

2019MY Crosstrek & Crosstrek Hybrid (PHEV) Exterior A/D Approach Light Mirror Installation Instructions P# J201SFL301

Note: 2017MY Impreza models with BSD will not require a different A/D Approach mirror kit. BSD indicator is part of the exterior mirror housing.



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Note: The accessory interior A/D Compass mirror or Home Link Mirror must be installed for the exterior A/D Approach Mirrors to fully function as designed.



Ensure the VIN matches the work order, the vehicle due date is in the lock period, and verify there are no "Holds" on the vehicle for any reason. Verify the vehicle calls for the accessory installation.

CAUTION: ACCESSORY INSTALLATIONS PERFORMED BY UNTRAINED PERSONS COULD RESULT IN SERIOUS INJURY TO THOSE PERSONS OR TO OTHERS.

Subaru Work Instructions are intended for use by professional accessory installers ONLY. They are written to provide step by step accessory installation instruction for a fast paced production environment. Properly trained accessory installers have the equipment, tools, safety instructions and know-how to do the job correctly and safely.

Inspect the Exterior A/D Approach Light Kit parts to ensure no missing parts or part defects



	STOP: Damage may occur to the vehicle/part. Do not proceed until process has been complied with.
	Work Hazard Analysis (WHA): 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.
	Revision Mark/Highlight: This mark highlights a change in installation with respect to the previous issue.
	Work Instruction Training (WIT): Key point that designates an important step to ensure the quality of the installation.
	Recycle: Item to be recycled.
	Safety Torque - This mark indicates that a torque is related to safety

Required Tools and Supplies:

- ¼" Drive Ratchet w/ 6" extension
- 10mm socket
- ¼" Drive Torque Wrench (In. Lbs.)
- Clean Towels
- Window cleaner (optional)
- 99% Rubbing alcohol
- Paint marker
- Masking Tape
- Mirror Grease
- Flux brush
- Clean Towels
- Plastic Trim Tool
- Vehicle Painted Parts Protection



Battery Terminal Stud Removal—Non Hybrid Vehicles



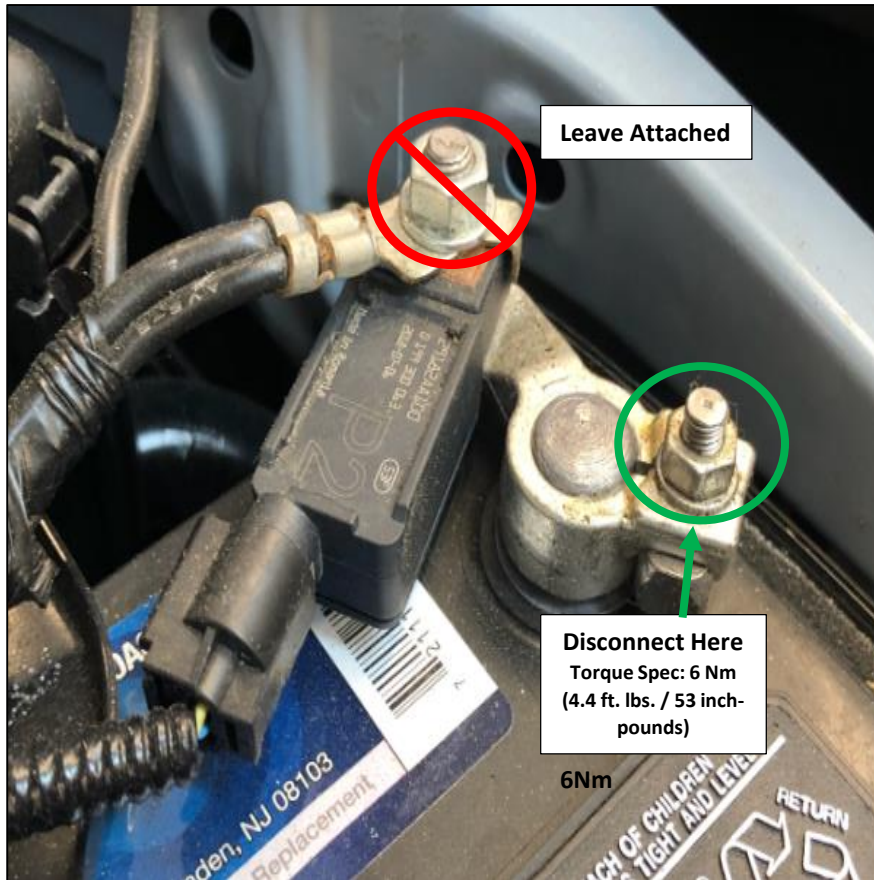
***See next slide for 12 volt battery disconnect on Hybrid Vehicles.**

