

MFJ-1734/1738

Installation Instructions

Important Note:

Please read these Installation Instructions completely, before attempting to install the MFJ GLASS MOUNT ANTENNAS!

INSTALLATION INSTRUCTIONS:

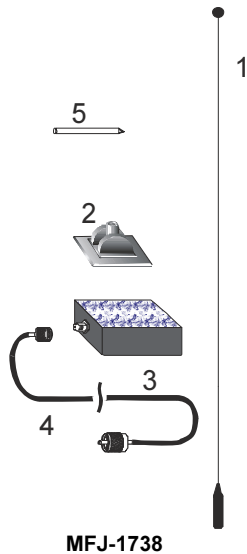
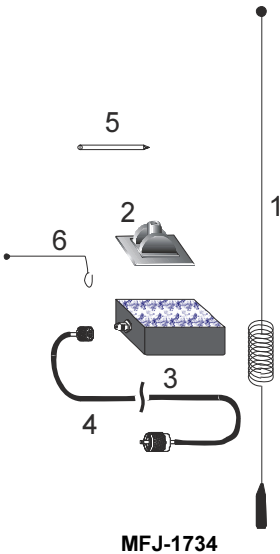
PRE-INSTALLATION TIPS:

1. Try to avoid installation near or on defroster wires, in-glass car antennas or any other metallic objects.
2. DO NOT install the antenna on any tinted windows. Some tinted glass contains a very high metallic content and can cause problems with the antenna operation. Even FILM type tint can cause problems so as a rule of thumb do not install on tinted glass.
3. Check to insure that the glass to which you are installing the antenna is not "shattered" or "nicked". If so DO NOT install the MFJ GLASS MOUNT ANTENNA.

PARTS CHECK LIST

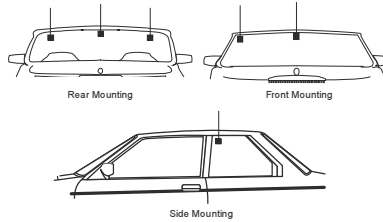
Before starting the installation be sure to check your antenna to see that all of the parts are there. Below is a Parts Check List, as to the parts that you should have in your antenna package:

- | | | |
|--------------------------|----|--|
| <input type="checkbox"/> | 1 | Antenna Whip with threaded collar |
| <input type="checkbox"/> | 2 | Outside Glass multi-angle coupling plate |
| <input type="checkbox"/> | 3 | Inside Coupling Box with coax connector |
| <input type="checkbox"/> | 4 | 12 ft of coax cable with connectors |
| <input type="checkbox"/> | 5. | Plastic tuning tool |
| <input type="checkbox"/> | 6. | Ground Plane Hook for inside connector (MFJ-1734 only) |
| <input type="checkbox"/> | 7. | Allen wrench for outside coupling plate |



INSTALLATION

1. The window glass should be neither too hot or too cold when installing the antenna. This could cause a problem with the coupling plate adhesives. An outside temperature of 65 to 75 degrees is best for installation.
2. Plan your installation **VERY CAREFULLY!** Once you mount your antenna you will not be able to easily move the antenna to another location. Be sure you know **EXACTLY** where you want the antenna and how you want to route the coax cable **BEFORE INSTALLATION BEGINS!** Then upper portion of the front and rear windows are the best locations for installation. These portions of the glass are the flattest and will allow the antenna to perform at it's peak. Ensure clearance from the wiper blades and leave a space of about 1" to 1 ½" between the antenna and the glass frame.



3. Clean the portion of glass where you have decided to place your antenna with rubbing alcohol. Allow the cleaned area to dry naturally.
4. Using a clean soft cloth wipe away the hazy film left by the alcohol if any. If the film is on the glass when you install the antenna this could cause the antenna to fall off sometime later after installation. This will result in damage to the antenna as well as the vehicle's finish.
5. If you have the MFJ-1734 Dual Band Glass Mount Antenna install the ground plane hook on the TNC connector on the inside of the coupling box so the ball end of the ground plane hook is pointing downwards. Attach and tighten the TNC connector on the cable firmly against the ground plane hook.
6. Peel the protective strip from the adhesive tape on the back of the inside coupling box.
7. Carefully place the inside coupling box over the glass where you have decided to mount the antenna, ensuring the coupling box is straight.
8. Using firm pressure press the coupling box to the glass surface and hold in place for a minute or so. Allow the adhesive on the coupling box to setup for 1 to 2 hours before attaching the coax cable.
9. Place the outside coupling plate on the outside portion of the glass surface over the location directly opposite the inside coupling box. Positioning the outside coupling plate in relation to the inside coupling box so that the two coupling surfaces are directly opposite each other. If the alignment is off the antenna operation will be affected, i.e. the SWR will not tune low enough. We can not stress this point strongly enough!
10. Position the swing arm of the outside base to where the antenna mast is not close to the metal body of the vehicle, as this will affect the SWR tuning later.
11. Screw the antenna mast into the outside base and tighten. **DO NOT** tighten too much as the base is made of aluminum and you will strip the threads if tightened too much.
12. Route the coax cable trying to avoid sharp bends and sharp metal edges of the vehicle body.
13. Connect the coax cable to your VHF/UHF transceiver.
14. Keep the tuning tool handy because you will need it in the antenna tuning instructions.

