

TOYOTA

TUNDRA

2014-2017

2 in 1 LED UPGRADE KIT

Part Number: T4R-2N1

**Kit Contents**

Item #	Quantity Req'd.	Description
1	2	DRL + Fog Light Housing
2	1	Driver Box
3	1	Harness bag
4	1	User's card
5	1	Switch

**Hardware Bag Contents**

Item #	Quantity Req'd.	Description
1	1	Hood Wire Harness
2	1	Cabin Wire Harness w/ Switch
3	1	Cabin Wire Harness w/o Switch (Platinum & 1794 Edition ONLY)
4	25	8" Wire ties
5	2	Black T-Taps
6	1	14" wire tie
7	1	Relay
8	2	Phillip Head Screws
9	2	DRL Connectors

**General Applicability**

SR5, Limited, TRD Pro, Platinum, 1794 Edition

**Conflicts****IMPORTANT NOTICE!!**

This LED Upgrade Kit Requires the Vehicle to be Equipped with Factory Installed Halogen Fog Lights

**Recommended Tools**

<b>Safety Tools</b>	
Safety Glasses	
Protective tape	
Electrical Tape	
<b>Installation Tools</b>	
10mm Wrench	
Phillips Screw Driver	
Pliers	
Panel Tool Removal	
Side Cutters	
Torque Wrench	
<b>Special Chemicals</b>	
3M Silicon Sealant	

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. These points will be audited on a completed vehicle installation



**TOOLS & EQUIPMENT:** This calls out the specific tools and equipment required for this process



**REVISION MARK:** This mark highlights a change in installation with respect to previous issue.

**SPECIAL NOTE:**

After Auer Automotive Safety mandated preparatory steps have been taken, the installation sequence is the suggested method for completing the accessory installation. In some instances the suggested sequence is written for one associate to install and in others the sequence is given as part of a team accessory installation. Unless otherwise stated in the document, the associates may perform the installation steps in any order to make the installation as efficient as possible while maintaining consistent quality. Also some items listed to be removed may not need to be removed if caution is taken to not damage vehicle.

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 quality installation.

## Preparation



Remove negative battery cable



## Installation

1. From front of vehicle, lay the DRL's wire harness on the engine compartment, left side from the battery towards the firewall of the car (pictures 1 and 1A).

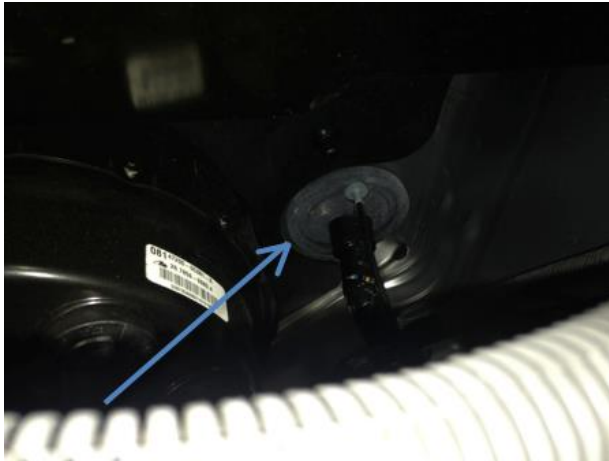


Picture 1



Picture 1B

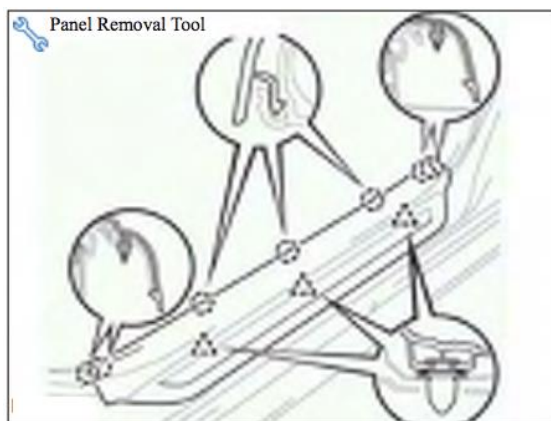
2. Locate the large vehicle harness grommet on the left side. If accessible, cut the auxiliary wiring access nipple off the grommet or cut 1/4" slit in grommet and push the red, black, black-white and red-white wires through firewall. Note: Extra caution should be taken not to damage the connector's pin. Seal with 3M Silicone sealant (picture 2)



