

Rear Disc Brake -

Item	Specification
Disc type	Ventilated
Disc diameter:	
Vehicles with 4.0L or 2.7L diesel engine	325 mm (12.7 in)
Vehicles with 5.0L or 3.0L diesel engine	354 mm (13.9 in)
Disc thickness - All engines:	
New	20.0 mm (0.78 in)
Service limit	18.0 mm (0.71 in)
Maximum disc run-out - disc installed	0.09 mm (0.003 in)
Caliper type	Sliding pin, single piston
Piston diameter	45.0 mm (1.7 in)
Pad minimum thickness	3.0 mm (0.12 in)
Brake pad wear warning lead:	
Location	Rear right hand brake pad
Activates at	75% of pad life utilised

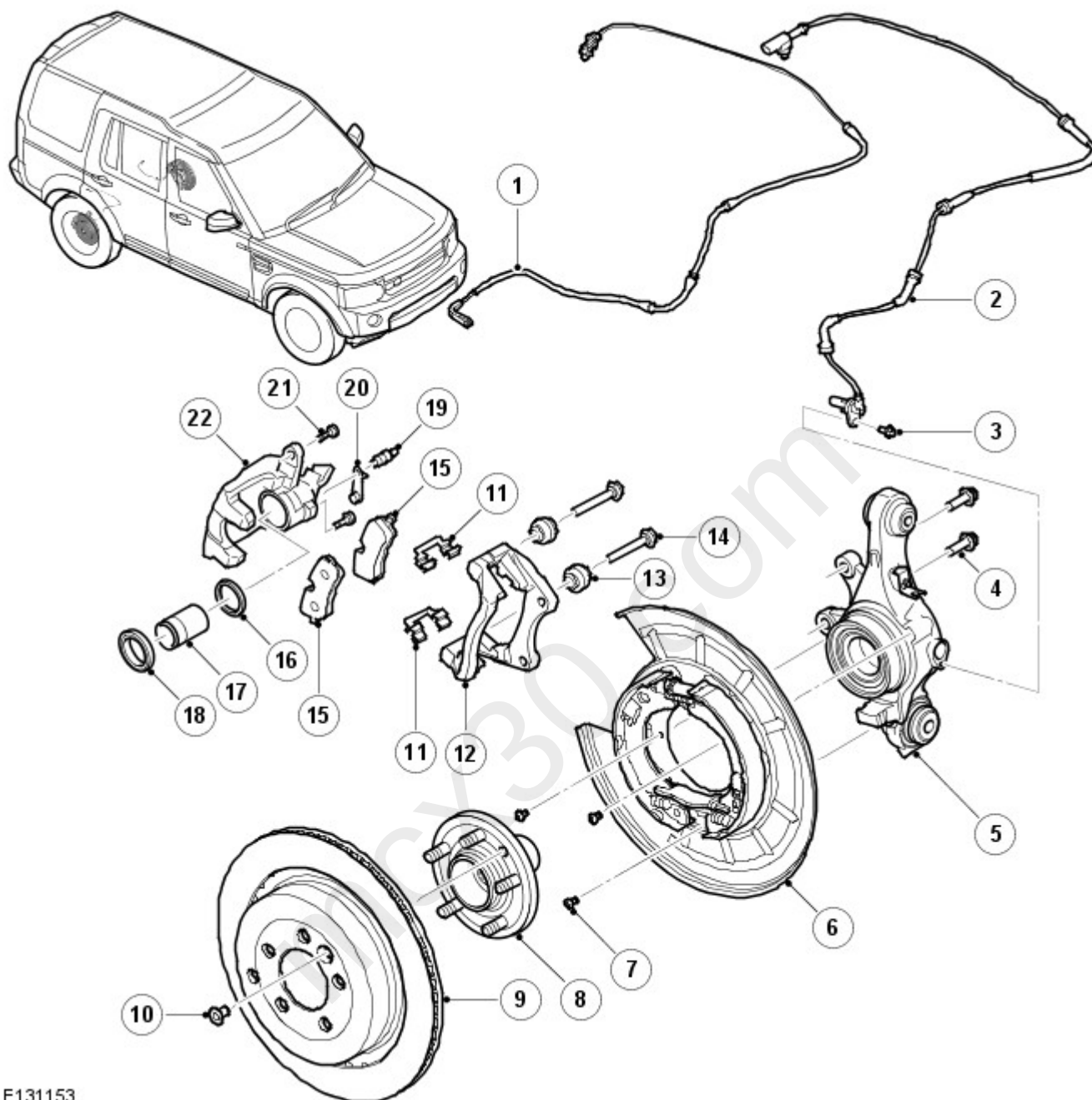
Torque Specifications

Description	Nm	lb-ft
Brake caliper bleed screw	10	7
Brake caliper housing to anchor plate bolts	35	26
Brake hose union	32	24
Brake disc Torx screw	16	12
Brake caliper anchor plate to wheel knuckle bolts	115	85
Road wheel nuts	140	103

Rear Disc Brake - Rear Disc Brake

Description and Operation

COMPONENT LOCATIONS



E131153

Item	Part Number	Description
1	-	Brake pad wear sensor lead
2	-	Wheel speed sensor
3	-	Wheel speed sensor bolt
4	-	Caliper bolt (x 2)
5	-	Rear knuckle
6	-	Backplate assembly and dust shield
7	-	Dust shield screw (x 3)
8	-	Drive flange assembly
9	-	Brake disc
10	-	Brake disc retaining bolt
11	-	Brake pad retainers
12	-	Caliper carrier
13	-	Guide pin dust cover (x 2)
14	-	Guide pin (x 2)
15	-	Brake pad
16	-	Piston seal
17	-	Piston

18	-	Piston dust cover
19	-	Bleed screw
20	-	Bleed screw dust cap
21	-	Guide pin bolt (x 2)
22	-	Caliper body

GENERAL

The rear brakes each consist of a single piston brake caliper, a ventilated brake disc and a dust shield (integrated as part of the parking brake). 2.7L and 4.0L models feature a different caliper and disc than the 3.0L and 5.0L models. The dust shield and parking brake are common on all derivatives.

