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2020.0 DEFENDER (LE), 206-03

FRONT DISC BRAKE

## BRAKE PADS 4 PISTON FIXED CALIPER (G2413849)

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## REMOVAL AND INSTALLATION

### MATERIALS

| NAME          | SPECIFICATION |
|---------------|---------------|
| Brake Cleaner | 3U7J-2C410-AA |

### GENERAL EQUIPMENT

| EQUIPMENT NAME                                  |
|-------------------------------------------------|
| Cable ties                                      |
| Jaguar Land Rover approved diagnostic equipment |

### PART(S)

| STEP                | PART NAME                     | QUANTITY |
|---------------------|-------------------------------|----------|
| Installation Step 6 | Brake caliper carrier bolt(s) | 2        |

## REMOVAL



#### WARNINGS:

- Brake pads must be renewed in axle sets only. Failure to follow this instruction may result in braking efficiency being impaired.
- If the brake pad wear warning indicator has been activated, a new brake pad wear sensor must be installed.



#### NOTE:

- This procedure contains some variation in the illustrations depending on the vehicle specification, but the essential information is always correct.
- This procedure contains illustrations for left side components, right side components are similar.

1. Use the Jaguar Land Rover (JLR) approved diagnostic equipment to activate the Integrated Power Brake assembly mode.

General Equipment: [Jaguar Land Rover approved diagnostic equipment](#)

2. Raise and support the vehicle on a suitable 2 post lift.  
Refer to: [Jacking and Lifting](#) (100-02 Jacking and Lifting, Description and Operation).

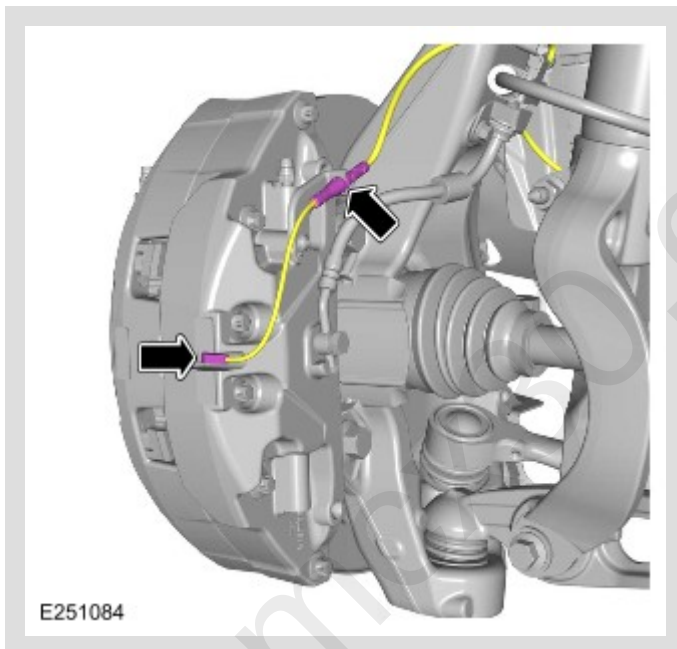
3. Remove the wheel and tire.  
Refer to: [Wheel and Tire](#) (204-04 Wheels and Tires, Removal and Installation).

4. **⚠ CAUTION:**

The brake pad wear indicator sensor is easily damaged. Do not use a lever to remove the sensor.  
Use fingers only.

**⚠ NOTE:**

Left side only.



