

Toyota 4Runner 2016

Frameless® EC Mirror w/ Compass &amp; HomeLink®

Part Number: 00016-05464

Accessory Code: ME4000

Note: This accessory requires 00016-05463-04 to complete the installation for this vehicle.



## Conflicts

Note: **Factory HomeLink**

### Kit Contents

Item #	Quantity Req'd.	Description
1	1	Frameless® Mirror w/Compass & HomeLink®
2	1	Wire Harness Cover
3	1	Main Power Wire Harness

### Hardware Bag Contents

Item #	Quantity Req'd.	Description
1	3	Red T-Taps
2	10	Wire Ties
3	6	Foam Tapes
4	1	Quick Reference Guides

### Additional Items Required For Installation

Item #	Quantity Req'd.	Description
1	1	Small Wire Harness Cover (00016-05463-04)

### Recommended Tools

<b>Safety Tools</b>	
Safety Glasses	
<b>Special Tools</b>	
<b>Installation Tools</b>	
Needle Nose Pliers	10mm Socket
Screw Gun	Torque Wrench-48 inch lbs (Car Battery)
T20 Torx Bit/Driver	Ratchet/Driver
#2 Phillips Bit	Torque Wrench-15.5 inch lbs
Nylon Tool	
Side cuts	
Dark Towel/ Cloth	
<b>Special Chemicals</b>	

### Service Parts Numbers

Part Description	Part Number
Frameless® EC Mirror w/Compass and HomeLink®	00016-05464-01
Main Power Wire Harness	00016-05464-02
33MM-58MM Wire Harness Cover	00016-05463-04

### General Applicability







All MY17 Models

### Recommended Sequence of Application

Item #	Accessory
1	
2	
3	

\*Mandatory

### Legend

	<b>STOP:</b> Damage to the vehicle may occur. Do not proceed until process has been complied with.
	<b>OPERATOR SAFETY:</b> Use caution to avoid risk of injury.
	<b>CAUTION:</b> 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.
	<b>TOOLS &amp; EQUIPMENT:</b> Used in Figures calls out the specific tools and equipment recommended for this process.
	<b>REVISION MARK:</b> This mark highlights a change in installation with respect to previous issue.
	<b>SAFETY TORQUE:</b> This mark indicates that torque is related to safety.

### SPECIAL NOTE: Installation Sequences

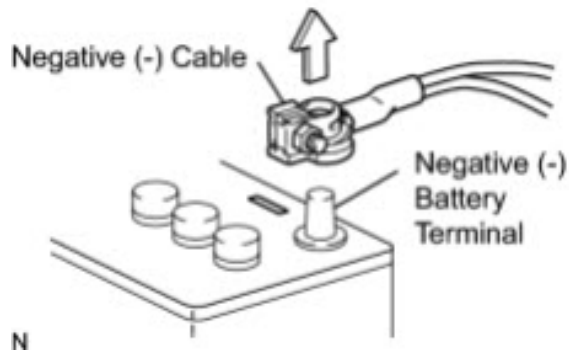
After TMS and Safety mandated preparatory steps have been taken, the installation sequence is the suggested method for completing the accessory installation. In some instances the suggested sequence is written for one associate to install and in others the sequence is given as part of a team accessory 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 a 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, rechecking torque procedure, etc.).
- Vehicle Disassembly/Reassembly (panel removal, part storage, etc.).
- Electrical Component Disassembly/Reassembly (battery disconnection, connector removal, etc.).



1. Remove the NEGATIVE (-) battery terminal before starting any disassembly. See figure 1.



**Caution: DO NOT touch the positive terminal.**



**Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.**

Figure 1

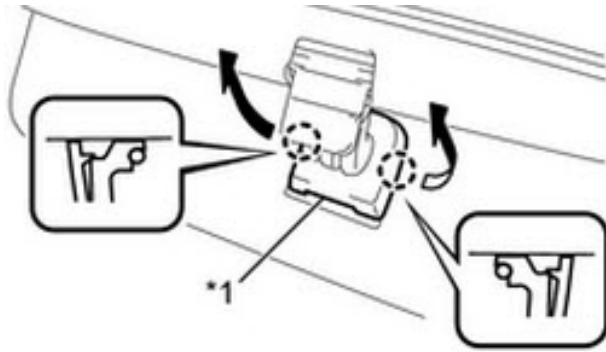
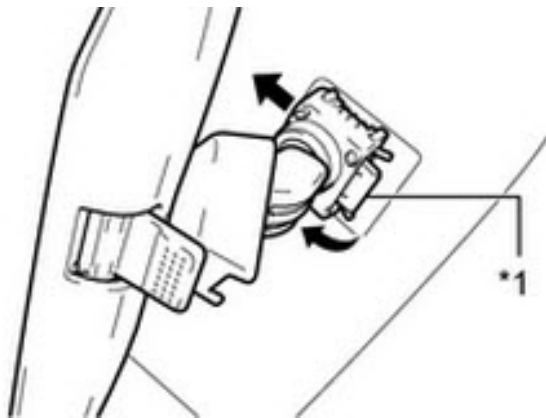


Figure 2

2. Pinch the cover and detach the 2 claws. Then remove the cover. See figure 2.

Text in Illustration

*1	Cover
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Standard Mirror



Vehicles with Factory EC Mirror

Text in Illustration

*1	Lever
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Figure 3a

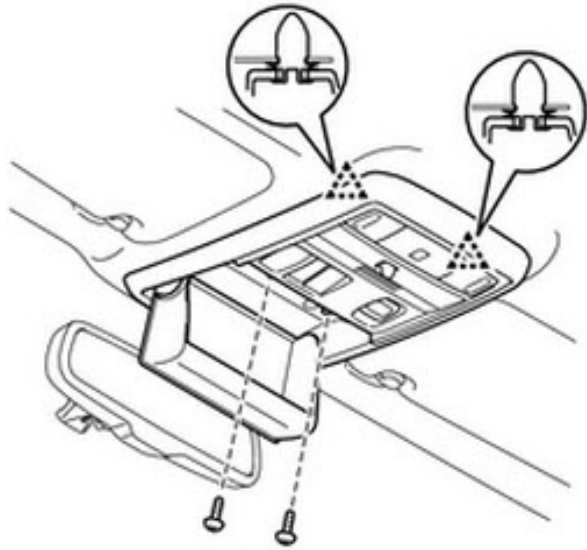
3. Pull the lever, and then slide to remove the inner rear view mirror assembly. See figure 3a.

