

TIGHTENING TORQUES : BRAKING SYSTEM

1. Front brake

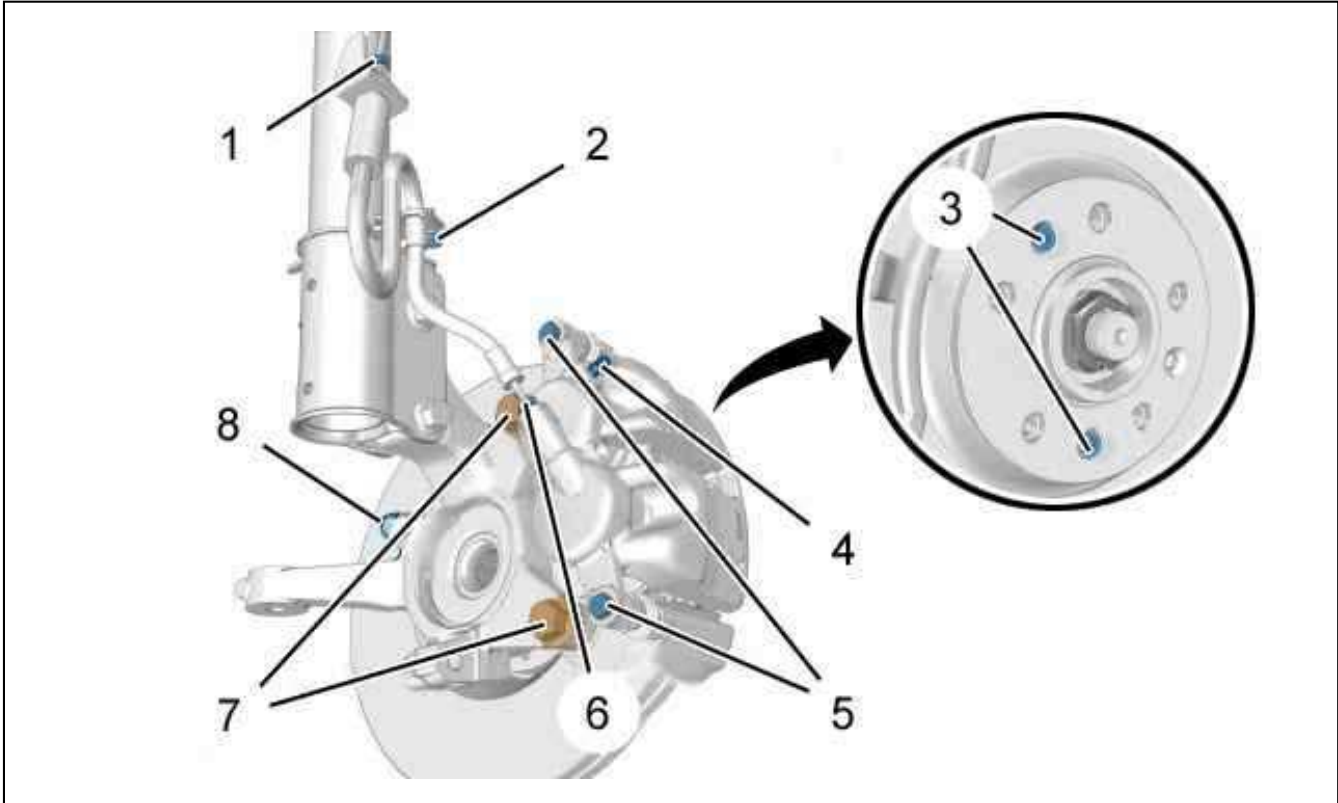


Figure : B3FB0EJD

Reference	Designation	Tightening torque
(1)	Union (Brake pipe / Hose)	1,5 daNm
(2)	bolts (Hose / Damper clevis)	2 daNm
(3)	bolts (Front brake disc)	1 daNm
(4)	bleed screw(s)	1 daNm
(5)	bolts (Front brake caliper) (*)	2,7 daNm
(6)	Union (Hose / Front brake caliper)	1,5 daNm
(7)	bolts (Front brake caliper support) (*)	19 daNm
(8)	bolts (Front wheel sensor)	0,8 daNm
(*) Always to be replaced whenever removed		

