

TECHNICAL BULLETIN

JTB00267NAS2

19 MAY 2016



© Jaguar Land Rover North America, LLC

NOTE: The information in Technical Bulletins is intended for use by trained, professional Technicians with the knowledge, tools, and equipment required to do the job properly and safely. It informs these Technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by 'do-it-yourselfers'. If you are not a Retailer, do not assume that a condition described affects your vehicle. Contact an authorized Jaguar service facility to determine whether this bulletin applies to a specific vehicle.

This reissue replaces all previous versions. Please destroy all previous versions.

Changes are highlighted in gray

SECTION: 206-00

Brake Judder

AFFECTED VEHICLE RANGE:

F-TYPE (X152)

Model Year: 2014 Onwards
VIN: K00001 Onwards
Assembly Plant: Castle Bromwich

XF (X250)

Model Year: 2010-2015
VIN: R47154-U88785
Assembly Plant: Castle Bromwich

XJ Range (X351)

Model Year: 2010 Onwards
VIN: V03548 Onwards
Assembly Plant: Castle Bromwich

XK Range (X150)

Model Year: 2010-2015
VIN: B32964-B56794
Assembly Plant: Castle Bromwich

MARKETS:

NAS

CONDITION SUMMARY:

Situation: A vibration or shaking sensation coming from different areas of the vehicle may be evident while driving. This may be felt through the steering wheel and/or through the seats/vehicle body. It may, or may not, occur during braking.

Cause: This may be caused by excessive brake disc run-out leading to disc thickness variation as a result of one or more of the following:

- Hub-to-disc interface cleanliness
- Wheel mounting face paint or wheel damage
- Park Brake Drag (disc distortion due to thermal activity [overheating the brakes])

Action: Should a customer express this concern, follow the Service Instruction below.

PARTS:

C2P25746	Return Spring - Left	1
C2P25747	Return Spring - Right	1

TOOLS:

Jaguar Land Rover-approved diagnostic tool with latest DVD and Calibration File

Jaguar Land Rover-approved Midtronics battery power supply

Refer to the Service Instruction/Workshop Manual for any required special tools.

WARRANTY:

 **NOTE: Repair procedures are under constant review, and therefore times are subject to change; those quoted here must be taken as guidance only. Always refer to TOPIx to obtain the latest repair time.**

 **NOTE: DDW requires the use of causal part numbers. Labor only claims must show the causal part number with a quantity of zero.**

DESCRIPTION	SRO	TIME (HOURS)	CONDITION CODE	CAUSAL PART
Front disc - Vehicle Set - Renew - F-TYPE (X152) - All variants except Brembo/Sport Brakes and Carbon ceramic	70.10.12	0.6	13	T2R5939
Rear disc - Vehicle set - Renew - F-TYPE (X152) - All variants except Brembo/Sport Brakes and Carbon ceramic	70.10.13	1.3	13	T2R5939
Rear brake disc run out procedure - Per side - F-TYPE (X152) - All variants	70.10.32	0.2	13	T2R5939
Electronic Park Brake release - Calibration - Per Side - F-TYPE (X152) - All variants	70.35.54	0.1	12	T2R5939
Front brake discs - Pair - Renew - XF (X250) - 4.2L NA V8	70.10.12	0.7	13	C2C25337
Rear brake discs - Pair - Renew - XF (X250) - 4.2L NA V8	70.10.13	0.7	13	C2D26352
Front brake discs - Pair - Renew - XF (X250) - 5.0L NA V8	70.10.12	0.7	13	C2C25337
Rear brake discs - Pair - Renew - XF (X250) - 5.0L NA V8	70.10.13	0.7	13	C2D26352
Front brake discs - Pair - Renew - XF (X250) - 5.0L SC V8	70.10.12	0.7	13	C2P12622
Rear brake discs - Pair - Renew - XF (X250) - 5.0L SC V8	70.10.13	0.7	13	C2P13648
Rear brake disc run out procedure - Per side - XF (X250) - All variants	70.10.32	0.2	13	C2D26352
Electronic Park Brake release - Calibration - XF (X250) - All variants	70.35.54	0.1	13	C2D26352
Rear brake caliper springs - Renew - XF (X250) - All variants	05.10.20	0.2	13	C2P25746
Front brake discs - Pair - Renew - XJ (X351; Fitted with Brembo/Sports Brakes Fitted)	70.10.12.36	0.7	13	C2C25337
Front brake discs - Pair - Renew - XJ (X351)	70.10.12	0.7	13	C2C25337
Rear brake discs - Pair - Renew - XJ (X351; Fitted with Brembo/Sports Brakes Fitted)	70.10.13.36	0.7	13	C2P12622
Rear brake discs - Pair - Renew - XJ (X351) - All variants	70.10.13	0.7	13	C2D26352
Rear brake disc run out procedure - Per side - XJ (X351) - All variants	70.10.32	0.2	13	C2D26352
Electronic Park Brake Release - Calibration - XJ (X351) -				

