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PCTEL, Inc.
Attention: RMA Coordinator
471 Brighton Drive
Bloomington, Illinois 60108 U.S.A.



Through-hole Mount GPS L1 Antenna Installation Instructions

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Part #: MIS-3200GPS Rev A
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Introduction

The product described in this section is supplied with the antenna, coaxial cable and mounting hardware. Figure 1 is an exploded view and parts list of the antenna.

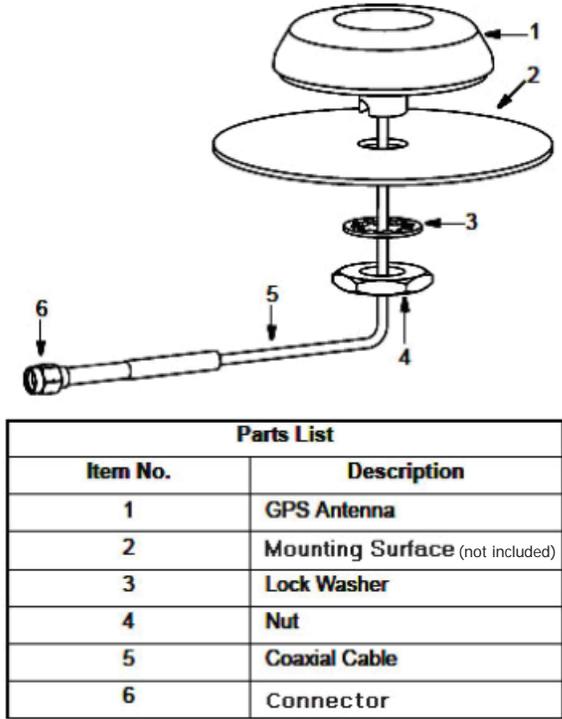


Figure 1. Exploded View and Parts List of the Antenna

General

The installation procedure which follows is for a typical passenger car. The procedure may vary slightly with the type of vehicle on which the antenna is to be installed. Generally speaking, however, the procedures outlined are of a universal nature.

NOTE: The antenna should be mounted on a flat metal roof of 0.02 to 0.04 inch thickness.

The following item reference numbers refer to the item numbers in Figure 1.

1. First, select a location for the antenna. This location should have no physical obstruction near antenna such that the GPS antenna has a clear view of the sky, no electrical interference and should be located 3 feet away from any RF transmitting antenna.

2. The headlining may be probed with the fingers to make sure that all points of obstruction are avoided.
3. Remove the headlining from the installation area.

Single Wall Construction

1. Using the desired location on the roof for the GPS antenna, drill a pilot hole down through the roof.
2. Using the pilot hole location, carefully drill a 9/16-inch hole from the top of the roof until the saw bottoms.

IMPORTANT: For proper seating of the GPS unit and nut, deburr and scrape any foreign matter from underside of hole out to at least 1/8-inch from edge.

3. Determine the routing of the cable from the antenna mounting base to the radio set; then remove the molding and trim necessary to facilitate pulling the cable through.
4. Remove washer (3) and nut (4) from assembly.
5. Insert the connector (6) into the hole in the roof and pull the wire through.
6. Insert the antenna shaft (1) into the hole from the top and press firmly to secure the antenna in place.
7. From inside the vehicle, slide the lock washer (3) and nut (4) over the connector. Continue sliding this assembly along the entire length of the coaxial cable (5) until you reach the antenna bushing.
8. Thread the nut (4) onto the antenna bushing and tighten as far as possible by hand.
9. Securely tighten the nut (4) using a 1-inch open-end wrench or adjustable wrench while holding the antenna in place.
10. Route the cable between roof and the radio set.
11. Take up the slack in the cable and replace the headlining retainer molding.
12. Replace headlining if removed.

Double Wall Construction

1. Using the desired location on the roof for the GPS antenna, drill a pilot hole down through the roof.
2. Using the pilot hole location, carefully drill a 9/16-inch hole from the top of the roof until the saw bottoms.
3. Using a 1-3/4-inch diameter hole saw cut a hole in the inside layer of the metal.
4. Remove the metal and filler from this 1-3/4-inch diameter hole.
5. Complete the installation per installation procedure for vehicles with single wall construction.