



# Technical Service Bulletin

SUBJECT:			No: <b>TSB-20-54-004</b>
<b>NOISE NEAR RIGHT SUBWOOFER WHEN DRIVING OR USING AUDIO (ROCKFORD FOSGATE)</b>			DATE: <b>November 2020</b>
			MODEL: <b>2018-19 Eclipse Cross</b>
<b>CIRCULATE TO:</b>	<input type="checkbox"/> GENERAL MANAGER	<input checked="" type="checkbox"/> PARTS MANAGER	<input checked="" type="checkbox"/> TECHNICIAN
<input checked="" type="checkbox"/> SERVICE ADVISOR	<input checked="" type="checkbox"/> SERVICE MANAGER	<input checked="" type="checkbox"/> WARRANTY PROCESSOR	<input type="checkbox"/> SALES MANAGER

## PURPOSE

On vehicles equipped with the Rockford Fosgate® Premium Sound System, noise may occur near the right subwoofer while driving and/or using audio.

## BACKGROUND

The Rockford Fosgate® woofer box has the characteristic to resonate around 60Hz. When music with a large amount of sound components near 60Hz is played at a certain volume or higher, the vibration of the woofer box becomes greater, and the spot welding between the rear pillar reinforcement and the quarter inner lower panel may fracture.

This TSB instructs dealers how to repair and reinforce the fractured area near the subwoofer by installing the new Sub Woofer Kit and applying epoxy-resin structural adhesive in specified locations.

## AFFECTED VEHICLES

2018 - 2019 Eclipse Cross vehicles built **before** April 15, 2019

## REPAIR PROCEDURE



**Use all tools with care to prevent scratches on interior trim.**

1. Confirm the affected vehicle is equipped with the Rockford Fosgate® Premium Sound System.
2. BEFORE disconnecting the battery, write down all the customer's audio presets and settings in the table below.

PRESETS	1	2	3	4	5	6
AM						
FM1						
FM2						
SXM*						

\* If applicable.

3. Disconnect the negative (-) battery terminal.
  - a. In order to remove the seat belt with pre-tensioner, disconnect the terminal according to the procedures and instructions described in the Service Manual: Refer to Group 52B-Supplemental Restraint System (SRS) / Seat Belts with Pre-Tensioner / Removal and Installation.
  - b. After disconnecting the battery cable, wait 60 seconds or more before proceeding with the following step.

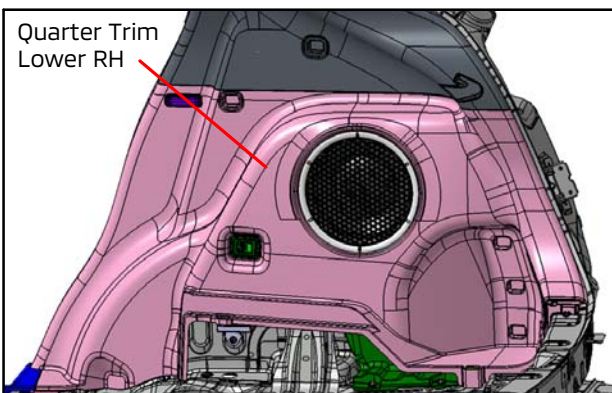
**WARNING**

**The SRS system is designed to retain enough voltage to deploy the air bag for a short time even after the battery has been disconnected, a serious injury may result from unintended air bag deployment if work on the SRS system is done immediately after the battery cables are disconnected.**

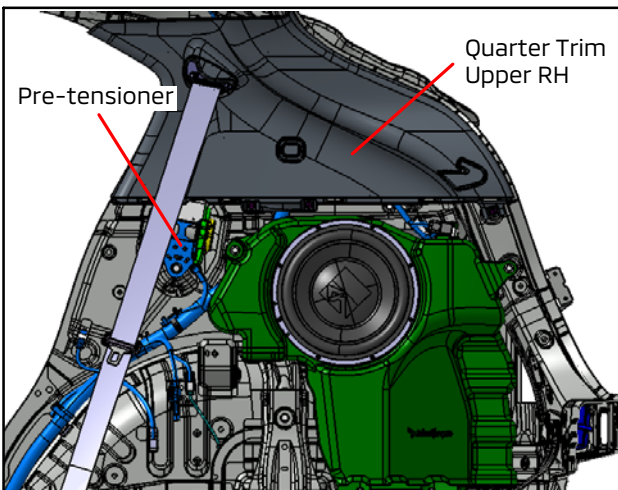
- c. **After waiting at least 60 seconds**, tape the disconnected battery cable with insulating tape.
4. Remove parts around the sub-woofer.

