

**P-001**



## **SVE BULLETIN**

# **Police Modifier Bulletin**

**SPECIAL VEHICLE ENGINEERING – BODY BUILDERS ADVISORY SERVICE**

E-Mail via website: [www.fleet.ford.com/truckbbas](http://www.fleet.ford.com/truckbbas) (click "Contact Us")

Toll-free: (877) 840-4338

Date: 3 April, 2012

### **2013 Sedan & Utility Police Interceptors Wire Harness Pass-Through**

#### **Models Affected**

2013 Sedan & Utility Police Interceptor applications beginning Job #1 2013MY that require addition of a wire harness to pass-through from the interior of the vehicle to the engine compartment.

#### **Purpose**

This bulletin provides direction to route a wire harness from the interior of the vehicle to the engine compartment.

#### **Procedure**

**⚠ WARNING: Before beginning any service procedure in this section, REFER to [Safety Warnings](#). Failure to follow this instruction may result in serious personal injury.**

Refer to suggested warnings at beginning of this publication and contact the Ford Truck Body Builders Advisory Service as shown in the header of this bulletin.

Ensure Safety Warnings for all components/systems encountered or possibly affected are reviewed. Following are suggestions:

#### **Battery System Service Warnings**

**⚠ WARNING: Always disconnect the battery ground cable at the battery before disconnecting the starter motor battery terminal lead. If a tool is shorted at the starter motor battery terminal, the tool can quickly heat enough to cause a skin burn. Failure to follow this instruction may result in serious personal injury.**

**⚠ WARNING: Before carrying out maintenance on the starting system, disconnect the battery ground cable from the frame to completely isolate the starter from the dual frame-mounted batteries. Failure to follow this instruction may result in serious personal injury.**

## Wire Harness Pass-Through Dash Panel

### Battery System Service Warnings

 **WARNING:** Batteries contain sulfuric acid and produce explosive gases. Work in a well-ventilated area. Do not allow the battery to come in contact with flames, sparks or burning substances. Avoid contact with skin, eyes or clothing. Shield eyes when working near the battery to protect against possible splashing of acid solution. In case of acid contact with skin or eyes, flush immediately with water for a minimum of 15 minutes, then get prompt medical attention. If acid is swallowed, call a physician immediately. Failure to follow these instructions may result in serious personal injury.

 **WARNING:** Always lift a plastic-cased battery with a battery carrier or with hands on opposite corners. Excessive pressure on the battery end walls may cause acid to flow through the vent caps, resulting in personal injury and/or damage to the vehicle or battery.

 **WARNING:** Do not get underneath the frame-mounted battery when disconnecting or connecting the auxiliary battery safety straps. The battery is heavy and could fall. Failure to follow this instruction may result in serious personal injury.

 **WARNING:** Battery posts, terminals and related accessories contain lead and lead components. Wash hands after handling. Failure to follow these instructions may result in serious personal injury.

### Body and Frame Service Warnings

 **WARNING:** Always refer to MSDS when handling chemicals and wear protective equipment as directed. Examples may include but are not limited to respirators and chemically resistant gloves. Failure to follow these instructions may result in serious personal injury.

 **WARNING:** Always wear protective equipment including eye protection with side shields, and a dust mask when sanding or grinding. Failure to follow these instructions may result in serious personal injury.

 **WARNING:** On vehicles equipped with Safety Canopy® options, prior to carrying out any sectioning repairs near the roof line or sail panel areas of the vehicle, remove the Safety Canopy® module and related components. Failure to comply may result in accidental deployment or damage to the Safety Canopy®. Refer to Section 501-20 Supplemental Restraint System. Failure to follow these instructions may result in serious injury to technician or vehicle occupant(s).

## Wire Harness Pass-Through Dash Panel

### Body and Frame Service Warnings

 **WARNING:** Do not cut or grind body side components within 50 mm (1.9685 in) of restraint anchoring points. Welding within 50 mm (1.9685 in) of restraint anchoring points may result in incorrect operation of restraint devices. For additional restraints anchoring location information, refer to Section 501-20 Safety Belt System and Section 501-20 Supplemental Restraint System. Failure to follow these instructions may result in serious injury to vehicle occupant(s).

 **WARNING:** If a vehicle has been in a crash, inspect the RCM and the impact sensor (if equipped) mounting areas for deformation. If damaged, restore the mounting areas to the original production configuration. A new RCM and sensors must be installed whether or not the air bags have deployed. Failure to follow these instructions may result in serious personal injury or death in a crash.

### Engine Cooling System Service Warnings

 **WARNING:** Always allow the engine to cool before opening the cooling system. Do not unscrew the coolant pressure relief cap when the engine is operating or the cooling system is hot. The cooling system is under pressure; steam and hot liquid can come out forcefully when the cap is loosened slightly. Failure to follow these instructions may result in serious personal injury.

### General Service Warnings

 **WARNING:** Never get underneath a vehicle that is supported only by a jack. The jack could unintentionally lower. Always support vehicle with floor stands. Failure to follow these instructions may result in serious personal injury.

 **WARNING:** Always wear eye protection when servicing a vehicle. Failure to follow this instruction may result in serious personal injury.

 **WARNING:** Do not apply heat or flame to the shock absorber or strut tube. The shock absorber and strut tube are gas pressurized and could explode if heated. Failure to follow this instruction may result in serious personal injury.

 **WARNING:** Carefully read cautionary information on product label. For **EMERGENCY MEDICAL INFORMATION** seek medical advice. In the USA or Canada on Ford/Motorcraft products call: 1-800-959-3673. For additional information, consult the product MSDS, if available. Failure to follow these instructions may result in serious personal injury.

 **WARNING:** Use tools, not fingers, to hold flagnuts. Flagnuts may slip or spin unexpectedly when removing fasteners. Failure to follow this instruction may result in injured fingers.

## Wire Harness Pass-Through Dash Panel

### General Service Warnings

 **WARNING:** Keep solvents away from ignition sources. Solvents may be flammable and can ignite or explode if not handled correctly. Failure to follow this instruction may result in serious personal injury.

 **WARNING:** Place a shop towel between the hands and the exterior mirror glass for protection in case of glass breakage during mirror service. Failure to follow this instruction may result in serious personal injury.

 **WARNING:** Use only a type-D fire extinguisher to extinguish magnesium fires. Never attempt to use a type-A, -B, -C extinguisher, or water, as these items are ineffective and may accelerate a magnesium fire. Failure to follow these instructions may result in serious personal injury.

 **WARNING:** Only raise the vehicle when positioned on a hard, level surface. Attempting to raise the vehicle on an uneven or soft surface may result in vehicle slipping or falling from the jack or jackstand. Failure to follow this instruction may result in serious personal injury.

 **WARNING:** Identify the correct jacking points by locating the triangle stamped into the uni-body sheet metal or vehicle frame. Raising a vehicle in any other location may result in vehicle shifting or falling. Failure to follow this instruction may result in serious personal injury.

 **WARNING:** Install only FCC-approved radio transmitting equipment. See your authorized radio dealer for the correct transmitter. Use of incorrect transmitting equipment may cause the vehicle to malfunction or stall, resulting in loss of power brake and power steering assist. Failure to follow these instructions may result in serious personal injury to vehicle occupant(s).

 **WARNING:** Vehicle may have multiple drive wheels. Do not use engine to power the driveline unless all drive wheels are elevated off the ground. Drive wheels in contact with ground could cause unexpected vehicle movement. Failure to follow this instruction may result in serious personal injury.

 **WARNING:** Do not operate the engine with the hood open until the fan blade has been examined for possible cracks and separation. A damaged fan can separate during operation. Failure to follow this instruction may result in serious personal injury.

 **WARNING:** Do not stand in line with or near the engine cooling fan blade when revving the engine. A damaged fan can separate during operation. Failure to follow this instruction may result in serious personal injury.

## Wire Harness Pass-Through Dash Panel

### General Service Warnings

 **WARNING:** When jacking or lifting the vehicle, block all wheels remaining on the ground. Set the parking brake if the rear wheels will remain on the ground. These actions help prevent unintended vehicle movement. Failure to follow these instructions may result in serious personal injury.

