

Toyota Corolla 2017 Frameless® EC Mirror w/ Compass & HomeLink®

Part Number: 00016-05464

Accessory Code: ME4000

Note: This accessory requires replacement A-Pillar clip 62217-24020 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
5	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	A-Pillar Clip (62217-24020)

Recommended Tools

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

Service Part Numbers

Part Description	Part Number
Frameless® EC Mirror w/Compass and HomeLink®	00016-05464-01
Main Power Wire Harness	00016-05464-02
A-Pillar Clip	62217-24020

General Applicability

All models except factory installed Homelink

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 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.).**

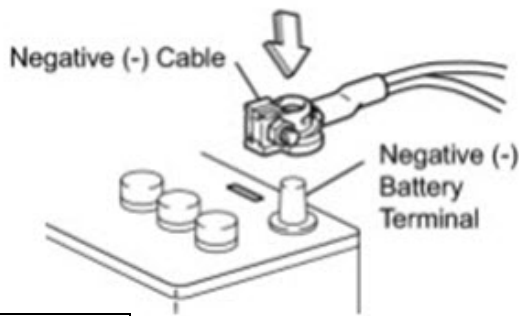


Fig. 1a.

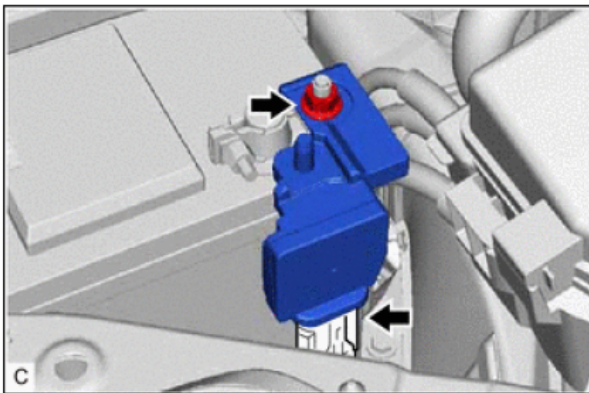
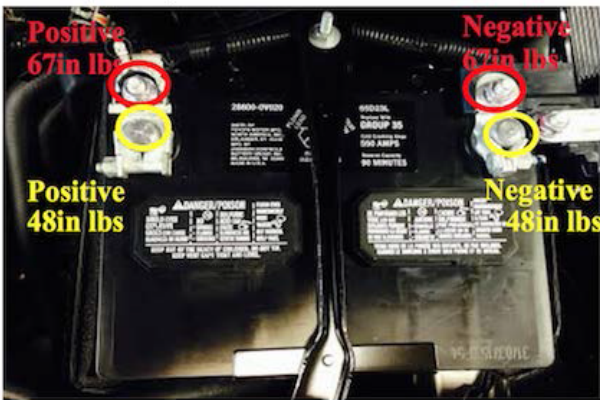


Fig. 1b.

1. Remove the (-) battery terminal

Option 1

For Gas Vehicles, the battery is in the engine Compartment.

1. Loosen the negative battery cable. See Fig. 1a.

Note: For Hybrid Vehicles, the battery is in the luggage compartment.

- (a) Remove the LH (driver's) luggage side cover.

OPTION 1

If the battery clamp nut cannot be accessed to set the torque to the recommended specification without removing additional panels and/or other components, you may change (reverse) the direction of the negative battery clamp bolt and nut. Battery terminal must have torque set to factory specification.

CAUTION: Do not touch the positive terminal. Re-torque to 48in*lbs.

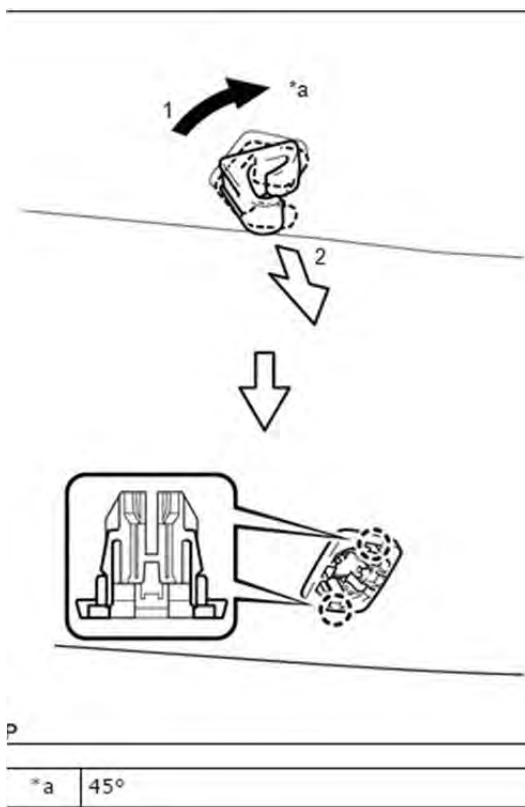
OPTION 2

Remove the 12mm nut from the positive or negative terminal junction. When re-tightening, the torque specification is 67 in*lbs. See Fig. 1b.

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

NOTE: It is recommended to use Option 1 when a lead wire is not being installed. However, Option 2 is to be used when a lead wire is being added to the positive side, or anytime the negative side 12mm nut is being removed, re-torque both to 67in*lbs.

NOTE: If removal of the positive battery terminal 12mm nut is required to install a lead wire, the negative battery terminal must be disconnected first to disable the electrical system. The positive battery or terminal should never be disconnected unless the negative battery terminal is first removed & waiting 90 seconds for the SRS system to power down.



2. Remove the driver side visor holders. Turn the holder clockwise approximately 45° and pull it as shown in the illustration. Detach the 2 claws and remove the visor holder. See Figure 2

Figure 2

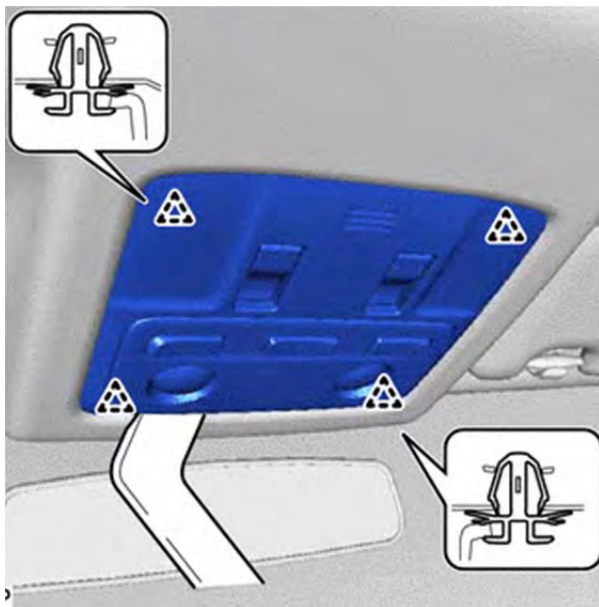


Figure 3a

3. Remove map light assembly.
Sunroof Models: Using a moulding remover, disengage the 4 clips. Disconnect the connector. See figure 3a
Non-Sunroof models: Using a moulding remover, disengage the 4 claws. Disconnect the connector. See figure 3b.

