

Section I - Installation Preparation

**Part Number: 08150-60821-XX**

Section I - Installation Preparation

**Kit Contents**

Item #	Quantity Reqd.	Description
1	1	Rear Wind Deflector
2	1	Paper Template
3	1	Wire Jumper Harness
4	1	High-mount Stop-lamp Cover
5	1	DIO Installation Instructions
6	1	Hardware Bag

**Hardware Bag Contents**

Item #	Quantity Reqd.	Description
1	2	M6 x 20.0 Stud Bolt
2	2	Nut
3	2	Foam O-Rings (Washer)
4	2	M5 x 13.0 Pop Rivet
5	2	Foam Tape

**Additional Items Required For Installation**

Item #	Quantity Reqd.	Description

**Conflicts**

Note:

**Recommended Tools**

<b>Safety Tools</b>	
Safety Glasses	
Vehicle Protection	Blankets/Masking Tape
<b>Special Tools</b>	
DIO Installation Template	Paper Template
<b>Installation Tools</b>	
Drill Motor	
Drill Bits & Drill Stops	3mm, 5mm, 10mm, 17mm
Hole De-burring Tool	
Hex Socket & Ratchet	10mm, Deep Wall
Torque Wrench	lbf.-in. (or N-m)
Pop Rivet Tool	3mm (1/8") Mandrel
Lint Free Cloth	
Shop Vacuum	
Panel Clip Removal Tool	e.g. Toyota SST P/N:- 00002-06002-01 Two (2) Required
Tape Measure	Metric
Screwdriver	Flat Head, Small
Screwdriver	Phillips Head, #2
Center Punch	
Small Shop Hammer	
Magnet	with Flexible S haft
Wire	450mm, Flexible

Pliers	Long Nose
<b>Special Chemicals</b>	
Cleaner	3M™ Prep Solvent-70
Body Sealer	3M™ Ultra-Pro Body Sealant

**General Applicability**






Note: Can be mounted on all GX470 models.

**Recommended Sequence of Application**

Item #	Accessory
1	
2	

\*Mandatory

**Legend**

-  **STOP:** Damage to the vehicle may occur. Do not proceed until process has been complied with.
-  **OPERATOR SAFETY:** Use caution to avoid risk of injury.
-  **CRITICAL PROCESS:** Proceed with caution to ensure a quality installation.
-  **GENERAL PROCESS:** This highlights specific processes to ensure a quality installation.
-  **TOOLS & EQUIPMENT:** Calls out the specific tools and equipment recommended for this process.

**A. Installation Preparation**

1. Verify kit contents.
2. Open the hood and apply protective covers to the fender/grill area by the battery / R/B.
3. Locate the engine room relay box (R/B) and remove cover. (Fig. A-1)



