

**Part Number: PT413-18170**

**Kit Contents**

Item #	Quantity Req.	Description
1	2	Fog Lights
2	1	LH Fog Light Bezel
3	1	RH Fog Light Bezel
4	1	Extension Harness
5	1	LH Adapter Bracket
6	1	RH Adapter Bracket
7	1	Switch Panel
8	1	Switch

**Hardware Bag Contents**

Item #	Quantity Req.	Description
1	6	Nylon Lock-Nut, M6X1
2	6	Hex Flange Screw, M6X1
3	6	Self-tapping Screw, M4.2X1.4
4	1	Wire Tie
5	1	Foam Pad

**Additional Items Required For Installation**

Item #	Quantity Req.	Description
1		
2		
3		

**Conflicts**

None
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**General Applicability**

All 86 models
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**Recommended Sequence of Application**

Item #	Accessory
1	
2	
3	

\*Mandatory


**Recommended Tools**


<b>Personal &amp; Vehicle Protection</b>	Notes
Blankets	
<b>Special Tools</b>	Notes
Hella Photometric Beam Setter (or equivalent)	DIO Only
<b>Installation Tools</b>	Notes
Nylon Panel Removal Tool	
Ratchet	
Socket	10mm
Socket Extension	8"
Diagonal Cutters	
Pliers	
Screwdriver	#2 Phillips & Small Flat Blade
Wrench	10mm
<b>Special Chemicals</b>	Notes


**Vehicle Service Parts** (may be required for reassembly)


Item #	Quantity Req.	Description
1		
2		
3		


**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.

 **CAUTION:** A process that must be carefully observed in order to reduce the risk of damage to the accessory/vehicle and to ensure a quality installation.

 **TOOLS & EQUIPMENT:** Used in Figures calls out the specific tools and equipment recommended for this 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.

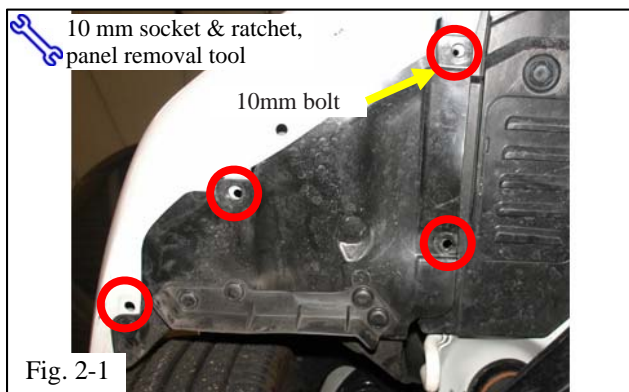
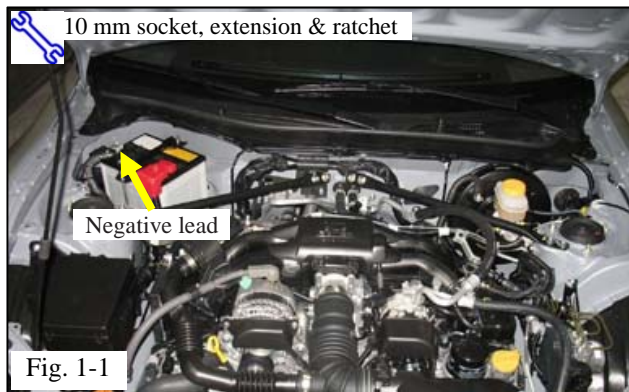
Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

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, rechecking torque procedure, etc.).
- Vehicle Disassembly/Reassembly (panel removal, part storage, etc.).
- Electrical Component Disassembly/Reassembly (battery disconnection, connector removal, etc.).