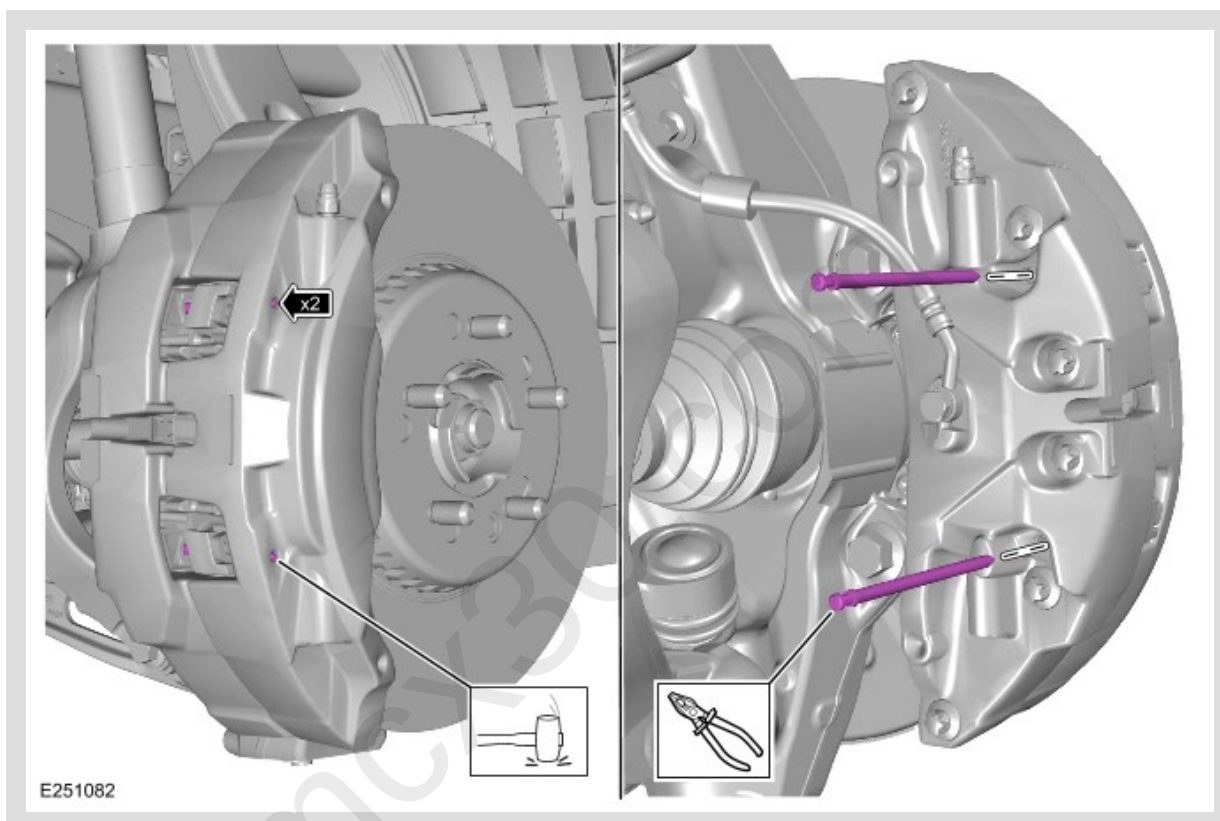
- Disconnect the brake pad wear sensor.
- Release the brake pad wear sensor grommet and position the component to one side.

**⚠ CAUTION:**

- Make sure that excessive force is not used. Failure to follow this instruction may result in damage to the vehicle.
- Take extra care not to damage the component.

**⚠ NOTE:**

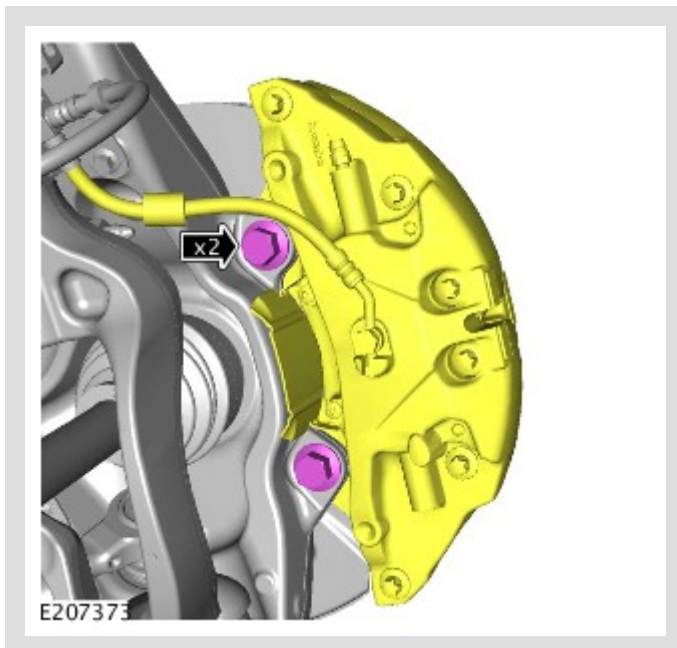
Note the orientation of the brake caliper guide pins.