The brake caliper is attached to the rear knuckle. The brake pads are made from an asbestos free material. The inboard brake pad of the right rear brake incorporates a wear sensor.

When hydraulic pressure is supplied to the caliper, the piston extends and forces the inner pad against the disc. The caliper body reacts and slides on the guide pins to bring the outer pad into contact with the disc.

The rear brake pad wear sensor is connected in series with the front brake pad wear sensor, between the instrument cluster and ground. When a brake pad incorporating a brake pad wear sensor is approximately 75% worn, the brake pad wear sensor goes open circuit. When the instrument cluster detects the open circuit, it illuminates the amber Light Emitting Diode (LED) in the brake warning indicator. Vehicles with the high line instrument cluster also display an appropriate warning in the message center and sound a warning chime.

For additional information, refer to: [Instrument Cluster](#) (413-01 Instrument Cluster, Description and Operation).

At the beginning of each ignition cycle, the instrument cluster performs a bulb check on the brake warning indicator: the indicator is illuminated amber for 1.5 seconds, then red for 1.5 seconds.

Rear Disc Brake - Brake Disc

Removal and Installation

Removal

 **WARNING:** If installing a new brake disc, install new brake pads.

 **CAUTION:** Brake discs must be renewed in pairs.

- **NOTE:** If the parking brake shoes or the brake discs have been removed for access to other components then DO NOT carry out the bedding in procedure.
- **NOTE:** LH illustration shown, RH is similar.
- **NOTE:** The brake pad wear warning indicator sensor must be replaced each time the brake pads are serviced.

