

SCION

tC

2014

FOG LIGHT

Part Number: 00016- 79009

Accessory Code: YF30



**Conflicts**

TMS Fog Light Kit
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**Kit Contents**

Item #	Quantity Reqd.	Description
1	2	Fog Lamps
2	2	Fog Lamp's bezels
3	1	Switch Assembly

**Hardware Bag Contents**

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

**Additional Items Required For Installation**

Item #	Quantity Reqd.	Description

**Recommended Tools**

<b>Safety Tools</b>	
Safety Glasses	
Electrical Tape	
<b>Installation Tools</b>	
10mm Wrench	Nylon pry-tool
Phillips Screw Driver	
Pliers	
Side Cutters	
Torque wrench 48"lbs	
<b>Special Chemicals</b>	
3M Silicon Sealant	

**Color Applicability/Trim Level**

Part Number	Service Part	Fog Light Housing LH	Fog Light Housing RH	Switch	Wire Harness	Relay	Bezel LH	Bezel RH
00016-08401-04		X						
00016-08401-03			X					
00016-79417-05				X				
00016-79417-03					X			
00016-79417-04						X		
00016-79009-02							X	
00016-79009-01								X

**General Applicability**







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**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.
-  **CAUTION:** A process that must be carefully observed in order to reduce the risk of damage to the accessory/vehicle and to ensure a quality installation.
-  **TOOLS & EQUIPMENT:** Used in Figures calls out the specific tools and equipment recommended for this process.
-  **REVISION MARK:** This mark highlights a change in installation with respect to previous issue.
-  **SAFETY TORQUE:** This mark indicates that torque is related to safety.

**SPECIAL NOTE: Installation Sequences**

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.

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)

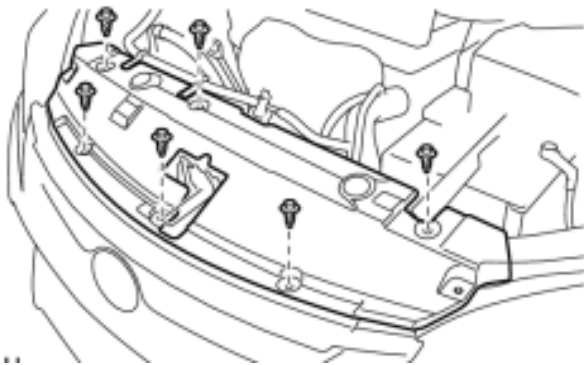
### Preparation



Remove negative battery cable

### Vehicle Disassembly

1. Remove the engine cover (picture 1)



Picture 1

2. Remove screws from both fender liners (picture 2).



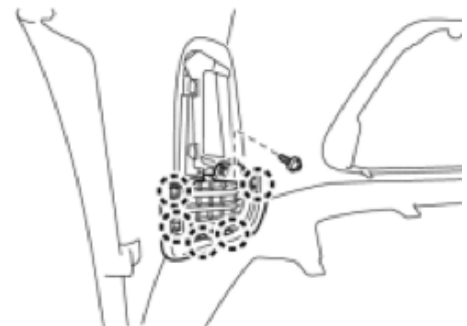
Picture 2

3. Pull fender liner aside for access to rear of lamp (picture 3)



Picture 3

4. Remove existing fog light cover on both sides (picture 4 and 4A). Remove the screw holding the bezel.



Picture 4



Picture 4A

**Installation**

5. Install the fog light bezels from behind bumper (picture 5).



Picture 5

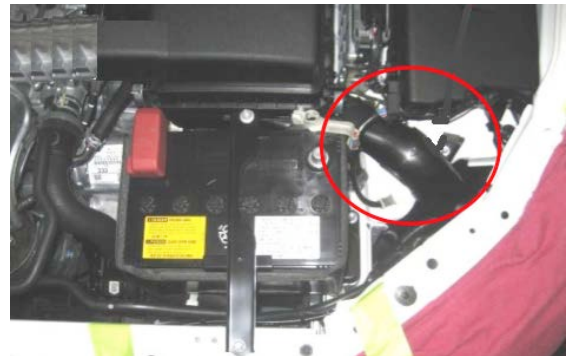
6. Lamps are marked for installation on the left or right side of vehicle. Mount the fog light housings into the bezels on each side of bumper (picture 6). Secure with Philip screws.