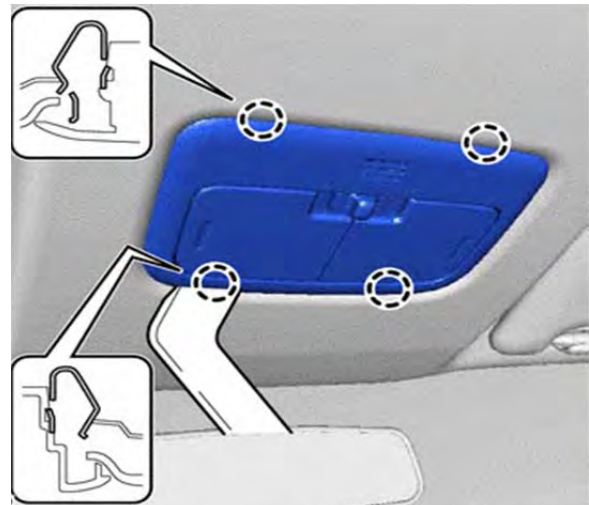
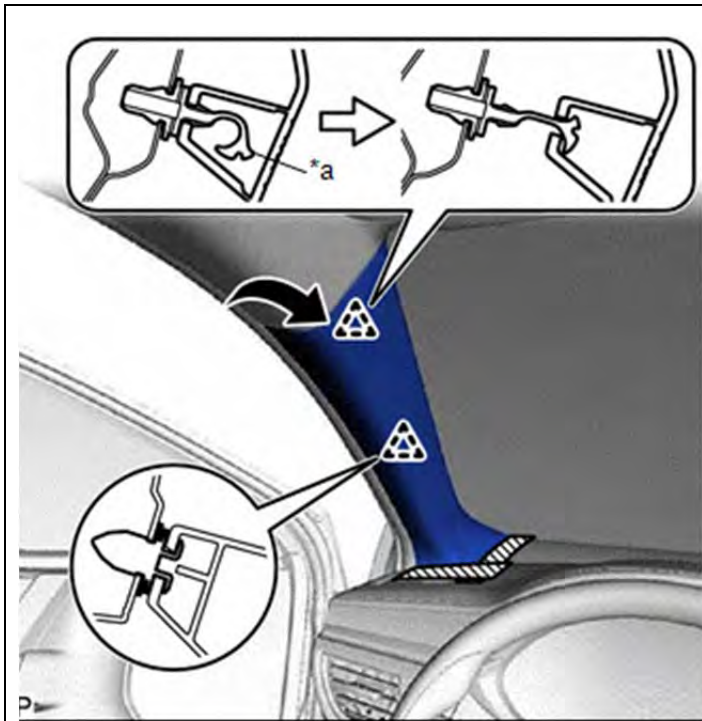



Figure 3b



*a	Front Pillar Garnish Clip
	Protective Tape

4. Apply protective tape around the front pillar garnish assembly LH as shown in the figure 4. Pull the upper part of the front pillar garnish assembly LH toward the inside of the cabin and disengage the front pillar garnish assembly LH from the base of the 2 clips. See figure 4.

HINT: Let the front LH pillar garnish hang from the 2 front pillar garnish clips.

Figure 4

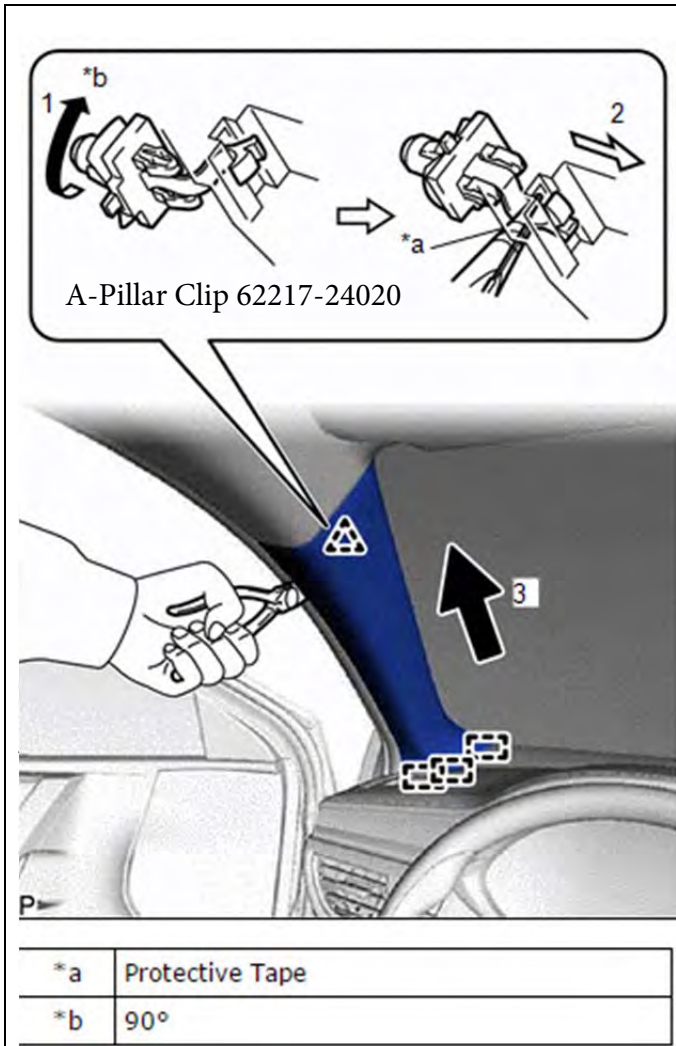
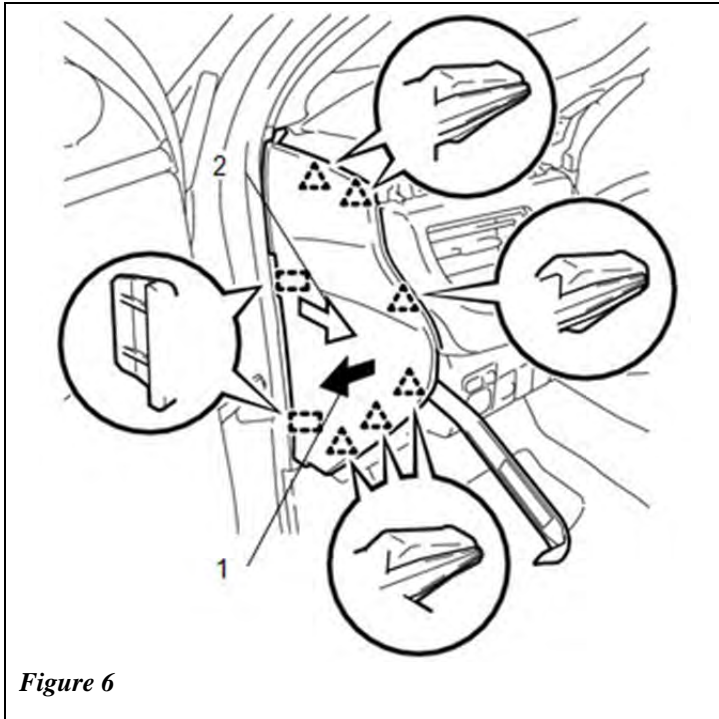


Figure 5

- Using needle-nose pliers with the tips wrapped with protective tape, rotate the front pillar garnish clip 90° in the direction indicated by the arrow (1) shown in the illustration. Pull the front A-Pillar garnish assembly LH in the direction indicated by the arrow (2) shown in the illustration to disengage it from the front A-Pillar garnish clip. Pull the front A-Pillar garnish assembly LH in the direction indicated by the arrow (3) shown in the illustration to disengage the 3 guides to remove the front A-Pillar garnish assembly LH. Remove the upper A-Pillar garnish clip. The clip CAN NOT be reused. DESTROY and DISPOSE of clip. See figure 5.

