



XK8

DATE 03/01

910-11

SERVICE

TECHNICAL BULLETIN

**Squeaks & Rattles –
Diagnostics –
Repair Methods**

MODEL 1997 MY-ON
XK8 Range
VIN Refer to text

Issue:

This bulletin has been issued to assist in the diagnostic process on a customer complaint basis only, relating to vehicles with squeaks and rattles issues.

BACKGROUND INFORMATION

Vehicle noise is inevitable when a vehicle is in use. Current development efforts are aimed at reducing noise levels created by components such as engine, driveline and tires, but, the quieter these become, the more evident any other unwanted noises will be.

Squeaks are generated through frictional contact of parts. The severity of the noise is a function of contact velocity, material properties, angle of contact etc.

Rattles are generated through part impact contact between two or more components. The severity of the noise is dependent upon velocity, clearance (between the components), local stiffness of components etc.

Listed below are descriptions of the types of noises from either a Squeak or Rattle.

Noise type Description of noise

Creak Metallic squeak - Like a seatback frame flexing, or two pieces of material against one another.

Squeak High-pitched sound - Like rubbing a clean window.

Buzz Low-pitched sound - usually associated with vibrations. Often metallic or hard plastic humming.

Click Light sound - Like a ballpoint pen being clicked.

Knock Heavy sound - Like a knock on a door.

Rattle A sound suggesting looseness - Like marbles rolling round in a can.

Action:

To identify the source of the concern, first determine where the noise is generated. To assist with this, the customer can provide important information in helping diagnose the noise in question.

For all Squeaks and Rattles concerns and to ensure the correct root cause is identified and repaired, follow the Workshop Procedure below and see the Squeaks and Rattles Verification Process.

A Squeaks and Rattles Diagnostic Check sheet has been produced, that should be completed with the customer to help identify where the noise is, and under what conditions it happens.



WORKSHOP PROCEDURE

Note: Before carrying out any repairs, check Technical Service Bulletins for any related issues.

If after checking the Diagnostic Check Sheet information the issue is known, investigate, repair and verify. (See Appendix 1 route **A**)

Once the area from which the noise is being generated has been identified, follow the procedure listed below. (See Appendix 1 route **B**)

1. Check the quality of fit, clearance or bonus material and security.
2. Manipulate the assembly parts to see if a noise is produced.
3. Remove the part (if necessary) and rectify.
4. Re-test the vehicle to verify fix.

If the noise is still present, consider the following questions:

- What information has the customer provided?
- What is the possible cause?
- What is the purpose and function of the component concerned?
- What type of testing can be done?
- How does it fit and what is it next to?
- What equipment is available to me?
- What is the remedial action?
- What raw materials do we have to rectify the component?

ROAD TESTING

The Road Test should be conducted under the same conditions as described by the customer to identify the concern accurately.

The test is better conducted by two people. Whilst one concentrates on driving, the other can work on the component from which the noise is emanating.

Note: It is a good idea that the two people change places to compare impressions as appropriate.

Apply a load to see if the noise is affected. If the noise changes or is eliminated, re-test without the item fitted. If the noise is no longer present, examine the part and treat with anti-rattle materials or refit as appropriate. (See Technical Service Bulletin 910-08 for Squeaks and Rattles Service Kits)

If the noise cannot be isolated, consider adjacent locations and investigate.

Removing parts and re-testing should be undertaken to isolate the affected component.

POSSIBLE AREAS OF CONCERN

The following tables depict areas around the vehicle that could possibly cause a Squeak or Rattle.