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

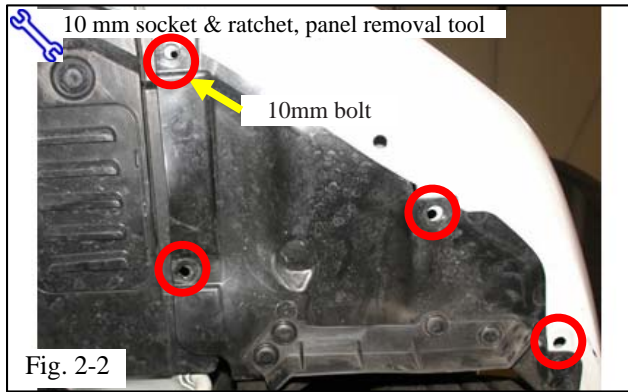


### 1. Prepare for the Installation.

- ✚ (a) The engine components and coolant may be hot, use caution.
- ⛔ (b) Check the kit for contents and any damage.
- (c) Protect the fender before starting.
- ⚠ (d) Remove the battery cable from the negative terminal (Fig. 1-1).
- ✚ **CAUTION:** Do not touch the positive terminal with any tool.

### 2. Remove the Under Body Panels.

- (a) Raise vehicle as needed to access under body panels.
- (b) Remove the three (3) fasteners and one (1) bolt to remove the passenger side panel (Fig. 2-1).



- (c) Remove the three (3) fasteners and one (1) bolt to remove the driver side panel (Fig. 2-2).

**3. Remove the Bezels.**



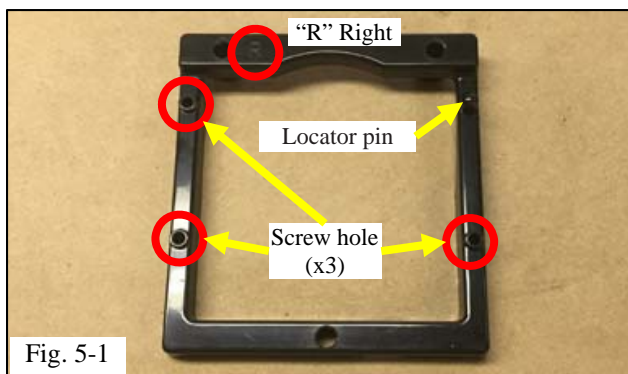
- (a) Apply protective tape around the outer edges of the bezel to protect the paint.
- (b) Push in (by hand) and release the five (5) circled clips (Fig. 3-1, left).
- (c) Pull the bezel out in the direction shown (Fig. 3-1, right).
- (d) Repeat on the other side.

**4. Locate and Free the Harness Connection.**



- (a) Locate the fog lamp harness connection secured with blue tape (Fig. 4-1).
- (b) Remove the blue tape.
- (c) Repeat on the other side.

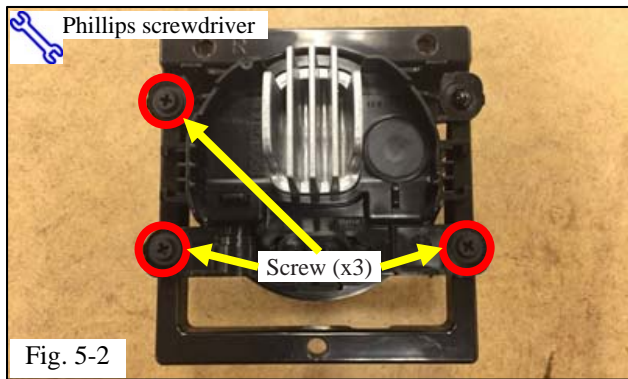
**5. Mount the Fog Lamp Adapter.**



- (a) Locate the fog lamp adapter (right adapter shown) (Fig. 5-1).

