



ASTON MARTIN



Squeaks and Rattles Repair Manual



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Evaluation Drives - Squeak & Rattle Feedback Guidelines

When you evaluate the vehicle, please make comments about all Squeak and Rattle problems that you find. Do this if the problem is caused by dynamic road inputs or the functional operation of components.

Please give as much data as possible about the incident to help the analysis of the cause. If possible include the data that follows in your comments:

- The noise type (refer to the examples that follow)
- The specific area of the vehicle (Lest side / Right side, Underbody, Parcel shelf, Rear environment, Doors / Casings, Seats, Header, IP, Front End)
- The road surface (Broken tarmac, Motorway - concrete or tarmac, Cobblestones, Gravel etc.)
- A specific road input (Painted lines, cats-eyes or speed bumps)
- The vehicle temperature (Ambient / Cold / Hot, or the specific temperature in °C)
- The vehicle speed.

Squeak and Rattle Terminology

Squeaks

CHIRP	High-pitched rapidly repeating sound, like chirping birds.
CREAK	Metallic squeak, like the back of a seat flexing.
GRIND	Abrasive sound, like a grinding wheel or sandpaper rubbing against wood.
GRAUNCH	Metallic abrasive sound, like two cast components rubbing together.
SQUEAK	High-pitched sound, like rubbing a clean window.
TICK	Audible rhythmic tap – clock noise.

Rattles

BRUSH	Swish sound as contact parts touch lightly.
BUZZ	Low-pitched sound, similar to a bee. Usually associated with vibrations. Often metallic or hard plastic humming.
CHATTER	Rapidly repeating metallic sound.
CHUCK	Rapid noise that sounds like a stick against the spokes of a spinning bicycle wheel.
CLICK	light sound, like a ball point pen being clicked.
CLINK	Usually a high frequency sound, like a sharp hard input to ceramic or glass.
CLANK	Usually a mid-frequency. A sharp, hard, metallic knock.
CLUNK	Usually a low-frequency, heavy sound, like something stressed being released under pressure.
DING	Ringing noise like a bell.
HUM	Continuous sound of varying frequencies, like a wire humming in the wind.
KNOCK	Heavy, loud, repeating sound like a knock on a door.
OIL CANNING	Metallic "in/out" noise from metal surfaces rebounding in response to forced input like slamming doors/hood.
PING	Similar to knock, but at higher frequency.
RATTLE	A sound that suggests looseness, such as marbles rolling around in a can.
SLAP	Resonance from flat surfaces (seat belt webbing or door trim panels).
TAP	Light hammering sound like tapping pencil on edge of table. Can be rhythmic or intermittent.
THUMP/THUD	Dull beat caused by two items striking together.
TIZZ	Rapid low-pitched diminishing sound often a secondary loose vibration after an impact.



NVH

BOOM	Rhythmic sound like a drum roll or distant thunder. Can cause pressure on the ear drum.
GROAN/MOAN	Continuous, low-pitched humming sound.
GROWL/HOWL	Low, guttural sound, like an angry dog.
HISS	Continuous sound like air escaping from a balloon.
ROAR	Deep, long, prolonged sound like an animal, or winds and ocean waves.
RUMBLE	Low, heavy continuous sound like that made by wagons or thunder.
SQUEAL	Continuous, high-pitched sound like running finger nails across a chalkboard.
WHIRR/WHINE	High-pitched buzzing sound, like an electric motor or drill.
WHISTLE	Sharp, shrill sound, like wind passing a small opening.

Steering Wheel Airbag Rattle

SRO: 01.20.CJ

Safe VINs: **DBS** - E01082, **V8 Vantage** - D13104, **DB9** - A12179

Repair:

1. Put the Emotion Control Unit (ECU) into the docking station at position 2 to release the Electronic Steering Column Lock (ESCL)
2. Disconnect the battery (refer to Workshop Manual procedure 14.01.CA).