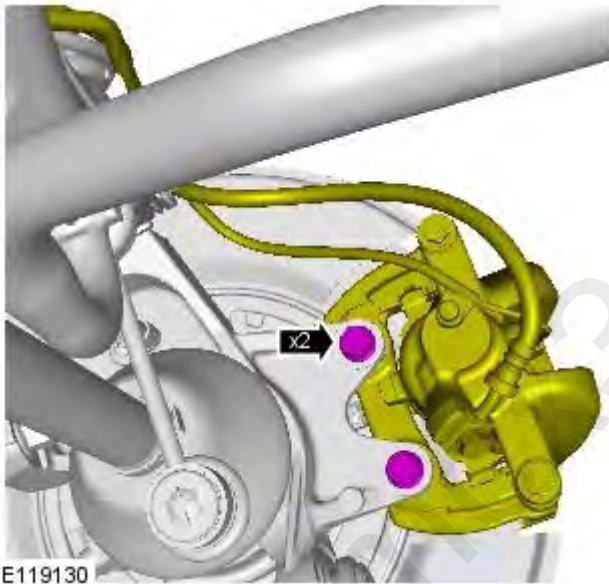
1. Using the Land Rover approved diagnostic system, drive the parking brake to the 'mounting position'.

2.  **WARNING:** Make sure to support the vehicle with axle stands.

Raise and support the vehicle.

3. Remove the rear wheel and tire.

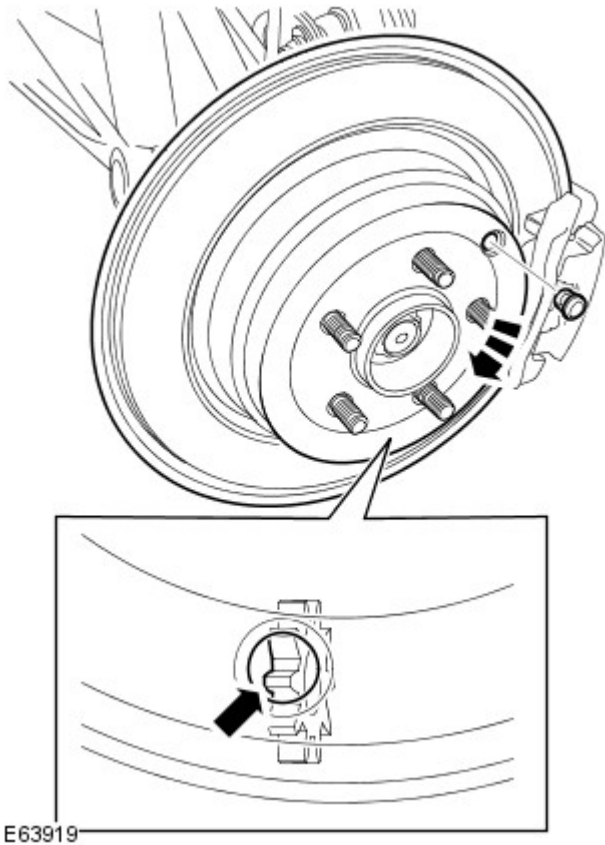
4. Remove the brake caliper and anchor plate.



5. NOTE: Rotate the rear brake disc to locate the parking brake shoe adjuster.

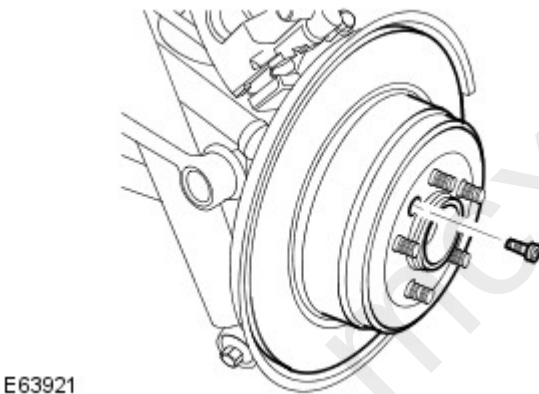
Release the parking brake shoe adjustment.