Place protection over the LF fender. Using a ¼” drive ratchet and 10mm socket remove the negative battery cable from the negative battery stud. Do not remove negative cable from the battery post. Position / protect the negative cable so it cannot accidentally touch body ground or the negative battery terminal. Allow (60) seconds before the next installation step to ensure the airbag power supply is discharged.

⚠ Carefully remove the negative battery cable from the battery stud only. Do not allow the negative cable to accidentally ground during the installation.



Battery Terminal Stud Removal—Hybrid Vehicles



PHEV Vehicles Only (HYBRID)

Crosstrek PHEV is equipped with a new-style battery sensor connecting the negative (-) battery cable to the negative battery post. In the past, the recommended procedure has been to disconnect the negative cable from the battery sensor leaving the sensor attached to the battery post. This new-style sensor requires the negative cable to stay attached and the cable / sensor “assembly” be removed from the battery post as shown.

Allow (60) seconds before the next installation step to ensure the airbag power supply is discharged

- **Open the hood and use the prop rod to hold the hood open.**
- **Using a ¼” drive ratchet and 10mm socket loosen the 10mm nut on the negative battery cable. Do NOT fully remove nut.**
- **Remove the negative battery cable from the negative battery post.**



Carefully remove the negative battery cable from the battery post. Do not allow the negative cable accidentally ground during the installation.

Prepare the Exterior Mirror Housings

Using masking tape, apply tape to the top and the bottom of the LH and RH mirror housing to prevent scratching or chipping the plastic housing surfaces.




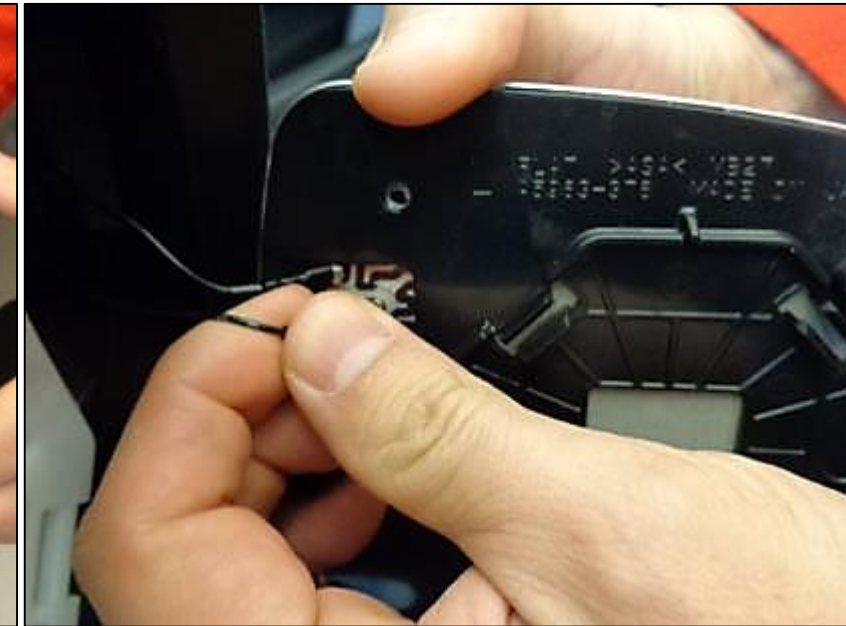
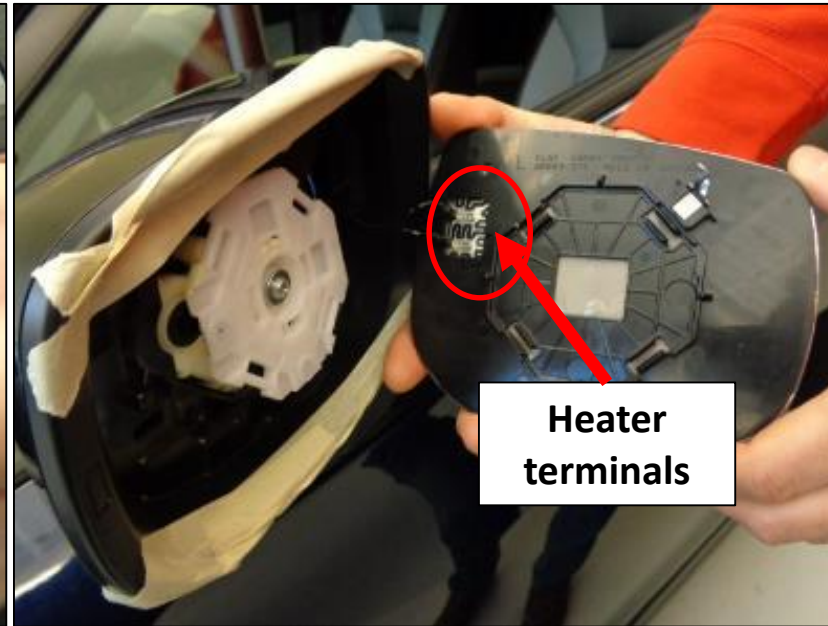
RH Mirror Shown

