



GENUINE ACCESSORIES

Installation Instructions

Part Number:

0000-8E-R13

0000-89-R33

Trailer Hitch Harness Kit

Applicable Models:

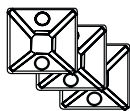
2017 > CX-5 (GAS 2.5L)

2017 > CX-5 (DIESEL)

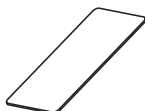
Package Contents:



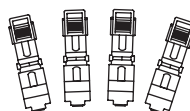
Installation
Instructions
(QTY 1)



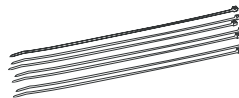
Tie Mounts
(QTY 3)



Foam Tape
(QTY 1)



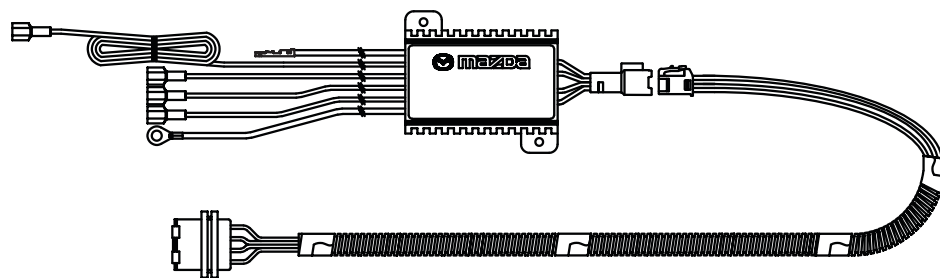
Red T-Taps
(QTY 4)



Large Tie
Wraps
(QTY 7)



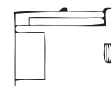
Tie Wraps
(QTY 10)



Main Harness
(QTY 1)



Grommet
(QTY 1)



Female Connector
(QTY 1)

Tools Required

Before Installation

A



Panel
Removal Tool

B



Small Flathead
Screwdriver

C



Trim Panel
Remover

D



Phillips
Screwdriver

E



10mm
Socket Wrench

F



Wire Cutters

G



Needle
Nose Pliers

H



Tape
Measure

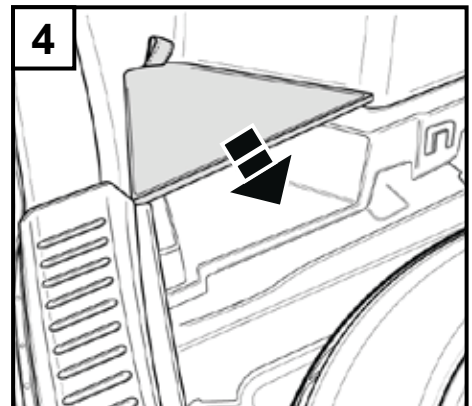
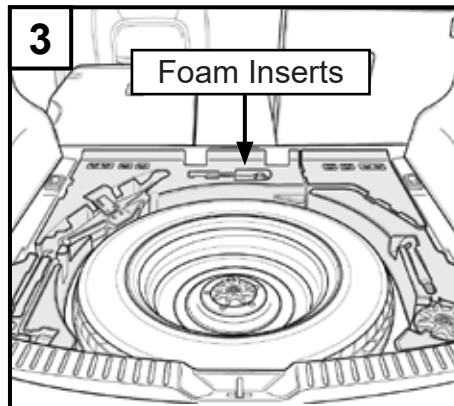
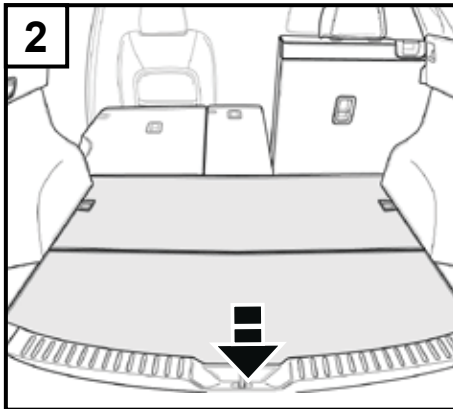
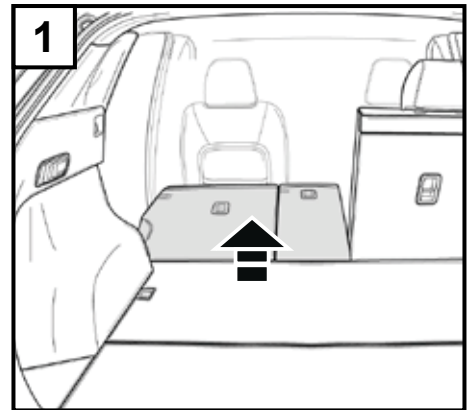
- 1.) Read installation instructions before proceeding.
- 2.) Be careful not to damage vehicle paint or kit components.
- 3.) Do not over tighten bolts, tighten to specified torque.
- 4.) Record customers preset radio stations (if applicable).
- 5.) Using a 10mm socket, remove negative (-) battery terminal.

⚠ INSTALLATION ALERT

The following installation instructions apply to both gas and diesel CX-5 models. However, due to the difference in exhaust layout between the two models, the 50mm measurement on page 7 does not apply to the diesel models. All other steps are to be performed per the instructions; including the removal of all slack when routing harness.

A ACCESS STORAGE COMPARTMENTS

1. Lift rear hatch door and lower passenger seats behind driver seat as shown.
2. Temporarily remove floor deck panel.
3. Temporarily remove jack and tow bar foam inserts.
4. Temporarily remove floor deck corner panel.



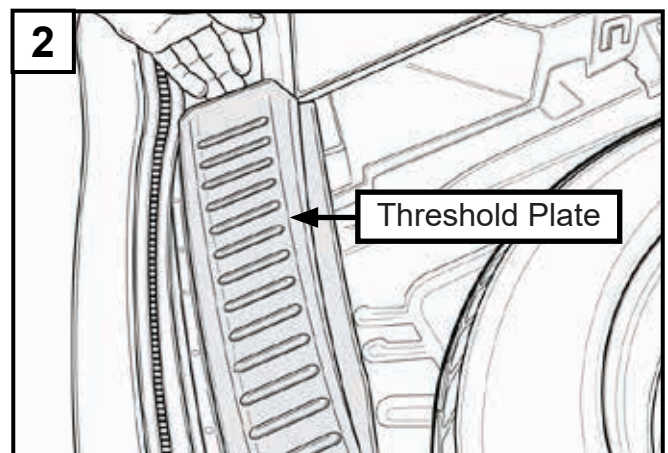
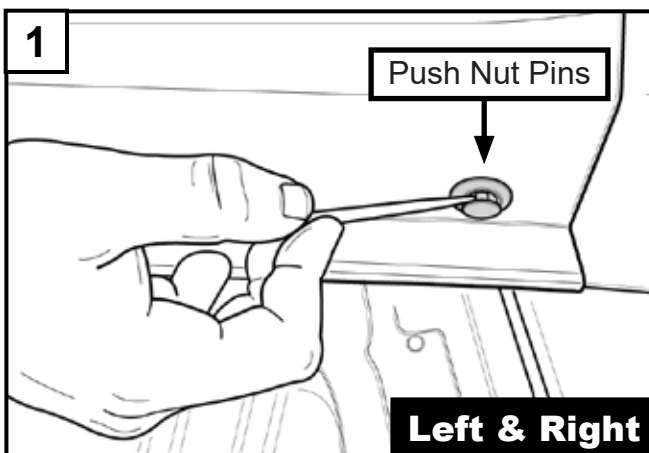
B REMOVE REAR THRESHOLD PLATE & LIFT RUBBER SEAL

Tools Needed:



Small Flathead
Screwdriver

1. Locate left and right push nut pins on threshold plate and temporarily remove using a small flathead screw driver.
2. Firmly pull up on the threshold plate and temporarily remove from vehicle.

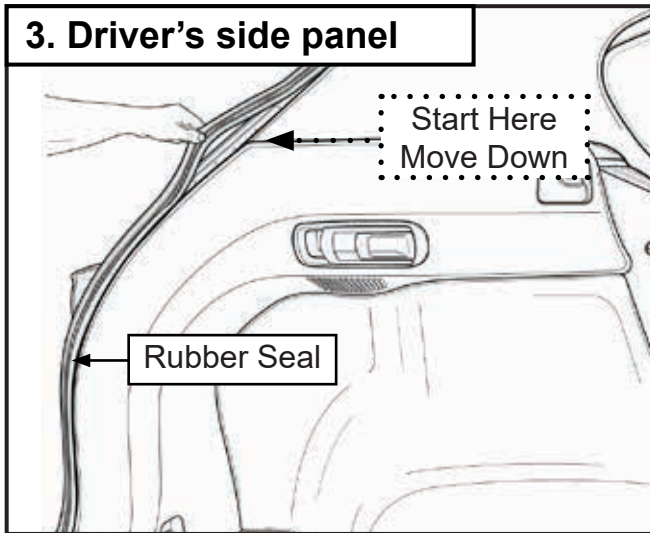


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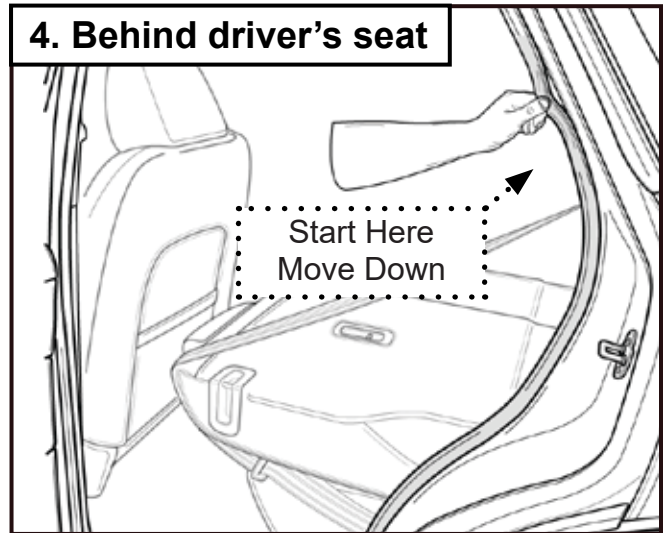
3. Temporarily lift away rubber seal along rear hatch as shown.