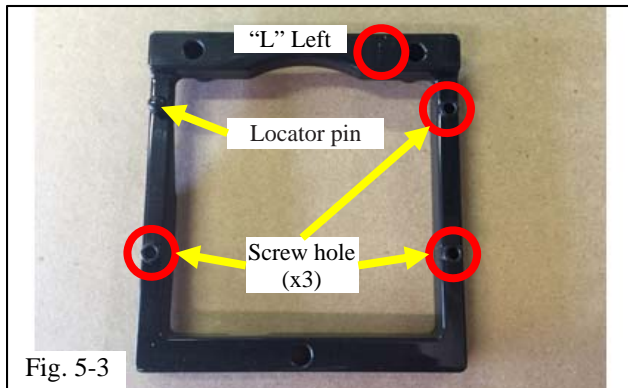
**⚠ NOTE:** The adapter is marked by an "R" or "L" symbol indicating right or left. This is to indicate in which side of the vehicle it will be installed.

- (b) Locate a fog light. It does not matter which one you choose as they are the same.

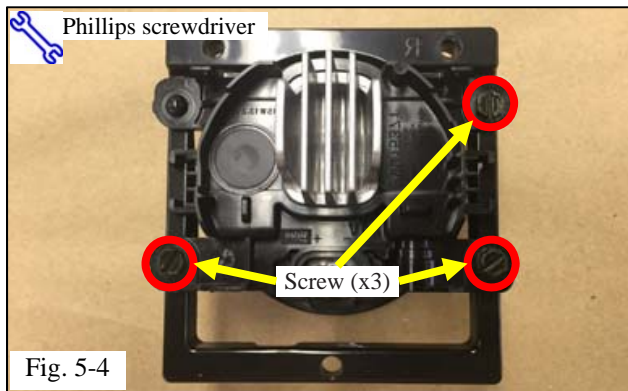


(c) Use three (3) self-tapping screws to mount the fog light to the adapter (Fig. 5-2).

**NOTE:** Make sure the locator pin is inserted into the hole that does not have a screw.

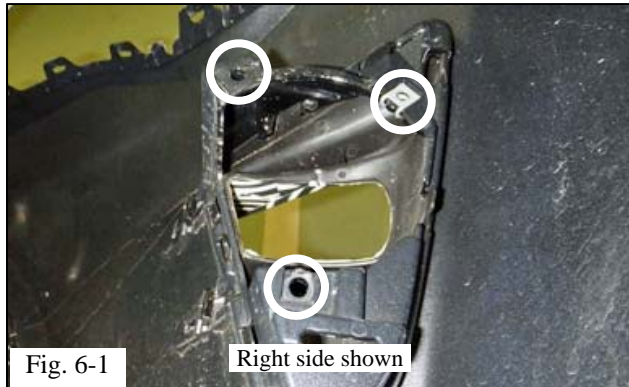


(d) Locate the other fog light adapter (left adapter shown) (Fig. 5-3).



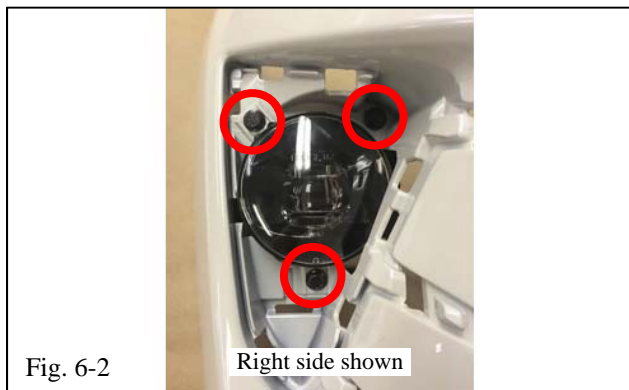
(e) Use three (3) self-tapping screws to mount the fog light to the adapter (Fig. 5-4).



