



GENUINE ACCESSORIES

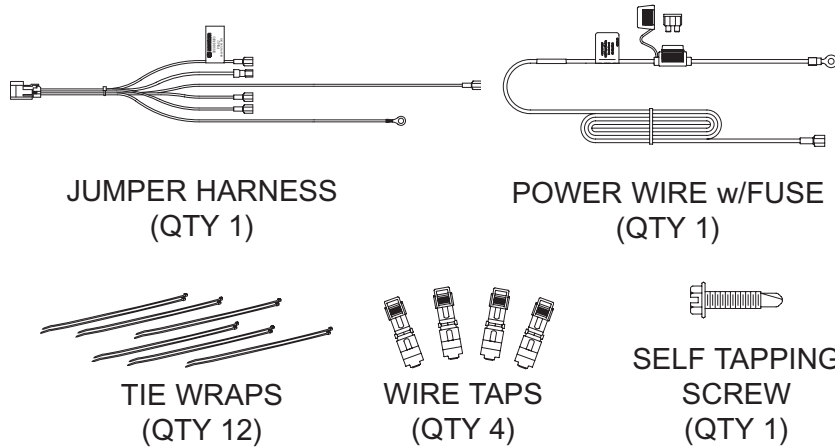
# INSTALLATION INSTRUCTIONS

**PART NUMBER:**  
0000-8E-M03

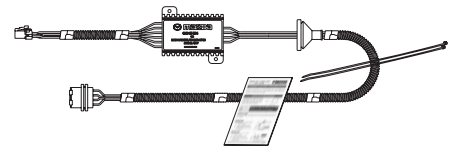
**APPLICABLE MODELS:**  
2007 > CX-7

## TRAILER HITCH JUMPER HARNESS

### PACKAGE CONTENTS



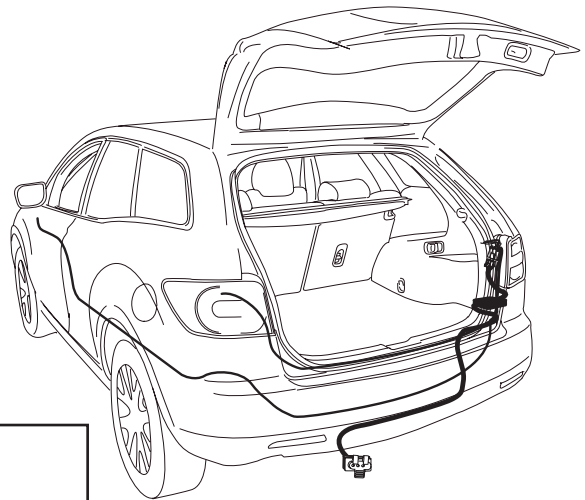
### ADDITIONAL MATERIAL REQUIRED



**HARNESS KIT**  
0000-8E-M04  
(INCLUDED WITH TRAILER HITCH KIT 0000-8E-M01)

### TOOLS REQUIRED

PLASTIC PANEL REMOVAL TOOL  
 PHILLIPS SCREWDRIVER  
 10MM SOCKET WRENCH  
 ELECTRICAL TAPE  
 WIRE CUTTERS  
 CHINA MARKER  
 FIBERSTICK  
 FISHWIRE  
 PLIERS



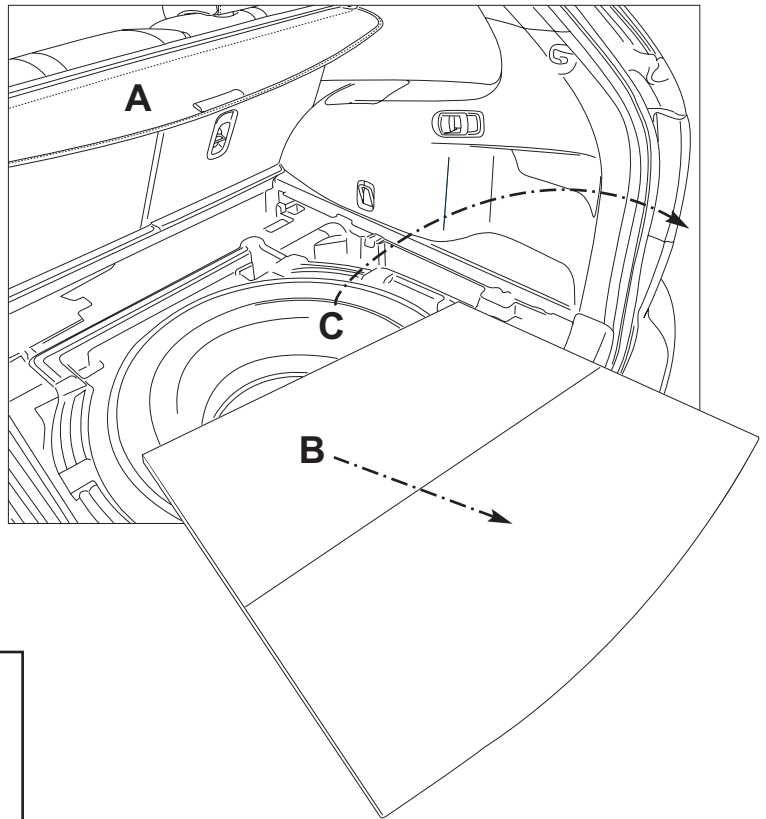
### INSTALLATION LAYOUT

#### **0** BEFORE INSTALLATION

1. Read entire installation instruction sheet before beginning.  
NOTE: This kit is designed for vehicles not prewired. Trailer Hitch Wiring Harness 0000-8E-M04 (provided in hitch kit 0000-8E-M01) must be used along with this kit.
2. This instruction sheet replaces that provided with kit number 0000-8E-M04.  
NOTE: Access to the underside of vehicle is required.
3. Record customer's preset radio stations (if applicable).
4. Using a 10mm socket, remove negative (-) battery terminal.

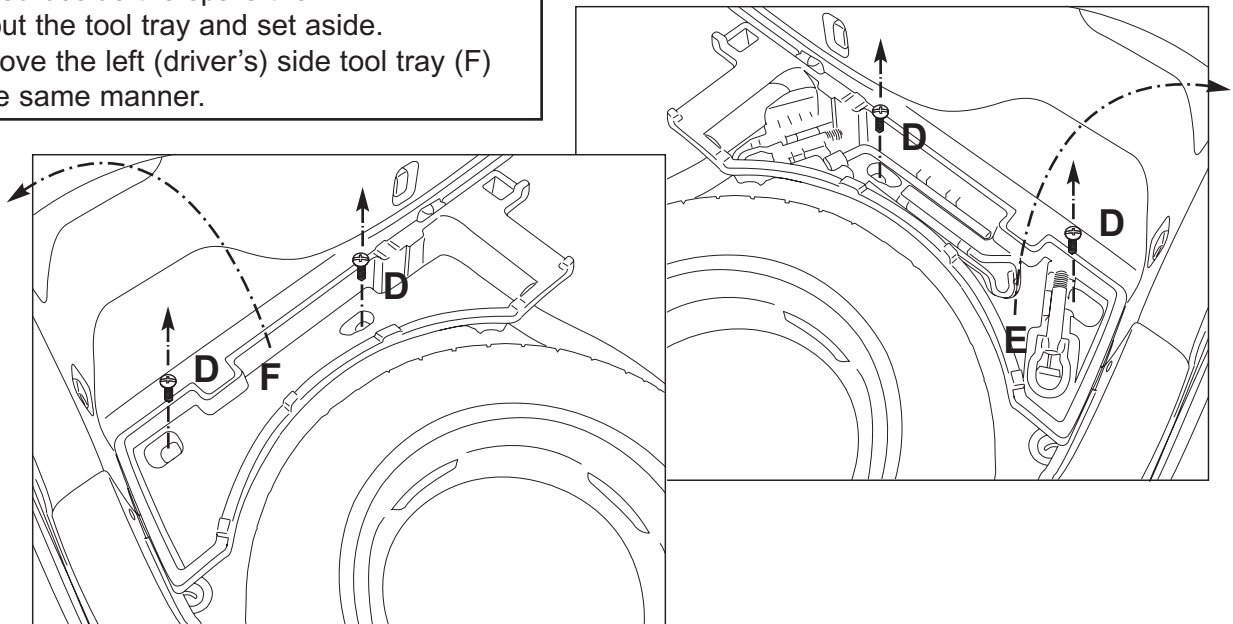
## **1** ACCESS SPARE TIRE STORAGE COMPARTMENT