Picture 2

### Vehicle Disassembly

3. Remove driver side door scuff plate. Disengage with panel tool and remove (picture 3 and 3A)

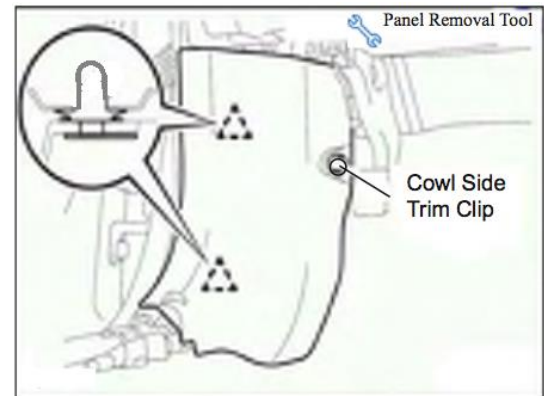


Picture 3



Picture 3A

4. Remove the driver side cowl side trim (pictures 4 and 4A)



Picture 4



Picture 4A

5. Remove the driver's side lower dash panel: remove two lower screws (picture 5)



Picture 5

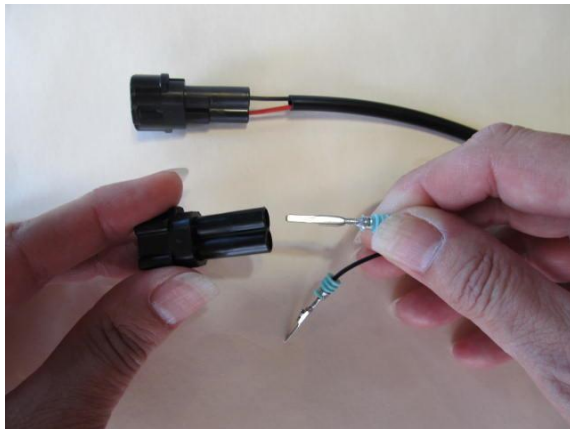
6. From inside the cabin, locate the wires that were pushed through in step 2. It will be the grommet left of the emergency brake (picture 6)





Picture 6

7. Route the wire harness to reach the left area of the steering wheel
8. Push the pins into the connector supplied in kit. The plastic connects have a mark with a positive (+) and a negative (-) symbol. Push the red wires into the "+" symbol and the black wires into the "-" symbol (picture 7)



Picture 7

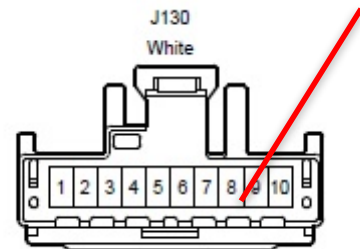
9. Connect the driver box to the wires pushed into the connectors on step 8 (make sure wire colors are aligned: black with black and red with red).
10. Using a 14" wire tie, secure the driver box to the factory harness by the kick panel (picture 8).



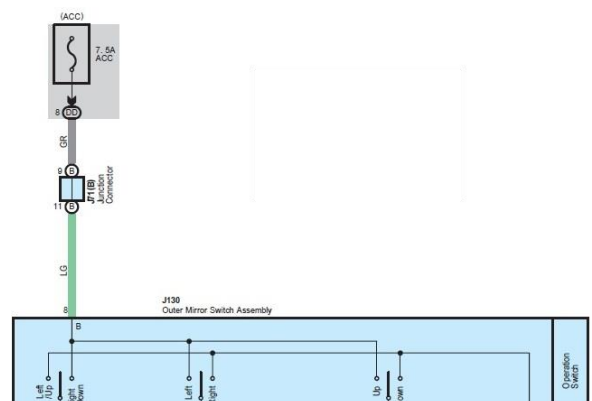
Picture 8

**NOTE:** If you are installing this kit on a **Tundra Platinum or 1794 Edition model**, skip steps 11~13 and jump to step 14.