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Remove OE Mirror Glass

LH Mirror Shown

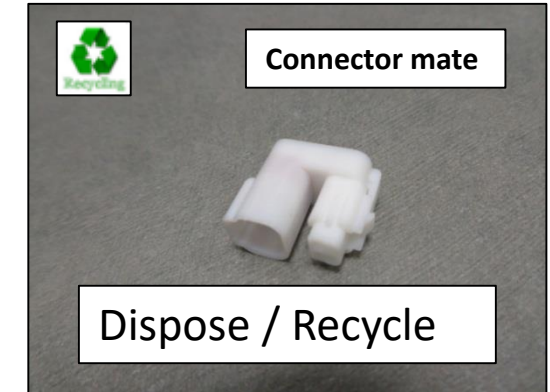
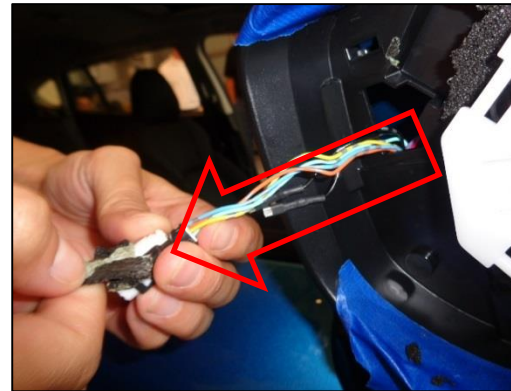
Remove the OE exterior mirror glass assembly from the LH and RH mirror housing by firmly gripping the bottom of the mirror glass and pulling out with moderate force. If the mirror glass is heated carefully remove the heater circuit connectors from the glass assembly.  Dispose / recycle the exterior mirrors.



Locate Exterior Approach Wiring Harness

1. Locate and carefully pull the OE mirror harness connector, in order to expose the mirror connector. **DO NOT USE ANY TOOL OR INSTRUMENT TO EXPOSE THE MIRROR CONNECTOR.**
2. Clean away the excess foam still affixed to the mirror housing and the pre-arranged connector.
3. Carefully remove and dispose/recycle the white pre-arranged connector mate from the prearranged connectors.

