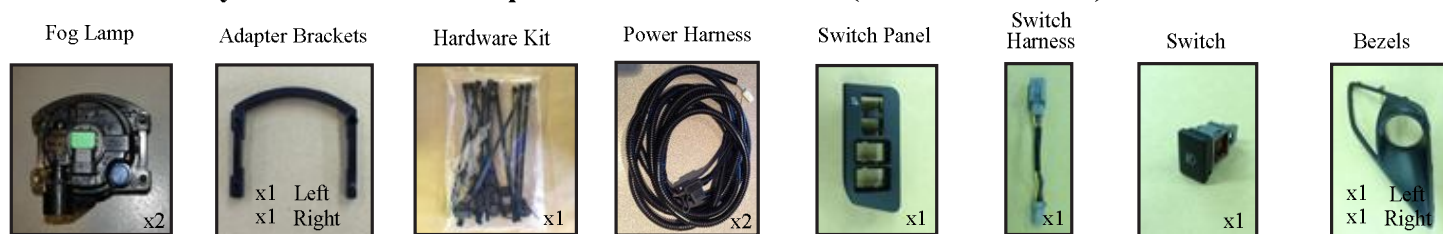


**Part #: PT413-18130****Conflicts: Lowering Springs PTR07-18130-LL (California only)****Kit Contents:****For Anniversary Edition, additional parts need to be ordered (PT413-18130-LL)****General Applicability****Hardware Kit Contents**

Item#	Quantity Reqd.	Description
1	10	Wire Ties
2	4	Self-tapping Screws
3	2	Hex-flange Screws
4	2	Nylon Lock-nut
5	14	Retention Clip
6	1	Foam Pad

**Additional Items** (may be required)

Item#	Quantity Reqd.	Description
1	1	Paper Clip
2	1	For Anniversary Edition, additional parts need to be ordered (PT413-18130-LL)

**Recommended Tools**

Personal & Vehicle Protection	
Blankets	
Masking Tape	
Eye Protection	
Special Tools	
Nylon Panel tool	
Paper Clip	
Installation Tools	
Socket Wrench	
10 mm Socket	
Socket Extension	
Diagonal Cutters	
Needle Nose Pliers	
Phillips Screwdriver	
11 mm Wrench	
Small Flat Screwdriver	
Special Chemicals	

**Legend****STOP:** Damage to the vehicle may occur. Do not proceed until process has been complied with.**CAUTION:** A process that must be carefully observed in order to reduce the risk of damage to the accessory/vehicle.**OPERATOR SAFETY:** Use caution to avoid risk of injury.**TOOLS & EQUIPMENT:** Used in Figures to call out the specific tools and equipment recommended for the process.**REVISION MARK:** This mark highlights a change in installation with respect to previous issue.**SAFETY TORQUE:** This mark indicates that torque is related to safety.**VIDEO:** Video Available; click to Play

Table of Contents

I. Preparation .....	1-2
1. Table Of Contents.....	2
II. Procedure.....	3-15
1. Vehicle Preparation.....	3
III. Accessory Function Checks.....	16
1. Vehicle Function Checks.....	16

Accessory Installation Practice (read before installation)

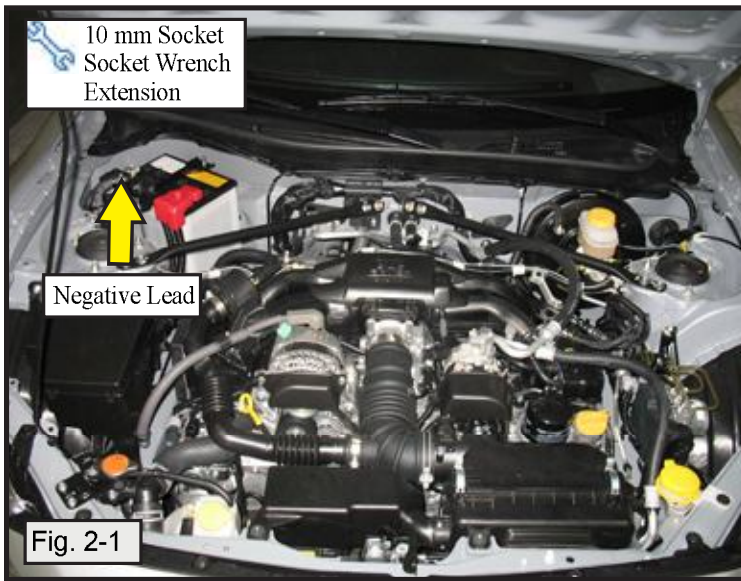
Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

These guidelines can be found in the “Accessory Installation Practices” document.

This document covers such items as:

- Vehicle Protection (use of covers and blankets, cleaning chemicals, etc.)
- Safety (eye protection, checking torque procedure, etc.)
- Vehicle Disassembly/Reassembly (panel removal, part storage, etc.)
- Electrical Component Disassembly/Reassembly (battery disconnection, connector removal, etc.)

Please see your Toyota/Scion/Lexus dealer for a copy of this document.



### 1. Check Kit Contents

- Check kit for content and damage.

### 2. Vehicle Preparation



- Remove battery negative cable.

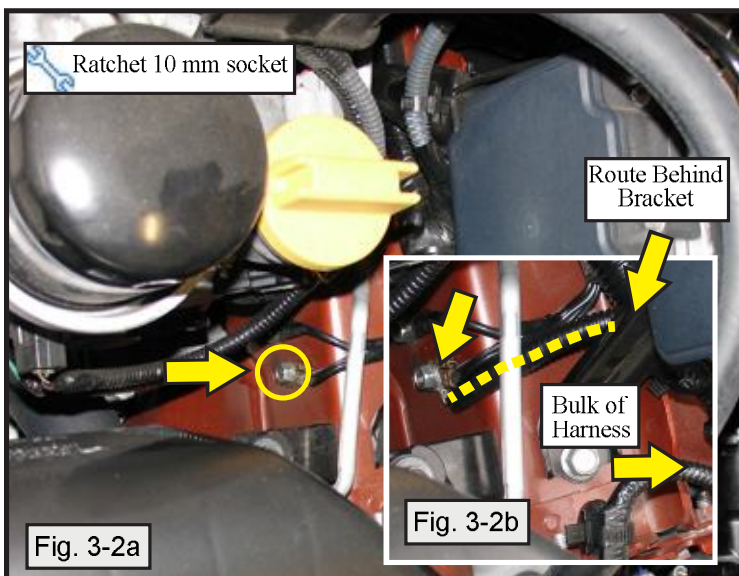
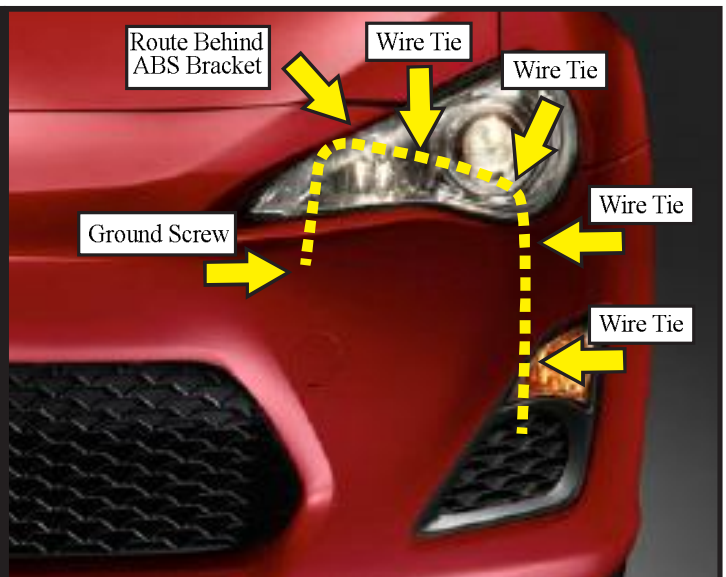
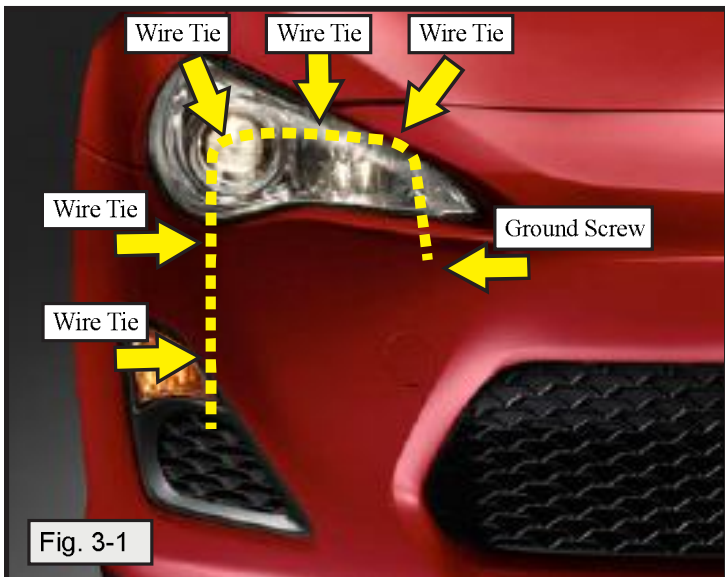