**Note: When replacing factory EC mirror with the Frameless® EC Mirror w/Compass & HomeLink®.**

Remove the factory EC mirror wire harness cover. Using a T20 Torx bit remove screw. Slide mirror to remove. Using foam tape from the new Frameless® EC Mirror w/ Compass & HomeLink® kit, secure the harness above to the headliner. See figure 3a and 3b.

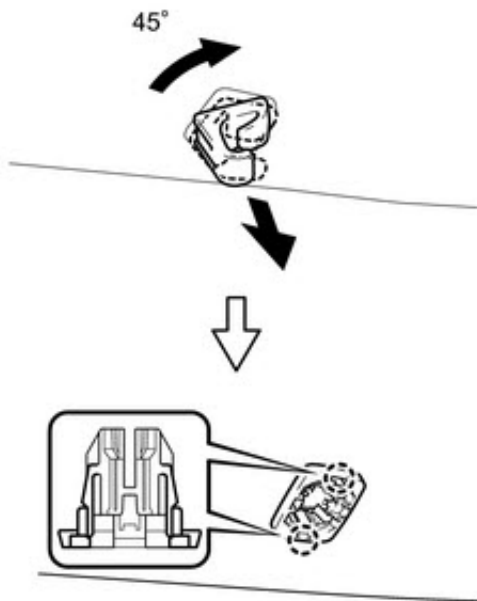


Figure 3b



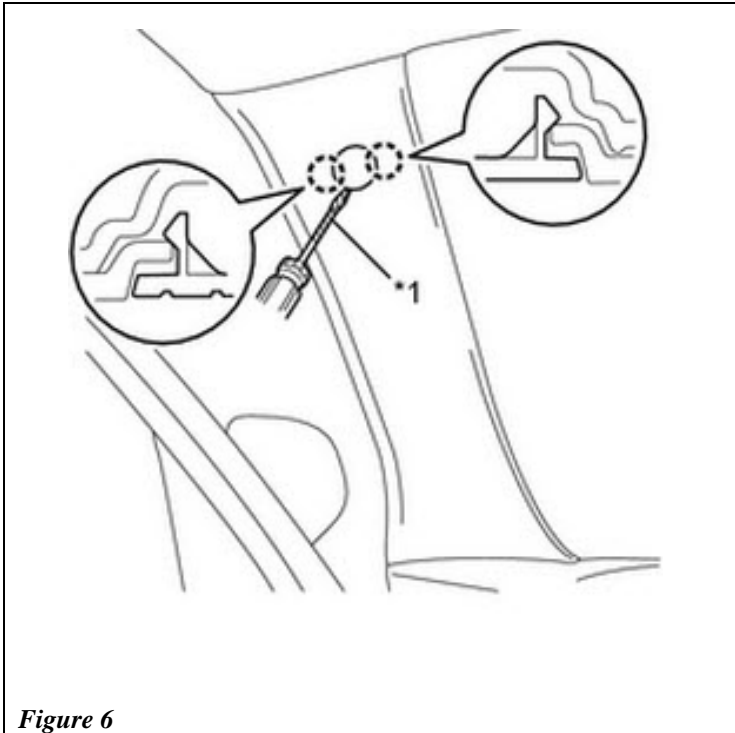
*Figure 4*

4. Remove the 2 screws. Detach the 2 clips to remove the map light assembly. Disconnect the connector. See figure 4.



*Figure 5*

5. Turn the visor holder approximately 45° and pull it out as shown in the illustration. See figure 5.



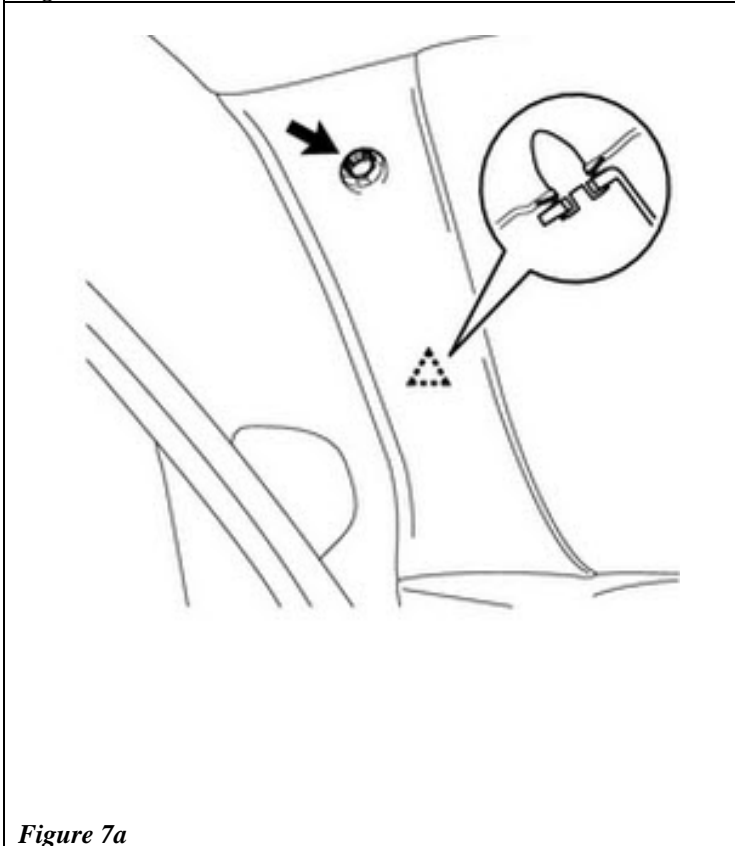
- 6. Using a screwdriver, detach the 2 claws to remove the No. 1 front pillar garnish cover LH. See figure 6.

**Text in Illustration**

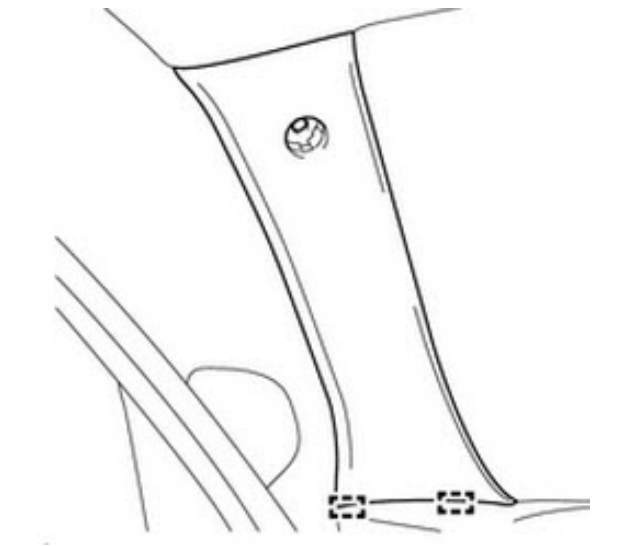
*1	Protective Tape
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**HINT:** Tape the screwdriver tip before use.

