

LTB00857NAS6



TECHNICAL BULLETIN

06 APR 2018

© 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 Land Rover service facility to determine whether this bulletin applies to a specific vehicle.

INFORMATION

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

SECTION:

206-03: Front Disc Brake

SUBJECT/CONCERN:

'Squeal' Noise From Front Brakes During Light Braking - High Performance Brakes Only

AFFECTED VEHICLE RANGE:

MODEL:

MODEL
YEAR:

VIN:

ASSEMBLY
PLANT:

APPLICABILITY:

| MODEL: | MODEL YEAR: | VIN: | ASSEMBLY PLANT: | APPLICABILITY: |
|------------------------|-------------|---------------|-----------------|--|
| Range Rover Sport (LW) | 2014 | 001154-001205 | Solihull | Vehicles With: High Performance Brakes |
| Range Rover Sport (LW) | 2014-2015 | 300003-399997 | Solihull | Vehicles With: High Performance Brakes |
| Range Rover Sport (LW) | 2014-2016 | 500023-599999 | Solihull | Vehicles With: High Performance Brakes |
| Range Rover Sport (LW) | 2014-2017 | 600009-690429 | Solihull | Vehicles With: High Performance Brakes |
| Range Rover Sport (LW) | 2016-2017 | 100000-181319 | Solihull | Vehicles With: High Performance Brakes |
| Range Rover (LG) | 2013-2017 | 001204-380216 | Solihull | Vehicles With: High Performance Brakes |

MARKETS:

NORTH AMERICA

CONDITION SUMMARY:

NOTE:

Jaguar Land Rover braking systems are designed to achieve peak performance under a broad range of driving conditions. Jaguar Land Rover's priority is the safety of its braking systems, and they are designed to perform in all circumstances, however the brake may, dependent on the environment and driving style, produce the occasional noise. This does not impair the operation or performance. Brake noise is an issue facing many vehicle manufacturers and Jaguar Land Rover are constantly working in conjunction with the leading brake caliper and brake pad suppliers to develop design solutions which reduce brake squeal noises.

SITUATION:

On vehicles fitted with the High Performance Brake system (380mm diameter front brake disc), a 'squeal' noise may be heard from the front brakes during low-speed, light-to-moderate brake pedal application, until the vehicle comes to a stop.

CAUSE:

This may be caused by front brake pad resonance.

ACTION:

Should a Customer express this concern, follow the Workshop Procedure outlined below.

PARTS: **NOTES:**

- Front brake pad set part number LR093886 should be fitted to a vehicle only where a customer has reported the condition as described and not as a standard service replacement.
- An allowance (\$0.77USD [or local equivalent]) has been allocated for long life lubricating grease (LR020972); claim using 'ZZZ001'. One tube of grease will repair 50 vehicles.

| PART NUMBER | DESCRIPTION | QUANTITY |
|-------------|---|----------|
| LR093886 | Front brake pad set | 1 |
| LR033275 | Wire - Brake pad wear sensor - where applicable | 1 |
| LR033274 | Caliper bolts | 4 |
| LR020972 | Long life lubricating grease | 1 |

WARRANTY: **NOTE:**

An allowance (\$0.77USD [or local equivalent]) has been allocated for long life lubricating grease (LR020972); claim using 'ZZZ001'. One tube of grease will repair 50 vehicles.

 **NOTES:**

- 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 JLR claims submission system to obtain the latest repair time.

- The JLR Claims Submission System 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 brake pads - Renew | 70.40.02.36 | 0.7 | 42 | LR020362 |
| Front brake pads - Modification | 70.40.89.40 | 0.2 | 42 | LR020362 |