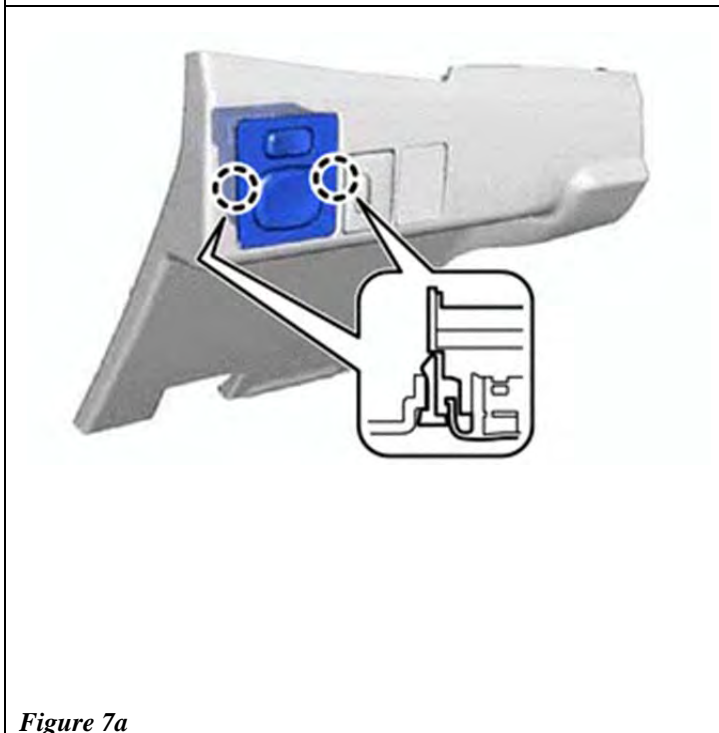
STOP
NOTE: Install a new A-Pillar garnish clip when replacing A-Pillar garnish at the end of installation. A-Pillar clip 62217-24020 is not provided in the mirror kit. This item must be ordered separately.

NOTICE: Do not apply excessive force using a tool.



6. Using a moulding remover, disengage the 6 clips in the direction indicated by the arrow (1) as shown in the illustration. Pull the instrument side panel LH in the direction indicated by the arrow (2) as shown in the illustration to disengage the 2 guides and remove the instrument side panel LH. See figure 6.

Figure 6



7. Disengage the 2 claws and remove the outer mirror switch assembly. See figure 7a and figure 7b.



Figure 7a

Figure 7b

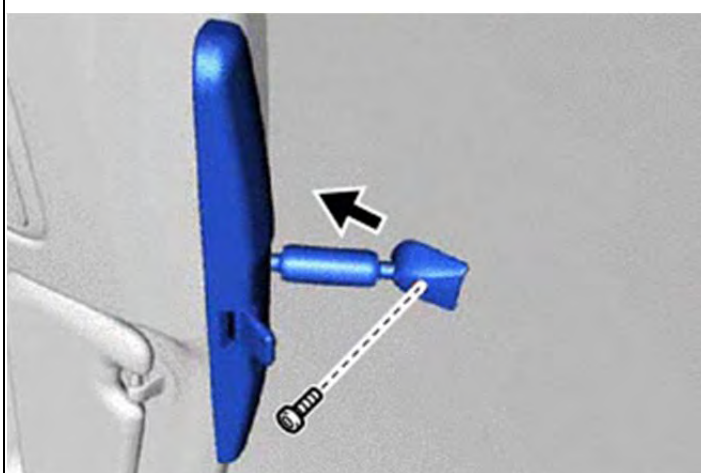


Figure 8a

8. Using a T20 "TORX" socket wrench, remove the screw and inner rear view mirror assembly as shown in the illustration. See figure 8a.

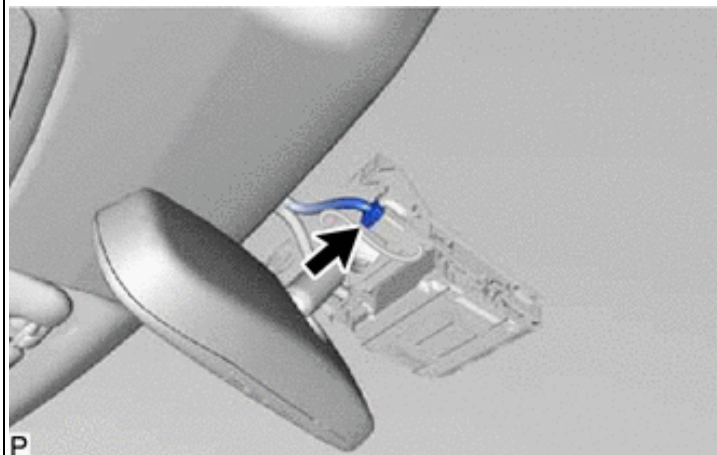


Figure 8b

Replacing EC mirror with Frameless® EC Mirror w/ Compass & HomeLink®.

Disconnect the connector. Disengage the clamp. See figure 8b and figure 8c.

Remove the factory ec mirror cover. Disconnect the connector. Using a T20 "TORX" bit, remove the screw and inner rear view mirror assembly. See figure 8d.

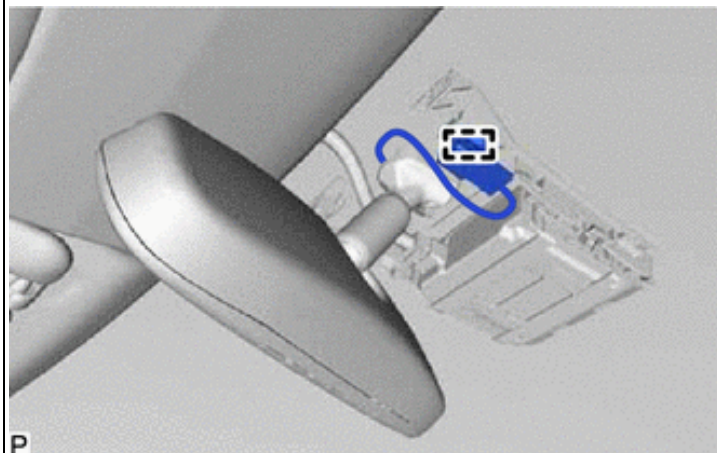


Figure 8c

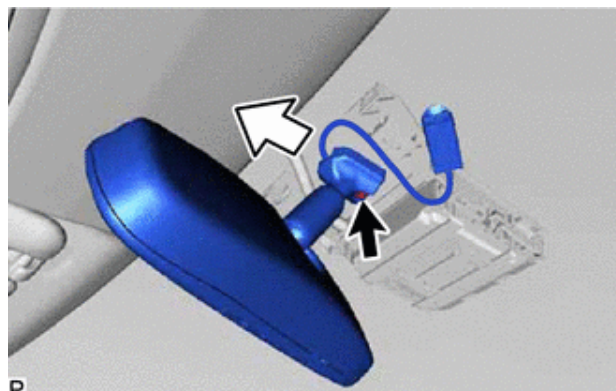
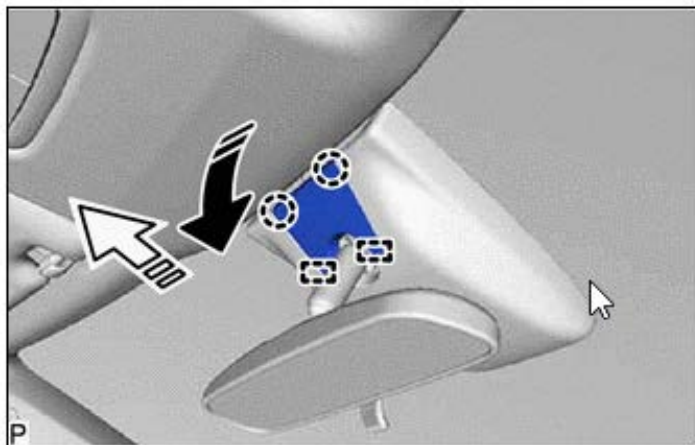


