Make sure the bottom of the vertical mounting plate (item 3) rests in the channel of the drip rail.
Step 4. Attach the Top Hat to the Vertical Mounting Plate

1. Attach the top hat to the vertical mounting plate (item 3) using the 3/8” washers and nuts.

2. Ensure the mount is level.

This completes the installation of the AMA-83 Outdoor Unit Mount.
## Parts List: MCN 10-8693-1 (AMA-83)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty,</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
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<td>50-3595-2</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>50-3595-1</td>
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<td>Antenna Mounting Bracket</td>
<td></td>
<td>5</td>
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<tr>
<td>3</td>
<td>50-30276-1</td>
<td>1</td>
<td>Vertical Mounting Plate</td>
<td></td>
<td>7</td>
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<td>4</td>
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<td>1</td>
<td>Adjustment Plate</td>
<td></td>
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<td>5</td>
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<td>Adjustment Plate</td>
<td></td>
<td>11</td>
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<tr>
<td>6</td>
<td>50-4046-1</td>
<td>4</td>
<td>Nut Cam</td>
<td></td>
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<tr>
<td>7</td>
<td>552-02069-1250</td>
<td>5</td>
<td>Hex Head Bolt</td>
<td>3/8-16 UNC x 1.250</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>554-02072-0375</td>
<td>13</td>
<td>Nylon Lock Nut</td>
<td>3/8-16 UNC</td>
<td>9</td>
</tr>
<tr>
<td>9</td>
<td>556-02074-0375</td>
<td>13</td>
<td>Flat Washer</td>
<td>3/8 (1 x 7/16 x 5/64)</td>
<td>11</td>
</tr>
</tbody>
</table>

**Note:** Items 6 through 9 are contained in antenna mounting kit 65-2910-83. Extra hardware items are included.
AMA-84

Designed for Kenworth T600/800 Series w/AeroCab Flat Top Sleeper and Side Skirts* (Passenger-side Application)

*Note: This mount to be installed on passenger side of truck. This mount is NOT recommended for tractors pulling Dry Van or Reefer trailers.
Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-84 Outdoor Unit mount (MCN 10-8694-1) on your Kenworth T600/800 Series conventional truck with side skirts and 63” low roof sleeper. An assembly drawing of the AMA-84 and an accompanying parts list are provided in these instructions.

Important

The instructions for mount installations provided in this guide, assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle. QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first-time installations and/or new mount types and/or vehicle types prior to installation.

- The AMA-84 is installed on the passenger side in the area behind the sleeper and attached to the boomerang brackets that connect the side skirts to the back of the sleeper.

Note

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call Customer Support at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

To use this mount, the truck must have side skirts and boomerang brackets with an open channel that faces into the truck. Installation of the AMA-84 is for the passenger side of the sleeper. This mount cannot be used if an exhaust stack is on the rear, passenger side of the sleeper. This mount is ideal for trucks with flatbed and tanker trailers.

Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call Customer Support.

2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13' 6”.

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hails refrigerated trailers or Dry Van, this mount should NOT be used.

Note

Do not use impact wrenches or other air-pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation kits. Over-torquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.

Use hand tools to tighten these parts.
Installation Procedure

The following steps apply to every AMA-84 installation. Perform these steps in the order listed below. Installation of the AMA-84 is divided into the following groups:

1. Place Antenna Mounting Mast Against Boomerang Brackets
2. Mark and Drill Mounting Holes on the Boomerang Brackets
3. Attach the Antenna Mounting Mast at the Boomerang Brackets

Help
For help during installation, call Customer Support for assistance. The toll-free telephone number is (800) 541-7490, and Customer Support is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-84, be sure to review the Installation Guidelines provided on page 84-2.

Step 1. Place Antenna Mounting Mast Against Boomerang Bracket

1. Place the antenna mounting mast (item 1 of the parts list) against the boomerang brackets that attach the side skirts to the back of the sleeper.

Note
Make sure you place the antenna mounting mast against the passenger side. This mount is designed to be used on the passenger side.
Step 2. Mark and Drill Mounting Holes on the Boomerang Brackets

1. Mark mounting holes on the boomerang brackets. Make sure the mount is level when the truck is level.

**Note**
You may need another person to help with step 1.

2. Drill the 5/16" mounting holes.

Step 3. Attach the Antenna Mounting Mast at the Boomerang Brackets

1. Attach the antenna mounting mast to the boomerang brackets using the 5/16" bolts, washers, and nuts.

2. Ensure the antenna mounting mast is vertical and the top is level when the truck is level.

3. Once the AMA-84 is completely assembled, verify that all bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-84 Outdoor Unit Mount.
## Parts List: MCN 10-8694-1 (AMA-84)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-30166-1</td>
<td>1</td>
<td>Antenna Mounting Mast</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>552-02068-1000</td>
<td>9</td>
<td>Hex Head Bolt</td>
<td>5/16-18UNC-2A x 1.00 G5</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>556-02074-0312</td>
<td>17</td>
<td>Washer Flat Zinc/Steel</td>
<td>5/16 (7/8 x 3/8 x 5/64)</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>554-02072-0312</td>
<td>9</td>
<td>Nylon Lock Nut</td>
<td>5/16-18UNC ZINC</td>
<td>7</td>
</tr>
</tbody>
</table>

Note: Items 2 through 4 are contained in antenna mounting kit 65-2910-84. Extra hardware items are included.
Designed for 1995 Freightliner Conventional w/ Able Body Sleeper and Airdam

AMA-85

Outdoor Unit Mount Installation Guide

Side View

Rear View

OmniTRACS
## Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-85 Outdoor Unit mount (P/N 10-8695-1) on your 1995 Freightliner conventional truck with Able Body sleeper and full air dam. An assembly drawing of the AMA-85 and an accompanying parts list are provided in these instructions.

The AMA-85 is designed specifically for the 1995 Freightliner mid-roof, Able Body Sleeper with full air dam. It is installed on the driver’s side between the upper part of the side skirt and the back of the sleeper.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.

### Note

To use this mount, the truck must have side skirts. The side skirt provides the hardware to mount the AMA-85 to the truck.

### Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

## Installation Guidelines

<table>
<thead>
<tr>
<th>1.</th>
<th>Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.</td>
</tr>
<tr>
<td>3.</td>
<td>Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.</td>
</tr>
<tr>
<td>4.</td>
<td>The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties and convoluted tubing.</td>
</tr>
<tr>
<td>5.</td>
<td>Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</td>
</tr>
<tr>
<td>6.</td>
<td>If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>7.</td>
<td>If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
</tbody>
</table>

### Note

Do not use impact wrenches or other air-pressed tools to tighten the nuts and bolts in your MCT/IMCT Installation kits. Over-torquing the MCT/IMCT hardware results in stripped nuts and potentially time-consuming and expensive repairs.

Use hand tools to tighten these parts.
Installation Procedure

The following steps apply to every AMA-85 installation. Perform these steps in the order listed to the right. Installation of the AMA-85 is divided into the following groups:

1. Remove Mounting Hardware from Side Skirt
2. Align the Flush Mounting Plate
3. Install the Flush Mounting Plate
4. Assemble the Top Hat
5. Attach the Top Hat to the Flush Mounting Plate

Help
For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-85, be sure to review the Installation Guidelines provided on page 85-2.

Step 1. Remove Mounting Hardware from Side Skirt

Pull back side skirt to install plate

1. Remove enough bolts connecting the side skirt on the driver’s side to the air fairing at the top so that the flush mounting plate can be inserted.

2. Pull the side skirt back from the sleeper without removing it.
### Step 2. Align the Flush Mounting Plate

1. Place the flush mounting plate (item 3 of the parts list) between the air fairing and side skirt. Use the pre-drilled mounting hole at the bottom of the flush mounting plate to align the mount.

2. Level the flush mounting plate and use the existing holes on the left side and top of the side skirt as guides to mark the hole locations on the flush mounting plate. Mark enough holes so that the flush mounting plate is secured firmly.

3. Remove the flush mounting plate and drill clearance holes on the left side and top of the flush mounting plate, in the locations marked in step 2, for side skirt mounting bolts.

### Step 3. Install the Flush Mounting Plate

1. Insert the flush mounting plate between the side skirt and air fairing again, using a bolt so it hangs from the top of the air fairing. Be sure that the flush mounting plate is level and then insert the remaining bolts.
Step 4. Assemble the Top Hat

1. Assemble the top hat by sliding the antenna mounting plate (item 1) into the antenna mounting bracket (item 2) and lining up the holes in the two pieces so that the top of the mounting plate is level when the vehicle is level.

2. After the antenna mounting plate is level, secure it to the antenna mounting bracket using 3/8” bolts, washers, and nuts.

Step 5. Attach the Top Hat to the Flush Mounting Plate

1. Slide the top hat onto the four studs protruding from the flush mounting plate, using the 3/8” nuts and washers provided. Be sure that it is level when the truck is level.

2. After the AMA-85 installation is completed, verify that all of the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-85 Outdoor Unit mount.
## Parts List: MCN 108696-1 (AMA-85)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-3595-1</td>
<td>1</td>
<td>Antenna Mounting Plate</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>50-3595-2</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>50-30242-1</td>
<td>1</td>
<td>Flush Mounting Plate</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>552-02069-1250</td>
<td>5</td>
<td>Hex Head Bolt</td>
<td>3/8-16 UNC</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>554-02072-0375</td>
<td>9</td>
<td>Nylon Lock Nut</td>
<td>3/8-16 UNC</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>556-02074-0375</td>
<td>13</td>
<td>Flat Washer Zinc/Steel</td>
<td>3/8-16 UNC</td>
<td>7</td>
</tr>
</tbody>
</table>

Note: Items 4 through 6 are contained in antenna mounting kit 65-2910-85. Each hardware item includes spare parts.
Designed for Freightliner Conventional w/ Side Skirts and Mid-Rise Sleeper*
(Driver-side Application)

*Note: Use of this mount is RESTRICTED to tractors hauling flatbeds and tankers only. NOT to be used on trucks hauling vans, refrigerated or dry.
Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-86 Outdoor Unit mount (MCN 10-8696-1) on your Freightliner conventional truck with side skirts and mid-rise sleeper. An assembly drawing of the AMA-86 and an accompanying parts list are provided in these instructions.

The AMA-86 is installed on the driver’s side in the area behind the sleeper and attached to the boomerang brackets that connect the side skirts to the back of the sleeper.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call Customer Support at (800) 541-7490.

Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

Note

To use this mount, the truck must have side skirts and boomerang brackets made of square tubing. Installation of the AMA-86 is for the driver side of the sleeper. This mount cannot be used if an exhaust stack is on the rear, driver side of the sleeper. This mount is ideal for trucks with flatbed and tanker trailers.

Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call Customer Support.

2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls refrigerated trailers or Dry Van, this mount should NOT be used.

Note

Do not use impact wrenches or other air-pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation kits. Over-torquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.

Use hand tools to tighten these parts.
Installation Procedure

The following steps apply to every AMA-86 installation. Perform these steps in the order listed below. Installation of the AMA-86 is divided into the following groups:

1. Insert the Spacers
2. Place Antenna Mounting Mast on Boomerang Brackets
3. Attach the Antenna Mounting Mast at the Boomerang Brackets

**Help**

For help during installation, call Customer Support for assistance. The toll-free telephone number is (800) 541-7490, and Customer Support is staffed 24 hours a day, 7 days a week (including holidays).

**Note**

Before installing the AMA-86, be sure to review the Installation Guidelines provided on page 86-2.

---

**Step 1. Insert the Spacers**

1. Ensure the mounting holes of the spaces lineup with the holes of the boomerang brackets.

2. Insert the spacers into the hollow boomerang brackets.

**Note**

You may have to redrill the mounting holes of the boomerang brackets to 5/16".
Step 2. Place Antenna Mounting Mast on Boomerang Bracket

1. Ensure the antenna mounting mast is level.
2. Place the antenna mounting mast (item 2) against the back of the sleeper with each mounting ledge resting on each boomerang bracket.
3. Mark and drill 5/16" holes through boomerang brackets.

Step 3. Attach the Antenna Mounting Mast at the Boomerang Brackets

1. Attach the antenna mounting mast to the boomerang brackets and spacers using the 5/16” bolts, washers, and nuts.
2. Ensure the antenna mounting mast is vertical and the top is level when the truck is level.
3. Once the AMA-86 is completely assembled, verify that all bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-86 Outdoor Unit Mount.
<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
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<td>1</td>
<td>Antenna Mounting Mast</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>552-02068-1500</td>
<td>7</td>
<td>Hex Head Bolt</td>
<td>5/16-18UNC</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>556-02074-0312</td>
<td>13</td>
<td>Washer Flat Zinc/Steel</td>
<td>5/16 (7/8 X 3/8 X 5/64)</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>554-02072-0312</td>
<td>7</td>
<td>Nylon Lock Nut</td>
<td>5/16-18UNC ZINC</td>
<td>8</td>
</tr>
</tbody>
</table>

Note: Items 3 through 5 are contained in antenna mounting kit 65-2910-86. Extra hardware items are included.
AMa-90

Designed for Kenworth Conventional w/ Aerodyne Sleeper and Spoiler*

*Note: This mount can be used instead of the AMA-18 when additional clearance for reefers is required. Highly recommended for tractors hauling refrigerated vans.
Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-90 Outdoor Unit mount (MCN 10-8700-1) on your Kenworth conventional truck with Aerodyne sleeper and spoiler. An assembly drawing of the AMA-90 and an accompanying parts list are provided in these instructions.

The AMA-90 is installed on the driver’s side on top of the spoiler.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call Customer Support at (800) 541-7490.

Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

Note

This mount was designed as an alternative to the AMA-18 shown below.

Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call OmniTRACS Customer Support.

2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13' 6".

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

Note

Do not use impact wrenches or other air-pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation kits. Over-torquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.

Use hand tools to tighten these parts.
Installation Procedure

The following steps apply to every AMA-90 installation. Perform these steps in the order listed below. Installation of the AMA-90 is divided into the following groups:

1. Attach the Antenna Mounting Bracket and Upper Mounting Bracket
2. Place Mount on the Spoiler Air Dam (driver’s side)
3. Attach Mount to Bottom of Spoiler Air Dam
4. Attach Mount to Top of Spoiler Air Dam

Help
For help during installation, call Customer Support for assistance. The toll-free telephone number is (800) 541-7490, and Customer Support is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-90, be sure to review the Installation Guidelines provided on page 90-2.

Step 1. Attach the Antenna Mounting Bracket and Upper Mounting Bracket

1. Attach the antenna mounting bracket to the upper mounting bracket using the 5/16" washers and nuts provided.
## Step 2. Place Mount on the Spoiler Air Dam

1. Remove two bolts on the bottom of the spoiler that attach the spoiler to its roof mounted bracket.
2. Place the assembled mount on top of the spoiler.
3. Line up the mounting holes of the antenna mounting bracket with the holes of the bolts removed in step 1. Make sure antenna mounting surface is level. You may have to redrill these holes.
4. Use the mounting holes of the upper mounting bracket (item 3) as a template and mark access holes on the back of the spoiler air dam.
5. Drill 5/16" mounting holes.

![](image1.png)

## Step 3. Attach Mount to the Bottom of the Spoiler Air Dam

1. Attach the bottom of the antenna mounting bracket to the bottom of the spoiler air dam and existing angle bracket using the 5/16" bolts, washers, and nuts.

![](image2.png)
### Step 4. Attach Mount to the Top of the Spoiler Air Dam

1. Make sure the backing bracket is on the outside of the spoiler. This provides added strength to the attachment point of the mount.

2. Once the AMA-90 is completely assembled, verify that all of the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-90 Outdoor Unit mount.
### Parts List: MCN 10-8700-1 (AMA-90)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-30375-1</td>
<td>3</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>50-30376-1</td>
<td>1</td>
<td>Backing Bracket</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>50-30377-1</td>
<td>1</td>
<td>Upper Mounting Bracket</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>552-02068-1250</td>
<td>5</td>
<td>Hex Head Bolt</td>
<td>5/16-18UNC</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>552-02074-0312</td>
<td>11</td>
<td>Washer Flat Zinc/Steel</td>
<td>5/16UNC</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>554-02072-0312</td>
<td>7</td>
<td>Nylon Lock Nut</td>
<td>5/16-18UNC ZINC</td>
<td>8</td>
</tr>
</tbody>
</table>

Note: Items 4 through 6 are contained in antenna mounting kit 65-2910-90. Extra hardware items are included.
Designed for Kenworth T400, T450, T600, T600, T603, T800, W900, w/ 72” Aerodyne and 60” Modular Aerodyne, all model years* (with OEM roof fairing)

*Note: Not compatible with dual back-of-sleeper exhaust option. Does not fit Studio Sleeper or T2000.
# Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-91 Outdoor Unit mount (MCN 10-30401-1) on the Kenworth T400, T450, T600, T603, T800, W900, with 72” AeroCab Aerodyne and 60” Modular Aerodyne truck with OEM roof fairing. An assembly drawing of the AMA-91 and an accompanying parts list are provided in these instructions.

**Important**

The instructions for mount installations provided in this guide, assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized Qualcomm representative has identified the mount type to be used on the vehicle. Qualcomm strongly recommends that you obtain installation training from Qualcomm for first time installations and/or new mount types and/or vehicle types prior to installation.

**Note**

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call the OmniTRACS Customer Service Hotline at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

## Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline.

2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

**Note**

Do not use impact wrenches or other air-pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation kits. Over-torquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.

Use hand tools to tighten these parts.
Installation Procedure

The following steps apply to every AMA-91 installation. Perform these steps in the order listed below. Installation of the AMA-91 is divided into the following groups:

1. Sand Mount and Fairing.
2. Postion Mount and Drill Holes.
3. Apply Adhesive and Bolt in Place.

Help
For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-91, be sure to review the Installation Guidelines provided on page 91-2.

Step 1. Sand Mount and Fairing

1. Position mount on driver’s side in the curve of the air fairing.

2. Sand surface of mount and fairing where contact will be made. This will provide a proper bonding surface for the silicone (RTV) adhesive.

Note
Use 120 grit sandpaper for sanding.
Step 2. Position Mount and Drill Holes

1. Position mount (without the antenna) against the air fairing flange. (Sand off any large bumps on underside of fairing that may interfere with a proper fit).

2. Set mount in position, using “C” clamps. Using the pre-drilled holes in the mount as a guide, drill four 3/8” holes through fairing. Install a screw after drilling each hole to insure proper alignment of all holes.

**Note**
Be sure to check the fit of the mount against the fairing before drilling. As a general precaution, do not drill any holes near the edge of the air fairing flange.

---

Step 3. Apply Adhesive and Bolt in Place

1. Remove “C” clamps and mount. Apply silicone (RTV) adhesive to the entire contact surface of the mount.

2. Bolt in place using screws, washers and locknuts provided.

3. Wipe off excess adhesive that may squeeze out from mount.

This completes the installation of the AMA-91 Outdoor Unit mount.
## Parts List: MCN 10-30401-1 (AMA-91)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-52342-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>554-02072-0375</td>
<td>5</td>
<td>Nylon Lock Nut</td>
<td>3/8 16UNC</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>556-12612-0375</td>
<td>9</td>
<td>Flat Washer</td>
<td>.375 X 1.0 X .062</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>552-12722-1250</td>
<td>5</td>
<td>Button Head Cap Socket Screw</td>
<td>3/8-16 X 1.25</td>
<td>7</td>
</tr>
</tbody>
</table>

Note: Items 2 through 4 are contained in antenna mounting kit 65-2910-91. Extra hardware items are included.
AM A-92

Outdoor Unit Mount Installation Guide

Designed for Kenworth 74” Studio Sleeper Aerodyne, all model years* (with OEM roof fairing)

Note: Compatible with all exhaust options. Does not fit Kenworth T2000.
Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-92 Outdoor Unit mount (MCN 10-30402-1) on the Kenworth 74” Studio Sleeper Aerodyne with OEM roof fairing. An assembly drawing of the AMA-92 and an accompanying parts list are provided in these instructions.

**Important**

The instructions for mount installations provided in this guide, assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized Qualcomm representative has identified the mount type to be used on the vehicle. Qualcomm strongly recommends that you obtain installation training from Qualcomm for first time installations and/or new mount types and/or vehicle types prior to installation.

- The AMA-92 is installed directly to the roof fairing at the driver’s side.

**Note**

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call the OmniTRACS Customer Service Hotline at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline.

2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties and convoluted tubing.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

**Note**

Do not use impact wrenches or other air-pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation kits. Over-torquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.

