

PUBLISHED: 02-OCT-2017
2017.0 DISCOVERY (LR), 206-03

FRONT DISC BRAKE

BRAKE CALIPER - VEHICLES WITH: STANDARD BRAKES (G1606171)

REMOVAL AND INSTALLATION

70.55.24	HOUSING ASSEMBLY - BRAKE CALIPER - FRONT - EACH - RENEW	ALL DERIVATIVES	0.7	USED WITHINS
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70.55.25	HOUSING ASSEMBLY - BRAKE CALIPER - REAR - EACH - RENEW	ALL DERIVATIVES	1.3	USED WITHINS
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REMOVAL



WARNING:

If the brake pad wear warning light has been activated, a new brake pad wear sensor must be installed.

 **NOTE:**

- Some variation in the illustrations may occur, but the essential information is always correct.
- Some components shown removed for clarity.

1.



WARNING:

Make sure to support the vehicle with axle stands.

Raise and support the vehicle.

2.

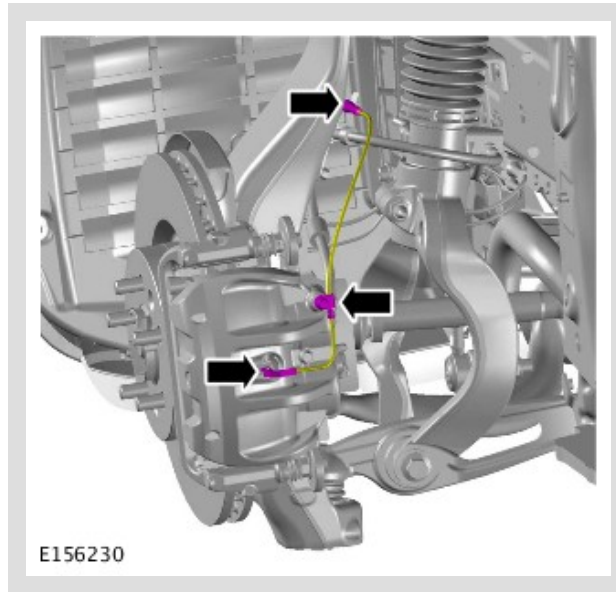
Remove the wheel and tire.

Refer to: Wheel and Tire - TDV6 3.0L Diesel /V6 S/C 3.0L Petrol /INGENIUM I4 2.0L Diesel (204-04 Wheels and Tires, Removal and Installation).

3.

⚠ CAUTION:

The brake pad wear indicator sensor, which is installed on the left hand side only, is easily damaged. Do not use a lever to remove the sensor.



Inspect the brake pad wear sensor for signs of wear or damage. Install a new sensor if necessary.

4.



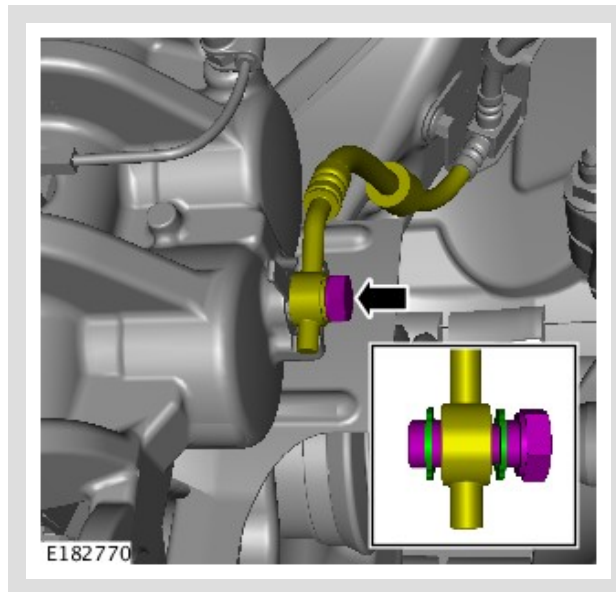
WARNING:

Be prepared to collect escaping fluid.

