

SUBJECT: Pop, Click, Creak Sounds from the Rear Body Area

## **INTRODUCTION:**

This bulletin provides potential source locations and procedures to help isolate areas of the vehicle which may be generating popping, clicking or creaking sounds when the body is in a "twisting" condition. This can occur while driving on rough, irregular or uneven road surfaces or even during low-speed maneuvers such as pulling into or backing out of a driveway. Production information and field reports received indicate where multiple layers of the vehicle's body structure are spot-welded together, primarily in the "D"-pillar and rear gate opening areas, a "stick-slip" condition can occur between the layers and cause these types of sounds to occur. Service information has been released previously describing similar conditions which involved accessing and then punching or separating the layers of metal and applying a lubricant to prevent recurrence. Those same techniques may also provide good results on these vehicles too but, in some cases, a Body Shop repair may be required.

### **PART INFORMATION:**

Castle Products "Endura" is a penetrating spray grease product available through their network of local distributors. To find your closest local distributor, go to: <u>http://www.castlepackspower.com</u> or call: 1-800-876-0222.

# **SERVICE PROCEDURE / INFORMATION:**

- Read through and understand this bulletin completely **before** beginning any repairs.
- Always confirm the condition as reported by the customer prior to starting any repairs.
- A properly used set of chassis ears can be an invaluable tool to assist in isolating the source(s) of the sound(s) and confirming the successful repair **before** interior reassembly.

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.

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• NOTE: It is NOT recommended to use expandable foam as shown in the photos below. Once the foam has been applied, if the condition persists afterward, identifying the actual source of the sound, accessing and repairing it all become considerably more difficult along with increased chances of an ineffective repair.



- Whenever removing the interior trim panels, always follow the service procedures in the applicable Service Manual. Take proper precautions (e.g. use of plastic trim tools, application of protective tape, etc.) to prevent damaging them and protect them while they are removed. Patience and cleanliness are key!
- In some cases, a small amount of additional welding may be required. It is VERY IMPORTANT to always take the proper precautions to protect the vehicle's electrical system components along with the surrounding areas of the body whenever welding processes are performed. It is **strongly recommended** a Body Shop be utilized for these repairs for their experience in proper performance of both the required welding and related refinishing procedures.
- Always confirm the sound(s) have been eliminated before reassembling the interior.



# **AREAS OF THE VEHICLE TO INSPECT:**

Using a set of chassis ears, check the areas circled in red in **Figure 1** above, the roof rail ends and stepped portions of the roof panel (the left side shown but always check both sides) for the sound. If the vehicle is not equipped with roof rails, check the areas at the ends of the roof moldings along with the stepped portion where the rear gate hinges are secured.

In **Figure 2** above, the term "Work Hole" is used for the access points where chassis ears can be inserted to help isolate the source(s) of the sound. Tools can be inserted into these holes where accessible to separate the layers of sheet metal and reduce or eliminate welding spatter by using a hammer and flat-nosed punch in other spot weld areas. Use the photo below to identify the work holes.

Figure 3 below shows arrangement of the Work Holes and Figure 4, a cross-section view of how the sheet metal is layered in the suspect areas.



By working through the Work Holes, separate the layers (enlarging the gap) of sheet metal as shown in the procedure steps below. In areas where the edges of the metal layers are not accessible to separate, use a hammer and flat-nosed punch around the spot welds in the starred areas as shown in Steps 2 and 3 below to gain some separation. **SPARINGLY** apply a SMALL amount of the Endura penetrating grease into any new gaps created using the aerosol applicator tube. Always inspect for any weld spatter and crush or remove it as best as possible with either a flat blade screw driver or a "modified" tool as shown in the example photo below.



Use the reference photos provided below to help with identification of the areas described throughout the service procedure steps. **NOTE:** In order to better show the described weld and seam areas, the orientations of these photos may differ in comparison to how they actually appear on the vehicle.





**NOTE:** It is **VERY IMPORTANT** to perform each (without skipping over any) of the **STEPS (1-4)** as outlined below before proceeding to **STEP 5** (welding repairs).



After separating the layers of sheet metal, **SPARINGLY** apply a **SMALL** amount of the Endura penetrating grease into any newly-created gap using an aerosol applicator tube to be more precise and eliminate any overspray.



Flat-nosed punch



Spot Weld Area A

### Work Hole A

Using a hammer and a long flat-nosed punch through Work Hole A, **dimple** the metal around the spot welds as shown by the star markings in the photo below. When complete, go back through Work Hole C and use a flat blade screwdriver to remove / crush any additional welding spatter found around Spot Weld Area A.



After performing Steps 1-3 above, road test the vehicle (STEP 4) and listen to hear if the sound has been reduced or eliminated. If the sound is still present or reduced, repeat Steps 1-4 again. These procedures may need to be performed several times. If still unsuccessful, a Body Shop welding repair (STEP 5) will need to be performed.

### **IMPORTANT NOTES:**

- **REMINDER:** It is **strongly recommended** a Body Shop be utilized for this repair for their experience in proper performance of both the required welding and refinishing procedures.
- **Before** sending the vehicle for the welding repairs and to avoid confusion, use a permanent marker to indicate **exactly** where the new welds need to be added as described below.







### Warranty / Claim Information:

For vehicles within the Basic New Car Limited Warranty period, this repair may be submitted using the following claim information:

Labor Description	Labor Operation #	Labor Time	Fail Code
FORESTER R/H "D" PILLAR SOUND REPAIR	B900-561	2.0	OCB-25
SUBLET REPAIR, ADMINISTRATION EXPENSES	C101-108	0.3	
FORESTER L/H "D" PILLAR SOUND REPAIR	B900-562	2.0	0CC-25
SUBLET REPAIR, ADMINISTRATION EXPENSES	C101-108	0.3	
FORESTER "D" PILLAR REPAIR- BOTH SIDES	B900-564	2.8	0CD-25
SUBLET REPAIR, ADMINISTRATION EXPENSES	C101-108	0.3	
NOTE: The labor times listed include all trim (including headliner) R&R, all related road testing and the actual repairs (EXCEPT for welding repairs which will be sublet).			

**NOTE:** When submitting a claim for this procedure, up to \$2.00 can be claimed in sublet to cover the cost of spray grease.

# **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.