*Figure 6*



- 7. Remove the bolt and detach the clip. See figure 7a. Detach the 2 guides to remove the front pillar garnish LH. See figure 7b.



*Figure 7b*

*Figure 7a*



**Note: Remove fingerprints, smudges, dirt, etc. from mirror and windshield with glass cleaner.**

Figure 8a

8. Mount the Frameless® EC Mirror w/Compass in reverse of original factory mirror removal. Slide and attach the rearview mirror assembly and tighten mirror set screw with a T20 torx bit or driver. DO NOT over tighten screw. See figure 8a and 8b.

**Torque: 15.5 in.\*lbf**



**Do not use power tools to tighten screw. Hands tighten only.**

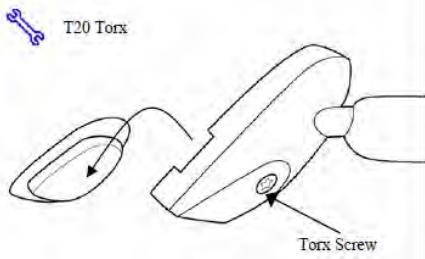
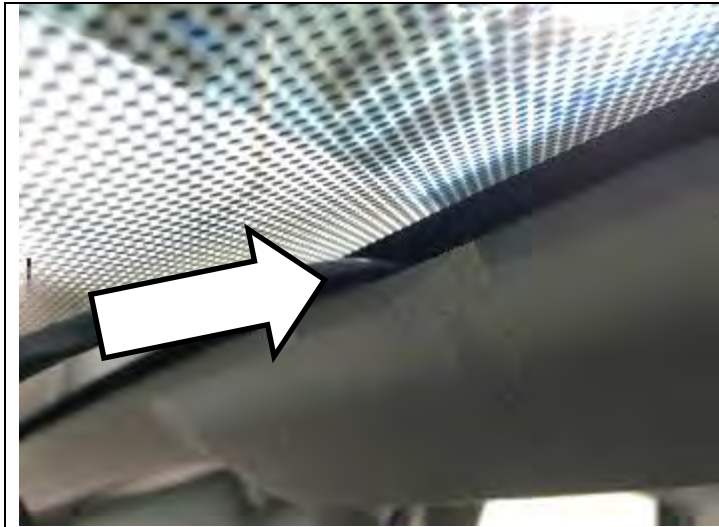
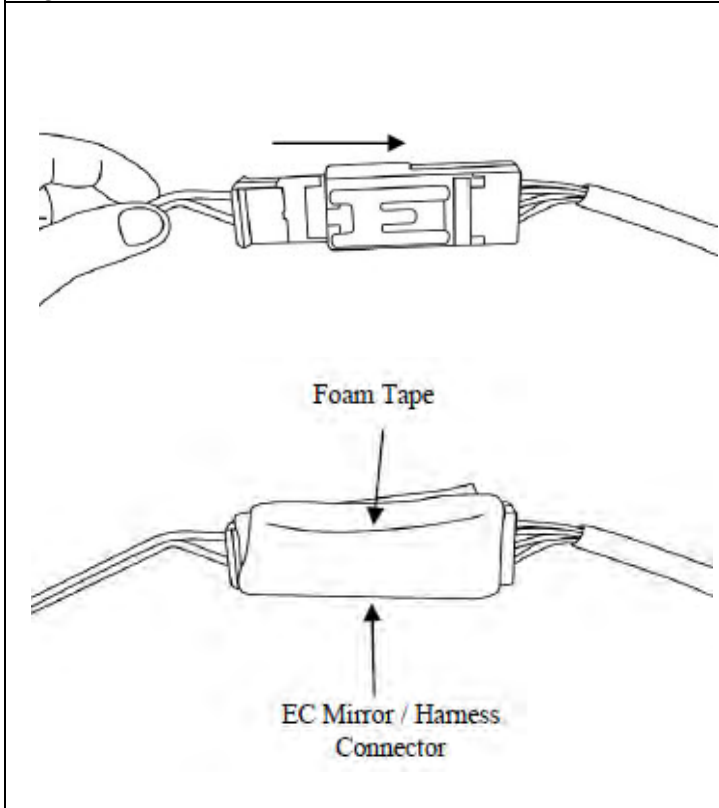


Figure 8b



9. Route the mirror harness to overhead console opening as shown. See figure 9.

Figure 9



10. Connect the mirror harness to the mirror main power harness. Make sure both connectors are fully engaged. Wrap foam tape around connectors. See figure 10a.

Secure the harness to the front center of the headliner with one (1) piece of foam tape. See figure 10b.

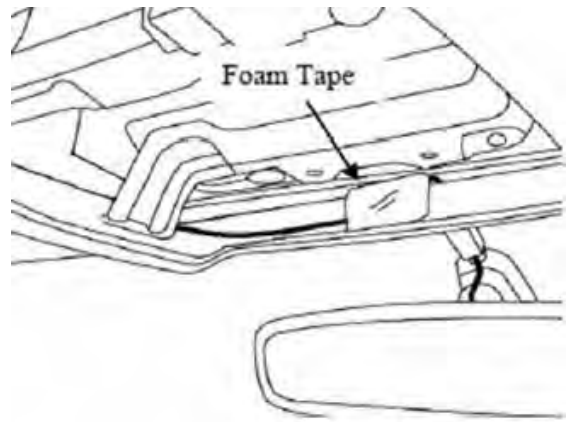
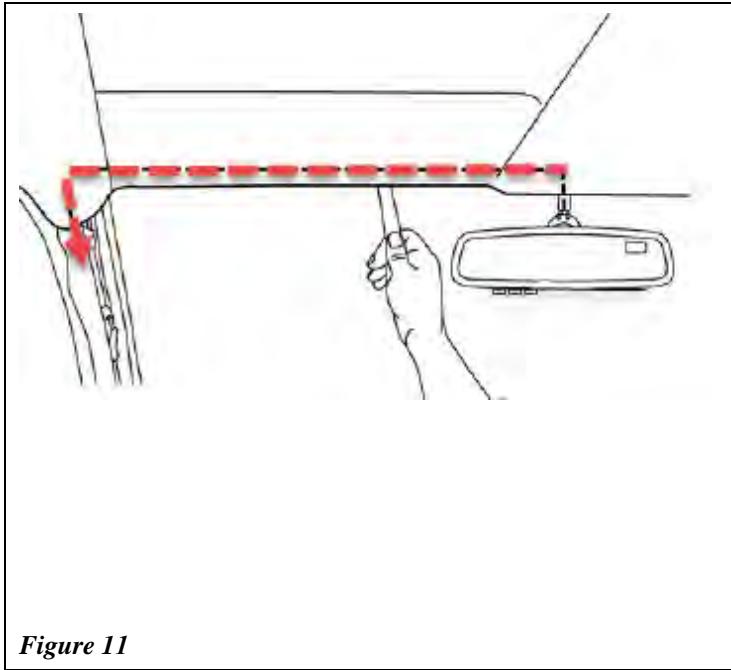