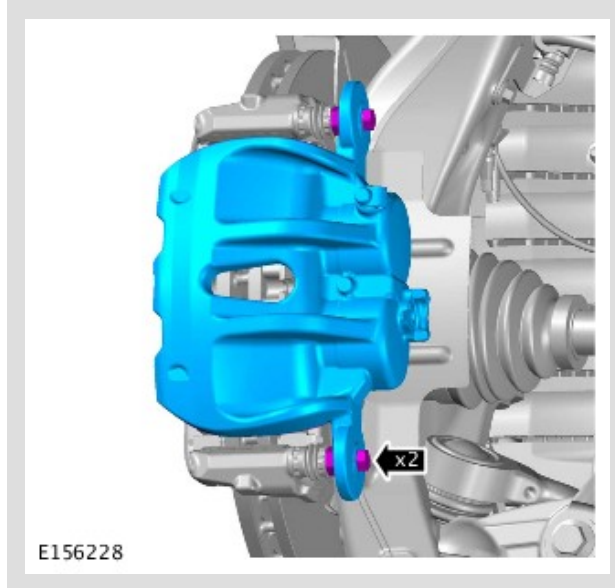


CAUTION:

- Before disconnecting or removing the components, make sure the area around the joint faces and connections are clean.
- Using a suitable hose clamp, clamp the brake hose prior to removal.



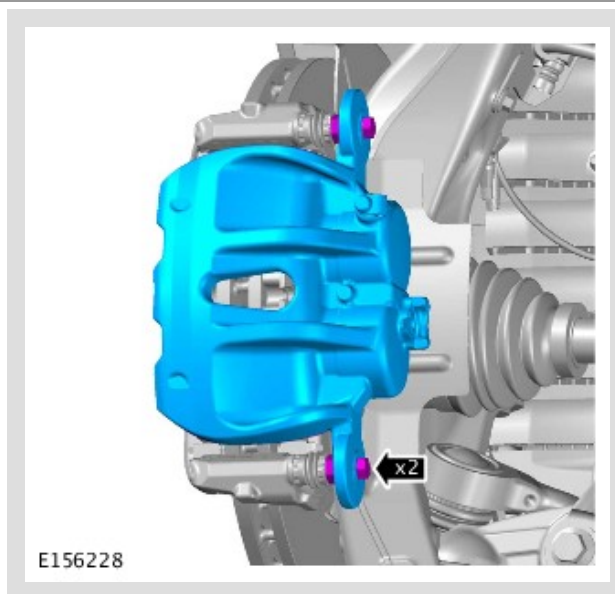
5.



Remove the brake caliper housing.

INSTALLATION

1.

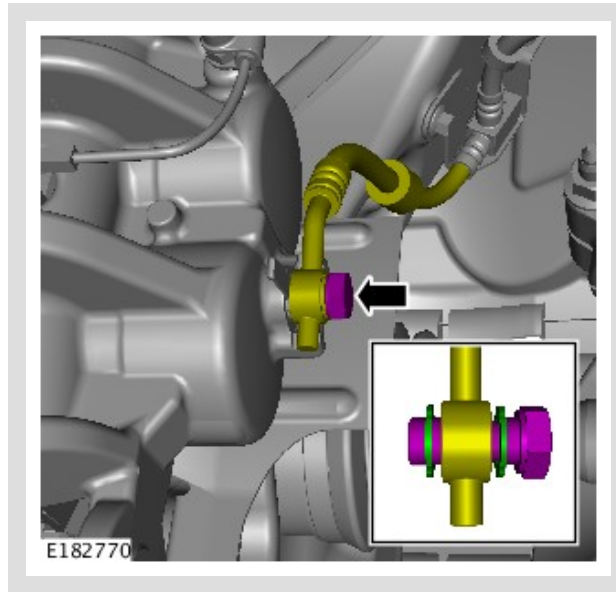


Torque: 35 Nm

2.

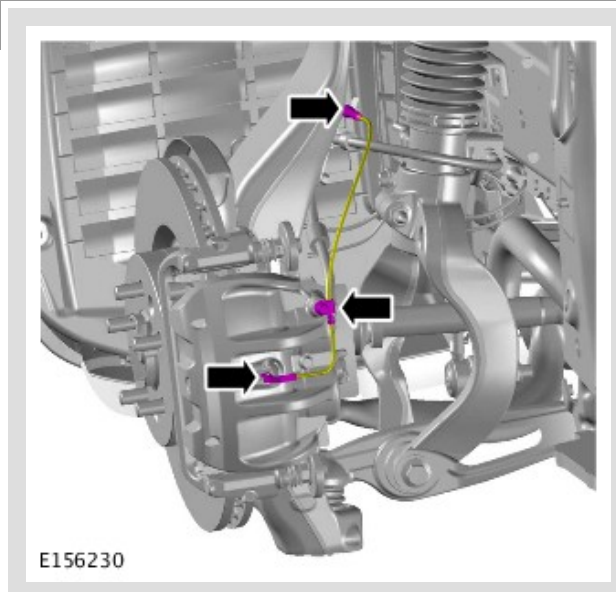
⚠ CAUTION:

Inspect the brake hose sealing washers for signs of damage, if damage is present install new sealing washers.