Figure 8d





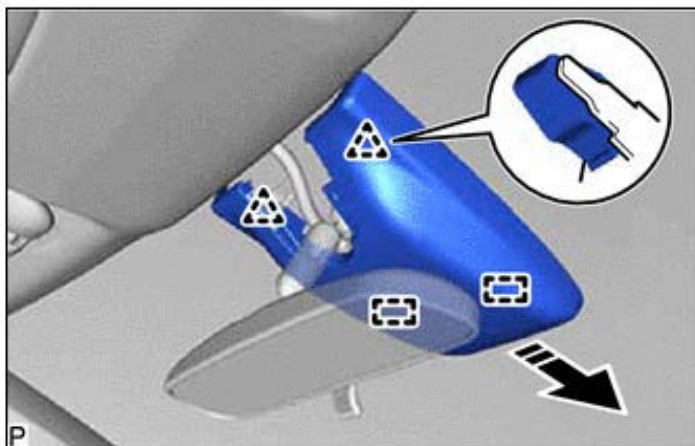
	Remove in this Direction (1)
	Remove in this Direction (2)

Figure 8e




	Remove in this Direction
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Figure 8f

Vehicles Equipped with Safety Sense (Lane Departure) System- Cover Removal.

Pull the No. 2 forward recognition cover in the direction indicated by the arrow (1) in the illustration to disengage the 2 claws. Pull the No. 2 forward recognition cover in the direction indicated by the arrow (2) in the illustration to disengage the 2 guides and remove the No. 2 forward recognition cover. See figure 8e.

NOTICE: If these claws are disengaged separately, they may break. Insert a molding remover between them and pull it down to disengage the claws simultaneously.

Disengage the 2 clips and 2 guides to remove the No. 1 forward recognition cover as shown in the illustration. See figure 8f.

NOTICE: To avoid damaging the guides, always slide the No. 1 forward recognition cover parallel to the windshield glass.



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

Figure 9a

9. 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 9a and 9b.

Torque: 15.5 in.*lbf

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

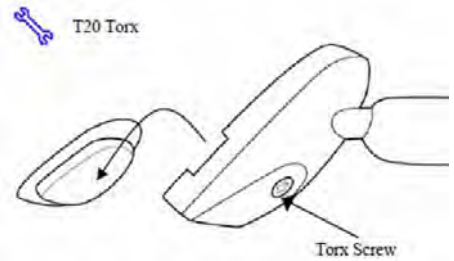
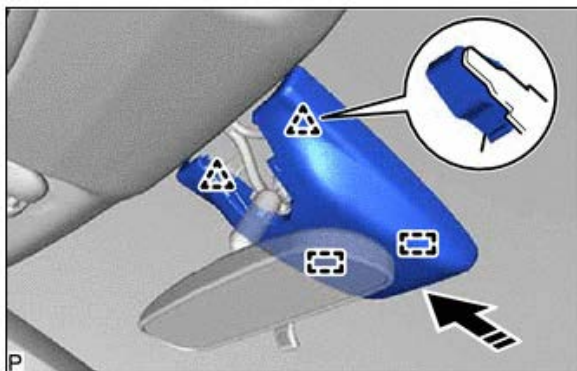


Figure 9b



Figure 10

10. Route the mirror harness to overhead console opening using the precut notches on the front of the headliner. See figure 10.




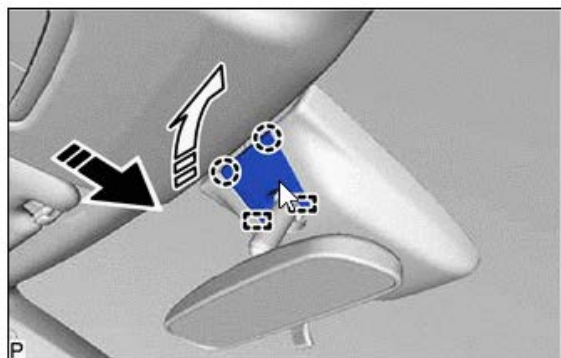
	Install in this Direction
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Figure 11a





	Install in this Direction (1)
	Install in this Direction (2)

Figure 11b

11. Vehicles Equipped with Saftey Sense (Lane Departure) System-Cover Installation.

Engage the 2 clips and 2 guides as shown in the illustration to install the No. 1 forward recognition cover. See figure 11a.

Engage the 2 guides and 2 claws as indicated by the arrows, in the order shown in the illustration to install the No. 2 forward recognition cover. See figure 11b.

Note: Vehicles with Lane departure System (Saftey Sense) will not require the mirror wire harness cover.

Vehicles without Saftey Sense (Lane Departure) System-Mirror Wire harness cover installation.

Install the wire harness cover over the wire harness. Seat the bottom of the cover securely to base of the mirror. Extend the top of the cover fully into headliner. See figure 11c.

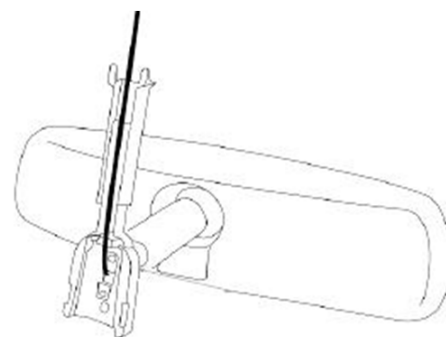
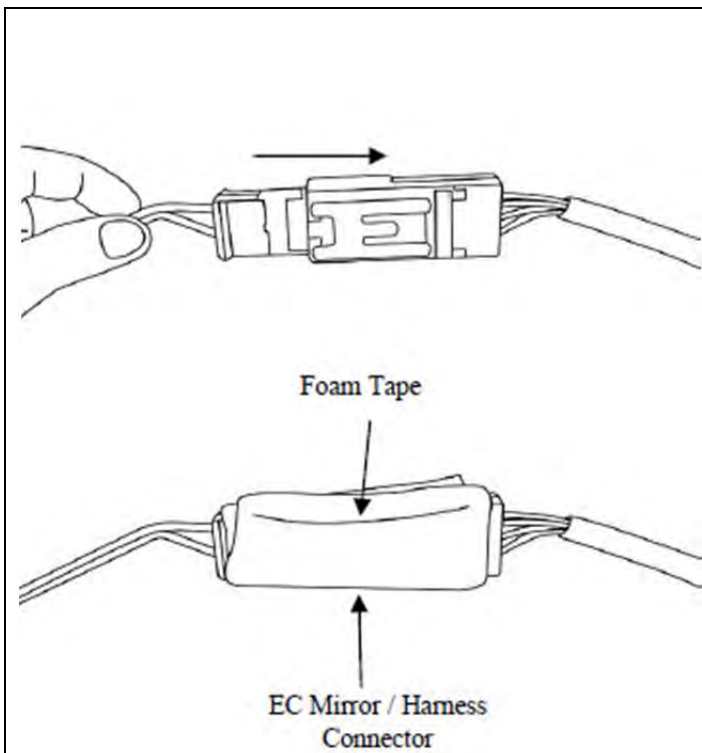
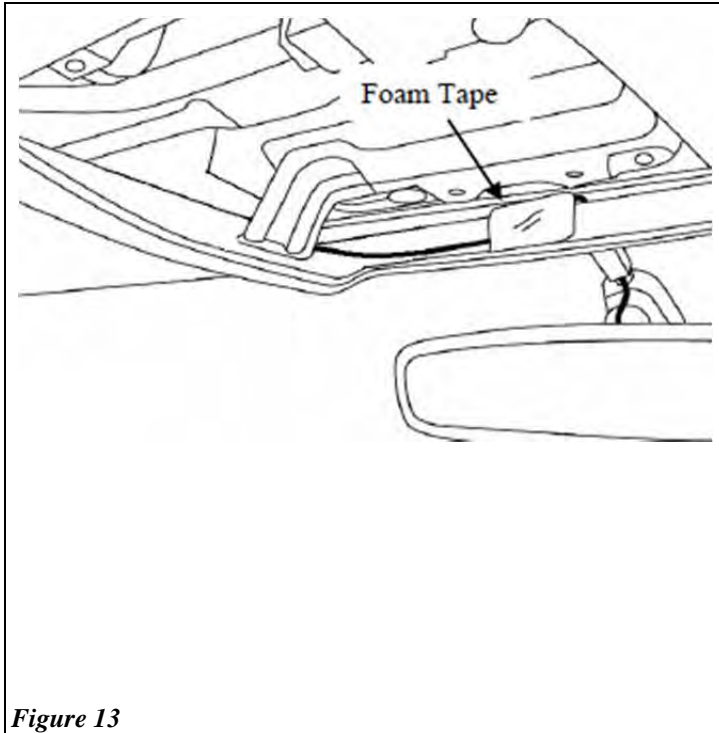