**NOTE: For clip and claw positions, refer to diagram on next page, "Quarter Trim Details."**

**For more detailed information, refer to the Service Manual, Group 52A-Interior / Trims / Interior Trims / Quarter Trim.**



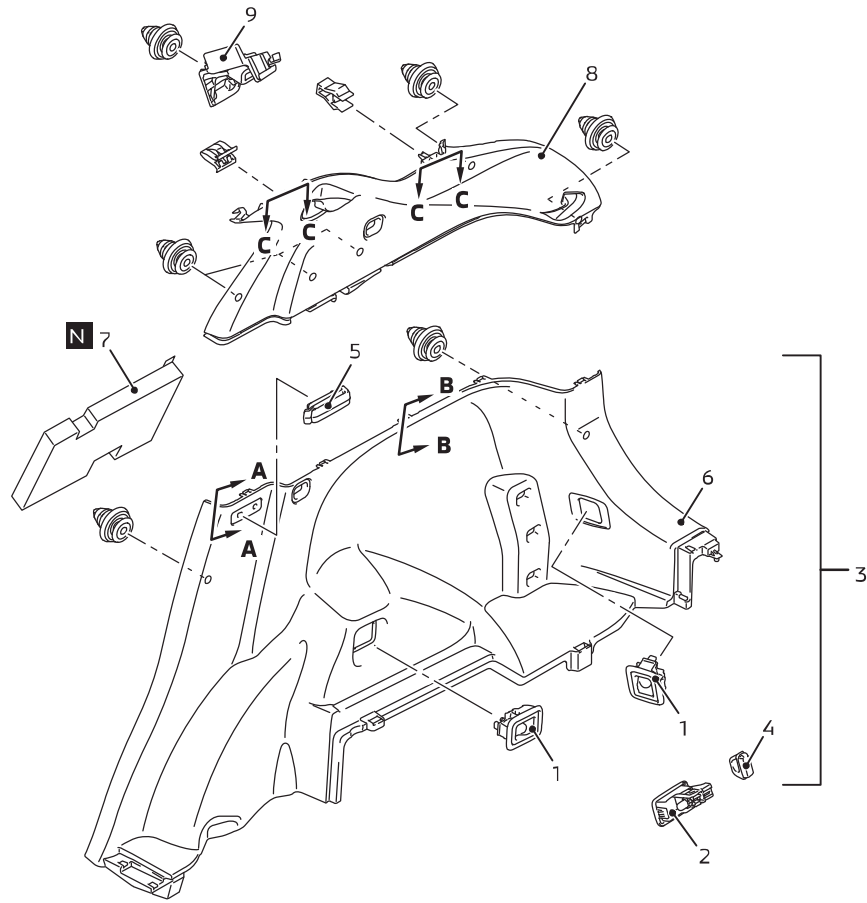
- a. Fold the back seat (to allow working space).
- b. Remove the quarter trim lower panel RH.



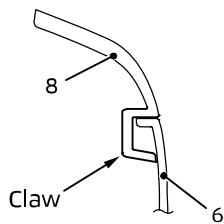
- c. Remove the rear seat belt pre-tensioner and the Quarter trim upper panel RH.