CAUTION: Do not touch the positive terminal with any tool during removal.

- Disconnect Battery.

- IMPORTANT-vehicle must be turned to "OFF" position before performing this step.

- Remove negative lead from battery. Place battery lead so it does not come into contact with battery terminal. (Fig. 2-1)



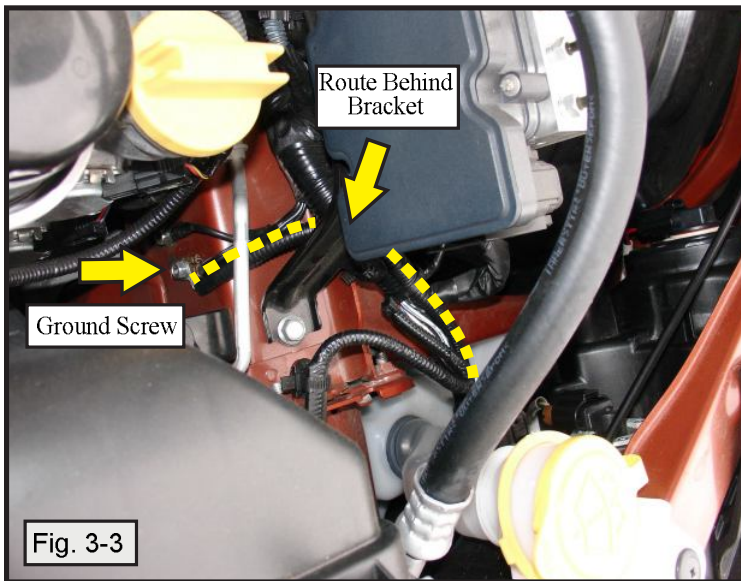
### 3. Route Harness (Engine Bay)

- Review illustration to understand routing of fog light harness. (Fig. 3-1)
- Locate ground screw on driver side. (Fig. 3-2a)
- Place bulk of harness behind ABS bracket. Route ground lead downward to location indicated by arrow. (Fig. 3-2b)
- Connect fog light harness ground, secure screw bolt. Torque: 8.4 N-m (74 inf-lbs)

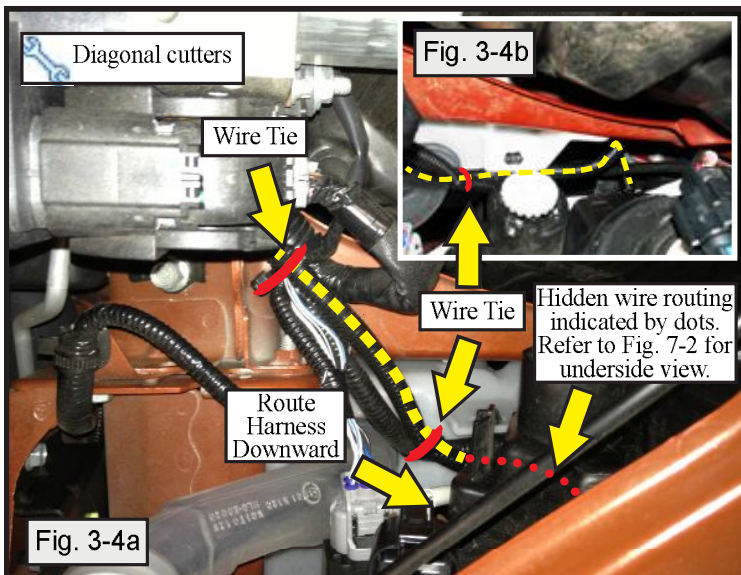


**Torque: 8.4 N-m (74 inf-lbs)**



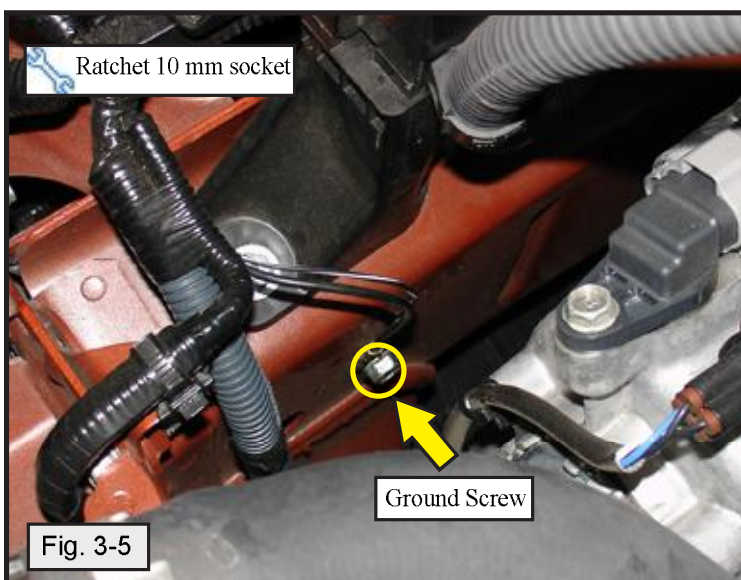


1. With the harness behind the bracket route harness towards driving light and down towards bottom of vehicle. (Fig. 3-3)



- e. Add two (2) wire ties as shown. (Fig. 3-4a)
- f. Wire routing below vehicle. (Fig. 3-4b)
- ⚠ g. Trim excess wire tie.

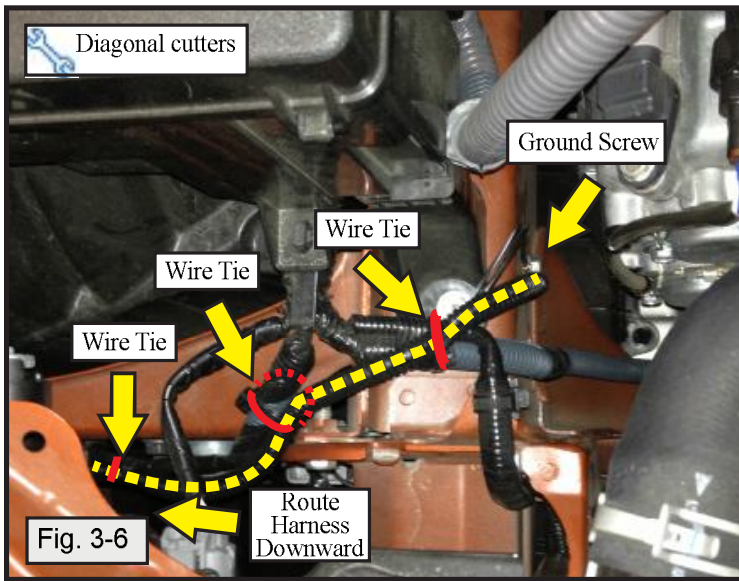
**CAUTION:** Do not route harness to rear of windshield washer reservoir.