 **WARNING:** Turn OFF the ignition switch for a minimum of 5 minutes before removing high-voltage cables. High-voltage cables and wiring are orange in color. The nominal HVTB is 330 V DC. Failure to follow these instructions may result in serious personal injury or death.

 **WARNING:** Vehicles with engine auto start-stop technology may start automatically with the ignition on. Make sure the ignition is off when servicing or working in close proximity to rotating engine parts. Failure to follow this instruction could result in serious personal injury.

 **WARNING:** Wear high-voltage insulated safety gloves and a face shield when working with high-voltage batteries or cables. The high-voltage insulated safety gloves should be of the appropriate safety and protection rating. Inspect the gloves before use and always wear them with the leather outer glove. Any hole in the rubber insulating glove is a potential entry point for high-voltage. Failure to follow these instructions may result in serious personal injury or death.

 **WARNING:** Depower the HVTB before carrying out any removal or installation procedures affecting the high-voltage battery system. Failure to follow this instruction may result in serious personal injury or death.

 **WARNING:** Secure the torque converter in the transmission during removal or installation. The torque converter is heavy and may result in injury if it falls out of the transmission. Failure to follow this instruction may result in serious personal injury.

 **WARNING:** When using compressed air, never let air pressure exceed 172.4 kPa (25 psi) and always wear safety glasses. Compressed air may cause foreign material or parts to become airborne. Failure to follow this instruction may result in serious personal injury.

## Wire Harness Pass-Through Dash Panel

### General Service Warnings (continued)

**⚠ WARNING:** Wear protective gloves when handling components or parts that have pointed or sharp edges. Failure to follow this instruction may result in serious personal injury.

**⚠ WARNING:** Turn off (disable) the power running boards (if equipped) before jacking, lifting or placing any object under the vehicle. Never place your hand between the power running board and the vehicle. Extended power running boards will retract when doors are closed. Failure to follow these instructions may result in serious personal injury.

**⚠ WARNING:** Disconnect the window regulator motor connector before working inside the vehicle doors. Service actions inside the door (such as door latch, handle or lock cylinder service) or operating the RKE fob may activate the windows on vehicles equipped with global open/close. Serious injury to hands or arms may occur if a window motor is activated during service. Failure to follow these instructions may result in serious personal injury.

#### *Safety Restraints Service Warnings*

**⚠ WARNING:** Never disassemble or tamper with seat belt deployable components, including pretensioners, load limiters and inflators. Never back probe deployable device electrical connectors. Tampering or back probing may cause an accidental deployment and result in personal injury or death.

**⚠ WARNING:** Never probe the electrical connectors on air bag, Safety Canopy® or side air curtain modules. Failure to follow this instruction may result in the accidental deployment of these modules, which increases the risk of serious personal injury or death.

**⚠ WARNING:** Never put any type of fastener or tie strap around any part of a Safety Canopy® module, side air curtain module or interior trim panel. This will prevent the Safety Canopy® or side air curtain module from deploying correctly. Failure to follow this instruction may increase the risk of serious personal injury or death in a crash.

**⚠ WARNING:** Always tighten the fasteners of the RCM and impact sensor (if equipped) to the specified torque. Failure to do so may result in incorrect restraint system operation, which increases the risk of personal injury or death in a crash.

**⚠ WARNING:** Always carry or place a live Safety Canopy®, or side air curtain module, with the module and tear seam pointed away from your body. Failure to follow this instruction may result in serious personal injury or death in the event of an accidental deployment.

*Safety Restraints Service Warnings (continued)*

**⚠ WARNING:** Always deplete the backup power supply before repairing or installing any new front or side air bag SRS component and before servicing, removing, installing, adjusting or striking components near the front or side impact sensors or the RCM. Nearby components include doors, instrument panel, console, door latches, strikers, seats and hood latches. Refer to the Description and Operation portion of Section 501-20 for location of the RCM and impact sensor(s). To deplete the backup power supply energy, disconnect the battery ground cable and wait at least 1 minute. Be sure to disconnect auxiliary batteries and power supplies (if equipped). Failure to follow these instructions may result in serious personal injury or death in the event of an accidental deployment.

**⚠ WARNING:** Always carry or place a live air bag module with the air bag and deployment door/trim cover/tear seam pointed away from the body. Do not set a live air bag module down with the deployment door/trim cover/tear seam face down. Failure to follow these instructions may result in serious personal injury in the event of an accidental deployment.

*Safety Restraints Service Warnings (continued)*

**⚠ WARNING:** Do not paint any air bag module trim covers or deployment doors. Paint may cause the air bag to deploy incorrectly. Failure to follow this instruction may increase the risk of serious personal injury or death in a crash.

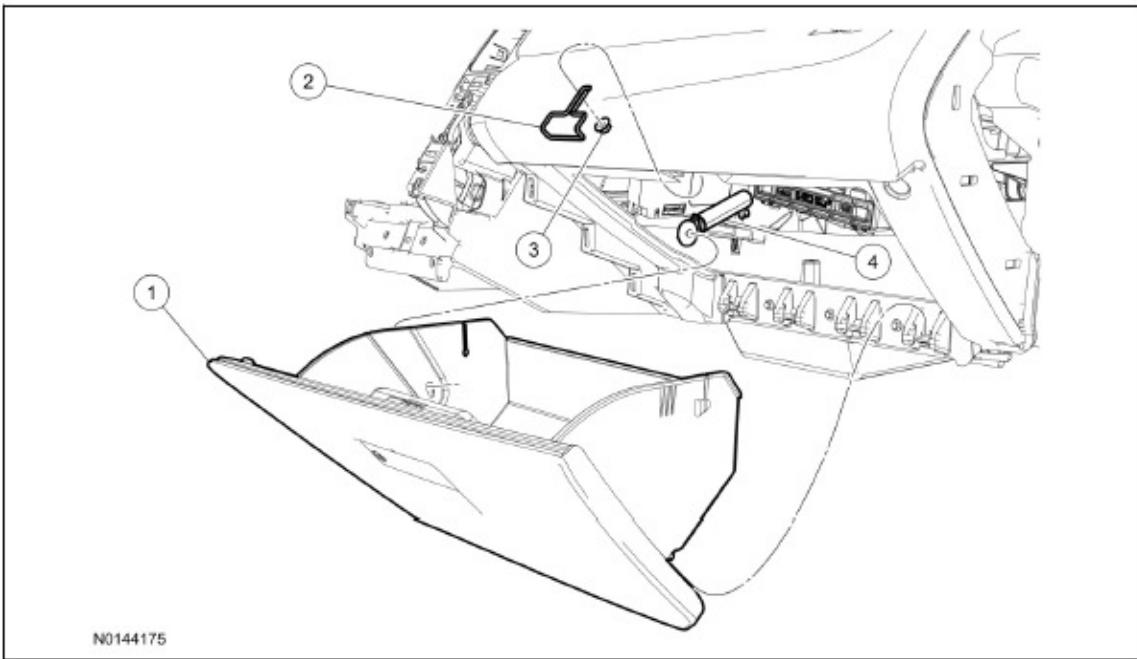
**Prior to beginning work, ensure you inspect the area in which you will be working for any components and/or systems that will be encountered and determine the safety procedures required to work in that and adjacent areas.**

