

Part Number: 00016-42023

Accessory Code: LF10



Conflicts

Factory Fog Lights

Kit Contents

Item #	Quantity Req'd.	Description
1	2	Fog Lamps
2	1	Switch Assembly
3	1	Fog light operation guide

Hardware Bag Contents

Item #	Quantity Req'd.	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 Req'd.	Description

Recommended Tools

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

Accessory Service Parts

Service Part	Fog Light Housing LH	Fog Light Housing RH	Switch	Wire Harness	Relay kit			
Part Number								
00016-42023-02	X							
00016-42023-01		X						
00016-32230-02			X					
00016-32230-01				X				
00016-32105-04					X			

General Applicability

Models: 4430,4432

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 tools and equipment required for this process

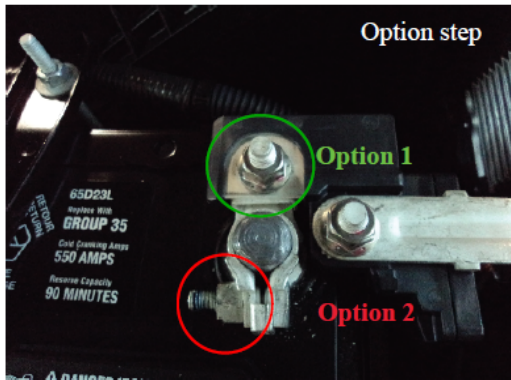
REVISION MARK: This mark highlights a change in installation with respect to previous issue.

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.

Preparation



Remove negative battery cable

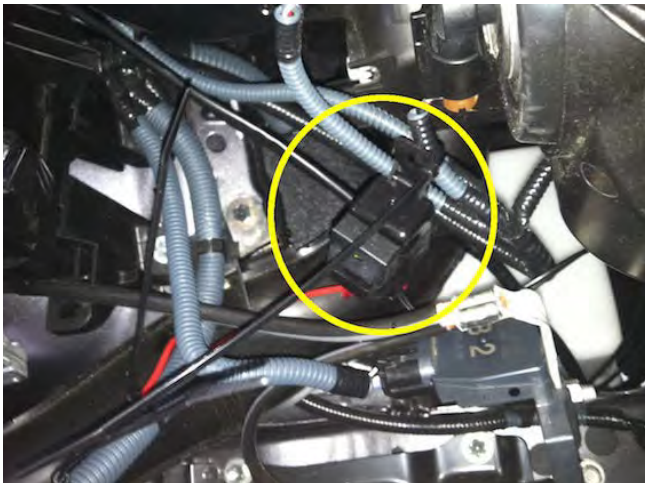


Option 1 : Remove the 12mm nut from the negative terminal junction. When tightening set to terminal torque specification.

Option 2 : If the battery clamp nut cannot be accessed to set torque to the recommended specification without removing additional panels and/or other components, you may change (reverse the direction) the battery clamp bolt & nut. Battery terminal must have torque set to factory specification. **CAUTION:** Do not touch positive terminal.

Installation

1. Secure the relay and fuse to the driver's side factory headlamp harness. Secure top and bottom with wire ties (picture 1).