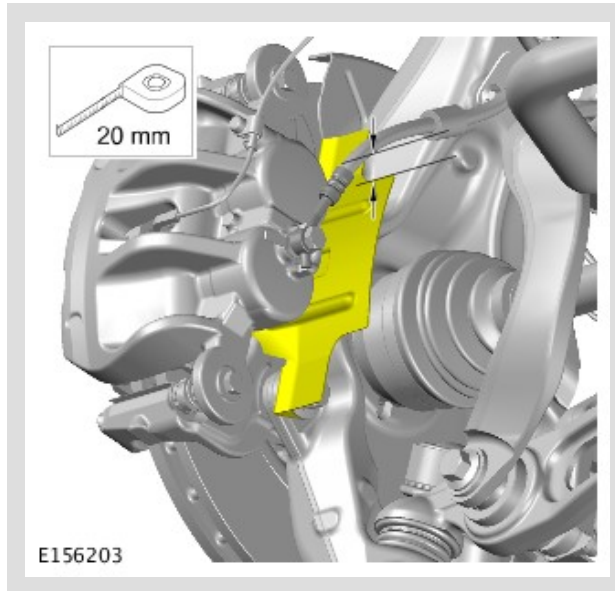
Torque: 32 Nm

3.



Carefully install the brake pad wear indicator sensor.

4.



Make sure that the scoop is at least 20mm from the brake hose after the caliper bolts are tighten. If necessary, manipulate into position.

5.

Bleed the brake system.

Refer to: Brake System Bleeding - Vehicles With: High Performance Brakes (206-00 Brake System - General Information, General Procedures).

6.

Install the wheel and tire.

Refer to: Wheel and Tire - TDV6 3.0L Diesel /V6 S/C 3.0L Petrol /INGENIUM I4 2.0L Diesel (204-04 Wheels and Tires, Removal and Installation).

PUBLISHED: 23-JUN-2017
2017.0 DISCOVERY (LR), 206-03

FRONT DISC BRAKE

BRAKE DISC - VEHICLES WITH: HIGH PERFORMANCE BRAKES (G2003542)

REMOVAL AND INSTALLATION

70.12.10	DISC - FRONT - EACH - RENEW	ALL DERIVATIVES	0.4	USED WITHINS	
70.12.33	DISC - REAR - EACH - RENEW	ALL DERIVATIVES	1	USED WITHINS	

PART(S)

STEP	PART NAME	QUANTITY
Installation Step 4	Brake caliper carrier bolt(s)	2

REMOVAL



WARNING:

If installing a new brake disc, install new brake pads.



CAUTION:

Brake discs must be renewed in pairs.

NOTE:

The brake pad wear warning indicator sensor must be replaced each time the brake pads are serviced.

1.

WARNING:

Make sure to support the vehicle with axle stands.

Raise and support the vehicle.

2.

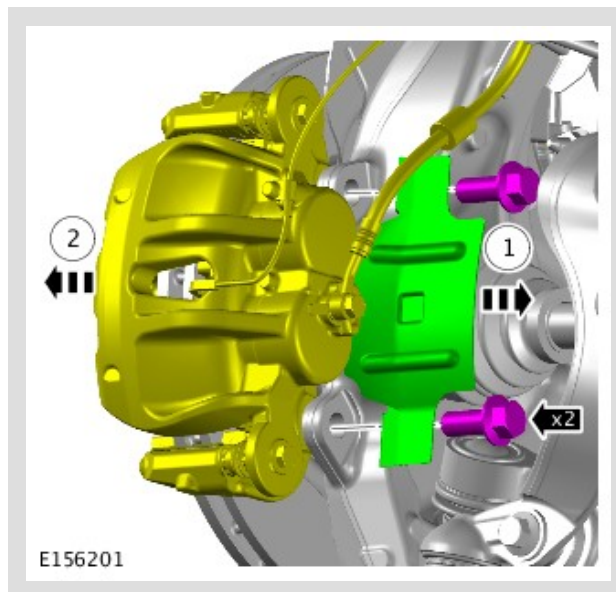
Remove the front road wheel.