Quarter Trim Details

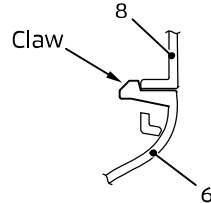
(from Service Manual,  
 52A-Interior / Trims)



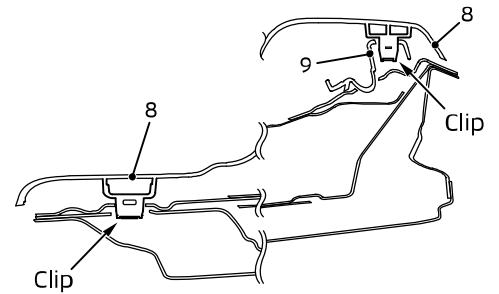
Cross Section A-A



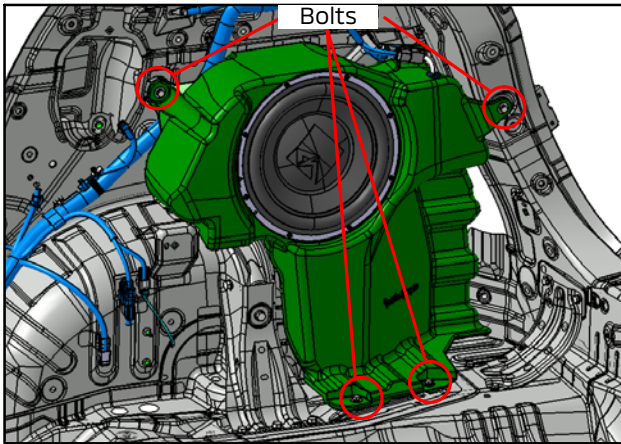
Cross Section B-B



Cross Section C-C

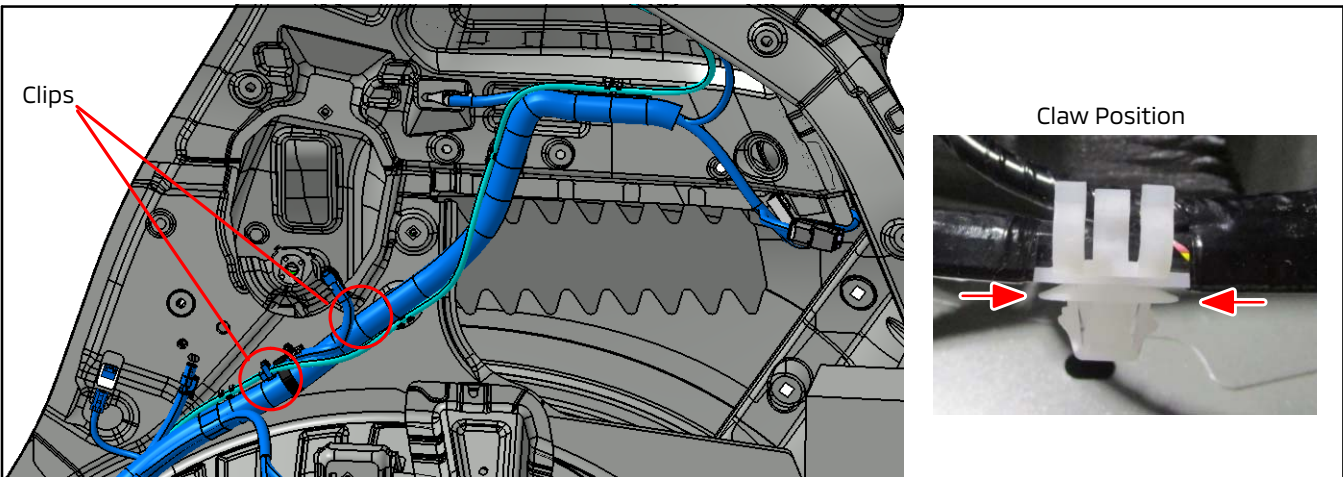


1. Parcel strap hook	4. Quarter trim hook	7. Quarter panel silencer
2. Cargo room light assembly	5. Rear seat belt clip	8. Quarter trim upper
3. Quarter trim lower assembly	6. Quarter trim lower	9. Quarter trim bracket