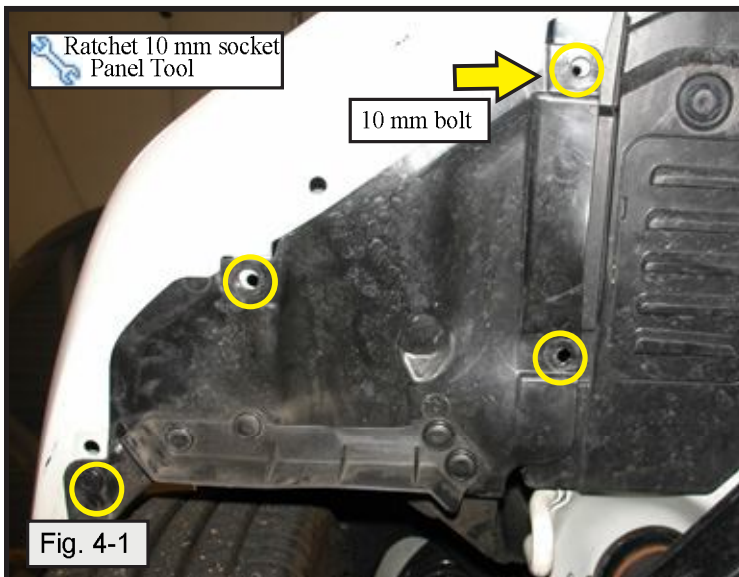
- h. Locate Ground Screw on passenger side.
- i. Connect fog light harness ground, secure screw bolt. Torque: 8.4 N-m (74 inf-lbs) (Fig. 3-5)



**Torque: 8.4 N-m (74 inf-lbs)**

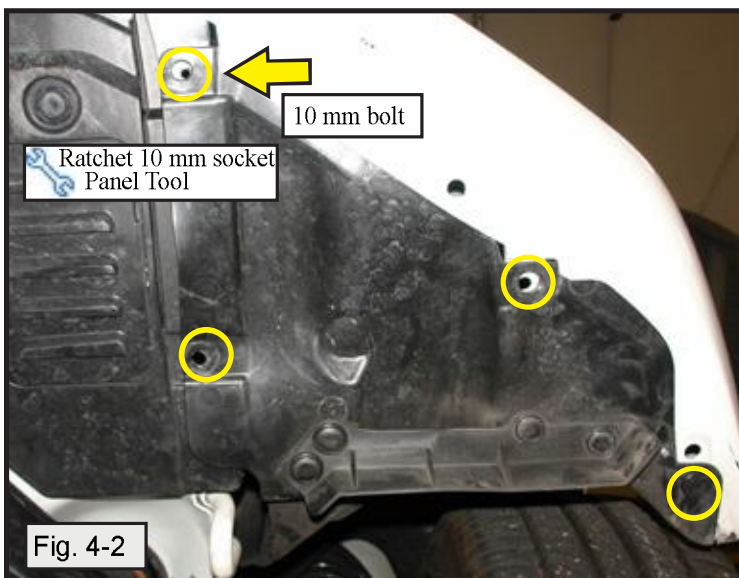


- j. Add three (3) wire ties as shown. (Fig. 3-6)
- k. Trim excess wire tie.

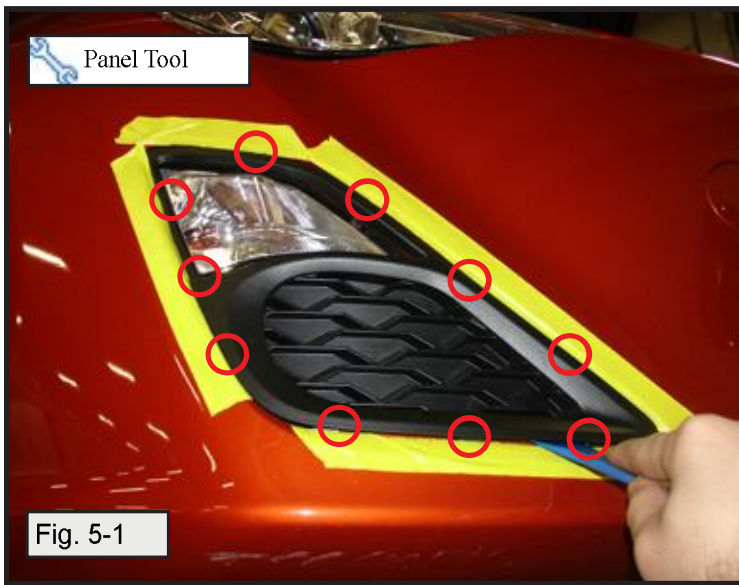


#### 4. Remove Under Body Panels

- a. Raise vehicle as needed to access under body panels.
- b. Remove passenger side panel. (Fig. 4-1)
- c. Remove three (3) fasteners and one (1) bolt.

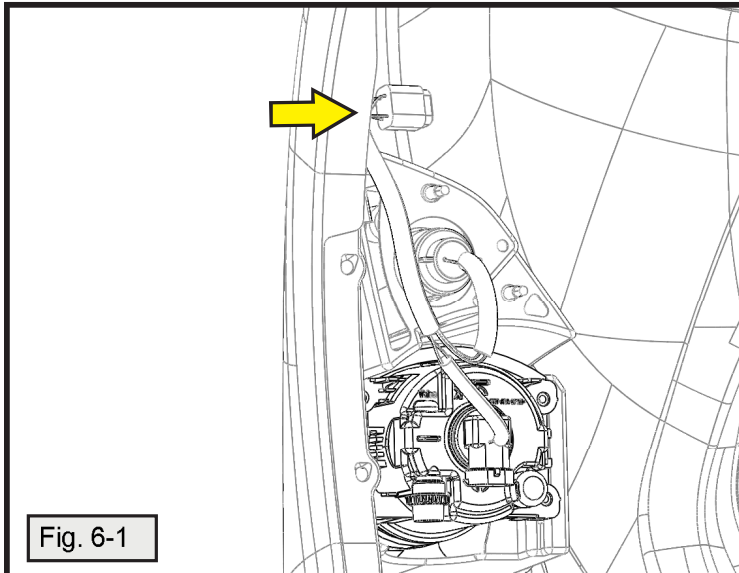


- d. Remove driver side panel. (Fig. 4-2)
- e. Remove three (3) fasteners and one (1) bolt.



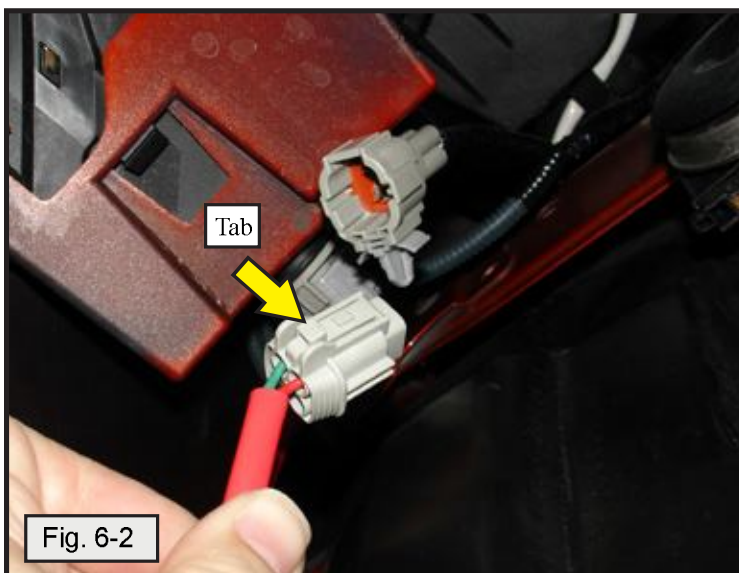
## 5. Remove Bezels

- Apply protective tape around outer edges of bezel to protect paint.
- Using panel tool remove passenger and driver side bumper inserts (circles indicate location of clips). (Fig. 5-1)

