

Clamp Mount Truck

Satellite Radio Antenna



This antenna is designed for long haul trucks that employ single arm XM Satellite Radio applications. There are several methods of clamping this antenna to the long haul truck; Mirror Mounting, Air Dam Shield Mounting, Flap Mounting to the trucks cab and any flat surface accommodating the U-Bracket clamp style mounting.

FEATURES:

- Aerodynamic Antenna Assembly Design
- 21 feet of RG174 Coax Cable with Right-Angle SMB connector
- Ground Plane Independent Design
- Field Replaceable Sub-Assembly Components
- Robust Antenna Design to withstand Long Haul Truck Vibration Environments
- High Performance meets XM Satellite Radio Specifications

PACKAGING CONTENTS:

The following items are contained within the packaging for the XM Truck Antenna:

- (1) Antenna Assembly
- (1) Mirror Mount Clamp A
- (1) Mirror Mount Clamp B
- (4) M6XP1.0 Hex Screws
- (4) M6 Washers
- (4) M6 Lock Washers
- (4) M6XP1.0 Hex Nuts
- (1) 3/4 Ext. Tooth Lock Washer
- (1) 3/4-16 Hex Nut
- (1) U-Bracket Assembly
- (1) Air Dam Shield Clamp D
- (1) 3/8-16 Hex Nut
- (1) 3/8 Split Lock Washer
- (1) 21 foot RG-174/U Low-Loss Coax Cable with R/A SMB Connector

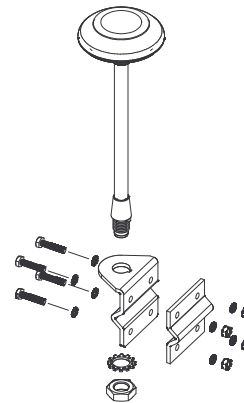


Figure 1- Mirror Mounting

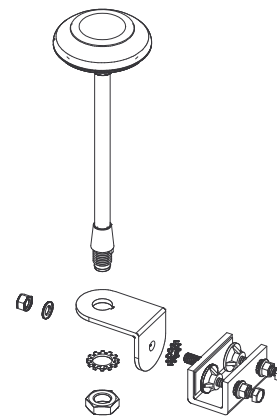


Figure 2- Air Dam Shield or Flap Mounting

REPLACEMENT PARTS:

- Antenna Assembly-(73094-1)
- 21 ft. RG-174/U Low-Loss Coax Cable-(73094-CA)
- Mounting Bracket Assembly-(73094-BA)
 - Include all brackets shown with hardware

Clamp Mount Truck

Satellite Radio Antenna



Recommended Tools Required:

(Note: Not all Tools listed are needed-see Text)

- Appropriate Open-End Wrenches:
 - 3/4 “
 - 3/8”
 - 10mm
 - 9/16”
 - 5/16”
- Torque Wrench, 12 ft-lbs. (144 in-lbs.) Capability with appropriate adapters: 10mm, 1/2”, 9/16”, 1-1/8” hex sockets.

About The Installation:

- Installation of the vehicle audio components can require extensive experience with a variety of mechanical and electrical procedures. Although these instructions explain how to install the Clamp Mount Truck Satellite Radio Antenna in a general sense, they do not show the exact installation methods for your particular vehicle.
- If you are not comfortable performing a complex installation, ask your local mobile audio dealer for professional installation options or support.

Installation Tips:

- The cable length as supplied is part of the electrical circuit of the antenna. **DO NOT ALTER THE CABLE LENGTH.** The cable must not be cut, spliced or altered in any manner, as satellite receiver reception will be adversely affected. Excess cable may be stored where it will not be damaged.
- Care must be taken during installation to avoid nicks, cuts or damage to the cable and cable jacket. Once damaged the cable cannot be repaired and must be replaced. See Replacement parts list on page 1.
- The connector should not be removed for routing purposes. It cannot be repaired or replaced once removed in the field. If damaged you will need to replace the entire cable assembly. See Replacement parts list on page 1.
- To ensure that water does not seep into the connector connecting the cable to the Antenna Assembly make sure the rubber boot is tightly secured onto the Antenna Assembly.
- Cable ties may be required depending on the desired installation. These items are not included in the packaging.
- Select a mounting location that enables the antenna to have a clear and unobstructed view (no impediments/blockages below 25 degrees from horizontal). The truck cab or truck trailer should not block the view of the antenna.
- To decrease interference from other antennas mounted on the vehicle, place this antenna on the opposite side of the truck from any HAM or CB radios.