2. Master cylinder - Brake servo

2.1. Left-hand drive and right-hand drive

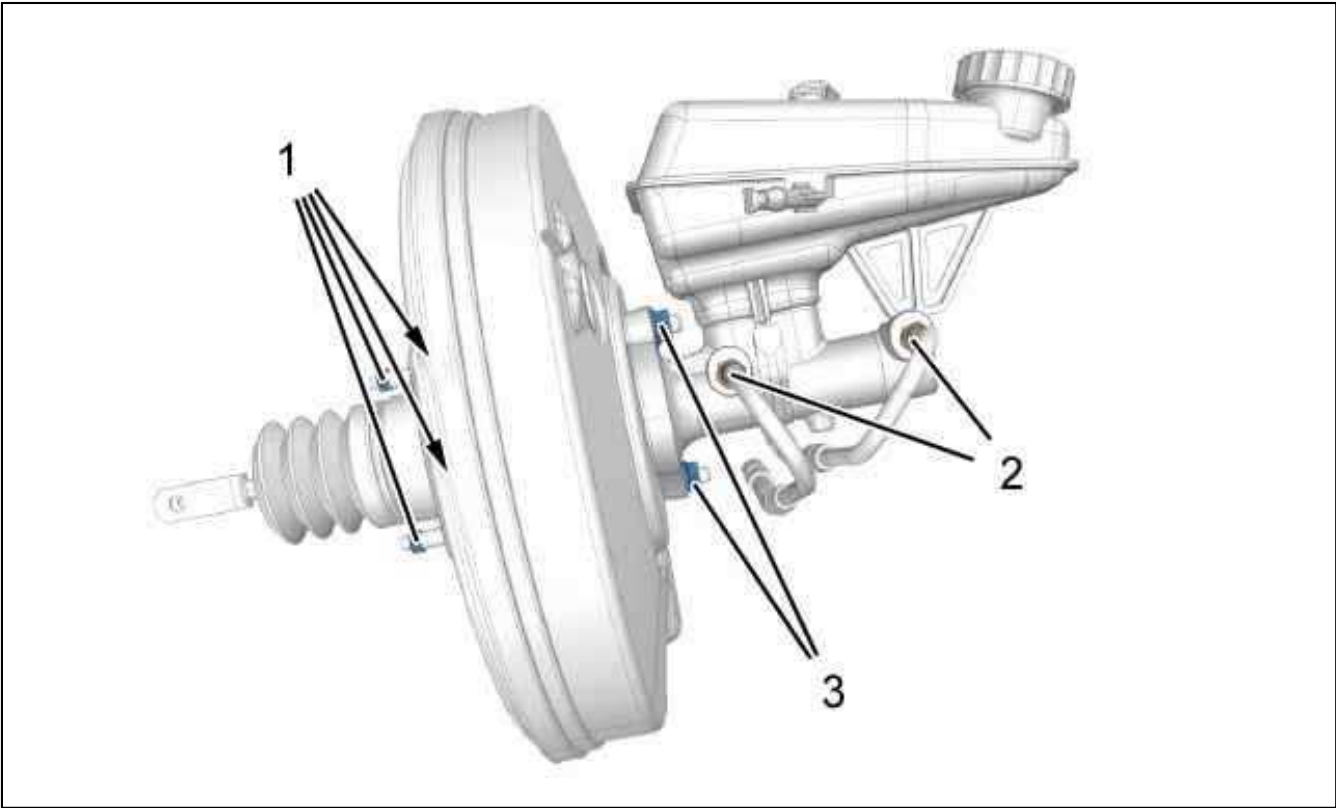


Figure : B3FB08BD

Reference	Designation	Tightening torque
(1)	nuts (Brake servo) (*)	2 daNm
(2)	Connections (Hydraulic piping / Master cylinder) (Without ESP)	1,5 daNm
	Connections (Hydraulic piping / Master cylinder) (With ESP)	1,8 daNm
(3)	nuts (Master cylinder - Brake servo) (*)	2,5 daNm
(*) Always to be replaced whenever removed		

2.2. Special feature(s) : right-hand drive

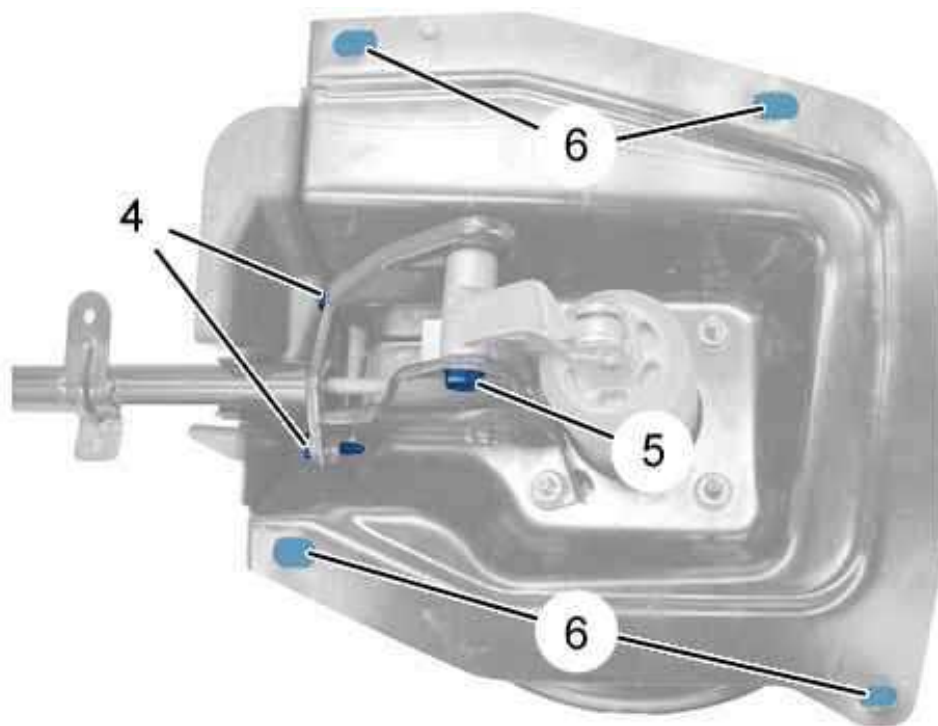


Figure : B3FB08ED

Reference	Designation	Tightening torque
(4)	bolts (Pipes / Upper mounting)	0,7 daNm
(5)	bolts (Upper mounting / Pedal bracket)	2 daNm
(6)	nuts (Plate / Pedal bracket)	2 daNm

