## ТОУОТА

## **COROLLA**

2014-16

# **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 Installed Fog Lights

#### 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 isols and equipment required for this process
REVISION MARK: This mark highlights a change in

#### 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.

installation with respect to previous issue.

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 bulkhead of the vehicle. Secure the wire harness with wire ties as needed (picture 1)



Picture 1

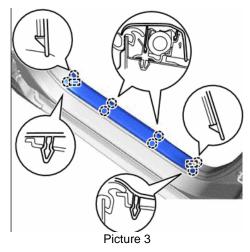
 Locate the large vehicle harness grommet on the driver side. If accessible, cut the auxiliary wiring access nipple off the grommet or cut ¼" slit in grommet. Using fish tool Push the DRL wire harness through grommet. <u>Note</u>: Extra caution should be taken not to damage the pin connectors. Seal with 3M Silicone sealant (picture 2).



Picture 2

#### **Vehicle Disassembly**

 Remove the driver's scuff plate, by disengaging the claws (picture 3)



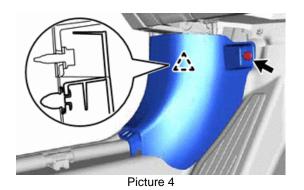
 Remove the side kick panel by removing the clip (picture 4)

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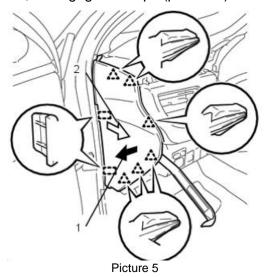
## COROLLA

2014-16

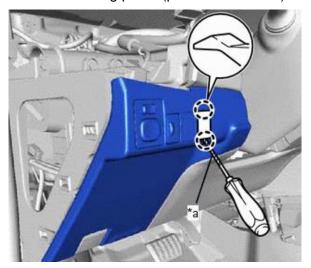
# 2 in 1 LED UPGRADE KIT



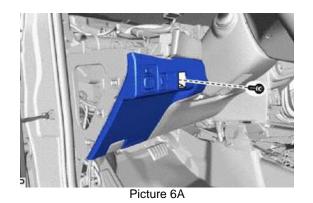
5. Remove side instrument panel. Using a pry tool, disengage the clips (picture 5)



 Remove left side switch panel: Remove switch knockout, then remove screw and claws securing panel (pictures 6 and 6A)



Picture 6



 Use an empty switch knock out on left panel, then mount switch into switch knock out (picture 7)



Picture 7

 Locate the wires that were pushed through the grommet in step 5. It will be the grommet above the gas pedal. Route the wire harness to reach the area on left of the steering wheel and tie wrap to factory harness (picture 8)

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#### COROLLA

2014-16

## 2 in 1 LED UPGRADE KIT



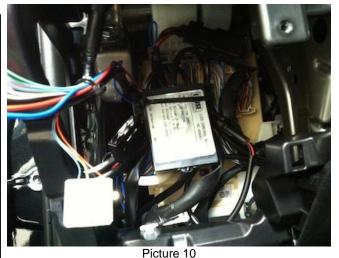
Picture 8

9. 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 9)

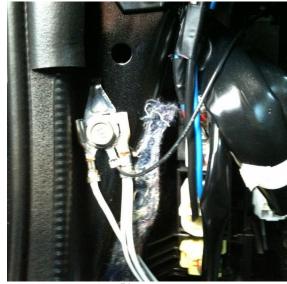




- 10. Connect the driver box to the wire harness (make sure wire colors are aligned).
- 11. Using a 14" wire tie, secure the driver box next to the main junction block (pic. 10).



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- 12. Secure black ground wire to ground point behind kick panel (picture 11).



Picture 11

 At connector E22 install a black T-Tap to pin 19, gray wire. This is part of the power mirror switch circuit. Then connect the red wire from DRL harness to T-tap. Connector E22 is located behind the door mirror control switch (pictures 12, 13 and 14) DRL blue wire to Pin 12 (green wire)

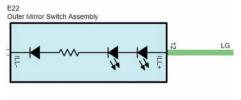




Picture 13

	ß	
E22 Outer Mirror Switch Assembly	19	
	В	
Picture 14: Door mirr		•

- Picture 14: Door mirror control switch
- 14. At connector E22 (power mirror control switch), pin 12, install a black T-Tap to the light green wire. Then connect the blue wire from DRL harness to t-tap. (pictures 12, 13 & 15).



Picture 15

Secure relay in vertically, in a 12:00 position, so moisture does not condensate inside. Then secure excess wire from t-taps and fuse to main wire harness (picture 16).



Picture 16

16. Reinstall all panels and connectors inside car.

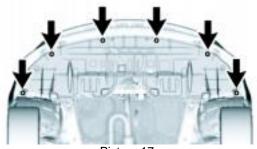
## **Engine Compartment**

- 17. On the driver side, route the DRL wire harness to reach the driver side fog light area.
- Remove lower splash shield. There are 6 screws and 2 push-pins on the bottom of bumper (picture 17). Then remove hard plastic shield above lower splash shield.

## ΤΟΥΟΤΑ

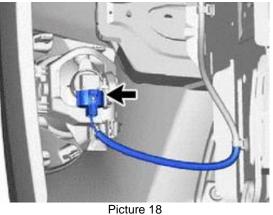
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# 2 in 1 LED UPGRADE KIT

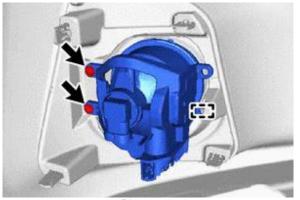


Picture 17

Unplug both factory fog lamps (picture 2) 19.



20. Remove the factory fog lamps, by removing the factory screw (s). Note: Factory screws will be used on installation. Do not discard them (picture 19).



Picture 19

Mount the LH and RH 2in1 Lights into 21. bumper: use the factory screws (picture 20)



Picture 20

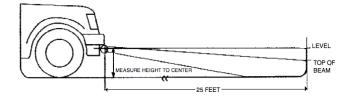
- Reinstall lower splash shield. 22.
- Adjust LED fog lights. 23.
- 24. Reconnect negative battery terminal. Torque terminal to 48 in-lbs.

# **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 21)



Picture 21

**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**

- DRL will work at full power when ignition switch is ON. DRL will dim out to DOT specifications when lights are ON.
- 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.