MIDLAND®

NW-1000, NW-1001, M150-GSA, M-285 (2m/70cm)
NR-770R, NR-770S (2m/70cm)
AZ-504, AZ-506, NW-2000, NW-2002 (2m/70cm)
CR-627 (6m/2m/70cm)
CR-11 (11m)

11m/6m/2m/70cm single, dual, three band high performance no-radial mobile gain whip antenna series.
Omni-directionally tilting whip structure (except the NR-770S model).

Description

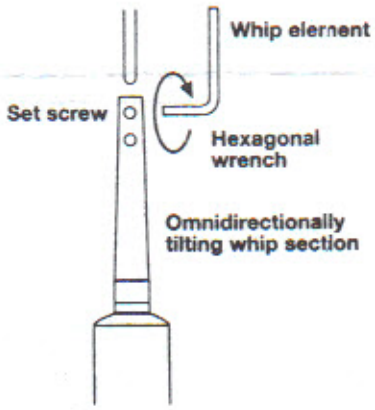
- The antennas employ no-radial structure which allows the antennas to work well at any condition.
- Omni-directionally tilting whip structure being employed in CR-11, NR-770R, NW-1000, NW-1001, NW-2000, NW-2002, AZ-506 and CR-627 enable the antennas to be tilted in any direction with a touch of your fingertips. It eliminates troublesome antennas detachment work when your car is being parked in a garage
- CR-11, NW-1000, NW-1001, NR-770R, AZ-504, AZ-506, NW-2000, NW-2002 and CR-627 models employ tapered stainless steel whip element to avoid unwanted QSB and degain effect caused by element vibration.
- Both of two bands can be operated simultaneously by using separately antenna duplexer.
- The antennas are designed to go well with the shape of contemporary car design.

Installation

Since all NR/NW/AZ/CR series employ no-radial structure, they can be installed at virtually any place on your car. In any case use Midland genuine antenna brackets or bases, variety of roofside gutter mount or trunk rid mount brackets, or rooftop magnetic bases are prepared for your convenience.

Adjustment

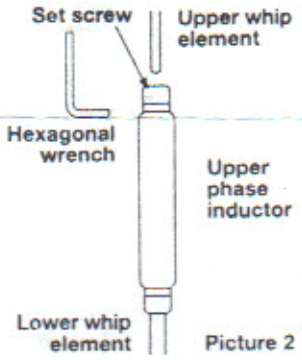
All NR/NW/AZ/CR series can be operated without any adjustment on 2m and 70cm bands. If frequency coverage has to be changed, put a whip element in and out from whip element bracket section to adjust to desired frequency. It can easily be practiced by loosening two set screws on the bottom section of the whip element, (in NR-770S upper part of whip element bracket and other antennas upper part of omni-directionally tilting whip structure section, with a hexagonal wrench attached and put the element in and out from the section). Be sure to re-fasten the screws firmly after adjustment is finished.



Picture 1

Assembling the CR-11,NW-1001, NW-2002, CR-627.

Upper whip element of the antenna is packaged separately. Put upper whip element into the upper part of the upper phase inductor and fix it firmly with an hexagonal wrench attached.

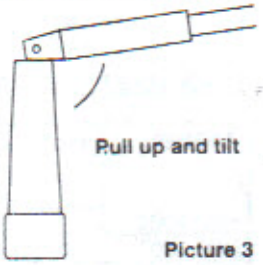


Picture 2

To tilt the antennas

CR-11, NW-1000, NW-1001, NR-770R, NW-2000, NW-2002, AZ-506 and CR-627 models employ omnidirectionally tilting whip structure. If the antenna has to be tilted when your car is parked in a garage, pull the antenna up at omni-directionally tilting whip structure section and incline it for desired direction.

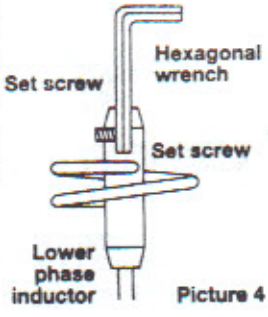
Important: Be sure not to drive the car with the antenna tilted! Since tilted antenna moves freely in any direction, it may hurt pedestrians or cars around your car if the car is being driven with the antenna tilted.



Picture 3

NOTE:

- Since all NR/NW/CR series, except the NR-770S, employ DC round structure, circuit across whip element section and ground section, outershell of the impedance matching section, is short-circuited and centre conductor of the feedpoint section and whip element is isolated.
- Since those set screws on connecting sections may be loosened more or less due to the vibration during driving, they have to be re-fastened from time to time, especially the antenna is right off from the package. Fallen off element may hurt pedestrians or cars around yours.
- If centre phase inductor in the NR-770S or lower phase induction in the NW-2002 is loosened, realign it by removing upper and lower whip elements from the inductor and refasten two set screws inside the inductor with a hexagonal wrench attached as show in Picture No.4.
- The inductor has to be replaced horizontally as shown in Picture No.4.