**Verify that the most recent safety and removal and installation procedures are identified and implemented.**

# Wire Harness Pass-Through Dash Panel Sedan Interceptor

## Remove glove compartment from passenger side instrument panel

### Glove Compartment



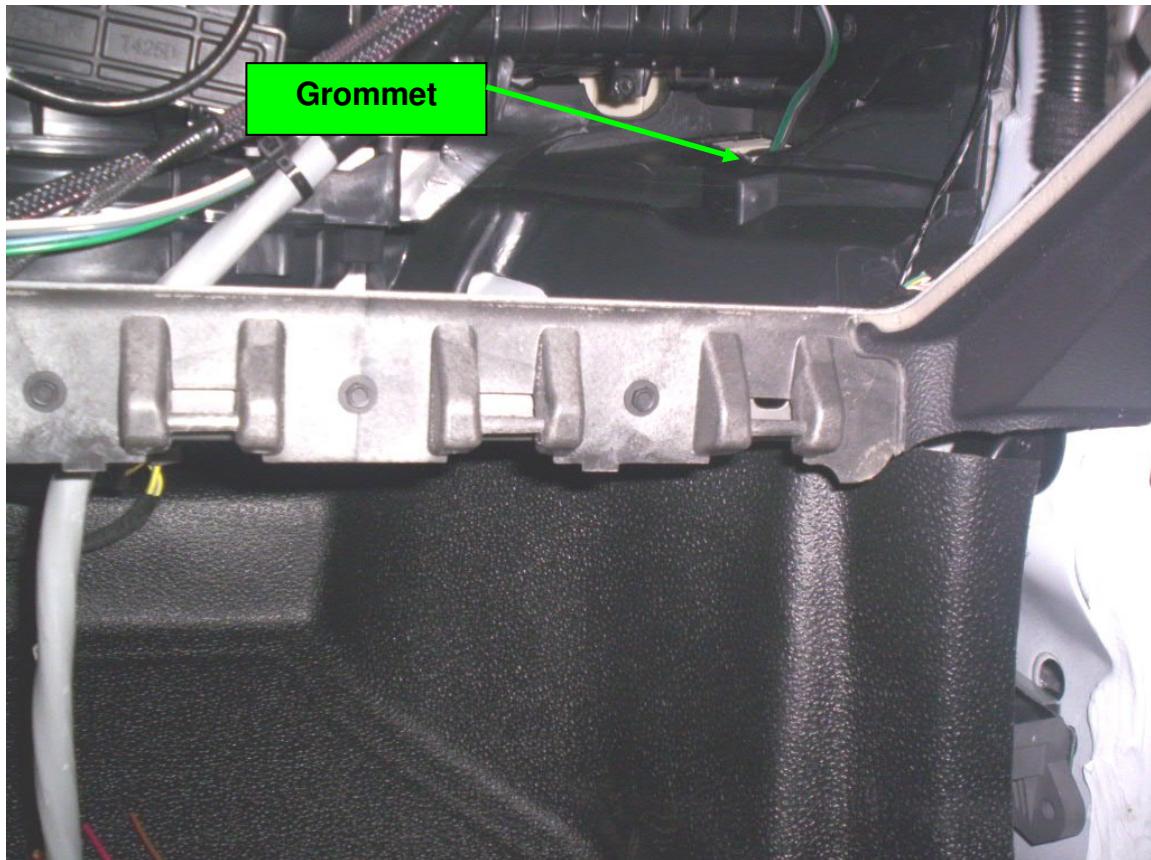
Item	Part Number	Description
1	060T10	Glove compartment assembly
2	06157	Glove compartment striker
3	N805572	Glove compartment striker nut
4	06102	Glove compartment damper

- 1. Open glove box**
- 2. Disconnect glove box damper (item 4)**
- 3. Depress tabs on both sides of glove box and rotate glove compartment assembly downward**
- 4. Open the glove compartment door, disengage the glove compartment down stops and remove the glove compartment door.**

## Wire Harness Pass-Through Dash Panel Sedan Interceptor

Remove interior trim panels as necessary for access

View with glove compartment assembly removed



Locate flooring retention points and pull back flooring on top of wheel well in passenger side area of front row seat.

Locate grommet (22 mm / 0.866 in. diameter) on top of wheel well (see photo above).

Wire should be covered with a material that meets worst case environmental requires experienced along its routing (i.e., convolute. etc.) minimum of 125°C.

Remove and cut grommet to allow wire harness to pass through.

## **Wire Harness Pass-Through Dash Panel Sedan Interceptor**

**Note:**

**If a larger hole is required for wire harness pass-thru**

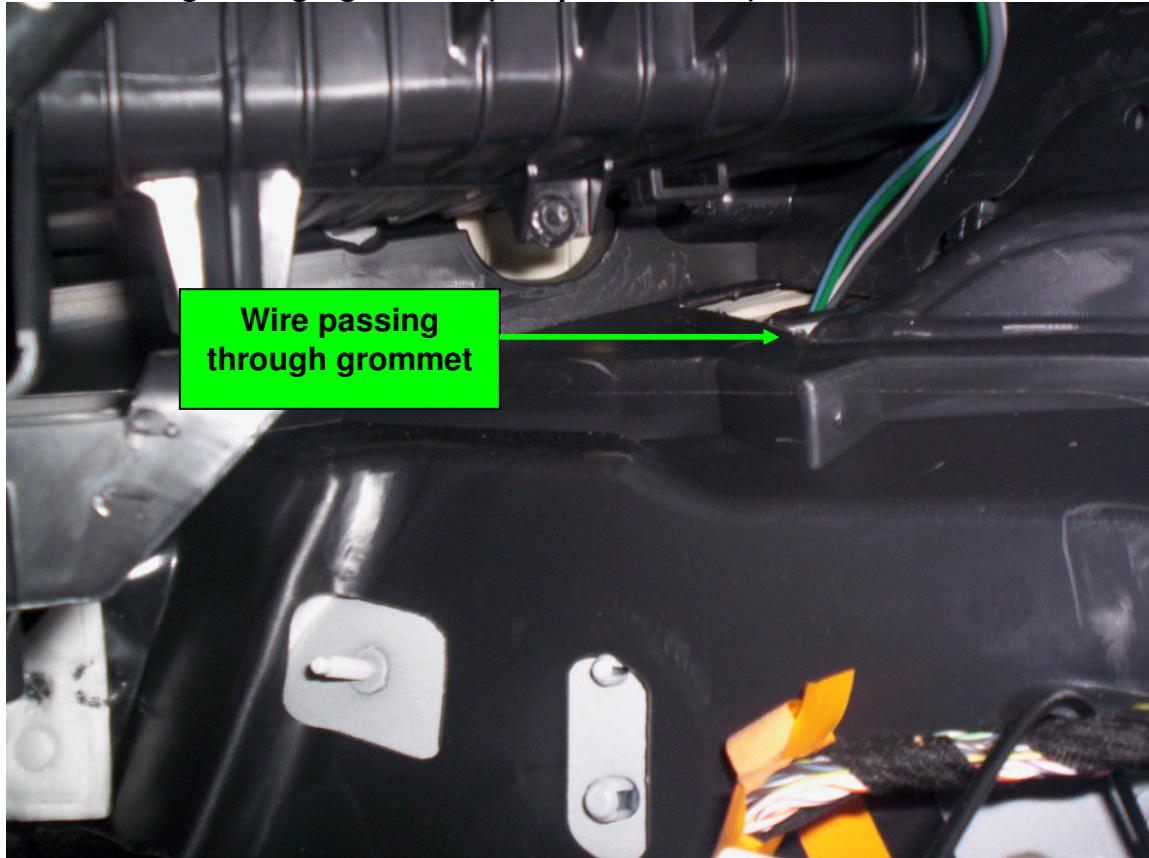
- Remove grommet
- Enlarge existing grommet hole to desired diameter
- De-bur edges of enlarged hole to prevent chafing/cutting damage to wire Harness
- Obtain new grommet to fit size of wire pass-through hole
- Cut open grommet just enough to allow harness to pass through
- Use sealant that meets performance characteristics for environment that the vehicle will experience

**Pass wire through grommet and re-install grommet.**

**Retain wiring passing behind glove compartment towards bottom of center stack so that it will not interfere with opening/closing of glove compartment. Determine and implement retention points and locations to secure wiring/harness.**

## Wire Harness Pass-Through Dash Panel Sedan Interceptor

Route wiring through grommet (see photo below)



