

FORM FIT Hood Protector Installation Instructions

HD 20K13
Toyota Rav4 (2013-2018)

Kit Contents

Adhesive pedestals (4)



Metal mounting bracket- Type A – marked with a dot (2)



Metal mounting bracket- Type B (2)



Square expansion plugs (2)



Anti-abrasion pads (4)



Automotive surface cleaner (1)



Push-type retainers (6)



#6 x 5/8" flat head screws (4)



Pins (4)



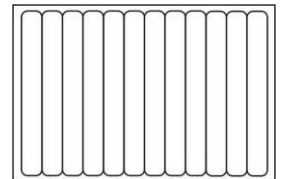
Large bumpons (3)



Small bumpons (2)



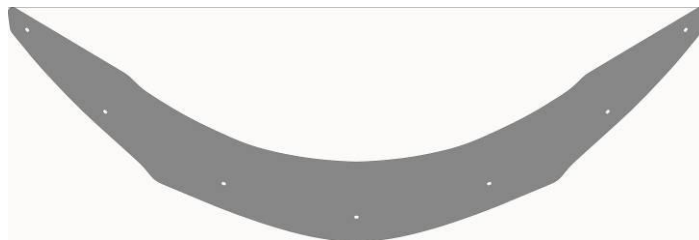
Reusable tape strips (1)



#8 X 7/16" truss head screws (2)



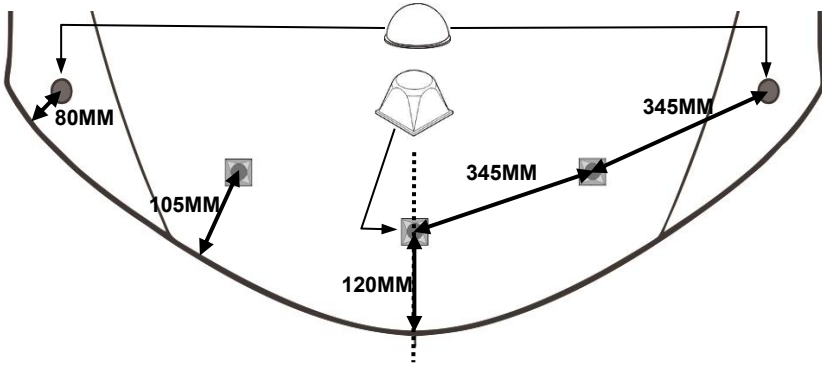
Hood Protector Blade (1)



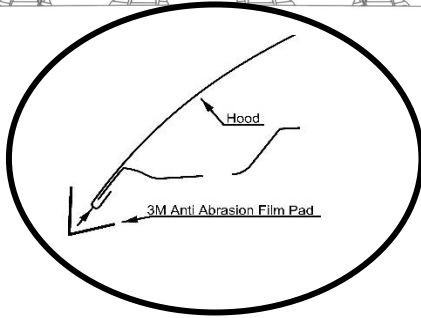
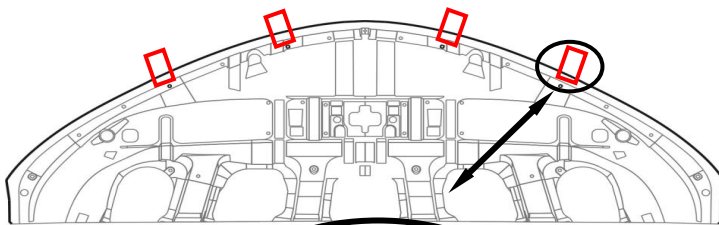
Tools and Supplies Required