Refer to: Wheel and Tire - TDV6 3.0L Diesel /V6 S/C 3.0L Petrol /INGENIUM I4 2.0L Diesel (204-04 Wheels and Tires, Removal and Installation).

3.

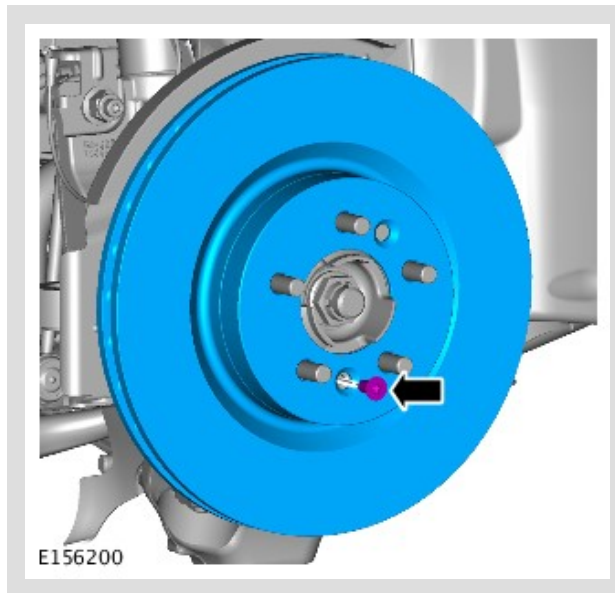
CAUTION:

Make sure that the brake hose does not support the full weight of the brake caliper assembly.



Tie aside.

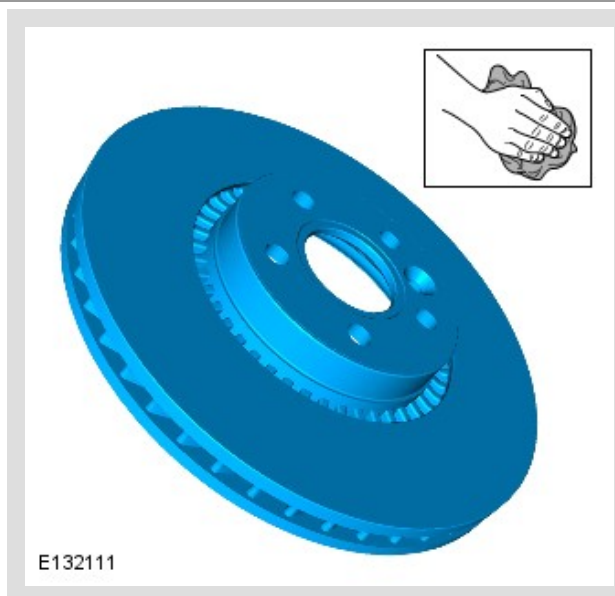
4.



Remove the brake disc.

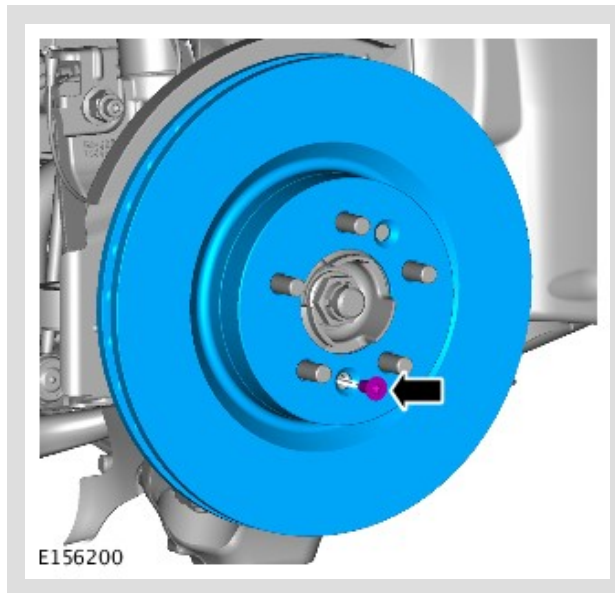
INSTALLATION

1.



Clean the brake disc using brake cleaning fluid.

2.