4. Remove and save the 10A STOP fuse using a Fuse Removal Tool. (Fig. A-2)



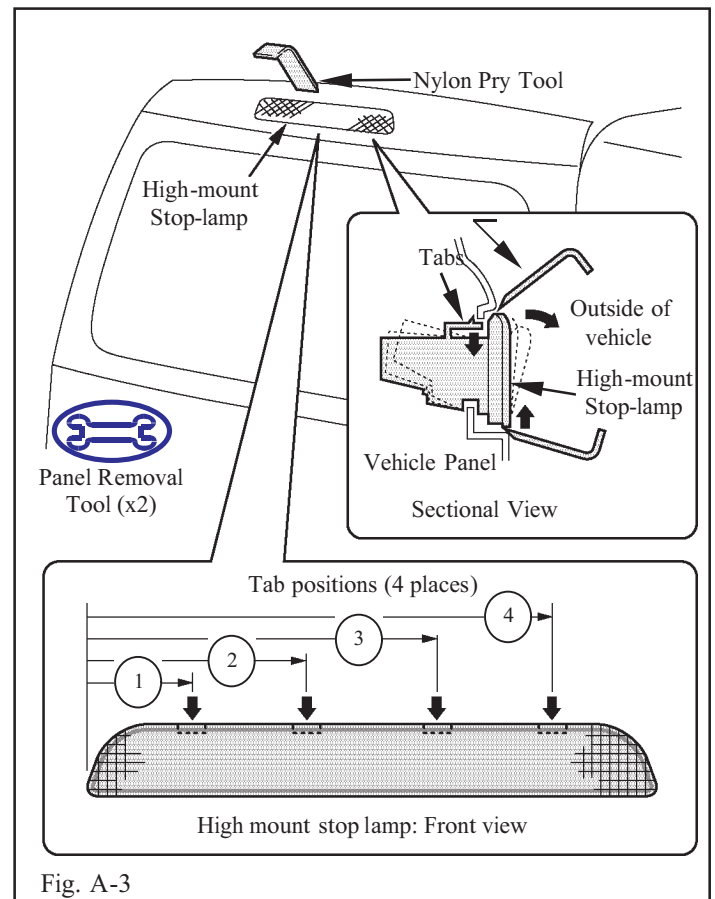
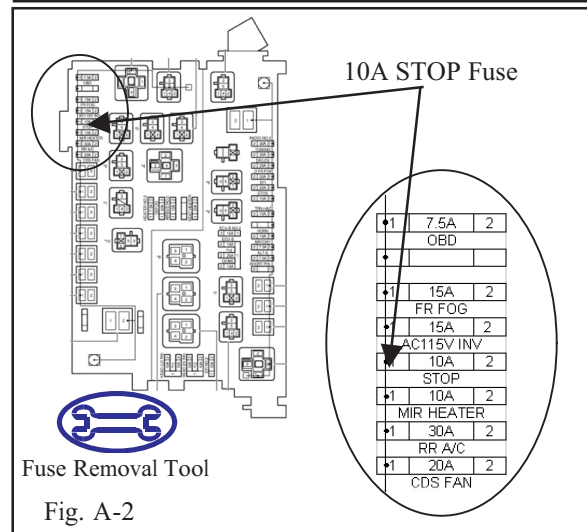
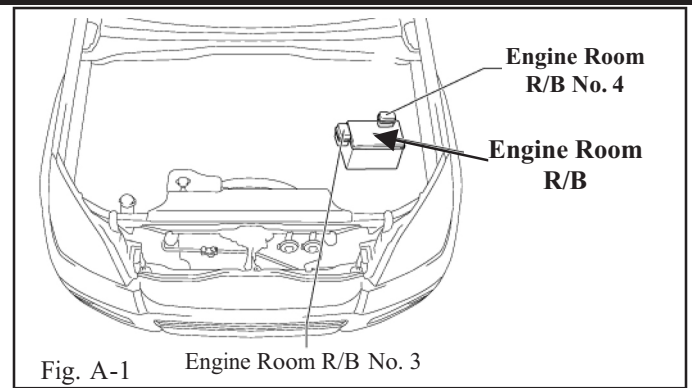
5. The vehicle surface must be between 60 F and 90 F for optimum installation.



6. Remove and discard high-mount stop-lamp using two nylon pry tools



- i. Insert nylon pry tools between narrow gap of body and high-mount stop lamp at position [1] (underneath the seal) as shown in sectional view. (Fig. A-3)
- ii. Locate and press down on upper tab to release it. Continue with positions [2], [3] & [4] to release stop lamp.



Section II - Installation Procedure

- ➔ 7. Disconnect the high-mount stop-lamp connector and discard high-mount stop-lamp.
- 8. Open the back door. (Fig. A-4)
- 9. Remove plug hole covers (2 locations). (Fig. A-5)

**B. Drill Template Placement**

- ➔ 1. Align right hand side paper template as shown in Fig. B-1.
  - i. Align along the side locating line
  - ii. Align along the top locating line.
  - iii. Measure the dimension along the curved surface.
- 2. Tape the template to the vehicle with masking tape.
  - ➔ i. Verify dimension along the curved surface to check if template is in correct position. (Fig. B-2)
- 3. Repeat Steps B. 1. and B. 2. for left hand side paper template.
- ➔ 4. Center the point of the punch onto the center of the  $\oplus$  marks for all five (5) hole locations on the template, and strike once with the hammer.