1. Open the rear hatch of the vehicle and retract the cargo cover (A).
2. Lift up and remove the deck panel (B) exposing the spare tire cover (C).
3. Temporarily remove the spare tire cover.



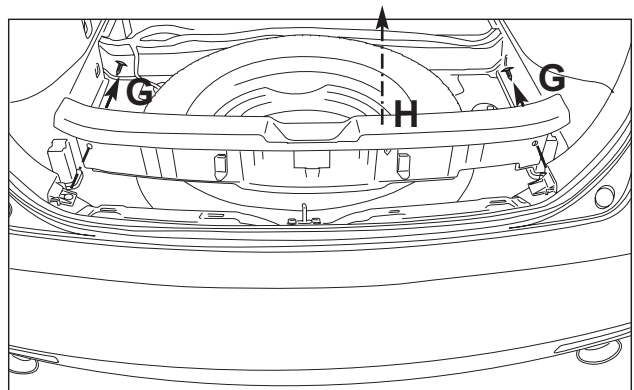
## **2** REMOVE TOOL TRAYS

1. Remove the two phillips head screws (D) from the right (passenger) side tool tray (E) located beside the spare tire.
2. Lift out the tool tray and set aside.
3. Remove the left (driver's) side tool tray (F) in the same manner.



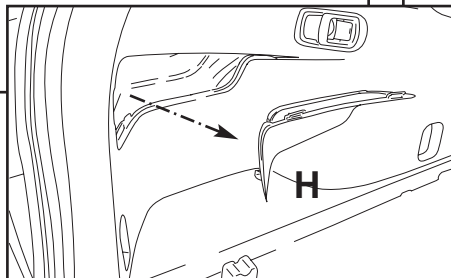
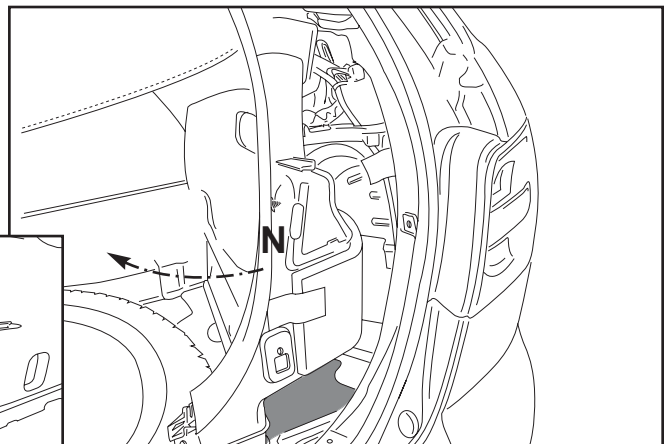
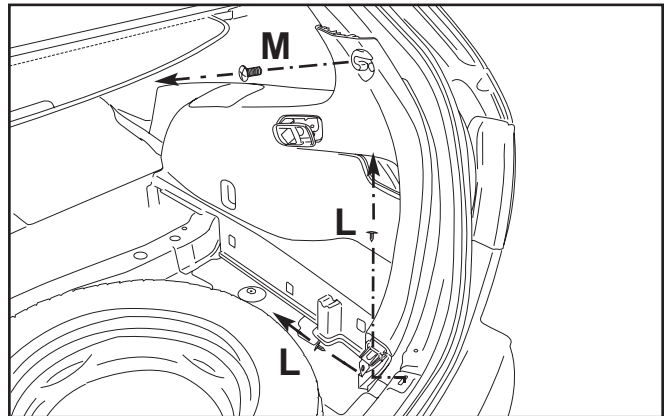
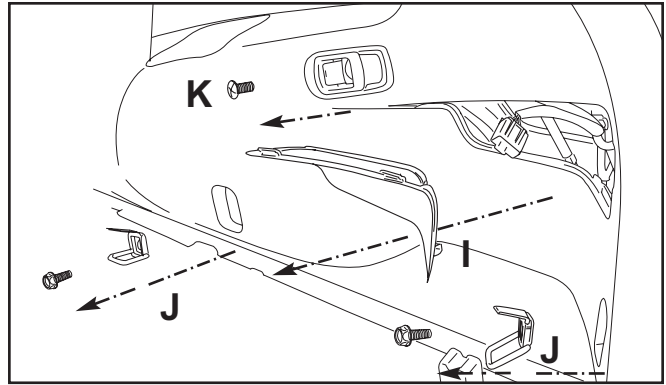
## **3** REMOVE THE REAR THRESHOLD PLATE

1. Using a plastic removal tool, remove the plastic push nuts (G) located on each side of the threshold plate (H).
2. Firmly pull up on the threshold plate and temporarily remove from vehicle.



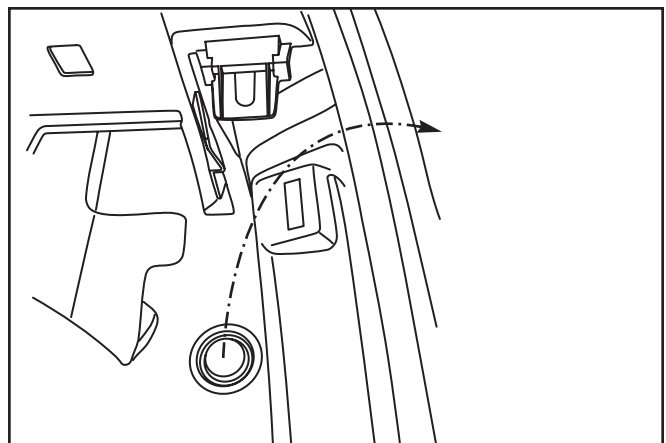
## 4 ACCESS WIRE HARNESS BEHIND INTERIOR TRIM PANELS

1. Carefully remove the right (passenger) side wiring harness access panel (I) from the interior trim panel by carefully pulling inward.
2. Remove the two cargo tie downs (J) from the right side trim panel.
  - a. Using a small flat tip screwdriver, carefully pry up the trim cover on each tie down.
  - b. Remove the bolt securing the tie down to the vehicle using a 10mm socket.
3. Remove the release latch cover mounting screw (K) from the right side trim panel.
  - a. Using a small flat tip screwdriver, carefully pry out the trim cover on the release handle.
  - b. Remove the phillips head screw securing the lift handle to the vehicle.
4. Remove the two black push nuts (L) located at the lower inside edge of the interior trim panel.
5. Remove the upper and lower phillips head screws (M) from the right side trim panel.
6. Carefully pull the trim panel (N) back to expose the vehicle wiring harnesses.
7. Carefully remove the left (driver's) side wiring harness access panel (H) from the interior trim panel by carefully pulling inward.



