

- ATTENTION:**
- GENERAL MANAGER
 - PARTS MANAGER
 - CLAIMS PERSONNEL
 - SERVICE MANAGER

IMPORTANT - All Service Personnel Should Read and Initial in the boxes provided, right.

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QUALITY DRIVEN® SERVICE

PRODUCT CAMPAIGN BULLETIN

APPLICABILITY: 2015-18MY Forester **NUMBER:** WUM-98R
SUBJECT: Occupant Detection Wiring Harness Inspection **NHTSA ID:** 19V-701
DATE: 10/14/19
REVISED: 12/13/19

Subaru of America, Inc. (Subaru) is recalling certain 2015-2018 model year Forester vehicles to replace the passenger-side front airbag Occupant Detection System (ODS) harness. A total of 366,282 U.S. vehicles will be affected by this recall.

AFFECTED VEHICLES:

Model Year	Carline	Production Date Range	Vehicle count
2015-2018	Forester	January 20, 2015 – August 01, 2017	366,282

Not all vehicles in the production range listed above are affected by this recall. Coverage must be confirmed by using the Vehicle Coverage Inquiry function on subarunet.com prior to repair. This information is now available.

REASON FOR THIS RECALL:

Over time, due to a decrease in contact pressure between terminals in the ODS sensor mat harness, a temporarily unstable electrical connection may be possible. If the connection is temporarily unstable, the ODS may not properly determine the status of the right front seat occupant.

SAFETY RISK:

If the ODS is unable to correctly determine the status of a front occupant, the airbag warning light may illuminate, and the front passenger airbag may deactivate even though the seat is occupied, increasing the risk of injury to the front passenger in the event of a crash.

DESCRIPTION OF THE REMEDY:

For all potentially affected vehicles, Subaru retailers will replace the ODS sensor mat harness with a new part at no cost to the customer.

<p>CAUTION: VEHICLE SERVICING PERFORMED BY UNTRAINED PERSONS COULD RESULT IN SERIOUS INJURY TO THOSE PERSONS OR TO OTHERS.</p> <p>Subaru Service Bulletins are intended for use by professional technicians ONLY. They are written to inform those technicians of conditions that may occur in some vehicles, or to provide information that could assist in the proper servicing of the vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do the job correctly and safely. If a condition is described, DO NOT assume that this Service Bulletin applies to your vehicle, or that your vehicle will have that condition.</p>	<p style="text-align: center;">Subaru of America, Inc. is ISO 14001 Compliant</p> <p>ISO 14001 is the international standard for excellence in Environmental Management Systems. Please recycle or dispose of automotive products in a manner that is friendly to our environment and in accordance with all local, state and federal laws and regulations.</p>
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OWNER NOTIFICATION:

Subaru notified affected vehicle owners by first class mail in early December advising them of this recall and that parts are not yet available. As parts supply improves, owners will be re-notified to schedule an appointment for this repair. Retailers will be advised when re-notification begins.

RETAILER RESPONSIBILITY:

Please be advised that it is a violation of Federal law for a dealer to deliver a new motor vehicle covered by a recall under a sale or lease until the defect is remedied. Therefore, any Authorized Subaru Retailer failing to perform the applicable service procedures to correct all affected vehicles in their inventory prior to the vehicle being placed in service may be subject to civil penalties of up to \$21,000 per violation (i.e., for each vehicle), as provided in 49 CFR §578.6 and will also be in breach of the Subaru Dealer Agreement.

Any vehicles listed in any recall/campaign that are in retailer stock must be:

- Immediately identified.
- Tagged or otherwise marked to prevent their delivery or use prior to repair.
- Repaired in accordance with the repair procedures outlined in the Product Campaign Bulletin

Retailers are to promptly follow the applicable service procedures to correct all affected vehicles in their inventory (used, demo & SSLP). Additionally, whenever a vehicle subject to this recall is taken into retailer inventory, necessary steps should be taken to ensure the recall correction has been made before selling or releasing the vehicle.

SERVICE PROCEDURE:

IMPORTANT NOTE: If aftermarket leather trim is found installed on the ODS seat cushion, all efforts must still be made to complete this recall. The presence of aftermarket leather alone does not prevent performance of this repair procedure. Should any questions arise, please refer to the Claims Policy and Procedure Manual, section 8.4.45.4 “Non-OEM Components Discovered During a Safety Recall Repair.”