AREA OF CONCERN: FRONT OF VEHICLE

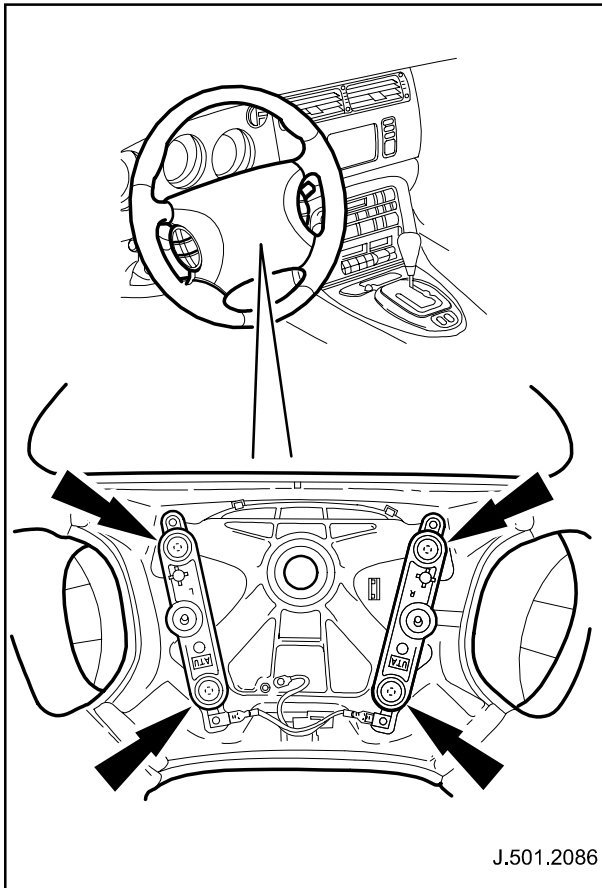


ILLUSTRATION 1

Description

Creak from steering wheel.

Root Cause

Horn bar springs creaking in mountings.

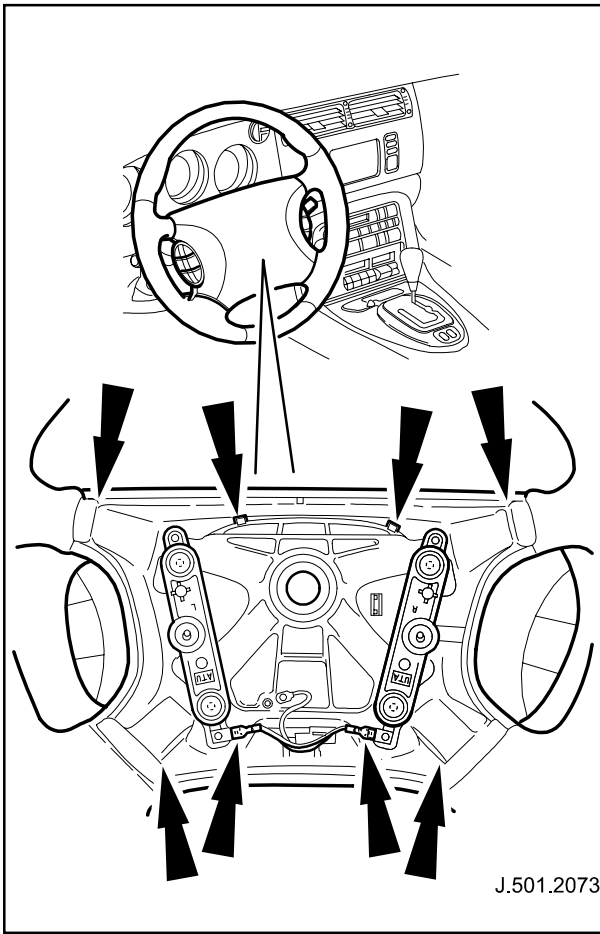
Action

▲ Warning: Observe the safety precautions in JTIS section 501-20, Driver Air Bag Module SRO 76.73.39.

Apply Krytox[®] grease to springs.

Affected VIN range

A00116 to A07460



Description

Creak from steering wheel.

Root Cause

Steering wheel securing lugs creaking.

Action

▲ Warning: Observe the safety precautions in JTIS section 501-20, Driver Air Bag Module SRO 76.73.39.

Fit anti-squeak tape under securing lugs.