WARNING:

WAIT FOR TWO MINUTES BEFORE YOU CONTINUE WITH THIS PROCEDURE. THIS IS TO MAKE SURE THAT THERE IS NO POWER TO THE AIRBAG SYSTEM. IF YOU DO NOT DO THIS, THE AIRBAG CAN OPERATE SUDDENLY AND CAUSE INJURY

WARNING:

BE CAREFUL WHEN YOU HOLD AND MOVE THE AIRBAG UNIT. THE AIRBAG UNIT HAS AN EXPLOSIVE CHARGE IN IT. IF YOU DO NOT HOLD THE UNIT CAREFULLY, THE CHARGE CAN OPERATE AND CAUSE INJURY.

3. Turn the steering wheel to get access to the screws that attach the driver's airbag to the steering wheel.



Figure 1

4. Remove the screw that attaches the driver's airbag to the steering wheel.

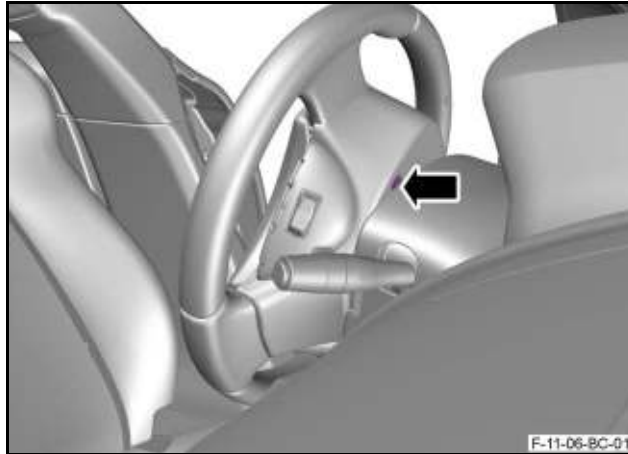


Figure 2

5. Install a bush (Part Number 9G43-33698-AA) onto the airbag attachment screw (refer to Figures 3).

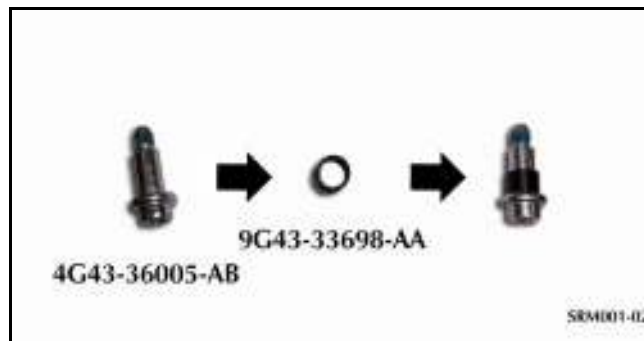


Figure 3

6. Install the screw and torque it to 9 Nm.
7. Turn the steering wheel to get access to the second airbag attachment screw.
8. Do steps 4 thru 6 again for the second airbag attachment screw.
9. Connect the battery (refer to Workshop Manual procedure 14.01.CA).

Satellite Navigation (Sat-Nav) Lid Rattles

Sat-Nav Tapping Noise

SRO:10.07.CH

Safe VINs: **DB9** - A12390, **V8 Vantage** - C13317, **DBS** - E01313

Repair

CAUTION:

BE CAREFUL WHEN YOU RELEASE THE INSTRUMENT PANEL VENEER BEZEL. THE SURFACE FINISH CAN BE EASILY DAMAGED.

