

Installation

SW2 VHF Band Antenna Kit

144-175MHz

The SW2 is a roof mounting antenna suitable for VHF mobile radio bands. Centre roof mounting is strongly recommended for optimum performance on vehicles with metal roofs. Mounting on fenders or boot lids will result in degraded performance and an alternative antenna kit, CD28 series should be used.

Specifications:

Gain:	Unity (0dB)
Power Rating:	100 Watts continuous
Tuning:	Field tuneable by cutting to user frequency
Impedance:	50 Ohms Nominal
Radiator:	Stainless Steel with chrome ferrule
Mount:	MB9

Installing the Antenna

1. The MB9 base may be mounted from above or below the roof. When fitting from above roof as pictured a 19mm hole is required. If fitting from the underside a 12mm minimum hole is required.
2. Loosen base nut to top of thread (do not remove) and unravel cable.
3. Feed the coaxial cable through the hole and on to the transceiver via the best and most direct path.
4. Slide the sealing washer, cup and o'ring up to meet the nut.
5. Insert the "toe" of the baseplate into the hole at an angle (Fig.1).
6. Slide the base backwards as far as possible (Fig 2.) then while holding the base cup with one hand, tighten the nut with a spanner. **TIGHTEN ONLY ONE TURN BEYOND HAND TIGHT. DO NOT OVERTIGHTEN.**
7. Take up any excess in the coaxial cable.
8. Fit the whip top and tighten with a spanner. **NO MORE THAN 1½ TURNS BEYOND HAND TIGHT.**
9. Tune whip and fit connector as per tuning chart.

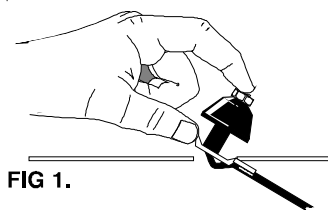


FIG 1.

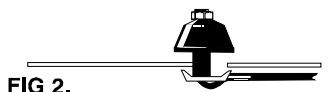


FIG 2.

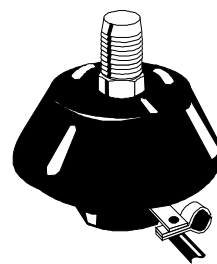


FIG 3.

Component Listing



Whip Section
SW2



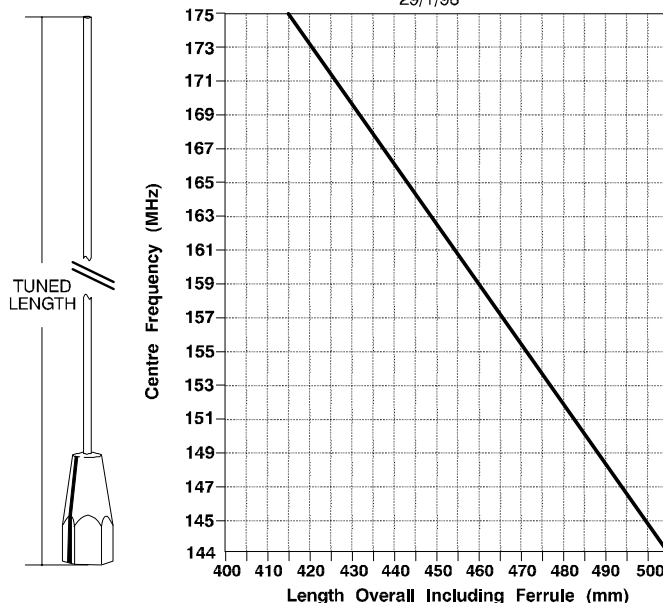
MB9 Base Section with
3.6m RG58C/U and MPL-604
connector MB9-00-11M

Tuning the Antenna

The chart provides an approximate cutting length for the antenna when mounted with the antenna base supplied. It will ensure a VSWR of less than 1.5:1 at the operating frequency. For optimum match at the operational frequency, tune the whip on the vehicle using a power or VSWR meter.

Notes:

1. Chart shows the total overall length of the antenna and the ferrule
2. To trim the antenna, cut using good quality bolt cutters
3. Fine tuning to minimum VSWR is recommended if a VSWR or RF Power meter is available



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