

INSTALLATION GUIDE

VHF TRANSIT ANTENNA

WARNING !

**Antenna Contact with High Voltage Wires
May Result in Death by Electrocutation!**

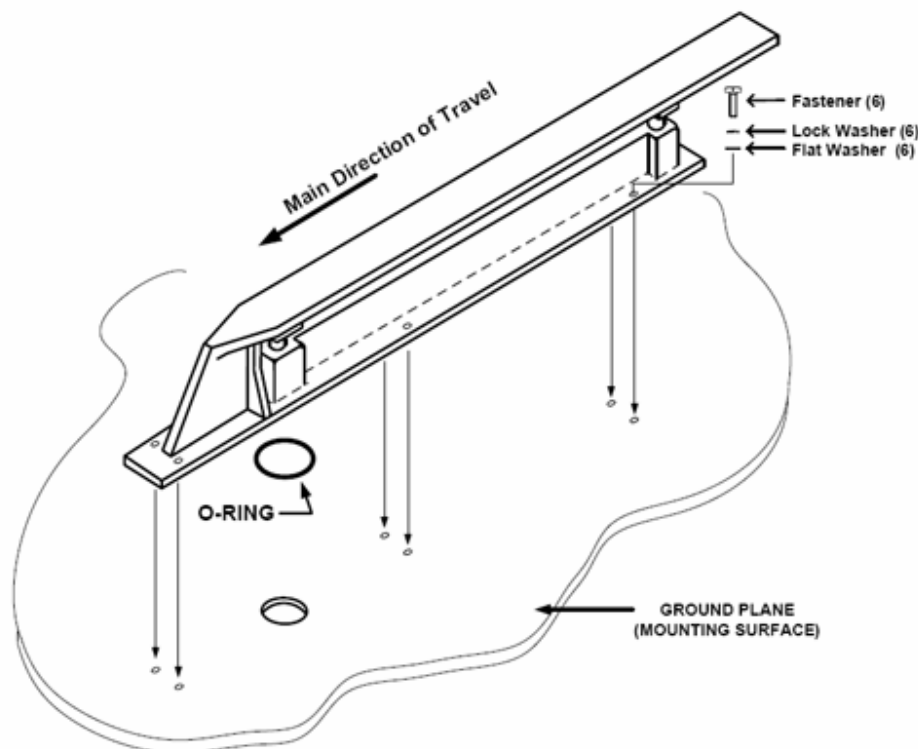


358-75

Choose Mounting Location: Antenna must be mounted on a suitable ground plane such as the top of a locomotive or bus. Minimum recommended ground plane size is 36"x48". If the antenna is to be mounted on a non-metallic surface such as fiberglass, a metallic ground plane must be mounted between the vehicle top and the antenna (see below).

Ideally, the antenna should be centered on the ground plane with the closed end of the antenna facing the main direction of travel.

Mount the antenna as high as possible on the vehicle. Mounting at a low level (such as on a fender) or near a structural member may cause RF reflections and distortion of the pattern. If mounting near other vehicle structures cannot be avoided, mount the antenna at least $\frac{1}{2}$ wavelength away from such structures (for example: 36" at 160MHz).

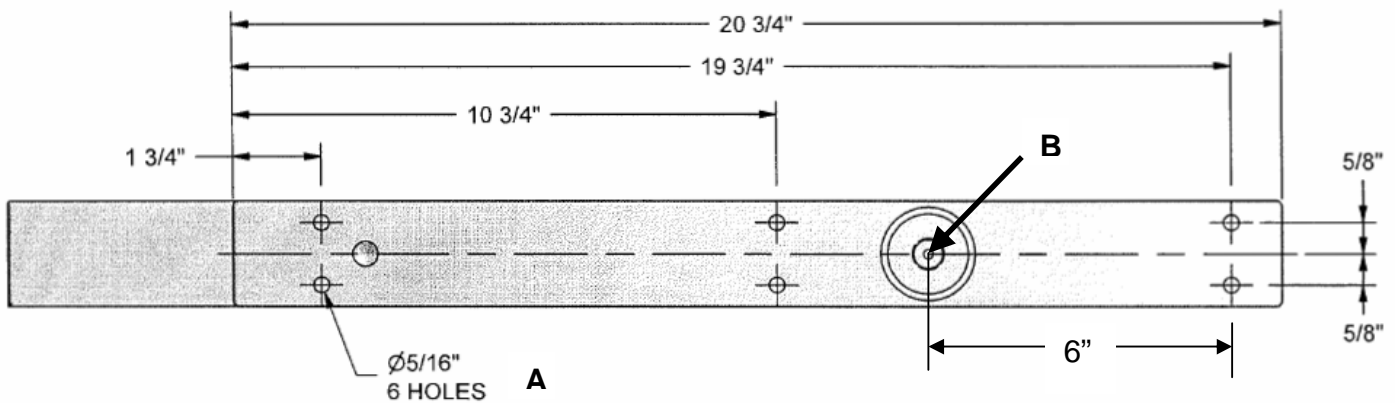


Drill or Punch Holes in the Ground Plane and/or Vehicle Top:

- A) **6 HOLES:** Drill for selected fastener size. Antenna may be attached with #14 x 5/8" sheet metal screws (provided). Other fasteners such as 1/4-20 bolts may be used. Vehicle top can be drilled and tapped or drilled for clearance and the antenna fastened using nuts and washers as the installation demands.

- B) **1 HOLE:** Drill or punch clearance hole through the Ground Plane for input connector. Diameter must be a minimum of 1-3/16" and a maximum of 1-1/2".

NOTE: Standard connector type is UHF Female (PL259).



NOTE: ABOVE DRAWING NOT TO SCALE – DO NOT USE AS A TEMPLATE

Attach the Antenna: Use the fasteners provided to attach the base flange to the ground plane in 6 places. The **O-Ring** fits into the circular groove surrounding the input connector between the base flange and the ground plane, providing a seal around the input connector and transmission line. **Failure to properly install the O-Ring will cause water leakage.**

Application of Sealant: Sealant should be applied around the six 5/16" mounting holes only, before bolting the antenna to the ground plane. Recommend sealant type is silicone based (RTV) or equivalent. If desired, a thin bead of sealant may be placed at the junction of the antenna base and the ground plane.

IT IS NOT NECESSARY OR DESIREABLE TO COAT THE ENTIRE BOTTOM OF THE ANTENNA WITH SEALANT.

NOTE: DO NOT apply paint to the fiberglass insulators. Applying paint to the insulators may cause high VSWR.