

Figure 7

mount the unit on the floor. See Figures 4A and 4B. The gimbal bracket should be mounted in the desired location in the automobile, using the #10 sheet metal screws. The starting holes for these screws should be made with a 9/64" drill, being careful not to drill into existing wiring or instruments. Keep all Transceiver cables clear of the automobile pedals and control cables.

Any cables that have to go through the fire wall will usually fit through existing grommets. If it is necessary to make holes through a sheet metal partition, a long tapered punch usually works better than a drill. A drilled hole leaves sharp edges which can cut the wires. When a punch is driven through the metal, the sharp edge is rolled back and a smooth hole will result.

Be sure to leave enough extra cable so the Transceiver can be removed from the gimbal bracket and operated, to permit adjusting the rear apron controls.

Mount the antenna according to the manufacturer's instructions. Be sure to make a good ground connection between the shield of the coax cable and the car body at the antenna base. Low frequency antennas with loading coils must be carefully tuned, as a small change in antenna length changes the SWR considerably. The frequency range of whip antennas on 75 meters is usually only about 25 kc; beyond this range loading becomes difficult or impossible without readjusting the antenna.

IMPORTANT NOTE: To make a loaded whip antenna present a 50 Ω load to match the coax cable on 75 meters, a 1000 μf mica capacitor must be connected between the base of the antenna and ground. This can be done inside the automobile body as shown in Figure 8A, or between the antenna and one of the mounting screws, using two control solder lugs as shown in Figure 8B. The necessary parts are supplied with this kit. Connect a SWR bridge to the antenna and make sure the SWR is below 1.5 to 1. Power for operating the bridge may be obtained by carrier output in the TUNE position of the FUNCTION switch.

The FINAL TUNE knob will peak in the center third of rotation with a properly matched antenna. Do not use an antenna that will not tune through a "peak" in TUNE.

The Heath Mobile Speaker can be used for installation in an automobile, or a car radio speaker (3.2 to 16 Ω) may be used.

Connect the cables and mount the Transceiver in the gimbal bracket. Position as desired and tighten the thumbnuts.

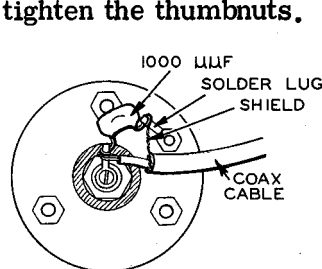


Figure 8A

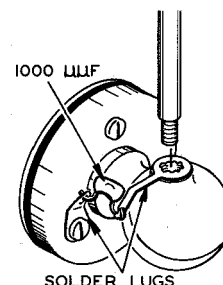


Figure 8B