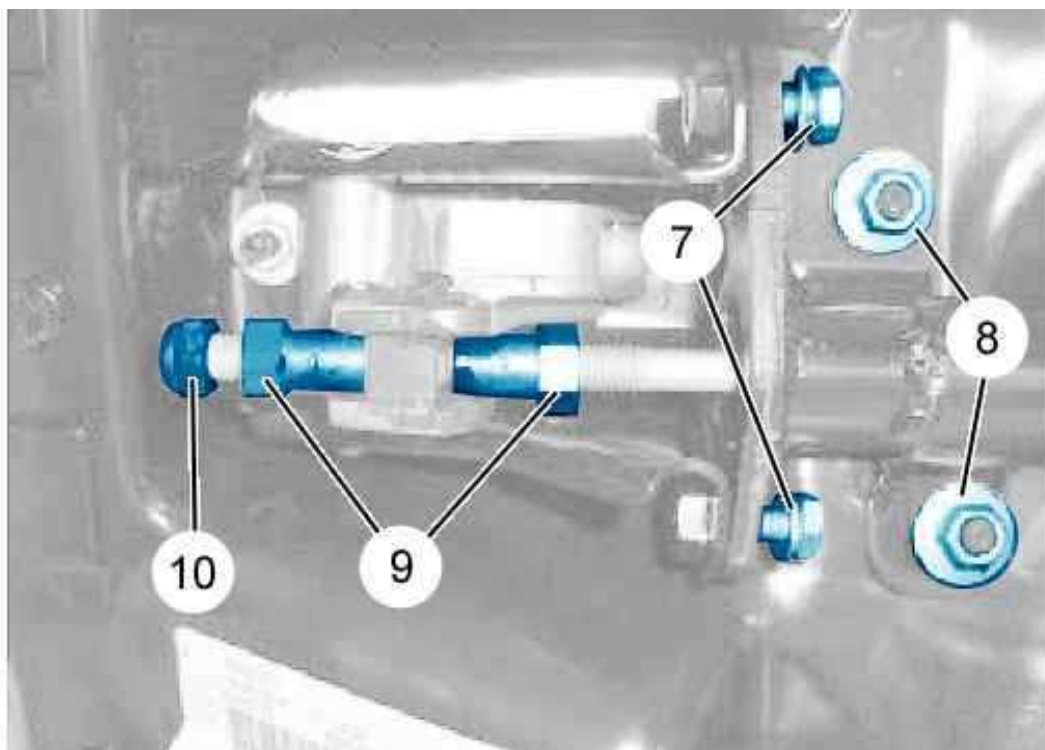


Figure : B3FB08HD

Reference	Designation	Tightening torque
(7)	bolts (Pipes / Upper mounting)	0,7 daNm
(8)	nuts (Bracket / Bulkhead)	0,7 daNm
(9)	Adjusting nut	1,9 daNm
(10)	Locknut	1 daNm

