There are a number of important details to observe when making your mobile installation.

(1) The transceiver must have a direct ground connection to the car body. This must be done through the mounting brackets. Do no rely on the DCC cable running to the battery, or on the coaxial cable going to the antenna.

If you are installing the Atlas plug-in mobile mount, the mounting brackets will provide a good ground through the screws that secure the brackets to the transmission hump or firewall. Use the large 1/4 in screws, and make certain that they are tight. Also, make certain that all the screws in the plug-in mounting assembly are tight, and that internal tooth shakeproof washers are in place under the screw heads and nuts. The black anodized finish is actually a very good insulation, and it is important that the shakeproof washers cut through the anodizing to make electrical contact. If there is any doubt, connect a piece of copper braid from the antenna bracket to the mounting bracket.

If you are installing the transceiver using the Atlas bracket kit, (not the plugin model), it will be best to use a piece of copper braid from a mounting screw on the transceiver to one of the mounting brackets. This will serve as a backup ground connection in the event of a good ground is not being secured between the brackets and the transceiver.

(2) At the antenna mount it is very important that the coaxial cable be grounded securely to the auto body or frame. If you are cowl mounting the antenna, one of the mounting screws for the ball mount will normally give a good ground connection to the body.

If you are using a rear bumper mount, make certain that the bumper is electrically connected to the frame of the car. Some of the late model cars have rubber mounting parts, and the bumper may not be connected electrically. If this is the case, run the coax shield braid back to the body, and ground it with a good sized sheet metal screw, or nut and bolt.

- (3) Impedance matching to the antenna. Practically all the common mobile antennas on the market have a base impedance in the 15 to 25 ohm range when installed on an automobile. For this reason, we recommend the Atlas model MT-1 matching transformer, in order to run full power. Large motor homes are generally an exception, and do not require the transformer. Their larger ground area increases the base impedance to nearly 50 ohms. The same is true on marine installations.
- (4) Information on mobile noise suppression is available from the factory if required.

If you have any problems or questions about your mobile installation, please contact us.