There are two (2) service procedures which can be used to satisfy this Recall Campaign. The **REQUIRED** first step for **BOTH** procedures is the Harness Label Inspection Procedure described below. If the harness label inspection outcome dictates a repair is required, either:

A. (PREFERRED METHOD) Replace the pictured ODS harness (p.n. 64084SG23A) following the Harness Replacement Procedure below

OR

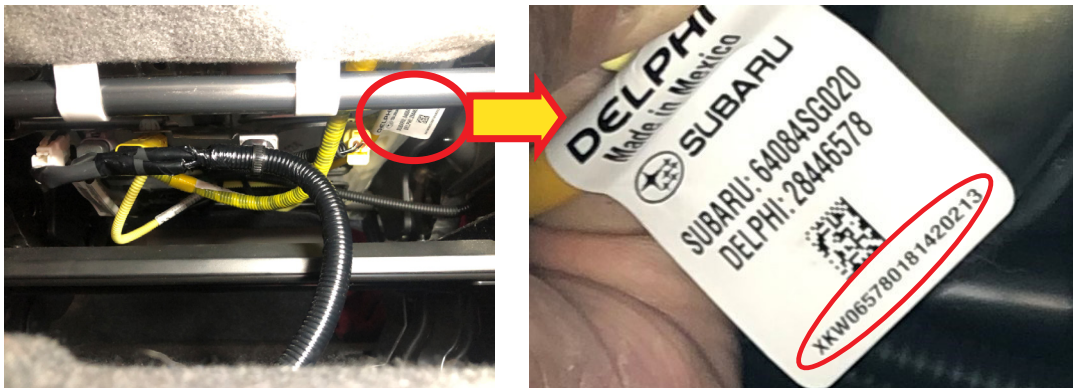
B. Replace the seat cushion assembly following the procedure supplied in the applicable Service Manual. Always order the most up-to-date seat cushion assembly based on the specific VIN being repaired.



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Harness Label Inspection Procedure:

The part identification label affixed to the yellow sensor mat wiring harness is the focus of this inspection. The left photo shows an underside view of the passenger seat as seen from the front floor area and provides an approximate location of the label. On the right is a close-up of the identification label itself.



NOTES:

- There is enough room under the seat to access the harness label and perform the date / supplier code inspection without removing the seat assembly.

TIP: Take a photo of the label with a phone then review the image to get the necessary information.

Inspection Determination:

Step 1. If the date code (**BROWN** box in photo) on the label is **AFTER 18074**, the harness is **OK**. **Harness replacement is NOT necessary.** See additional ****NOTE** below.

Step 2. If the date code is **18074** or **BEFORE AND** has the supplier code **6578** (**RED** box in photo) on it, the harness is **NG** must be replaced. **Proceed to Harness Replacement Procedure as outlined below.**

- “16” is the year (2016) and “232” is the 232nd day of the year: “16232”.

IMPORTANT: The supplier code AND date code from the **INSTALLED** harness **MUST** be entered in the Miscellaneous Detail field at claim entry (e.g: **657818074**).



****NOTE:** In the **VERY RARE** case where the harness is **OK** but the AIRBAG warning light is on with an ODS -related DTC in memory, submit a recall claim for inspection only. Continue diagnosing the DTC following the modified Service Manual procedure provided **on pg. 8** for reference as there may be another cause for this DTC. Refer to the Vehicle Coverage Inquiry to identify available coverage.

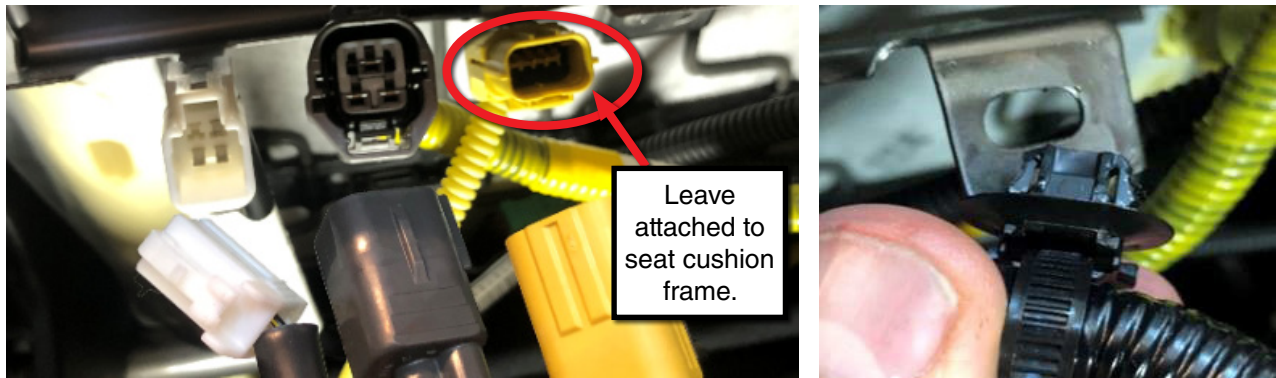
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Harness Replacement Procedure:

Preparation:

- Record the customer's radio station presets (and Navigation favorites where applicable).
- Put the seat at the front-to-back midpoint on the slide rails.
- Disconnect the negative (-) cable from the battery and wait at least 60 seconds before proceeding further.

Step1- CAREFULLY disconnect the three (3) seat harness connectors and the harness retaining clip. Leave the yellow Airbag harness connector attached to the seat cushion frame.

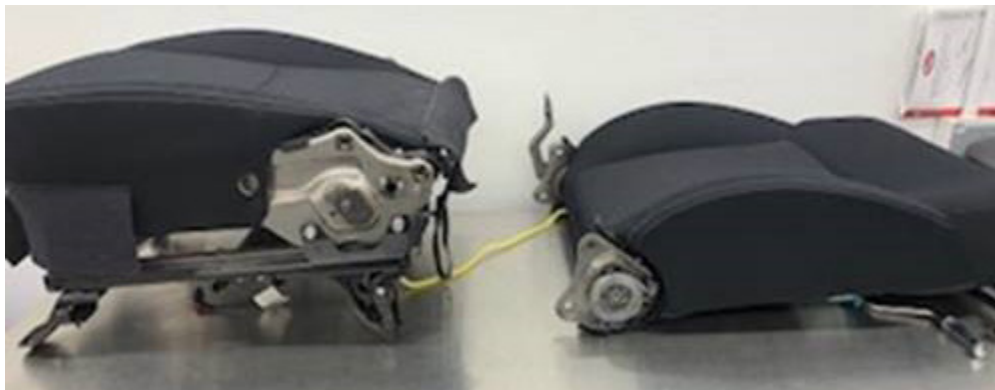


Step2- CAREFULLY remove the passenger seat assembly following the applicable Service Manual procedure. **IMPORTANT:** When removing (and reinstalling) the seat assembly, always use **CAUTION** to protect the door opening area painted and surrounding trim surfaces from coming in contact with and possibly being scratched by the seat mounting points.

Step3- CAREFULLY remove the backrest reclining lever then both the outer and inner hinge cover trim panels and the inner seat belt buckle assembly following applicable Service Manual procedures.

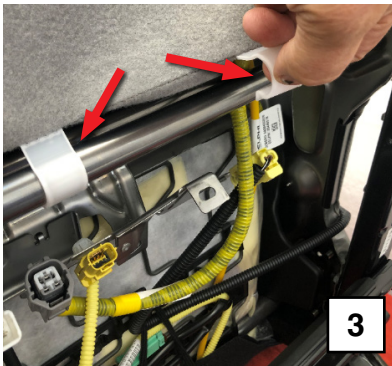
TIP: Pay close attention to all the wiring harness securing points, clips, etc. to insure their proper reassembly. Taking a photo(s) to use for reference at reassembly is recommended.

Step4- Disconnect the seat heater harness connector. Remove the bolts (2 inner and 2 outer), then CAREFULLY separate the backrest assembly and set it aside as shown in the photo below.

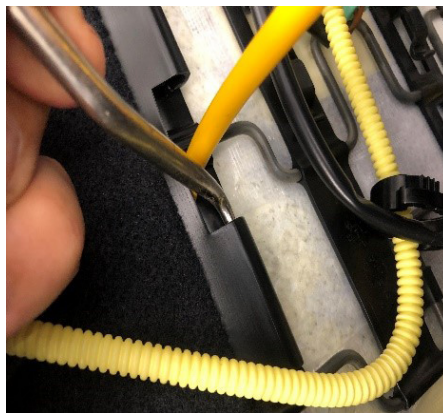


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Step5- Unclip the two retaining loop / clips from the seat cushion front frame, unhook the elastic loop with a finger and unplug the ODS mat harness from the ODS module as shown in the sequence below.