 **NOTE:**

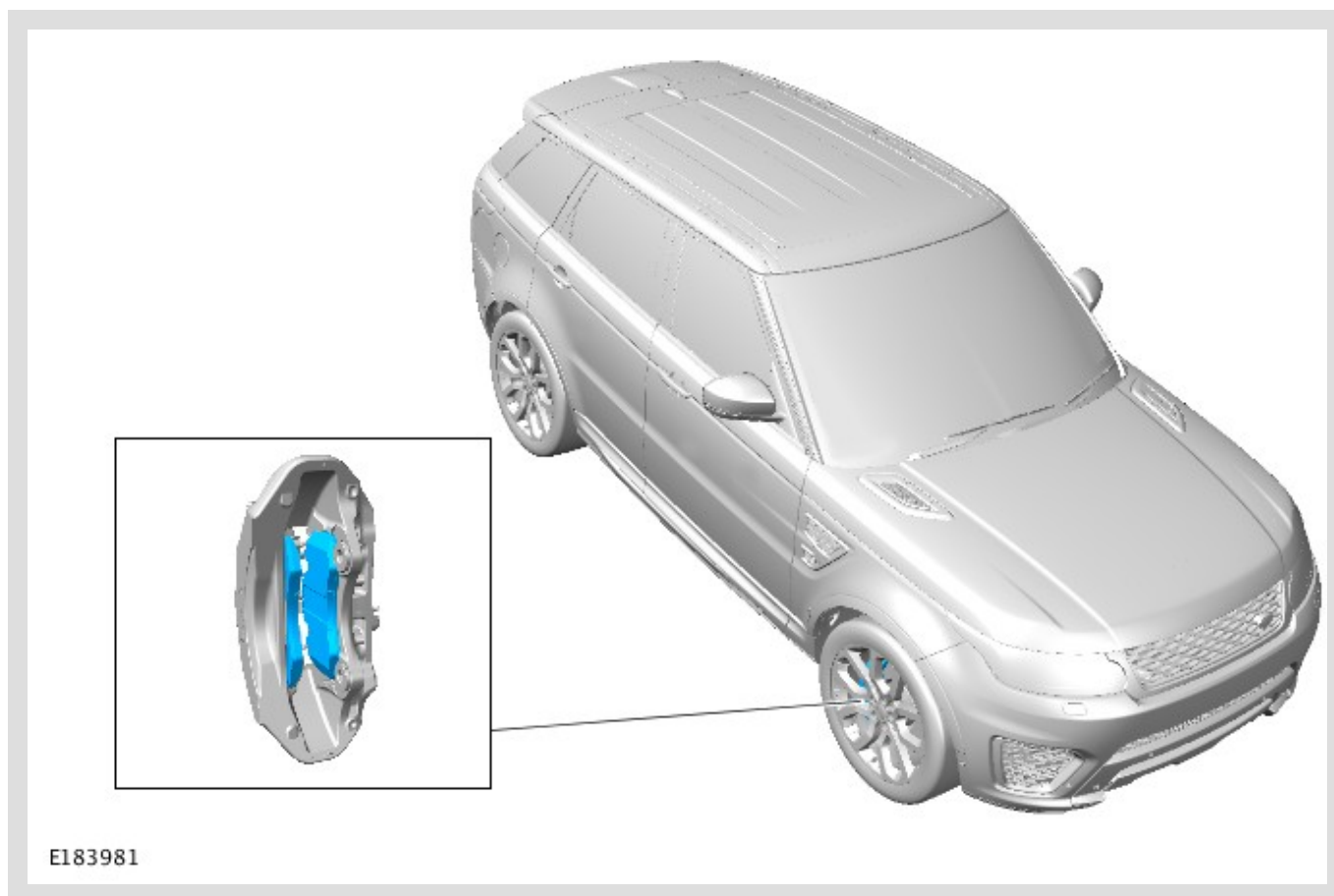
Normal Warranty procedures apply.

COMPONENT LOCATION

1

 **NOTE:**

Front right shown; front left similar.



Component location.

WORKSHOP PROCEDURE:

WARNING:

Brake pads must be renewed in axle sets only. Failure to follow this instruction may result in braking efficiency being impaired.

1

WARNING:

Make sure to support the vehicle with axle stands.

Raise and support the vehicle (see TOPlx Workshop Manual section 100-02: General Information - Service Information - Jacking and Lifting).