Phillips Screwdriver # 2
Clean cloth or paper towel
Masking tape

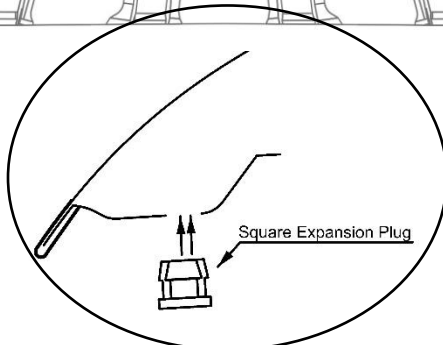
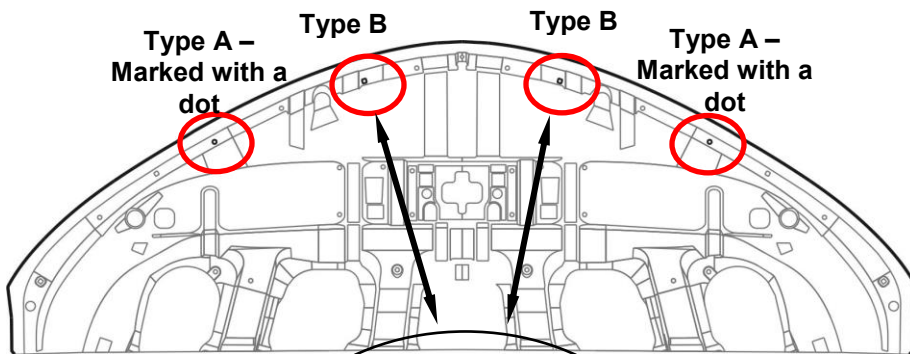




**Looking at underside of the hood
Anti-abrasion Pad Locations**



Metal Bracket Guide



Installation Procedure

1. Be sure that the hood is clean and dry inside and out.
2. Install the five (5) bumpons as shown. **Attention: the bumpons must be installed on the hood, not on the protector!!!** If the bumpons are installed on the protector, they may wear through the paint. **NOTE:** Locate the center of the hood using a tape measure and place the bumpons as shown in the illustration.



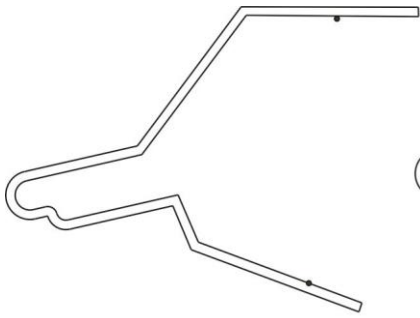
3. Open the hood of the vehicle. Peel and fold the anti-abrasion pads in half over the edge of the hood in the four (4) locations shown.

NOTE: Use the Metal Bracket Guide to determine where the metal brackets are installed in following steps. See *Illustration*.

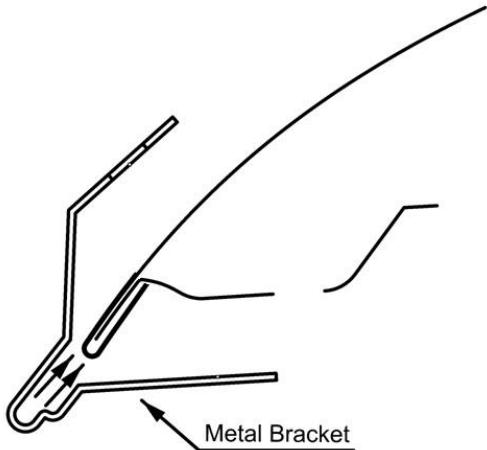
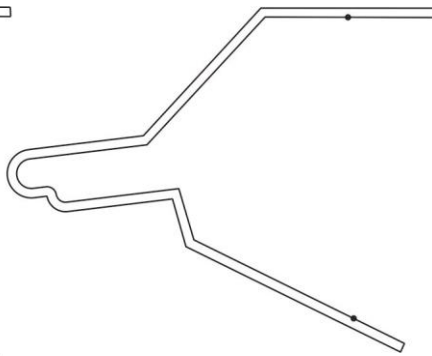
4. Insert square expansion plugs into the holes identified in the illustration. **Note:** Type "A" locations do not use the square expansion plugs.

