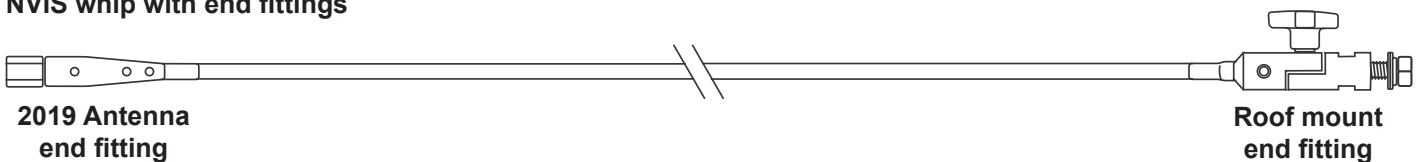


NVIS Kit for 2019 antenna - P/N BCA201910

The Barrett Near Vertical Incidence Skywave (NVIS) antenna whip is designed to enhance the short range communications efficiency of the Barrett 2019 Automatic Tuning Mobile HF Antenna. The increased whip length combined with its horizontal orientation (once installed) provides a significantly higher take off angle and radiation efficiency. Communications paths over the range 20 - 500 kms, particularly in hilly and mountainous terrain, can be greatly improved through the use of the NVIS kit.

The NVIS kit comprises of a single flexible whip section of 4 metres in length which replaces the two section whip (BCA201901) supplied with the Barrett 2019 Antenna. It has fittings at each end to attach to the 2019 antenna and the optional NVIS Kit Magnetic Mounting Base (BCA201911). The whip can also be secured to the vehicle without the magnetic mounting base by using a custom made bracket with a 13mm hole (sourced by end user). This option may be preferable if the vehicle is fitted with a roof rack for example.

NVIS whip with end fittings



The NVIS kit can be installed as follows:

- 1) Remove the existing 2019 antenna whip, leaving the spring in place.
- 2) Unscrew the lowest hex grub screw on the 2019 antenna end of the whip so that the hex fastener with recessed shaft can be removed.
- 3) Tighten the hex fastener with recessed shaft onto the top threaded stud of the antenna spring with an appropriate tool.
- 4) Place the conical fitting over the recessed stud and tighten the hex grub screw enough so that the conical fitting can rotate but can not be separated from the recessed shaft. This will allow the conical fitting to rotate while the roof mount end is being attached and also prevent antenna end fitting damaging the vehicle by becoming detached while attaching the roof mount end.
- 5) Attach the roof mount end of the whip to an appropriate location (see figure 1 as a guide). It could be attached to the optional NVIS kit magnetic mounting base (see figure 3), optional NVIS kit gutter mount bracket (see figure 4) or to a custom fabricated bracket (with 13mm hole). If the magnetic mounting base is used the roof mount end must be locked into one of three angle positions by locating the pin on the surface of one side of the fitting into the hole on the surface of the other side of the fitting (see figure 2). Once the correct angle is achieved tighten the knob firmly by hand.
- 6) Once the roof mount end is securely in its final position, tighten the hex grub screw that was loosened in step 2.

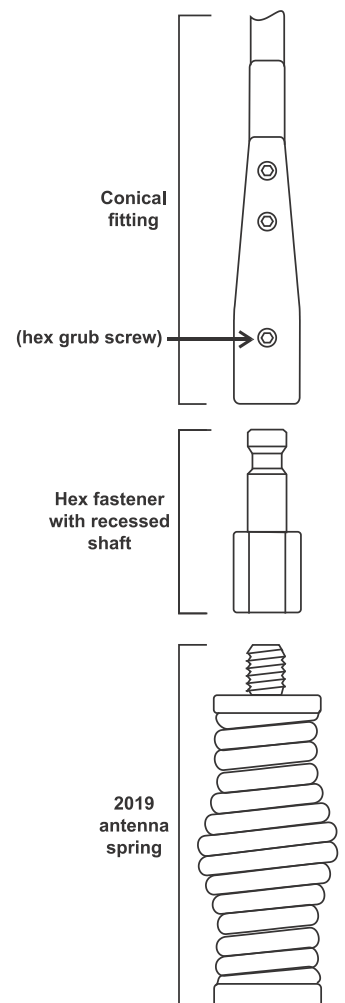
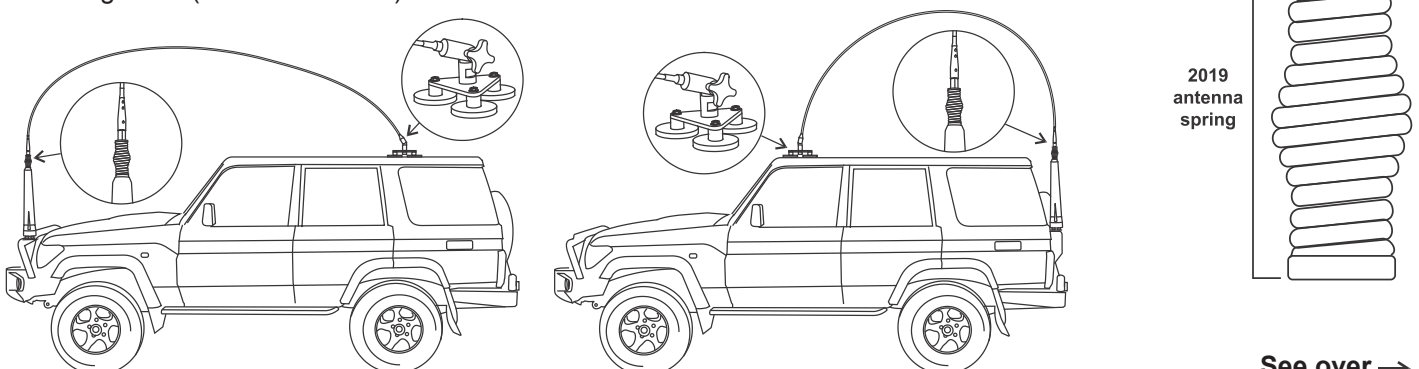


