

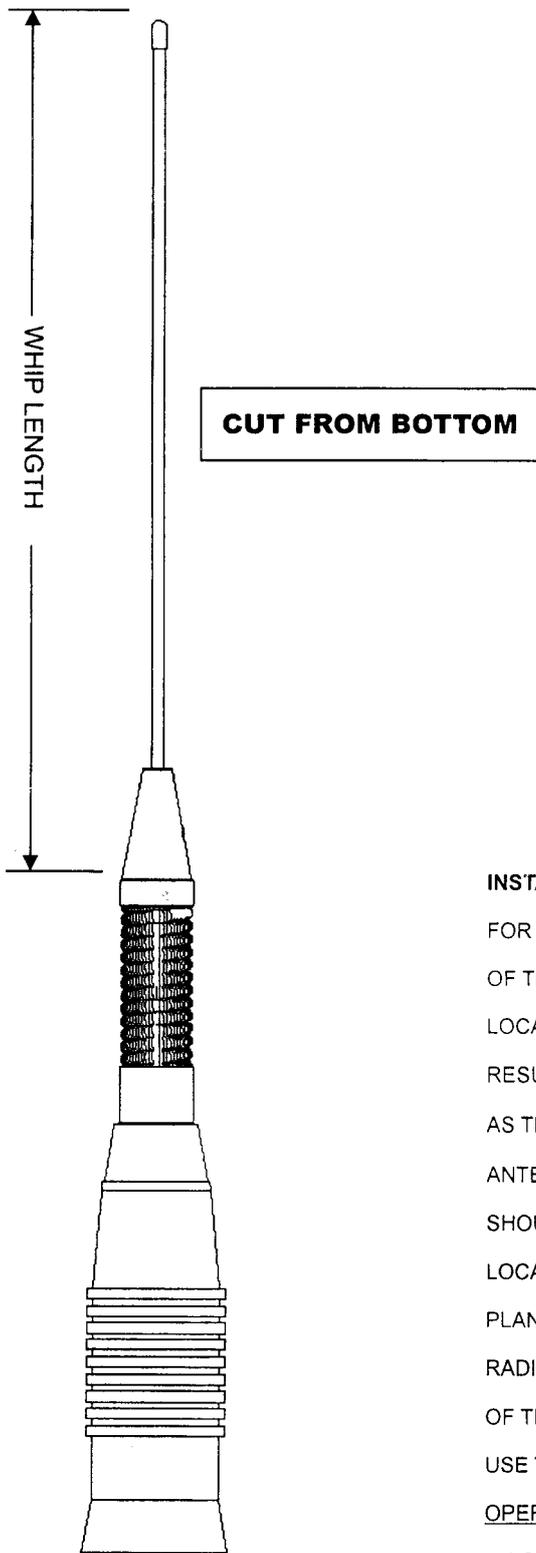


MODEL : VH-1221
HIGH PERFORMANCE VHF MOBILE
COMMUNICATION ANTENNA

- **FREQUENCY: 136 – 174 MHz (WITH CUTTING CHART)**
- **5/8 λ DESIGN , 3dBi GAIN**
- **V.S.W.R. LESS THAN 1.5**
- **50 OHMS IMPEDANCE**
- **POWER HANDLING : 300 WATTS**
- **UHF MALE (PL-259) CONNECTION**

ASSEMBLE THE ANTENNA PER THE DIAGRAM ATTACHED. TO OBTAIN THE LOWEST S.W.R. (STANDING WAVE RATIO), THE ANTENNA MUST BE CUT TO THE SPECIFIC FREQUENCY OF OPERATION (SEE CUTTING CHART) . THE STAINLESS MATERIAL USED IN THE ANTENNA IS VERY STRONG AND IS NOT EASILY CUT. WE SUGGEST " SCORING " THE STAINLESS WHIP TO A 75% DEPTH THEN USING TWO PLIER TO SNAP OFF THE UNUSED PORTION. USE CARE TO AVOID AN ACCIDENT. FILE DOWN ANY " BURRS " ON THE CUT OFF PORTION. THE COIL ASSEMBLY IS FACTORY TUNED AND SEALED, NO ADJUSTMENT TO THE COIL IS NECESSARY.

NOTE: ALWAYS USE PROTECTIVE EYEGLASSES WHEN CUTTING OR FILING METAL RODS.



CUTTING CHART

FREQUENCY (MHz)	WHIP LENGTH
	mm
136	1300
138	1290
140	1270
142	1240
144	1215
146	1195
148	1180
150	1150
152	1125
154	1105
156	1080
158	1060
160	1045
162	1025
164	1010
166	995
168	970
170	950
172	940
174	925

INSTALLATION:

FOR GROUND PLANE DEPENDENT ANTENNA THE CENTER OF THE VEHICULAR ROOF IS CONSIDERED THE BEST LOCATION FOR YOUR INSTALLATION. SATISFACTORY RESULTS MAY BE OBTAINED ON OTHER LOCATION SUCH AS THE FENDER OR TRUNK DECK. WHEN MOUNTING ANY ANTENNA, ESPECIALLY A LOW BAND ANTENNA, CARE SHOULD BE TAKEN WHEN CHOOSING THE MOUNTING LOCATION SO AS TO PROVIDE AN ADEQUATE GROUND PLANE AND FREE SPACE FOR THE RADIATOR. IF THE RADIATOR IS MOUNTED TOO CLOSE TO THE METAL SIDE OF THE VEHICLE, A LOW V.S.W.R. MAY NOT BE ACHIEVED. USE THE TABLE BELOW AS A GUIDE:

<u>OPERATION BAND</u>	<u>GROUND PLANE</u>
LOW BAND	AS LARGE AS POSSIBLE
VHF	89 cm ²
UHF	33 cm ²
800/900	18 cm ²