1. Release the clips that attach the centre-stack instrument panel (refer to Figure 1).

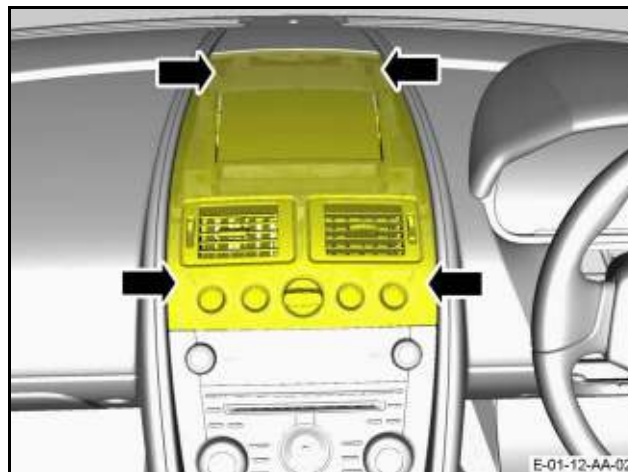


Figure 1

2. Disconnect the electrical connectors from each of the four transmission control switches (refer to Figure 2).

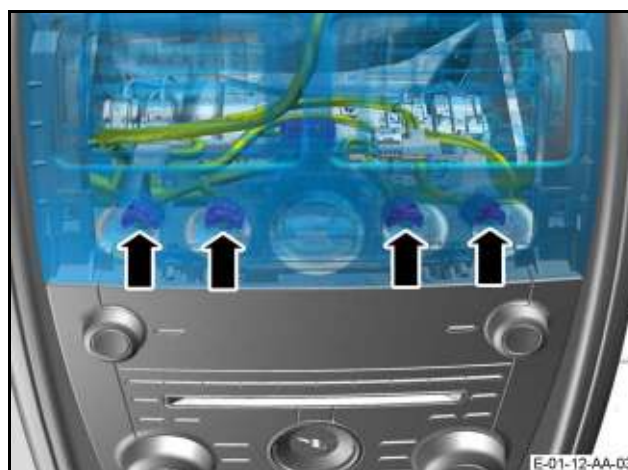


Figure 2

3. Disconnect the electrical connector from the ignition start/stop switch (refer to Figure 3).

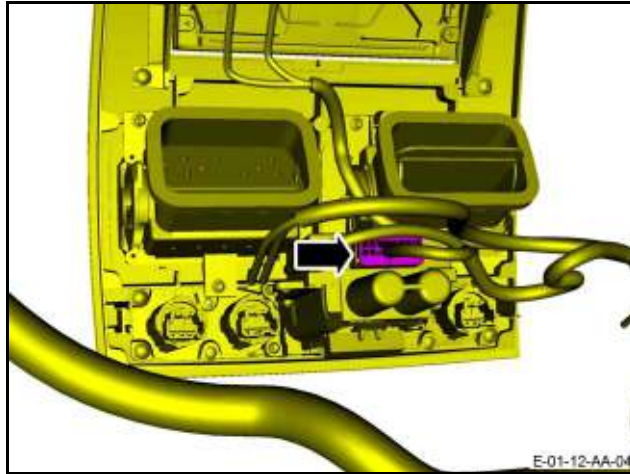


Figure 3

4. Remove the centre-stack instrument panel (panel).
5. Put the panel on a work bench that has protective material to prevent damage.
6. Remove the screw that attaches the locating peg bracket to the veneer bezel (refer to Figure 4).