Affected VIN ranges

A00116 to A05577

ILLUSTRATION 2

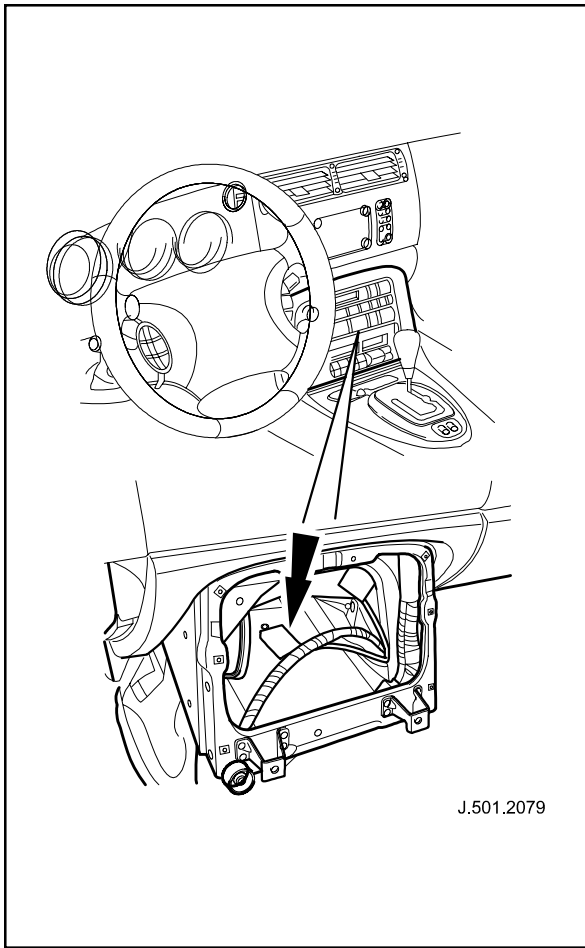


ILLUSTRATION 3

Description

Radio rattle.

Root Cause

Rear of radio not fully supported.

Action

Fit foam pad to transmission tunnel to support rear of radio.

Affected VIN range

A00116 to A01362

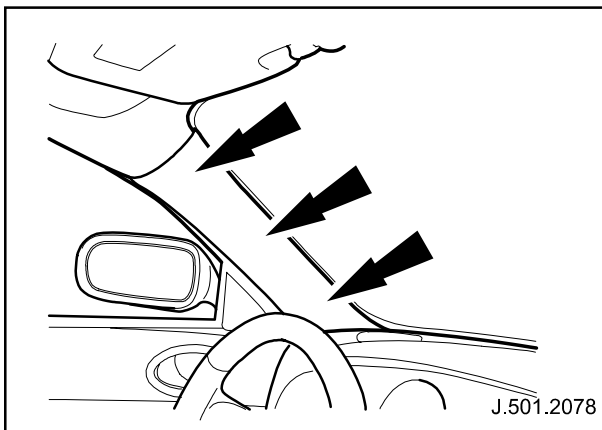


ILLUSTRATION 4

Description

A-post trim rattle.

Root Cause

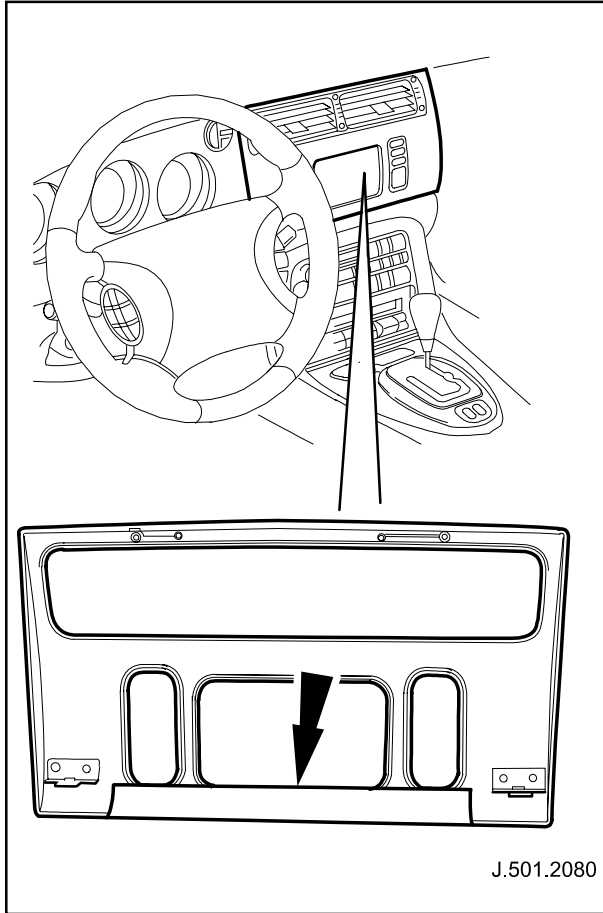
A-post trim not fully secured.

Action

Add anti-squeak tape to a-post trim fixings to improve fit.

Affected VIN range

A00116 to A04021



Description

Creaking noise emanating from lower edge of navigation screen.

Root Cause

Fascia/surround rubbing against navigation screen.

