

TOYOTA

CAMRY

2012-2014

2 in 1 LED UPGRADE KIT

Part Number: T4R-2N1



Kit Contents

Item #	Quantity Reqd.	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 Reqd.	Description
1	1	Hood Wire Harness
2	1	Cabin Wire Harness
3	25	8" Wire ties
4	2	Black T-Taps
5	1	14" wire tie
6	1	Relay
7	2	Phillip Head Screws
8	2	DRL Connectors

General Applicability

Models with factory fog light

Conflicts

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

Recommended Tools

Safety Tools	
Safety Glasses	
Protective tape	
Electrical Tape	
Installation Tools	
10mm Wrench	
Phillips Screw Driver	
Pliers	
Panel Tool Removal	
Side Cutters	
Torque Wrench	
Special Chemicals	
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.

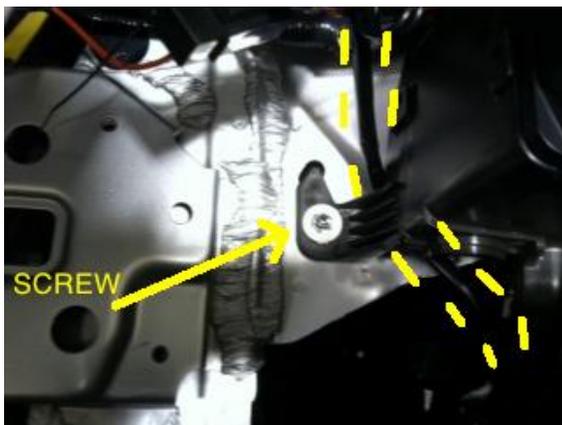
Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure quality installation.

Preparation

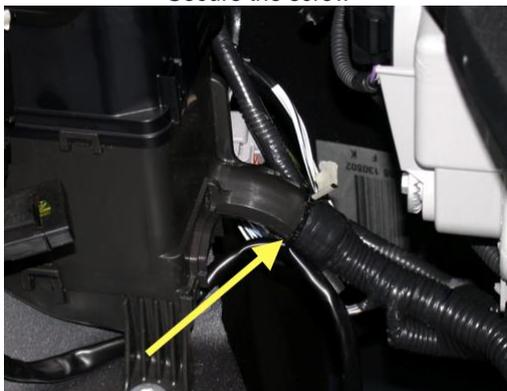
 Remove negative battery cable

Installation

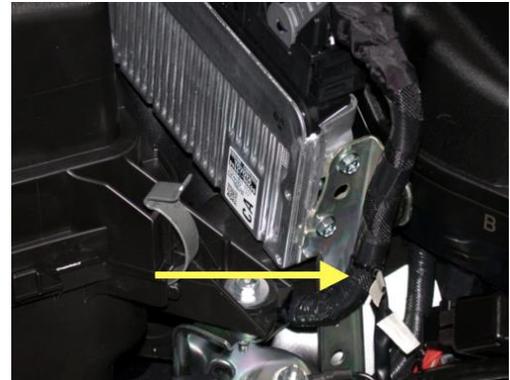
1. From front of vehicle, run the DRL's wire harness on the driver side from the battery towards the firewall of the car. Use wire ties as needed (pictures 1A ~1E).



Picture 1A: Remove screw of the base of filter box. Gently, lift the base and slide in the wire harness. Secure the screw



Picture 1B: wire tie to the harness just below the driver's side headlight



Picture 1C: wire tie to the ECU harness



Picture 1D: run wire behind air filter box



Picture 1E: wire tie left to brake reservoir

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 and red-white wires through

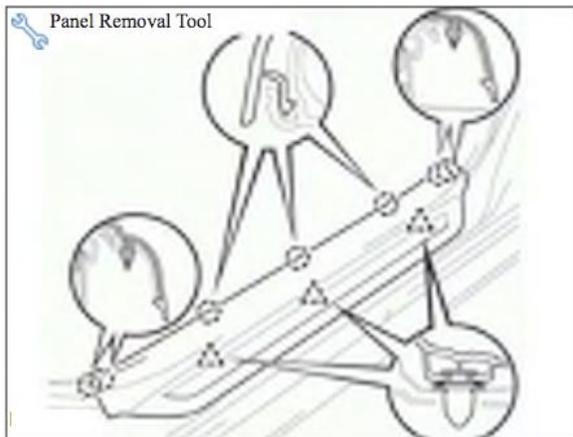
firewall. Note: Extra caution should be taken not to damage the pin connectors. Seal with 3M Silicone sealant (picture 2).