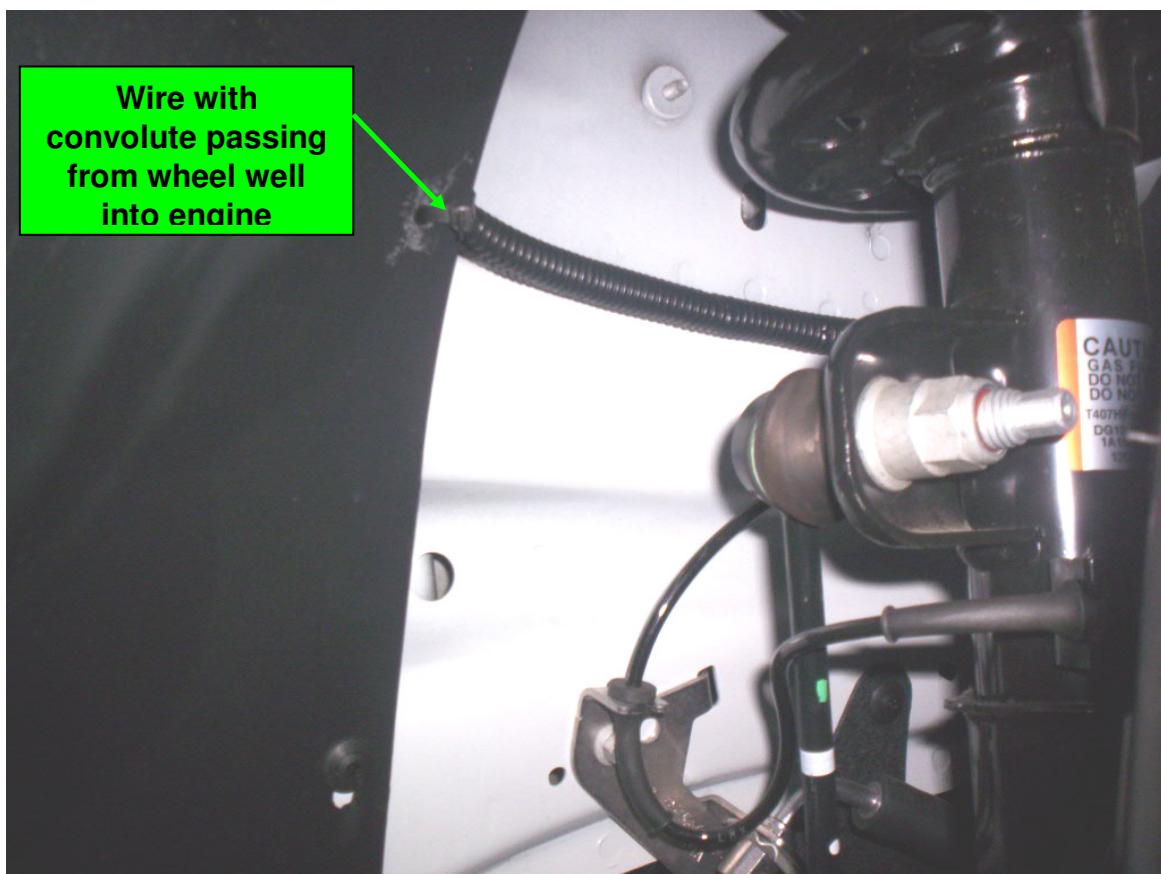
The wire passing downward through the grommet, will enter into the passenger side wheel well.

## Wire Harness Pass-Through Dash Panel Sedan Interceptor

Turn the steering wheel to simulate a full left hand turn and provide access to passenger side wheel well area.

From outside the passenger side of front wheel area, remove fasteners retaining inner wheel well liner to provide view of wire harness entering wheel well and opening to engine compartment.

Wire with convolute enter wheel well and routed toward engine compartment opening. (see photo below)

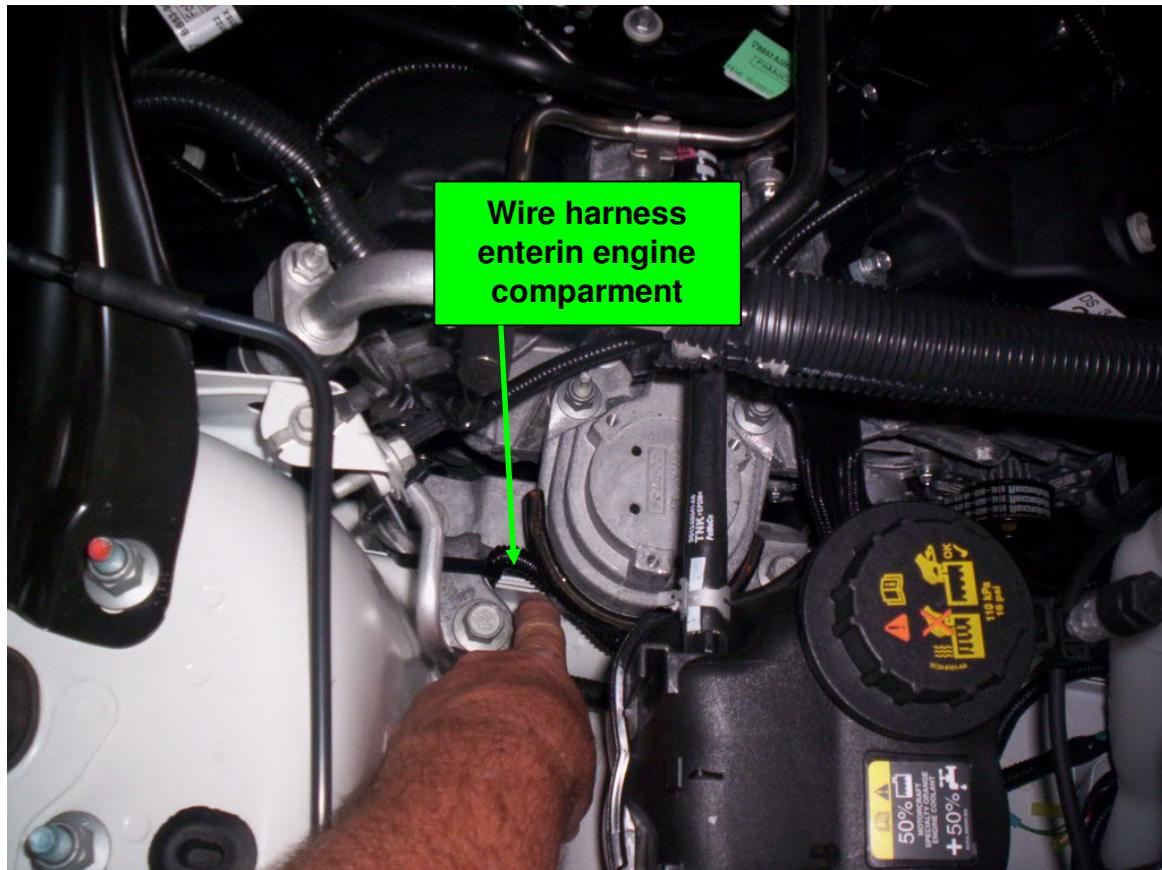


Add wire harness retention fastener/clamp at entry point to wheel well and along routing pathway to ensure proper retention to avoid contact with moving components/systems and protection from heat.

Use drip loop after entry into wheel well area.