4. Temporarily lift away rubber seal along passenger door, behind driver's seat.

3. Driver's side panel

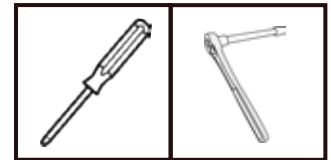


4. Behind driver's seat



C ACCESS WIRE HARNESS BEHIND DRIVER' SIDE TRIM PANEL

Tools Needed:

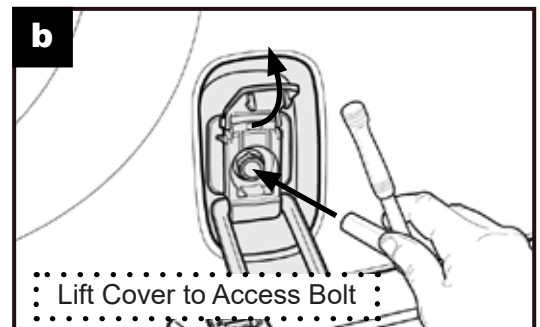
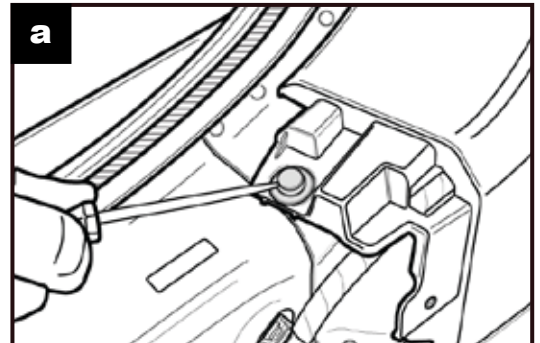
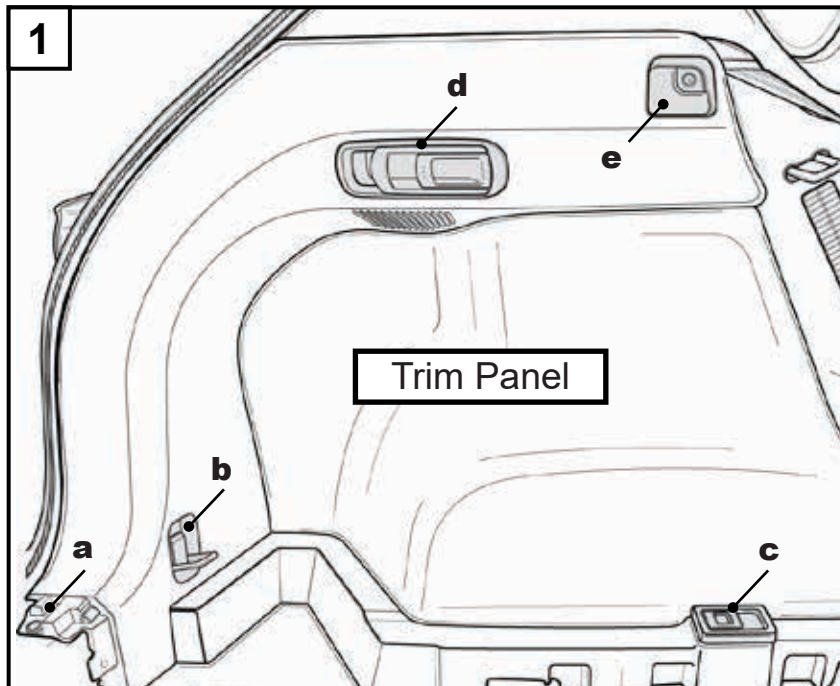


Small Flathead Screwdriver 10mm Socket Wrench

1. Locate driver's side interior trim panel and follow sequence to remove. **(a-b-c-d-e)**

a.) Temporarily remove push nut pin of trim panel using a small flathead screwdriver for sequence (a).

b.) Remove trim panel piece (b). Lift cover to access bolt and remove using a 10mm socket wrench. **(Torque Spec 9.0 - 12.0 N·m).**



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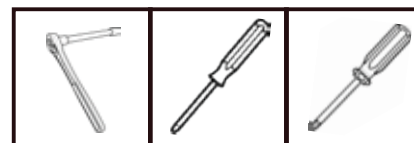
c.) Remove trim panel piece (c). Access bolt by lifting cover. Use a 10mm socket wrench to remove bolt.

(Torque Spec 9.0 - 12.0 N m).

d.) Remove trim panel piece (d). Carefully release latch cover using a small flat head screwdriver. Remove phillips head screw securing the lift handle to the vehicle.

e.) Remove trim panel piece (e), using a phillips head screw driver.

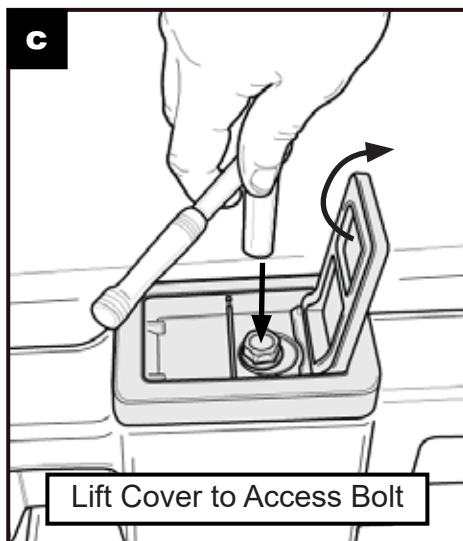
Tools Needed:



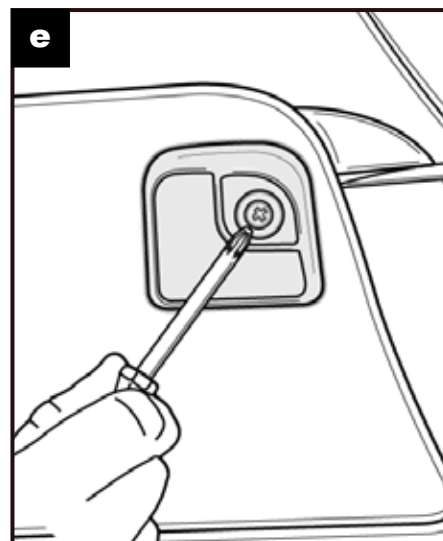
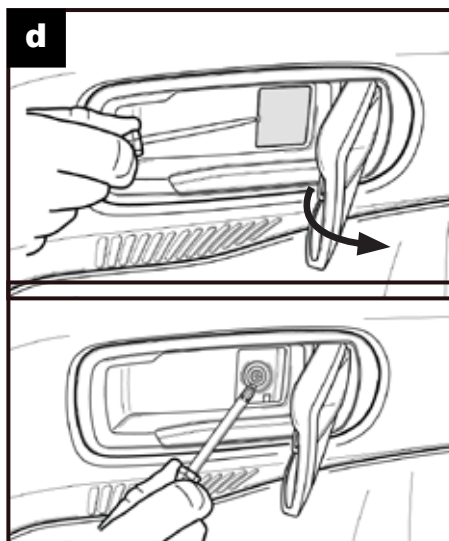
10mm Socket
Wrench

Small Flathead
Screwdriver

Phillips
Screwdriver



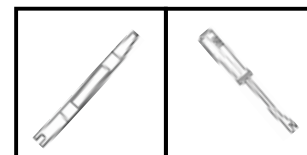
Lift Cover to Access Bolt



D REMOVE THE LEFT HAND SIDE TRIM PANEL

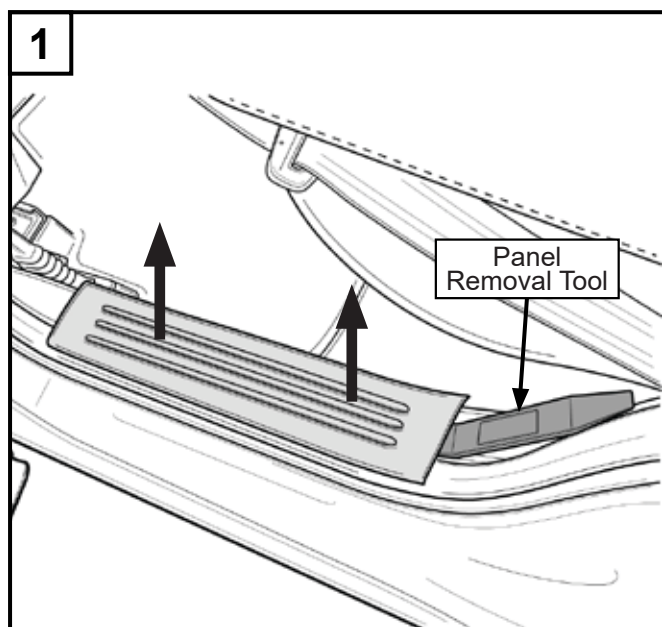
1. Remove kick plate on the driver side rear door using a panel removal tool to release trim panel.
2. Carefully lift trim panel starting from inside driver side rear door area behind driver's seat using trim panel remover tool.

Tools Needed:

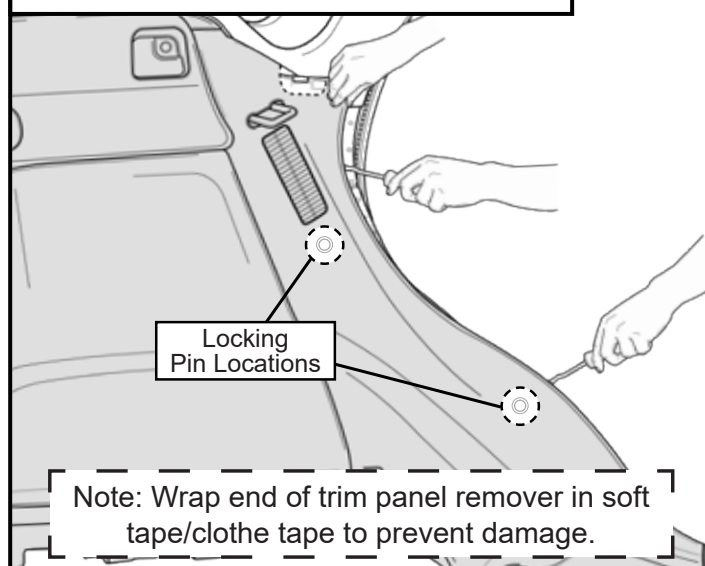


Panel
Removal Tool

Trim Panel
Remover

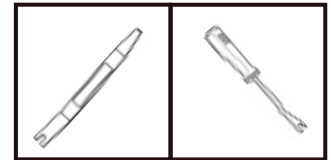


2. Driver Side Rear Door Area



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Tools Needed:

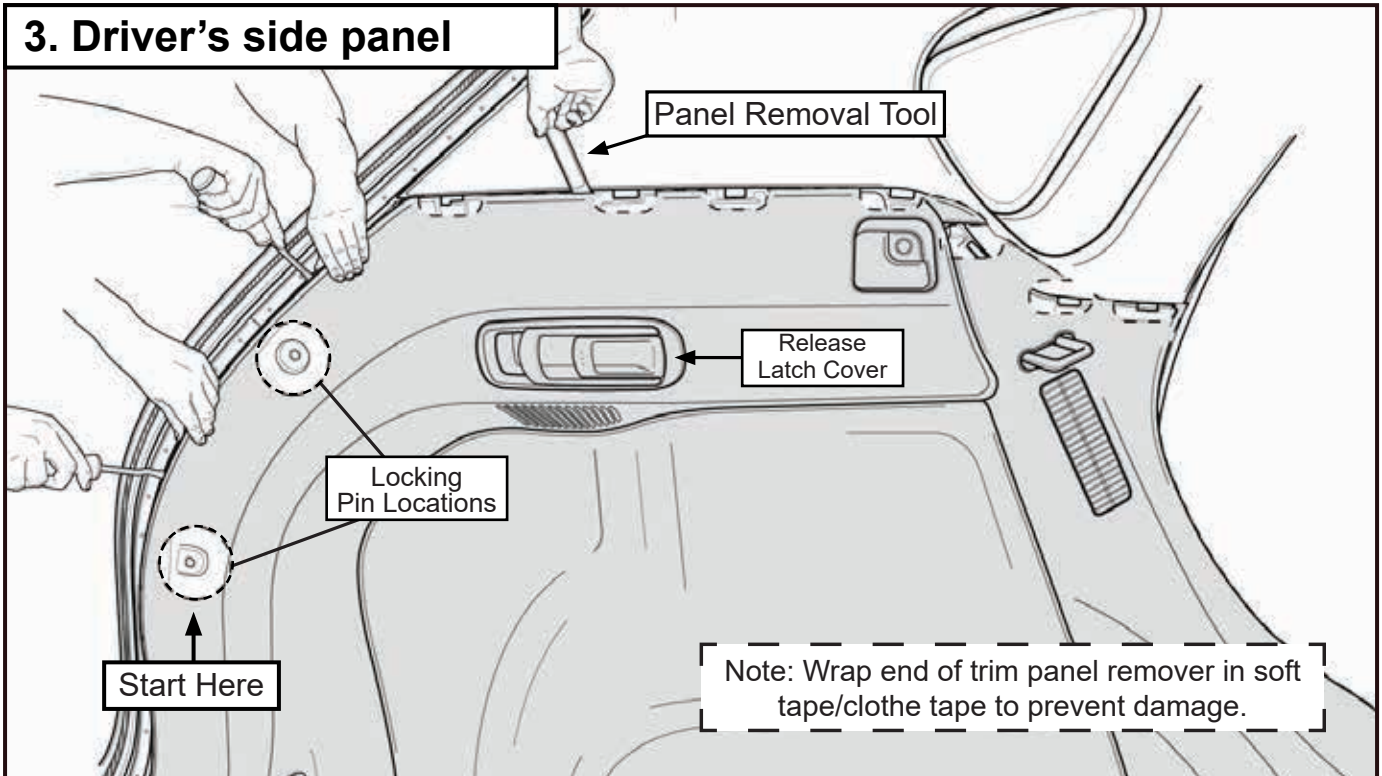


Panel
Removal Tool

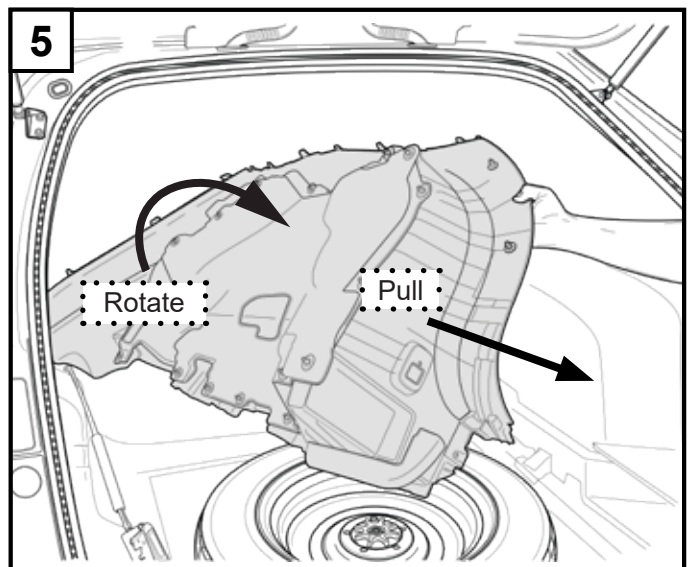
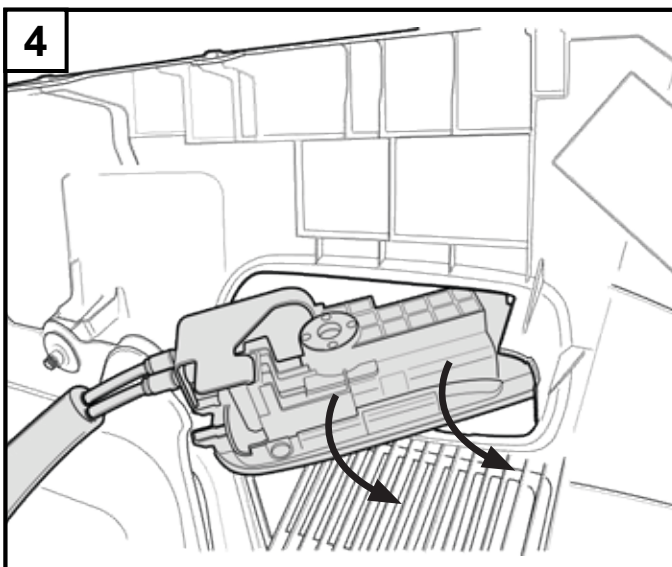
Trim Panel
Remover

3. Use trim panel remover tool to disengage two locking pin locations along trim panel side. Revert to the panel removal tool to disengage locking pin locations along top portion of trim panel.

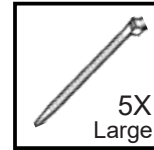
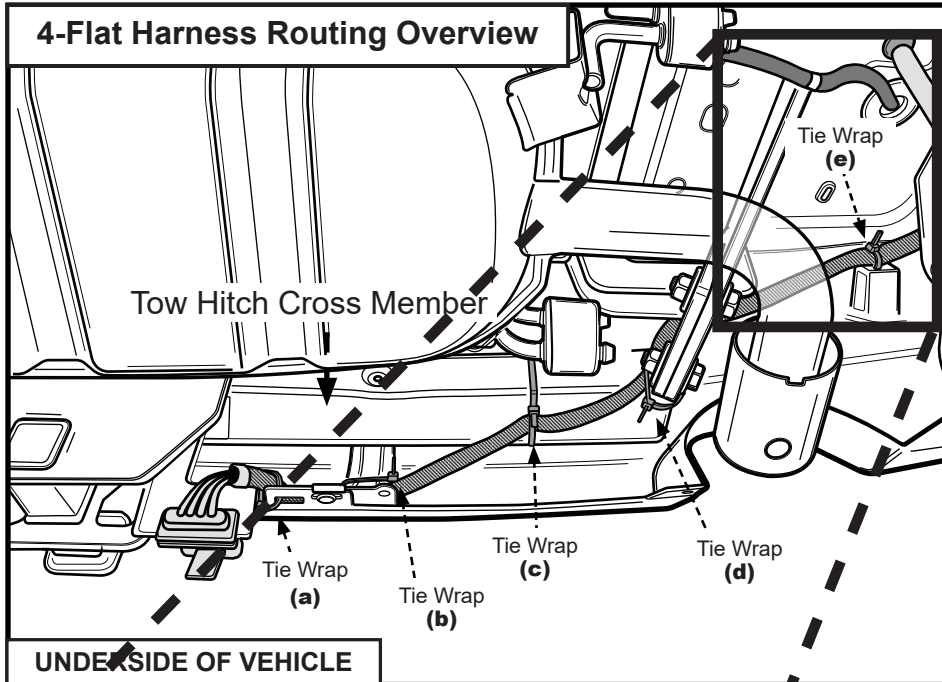
3. Driver's side panel



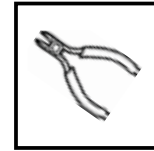
4. Push forward, rotate, and pull out the release latch cover through trim panel opening and set aside.
5. Temporarily remove trim panel from vehicle using a rotating and pulling motion as shown in image.



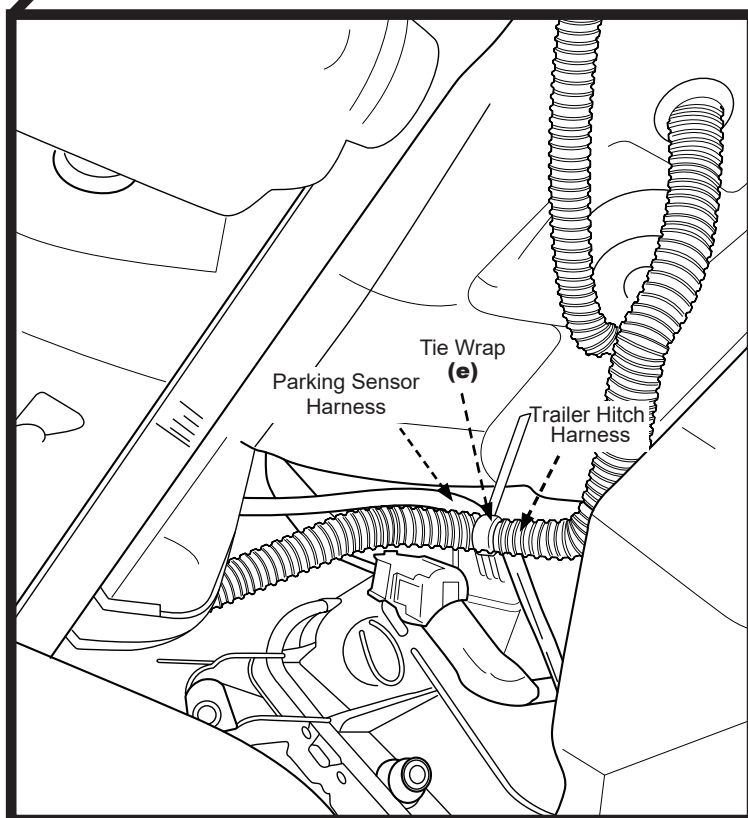
E ROUTE NEW 4-FLAT MOLD FROM HITCH TO INTERIOR OF VEHICLE **Tools Needed:**



Tie Wraps



Wire Cutters



Note: Vehicles equipped with factory parking sensors will have a harness mounted on the rear side of the bumper deflector where tie wrap (e) would otherwise go. In this case, secure trailer harness to the parking sensor harness right above the bumper deflector mounting point. Remove all slack.