Picture 2

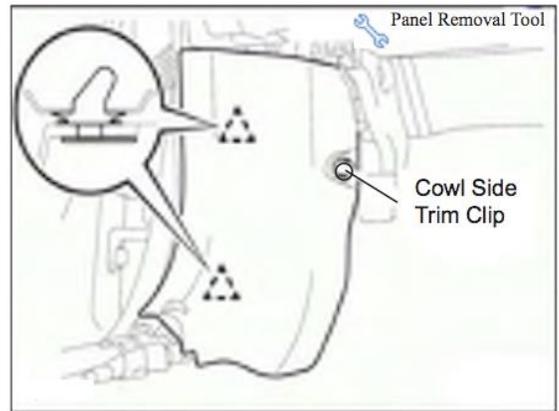
Vehicle Disassembly

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



Picture 3

4. Remove the driver side cowl side trim (see picture 4):
 - a. Unscrew the cowl side trim clip.
 - b. Disengage two (2) clips and remove the cowl side trim.



Picture 4

5. Remove the finish panel covering the knee airbag, lower airbag and move aside to access behind dashboard.
6. Remove side panel from dash, pry outward at front edge then pull straight back (pic. 5).



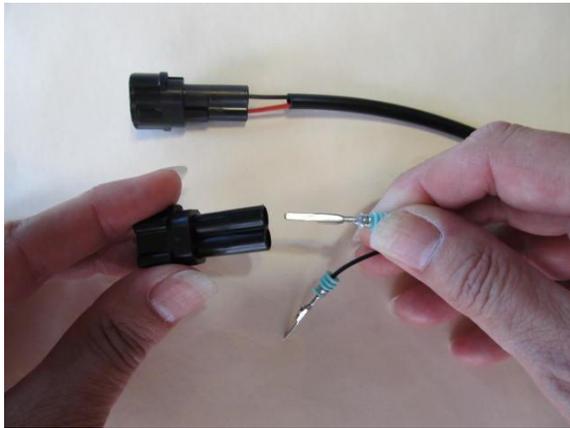
Picture 5

7. Remove dash plug then mount switch into switch knockout on left side of dash (see picture 6).



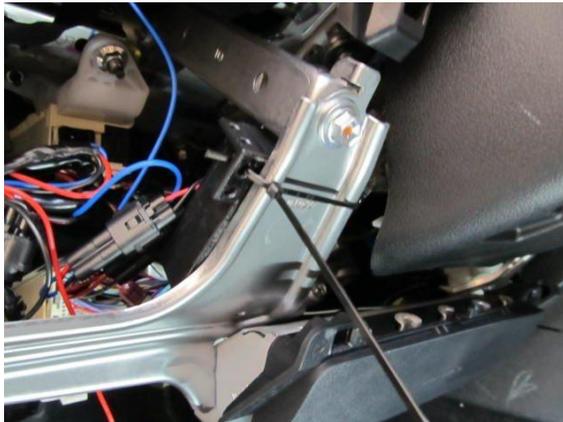
Picture 6

8. From inside the cabin, locate the wires that were pushed through in step 2. It will be the grommet above the gas pedal.
9. Push the pins into the connector supplied in kit. Make sure that the wire colors of the connectors are aligned with the wire colors of the driver box: black with black and red with red, etc (picture 7).



Picture 7

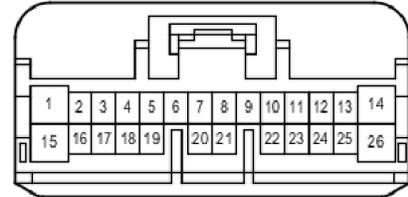
10. Connect the driver box to the wires pushed into the connectors on step 10 (make sure wire colors are aligned).
11. Using a 15" wire tie, secure the driver box next to the steering wheel column (pic. 8).



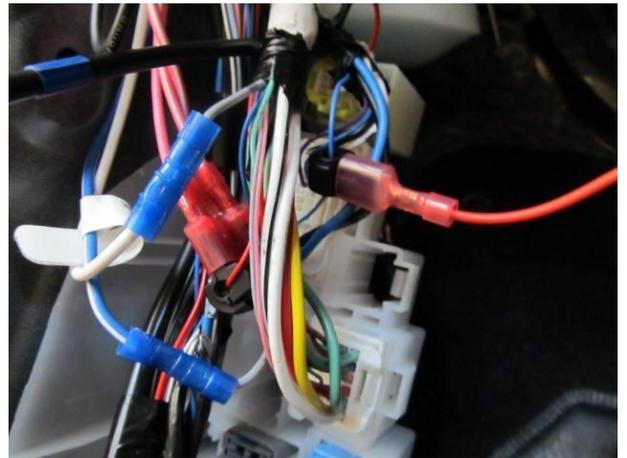
Picture 8

12. Route the wires to the left area of the steering column. Use wire ties as needed

13. T-tap the red wire from DRL harness to connector K12 pin 19, blue wire. Connector K12 is located in the driver side kick panel (pictures 9 and 10).