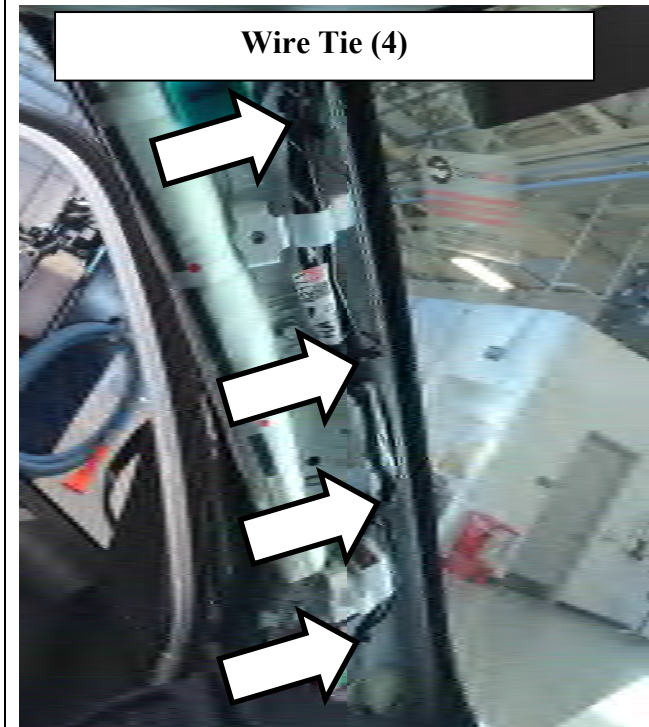
Figure 10a

Figure 10b



11. Route mirror main power harness wires along front edge of headliner towards the LH vehicle A-Pillar. See figure 11.

Figure 11



12. Route the mirror harness power wires down to the bottom of the Front LH pillar. Secure the harness to the vehicle OE harness as shown using (4) wire ties. If equipped with a sunroof, be sure not to secure mirror harness to sunroof drain tube. See figure 12a and 12b.

Figure 12a



Figure 12b



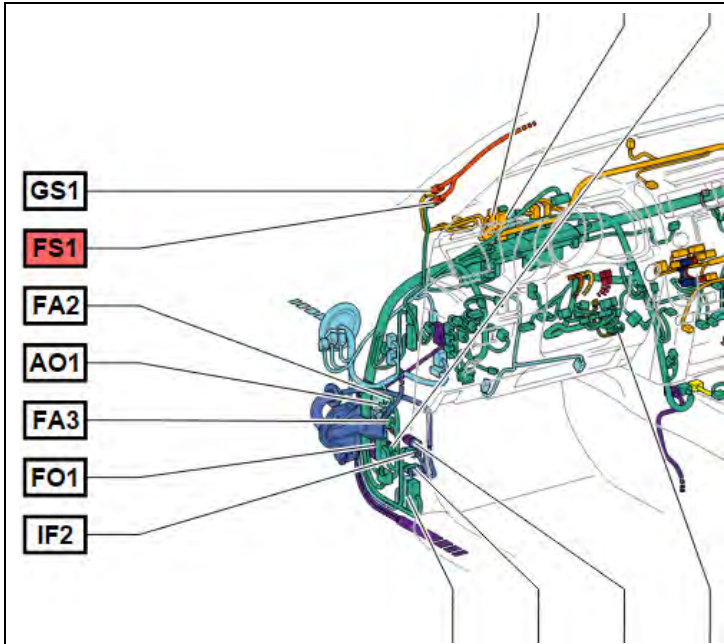


Figure 13a

13. Locate white connector FS1 (25 pin) in the LH A-Pillar. See figure 13a and 13b.



Figure 13b

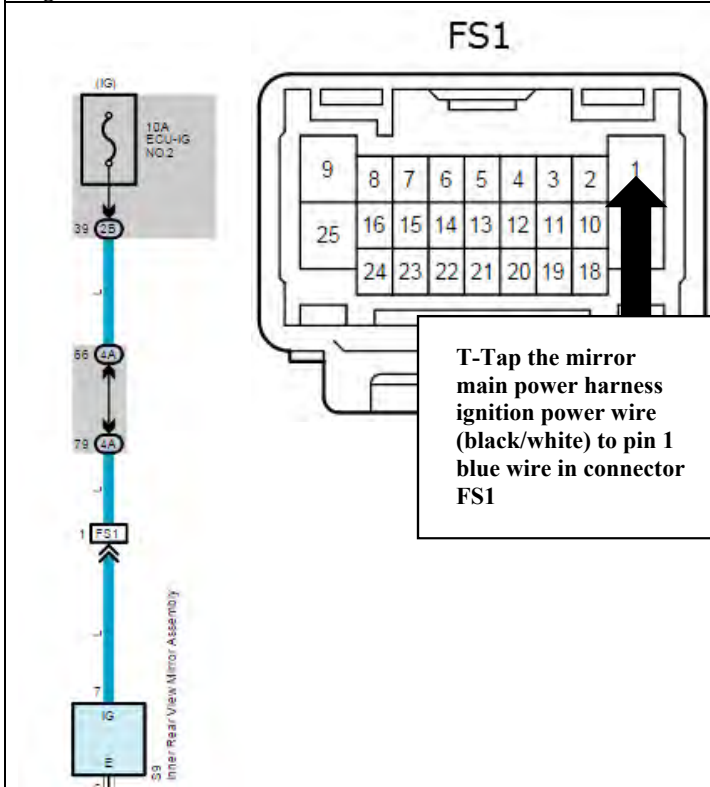


Figure 14a

14. T-Tap the mirror main power harness ignition power wire (black/white) to pin 1 blue wire in connector FS1. See figure 14a and 14b.



