

VHF/UHF ANTENNAS
MOBILE STATION MOBILE TELEPHONE SERVICE ANTENNAS
INSTALLATION
KS-15510 WHIP

The KS-15510 type antenna has been designed for roof-top mounting in the 152-162 mc and 450-460 mc bands. When mounting this type antenna on passenger cars, panel trucks and similar vehicles that have metal roofs, locate the antenna along the longitudinal center line of the top, the exact point being determined with regard to dome lights, roof struts, distance to the radio equipment and the ease of running the coaxial cable.

It is permissible to locate the antenna toward either end of the top provided it is at least the length of the whip away from the edge of the front or rear window or any sharp drop portion of the roof.

The KS-15510 antenna may be mounted on convertibles. In such cases, the antenna should be mounted on the trunk cover in such a position as not to detract from the appearance of the vehicle.

For optimum performance in such installations, there should be flat and horizontal surface at least the length of the whip in all directions from the antenna. Leave adequate but not excessive slack in the antenna cable to allow for opening and closing of the trunk cover. Secure the antenna cable in a neat manner that will avoid damage to the cable.

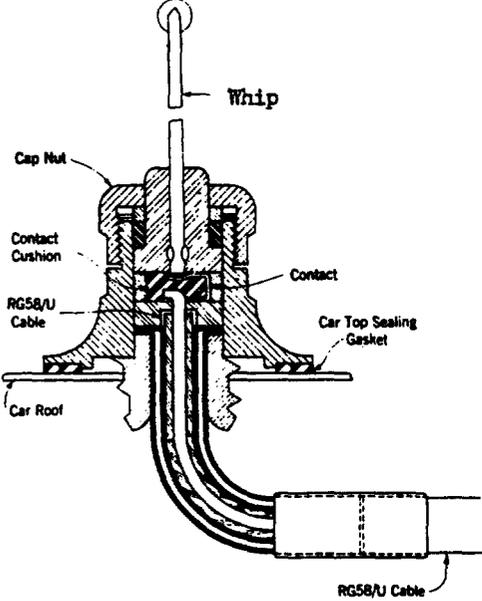
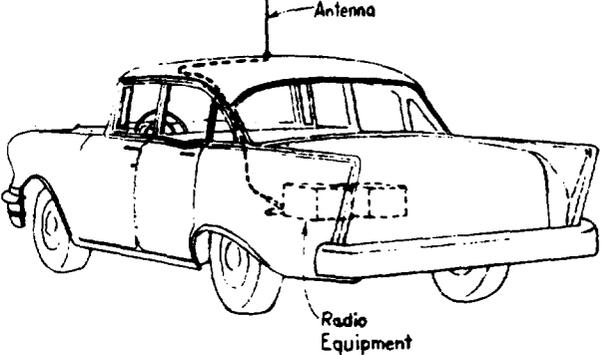
The KS-15510 antenna may be mounted on trucks and tractors. Where the truck body or trailer extends above the roof of the cab a coaxial antenna or some other type should generally be used.

The following chart lists the antennas and associated items. Some of the items listed are not required in the process of an installation but are listed so that proper ordering information is readily available in those cases where associated items may be required for maintenance purposes or other reasons.

ANTENNA MATERIAL LIST:

ITEM	BAND OF OPERATION
Antenna, KS-15510, List 1	152-162 Mc
Antenna, KS-15510, List 21	450-460 Mc
Spare Whips:	
Whip, Antenna, 18-inch, No. 023A1654-C1, Buggie Co.	152-162 Mc
Whip, Antenna, 6-inch, No. 023A1654-C21, Buggie Co.	450-460 Mc

STEP	PROCEDURE
1	Drill 29/64-inch hole in desired roof-top location. The KS-15510 antenna has a self-tapping thread on its base and normally requires a 29/64-inch hole in which to start the self-tapping thread. The diameter of the hole is quite critical, however, and in some of the lighter gauges of top metal a slightly smaller hole may be more desirable. Under such conditions, drill a small hole first and then enlarge it to the proper size with a milling or reaming tool.

STEP	PROCEDURE
	<div style="display: flex; justify-content: space-around; align-items: center;">   </div> <p style="text-align: center;">Typical Roof-top Installation</p> <p>Fig. 1 – Mounting Details</p> <ol style="list-style-type: none"> 2 Note that roof-top sealing gasket is in place. See Fig. 1. 3 Insert the loose end of the coaxial cable into the hole. 4 In a sedan installation endeavor to feed the cable directly back into the trunk. If this cannot be accomplished after a few attempts loosen the window frame and feed the antenna cable down into the car. Then fish the cable from this point into the trunk. 5 Loosen cap nut on antenna assembly until bent elbow rotates freely. See Fig. 1. 6 With bent elbow in hole, start self-tapping thread engagement by hand. Use a 5/8-inch end wrench with a 4-inch handle or equivalent and tighten until the gasket is completely seated and a firm torque pressure realized. The normal action using a 5/8-inch end wrench is for the base screw to enter at a tilt. As it is screwed in further, the base reaches a point where it starts to right itself. Another 1/2 to 3/4 turn draws the base up snug, fully compressing the gasket. At this point, the edge of the mounting hole has been crowned along approximately one-half its perimeter. Another 1/8 to 1/3 turn can be taken with the torque rising only slowly, thus providing a desirable margin of safety. The righting of the base can therefore be used as a visible guide and starting point for the final 1/8 to 1/3 turn of tightening. 7 Tighten cap on threaded portion of base with a 5/8-inch end wrench until full compression is reached, using another end wrench to hold mounted self-tapping shell stationary so as not to strip the self-tapping thread of the base. 8 Terminate the antenna cable in a modified PL-259 plug at the radio equipment using the method recommended in Section 402-304-210.