RH Mirror Shown



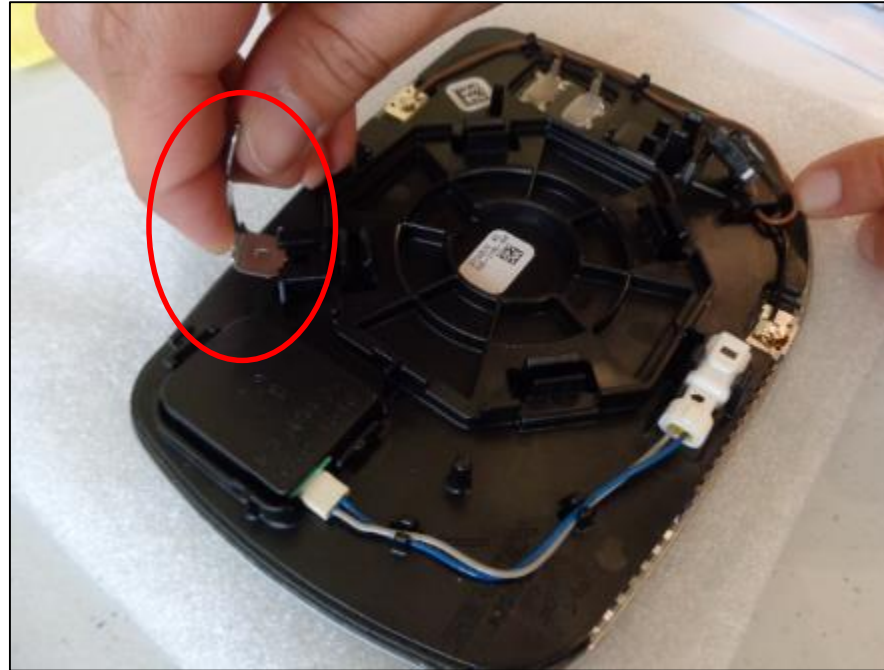
Carefully pull out the OE mirror wiring harness. Do not pull the wires out of the connectors because permanent connector damage will result. Use no tools!



Exterior Approach Installation

1. Install the friction damper spring to the slot at the top of the A/D Approach Light mirror assembly for RH & LH mirrors
2. Apply mirror grease to the slot located in the RH & LH mirror housings. Clean off all surfaces of excess grease if accidentally applied to areas surrounding the target area. Do not get grease on the backing plate.