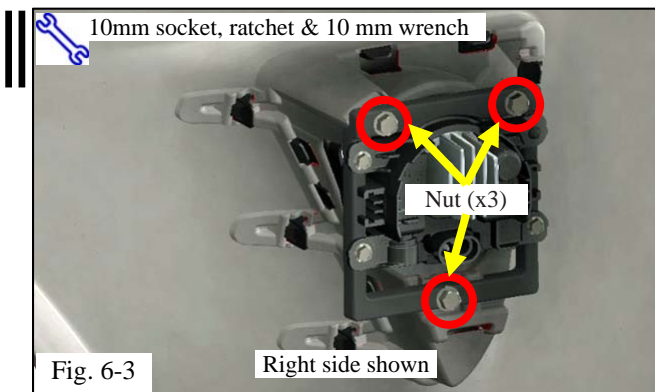


**6. Install the Fog Lamps.**

(a) Align the fog light adapter holes to the holes indicated by the circles in Fig. 6-1.

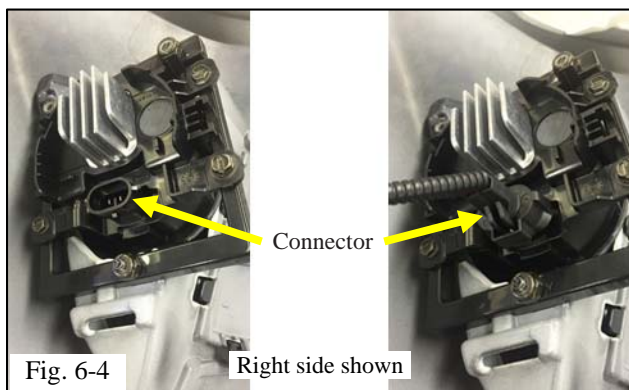


(b) Secure the fog lamp assembly using three (3) bolts, inserted from the front (Fig. 6-2).



(c) Secure the bolts with three (3) nuts (Fig. 6-3).

**NOTE:** Use a 10mm wrench to hold the nuts while tightening the bolt.



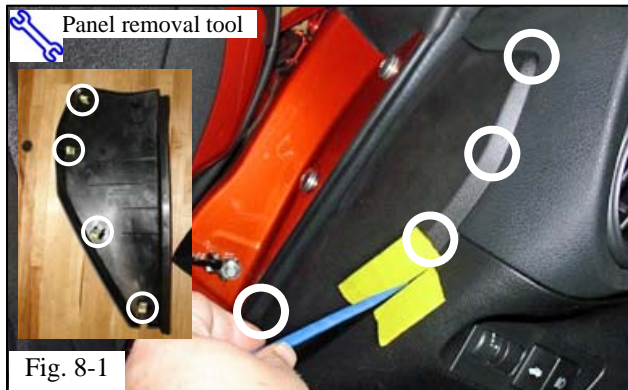
(d) Connect the harness to the fog lamp (Fig. 6-4).

(e) Repeat Step 6 on the other side.



**7. Install the Bezel.**

- (a) Press a bezels into place. Verify the longer snaps insert correctly into the bumper (Fig. 7-1).
- (b) Ensure all of the bezel clips engage securely into the bumper.
- (c) Remove the protective tape.
- (d) Install the bezel on the other side.
- (e) Reinstall the under body panels removed in Step 2.
- (f) Lower the vehicle.

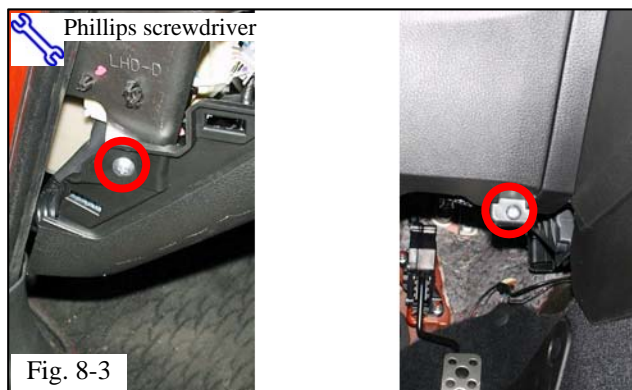


**8. Remove the Interior Panels.**

- (a) Apply protective tape (Fig. 8-1).
- (b) Remove the side panel (Fig. 8-1).



