



# TECHNICAL BULLETIN

S100-10

12/2001

## Subject

**HIGH SPEED VIBRATIONS**

**Model: S-TYPE**

**Year: 1999 Onwards**

**VIN L00600 Onwards**

**Section: 100-04**

**Noise, Vibration and Harshness**

## Summary

S100-10: This Technical Bulletin has been issued due to customer complaints of a high-speed body vibration. A workshop procedure has been produced to eliminate this problem.

## Action

On a customer complaint basis only, the rear suspension beam front bushings are to be replaced with modified bushings to eliminate high-speed body vibrations at 100 Mile/h (160 Km/h).

To replace the rear suspension beam front bushings, follow the workshop procedure outlined below.

## Workshop Procedure

- 1 Open hood and fit fender protection covers.
- 2 Open driver's door.
- 3 Turn ignition 'ON'.
- 4 Apply foot brake.
- 5 Select 'Neutral'.
- 6 Turn ignition 'OFF'.
- 7 Ensure hand brake is in the 'OFF' position.
- 8 Release foot brake.
- 9 Close driver's door.
- 10 Raise vehicle on twin-post ramp.
- 11 Remove both rear wheels and tires (see Workshop Manual, JTIS CD ROM section: 204-04).

## Working on right-hand side of vehicle:

- 12 Disconnect rear handbrake cable from forward hand brake cable.
- 13 Remove rear brake pads (see Workshop Manual, JTIS CD ROM section: 206-04).

## Note: Secure the caliper to the body pipe bracket and not the suspension.

- 14 Undo and remove upper wishbone arm to rear suspension beam securing nuts and bolts.
- 15 Reposition upper wishbone.
- 16 Feed brake hose through upper wishbone arm to allow suspension assembly removal.
- 17 Reposition and align upper wishbone arm to beam.
- 18 Install but do not tighten upper wishbone arm to rear suspension beam forward securing bolt and nut.
- 19 Displace and reposition rear wheel speed sensor harness from body retaining clip.
- 20 Undo and remove rear damper to lower wishbone securing bolt.
- 21 Reposition rear damper mounting from lower wishbone.

## Repeat steps 12 to 21 on left-hand side of vehicle.

- 22 Remove intermediate silencer, and both rear tail pipe and silencer assemblies (see Workshop Manual, JTIS CD ROM section: 309-00).
- 23 Undo and remove rear tunnel heat shield securing bolts.

- 24 Remove rear tunnel heat shield.
- 25 Mark driveshaft nut/bolts and flange position.

**Note: The driveshaft securing nut/bolts position affects driveline balancing.**

- 26 Undo and remove driveshaft to final drive unit securing nut/bolts.
- 27 Disconnect both wheel speed sensor harness electrical connectors above rear suspension.
- 28 Install and tighten suitable hose clamp to fuel filler hose (Girling 64947017).
- 29 Undo and reposition fuel filler hose to fuel filler pipe securing clip.
- 30 Disconnect and reposition fuel filler hose from fuel filler pipe.

**CAUTION: TAKE CARE WHEN DISCONNECTING FUEL FILLER HOSE.**

- 31 Position suitable lift (Nike Lift tool number HTJ1200-2) under vehicle and place suitable blocks under differential for support.
- 32 Raise lift to take weight of rear suspension unit.
- 33 Install safety strap around differential unit and secure to Nike lift.
- 34 Using suitable straight edge against rear suspension beam mountings, mark position of beam to body.

**Note: Mark position for alignment of rear suspension beam during re-installation procedure.**

- 35 Undo and remove rear suspension beam to body securing bolts.
- 36 Lower Nike lift disconnecting rear suspension assembly from prop shaft at same time.

**Note: When lowering suspension check that all hoses are clear.**

- 37 Position Nike lift/rear suspension assembly from under ramp.
- 38 Clean and lubricate special tool bearing, nut and bolt before use.

**Note: New special tools 204- 328 and 501- 086 have been issued for replacing rear suspension beam front bushings.**

- 39 Using special tools, remove rear suspension beam front bushings. (See Fig. 1 for tool numbers)

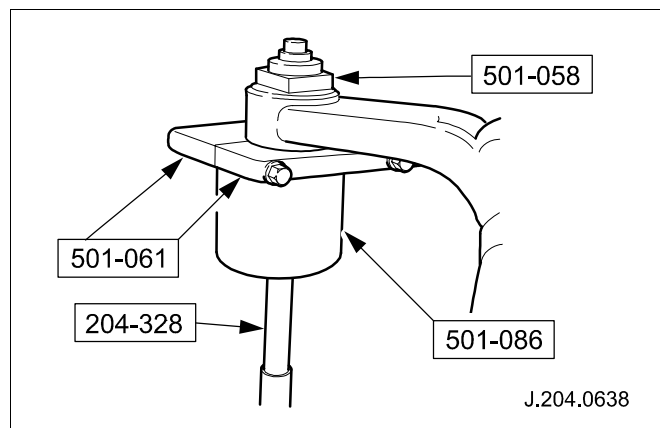


Fig. 1

- 40 Discard front bushings.
- 41 Place new bushings to front.