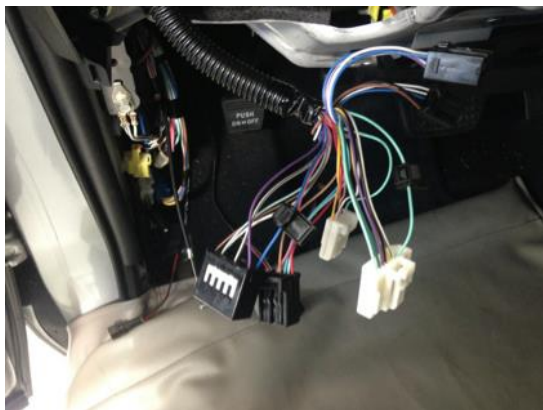
11. Connect the cabin wire harness to the driver box.
12. Install a black T-tap to connector J130 pin 8, light green wire. J130 is located on the back of the power mirror control switch. Then connect the red wire from DRL cabin harness (with switch option) to the t-tap (pictures 9, 9A and 9B).



Picture 9: DRL red wire to connector J130 (light green wire)

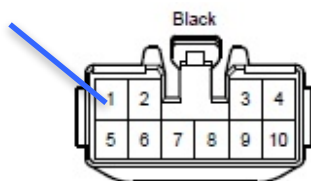


Picture 9A

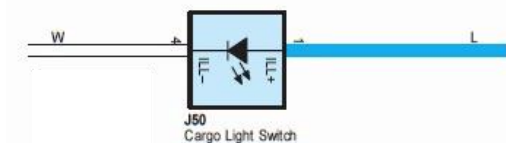


Picture 9B

13. Install a black T-tap to connector J50 pin 1, blue. J50 is located at the back of the cargo light switch. Then connect the blue wire from DRL harness to the t-tap (pictures 10 and 10A).



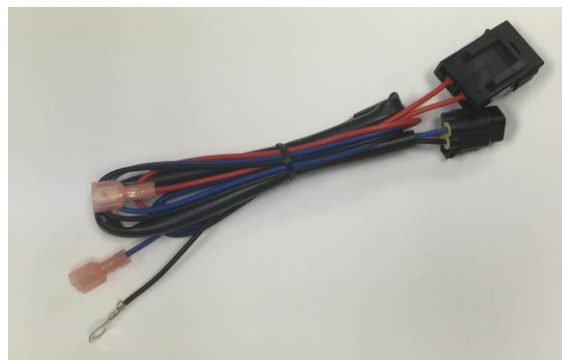
Picture 10: DRL blue wire to connector J50, pin1 (blue wire)



Picture 10A

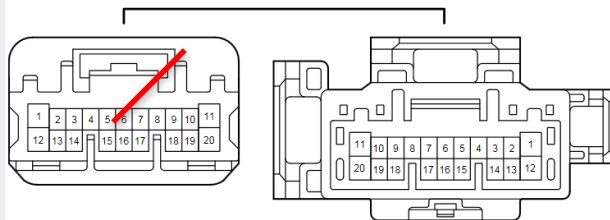
**Tundra Platinum and 1794 Edition models ONLY** (steps 14~16).

14. Connect the cabin wire harness with “no switch” option to the driver box, and secure excess wire to driver box (picture 11).

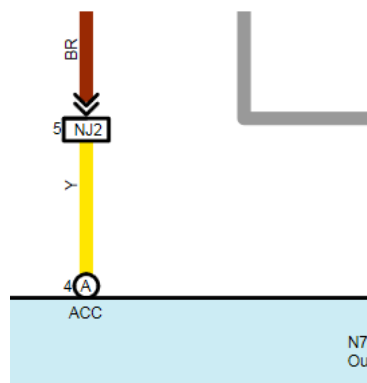


Picture 11

15. Install a black T-tap to connector NJ2 pin 5, yellow wire. NJ2 is located in the lower section of the kick panel area. Then connect the red wire from DRL harness to the t-tap (pictures 12, 12A and 12B).