## Wire Harness Pass-Through Dash Panel Sedan Interceptor

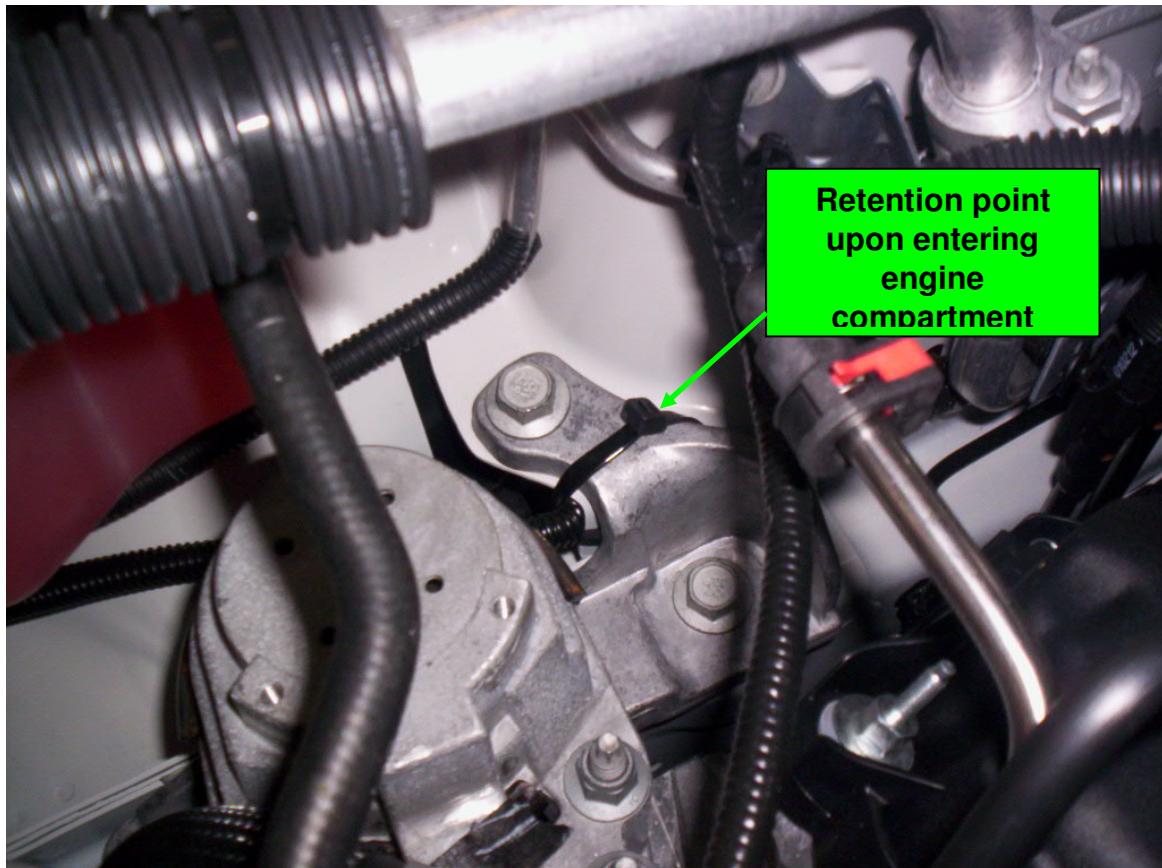
View of wire with convolute entering engine compartment near passenger side shock tower and engine mount.



## Wire Harness Pass-Through Dash Panel Sedan Interceptor

Ensure wire harness is retained without slack and in a position that will not have any contact with shock absorber travel and/or engine roll.

View of fastener location inside engine compartment.



Follow OEM wiring to desired location in upper engine compartment to ensure no contact with moving components.

Do not route wire harness to lower engine compartment near exhaust manifolds and/or turbochargers.

Replace flooring and fasteners to OEM installed position.

Replace trim panels to OEM install position.

Replace glove box in reverse order of removal process.

# Wire Harness Pass-Through Dash Panel Utility Interceptor

## Utility Interceptor

Remove glove compartment from passenger side instrument panel.

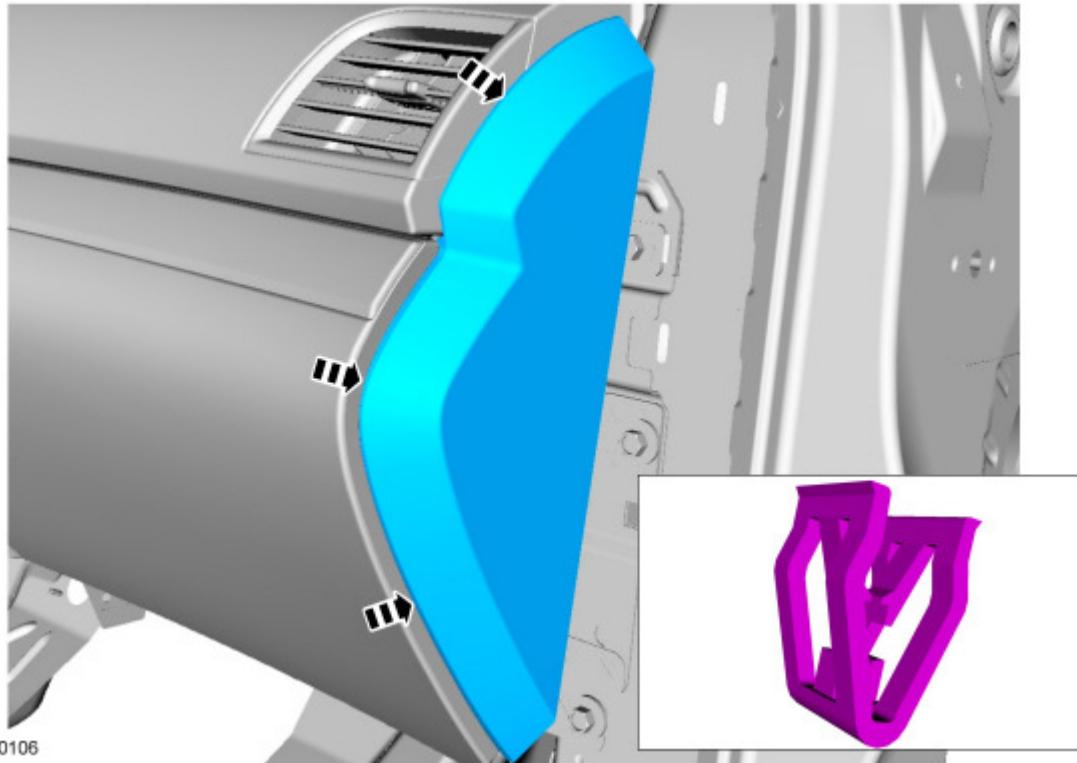
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Failure to follow this instruction may result in serious personal injury.