Action

Fit anti-squeak tape to lower edge of navigation surround.

Affected VIN ranges

A00116 to A00809

ILLUSTRATION 5

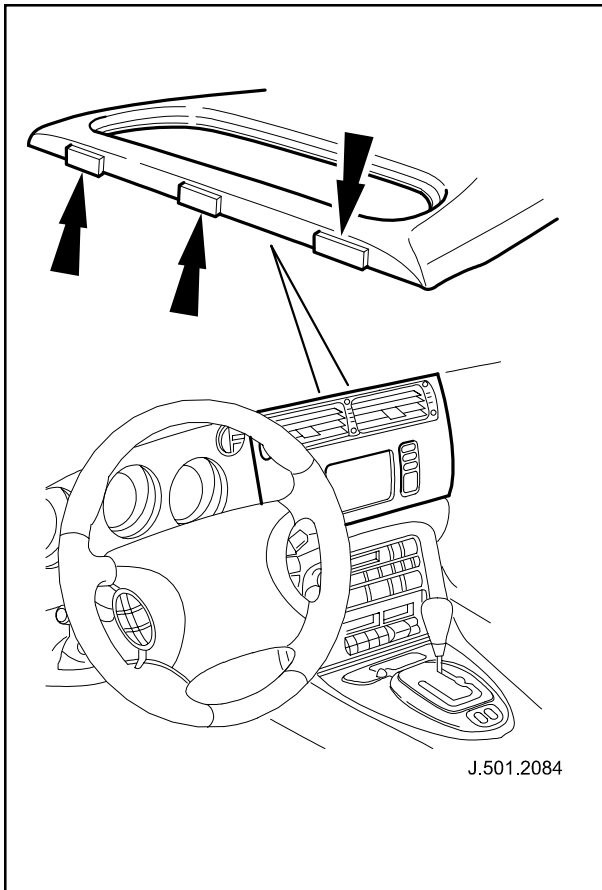


ILLUSTRATION 6

Description

Center veneer creak.

Root Cause

Top edge of console veneer rubbing against dash.

Action

Fit anti-squeak pads to top edge of center veneer.

Affected VIN ranges

A00116 to A01362

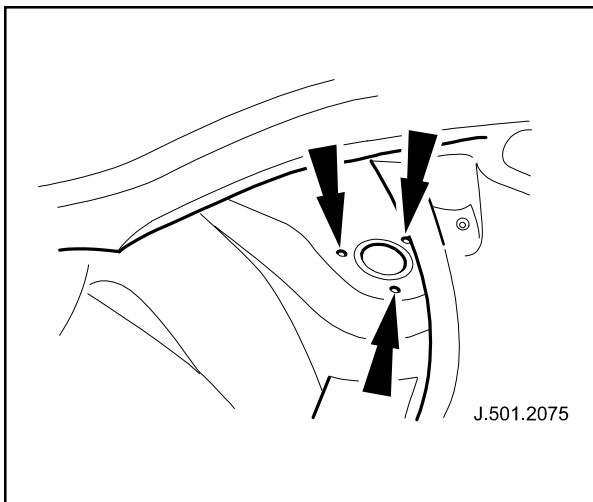


ILLUSTRATION 7

Description

Fascia creak.

Root Cause

Excessive sealer or weld flash (from spot-weld) on front suspension turret mounting face.

Action

Remove excessive sealer or spot-weld flash.

Affected VIN range

A00116 to A06711

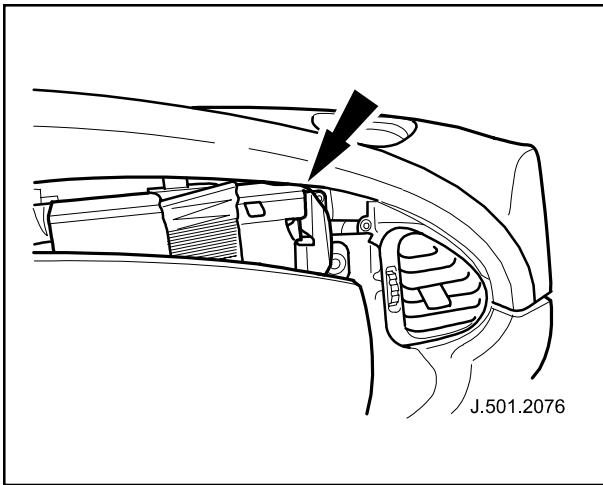


ILLUSTRATION 8

Description

Ticking noise from fascia.