Use hand tools to tighten these parts.
Installation Procedure

The following steps apply to every AMA-92 installation. Perform these steps in the order listed below. Installation of the AMA-92 is divided into the following groups:

1. Sand Mount and Fairing.
2. Position Mount and Drill Holes.
3. Apply Adhesive and Bolt in Place.

Help
For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-92, be sure to review the Installation Guidelines provided on page 92-2.

Step 1. Sand Mount and Fairing

1. Position mount in the driver’s side corner of the air fairing.

2. Sand surface of mount and fairing where contact will be made. This will provide a proper bonding surface for the silicone (RTV) adhesive.

Note
Use 120 grit sandpaper for sanding.
**Step 2. Position Mount and Drill Holes**

<table>
<thead>
<tr>
<th>1. Set mount in position</th>
<th>1. Position mount (without the antenna) against the air fairing flange. Sand off any large bumps on underside of fairing that may interfere with a proper fit.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Drill holes in fairing to match mount (4 places)</td>
<td>2. Set mount in position, using “C” clamp. Using the pre-drilled holes in the mount as a guide, drill four 3/8” holes through fairing. Install a screw after drilling each hole to insure proper alignment of all holes.</td>
</tr>
</tbody>
</table>

**Note**

Be sure to check the fit of the mount against the fairing before drilling. As a general precaution, do not drill any holes near the edge of the air fairing flange.

**Step 3. Apply Adhesive and Bolt in Place**

<table>
<thead>
<tr>
<th>1. Apply adhesive</th>
<th>1. Remove “C” clamps. Apply silicone (RTV) adhesive to the entire contact surface of the mount.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Connect with bolts</td>
<td>2. Bolt in place using screws, washers and locknuts provided.</td>
</tr>
<tr>
<td></td>
<td>3. Wipe off excess adhesive that may squeeze out from edges.</td>
</tr>
</tbody>
</table>

This completes the installation of the AMA-92 Outdoor Unit mount.
### Parts List: MCN 10-30402-1 (AMA-92)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-52343-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>554-02072-0375</td>
<td>5</td>
<td>Nylon Lock Nut</td>
<td>3/8-16 UNC</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>556-12612-0375</td>
<td>9</td>
<td>Flat Washer</td>
<td>.375 X 1.0 X .062</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>552-12722-1250</td>
<td>5</td>
<td>Cap Socket Screw</td>
<td>3/8-16 x 1.25</td>
<td>7</td>
</tr>
</tbody>
</table>

Note: Items 2 through 4 are contained in antenna mounting kit 65-2910-92. Extra hardware items are included.
Designed for Kenworth T600/603 AeroCab Flattop Sleeper with Side Skirts* (Driver-side Application)

*Note: Use of this mount is restricted to tractors hauling flatbeds and tankers only. Do not use on trucks hauling refrigerated or dry vans.
Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-93 Outdoor Unit mount (MCN 10-30403-1) on your Kenworth T600/603 conventional truck with side skirts and 63” low roof sleeper. An assembly drawing of the AMA-93 and an accompanying parts list are provided in these instructions.

The AMA-93 is installed on the driver side in the area behind the sleeper and attached to the boomerang brackets that connect the side skirts to the back of the sleeper.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call Customer Support at (800) 541-7490.

Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

Note

To use this mount, the truck must have side skirts and boomerang brackets with an open channel that faces into the truck. Installation of the AMA-93 is for the driver side of the sleeper. This mount is ideal for trucks with flatbed and tanker trailers.

Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call Customer Support.

2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6.”

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls refrigerated trailers or dry van, this mount should NOT be used.

Note

Do not use impact wrenches or other air-pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation kits. Over-torquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.

Use hand tools to tighten these parts.
Installation Procedure

The following steps apply to every AMA-93 installation. Perform these steps in the order listed below. Installation of the AMA-93 is divided into the following groups:

1. Place antenna mounting mast against boomerang brackets.
2. Mark and drill mounting holes on the boomerang brackets.
3. Attach the antenna mounting mast at the boomerang brackets.

Help
For help during installation, call Customer Support for assistance. The toll-free telephone number is (800) 541-7490. Customer Support is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-93, be sure to review the Installation Guidelines provided on page 93-2.

Step 1. Place antenna mounting mast against boomerang bracket

1. Place the antenna mounting mast (item 1 of the parts list) against the boomerang brackets that attach the side skirts to the back of the sleeper.

Note
Make sure you place the antenna mounting mast against the driver side. This mount is designed to be used on the driver side.
Step 2. Mark and drill mounting moles on the boomerang brackets

1. Mark mounting holes on the boomerang brackets. Make sure the mount is level when the truck is level.

*Note*
You may need another person to help with step 1.

2. Drill the 5/16" mounting holes.

---

Step 3. Attach the antenna mounting mast at the boomerang brackets

1. Attach the antenna mounting mast to the boomerang brackets using the 5/16" bolts, washers, and nuts.

2. Ensure the antenna mounting mast is vertical and the top is level when the truck is level.

3. Once the AMA-93 is completely assembled, verify that all bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-93 Outdoor Unit Mount.
# Parts List: MCN 10-30403-1 (AMA-93)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-30713-1</td>
<td>1</td>
<td>Antenna Mounting Mast</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>552-02068-1000</td>
<td>9</td>
<td>Hex Head Bolt</td>
<td>5/16-18UNC-2A X 1.00 G5</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>556-02074-0312</td>
<td>17</td>
<td>Washer Flat Zinc/Steel</td>
<td>5/16 (7/8 X 3/8 X 5/64)</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>554-02072-0312</td>
<td>9</td>
<td>Nylon Lock Nut</td>
<td>5/16-18UNC ZINC</td>
<td>7</td>
</tr>
</tbody>
</table>

Note: Items 2 through 4 are contained in antenna mounting kit 65-2910-93. Extra hardware items are included.
Designed for Kenworth T600/603 Aerocab Flattop with Side Skirts* (Passenger-side Application)

*Note: This mount to be installed on passenger side of truck. This mount is not recommended for tractors pulling dry van or reefer trailers.
### Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-94 Outdoor Unit mount (MCN 10-30404-1) on your Kenworth T600/603 conventional truck with side skirts and 63” low roof sleeper. An assembly drawing of the AMA-94 and an accompanying parts list are provided in these instructions.

The AMA-94 is installed on the passenger side in the area behind the sleeper and attached to the boomerang brackets that connect the side skirts to the back of the sleeper.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call Customer Support at (800) 541-7490.

<table>
<thead>
<tr>
<th>Caution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>To use this mount, the truck must have side skirts and boomerang brackets with an open channel that faces into the truck. Installation of the AMA-94 is for the passenger side of the sleeper. This mount is designed for trucks pulling flatbed and tanker trailers.</td>
</tr>
</tbody>
</table>

### Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call Customer Support.

2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6.”

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties and convoluted tubing.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls refrigerated trailers or dry van, this mount should **NOT** be used.

<table>
<thead>
<tr>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not use impact wrenches or other air-pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation kits. Over-torquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.</td>
</tr>
</tbody>
</table>

Use hand tools to tighten these parts.
Installation Procedure

The following steps apply to every AMA-94 installation. Perform these steps in the order listed below. Installation of the AMA-94 is divided into the following groups:

1. Place antenna mounting mast against boomerang brackets.
2. Mark and drill mounting holes on the boomerang brackets.
3. Attach the antenna mounting mast at the boomerang brackets.

Help

For help during installation, call Customer Support for assistance. The toll-free telephone number is (800) 541-7490. Customer Support is staffed 24 hours a day, 7 days a week (including holidays).

Note

Before installing the AMA-94, be sure to review the Installation Guidelines provided on page 94-2.

Step 1. Place antenna mounting mast against boomerang bracket

1. Place the antenna mounting mast (item 1 of the parts list) against the boomerang brackets that attach the side skirts to the back of the sleeper.

Note

Make sure you place the antenna mounting mast against the passenger side. This mount is designed to be used on the passenger side.
Step 2. Mark and drill mounting holes on the boomerang brackets

1. Mark mounting holes on the boomerang brackets. Make sure the mount is level when the truck is level.

**Note**
You may need another person to help with step 1.

2. Drill the 5/16" mounting holes.

Step 3. Attach the antenna mounting mast at the boomerang brackets

1. Attach the antenna mounting mast to the boomerang brackets using the 5/16" bolts, washers, and nuts.

2. Ensure the antenna mounting mast is vertical and the top is level when the truck is level.

3. Once the AMA-94 is completely assembled, verify that all bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-94 Outdoor Unit Mount.
### Parts List: MCN 10-30404-1 (AMA-94)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-30714-1</td>
<td>1</td>
<td>Antenna Mounting Mast</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>552-02068-1000</td>
<td>9</td>
<td>Hex Head Bolt</td>
<td>5/16-18 UNC-2A X 1.00 G5</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>556-02074-0312</td>
<td>17</td>
<td>Washer Flat Zinc/Steel</td>
<td>5/16 (7/8 X 3/8 X 5/64)</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>554-02072-0312</td>
<td>9</td>
<td>Nylon Lock Nut</td>
<td>5/16-18 UNC ZINC</td>
<td>7</td>
</tr>
</tbody>
</table>

Note: Items 2 through 4 are contained in antenna mounting kit 65-2910-94. Extra hardware items are included.
CAUTION

These installation procedures are generalized instructions to allow for the differences in straight truck cargo boxes; however, if your equipment does not match this mount’s specifications, do not use this mount.
# AMA-95 Outdoor Unit Mount Installation Guide

## Introduction

This document provides the guidelines and installation procedure to follow when installing the AMA-95 Outdoor Unit Mount (MCN 10-30405-1) on trucks and vans with a cargo box. An assembly drawing of the AMA-95 and an accompanying Parts List are provided in these instructions.

### Important

The instructions for mount installations provided in this guide assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle.

QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first-time installations and/or new mount types and/or vehicle types prior to installation.

### CAUTION

Read these instructions prior to installing the AMA-95 to check whether your equipment matches the requirements for this mount. If your equipment does not match this mount’s specifications, do not use this mount.

### Note

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call the QUALCOMM Customer Support 24-Hour Hotline at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

## Installation Guidelines

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Unpack the mount hardware and verify that all the parts listed on the Parts List at the end of this document are present. If a part is missing, call the Customer Support Hotline.</td>
</tr>
<tr>
<td>2.</td>
<td>In general, the higher the Outdoor Unit the better the MCT/IMCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6.”</td>
</tr>
<tr>
<td>3.</td>
<td>Install the mount so the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.</td>
</tr>
<tr>
<td>4.</td>
<td>The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.</td>
</tr>
<tr>
<td>5.</td>
<td>Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</td>
</tr>
<tr>
<td>6.</td>
<td>If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>7.</td>
<td>If the vehicle hauls a refrigerated trailer or dry van, make sure the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
</tbody>
</table>
## Installation Procedures

<table>
<thead>
<tr>
<th>Steps</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1–3</td>
<td>Pre-installation information.</td>
</tr>
<tr>
<td>1.</td>
<td>The design of the bracket.</td>
</tr>
<tr>
<td>2.</td>
<td>When you build the bracket.</td>
</tr>
<tr>
<td>3.</td>
<td>How to determine the best location.</td>
</tr>
<tr>
<td>3a.</td>
<td>Primary Location</td>
</tr>
<tr>
<td>3b.</td>
<td>Alternate Location</td>
</tr>
<tr>
<td>4–8</td>
<td>Installation steps. Perform them in the following order.</td>
</tr>
<tr>
<td>4.</td>
<td>Align the bracket against the cargo box.</td>
</tr>
<tr>
<td>5.</td>
<td>Straddle the bracket over a vertical stringer.</td>
</tr>
<tr>
<td>6.</td>
<td>Mark and drill the upper and lower attachment points.</td>
</tr>
<tr>
<td>7.</td>
<td>Align the upper and lower attachment points.</td>
</tr>
<tr>
<td>8.</td>
<td>Tighten the lower attachment points, the upper attachment points, and all the bolts.</td>
</tr>
</tbody>
</table>

### Help

For help during installation, call the QUALCOMM Customer Support Hotline at (800) 541-7490. The Hotline is staffed 24 hours a day, 7 days a week (including holidays).

### Note

Before installing the AMA-95, be sure to review the Installation Guidelines provided on page 95-2.
## Step 1. The design of the bracket

The AMA-95 is designed to attach to a cargo box by using four (4) attachment points in the following way:

1. The two (2) upper attachment points **must** attach to the internal structure of the cargo box, typically by attaching through the horizontal stringer (lip) that joins the external front wall skin to the top radius skin.

2. The two (2) lower attachment points generally do not have an internal structure for attachment purposes. However, there is usually a piece of plywood or stripwood in the interior cargo barrier wall, spaced away from the external skin by vertical stringers, suitable for attachment purposes. This is the ideal place to straddle a vertical stringer with the two (2) lower attachment points.
Step 2. When you build the bracket

1. Attach the vertical supports to the antenna mounting bracket using the 3/8" x 1-1/4" bolts, washers, and nylock nuts provided.

2. Attach the antenna mounting plate to the antenna mounting bracket using the 3/8" x 1-1/4" bolts, washers, and nylock nuts provided.
Step 3. How to determine the best location

Select a location so the antenna is high enough to receive a satellite signal without exceeding the height of the cargo box roof.

1. Allow 2" clearance from the top of the antenna to the top of the roof.

2. Allow 7" for the height of the antenna.

3. The bracket height should be 9" below the cargo box roof.

Note
The driver's side of the truck or van cargo box provides the best protection from tree branches for this bracket.

Step 3a. Primary Location

1. Align the bracket against the front of the cargo box on the driver’s side, straddling a vertical stringer. Make sure there is a 9" clearance to the rooftop.

CAUTION
Do not locate the bracket on the passenger’s side.
### Step 3b. Alternate Location

1. Align the bracket against the front and side of the cargo box on the driver’s side, i.e, adjacent to the corner stringer. Make sure there is a 9” clearance to the rooftop.

**CAUTION**

Do not locate the bracket on the passenger’s side.
Step 4. Straddle the bracket over a vertical stringer

1. Make sure to straddle the assembled bracket over a vertical stringer.
Step 5. Mark and drill the upper and lower attachment points

1. Make sure both top attachment points go through the lower flange of the horizontal stringer (lip).

**Note**
In order to accommodate variations in wall thickness, 3 different lengths of 5/16" bolts are provided: 2-1/2", 3", and 3-1/2".

2. Loosely install the upper bolts, washers, and nuts using an RTV sealant around the holes to prevent leakage.

3. Make sure both lower attachment points go through the interior cargo barrier of plywood or stripwood.

---

Step 6. Align the upper and lower attachment points

1. Using the spacer bars provided, space out the lower attachment point so it matches the lip height of the upper attachment point.

2. Mark and drill holes in the spacer bar(s).

**Note**
Use only one (1) or two (2) of the spacer bars provided. You will need one spacer bar for the inside of the lower attachment point.
This completes the installation of the AMA-95 Outdoor Unit Mount.
## Parts List: MCN 10-30405-1 (AMA-95)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-3595-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>50-3595-2</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>50-30775-1</td>
<td>2</td>
<td>Mount Support</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>50-30776-1</td>
<td>3</td>
<td>Mount Spacer</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>552-02069-1250</td>
<td>9</td>
<td>Hex Head Bolt</td>
<td>3/8-16 UNC-2A x 1.250 Zinc G5</td>
</tr>
<tr>
<td>6</td>
<td>552-02068-2500</td>
<td>4</td>
<td>Hex Head Bolt</td>
<td>5/16 x 2.50</td>
</tr>
<tr>
<td>7</td>
<td>552-02068-3000</td>
<td>4</td>
<td>Hex Head Bolt</td>
<td>5/16 x 3.00</td>
</tr>
<tr>
<td>8</td>
<td>552-02068-3500</td>
<td>4</td>
<td>Hex Head Bolt</td>
<td>5/16 x 3.500</td>
</tr>
<tr>
<td>9</td>
<td>554-02072-0375</td>
<td>9</td>
<td>Nylon Lock Nut</td>
<td>Regular Hex 3/8-16 UNC Zinc</td>
</tr>
<tr>
<td>10</td>
<td>554-02072-0312</td>
<td>5</td>
<td>Nylock Nut</td>
<td>5/16</td>
</tr>
<tr>
<td>11</td>
<td>556-02073-0000</td>
<td>2</td>
<td>Washer</td>
<td>7/16 (1.812)</td>
</tr>
<tr>
<td>12</td>
<td>556-02074-0312</td>
<td>9</td>
<td>Flat Washer</td>
<td>5/16</td>
</tr>
<tr>
<td>13</td>
<td>556-02074-0375</td>
<td>17</td>
<td>Flat Washer</td>
<td>3/8 Zinc/Steel (1 x 7/16 x 5/64)</td>
</tr>
</tbody>
</table>

Items 5–13 are contained in antenna mounting kit 65-2910-95. Extra hardware items are included.
Note: The antenna mounting spacer is available in 2" and 2.5" sizes. Refer to the Parts List for the specific MCN.
## Introduction

This document provides the guidelines and installation procedure to follow when installing the AMA-98 Outdoor Unit Mount (MCN 10-30408-1 or -2) on the cabover or conventional truck. An assembly drawing of the AMA-98 and Parts Lists are provided in these instructions.

**Important**

The instructions for mount installations provided in this guide, assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle.

QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first-time installations and/or new mount types and/or vehicle types prior to installation.

**Note**

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call QUALCOMM Customer Support at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

Special attention is needed to ensure a watertight seal when installing this mount. The best approach is to create a silicon seal on the inside and outside of the holes drilled into the truck/sleeper roof. Bolts should be installed from the inside with the nuts on the outside. (If the bolts are installed from the outside, the extra bolt length may not allow you to reinstall the headliner.)

## Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the Parts List at the end of this document are present. If a part is missing, call Customer Support.

2. In general, the higher the Outdoor Unit the better the IMCT/MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6’.

3. Install the mount so the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls a refrigerated trailer or dry van, make sure the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

**Note**

Do not use impact wrenches or other air pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation Kits. **Use hand tools to tighten these parts.** Overtorquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.
Installation Procedures

The following steps apply to every AMA-98 installation. Perform these steps in the order listed.

1. Attach spacer to antenna.
2. Attach spacer to shelf.

Help
For help during installation, call QUALCOMM Customer Support for assistance at (800) 541-7490. Customer Support is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-98, be sure to review the Installation Guidelines provided on page 98-2.

Step 1. Attach spacer to the antenna

1. Attach the spacer to the antenna using the stainless-steel bolts and washers provided with the antenna.

Step 2. Attach spacer to the shelf

1. Attach the spacer to the shelf using the 5/16” bolts, washers, and nuts provided with the spacer.

This completes the installation of the AMA-98 Outdoor Unit Mount.
<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-30774-1</td>
<td>1</td>
<td>Antenna Mounting Spacer</td>
<td>2'</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>552-02068-1000</td>
<td>7</td>
<td>Hex Head Bolt</td>
<td>5/16 18NC 2A x 1.0</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>556-02074-0312</td>
<td>13</td>
<td>Flat Washer</td>
<td>5/16 (7/8 x 3/8 x 5/64)</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>554-02072-0312</td>
<td>7</td>
<td>Nylon Lock Nut</td>
<td>5/16-18UNC</td>
<td>7</td>
</tr>
</tbody>
</table>

Note: Items 2–4 are included in antenna mounting kit #65-2910-98. Extra hardware items are included.

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-30774-2</td>
<td>1</td>
<td>Antenna Mounting Spacer</td>
<td>2.5'</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>552-02068-1000</td>
<td>7</td>
<td>Hex Head Bolt</td>
<td>5/16 18NC 2A x 1.0</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>556-02074-0312</td>
<td>13</td>
<td>Flat Washer</td>
<td>5/16 (7/8 x 3/8 x 5/64)</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>554-02072-0312</td>
<td>7</td>
<td>Nylon Lock Nut</td>
<td>5/16-18UNC</td>
<td>7</td>
</tr>
</tbody>
</table>

Note: Items 2–4 are included in antenna mounting kit #65-2910-98. Extra hardware items are included.
AMA-99

Designed for Kenworth T2000 Conventional w/ Full Airdam

Outdoor Unit Mount Installation Guide

Note: For IMCT application, it is recommended a 36' ACU power cable be ordered. The AMA-99 kit also contains a display unit holster mount. Kenworth T2000s without airdam are advised to use AMA-101.
**Introduction**

This document provides the guidelines and an installation procedure to follow when you install the AMA-99 Outdoor Unit mount (MCN 10-30409-1) on your Kenworth T2000 conventional truck with full air dam. An assembly drawing of the AMA-99 and an accompanying parts list are provided in these instructions.