- Remove the parking brake shoe adjuster access plugs.
- Rotate the parking brake shoe adjuster.



6. Remove the rear brake disc.

- Remove the Allen screw.



Installation

1. Make sure that the rear brake disc and hub mating surfaces are clean.
2. Install the rear brake disc.
 - Tighten the bolt to 35 Nm (26 lb.ft).
3. Install the brake caliper and anchor plate.
 - Tighten the bolts to 115 Nm (85 lb.ft).
4. Adjust the parking brake.

For additional information, refer to: [Parking Brake Shoe and Lining Adjustment](#) (206-05 Parking Brake and Actuation, General Procedures).
5. Install the rear wheel and tire.
 - Tighten the wheel nuts to 140 Nm (103 lb.ft).

Rear Disc Brake - Brake Pads

Removal and Installation

Removal



WARNING: Brake pads must be renewed in axle sets only, otherwise braking efficiency may be impaired.

- NOTE: RH illustration shown, LH is similar.
- NOTE: The brake pad wear warning indicator sensor must be replaced each time the brake pads are serviced.

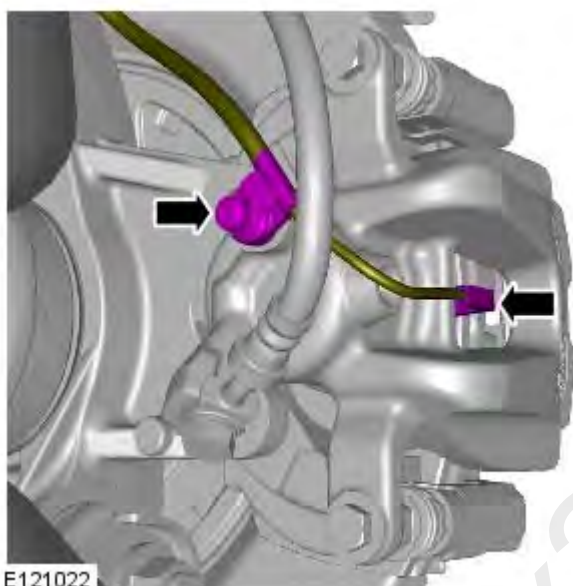


1. WARNING: Make sure to support the vehicle with axle stands.

Raise and support the vehicle.

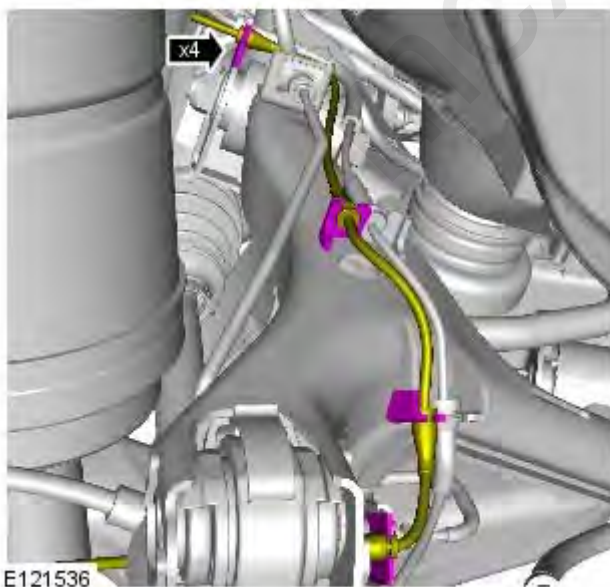
2. Remove the wheels and tires.