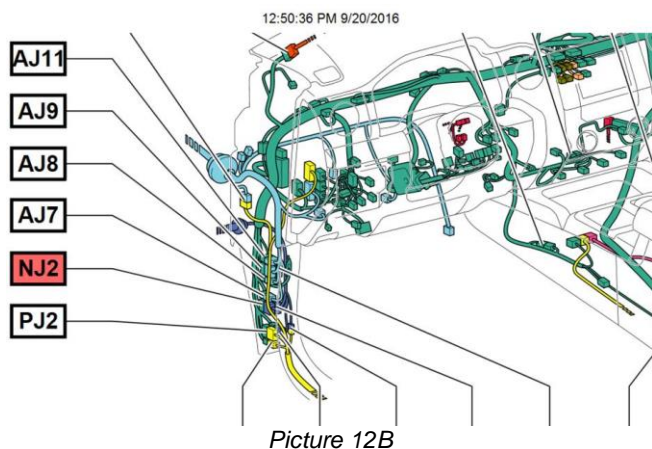


Picture 12: DRL red wire to connector NJ2 (yellow wire).  
**Tundra Platinum and 1794 models ONLY**



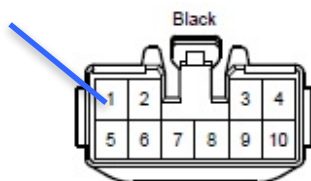
Picture 12A

**Tundra Platinum and 1794 models ONLY**

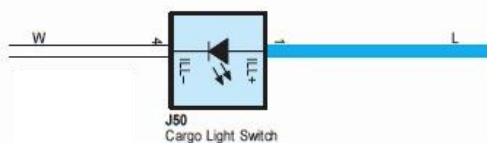


**Tundra Platinum and 1794 models ONLY**

16. Install a black T-tap to connector J50 pin 1, blue. J50 is located at the back of the cargo light switch. Then connect the blue wire from DRL harness to the t-tap (pictures 13 and 13A).



Picture 13: DRL blue wire to connector J50, pin1 (blue wire)



Picture 13A

17. Secure ground (black) wire to bolt by the kick panel (picture 14).



Picture 14

18. Secure relay, fuse and any excess wire from t-taps to factory wire harness, next to driver box (picture 15).



Picture 15

**Note: Tundra Platinum and 1794 Edition models, skip steps 19~20.**

19. Use an empty switch knock out on left panel, (left to the cargo light switch) and mount switch into switch knock out (picture 16).



Picture 16

20. Plug DRL harness into switch.
21. Reinstall dash panels and connectors.



**ENGINE COMPARTMENT**

22. From underneath the hood remove two plastic fasteners from the factory grille located inside of the headlamps with a nylon fastener tool (picture 16).



Picture 16

23. Remove four 10mm bolts from the plastic radiator cover then pull the radiator cover upward to remove (picture 17).



Picture 17

24. Pull the top of the grille slightly forward a couple of inches, reach down behind the grille and press on two plastic latches located on the bottom and ends of the factory grille (picture 18) while pulling the bottom of the grille forward, remove the grille from the vehicle (Picture 18A).