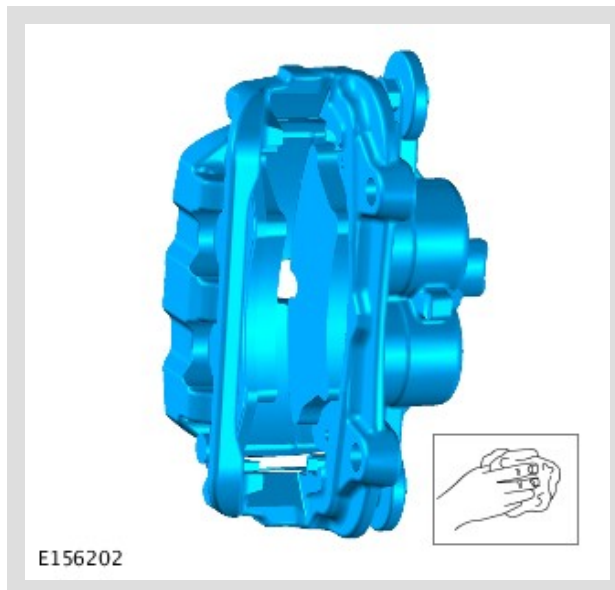
Torque: 35 Nm

3.



WARNING:

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

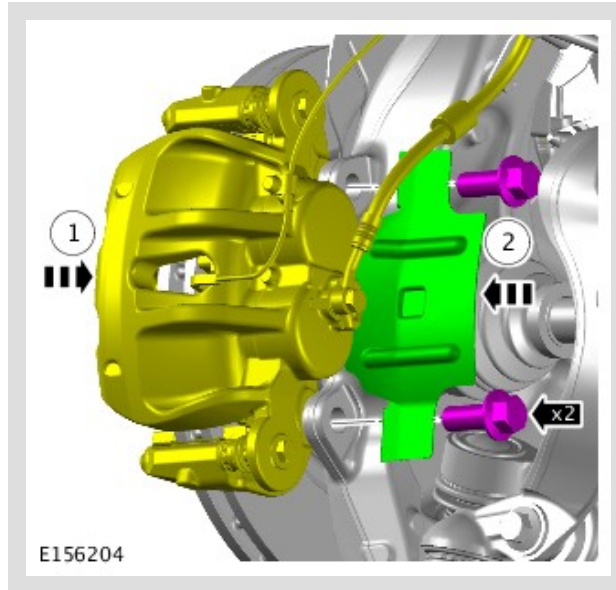


Clean the brake caliper housing and anchor plate using brake cleaning fluid.

4.

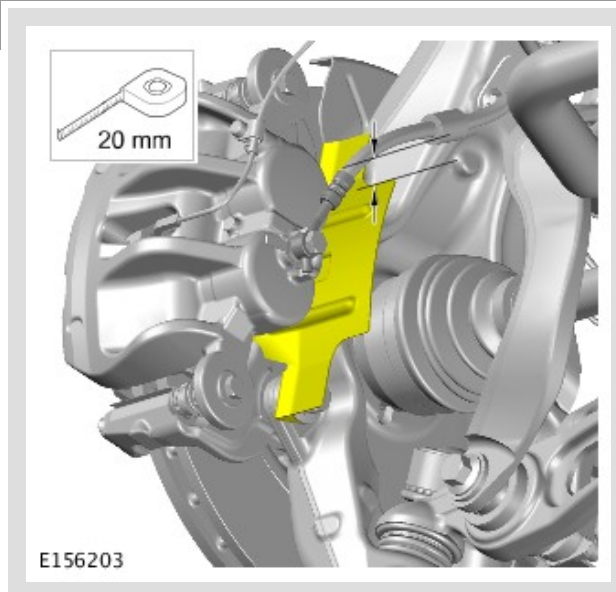
 CAUTION:

Make sure that the brake hose is not twisted and is correctly located.



Renew Part: *Brake caliper carrier bolt(s)* Quantity: 2 .
Torque: 282 Nm

5.



6. Install the front wheel.

Refer to: Wheel and Tire - TDV6 3.0L Diesel /V6 S/C 3.0L Petrol /INGENIUM
I4 2.0L Diesel (204-04 Wheels and Tires, Removal and Installation).

7. Depress the brake pedal several times, check the fluid level in the brake fluid reservoir and top-up with brake fluid if necessary.

