



## OPERATION INSTRUCTIONS

To use this antenna properly, read this instructions thoroughly before using the antenna. Keep this manual carefully at hand for later use.

This antenna is for amateur usage. Do not operate at frequency other than stated in the manual

### ! WARNING

To avoid inviting accident, please follow the following notices.

- 1) Nuts and screws can be loosened by vibration during driving. Be sure to check those fastening devices from time to time and refasten if necessary.
- 2) Strong impact can cause or break the antenna and may invite accidents by falling the element. It is recommended to drive away from those obstacles such as branches.
- 3) Strong vibrations caused by diesel engines may damage the antenna. It is recommended to install the antenna at the location where has least vibration as possible.
- 4) Touching the antenna during transmission may cause to electrify. Be sure to confirm to see if there is no one around the antenna of transmission is taking place while the car is parking.
- 5) Don't drive a car with the antenna tilted. Driving the car with the antenna tilted may cause serious human accident.
- 6) To install the antenna, be sure to take those things such as local traffic regulations and physical length of the car in account, and especially it has to be installed the location where is not easily reachable by people.
- 7) Adjust the antenna thoroughly on operating frequency before operation. Using unadjusted antenna may cause to damage transceiver.
- 8) If the thunder seems to rumbling the vicinity, do not touch the antenna and coaxial cable to avoid electrocuted by lightning.
- 9) Select strong enough place to install the antenna to avoid damaging the car body falling the antenna.

### ! CAUTION

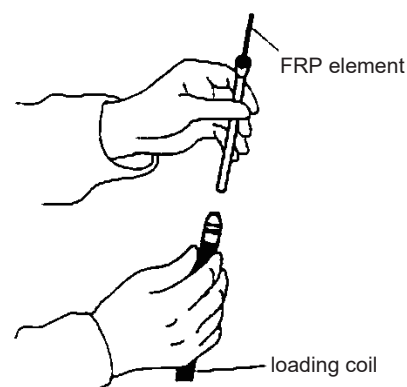
Continue transmitting with high VSWR may cause transceiver and other devices damage. Stop the operation when there is anomaly immediately and ask the store you purchased for help.

#### • Description

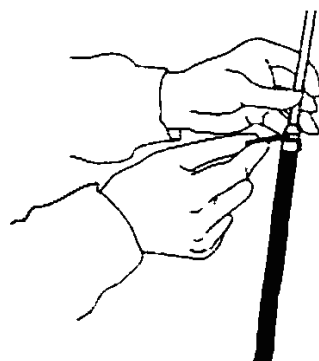
- 1) This is designed a light weight, compact and slim with high performance though it is trapped antenna.
- 2) Loading coil section employs dual section distributed system to dissipate extra heat on transmission. High power rating specification allow the antenna to be 200W (SSB) Max. power rating.
- 3) Antenna element section employs a tapered FRP element to prevent damage being caused by obstacles.
- 4) It is easy to adjust sliding to an adjustment element support without cut element.

#### • Assembling

- 1) Fix the loading coil and FRP element.

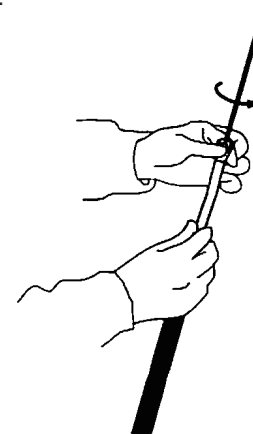


- 2) Loosen locked nut of an upper loading coil and insert an adjustment element support.
- 3) FRP element can slide about 10cm. Start from adjusting 5cm from the shortest point.
- 4) Fasten with the hexagonal wrench after adjustment.

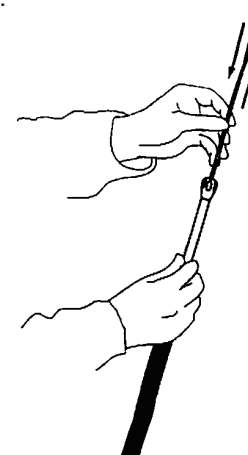


#### • Adjustment

- 1) Loosen locked nut of an upper loading coil and slide the FRP antenna.