3. ABS/ESP hydraulic block

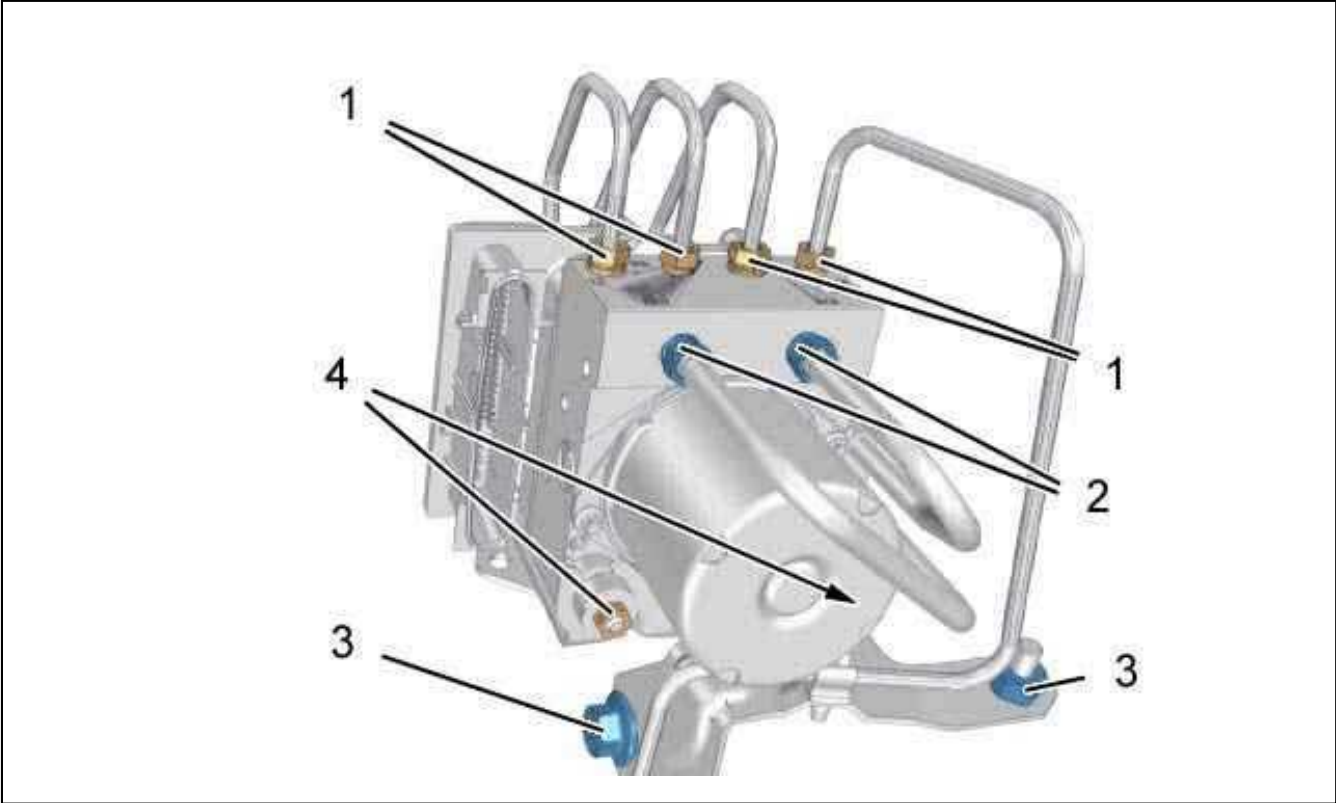


Figure : B3FB08KD

Reference	Designation	Tightening torque
(1)	Union (Hydraulic pipes / "ABS" hydraulic valve block)	1,5 daNm
(2)	Connections (Hydraulic pipes / "ABS" hydraulic valve block) (Without ESP)	1,5 daNm
	Connections (Hydraulic pipes / "ABS" hydraulic valve block) (With ESP)	1,8 daNm
(3)	Nuts and bolts (Mobile support / Body)	1,9 daNm
(4)	nuts ("ABS" hydraulic valve block)	0,8 daNm