PUBLISHED: 28-APR-2017
2017.0 DISCOVERY (LR), 206-03

FRONT DISC BRAKE

BRAKE DISC - VEHICLES WITH: STANDARD BRAKES (G1885320)

REMOVAL AND INSTALLATION

70.12.10	DISC - FRONT - EACH - RENEW	ALL DERIVATIVES	0.4	USED WITHINS	
70.12.33	DISC - REAR - EACH - RENEW	ALL DERIVATIVES	1	USED WITHINS	

PART(S)

STEP	PART NAME	QUANTITY
Installation Step 4	Brake caliper carrier bolt(s)	1

REMOVAL



WARNING:

If installing a new brake disc, install new brake pads.



CAUTION:

Brake discs must be renewed in pairs.

NOTE:

The brake pad wear warning indicator sensor must be replaced each time the brake pads are serviced.

1.

WARNING:

Make sure to support the vehicle with axle stands.

Raise and support the vehicle.

2.

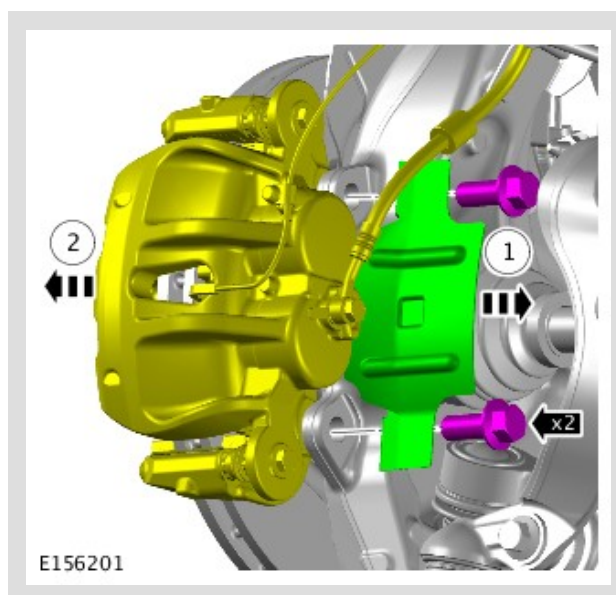
Remove the front road wheel.

Refer to: Wheel and Tire - GTDi 2.0L Petrol/TDV6 3.0L Diesel /TDV8 4.4L Diesel/V6 S/C 3.0L Petrol /V8 N/A 5.0L Petrol/V8 S/C 5.0L Petrol (204-04 Wheels and Tires, Removal and Installation).

3.

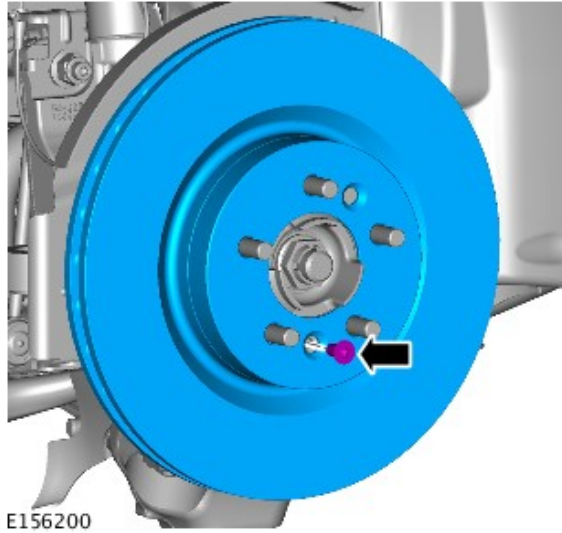
CAUTION:

Make sure that the brake hose does not support the full weight of the brake caliper assembly.



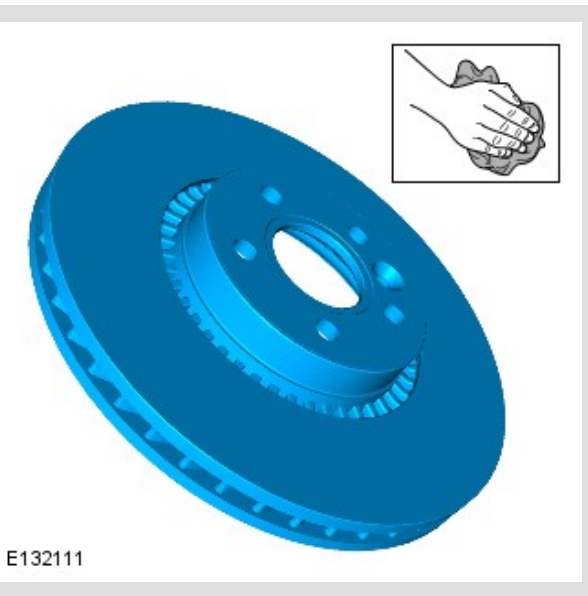
Tie aside.