Picture 6

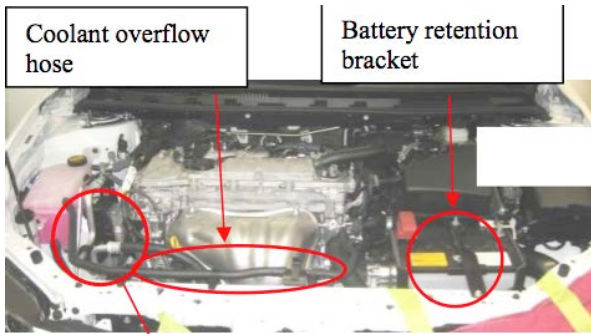
**⚠ NOTE:** Use only hand tools to adjust the fog light aiming screw. DO NOT use automatic tools, as they will damage the fog light

7. Lay harness over top of engine. Route the short end of wire with 2-pin connector down through the opening near the driver side of battery. Plug it into the driver side lamp (picture 8)



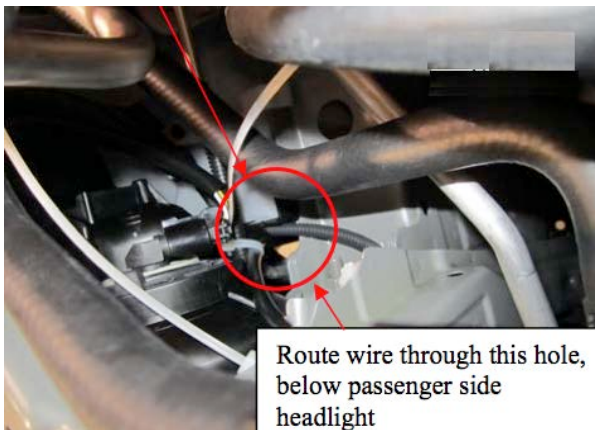
Picture 8

8. Route wiring underneath the battery retention and coolant overflow hose (picture 9)



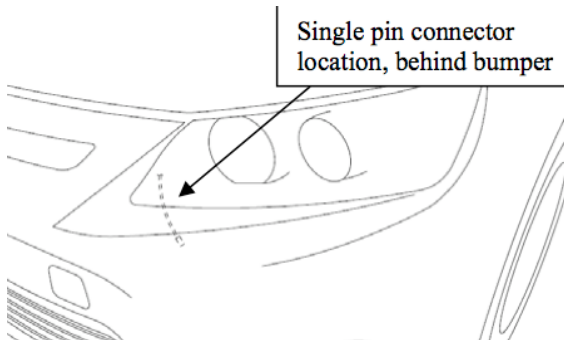
Picture 9

- 9. Route the end of wire with 2-pin connector through the opening under passenger side headlight. Reach underneath bumper. Plug harness to lamp.
- 10. Route wire with single-pin connector down beside battery (picture 11)



Picture 11

- 11. Locate the vehicle single-pin connector behind bumper (below and in front of battery). Connect harness to this connector. Check all wires connections (picture 12)