Clamp Mount Truck

Satellite Radio Antenna



Mirror Mount Installation:

NOTE:

The mounts supplied may not fit on all model year and make truck mirrors. If your rig does not have the chrome pipe type mirror bars you will need to use the Air Dam Shield mounting method or flat surface mounting method.

1. Insert the Antenna Assembly into the Mirror Mount Clamp hole. See Figure 1.
2. On the bottom side of the Mirror Mount Clamp A place the $\frac{3}{4}$ " Ext. Tooth Lock Washer on the Antenna Assembly Shaft.
3. Now place the $\frac{3}{4}$ -16 Hex Nut onto the shaft securing the nut with a $\frac{3}{4}$ Open-End Wrench.
4. Using a torque wrench tighten to 10.5ft-lbs. (126 in-lbs.) using the appropriate torque wrench adapter (1-1/8").
5. Select the highest location on the truck mirror to mount the satellite radio antenna without obstruction.
6. Take the four M6XP1.0 Hex Screws and insert them through the four holes in Mirror Clamp A.
7. Take Mirror Mount Clamp B and insert them onto the four M6XP1.0 Hex Screws and Mirror Mount Clamp A.
8. Now place the four M6 Lock Washers onto the M6XP1.0 Hex Screws.
9. Now place the four M6 Washers onto the M6XP1.0 Hex Screws.
10. Now use the M6XP1.0 Hex Nuts and hand tighten all four onto the M6XP1.0 Hex Screws.
11. Using the torque wrench torque the M6XP1.0 Hex Nuts to 15 in-lbs.

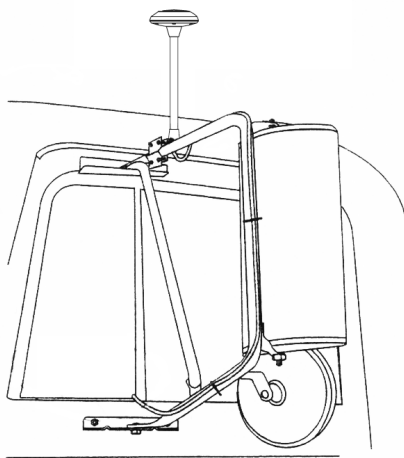


Figure 3- Mirror Mount Cable Routing

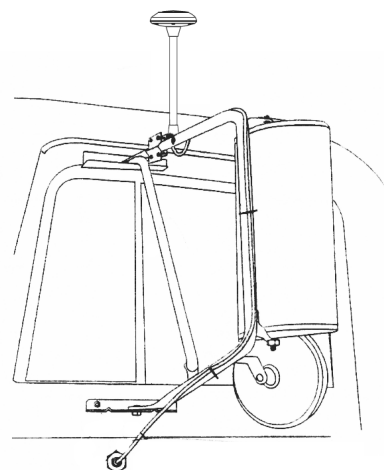


Figure 4- Mirror Mount Cable Routing

Clamp Mount Truck

Satellite Radio Antenna



Mirror Mount Installation: Cont.