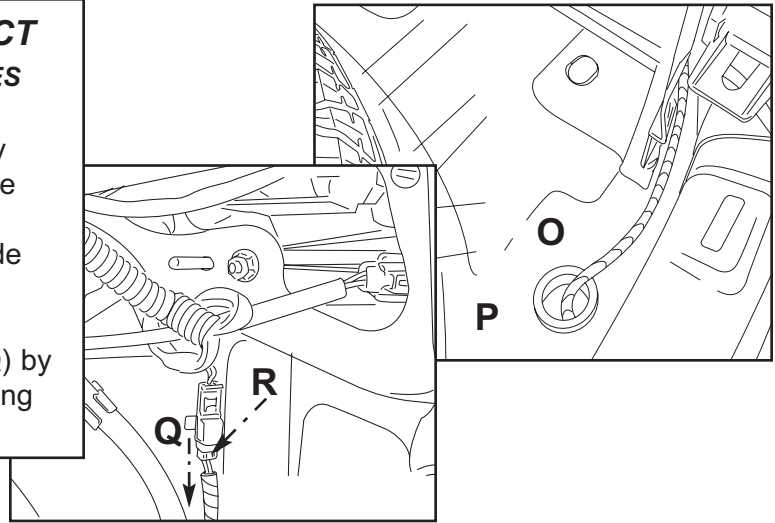
## 5a FOR VEHICLES WITHOUT ADVANCED KEY

1. Proceed directly to step 9. Steps 5b, 6b, 7b and 8b are not required for vehicles without advanced key systems. For vehicle with advanced key systems proceed with step 5b and follow all steps listed.
2. Using a fiberstick, remove the hole cover located in the floor of the vehicle.



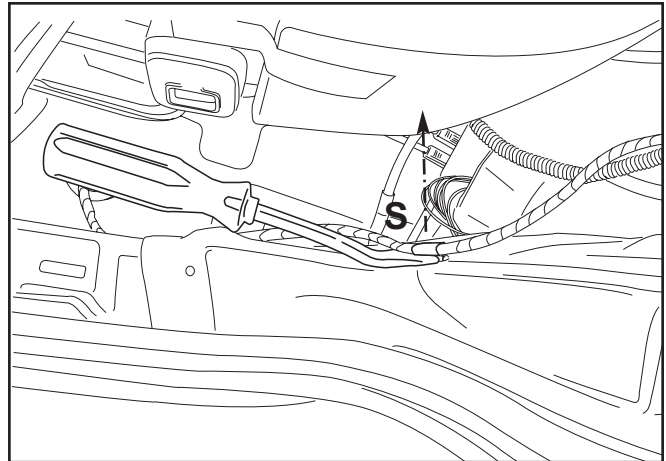
## 5b TEMPORARILY DISCONNECT SENSOR WIRE (FOR VEHICLES EQUIPPED WITH ADVANCED KEY)

1. Locate the sensor wire connector (Q) by following the wire (O) protruding from the grommet (P) in the vehicle floor to its location behind the right (passenger) side interior trim panel behind the tail light assembly.
2. Separate the sensor wire connectors (Q) by pressing on the locking tab (R) and pulling apart.



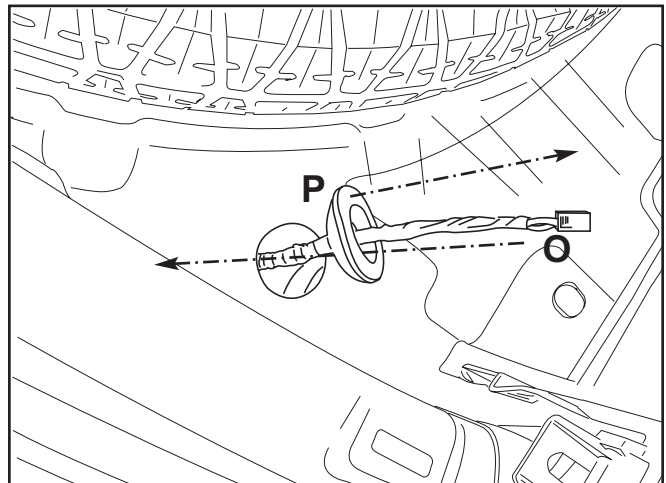
## 6b TEMPORARILY DISCONNECT SENSOR WIRE

1. Remove the two wire mounting clips (S) from the body using a plastic panel removal tool then pull the sensor wire out from behind the trim panel.
2. Using a china marker, mark the location of the mounting clips on the sensor wire for later re-installation.
3. Carefully remove the tape securing the mounting clips to the sensor wire. Save the mounting clips for later use.



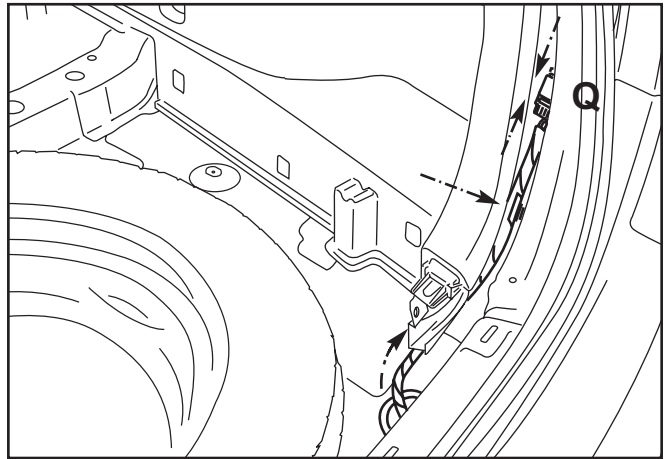
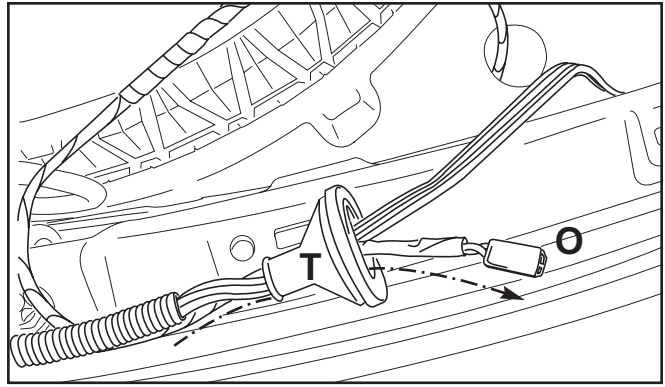
## 7b REMOVE GROMMET

1. Pull up and remove the sensor wire's grommet (P) located in the floor of the vehicle.
2. Using a china marker, mark the location of the grommet on the sensor wire for later re-installation.
2. Remove the grommet from the sensor wire (O) by feeding the wire and its connector down through the grommet opening or by cutting the grommet away from the sensor wire.  
**CAUTION: TAKE CARE NOT TO CUT OR DAMAGE THE SENSOR WIRE IF CUTTING THE GROMMET.**
3. Discard the original grommet.