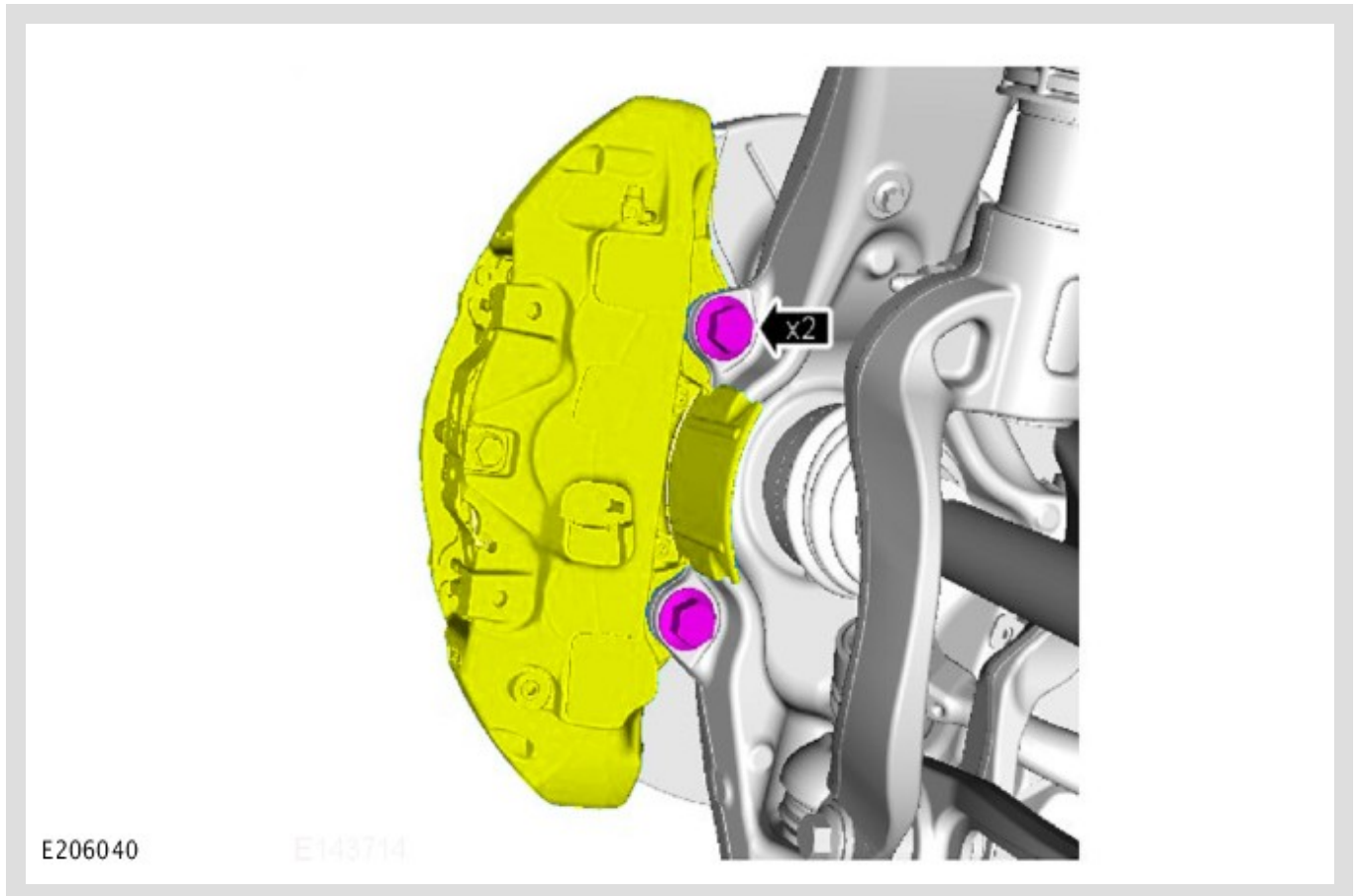
2 Remove the brake pads (see TOPIx section 206-03: Front Disc Brake - Brake Pads).

- Follow steps 1-6 for the removal.

3

⚠ CAUTIONS:

- Make sure that no load is placed on the brake hose.
- Discard the bolts.