Figure 14b

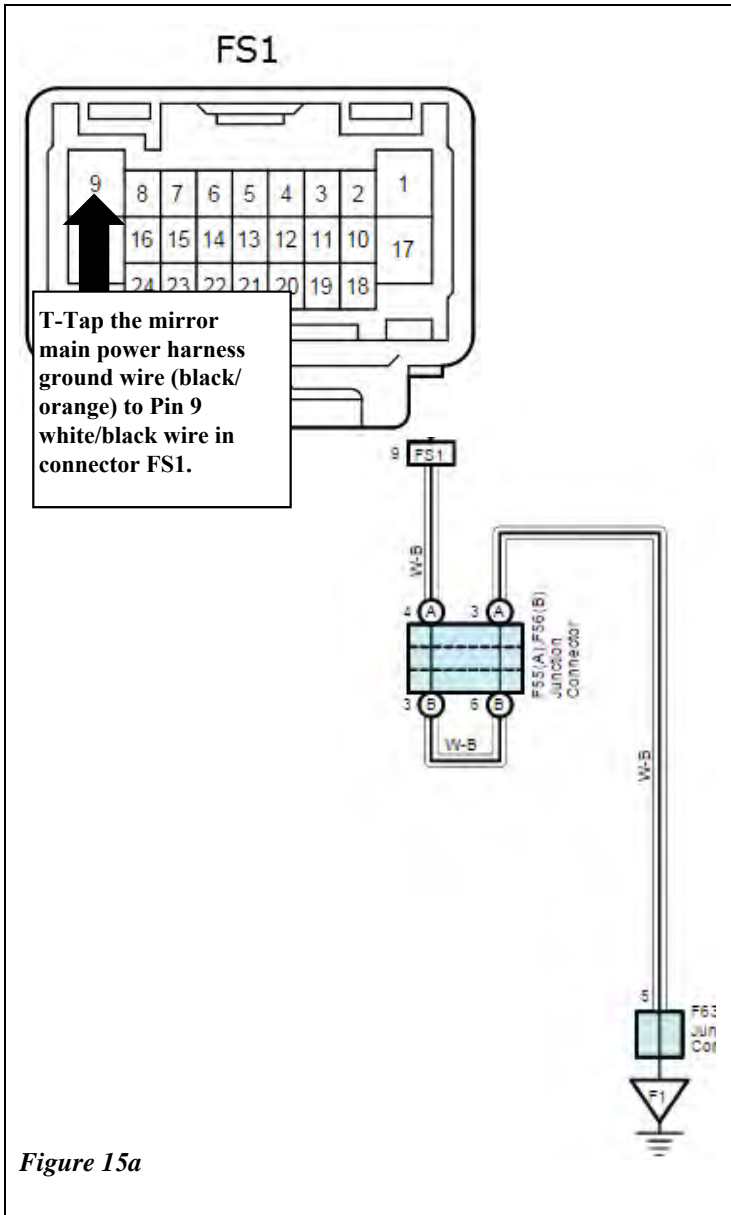


Figure 15a

15. T-Tap the mirror main power harness ground wire (black/orange) to Pin 9 white/black wire in connector FS1. See figure 15a and 15b.

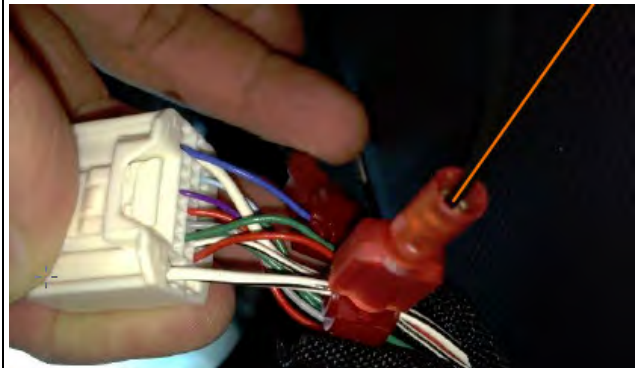
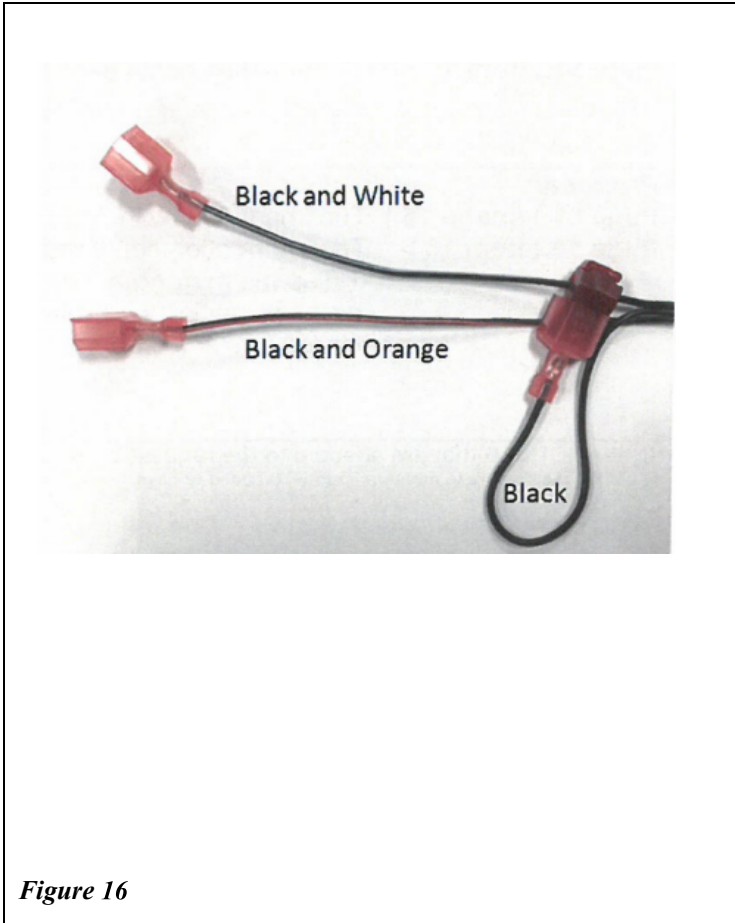
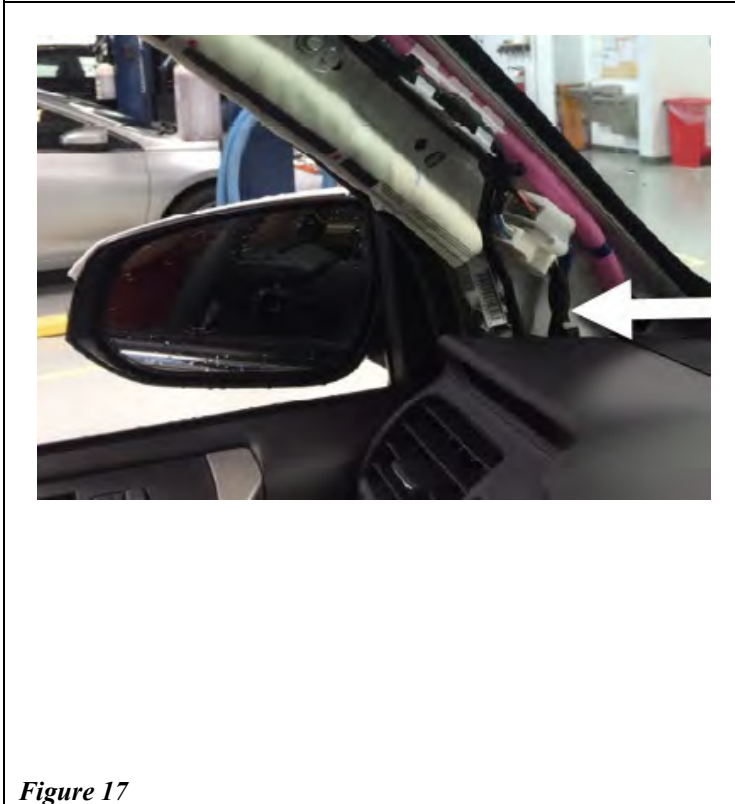