Use suitable tools to remove the 2 brake pad slide pins.

**ⓘ CAUTION:**

Do not allow the brake caliper to hang on the brake hose.



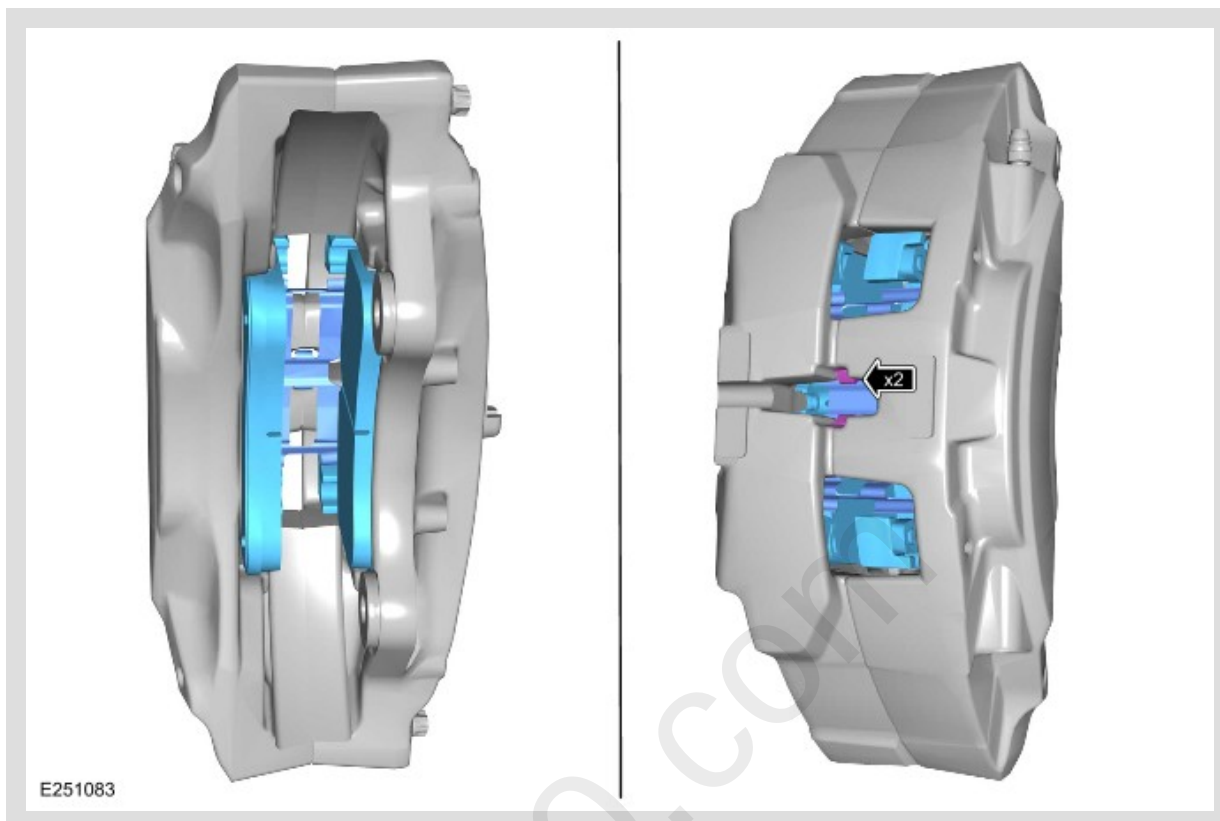
- Remove and discard the brake caliper bolts.
- Release the brake caliper and position to one side.

*General Equipment:* [Cable ties](#)

7.

 **NOTE:**

Note the orientation of the brake pads and the anti-rattle spring.



- Release the 2 clips.
- Remove the brake pads and the anti-rattle spring.