Step6- From the rear of the cushion (a cotter pin extractor works well), **CAREFULLY** release the plastic seat cover trim retainers as shown below and pull the back of the cover up as needed to access the harness to ODS sensor mat connection point (tail) circled below. The tail is covered in a self-adhesive fabric padding.



Step7- **CAREFULLY** peel the padding back to expose the tail and connections. Be advised, the adhesive used has a very strong grip. **CAREFULLY** peel the padding in a direction parallel to the tail and discard. A new piece of padding is included in the new replacement harness kit.



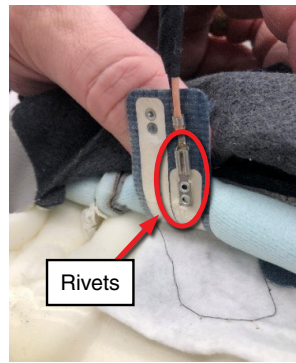
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Step8- IMPORTANT: Before connecting the new harness, inspect the tail and sensor mat connectors to confirm they are tight on the 2 metal bands of the mat. Inspect closely for any breaks, cracks or other damage to the visible components of the sensor mat. If any damage is identified, the complete seat cushion assembly must be replaced as the sensor mat is not a serviceable component.

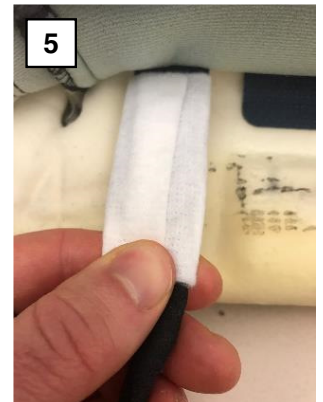
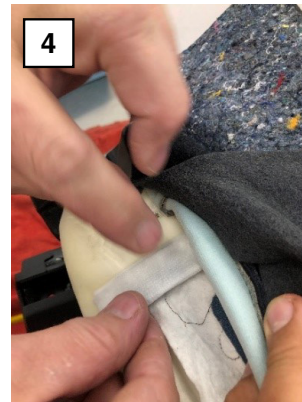
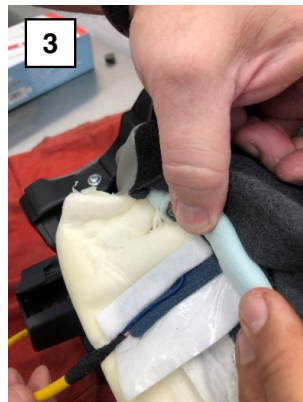
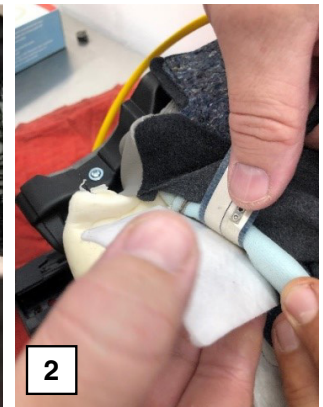
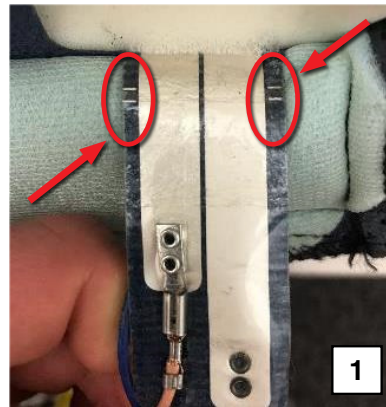


REMINDER: If a replacement is necessary, always order the most up-to-date seat cushion assembly part number for the VIN being repaired.

Step9- IMPORTANT: Always squeeze the tail terminals firmly at the rivets when disconnecting / reconnecting the harness terminals. Connect the new harness terminals to the sensor mat removing **ONE CONNECTION AT A TIME** to make sure they are reconnected in the proper configuration.