**CAUTION: WHEN HANDLING THE NEW BUSHINGS, THE INTERNAL FLUID IS AN IRRITANT AND REQUIRES HANDLING WITH CARE.**

**Note:** The new rear suspension beam front bushings must be fitted with cutouts to face front and rear of vehicle and the solid webs in the bushing should go across the vehicle. (See Fig. 2)

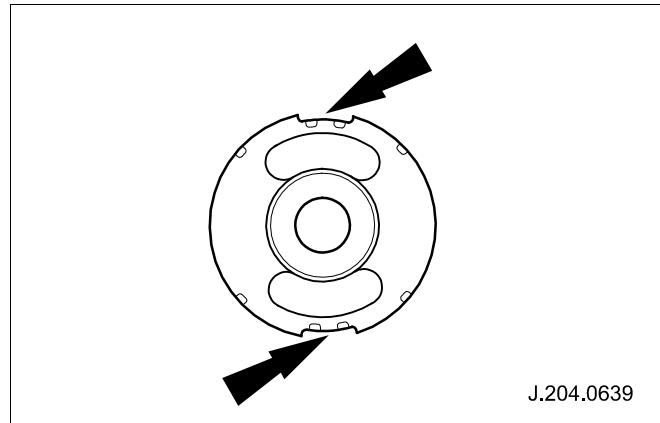


Fig. 2

- 42 Using special tools, install new rear suspension beam front bushings. (See Fig. 3 for tool numbers)

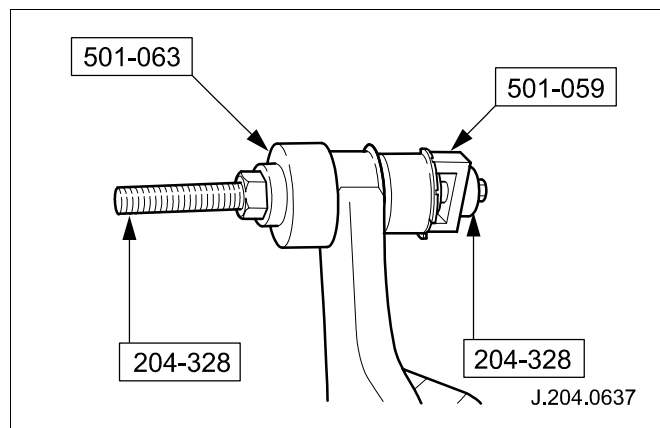


Fig. 3

- 43 Position Nike lift/rear suspension assembly under ramp.  
44 Raise Nike lift and at same time connect driveshaft to rear suspension assembly.

**Note:** Take care not to trap fuel filler hose and brake hoses.

- 45 Install but do not fully tighten rear suspension beam to body securing bolts.  
46 Reposition rear suspension beam to marks on body previously made during removal for alignment.  
47 Fully tighten rear suspension beam to body securing bolts to 103Nm.  
48 Release and remove safety strap over differential.  
49 Lower Nike lift.  
50 Position Nike lift from under ramp.  
51 Install and connect fuel filler hose to fuel filler pipe.  
52 Install and tighten fuel filler hose to fuel filler pipe securing clip.  
53 Undo and remove hose clamp from fuel filler hose.  
54 Connect both rear wheel speed sensor harness connectors above rear suspension.  
55 Reposition and align driveshaft to differential flange (marked on removal).  
56 Install and fully tighten driveshaft to differential securing nuts and bolts to 85Nm.

**Note:** Ensure correct nuts and bolts are fitted as marked on removal (due to balancing).

- 57 Install and align rear tunnel heat shield.  
58 Install and tighten heat shield securing nut/bolts.  
59 Install intermediate silencer and both rear tail pipe and silencer assemblies (see Workshop Manual, JTIS CD ROM section: 309-00).

**Note:** Working on right hand side of vehicle:

- 60 Install and align rear damper lower mounting to rear lower wishbone.  
61 Install and tighten rear damper to lower wishbone securing bolt to 133Nm.  
62 Install and secure wheel speed sensor harness to body retaining clip.

- 63 Undo and remove upper wishbone to rear suspension beam securing nut/bolt.  
 64 Reposition wishbone arm.  
 65 Route brake hose through upper wishbone arm.  
 66 Install and align upper wishbone arm to rear suspension beam.  
 67 Install but do not fully tighten upper wishbone arm to rear suspension beam securing nuts/bolts.  
 68 Fully tighten upper wishbone arm to rear suspension beam securing nuts/bolts to 90Nm.  
 69 Install rear brake pads (see Workshop Manual, JTIS CD ROM section: 206-04).

**Note: Repeat steps 60 to 69 on left-hand side of vehicle.**

- 71 Re-connect rear handbrake cable to forward handbrake cable.  
 72 Install both rear wheels and tires (see Workshop Manual, JTIS CD ROM section: 204-04).  
 73 Lower vehicle on ramp.  
 74 Remove fender protection covers and close hood.

### Parts Information

The following parts must be ordered via Jaguar Cars Parts Operations.

Description	Part Number	Quantity
Rear suspension bushing	XR8 34628	2
Rear suspension bushing washer	XR8 34629	2

### Warranty Information

Description	SRO	Labor Time Allowance	Warranty Code
Rear suspension bushing replacement	64 91 14	2.7 Hours	GM-BK-33