Picture 1

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



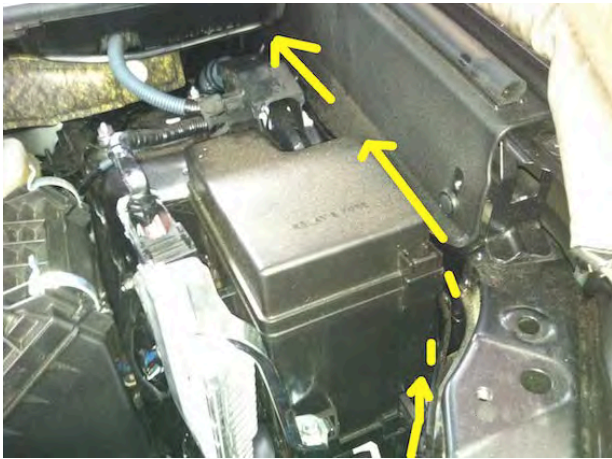
Picture 2

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



Picture 3

4. Route wire to the left side of the vehicle and secure with wire ties (picture 4)



Picture 4

5. From inside the car, locate the large vehicle harness grommet on the left side. Cut ¼" slit in grommet and using fish tape pull the red and gray/white wires through firewall. Note: Extra caution should be taken not to damage the bullet connectors. Seal with 3M Silicone sealant from inside vehicle (pictures 5 and 5A)



Picture 5: View from inside vehicle



Picture 5B: View from the engine compartment

Vehicle Disassembly

6. Remove the driver's side lower dash panel: remove two lower screws (picture 6)



Picture 6

7. Remove driver's side upper panel (pic. 7)

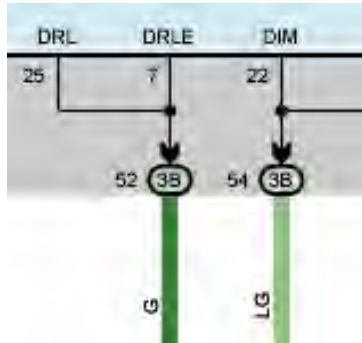


Picture 7

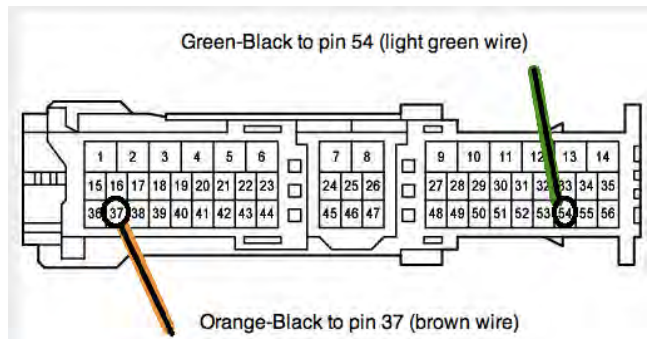
8. Locate the wires that were pulled through in step 5. Connect the bullet connectors to

interior wire harness (red and gray-white wires)

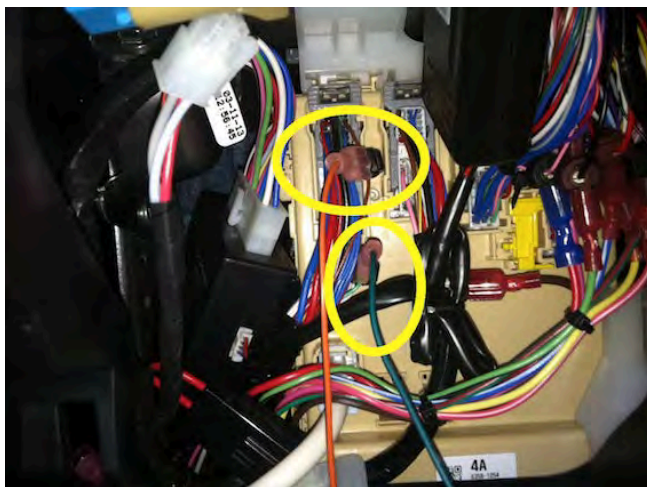
9. T-tap green/black wire from fog light harness to connector 3B pin 54, light green. Connector 3B is located at the main junction block (pictures 8, 9 and 10)



Picture 8: Headlight DIM circuit. Connector 3B, pin 54 (light green wire)