3. RH side rear: Disconnect the brake pad wear indicator sensor wiring harness.



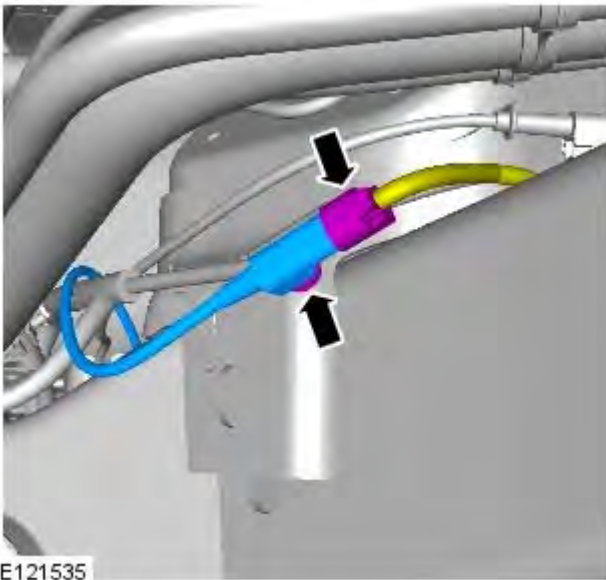
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4. RH side rear: Disconnect the brake pad wear indicator sensor wiring harness.



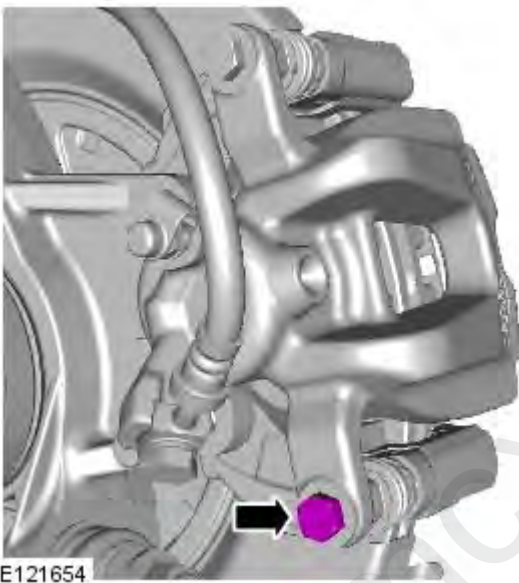
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5. RH side rear: Release and disconnect the brake pad wear indicator wiring harness electrical connector.



6. NOTE: Use an additional wrench to prevent the component from rotating.

Remove the brake caliper lower bolt.

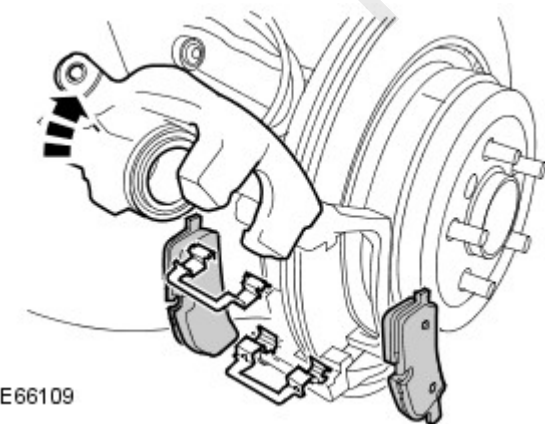


7. NOTE: Note the orientation of the brake pads.

- NOTE: Note the orientation of the clips.

Remove the brake pads.

- Rotate the brake caliper upwards.
- Remove the 2 clips.



8. Repeat the above 2 steps 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 the brake caliper housing and anchor plate using brake cleaning fluid.

2. Inspect the caliper piston and slide pin seals for damage.

3. CAUTIONS:



The brake caliper should move freely on both slide pins.



If necessary, renew the components.

Check the slide pins for correct operation.

4. Position a bleed jar containing a small quantity of approved brake fluid. Connect the bleed tube to the bleed screw and loosen the screw.

5. Press the piston into the caliper housing.

- Tighten the rear caliper bleed screws to 10 Nm (7 lb.ft).

6. Disconnect the bleed tube and remove the jar.



CAUTION: If installed, the adhesive strips covering the outer brake pads must be removed before installation. Failure to follow this instruction may result in damage to the vehicle.

If installed, remove the adhesive strips from the 2 outer brake pads.