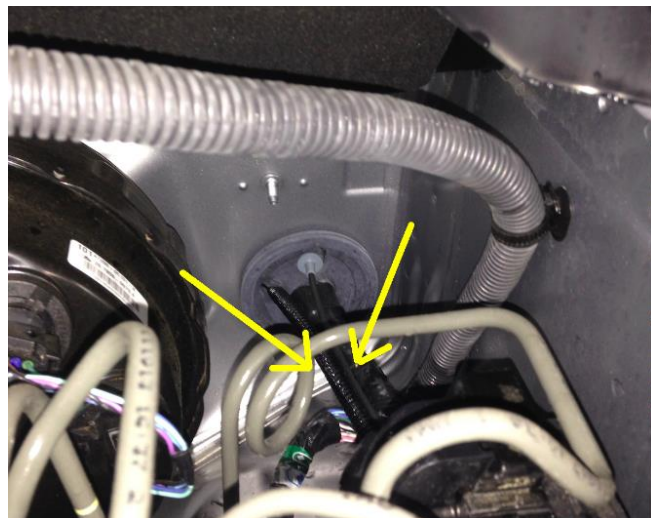


Picture 18

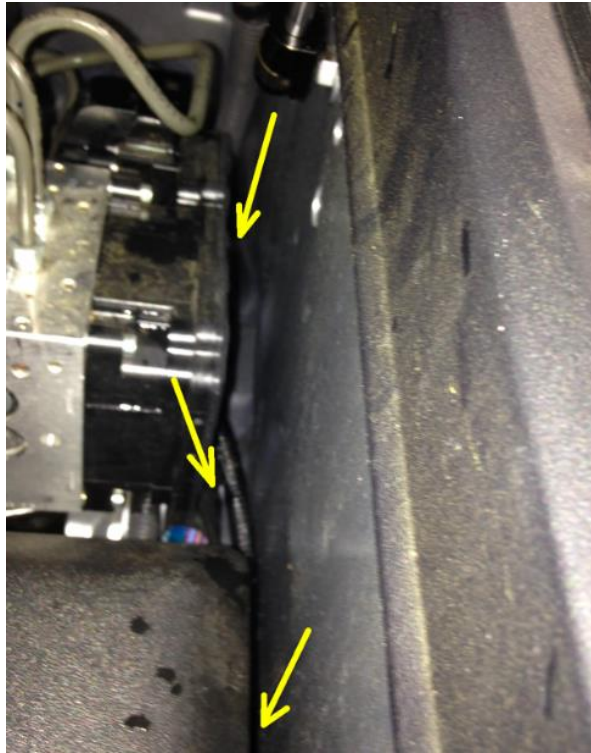


Picture 18A

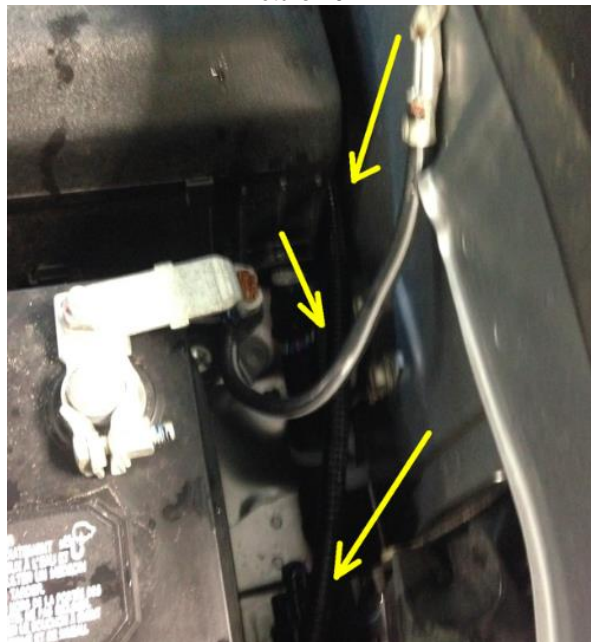
25. Using wire ties, secure the DRL's wire harness along the driver side of vehicle (pictures 19, 19A and 19B)