Metal Bracket Guide

Type A - Marked with DOT

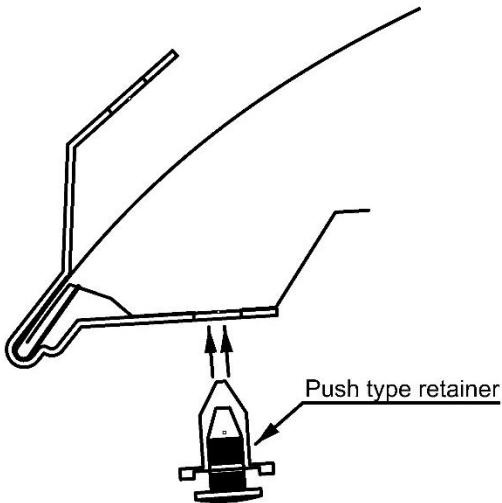


Type B

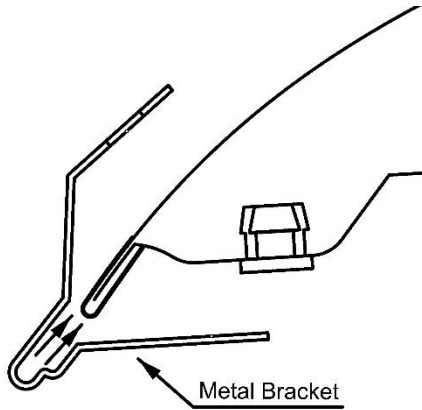


5. Install metal brackets "A" over the hood edge in their correct positions; align the hole in the bottom leg of the bracket with the round hole in the hood. See *Illustration*.

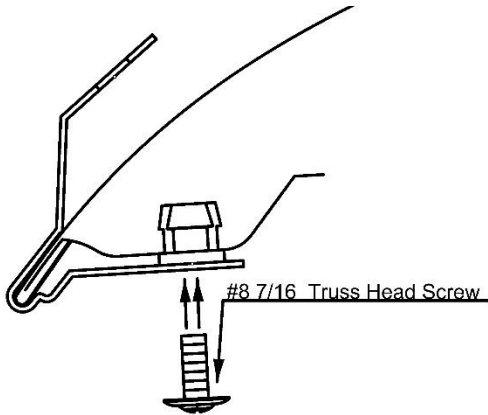
6. Insert a push type retainer through the metal bracket "A" and into the hood. Ensure leg of the bracket is well seated against the surface of the hood and push the center pin of the retainer assembly to lock it into place. See *Illustration*.



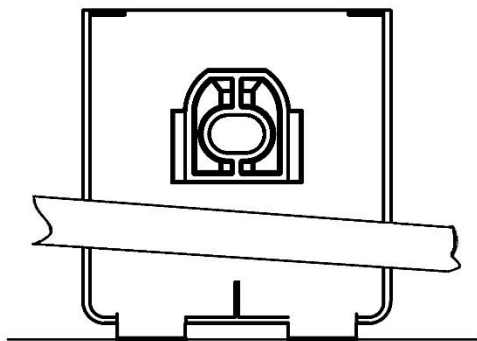
NOTE: Engaging the center pin of the "push type retainer" is best accomplished by placing a #2 Philips drive screwdriver into the recess of the center pin. Use a firm push to seat the pin into the retainer. The retainer can be removed by unthreading the center pin in the conventional manner with a Philips screwdriver, however initial or subsequent placement is best performed using the "push" method described above.