**Important**

The instructions for mount installations provided in this guide, assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle. QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first-time installations and/or new mount types and/or vehicle types prior to installation.

- The AMA-99 is installed in the middle, on top of the sleeper, and straddling the roof stiffeners.
- Kenworth T2000’s without and air dam are advised to use AMA-101.

**Note**

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call Customer Support at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

**Installation Guidelines**

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call Customer Support.</td>
</tr>
<tr>
<td>2.</td>
<td>In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.</td>
</tr>
<tr>
<td>3.</td>
<td>Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.</td>
</tr>
<tr>
<td>4.</td>
<td>The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.</td>
</tr>
<tr>
<td>5.</td>
<td>Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</td>
</tr>
</tbody>
</table>

**Note**

Do not use impact wrenches or other air-pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation kits. Over-torquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.

Use hand tools to tighten these parts.
Installation Procedure

The following steps apply to every AMA-99 installation. Perform these steps in the order listed below. Installation of the AMA-99 is divided into the following groups:

1. Pull Sleeper Headliner Down
2. Mark and Drill Mounting Holes
3. Attach Mount
4. Mount Display Unit Holster

Help
For help during installation, call Customer Support for assistance. The toll-free telephone number is (800) 541-7490, and Customer Support is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-99, be sure to review the Installation Guidelines provided on page 99-2.

This document also includes instructions on mounting the Display Unit Holster. An adapter plate is provided with the mount and used to mount the holster against the driver or passenger seat.

Step 1. Pull Sleeper Headliner Down

1. Pull down the headliner of the sleeper roof.

Note
If there are cabinets installed in the sleeper, you may have to remove these first.

The headliner is fastened to the roof by velcro and it may tend to rip away from the headliner (glue failure) rather than separating from the matching velcro fastener. If this happens, re-glue the velcro to the headliner.
Step 2. Mark and Drill Mounting Holes

1. Position the mount about 6” from the rear edge of the sleeper, in the center.

2. The underside of the air dam has a roof stiffener running in the center from the front to the back. Place the mount so it straddles this stiffener.

   **Note**
   Ensure that the radome of the ODU does not make contact with the air dam.

3. With mount in position, verify that the antenna mounting surface is level, then mark the four places where the holes will be drilled.

   **Note**
   Ensure that the roof stiffener is straddled.

4. Drill holes.
### Step 3. Attach Mount to the Sleeper Roof

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Apply silicon (RTV) sealant on the inside and outside of each of the 4 holes drilled.</td>
</tr>
<tr>
<td><strong>Note</strong></td>
<td>On the inside, it might be easier to apply the silicon (RTV) sealant to the stud plate which installs through each hole from the inside.</td>
</tr>
<tr>
<td>2.</td>
<td>Set the antenna mounting bracket on the 4 holes. Verify the antenna mounting surface is level.</td>
</tr>
<tr>
<td>3.</td>
<td>Insert the 4 stud plates through the 4 holes and antenna mounting bracket. Install the 4 washers and 4 self-locking nuts on the 4 stud plates.</td>
</tr>
<tr>
<td><strong>Note</strong></td>
<td>This may require a second person to hold the stud plates from inside while the self locking nuts are tightened.</td>
</tr>
<tr>
<td>4.</td>
<td>Once the AMA-99 is completely assembled, verify that all the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.</td>
</tr>
</tbody>
</table>

![Diagram of Mount Attachment](image-url)
Step 4. Mount Display Unit Holster

1. Remove bolt and seat belt from passenger or driver seat.
2. Slide seat belt back into place. Attach mounting plate and replace bolt. Be sure to tighten all bolts.
3. Display unit holster attaches with four bolts to the mounting plate.

This completes the installation of the AMA-99 Display Unit Holster.

Parts List: MCN 10-30409-1 (AMA-99)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-30845-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>50-30846-1</td>
<td>1</td>
<td>Stud Plate</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>50-30847-1</td>
<td>1</td>
<td>Holster Mounting Plate</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>554-02072-0312</td>
<td>5</td>
<td>Nylon Lock Nut</td>
<td>5/16-18 UNC</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>556-02074-0312</td>
<td>5</td>
<td>Washer Flat Zinc/Steel</td>
<td>5/16(7/8 X 3/8 X 5/64)</td>
<td>6</td>
</tr>
</tbody>
</table>

Note: Items 4 and 5 are contained in antenna mounting kit 65-2910-99. Extra hardware items are included.
AMA-101

Designed for Kenworth T2000 Conventional without Airdam

Note: For IMCT application, it is recommended a 36’ ACU power cable be ordered. The AMA-101 also contains a display unit holster mount. Kenworth T2000s with airdam are advised to use AMA-99.
## Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-101 outdoor unit mount (MCN 10-30411-2) on the Kenworth T2000 conventional truck without airdam. An assembly drawing of the AMA-101 and an accompanying parts list are provided in these instructions.

### Important

The instructions for mount installations provided in this guide, assume familiarity with the operation and use of the OmniTRACS equipment and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle. QUALCOMM strongly recommends that you obtain training from QUALCOMM for first time installations and/or new mount types and/or vehicle types prior to installation.

- Kenworth T2000s with an airdam are advised to use AMA-99.

### Note

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call QWBS Customer Support at 800-541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

## Installation Guidelines

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong> Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call Customer Support.</td>
<td><strong>5.</strong> Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</td>
</tr>
</tbody>
</table>
| **2.** In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13' 6". | **Note**  
Do not use impact wrenches or other air-pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation kits. Over-torquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs. Use hand tools to tighten these parts. |
| **3.** Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance. |   |
| **4.** The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties. |   |
Installation Procedure

The following steps apply to every AMA-101 installation. Perform these steps in the order listed below. Installation of the AMA-101 is divided into the following groups:

1. Pull down sleeper headliner.
2. Determine location of mount.
3. Mark and drill mounting holes.
4. Attach plate to sleeper roof.
5. Assemble top hat.
6. Attach top hat to plate.
7. Mount display unit holster.

Help

For help during installation, call QWBS Customer Support for assistance. The toll-free telephone number is 800-541-7490, and Customer Support is staffed 24 hours a day, 7 days a week (including holidays).

Note

Before installing the AMA-101, be sure to review the Installation Guidelines provided on page 101-2.

This document also includes instructions on mounting the Display Unit Holster. An adapter plate is provided with the mount and used to mount the holster against the driver or passenger seat.

Step 1. Pull down sleeper headliner

1. Pull down the headliner of the sleeper roof from inside the cab.

Note

If there are cabinets installed in the sleeper, you may have to remove these first.

The headliner is fastened to the roof by velcro and it may tend to rip away from the headliner (glue failure) rather than separating from the matching velcro fastener. If this happens, re-glue the velcro to the headliner.
### Step 2. Determine location of mount

1. The inside of the sleeper roof has a stiffener running in the center from the front to the back.

2. The ideal location for the mount is on the driver’s side of the stiffener.

3. If the driver side of the sleeper has an exhaust stack preventing placement of the mount, then position the mount on the passenger side of the sleeper.

4. If both the driver side and passenger side of the sleeper have stacks, then position the mount as close to the center as possible without bolting into the stiffener.

**CAUTION**

The center section of the sleeper is a LAST resort mounting location as it places the radome in a location where it may be hit by the trailer. Make sure adequate trailer clearance is available for turns and ramps.

### Step 3. Mark and drill mounting holes

1. Position the vertical mounting plate in place following the guidelines from the previous step.

2. Verify that the antenna mounting surface is level, then mark the four places where the holes will be drilled.

   **Note**

   Ensure that the roof stiffener is not located directly below where the holes will be drilled.

3. Drill holes.
## Step 4. Attach plate to the sleeper roof

1. Apply silicon (RTV) sealant on the inside of each stud plate (where it comes into contact with the roof) to seal against moisture.

2. Insert the four stud plates on the roof and back of the sleeper.

3. Set the vertical mounting plate on the 4 stud plates.

4. Install 3/8” washers and self-locking nuts on the 4 stud plates.

**Note**
A second person may be required to hold the stud plates from inside while the self-locking nuts are tightened.

## Step 5. Assemble top hat

1. Assemble the top hat by sliding one of the antenna mounting brackets into the other antenna mounting bracket and lining up the holes in the two pieces so that the top of the mounting bracket is level when the vehicle is level.

2. After the top antenna mounting bracket is level, secure it to the other antenna mounting bracket using the 3/8” bolts, washers, and nuts.

3. This assembly is now called the top hat.
**Step 6. Attach top hat to plate**

1. Place the top hat assembly onto the pre-mounted studs on the back of the vertical mounting plate.

2. Use the 3/8" washers and self-locking nuts to attach securely.

3. Once the AMA-101 is completely assembled, verify that all the bolts are securely tightened and the mount provides a solid, level mounting surface for the outdoor unit.

4. Replace the headliner on the cab roof once installation is complete.

---

**Step 7. Mount display unit holster**

1. Remove bolt and seat belt from passenger or driver seat.

2. Slide seat belt back into place. Attach mounting plate and replace bolt. Be sure to tighten all bolts.

3. Display unit holster attaches with four bolts to the mounting plate.

This completes the installation of the AMA-101 Display Unit Holster.
### Parts List: MCN 10-30411-2 (AMA-101)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-52610-2</td>
<td>1</td>
<td>Vertical Mounting Plate</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>50-3595-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>50-3595-2</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>556-02074-0375</td>
<td>17</td>
<td>Flat Washer</td>
<td>3/8 (1 x 7/16 x 5/64)</td>
<td>12</td>
</tr>
<tr>
<td>5</td>
<td>552-02069-1250</td>
<td>5</td>
<td>Hex Head Bolt</td>
<td>3/8-16UNC-2A x 1.250 ZINC</td>
<td>15</td>
</tr>
<tr>
<td>6</td>
<td>554-02072-0375</td>
<td>13</td>
<td>Lock Nylon Nut</td>
<td>3/8-16UNC ZINC</td>
<td>18</td>
</tr>
<tr>
<td>7</td>
<td>50-30847-1</td>
<td>1</td>
<td>Holster Mounting Plate</td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>8</td>
<td>50-30846-1</td>
<td>4</td>
<td>Stud Plate</td>
<td></td>
<td>24</td>
</tr>
</tbody>
</table>

**Note:** Extra hardware items are included.
Designed for Kenworth T600/800 Series w/AeroCab Flattop Sleeper and Side Skirts* (Driver-side Application)

*Note: This mount to be installed on driver side of truck. This mount is NOT recommended for tractors pulling Dry Van or Reefer trailers.
Introduction

This document provides the guidelines and installation procedure to follow when installing the AMA-102 Outdoor Unit mount (MCN 10-30412-1) on your Kenworth T600/800 conventional truck with 63” low roof sleeper. To use this mount, the truck must have side skirts and boomerang brackets with an open channel facing into the truck. It must be installed on the driver side of the sleeper. This mount cannot be used if there is an exhaust stack located on the rear, driver side of the sleeper. It is ideal for trucks with flatbed and tanker trailers.

An assembly drawing of the AMA-102 and an accompanying Parts List are provided in these instructions.

Important

The instructions for mount installations provided in this guide, assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle. QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first-time installations and/or new mount types and/or vehicle types prior to installation.

Note

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call QWBS Customer Support at (800) 541-7490. Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

If the mount you are installing requires the use of a sealant, special attention is needed to ensure a watertight seal. The best approach is to create a silicone seal on the inside and outside of the holes drilled into the truck/sleeper roof. Bolts should be installed from the inside with the nuts on the outside. (If the bolts are installed from the outside, the extra bolt length may not allow you to reinstall the headliner.)

Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call Customer Support.

2. In general, the higher the Outdoor Unit the better the MCT/IMCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.

3. Install the mount so the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicone (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls a refrigerated trailer or dry van, this mount should NOT be used.

Note

Do not use impact wrenches or other air-pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation Kits. Use hand tools to tighten these parts. Over-torquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.
Installation Procedures

The following steps apply to every AMA-102 installation. Perform these steps in the order listed.

1. Place the antenna mounting mast against the boomerang brackets.

2. Mark and drill mounting holes on the boomerang brackets.

3. Attach the antenna mounting mast to the boomerang brackets.

Help
For help during installation, call QWBS Customer Support at (800) 541-7490. Customer Support is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-102, be sure to review the Installation Guidelines provided on page 102-2.

Step 1. Place the antenna mounting mast against the boomerang brackets

1. Place the antenna mounting mast against the boomerang brackets that attach the side skirts to the back of the sleeper.

Note
Make sure you place the antenna mounting mast against the driver side. This mount is designed to be used on the driver side.
Step 2. Mark and drill mounting holes on the boomerang brackets

1. Mark the mounting holes on the boomerang brackets. Make sure the mount is level when the truck is level.

**Note**
You may need another person to help with step 1.

2. Drill the 5/16" mounting holes.

Step 3. Attach the antenna mounting mast to the boomerang brackets

1. Attach the antenna mounting mast to the boomerang brackets using the 5/16" bolts, washers, and nuts.

2. Ensure the antenna mounting mast is vertical and the top is level when the truck is level.

3. Once the AMA-102 is completely assembled, verify that all bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-102 Outdoor Unit Mount.
## Parts List: MCN 10-30412-1 (AMA-102)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-52212-1</td>
<td>1</td>
<td>Antenna Mounting Mast</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>552-02068-1000</td>
<td>9</td>
<td>Hex Head Bolt</td>
<td>5/16-18UNC-2A x 1.00 G5</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>554-02072-0312</td>
<td>9</td>
<td>Nylon Lock Nut</td>
<td>5/16-18UNC ZINC</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>556-02074-0312</td>
<td>17</td>
<td>Washer Flat Zinc/Steel</td>
<td>5/16 (7/8 x 3/8 x 5/64)</td>
<td>12</td>
</tr>
</tbody>
</table>

Extra hardware items are included.
*Note: This mount is for single stack applications. Tractor must have side skirts for this installation. Vans and reefers are okay.
### Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-103 Outdoor Unit mount (MCN 10-30413-1) on Volvo VNL-610. An assembly drawing of the AMA-103 and an accompanying parts list are provided in these instructions. The AMA-103 is for application on a mid-sloping roof with integral sleeper and single stack. The AMA-103 is installed on the driver side of the vehicle.

**Important**

The instructions for mount installations provided in this guide, assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle. QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first-time installations and/or new mount types and/or vehicle types prior to installation.

**Note**

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call QWBS Customer Support at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

### Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call Customer Support.

2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

**Note**

Do not use impact wrenches or other air-pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation kits. Over-torquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.

Use hand tools to tighten these parts.
Installation Procedure

The following steps apply to every AMA-103 installation. Perform these steps in the order listed below. Installation of the AMA-103 is divided into the following groups:

1. Remove and loosen bolts
2. Install mounting plates
3. Install top vertical assembly
4. Install mast

Help
For help during installation, call Customer Support for assistance. The toll-free telephone number is (800) 541-7490, and Customer Support is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-103, be sure to review the Installation Guidelines provided on page 103-2.
Step 1. Remove and Loosen Bolts

1. Remove the top three bolts from the top of side skirt.

2. Loosen the fourth bolt, but do not remove. (This allows room for the addition of the mounting plate).

3. Remove two bolts from top boomerang bracket.
Step 2. Install Mounting Plates

1. Apply RTV silicone sealant to the under side of the vertical mounting plate. Use of sealant is intended to affix plate to cab wall, reducing vibration.

2. Install vertical mounting plate under lip of top fairing using the 8mm metric hex bolts provided. Tighten fourth bolt, that was previously loosened.

3. Install lower horizontal support onto top boomerang bracket using the 8mm metric hex bolts provided.

CAUTION
Do not re-use the metric bolts that were removed from the air fairing and boomerang brackets. These are too short for application with the mount hardware. 8mm x 30mm metric bolts are provided in the AMA-103 mount kit to be used for this purpose.
Step 3. Install Top Vertical Assembly

1. Install vertical support bracket to the studs on the vertical mounting plate.

2. Install the upper backing plate onto the studs of the vertical mounting plate after the vertical support bracket is in place. Loosely screw washer and nuts into place. Do not tighten at this point.

Step 4. Install Mast

1. Install mast by setting antenna mounting mast into place inside the vertical mast bracket. Attach loosely with the 3/8 bolts, washers, and nuts provided.

2. Place lower backing plate at the bottom of the mast and tighten into position using the 3/8 bolt, washer, and nut provided. Tighten securely.

3. Return to the vertical mast bracket at the top of the mast and tighten the hardware securely.

This completes the installation of the AMA-103 Outdoor Unit mount.
### Parts List: MCN 10-30413-1 (AMA-103)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-52596-1</td>
<td>1</td>
<td>Antenna Mounting Mast</td>
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<td></td>
</tr>
<tr>
<td>2</td>
<td>50-52597-1</td>
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<td>Upper Backing Plate</td>
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<td></td>
</tr>
<tr>
<td>3</td>
<td>50-52598-1</td>
<td>1</td>
<td>Lower Backing Plate</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>50-52599-1</td>
<td>1</td>
<td>Lower Horizontal Support</td>
<td>8</td>
<td></td>
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<tr>
<td>5</td>
<td>50-52600-1</td>
<td>1</td>
<td>Vertical Support Bracket</td>
<td>10</td>
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<tr>
<td>6</td>
<td>50-52601-1</td>
<td>1</td>
<td>Vertical Mounting Plate</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>552-02069-1250</td>
<td>6</td>
<td>Hex Head Bolt</td>
<td>3/8-16 UNC 2A x 1.250</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>554-02072-0375</td>
<td>8</td>
<td>Nylon Lock Nut</td>
<td>3/8-16 UNC</td>
<td>6</td>
</tr>
<tr>
<td>9</td>
<td>556-02074-0375</td>
<td>18</td>
<td>Flat Washer</td>
<td>1x7/16 x 5/64</td>
<td>8</td>
</tr>
<tr>
<td>10</td>
<td>552-08903-0830</td>
<td>6</td>
<td>Hex Bolt Full Thread</td>
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Note: Items 7 and 10 are contained in antenna mounting kit 65-2910-103. Extra hardware items are included.
AMA-104

Designed for 1993 and later Ford 9000 Day Cab

Outdoor Unit Mount Installation Guide
### Introduction

This document provides the guidelines and installation procedure to follow when installing the AMA-104 Outdoor Unit Mount (MCN 10-30414-1) on 1993 and later Ford 9000 day cabs. An assembly drawing of the AMA-104 and an accompanying Parts List are provided in these instructions.

**Important**

The instructions for mount installations provided in this guide assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle. QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first-time installations and/or new mount types and/or vehicle types prior to installation.

**Note**

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call the QUALCOMM Customer Support 24-Hour Hotline at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

Special attention is needed to ensure a watertight seal when installing this mount. The best approach is to create a silicon seal on the inside and outside of the holes drilled into the truck/sleeper roof. Bolts should be installed from the inside with the nuts on the outside. (If the bolts are installed from the outside, the extra bolt length may not allow you to reinstall the headliner.)

### Installation Guidelines

| 1. Unpack the mount hardware and verify that all the parts listed on the Parts List at the end of this document are present. If a part is missing, call the Customer Support Hotline. |
| 2. In general, the higher the Outdoor Unit the better the MCT/IMCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6.” |
| 3. Install the mount so the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance. |
| 4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties. |
| 5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties. |
| 6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp. |
| 7. If the vehicle hauls a refrigerated trailer or dry van, make sure the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp. |

**Note**

Do not use impact wrenches or other air pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation Kits. **Use hand tools to tighten these parts.** Overtorquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.
Installation Procedures

The following steps apply to every AMA-104 installation. Perform these steps in the order listed.

1. Attach the angle clips.
2. Attach the triangular plate.
3. Attach the diagonal legs.
4. Assemble and attach the top hat.
5. Attach the adjustable (telescoping) legs.
6. Drill clearance holes.

Help

For help during installation, call the QUALCOMM Customer Support Hotline at (800) 541-7490. The Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note

Before installing the AMA-104, be sure to review the Installation Guidelines provided on page 104-2.