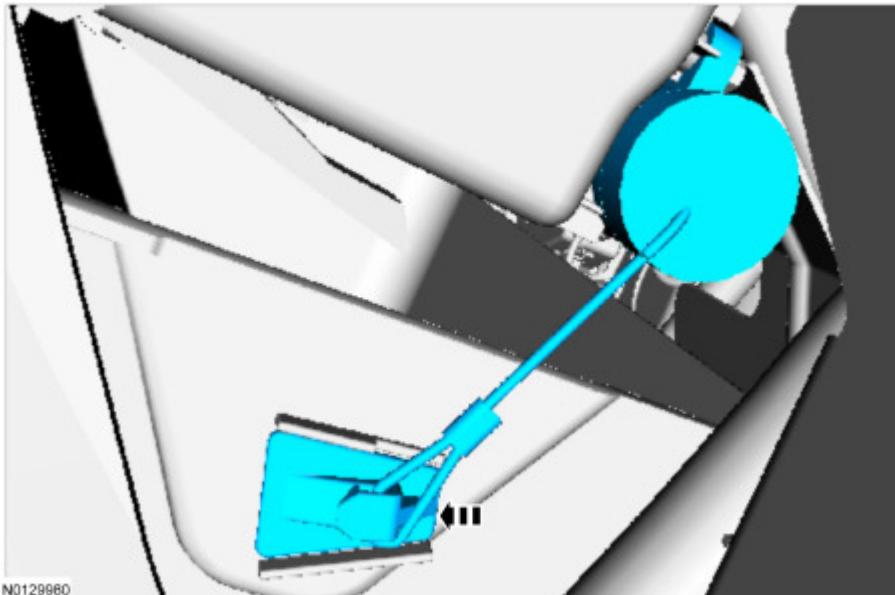
### Removal

1. Remove the RH instrument panel side trim panel.
  - Pull outward to release the 4 retaining clips.



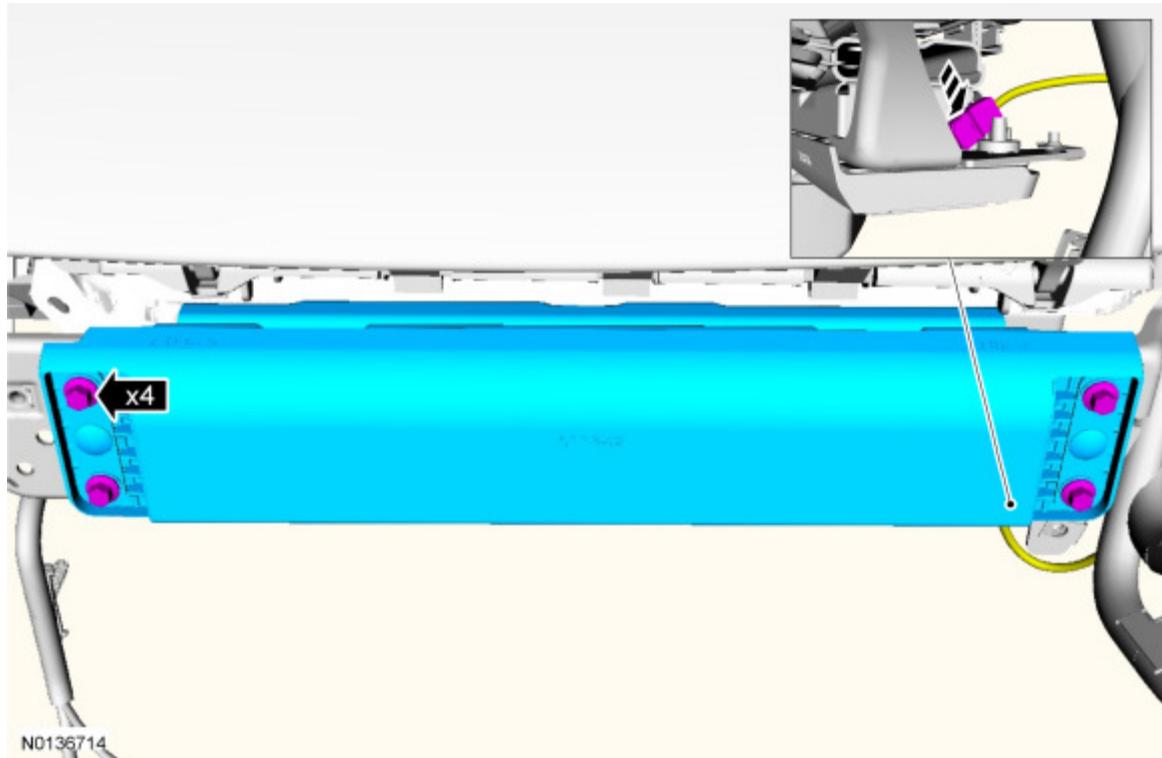
## Wire Harness Pass-Through Dash Panel Utility Interceptor

2. Detach the glove compartment dampener string from the glove compartment bin.



## Wire Harness Pass-Through Dash Panel Utility Interceptor

3. If equipped with a passenger side knee bolster air bag disconnect the battery. REFER to [Battery Disconnect](#).
4. If equipped, remove the passenger side knee bolster air bag.
  - a. Disconnect the electrical connector.
  - Tighten to 10 Nm (89 lb-in).

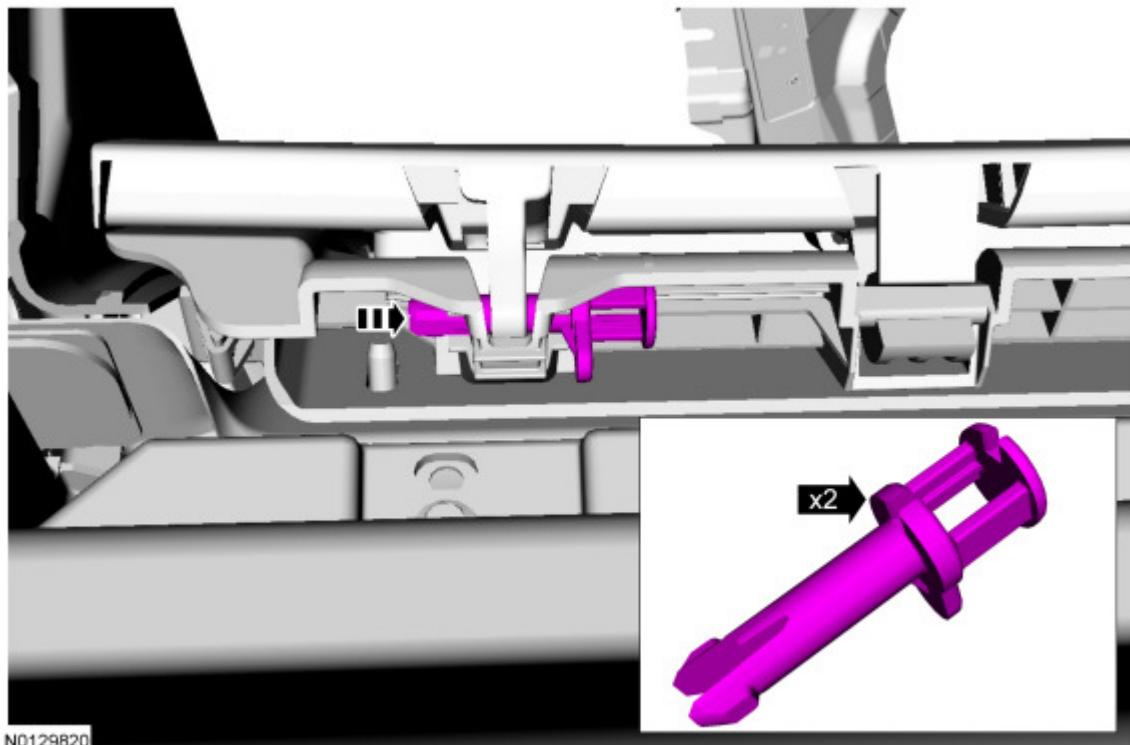


## Wire Harness Pass-Through Dash Panel Utility Interceptor

### 5. NOTE:

LH side shown, RH side similar.

Remove the 2 glove compartment hinge pins.



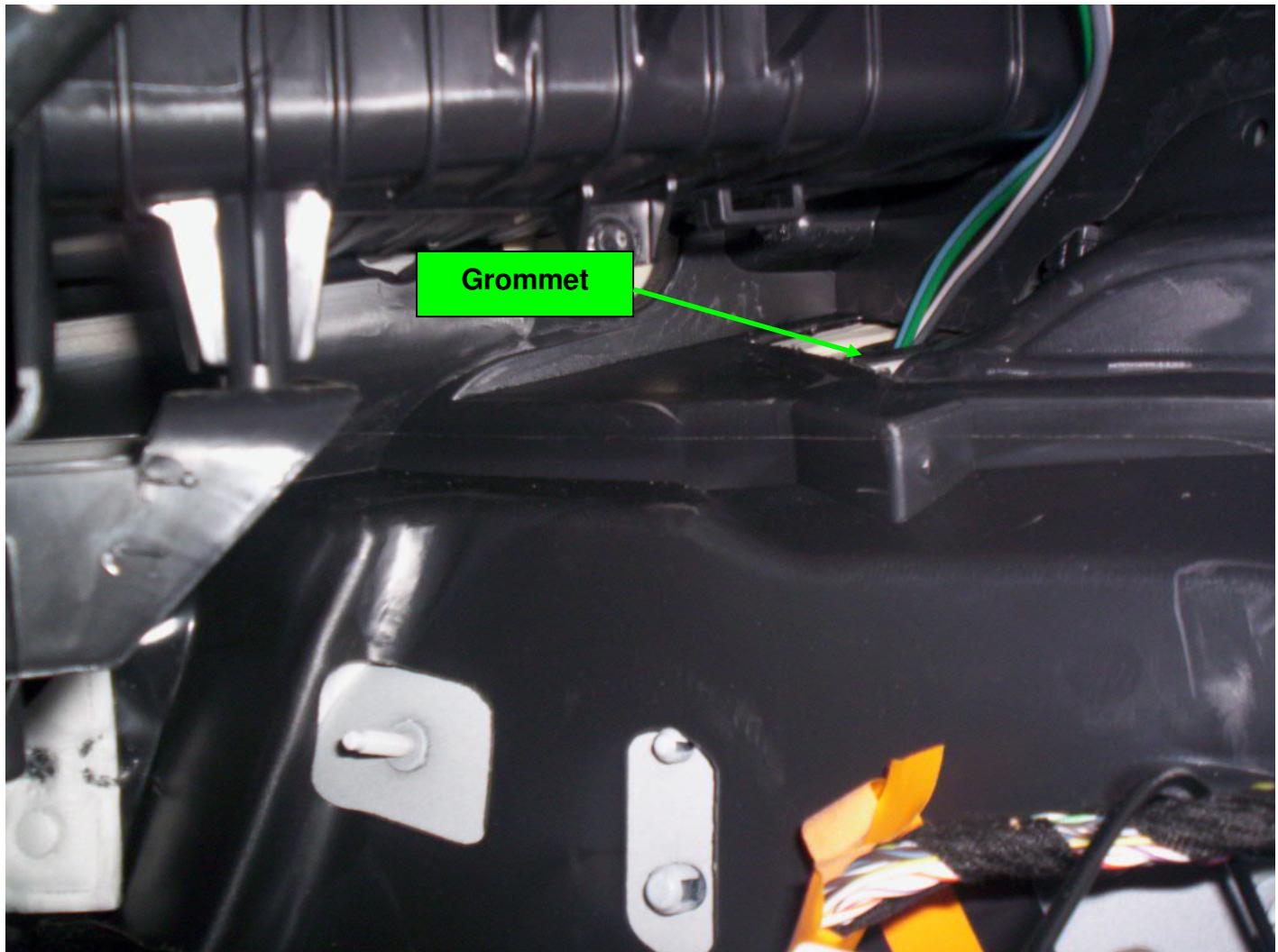
6. Open the glove compartment door, disengage the glove compartment down stops and remove the glove compartment door.