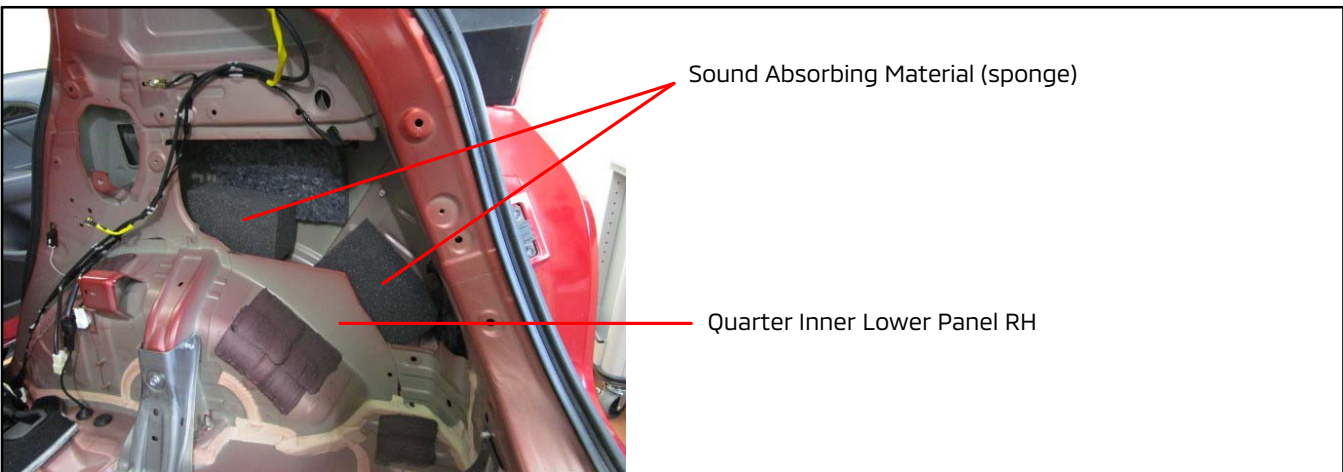


d. Remove four bolts and the subwoofer.

e. Remove two clips (P/N MU001484) and move the harness to allow working space.

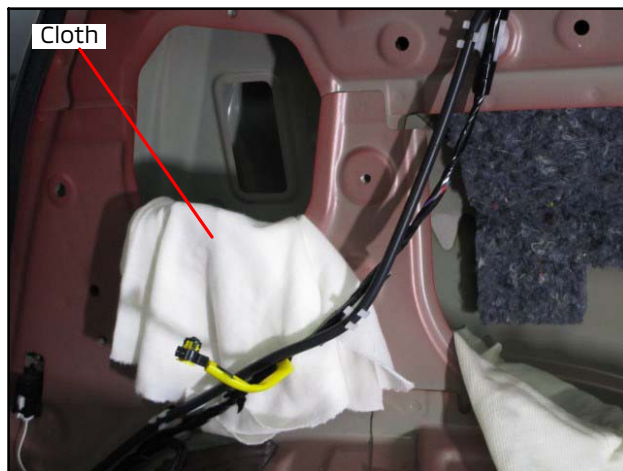


f. Remove the front sound absorbing material (sponge).