Step 1. Attach the angle clips

1. Attach the angle clips to the right and left sides of the airdam brackets using the existing bolts.
2. Tighten all bolts.
Step 2. Attach the triangular plate

1. Attach the triangular plate to the right and left diagonal legs.

**Note**
Use only two bolts in the lower positions. DO NOT tighten the bolts.

---

Step 3. Attach the diagonal legs

1. Attach the diagonal legs to the angle clips on both sides of the airdam brackets with the bolts provided.

2. DO NOT tighten the bolts.
Step 4. Assemble and attach the top hat

1. Assemble the top hat by sliding the antenna mounting plate into the antenna mounting bracket and lining up the holes in the two pieces.

2. Secure it to the antenna mounting bracket using 3/8" bolts, washers, and nuts. This assembled part is called the “top hat.”

3. Attach the top hat to the triangular plate using four bolts.

4. DO NOT tighten the bolts.

Caution
Always secure the AMA-104 legs to the existing airdam mounting brackets. Never attach the legs to the roof of the cab. Attaching the AMA-104 legs directly to the roof of the cab could damage it over time.

Step 5. Attach the adjustable (telescoping) legs

1. Bend the feet of the larger 1-1/4” diameter legs so the legs converge toward the side of the top hat.

2. Bend the feet of the smaller 1” diameter legs so the legs converge toward the forward airdam mounting brackets.

3. Attach the smaller diameter legs to the forward airdam mounting brackets.

Caution
Always install the smaller diameter legs on the bottom. If the larger diameter legs are installed on the bottom they can fill up with rain water and rust from the inside.
Step 6. Drill clearance holes

1. Drill two clearance holes for the 5/16” bolts in each of the legs. Position these holes three to four inches apart at 90° angles from one another. Make sure the holes pass through both tubes.

2. Install the 5/16” bolts, washers, and nuts in each hole.

3. Tighten the bolts and adjust the top hat for a level antenna mounting platform.

This completes the installation of the AMA-104 Outdoor Unit Mount.
### Parts List: MCN 10-30414-1 (AMA-104)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
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<tbody>
<tr>
<td>1</td>
<td>50-3595-2</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>50-3595-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>50-52819-1</td>
<td>1</td>
<td>Adapter Plate</td>
<td>9</td>
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</tr>
<tr>
<td>4</td>
<td>50-52820-2</td>
<td>1</td>
<td>Mirrored Angle Support</td>
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<td>5</td>
<td>50-52820-1</td>
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<td>Angle Support</td>
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<td></td>
</tr>
<tr>
<td>6</td>
<td>50-52818-1</td>
<td>2</td>
<td>Angle Bracket</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>50-2487-40</td>
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<td>Adjustable Steel Leg</td>
<td>1.25 diameter</td>
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<tr>
<td>8</td>
<td>50-2488-40</td>
<td>2</td>
<td>Adjustable Steel Leg</td>
<td>1.00 diameter</td>
<td>24</td>
</tr>
<tr>
<td>9</td>
<td>552-02069-1250</td>
<td>15</td>
<td>Hex Head Bolt</td>
<td>3/8-16UNC-2AX1.250 Zinc</td>
<td>27</td>
</tr>
<tr>
<td>10</td>
<td>556-02074-0375</td>
<td>33</td>
<td>Flat Washer</td>
<td>3/8 Zinc/Steel</td>
<td>30</td>
</tr>
<tr>
<td>11</td>
<td>554-02072-0375</td>
<td>17</td>
<td>Nylon Lock Nut</td>
<td>3/8-16UNC Zinc</td>
<td>33</td>
</tr>
<tr>
<td>12</td>
<td>552-02069-1500</td>
<td>5</td>
<td>Hex Head Bolt</td>
<td>3/8-16UNC-2AX1.500 Zinc</td>
<td>35</td>
</tr>
<tr>
<td>13</td>
<td>552-02068-2250</td>
<td>3</td>
<td>Hex Head Bolt</td>
<td>5/16-18UNC-2AX2.25 Zinc</td>
<td>37</td>
</tr>
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<td>14</td>
<td>556-02074-0312</td>
<td>9</td>
<td>Flat Washer</td>
<td>5/16 Zinc/Steel</td>
<td>39</td>
</tr>
<tr>
<td>15</td>
<td>556-02072-0312</td>
<td>5</td>
<td>Nylon Lock Nut</td>
<td>5/16-18UNC Zinc</td>
<td>41</td>
</tr>
</tbody>
</table>
Designed for FedEx International 9600 COE Day Cab, No Airdam
# Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-105 Outdoor Unit mount (MCN 10-30415-1) on the FedEx International 9600 Cab Over Engine Day Cab. An assembly drawing of the AMA-105 and an accompanying parts list are provided in these instructions.

The AMA-105 is installed between the roof and headliner, and are attached to the existing roof support I-beams.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call the OmniTRACS Customer Service Hotline at (800) 541-7490.

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# Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

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# Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline.

2. In general, the higher the Outdoor Unit the better the MCT/IMCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

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# Note

Do not use impact wrenches or other air-pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation kits. Over-torquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.

Use hand tools to tighten these parts.
# Installation Procedure

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Pull Cab Headliner Down.</td>
</tr>
<tr>
<td>2.</td>
<td>Remove AMA-10 ODU Dome ANtenna Mount Hardware.</td>
</tr>
<tr>
<td>3.</td>
<td>Mount the Roof Bracket</td>
</tr>
<tr>
<td>4.</td>
<td>Drill Mounting Holes and Replace ODU Dome Antenna Mount Hardware.</td>
</tr>
</tbody>
</table>

## Help
For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

## Note
Before installing the AMA-105, be sure to review the Installation Guidelines provided on page 105-2.

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### Step 1. Pull Cab Headliner Down

1. Locate speaker grills above driver and passenger side windows. Remove screws and lower speaker grills.

2. Locate screw for plastic headliner rail above seatbelt hardware on each side of the truck. Screw is hidden behind vinyl backing.

3. Remove screw. Pull headliner rail away to lower headliner.

4. Foam rubber may be found between the headliner and the roof. This will need to be cut away to install the Roof Support Brackets.
**Step 2. Remove AMA-10 ODU Dome Antenna Mount Hardware**

1. Remove nuts, bolts, and plywood blocks holding AMA-10 ODU mount in place. Set hardware and plywood blocks aside leaving the ODU mount in its original position on roof.

**Note**

Plywood blocks are located on the underside of roof.

2. The hardware and plywood blocks will be used to secure the ODU mount and roof to the Roof Support Brackets.

![Diagram of ODU Dome Antenna Mount Hardware](image)
Step 3. Mount the Roof Bracket

1. The underside of the roof has roof support I-beams running from the front to the back of the cab. These I-beams are attached to the roof by an adhesive material. If the roof has not already become detached, separate it from the support I-beams at the adhesive point.

2. The Roof Support Brackets will be mounted perpendicular to the roof support I-beam.

3. Remove the nuts, washers, and plates from the Roof Support Brackets.

4. Insert the Roof Support Brackets (with flat side of Brackets facing up) in the space between the roof support I-beams and the cab roof. Cut-outs in the metal will allow the brackets to sit securely on top of the roof support I-beams.

**Note**
You may have to exert some upward force on the roof to allow Roof Support Brackets to slide into place.

5. Align Roof Support Brackets so they cover the holes previously drilled in the cab roof to support the ODU mount.

6. Anchor Roof Support Brackets to the roof support I-beams with the plates, washers, and nuts provided. The plates should clamp firmly to the top lip of the roof support I-beams, to keep the Roof Support Brackets in place.
Step 4. Drill Mounting Holes and Replace ODU Dome Antenna Mount Hardware

1. From the outside of the cab roof, drill a 3/8” hole into existing ODU mount holes and through Roof Support Brackets.

2. Inside, apply RTV sealant to wood blocks and insert wood blocks between the Roof Support Brackets and roof skin. Align holes in wood blocks with holes in Roof Support Brackets.

3. Re-install ODU mounting hardware. Tighten until rubber gasket begins to squeeze out from under the mount.

4. On the outside of the roof, apply RTV sealant to hardware and surrounding area.

5. Replace headliner and speaker grills.

This completes the installation of the AMA-105 Outdoor Unit Mount.
### Parts List: MCN 10-30415-1 (AMA-105)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>50-2591-1</td>
<td>1</td>
<td>Flush Mount Bracket</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>50-52470-1</td>
<td>2</td>
<td>Horizontal Support</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>552-02069-1500</td>
<td>6</td>
<td>Hex Head Bolt</td>
<td>3/8-16 UNC-2A x 1.500</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>552-02068-1250</td>
<td>9</td>
<td>Hex Head Bolt</td>
<td>5/16-18 NC-2A x 1.25</td>
<td>7</td>
</tr>
<tr>
<td>5</td>
<td>556-02074-0375</td>
<td>11</td>
<td>Flat Washer</td>
<td>3/8 (1 x 7/16 x 5/64)</td>
<td>9</td>
</tr>
<tr>
<td>6</td>
<td>556-02074-0312</td>
<td>17</td>
<td>Flat Washer</td>
<td>5/16 (7/8 x 3/8 x 5/64)</td>
<td>11</td>
</tr>
<tr>
<td>7</td>
<td>554-02072-0375</td>
<td>6</td>
<td>Nylon Lock Nut</td>
<td>3/8/16 UNC</td>
<td>13</td>
</tr>
<tr>
<td>8</td>
<td>554-02072-0312</td>
<td>9</td>
<td>Nylon Lock Nut</td>
<td>5/16-18 UNC</td>
<td>15</td>
</tr>
</tbody>
</table>

**Note:** Items 3 through 8 are contained in antenna mounting kit 65-2910-1. Extra hardware items are included.

Side View

Rear View

Note: RTV sealant is placed in these locations on back side of plate to adhere plate to truck.

4 places

Note: Washers and nuts on inside of tophat are not shown in this drawing.

Note: The installation of this mount prevents the location of exhaust stacks on the driver side of the tractor.
### Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-106 Outdoor Unit mount (MCN 10-30416-1) on the 1997/98 Ford AeroMax and 1998/99 Sterling Silver Star. An assembly drawing of the AMA-106 and an accompanying parts list are provided in these instructions.

**Important**

The instructions for mount installations provided in this guide, assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle. QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first time installations and/or new mount types and/or vehicle types prior to installation.

- The AMA-106 is installed on the driver’s side between the upper part of the side skirt and the back of the sleeper.

**Note**

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

### Installation Guidelines

<table>
<thead>
<tr>
<th>Steps</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline.</td>
</tr>
<tr>
<td>2.</td>
<td>In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.</td>
</tr>
<tr>
<td>3.</td>
<td>Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.</td>
</tr>
<tr>
<td>4.</td>
<td>The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties and convoluted tubing.</td>
</tr>
<tr>
<td>5.</td>
<td>Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</td>
</tr>
<tr>
<td>6.</td>
<td>If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>7.</td>
<td>If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
</tbody>
</table>

**Note**

Do not use impact wrenches or other air-pressured tools to tighten the nuts and bolts in your MCT/IMCT Installation kits. Over-torquing the MCT/IMCT hardware results in stripped nuts and potentially time-consuming and expensive repairs.

Use hand tools to tighten these parts.
Installation Procedure

The following steps apply to every AMA-106 installation.

1. Remove Mounting Hardware from Side Skirt
2. Align the Flush Mounting Plate
3. Apply RTV to Flush Mounting Plate
4. Install the Flush Mounting Plate
5. Assemble the Top Hat
6. Attach the Top Hat to the Flush Mounting Plate

Help
For help during installation, call the Qualcomm Customer Support Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Before installing the AMA-106, be sure to review the Installation Guidelines provided on page 106-2.

Step 1. Remove Mounting Hardware from Side Skirt

1. Remove the bolts connecting the horizontal braces to the back of the sleeper; (These serve as additional support for the side skirt).
2. Remove enough bolts connecting the side skirt on the driver’s side to the air fairing at the top so that the flush mounting plate can be inserted.
3. Pull the side skirt back from the sleeper without removing it.
Step 2. Align Flush Mounting Plate

1. Place the flush mounting plate between the air fairing and side skirt. Use the pre-drilled mounting hole at the bottom of the flush mounting plate to align the mount.

2. Level the plate and use the existing holes on the left side and top of the side skirt as guides to line up holes on the plate. If holes on the side skirt do not match up to the holes on the plate, then mark hole locations on the plate to drill. Mark enough holes so that the flush mounting plate is secured firmly.

3. Remove the plate and drill clearance holes if necessary on the left side and top of the flush mounting plate for side skirt mounting bolts.

Step 3. Apply RTV to Flush Mounting Plate

1. After plate has been used to align mounting holes on back of sleeper and holes have been drilled as necessary, apply RTV sealant on the back surface of the flush mounting plate as shown.
Step 4. Install the Flush Mounting Plate

1. Insert the flush mounting plate between the side skirt and air fairing again, using a bolt so it hangs from the top of the air fairing.

2. Be sure that the flush mounting plate is level and then insert the remaining bolts.

3. Replace the bolts to secure the side skirt back onto the sleeper. Also replace the horizontal braces using the original hardware.

Step 5. Assemble the Top Hat

1. Assemble the top hat by sliding the antenna mounting bracket (item 2 in parts list) into the other antenna mounting bracket (item 3) and lining up the holes in the two pieces so that the top of the mounting plate is level when the vehicle is level.

2. After the top antenna mounting bracket is level, secure it to the other antenna mounting bracket using the 3/8" bolts, washers, and nuts provided.
Step 6. Attach the Top Hat to the Flush Mounting Plate

1. Slide the top hat onto the four studs protruding from the flush mounting plate, using the 3/8” nuts and washers provided. Be sure that it is level when the truck is level.

2. After the AMA-106 installation is completed, verify that all of the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-106 Outdoor Unit mount.
### Parts List: MCN 10-30416-1 (AMA-106)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-52742-1</td>
<td>1</td>
<td>Flush Mounting Plate</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>50-3595-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>50-52777-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>556-02074-0375</td>
<td>13</td>
<td>Flat Washer Zinc/Steel</td>
<td>3/8 (1 x 7/16 x 5/64)</td>
<td>12</td>
</tr>
<tr>
<td>5</td>
<td>552-02069-1250</td>
<td>5</td>
<td>Hex Head Bolt</td>
<td>3/8-16 UNC</td>
<td>15</td>
</tr>
<tr>
<td>6</td>
<td>554-02072-0375</td>
<td>9</td>
<td>Nylon Lock Nut</td>
<td>3/8-16 UNC</td>
<td>18</td>
</tr>
</tbody>
</table>

**Note:** Each hardware item includes spare parts.
Note: Use the AMA-106 for the Sterling SilverStar with a single exhaust stack.
Introduction

This document provides the guidelines and installation procedure to follow when installing the AMA-109 Outdoor Unit Mount (MCN 10-53165-1) on the Sterling SilverStar condo. An assembly drawing of the AMA-109 and Parts List are provided in these instructions.

Important

The instructions for mount installations provided in this guide, assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle. QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first-time installations and/or new mount types and/or vehicle types prior to installation.

Note

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call QWBS Customer Support at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

Special attention is needed to ensure a watertight seal when installing this mount. The best approach is to create a silicon seal on the inside and outside of the holes drilled into the truck/sleeper roof. Bolts should be installed from the inside with the nuts on the outside. (If the bolts are installed from the outside, the extra bolt length may not allow you to re-install the headliner.)

Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the Parts List at the end of this document are present. If a part is missing, call Customer Support.

2. In general, the higher the Outdoor Unit the better the IMCT/MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6’’.

3. Install the mount so the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls a refrigerated trailer or dry van, make sure the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

Note

Do not use impact wrenches or other air pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation Kits. Use hand tools to tighten these parts. Overtorquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.
**Installation Procedures**

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Remove the boomerang bracket bolts.</td>
</tr>
<tr>
<td>2.</td>
<td>Position and install the horizontal mounting channels.</td>
</tr>
<tr>
<td>3.</td>
<td>Position the vertical channel/top plate.</td>
</tr>
<tr>
<td>4.</td>
<td>Install and tighten bolts.</td>
</tr>
</tbody>
</table>

**Help**

For help during installation, call QWBS Customer Support for assistance at (800) 541-7490. Customer Support is staffed 24 hours a day, 7 days a week (including holidays).

**Note**

Before installing the AMA-109, be sure to review the Installation Guidelines provided on page 109-2.

---

**Step 1. Remove the boomerang bracket bolts**

1. Unbolt and remove the upper two boomerang brackets from the back of the sleeper.
2. DO NOT remove the brackets.

Remove bolts from top 2 pairs of boomerang brackets where they attach to cab.
**Step 2. Position and install the horizontal mounting channels**

1. Slip the horizontal mounting channels under the boomerang brackets, making sure to align the holes with the existing bolt pattern of the brackets.

2. Install the horizontal mounting channels so that the shorter of the two channels is on top and the longer of the two channels is on the bottom.

3. Reinstall the two bolts into each boomerang bracket.

4. DO NOT tighten the bolts yet.

**Step 3. Position the vertical channel/top plate**

1. Position the vertical channel/top plate in back of the horizontal mounting channels (flat channel to flat channel) so the hole patterns in all three parts line up.

Make sure the vertical channel/top plate is centered between the dual exhaust stacks.
Step 4. Install the vertical channel/top plate

1. First install and then tighten all bolts to the vertical channel, making sure the vertical channel is not slanted to the left or right.

2. Now tighten the bolts where the horizontal channels fit into each boomerang bracket.

This completes the installation of the AMA-109 Outdoor Unit Mount.

### Parts List: MCN 10-53165-1 (AMA-109)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
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<th>PL Ref</th>
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<td>Mast</td>
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<tr>
<td>2</td>
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<td>3</td>
<td>50-53167-2</td>
<td>1</td>
<td>Mounting Channel</td>
<td>Long</td>
<td>5</td>
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<td>4</td>
<td>552-02069-1250</td>
<td>9</td>
<td>Hex Head Bolt</td>
<td>3/8-16UNC-2A x 1.250</td>
<td>7</td>
</tr>
<tr>
<td>5</td>
<td>556-02074-0375</td>
<td>17</td>
<td>Flat Washer</td>
<td>3/8 (1 x 7/16 x 5/64)</td>
<td>9</td>
</tr>
<tr>
<td>6</td>
<td>554-02072-0375</td>
<td>9</td>
<td>Nylon Lock Nut</td>
<td>3/8-16UNC</td>
<td>11</td>
</tr>
</tbody>
</table>
AMA-110

Outdoor Unit Mount Installation Guide

Designed for Cabover or Conventional

Side View

Rear View

4 places

7
5

4 places

1
3
6
4

400EF_99

399EF_99

OmniTRACS®
Introduction

This document provides the guidelines and installation procedure to follow when installing the AMA-110 Outdoor Unit Mount (MCN 10-53118-1) on the cabover or conventional truck. An assembly drawing of the AMA-110 and Parts List are provided in these instructions.

Important

The instructions for mount installations provided in this guide assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle. QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first-time installations and/or new mount types and/or vehicle types prior to installation.

Note

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call the QUALCOMM Customer Support 24-Hour Hotline at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

Special attention is needed to ensure a watertight seal when installing this mount. The best approach is to create a silicon seal on the inside and outside of the holes drilled into the truck/sleeper roof. Bolts should be installed from the inside with the nuts on the outside. (If the bolts are installed from the outside, the extra bolt length may not allow you to reinstall the headliner.)

Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the Parts List at the end of this document are present. If a part is missing, call the Customer Service Hotline.

2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6.”

3. Install the mount so the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls a refrigerated trailer or dry van, make sure the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

Note

Do not use impact wrenches or other air pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation Kits. **Use hand tools to tighten these parts.** Overtorquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.
Installation Procedures

The following steps apply to every AMA-110 installation. Perform these steps in the order listed.

1. Pull down the headliner.
2. Position the mount and drill the holes.
3. Cut and drill the plywood backing panel.
4. Prepare the outside and inside roof surfaces.
5. Create silicon seal inside and outside.
6. Install the mount.

Help
For help during installation, call the QUALCOMM Customer Support 24-Hour Hotline for assistance at (800) 541-7490. The Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-110, be sure to review the Installation Guidelines provided on page 110-2.

Step 1. Pull down the headliner

1. Prior to drilling the holes, the vehicle headliner should be dropped. This prevents damage to the headliner when drilling and also provides access to the holes.
Step 2. Position the mount and drill the holes

1. Position the mount near the vehicle center line and place it as far forward as possible to ensure the Outdoor Unit has a clear 360º line-of-sight view of the satellite even with the trailer attached.

2. Place the mount on a flat surface. If no flat surface is available, the mount should be positioned so that no distortion to the roof occurs (the roof should maintain its original shape) when it is firmly secured to the vehicle.