Figure 11c



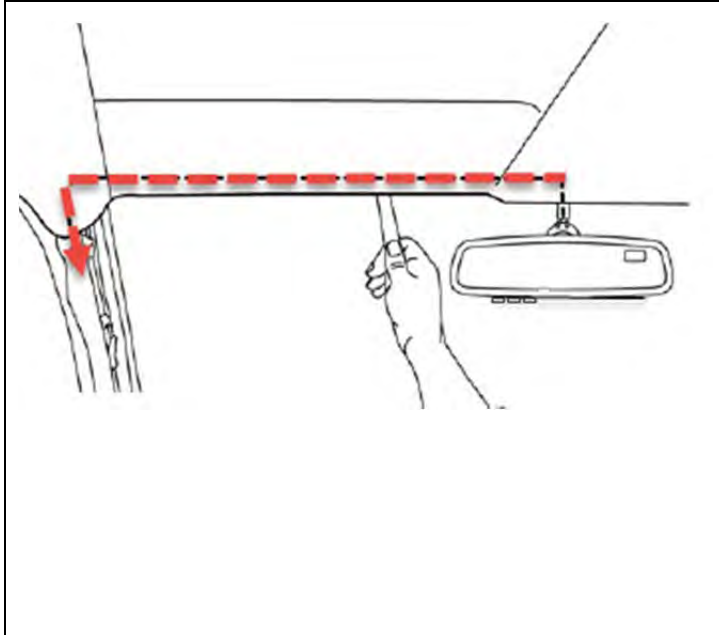
12. Connect the mirror harness to the mirror main power harness. Make sure both connectors are fully engaged. Wrap foam tape around connectors. See figure 12.

Figure 12



13. Secure the harness to the front center of the headliner with one (1) piece of foam tape. See figure 13.

Figure 13



14. Route mirror main power harness along front edge of headliner towards the LH vehicle A-Pillar. See figure 14.

Figure 14



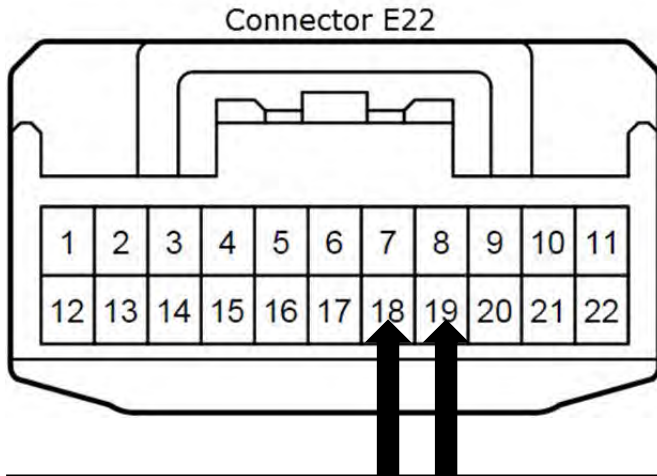
15. Route the mirror harness down to the bottom of the Front LH pillar. Route the harness through the factory harness clips attached to the vehicle. Wire tie the harness to the vehicle harness as shown. See figure 15.

Figure 15



16. Route the mirror harness down to the outer mirror remote switch. Follow the factory harness. See figure 16.

Figure 16



T-Tap the mirror main power harness ignition power wire (black/white) to Pin 19 grey wire in black connector E22. T-Tap the mirror main power harness ground wire (black/orange) to Pin 18 white/black wire in black connector E22.

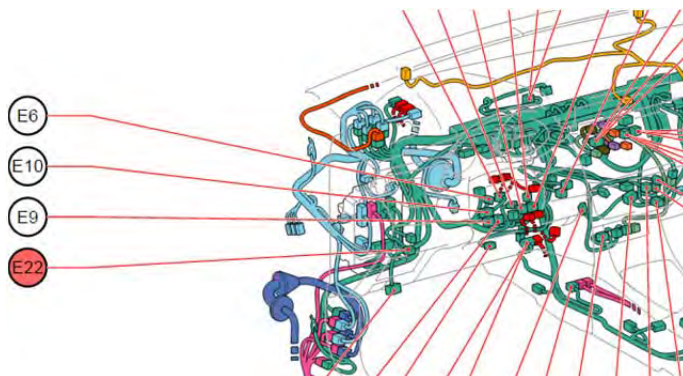
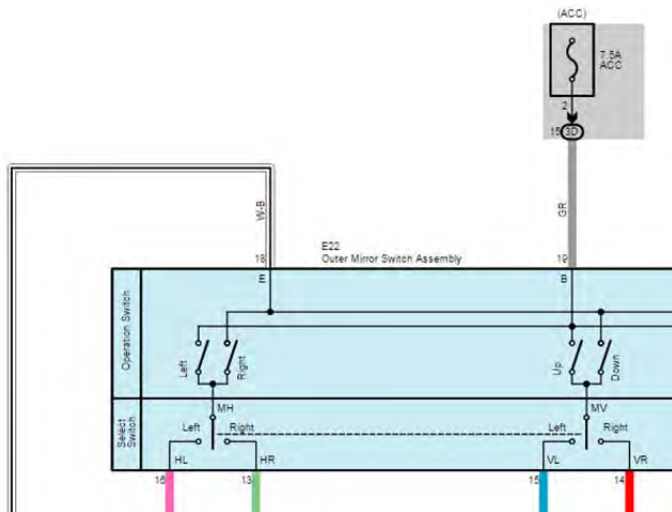


Figure 17a

17. Locate vehicle connector E22 outer remote mirror switch. Disconnect connector. T-Tap the mirror main power harness ignition power wire (black/white) to Pin 19 grey wire in black connector E22. T-Tap the mirror main power harness ground wire (black/orange) to Pin 18 white/black wire in black connector E22. See figure 17a and figure 17b.