- 2) The desired frequency can be adjusted by the FRP element length. With longer element size, the frequency will move to lower side and shorter length move the frequency to higher level. The frequency change per 1cm length is 23kHz.



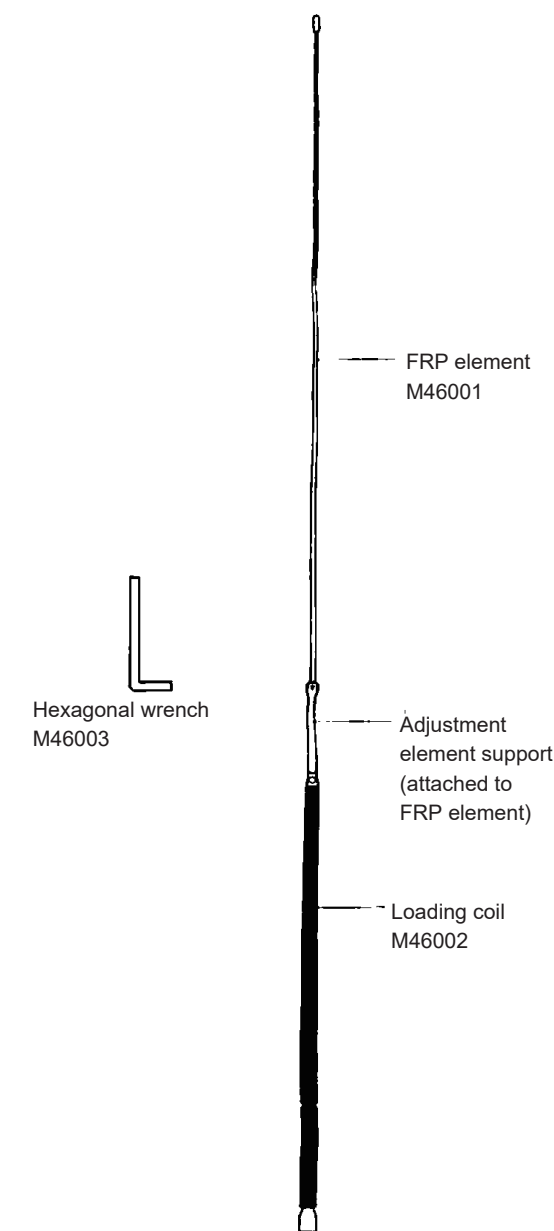
#### • Note

- 1) Do not touch the antenna during transmission to avoid electrocuted.
- 2) Since the VSWR of HF antenna varies depending on the installation location, be sure to adjust the antenna after fixing on the actual installation location.
- 3) Adjust the antenna where there is no obstacle or power line, other cars and pedestrians.
- 4) Due to insufficient earth capacity, correct adjustment cannot be performed at the place where has vast space under the car such as on a bridge or in the multi-level parking lot.
- 5) To avoid interfering other station, adjustment has to be performed with least RF power and shortest time as possible.
- 6) This is an earthing antenna using car body to earth. Performance will get worse if it is not good earth and also adjustment.
- 7) Do not remove rubber tube covering loading coil.
- 8) Wipe off dirt regularly. Do not use thinner or benzene.

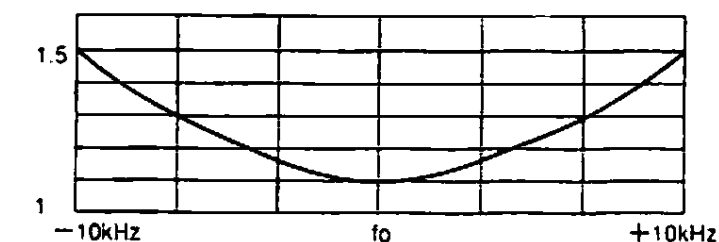
#### • Specification

Frequency : 7MHz (Convertible 7.0~7.2MHz)  
 Impedance : 50ohms  
 VSWR : Less than 1.5  
 Max. power rating : 200W (SSB)  
 Length : 1.4m  
 Weight : 270g  
 Connector : M-J  
 Type : 1/4 wave bottom loading

#### • Part name (number)



#### • VSWR chart



- Though these products purchased are manufactured under strict quality control, if damage is caused by transporting, ask your dealer promptly.
- Design and specifications of these products will be changed for future improvement without advance notice.