3. Drill the four mount holes.

Step 3. Cut and drill the plywood backing panel

**Note**
QUALCOMM suggests keeping the plywood panel as one piece; however, it may be cut into more than one square, as necessary.

1. Preplace the plywood panel(s) on the inside of the roof where the four mount holes have already been drilled. Determine whether the required holes need to be off-center because of an obstruction, such as roof stiffeners.

**Note**
Some trucks have roof stiffeners that may prevent the plywood backing panel(s) from being centered on the roof hole.

2. Mark the plywood backing panel(s) and drill 3/8” holes outside the truck.

3. Install 3/8” x 1.75” bolt and larger fender washer into the plywood backing panel(s) and set aside.
Step 4. Prepare the outside and inside roof surfaces

1. Clean the outside roof surface so it is free from dirt and grease. Scrape off any adhesives used.

2. Clean the inside roof surface so it is free from dirt and grease. Scrape off any adhesives used.

Step 5. Create silicon seal inside and outside

1. Using a liberal amount of silicon, place a 1/2" thick bead of silicon sealant around each bolt where it protrudes from the plywood backing panel(s).

2. Using a liberal amount of silicon, place a 1/2" bead of silicon around each of the four holes drilled for the mount on the outside of the roof.
### Step 6. Install the mount

This step requires two people.

1. Insert the plywood backing panel(s) with protruding 3/8” bolts through the roof holes from the inside.

2. As each bolt is inserted through each hole from the inside, press the rubber mounting pad onto the four bolts on the outside.

3. Once all four plywood backing panels are in place, lower the AMA-110 onto the four bolts.

4. Attach a small flat washer and nut to each bolt. Tighten the nuts evenly as they draw the mount to the roof.

---

This completes the installation of the AMA-110 Outdoor Unit Mount.
## Parts List: MCN 10-53118-1 (AMA-110)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
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<tbody>
<tr>
<td>1</td>
<td>50-53119-1</td>
<td>4</td>
<td>Rubber Mounting Pad</td>
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<td>3</td>
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<td>2</td>
<td>50-53111-1</td>
<td>1</td>
<td>Flush Mounting Bracket</td>
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<td>6</td>
</tr>
<tr>
<td>3</td>
<td>50-2555-1</td>
<td>1</td>
<td>Plywood Backing Panel</td>
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<td>9</td>
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<td>4</td>
<td>552-02069-2000</td>
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<td>Hex Head Bolt</td>
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<td>12</td>
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<tr>
<td>5</td>
<td>556-02074-0375</td>
<td>5</td>
<td>Flat Washer</td>
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<td>15</td>
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<tr>
<td>6</td>
<td>556-02073-0000</td>
<td>5</td>
<td>Fender Washer</td>
<td>3/8 (2 x 7/16 x 1/8)</td>
<td>16</td>
</tr>
<tr>
<td>7</td>
<td>554-02072-0375</td>
<td>5</td>
<td>Nylon Lock Nut</td>
<td>3/8-16UNC</td>
<td>18</td>
</tr>
</tbody>
</table>

Note: Each hardware item includes spare parts.
AMA-112

Outdoor Unit Mount Installation Guide

Designed for International Sky Rise (Driver or Passenger Side Application)

*Note: This mount replaces the crossbar that connects the side skirt to the back of the sleeper.
# Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-112 Outdoor Unit mount (MCN 10-30422-1 - Right or MCN 10-30422-2 - Left) on the International SkyRise. An assembly drawing of the AMA-112 and an accompanying parts list are provided in these instructions.

**Important**

The instructions for mount installations provided in this guide, assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle. QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first-time installations and/or new mount types and/or vehicle types prior to installation.

- The AMA-112 is installed on the driver side (MCN 10-30422-2) or passenger side of the tractor behind the side skirts. (MCN 10-30422-1)

**Note**

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call QWBS Customer Support at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

---

<table>
<thead>
<tr>
<th>Installation Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call Customer Support.</td>
</tr>
<tr>
<td>2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.</td>
</tr>
<tr>
<td>3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.</td>
</tr>
<tr>
<td>4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.</td>
</tr>
<tr>
<td>5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</td>
</tr>
</tbody>
</table>

**Note**

Do not use impact wrenches or other air-pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation kits. Over-torquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.

Use hand tools to tighten these parts.
Installation Procedure

The following steps apply to every AMA-112 installation. Perform these steps in the order listed below. Installation of the AMA-112 is divided into the following groups:

1. Remove cross bar from side skirt
2. Attach brackets to mount
3. Align mounting holes
4. Bolt mount into place

Help
For help during installation, call Customer Support for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-112, be sure to review the Installation Guidelines provided on page 112-2.

This mount may be ordered for driver-side or passenger-side installation. Verify the correct mount has been ordered and shipped. See Parts List at end of instructions.

Step 1. Remove Cross-bar from Side Skirt

1. Remove hardware from the cross bar that connects the side skirt to the rear of the cab. (The cross bar will be replaced by the mount assembly).
**Step 2. Attach Brackets to Antenna Mounting Bracket**

1. Attach Side Extender Bracket and Rear Cab Bracket to Antenna Mounting Bracket, using 3/8” hardware provided. Do not tighten.

*Note*
Reverse application for passenger side installation.

---

**Step 3. Align Mounting Holes**

1. Remove third and fourth bolt from the side skirt. These bolts will be reused for the mount installation.
Step 4. Bolt Mount into Place

1. Align the bracket with side extender and crossbar holes.
2. Use the hardware that was previously removed to bolt the antenna mounting bracket into place on the truck.
3. Tighten all hardware.

This completes the installation of the AMA-112 Outdoor Unit Mount.

### Parts List: MCN 10-30422-1 (AMA-112 - Right)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-52731-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td>(Right)</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>50-52733-1</td>
<td>1</td>
<td>Side Extender Bracket</td>
<td>(Right)</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>50-52732-1</td>
<td>1</td>
<td>Rear Cab Bracket</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>552-02069-1250</td>
<td>3</td>
<td>Hex Head Bolt</td>
<td>3/8-16UNC - 2A x 1.250</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>554-02072-0375</td>
<td>3</td>
<td>Nylon Lock Nut</td>
<td>3/8-16 UNC</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>556-02074-0375</td>
<td>5</td>
<td>Washer Flat Zinc/Steel</td>
<td>3/8(1 X 7/16 X 5/64)</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: Items 4 through 6 are contained in antenna mounting kit 65-2910-112. Extra hardware items are included.

### Parts List: MCN 10-30422-2 (AMA-112 - Left)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-52731-2</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td>(Left)</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>50-52733-2</td>
<td>1</td>
<td>Side Extender Bracket</td>
<td>(Left)</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>50-52732-1</td>
<td>1</td>
<td>Rear Cab Bracket</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>552-02069-1250</td>
<td>3</td>
<td>Hex Head Bolt</td>
<td>3/8-16UNC - 2A x 1.250</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>554-02072-0375</td>
<td>3</td>
<td>Nylon Lock Nut</td>
<td>3/8-16 UNC</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>556-02074-0375</td>
<td>5</td>
<td>Washer Flat Zinc/Steel</td>
<td>3/8(1 X 7/16 X 5/64)</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: Items 4 through 6 are contained in antenna mounting kit 65-2910-112. Extra hardware items are included.
Note: This mount can be used with single and dual stack configurations. Application of the mount does not require side skirts.
## Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-113 Outdoor Unit mount (MCN 10-30423-1) on the Freightliner FLD Condo, Century Class Condo and Argosy. An assembly drawing of the AMA-113 and an accompanying parts list are provided in these instructions.

### Important

The instructions for mount installations provided in this guide, assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle.

QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first-time installations and/or new mount types and/or vehicle types prior to installation.

- The AMA-113 can be used with single and dual stack configurations. Application of this mount does not require side skirts.

### Note

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call QWBS Customer Support at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

## Installation Guidelines

<table>
<thead>
<tr>
<th>1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call Customer Support.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.</td>
</tr>
<tr>
<td>3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.</td>
</tr>
<tr>
<td>4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties and convoluted tubing.</td>
</tr>
<tr>
<td>5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</td>
</tr>
<tr>
<td>6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
</tbody>
</table>

### Note

Do not use impact wrenches or other air-pressured tools to tighten the nuts and bolts in your MCT/IMCT Installation kits. Over-torquing the MCT/IMCT hardware results in stripped nuts and potentially time-consuming and expensive repairs.

Use hand tools to tighten these parts.
Installation Procedure

The following steps apply to every AMA-113 installation.

1. Remove Speaker or Light for Interior Access
2. Position Flush Mounting Plate on Sleeper
3. Apply RTV Sealant to Flush Mounting Plate
4. Attach Flush Mounting Plate to Sleeper
5. Attach Antenna Mounting Bracket

Help
For help during installation, call QWBS Customer Support for assistance. The toll-free telephone number is (800) 541-7490, and Customer Support is staffed 24 hours a day, 7 days a week (including holidays).

Before installing the AMA-113, be sure to review the Installation Guidelines provided on page 113-2.

Step 1. Remove Speaker or Light for Interior Access

1. On the back wall of the sleeper, remove the speaker or light. Removal of these items provides access to the back wall, where the hardware for the mount will be attached.
Step 2. Position Flush Mounting Plate on the Sleeper

1. Hang the flush mounting plate off the back of the sleeper about 5” from the vertical seam on the back wall. Make sure the lip is in contact with the top of the sleeper.

2. Mark the four hole locations using the flush mounting plate as a template. Keep in mind where the interior access hole is located inside the sleeper.

**CAUTION**

Be sure to position plate clear of any stacks.

3. Drill holes through back wall of sleeper as marked.

---

Step 3. Apply RTV Sealant to Flush Mounting Plate

1. After plate has been used to mark and drill holes on back of sleeper, apply RTV sealant on the back surface as shown.

2. The RTV provides additional support for the mount on the back of the sleeper.
**Step 4. Attach Flush Mounting Plate to Sleeper**

1. Position the flush mounting plate, lining up all four pre-drilled holes with those that have been drilled into the back of the sleeper.

2. Be sure that the lip of the flush mounting plate is in contact with the top of the sleeper. Using the 3/8" bolts, washers, and nuts, attach the plate to the sleeper. The 7/16" washers and 3/8" nuts are tightened through the sleeper wall access hole.

**Step 5. Attach Antenna Mounting Bracket**

1. Slide the antenna mounting bracket into place inside the angles of the flush mounting plate.

2. Use the slotted hole in the bracket as a guide to leveling the top surface of the bracket. Once level, use the 3/8" bolts, washers and nuts to secure.

3. After the AMA-113 installation is completed, verify that all of the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

4. Remember to replace the speaker/light on the back wall of the sleeper.

This completes the installation of the AMA-113 Outdoor Unit mount.
## Parts List: MCN 10-30423-1 (AMA-113)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-52856-1</td>
<td>1</td>
<td>Flush Mounting Plate</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>50-3595-2</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>556-02074-0375</td>
<td>13</td>
<td>Flat Washer Zinc/Steel</td>
<td>3/8 (1 x 7/16 x 5/64)</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>552-02069-1250</td>
<td>9</td>
<td>Hex Head Bolt</td>
<td>3/8-16 UNC</td>
<td>15</td>
</tr>
<tr>
<td>5</td>
<td>554-02072-0375</td>
<td>9</td>
<td>Nylon Lock Nut</td>
<td>3/8-16 UNC</td>
<td>18</td>
</tr>
<tr>
<td>6</td>
<td>556-02281-0007</td>
<td>5</td>
<td>Flat Washer Steel (Cad Plate)</td>
<td>7/16 (1.812 x .453 x .109)</td>
<td>22</td>
</tr>
</tbody>
</table>

Note: Each hardware item includes spare parts.
Note: Use of this mount is RESTRICTED to tractors with side skirts, single exhaust stack, flatbeds and tankers only.
Introduction

This document provides the guidelines and an installation procedure to follow when installing the AMA-116 outdoor unit mount (MCN 10-53070-1) on the Peterbilt low roof sleeper (cab-high). An assembly drawing of the AMA-116 and an accompanying parts list are provided in these instructions.

Important

The instructions for mount installations provided in this guide, assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle. QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first-time installations and/or new mount types and/or vehicle types prior to installation.

- The AMA-116 is installed on the driver’s side in the area behind the sleeper and attached to the side skirt boomerang brackets and the sleeper at the cap rivet line.
- To use this mount, the truck must have side skirts and boomerang brackets with an open channel that faces into the truck. This mount is ideal for trucks with flatbed and tanker trailers. It is not recommended for use on trucks pulling vans, dry or refrigerated.

Note

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call QWBS Customer Support at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call Customer Support.

2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties and protected by convoluted tubing.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls refrigerated trailers or dry van, this mount should NOT be used.

Note

Do not use impact wrenches or other air-pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation kits. Over-torquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.

Use hand tools to tighten these parts.
Installation Procedure

The following steps apply to every AMA-116 installation. Perform these steps in the order listed below. Installation of the AMA-116 is divided into the following groups:

1. Attach the Support Bracket
2. Place Antenna Mounting Mast/Support Bracket Against Rivet Line
3. Slide the Nut Plates Behind the Boomerang Brackets
4. Mark and Drill Mounting Holes on the Boomerang Brackets
5. Attach the Antenna Mounting Mast at the Rivet Line
6. Attach the Antenna Mounting Mast at the Boomerang Brackets

For help during installation, call QWBS Customer Support for assistance. The toll-free telephone number is (800) 541-7490, and Customer Support is staffed 24 hours a day, 7 days a week (including holidays).

**Note**

Before installing the AMA-116, be sure to review the Installation Guidelines provided on page 116-2.

Step 1. Attach the Support Bracket

1. Attach the support bracket to the antenna mounting mast using a 3/8” bolt, washer, and nut.
## Step 2. Place Antenna Mounting Mast/Support Bracket Against Rivet Line

<table>
<thead>
<tr>
<th>Step</th>
<th>Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Prior to drilling any holes, the vehicle rear-wall liner should be dropped. This prevents damage to the headliner when drilling and also provides access to the holes from the inside of the sleeper.</td>
</tr>
<tr>
<td>2.</td>
<td>Place the antenna mounting mast and the attached support bracket against the rivet line of the sleeper.</td>
</tr>
<tr>
<td>3.</td>
<td>Mark the rivets that align with the mounting holes of the support bracket.</td>
</tr>
<tr>
<td>4.</td>
<td>Drill out the marked rivets.</td>
</tr>
<tr>
<td>5.</td>
<td>Drill the 5/16&quot; mounting holes.</td>
</tr>
</tbody>
</table>

### Diagram

- Back of Truck
- Rivets
- Remove Rivets
- Support Bracket
- Antenna Mounting Mast

---

## Step 3. Mark and Drill Mounting Holes on the Boomerang Brackets

<table>
<thead>
<tr>
<th>Step</th>
<th>Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Ensure the antenna mounting mast is vertical when it rests against the boomerang brackets.</td>
</tr>
<tr>
<td>2.</td>
<td>Mark where the antenna mounting mast rests against both the top and bottom boomerang brackets.</td>
</tr>
<tr>
<td>3.</td>
<td>Remove the antenna mounting mast from the rivet line (attached in Step 2).</td>
</tr>
<tr>
<td>4.</td>
<td>Drill the 3/8&quot; mounting holes, as marked on the boomerang brackets.</td>
</tr>
</tbody>
</table>

### Diagram

- Mark and drill holes
- Antenna Mounting Mast
- Boomerang Bracket (existing part)
Step 4. Attach the Antenna Mounting Mast at the Rivet Line

1. Attach the antenna mounting mast/support bracket to the rivet line of the sleeper using the 5/16” bolts, washers, and nuts.

**Note**
1/4” huck rivets may be used instead of the 5/16” hardware. However, huck rivets are NOT provided with this mounting kit.

2. Be sure to use silicon (RTV) sealant around each of the mounting holes, both inside and outside the sleeper.

3. Ensure the antenna mounting mast is vertical and the top is level when the truck is level.

Step 5. Attach the Antenna Mounting Mast at the Boomerang Brackets

1. Slide each nut plate behind each boomerang bracket.

2. Attach the antenna mounting mast to the boomerang brackets and nut plates using the 3/8” bolts and washers.

3. Ensure the antenna mounting mast is vertical and the top is level when the truck is level.

4. Once the AMA-116 is completely assembled, verify that all bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-116 Outdoor Unit Mount.
### Parts List: MCN 10-53070-1 (AMA-116)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-53071-1</td>
<td>1</td>
<td>Antenna Mounting Mast</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>50-30084-1</td>
<td>1</td>
<td>Support Bracket</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>50-30083-1</td>
<td>2</td>
<td>Nut Plate</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>552-02069-1250</td>
<td>6</td>
<td>Hex Head Bolt</td>
<td>3/8-16 UNC</td>
<td>12</td>
</tr>
<tr>
<td>5</td>
<td>556-02074-0375</td>
<td>7</td>
<td>Flat Washer Zinc/Steel</td>
<td>3/8 (1 x 7/16 x 5/64)</td>
<td>15</td>
</tr>
<tr>
<td>6</td>
<td>554-02072-0375</td>
<td>2</td>
<td>Nylon Lock Nut</td>
<td>3/8-16 UNC</td>
<td>18</td>
</tr>
<tr>
<td>7</td>
<td>552-02068-1250</td>
<td>3</td>
<td>Hex Head Bolt</td>
<td>5/16-18 UNC</td>
<td>21</td>
</tr>
<tr>
<td>8</td>
<td>556-02074-0312</td>
<td>5</td>
<td>Flat Washer Zinc/Steel</td>
<td>5/16 (7/8 x 3/8 x 5/64)</td>
<td>24</td>
</tr>
<tr>
<td>9</td>
<td>554-02072-0312</td>
<td>3</td>
<td>Nylon Lock Nut</td>
<td>5/16-18 UNC</td>
<td>27</td>
</tr>
</tbody>
</table>

**Note:** Extra hardware items are included.
AMTA-117

Designed for Volvo VNL-770 Condo

Outdoor Unit Mount Installation Guide

Note: This mount may be used with single or dual stack configurations. High or low trailers are approved for this application.
**Introduction**

This document provides the guidelines and an installation procedure to follow when installing the AMA-117 outdoor unit mount (MCN 10-53072-1) on the Volvo VNL-770 condo. An assembly drawing of the AMA-117 and an accompanying parts list are provided in these instructions.

**Important**

The instructions for mount installations provided in this guide, assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle. QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first-time installations and/or new mount types and/or vehicle types prior to installation.

**Note**

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call QWBS Customer Support at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

---

**Installation Guidelines**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong> Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call Customer Support.</td>
<td><strong>5.</strong> Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</td>
</tr>
<tr>
<td><strong>2.</strong> In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.</td>
<td><strong>6.</strong> If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td><strong>3.</strong> Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.</td>
<td><strong>7.</strong> If the vehicle hauls refrigerated trailers or dry van, this mount should <strong>NOT</strong> be used.</td>
</tr>
</tbody>
</table>
| **4.** The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties and protected by convoluted tubing. | **Note**

Do not use impact wrenches or other air-pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation kits. Over-torquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs. Use hand tools to tighten these parts. |
Installation Procedure

The following steps apply to every AMA-117 installation. Perform these steps in the order listed below. Installation of the AMA-117 is divided into the following groups:

1. Remove Protective Buttons
2. Attach Mounting Bracket
3. Assemble Top Hat Bracket

Note
For help during installation, call QWBS Customer Support for assistance. The toll-free telephone number is (800) 541-7490, and Customer Support is staffed 24 hours a day, 7 days a week (including holidays).

Before installing the AMA-117, be sure to review the Installation Guidelines provided on page 117-2.

Step 1. Remove Protective Buttons

1. Remove the four factory-installed protective buttons covering the imbedded nuts on sleeper, near top of back wall
Step 2. Attach Mounting Bracket

1. Align the holes of the antenna mounting bracket with the four imbedded nuts on back wall of sleeper.

2. Attach mounting bracket using the 8 mm bolts and washers provided.

Step 3. Assemble Top Hat

1. Assemble the top hat by sliding the antenna mounting bracket (item 2 in parts list) into the mounting bracket just bolted onto the truck.