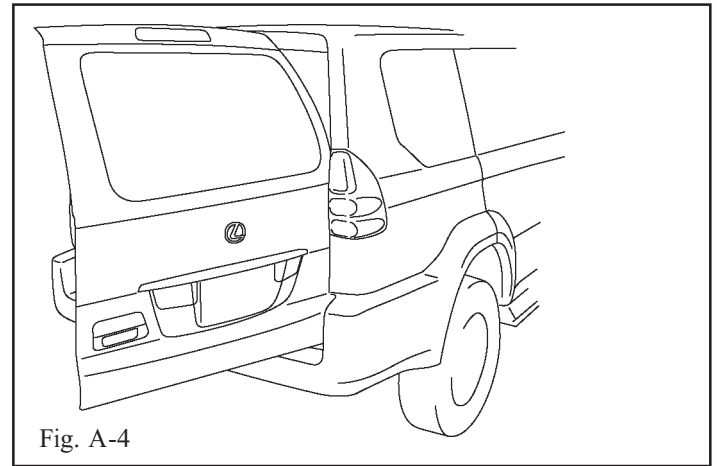


Fig. A-4

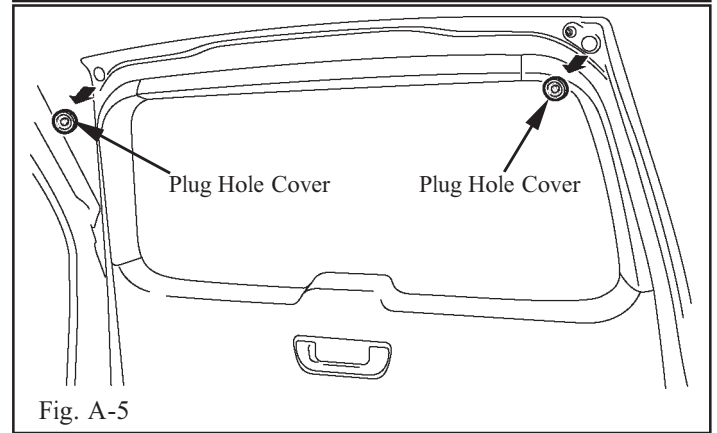


Fig. A-5

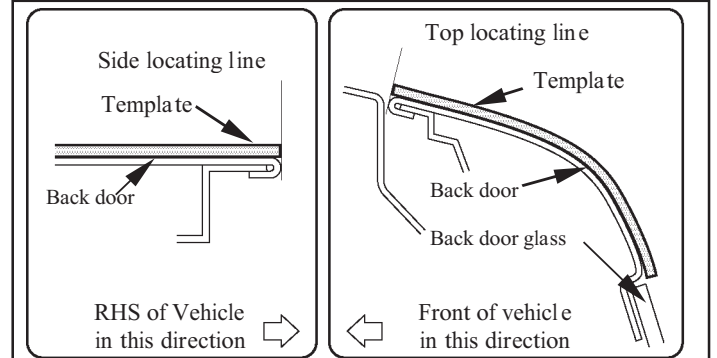


Fig. B-1

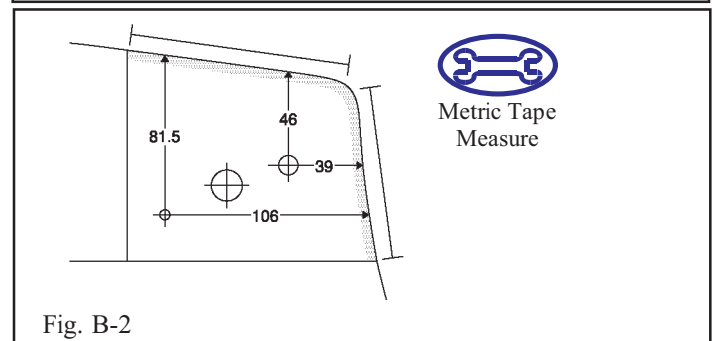
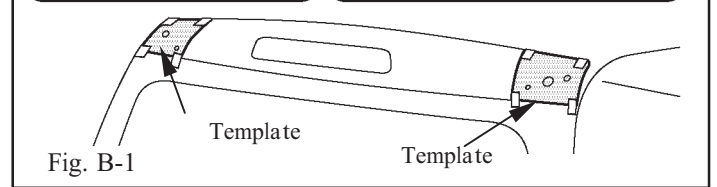


Fig. B-2

**C. Hole Drilling**

**+** **CAUTION:** Eye protection must be worn.

1. Ensure back door is clean and free from any dirt or debris.



2. Roll a strip of masking tape into a cylinder shaped and insert through drivers side plug hole as shown in Fig. C-1.



3. Repeat Step C. 2. for other side of vehicle.