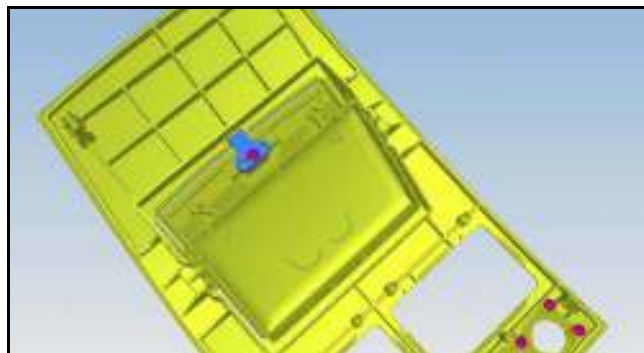


Figure 4

7. Replace the installed locating peg (type "A") with the new flocked peg (type "B") (refer to Figure 5).

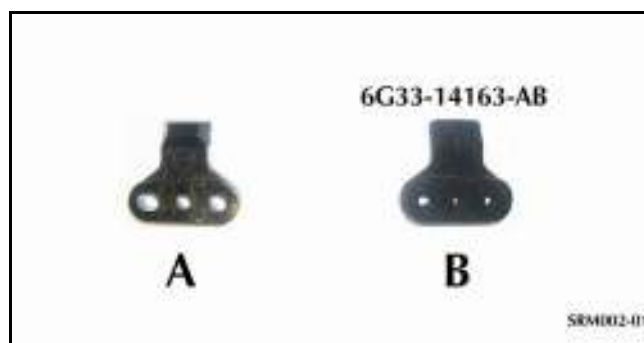


Figure 5

8. Install and torque the screw to 2 Nm.
9. Put the panel into position (refer to Figure 6).



Figure 6

10. Connect the electrical connector to ignition start/stop switch (refer to Figure 7).

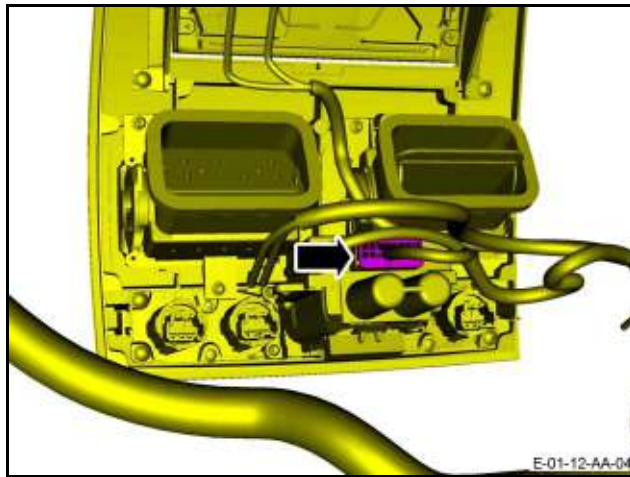


Figure 7

11. Connect the electrical connectors to each of the four transmission control switches (refer to Figure 8).

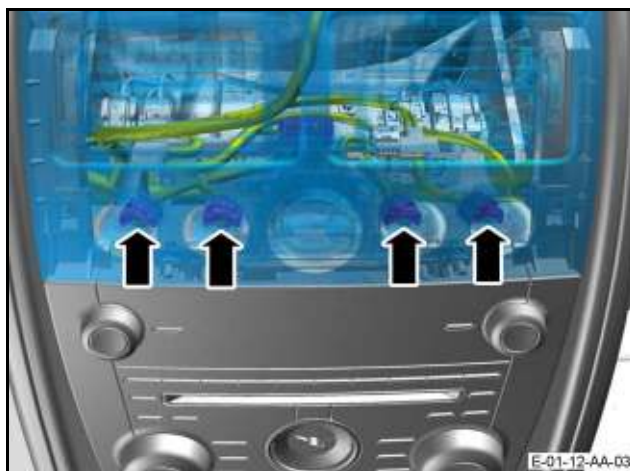


Figure 8

12. Make sure that the heater vents are correctly aligned.



13. Push the centre-stack instrument panel until it engages with the four retaining clips.

Sat-Nav Chatter

SRO: 19.07.CG

Safe VINs: **DBS** - E01840, **DB9** - A12676, **V8 Vantage** - C13743

Repair:

Pre safe VIN

CAUTION:

BE CAREFUL WHEN YOU RELEASE THE INSTRUMENT PANEL VENEER BEZEL. THE SURFACE FINISH CAN BE EASILY DAMAGED.

