

## Installation Hints and Tips

By: Kelvin Reynolds Wednesday, 16th November 2016

## **Installation Hints and Tips**

Generally speaking, installation is largely common sense. A few tips will help you get a better result:

Best results are when an antenna is installed in the centre of the car on a horizontal surface and at the highest point possible.

- 1. Make sure that your antenna base is well earthed. It is recommended that we use a short piece of electrical cord and solder it to the chassis, even if your base is magnetic.
- 2. Use the shortest possible piece of antenna cable and make sure that the cable is not kinked or looped in any way. Your local radio shop can help you shorten it.

Place your antenna at the highest point in the car that has the largest area of flat metal around that point. Central is the best. In a tin top- slap bang in the middle of the roof is ideal- in a single seater- it's not so easy but there is generally some space in front of the driver. The antenna must be perpendicular.

3. Mount the radio securely and use a Radio box. It must be secure and protected from vibration if possible. Consider the possibility of Rain – the Radios are not waterproof!

Avoid ignition systems, alternators and heat. Do not attach the radio to the cars own electrical system in any way.

See Antenna Installation and Tuning guide under FAQ- Files for more information.

## Single Seaters and Open Sports cars

These represent a slightly bigger challenge in that any antenna works best when located in the centre of a conductive piece of metal about the size of a Pizza at least. Often this is difficult and it may be necessary to add an earth plane by glueing some copper foil or shim stock to the bodywork and earthing this to the chassis where there is metal. If this fails, there are special NGP antenna that can be imported.

## **SWR Meter Testing**

It will be seldom that an installation will not provide a signal but the quality of the installation will have a significant impact on range. The quality of the antenna installation can best be measured by making use of an SWR meter and this will be available from Radio Reynolds by arrangement at an agreed daily rate.