- (c) Note the approximate location of the screws that will be removed in Step 8(d) (Fig. 8-2).



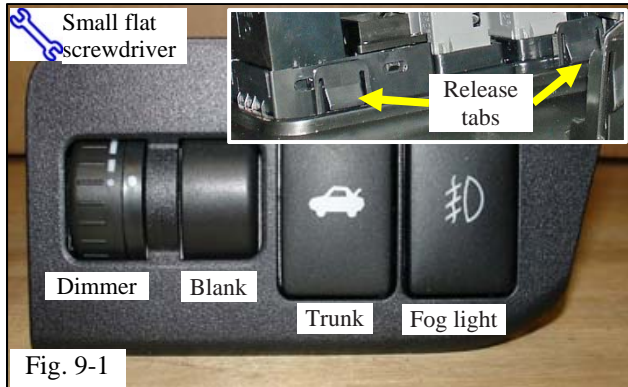
- (d) Remove the screw located under the side panel (Fig. 8-3, left).
- (e) Remove the screw located at the bottom right of the knee bolster panel (Fig. 8-3, right).



- (f) Note the approximate location to use the panel removal tool in Step 8(f) (Fig. 8-4).



- (g) Release the knee bolster clips (Fig. 8-5).
- (h) Disconnect all connectors and remove the knee bolster from the vehicle.



**9. Install the Switch and Switch Panel.**

- (a) Press the release tabs to remove the switch panel from the knee bolster (Fig. 9-1, inset).
- (b) Remove the dimmer, blank, and trunk release switches from the existing switch panel and install them in the new switch panel (Fig. 9-1).

**⚠ NOTE:** The switch locations are embossed on the back of the switch panel.

- (c) Install the supplied switch panel into the knee bolster.

**10. Connect the Vehicle-Side Switch Harness.**

- (a) Note the location of the connector under the left side instrument panel (Fig. 10-1).

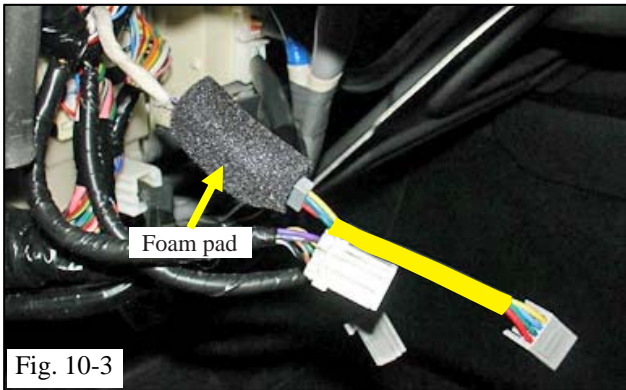


- (b) Locate the vehicle-side connector. The connector is taped to the side of the harness; remove the tape indicated by the circle to expose the connector (Fig. 10-2).

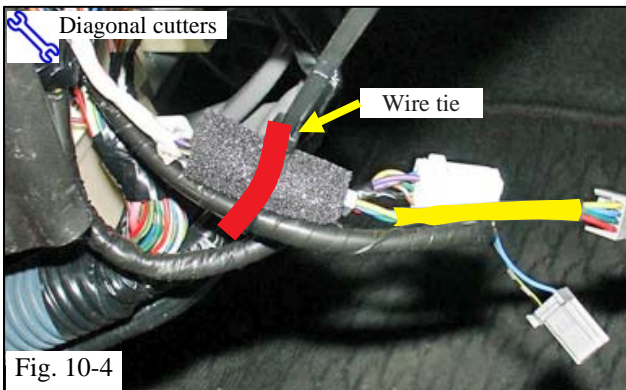


- (c) Connect the extension harness to the vehicle harness.