12. Take the cable connector (180 degree connector) not the Right-Angle SMB Connector and hand tighten over the connector on the bottom side of the Antenna Assembly. See Figure 5.
13. Using the 5/16" open-end wrench, tighten the cable connector on the Antenna Assembly connector.
14. Place the rubber boot over the end of the Antenna Assembly shaft after the cable connector has been tighten. See Figure 5.
15. The next step is routing the cable from the Antenna Assembly to the satellite radio receiver inside the truck cab. Since every truck cab is slightly different this is only a guide line to follow and your cable routing maybe different.
16. Route the cable through the vent window of the truck cab. Again **DO NOT BEND** the cable at 90 degree angles as this will break the coax center conductor causing the satellite receiver not to receive the satellite radio broadcast. See Figure 3.
17. If you have an access hole and do not want the cable routing through the window vent route the cable through this hole. See Figure 4.
18. Connector the Right-Angle SMB connector to the satellite radio receiver.

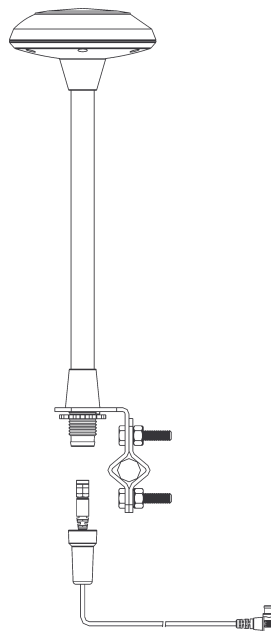


Figure 5- Cable Connector/Rubber Boot Connection

Clamp Mount Truck

Satellite Radio Antenna



Air Dam Shield Mount Installation:

NOTE:

The mounts supplied may not fit on all model year and make truck mirrors. If your rig does not have the chrome pipe type mirror bars you will need to use the Air Dam Shield mounting method or flat surface mounting method.

1. Insert the Antenna Assembly into the Air Dam Shield Clamp D hole. See Figure 6.
2. On the bottom side of the Air Dam Shield Clamp D place the $\frac{3}{4}$ " Ext. Tooth Lock Washer on the Antenna Assembly Shaft.
3. Now place the $\frac{3}{4}$ -16 Hex Nut onto the shaft securing the nut with a $\frac{3}{4}$ Open-End Wrench.
4. Using a torque wrench tighten to 10.5ft-lbs. (126 in-lbs.) using the appropriate torque wrench adapter (1-1/8").
5. Select the highest location on the truck mirror to mount the satellite radio antenna without obstruction. See Figure 6a.
6. Place the $\frac{3}{8}$ " Int./Ext. Lock Washer onto the U-Bracket screw.
7. Assemble the U-Bracket into the Air Dam Shield Clamp D hole. See Figure 6.
8. Place the $\frac{3}{8}$ " Split Lock Washer onto the U-Bracket screw.
9. Hand Tighten the $\frac{3}{8}$ "-16 Hex Nut onto the U-Bracket screw. Using the appropriate torque wrench and adapters (9/16" size hex or open-end), torque $\frac{3}{8}$ " hex nut to 12 ft-lbs.

