

# ANTENNA DESCRIPTION

SGL477-B is a light to medium-duty UHF CB Radio antenna designed exclusively for mounting to a vehicle guard, the boot of a sedan or to a truck mirror.

Suitable for all UHF CB radios on the market, this antenna is manufactured from the finest quality components and will survive harsh Australian conditions long term.

Standing 750mm tall, the antenna mounts easily into any bracket with a 16mm minimum diameter hole and is secured firmly by the nut and washer at the base.

The electro-polished stainless steel spring dampens vibrations while travelling and maintains the antenna in a vertical position for the optimum receive and transmit performance at any speed.

5 metres of RG58 low loss stranded cable bottom exits through the spring and mount ferrule and is not terminated to allow easy installation through vehicle firewalls and dashboards. A UHF male solder connector is supplied, not fitted.

A detailed specification sheet is available to download from www.zcg.com.au

## TUNING

The antenna has been tuned in the factory for 477 MHz UHF CB Radio (476.4125 - 477.4125 MHz) all 40/80 channels. VSWR has been optimised to less than 1.5:1.

This tuning cannot be altered.

#### SELECTING THE MOUNTING POSITION

No metal ground plane is necessary for the antenna to operate effectively.

The typical mounting position for this antenna is to a vehicle guard, the boot of a sedan or truck mirror using the appropriate bracket with minimum 16 mm diameter hole.

This model can also be mounted to a vehicle bull bar.

To achieve best performance from your antenna, these are the important principles you should consider when selecting the mounting point:

- 1. Mount the antenna in as high a place as possible.
- Mount the antenna as far away from other antennas and metallic objects as possible to avoid interference and distortion of the 360° omnidirectional pattern. At least 350 mm side clearance is desireable, preferably more.
- 3. Mount the antenna properly vertical, not at an angle.

## INSTALLATION GUIDE

Remove the nut and washer from the threaded base and slip them off over the cable. Pass the cable through the hole of your mounting bracket. Thread the washer and nut back up the cable and onto the threaded base.

From underneath, tighten the nut to secure the antenna firmly to the bracket.

**IMPORTANT** : <u>Leave some slack</u> in the cable at the point where the cable bottom exits through the spring base. This will allow the antenna to flex in the usual manner during travel.



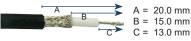
Route the RG58 low loss stranded cable carefully. Avoid high heat areas in the engine bay. Ensure that the cable is not stretched excessively and there are no sharp kinks. Use cable ties, but do not pull so tight as to crush the cable. A damaged feeder cable is a cause of high VSWR and reduced performance.

We recommend that you cut the cable to the shortest length necessary, prior to fitting the UHF male connector provided.

Carefully strip the end of the coaxial cable as shown in the diagram.

1.

2.





Fold back the uncovered braid over the outer jacket.

Screw the UHF male connector over the braid until tight. Trim any exposed braid.

 Solder the centre core of the cable to the connector pin. Remove any excess solder.

Attach the connector to your radio. The maximum input power is  ${\bf 20}\ {\rm watts.}$ 

### Installation is now complete.

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