03/20/13

TOYOTA **PRIUS** 2013 -

Part Number: 00016-47660 **Accessory Code: LF10**



Conflicts

NONE			

Kit Contents

Item #	Quantity Reqd.	Description
1	2	Fog Lamps
2	1	Lower grill
3	1	Switch Assembly
4	1	Fog light operation guide

Hardware Bag Contents

Item #	Quantity Reqd.	Description
1	1	Wire harness
2	1	Switch harness
3	2	Relays
4	15	Wire ties
5	2	Phillip head screws
6	2	T-Taps

Additional Items Required For Installation

Item#	Quantity Reqd.	Description

Recommended Tools

Safety Tools		
Safety Glasses		
Electrical Tape		
Installation Tools		
10mm Wrench		
Phillips Screw Driver		
Pliers		
Torque Wrench	48" lbs	
Side Cutters		
Special Chemicals		
3M Silicon Sealant		

Accessory Service Parts

Part Number	Fog Light Housing RH	Fog Light Housing LH	Switch	Wire Harness	Relay	Lower Grill
00016-47660-01	X					
00016-47660-02		X				
00016-47660-06			X			
00016-47660-03				X		
00016-47660-05					X	
00016-47660-04						X

FOG LIGHT

General Applicability

Recommended Sequence of Application

Item #	Accessory	
1		
2		
3		

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 ools and equipment required for this process



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

SPECIAL NOTE:

After TMS and 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. These guidelines can be found in the Accessory Installation Practices document.

This document covers such items as:

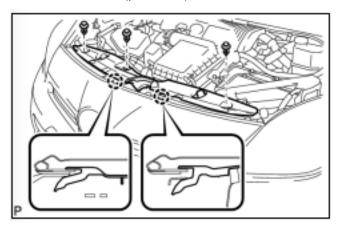
- Vehicle Protection (use of covers and blankets, cleaning chemicals, etc)
- Safety (eye protection)
- Vehicle Disassembly / Reassembly (panel removal, part storage, etc)

Preparation



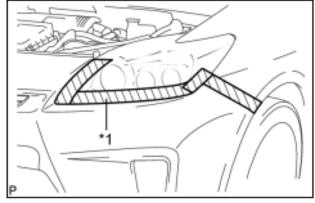
Remove negative battery cable

 Remove the radiator support opening cover, by removing 3 clips on top. Then disengage the 2 claws (picture 1)



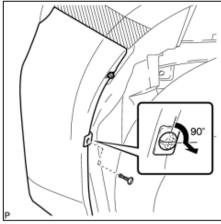
Picture 1

2. Use protective tape around the bumper (left and right sides)



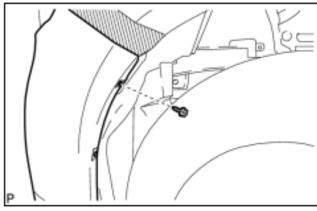
Picture 2

Remove the pins located at the left wheel well: turn the pin 90 degrees



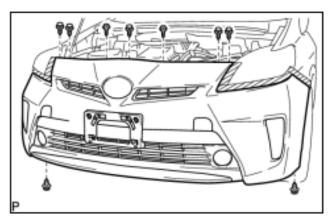
Picture 3

4. Remove screw located next to the pin



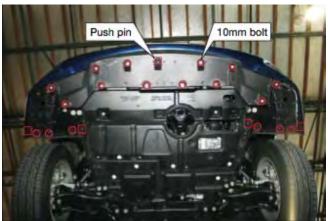
Picture 4

- 5. Repeat steps 3 and 4 for RH side of bumper
- 6. Remove 7 clips on top of bumper, then remove 2 bolts at the bottom of it (picture 5)



Picture 5

7. Remove left and right splash shields from the front of the car. There are 18 x10mm bolts and 5 plastic push pins (picture 6)



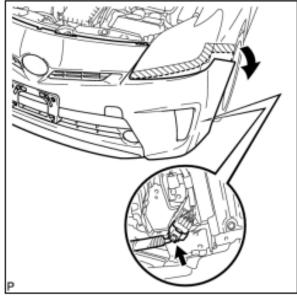
Picture 6

8. Disengage 3 claws (picture 7)



Picture 7

9. On the left side of bumper, disconnect the turn signal connector. Then dismount bumper (picture 8)



Picture 8

- 10. Remove bumper from vehicle
- Remove the secondary splash shield from bumper. Remove two screws and then disengage clips (pictures 9 and 9A)

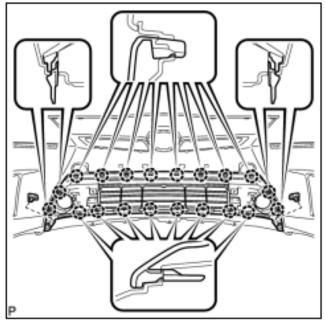


Picture 9



Picture 9A: disengaging clips

12. Remove factory lower radiator grill from bumper: there are two retainers on the outside and 20 claws (pic. 10 & 10A)



Picture 10



Picture 10A: showing the retainer

 Mount fog lights into lower grill by sliding fog light tabs into slots and secure other side with supplied screw (picture 11)