4. Place protective covers around the back door and bumper areas to protect from metal chips.



5. Use masking tape to cover the gap between the back door Wind Deflector mounting face and back door glass, to prevent cutting chips from entering the gap while drilling. (Fig. C-2)



**STOP** 6. Use a 3mm drill bit, with a drill stop set to 12 mm (0.5") depth, to drill pilot holes in all punched locations. (Fig. C-3)



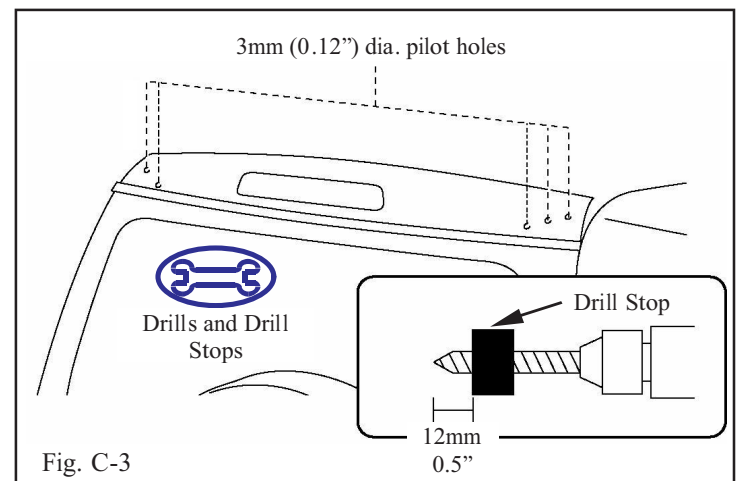
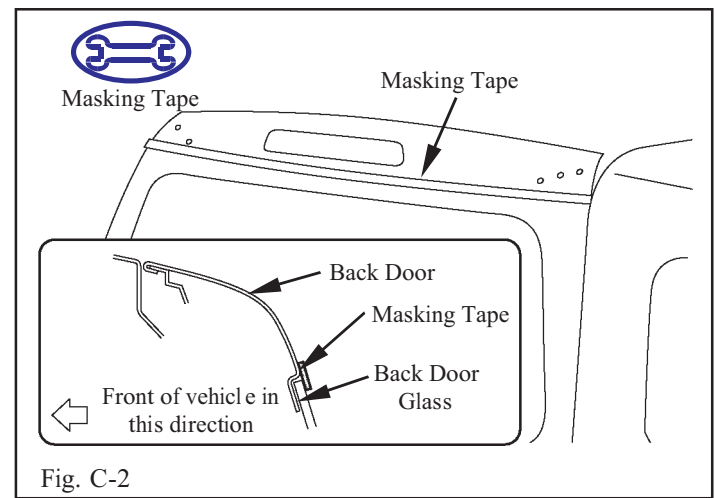
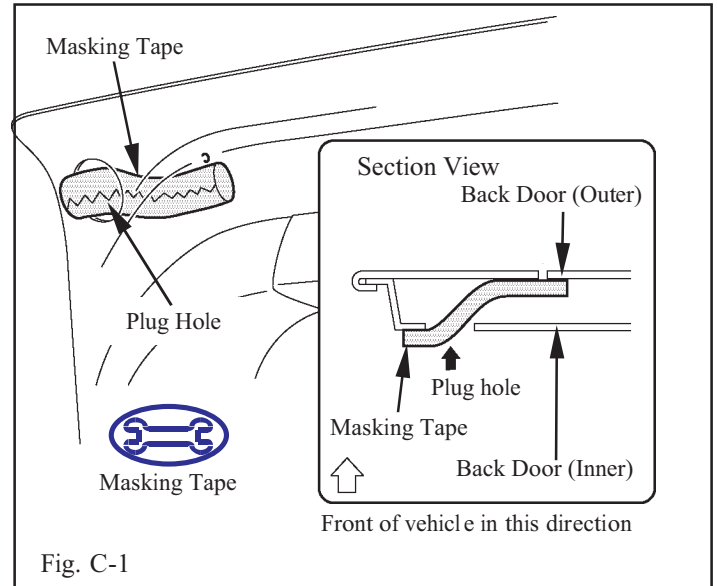
7. Drill holes (in 5 locations) to required dimensions.