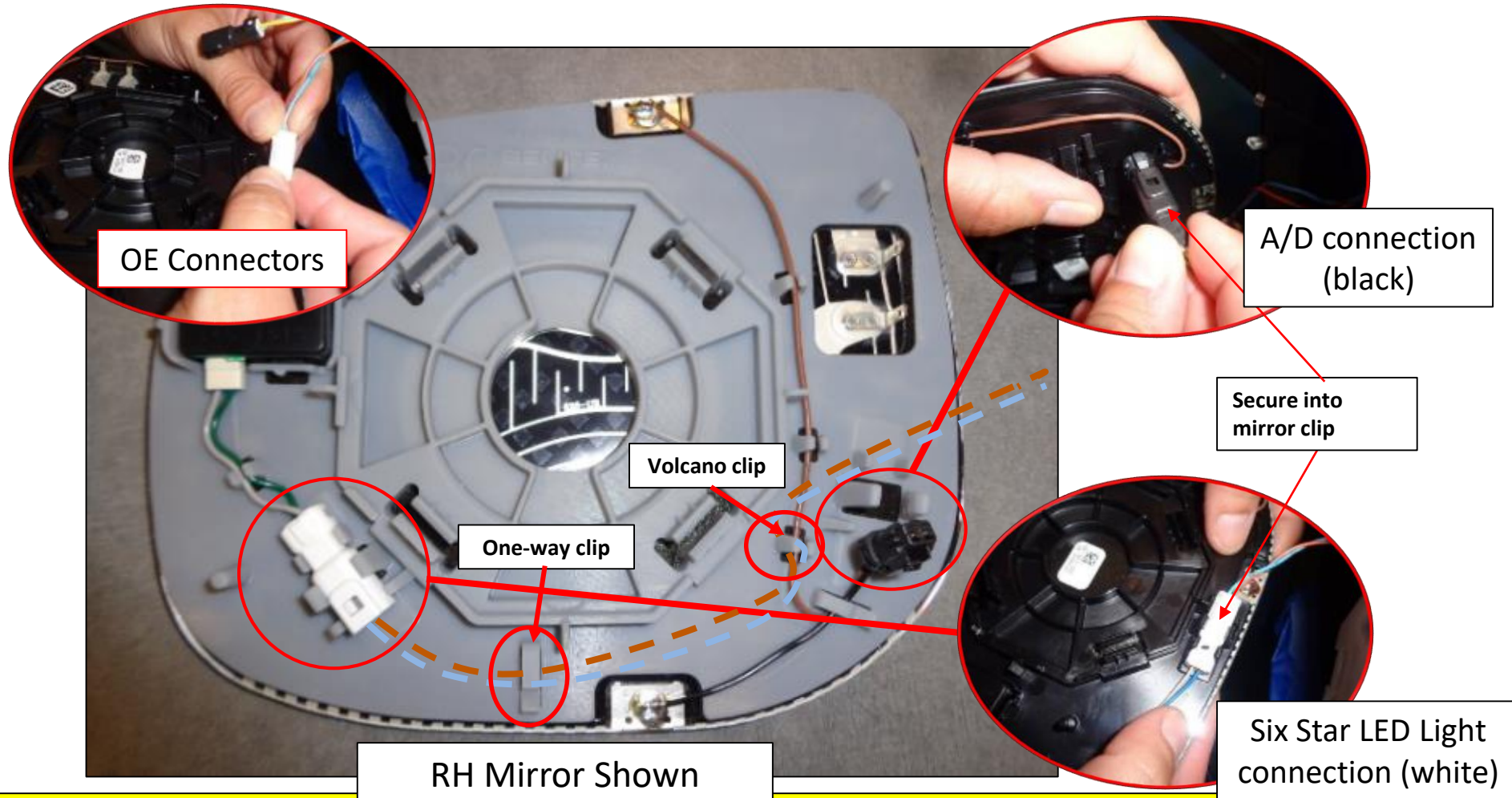
RH Mirror Shown



 **Wipe off all excess grease. Do not get grease on the backing plate.**

Exterior Approach Installation

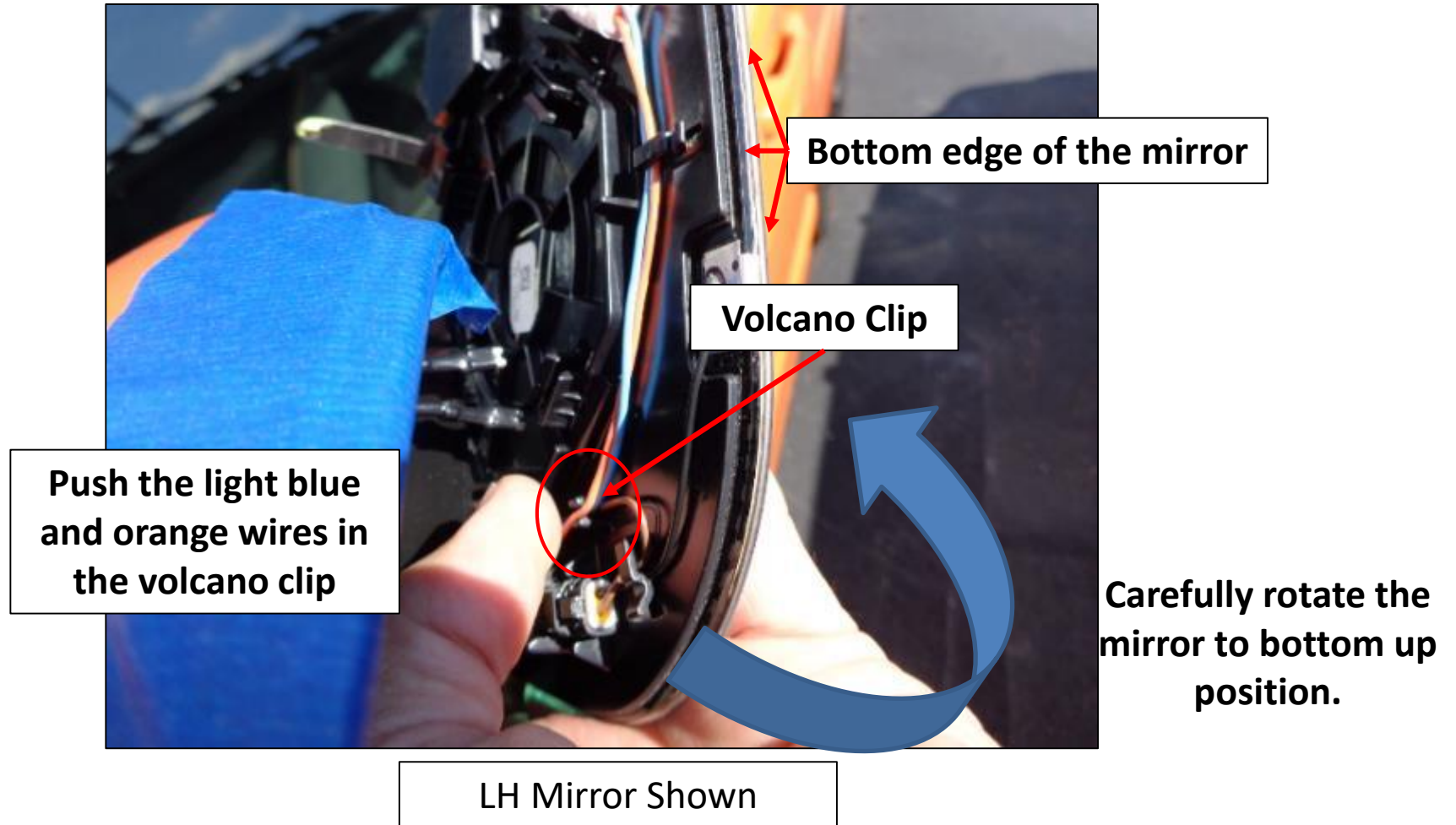
1. Connect the OE harness (white) 2-pin connector into the corresponding mirror (white) 2-pin harness connector.
2. Route the orange and blue wires through the one way clip and then through the volcano clip.
3. Connect the OE harness (black) 2-pin connector into the corresponding mirror (black) 2-pin harness connector.
4. Ensure both connections are secured into the mirror clips.