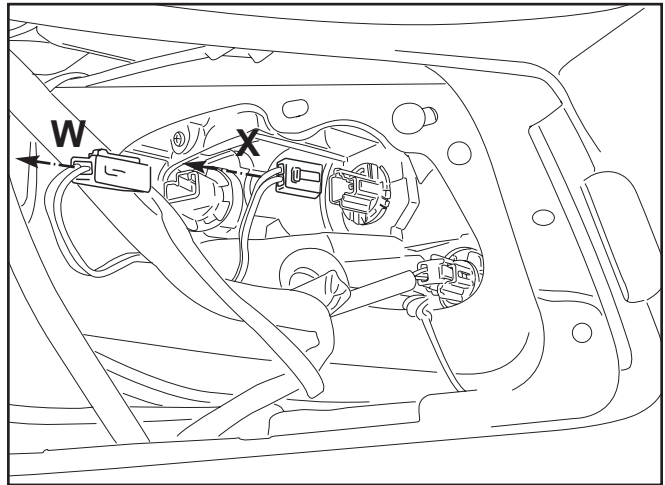
## 8b REATTACH SENSOR WIRE

1. Carefully feed the Sensor wire connector (O) through the new grommet (T) located on the Trailer Wiring Harness included in the 0000-8E-M04 Trailer Hitch Wiring Kit. Be sure to feed from the narrow end of the grommet as illustrated.
2. Pull the sensor wire through the grommet positioning the grommet in the original location as marked during step 7b.2 .
3. Reattach the wire mounting clips to their original positions on the sensor wire (as marked during step 6b.2) using electrical tape.
4. Route the sensor wire behind the passenger side trim panel in the same manner as when removed then reattach the mounting clips to the vehicle securing the sensor wire into its original position.
5. Reconnect the sensor wire connector to its mating connector by pressing firmly together until the locking tab engages.



## 9 DISCONNECT TAIL LIGHT CONNECTORS

1. Locate and disconnect the stop/tail light and turn signal connectors (W & X) from the back of the right (passenger) side lamp assembly by pressing on the locking tabs and carefully pulling from their sockets. Note: Take care not to damage the locking tabs.
2. Repeat this procedure on the left (driver's) side disconnecting only the connector with the blue wire.



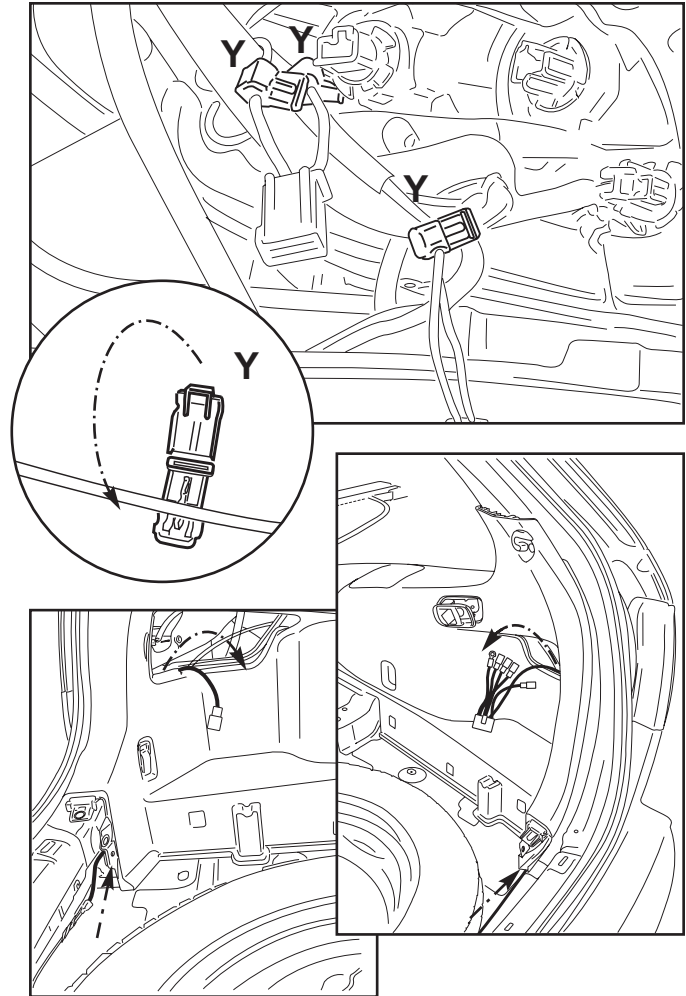
## 10 CONNECT WIRE TAPS TO VEHICLE HARNESS

1. Locate and identify the tail light, turn signal and brake light wires behind the right (passenger) side interior trim panel.

Function	Wire Color
Tail Light	Red/Orange
Right Turn Signal	Blue/Red
Brake Light	Red/Green

2. Attach a wire tap (Y) to each of the indicated wires approximately 1.5" from the vehicle connector.
  - A. Place wire into the center jaw of the wire tap.
  - B. Fold wire tap around wire.
  - C. Squeeze tightly together with pliers, making a secure connection.
3. Repeat this procedure on the left (Driver's) side for the left turn signal wire only.

Function	Wire Color
Left Turn Signal	Blue

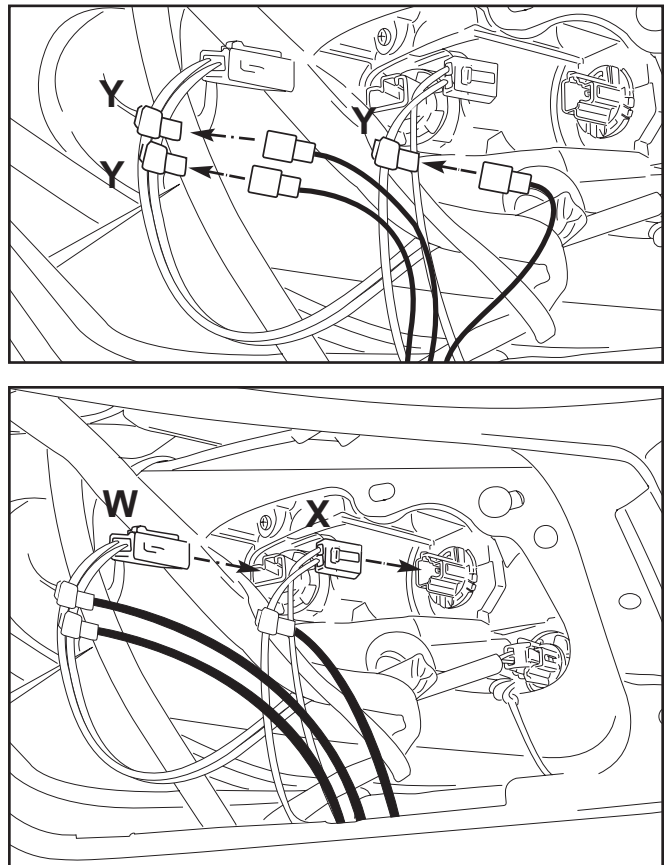


## 11 CONNECT HARNESS TO T-TAPS

1. Using a fishwire, route the jumper harness Yellow wire up behind the left (driver's) side trim panel and out through the wiring access panel.
2. Connect the spade terminal on the Yellow wire to the wire tap installed on the Blue wire.
3. Route the remainder of the jumper harness across the vehicle and up behind the right (passenger) side interior trim panel and out through the wiring access panel.
4. Plug the spade terminals on the jumper harness wires into the wire taps in the following manner:

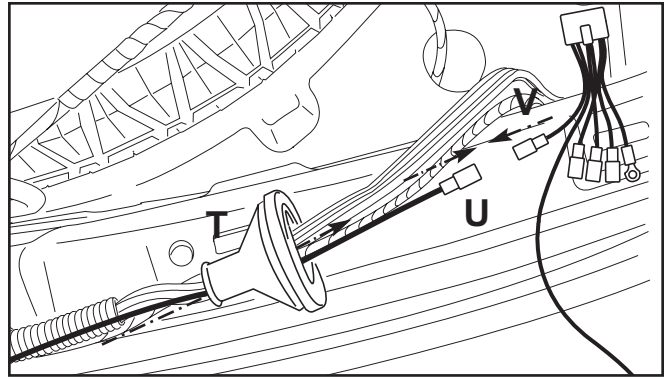
Jumper Wire Color	Vehicle Wire Color
Brown	Red/Orange
Green	Blue/Red
Red	Red/Green

5. Reconnect the Tail Light Connectors (W & X) for both the left (driver's) and right (passenger) sides.  
Note: Ensure the connectors are firmly seated in their sockets with the locking tabs engaged.



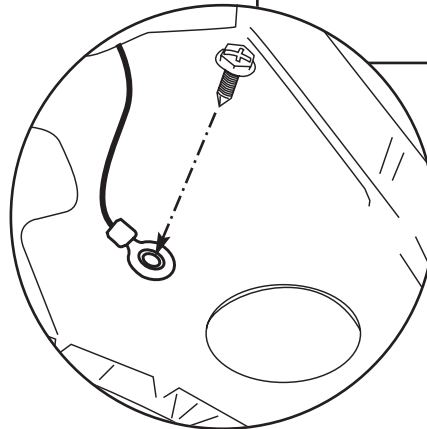
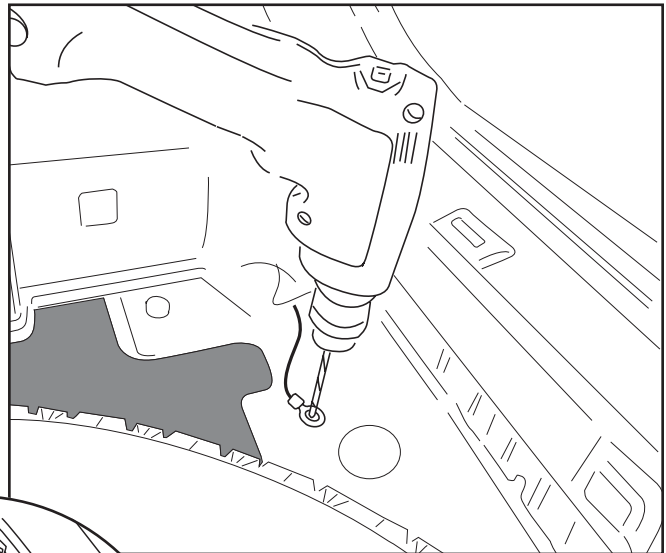
## 12 ADD POWER WIRE TO HARNESS

1. Feed approximately three feet of the long red power wire with the female spade terminal (U) through the narrow opening in the grommet (T) from the harness kit.
2. Plug the spade terminal on the red wire (U) into the mating connector on the adapter harnesses black wire (V) making sure the terminals are firmly connected.



## 13 MOUNT GROUND WIRE

1. Locate the area behind the right (Passenger) side trim panel within reach of the white ground wire approximately 2" from the grommet opening near the spare tire
2. Drill a 7/64" hole for the ground screw.  
**CAUTION: Do not drill through the heat shield below.**
3. Attach the white ground wire to the vehicle using the eyelet and ground screw.



## 14 MOUNT THE TRAILER HITCH WIRING HARNESS BLACK BOX

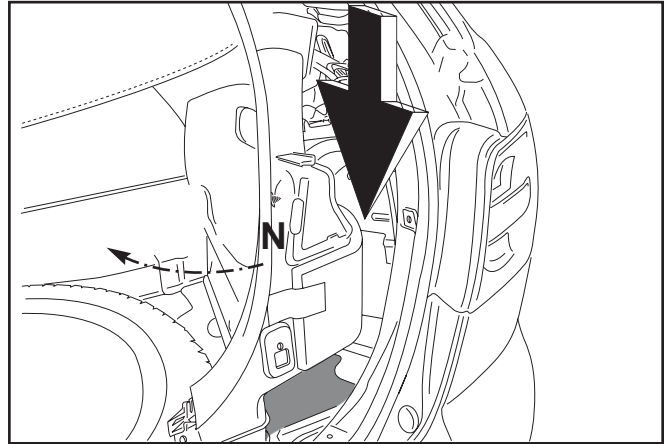
1. Locate the ditch on the floor pan behind the right (passenger) side trim panel (N).
2. Locate the center of the large notch on the tar insulator (Position X).
3. Without removing the adhesive backing, align the harnesses black box so that the hole in the left hand tab is located over the indicated position and the box is parallel to the vehicle side panel.

NOTE: The black box should not touch the caulking or vertical panel and should have adequate clearance to allow the trim panel to be returned to its original position.

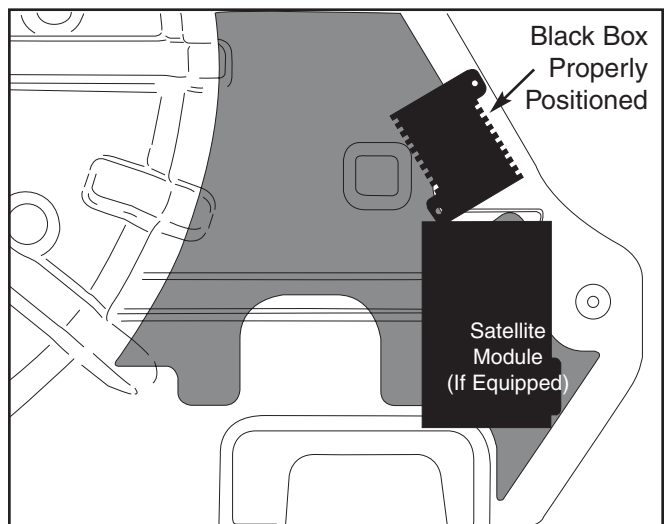
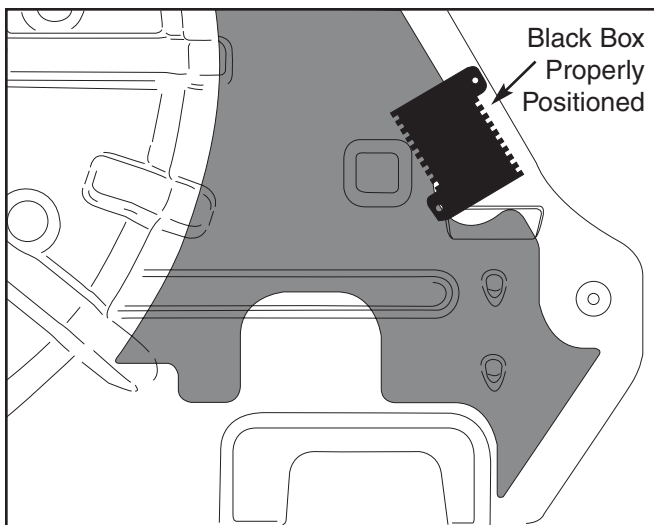
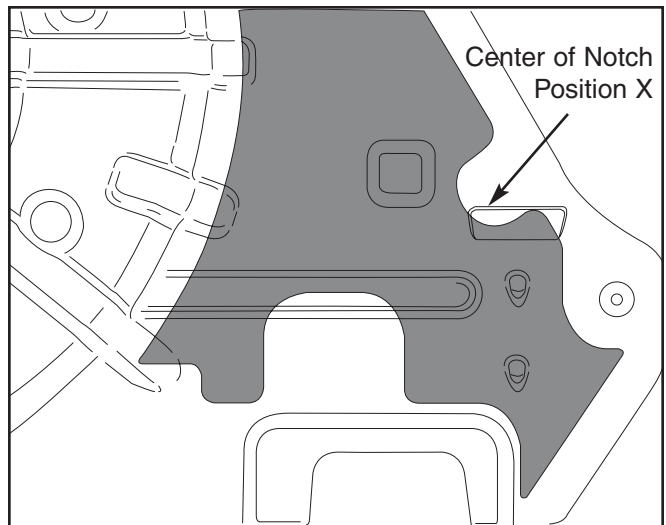
Note: Position the black box as indicated to ensure adequate current or future clearance for the satellite receiver module.