1. Release the four clips that attach the centre-stack instrument panel (refer to Figure 1).

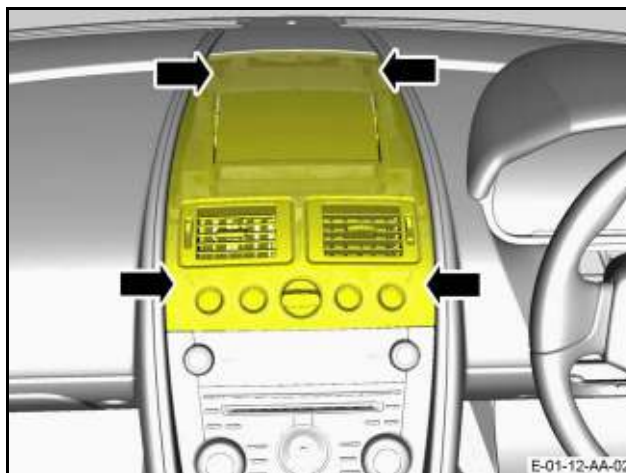


Figure 1

2. Disconnect the electrical connectors from each of the four transmission control switches (refer to Figure 2).

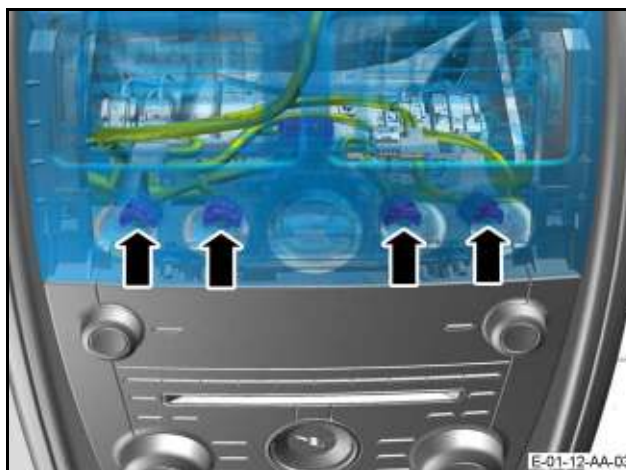


Figure 2

3. Disconnect the electrical connector from the ignition start/stop switch (refer to Figure 3).

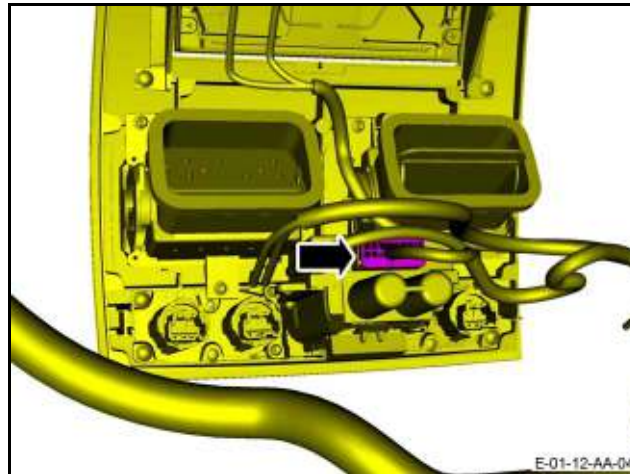


Figure 3

4. Remove the centre-stack instrument panel (instrument panel) (refer to Figure 4).



Figure 4

5. Put the instrument panel on a work bench that has protective material to prevent damage.
6. Release the sat-nav top panel.
7. Remove the spring type "A" (refer to Figure 5).
8. Install the new spring type "B" in the top panel (refer to Figures 5 and 6).

Note: The wire of the spring has a larger diameter and the spring has a different shape.