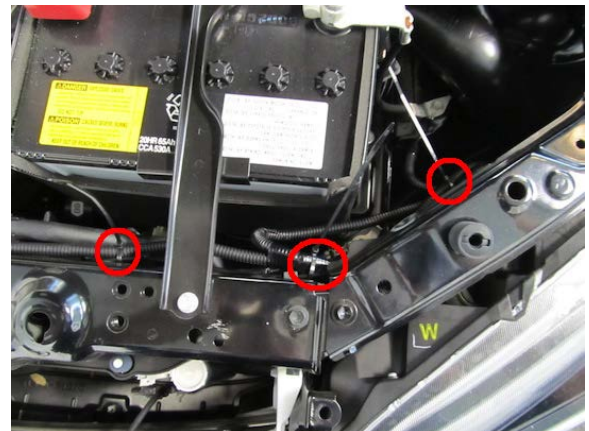
Picture 12

- 12. Attach the ground ring terminal of the fog lamps wire harness to the ground wire of the battery. Tighten to 48 in-lb (picture 13)



Picture 13

- 13. Secure the wire harness across the engine compartment with wire ties (pic. 14 & 14A)

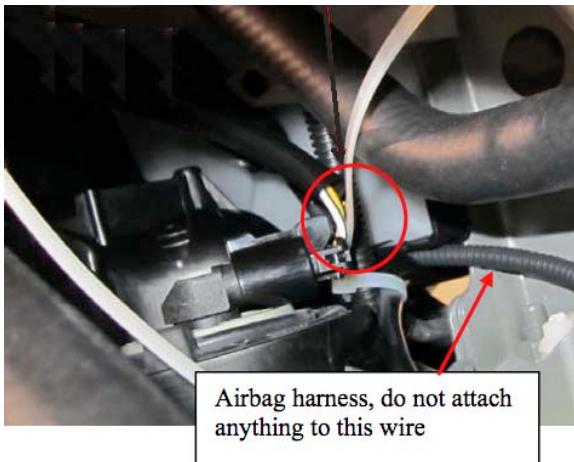


Picture 14



Picture 14A

14. Note: do not attach anything to the airbag wire harness (picture 15)

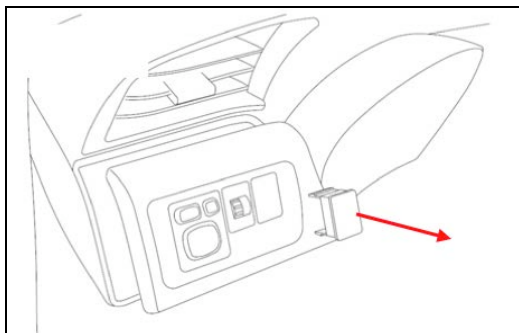


Picture 15

15. Reinstall fender liner

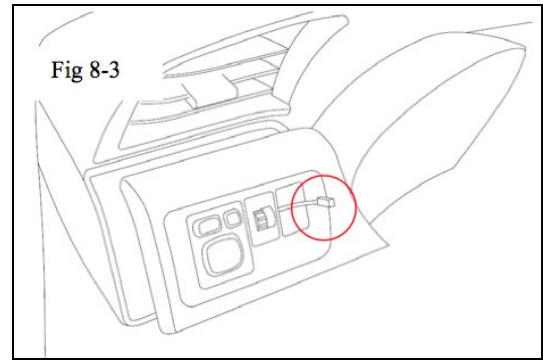
SWITCH INSTALLATION

16. Detach the mirror control panel and remove the right switch knock out from this panel (picture 18)



Picture 18

17. Find the 4-pin connector inside of instrument panel and remove electrical tape. Connect switch harness to factory 4-pin connector. Thread wire through opening in panel and connect it to fog lamp switch (picture 19)