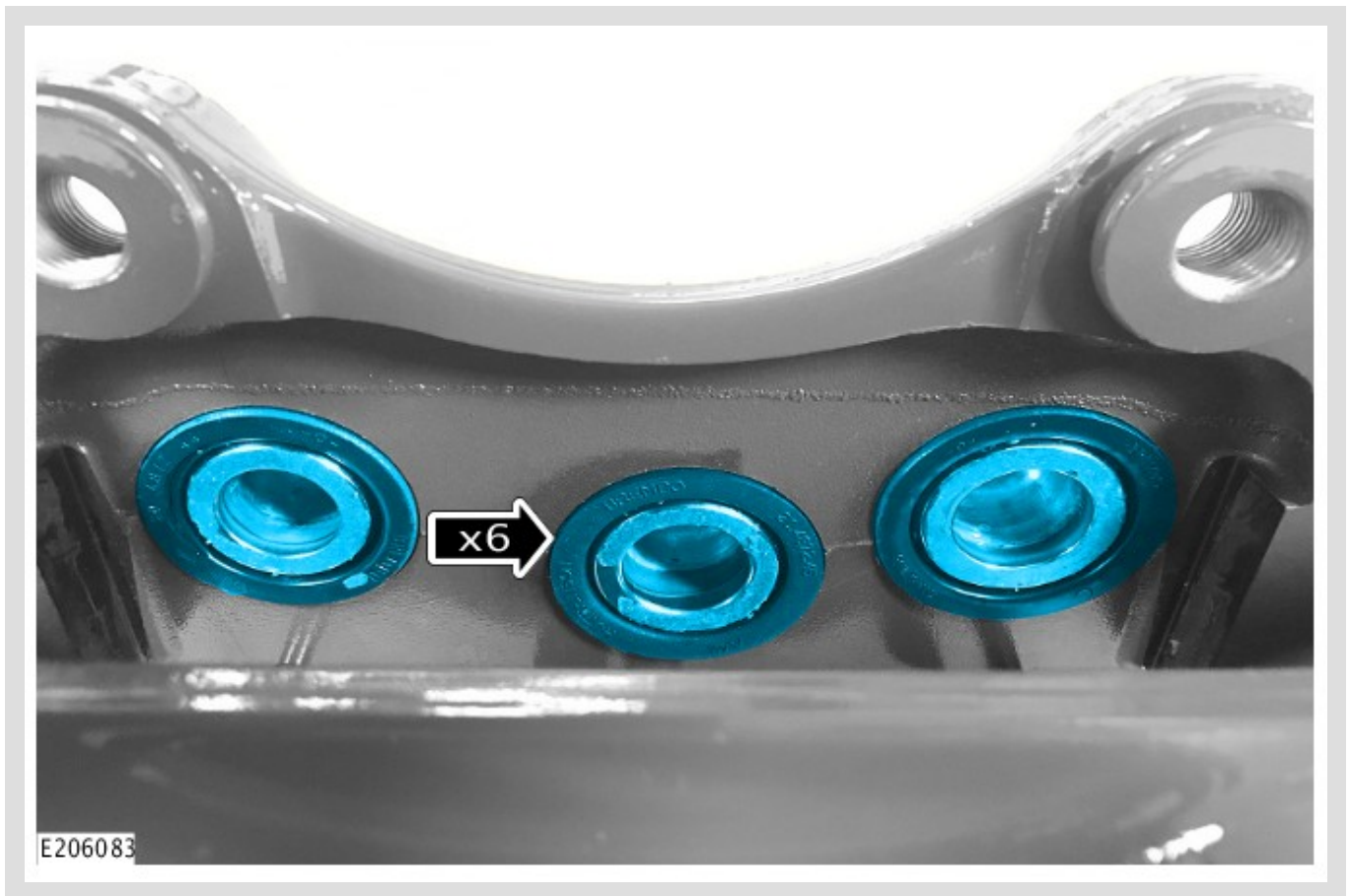
Remove and discard the bolts.

- Reposition the caliper, making sure to leave access to the brake caliper pistons and brake caliper piston dust boots.

4

⚠ CAUTIONS:

- Do not damage the brake caliper pistons or the brake caliper piston dust boots.
- Make sure the brake caliper piston dust boots are correctly seated.