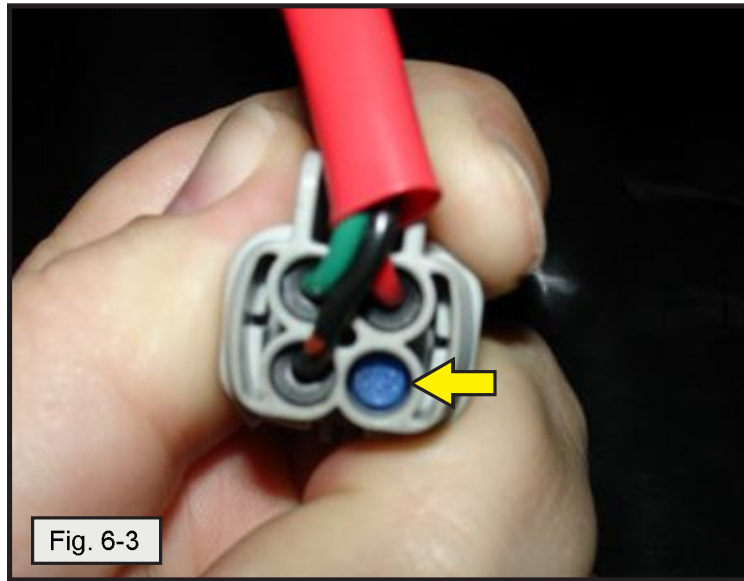


## 6. Install Lamp Assembly

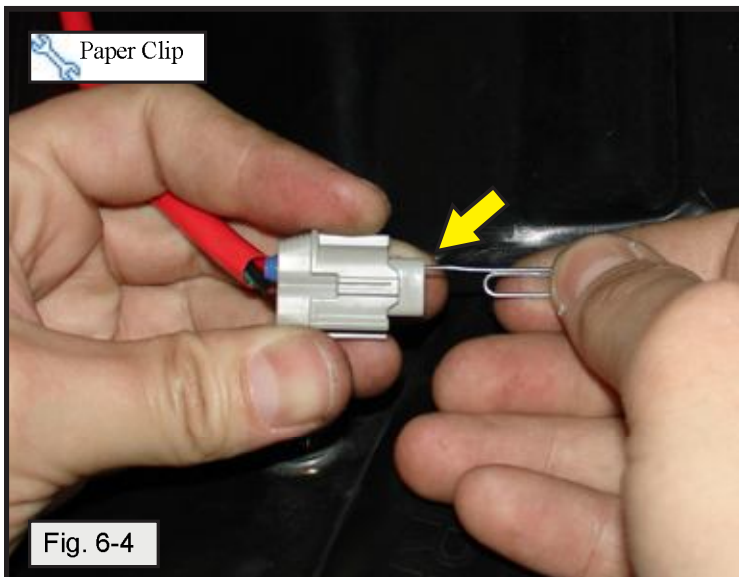
- Locate driver side turn signal connector as shown. (Fig. 6-1)
  - Detach connector from vehicle bracket.
    - The turn signal connector is difficult to access. Reach upward to grasp connector and manually push in the barbs of the attachment pin and push connector off the bracket.
- c. Separate connector. (Fig. 6-2)
- Press tab to release connector.



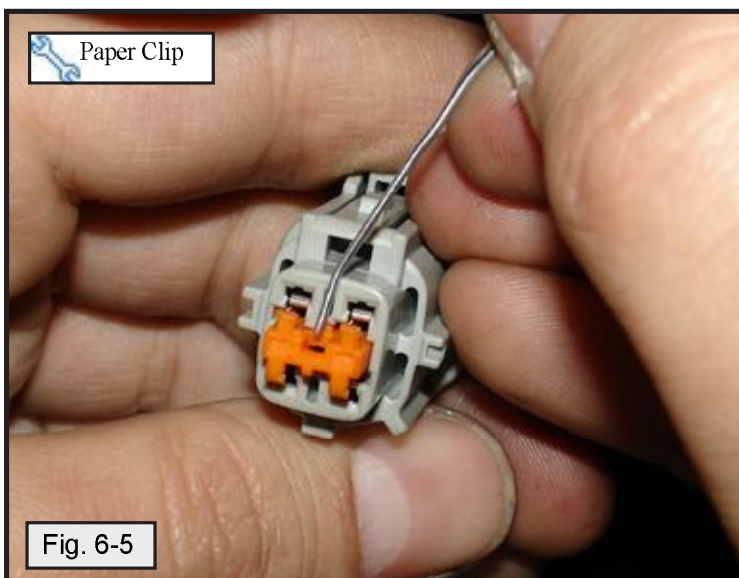




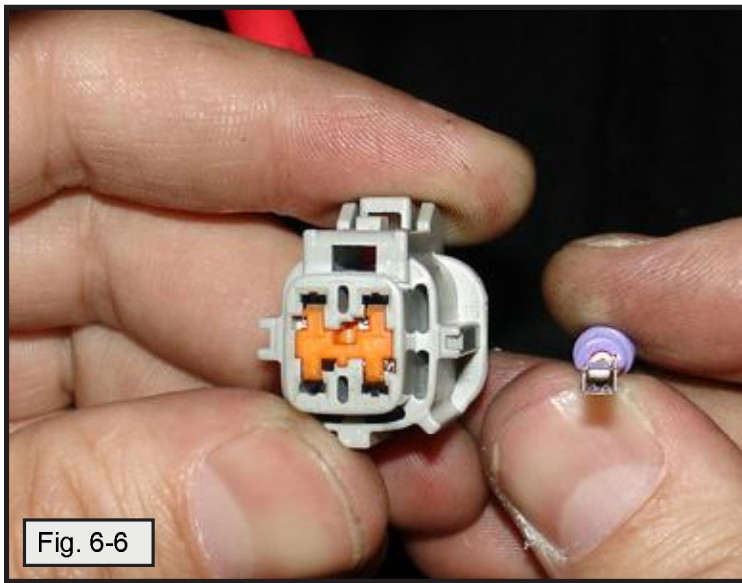
- d. Locate blue plug on turn signal side connector. (Fig. 6-3)



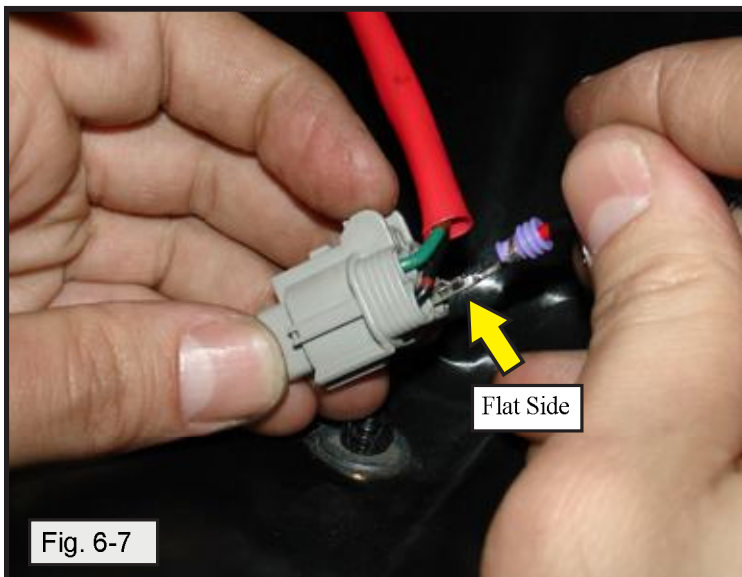
- e. Insert a paper clip in front of connector to remove blue plug, discard plug. (Fig. 6-4)