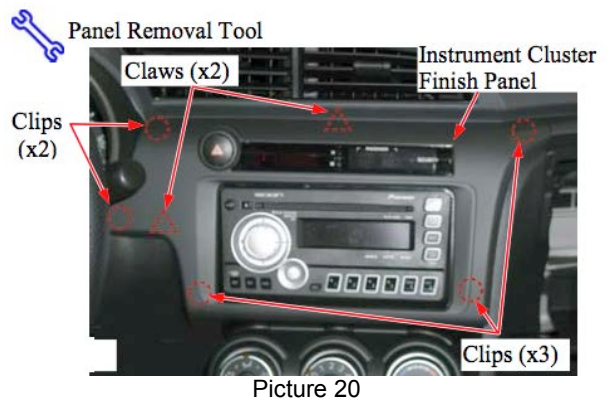
Picture 19

18. Mount switch into panel's knock out

19. Reinstall mirror control panels

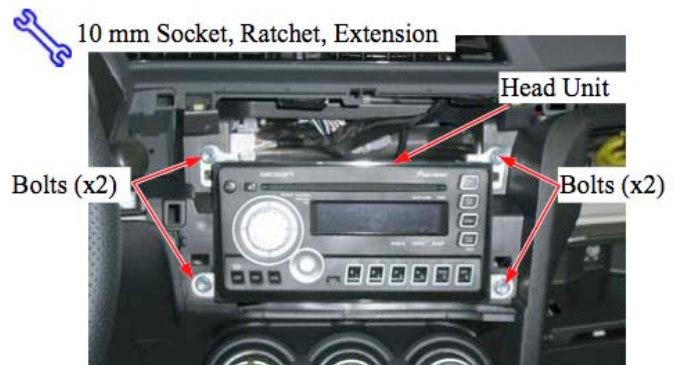
DIO ONLY: Steps 20 and 21. PIO go to step 22.

20. Remove the radio head unit, by disengaging the five clips and two claws in the instrument cluster finish panel (picture 20)



Picture 20

21. Using a 10mm wrench, remove the 4 bolts that hold the radio head unit in place. Disconnect the wire harness from head unit (picture 21)

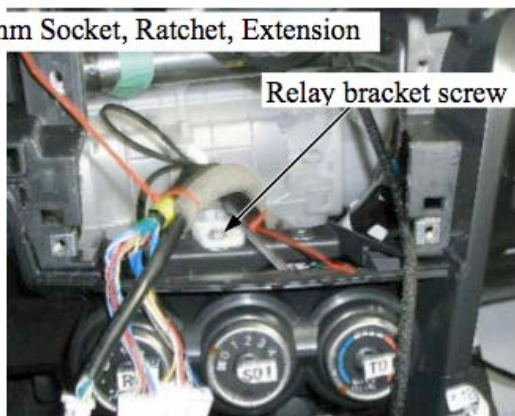


Picture 21

22. Loosen the screw holding the relay bracket in place, located behind the radio head unit (picture 22)

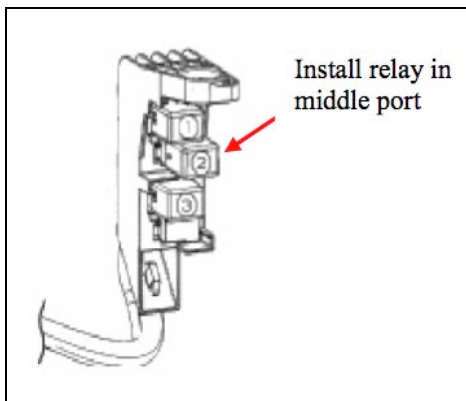


10 mm Socket, Ratchet, Extension



Picture 22

23. Raise bracket up and install the supplied relay in the middle port of the relay bracket (second port from down to top) (picture 23)



Picture 23

24. Reinstall radio head unit and instrument cluster finish

25. Reinstall cover over radiator  
26. Reconnect negative cable of battery to the negative terminal of battery. Torque to 48 in-lb.