2. Line up the holes in the two pieces so that the top of the mounting plate is level when the vehicle is level.

3. After the top antenna mounting bracket is level, secure it to the other antenna mounting bracket using the 3/8” bolts, washers, and nuts provided.
## Parts List: MCN 10-53072-1 (AMA-117)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-6966-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>50-3595-2</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>552-02069-1250</td>
<td>5</td>
<td>Hex Head Bolt</td>
<td>3/8-16 UNC</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>556-02074-0375</td>
<td>13</td>
<td>Flat Washer Zinc/Steel</td>
<td>3/8 (1 x 7/16 x 5/64)</td>
<td>12</td>
</tr>
<tr>
<td>5</td>
<td>552-02072-0375</td>
<td>5</td>
<td>Lock Nut</td>
<td>3/8-16 UNC</td>
<td>15</td>
</tr>
<tr>
<td>6</td>
<td>552-08903-0830</td>
<td>5</td>
<td>Hex Head Bolt</td>
<td>8 mm</td>
<td>18</td>
</tr>
</tbody>
</table>

Note: Extra hardware items are included.
Designed for Kenworth T2000 Conventional w/ Side Skirts and Full Airdam

Location of installation

Existing Hardware

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### Introduction

This document provides the guidelines and installation procedure to follow when installing the AMA-120 Outdoor Unit Mount (MCN 10-53486-1) on your 2000 Kenworth T2000 truck with side skirts and full airdam. It should be installed on the rear flange of the airdam in the center.

An assembly drawing of the AMA-120 and an accompanying Parts List are provided in these instructions.

**Important**

The instructions for mount installations provided in this guide, assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle. QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first-time installations and/or new mount types and/or vehicle types prior to installation.

**Note**

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call QUALCOMM Customer Support at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

### Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the Parts List at the end of this document are present. If a part is missing, call Customer Support.

2. In general, the higher the Outdoor Unit the better the MCT/IMCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.

3. Install the mount so the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls a refrigerated trailer or dry van, make sure the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

**Note**

Do not use impact wrenches or other air pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation Kits. **Use hand tools to tighten these parts.** Overtorquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.
Installation Procedures

The following steps apply to every AMA-120 installation. Perform these steps in the order listed.

1. Attach fairing mount brackets.
2. Attach antenna mounting bracket.
3. Attach vertical support brackets.
4. Attach antenna support arms.
5. Attach antenna mounting plate.

Help
For help during installation, call QUALCOMM Customer Support at (800) 541-7490. Customer Support is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-120, be sure to review the Installation Guidelines provided on page 120-2.
Step 1. Attach fairing mount brackets

1. Mark the location of the center support rib on the airdam lip.

2. Mark the (4) horizontal mounting holes in the bracket and align the top of the bracket just below the lip radius.

3. Drill (4) horizontal pilot holes using a 1/8” drill bit.
### Step 1. Attach fairing mount brackets (Continued)

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.</td>
<td>Holding the fairing mount brackets secure against the airdam lip while sandwiching the airdam rib, verify the slotted holes align with the (4) 1/8&quot; pilot holes drilled in the airdam lip.</td>
</tr>
<tr>
<td><strong>Note</strong></td>
<td>Long leg of fairing mount bracket goes to airdam center support rib.</td>
</tr>
<tr>
<td>5.</td>
<td>Drill (6) 7/16&quot; holes through the center rib and lip, using the slotted holes in the fairing brackets as a template.</td>
</tr>
<tr>
<td>6.</td>
<td>Attach the fairing mount brackets to the center airdam rib.</td>
</tr>
</tbody>
</table>
Step 2. Attach antenna mounting bracket

1. Attach the antenna mounting bracket to the airdam lip and the fairing mount brackets.

Step 3. Attach vertical support brackets

1. Attach the left and right vertical support brackets to the boomerang brackets using the (metric) hardware provided.

Note
If the exhaust stacks are also attached to the boomerang brackets, place the vertical support bracket on top of the exhaust bracket, not between the boomerang and exhaust brackets.
This completes the installation of the AMA-120 Outdoor Unit Mount.
## Parts List: MCN 10-53486-1 (AMA-120)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>50-53576-1</td>
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<td>Antenna Support Arm, right</td>
<td></td>
<td>1</td>
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<td>2</td>
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<td>Antenna Mounting Plate</td>
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<td>50-53487-1</td>
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<td>Antenna Mounting Bracket</td>
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<td>6</td>
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<td>4</td>
<td>50-J2200-1</td>
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<td>Fairing Mount Bracket</td>
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<tr>
<td>5</td>
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<td>6</td>
<td>50-J2199-1</td>
<td>2</td>
<td>Vertical Support Bracket</td>
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<td>7</td>
<td>552-02069-1250</td>
<td>15</td>
<td>Hex Head Bolt</td>
<td>3/8-16UNC-2AX1.25 Zinc</td>
<td>27</td>
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<td>8</td>
<td>556-02074-0375</td>
<td>29</td>
<td>Flat Washer</td>
<td>3/8 Zinc/Steel</td>
<td>30</td>
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<tr>
<td>9</td>
<td>554-02072-0375</td>
<td>15</td>
<td>Nylon Lock Nut</td>
<td>Regular Hex 3/8-16UNC Zinc</td>
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<td>10</td>
<td>552-08903-6030</td>
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<td>Hex Full Thread Bolt</td>
<td>M6X30 Steel Zinc-Dichromate</td>
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<td>11</td>
<td>554-53221-0060</td>
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<td>Nylon Hex Locking Nut</td>
<td>M6 Class 8 Steel/Zinc-Clear Chrome</td>
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<td>12</td>
<td>556-02074-0250</td>
<td>17</td>
<td>Flat Washer</td>
<td>1/4 Zinc/Steel</td>
<td>42</td>
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</table>

Note: Extra hardware items are included.
Introduction

This document provides the guidelines and installation procedure to follow when installing the AMA-121 Outdoor Unit Mount (MCN 10-53569-1) on a Sterling day cab. An assembly drawing of the AMA-121 and an accompanying Parts List are provided in these instructions.

Important

The instructions for mount installations provided in this guide assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle. QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first-time installations and/or new mount types and/or vehicle types prior to installation.

Note

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call the QUALCOMM Customer Support 24-Hour Hotline at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

If the mount you are installing requires the use of a sealant, special attention is needed to ensure a watertight seal. The best approach is to create a silicon seal on the inside and outside of the holes drilled into the truck/sleeper roof. Bolts should be installed from the inside with the nuts on the outside. (If the bolts are installed from the outside, the extra bolt length may not allow you to reinstall the headliner.)

Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the Parts List at the end of this document are present. If a part is missing, call the Customer Support Hotline.

2. In general, the higher the Outdoor Unit the better the MCT/IMCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6.”

3. Install the mount so the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls a refrigerated trailer or dry van, make sure the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

Note

Do not use impact wrenches or other air pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation Kits. Use hand tools to tighten these parts. Overtorquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.
Installation Procedures

The following steps apply to every AMA-121 installation. Perform these steps in the order listed.

1. Attach the airdam plate attachment to the truck.

2. Attach the long mounting channel to the gutter mounting plate.

3. Attach the gutter mounting plate to the cab roof gutter.

4. Attach the antenna mounting bracket.

5. Attach the antenna mounting plate.

6. Attach the short mounting channel to the long mounting channel.

7. Attach the adjustable legs.

8. Drill the clearance holes.

Help

For help during installation, call the QUALCOMM Customer Support Hotline at (800) 541-7490. The Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note

Before installing the AMA-121, be sure to review the Installation Guidelines provided on page 121-2.
Step 1. Attach the airdam plate attachment to the truck

1. Attach the airdam attachment plate to the airdam on the truck using the existing hardware.

Step 2. Attach the long mounting channel to the gutter mounting plate

1. Attach the gutter mounting plates to the long mounting channel using the 3/8" bolts, washers, and nuts.

Note
The part number is stamped into each gutter mounting plate. Be sure to attach the 50-53571-1 plate to the left side of the channel and the 50-53571-2 plate to the right side of the channel.
Step 3. Attach the gutter mounting plate to the cab roof gutter

1. Attach the gutter mounting plate to the roof gutter by using the gutter clamp plate and cam nuts and rotating them until they are tight against the roof gutter.

2. Secure by using the 3/8” washers and nuts.

Step 4. Attach the antenna mounting bracket

1. Use the four predrilled holes in the short antenna mounting channel to attach the antenna mounting bracket.
Step 5. Attach the antenna mounting plate

1. Attach the antenna mounting plate by sliding it into the antenna mounting bracket and lining up the bolt holes in the two pieces so the top of the mounting plate is level when the vehicle is level. If necessary, additional 3/8" clearing holes can be drilled in the sides of the mounting plate.

2. After the antenna mounting plate is level, secure it to the antenna mounting bracket using 3/8" bolts, washers, and nuts. This is now called the top hat.

Step 6. Attach the short mounting channel to the long mounting channel

1. Attach the short mounting channel to the long mounting channel using 3/8" bolts, washers, and nuts.
Step 7. Attach the adjustable legs

1. Attach the adjustable legs between the antenna mounting bracket and the airdam attachment plate. Use the 3/8" bolts, washers, and nuts.

2. Bend the feet of the smaller-diameter legs so, when they are bolted to the forward brackets, the legs converge toward the antenna mounting bracket.

3. Attach the smaller-diameter legs to the forward antenna mounting bracket.

4. Slide the larger-diameter brackets over the smaller-diameter legs and bolt the feet of the larger-diameter legs to the antenna mounting plate. Use the 3/8" bolts, washers, and nuts.

**Caution**
Always install the smaller-diameter legs on the bottom. If the larger-diameter legs are installed on the bottom they fill up with rain water and rust from the inside.

Step 8. Drill clearance holes

1. Drill two clearance holes for the 5/16" bolts in each leg. These holes should be 3 to 4 inches apart and positioned at 90-degree angles from one another. Ensure the holes pass through both tubes.

2. Install the 5/16" bolts, washers, and nuts in each hole.

3. Verify all bolts are securely tightened and that the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-121 Outdoor Unit Mount.
## Parts List: MCN 10-53569-1 (AMA-121)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
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<tr>
<td>1</td>
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<td>Antenna Mounting Bracket</td>
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<td>3</td>
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<td>3</td>
<td>50-53573-1</td>
<td>1</td>
<td>Short Mounting Channel</td>
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<td>4</td>
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<td>1</td>
<td>Long Mounting Channel</td>
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<td>5</td>
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<td>Gutter Mounting Plate, right-hand</td>
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<td>7</td>
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<td>10</td>
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<td>Adjustable Steel Leg, 1.25 diameter</td>
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<td>11</td>
<td>552-02068-2250</td>
<td>5</td>
<td>Hex Head Bolt, 5/16-18UNC-2AX2</td>
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<td>12</td>
<td>556-02074-0312</td>
<td>9</td>
<td>Flat Washer, 5/16 Zinc/Steel</td>
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</tr>
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<td>13</td>
<td>554-02072-0312</td>
<td>5</td>
<td>Nylon Lock Nut, Regular Hex 5/1</td>
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<td>14</td>
<td>552-02069-1250</td>
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<td>Hex Head Bolt, 3/8-16UNC-2AX1.2</td>
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<td>16</td>
<td>554-02072-0375</td>
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<td>17</td>
<td>50-4046-1</td>
<td>4</td>
<td>Cam Nut</td>
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<td>48</td>
</tr>
</tbody>
</table>

Extra hardware items are included.
AMA-126 Outdoor Unit Mount Installation Guide

Designed for Freightliner FLD-120 Condo with BAC PAC

Side View

Rear View

6 places

1

2

3

(2)

4
### Introduction

This document provides the guidelines and installation procedure to follow when installing the AMA-126 Outdoor Unit Mount (MCN 10-53711-1) on the Freightliner FLD-120 condo. An assembly drawing of the AMA-126 and Parts List are provided in these instructions.

**Important**

The instructions for mount installations provided in this guide assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle. QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first-time installations and/or new mount types and/or vehicle types prior to installation.

**Note**

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call the QUALCOMM Customer Support 24-Hour Hotline at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

Special attention is needed to ensure a watertight seal when installing this mount. The best approach is to create a silicon seal on the inside and outside of the holes drilled into the truck/sleeper roof. Bolts should be installed from the inside with the nuts on the outside. (If the bolts are installed from the outside, the extra bolt length may not allow you to re-install the headliner.)

### Installation Guidelines

<table>
<thead>
<tr>
<th>1. Unpack the mount hardware and verify that all the parts listed on the Parts List at the end of this document are present. If a part is missing, call the Customer Support Hotline.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. In general, the higher the Outdoor Unit the better the MCT/IMCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6.”</td>
</tr>
<tr>
<td>3. Install the mount so the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.</td>
</tr>
<tr>
<td>4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.</td>
</tr>
<tr>
<td>5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</td>
</tr>
<tr>
<td>6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>7. If the vehicle hauls a refrigerated trailer or dry van, make sure the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
</tbody>
</table>

**Note**

Do not use impact wrenches or other air pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation Kits. **Use hand tools to tighten these parts.** Overtorquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.
Installation Procedures

The following steps apply to every AMA-126 installation. Perform these steps in the order listed.

1. Place the bracket in the saddle; mark and drill the holes.
2. Bolt the mount to the saddle.

Help

For help during installation, call the QUALCOMM Customer Support 24-Hour Hotline for assistance at (800) 541-7490. The Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note

Before installing the AMA-126, be sure to review the Installation Guidelines provided on page 126-2.

Step 1. Place the bracket in the saddle; mark and drill the holes

1. Place the bracket in the saddle.
2. Adjust the position of the bracket so the antenna mounting surface is level.
3. Mark the position where the (6) holes are to be drilled into the saddle.
4. Drill six holes.
Step 2. Bolt the mount to the saddle

1. Position and bolt the antenna mounting bracket to the saddle.

This completes the installation of the AMA-126 Outdoor Unit Mount.
AMA-130

Designed for Mack CH Day Cab with Full Airdam and W-Bracing

Outdoor Unit Mount Installation Guide
## Introduction

This document provides the guidelines and installation procedure to follow when installing the AMA-130 Outdoor Unit Mount (MCN 10-J0542-1) on your Mack CH day cab with full airdam and W-bracing.

An assembly drawing of the AMA-130 and an accompanying Parts List are provided in these instructions.

**Important**

The instructions for mount installations provided in this guide assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle. QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first-time installations and/or new mount types and/or vehicle types prior to installation.

---

## Installation Guidelines

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Unpack the mount hardware and verify that all the parts listed on the Parts List at the end of this document are present. If a part is missing, call Customer Support.</td>
</tr>
<tr>
<td>2.</td>
<td>In general, the higher the Outdoor Unit the better the MCT/IMCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6.”</td>
</tr>
<tr>
<td>3.</td>
<td>Install the mount so the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.</td>
</tr>
<tr>
<td>4.</td>
<td>The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.</td>
</tr>
<tr>
<td>5.</td>
<td>Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</td>
</tr>
<tr>
<td>6.</td>
<td>If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>7.</td>
<td>If the vehicle hauls a refrigerated trailer or dry van, make sure the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
</tbody>
</table>

**Note**

Do not use impact wrenches or other air pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation Kits. **Use hand tools to tighten these parts.** Overtorquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.
Installation Procedures

The following steps apply to every AMA-130 installation. Perform these steps in the order listed.

1. Assemble the vertical mount plate and support bracket.

1.5 Assemble the mount plate and vertical support angle.

2. Remove the original hardware from the airdam supports.

3. Position the assembled mount plate and support angle.

4. Attach the mount plate to the airdam.

5. Install the mounting bracket.

Help

For help during installation, call QUALCOMM Customer Support at (800) 541-7490. Customer Support is staffed 24 hours a day, 7 days a week (including holidays).

Note

Before installing the AMA-130, be sure to review the Installation Guidelines provided on page 130-2.

Step 1. Assemble the vertical mount plate and support bracket

1. Assemble the support bracket to the vertical mount plate using the 3/8" x 1.25 bolts and washers provided for each of the five locations shown in the illustration.

2. Hand-tighten the bolts.
Step 1.5 Assemble the mount plate and vertical support angle

1. Assemble the mount plate and support angle by sliding the support angle through the cutout in the leg of the mount plate.

2. Orient the support angle so the side without holes is at the top of the assembly, the slotted hole is to the right of the assembly, and the round hole is to the left of the assembly.

3. Install two sets of the 3/8” x 1.25 bolts, nuts, and washers through the mount plate and support angle assembly.

4. **Hand-tighten** the bolts.

Step 2. Remove the hardware from the airdam supports

1. Remove the original top two sets of 10 mm bolts from the airdam support.

2. Do not reuse the hardware.
Step 3. Position the assembled mount plate and support angle

1. Position the assembled mount plate and support angle so the slotted hole and round hole of the support angle align with the holes where the original hardware was removed from the airdam.

2. Install two sets of 3/8” x 1.75 bolts, nuts, and washers through the support angle, the two tubular supports, and the airdam brackets.

3. **Hand-tighten** the bolts.

Step 4. Attach the mount plate to the airdam

**Note**
This is the critical step for aligning the mount.

1. Position the upper flange of the mount plate so it is **up and against** the inside surface of the fairing, that is, the top front corner of the flange should be nested in the corner of the fiberglass support which crosses the fairing. Clamp the mount plate into position.

2. Mark two holes in the upper flange of the mount plate. Position the holes so they will pass through the flange of the fiberglass support when drilled.

3. Drill two 7/16” holes, making sure to drill through the flange of the fiberglass support.

4. Install and tighten the 3/8” x 1.75 bolts, nuts, and washers.
Step 5. Install the mounting bracket

1. Re-tighten all hand-tightened bolts in the mounting hardware.

2. Slide the mounting bracket inside the legs of the mount plate and attach with four 3/8” x 1.25 hardware provided.

3. Make sure the mounting bracket is level before tightening all bolts, nuts, and washers.

This completes the installation of the AMA-130 Outdoor Unit Mount.

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
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<td>50-J0540-1</td>
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<td>Vertical Support Angle</td>
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<td>50-J2179-1</td>
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<td>Support Bracket</td>
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<td>5</td>
<td>556-02074-0375</td>
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<td>Flatwasher</td>
<td>3/8 Zinc/Steel</td>
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<tr>
<td>6</td>
<td>552-02069-1250</td>
<td>10</td>
<td>Hex Head Bolt</td>
<td>3/8-16UNC-2AX1.25</td>
<td>15</td>
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<tr>
<td>7</td>
<td>554-02072-0375</td>
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<td>Hex Head Bolt</td>
<td>3/8-16UNC-2AX1.75</td>
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</table>

Note: Extra hardware items are included.
Designed for Volvo 42T Conventional Day Cab with Airdam
Introduction

This document provides the guidelines and installation procedure to follow when installing the AMA-131 Outdoor Unit mount (MCN 10-J0575-1) on your Volvo 42T conventional day cab.

The AMA-131 is designed specifically for the Volvo 42T conventional day cab with airdam, as it is installed using the airdam bracketry.

An assembly drawing of the AMA-131 and an accompanying Parts List are provided in these instructions.

Note
Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call the OmniTRACS Customer Support Hotline at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

Important
The instructions for mount installations provided in this guide, assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle.

QUALCOMM strongly recommends that you obtain installation training from Qualcomm for first-time installations and/or new mount types and/or vehicle types prior to installation.

Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Support Hotline.

2. In general, the higher the Outdoor Unit the better the MCT/IMCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6”.

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.
**Installation Procedure**

The following steps apply to every AMA-131 installation. Perform these steps in the order listed.

1. Assemble horizontal support and support mounting plate.
2. Assemble vertical support and antenna brackets.
3. Attach horizontal support to brackets on cab.
4. Attach vertical support to support mounting plate.
5. Attach telescoping legs.
6. Drill clearance holes.
7. Adjust and tighten antenna mounting bracket.

**Help**

For help during installation, call the QUALCOMM Customer Support Hotline at (800) 541-7490. The Hotline is staffed 24 hours a day, 7 days a week (including holidays).

**Note**

Before installing the AMA-131, be sure to review the Installation Guidelines provided on page 131-2.

---

**Step 1. Assemble horizontal support and support mounting plate**

1. Using the 3/8” x 1.25” bolts, washers, and nuts that are provided, attach the support mounting plate to the horizontal support.

2. Tighten all hardware securely.
Step 2. Assemble vertical support and antenna brackets

1. Using the 3/8” x 1.25” bolts, washers, and nuts that are provided, attach the antenna mount bracket to the vertical antenna support channel.

2. Tighten the hardware.

3. Using the 3/8” x 1.25” bolts, washers, and nuts that are provided, attach the antenna mounting bracket to the antenna mount bracket.