4. Parking brake

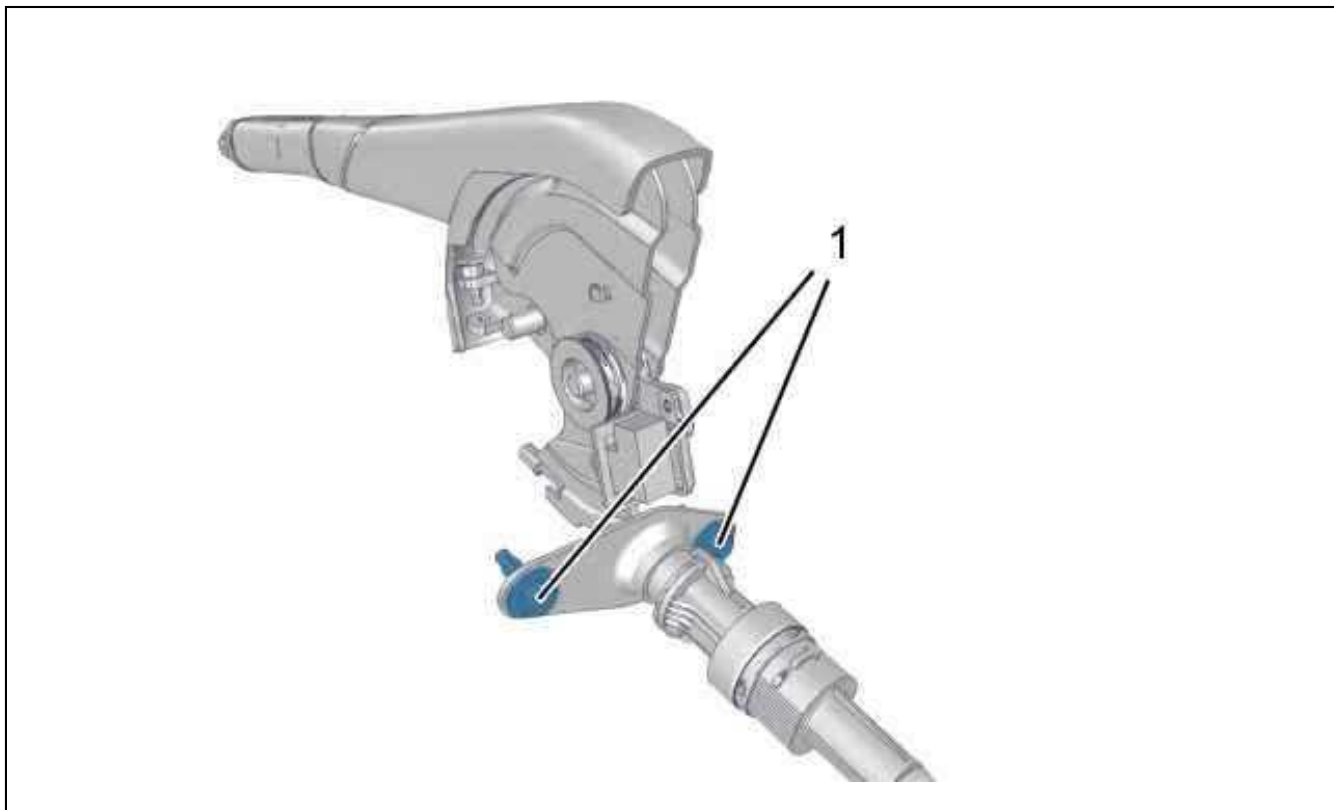


Figure : B3FB08ND

Reference	Designation	Tightening torque
(1)	bolts (Outer cable stop)	1,8 daNm

5. Rear brake

5.1. disc brakes

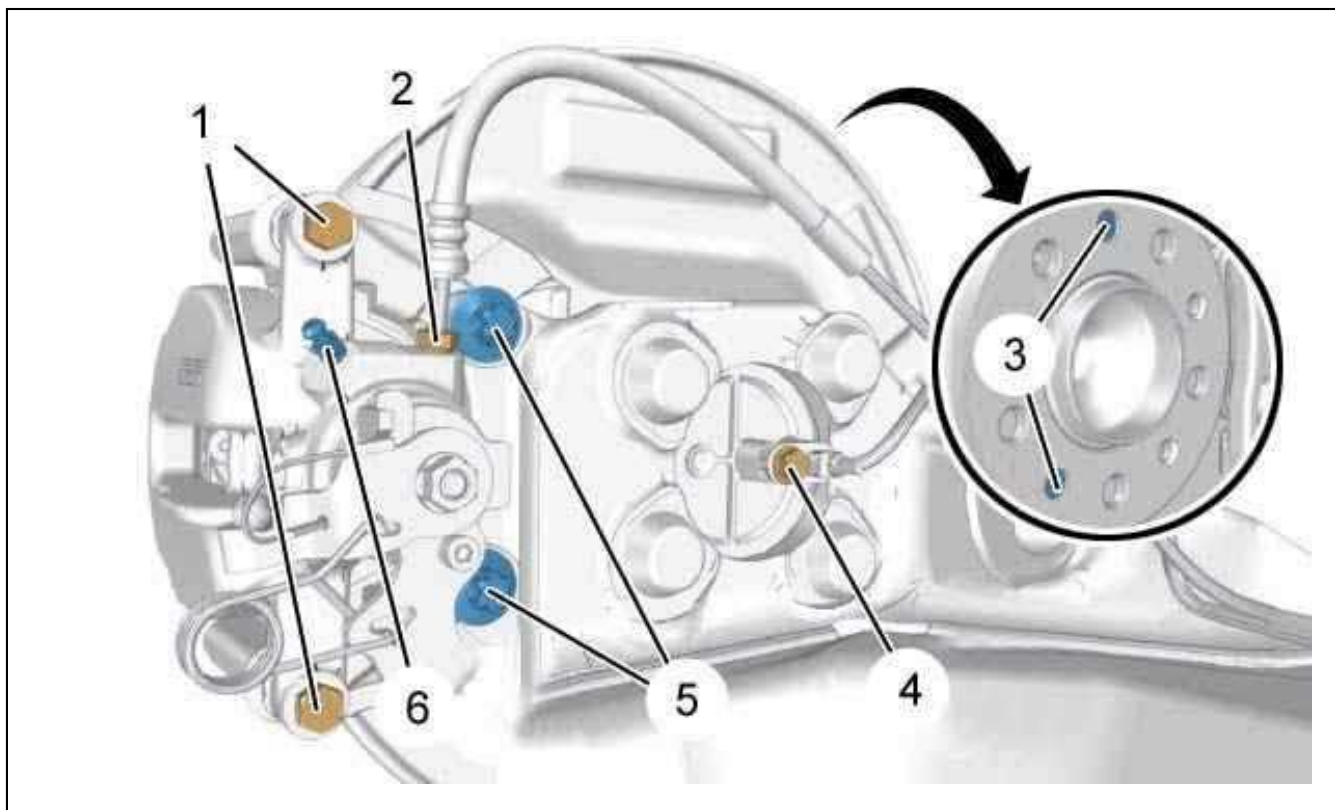


Figure : B3FB08QD

Reference	Designation	Tightening torque
(1)	bolts (rear brake caliper) (*)	3,5 daNm
(2)	Union (Hose / rear brake caliper)	1,5 daNm
(3)	bolts (Rear brake disc)	0,8 daNm
(4)	bolts (Rear wheel sensor)	0,8 daNm
(5)	bolts (Rear brake caliper support) (*)	10,8 daNm
(6)	bleed screw(s)	0,8 daNm
(*) Always to be replaced whenever removed		