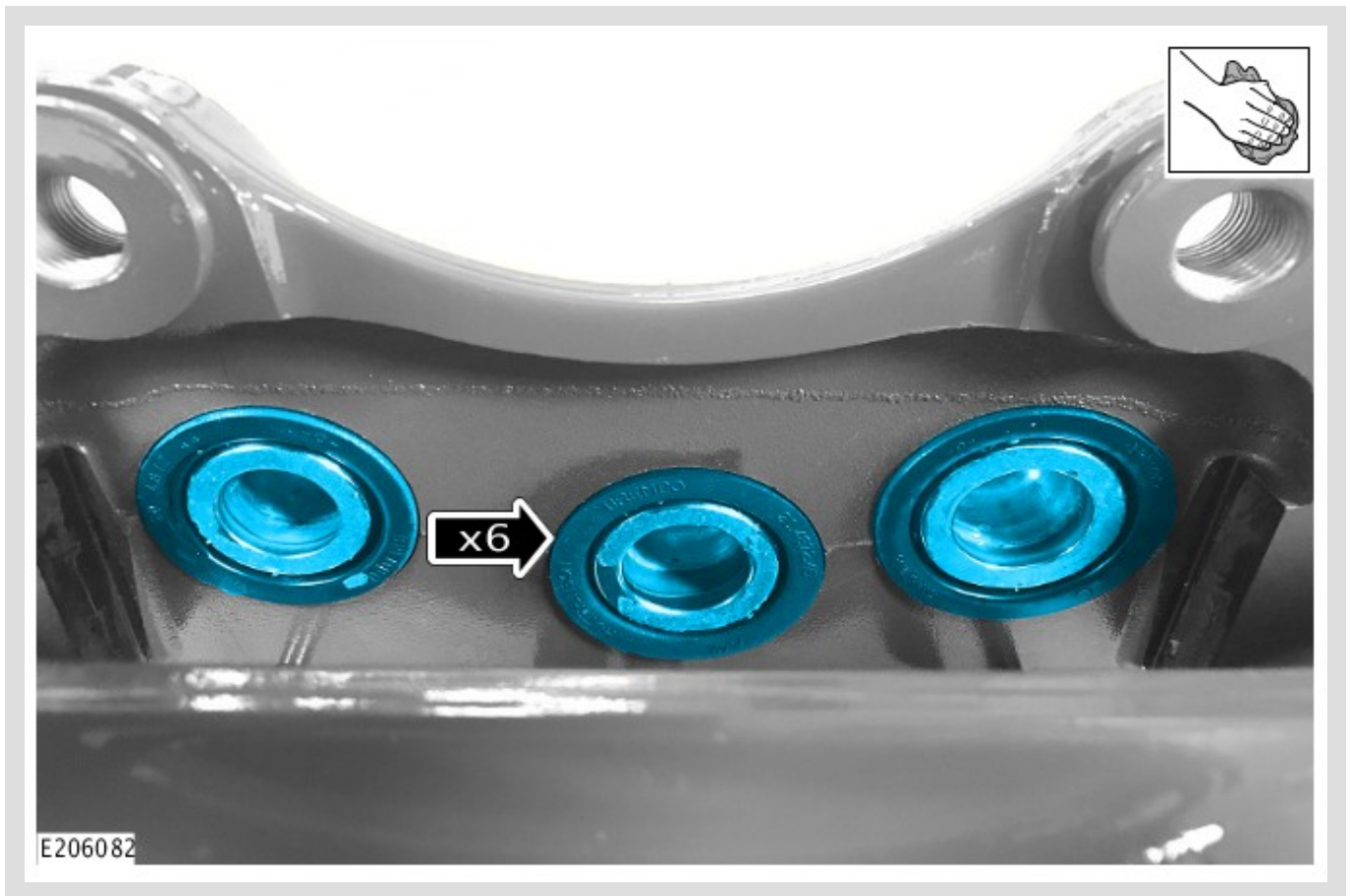
Inspect brake caliper piston dust boots for damage and brake caliper pistons for corrosion.

- If there is no damage to the brake caliper piston dust boots or corrosion to the brake caliper pistons, go to Step 6.
- If there is damage to the brake caliper piston dust boots or corrosion to the brake caliper pistons, go to Step 5.

5 Replace the brake caliper piston dust boots (see TOPlx Workshop Manual section 206-03: Front disc brake - Brake caliper dust boot - Vehicles with: High Performance Brakes)

6 **NOTE:**

The brake caliper pistons and brake caliper piston dust boots **MUST** be cleaned thoroughly. Failure to follow this instruction may result in the brake pads not adhering to the brake calipers pistons properly, leading to reduced effectiveness of the repair.



Thoroughly clean all of the brake caliper pistons and the brake caliper piston dust boots with brake cleaner to remove all traces of grease and dust.