All variants	70.35.54	0.1	13	C2P13648
Rear brake caliper springs - Renew - XJ (X351) - All variants	05.10.20	0.2	13	C2P25746
Front brake discs - Pair - Renew - XK (X150) - 5.0L NA V8	70.10.12	0.7	13	C2C25337
Rear brake discs - Pair - Renew - XK (X150) - 5.0L NA V8	70.10.13	0.7	13	C2D26352
Rear brake disc run out procedure - Each brake disc - XK (X150) - 5.0L NA V8	70.10.32	0.2	13	C2D26352
Front brake discs - Pair - Renew - XK (X150) - 5.0L SC V8	70.10.12	0.7	13	C2P12622
Rear brake discs - Pair - Renew - XK (X150) - 5.0L SC V8	70.10.13	0.7	13	C2P13648
Rear brake disc run out procedure - Each brake disc - XK (X150) - 5.0L SC V8	70.10.32	0.2	13	C2P13648
Electronic Park Brake release - Calibration - XK (X150) - All variants	70.35.54	0.1	13	C2P13648
Rear brake caliper springs - Renew - XK (X150) - All variants	05.10.20	0.2	13	C2P25746



NOTE: Normal Warranty procedures apply.

SERVICE INSTRUCTION:

- NOTE: Care must be taken to adhere to all of the relevant speed limits and with due consideration of all other road users, applicable driving codes and rules of the road. The speed ranges are targets and may not be fully attainable in all vehicle assessment conditions. Always obey all local traffic regulations.**

Carry out a driven assessment.

- Road to be straight and level, with minimal traffic, > 1.25 miles / 2Km, smooth, national speed limit applied.
- Drive at a constant speed of 100Km/h (60 MPH) and assess the steering wheel and car body vibration.
- Allow the car to coast down from 120Km/h to 80Km/h (70 MPH to 50 MPH) and assess the steering wheel and car body vibration.
- Brake moderately from 120Km/h to 80Km/h (70 MPH to 50 MPH) and assess the steering wheel and car body vibration.
- Score each step of the assessment for vibration from 5 to 10 where
 - 10 = No issue
 - 7 = Just acceptable
 - 6 = Customer complaint
 - 5 = Severe customer complaint
 - Do not use scores 1-4

Section 1

If the vibration was experienced without braking, the root cause is likely to be from the wheel or tire. In this case wheel shimmy is diagnosed. Follow the steps below:

For steering wheel shimmy found during Pre-Delivery Inspection (PDI), refer to bulletin JTB00258NAS.

For tire and wheel balance optimizations, refer to JTB00257NAS.

- Check the wheels for damage, and for paint overspray on the wheel/disc interface.
 - Check for customer caused damage on the wheels including inner rim of the wheel (Ex.: curbing or pothole

damage etc., and for overspray from aftermarket wheel painting).

2. Confirm the tire pressures are correct as indicated on the Vehicle Identification Number (VIN) placard label.
3. Check the wheel balance of all four wheels and correct as necessary.
4. Torque wheels nuts (see TOPIx Workshop Manual, section 204-04: Wheels and Tires, Removal and Installation).
5. Go to Section 4: Final Dynamic Assessment.

Section 2

If the vibration is only noticed while braking and is only felt in the steering wheel, it is caused by the Front discs.

Check the wheels for damage and paint overspray on the wheel/disc interface as these can cause high disc run-out leading to brake judder.

3. Remove both front brake discs (see TOPIx Workshop Manual, section 206-03: Front disc Brake).
4. Check for any dirt or debris on the hub mounting face.
 - Clean if necessary.
5. Check for any evidence of damage to the hub which could cause the disc to not sit 'square/flat' on the hub.
 - Replace if necessary.

6.  **NOTE: Make sure no dirt is introduced to the mating surfaces.**

Install the new front brake discs (see TOPIx Workshop Manual, section 206-03: Front disc Brake).

7. Go to Section 4: final dynamic assessment.

Section 3

If the vibration is only noticed while braking and is felt through the seats/body, or as a rumble/drumming sound, the rear brake assembly will be the issue. This will require replacement of the rear brake disc; additional checks may require the replacement of other components.

Check the wheels for damage and paint overspray on the wheel/disc interface as these can cause high disc run-out leading to brake judder.

8. If crescent-shaped blueing/corrosion marks are seen on the rear left disc only, and the left rear caliper park brake lever is not returning to its 'off-stop', then go to Section 5.