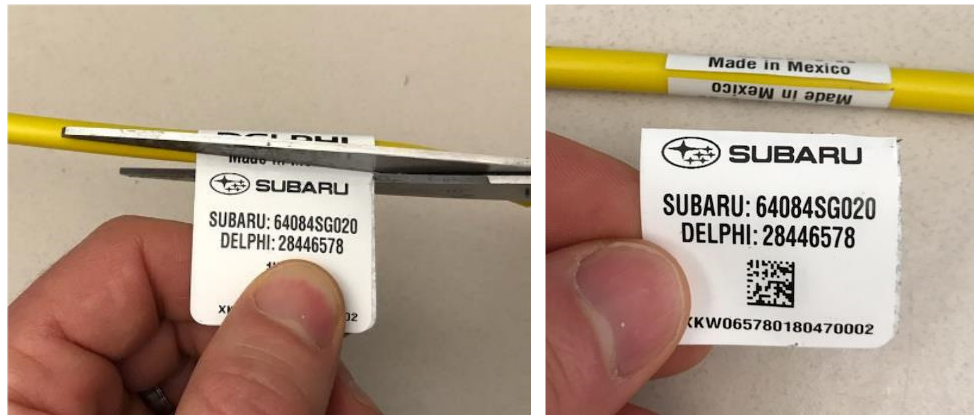


Step10- After connecting the new harness, place the new self-adhesive padding under the tail as shown (adhesive side up). Align the edge of the new padding with the two small, white registration marks on the tail as shown in (1) below. Peel the adhesive backing (2) and **CAREFULLY** apply the tail to the padding. Fold each side over (3) & (4) to recover it while being very careful to not create any wrinkles in the padding material. When complete, squeeze the padding material (5) end to end between fingers to ensure it is fully adhered.

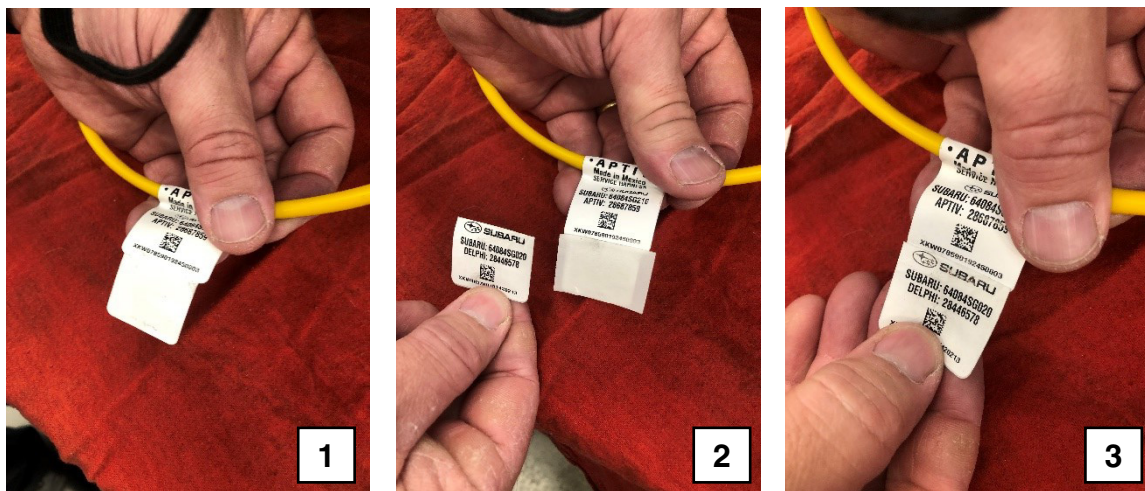


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Step11- Use a scissor to cut the harness label from the original (removed) wiring harness.



Step12- Remove the adhesive backing and apply the cut off section of the original label to the new replacement harness as shown in the photo sequence below.



Step13- Reassemble the seat cushion assembly in reverse order of disassembly. If a photo was taken as recommended in **Step 3**, refer to it to confirm the affected harnesses are properly resecured to the underside of the seat cushion assembly.

Step14- Secure the backrest to the cushion with the four (4) mounting bolts. The torque specifications are as follows:

- Backrest to cushion assembly bolts (4): 52 Nm (38.4 ft. lbs.)
- Inner Seat Belt Buckle Nut (1): 38 Nm (28 ft. lbs.) **VERY IMPORTANT:** Make sure the seat belt buckle assembly rotates freely on the shoulder of the mounting stud **BEFORE AND AFTER** torquing the retaining nut.
- Seat Assembly to vehicle floor mounting bolts (4): 53 Nm (39.1 ft. lbs.).