Picture 11

14. Install supplied lower grill to bumper by reversing step 12. Care should be taken to assure all tabs are locked into place (pic 12)



Picture 12

15. Locate the ECU mounting bracket on the top left corner of the fuse block, right of the brake fluid reservoir (picture 13)



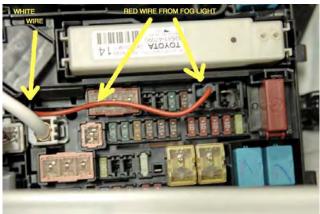
Picture 13

 Attach the ring terminal with 2 black wires to the 10mm bolt off the ECU bracket (see picture 14)



Picture 14

17. In the hood area, locate the red 12v wire from fog light harness to inside the fuse block. Follow the path of the big white wire.
12v red wire will be connected at the end of the installation (picture 15)



Picture 15

 Wire tie relay and fuse holder to harness next to fuse block (picture 16)



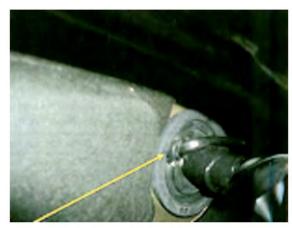
Picture 16

19. Route wire along factory harness and secure with wire ties (picture 17)



Picture 17

20. Locate the large vehicle harness grommet on the left side. If accessible, cut the auxiliary wiring access nipple off the grommet or cut ¼" slit in grommet and push the red and gray/white wires through firewall. Note: Extra caution should be taken not to damage the connectors. Seal with 3M Silicone sealant (picture 18)



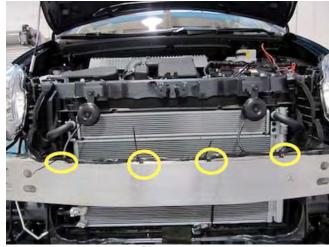
Picture 18

21. Route left fog light wire harness down to fog light opening. Secure fog light harness to factory wire (picture 19)



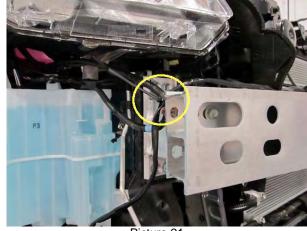
Picture 19

22. Run the wire harness to the right side of vehicle and secure it to factory wire harness loom, across bumper of vehicle (picture 20)



Picture 20

23. At the right side of bumper, by factory wire harness loom, secure fog light harness with wire tie and route down to fog light area (picture 21)

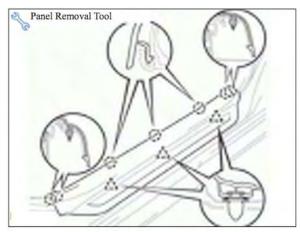


Picture 21

- 24. Connect fog lights to wire harness
- 25. Reconnect turn signal wire harness
- 26. Reinstall bumper and lower splash shields into place

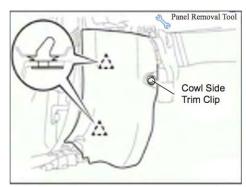
Vehicle disassembly

Remove driver side door scuff plate.
 Disengage with panel tool and remove (picture 22)



Picture 22

28. Remove the driver side cowl side trim (see picture 23 and 23A). Unscrew the cowl side trim clip. Disengage two (2) clips and remove the cowl side trim



Picture 23



Picture 23A

29. Remove screw from the bottom left dash panel (picture 24)



Picture 24

 Disconnect the hood release cable from latch, by pulling down the black cable and releasing it from its location (picture 25)



Picture 25

31. Pull the left top side of the panel away from dashboard and unplug connectors. Extra caution should be taking not to pull to hard and damage connectors (picture 26)



Picture 26

32. Remove 2 screws and push back on tabs to release lower panel (picture 27)



Picture 27

33. Unplug wire harness and remove panel by pulling it towards the seat (picture 28)



Picture 28

34. Remove plastic cap from switch knockout of dash (picture 29)



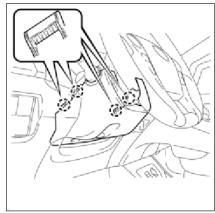
Picture 29

35. Install switch in empty knockout of dash (picture 29)



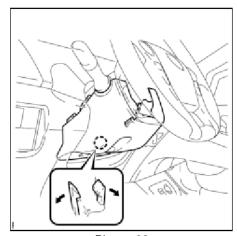
Picture 30

- 36. NOTE: steps 36~39 are optional. Remove lower steering wheel cover
- 37. Push the right and left sides of lower steering column cover to disengage the 4 claws (picture 31)