8. NOTE: Make sure the brake pads are installed in the correct orientation.

• NOTE: Make sure that the clips are installed in the correct orientation.

Install the brake pads.

- Install the 2 clips.

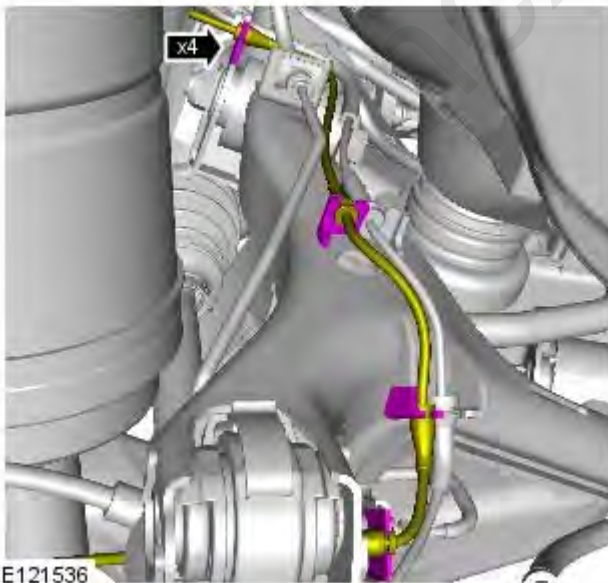
9. Rotate the brake caliper downwards.

- Tighten the brake caliper lower bolt to 35 Nm (26 lb.ft).

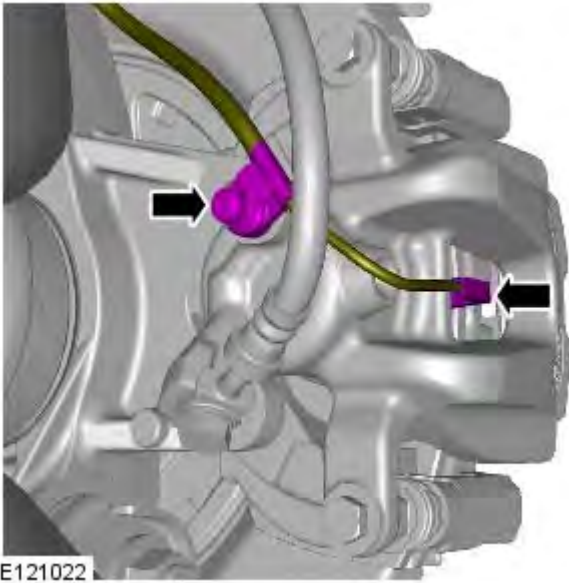
10. Repeat the above procedure for the other side.

11. RH side rear: Connect the brake pad wear indicator wiring harness electrical connection.

12. RH side rear: Connect the brake pad wear indicator sensor wiring harness.



- 13.** RH side rear: Connect the brake pad wear indicator sensor wiring harness.



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- 14.** Install the wheels and tires.

- Tighten the wheel nuts to 140 Nm (103 lb.ft).

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

Rear Disc Brake - Brake Caliper

Removal and Installation

Removal

- NOTE: RH illustration shown, LH is similar.

1.  **WARNING:** Make sure to support the vehicle with axle stands.

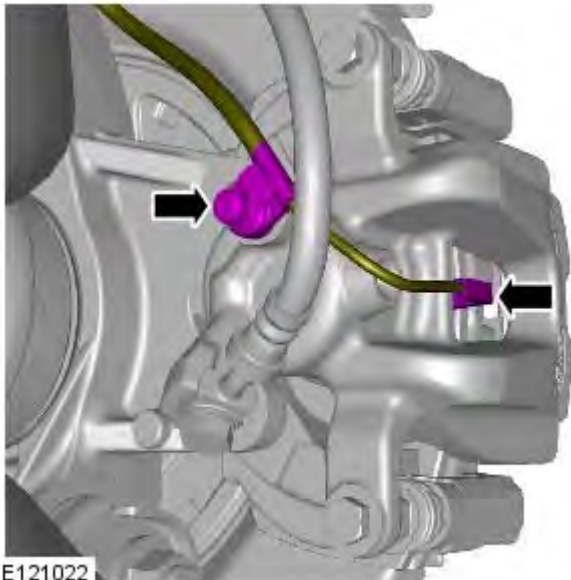
Raise and support the vehicle.