4. Hand-tighten this hardware.

Step 3. Attach horizontal support to brackets on cab

1. Rest the horizontal support on the two-sheet metal brackets that extend behind the square tubing support for the fairing.

2. Mark the hole locations on the sheet metal brackets.

3. Remove the horizontal support and drill a clearance hole through the sheet metal brackets for the 3/8” x 1.25” bolts, washers, and nuts that are provided.

**CAUTION**

Take care not to drill into the cab.

4. Mount the horizontal support to the sheet metal brackets. Orient bolts properly.

5. Tighten all hardware securely.
Step 4. Attach vertical support to support mounting plate

1. Using the 3/8” x 1.25” bolts, washers, and nuts that are provided, mount the vertical support to the support mounting plate.

2. Tighten the hardware.
**Step 5. Attach telescoping legs**

1. Locate the forward fairing mounting brackets. Find the two holes that go through the outboard flange of these brackets on each side of the truck.

**CAUTION**

Always secure the telescoping legs to the forward fairing mounting brackets. Never attach the legs to the roof of the cab.

2. Bend the feet of the smaller 1" diameter legs so the legs will converge toward the antenna mounting bracket when they are bolted to the forward bracketry.

3. Attach these (smaller) legs to the forward brackets using the 3/8” x 1.25” bolts, washers, and nuts that are provided.

4. Bend the feet of the larger 1.25" diameter legs so they are flush against the antenna mounting plate. Slide the larger legs over the smaller legs and bolt the feet of the larger legs to the antenna mounting plate using 3/8” x 1.25” bolts, washers, and nuts.

**CAUTION**

Always install the smaller legs on the bottom. If the larger legs are installed on the bottom they can fill up with rainwater and rust from the inside.

**Step 6. Drill clearance holes**

1. Drill two clearance holes for the 5/16” x 2.25” bolts in each of the legs. These holes should be 3–4” apart and positioned at 90-degree angles from one another. Make sure the holes pass through the inner and outer tubes.

2. Install 5/16” bolts, washers, and nuts in each hole.

3. Tighten all hardware securely.
Step 7. Adjust and tighten antenna mounting bracket

1. Adjust the angle of the antenna mounting bracket so the antenna is level.
2. Tighten all hardware securely.
3. Verify that all the bolts are securely tightened and the mount provides a solid level mounting surface for the antenna.

This completes the installation of the AMA-131 Outdoor Unit mount.
### Parts List: MCN 10-J0575-1 (AMA-131)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-J0549-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>3</td>
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<tr>
<td>2</td>
<td>50-J1363-1</td>
<td>1</td>
<td>Antenna Bracket Mount</td>
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<td>6</td>
</tr>
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<td>50-J0572-1</td>
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<td>Vertical Antenna Support</td>
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<td>4</td>
<td>50-J0573-1</td>
<td>1</td>
<td>Support Mounting Plate</td>
<td></td>
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<tr>
<td>5</td>
<td>50-J0574-1</td>
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<td>Horizontal Antenna Support</td>
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<td>15</td>
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<tr>
<td>6</td>
<td>50-J0576-40</td>
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<td>Outside Telescoping Leg</td>
<td></td>
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<tr>
<td>7</td>
<td>50-J0577-40</td>
<td>2</td>
<td>Inside Telescoping Leg</td>
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<td>21</td>
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<tr>
<td>8</td>
<td>552-02068-2250</td>
<td>5</td>
<td>Hex Head Bolt</td>
<td>5/16-18 UNC-2A x 2.25 zinc</td>
<td>24</td>
</tr>
<tr>
<td>9</td>
<td>552-02069-1250</td>
<td>25</td>
<td>Hex Head Bolt</td>
<td>3/8-16 UNC-2A x 1.250 zinc</td>
<td>27</td>
</tr>
<tr>
<td>10</td>
<td>556-02074-0312</td>
<td>9</td>
<td>Flat Washer</td>
<td>zinc steel 5/16 (7/8 x 3/8 x 5/64)</td>
<td>30</td>
</tr>
<tr>
<td>11</td>
<td>556-02074-0375</td>
<td>49</td>
<td>Flat Washer</td>
<td>zinc steel 3/8 (1 x 7/16 x 5/64)</td>
<td>33</td>
</tr>
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<td>12</td>
<td>554-02072-0312</td>
<td>5</td>
<td>Nylon Lock Nut</td>
<td>5/16-18 UNC zinc</td>
<td>36</td>
</tr>
<tr>
<td>13</td>
<td>554-02072-0375</td>
<td>25</td>
<td>Nylon Lock Nut</td>
<td>3/8-16 UNC zinc</td>
<td>39</td>
</tr>
</tbody>
</table>

Extra hardware items are included.
AMA-135

Designed for 2003 Sterling Day Cab without Airdam

Outdoor Unit Mount Installation Guide

[Diagram of truck with annotations for installation locations]

1. 2 Places
2. 4 Places
3. 4 Places
4. 4 Places
## Introduction

This document provides the guidelines and installation procedure to follow when installing the AMA-135 Outdoor Unit mount (MCN 10-J1517-1) on your Sterling day cab without airdam.

An assembly drawing of the AMA-135 and an accompanying Parts List are provided in these instructions.

**Note**

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Service Hotline at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

## Important

The instructions for mount installations provided in this guide, assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle.

QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first-time installations and/or new mount types and/or vehicle types prior to installation.

## Installation Guidelines

<table>
<thead>
<tr>
<th>1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Support Hotline.</th>
<th>should be attached to the vehicle using ultraviolet (UV) resistant cable ties.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. In general, the higher the Outdoor Unit the better the MCT/IMCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6.”</td>
<td>5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</td>
</tr>
<tr>
<td>3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.</td>
<td>6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables</td>
<td>7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
</tbody>
</table>
Installation Procedure

The following steps apply to every AMA-135 installation. Perform these steps in the order listed.

1. Attach the adjustment plates.

2. Attach the mount.

Help
For help during installation, call the QUALCOMM Customer Support Hotline at (800) 541-7490. The Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-135, be sure to review the Installation Guidelines provided on page 135-2.

Step 1. Attach the adjustment plates

1. Attach the adjustment plates (item 1 in the parts list) to each side of the antenna mounting bracket (item 4), using the studs on each side, cam nuts (item 3), and nylon lock nuts (item 2).
Step 2. Attach the mount

1. Attach the mount to the roof of the cab (in the corner on the driver's side). Ensure that the mount is level when the truck is level.

2. When a suitable location is found, tighten the lock nuts so that the adjustment plates grip the outside of the rain gutter of the sleeper.

3. After the AMA-135 installation is completed, verify that all the bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-135.

### Parts List: MCN 10-J1517-1 (AMA-135)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-4044-2</td>
<td>2</td>
<td>Adjustment Plate</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>554-02072-0375</td>
<td>5</td>
<td>Nylon Lock Nut</td>
<td>3/8-16 UNC</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>50-4046-1</td>
<td>4</td>
<td>Cam Nut</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>50-J1519</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

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5775 Morehouse Drive
San Diego, CA 92121-1714
U.S.A.

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The information in this document is subject to change with subsequent software releases without notice.

May 2003
AMA-210

Outdoor Unit Mount Installation Guide

Designed for 1997 International (Navistar) 8100 Conventional Daycab

Side View

Rear View

OmniTRACs
# AMA-210 Outdoor Unit Mount Installation Guide

## Introduction

This document provides the guidelines and installation procedure to follow when installing the AMA-210 Outdoor Unit Mount (MCN 10-53479-1) on the 1997 8100 conventional daycab. An assembly drawing of the AMA-210 and Parts List are provided in these instructions.

### Important

The instructions for mount installations provided in this guide assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle. QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first-time installations and/or new mount types and/or vehicle types prior to installation.

### Note

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call the QUALCOMM Customer Support 24-Hour Hotline at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

Special attention is needed to ensure a watertight seal when installing this mount. The best approach is to create a silicon seal on the inside and outside of the holes drilled into the truck/sleeper roof. Bolts should be installed from the inside with the nuts on the outside. (If the bolts are installed from the outside, the extra bolt length may not allow you to reinstall the headliner.)

## Installation Guidelines

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Unpack the mount hardware and verify that all the parts listed on the Parts List at the end of this document are present. If a part is missing, call the Customer Support Hotline.</td>
</tr>
<tr>
<td>2.</td>
<td>In general, the higher the Outdoor Unit the better the MCT/IMCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13' 6&quot;.</td>
</tr>
<tr>
<td>3.</td>
<td>Install the mount so the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.</td>
</tr>
<tr>
<td>4.</td>
<td>The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.</td>
</tr>
<tr>
<td>5.</td>
<td>Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</td>
</tr>
<tr>
<td>6.</td>
<td>If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>7.</td>
<td>If the vehicle hauls a refrigerated trailer or dry van, make sure the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
</tbody>
</table>

### Note

Do not use impact wrenches or other air pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation Kits. Use hand tools to tighten these parts. Overtorquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.
Installation Procedures

The following steps apply to every AMA-210 installation. Perform these steps in the order listed.

1. Pull down the headliner.

2. Locate the mounting hole locations and drill the holes.

3. Prepare and install the plywood backing panels.

4. Adjust mount feet to roof contour.

5. Prepare the roof surface for mounting.

6. Install the mount.

Help

For help during installation, call the QUALCOMM Customer Support 24-Hour Hotline at (800) 541-7490. The Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note

Before installing the AMA-210, be sure to review the Installation Guidelines provided on page 210-2.
Before proceeding with an AMA-210 installation, you should be aware of these general roof configurations:

- Every cab has front and rear inner roof sections.
- When placing the plywood, insert it between the inner and outer roofs.
- Ensure mount bolts penetrate the inner and outer roofs.
Step 1. Pull down the headliner

1. Locate the overhead console (above the driver’s side) and loosen for access to the front inner roof lip.

2. Drop the vehicle headliner. This prevents damage to the headliner when drilling holes and provides access to the holes.

Step 2. Locate the mounting hole locations and drill the holes

1. Find and mark the center line of the roof on the inside of the cab. DO NOT begin drilling until you have determined and verified all four hole locations.

2. On the front and rear inner roof panels, locate and mark two hole locations, each 15” from the center line. On the inner roof panel lip, locate and mark a hole location 1/2” from the outer edge.

3. Ensure the distance from hole-to-hole is 30” before drilling.

4. Drill four 3/8” holes at the locations you marked. The drilled holes must go through both roof layers.

**Note**

All four mounting bolts must pass through both roof layers. Failure to properly locate and drill these holes could cause roof failure.
### Step 3. Prepare and install the plywood backing panels

1. Cut the plywood panels into four 6” squares.
2. Pre-fit the plywood between the roof layers at each bolt hole location.
3. Adjust plywood size, if necessary, and mark each bolt hole location on the plywood.
4. Drill one hole, as marked, on each piece of plywood.
5. Using RTV where the wood and metal meet, install the four pieces of plywood.

**Note**
Supplied plywood must be installed with RTV between roof layers at all four bolt hole locations. Failure to properly prepare and install the plywood backing panels could cause roof failure.

![Diagram of plywood installation](image1.png)

### Step 4. Adjust mount feet to roof contour

1. Place the mount on the roof by aligning the mount with the drilled roof holes.
2. Observe how the mount feet need to be bent in order to conform with the roof contour.
3. Using a vise, clamp the mount foot to be bent and slightly pull the mount. DO NOT OVERBEND. Confirm bend by placing the mount on the cab roof.
4. Proceed as above with all four mount feet.

**Note**
Slightly bend mount feet to conform to roof contour. Failure to properly adjust the mount feet could cause roof failure.

![Diagram of mount adjustment](image2.png)
Step 5. Prepare the roof surfaces for mounting

1. Clean outside of roof
2. Apply silicon sealant around each hole

1. Clean the outside roof surface around the four bolt holes so they are free from dirt and grease.
2. Using a liberal amount of RTV, place a 1/2” thick bead around each of the four holes drilled for the mount on the outside of the roof.

Step 6. Install the mount

This step requires two people.

1. Insert the 3/8” bolts through the roof holes from the inside.
2. As each bolt is inserted through each hole from the inside, press the rubber mounting pad onto the four bolts from the outside.
3. Once the mounting pad is in place, lower the AMA-210 onto the four bolts.
4. Add a washer and nut to each bolt. Attach the mount to the roof by evenly tightening each nut.

This completes the installation of the AMA-210 Outdoor Unit Mount.
### Parts List: MCN 10-53479-1 (AMA-210)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
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</thead>
<tbody>
<tr>
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<td>50-53480-1</td>
<td>1</td>
<td>Antenna Bracket</td>
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</tr>
<tr>
<td>2</td>
<td>50-53119-1</td>
<td>1</td>
<td>Rubber Mounting Pad</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>50-2555-1</td>
<td>2</td>
<td>Plywood Backing Panel</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>552-02069-2000</td>
<td>5</td>
<td>Hex Head Bolt</td>
<td>3/8-16NC-2A X 2.0 G5</td>
<td>12</td>
</tr>
<tr>
<td>5</td>
<td>556-02074-0375</td>
<td>9</td>
<td>Flat Washer</td>
<td>3/8 (1 x 7/16 x 5/64)</td>
<td>15</td>
</tr>
<tr>
<td>6</td>
<td>554-02072-0375</td>
<td>5</td>
<td>Nylon Lock Nut</td>
<td>3/8-16UNC</td>
<td>18</td>
</tr>
</tbody>
</table>

Note: Each hardware item includes spare parts.
THESE INSTRUCTIONS INCLUDE CRITICAL RETROFIT INSTRUCTIONS.
**Introduction**

This document provides the guidelines and installation procedure to follow when installing the AMA-310 Outdoor Unit Mount (MCN 10-J0767-1) on the cabover or conventional truck. An assembly drawing of the AMA-310 and Parts List are provided in these instructions.

**Note**

These revised AMA-310 installation instructions include the critical installation instructions for the AMA-310 Retrofit.

**Important**

The instructions for mount installations provided in this guide assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle. QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first-time installations and/or new mount types and/or vehicle types prior to installation.

**Note**

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call the QUALCOMM Customer Support 24-Hour Hotline at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

**Note**

Do not use impact wrenches or other air pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation Kits. **Use hand tools to tighten these parts.** Overtorquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.

<table>
<thead>
<tr>
<th><strong>Installation Guidelines</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Unpack the mount hardware and verify that all the parts listed on the Parts List at the end of this document are present. If a part is missing, call the Customer Service Hotline.</td>
</tr>
<tr>
<td>2. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13' 6&quot;.</td>
</tr>
<tr>
<td>3. Install the mount so the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.</td>
</tr>
<tr>
<td>4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.</td>
</tr>
<tr>
<td>5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.</td>
</tr>
<tr>
<td>6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>7. If the vehicle hauls a refrigerated trailer or dry van, make sure the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
</tbody>
</table>

**Note**

Special attention is needed to ensure a watertight seal when installing this mount. The best approach is to create a silicon seal on the inside and outside of the holes drilled into the truck/sleeper roof. Bolts should be installed from the inside with the nuts on the outside. (If the bolts are installed from the outside, the extra bolt length may not allow you to reinstall the headliner.)
Installation Procedures for the AMA-310 Retrofit

The following steps apply to every AMA-310 retrofit installation. Perform these steps in the order listed.

1. Align the braces on one side of the mount.
2. Attach the braces to the mount.
3. Drill holes in the overlapping area of the braces.
4. Install and tighten the bolts.
5. Repeat steps 1–4.

Step 1. Align the braces on one side of the mount

1. Using one set of braces, align the braces on one side of the mount, positioning them high up on the mount.
2. Using one set of braces, mark and drill six 3/8" holes in the legs of the mount.

Note
Do not drill these holes where the braces overlap.

Step 2. Attach the braces to the mount

1. Using six 3/8" bolts, attach one set of braces to the mount.
2. Tighten securely.
Step 3. Drill holes in the overlapping area of the braces

1. Drill three 3/8” holes in the overlapping area of the braces.

Step 4. Install and tighten the bolts

1. Install the bolts in the overlapping area of the braces.
2. Tighten securely.

Step 5. Repeat steps 1–4

1. Repeat steps 1–4 on the opposite side of the mount.

This completes the installation of the AMA-310 (R) Retrofit for the AMA-310 Outdoor Unit Mount.

The installation instructions for the AMA-310 Outdoor Unit Mount follow.

Installation Procedures for the AMA-310 Mount

The following steps apply to every AMA-310 installation. Perform these steps in the order listed.

1. Pull down the headliner.
2. Position the mount and drill the holes.
3. Cut and drill the plywood backing panel.
4. Prepare the outside and inside roof surfaces.
5. Create a silicon seal inside and outside.
6. Install the mount.

Help
For help during installation, call the QUALCOMM Customer Support 24-Hour Hotline for assistance at (800) 541-7490. The Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-310, be sure to review the Installation Guidelines provided on page 310-2.
Step 1. Pull down the headliner

1. Prior to drilling the holes, the vehicle headliner should be dropped. This prevents damage to the headliner when drilling and also provides access to the holes.

Step 2. Position the mount and drill the holes

1. Position the mount near the vehicle center line and place it as far forward as possible to ensure the Outdoor Unit has a clear 360º line-of-sight view of the satellite even with the trailer attached.

2. Place the mount on a flat surface. If no flat surface is available, the mount should be positioned so that no distortion to the roof occurs (the roof should maintain its original shape) when it is firmly secured to the vehicle.

3. Drill the four mount holes.
**Step 3. Cut and drill the plywood backing panel**

**Note**
QUALCOMM suggests keeping the plywood panel as one piece; however, it may be cut into more than one square, as necessary.

1. Preplace the plywood panel(s) on the inside of the roof where the four mount holes have already been drilled. Determine whether the required holes need to be off-center because of an obstruction, such as roof stiffeners.

**Note**
Some trucks have roof stiffeners that may prevent the plywood backing panel(s) from being centered on the roof hole.

2. Mark the plywood backing panel(s) and drill 3/8" holes outside the truck.

3. Install 3/8" x 1.75" bolt and larger fender washer into the plywood backing panel(s) and set aside.

**Step 4. Prepare the outside and inside roof surfaces**

1. Clean the outside roof surface so it is free from dirt and grease. Scrape off any adhesives used.

2. Clean the inside roof surface so it is free from dirt and grease. Scrape off any adhesives used.

Step 5. Create a silicon seal inside and outside

1. Using a liberal amount of silicon, place a 1/2" thick bead of silicon sealant around each bolt where it protrudes from the plywood backing panel(s).

2. Using a liberal amount of silicon, place a 1/2" bead of silicon around each of the four holes drilled for the mount on the outside of the roof.

Step 6. Install the mount

This step requires two people.

1. Insert the plywood backing panel(s) with protruding 3/8" bolts through the roof holes from the inside.

2. As each bolt is inserted through each hole from the inside, press the rubber mounting pad onto the four bolts on the outside.

3. Once all four plywood backing panels are in place, lower the AMA-310 onto the four bolts.

4. Attach a smaller flat washer and nut to each bolt. Tighten the nuts evenly as they draw the mount to the roof.

This completes the installation of the AMA-310 Outdoor Unit Mount.
### Parts List: MCN 10-J0767-1 (AMA-310)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-53119-1</td>
<td>4</td>
<td>Rubber Mounting Pad</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>50-J0757-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>50-2555-1</td>
<td>1</td>
<td>Plywood Backing Panel</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>50-J1418-1</td>
<td>2</td>
<td>Left Supplemental Brace</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>50-J1419-1</td>
<td>2</td>
<td>Right Supplemental Brace</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>6</td>
<td>552-02069-1750</td>
<td>5</td>
<td>Hex Head Bolt</td>
<td>3/8-16UNC-2AX1.75</td>
<td>12</td>
</tr>
<tr>
<td>7</td>
<td>552-02069-1250</td>
<td>18</td>
<td>Hex Head Bolt</td>
<td>3/8-16UNC-2AX1.25</td>
<td>13</td>
</tr>
<tr>
<td>8</td>
<td>556-02074-0375</td>
<td>41</td>
<td>Flat Washer</td>
<td>3/8 (1 x 7/16 x 5/64)</td>
<td>15</td>
</tr>
<tr>
<td>9</td>
<td>556-02073-0000</td>
<td>5</td>
<td>Fender Washer</td>
<td>3/8 (2 x 7/16 x 1/8)</td>
<td>16</td>
</tr>
<tr>
<td>10</td>
<td>554-02072-0375</td>
<td>23</td>
<td>Nylon Lock Nut</td>
<td>3/8-16UNC</td>
<td>18</td>
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<tr>
<td>11</td>
<td>80-6270-310</td>
<td>1</td>
<td>Outdoor Unit Mount Instruction, AMA-310</td>
<td>21</td>
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</tbody>
</table>

**Note:** Each hardware item includes spare parts.

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QUALCOMM Incorporated, 5775 Morehouse Drive, San Diego, CA 92121-1714

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### Introduction

This document provides the guidelines and installation procedure to follow when installing the AMA-410 Outdoor Unit Mount (MCN 10-J1409-1) on the cabover or conventional truck. An assembly drawing of the AMA-410 and Parts List are provided in these instructions.