Picture 19



Picture 19A



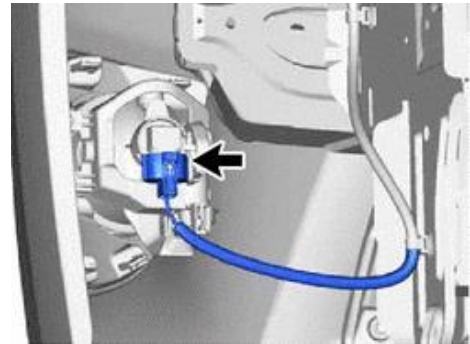
Picture 19B

26. At the driver side, pull the radiator liner, next to the headlamp (picture 20)



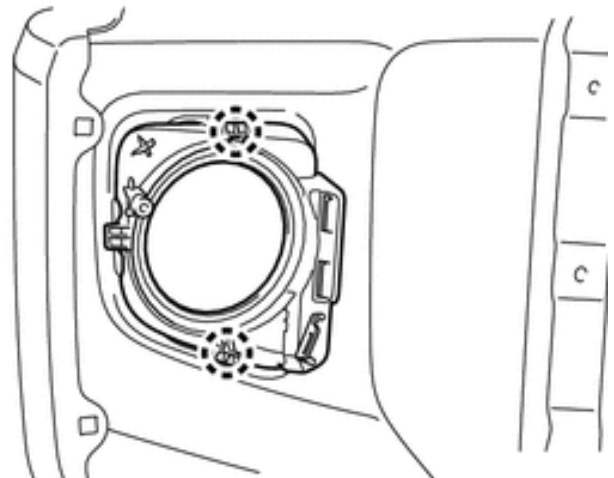
Picture 20

27. From behind the liner, unplug driver side fog lamp (picture 21)



Picture 21

28. For steel bumper models: from the front of the bumper, using a pry tool, remove the bezel from the bumper. There are two claws that secure the bezel to the bumper.



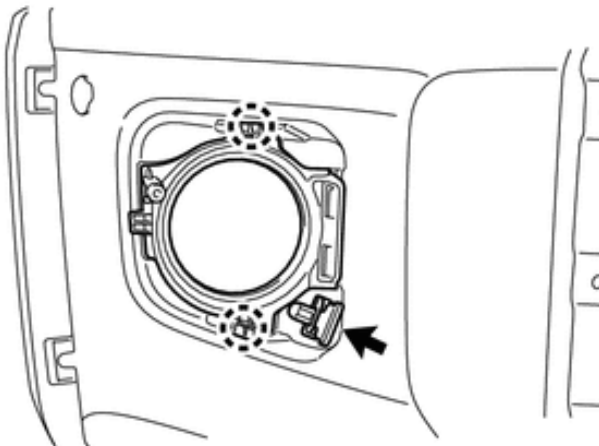
Picture 22





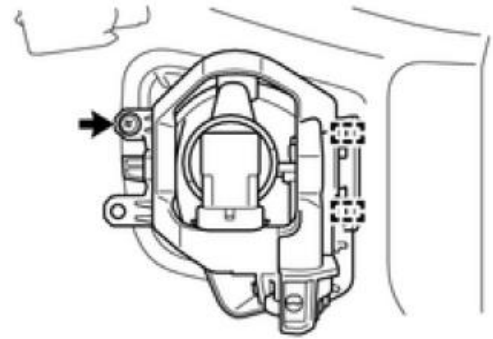
Picture 22A

29. For Resin bumper models: First remove the clip that secures the bezel to the bumper. Then, from the front of the bumper, using a pry tool, remove the bezel from the bumper. There are two claws that secure the bezel to the bumper (picture 23).



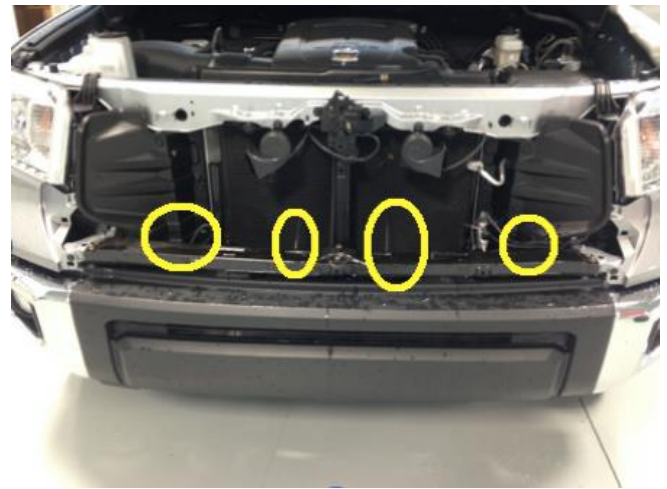
Picture 23: Showing clip on resin bumpers.

30. Remove the factory fog light from bezel: remove Philip screw (do not discard screw, as it will be used to mount 2in1 light).