4.



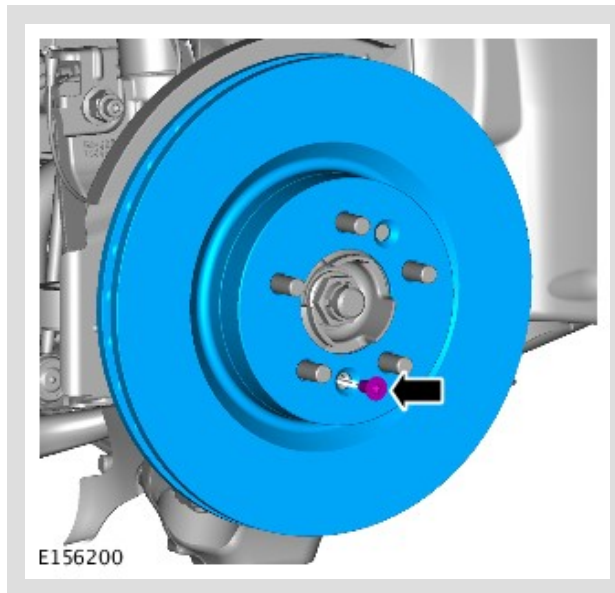
INSTALLATION

1.



Clean the brake disc using brake cleaning fluid.

2.



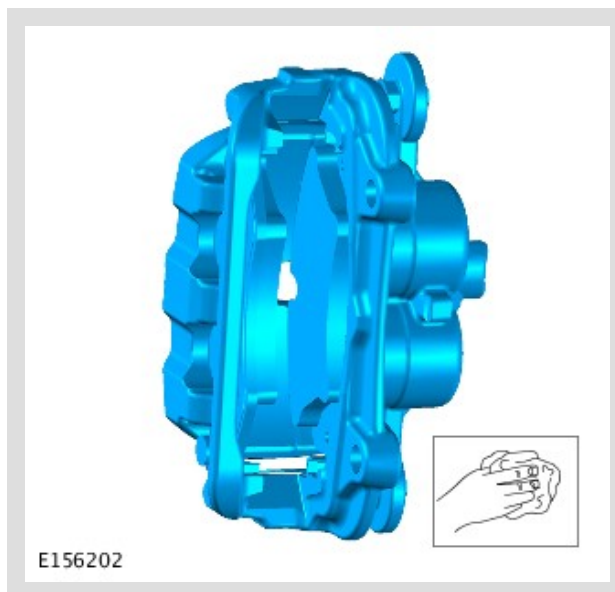
Torque: 35 Nm

3.



WARNING:

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

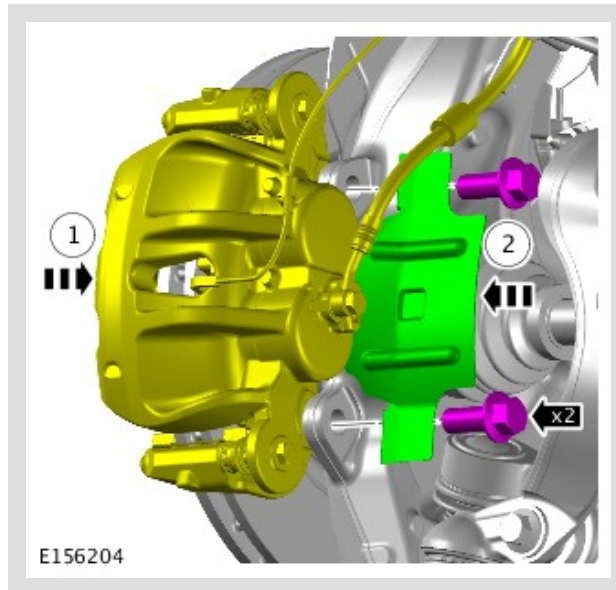


Clean the brake caliper housing and anchor plate using brake cleaning fluid.

4.

⚠ CAUTION:

Make sure that the brake hose is not twisted and is correctly located.