Root Cause

Passenger air bag mounting bracket touching fascia.

Action

Fit felt pad between air bag mounting bracket and fascia.

Affected VIN range

A00116 to A07704

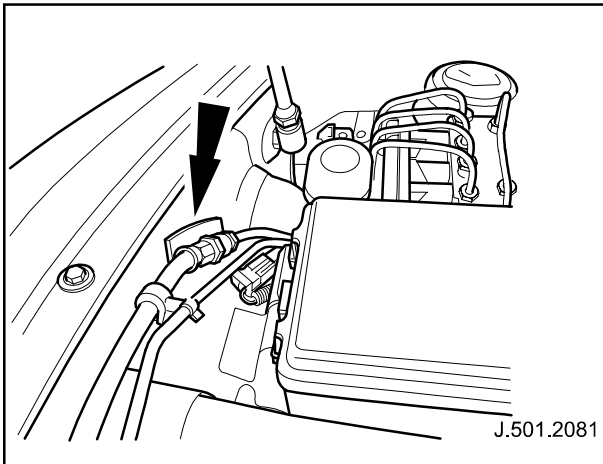


ILLUSTRATION 9

Description

Fascia rattle/knock.

Root Cause

Traction control pipe touching body.

Action

Fit foam pad between body and pipe.

Affected VIN range

A00116 to A04837

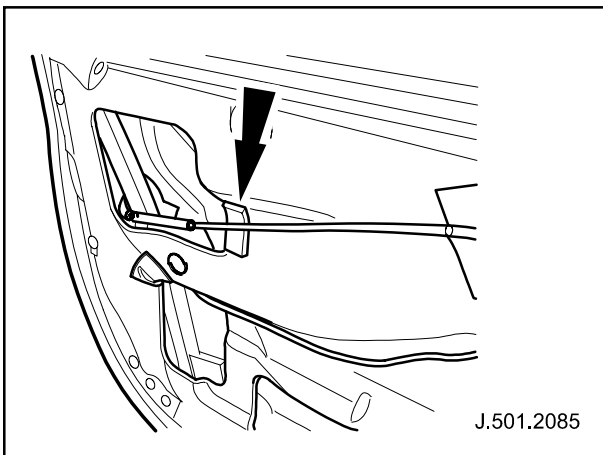


ILLUSTRATION10

Description

Front door rattle.

Root Cause

Door handle cable release fouling door panel.

Action

Fit foam pad between door panel and release cable.

Affected VIN range

A00116 to A06849

AREA OF CONCERN: REAR OF VEHICLE

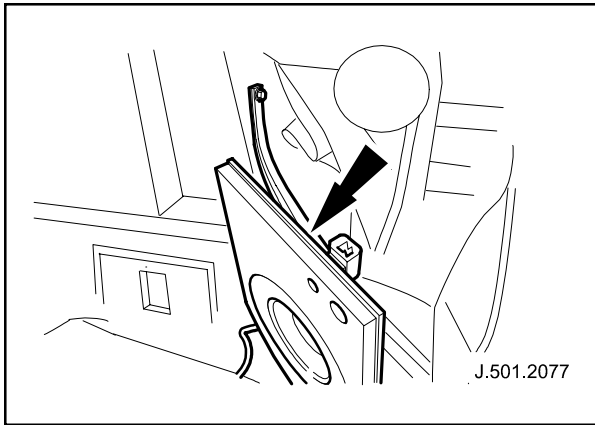


ILLUSTRATION 11

Description

Rear speaker rattle (non-premium Audio System).

Root Cause

Back of speaker touching body reinforcement bracket.

Action

Fit foam pad between rear of speaker and reinforcement bracket.

Affected VIN range

A00116 to A09443

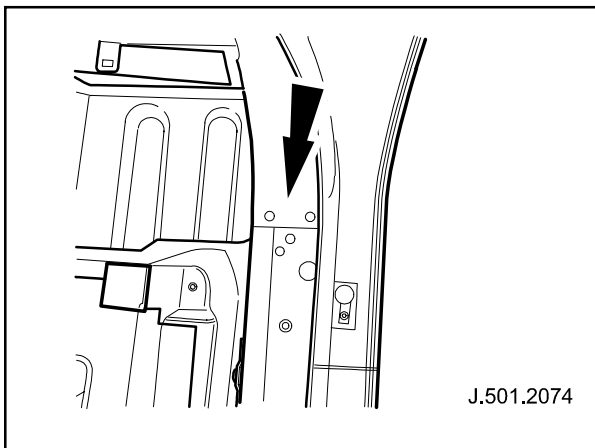


ILLUSTRATION 12

Description

Ticking noise from rear quarter.

