ZCG

Model

ZN3-77-10BLKR-TPM

Medium-duty UHF CB Radio 477 MHz antenna top 1.1 metres

6.6 dBi Gain

For mounting on existing ZCG compatible UHF spring base

- Replacement top for the "**ZN3-77-10**" UHF CB radio mobile antenna.
- Mounts onto the "**ZN3-SB-S**" large spring base.

INSTALLATION GUIDE

www.zcg.com.au

ANTENNA DESCRIPTION

The ZN3-77-10BLKR-TPM medium-duty UHF 477 MHz CB radio vehicle antenna top, stands 1.1 metres tall and delivers 6.6 dbi gain.

This antenna will provide effective performance across either moderate hilly or flat terrain and the high quality construction ensures long term survival in harsh Australian conditions. Key features include :

- The antenna top can be detached for storage when not required using the supplied 3mm Allen hex key. It can also be substituted with the short 530mm rugged **ZN3-77-06BLKR-TPM** "quick fit" 2.1 dBi whip when desired.
- A precision machined marine grade aluminium ferrule prevents water and dust ingress giving the antenna a longer service life.
- The machined aluminum top cap stops water and dust ingress into the radome.

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

TUNING

The antenna has been tuned in the factory for 477 MHz UHF CB Radio - all 40/80 channels. VSWR has been optimised to less than 1.5:1. This tuning cannot be altered.

MOUNTING POSITION

The recommended mounting position for this antenna is as high on your vehicle as possible. The height and weight of this antenna make mounting to the guard, boot or mirror not practical.

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

To achieve best performance, mount the antenna as far away from other antennas and metallic objects as possible to avoid interference and distortion of the 360^{O} omnidirectional pattern.

At least 350 mm side clearance is desireable, preferably more.

INSTALLATION GUIDE

1. Remove existing antenna or protection cap from top of existing **"ZN3-SB-S"** spring base.
2. Inspection entire mounting base for any damage or water ingression.
3. If any debris located within mount connector or spring remove debris.
4. Ensure strain relief in base of spring sufficient to allow movement of spring base and antenna when put under tension.
5. Screw the antenna top onto the compatible "**ZN3-SB-S**" spring base until the aluminium ferrule touches the spring surface.
6. Tighten the grub screw in the antenna ferrule using a 3 mm Allen Hex Key to properly secure the antenna top to the spring base.

MAINTENANCE

Our ZN3-77-10BLKR-TPM is constructed of robust and reliable external materials and high quality silver soldered brass internal radiating components to ensure a long, reliable with minimum maintenance service life.

We recommend a full system visual inspection of your antenna, mount base, coaxial cable route and termination security yearly or prior to any remote expedition to ensure your system is performing adequately. A regular check of your communications device performance should also be undertaken as per the manufacturers guidance.

FAULT TROUBLESHOOTING

If an issue with your UHF system is found, below are some common faults to troubleshoot:

1. Check the cable connector to radio termination is both secure and tight with not dust/debris or moisture ingress. This is the leading fault.

2. Check the cable route has no sharp kinks, excessive wear or interaction with moving parts such as electric fans. Check no interaction with high heat areas such as turbo's, exhaust manifolds or coolant lines. Finally ensure the cable is not routed through or in close proximity to fuse boxes or high electrical interference locations, this can cause interference and in some cases complete blockage of the RF signal.

3. Check the cable entry into your spring base, if a strain relief loop (looks like a sideways question mark) is not left, this will cause excessive tension applied to the internal connection of the cable to spring base connector. The antenna must be able to 'lay-over' in the case of antenna contact any overhead objets, move movement of the cable will lead to cable to connector disconnection and failure of your system.

4. Check the antenna top is screws down onto your spring base and the grub screw securely tightened. Movement or rotation of your antenna during transit will cause disconnection of the internal connector to spring base connector.

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DOC:291025