Picture 4

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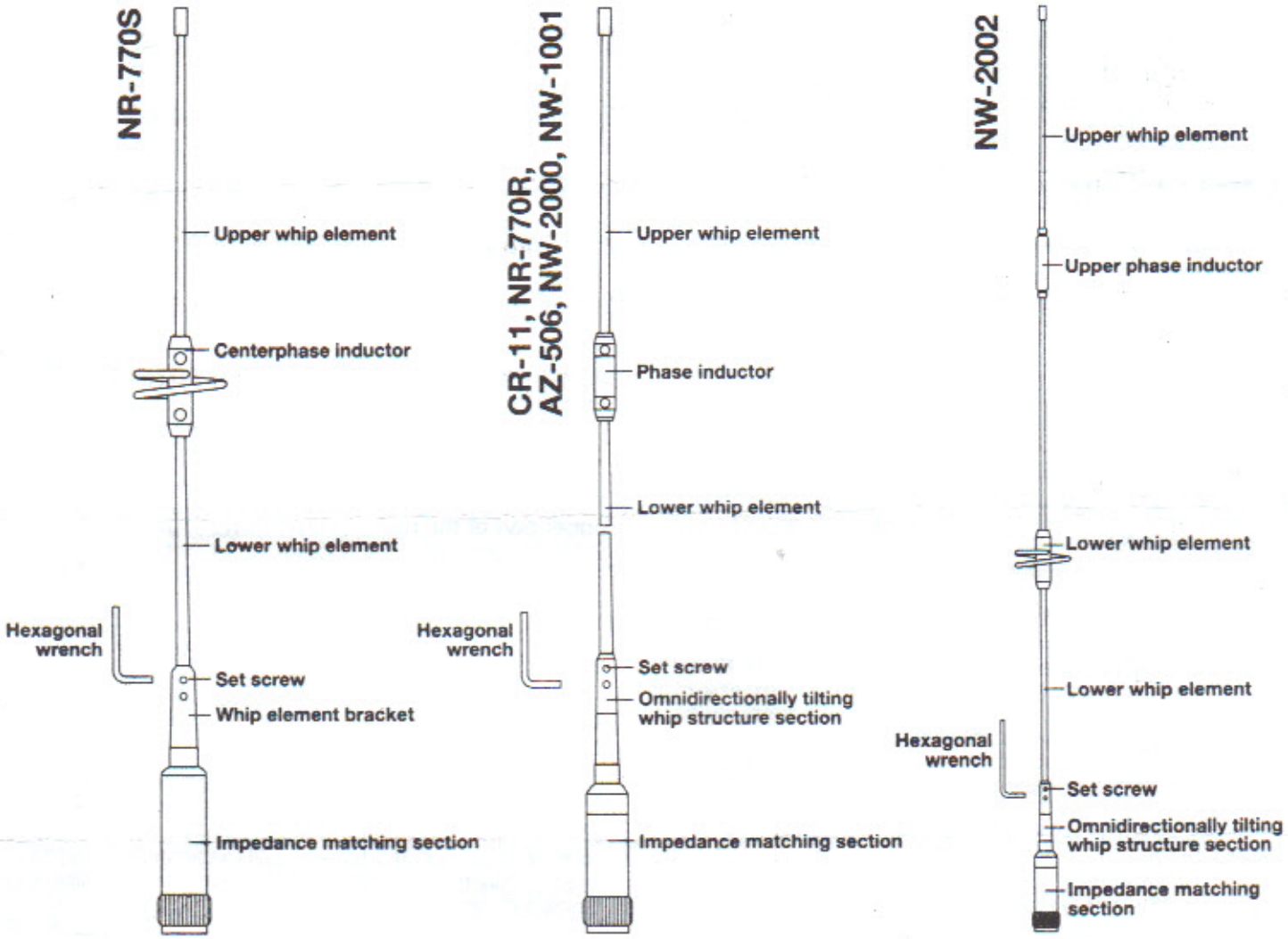

Technical Specifications

MODEL	FREQUENCY (MHz)	GAIN (db)	LENGTH (meter)	TYPE
NW-1000	144	2.15	1.09	1/2 λ - 200W
NW-1001	144	3	1.41	C-load 150W
NW-2000	144 – 430	2.15 (144MHz) – 5.5 (430MHz)	0.98	1/2 λ (144MHz) – 2 x 5/8 (430MHz) – 200W
NW-2002	144 – 430	4.5 (144MHz) – 7.2 (430MHz)	1.46	6/8 λ C-load (144MHz) – 3 x 5/8 λ C-load (430MHz) – 120W
NR-770R	144 – 430	3 (144MHz) – 5.5 (430MHz)	0.99	1/2 λ (144MHz) – 2 x 5/8 λ (430MHz) – 200W
NR-770S	144 – 430	2.15 (144MHz - 430MHz)	0.43	1/4 λ (144MHz) – 1/2 λ (430MHz) – 100W
M-150GSA	138 – 174	-	0.51	1/4 λ - 200 W
AZ-504	144 – 430	3	0.46	1/4 λ (144MHz) – 1/2 λ (430MHz) – 50W
AZ-506	144 – 430	2.15 (144MHz) – 4.5 (430MHz	0.67	3/8 λ (144MHz) – 3/4 λ (430MHz) – 50W
CR-627	50 - 144 – 430	2.15 (50 MHz) – 4.5 (144 MHz) –7.2(430 MHz)	1.69	1/4 λ (50MHz) – 6/8 λ C-load (144MHz) – 3x 5/8 λ (430MHz) - 120W
M-285	138 - 174	2.15	1.09	5/8 λ - 200W
CR-11	26-28	1.5	1.65	1/4 λ - 200W

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Via. R.Sevardi 7 - 42010 Mancasale - Reggio Emilia Italia
Prima dell'uso leggere attentamente le istruzioni.

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Read the instructions carefully before installation and use.