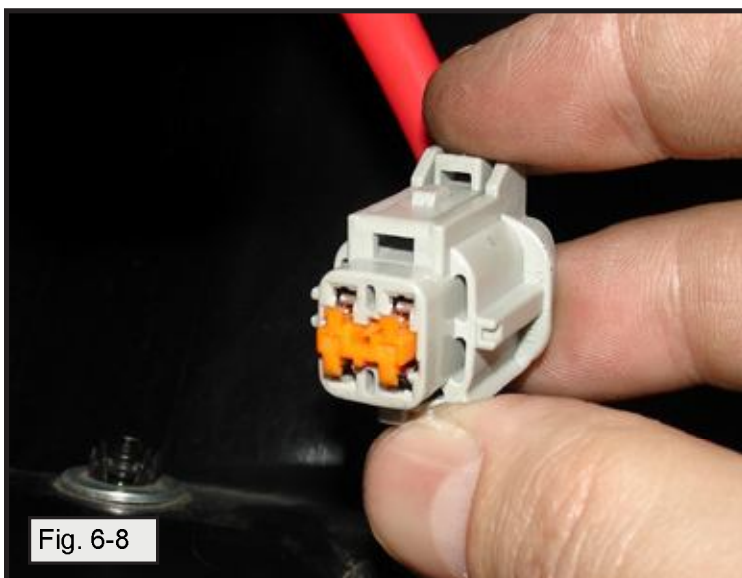
- f. Remove orange locking tab from front of connector using a paper clip. (Fig. 6-5)



- g. Insert terminal with purple seal from fog light harness into open cavity of turn signal connector. (Fig. 6-6)

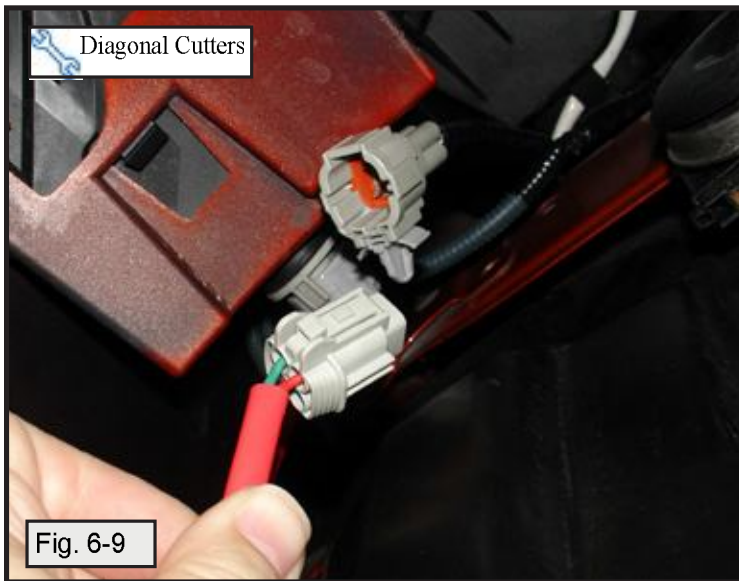


- h. Flat side of terminal goes toward outside of connector as indicated by arrow. Make sure to align and properly snap in. (Fig. 6-7)

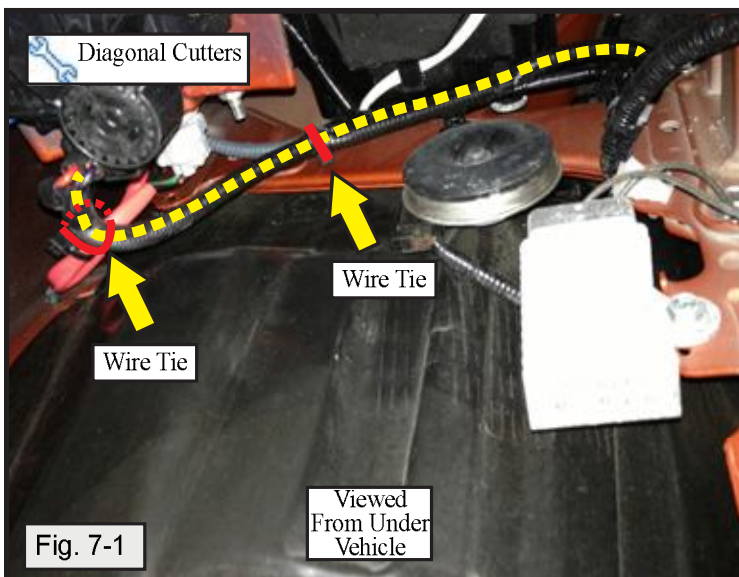


- i. Replace orange retainer and press into place. (Fig. 6-8)



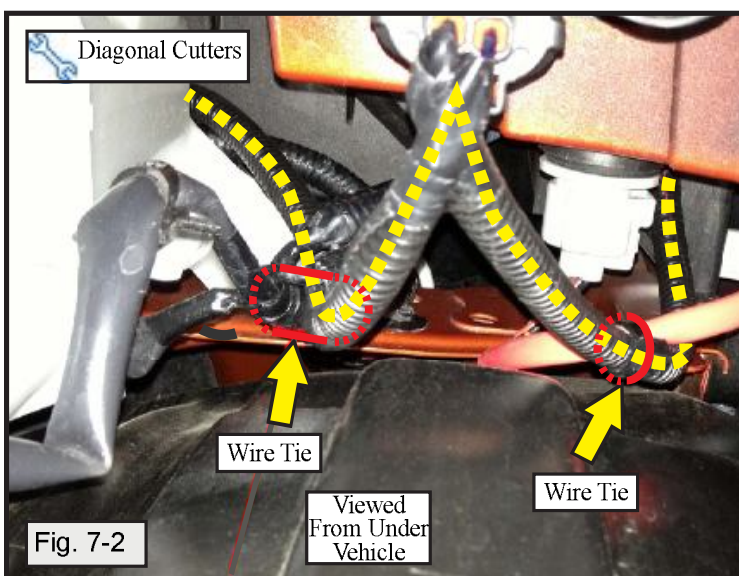


- j. Reassemble turn signal connector and reattach to vehicle. (Fig. 6-9)
- k. Locate passenger side turn signal connector.
- l. Repeat steps 6b thru 6j.

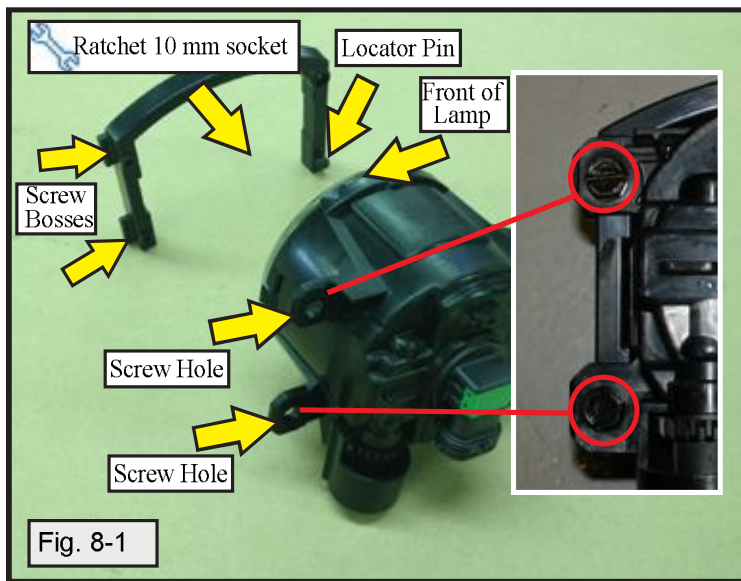


## 7. Route Harness (Below Vehicle)

- a. Route passenger side harness as shown.
- b. Add two (2) wire ties as shown. (Fig. 7-1)
- c. Trim excess wire tie.