### Check System for Operation

1. Check that battery is connected
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"

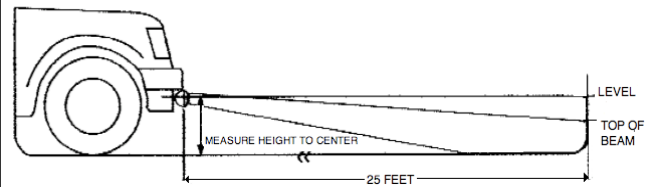
### Fog Light Aiming

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 24)



Picture 24

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

**Check**

Accessory Functions Checks

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

Vehicle Function checks

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- Check functions all switch functions

**Look For:**

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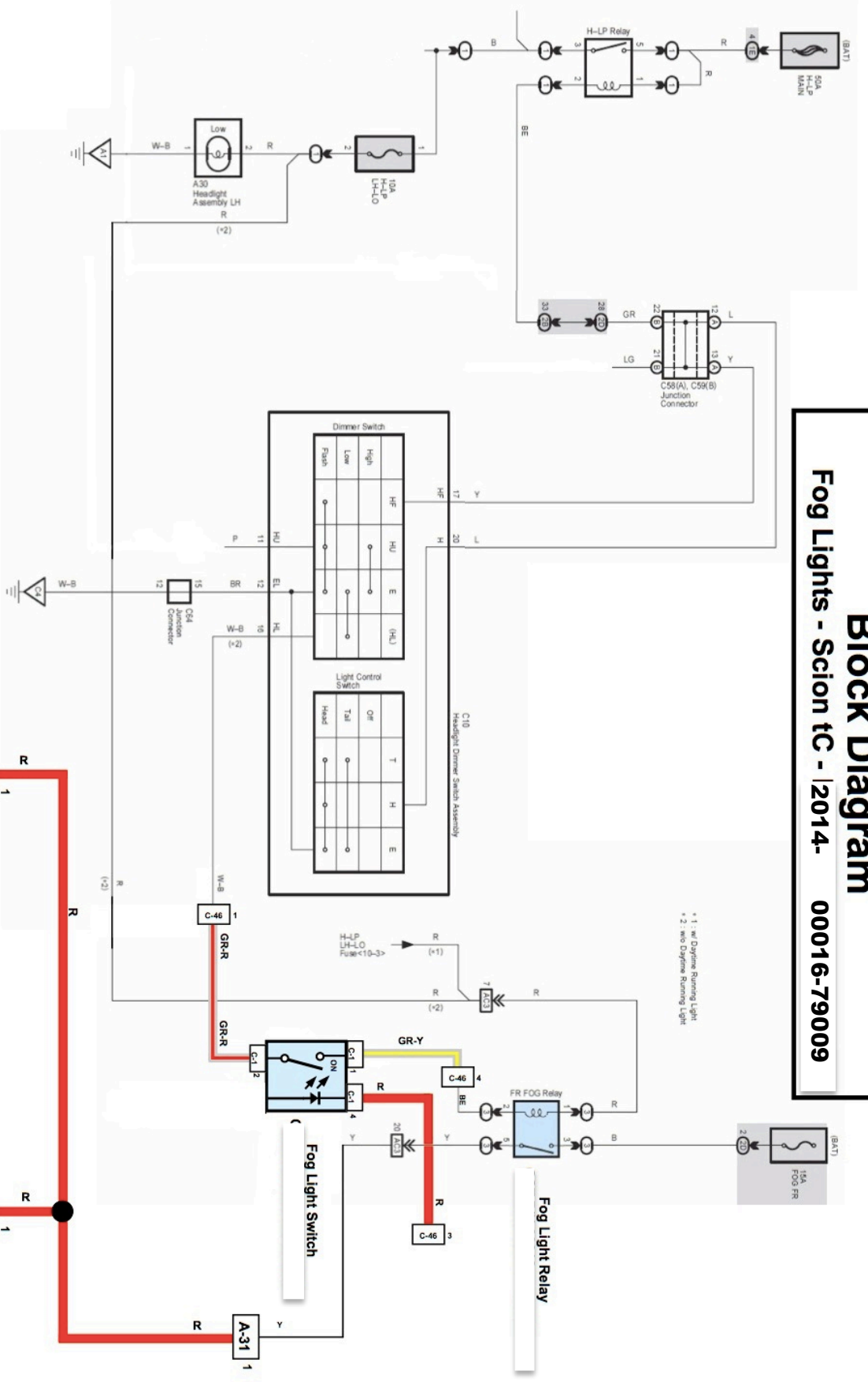
- Loose panels and switches
- Visually confirm lights are straight forward
- Re-torque negative battery terminal to 48 in-lb