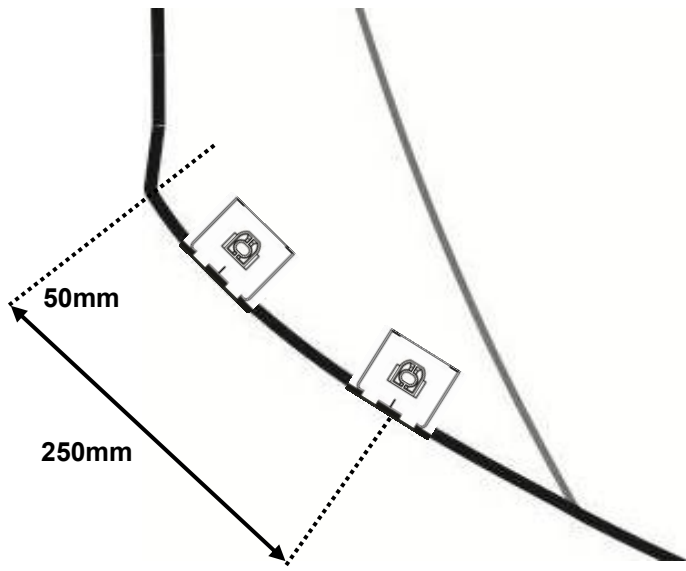
7. Install the metal brackets "B" at the correct location over the hood edge, aligning the hole in the bottom leg of the bracket with the hole in the expansion plug.



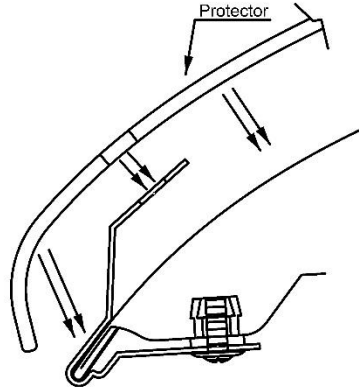
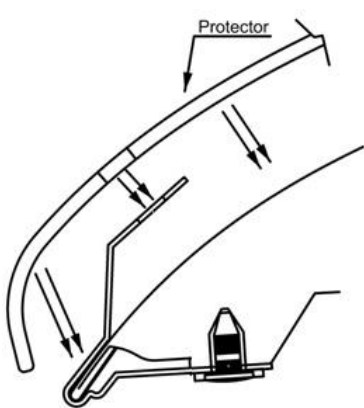
8. Insert the #8 x 7/16" truss head screw through the metal bracket "B" and into the expansion plug. Tighten the screw into the expansion plug making sure the leg of the bracket is well seated against the surface of the hood. See *Illustration*.



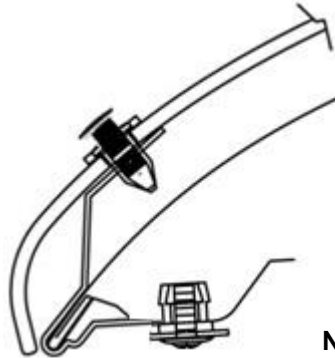
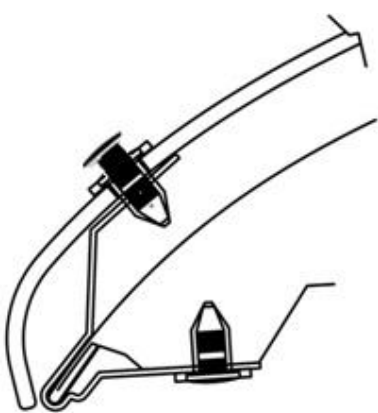
9. Dry fit the adhesive pedestals using masking tape or the repositionable tape strips supplied to hold them in position.



10. The positions of the pedestals are shown in **illustration**. Use the center mark on the leading edge of the pedestal for accurate measuring. The fingers incorporated on the leading edge of the pedestal will help ensure the correct position relative to the hood edge. When correctly positioned the fingers should contact the leading edge of the hood.