2. Remove the wheel and tire.

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

RH side only: Disconnect the brake pad wear indicator sensor.

- Release from the clip.



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4. NOTE: Note the orientation of the brake pads.

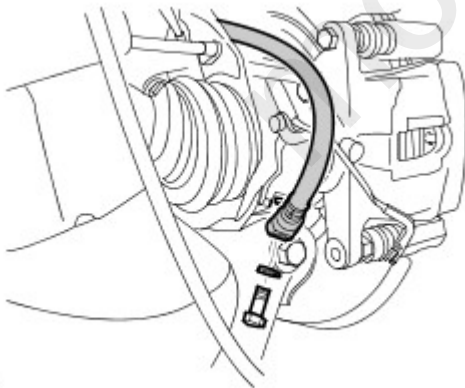
Remove the brake pads.

For additional information, refer to: [Brake Pads](#) (206-04 Rear Disc Brake, Removal and Installation).

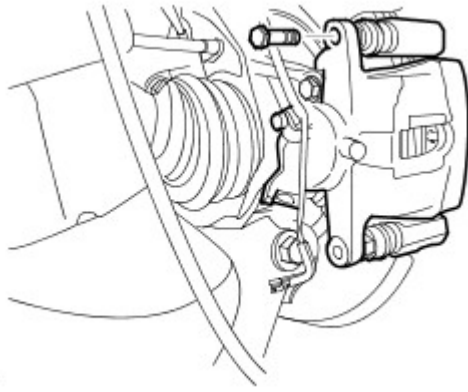
5.  **CAUTION:** Before disconnecting or removing components, ensure the area around the joint faces and connections are clean. Plug open connections to prevent contamination.

Disconnect the brake hose from the brake caliper.

- Remove the union.
- Remove and discard the two sealing washers.
- Install blanking caps to the exposed ports.



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E66184

6. NOTE: Use an additional wrench to prevent the component from rotating.

Remove the brake caliper housing.

- Remove the brake caliper upper bolt.

Installation

1. NOTE: Use an additional wrench to prevent the component from rotating.

Install the brake caliper.

- Tighten the brake caliper upper bolt to 35 Nm (26 lb.ft).

2. NOTE: Make sure the brake pads are installed in the correct orientation.

Install the brake pads.

For additional information, refer to: [Brake Pads](#) (206-04 Rear Disc Brake, Removal and Installation).

3. Connect the brake hose to the brake caliper.

- Clean the component mating faces.
- Remove the blanking caps from the ports.
- Install new sealing washers.
- Tighten the brake hose union to 32 Nm (24 lb.ft).

4. Connect the brake pad wear indicator sensor.

5. Bleed the brake caliper.

For additional information, refer to: [Component Bleeding](#) (206-00 Brake System - General Information, General Procedures).

6. Install the wheel and tire.

- Tighten the wheel nuts to 140 Nm (103 lb.ft).

Rear Disc Brake - Brake Caliper Anchor Plate

Removal and Installation

Removal

- NOTE: RH illustration shown, LH is similar.

1.  **WARNING:** Make sure to support the vehicle with axle stands.