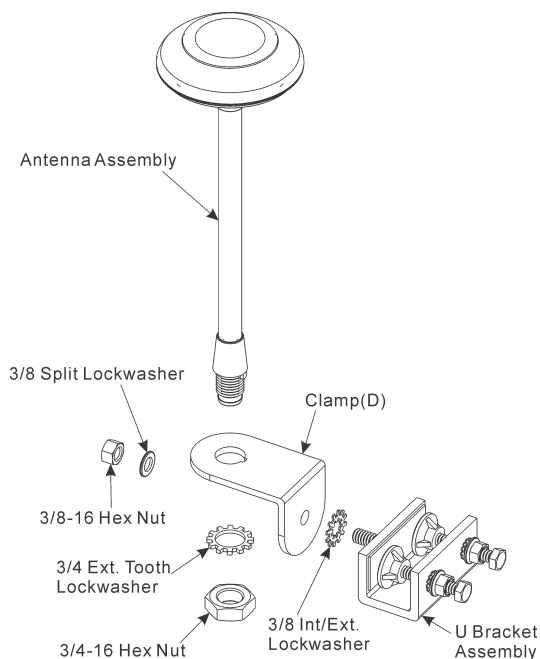


Figure 6- Air Dam Shield Mounting

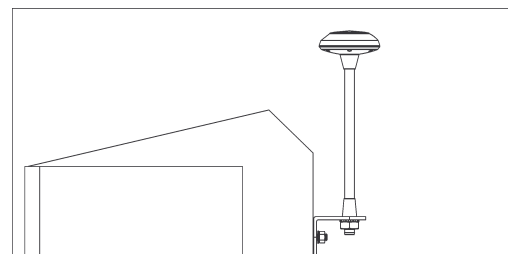


Figure 6a- Mounting Location

Clamp Mount Truck

Satellite Radio Antenna



Air Dam Shield Mount Installation: Cont.

10. Install antenna to Air Dam Shield of truck, See Figure 7.
11. Loosen two screws and two hex nuts in U-Bracket assembly. Note: Installation on tubular surface is NOT recommended. Insert Air Dam Shield edge between the U-Bracket Assembly and Clamp feet. See Figure 8.
12. Tighten clamp screws on U-Bracket Assembly evenly up against the Air Dam Shield, See Figure 9 to 15 ft-lbs. using the appropriate torque wrench and adapters (1/2" size, hex or open-end wrench). **IMPORTANT:** Assure two 5/16" Hex Nuts are not tight at this step.
13. Tighten two 5/16"-18 Hex Nuts securely up against clamp bracket, See Figure 8.
14. Using the appropriate torque wrench and adapters (1/2" size, hex or open-end wrench) torque 5/16-18 Hex Nuts to 4 ft-lbs. (48 in-lbs.).
15. Loosen the 3/8"-16 Hex Nut and pivot antenna until true vertical position is achieved. Re-torque 3/8"-16 Hex Nuts to 12 ft-lbs.
16. Take the cable connector (180 degree connector) NOT the Right-Angle SMB Connector and hand tighten over the connector on the bottom side of the Antenna Assembly. See Figure 9.
17. Using the 5/16" open-end wrench, tighten the cable connector on the Antenna Assembly connector.
18. Place the rubber boot over the end of the Antenna Assembly shaft after the cable connector has been tighten. See Figure 9
19. Route cable into truck cab and connect to satellite receiver. Verify you have satellite broadcast.

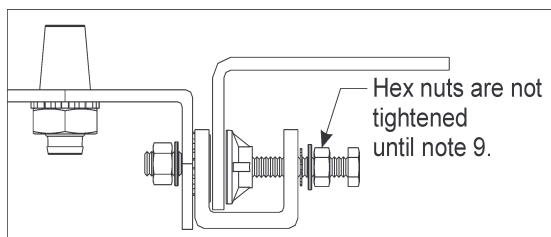


Figure 7- Mounting Location

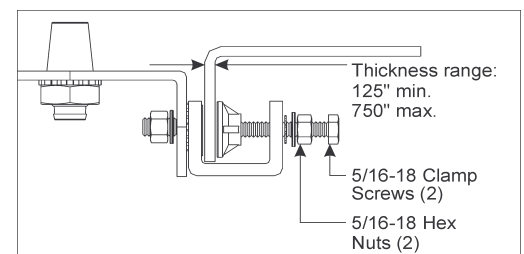


Figure 8- Mounting Location

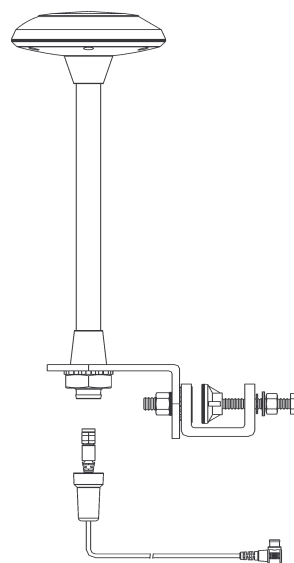


Figure 9- Cable Connector/Rubber Boot Connection