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CRITICAL
STEP

GAS MODELS ONLY

Due to the extreme high temperatures produced by the exhaust, a minimum clearance of 50mm must be maintained between exhaust and harness. Failure to do so will result in severe damage to harness and loss of trailer functions, such as brake light and turn signal lights.

1. After performing Step 2, verify that a minimum of 50mm has been achieved between exhaust and harness. If not, remove tie wrap and repeat Step 2 above using a new tie wrap. If 50mm has been achieved, move on to Step 3.

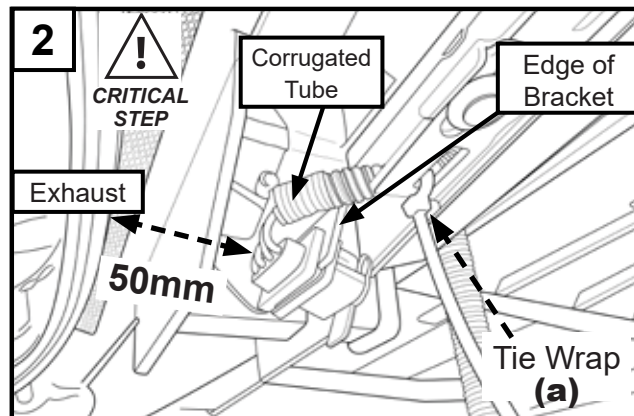
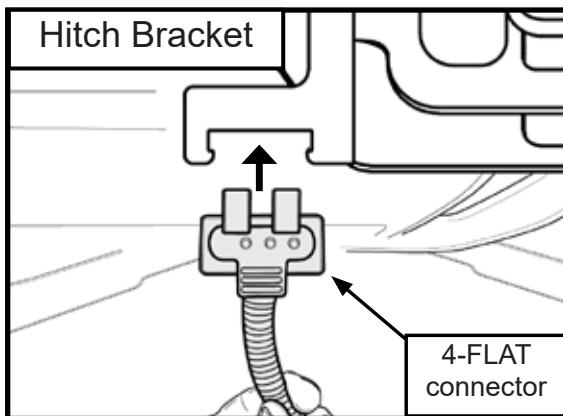


CRITICAL
STEP

Critical Step:

See Caution prior to performing step.

2. Secure the 4-FLAT trailer connector into the hitch bracket as shown. Route the wiring towards the cutout located on the bumper fascia mount (a). Use a large tie wrap to fully secure the wire harness ensuring a 50mm clearance (gas models only) from any and all exhaust surfaces closest to the harness as shown in the measurement photo and make sure to remove all slack. It's important that the corrugated tube is outed over the edge of the bracket for protection.

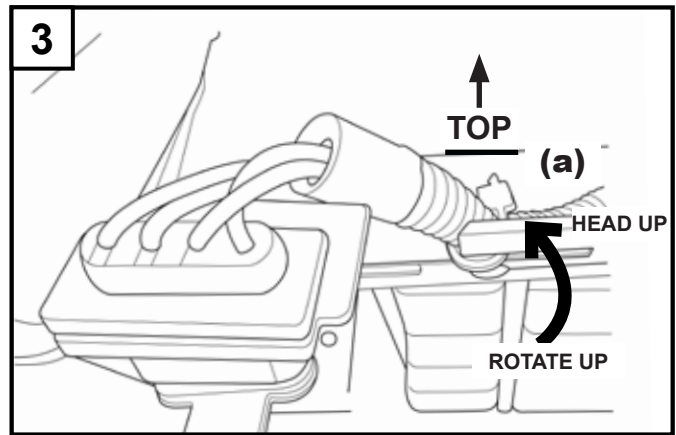


CRITICAL
STEP

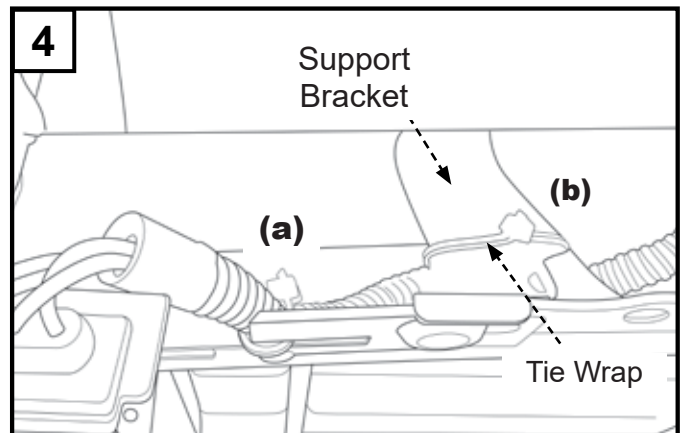
It's important that the corrugated tube is routed over the edge of the bracket for protection. Damage to harness may occur otherwise.

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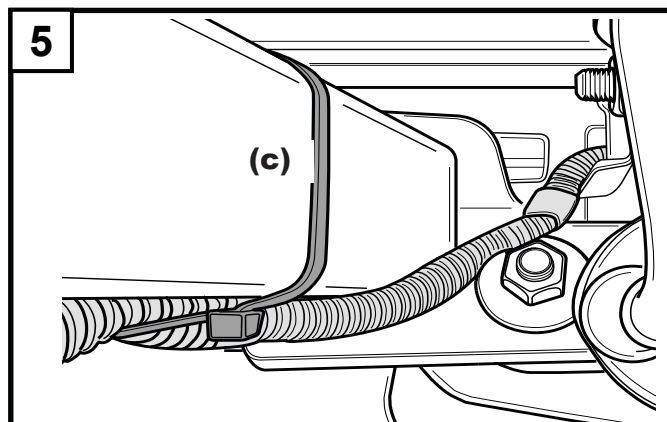
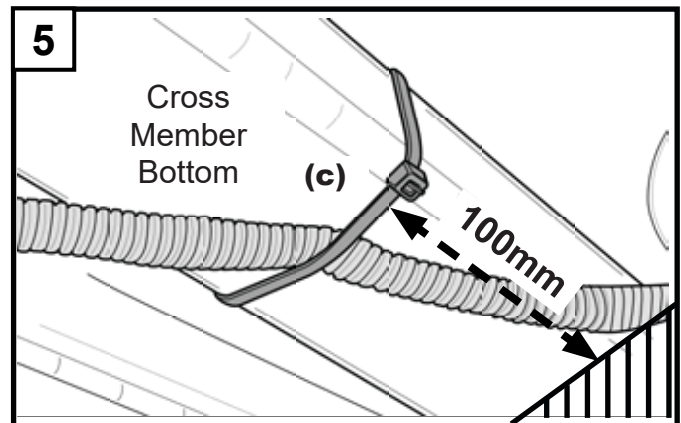
3. After verifying 50mm clearance, trim the tie wrap using the wire cutters and rotate the tie wrap head up so it is not visible from the rear of the vehicle to avoid injury.



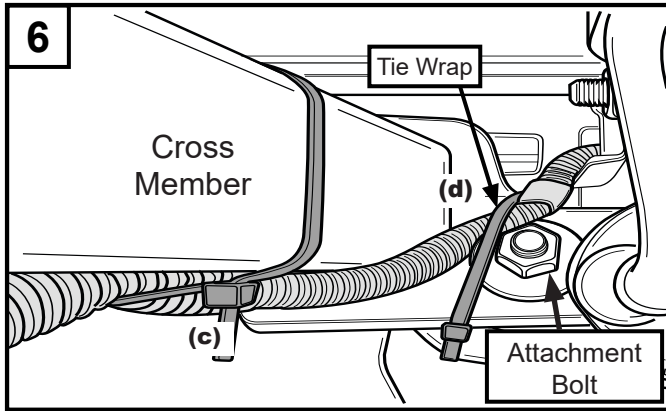
4. Route the harness behind fascia support bracket making sure the harness is routed between the bumper fascia and bracket (b). Use a large tie wrap to secure the harness to the fascia. Tighten the tie wrap and trim the tie wrap tail with wire cutters.



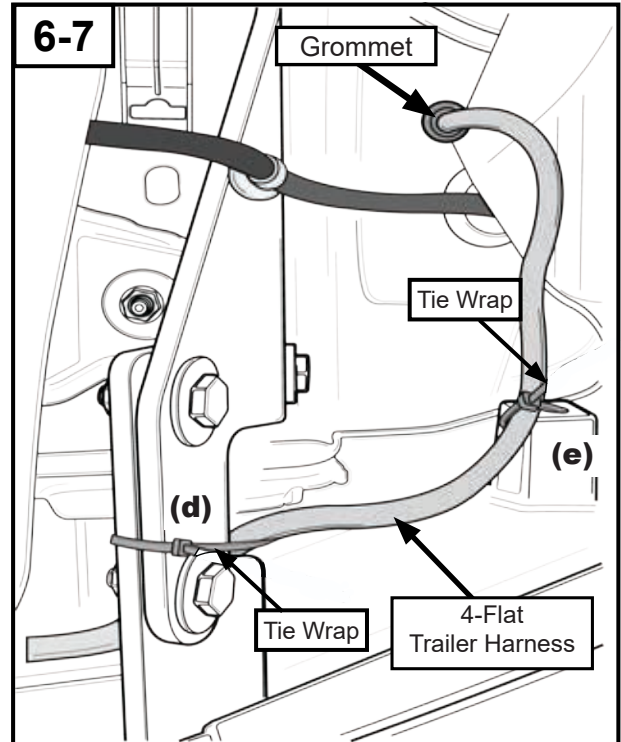
5. Use a large tie wrap (c) to secure the harness to the bottom of the cross member of the hitch. Tie wrap should be located 100mm from cross member end. Remove all slack, tighten the tie wrap and trim the tie wrap tail with wire cutters.