Figure 17b

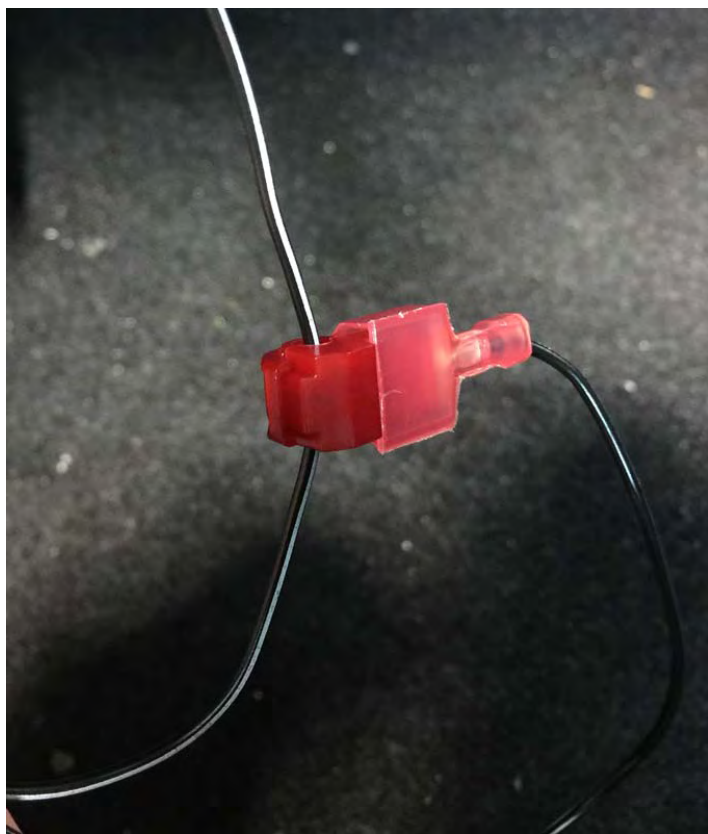


Figure 18

18. T-Tap the mirror main power harness power wire (black) to the mirror main power harness ignition wire (black/white). See figure 18.

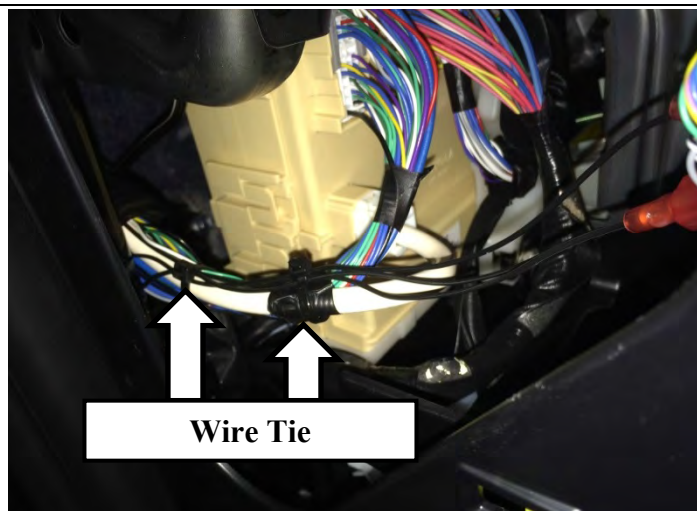


Figure 19

19. Bundle up any excess wire. Using wire ties, secure the mirror main power harness wires to the vehicle harness as shown. See figure 19.

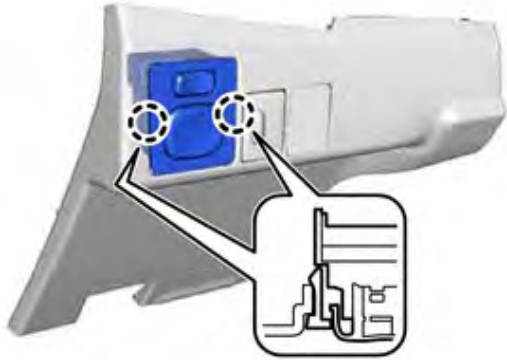


Figure 20

20. Engage the 2 claws and install the outer mirror switch assembly. See figure 20.

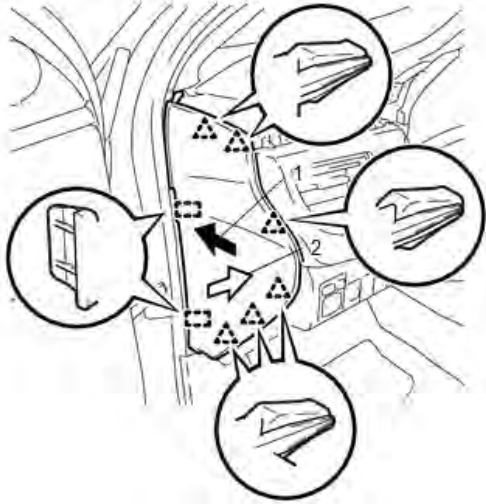
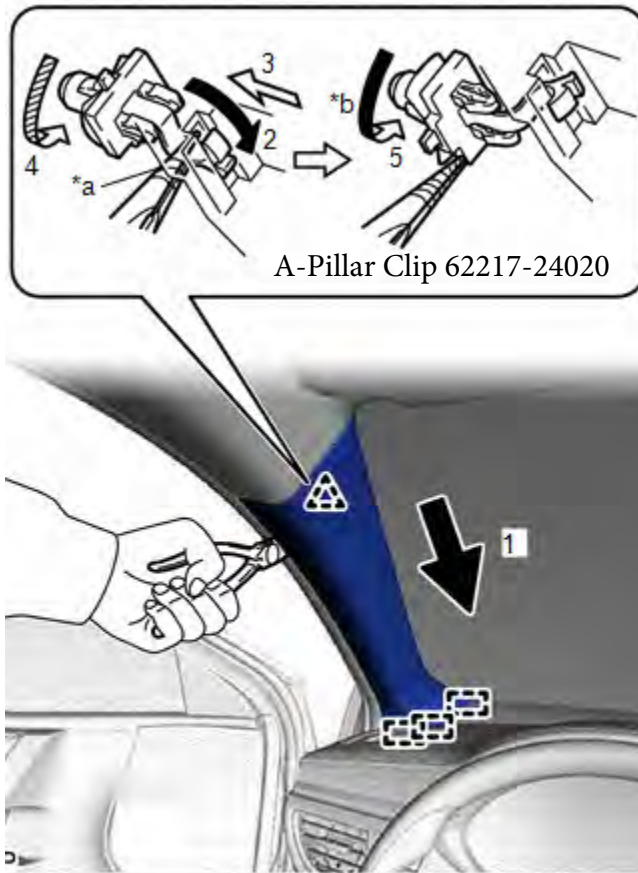


Figure 21

21. Push the instrument side panel LH in the direction indicated by the arrow (1) as shown in the illustration to engage the 2 guides and push it in the direction indicated by the arrow (2) as shown in the illustration to engage the 6 clips to install the instrument side panel LH. See figure 21.



A-Pillar Clip 62217-24020

*a	Protective Tape
*b	90°

HINT: Rotate the front A-Pillar garnish clip so that the longer end of the clip is positioned at the bottom. Make sure that the front A-Pillar garnish clip is positioned as shown in the illustration. Failing to do so may cause a gap between the front A-Pillar garnish assembly LH and roof headlining assembly.