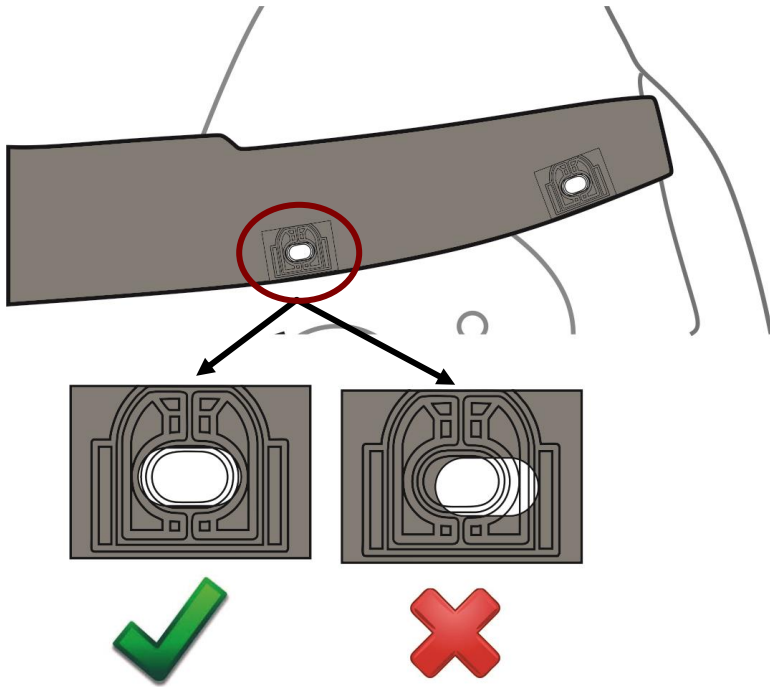


11. Place the protector temporarily onto the metal brackets aligning the holes in the protector with the holes in the metal brackets. This step will allow you to confirm the position of the adhesive pedestals.

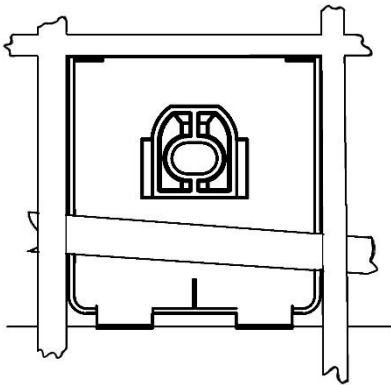


12. Insert a "push type retainer" through the hole in the protector, and into the bracket and push the center pin of the retainer assembly enough to hold protector on the metal brackets.

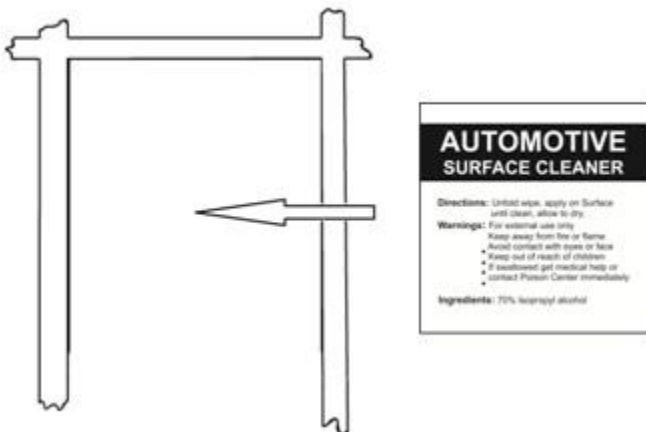
NOTE: Do not engage the push pin all the way; this step is to merely hold the protector in place to help confirm pedestal alignment.



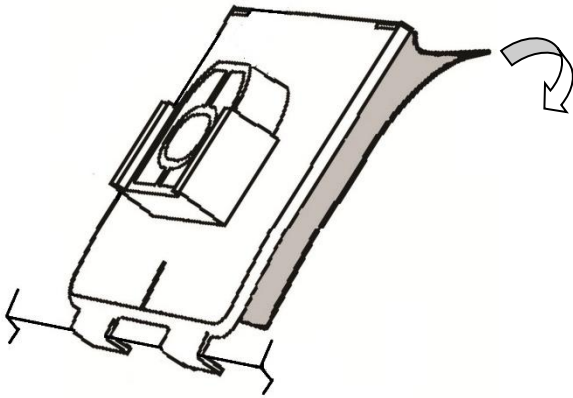
- Confirm correct positioning of the pedestals, by adjusting the pedestal position on the hood to align with the holes in the hood protector.