Ensure the connections are in place by the push-pull method to ensure proper wiring connection.

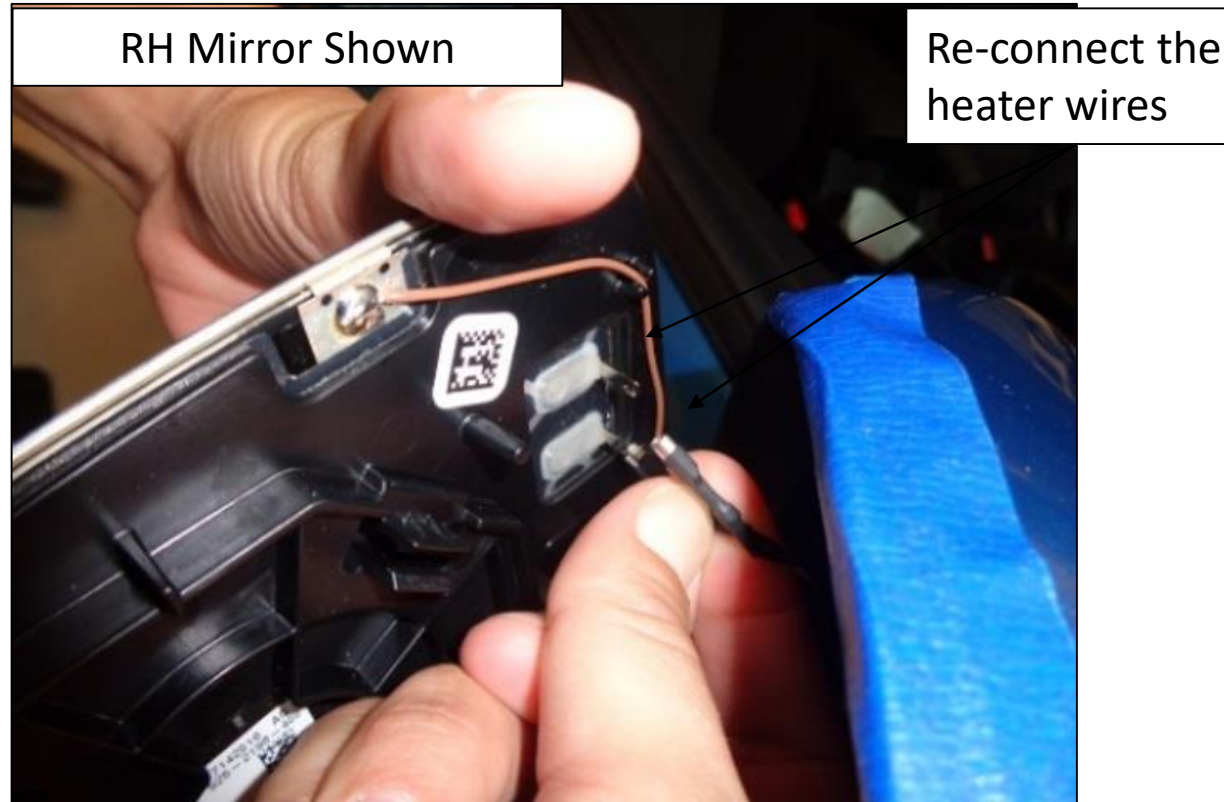
Exterior Approach Installation Volcano Clip Best Practice