5.2. Drum brakes

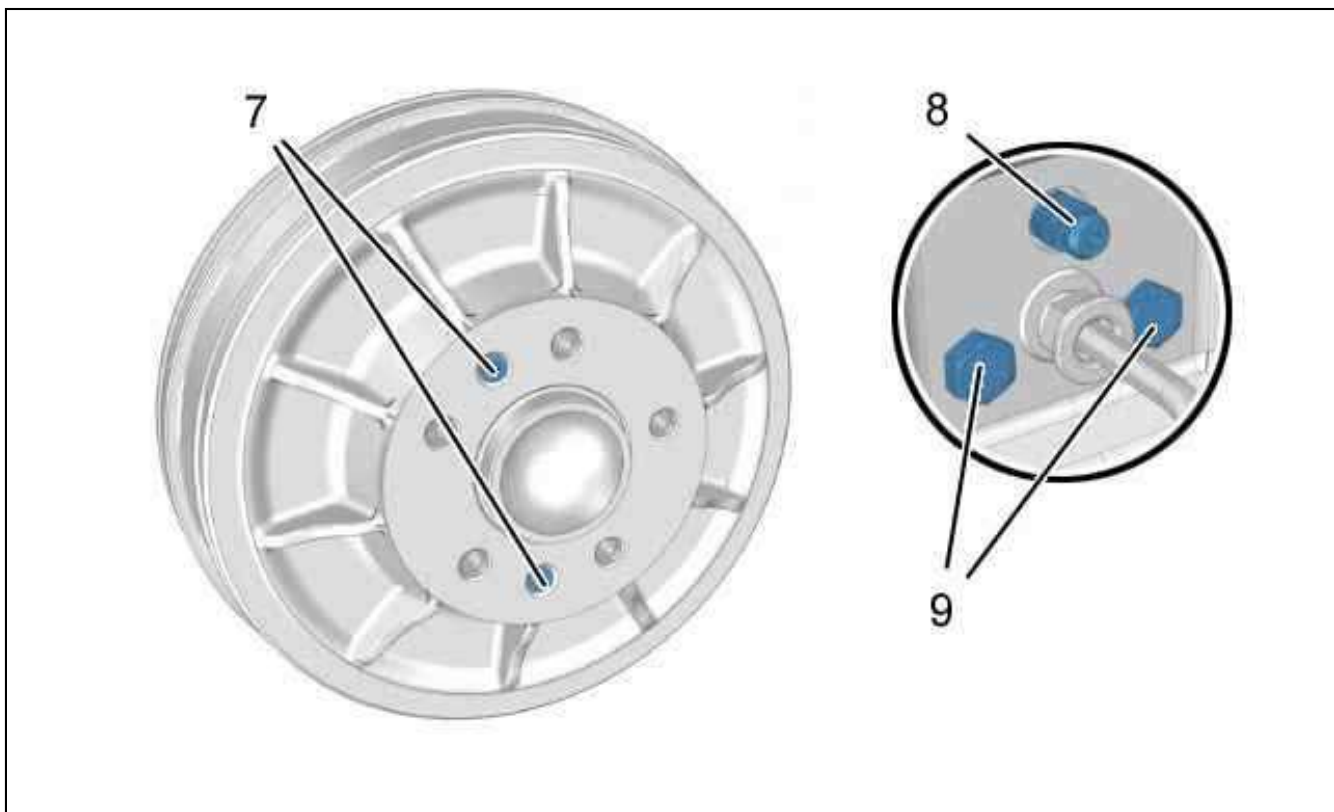


Figure : B3FB08TD

Reference	Designation	Tightening torque
(7)	bolts (Rear brake drum)	0,8 daNm
(8)	bleed screw(s)	0,6 daNm
(9)	bolts (Wheel cylinder)	1,4 daNm