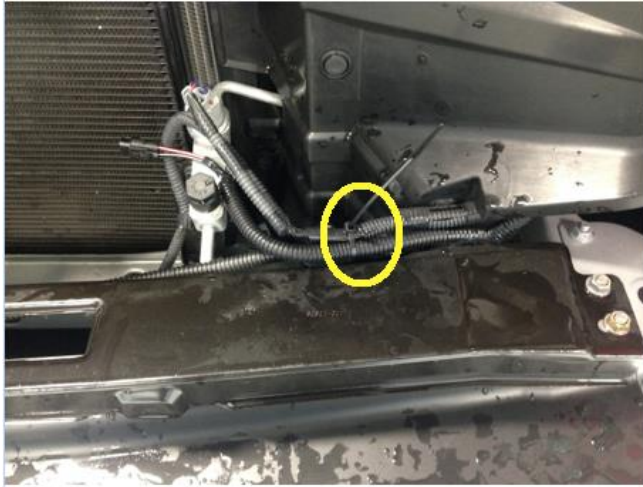
Picture 24

31. Repeat steps 25~28 on passenger side.
32. Mount the LH and RH 2 in 1 Lights into bezels.
33. Run the 2 in1 wire harness to the right side above the bumper, and secure with wire ties as shown (picture 25).



Picture 25

34. Secure excess wires at both sides with wires ties, leaving enough lead to connect the DRL to the harness (picture 26).




Picture 26

35. At the driver side, take the 2 in 1 light and plug the factory fog light connector into 2 in1 fog light terminal and then connect the DRL harness to the 2 in 1 light DRL terminal (picture 27). Then reinstall the 2 in 1 light and bezel back into bumper.



Picture 27

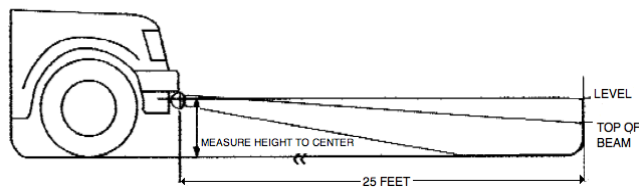
36. Repeat process for passenger side.
37. Secure excess wire from DRL harness with wire ties.
38. Reinstall all panels and radiator grill.
-  39. Reinstall negative battery cable and torque to 48 in-lbs
40. Adjust fog light aiming by following the procedure below.

## Fog Light Aiming

Traditional fog lights are usually mounted in the front bumper about 10-24 inches from the ground. There are two important issues to address when installing fog lights: the first is to minimize the amount of return glare into the driver's eyes, and the other is to minimize the glare into oncoming eyes. Both of these issues must be accomplished while putting as much light as possible on the road.

These fog weather light aiming instructions are suggestions taken from common practice and the S.A.E. standard J583. Some modifications to these instructions may be necessary to minimize glare.

Visual aim is made with the top of the beam 4 inches below the lamp center at 25 feet with the lamp facing straight forward (see picture 25)



Picture 25

**NOTE:** Use only hand tools to adjust the fog light aiming screw. DO NOT use automatic tools, as they will damage the fog light



<b>Checklist</b> – these points MUST be checked to ensure quality installation
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### Check System for Operation

1. DRL will work at full power when ignition switch is ON. DRL will dim out to DOT specifications when lights are ON.
2. For the SR, SR5 and Limited models: If DRL switch position is off, DRL will not work at any time.

### Check

#### Accessory Functions Checks

- |                          |                                    |
|--------------------------|------------------------------------|
| <input type="checkbox"/> | DRL function.....                  |
| <input type="checkbox"/> | Fog Lights function.....           |
| <input type="checkbox"/> | All Panels snapped into place..... |
| <input type="checkbox"/> | Fog Lights.....                    |
| <input type="checkbox"/> | Battery Terminal.....              |
| <input type="checkbox"/> | Operation Guide.....               |

#### Vehicle Function checks

- |                          |                                      |
|--------------------------|--------------------------------------|
| <input type="checkbox"/> | Check functions all switch functions |
|--------------------------|--------------------------------------|

### Look For:

- |      |   |
|------|---|
| .... |   |
| .... |   |
|      | - Loose panels and switches                   |
|      | - Visually confirm lights are straightforward |
|      | - Re-torque battery terminals to 48 in-lb     |
|      | - Place DRL operation guide inside glove box. |