22. Install the New A-Pillar garnish clip to vehicle A-Pillar.

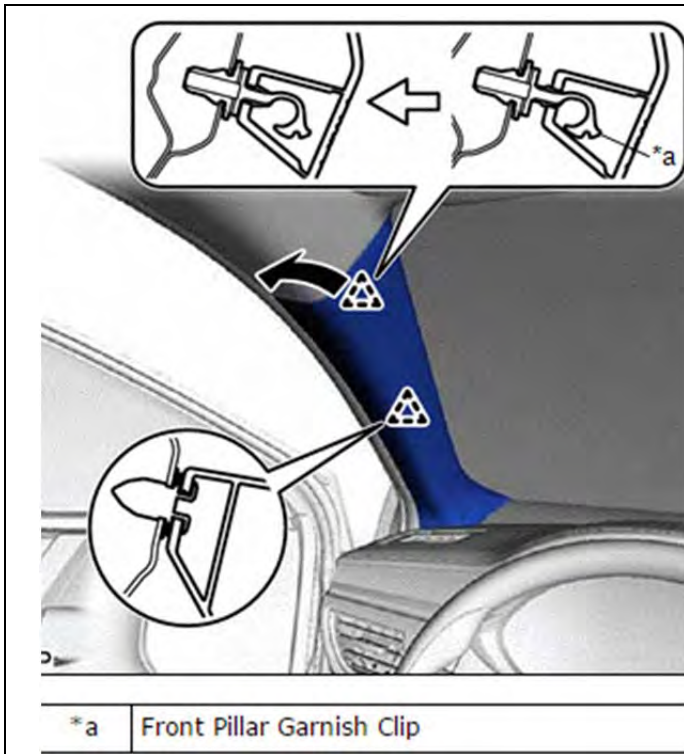


NOTE: Install a new A-Pillar garnish clip when installing garnish. DO NOT reuse the old clip. THE CLIP MUST BE REPLACED.

A-Pillar clip 62217-24020 is not provided in the mirror kit. This item must be ordered separately.

Push the front A-Pillar garnish assembly LH in the direction indicated by the arrow (1) shown in the illustration to engage the 3 guides. Using needle-nose pliers with the tips wrapped with protective tape, bend the end of the front A-Pillar garnish clip in the direction indicated by the arrow (2) shown in the illustration. Push the front A-Pillar garnish assembly LH in the direction indicated by the arrow (3) shown in the illustration and insert it to the front A-Pillar garnish clip. Using needle-nose pliers with the tips wrapped with protective tape, rotate the front pillar garnish clip in the direction indicated by the arrow (4) shown in the illustration. Using needle-nose pliers with the tips wrapped with protective tape, push the front A-Pillar garnish clip in the direction indicated by the arrow (5) and rotate it to the position shown in the illustration. See figure 22.

Figure 22



23. Engage the clip and front pillar garnish clip to install the front pillar garnish assembly LH. See figure 23.

Figure 23

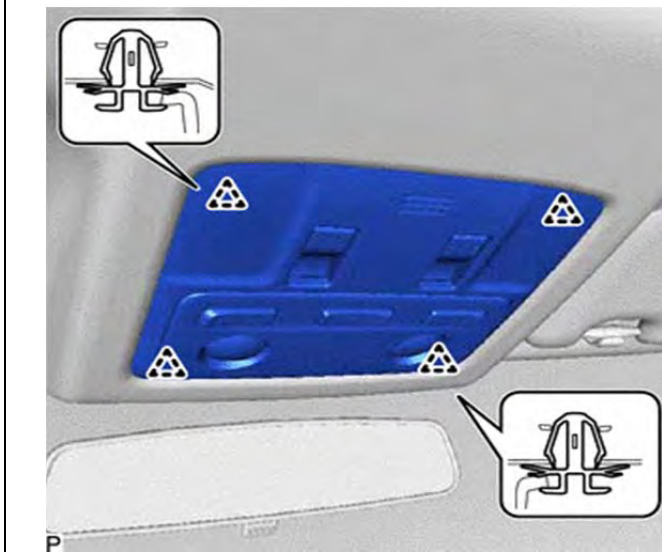


Figure 24a

24. Install map light assembly.
Sunroof Models: Connect the connector. Engage the 4 clips. See figure 24a.
Non-Sunroof models: Connect the connector. Engage the 4 claws. See figure 24b.

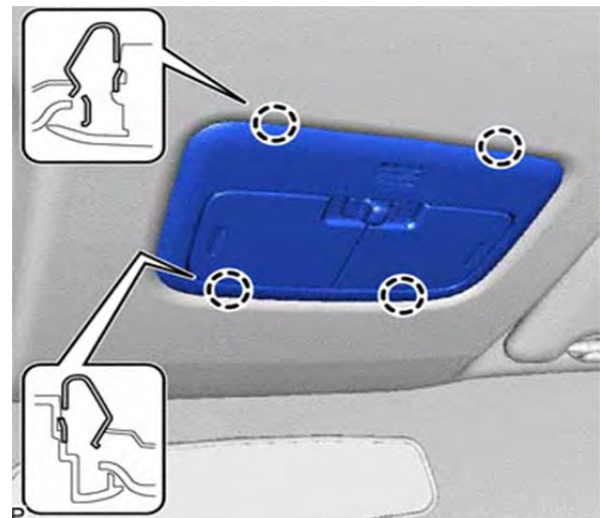
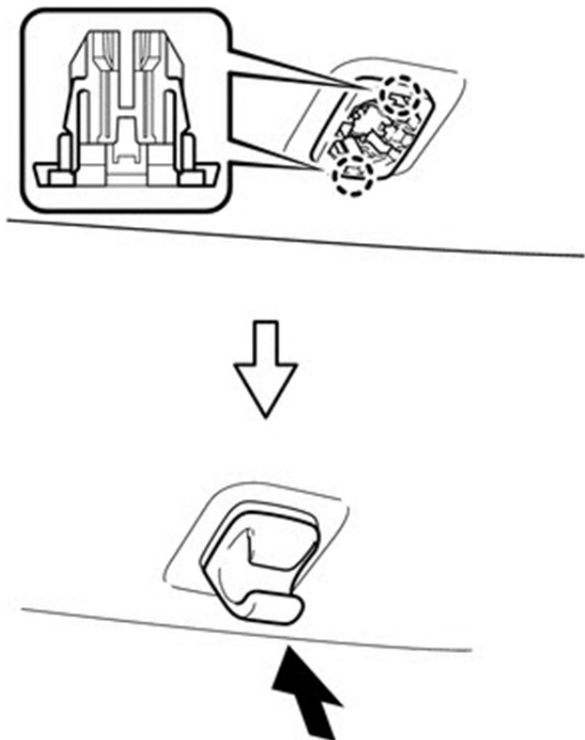


Figure 24b



25. Engage the 2 claws. Push in the visor holder as shown in the illustration. See figure 25.

Figure 25



Figure 26

26. Place owner's cards in the glove box. See figure 26.

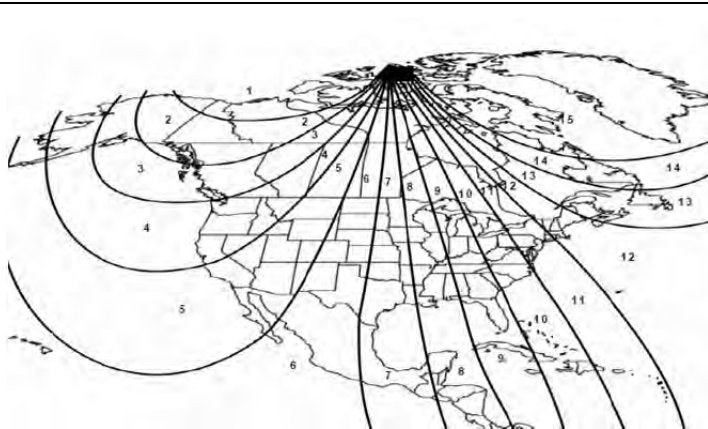


Figure 28

28. 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 28.