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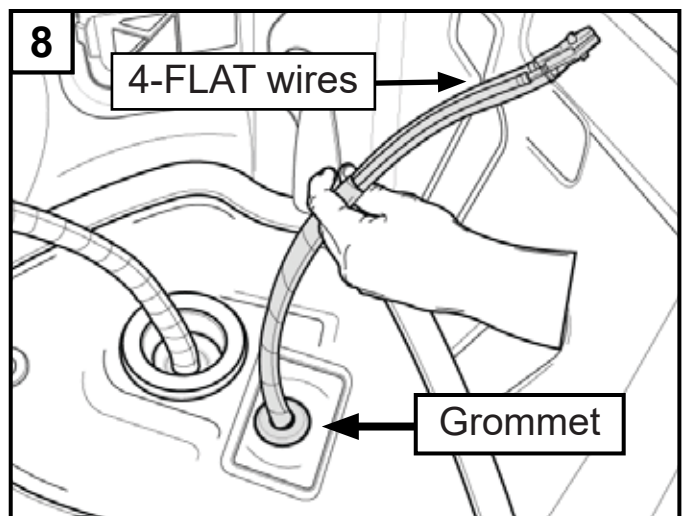
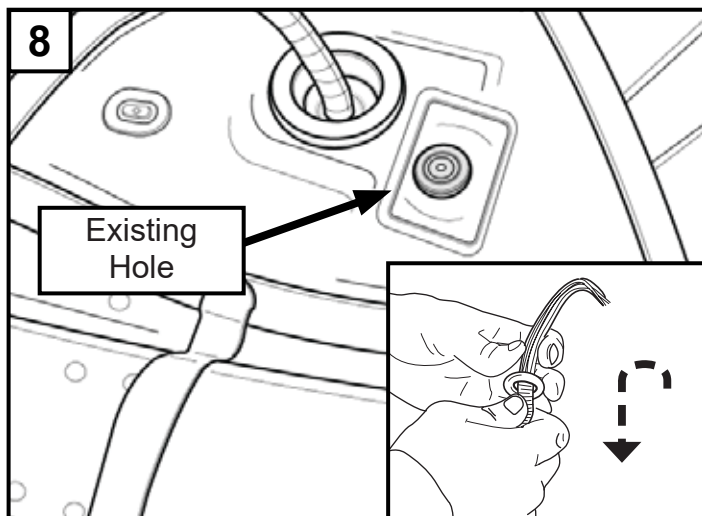
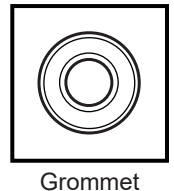
6. Route the harness near the rear most hitch attachment bolt (d). Use a large tie wrap to secure the harness to the hitch attachment bracket. Remove all slack, tighten the tie wrap and trim the tail using wire cutters.



7. Route the harness to the wire attachment point near the grommet. This is located on the rear side of the bumper deflector (e). Use a large tie wrap to secure the harness to the attachment point. Remove all slack, tighten the tie wrap and trim the tie wrap tail using wire cutters. **Refer to note on page 6 if mounting location (e) is not available due to an existing vehicle harness.**

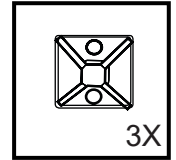
Tools Needed:

8. Remove and dispose of the existing cavity plug from floor of vehicle. Route the four terminated wires through the exposed opening. Use care to prevent any damage being done to wires. Slide the supplied grommet over the four terminated wires and seat the grommet into the vehicle opening.



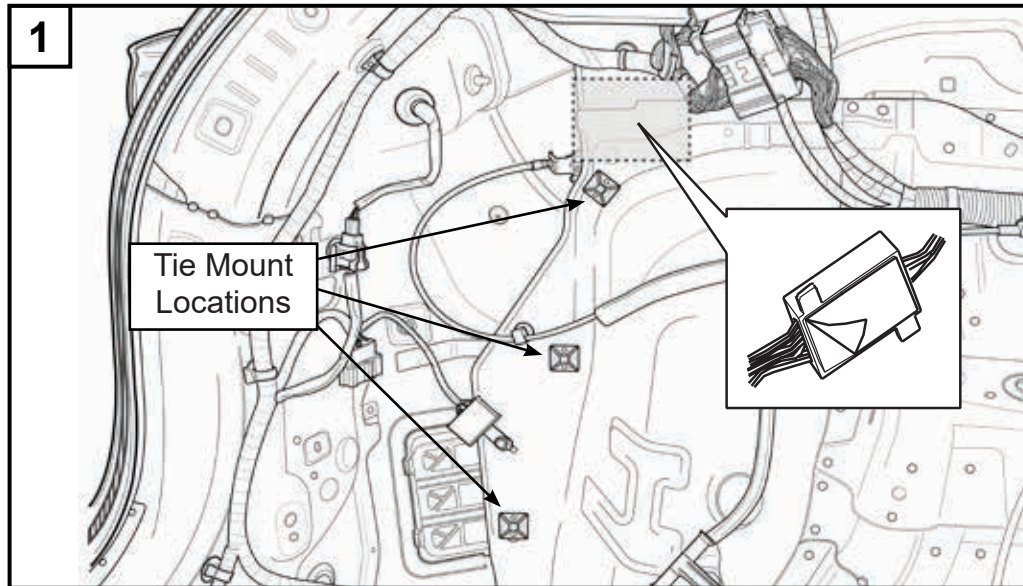
MOUNT MAIN HARNESS & CONNECT 4-FLAT HARNESS TO MODULE

Tools Needed:



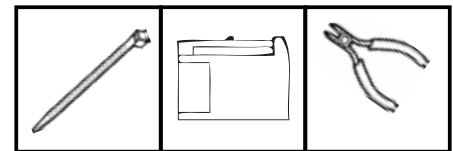
Tie Mounts

1. Clean the indicated wire tie mount and module mounting areas behind the driver's side trim panel with an alcohol wipe. Remove adhesive backing on module and tie mounts. Mount wire harness module and three tie mounts to specified locations.



2. Insert the provided female connector to the four terminated wires. Firmly push terminal lock into the locked position.

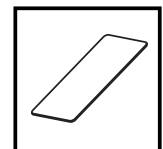
Attach the 4-Flat harness connector to the module connector. The wires should match color to color at the connectors. (reference illustration).



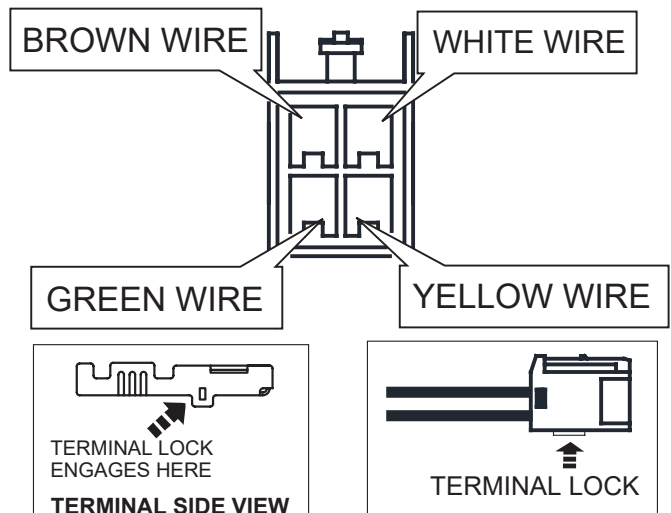
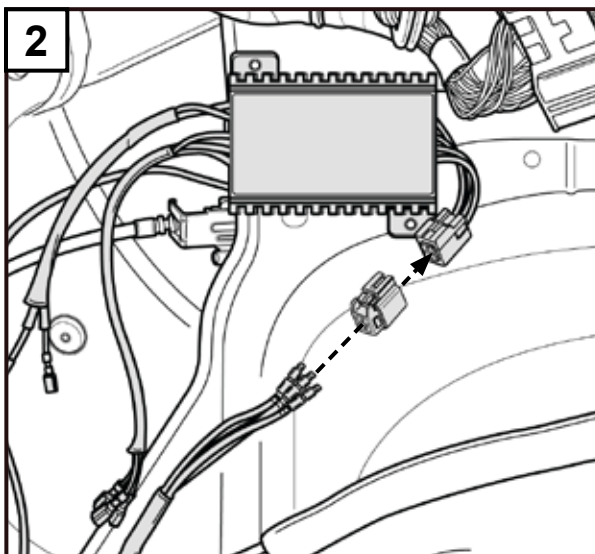
Tie Wrap

Female Connector

Wire Cutters

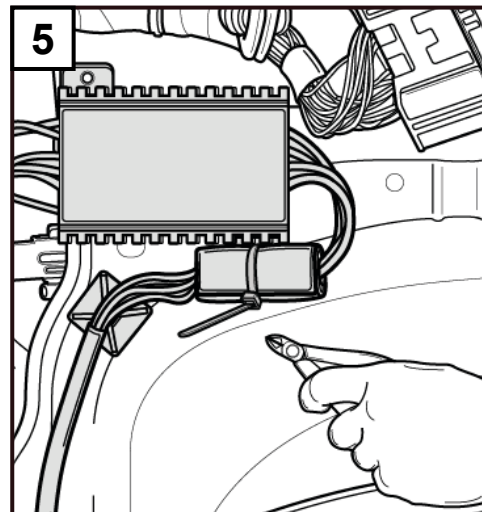
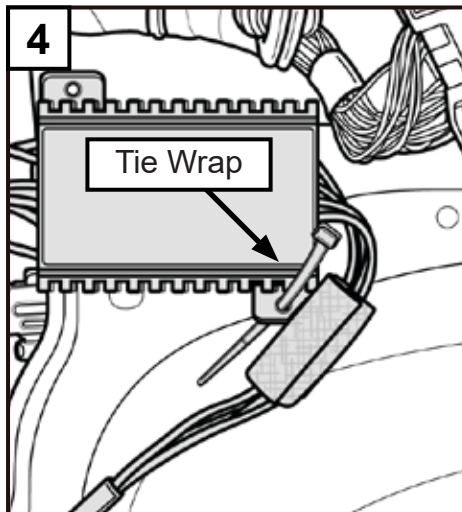
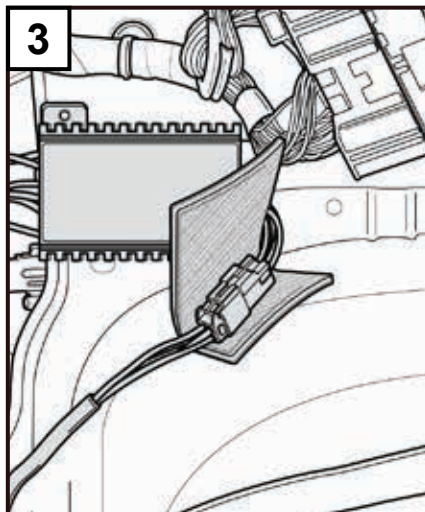


Foam Tape



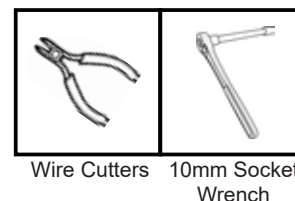
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3. Use one piece of foam tape to protect connectors and to prevent rattle.
4. Use a tie wrap to secure connectors wrapped in foam tape to the main harness's mounting component as shown.
5. Cut excess tie wrap used in prior step with wire cutters.