i. Set the drill stops to 12mm (0.5") from the tip of the drill bits for each hole.

(1) Drill bit - 5 mm dia. (2 locations).

(2) Drill bit - 10 mm dia. (2 locations).

(3) Drill bit - 17 mm dia. (1 location).



Section II - Installation Procedure

- ➔ 8. De-burr drilled holes (5 locations). Mask adjacent areas with adhesive tape. (Fig. C-4)
- 9. Remove masking tape between backdoor and rear window, and from plug holes.
- 🛑 10. Vacuum the surface of the rear door and the surrounding drilled areas.
- ➔ 11. Insert magnet through the high-mount stop-lamp hole and plug holes to remove metal chips. (Fig. C-4)

**D. Wire Harness**

- ➔ 1. Insert wire through harness hole (17mm dia.) towards high-mount stop-light opening. (Fig. D-1)
- ➔ 2. Tie jumper harness connector (smaller connector) to wire, and pull through harness hole. (Fig. D-2)

**NOTE:** In case of difficulty use long nose pliers to carefully pull harness connector through harness hole.

- ➔ 3. Connect jumper harness connector to high-mount stop-light connector and wrap the connectors with foam tape. (Fig. D-3)

**E. Mounting Wind Deflector**

- 1. The Rear Wind Deflector attachment area (including high-mount stop-light opening) must be cleaned with 3M™ Prep Solvent-70 and a lint free cloth. (Fig. E-1)
- ➔ i. When cleaning with 3M™ Prep Solvent-70 follow the manufacturer's directions. Do not allow cleaner to air dry.