Step15- Reconnect the negative (-) battery cable, reset the customer's audio (and Navigation where applicable) presets and confirm proper vehicle operation to complete the procedure.

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DTC Diagnosis:

IMPORTANT: BEFORE proceeding with diagnosis of any ODS-related DTC. Always check to see if the passenger seat cushion is wet, contains moisture or has been exposed to excessively humid conditions for some time. The seat cushion must be completely dry before proceeding with further diagnostics. NEVER use a hair dryer or heat gun to dry the seat cushion.

Step	Check	Yes	No
1. CHECK DTC. Read the DTC of the occupant detection system.	Are any of DTC B1760, B1761, B1771 and B1795 detected?	Perform the diagnosis according to DTC.	Go to step 2.
2. CHECK POOR CONTACT OF CONNECTORS. Check for poor contact of the connectors between the occupant detection control module and airbag control module.	Is there poor contact?	Reconnect the connector. If condition is not improved, replace the Right Hand (RH) rear body harness.	Go to step 3.
3. CHECK AIRBAG REAR HARNESS. 1) Turn the ignition switch to OFF, disconnect the battery ground cable, and wait for 60 seconds or more. 2) Disconnect the connectors (AB59) and (AB53) under the passenger's seat. 3) Disconnect the connectors (AB6, AB17, AB18) from the airbag control module, and connect the connector (1AG) in the test harness AG to connectors (AB6, AB17, AB18). 4) Connect the connector (1AP) in the test harness AP to the connector (AB53). 5) Measure the resistance between connector (6AG) in the test harness AG and connector (2AP) in the test harness AP. Connector & terminal (6AG) No. 9 — (2AP) No. 1: (6AG) No. 11 — (2AP) No. 2:	Is the resistance less than 10 Ω?	Go to step 4.	Replace the RH rear body harness.
4. CHECK AIRBAG REAR HARNESS. Measure the resistance between connector (6AG) in the test harness AG and chassis ground. Connector & terminal (6AG) No. 9 — Chassis ground: (6AG) No. 11 — Chassis ground: (6AG) No. 9 — (6AG) No. 11:	Is the resistance 1 MΩ or more?	Go to step 5.	Replace the RH rear body harness.
5. CHECK OCCUPANT DETECTION HARNESS. 1) Turn the ignition switch to ON. 2) Measure the voltage between connector(2AP) in the test harness AP and chassis ground. Connector & terminal (2AP) No. 3 (+) — Chassis ground (-):	Is the voltage 10 V or more?	Go to step 6.	Check the battery voltage and fuse. If there is no fault, replace the RH rear body harness.
6. CHECK AIRBAG SYSTEM DTC. 1) Turn the ignition switch to OFF. 2) Reconnect the disconnected connector. 3) Turn the ignition switch to ON. 4) Read Airbag System current DTC.	Is DTC B1650 detected?	If the condition is not improved, replace the occupant detection system (passenger side cushion & frame assembly). If the condition is still not improved, then replace the airbag control module.	The system is currently normal. Check if any other DTC is detected. If there is no current DTC, perform Clear memory.

REMINDER: The **INSTALLED** part's supplier code AND date code MUST be recorded on the document(s) submitted for claim reimbursement. Use the following format example: **657818074**.

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CLAIM REIMBURSEMENT AND ENTRY PROCEDURES:

Credit to perform this recall will be based on properly completed repair order information. The Repair Order must include the Original **AND** (if the seat cushion assembly was replaced) the **INSTALLED** part's supplier code and date information as outlined above.

Specific Conditions Identified During Inspection	Recall Coding	Labor Operation #	Labor Time	Claim Type
Harness Outside Affected Range- No Repairs Required	WUM-98R Inspection Only	A182-048	0.2	RC
Harness Within Affected Range- ODS Harness or Seat Cushion Assembly R&R Only (includes inspection)	WUM-98R- Seat Cushion R&R	A182-051	0.8	
	WUM-98R- ODS Harness R&R	A182-042	1.0	

IMPORTANT REMINDERS:

- SOA strongly discourages the printing and/or local storage of service information as previously released information and electronic publications may be updated at any time.
- Always check for any open recalls or campaigns anytime a vehicle is in for servicing.
- Always refer to STIS for the latest service information before performing any repairs.