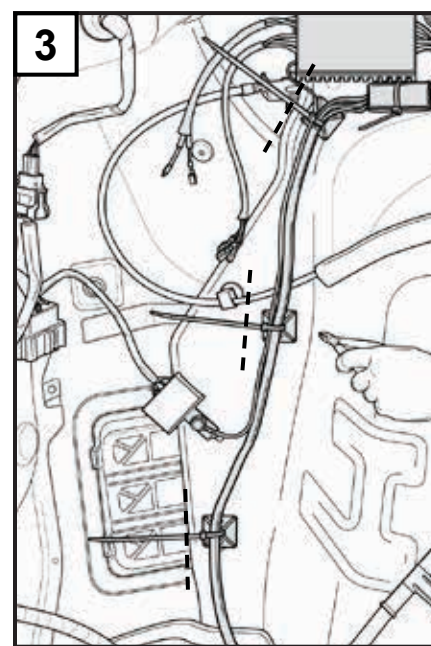
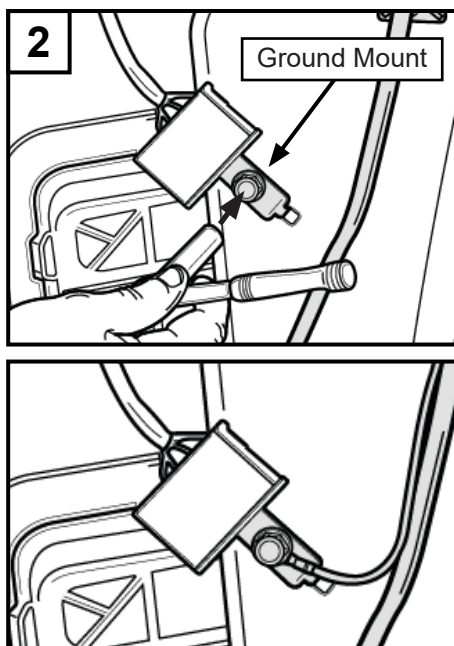
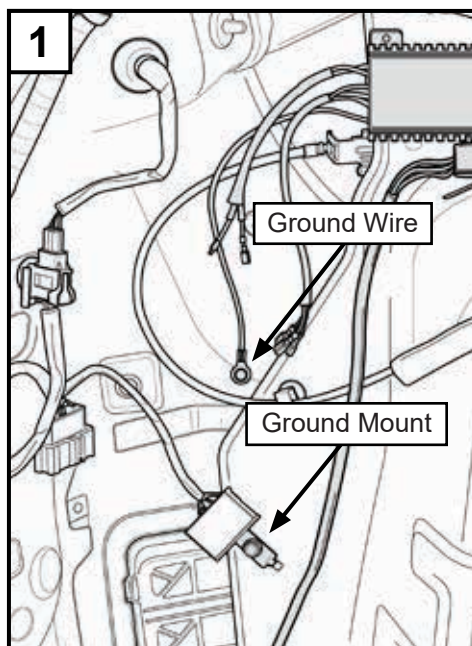


G MOUNT GROUND WIRE

Tools Needed:

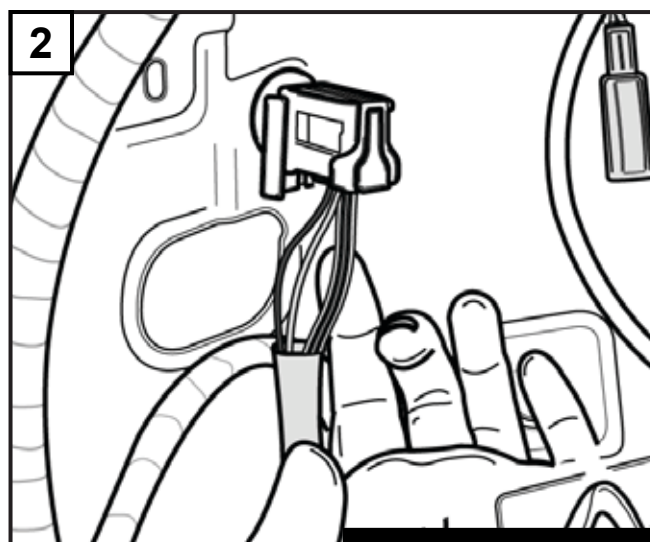
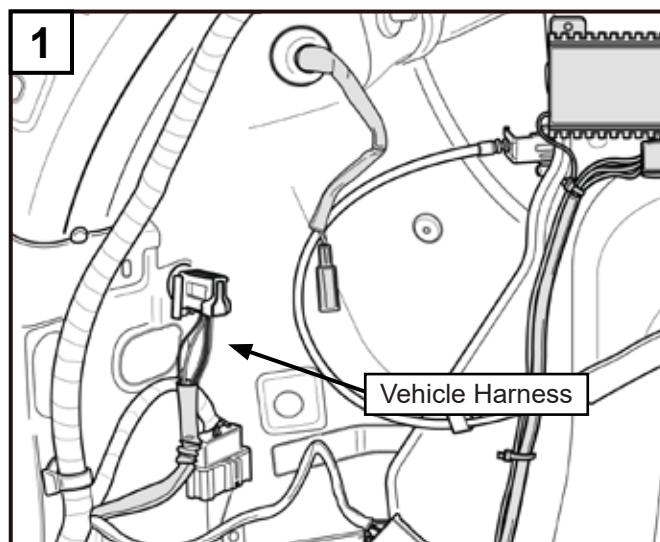


1. Locate ground mount and ground wire connection.
2. Remove the existing ground mount bolt using a 10mm socket wrench. Route the black ground wire from the main harness module to the bolt location and tighten. **(Torque bolt to 7 N m)**
3. Gently pull up on 4-Flat harness until corrugated portion on harness makes contact with grommet on external portion of vehicle. While making sure corrugated tube is in contact with grommet, use three tie wraps to secure 4-Flat harness and ground wire to the three tie mount locations. Once secure, cut excess tie wraps.



H ACCESS VEHICLE HARNESS & CONNECT WIRE TAPS TO VEHICLE HARNESS

1. Locate vehicle harness and unplug connection.
2. Expose vehicle harness wires by pulling back rubber casing sleeve.



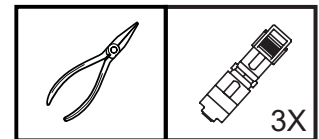
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3. Connect wire taps to vehicle harness on driver side. Locate and identify the tail light (PINK), left turn signal (SKY BLUE), and stop wire (RED), behind the driver's side light. Attach a red T-tap to each of the indicated wires.

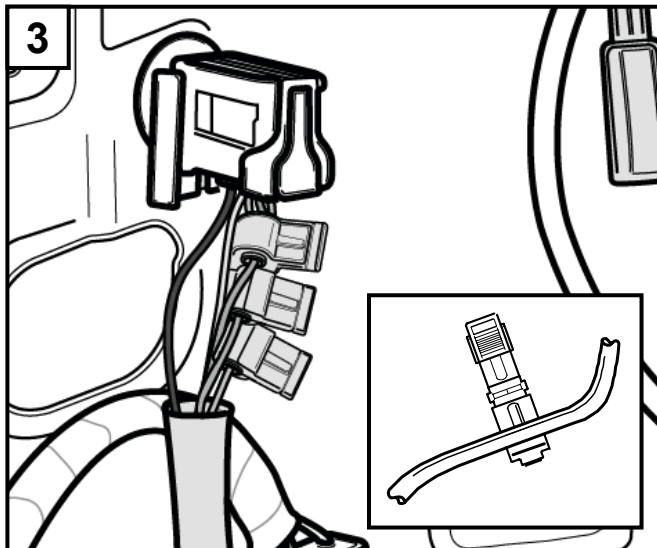
- (a) place wire into the center jaw of the wire T-Tap splice.
- (b) fold wire tap around wire.
- (c) Squeeze tightly together with pliers, making a secure connection.

4. Connect main harness spade terminals to wire taps (Use chart for reference).

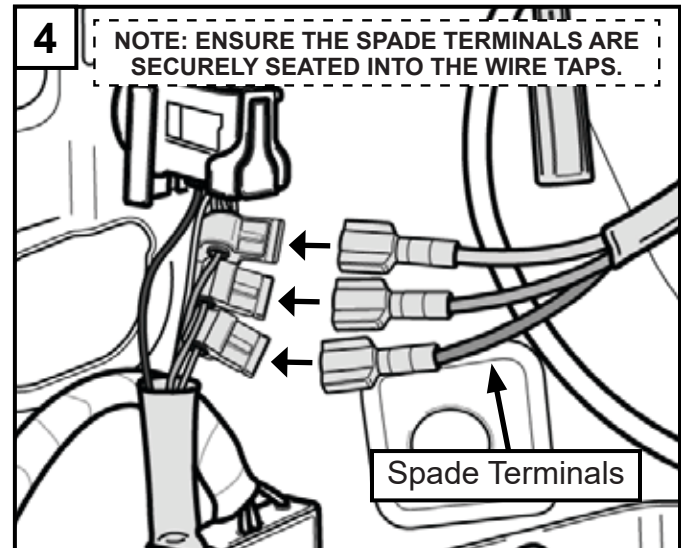
Tools Needed:



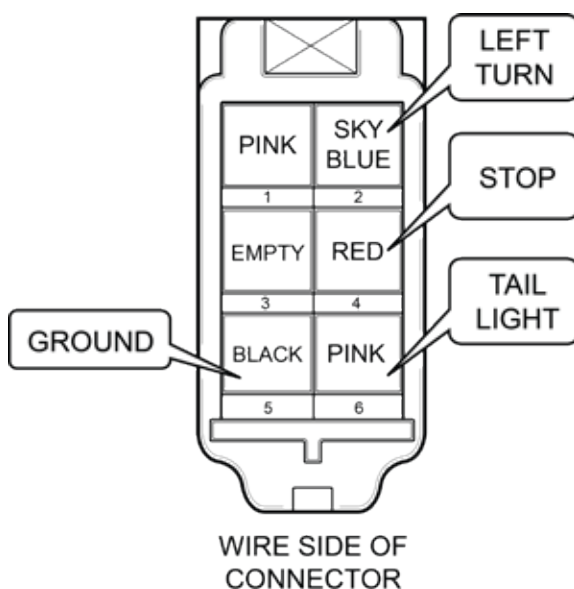
Needle nose pliers Red T-Taps 3X



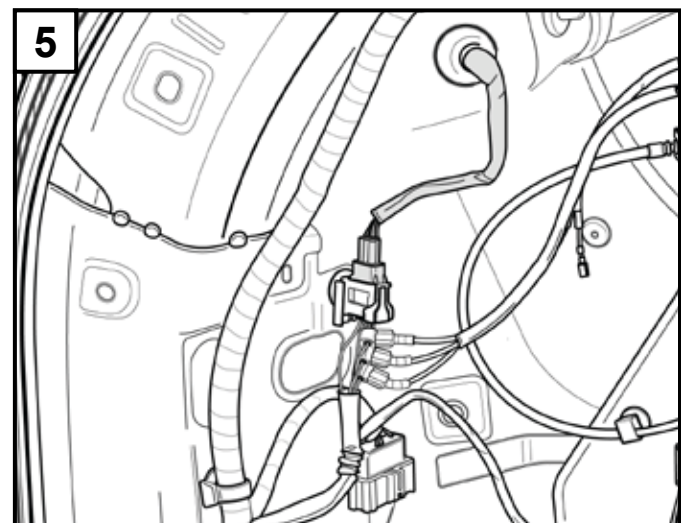
VEHICLE HARNESS WIRE COLOR		CIRCUIT
PINK	(4-WAY CONNECTOR)	TAIL LIGHT
RED	(4-WAY CONNECTOR)	STOP
SKY BLUE	(3-WAY CONNECTOR)	LEFT TURN