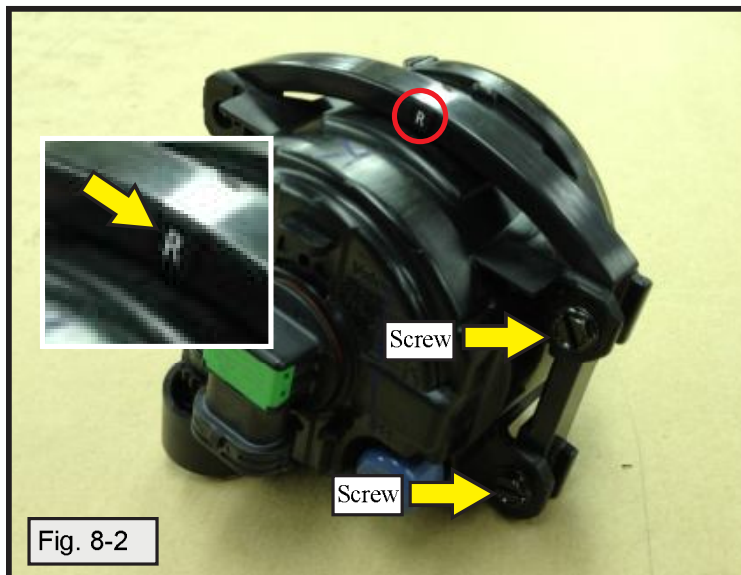


- d. Route driver side harness as shown.
- e. Add two (2) wire ties as shown. (Fig. 7-2)
- f. Trim excess wire tie.



## 8. Install Fog Lamps

- a. The lamps are the same. Install driver and passenger side fog light adapter rings to front of lamps as shown using two (2) self tapping screws. Insert screws from rear of lamp and thread into adapter bracket (Fig. 8-1)



- b. Assemblies will now be handed and are marked left and right on top part of adapter bracket. (Fig. 8-2)

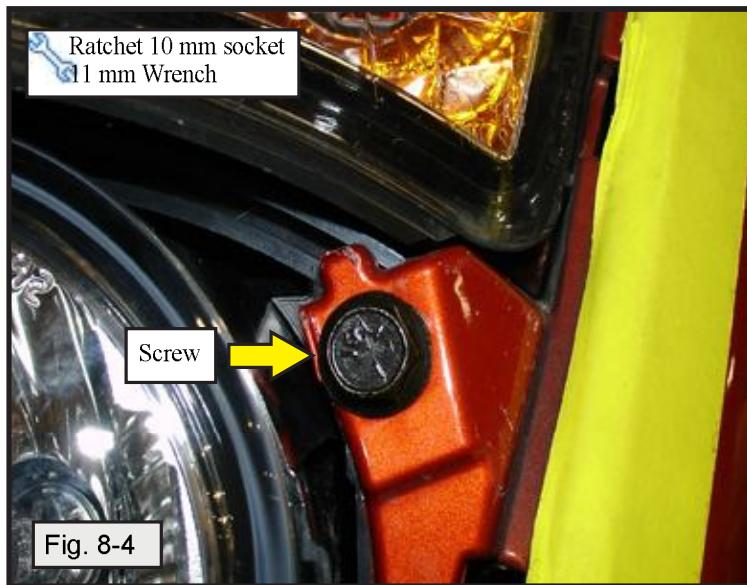


- c. Insert light assembly from inside of bumper then shift inboard to seat inboard retaining tabs into slots indicated by arrows on bumper cover. (Fig. 8-3)



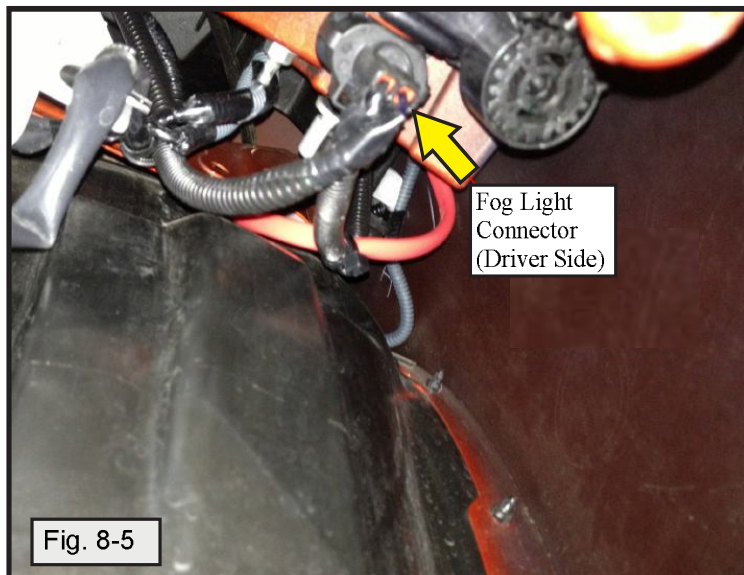
**CAUTION:** Make sure connector points downward.






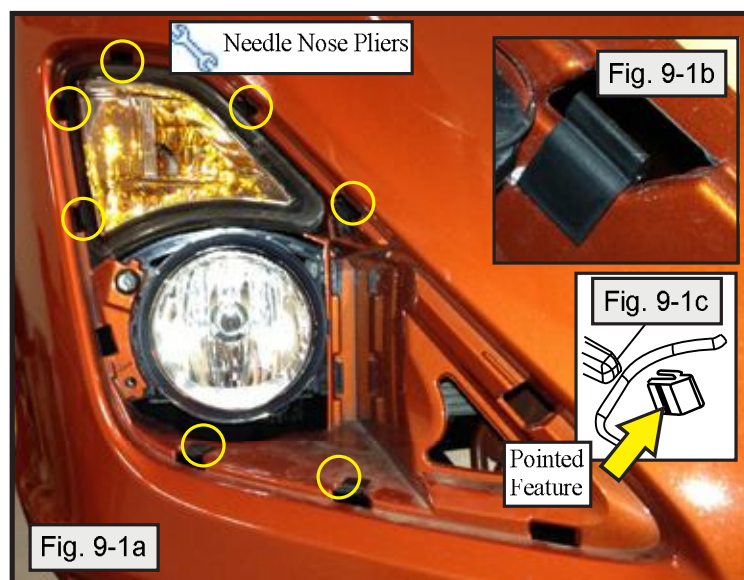
- d. Insert screw from front and nylock from the back. Use 10 mm socket on the front and the 11 mm wrench on the back. (Fig. 8-4)

 **CAUTION:** Do not overtighten.



- e. Connect fog light harness to fog lights. (Fig. 8-5)

 **CAUTION:** Make sure connector lock engages properly.



## 9. Install Retention Clips.

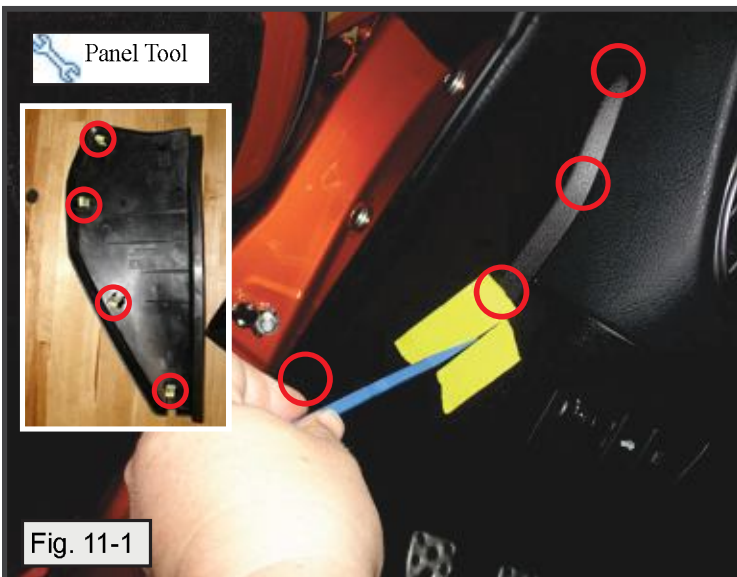
- Place seven (7) retainer clips in areas indicated by circles. Use needle nose pliers if needed. (Fig. 9-1a)
- Verify pointed feature faces outward from opening in all locations. (Fig. 9-1b,c)
- Press clips into the lip of the bumper.
- Repeat on opposite side.