Root Cause

2 Spot-welds on rear sill too far rearwards.

Action

Dress down panel forward of spot-welds.

Affected VIN range

A00116 to A02253

FURTHER ASSISTANCE

In some cases it may not be possible to identify the cause of the noise, or it could have re-occurred.

If this is the case, contact the Technical Hotline for assistance.

Please fax your completed Squeaks and Rattles Diagnostic Check Sheet to the Product Investigation Department at fax number 201-236-4410 and call the Technical Hotline at 1-888-524-3577 for assistance.

Warranty Information:

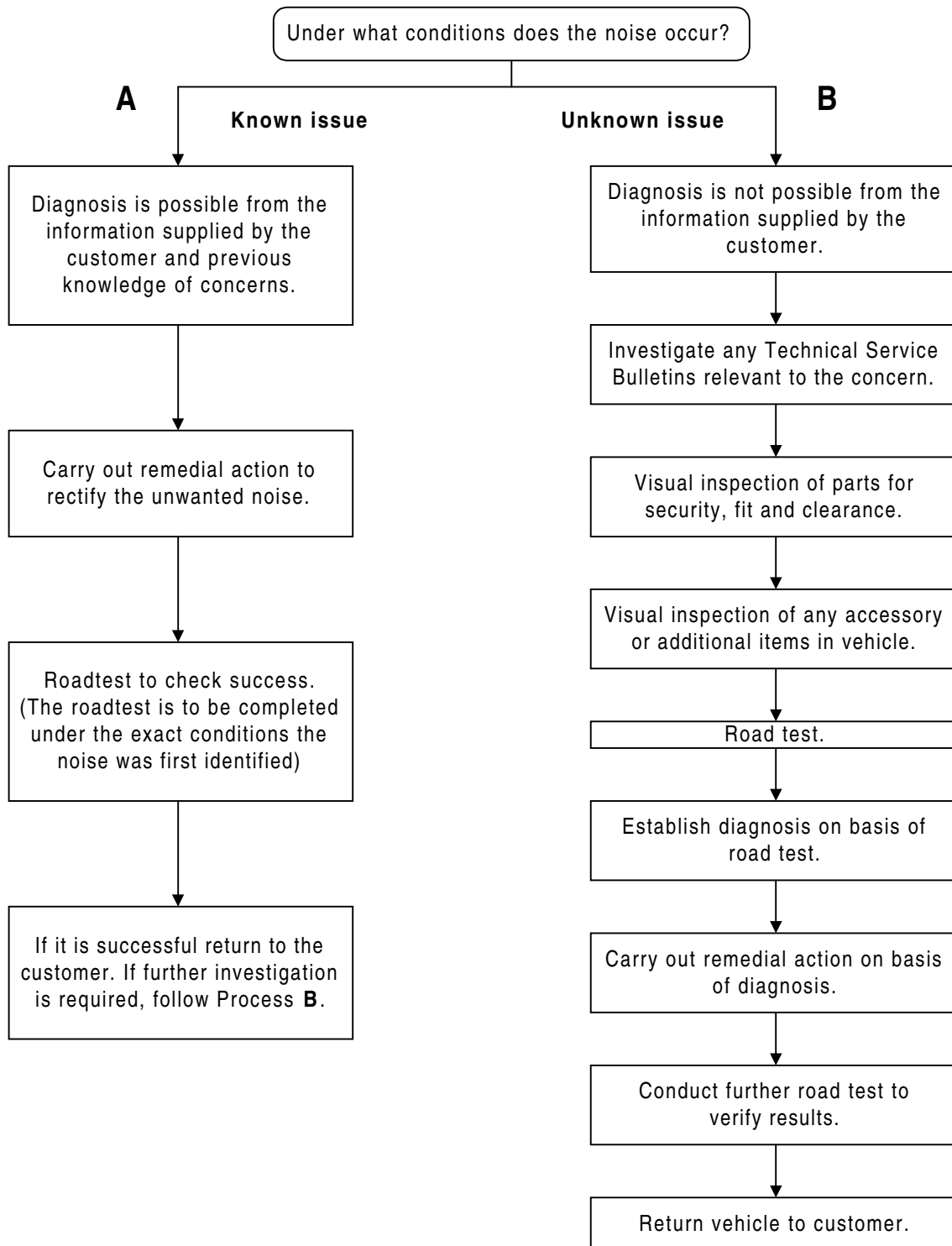
This bulletin is issued for information only.

