



## Fender Mount Installation Considerations Narrow Band, VHF Antennas

(ALL)-NB-VHF

## **VERIFY:**

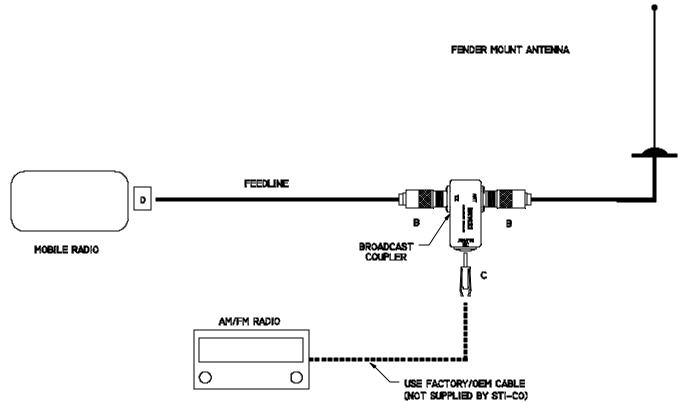
- 1. **Part List:** The system package includes antenna, cable(s), broadcast coupler and connectors if applicable. Use only components supplied with the antenna.
- 2. **Bandwidth:** VHF Narrow-band antennas are 1.5 to 4 MHz wide, within the range of 150-174 MHz. Extended tuning range is available. Be certain that the antenna was tuned to the frequency required.

## **INSTALLATION:**

Refer to the Antenna Mounting Instructions provided for your specific antenna model.

**Note**: Be careful not to tear the sheath of cable when pulling through sharp body panels. If a hole appears in the cable's sheath, cover with several layers of a high quality electrical tape.

1. **Grounding:** Fender-mount antennas must be grounded at the point where the antenna passes through the body of the vehicle. The antenna base must be fastened snuggly to the fender. (Be careful not to over-tighten) If required, follow the grounding procedure for installation of the grounding kit. Antennas lacking ground will produce high-reflected power.



2. **Electromagnetic interference:** Do not coil feedline cable or matching network. If limited space is a concern, fold the cable upon itself rather than coiling.

ci-249 **Page 1 of 2** REV 000





- 3. Moisture Prevention: Antennas installed on the front fenders should have a drip bend made with the cable to prevent water running down the cable into the connectors. Bending the section of cable coming from the antenna base/ fender into a "U" shape can make a drip bend. Water will drip off rather than flow into the connectors or coupler boxes. Attempts should be made to bring all couplers inside the cabin of the vehicle so they are not exposed to the elements.
- 4. **Cable Cutting: Do not cut the impedance cable.** Cut the feedline cable to the appropriate length required to reach the transmitter.
- 5. **Install Connectors:** Refer to Cable Stripping Dimensions diagram. The entertainment radio cable may not have the correct connector to tie into the broadcast port; in that case you must install the Smith jack (supplied) onto that cable.

## **TESTING:**

Installation testing must take place at the transmitter side of the feedline. Make sure all doors, hood, and trunk are closed.

**Note:** Some vehicles are sensitive to VHF frequencies. STI-CO suggests that you isolate feedlines and check for unwanted interference with the ignition switch on.

- 1. **Reflective Power:** A measurement of reflective power using a wattmeter, you can expect up to 8% reflected power. When results are greater than 8%, recheck grounding.
- 2. **SWR:** A measurement of SWR (standing wave ratio) will yield better than 1.5:1. If greater than 1.5:1, recheck grounding.

CAUTION: The mast must be removed before entering a car wash.