Figure 1 Example of front and rear antenna mounting using optional Magnetic Mounting Base (P/N BCA201911).



See over →



NVIS Kit for 2019 antenna - P/N BCA201910

Figure 2

Adjustable roof mount fitting showing locating pin and locating holes.

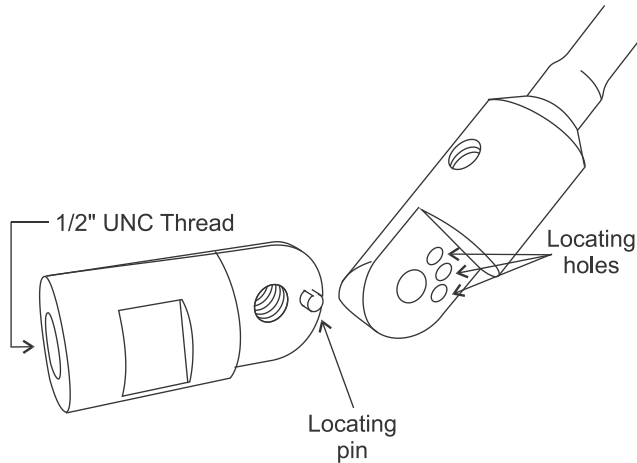


Figure 3

NVIS Kit Magnetic Mounting Base (optional) P/N BCA201911.

Base shown here with roof mount fitting attached.

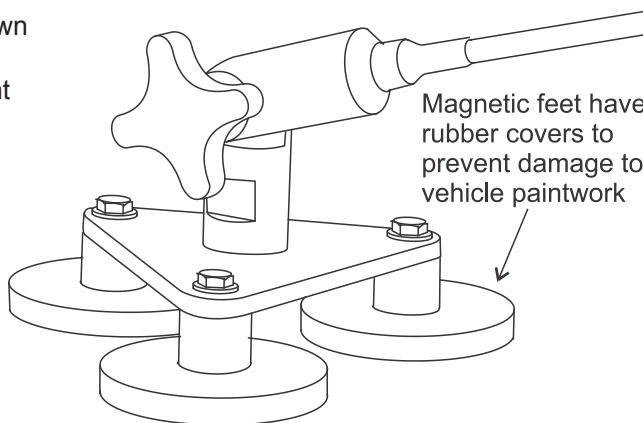
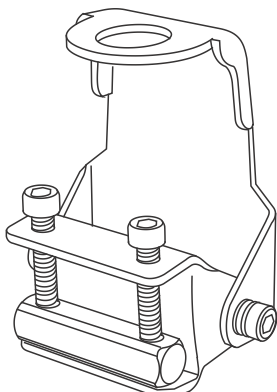


Figure 4

NVIS Kit Gutter Mount Bracket (optional) P/N BCA201912.



Specifications NVIS whip antenna

Electrical

Frequency Range 3 to 15 MHz
Power Rating 150 Watts PEP

Mechanical

Antenna Length 4.2metres overall.
Antenna Weight 2.8 Kg
Colour Matt Black UV stabilized
Packing Size L75 x W75 x H7.5 cm
Packing Weight 2.8 Kg

Environmental

Temperature -40°C to +85°C Storage
-40°C to +70°C Operational
Humidity 0% to 97% RH
Ingress Protection IP67

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