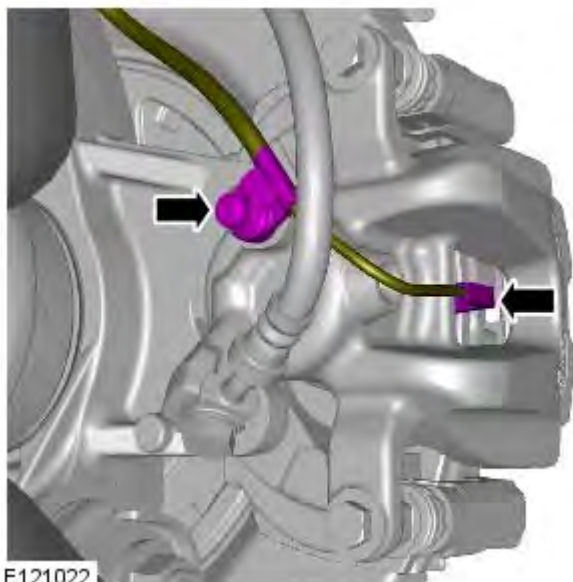
Raise and support the vehicle.

2. Remove the wheel and tire.

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

RH side only: Disconnect the brake pad wear indicator sensor.

- Release from the clip.

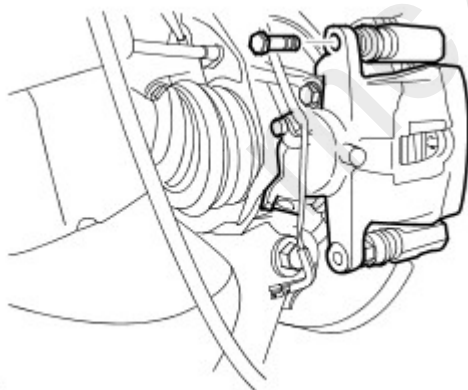


4. Remove the rear brake pads.
For additional information, refer to: [Brake Pads](#) (206-04 Rear Disc Brake, Removal and Installation).

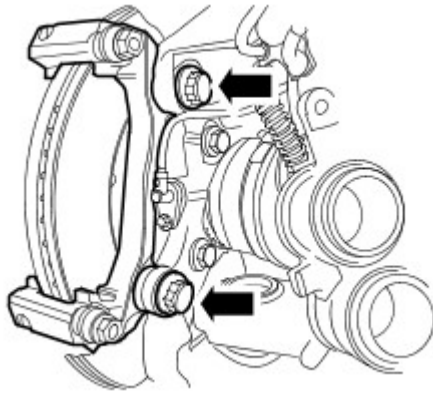
5. NOTE: Use an additional wrench to prevent the component from rotating.

Remove the brake caliper housing.

- Remove the brake caliper upper bolt.



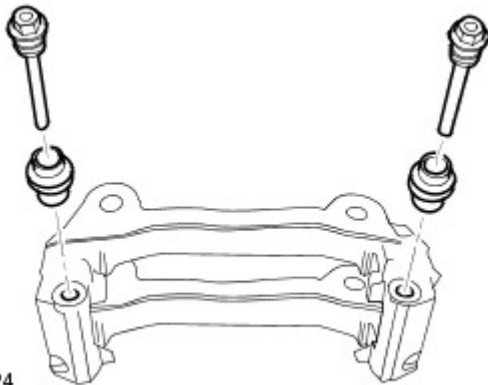
6. Remove the brake caliper anchor plate.



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7. NOTE: Note the orientation of the brake caliper guide pins.

Remove the guide pins and seals.



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Installation

1. CAUTIONS:



The brake caliper should move freely on both slide pins.



If necessary, renew the components.

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

Install the brake caliper guide pins.

- Check the condition of the caliper guide pin seals.
- Check for correct operation.

2. Install the brake caliper anchor plate.

- Tighten the bolts to 115 Nm (85 lb.ft).

3. NOTE: Use an additional wrench to prevent the component from rotating.

Install the brake caliper.

- Tighten the brake caliper upper bolt to 35 Nm (26 lb.ft).

4. Install the rear brake pads.

For additional information, refer to: [Brake Pads](#) (206-04 Rear Disc Brake, Removal and Installation).

5. Connect the brake pad wear indicator sensor.

6. Install the wheel and tire.

- Tighten the wheel nuts to 140 Nm (103 lb.ft).