9.  **NOTE: Cleanliness is required when carrying out this repair.**

 **NOTE: If during this part of the process damage is noted to the driveshaft, contact the Technical HelpLine.**


Remove both rear brake discs (see TOPIx Workshop Manual, section 206-04: Rear disc Brake).

10. Check for any dirt or debris on the hub mounting face.
 - Clean if necessary.
11. Check for any evidence of damage to the hub which could cause the disc to not sit 'square/flat' on the hub.
 - Replace if necessary.

12.  **NOTE: Make sure no dirt is introduced to the mating surfaces.**

Install the new rear brake discs (see TOPIx Workshop Manual, section 206-04: Rear disc Brake).

Section 4: Final Dynamic Assessment


13.  **NOTE: Carry out a final dynamic assessment to confirm vehicle no longer has brake judder (reference driven assessment at the start of the document).**

If unable to diagnose the root cause of the brake judder or a repair has been carried out and the brake judder either persists or returns after a short period, contact the Technical HelpLine, raise a Technical Assistance (TA) request, and submit an Electronic Product Quality Report (EPQR) after the issue has been resolved.

Section 5: Electronic Park Brake Check

In this case it is possible that the Electronic Park Brake (EPB) cables have been preventing a full release of the rear left calliper. This could be highlighted by blueing of the brake disc.

14. Check the cables and routing for any damage, mis-routing, and or signs of snagging.

15.  **NOTE: Do not carry out this step to vehicles from VIN K00001 (F-TYPE [X152], U16163 (XF [X250]), V64028 (XJ [X351]), and B52040 (XK [X150]) 14MY Vehicles.**

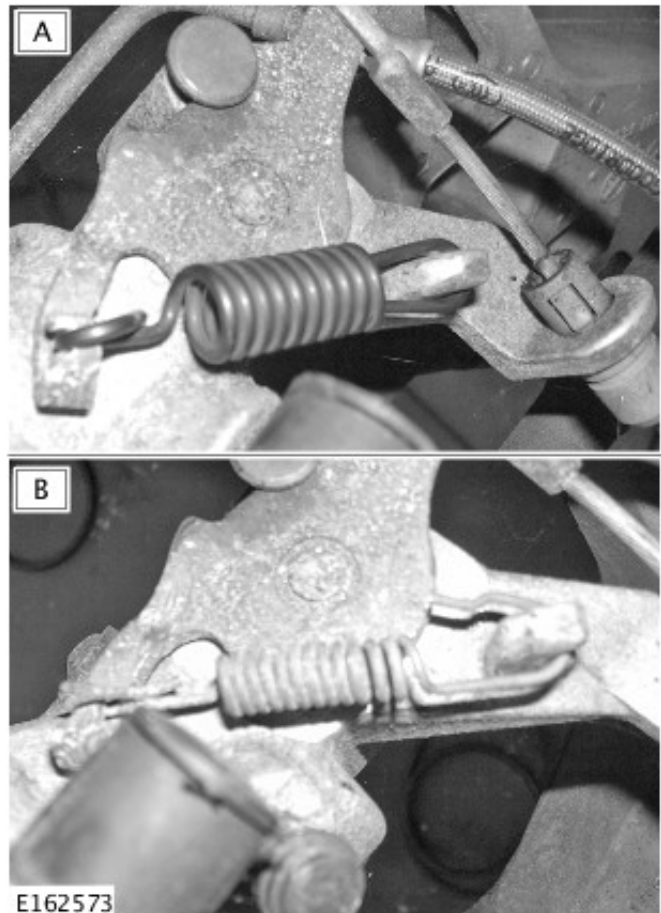
 **NOTE: 'A' is a new condition spring; 'B' is the old condition spring.**


 **NOTE: new springs are handed.**

 **NOTE: Rear caliper return springs must be installed in pairs (left and right calipers).**

Replace rear caliper return springs.

- Using a suitable tool, remove the existing springs.
- Using a suitable tool, install the new springs.



16. Using a suitable grease, lubricate the 'C' clip.
17. Refer to Section 3 and install the new rear brake discs (see TOPIx Workshop Manual, section 206-04: Rear disc Brake).
18. Use the Jaguar Land Rover-approved diagnostic equipment to re-calibrate the EPB system.
19.  **NOTE: Carry out a final dynamic assessment to confirm vehicle no longer has brake judder (reference driven assessment at the start of the document).**

If unable to diagnose the root cause of the brake judder or a repair has been carried out and the brake judder either persists or returns after a short period, contact the Technical HelpLine, raise a Technical Assistance (TA) request, and submit an Electronic Product Quality Report (EPQR) after the issue has been resolved.