**VEHICLE FUNCTION CHECK**

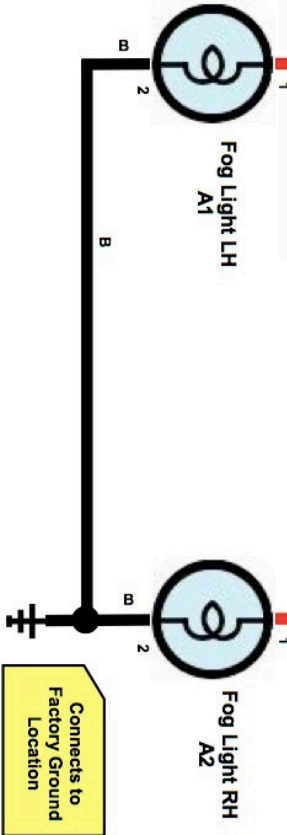
AFTER ALL PANELS, COVERS AND COMPONENTS THAT WERE REMOVED HAVE BEEN REINSTALLED, TEST THOROUGHLY ALL MECHANICAL AND ELECTRICAL COMPONENTS DISCONNECTED AND/OR REMOVED FROM THE VEHICLE DURING THE INSTALLATION OF THIS ACCESSORY



# Block Diagram Fog Lights - Scion tC - |2014- 00016-79009



Replacement Bulbs:  
Use standard 55 watt  
H11 bulbs.

Rev: -

Issued: 10/11/11

## Checking the Harness Pinouts:

### Connector C-1



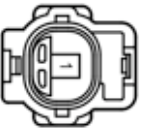
Pin	Wire Color	Test Reference	Proper Operation
1	Gray-Yellow	Pin 1 to Ground	Approximately 0 VDC Headlights OFF or HIGH position. Approximately +1 VDC Headlights ON LOW position
2	Gray-Red	Pin 2 to Ground	No continuity Headlights OFF or HIGH position Continuity Headlights ON LOW position
4	Red	Pin 4 to Pin 5	Approximately 0 VDC dash lights OFF A positive voltage when dash lights are ON

### Connector C46



Pin	Wire Color	Test Reference	Proper Operation
1	White-Black	Pin 1 to Ground	Approximately 0 VDC Headlights OFF or HIGH position. Approximately +1 VDC Headlights ON LOW position
2	Blue	Pin 2 to Ground	Approximately 0 VDC Headlights OFF or HIGH position. Approximately +1 VDC Headlights ON LOW position
3	Beige	Pin 3 to Ground	No continuity Headlights OFF or HIGH position Continuity Headlights ON LOW position
4	Beige	Pin 4 to Ground	No continuity Headlights OFF or HIGH position Continuity Headlights ON LOW position

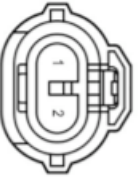
### Connector A31



Pin	Wire Color	Test Reference	Proper Operation
1	Red	Pin 1 to Ground	+12VDC when Fog Light Switch ON and Low Beam headlights ON. 0 VDC All other times

### Connector A-1, A-2

Fog Lamp Connectors at Bulb



FEMALE TERMINALS  
TERMINAL VIEW  
HARNESS SIDE

Pin	Wire Color	Test Reference	Proper Operation
1	Red	Pin 1 to Ground	+12VDC while low beam headlights are ON and the Fog Light switch is ON 0 VDC while high beam headlights are ON and Fog Light switch is ON 0 VDC while headlights are OFF and Fog Light switch is ON 0 VDC while Fog Light switch is OFF
2	Black	Pin 2 to Ground	Always Continuity