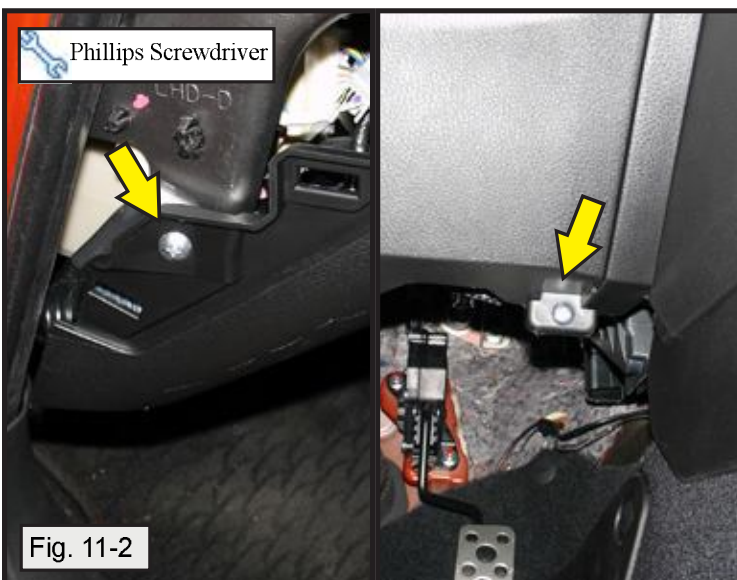
## 10. Install Bezels

- Press bezels into place. Verify longer snaps insert correctly into the bumper. (Fig. 10-1)
- Verify all bezel clips engage securely into the bumper.
- Remove protective tape.
- Reinstall under body panels removed in step 4.
- Lower vehicle to ground.

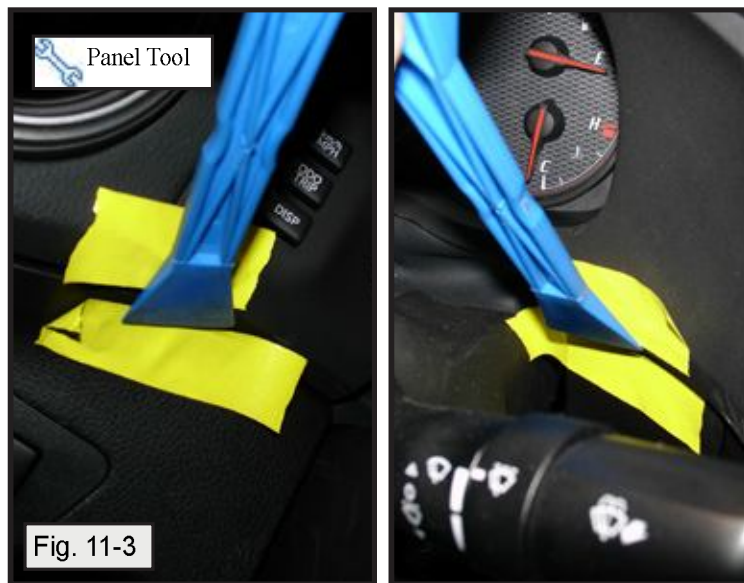


## 11. Remove Interior Panels

- Apply protective tape as shown. (Fig. 11-1)
- Using panel safe tool remove side panel.



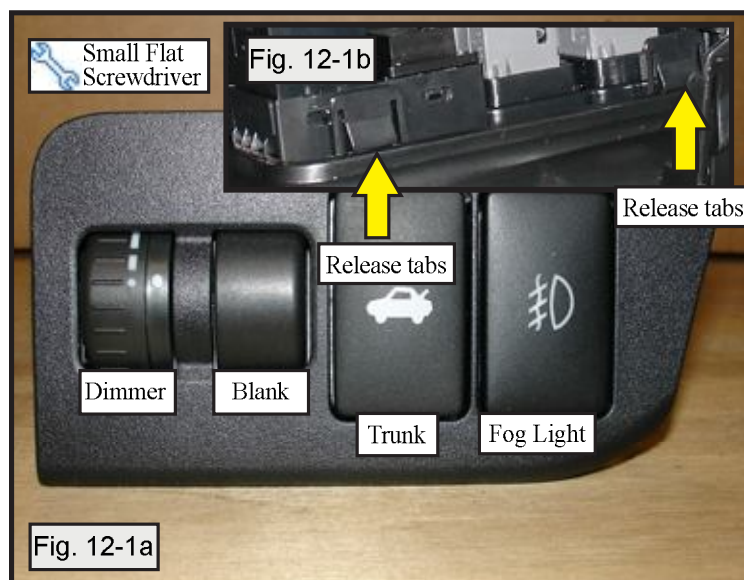
- Remove one (1) screw located under side panel, and one (1) screw located at the right bottom of the knee bolster panel as indicated by arrows. (Fig. 11-2)



- d. Use panel safe tool to pull out knee bolster. (Fig. 11-3)

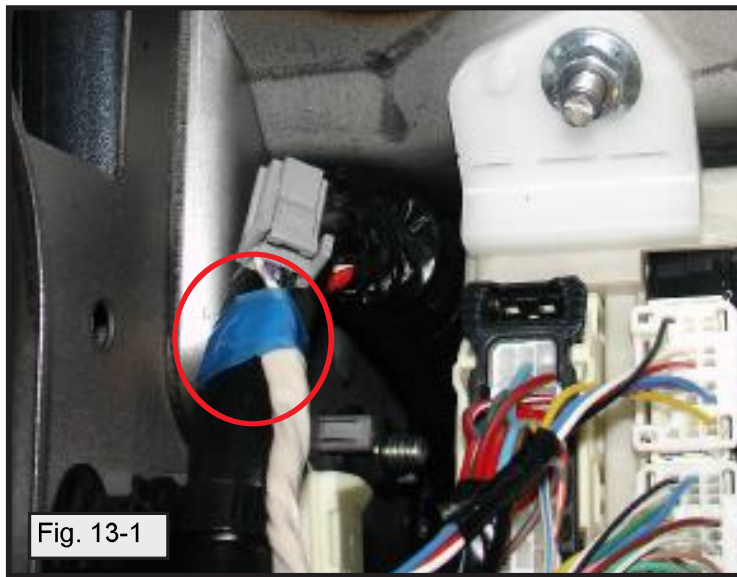


- e. Disconnect all connectors and remove from vehicle. (Fig. 11-4)



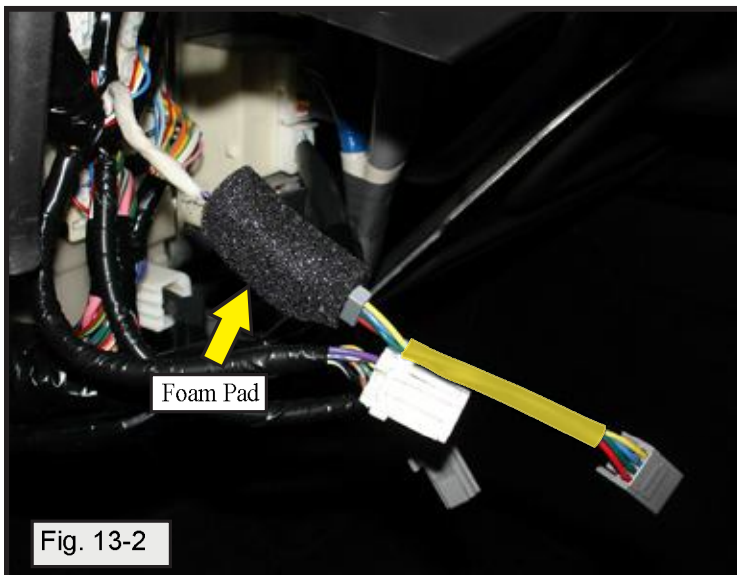
## 12. Install switch and Switch Panel

- a. Remove switch panel from knee bolster by pressing release tabs, install new switch panel. (Fig. 12-1b)
- b. Remove dimmer, blank, and trunk release from existing switch panel and install in new switch panel. (switch locations embossed on back of switch panel) (Fig. 12-1a)
- c. Install new switch panel into knee bolster.
- d. For Anniversary Edition vehicle, use switch panel PT413-18130-LL. Install light-leveling switch to this panel.