8. Repeat the above procedure for the other side.

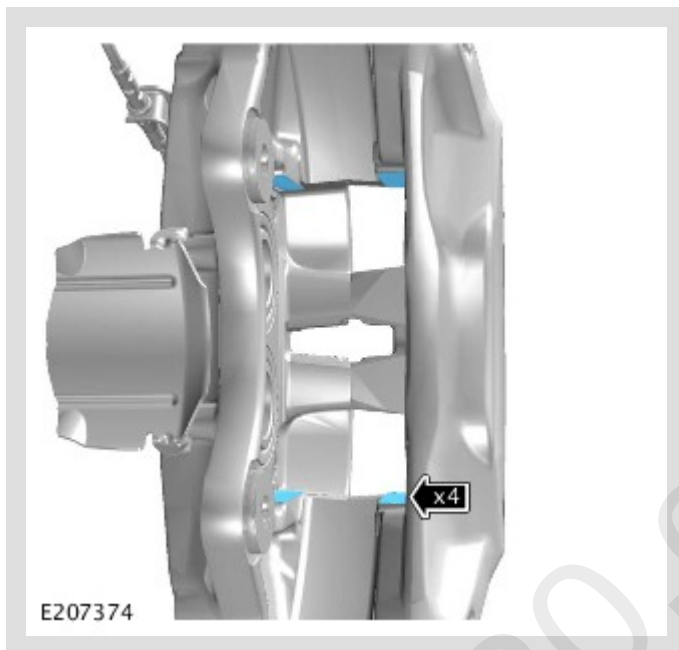
## INSTALLATION

1.



### WARNING:

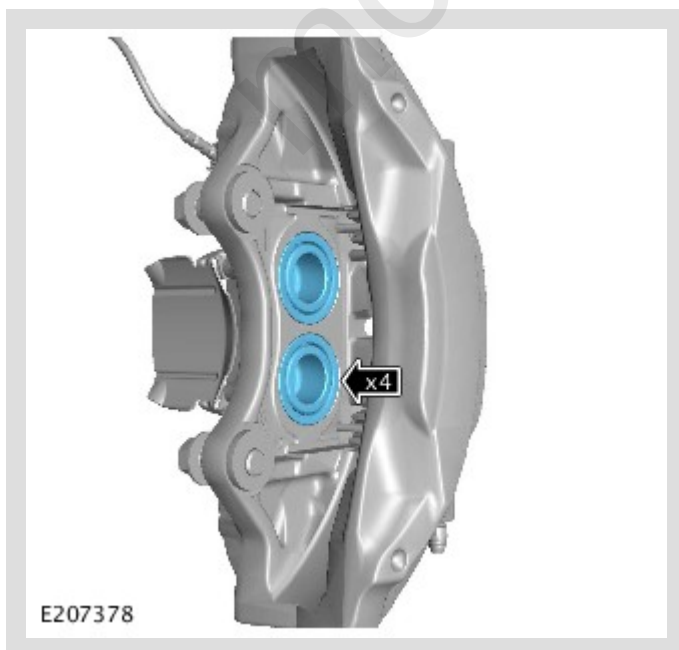
Do not use compressed air to clean brake components. Dust from friction materials can be harmful if inhaled.



Clean and inspect the brake caliper at the brake pad contact points.

Material: [Brake Cleaner \(3U7J-2C410-AA\)](#)

2.

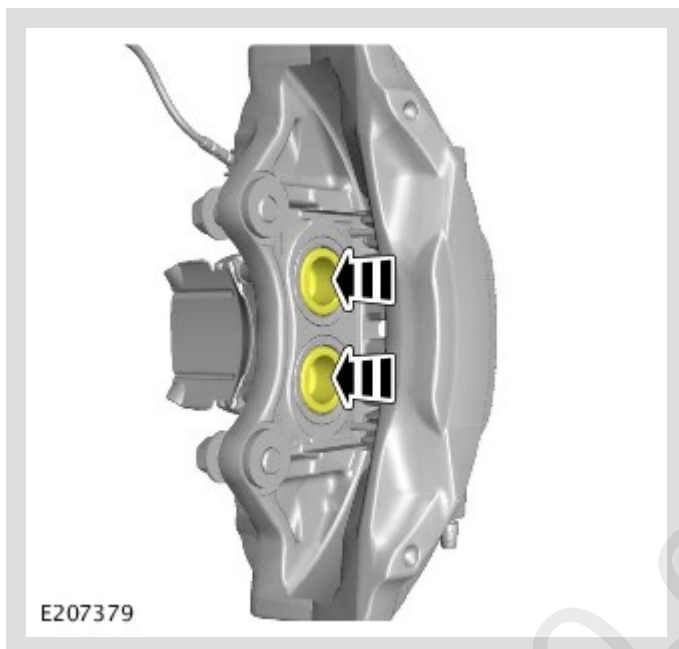


Use brake cleaning fluid to clean the caliper piston seals and inspect for damage.

