Part Number: TCO-303 / TCO-810



### **Kit Contents**

Item #	Quantity Reqd.	Description
1	2	Fog Lamps
2	2	Fog Light bezels
3	1	Switch Assembly
4	1	Fog Light Operation guide
5	1	Harness Bag

**Hardware Bag Contents** 

Item#	Quantity Reqd.	Description
1	1	Wire harness
2	1	Switch harness
3	2	Relays
4	25	Wire ties
5	4	Phillip head screws
6	2	Black T-Taps
7	1	Green Jumper Wire
8	2	LED Connectors (for TCO-810)

#### **Conflicts**

<ul> <li>Factory</li> </ul>	Inctall	ed Foo	r Lighte

#### **General Applicability**

Model	S
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#### **Recommended Tools**

Safety Tools	
Safety Glasses	
Electrical Tape	
<b>Installation Tools</b>	
10mm Wrench	
Phillips Screw Driver	
Pliers	
Side Cutters	
<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.



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



REVISION MARK: This mark highlights a change in 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

Secure the relay and fuse to the negative battery harness next to the battery. Secure top and bottom with wire ties (picture 1).



Picture 1

 Attach the ring terminal with 2 black wires to the 10mm bolt at factory ground next to battery (picture 2)



Picture 2

 Connect the ring terminal from the relay (12v red wire) routing it through positive red terminal cover (picture 3)

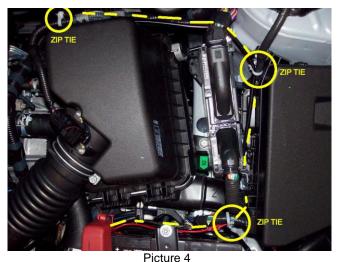


Picture 3

4. 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. Secure excess wires with wire ties to fuse block wire harness. Push the red and gray/white wires through firewall. Note: Extra caution

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- should be taken not to damage the bullet connectors. Seal with 3M Silicone sealant
- 5. Route wire to large vehicle grommet and secure with wire 3 wire ties (picture 4)



#### **Vehicle Disassembly**

 Remove left side switch panel by disengaging clips. Remove connector plugs (picture 5)



Picture 5

7. Mount switch into switch knockout on left side of dash (see picture 6)



Picture 6

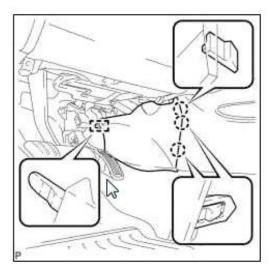
 Remove lower knee finish panel by removing 2 Phillip screws. Disengage 2 clips and disconnect tire pressure reset plug (picture 7)



Picture 7

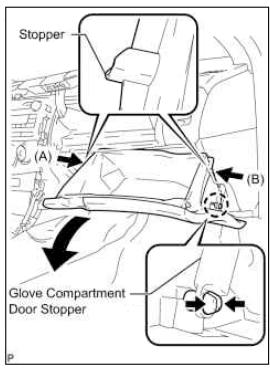
 Remove the left front console box insert.
 Disengage 3 claws, then disengage the guide (picture 8)

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Picture 8

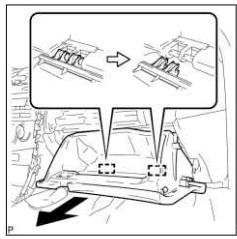
- Repeat step 9 for right front console box insert.
- 11. Remove glove compartment door:
  - a. Disengage the claw and release the door stopper (picture 9)



Picture 9

b. Bend portions (A) and (B) in the direction indicated by the arrows in picture 9A, to

release the 2 stoppers, and lower the glove compartment door



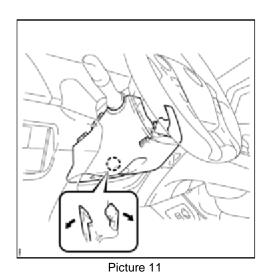
Picture 9A

- c. Pull the glove compartment door assembly horizontally toward the rear of the vehicle to release the 2 hinges, then remove door assy.
- 12. Remove lower steering wheel cover
- 13. Push the right and left sides of lower steering column cover to disengage the 4 claws (picture 10)

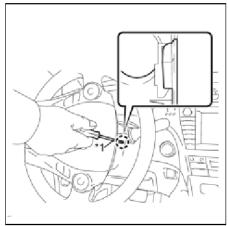


Picture 10

14. Insert fingers into the opening of the tilt leveler of the lower steering column cover to disengage the claw (picture 11)

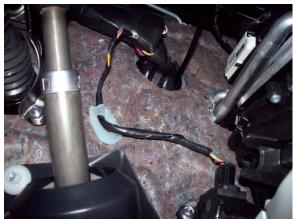


15. Turn the steering wheel assembly (pic. 12)



Picture 12

16. From inside the cabin, locate the wires that were pushed through in step 4. It will be the grommet above the gas pedal (picture 13)

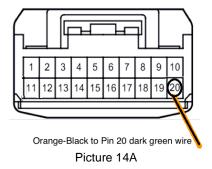


Picture 13

17. T-tap orange/black wire from fog light harness to connector E8 pin 20, dark green wire: first pin on left (pictures 14 and 14A). Connector E8 is located under the steering column.