Figure 15b




16. T-Tap the mirror main harness power wire (black) to the mirror main harness ignition wire (black/White) of the same mirror harness. Fig. 16

Note: This step can be done on the work table to speed the process.



17. Bundle up any excess wire. Secure the mirror main power harness to OE harness. Make sure to keep harness away from the airbag, See figure 17.

 **Make sure to keep harness away from the airbag.**

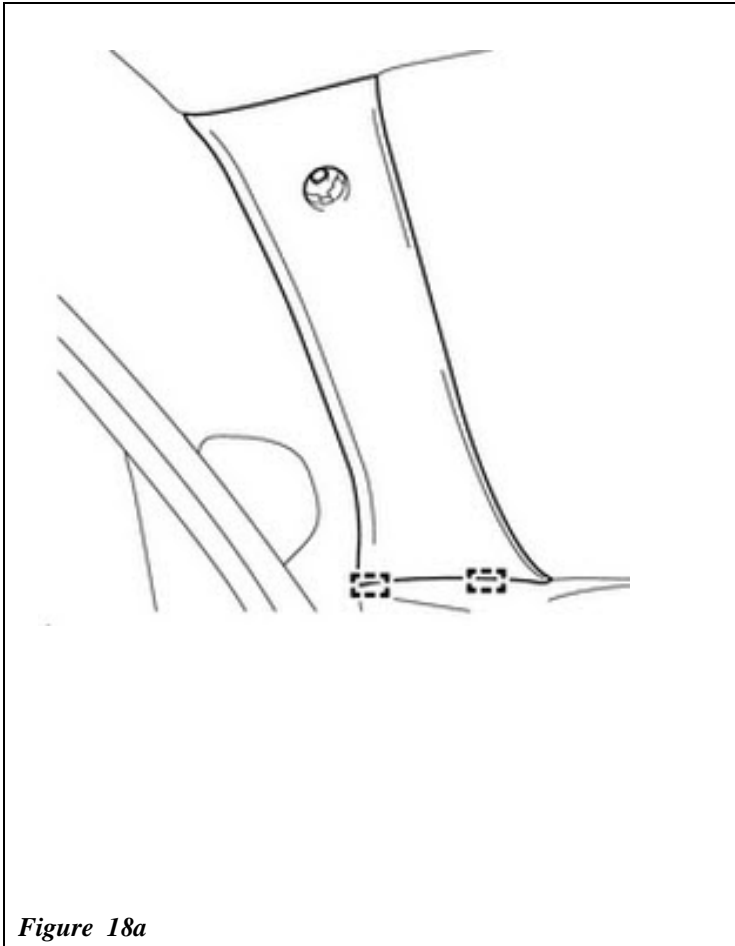


Figure 18a

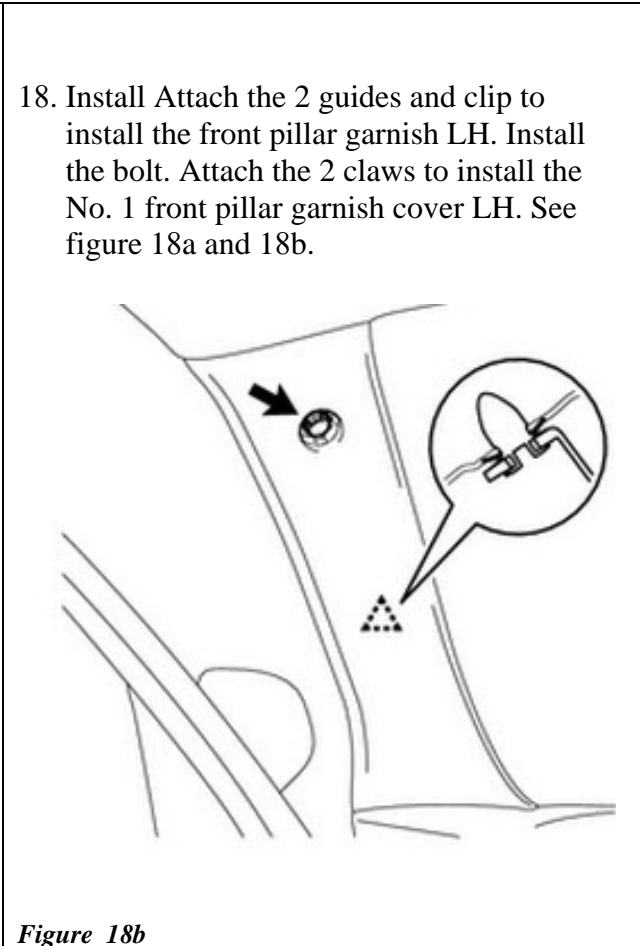


Figure 18b

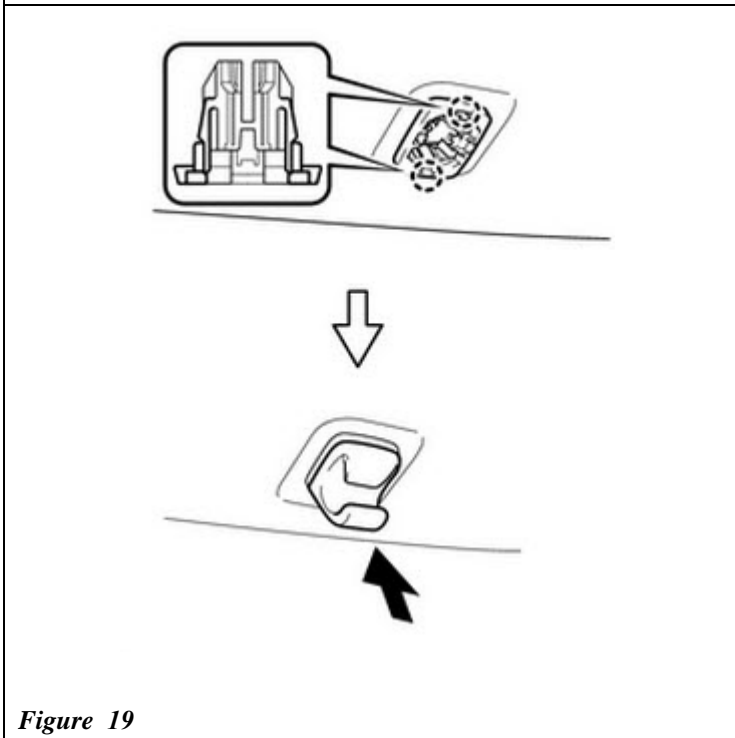


Figure 19

19. Attach the 2 claws. Push in the visor holder to install it. See figure 19.

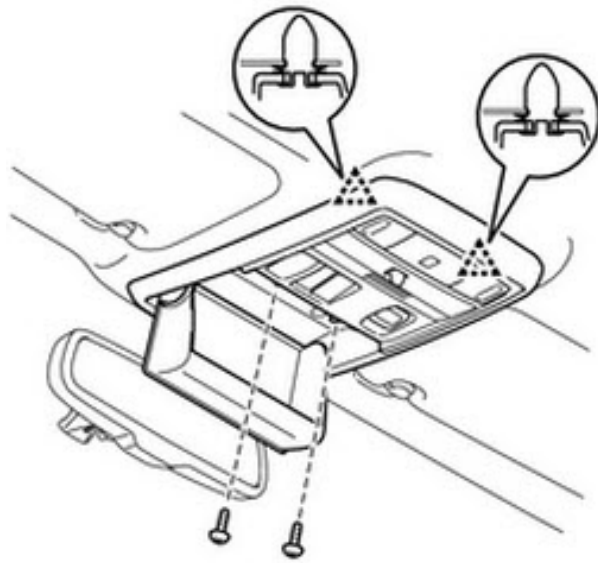


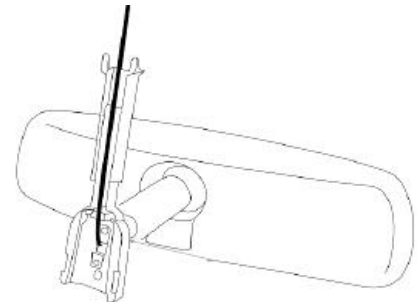
Figure 20

20. Connect the connector. Attach the 2 clips to install the map light assembly. Install the 2 screws. See figure 20.



Figure 21a

21. Install the 33MM-58MM wire harness cover (SET part # **00016-05463-04**) over the wire harness. Seat the bottom of the cover securely to base of the mirror. Extend the top of the cover fully into the headliner. See figure 21a and figure 21b.



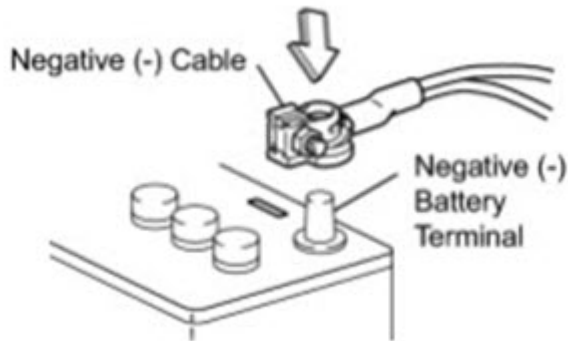
**Note: The 33MM-58MM wire harness cover 00016- 05463-04 is not provided in the mirror kit. This item must be ordered separately.**

Figure 21b