(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.

29. 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.

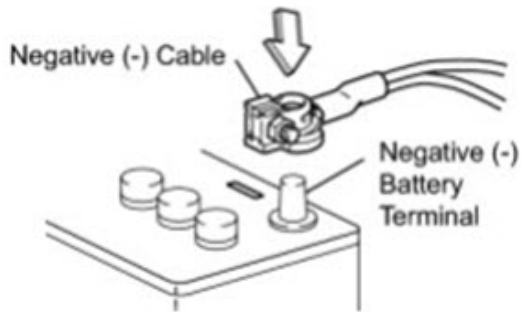


Fig. 29

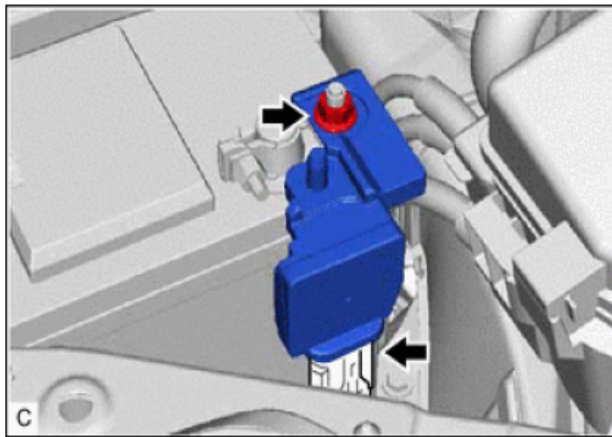


Fig. 30

Re-install the (-) battery terminal**Option 1**

For Gas Vehicles, the battery is in the engine Compartment.

1. Tighten the negative battery cable. See Fig.29
For Hybrid Vehicles, the battery is in the luggage compartment.
2. Re-install the LH (driver's) luggage side cover.



Torque: 48 in*lbs



Do not touch the positive terminal.

INSTALL GENERATOR CONTROL ECU ASSEMBLY**Option 2**

- (a) Install the generator control ECU assembly to the negative (-) battery terminal with the nut.



Torque:
7.6 N·m {77 kgf·cm, 67 in·lbf}

Fig. 30

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).

Mirror clears:

- 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.

Vehicle Functions:

- Check dome light.

- Check remote outer mirror switch.

- 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.

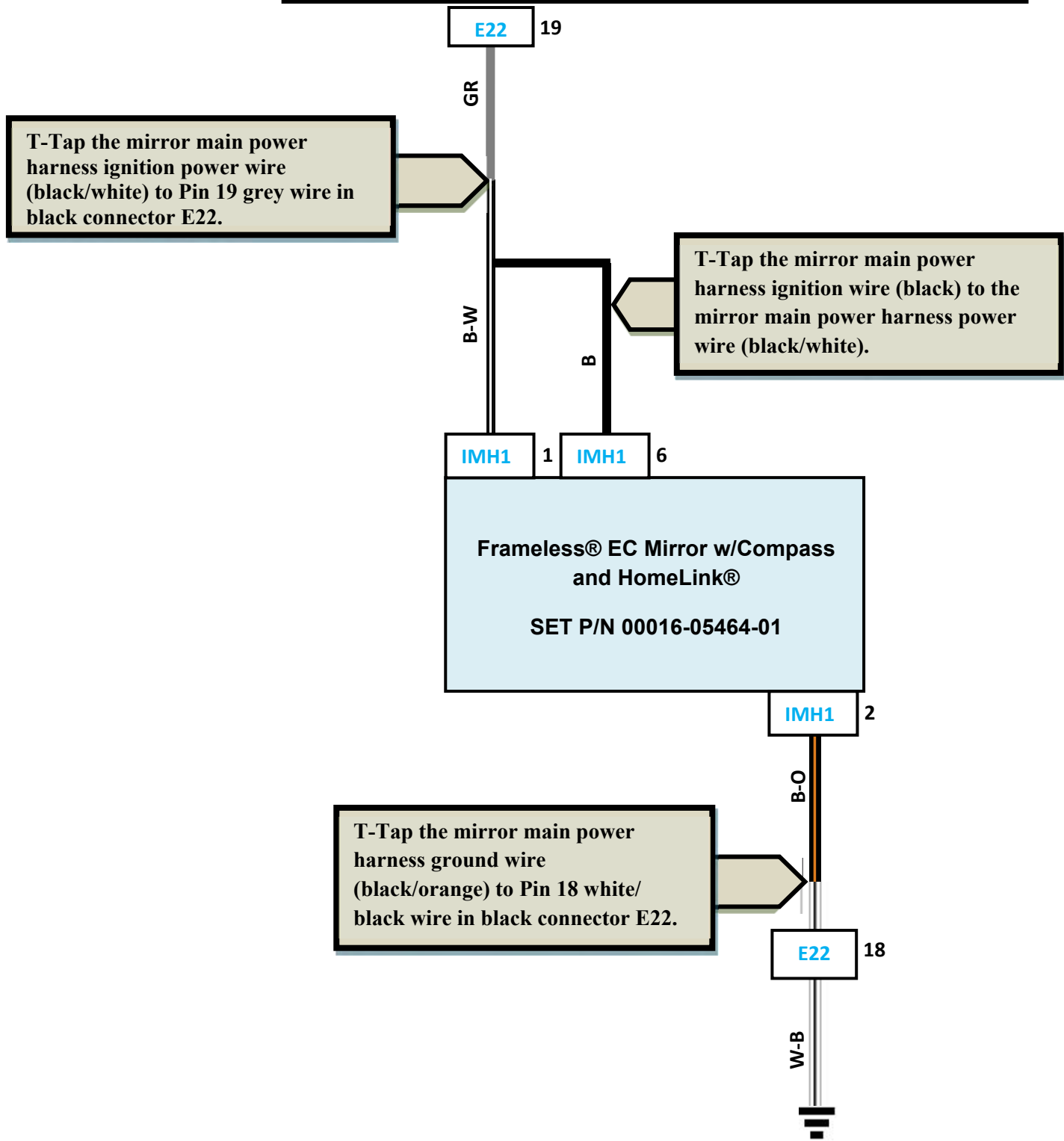
Verify the dome light functions properly.

Verify the switch functions properly.

Verify the sunroof functions properly.

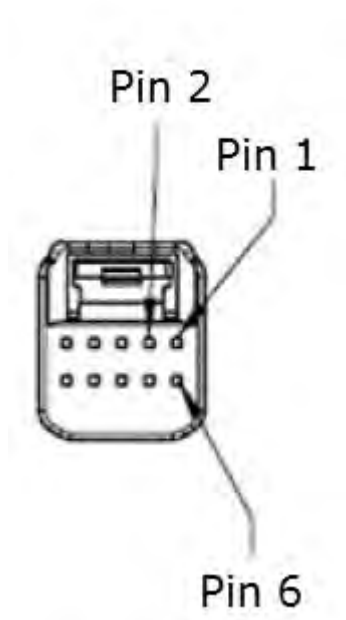
Block Diagram
Frameless® EC Mirror w/Compass & HomeLink®

Applies to SET P/N 00016-05464 2017 Corolla



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 I8 Circuit