Picture 14



18. Connect the 36" extension to the greenblack wire from the fog light harness. Run the extension to the passenger side, through the console box front area. Use wire ties as needed (picture 15 and 15A)



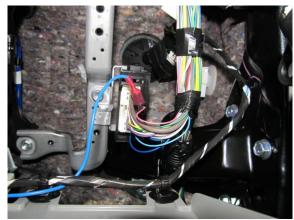


Picture 15

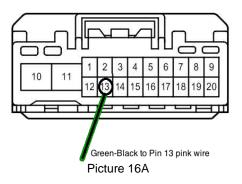


Picture 15A

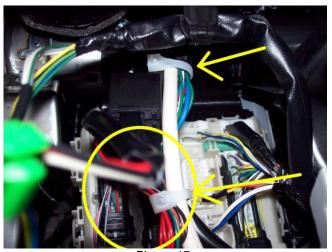
19. T-tap the 36" extension wire from fog light harness to connector E91 pin 13, pink wire. Connector E91 is behind the glove compartment (pictures 16 and 16A)



Picture 16



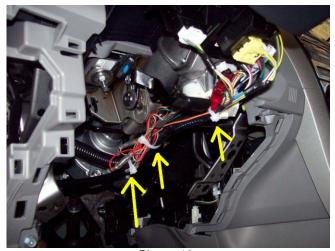
20. Secure top of fog light relay to big white wire at junction box connector. Run wire to switch location on switch finish panel and secure any excess wire along with bottom of relay to white wire at junction box (see picture 17)



Picture 17

 Secure any excess wire from t-taps from to main wire harness next to the steering wheel column (picture 18)

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Picture 18

- 22. Connect switch harness to switch
- 23. Reinstall glove compartment, dash panels and connectors

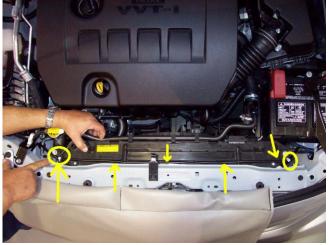
#### **ENGINE COMPARTMENT**

24. Remove 2x12 mm bolts holding the radiator supports from core support (picture 19)



Picture 19

25. Run harness along top of radiator and secure with a wire tie at each end (picture 20)



Picture 20

- 26. Reinstall radiator supports and torque to 14 ft-lb.
- 27. Run harness down right and left side of vehicle
- 28. Remove splash guard corners on both sides by removing a 10mm bolt (picture 21)



Picture 21

29. Remove fog light cover plates on both sides of vehicle

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30. Insert one side of the fog light into the plastic sleeve and secure with 2 supplied Phillip screws (picture 23). Repeat this step for other side of vehicle.



Picture 23

31. Note: For Halogen installations, proceed to step 32. For LED installations; The LED fog light wires may not be pushed into their connectors. If not, push the negative wire (black or black-white) into Pin 2 of the connector. Then, push the positive wire (red or red-white) into Pin 1 of the connector. See Picture 22 below.



LED Lights will NOT work if the polarity is reversed. Be sure the red positive wire of the harness matches the red positive wire of the light housing, and the black negative wire of the harness matches the black negative wire of the light housing.



Picture 22

- 32. Plug in left and right side fog light into harness plug and secure with wire ties.
- 33. Snap on both fog light bezels (picture 24)



Picture 24

- 34. Reattach the lower splash shield corners
- **35.** Reconnect negative battery cable. Torque to 48 in-lbs.

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

## **Check System for Operation**

- 1. Reconnect battery terminals
- 2. Turn on headlamp low beams, then press fog light switch to "ON" position. Fog lights should be working. Fog lights will only work when the low beam headlamps are "ON". Fog lights will NOT work when the high beam headlamps are "ON"

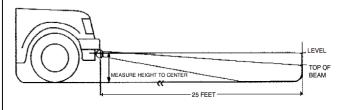
## **Fog Light Aiming**

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

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 24)



Picture 24

# TOYOTA COROLLA

# 2011 - 2013 FOG LIGHT (Halogen or LED)

Check	Look For:
Accessory Functions Checks	
☐ Fog Lights function	<ul> <li>Inoperable fog light function</li> <li>Loose panels and switches</li> <li>Re-torque battery terminals to 48 in-lb</li> </ul>
Vehicle Function checks  Check all vehicle functions	Tre-torque battery terminals to 40 in-ib