- Remove the hood protector, and outline the perimeter of the pedestals with masking tap or the repositionable tape strips supplied to help final installation.

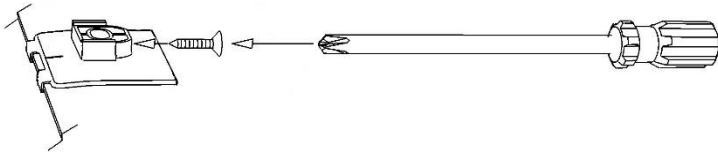


- Remove the pedestals and thoroughly clean the outlined area with the alcohol wiping pad. This will insure all wax, finger prints and oils are removed from the hood surface in the bonding area. Wipe dry with a soft cloth or paper towel.

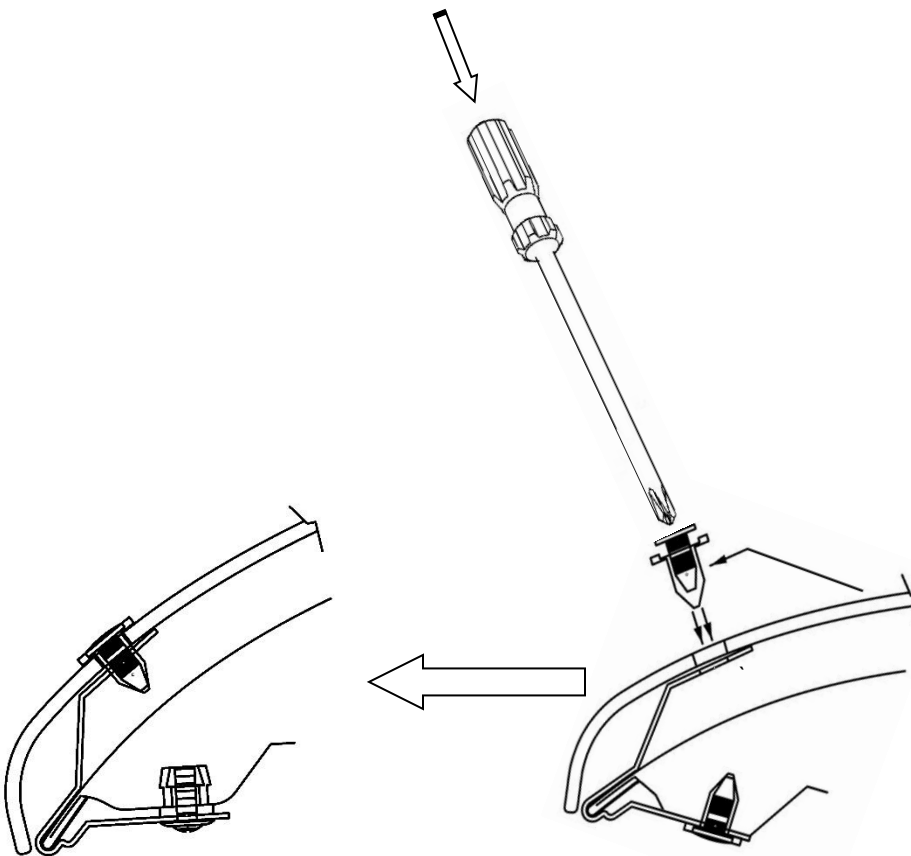


16. Remove the protective backing from the adhesive on the pedestals and install on the hood surface.

Tip: Hook the fingers on the pedestal over the hood edge and rotate the unit into position. After installation, remove the masking tape and “wet out” the tape to the hood surface by applying pressure with your thumb around the surface of the pedestals.