Picture 31

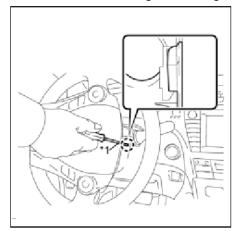
38. Insert fingers into the opening of the tilt leveler of the lower steering column cover to disengage the claw (picture 32)



Picture 32

39. Turn the steering wheel assembly (pic 33).

Caution: while turning steering wheel make sure not to damage or cut light wires

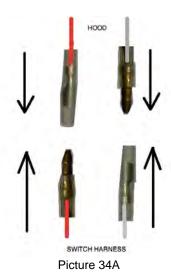


Picture 33

40. From inside the cabin, locate the wires that were pushed through in step 20 (picture 34). It will be the grommet above the gas pedal. Route wire harness to the left side of steering wheel. Then plug wire harness to the switch wire harness, matching colors on wires (picture 34A)

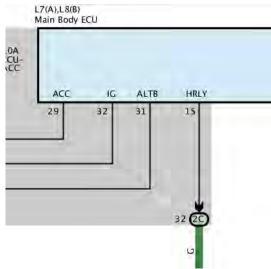


Picture 34



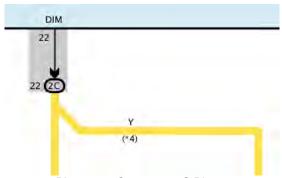
41. T-tap orange/black wire from fog light harness to connector 2C pin 32, green wire. Pin 32 is the headlight relay wire and is on the left side of the connector 7th pin up from bottom of the connector. Connector 2C located left of the steering column above big

white wire (pictures 35, 37, 38 and 38A)

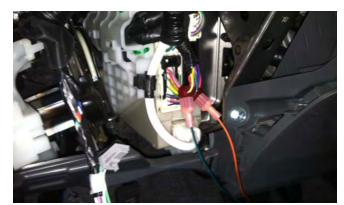


Picture 35: Connector 2C, Pin 32

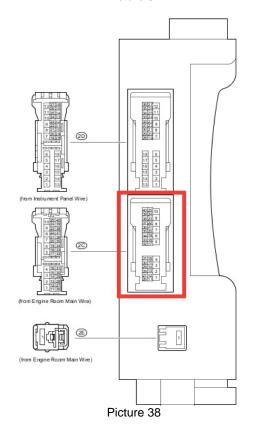
42. T-Tap green/black wire from fog light harness to connector 2C pin 22, yellow wire which is the DIM relay wire. (picture 36, 37 and 38 and 38A).

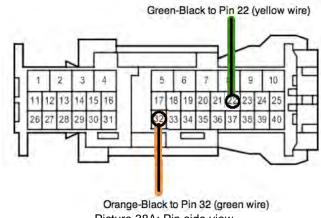


Picture 36: Connector 2C Pin 22



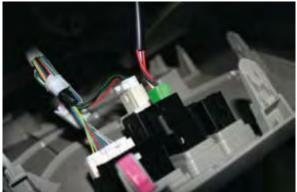
Picture 37





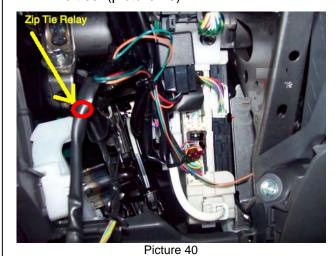
Picture 38A: Pin side view

Install switch harness into switch (pic. 39) 43.



Picture 39

Secure fog light wire harness and relay with wire ties (picture 40)



- 45. Reinstall all removed panels
- 46. Attach fog light 12v red wire to open spade inside the fuse block. Open spade is located

right above white wire (picture 15). Reattach cover into place

47. Reconnect negative battery terminal and torque to: 48 in-lb

Check System for Operation

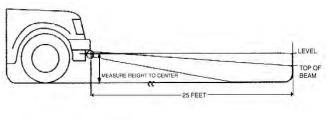
- 1. Reconnect battery negative terminal
- 2. Turn on headlamp low beams, then press fog light switch to "ON" position. Fog lights should be working. Fog lights will only work when the low beam headlamps are "ON". Fog lights will NOT work when the high beam headlamps are "ON"

Fog Light Aiming

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 drivers 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 39)



Picture 39

Checklist — these points MUST be checked to ensure quality installation

Check	Look For:
Accessory Functions Checks	
☐ Fog Lights function	
☐ All Panels snapped into place	Loose panels and switches
☐ Fog Lights	Visually confirm lights are straight forward
Battery Terminal	Re-torque negative battery terminal to 48 in-lb
	Place fog light operation guide inside glove
Vehicle Function checks	box.
☐ Check functions all switch functions	

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