6. Gyrometer/accelerometer sensor

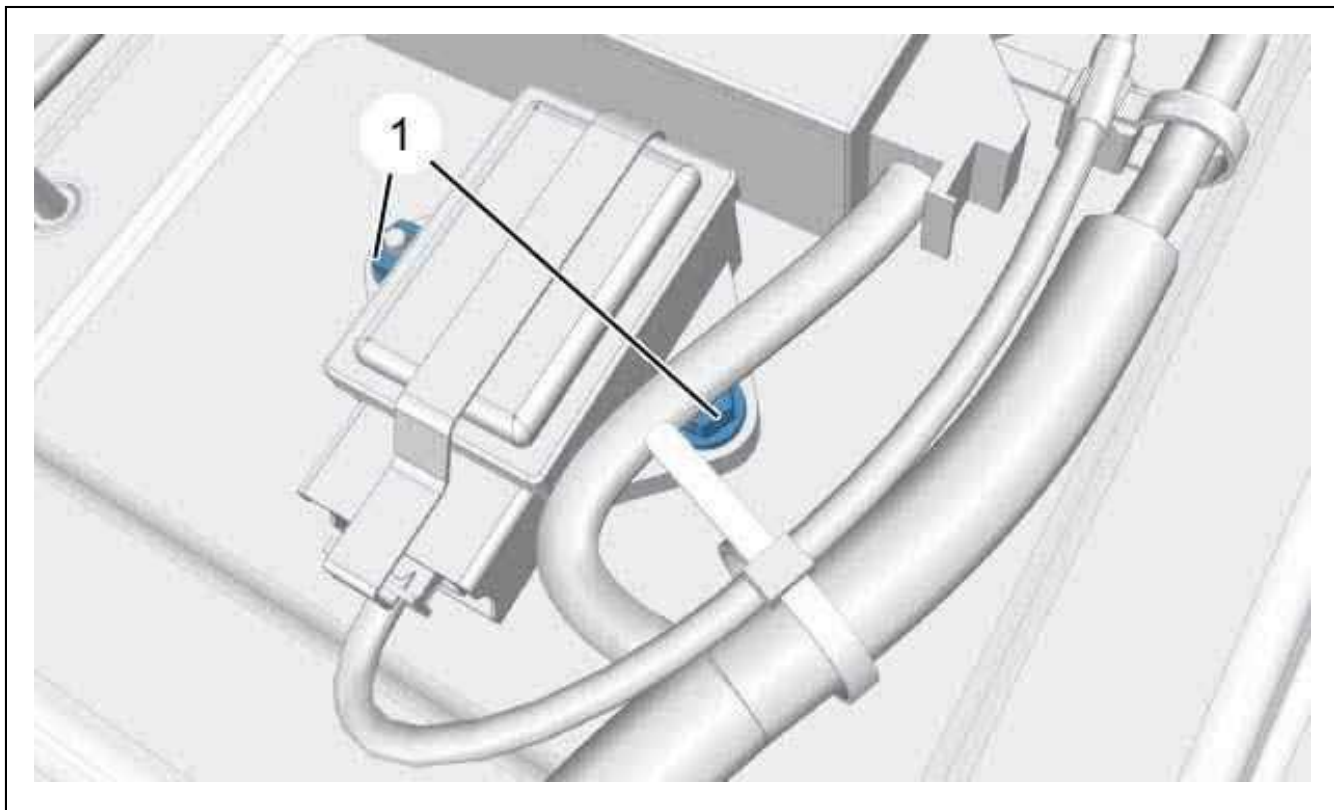


Figure : B3FB08WD

Reference	Designation	Tightening torque
(1)	nuts (Accelerometer gyro)	0,8 daNm

IDENTIFICATION - DATA : BRAKING SYSTEM

1. Identification

Diagonally split system.

Front brake discs : The front brake discs are ventilated.

Solid disc brakes at the rear or drum brakes.

Parking brake lever controlled by cables acting on the rear wheels.

2. Data

2.1. Front brakes

Van						
	1000 kg			1200 kg		
engine	DV6	DW10	EW10	DV6	DW10	EW10
Special feature	ABS	ABS or ABS/ESP				
Type of disc	Ventilated					
Nominal diameter (mm)	280	304				
Nominal thickness (mm)	28					
Minimum thickness (mm)	26					
Maximum run out (mm)	0,05					
Variation in thickness (mm)	0,01					
Brake caliper	TRW					
Piston diameter (mm)	Double piston diameter 45 + 48					
Nominal thickness of the brake linings (mm)	12					
Minimum thickness of the brake linings (mm)	2					

car			
	6/9 seater		
engine	DV6	DW10	EW10
Special feature	ABS or ABS/ESP		
Type of disc	Ventilated		
Nominal diameter (mm)	304		
Nominal thickness (mm)	28		
Minimum thickness (mm)	26		
Maximum run out (mm)	0,05		
Variation in thickness (mm)	0,01		
Brake caliper	TRW		
Piston diameter (mm)	Double piston diameter 45 + 48		
Nominal thickness of the brake linings (mm)	12		
Minimum thickness of the brake linings (mm)	2		

2.2. Rear brakes

Van						
	1000 kg			1200 kg		
engine	DV6	DW10	EW10	DV6	DW10	EW10
Type of brake	Drum	Disc				
Special feature	ABS	ABS or ABS/ESP				
Drum (inches)	10	-				
Original diameter (mm)	254,15	-				
Maximum diameter (mm)	256	-				
Type of disc	-	Solid disc				
Nominal diameter (mm)	-	290				
Nominal thickness (mm)	-	14				
Minimum thickness (mm)	-	12				
Maximum run out (mm)	-	0,05				
Variation in thickness (mm)	-	0,01				
Brake caliper	-	TRW				
Nominal thickness of the brake linings (mm)	-	11				
Minimum thickness of the brake linings (mm)	-	2				
Piston diameter (mm)	-	41				

car			
	6/9 seater		
engine	DV6	DW10	EW10
Type of brake	Disc		
Special feature	ABS or ABS/ESP		
Type of disc	Solid disc		
Nominal diameter (mm)	290		
Nominal thickness (mm)	14		
Minimum thickness (mm)	12		
Maximum run out (mm)	0,05		
Variation in thickness (mm)	0,01		
Brake caliper	TRW		
Nominal thickness of the brake linings (mm)	11		
Minimum thickness of the brake linings (mm)	2		
Piston diameter (mm)	41		

2.3. Master cylinder - Brake servo

	left-hand drive		right-hand drive	
system	ESP	ABS - AFU (*)	ESP	ABS - AFU (*)
Master cylinder	With valve			
Diameter of the master cylinder (mm)	25,4		23,8	
Brake servo	Without AFU (*)	With AFU (*)	Without AFU (*)	With AFU (*)
Servo diameter (inches)	11		10	
(*) AFU : Emergency Braking Assistance				

2.4. Brake fluid

	Type of brake fluid	Quantity
Brake fluid	DOT 4	0,54 l

2.5. Vacuum pump pressure

Engine oil temperature	Minimum vacuum (mbars)	Maximum time (in seconds) required to reach the minimum vacuum
80 ± 5°C	500	4,5 seconds
	800	18 seconds

TECHNICAL NOTE : BLEEDING THE BRAKE SYSTEM

CAUTION : The use of DOT4 brake fluid for the brake circuits is compulsory.

