Part Number: TRA-713



#### **Kit Contents**

Item #	Quantity Reqd.	Description
1	2	DRL's bezels w/LED DRL
2	1	Driver Box
3	1	Harness bag
4	1	User's card
5	1	Cushion pad
6	1	Switch
7	2	Drill Jigs

**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	DRL Connectors
8	6	Bolts

	General	Applica	bility
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Conflicts			
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#### **Recommended Tools**

Safety Tools	
Safety Glasses	
Protective tape	
Electrical Tape	
<b>Installation Tools</b>	
10mm Wrench	
Phillips Screw Driver	
Pliers	
Fish Tool	
Panel Tool Removal	
10 mm drill bit	
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



<u>CRITICAL PROCESS:</u> 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 cools 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

 Route the DRL wire harness along the driver side from the battery towards the firewall of the vehicle. Secure the wire harness with wire ties as needed (picture 1)



Picture 1

2. From inside the car, locate the large vehicle harness grommet on the left side. If accessible, cut the auxiliary wiring nipple off the grommet or cut 1/4" slit in grommet. Using fish tape pull the red, black, red-white and black-white wires through firewall. Note: Extra caution should be taken not to damage the pins. Seal with 3M Silicone sealant from inside vehicle (pictures 2 & 2A)



Picture 2: View from inside vehicle

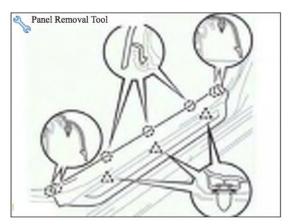


Picture 2A: View from the engine compartment

## **Vehicle Disassembly**

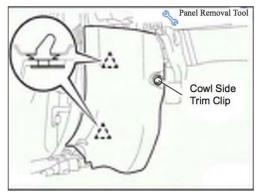
3. Remove driver side door scuff plate:

Disengage with panel tool and remove
(pic.3)



Picture 3

Remove the driver side cowl side trim.
 Unscrew the cowl side trim clip. Disengage two (2) clips and remove the cowl side trim (picture 4)



Picture 4

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



Picture 5

6. Remove driver's side upper panel (pic. 6)



Picture 6

- Locate the wires that were pulled through the grommet in step 2. Route wire harness towards the left side of steering wheel. Use wire ties as needed.
- 8. Using the driver box as a guide, push the pins of the DRL wire harness 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

- Connect the driver box to the wire harness (make sure wire colors are aligned).
- 10. Using a 14" wire tie, secure the driver box next to the main junction block (pic. 8).



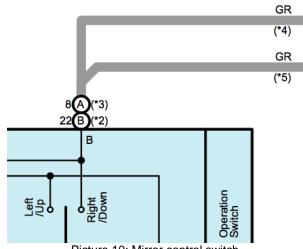
Picture 8

 Secure the black wire with a ring terminal from DRL harness to ground location behind kick panel (picture 9)

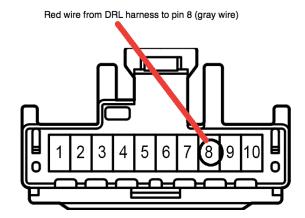


Picture 9

- Note: If vehicle is made in Canada (TMMC), then follow step 10. If vehicle is made in Japan (TMC), then follow step 11.
  - 12. Canada made vehicles (TMMC): At connector G39 install a black T-Tap to pin 8, gray wire. Then connect the red wire from DRL harness to T-tap. Connector G39 is located at the back of mirror control switch. (pictures 10 and 10A)

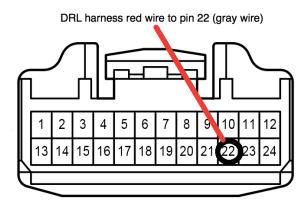


Picture 10: Mirror control switch Connector G39, Pin 8: TMMC made Connector G151, Pin 22, TMC made

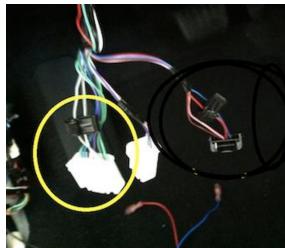


Picture 10A: Mirror control switch G39 NOTE: For Canada made vehicles ONLY

13. (Japan (TMC) made vehicles: At connector G151 install a black T-Tap to pin 22, gray wire. Then connect the red wire from DRL harness to T-tap. Connector G151 is located at the back of mirror control switch. (pictures 10, 11 and 11A)

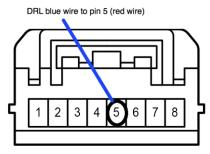


Picture 11: Mirror control switch G151 NOTE: For Japan made vehicles ONLY

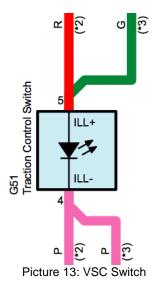


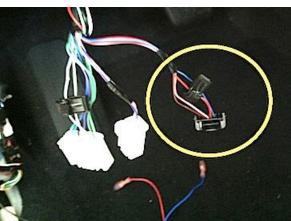
Picture 11A

14. At VSC switch control connector G51, pin 5, install a T-Tap to the red wire. Then connect the blue wire from DRL harness to t-tap. Connector D3 is located at the VSC dash switch. (Pictures 12, 13 and 14).



