## 910 Automatic Tuning Mobile Antenna Barrett P/N BC91000

The 910 Antenna plugs directly into the rear auxiliary connector of 550/530 or 950/930 transceivers using the cables supplied. Transceivers must have the 910/510 Antenna option set during programming (refer to operation and programming manual).

A good earth (ground) to the main body of the vehicle is essential for efficient operation of the antenna. To achieve this clean all joints to bare metal and use copper braid earth straps if any non-metallic joints are encountered.

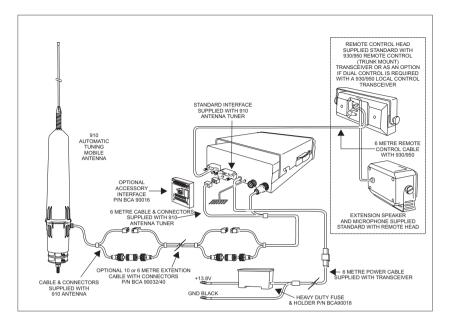
After mounting the main body of the antenna, screw the stainless steel whip to the black coil. The whole assembly is then screwed onto the top of the antenna body. In the case of the whip with integral spring screw this assembly onto the top of the antenna body.

The antenna is supplied with a pre-terminated 1.5 metre cable tail. This should be routed into either the engine compartment or boot (trunk) of the vehicle. A 6 metre

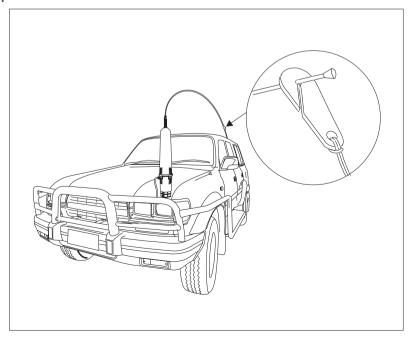
pre-terminated extension cable is supplied to connect the antenna to the transceiver (this cable may be extended to 12 metres by use of another extension cable). If the joint between the antenna stub cable and the extension cable is in an exposed position, a butyl rubber self amalgamating tape should be used to seal the joint. Do not wrap this joint if it cannot be made completely water tight as water will collect in the joint and cause it to corrode.

To test the antenna attach a SWR meter in line with the coaxial cable at the transceiver. Select any channel on the transceiver and activate PTT or use the tune function \* on the transceiver. The antenna should tune (indicated by the sound of relays clattering), within 2 seconds. Using the tune function \* check the SWR of the antenna, it should be less than 2:1. If the tune sequence does not occur check all wiring thoroughly. If the SWR is not within an acceptable limit check the earth (ground) bonding of the antenna base to the vehicle body.

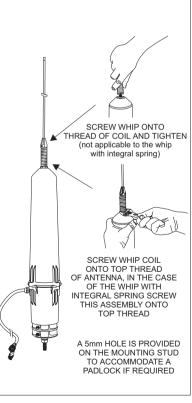
\*On the 550/950 transceiver press the tune button On the 530/930 transceiver press the channel key, on the channel required to tune, for more than 2 seconds.



For operation under low clearances use the supplied plastic clip and chord to pull the antenna into a horizontal configuration as indicated in the diagram bellow.



## Antenna Assembly

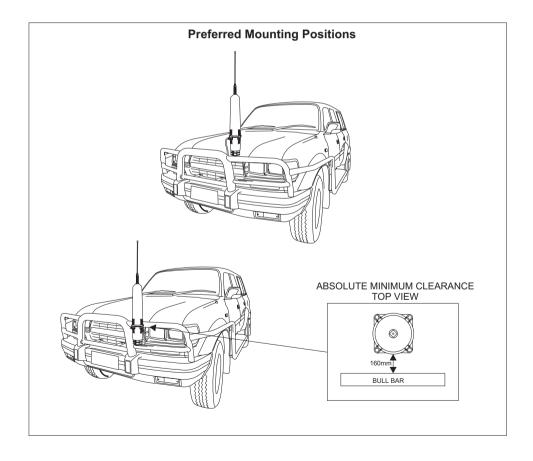


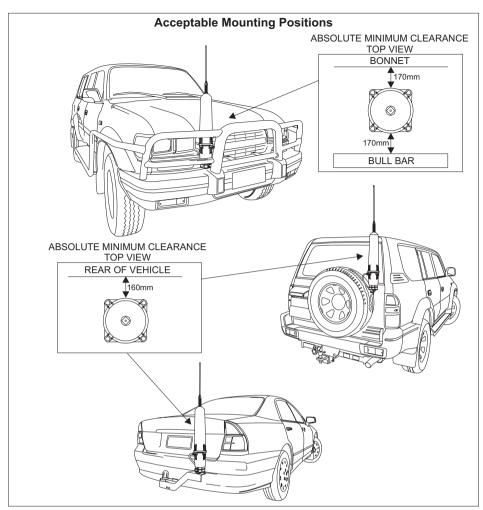
## **Important Information**

The 910 Antenna is a high performance device that must be mounted in positions as indicated in the illustrations following. It is ESSENTIAL to maintain the minimum clearances between the antenna and surrounding metal work as indicated in the diagrams. FAILURE TO MAINTAIN THESE CLEARANCES WILL NOT ONLY REDUCE THE EFFICIENCY OF THE 910 ANTENNA BUT MAY ALSO LEAD TO INTERNAL RF ARCING AND FAILURE.

Select a position free from excessive vibration. A bracket, fabricated to withstand the forces and vibration that can be expected during off-road driving, should be used to mount the antenna to the vehicle.

Caution:- Whilst the 910 Automatic Tuning Mobile Antenna is designed to withstand vibration to military specifications on tyred vehicles, some mounting positions on large prime-movers, particularly front mounted bull-bars, are subject to vibration that far exceeds this specification. Do not mount the 910 Antenna in positions such as these as damage to the antenna may result.





Unacceptable Mounting Positions