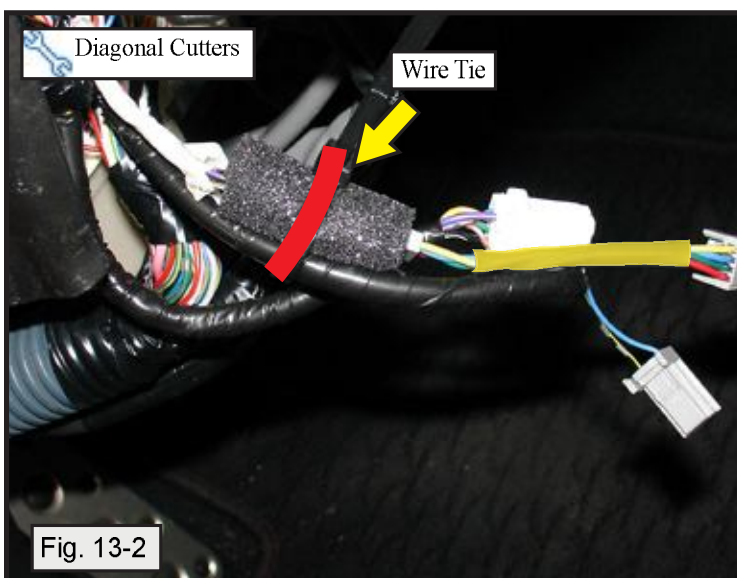


### 13. Reinstall Interior Panels

- a. Locate vehicle connector as shown. Connector is taped to side of harness, remove tape indicated by circle to expose connector. (Fig. 13-1)



- b. Connect extension harness to vehicle harness.
- c. Apply one (1) foam pad around connector. (Fig. 13-2)



- d. Apply one (1) wire tie as shown. (Fig. 13-2)
  1. Trim wire tie.
- e. Connect harness with yellow jacket to fog light switch. Reconnect trunk and dimmer switches.



**CAUTION:** Make sure you do not reverse the fog light and trunk switch connections.





#### 14. Complete Installation

- a. Reconnect Battery. (Fig. 14-1)



1. Position the Negative Battery cable at the original factory location.

2. Tighten the nut to 6.0 N-m (53 lbf-in).



**Torque: 6.0 N-m (53 lbf-in)**



**CAUTION:** Do not touch the positive terminal.

- b. Conduct vehicle function check.
- c. Reassemble dash panel.

#### 15. Aiming Instructions (DIO Only)

- a. Position vehicle on flat surface at a distance of 25 feet (7.6m) from the fog light to the wall (Fig. 15-1)

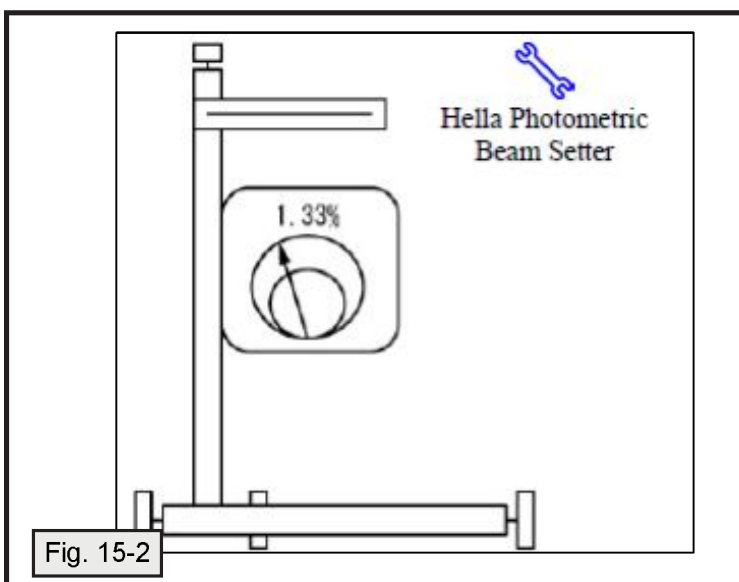
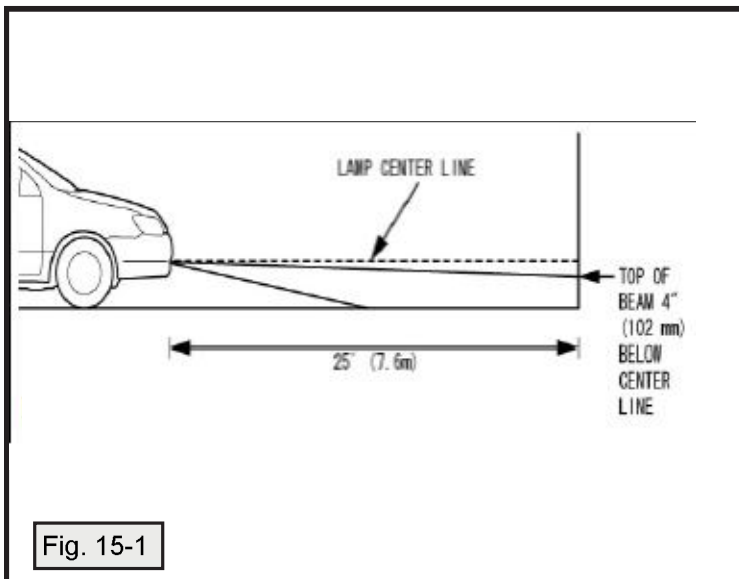
1. Measure the distance from the center of the lamp to the ground and mark off the same height on the wall. This is your fog light centerline.
2. Adjustment of the fog lights is done by turning the adjustment screw using a Philips screwdriver.

3. Turn on the fog lights and adjust them so that the top of the beam (high intensity portion) falls 4 inches (102mm) below the mark on the wall (fog light centerline).

- b. Alternate aiming method: Use Hella Photometric Beam Setter (or equivalent) to correctly align fog light beam. (Fig 15-2)

1. Adjustment of the fog lights are done by turning the adjustment screw using a Philips screwdriver.

- c. Repeat for other side of vehicle.



**Accessory Function Checks**

Major Action Item

	What to do.	What to look for.
1	Turn on Fog Lights (With Ignition On)	Fog Lights will Illuminate
2	Turn on High Beam Lights (With Ignition On)	Fog Lights will go off
3		
4		
5		
6		
7		
8		
9		

**Vehicle Function Check**

	Function		Function
<input type="checkbox"/>	Trunk switch operation	<input type="checkbox"/>	Dimmer Switch Operation
		<input type="checkbox"/>	
<input type="checkbox"/>		<input type="checkbox"/>	
<input type="checkbox"/>		<input type="checkbox"/>	

**Vehicle Appearance Check**

<input type="checkbox"/>	Verify fit of fog lamps		
<input type="checkbox"/>	Verify fit of bezels		
<input type="checkbox"/>	Verify fit of switch		
<input type="checkbox"/>	After accessory installation and removal of protective cover(s), perform a visual inspection of the vehicle		Ensure no damage (including scuffs and scratches) was caused during the installation process. (For PPO installations, refer to TMS Accessory Quality Shipping Standard.)