22. Place owner's cards in the glove box. See figure 22.

Figure 22



23. Tighten the negative battery cable. See figure 23.

 Torque: 48in.\*lbf



**Caution: DO NOT touch the positive terminal.**

Figure 23

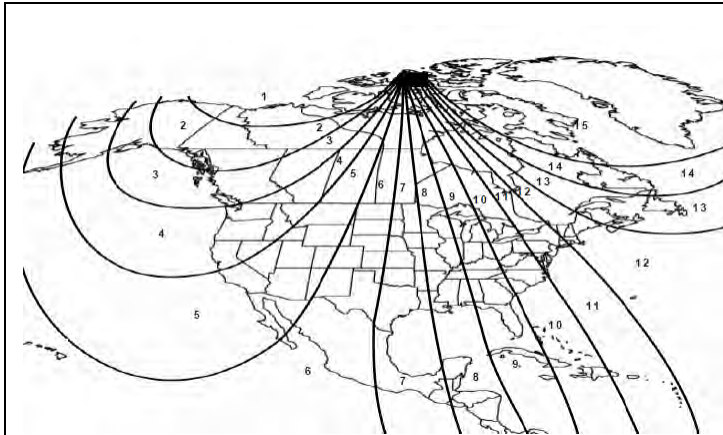


Figure 25

24. Compass Zone Setting.

(a) With display turned ON, push the mirror power button for 3 seconds or until a number is displayed in the display window.

(b) Refer to the Zone Map and toggle button until correct zone is displayed. See figure 24.

(c) Release button.

(d) The display will return to normal compass mode (showing either a "C" or a directional heading) within 10 seconds of no switch activity.

25. Calibrate Compass.

(a) If a "C" is displayed in window, drive the vehicle in one circle at less than 5 mph.

(b) Correct compass heading should now be displayed.

**NOTE:** Correct compass zone must be selected prior to compass calibration to ensure accurate calibration. If the vehicle is driven in a new zone, repeat zone selection procedure.

Checklist - these points **MUST** be checked to Ensure a quality installation.

**Check: After Installation**

- Vehicle should be in a fairly well lit area. Turn ignition (ACC power) to ON.

**Auto-dimming feature:**

- Cover the forward-looking light sensor (located on the back of the mirror).