4. Remove the adhesive backing and secure the black box to the desired position. Press down firmly to secure.

# A

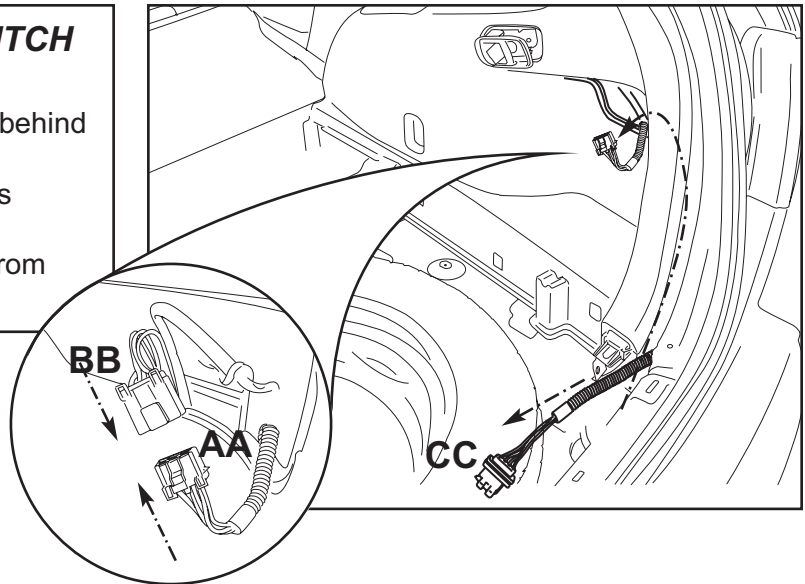


### VIEW A



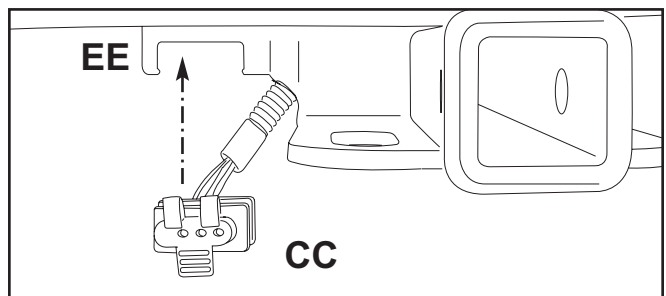
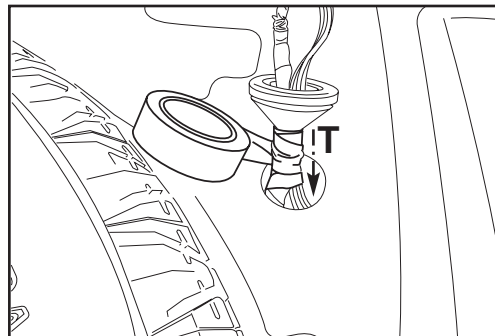
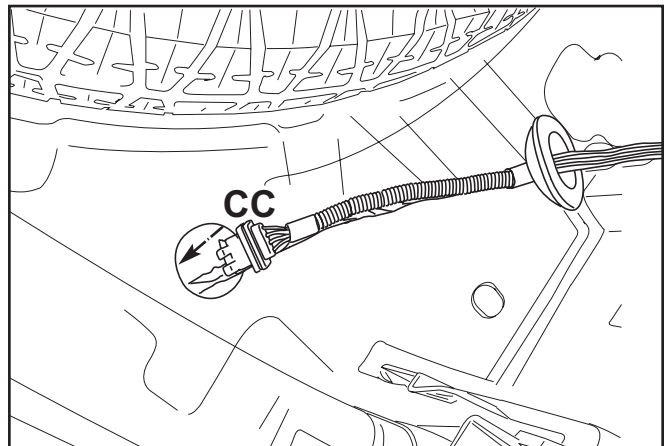
## 15 CONNECT THE TRAILER HITCH WIRING HARNESS

1. Route the trailer hitch wiring harness behind the trim panel and insert its mating connector (AA) into the jumper harness connector (BB).
2. Route the trailer connector (CC) out from behind the trim panel.



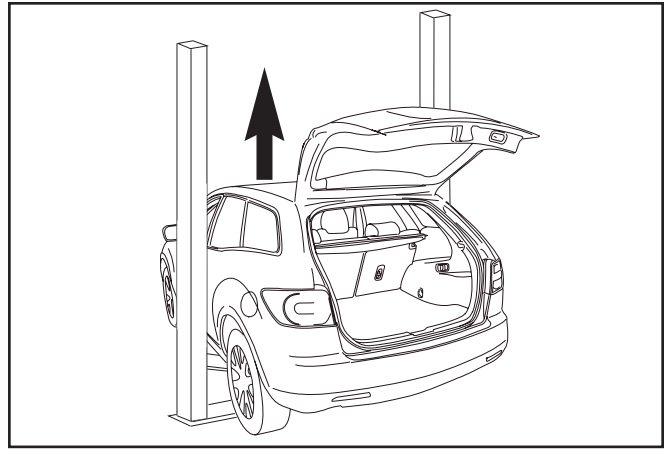
## 16 ROUTE TRAILER CONNECTOR BELOW VEHICLE

1. Route the trailer hitch wiring harness's 4-flat trailer connector (CC) and the Red power wire through the grommet opening to the under side of the vehicle.  
**CAUTION: THE HEAT SHIELD BELOW THE VEHICLE IS SHARP AND CAN CUT OR DAMAGE THE TRAILER HARNESS.**
2. Route the 4-Flat trailer connector (CC) out from behind the heat shield (DD) and toward the left side of the vehicle. Position the 4-Flat connector into the bracket on the trailer hitch (EE).
3. Slide the corrugated tubing toward the 4-flat trailer connector until there is an approximate 1" gap between the tubing and the 4-flat connector.
4. Tuck any excess harness length up above the heat shield and secure the harness into place below the vehicle by fastening to the trailer hitch using tie wraps.
5. Secure the grommet (T) to the wiring harness using electrical tape.
6. Push the grommet into the hole until it seats completely.