1. To ease the routing of the orange and light blue wires through the volcano clip, rotate the mirror bottom up so the harness wires have more length.
2. Use your fingers to seat the light blue and orange wires into the volcano clip.
3. Ensure both wires are securely in place in the volcano clip.
4. Rotate the mirror back in proper position to complete the installation.



Ensure the connections are in place by the push-pull method to ensure proper wiring connection.

Re-connect the OE heater circuit wires.

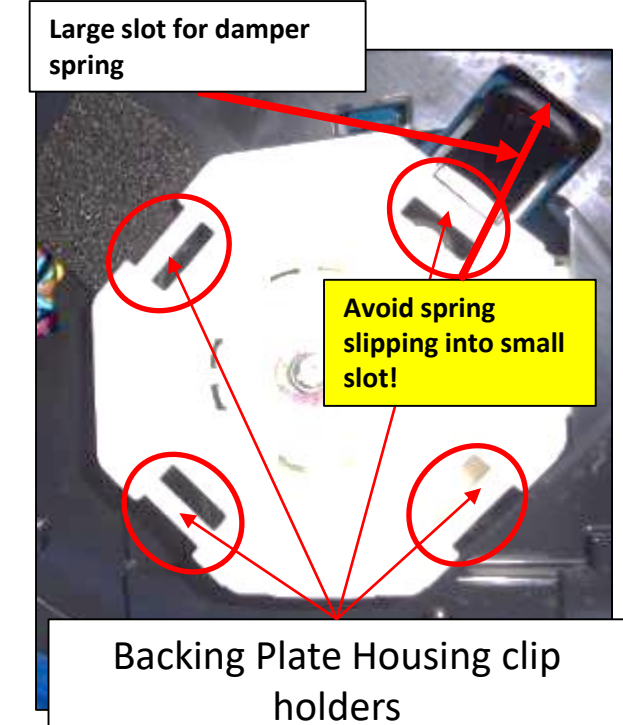
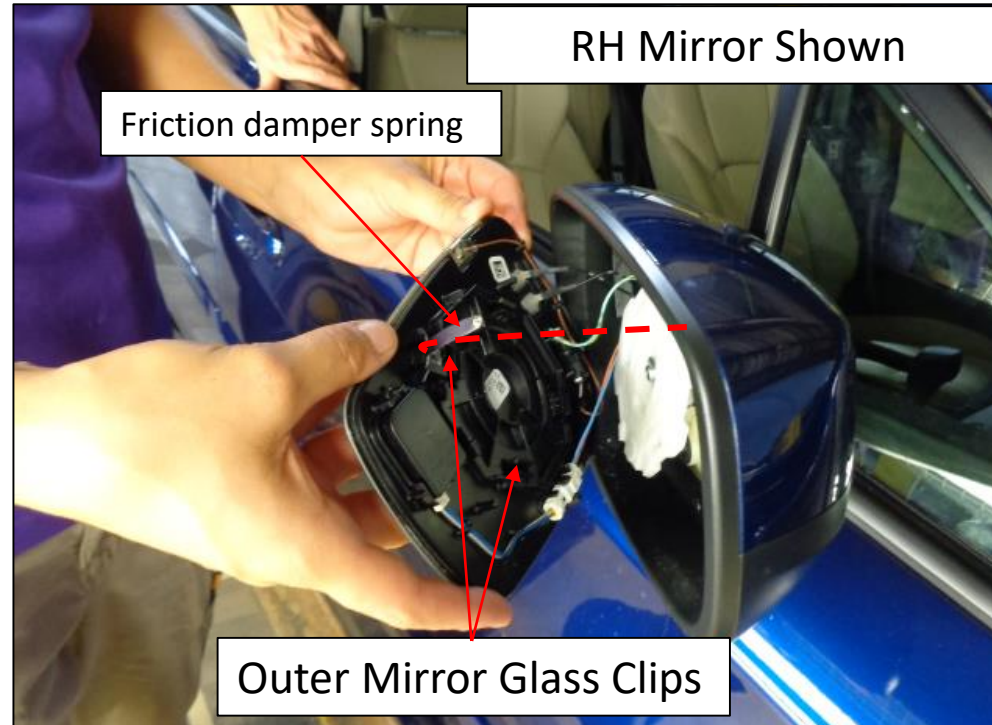