(d) Apply one (1) foam pad around the connector (Fig. 10-3).



(e) Apply one (1) wire tie as shown (Fig. 10-4). Trim the excess.

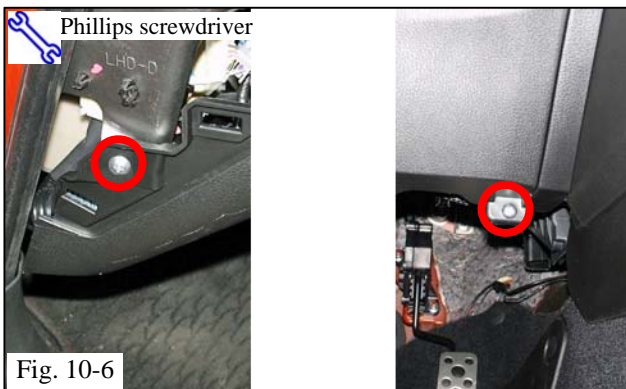
(f) Connect the harness with the yellow jacket to the fog light switch. Reconnect the trunk and dimmer switches.

**CAUTION:** Make sure the fog light and trunk switch connections are not reversed.

(g) Reinstall the knee bolster removed in Steps 8(c) to 8(g).



(1) Insert the top edge that was released in Steps 8(f) and 8(g) first (Fig. 10-5, indicated by arrows).



(2) Reinstall the screws removed in Step 8(d) and 8(e) (Fig. 10-6).

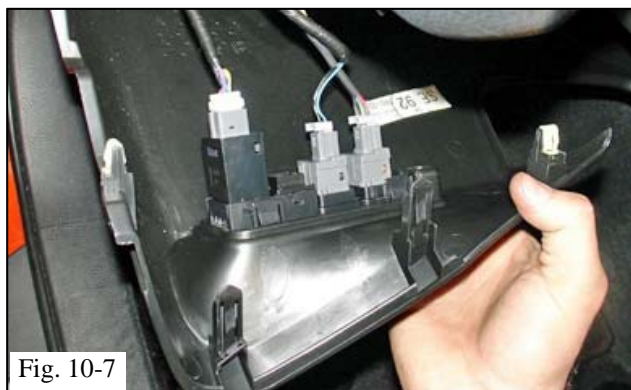


Fig. 10-7

- (h) Reinstall the switch panel removed in Step 9(a) (Fig. 10-7).
- (i) Reinstall the side panel removed in Step 8(b).