- Remove cover from photocell.

**Compass Feature:**

- Look at the mirror compass display.

- Operation Instruction Cards

**HomeLink Feature:**

- Look at the mirror's (3) HomeLink buttons.

- Press the mirror's (3) HomeLink buttons.

**Overhead Console:**

- Check dome light.

- Check the Sunroof if applicable.

**Look For:**

Verify green LED is on. If it is not ON press ON / OFF button - confirm LED is ON.

Verify mirror darkens.

Mirror returns to clear state.

Correct compass heading should now be displayed. If a "C" is displayed in window, calibrate the compass.

Place in the vehicle glove box.

Verify all (3) buttons are illuminated when the vehicle ignition is ON.

HomeLink icon will appear in mirror. Press button again to stop the icon from flashing.

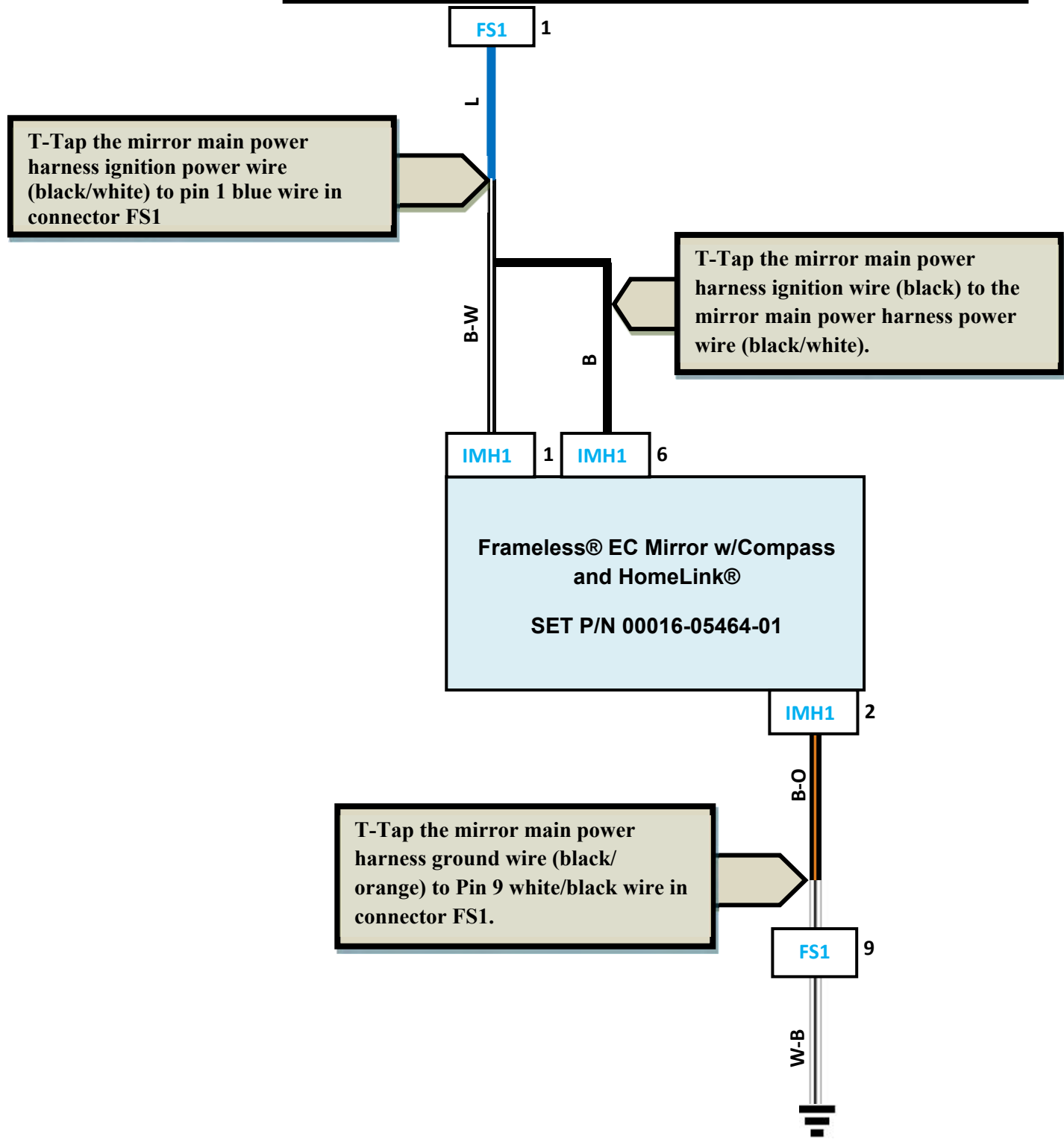
Verify the dome light functions properly.

Verify the sunroof functions properly.



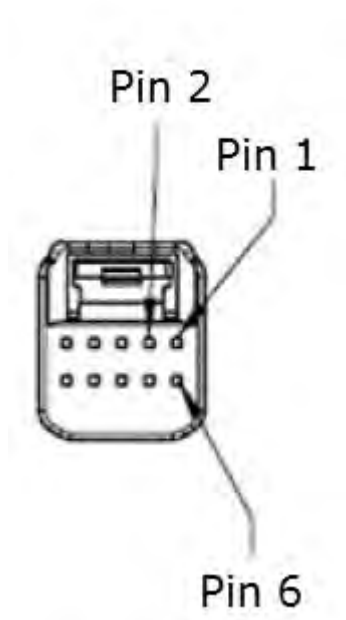
**Block Diagram**  
**Frameless® EC Mirror w/Compass & HomeLink®**

Applies to SET P/N 00016-05464      2017 4Runner



## Checking the Harness Pin outs:

### Connector IMH1: Frameless® EC Mirror w/Compass Power Harness Connector



**Connector view is from the front (pin side)**

**If feedback from the harness on any of the pins does not match the results shown in the Proper Operation field below, check the connection to the vehicle wiring and re-test.**

Pin	Wire Color	Test Reference	Proper Operation
1	Black w/White Trace	Pin 1 to ground	Approx. 12 VDC with switch in ON position Approx. 0 VDC with switch in OFF position
2	Black w/Orange Trace	Pin 2 to ground	Always Continuity
6	Black	Pin 3 to ground	Approx. 12 VDC with switch in ON position Approx. 0 VDC with switch in OFF position

Pin	Wire Color	Circuit
1	Black w/White Trace	Ignition
2	Black w/Orange Trace	Ground
6	Black	Battery

# Vehicle Connector FS1 Power Circuit / FS1 Ground Circuit