VEHICLE HARNESS WIRE COLOR		MAIN HARNESS WIRE
PINK	(4-WAY CONNECTOR)	BROWN
RED	(4-WAY CONNECTOR)	BLUE/BLACK
SKY BLUE	(3-WAY CONNECTOR)	YELLOW

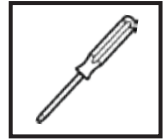


5. Plug the wire harness connection back in.



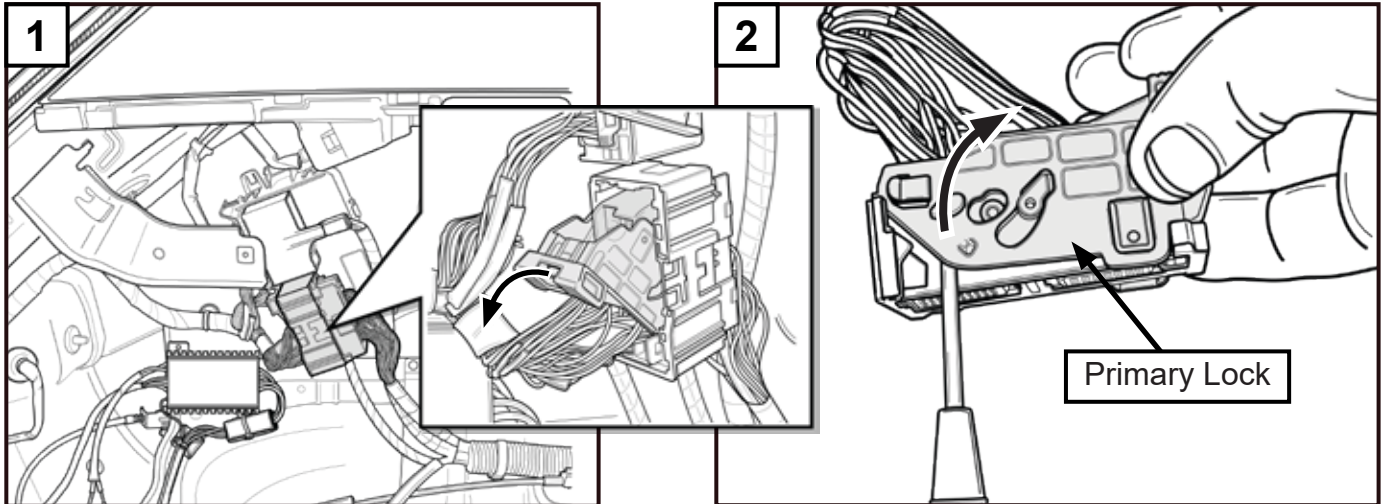
I REMOVE PRIMARY LOCK ON REAR JUNCTION CONNECTOR

Tools Needed:



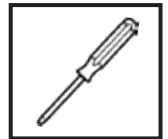
Small Flathead
Screwdriver

1. Disconnect the rear junction connector by pushing down on the black primary lock and tilting back to release. **Once connector is free, lock must be re-turned to its closed position before removing.**
2. Remove black primary lock by using a small flathead screwdriver to pry and carefully lift the lock on both mating sides.



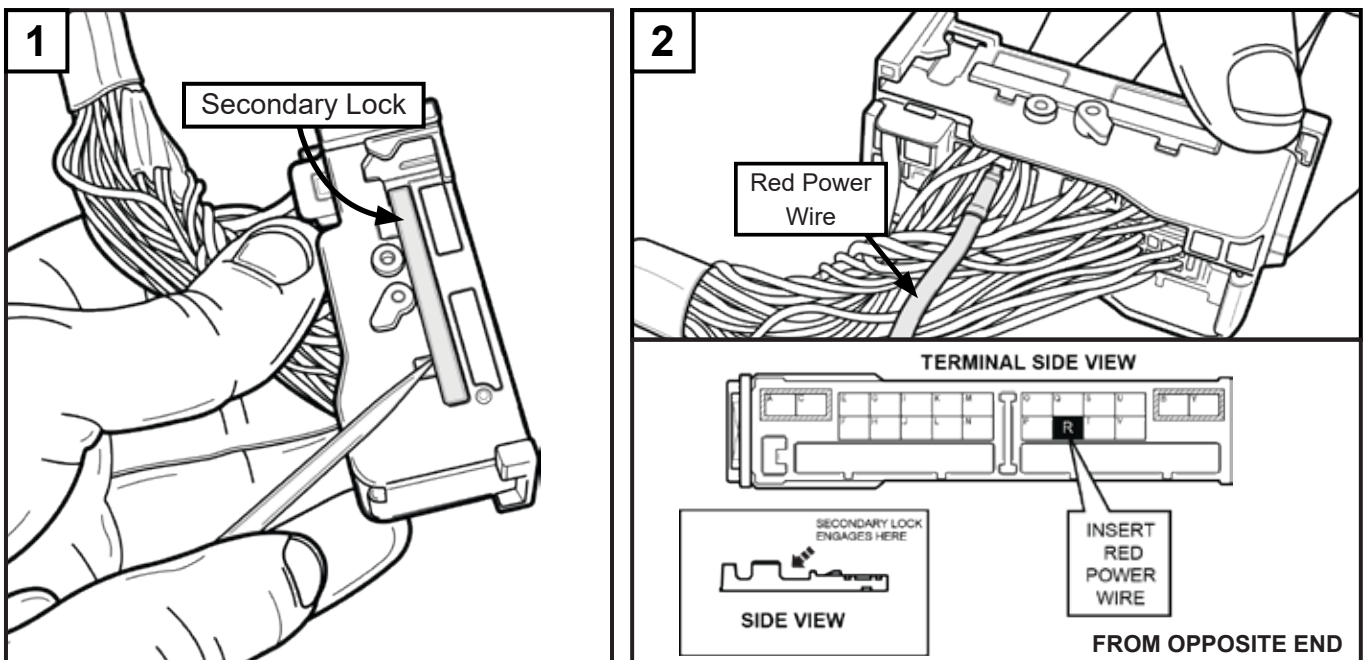
J DISENGAGE SECONDARY LOCK & INSERT RED POWER WIRE

Tools Needed:



Small Flathead
Screwdriver

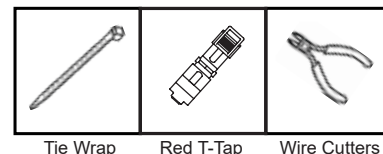
1. Disengage secondary lock on rear junction connector by carefully using a small flathead screwdriver or terminal removal pick tool.
2. Route the red power wire to the rear junction connector. Locate proper cavity to be populated (see illustration). Once terminal is properly engaged in connector, squeeze secondary lock into place.



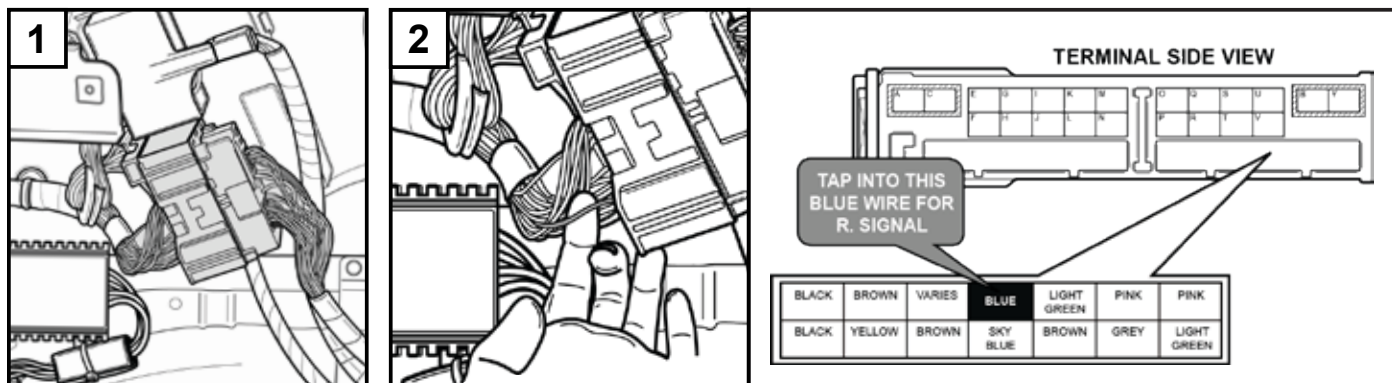
K

REASSEMBLE REAR JUNCTION CONNECTOR & REMAINING T-TAP WIRE

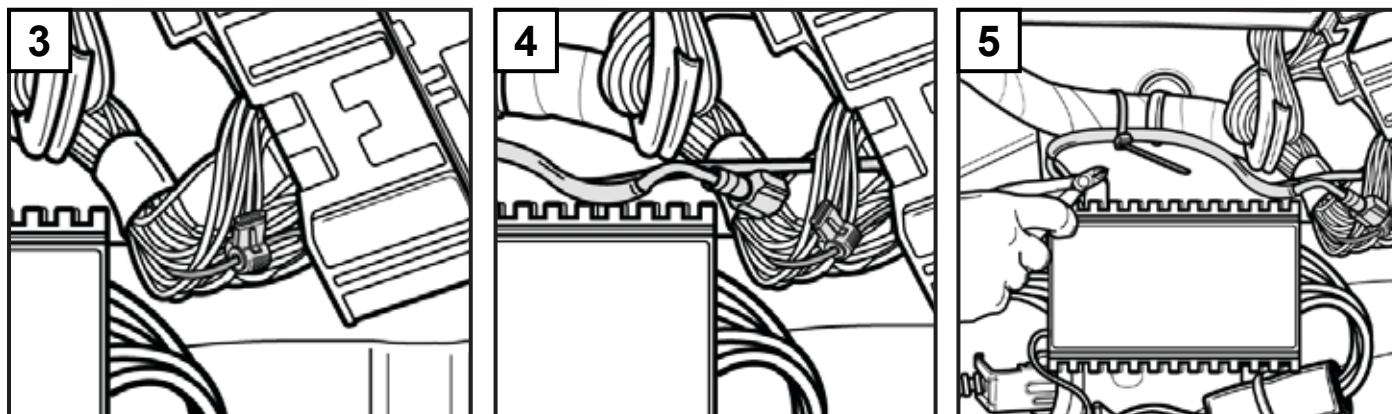
Tools Needed:



1. Reassemble and insert rear junction connector back in place. Visually check to confirm the secondary lock has re-engaged and place the black primary lock back on the connector.
2. Locate **BLUE** wire on rear junction connector for T-Tap connection.