Material: [Brake Cleaner \(3U7J-2C410-AA\)](#)

**ⓘ CAUTION:**

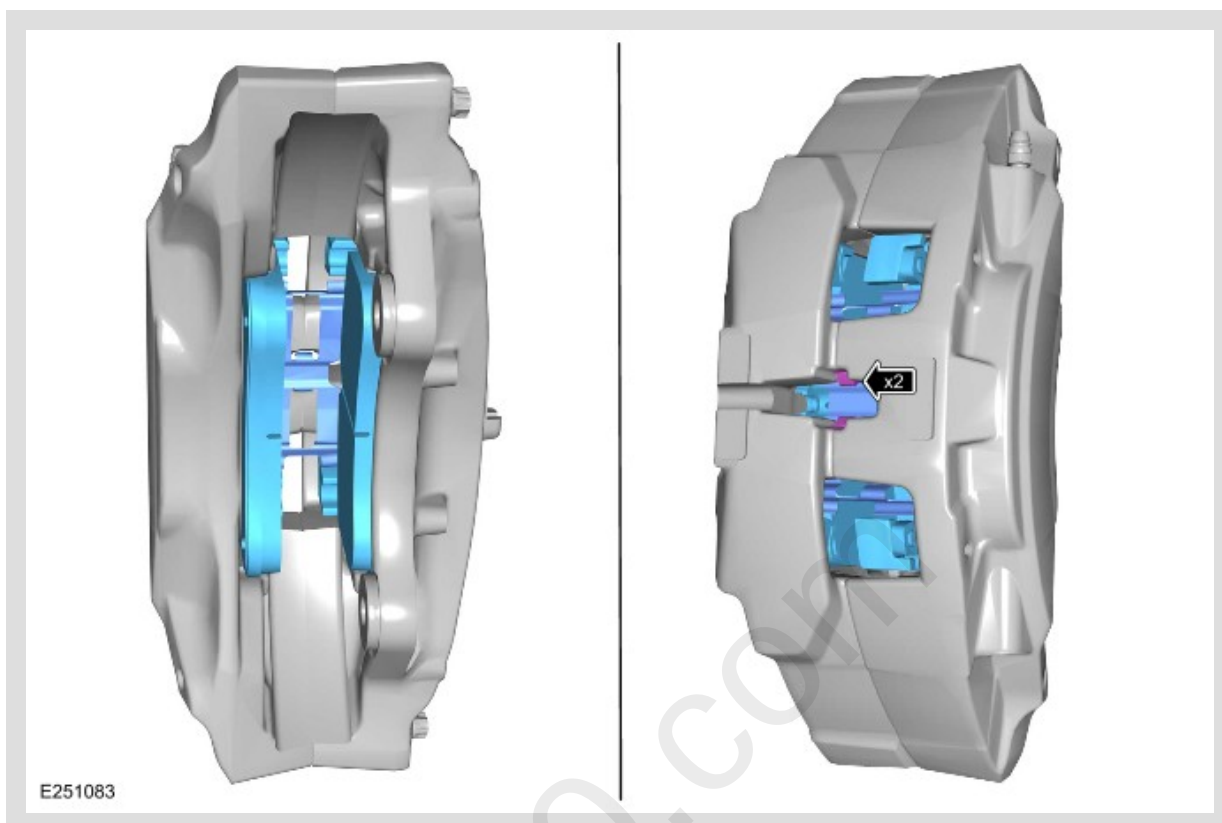
- Check the brake fluid reservoir level before pushing the piston back, failure to follow this instruction may result in damage to the vehicle.
- As the piston is pushed back into the caliper housing, the brake fluid level in the reservoir will rise. Do not allow the reservoir to overflow.