## Wire Harness Pass-Through Dash Panel Utility Interceptor

### Wire Harness Pass-Through

Remove interior trim panels as necessary for access

Photo with glove compartment assembly and knee air bag removed



## Wire Harness Pass-Through Dash Panel Utility Interceptor

Locate flooring retention points and pull back flooring on top of wheel well in passenger side of front row seat.

Locate grommet (22 mm / 0.866 in. diameter) on top of wheel well (see photo above).

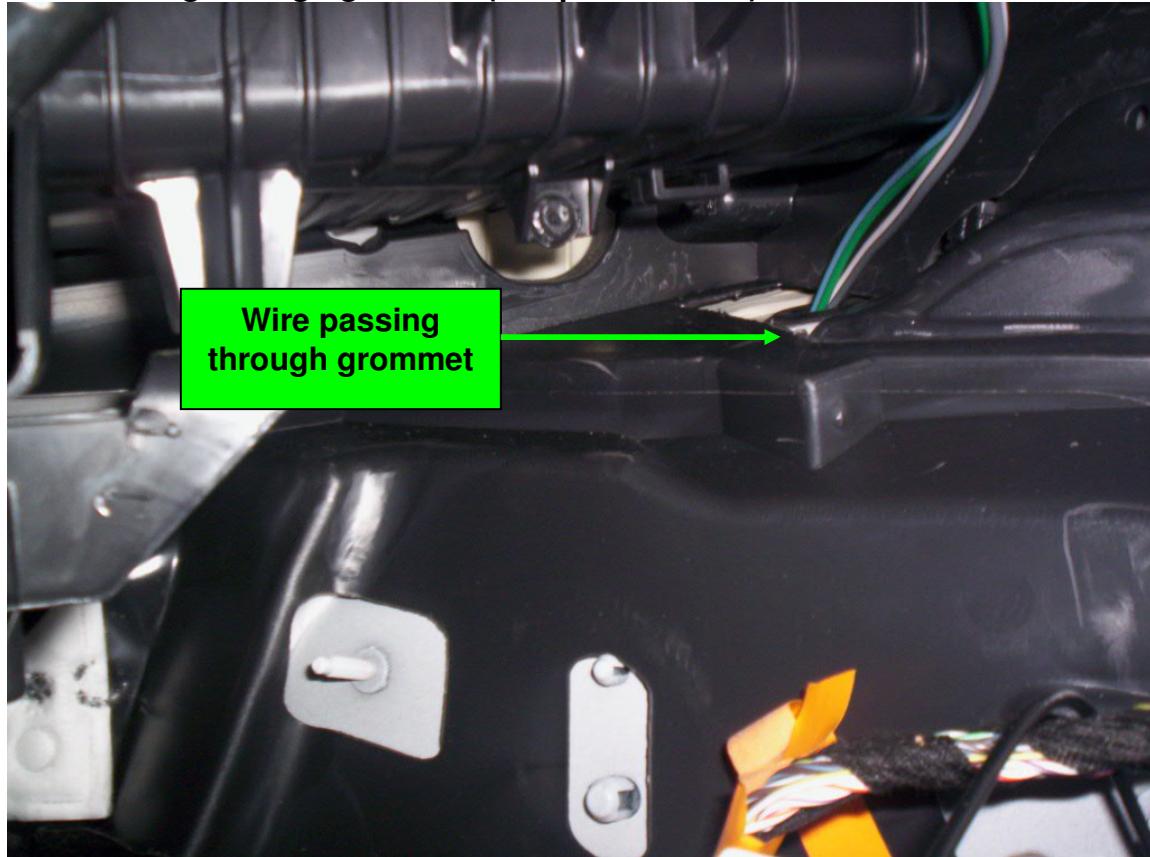
Remove and cut grommet to allow wire harness to pass through.

Pass wire through grommet and re-install grommet.

Wire should be covered with a material that meets worst case environmental requires experienced along its routing (i.e., convolute, etc.) minimum of 125°C.

Retain wiring passing behind glove compartment towards bottom of center stack so that it will not interfere with opening/closing of glove compartment. Determine and implement retention points and locations to secure wiring/harness.

Route wiring through grommet (see photo below)



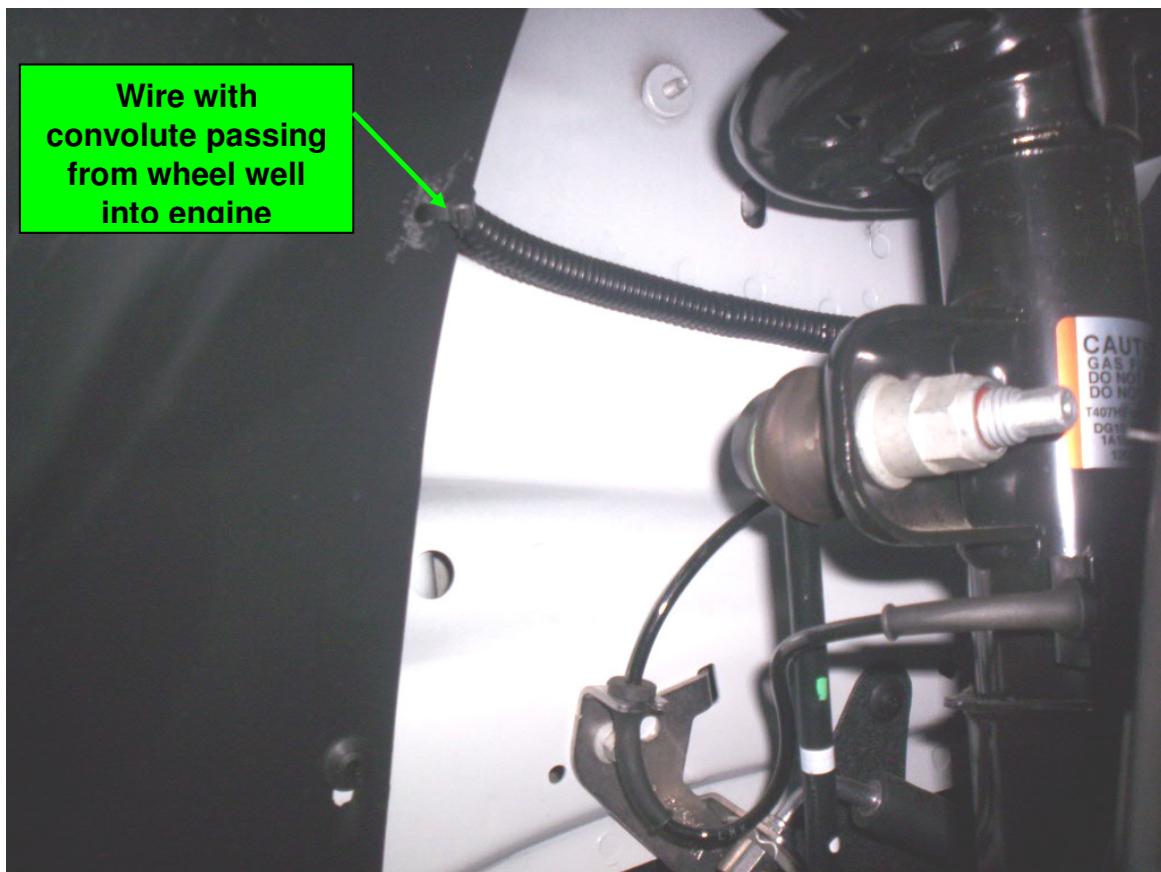
The wire passing downward through the grommet, will enter into the passenger side wheel well.

