814A / 814B / 814LC

HF sectional vehicle whip, monopole, 5 m, 1.5-30 MHz

Tactical Antennas: Vehicle Mount







Application

Intended mainly for mounting on military or paramilitary vehicles and particularly on armoured cars. These Antennas can be used on SSB transceivers equipped with an antenna coupler or as I/4 tuned antennas.

Construction

Antennas in the 814 series comprise:

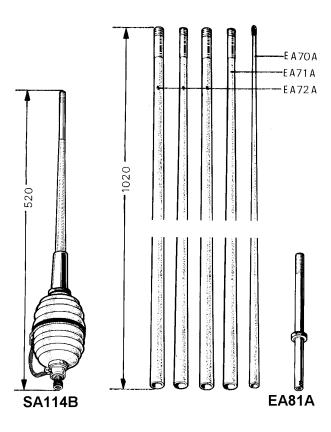
814 A (AN 356 A):	814LC	814B (AN357A):
- 1 SA 114 B base	- 1 base 75625	- 1 EA81A flexible base
- 3 EA 72 A sections	- 3 EA-72A sections	- 3 EA 72 A sections
- 1 EA 71 A section	- 1 EA-71A section	- 1 EA 71 A section
- 1 EA 70 A section	- 1 EA-70A section	- 1 EA 70 A section

All sections of the whip antenna are manufactured from fibreglass reinforced resin. A tin plated copper braid is inserted into the structure in compliance with the patented SPIRGLASS* process, thus forming the radiating conductor. The reinforced resin protects the conductor against any accidental contact with high-voltage cables.

The various sections, painted IR-NATO army green (sand or white colour optional), screw into one another. The assembly ferrules are made from mat dark-coloured brass.

The conical shape of the antenna gives it a behaviour similar to that of a solid of the same strength and gives it flexibility and robustness.

Dimensions



814A Total Unit

Reference No	Description	NSN	Mass (kg)
SA 114 B	Base	5985-14-041-8713	0.90
EA77A	Female insulator	5985-14-041-8705	0.20
EA78A	Male insulator	5985-14-041-8706	0.32
EA79A	Flexible unit	5985-14-041-8707	0.35
EA70A	Upper section	5985-14-342-4875	0.15
EA71A	Middle section	5985-14-343-1485	0.16
EA72A	Lower section	5985-14-342-4876	0.20

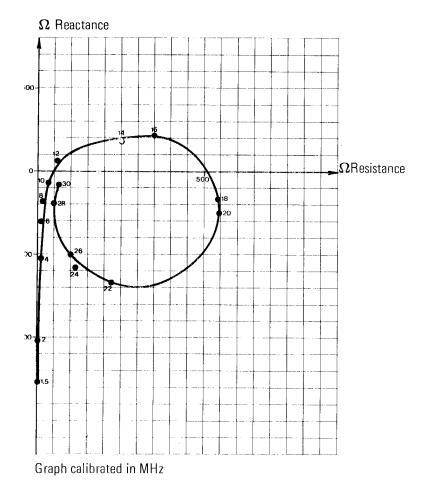
814LC (5m) Total Unit

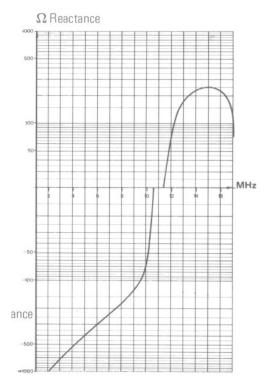
Reference Comrod	Reference	Description	NSN	Mass (kg)
F3435-75625	LC	Base	5985-15-068-7158	0.75
F3435-61246	EA-70A	Upper Section	5985-15-068-7155	0.15
F3435-61247	EA-71A	Middle Section	5985-15-068-7156	0.16
F3435-61248	EA-72A	Lower Section	5985-15-068-7157	0.20
Options				
F3435-75719		Tie Down		0.10
F3435-10877	HO 190 A	Bag (antenna sections only)		0.50
F3435-10835	MP50	Vehicle Bracket		2.60

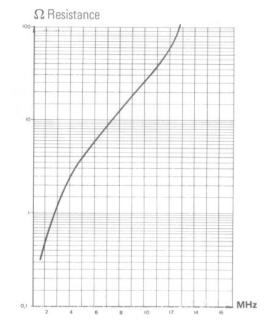


Electrical Specifications

Frequency Range	1.5 - 30 MHz
Polarisation	Vertical
Peak Power	500W
Connection	Screw terminal and high tension cable for SSB transceiver. UHF plug with earth clip for output of 50 W.
Breakdown Voltage	10,000 V minimum in compliance with MIL-A-55 288
Base Insulation Resistance	1000 M Ω minimum







Environmental and Mechanical Specifications

Resistance to Temperature	- 40°C to + 55°C
Resistance to Humidity	95% RH
Resistance to Saline Fog	96 hours
Tensile strength of screwed sections	225 daN
Impact resistance at 40km/h on wooden beam situated at 2500mm from base	25 blows

Installation





814 B Antenna (AN357A)

Alternative antenna to be mounted on a MP65 type base

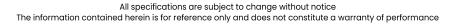
The EA81A adaptor replaces the flexible unit.

814 A Antenna (AN 356 A)

The SA 114 B base sits on a MP 50 type support or on any support with a $\cancel{E}52$ – 60 mm hole and a thickness less than 13 mm.

September 2018





COMROD