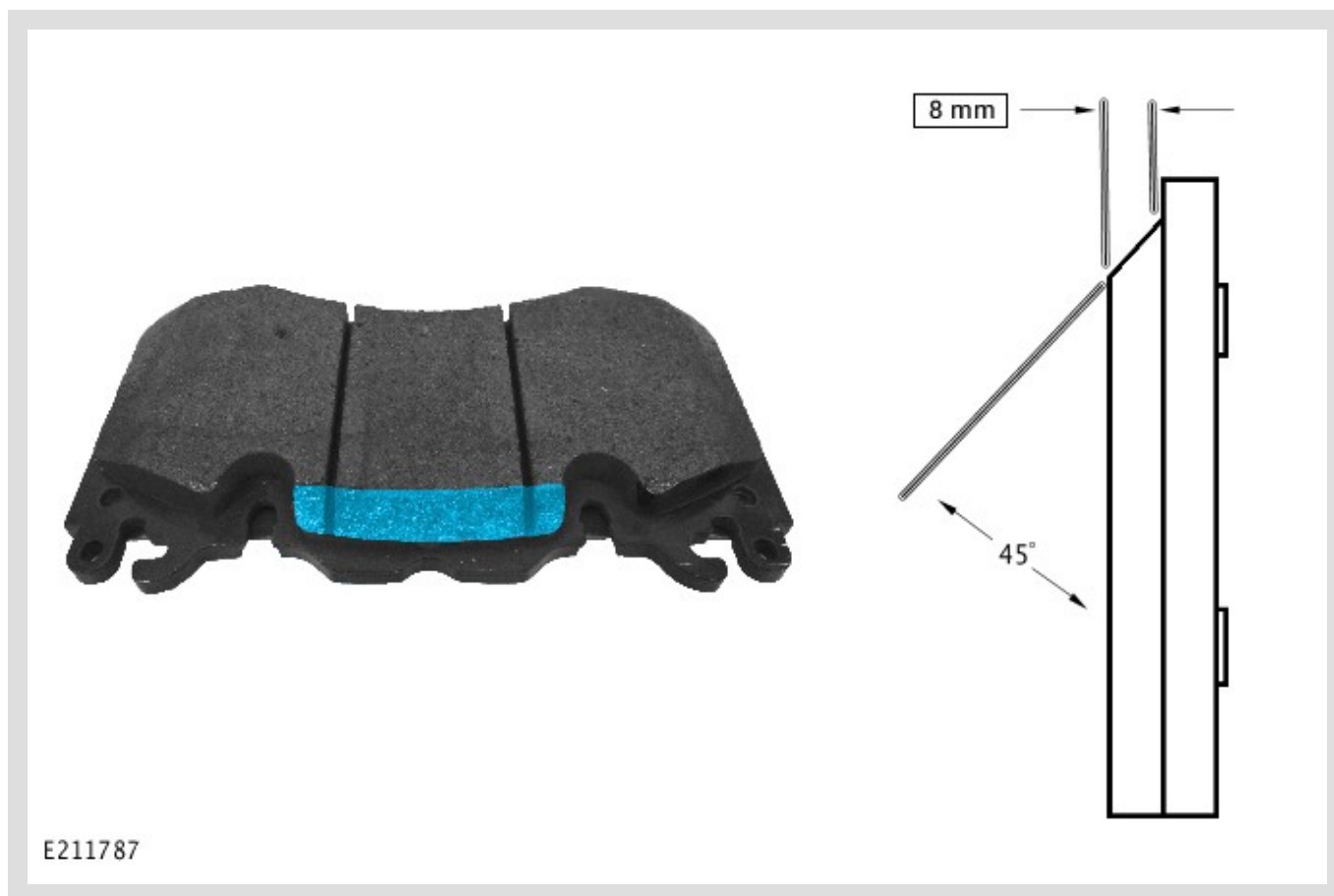
7

 **WARNING:**

Appropriate Personal Protective Equipment (PPE) must be worn when filing the brake pads. Avoid breathing dusts from powdery chemical materials or those arising from dry abrasion operations. Wear respiratory protection if ventilation is inadequate.

 **NOTES:**

- Make sure the file is free from contaminants.
- File only the highlighted area of the brake pad.
- There is a $2^\circ \pm$ tolerance on the 45° chamfer of the brake pads.