5. Adhesive application and assembly of the Subwoofer Reinforce (p/n 5301G926).

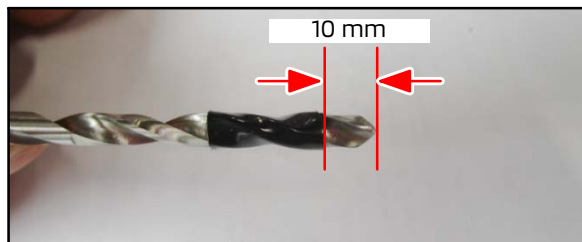
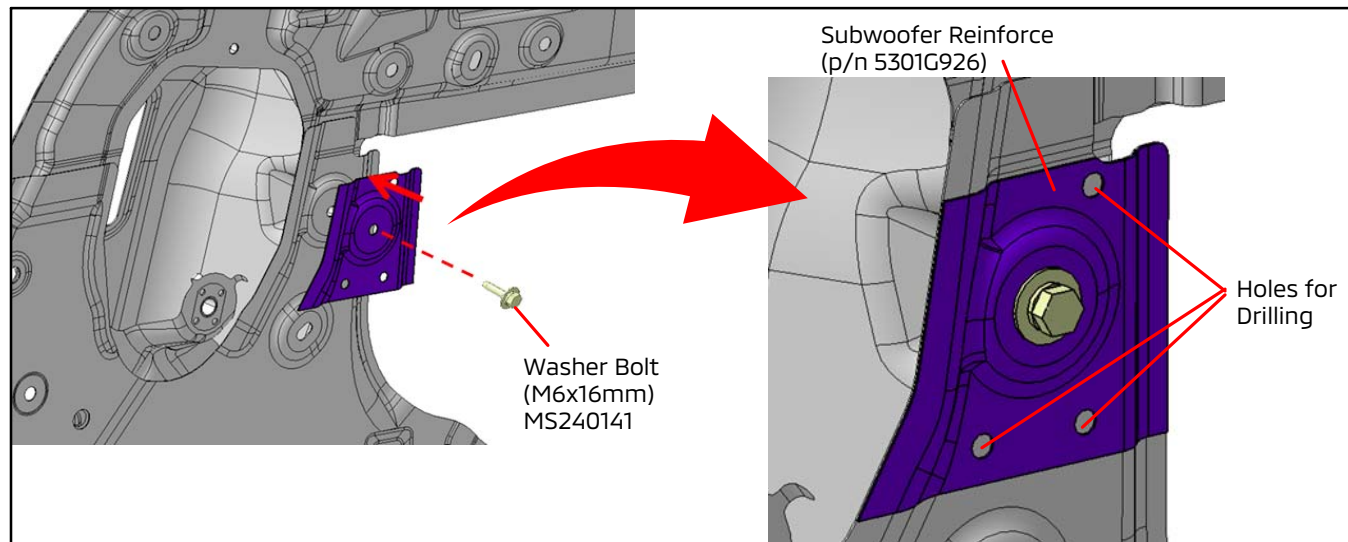
**⚠ WARNING** Be careful to **NOT** get injured when handling the subwoofer reinforce, and when drilling and deburring the part. Wear protective gloves and dust proof goggles to prevent chips from getting into your eyes.



- a. Place a cloth or rag in the space behind the panel, as shown. This is for catching chips from drilling and preventing bolts and nuts from falling in when tightening.

- b. Place the subwoofer reinforce (p/n 5301G926) onto the quarter inner lower panel RH and tighten the center with the washer bolt (p/n MS240141) for positioning.

**Tightening Torque: 4 - 6 N\*m**



- c. Wrap the drill bit with vinyl tape so that only 10 mm from the tip is exposed, as shown.

This is to prevent the outer panel from being penetrated by the drill when drilling the panel.

- d. Protect the harnesses, pre-tensioner connectors, and the pre-tensioner assembly to prevent damage and chips.



- e. Mark the center of the holes (three places) of the subwoofer reinforce (5301G926) with a pin punch.
- f. After making a pilot hole using a  $\Phi 3.0$  drill based on the marking, drill a hole with a  $\Phi 6.0$  to  $6.5$  drill.
- g. Remove the subwoofer reinforce (5301G926) once, deburr the drilled part (recommend to use a deburr reamer), and perform anticorrosion treatment with touch-up.
- h. Carefully degrease the adhesive surface of both the quarter inner lower panel RH and the subwoofer reinforce (5301G926) using Mitsubishi genuine parts cleaner (MZ100387) or equivalent.



- i. Squeeze out approximately 4g of adhesive (Epoxy-resin structural adhesive) on the pallet.