Renew Part: *Brake caliper carrier bolt(s)* Quantity: 1 .

Torque:

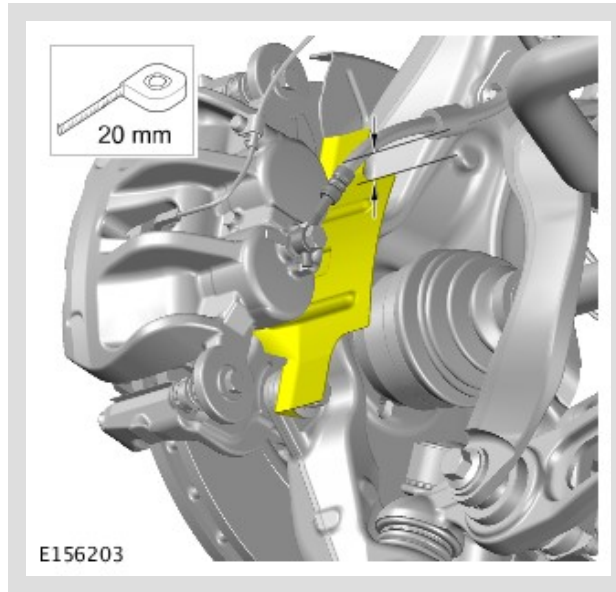
Stage 1: 135 Nm

Stage 2: 60°

5.

⚠ CAUTION:

Make sure that the scoop is at least 20mm from the brake hose after the caliper bolts are tighten. If necessary, manipulate into position.



6. Install the front wheel.

Refer to: Wheel and Tire - GTDi 2.0L Petrol/TDV6 3.0L Diesel /TDV8 4.4L Diesel/V6 S/C 3.0L Petrol /V8 N/A 5.0L Petrol/V8 S/C 5.0L Petrol (204-04 Wheels and Tires, Removal and Installation).

7. Depress the brake pedal several times, check the fluid level in the brake fluid reservoir and top-up with brake fluid if necessary.

PUBLISHED: 31-JUL-2012
2017.0 DISCOVERY (LR), 206-03

FRONT DISC BRAKE

DIAGNOSIS AND TESTING

For additional information.

REFER to: Brake System (206-00, Diagnosis and Testing).

PUBLISHED: 21-NOV-2016
2017.0 DISCOVERY (LR), 206-03

FRONT DISC BRAKE

SPECIFICATIONS

Item	Specification
Disc type	Ventilated
Disc diameter:	
Vehicles with Standard brakes	360 mm (14.2 in)
Vehicles with High performance brakes	380 mm (14.9 in)
Disc thickness:	
Vehicles with Standard brakes:	
New	30.0 mm (1.18 in)
Service limit	marked on the disc
Maximum disc run out	0.050 mm (0.002 in) with wheel fitted
Vehicles with High performance brakes:	
New	34.0 mm (1.33 in)
Service limit	marked on the disc
Maximum disc run out	0.050 mm (0.002 in) with wheel fitted
Vehicles with Standard brakes:	
Caliper type	Twin piston
Piston diameter	48 mm (1.90 in)
Pad minimum thickness	3.0 mm (1.12 in)
Vehicles with High performance brakes:	
Caliper type	Six piston
Piston diameter - 1 and 2	36 mm (1.41 in)
Piston diameter - 3 and 4	38 mm (1.49 in)
Piston diameter - 5 and 6	40 mm (1.57 in)

Pad minimum thickness	3.0 mm (0.12 in)
Brake pad wear sensor lead:	
Location	Front left hand brake pad
Activates at	75% of pad life utilised

Torque Specifications Vehicles with Standard brakes

DESCRIPTION	NM	LB-FT
Brake caliper bleed screw	8	6
Brake disc retaining bolt	35	26
*Brake caliper anchor plate to hub bolts	135 + 60°	100 + 60°
Brake caliper housing to anchor plate bolts	35	26
Brake hose union	32	24

Torque Specifications Vehicles with High performance brakes

DESCRIPTION	NM	LB-FT
Brake caliper bleed screw	8	6
Brake disc retaining bolt	35	26
*Brake caliper retaining bolts	135 + 60°	100 + 60°
Brake hose union	32	24
Brake pad centre bolt	30	22
Brake cooling duct (SVR vehicles only)	9	7

*** New bolts must be installed**