ANTENNA TUNING

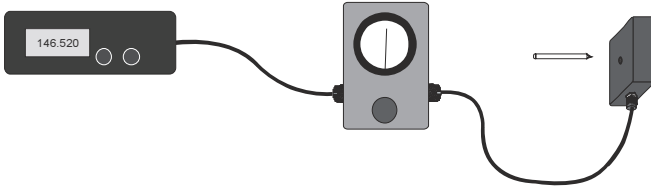
In order for the MFJ-1734 or MFJ-1738 to operate at their peak performance the antenna must be properly tuned first. Tuning the MFJ Glass Mount Antenna is very simple and is not very time consuming. Please follow very carefully!

EQUIPMENT NEEDED

- Accurate SWR/Wattmeter (such as the MFJ-864)
- Plastic tuning tool (provided)
- 144 MHz and/or 440 MHz Transceiver

TUNING PROCEDURE

1. Connect the SWR/Wattmeter between the transceiver and the MFJ Glass Mount Antenna.



2. Turn on the transceiver and set the transceiver to LOW power. Set the SWR/Wattmeter to the power range the transmitter is set for. Set the transceiver frequency for the frequency you want to tune the antenna for.
3. Insert the plastic tuning tool into the small access hole on the inside coupling box. Key the transceiver and turn the plastic tuning tool to minimize the SWR reading on the SWR/Wattmeter.
4. If the SWR is not acceptable, 1.5:1 or less then check the following:
 - a) Coax cable routing is sometimes critical. The cable should not be run too close to metal such as the vehicle body. There should be some insulation such as carpet pad or rubber mat. The cable should not be crimped or bent in tight places to the point that the cable is deformed or crushed.
 - b) The coupling plates are not aligned properly. The coupling plates must be directly opposite each other in order to obtain the best coupling between the transceiver and the antenna.
 - c) The antenna mast is too close to the metal body of the vehicle. Adjust the mast away from the body or window frame.
 - d) Coupling plate mounted on defroster wires or in glass antennas. Remount the coupling plates in a location other than the defroster wire location.

ANTENNA REMOVAL

To prevent damage to the antenna assemblies carefully follow the instructions below.

MATERIALS NEEDED

- Flat putty knife
- Paint thinner
- Clean cloth
- Glass cleaner

ANTENNA REMOVAL

1. Gently work the flat putty knife between the glass surface and the adhesive tape on both the inside and outside coupling plates. Do not scratch the defroster wires.
2. After the coupling plates are removed clean the adhesive residue using the cloth and paint thinner.
3. Clean the paint thinner residue off using a regular glass cleaner and a clean cloth.

ANTENNA REINSTALL

Use the MFJ-94 Re-Mount kit to reinstall either the MFJ-1734 or MFJ-1738 glass mount antennas.

12 MONTH LIMITED WARRANTY

MFJ Enterprises, Inc. Warrants to the original owner of this product, if manufactured by MFJ Enterprises, Inc. and purchased from an authorized dealer or directly from MFJ Enterprises, Inc. to be free from defects in material and workmanship for a period of 12 months from date of purchase provided the following terms of this warranty are satisfied.

1. The purchaser must retain the dated proof-of-purchase (bill of sale, canceled check, credit card or money order receipt, etc.) describing the product to establish the validity of the warranty claim and submit the original or machine reproduction of such proof-of-purchase to MFJ Enterprises, Inc. at the time of warranty service. MFJ Enterprises, Inc. shall have the discretion to deny warranty without dated proof-of-purchase. Any evidence of alteration, erasure, or forgery shall be cause to void any and all warranty terms immediately.
2. MFJ Enterprises, Inc. agrees to repair or replace at MFJ's option without charge to the original owner any defective product under warranty, provided the product is returned postage prepaid to MFJ Enterprises, Inc. with a personal check, cashiers check, or money order for \$12.00 covering postage and handling.
3. MFJ Enterprises, Inc. will supply replacement parts free of charge for any MFJ product under warranty upon request. A dated proof-of-purchase and a \$8.00 personal check, cashiers check, or money order must be provided to cover postage and handling.
4. This warranty is NOT void for owners who attempt to repair defective units. Technical consultation is available by calling (662) 323-5869.
5. This warranty does not apply to kits sold by or manufactured by MFJ Enterprises, Inc.
6. Wired and tested PC board products are covered by this warranty provided only the wired and tested PC board product is returned. Wired and tested PC boards installed in the owner's cabinet or connected to switches, jacks, or cables, etc. sent to MFJ Enterprises, Inc. will be returned at the owner's expense unrepaired.
7. Under no circumstances is MFJ Enterprises, Inc. liable for consequential damages to person or property by the use of any MFJ products.
8. Out-of-warranty Service: MFJ Enterprises, Inc. will repair any out-of-warranty product provided the unit is shipped prepaid. All repaired units will be shipped COD to the owner. Repair charges will be added to the COD fee unless other arrangements are made.
9. This warranty is given in lieu of any other warranty expressed or implied.
10. MFJ Enterprises, Inc. reserves the right to make changes or improvements in design or manufacture without incurring any obligation to install such changes upon any of the products previously manufactured.
11. All MFJ products to be serviced in-warranty or out-of-warranty should be addressed to MFJ Enterprises, Inc., 300 Industrial Park Road, Starkville, Mississippi 39759, USA and must be accompanied by a letter describing the problem in detail along with a copy of your dated proof-of-purchase.
12. This warranty gives you specific rights, and you may also have other rights which vary from state to state.