

## INSTALLATION:

Read instruction through completely, before beginning installation.

- Find a location on a window of the vehicle that:
  - Does not obstruct the driver's vision
  - Is as flat as possible
  - Will result in maximizing the whip extension above the roofline
  - Will not interfere with windshield wipers
  - Will allow cable to reach the radio/telephone unit
  - Is not installed over embedded or etched wires or onto window tint (after market tinting)
- Thoroughly clean and dry the exterior and interior glass mounting locations.

Glass preparation:

**Rain X® or other water-repellent products must be removed. For removal, Soft Scrub® Gel cleanser is recommended. For further information regarding removal, contact Rain X® at 1-800-416-1600. For removal of glass waxes, contact the manufacturer of the product (ex. Turtle Wax®).**

Thoroughly clean glass with provided alcohol pads only. If pads dry out, use only isopropyl alcohol for rewetting of pads.

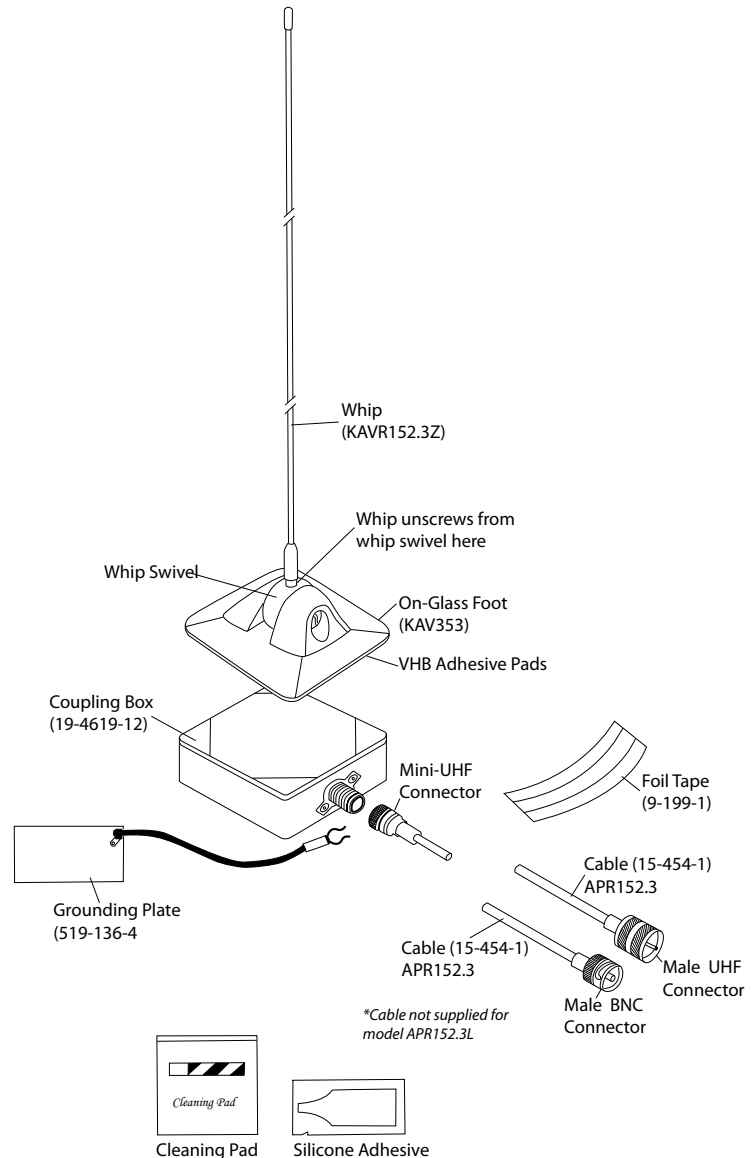
**CAUTION: Do not install antenna base or Coupling Box directly over glass embedded wires.**

- Carefully mount whip and base assembly on the outside of the glass. Verify whip is perfectly vertical before removing liner and applying the base adhesive to the glass.  
**CAUTION: Adhesive pad will stick to the glass instantly and cannot be removed without having to replace. Be sure the positioning is correct before it touches the glass.**

- Press and hold tightly for a few minutes; knead entire base surface area to assure adhesion across entire surface. If temperature is below 50° F (10° C), heat base with hair dryer then press and hold until cool. Optimum cure time for adhesive is 24 hours at 70° F.

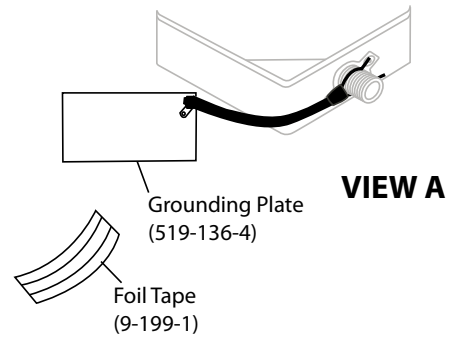
- Remove protective liner from Coupling Box pad. Carefully center Coupling Box on the inside of the glass. **Note: the Mini-UHF connector orientation must be horizontal, in either direction, in relation to the “On-Glass” foot, as shown.** Align the Coupling Box with the exterior base. Apply the adhesive-backed Coupling Box to the glass, following the same procedure as called out in note 4 above.

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## APR152.3 series

6. Connect the Grounding Plate Clip to the female/jack Mini-UHF connector on the Coupling Box (see View A). The grounding plate must be installed near an interior metallic surface, such as the underside of the vehicle roof, typically beneath the headliner. Attach the plate to metallic surface using the adhesive-backed foil tape.
7. Route the cable to the radio.
8. Any excess cable can be coiled near the transceiver.
9. Connect the cable to the transceiver.
10. Refer to the tuning instructions below.



### **TUNING:**

1. Verify that the antenna has been installed correctly. For proper operation, the Coupling Box must be grounded using the grounding strap and foil tape provided (refer to installation instruction step 6).
2. It is recommended that an Antenna Tester be used to verify and tune the antenna across the entire specified frequency band. Connect the Antenna Tester between the transceiver and the antenna.
3. The tuning screw on the side of the Coupling Box will need adjusting for proper match.
4. Turn the tuning screw until lowest reflected power is seen on the Antenna Tester.
5. *Optional Step:* For fine tuning, at a particular frequency point within the specific frequency range, remove cap and cut whip in 1/8" increments from upper section of whip. Replace cap.
6. When tuning is complete, disconnect the Antenna Tester and connect the transceiver to the antenna.

### **Tips:**

- Coupling Box is not "shunt-fed"; continuity test will not indicate a short circuit.
- Remove whip at swivel before entering automatic car wash.
- For complete antenna removal: use a sharp putty knife or similar tool; start under one corner of the base and Coupling Box and pry up slowly
- For high humidity areas, use of a silicone adhesive (not included) is recommended. Apply silicone in areas show below (see views B & C).