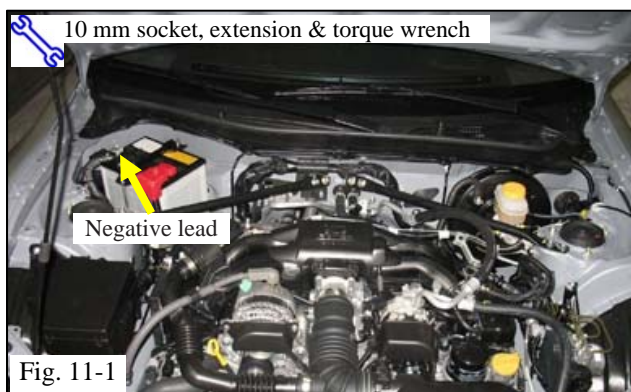



Fig. 11-1

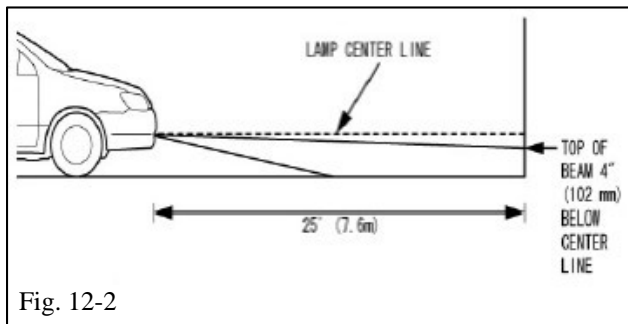
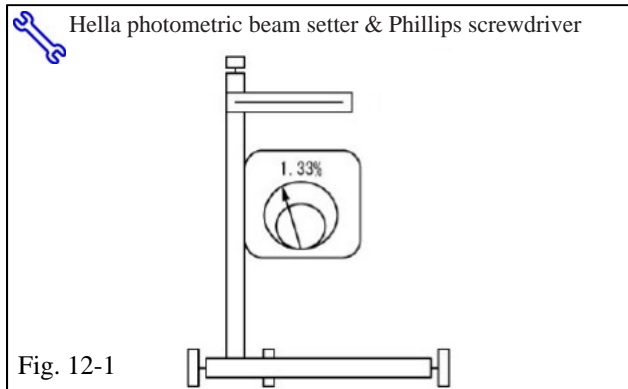
### 11. Complete the Installation.

- (a) Reconnect the battery negative cable (Fig. 11-1).

 **Torque: 5.4 N·m (48 in·lbs)**

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

- (b) Conduct a vehicle function check.



## 12. Aim the Fog Lights (DIO ONLY).

- (a) If available, use a Hella Photometric Beam Setter (or equivalent) to align the fog light beam (Fig. 12-1).
  
- (b) Alternate aiming method: Use a wall to aim the lights.
  - (1) Position the vehicle on a flat surface at a distance of 25 feet (7.6m) from the fog light to a wall (Fig. 12-2).
  - (2) Measure the distance from the center of the lamp to the ground and mark off the same height on the wall. This is the fog light centerline (Fig. 12-2).
  - (3) Turn the fog lights on and adjust them so that the top of the beam (high intensity portion) falls 4 inches (102 mm) below the mark on the wall (the fog light centerline) (Fig. 12-2).
  
- (c) Use a Phillips screwdriver to turn the adjustment screw on the fog lights.

Checklist - these points **MUST** be checked to ensure a quality installation.

<u>Check:</u>	<u>Look For:</u>
<u>Accessory Function Checks</u> <ul style="list-style-type: none"> <li><input type="checkbox"/> Install a short pin (if necessary)</li> <li><input type="checkbox"/> Turn the headlights on</li> <li><input type="checkbox"/> Check the fog light switch illumination</li> <li><input type="checkbox"/> Turn the fog lights on</li> <li><input type="checkbox"/> Switch the high beams on</li> <li><input type="checkbox"/> Turn the headlights off</li> <li><input type="checkbox"/> Check the fog light switch orientation</li> </ul>	<ul style="list-style-type: none"> <li>Headlights function as normal</li> <li>Switch lights up</li> <li>Fog lights turn on</li> <li>High beams on/Fog lights off</li> <li>Headlights and fog lights turn off</li> <li>The lamp symbol faces left</li> </ul>
<u>Vehicle Function Checks</u> <ul style="list-style-type: none"> <li><input type="checkbox"/> Taillights/brake lights/turn signals</li> <li><input type="checkbox"/> Reverse lights &amp; emergency flashers</li> <li><input type="checkbox"/> Mirror &amp; dimmer controls</li> <li><input type="checkbox"/> Traction control</li> <li><input type="checkbox"/> Trunk release</li> </ul>	<ul style="list-style-type: none"> <li>All function properly</li> <li>Function properly</li> <li>Function properly</li> <li>Functions properly</li> <li>Functions properly</li> </ul>
<u>Vehicle Appearance Check</u> <ul style="list-style-type: none"> <li><input type="checkbox"/> After accessory installation and removal of protective cover(s), perform a visual inspection.</li> </ul>	<p>Ensure no damage (including scuffs and scratches) was caused during the installation process.          (For PPO installations, refer to TMS Accessory Quality Shipping Standard.)</p>