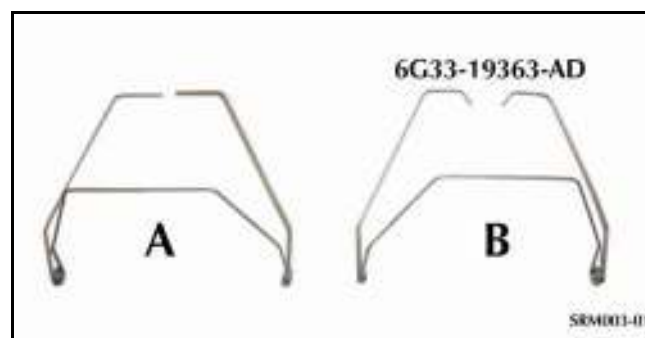


Figure 5



Figure 6

9. Install the sat-nav top panel.
10. Put the instrument panel into position (refer to Figure 7).



Figure 7

11. Connect the electrical connector to ignition start/stop switch (refer to Figure 8).

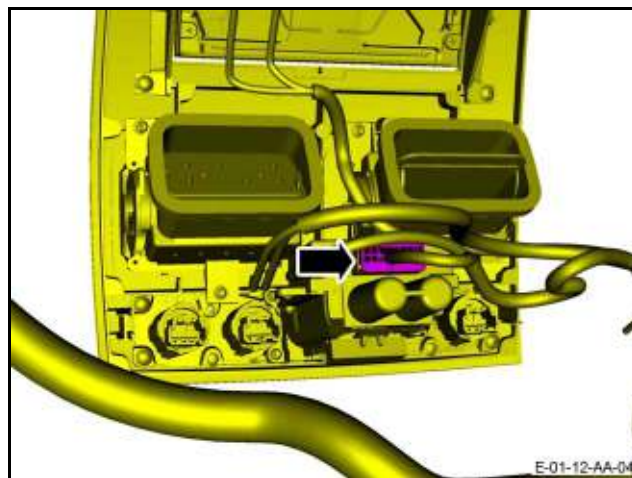


Figure 8

12. Connect the electrical connectors to each of the four transmission control switches (refer to Figure 9).

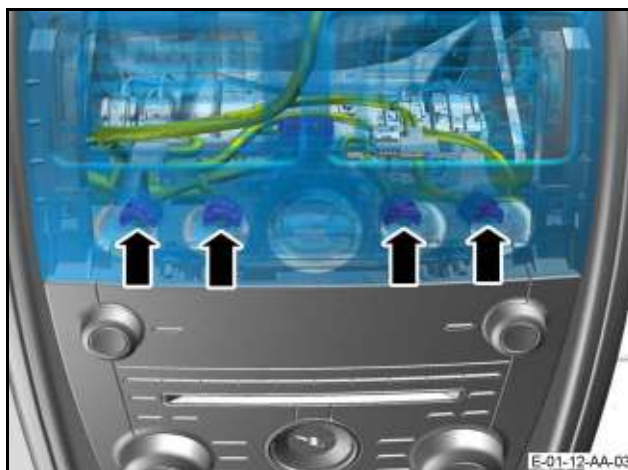


Figure 9

13. Make sure that the heater vents are correctly aligned.
14. Push the centre-stack instrument panel until it engages with the four retaining clips.

Sat-Nav Rattle (Loose in the aperture)

SRO: 19.07.CJ

Safe VINs: **DBS** - E01610, **DB9** - A12546, **V8 Vantage** - C13503, **V12 Vantage** - S00185

Repair

CAUTION:

BE CAREFUL WHEN YOU RELEASE THE INSTRUMENT PANEL VENEER BEZEL. THE SURFACE FINISH CAN BE EASILY DAMAGED.