Date of issue 03/01



Bulletin Number 910-11 Page 9 of 11

Squeaks and Rattles Diagnostics



Note: If the road test does not provide cause, fax the Squeaks and Rattles Diagnostic check sheet to Technical Hotline and then contact for further assistance.

DEALER INFORMATION

DEALER NAME	DEALER #	DATE
ORIGINATOR	PHONE #	

VEHICLE INFORMATION

VIN	MODEL CODE	DATE OF SALE
-----	------------	--------------

CUSTOMER CONCERN

DATE FIRST NOTICED _____ ROAD TESTED WITH CUSTOMER? YES NO

DESCRIBE ACTIONS TAKEN TO DATE _____

IS FURTHER ACTION REQUIRED? YES NO

PROBLEM OCCURS UNDER THE FOLLOWING CONDITIONS:

DRIVING CONDITIONS: CITY / LOCAL HIGHWAY RURAL ROADS OTHER: _____

VEHICLE SPEED (MPH) _____

ROAD CONDITIONS: STRAIGHT WINDING UNDULATING OTHER: _____

ROAD SURFACE: SMOOTH PAVED ROUGH PAVED DIRT / GRAVEL OTHER: _____

WEATHER CONDITIONS: DRY HUMID RAIN SNOW

OTHER: _____ AMBIENT TEMP. _____ °F

VEHICLE TEMPERATURE: CABIN _____ °F ENGINE _____ °F

VEHICLE STATE: ACCELERATING ROLLING / PITCHING STRESS

DECELERATING TWISTING / FLEXING OTHER: _____

TIRE PRESSURES: LH FRONT _____ RH FRONT _____ LH REAR _____ RH REAR _____

NOISE DETAILS

TYPE OF NOISE: CREAK BUZZ CLICK

SQUEAK RATTLE KNOCK

AREA OF CONCERN: STRUCTURE SUSPENSION STEERING RESTRAINTS

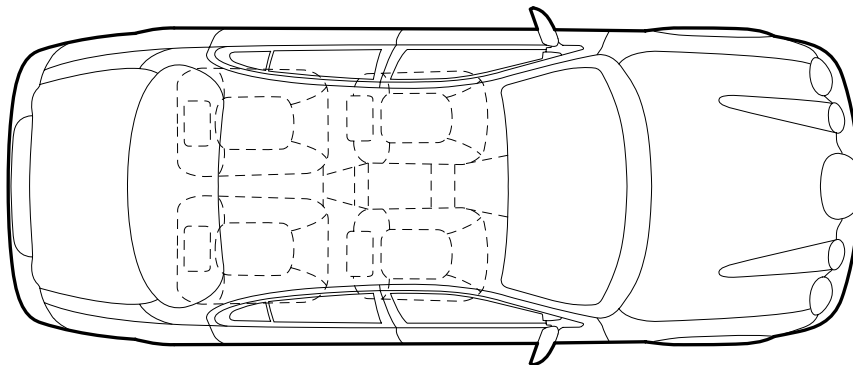
UNDERBODY POWERTRAIN ENG. COMPARTMENT INTERIOR TRIM

FRONT OF VEHICLE BRAKES DOORS CLOSURES

REAR OF VEHICLE FUEL SYSTEM INST. / FASCIA ELECTRICAL

TOP OF VEHICLE EXHAUST SEATS OTHER: _____

INDICATE THE APPROXIMATE AREA OF CONCERN ON THE ILLUSTRATION (S-TYPE SHOWN)



THIS SPACE FOR JAGUAR CARS USE ONLY

PRODUCT INVESTIGATIONS ENGINEER	CASE REFERENCE
---------------------------------	----------------

FORM DISTRIBUTION

JAGUAR PRODUCT INVESTIGATIONS VEHICLE SERVICE FILE