## Wire Harness Pass-Through Dash Panel Utility Interceptor

Turn the steering wheel to simulate a full left hand turn and provide access to passenger side wheel well area.

From outside the passenger side of front wheel area, remove fasteners retaining inner wheel well liner to provide view of wire harness entering wheel well and opening to engine compartment.

Wire with convolute enter wheel well and routed toward engine compartment opening. (see photo below)

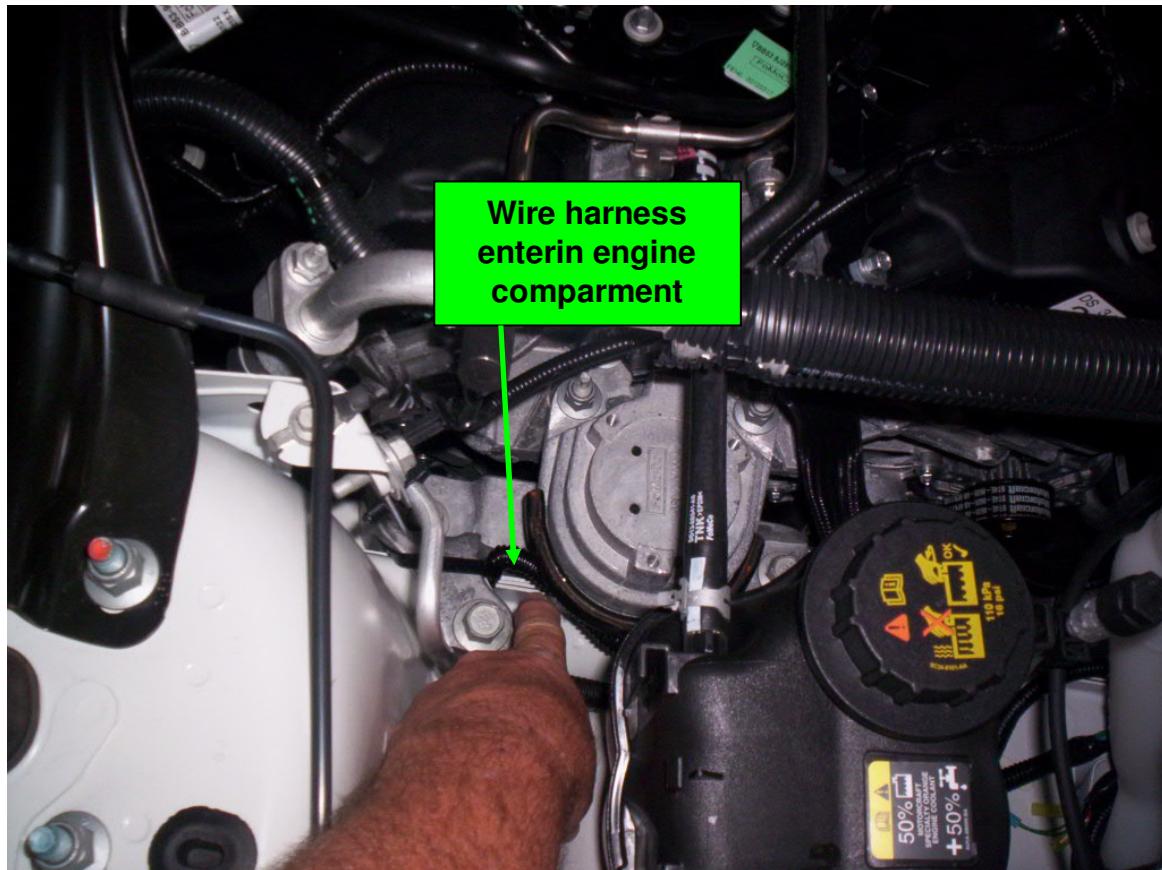


Add wire harness retention fastener/clamp at entry point to wheel well and along routing pathway to ensure proper retention to avoid contact with moving components/systems and protection from heat.

Use drip loop after entry into wheel well area.

## Wire Harness Pass-Through Dash Panel Utility Interceptor

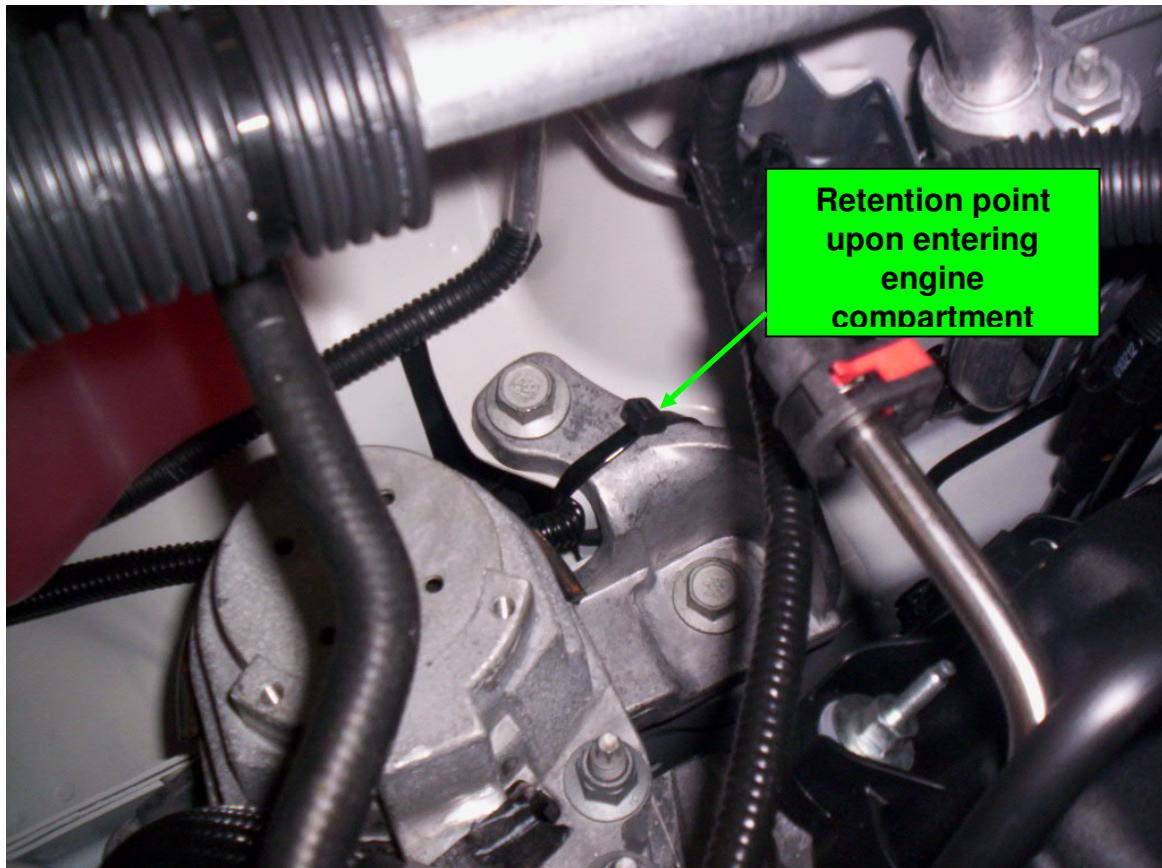
View of wire with convolute entering engine compartment near passenger side shock tower and engine mount.



## Wire Harness Pass-Through Dash Panel Utility Interceptor

Ensure wire harness is retained without slack and in a position that will not have any contact with shock absorber travel and/or engine roll.

View of fastener location inside engine compartment.



Follow OEM wiring to desired location in upper engine compartment to ensure no contact with moving components.

Do not route wire harness to lower engine compartment near exhaust manifolds and/or turbochargers.

Replace flooring and fasteners to OEM installed position.

Replace trim panels to OEM install position.

Replace glove box in reverse order of removal process.

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