1. Release the four clips that attach the centre-stack instrument panel (refer to Figure 1).

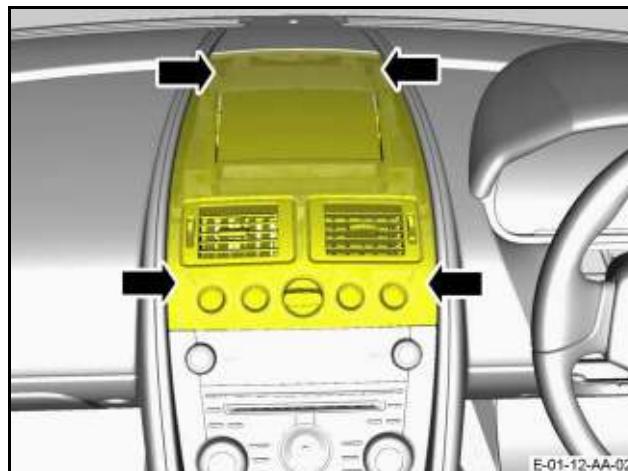


Figure 1

2. Disconnect the electrical connectors from each of the four transmission control switches (refer to Figure 2).

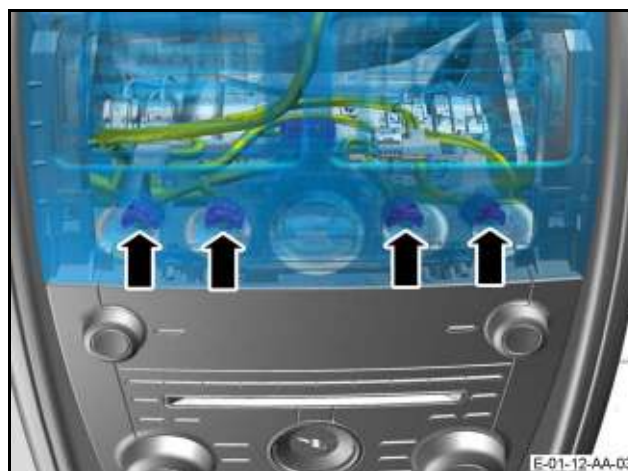


Figure 2

3. Disconnect the electrical connector from the ignition start/stop switch (refer to Figure 3).

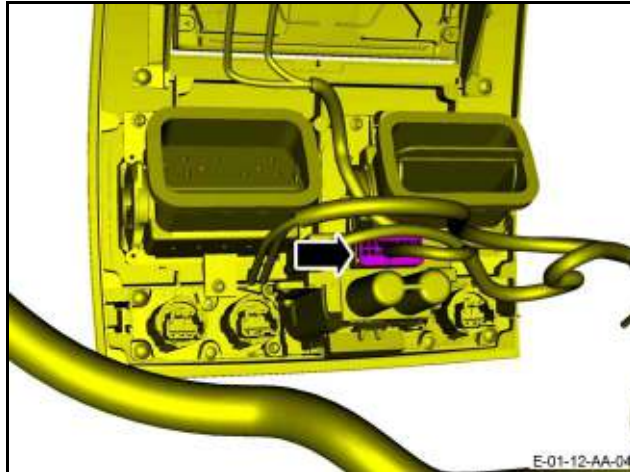


Figure 3

4. Remove the centre-stack instrument panel (panel) (refer to Figure 4).



Figure 4

5. Put the panel on a work bench that has protective material to prevent damage.
6. Remove the screws that attach the left and right navigation door hinge brackets to the panel. Remove the brackets (refer to Figure 5).

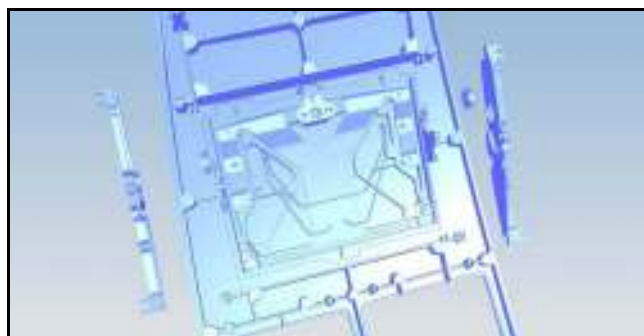


Figure 5

7. Remove the hinge bracket gear from the left hinge bracket (refer to Figure 6).

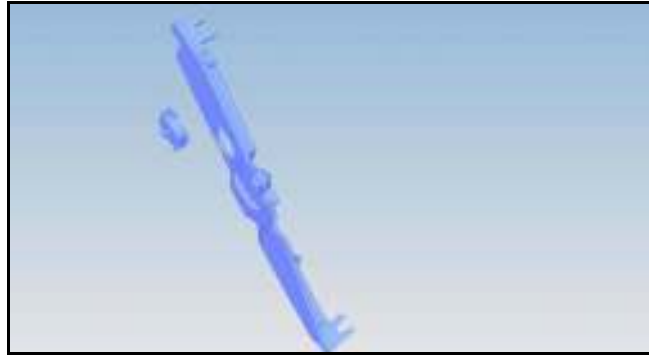


Figure 6

8. Install the hinge bracket gear onto the new left hinge bracket.
9. Install the new left and right side brackets onto the panel and torque the screws to 3 Nm (refer to Figure 7).