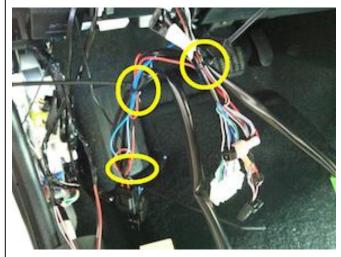
Picture 12: VSC switch connector G51





Picture 14

15. Secure any excess wire from t-taps, fuse and relay to main wire harness (picture 15 & 15A). Make sure to leave enough lead on the switch green connector.



Picture 15



Picture 15A

- 16. Push out the switch knockout located at the left of the steering wheel.
- 17. Route DRL switch connector through switch knockout connector.
- 18. Mount switch into dash panel. Then connect the switch wire harness to switch (pic 16)

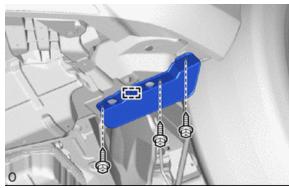


Picture 16

19. Reinstall panels and connectors

#### **ENGINE COMPARTMENT**

 Remove front fender splash shields by removing 3 screws. Then detach the clamp (picture 17)



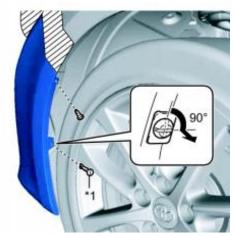
Picture 17

21. Remove 6 screws at the bottom of front bumper cover (picture 18)



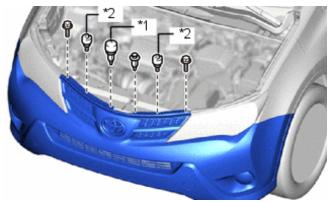
Picture 18

22. Remove the top screw securing fender lining. Then, using a screwdriver, turn clip 90 degrees and remove the pin/clip. Use same procedure for LH and RH sides (picture 19)



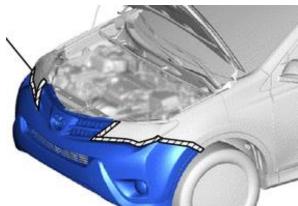
Picture 19

23. Remove the center hood cushion and 2 radiator grill protectors (picture 20), then remove 2 bolts and clips



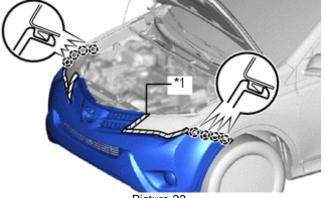
Picture 20

24. Put protective tape around the bumper cover (picture 21)



Picture 21

25. Detach the 8 claws then remove the front bumper cover (picture 22)



Picture 22

26. Place bumper on a workbench. On the front of the grill, place the LH drilling jig (supplied in kit) on grill. Then drill 3x 8 mm holes. Repeat step for RH side (picture 23).



Picture 23

27. Install LH and RH DRL's on grill with supplied screws (picture 24).

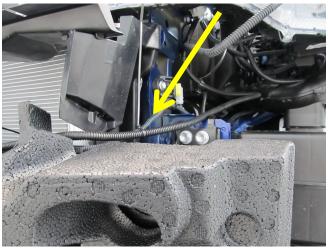


Picture 24

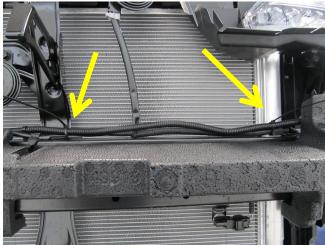
28. In the engine compartment, route the wire harness behind the driver's side head-lamp towards the radiator grill. Then route to the passenger side, securing harness by the bumper absorber assy. Use wire ties as shown (pictures 25~25B).



Picture 25:
Driver side head-lamp: showing securing excess wires



Picture 25A: Driver side: securing wire harness behind by radiator



Picture 25B

29. Reinstall bumper and connect DRLs to harness.

- 30. Reinstall lower splash shield.
- 31. Reconnect negative battery terminal.

  Torque terminal to 48 in-lbs.

TOYOTA RAV4 2013 - 15 LED DRL

**Checklist** — these points MUST be checked to ensure quality installation

## **Check System for Operation**

- While switch is in "ON" position (green indicator light on switch will illuminate), DRL will work at full power when ignition switch is ON.
- DRL will dim out to DOT specifications when vehicle lights are "ON"
- If DRL switch position is "OFF", DRL will not work at any time

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**Accessory Functions Checks** 

	DRL function
	All Panels snapped into place
	Battery Terminal
Ve	ehicle Function checks
	Check functions all switch functions

### Look For:

- Loose panels and switches
- Re-torque battery terminals to 48 in-lb

# **VEHICLE FUNCTION CHECK**

AFTER ALL PANELS, COVERS AND COMPONENTS THAT WERE REMOVED HAVE BEEN REINSTALLED, TEST THROUGHLY ALL MECHANICAL AND ELECTRICAL COMPONENTS DISCONNECTED AND/OR REMOVED FROM THE VEHICLE DURING THE INSTALLATION OF THIS ACCESSORY