Use a suitable piston retraction tool to press the 4 pistons into the caliper housing.

**ⓘ CAUTION:**

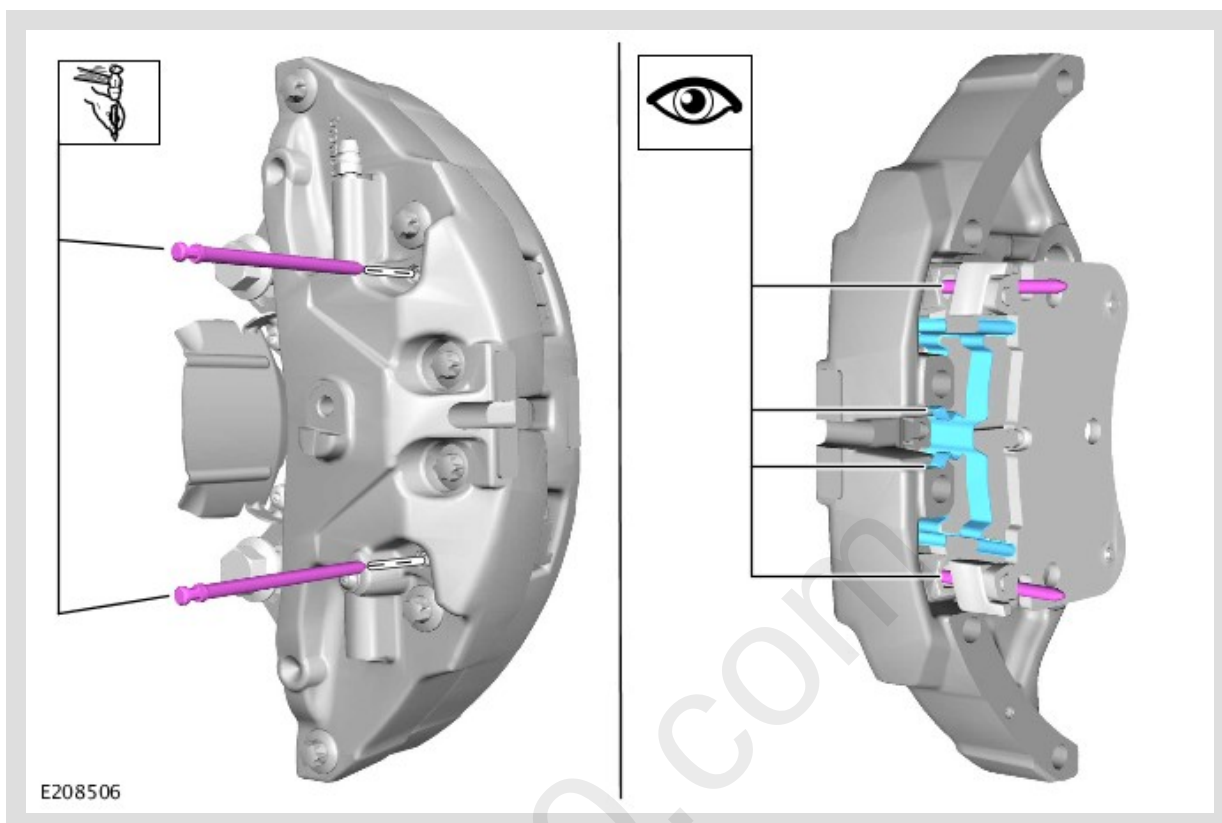
Make sure the anti-rattle spring is installed in the correct orientation.



- Install the anti-rattle spring.
- Install the brake pads.

 **NOTE:**

Make sure the brake caliper guide pins are installed in the correct orientation.