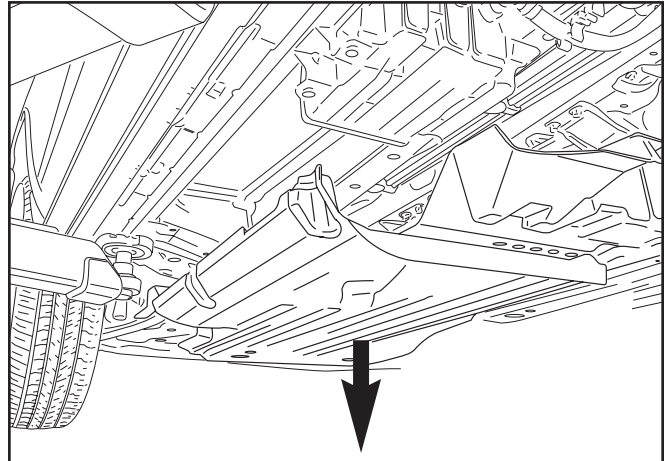
## **17** RAISE VEHICLE

1. Using an adequately rated vehicle lift, follow the instructions provided with the vehicle lift and carefully raise the vehicle ensuring there are no obstructions above or near the vehicle.



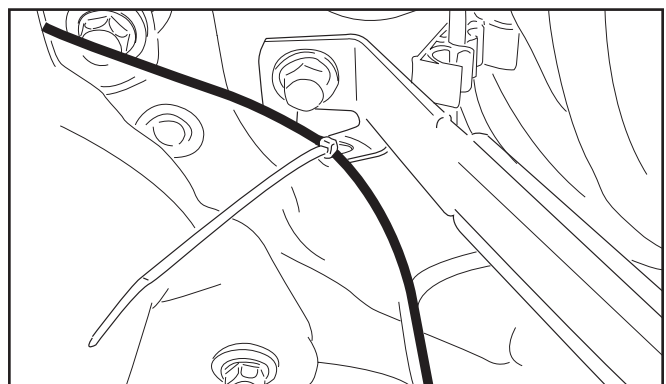
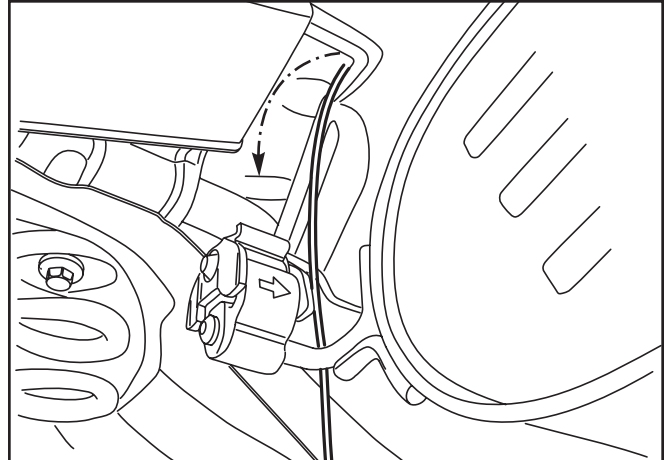
## **18** REMOVE UNDERBODY SPLASH SHIELD

1. Remove the seven 10mm bolts and two plastic nuts holding the splash shield into place.
2. Lower the splash shield and set aside.



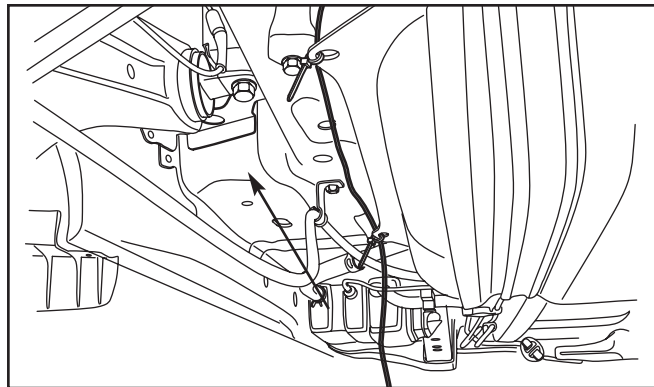
## **19** ROUTE POWER WIRE FROM UNDER HEAT SHIELD

1. Feed the red power wire above the heat shield and across to the left (driver's) side of the vehicle.
2. Exit from above the heat shield near the exhaust hangers and continue routing the red wire forward as illustrated, over the fuel filler pipe, over the rear axle (if present) and above the CV cradle.
3. Keeping the power wire taut, secure the wire to the fuel tank strap with a tie wrap.



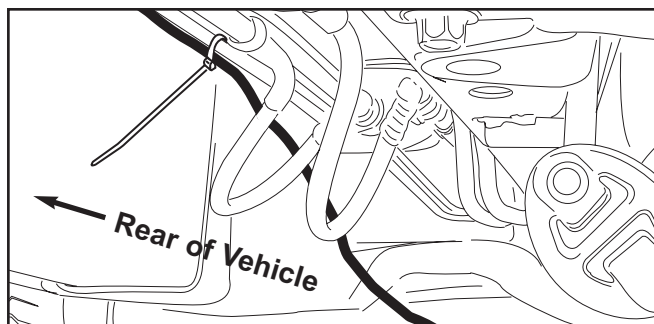
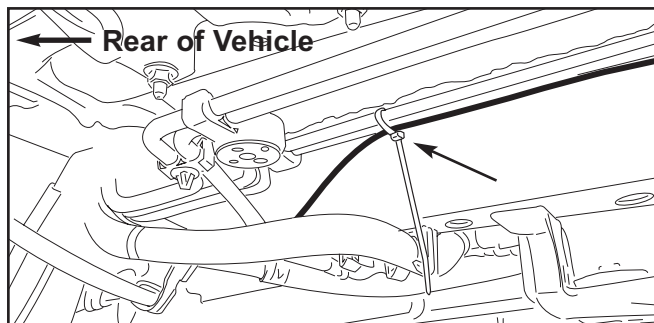
## **20** ROUTE POWER WIRE TO SIDE OF FUEL TANK

1. Continue routing the power wire along the side of the fuel tank.
2. Secure the wire to the rear and front edges of the fuel tank with a tie wrap.



## **21** ROUTE POWER WIRE ALONG BRAKE LINES

1. Continue routing the power wire along the brake lines toward the front of the vehicle.
2. Keeping the wire taut, secure the power wire to the brake line using 4 tie wraps.