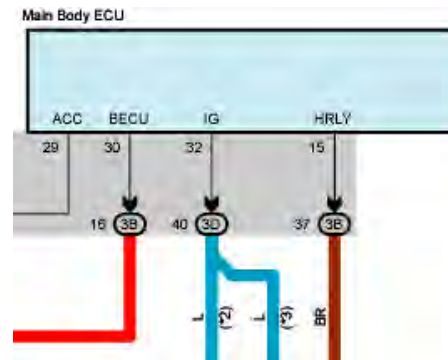


Picture 9



Picture 10

10. T-tap orange/black wire from fog light harness to connector 3B pin 37, brown wire (pictures 9, 10 and 11).



Picture 11: Headlight relay circuit wire. Connector 3B, pin 37 (brown wire)

11. Push out the switch knockout located at the left of the steering wheel.
12. Route fog light switch connector through switch knockout connector.
13. Secure fog light relay and excess wires to OE harness (see picture 12 & 13). Make sure to leave enough lead on the green switch plug



Picture 12



Picture 13

14. Mount switch into dash panel. Then connect the switch wire harness to switch (pic 14)



Picture 14

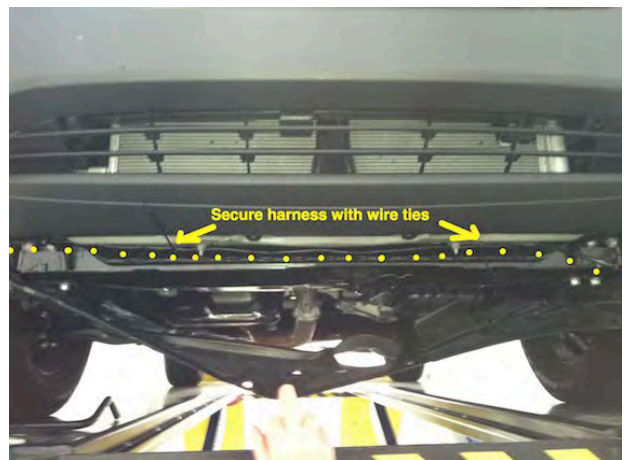
15. Reinstall panels and connectors

ENGINE COMPARTMENT

16. Remove lower splash panels
17. On the left side of the vehicle, drop wire harness to reach out the left fog lamp compartment. Route fog lamp wire under the car to the right side of the vehicle (picture 15 and 16) and secure with wire ties



Picture 15



Picture 16

18. From behind of bumper, remove fog light cover plates. There are two screws and 1 push-pin. *Save screws and push-pin for next step*
19. Install fog lights into bumper, using screws and push-pin removed on step 18 (pic. 17).



Picture 17



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

20. Plug in left side fog light into harness plug and secure with wire tie to factory harness
21. Plug in right fog light into harness plug and secure with wire tie to factory harness
22. At the driver side, secure excess wires with wire ties
23. Reinstall splash panels
24. Reconnect negative battery terminal.
Torque terminal to 48 in-lbs.

Checklist – these points MUST be checked to ensure quality installation**Check System for Operation**

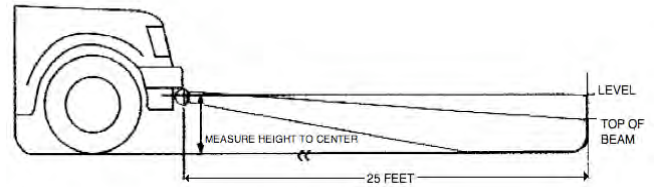
1. Turn on headlamp low beams, then press fog light switch to “ON” position. Fog lights should be working. Fog lights will only work when the low beam headlamps are “ON”. Fog lights will NOT work when the high beam headlamps are “ON”

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 19)



Picture 19

Check

Accessory Functions Checks

- Fog Lights function.....

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

Vehicle Function checks

- Check functions all switch functions

Look For:

Confirm fog lights turn off if headlights are turned off with remote or 30 seconds delay with headlight switch left in "ON" position.

Loose panels and switches

Visually confirm lights are straight forward

Re-torque battery terminals to 48 in-lb

Place fog light operation guide inside glove box.

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