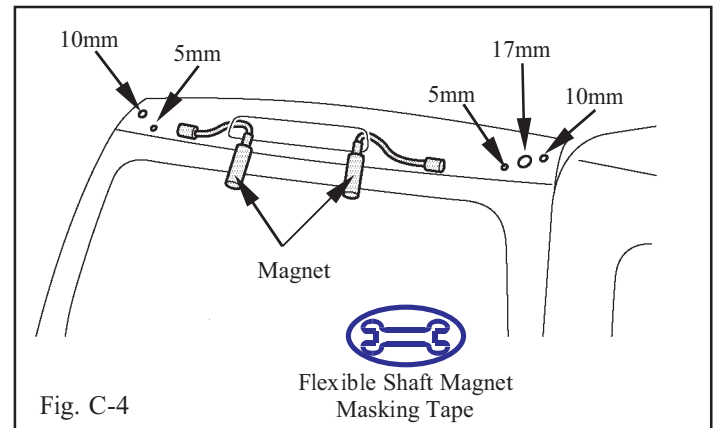


Fig. C-4

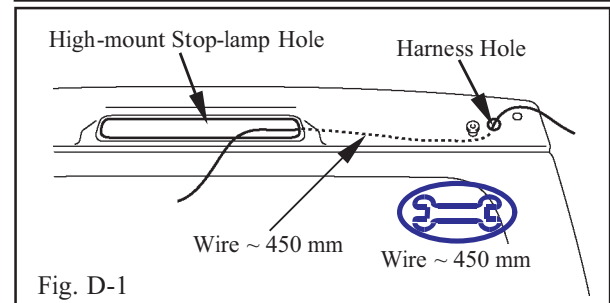


Fig. D-1

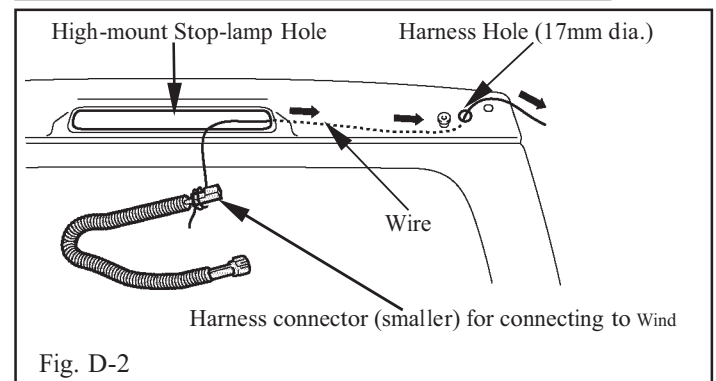


Fig. D-2

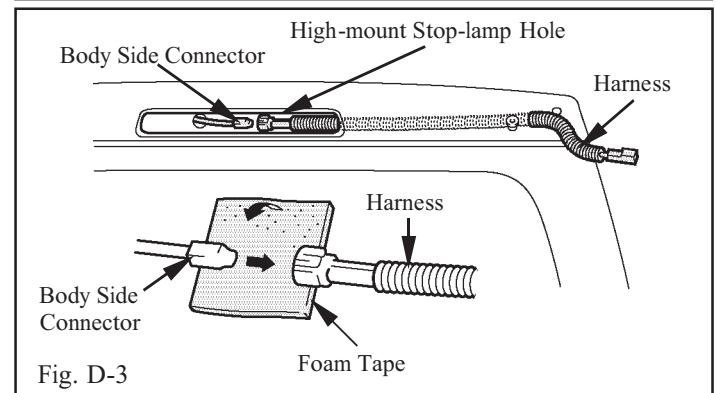


Fig. D-3

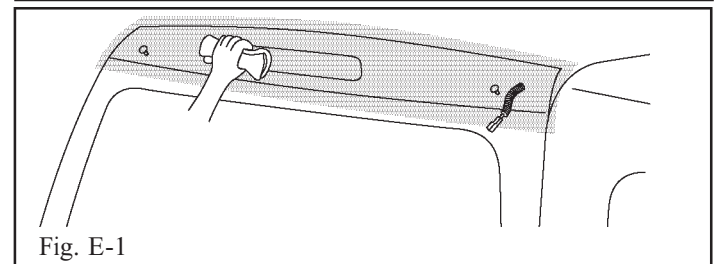


Fig. E-1

Section II - Installation Procedure

- ➔ 2. Remove the plastic liners from the adhesive pad on the high-mount stop-lamp cover, and install it. (Fig. E-2)
- ➔ 3. Coat the edges of the five (5) holes with 3M™ Ultra Pro Auto Body Sealant.
4. Install pop-rivets using the pop-rivet tool (2 locations). (Fig. E-3)
  - ⊘ i. Install foam O-rings (washers) onto pop-rivet tip prior to pop-rivet installation. (Fig. E-3)
5. Install stud bolts to threaded holes on Rear Wind Deflector, and tighten. (Fig. E-4).
- ⊘ 6. Connect the wind deflector harness connector to the jumper wire harness and wrap connectors with foam tape. (Fig. E-5)