**Brand of adhesive to be used: Sumitomo 3M Auto mix panel bond 8115 (or equivalent)**

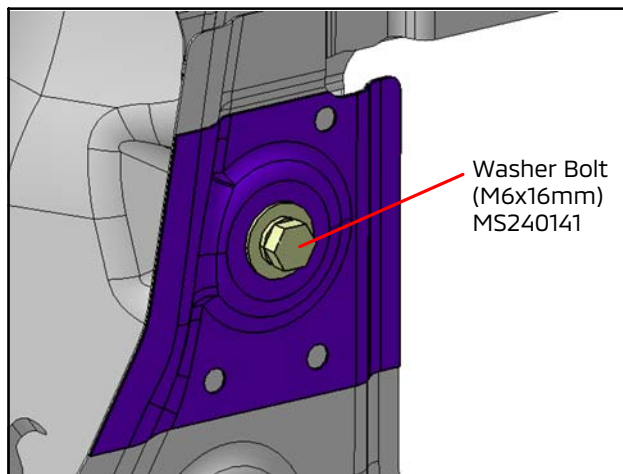
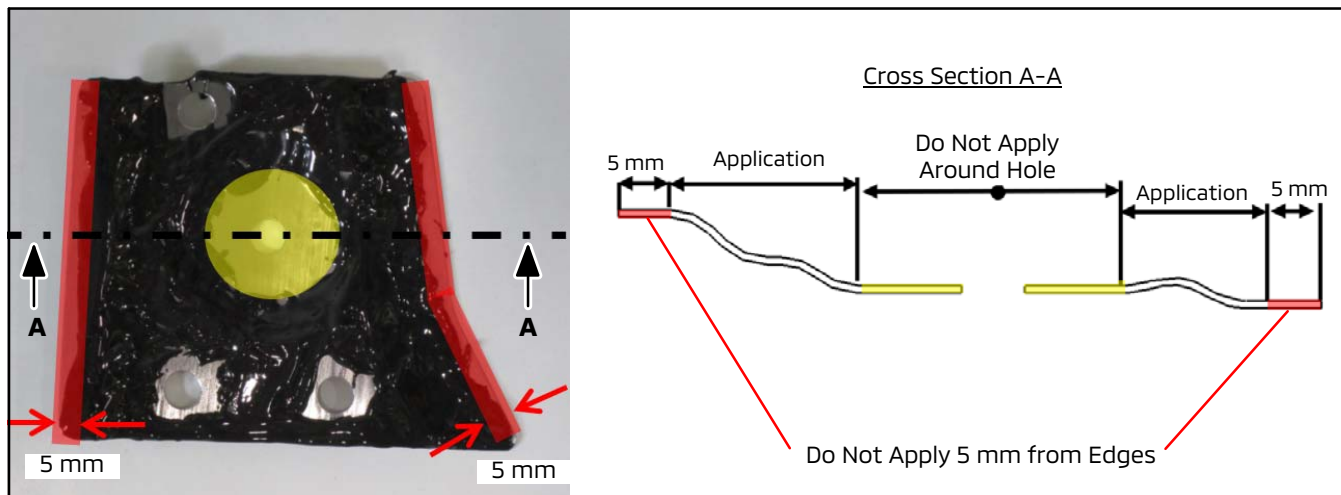
- j. Apply a thin layer of adhesive to the entire surface of the subwoofer reinforce (5301G926) and retighten the center with the washer bolt (MS240141).

**Coating thickness: approx. 0.5 - 1.0mm**

Refer to illustration below for Application area.

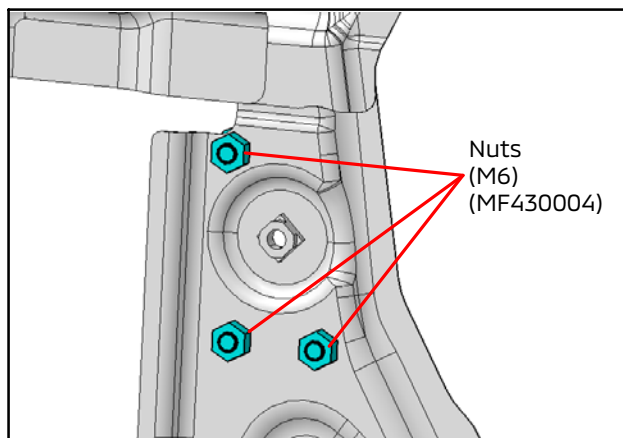
**NOTES: Do NOT apply 5 mm from edges to prevent protrusion.**