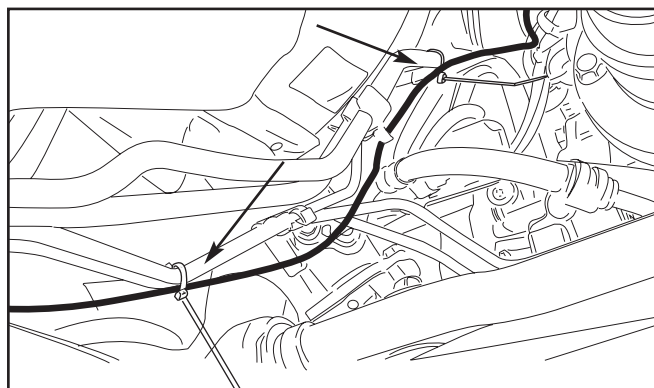
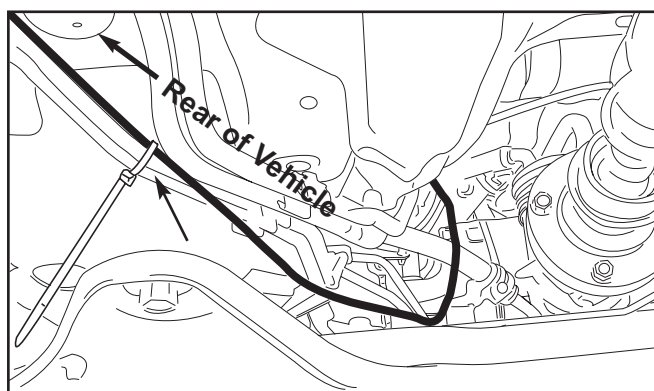


## **22** ROUTE POWER WIRE INTO ENGINE COMPARTMENT

1. Continue routing along the brake lines, up past the drive shaft (if AWD) and into the engine compartment.

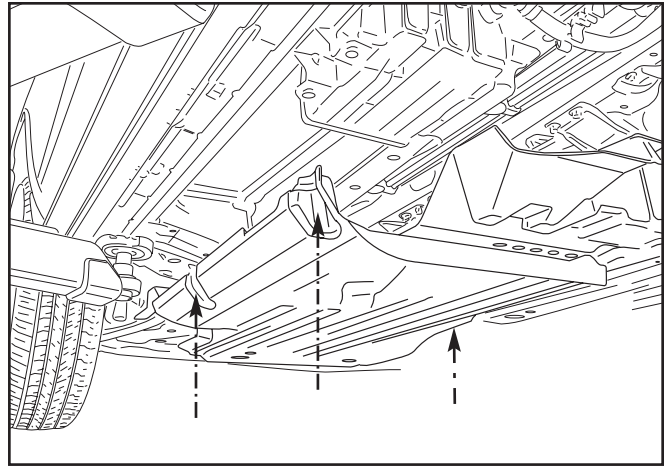
**Caution: Make sure wire is secured to prevent contact with drive shaft.**

2. Secure the wire in two positions as illustrated using tie wraps ensuring that the wire is taut to prevent rattling.



## **23** RE-INSTALL SPLASH SHIELD

1. Using wire cutters, trim the excess material from the tie wraps.
2. Replace the plastic splash shield using the fasteners removed in step 17.

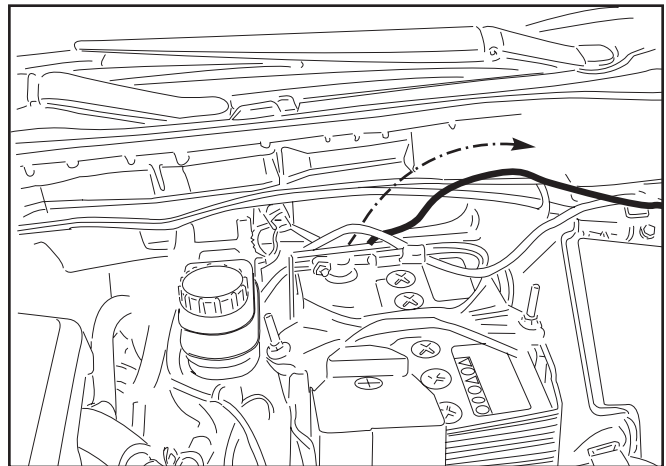


## **24** LOWER VEHICLE

1. Following the instructions provide with the vehicle lift, carefully lower the vehicle ensuring there are no obstructions under or near the vehicle.

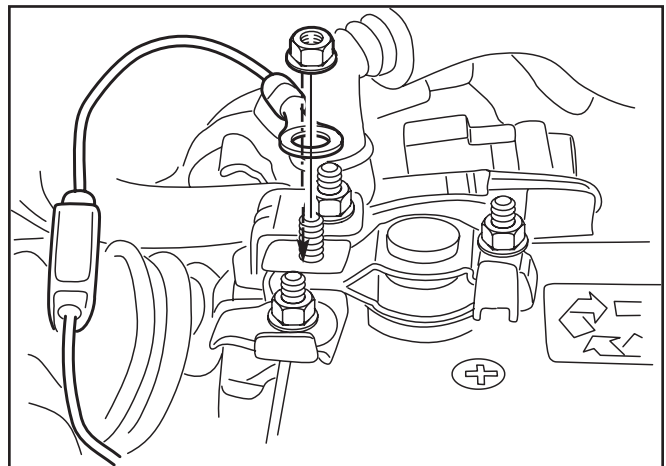
## **25** ROUTE FUSE HOLDER AROUND BATTERY

1. Route the fuse holder assembly up into the engine compartment behind the battery near the brake fluid reservoir.



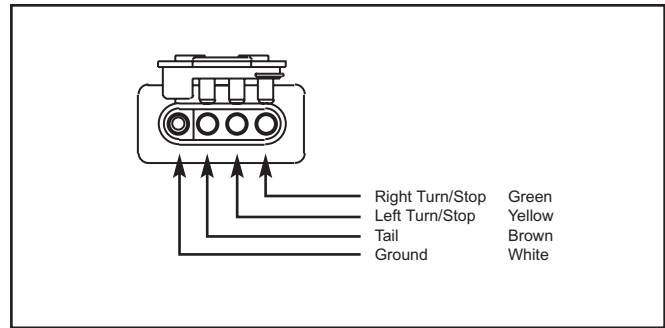
## **26** ATTACH FUSE HOLDER TO BATTERY

1. Remove the positive (+) battery cover by pulling upward.
2. Using a 10mm socket wrench, remove the center nut on the positive (+) battery cable.
3. Attach the ring terminal to the positive(+) battery cable using the loosened nut.  
Note: Ensure bolt is properly tightened to 5 ft lb. when re-installing.
4. Secure any loose wires using tie wraps.



## 27 CONFIRM CORRECT OPERATION

1. Ensure all connections are complete.
2. Use a 12V test light to check each signal function.
  - a. Attach the ground lead to the male trailer connector pin.
  - b. Verify the tail light circuit, right turn/brake and left turn/brake by activating each function on the vehicle individually while checking the appropriate terminal on the trailer connector.



## 28 REINSTALL ALL TRIM, TIE DOWNS AND INTERIOR PANELS

1. Bundle the remaining wire from the jumper harness behind the trim panel using a tie wrap.  
Note: Do not tie off on the drain tube, secure to the OE harness.
2. Reinstall all trim in the reverse order of removal, ensuring all fasteners are properly installed.  
Note: Torque tie down mounting bolts to 5 ft. lbs. using a 10mm socket.  
**CAUTION: MAKE SURE RUBBER DOOR SEAL IS PLACED OVER THE TOP OF THE SIDE TRIM PANELS & THRESHOLD TRIM.**
3. Clean Vehicle.
4. Place the User Guide (provided in the Trailer Hitch Wiring Harness Kit) into the vehicle glove box.

## ! BATTERY DISCONNECT NOTICE

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

Carry out the following operation from the driver seat first and then the passenger seat to restore normal operation:

1. Turn the ignition to the "ON" position.
2. Press the power window to fully open the power windows.
3. Lift up the power window switch to fully close the power windows, keeping it pulled up for approximately 2 seconds.
4. Cycle the engine switch to "OFF", and then to "ON" again. Should these procedures fail to correct the power window function, contact your Mazda dealer.

# TROUBLESHOOTING GUIDE

**PART NUMBER:**  
0000-8E-M03

## TRAILER HITCH WIRING KIT

**APPLICABLE MODELS:**  
2007 > CX-7

### 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.