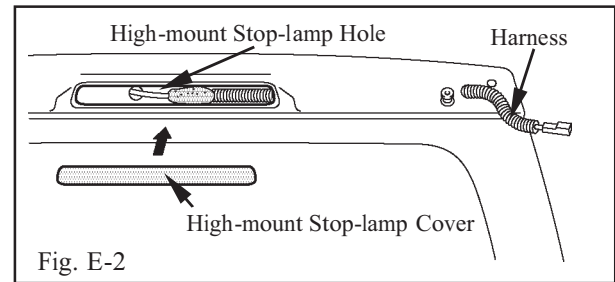


Fig. E-2

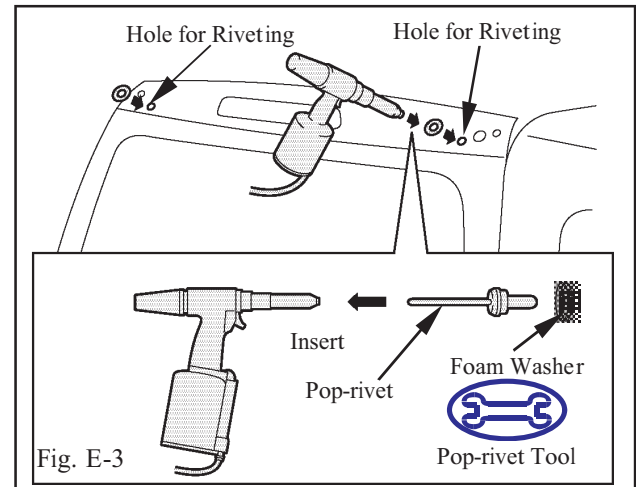


Fig. E-3

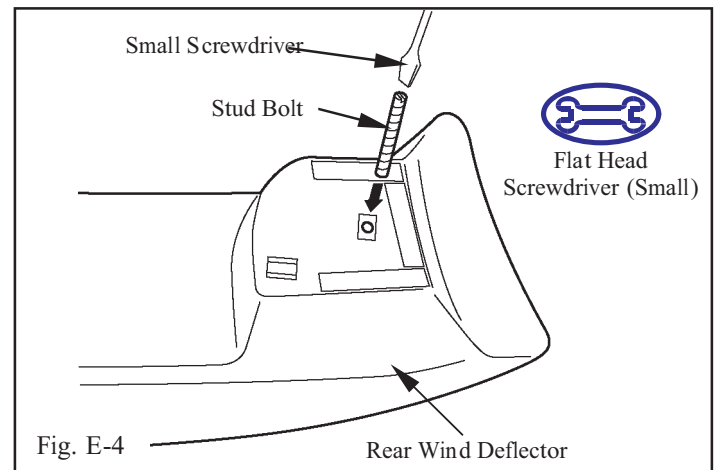


Fig. E-4

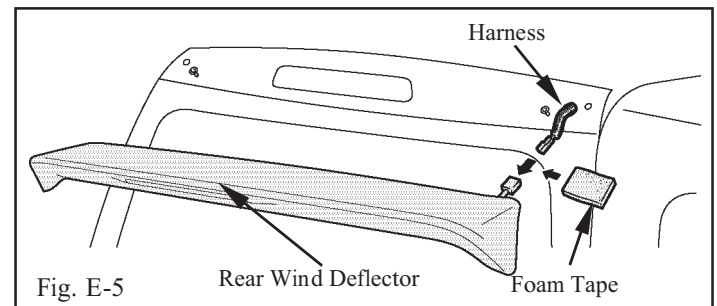


Fig. E-5

## Section II - Installation Procedure

- ➔ 7. Remove the plastic liners from the two stanchion adhesive pads. Be careful not to touch or allow any contaminants to come into contact with the pads. (Fig. E-6)
- ➔ 8. While supporting the wind deflector above the rear mounting surface, align the deflector studs over the mounting holes on the back door. Carefully lower the wind deflector into place and apply pressure on each stanchion until the deflector is secure. (Fig E-6)
- 🛑 i. Make sure pop-rivets click into wind deflector grommets.
- ➔ 9. Open the door and install nuts (2 locations). (Fig. E-7).
- ⚠ 10. Tighten nuts to a target torque of 4.9 N-m (44 lbf-in)
11. Install plug hole covers (2 locations).

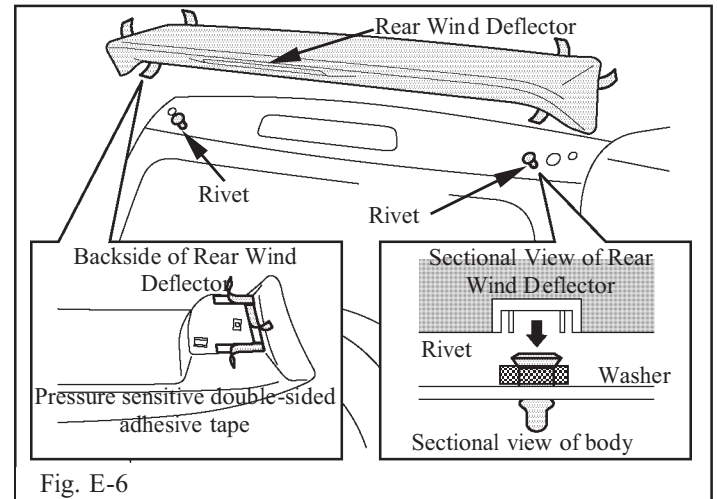


Fig. E-6

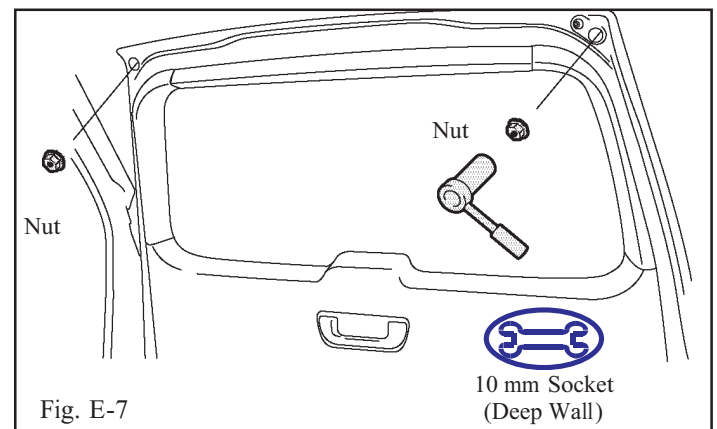


Fig. E-7

F. Final Checks



- 1. Verify that all metal chips have been vacuumed off the vehicle.
- 2. Verify that there is no interference of the Rear Wind Deflector when the rear door is in the full open position.



3. Replace the 10A STOP Fuse in Engine Room R/B using a Fuse Removal Tool.



4. Replace the Engine Room R/B cover.



5. From within the vehicle, depress the brake pedal to make sure spoiler brake light and vehicle brake lights are functioning properly.



Section III - Functional Verifications

Check: \_\_\_\_\_

- Verify Rear Wind Deflector stop lamp for proper operation
- Verify rear door operation. Open rear door.
- Verify that the Rear Wind Deflector is fully seated.
- Verify that high mounted stop light cover is properly installed

Look For: \_\_\_\_\_

Illumination of Rear Wind Deflector mounted stoplight

The Rear Wind Deflector must not interfere with the side of the vehicle.

The double-sided foam tape must be in full contact around perimeter of each mounting pad.

No gap must be visible.