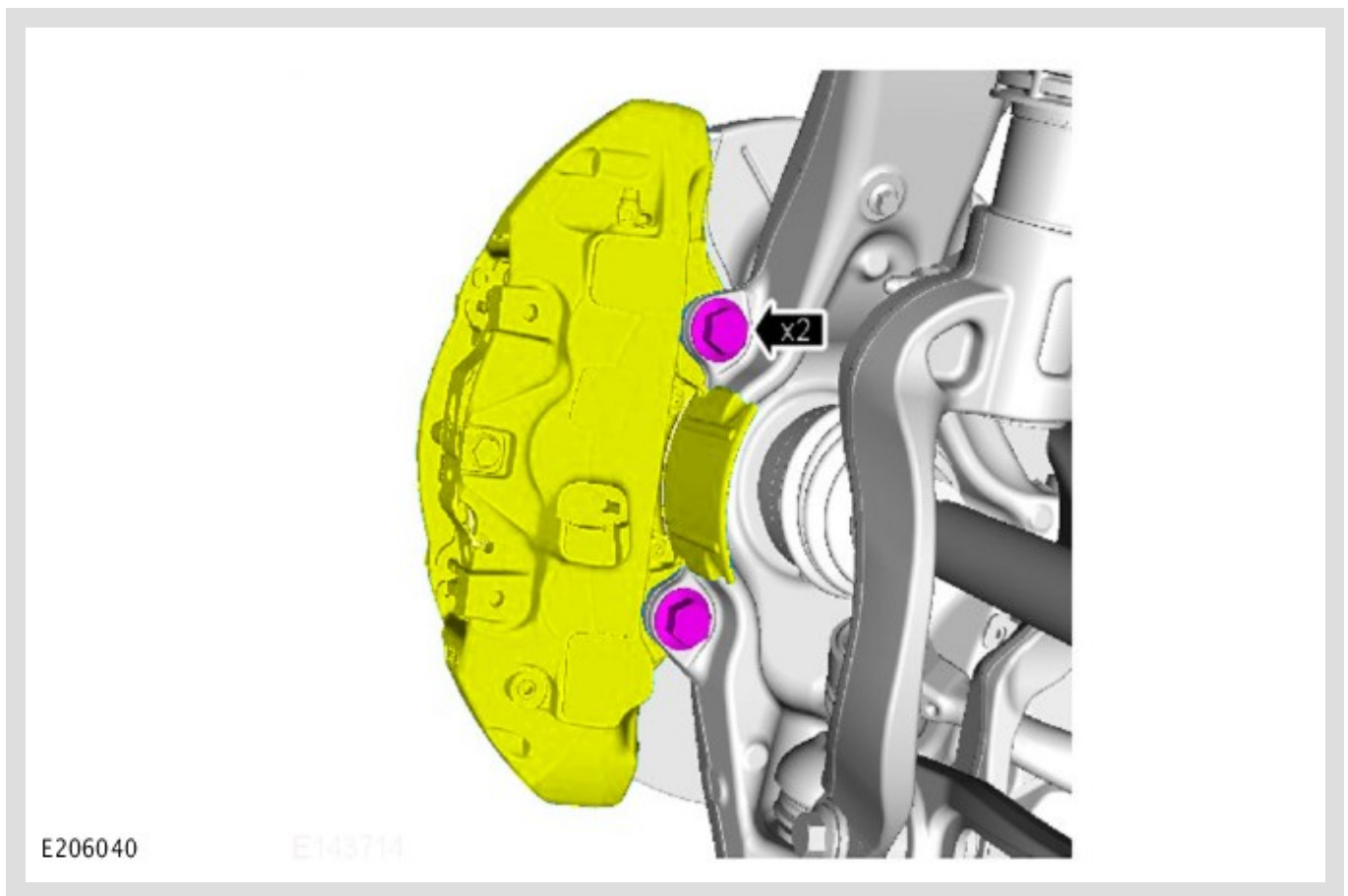


Use a suitable file to chamfer the new front brake pads as shown.

8

⚠ CAUTIONS:

- Make sure that no load is placed on the brake hose.
- New bolts **MUST** be fitted.



Install the brake caliper.

- Torque: **Stage 1: 133 Nm**
- Torque: **Stage 2: 60°**

9

ⓘ CAUTION:

Apply long life lubricating grease only to the highlighted areas shown.



Apply long life lubricating grease to both ends of the brake pads.

10



Gently remove the brake pad backing.

11

Install the brake pads (see TOPlx section 206-03: Front Disc Brake - Brake Pads).

- Follow steps 7-12 for installation.