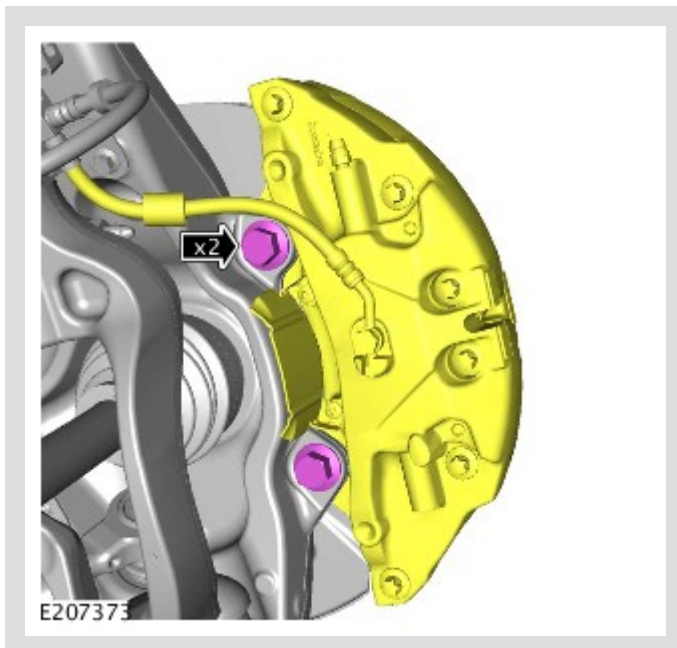


Install the 2 slide pins.

6.

**ⓘ CAUTION:**

Make sure that new bolts are used.



Install the brake caliper.

Renew Part: *Brake caliper carrier bolt(s)* Quantity: 2.

Torque

Stage1: 133Nm

Stage2: 60°

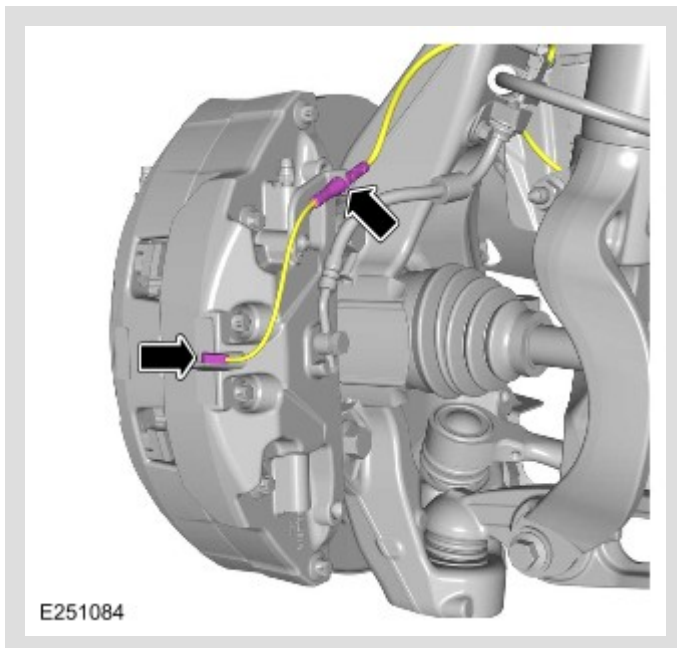
7.

Repeat the above procedure for the other side.

8.

 **NOTE:**

Left side only.



- Connect the brake pad wear sensor to the brake pad.
- Secure the brake pad wear sensor grommet.

9.

Install the front wheels and tires.

Refer to: [Wheel and Tire](#) (204-04 Wheels and Tires, Removal and Installation).

 **CAUTION:**

Failure to follow this instruction may lead to brake warning lamps and Diagnostic Trouble Code(s) (DTC) being set.

1.

 **NOTE:**

Although the brake pedal might feel firm make sure to hold the pedal through the 10 second period.

If the Integrated Power Brake unit - 'Assembly Mode' has not been activated, press and hold the brake pedal in a single apply for 10 seconds.

2. If the brake pedal felt soft and fell to the floor proceed to **substep 4**.
3. If the brake pedal felt firm proceed to **substep 5**.

4.

 **NOTE:**

Make sure to repeatedly press the brake pedal until a firm brake pedal feel is reached.

If the Integrated Power Brake unit - 'Assembly Mode' has been activated, press the brake pedal several times until a firm brake pedal feel is reached.

5. Check the fluid level in the brake fluid reservoir and top-up with brake fluid if necessary. Refer to: [Specifications](#) (206-00 Brake System - General Information, Specifications).

11.

Use the JLR approved diagnostic equipment to deactivate the Integrated Power Brake assembly mode.

*General Equipment:* [Jaguar Land Rover approved diagnostic equipment](#)