**Do NOT apply around the hole to prevent adhesion to the subwoofer fixing nut.**



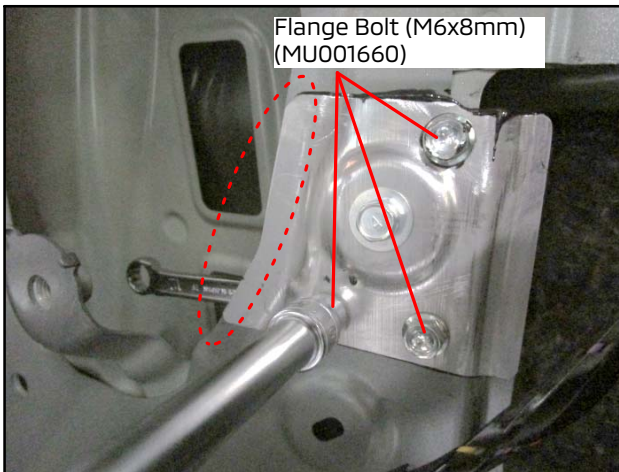
- k. Tighten the washer bolt.

**Tightening torque: 4 - 6 N\*m**



- l. Fasten the flange bolts (MU001660) and nuts (MF430004) in three places shown.

**NOTE: Back side of quarter inner lower panel shown.**



m. Fasten the flange bolts in three places,

**Flange bolt tightening torque: 14 N\*m**

- n. After fastening the flange bolts remove the center washer bolt (MS240141).
- o. Wipe off any adhesive that oozes out, especially in the area circled in the photo.

**IMPORTANT: Be especially careful NOT to stain the seat belt on the seat belt side.**

p. Remove the cloth/rag covering the space behind the panel.

6. Reassemble all removed parts.

- If the harness clip is damaged when removed, replace it with a new one.
- After attaching the subwoofer, wipe off any adhesive if it spills out.

**IMPORTANT: Be especially careful NOT to stain the seat belt on the seat belt side (circled area in photo above).**

7. Reconnect the negative (-) battery terminal.

- Restore all customer audio presets and settings.
- Initialize the throttle control servo and learn the fully closed position of the power window.

8. Confirm that the SRS warning lamp is OFF, after all work is finished.

#### **Check Procedure of SRS Warning Lamp**

Follow the SRS warning lamp check procedure described in the Service Manual:

1. Check SRS warning lamp is illuminated when the ignition switch is turned "ON".
2. Check that SRS warning lamp is extinguished after approximately 6 to 8 seconds, and check that the warning lamp remains extinguished afterward.
3. Except the above, the SRS system is abnormal. Thus, check the diagnosis code.



## PARTS INFORMATION

Order only the Genuine Mitsubishi Parts listed below.

Part Name	Kit Part Number	Quantity	Items in Kit		
			Part Name	Part Number	Qty
Reinforce, Sub Woofer Kit	5301J843	1	Clip, Wire Harness	MU001484	2
			Nut (6)	MF430004	3
			Bolt, Flange (6.0x8)	MU001660	3
			Bolt, Washer Assembled (6x16)	MS240141	1
			Reinf., Sub Woofer	5301G926	1

Part Name	Part Number	Quantity	Comments
Epoxy-resin Structural Adhesive: Sumitomo 3M Automix Panel Bond 8115, or equivalent	-	As Needed	Purchase structural adhesive from aftermarket, and claim actual expenses

## WARRANTY INFORMATION

This bulletin is supplied as technical information only and is not an authorization to repair. If an affected vehicle is reported with the described condition, diagnose the condition, repair as described in this bulletin and submit a normal warranty claim using the following information.

Labor Operation Code	Operation	Nature Code	Cause Code	Time Allowance
545034XB	Reinforcement and Addition of Adhesive to Broken Spot Weld Area near Subwoofer	(B Code: 80, strange noise)	(A Code: 10, broken or cracked)	1.0 hrs

Warranty Coverage: 5/60 Basic Coverage (Canada: 5/100)