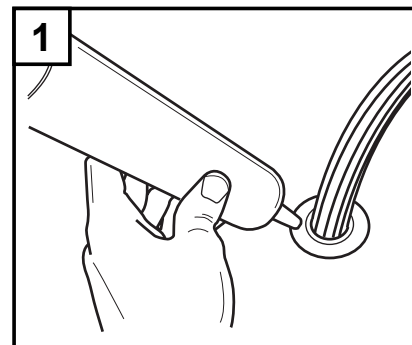
3. Use a T-Tap on **BLUE** wire of the rear junction connector.
4. Snap in remaining green main harness wire to T-Tap connection.
5. Tie wrap green main harness wire onto cable above main harness and cut excess tie wrap.



L

FINISHING STEPS

1. Seal the replacement grommet with silicon to prevent any possible water intrusion.
2. Reinstall all trim, tie downs and interior panels in reverse order of removal, ensuring all fasteners are properly installed.
3. Clean vehicle.
4. Vacuum and clean any debris caused by installation.
5. Place installation instructions into the glove box of vehicle.
6. Connect negative (-) battery terminal.



TROUBLESHOOTING GUIDE

PART NUMBER:

0000-8E-R13

0000-8E-R33

TRAILER HITCH WIRING KIT

APPLICABLE MODELS::

2017 > CX-5 (GAS 2.5L)

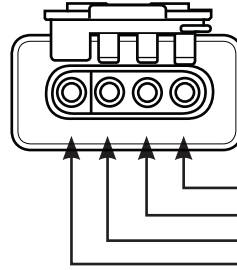
2017 > CX-5 (DIESEL)

TOOLS REQUIRED

TEST LIGHT

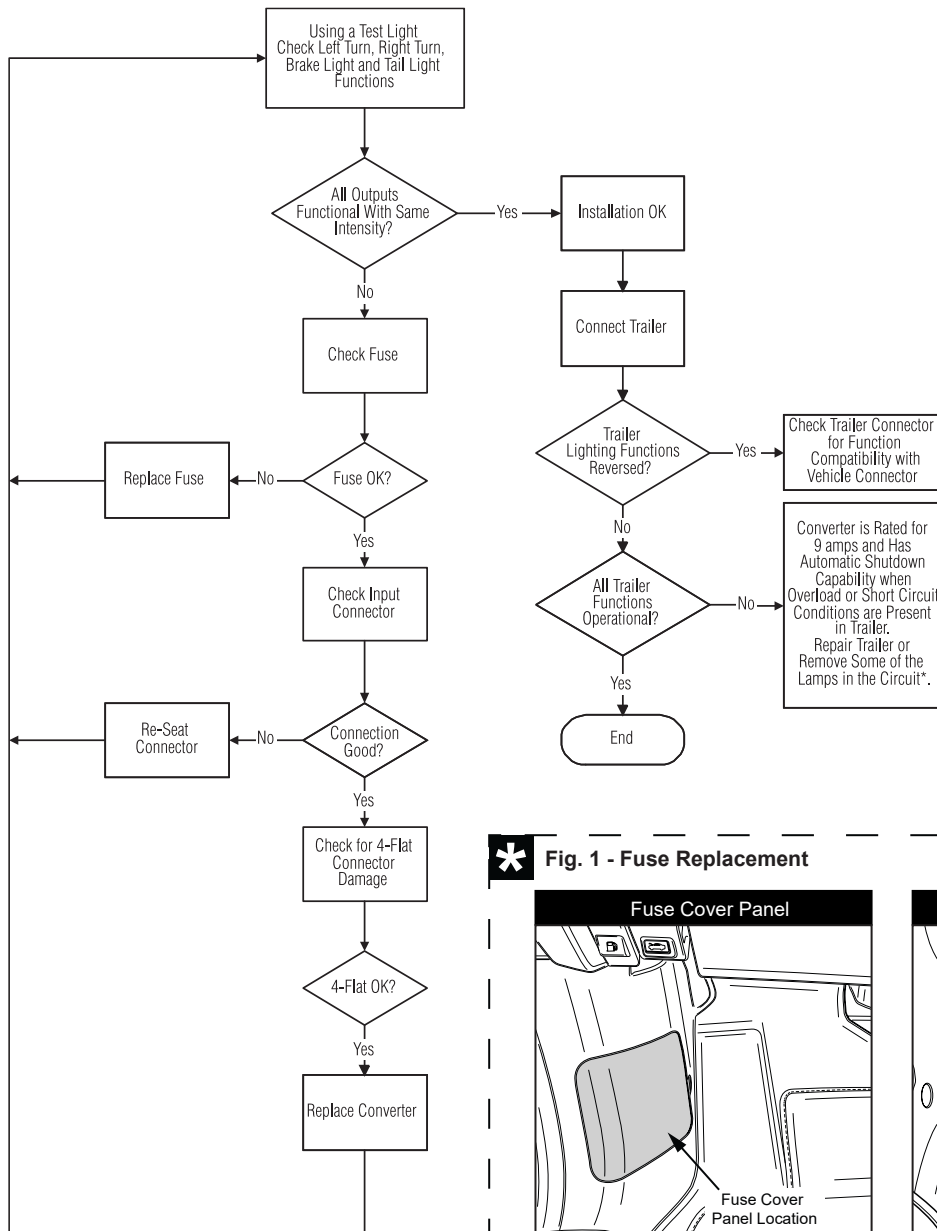
METHOD

1. Attach the test light ground connection to the male pin of the harness's 4-flat connector.
2. Probe each of the female pins individually to confirm correct circuit operation.

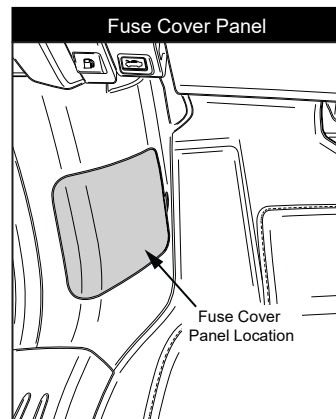


Right Turn/Stop
Left Turn/Stop
Tail
Ground

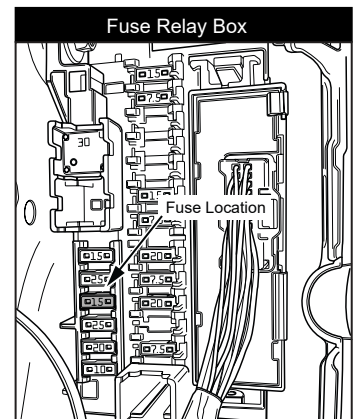
Green
Yellow
Brown
White



*** Fig. 1 - Fuse Replacement**



Remove fuse relay box cover panel from underneath the dashboard on the driver side of the vehicle.



15 amp fuse will be located in cavity labeled ESCL of the fuse relay box.

INSTALLATION INSPECTION

PART NUMBER:

0000-8E-R13

0000-8E-R33


TRAILER HITCH WIRING KIT

APPLICABLE MODELS:

2017 > CX-5 (GAS 2.5L)

2017 > CX-5 (DIESEL)

Inspect the installed / reinstalled parts for the following items:

		Inspection Items •			
	Inspection Parts	Clearance/Fit	Scratches/Dirt/ Harness Interference	Installation/ Tightening/ Engagement	Operation Check
 CRITICAL STEP	50mm Between Exhaust & Harness (Gas models only)	•	•	•	
	Tow Harness Functions				•
	Tow Harness	•	•	•	
	Tow Harness Module Ground Screw			•	
	Driver's Side Left Rear Interior Trim Panel	•	•	•	
	Passenger Side Right Rear Interior Trim Panel	•	•	•	
	Rear Threshold Plate	•	•	•	
	Rear Foam Inserts	•	•	•	
	Rear Floor Covering	•	•	•	
	Vehicle Negative Power Cable			•	
	4-FLAT Harness	•		•	

Notes:

1. Verify signal functionality at the trailer harness plug using test procedure on page 16.
2. Ensure tow harness module ground bolt is torqued to 7.0 N•m.

CAUTION



When the battery is disconnected, the DSC may stop operating.

(The DSC OFF indicator will flash at this time, and the TCS/DSC operation indicator will illuminate.)

1. Turn the ignition switch to "OFF" and then turn it back to "ON".
2. Turn the steering wheel clockwise as far as it will go, and then turn it back counterclockwise as far as it will go.
3. Check that the TCS/DSC operation indicator is turned off.
4. Turn the ignition switch to "OFF" and then turn it back to "ON".
5. Check that the TCS/DSC operation indicator is turned off. If the TCS/DSC operation indicator is still illuminated or the DSC indicator is not turned off when the ignition switch is turned back to "ON", contact your Mazda dealer.

CAUTION



If the battery is disconnected, the power windows may no longer fully open or fully close automatically.

1. Turn the ignition key to the "ON" position.
2. Press the power window switch to fully open the power windows.
3. Lift up the power window switch to fully close the power windows, and keep it pulled up for approximately 2 seconds.
4. Position the engine switch at "OFF", and then at "ON" again. When the function doesn't work after these procedures, please contact your Mazda dealer.

CAUTION



Gas models only

Due to the extreme high temperatures produced by the exhaust, a minimum clearance of 50mm must be maintained between exhaust and harness. Failure to do so will result in severe damage to harness and loss of trailer functions, such as brake lights and turn signal lights.

1. After performing Step 2 on page 7, verify that a minimum of 50mm has been achieved between exhaust and harness. If not, remove tie wrap and repeat Step 2 using a new tie wrap. If 50mm has been achieved, move on to Step 3.

Date					
Vehicle					
VIN					
Approved		Checked		Person in Charge	