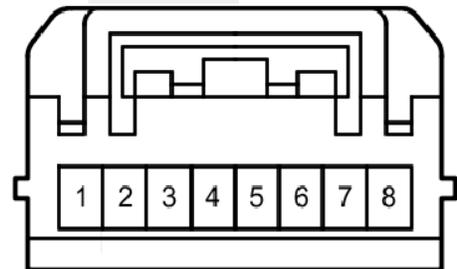


Picture 9: Connector K12

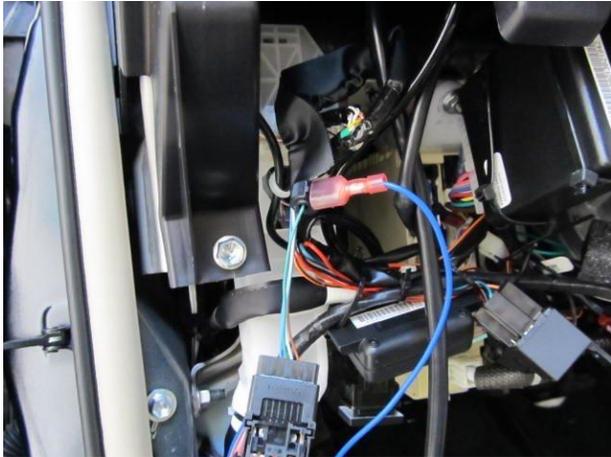


Picture 10

14. T-tap the blue wire from DRL harness to connector I130 pin 5, green wire. Connector I130 is located at the back of the traction control switch (pictures 11 and 12).



Picture 11



Picture 12

- Secure ground (black) wire to bolt in kick panel (see picture 13).



Picture 13

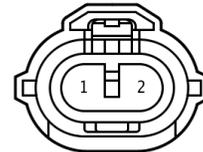
- Secure any excess wire from t-taps to main wire harness, along with double female bullet connector. Plug in the switch and secure relay
- Reinstall dash panels and connectors

ENGINE COMPARTMENT

- On the driver side, route the DRL's wire under car to reach left fog light area.
- Remove lower splash shields on both sides and then fog light cover plates.

- Remove the factory fog lights.

Note: If the fog light connector is pre-installed in the kit, proceed to step 24
- The factory fog light harness polarity is shown in picture 14. Pin 1 is negative. Pin2 is positive.



Picture 14: Factory Fog Light harness.
Pin 1: Negative
Pin 2: Positive



Picture 14A

- Push the wires from LED fog light housing into the supplied connector, to match the polarity of the factory wire harness (pic. 15).



Picture 15: 2in1 Fog Light wire terminal.



Picture 15A: Showing Fog light terminal connected

- Before connecting the LED Fog light, make sure that wires are aligned:

- LED Fog light red (+) with factory white (+)
 - LED Fog Light black (-) with factory white-black (-)
24. Insert one side of the 2in1 housing into the plastic sleeve and secure other side with supplied Phillip screws (picture 16). Repeat this step for left and right fog lamps.



Picture 16

25. Plug in left side DRL into harness plug and secure with wire ties .
26. Plug in the left fog light harness.
27. Run right side of wire harness under skid plate and secure with wire ties (picture 17).



Picture 17

28. Plug in right DRL into harness plug and secure with wire ties.
29. Plug in the RH fog light to factory harness.

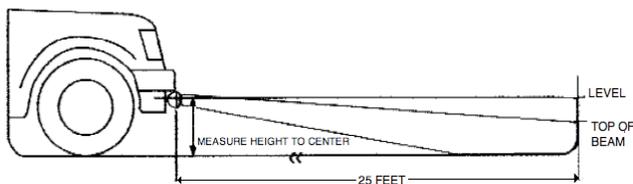
30. Snap on both DRL bezels.
31. Reattach the lower splash shields.
32. Reinstall negative battery cable. Torque to 48 in-lb.

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 20).



Picture 20

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

Checklist – these points MUST be checked to ensure quality installation

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. If DRL switch position is off, DRL will not work at any time.

Check

Accessory Functions Checks

- DRL function.....
- Fog Lights function.....
- All Panels snapped into place.....
- Fog Lights.....
- Battery Terminal.....
- Operation Guide.....

Vehicle Function checks

- 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.