 Ensure the heater connectors are fully seated onto terminals.

Exterior Approach Installation

1. Install the A/D Approach mirror by aligning the mirror clips with the exterior mirror Hexagonal (Stop Sign) white plastic backing plate housing. The A/D Approach mirror glass assembly has (4) clips that open to clip onto the (4) clip holders located on the Hexagonal (Stop Sign) white plastic housing.
2. Install the mirror carefully, ensuring the friction damper fits into the large slot, not the small slot above the large slot. Firmly press the mirror in place. You will feel all (4) clips engage.
3. **The exterior mirror wires are not twisted during the installation.**

TIP: Pressing from the center using the palm of your hand may help to install the mirror to the backing plate.



STOP Ensure the friction damper spring is inserted in the large slot. If installed in the smaller slot the mirror movement will be restricted.

STOP Ensure the wiring is not pinched between mirror glass & backing plate or overlapping on the areas where the mirror glass is installed on the backing plate to prevent pinching wires and potential wiring damage. Ensure the friction damper spring is inserted in the large slot. If installed in the smaller slot the mirror movement will be restricted.

Battery Terminal Stud Reinstall—Non Hybrid Vehicles



***See next slide for 12 volt battery re-connect on Hybrid Vehicles.**

With protection covering the LF fender, use a ¼” drive ratchet and 10mm socket reinstall the negative battery cable to the negative battery stud. Using a ¼” drive torque wrench, torque the 10mm nut to the stud to 66 In. Lbs. Do not over torque.

Using a paint marker mark the negative terminal stud top to indicate the nut was properly torqued

⚠ Always take the necessary precautions when working on or around the battery.



PHEV Vehicles Only (HYBRID)

Battery Terminal Stud Reinstall—Hybrid Vehicles

Using a ¼" drive torque wrench and 10mm socket reconnect the negative battery cable to the negative battery post. Tighten the 10mm nut to 4.4 Ft. Lbs. (53 In. Lbs.) or 6Nm. Ensure the nut is properly torqued by adding a torque marking to the top of the stud as shown.

Check Your Work

- Ensure the mirror glass on both mirrors are installed correctly by pulling out on the A/D Approach mirror glass to ensure there is no exposed wires and the mirror is secure in place.
- Ensure no scratches or damages to the outer mirror upper and lower covers.
- Ensure the mirror upper and lower covers are properly seated.
- Move the mirror up and down, back and forth (1) time to ensure proper clip engagement on both mirrors.
- Remove all masking tape on both mirror housings.
- Turn the Ignition to the “ON” position and cover the interior mirror light sensor and ensure both exterior mirrors dim in unison with the interior mirror.
- With your foot on the brake pedal, put the gear selector in “R” mode and ensure the mirrors return to the not dimmed mode.
- Using the mirror switch on the drivers front door adjust both mirrors in all extreme positions up/down and left/right. Ensure the exterior mirrors reposition freely.
- Activate heated mirror circuit and verify the heated elements operate.
- Toggle the “BSD” dash switch and observe the mirror housing “BSD” indicators. Ensure they both operate. (If Equipped with BSD).
- Operate the turn signal stalk and observe the turn signal mirror indicator. (If equipped with integral turn signal indicators)
- Ensure mirror glass, mirror housing, and surrounding work area is damage free.
- Ensure the approach light illuminates on both mirrors when door is opened.
- Clean mirror glass and housing.



Work Validation

- Ensure no exposed exterior mirror wires can be seen when inspecting the mirror openings on all four sides.
- Adjust as required.



RH Mirror Shown



The exterior mirror wires are not twisted during the installation.