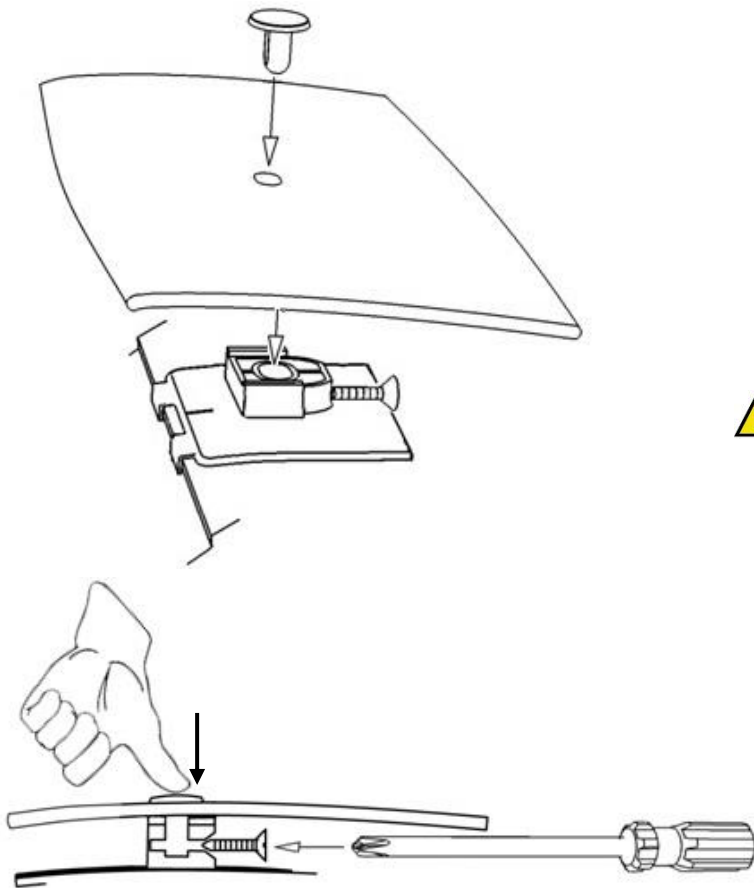
17. Start a #6 x 5/8 flat head screw into each pedestal a few turns. The tip of the screw must not protrude into the hole where the attachment pin will install later.



18. Reinstall the hood protector on the hood resting on the four (4) metal brackets; align the 4 center holes in the protector with the holes in the metal brackets. Insert a “push type retainer” through the hole in the protector, and into the bracket. Ensure the protector is well seated against the surface of the metal bracket, and push the center pin of the retainer assembly to lock it into place.

Metal Bracket “B” Shown

Metal Bracket “A” Shown



19. At the pedestal locations, drop a pin through the protector and into the pedestal.

20. Maintain slight pressure on the pin, to ensure proper seating of the components, while simultaneously tightening the screw.



CAUTION: Be sure to take care not to scratch or damage the hood surface while tightening the screw.

NOTE: Proper installation of the adhesive pedestal system requires the use of a #2 Phillips screwdriver, preferably with a long shaft. Use of the correct screw driver will facilitate a trouble free installation. Do not attempt to use #1 or smaller Phillips screwdriver or any type of electric screwdriver. **See illustration.**

21. On some vehicles it may be necessary to adjust the hood bumpers and/or latch for proper clearance.

Note: Do not pull on the protector when opening or closing the hood.



CAUTION: Do not expose the vehicle/hood protector to extreme environments (weather) or car washes for a 24 hour period following the installation to allow the adhesive pedestals sufficient time to reach full bond strength.

CARE INSTRUCTIONS

Clean the protector with a mild soap and water solution or plastic cleaner only. Do not use chemicals or solvents.

Periodically check to make sure the bumpers are in place and the protector is secure. Avoid using automatic car washes. Do not pull on the protector when opening or closing the hood.