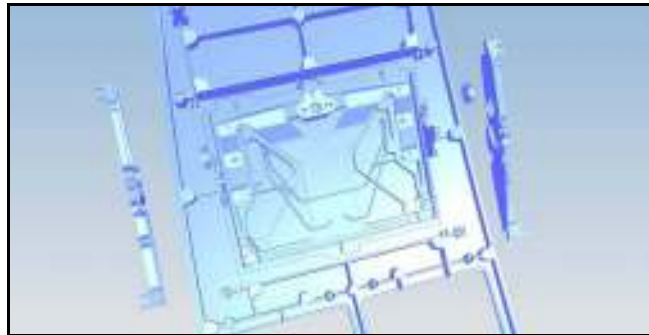


Figure 7

10. Put the centre-stack instrument panel into position (refer to Figure 8).



Figure 8

11. Connect the electrical connector to ignition start/stop switch (refer to Figure 9).

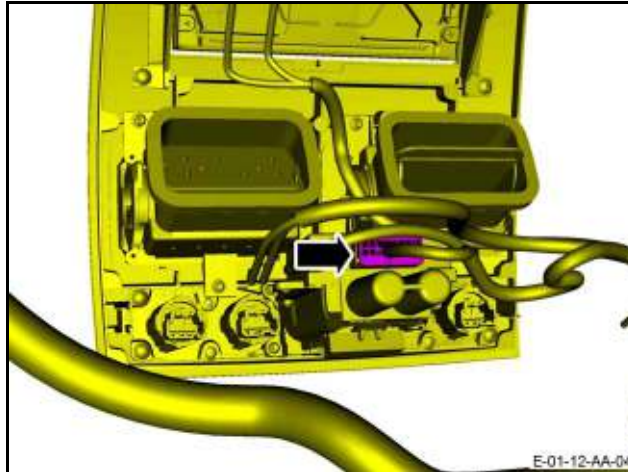


Figure 9

12. Connect the electrical connectors to each of the four transmission control switches (refer to Figure 10).

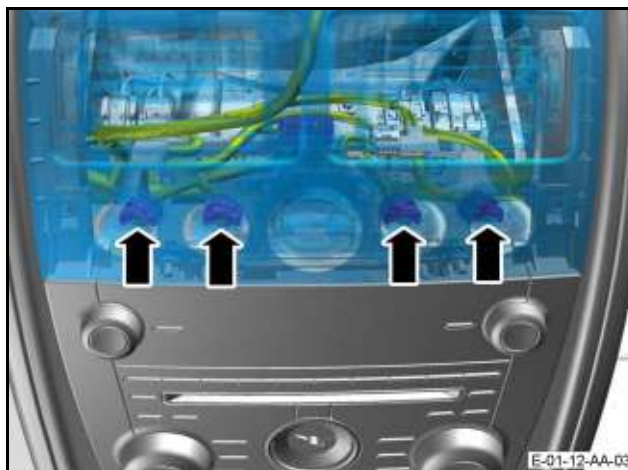


Figure 10

13. Make sure that the heater vents are correctly aligned.
14. Push the centre-stack instrument panel until it engages with the four retaining clips.

Door Noises

Door Trim Panel Assembly Rattle

SRO: 01.05.GY

Safe VINs: **DB9** - B10337, **V8 Vantage** - C10283

Repair:

1. Remove the front door trim panel from the door (refer to Workshop Manual procedure 01.05.CB).
2. Install three anti-rattle pads (SPD5596) onto the door at the positions shown in Figures 1 and 2.



Figure 1 – Left Door



Figure 2 – Right Door

3. Install the door trim panel onto the door (refer to Workshop Manual procedure 01.05.CB).