**Note**

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call the QUALCOMM Customer Support 24-Hour Hotline at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

### Important

The instructions for mount installations provided in this guide, assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle.

QUALCOMM strongly recommends that you obtain installation training from Qualcomm for first-time installations and/or new mount types and/or vehicle types prior to installation.

### Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Support Hotline.

2. In general, the higher the Outdoor Unit the better the MCT/IMCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6’’.

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.
Installation Procedures for the AMA-410 Mount

The following steps apply to every AMA-410 installation. Perform these steps in the order listed.

1. Assemble the side plates.
2. Pull down the headliner.
3. Position the mount and drill the holes.
4. Cut and drill the plywood backing panel.
5. Prepare the outside and inside roof surfaces.
6. Create a silicon seal inside and outside.
7. Install the mount.

Help

For help during installation, call the QUALCOMM Customer Support 24-Hour Hotline for assistance at (800) 541-7490. The Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note

Before installing the AMA-410, be sure to review the Installation Guidelines provided on page 410-2.

Step 1. Assemble the side plates

1. Assemble the side plates to the mount.
Step 2. Pull down the headliner

1. Before drilling the holes, pull down the vehicle headliner. This prevents damage to the headliner when drilling and also provides access to the holes.

Step 3. Position the mount and drill the holes

1. Position the mount near the vehicle center line and place it as far forward as possible to ensure the Outdoor Unit has a clear 360° line-of-sight view of the satellite even with the trailer attached.

2. Position the mount so all four feet of the mount are in contact with the roof. You may need to bend the feet slightly to make this contact.

Caution
Do not proceed if all four feet do not come in contact with the roof. The bracket is stronger than the roof and unless all four feet are evenly distributed, cracks or other distortions may occur when the bolts are tightened.

3. Position the plywood panel(s) on the inside of the roof where the four mount holes will be drilled to determine whether the holes need to be repositioned because of some obstruction.

4. Drill the four mount holes.
**Step 4. Cut and drill the plywood backing panel**

**Note**

Some trucks have roof stiffeners that may prevent the plywood backing panel(s) from being centered on the roof hole.

1. Mark the plywood backing panel(s) and drill 3/8” holes outside the truck.

2. Install 3/8” x 1.75” bolt and larger fender washer into the plywood backing panel(s) and set aside.

**Step 5. Prepare the outside and inside roof surfaces**

1. Clean the outside and inside roof surface so it is free from dirt and grease.

**Note**

If insulating material is glued to the interior roof surface, scrape away any excess adhesive so the surface is clean and smooth for the plywood backing.
Step 6. Create a silicon seal inside and outside

1. Using a liberal amount of silicon, place a 1/2" thick bead of silicon sealant around each bolt where it protrudes from the plywood backing panel(s).

2. Using a liberal amount of silicon, place a 1/2" bead of silicon around each of the four holes drilled for the mount on the outside of the roof.

Step 7. Install the mount

This step requires two people.

1. Insert the plywood backing panel(s) (with the hardware already in place) through the roof holes from the inside.

2. As each bolt is inserted through each hole (from the inside), press the rubber mounting pad onto the four bolts (on the outside).

3. Once all four plywood backing panels are in place, lower the AMA-410 onto the four bolts.

4. Attach a smaller flat washer and nut to each bolt and tighten the nuts evenly to draw the mount onto the roof.

**Note**

Be careful not to overtighten the nuts, as this will cause the rubber mounting pad to protrude excessively from under the mount feet.

This completes the installation of the AMA-410 Outdoor Unit Mount.
# Outdoor Unit Mount Installation Guide

## Parts List: MCN 10-J1409-1 (AMA-410)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
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<td>50-J1407-1</td>
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<td>3</td>
<td>50-53119-1</td>
<td>4</td>
<td>Rubber Mounting Pad</td>
<td></td>
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<td>4</td>
<td>50-2555-1</td>
<td>1</td>
<td>Plywood Backing Panel</td>
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<tr>
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<td>552-45194-1000</td>
<td>17</td>
<td>Flat Head Phillips Screws</td>
<td>82Deg 5/16-1</td>
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<tr>
<td>6</td>
<td>554-02072-0312</td>
<td>17</td>
<td>Nut Nylok</td>
<td>Regular Hex 5/16-1</td>
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<td>7</td>
<td>556-02074-0312</td>
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<td>Flat Washer</td>
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<td>8</td>
<td>552-02069-1750</td>
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<td>Hex Head Bolt</td>
<td>3/8-16UNC-2AX1.7</td>
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<td>556-02073-0000</td>
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<td>Fender Washer</td>
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<td>554-02072-0375</td>
<td>5</td>
<td>Lock Nylon Nut</td>
<td>Regular Hex 3/8</td>
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Note: Each hardware item includes spare parts.
AMA-77

Designed for 1994 Mack Model CH w/ Standup Sleeper - OEM Use Only

Note: This mount similar to AMA-42. AMA-77 contains no hardware. Parts are black.
### Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-77 Outdoor Unit mount (MCN 10-8488-1) on your Mack Model CH with Standup Sleeper. An assembly drawing of the AMA-77 and an accompanying parts list are provided in these instructions. Hardware kit is NOT included.

The AMA-77 is designed specifically for the 1994 Mack Model CH Stand-up Sleeper. It is installed on the driver’s side between the upper part of the side skirt and the back of the sleeper.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call the OmniTRACS Customer Service Hotline at (800) 541-7490.

### Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

### Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline.

2. In general, the higher the Outdoor Unit the better the MCT/IMCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13' 6".

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

**Note**

Do not use impact wrenches or other air-pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation kits. Over-torquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.

Use hand tools to tighten these parts.
### Installation Procedure

The following steps apply to every AMA-77 installation. Perform these steps in the order listed below. Installation of the AMA-77 is divided into the following groups:

1. Assemble the Top Hat
2. Mount Top Hat to Vertical Mounting Plate
3. Mount Horizontal Support to Vertical Mounting Plate
4. Mount Diagonal Support Tube to vertical Mounting Plate
5. Attach Mount to Vehicle.

**Help**

For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

**Note**

Before installing the AMA-77, be sure to review the Installation Guidelines provided on page 77-2.

#### Step 1. Assemble the Top Hat

1. Install the antenna mounting bracket by sliding it into the adjustable mounting bracket and lining up the holes in the two pieces so that the top of the mounting plate is level when the vehicle is level.

2. After the antenna mounting bracket is level, secure it to the adjustable mounting bracket. This assembled part is now called the top hat.
Step 2. Mount Top Hat to Vertical Mounting Plate

1. Mount the top hat to the vertical mounting plate.

Step 3. Mount Horizontal Support to Vertical Mounting Plate

1. Mount the horizontal support to the vertical mounting plate.

Step 4. Mount Diagonal Support Tube to Horizontal Support

1. Mount the diagonal support tube to the horizontal support.
Step 5. Attach Mount To Vehicle

1. Attach the assembled mount to the truck using the top ledge of the sleeper and side skirt as attachment points.

2. Verify that all bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-77 Outdoor Unit Mount.
### Parts List: MCN 10-8488-1 (AMA-77)

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<th>Item No.</th>
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<td>50-30031-1</td>
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<td>Antenna Mounting Bracket</td>
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</table>

**Note:** Hardware kit NOT provided.
AMA-79

Designed for 1994 Mack Model CH w/ StackBunk - OEM Use Only

Side View

Rear View

Note: This mount is similar to AMA-50. AMA-79 kit contains no hardware. Parts are black.
### Introduction

This document provides the guidelines and an installation procedure to follow when you install the AMA-79 Outdoor Unit mount (MCN 10-8490-1) on your Mack Model CH with StackBunk. An assembly drawing of the AMA-79 and an accompanying parts list are provided in these instructions. Hardware kit is NOT included.

The AMA-79 is designed specifically for the 1994 Mack Model CH StackBunk. It is installed on the driver’s side between the upper part of the side skirt and the back of the sleeper.

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call the OmniTRACS Customer Service Hotline at (800) 541-7490.

### Caution

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

### Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the parts list included in this document are present. If a part is missing, call the Customer Service Hotline.

2. In general, the higher the Outdoor Unit the better the MCT/IMCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13' 6".

3. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

### Note

Do not use impact wrenches or other air-pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation kits. Over-torquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.

Use hand tools to tighten these parts.
Installation Procedure

The following steps apply to every AMA-79 installation. Perform these steps in the order listed below. Installation of the AMA-77 is divided into the following groups:

1. Assemble the Top Hat
2. Mount Top Hat to Vertical Mounting Plate
3. Mount Horizontal Support to Vertical Mounting Plate
4. Mount Diagonal Support Tube to vertical Mounting Plate
5. Attach Mount to Vehicle.

Help
For help during installation, call the OmniTRACS Customer Service Hotline for assistance. The toll-free telephone number is (800) 541-7490, and the Hotline is staffed 24 hours a day, 7 days a week (including holidays).

Note
Before installing the AMA-79, be sure to review the Installation Guidelines provided on page 79-2.

Step 1. Assemble the Top Hat

1. Install the antenna mounting bracket by sliding it into the adjustable mounting bracket and lining up the holes in the two pieces so that the top of the mounting plate is level when the vehicle is level.

2. After the antenna mounting bracket is level, secure it to the adjustable mounting bracket. This assembled part is now called the top hat.
Step 2. Mount Top Hat to Vertical Mounting Plate

1. Mount the top hat to the vertical mounting plate.

Step 3. Mount Horizontal Support to Vertical Mounting Plate

1. Mount the horizontal support to the vertical mounting plate.

Step 4. Mount Diagonal Support Tube to Horizontal Support

1. Mount the diagonal support tube to the horizontal support.
Step 5. Attach Mount To Vehicle

1. Attach the assembled mount to the truck using the top ledge of the sleeper and side skirt as attachment points.

2. Attach the extension angle to the horizontal support and attach to existing part.

3. Verify that all bolts are securely tightened and the mount provides a solid, level mounting surface for the Outdoor Unit.

This completes the installation of the AMA-79 Outdoor Unit Mount.
### Parts List: MCN 10-8490-1 (AMA-79)

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**Note:** Hardware kit NOT provided.
Note: The AMA-128 is similar to the AMA-110, except the parts are black and Mack supplies the plywood & hardware for the AMA-128.
## Introduction

This document provides the guidelines and installation procedure to follow when installing the AMA-128 Outdoor Unit Mount (MCN 10-53118-1) on the cabover or conventional truck. An assembly drawing of the AMA-128 and Parts List are provided in these instructions.

**Note**

Plywood and hardware are supplied by Mack.

**Important**

The instructions for mount installations provided in this guide assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle. QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first-time installations and/or new mount types and/or vehicle types prior to installation.

**Note**

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420. If you do not have a copy of this document, call the QUALCOMM Customer Support 24-Hour Hotline at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

Special attention is needed to ensure a watertight seal when installing this mount. The best approach is to create a silicon seal on the inside and outside of the holes drilled into the truck/sleeper roof. Bolts should be installed from the inside with the nuts on the outside. (If the bolts are installed from the outside, the extra bolt length may not allow you to reinstall the headliner.)

## Installation Guidelines

1. Unpack the mount hardware and verify that all the parts listed on the Parts List at the end of this document are present. If a part is missing, call the Customer Support Hotline.

   **Note**
   
Plywood and hardware are supplied by Mack.

2. In general, the higher the Outdoor Unit the better the IMCT/MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6’’.

3. Install the mount so the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.

4. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.

5. Make sure all holes made in the vehicle surface are sealed with a silicon (RTV) sealant to prevent leakage. This includes the self-tapping screws used to secure cable ties.

6. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

7. If the vehicle hauls a refrigerated trailer or dry van, make sure the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.

   **Note**

   Do not use impact wrenches or other air pressure tools to tighten the nuts and bolts in your MCT/IMCT Installation Kits. **Use hand tools to tighten these parts.** Overtorquing the MCT/IMCT hardware can result in stripped nuts and potentially time-consuming and expensive repairs.
**Installation Procedures**

The following steps apply to every AMA-128 installation. Perform these steps in the order listed.

1. Pull down the headliner.
2. Position the mount and drill the holes.
3. Cut and drill the plywood backing panel.
4. Prepare the outside and inside roof surfaces.
5. Create silicon seal inside and outside.
6. Install the mount.

**Help**

For help during installation, call the QUALCOMM Customer Support 24-Hour Hotline for assistance at (800) 541-7490. The Hotline is staffed 24 hours a day, 7 days a week (including holidays).

**Note**

Before installing the AMA-128, be sure to review the Installation Guidelines provided on page 128-2.

---

**Step 1. Pull down the headliner**

1. Prior to drilling the holes, the vehicle headliner should be dropped. This prevents damage to the headliner when drilling and also provides access to the holes.
**Step 2. Position the mount and drill the holes**

1. Position the mount near the vehicle center line and place it as far forward as possible to ensure the Outdoor Unit has a clear 360° line-of-sight view of the satellite even with the trailer attached.

2. Place the mount on a flat surface. If no flat surface is available, the mount should be positioned so that no distortion to the roof occurs (the roof should maintain its original shape) when it is firmly secured to the vehicle.

3. Drill the four mount holes.

**Step 3. Cut and drill the plywood backing panel**

**Note**
QUALCOMM suggests keeping the plywood panel as one piece; however, it may be cut into more than one square, as necessary.

1. Preplace the plywood panel(s) on the inside of the roof where the four mount holes have already been drilled. Determine whether the required holes need to be off-center because of an obstruction, such as roof stiffeners.

**Note**
Some trucks have roof stiffeners that may prevent the plywood backing panel(s) from being centered on the roof hole.

2. Mark the plywood backing panel(s) and drill 3/8” holes outside the truck.

3. Install 3/8” x 2” bolt and washer into the plywood backing panel(s) and set aside.
Step 4. Prepare the outside and inside roof surfaces

1. Clean the outside roof surface so it is free from dirt and grease. Scrape off any adhesives used.

2. Clean the inside roof surface so it is free from dirt and grease. Scrape off any adhesives used.

Step 5. Create silicon seal inside and outside

1. Using a liberal amount of silicon, place a 1/2” thick bead of silicon sealant around each bolt where it protrudes from the plywood backing panel(s).

2. Using a liberal amount of silicon, place a 1/2” bead of silicon around each of the four holes drilled for the mount on the outside of the roof.
Step 6. Install the mount

This step requires two people.

1. Insert the plywood backing panel(s) with protruding 3/8” bolts through the roof holes from the inside.

2. As each bolt is inserted through each hole from the inside, press the rubber mounting pad onto the four bolts on the outside.

3. Once all four plywood backing panels are in place, lower the AMA-128 onto the four bolts.

4. Attach a washer and nut to each bolt. Tighten the nuts evenly as they draw the mount to the roof.

This completes the installation of the AMA-128 Outdoor Unit Mount.
### Parts List: MCN 10-53118-1 (AMA-128)

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<th>Item No.</th>
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<th>PL Ref</th>
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<td>Flush Mounting Bracket</td>
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</tr>
<tr>
<td>4</td>
<td>552-02069-2000</td>
<td>5</td>
<td>Hex Head Bolt</td>
<td>3/8-16UNC-2A X 2.00</td>
<td>12</td>
</tr>
<tr>
<td>5</td>
<td>556-02074-0375</td>
<td>9</td>
<td>Flat Washer</td>
<td>3/8 (1 x 7/16 x 5/64)</td>
<td>15</td>
</tr>
<tr>
<td>6</td>
<td>554-02072-0375</td>
<td>5</td>
<td>Nylon Lock Nut</td>
<td>3/8-16UNC</td>
<td>18</td>
</tr>
</tbody>
</table>

Note: This Parts List is for reference purposes only. The only item provided by QUALCOMM is the AMA-128 Flush Mounting Bracket. All other parts are provided by Mack.
AMA-133

Designed as an Adjustable Mount for Kenworth Trucks—OEM Use Only

Outdoor Unit Mount Installation Guide

Note: The AMA-133 kit contains no hardware or plywood; only brackets are provided.
### Introduction

This document provides the guidelines and installation procedure to follow when installing the AMA-133 Outdoor Unit Mount (MCN 10-J1392-1). A limited assembly drawing and Parts List are provided.

**Important**

The instructions for mount installations provided in this guide assume familiarity with the operation and use of the OmniTRACS equipment, and that an authorized QUALCOMM representative has identified the mount type to be used on the vehicle. QUALCOMM strongly recommends that you obtain installation training from QUALCOMM for first time installations and/or new mount types and/or vehicle types prior to installation.

**Note**

Before installing the mount, read the Outdoor Unit Installation Guidelines, 80-6420, thoroughly. If you do not have a copy of this document, call the Customer Support Network Hotline at (800) 541-7490.

Failure to comply with the Line-of-Sight Requirements and Installation Guidelines sections of the Outdoor Unit Installation Guidelines could degrade the performance of the MCT/IMCT and, in some cases, void the Outdoor Unit warranty.

### Installation Guidelines

<table>
<thead>
<tr>
<th>1. In general, the higher the Outdoor Unit the better the MCT performance. However, verify that the height of the Outdoor Unit does not extend above the approved maximum legal height of 13’ 6.”</th>
<th>4. Make sure all holes made in the vehicle surface are sealed with a silicone sealant (RTV) to prevent leakage.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Install the mount so that the Outdoor Unit is level when the vehicle is level. This ensures the best possible overall performance.</td>
<td>5. If the vehicle has a “sliding” fifth wheel, make sure that when the fifth wheel is fully forward, the trailer still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
<tr>
<td>3. The cables leading from the antenna may be routed outside, down the back of the sleeper. Cables should be attached to the vehicle using ultraviolet (UV) resistant cable ties.</td>
<td>6. If the vehicle hauls refrigerated trailers, make sure that the refrigeration unit still clears the Outdoor Unit and the mount when you make a sharp turn or go up a ramp.</td>
</tr>
</tbody>
</table>
### Installation Procedure

The following steps apply to every AMA-133 installation and should be performed in the order listed below.

1. Assemble the top hat.
2. Position the mount.
3. Attach the mount.

**Help**

For help during installation, call the QUALCOMM Customer Support Hotline at (800) 541-7490. The Hotline is staffed 24 hours a day, 7 days a week (including holidays).

**Note**

Before installing the AMA-133, be sure to review the Installation Guidelines provided on page 133-2.

### Step 1. Assemble the top hat

1. Install the antenna mounting bracket.
2. Secure the two pieces together to form the top hat.

**Note**

The top of the antenna mounting plate must be level when the truck is level. The mount is designed to compensate for forward or aft raise in the mounting surface. The antenna mounting plate has a slot allowing its surface to be level, regardless of the angle of the mounting bracket.
Step 2. Position the mount

1. When you install the AMA-133 on the rear wall of the vehicle, it can be positioned on either the driver’s side or the passenger’s side. However, the driver’s side is recommended to avoid contact with tree branches and other road hazards.

2. If you have dual stacks and must use the center of the rear wall, one of the following set of criteria should be present in order to safely use this mount.

   The trailer must clear the mount when making sharp turns and there must be only slightly more flexibility in the center of the wall than in the corners when pressure is exerted.

   The trailer must clear the mount when making sharp turns and there must be an internal support structure, such as stringers, so the mount has something to straddle or be bolted on to.

3. The AMA-133 should be installed on a flat surface. If a flat surface is not available, the mount should be positioned so that when it is firmly secured to the vehicle, there is no distortion to the vehicle cab or sleeper (the surface should maintain its original shape).

4. Make sure the top of the antenna mounting bracket is level when the truck is level.

Step 3. Attach the mount

This completes the installation of the AMA-133 Outdoor Unit mount.
### Parts List: MCN 10-J1392-1 (AMA-133)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No. (MCN)</th>
<th>Qty</th>
<th>Description</th>
<th>Size</th>
<th>PL Ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-3595-1</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>50-3595-2</td>
<td>1</td>
<td>Antenna Mounting Bracket</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The antenna mounting brackets are the only items provided by QUALCOMM.