CAUTION : During the bleeding operation : Keep the fluid topped up in the reservoir and complete it.

N.B. : Use only clean fluid free from bubbles. Avoid any introduction of impurities into the hydraulic system.

1. Bleeding the primary braking circuit

CAUTION : Do not switch on the ignition at any time during the operation.

N.B. : Bleed the primary circuit until clean, non-foaming brake fluid is obtained.

There are 2 procedures for bleeding the primary brake circuit.

1.1. Bleeding the primary braking circuit (With the bleeding device)

Bleed the circuit following the instructions for use of the equipment.

1.2. Bleeding the primary braking circuit (without brake bleeding equipment)

N.B. : Two operators are necessary.

Couple a transparent tube on the bleed screw .

Press the brake pedal slowly.

Open the bleed screw .

Hold the pedal fully down.

Close the bleed screw .

Allow the brake pedal to return naturally.

Repeat the operation until the fluid running out is clean and free from air bubbles.

Proceed in the same way for the other wheels.

N.B. : Check that the wheels rotate freely when the parking brake is released .

1.3. Checking : Bleeding the primary braking circuit

At the end of the bleed programme, check and top up, if necessary, the brake fluid level.

Check the travel of the brake pedal (no extension).

If the travel is long and spongy, repeat the bleed procedure.

Start the engine.

Check the travel of the brake pedal (no extension) ; Road test the vehicle (if necessary).

If brake pedal travel is not correct ; Bleed the secondary brake circuit.

2. Bleed the secondary brake circuit

Bleeding of the secondary braking circuit is done with a diagnostic tool.

This procedure is only carried out if the primary brake circuit has been bled.

Continue the procedure for bleeding of the hydraulic circuit as defined by the diagnostic tool.

At the end of the bleed programme, check and top up, if necessary, the brake fluid level.

Check the brake pedal travel (no extension), otherwise repeat the bleeding procedure.

CHECKING AND ADJUSTING VALUES : BRAKING SYSTEM

ESSENTIAL : Observe the safety and cleanliness recommendations ⓘ .

1. Brake disc - Brake drum - Brake pads - Brake shoes

Refer to the method ⓘ "Checking : Front brake disc - Rear brake disc - Rear brake drum - Brake pads - Brake shoes"

2. Vacuum pump

N.B. : Engine idling.

vehicles	DISPATCH (G9) - C8 (VV)
Engines:	DV6DUM / DV6UC
	DW10CE DTR / DW10CD DTR / DW10CTED4
Emission control	EURO 5
Oil temperature	125 ± 5°C
Minimum vacuum	Maximum duration to attain the minimum vacuum
300 Mbar	3 seconds
500 Mbar	6 seconds
700 Mbar	14 seconds
850 Mbar	29 seconds (VP*)
	39 seconds (VU**)

(*) VP : Private car.

(**) VU : Commercial vehicle.

3. Braking system compensator (Checking values)

Vehicle not affected.

4. Checking of the brake fluid

CAUTION : Brake fluid is highly corrosive to paintwork. If any is projected onto the bodywork, clean the surface immediately.

4.1. Tooling

Brake fluid tester (*)		
make	Reference	Type
SURETEST	TLF	Measures the boiling point of the brake fluid
DOW AUTOMOTIVE	BETATEST	
FACOM TOOLS	DF 16	
EBT	06.1	Measures the specific gravity of the brake fluid

(*) Non-exhaustive list, refer to the catalogue "Tools and Equipment".

4.2. Checking

Remove the brake fluid reservoir filter.

ESSENTIAL : Any contamination of the brake fluid is forbidden. The brake fluid should be clear and free from sediments or floating substances.

Check the fluid, following the instructions provided by the equipment supplier.

Checking values	
Brake fluid	Boiling point (minimum humidity)
DOT3	140 °C
DOT4	155 °C
DOT5	180 °C
DOT5.1	190 °C

N.B. : If the value checked is lower than the value for the "minimum humidity" boiling point, or within a tolerance of + 10 % of this value, replace the brake fluid (See the corresponding operation).

ESSENTIAL : Use only approved and recommended hydraulic fluids.

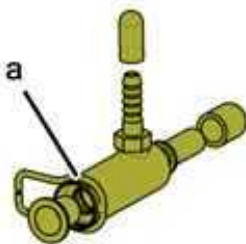
N.B. : The fluids DOT3, DOT4 and DOT5.1 are compatible.

CAUTION : The fluid DOT5 is not compatible with DOT3, DOT4 and DOT5.1.

CHECK : VACUUM PUMP

ESSENTIAL : Observe the safety and cleanliness recommendations ⓘ .

1. Tooling

Tools	Reference	Designation
[1602-A]  Figure : E5AD00OT	[1602-A] (S.1602 kit)	Pressure regulator
[0820]  Figure : E5AB13ZT	[0820]	"a" : Click-fit unions

2. Check

2.1. dw engine

Remove :

- The pollen filter housing
- The engine cover

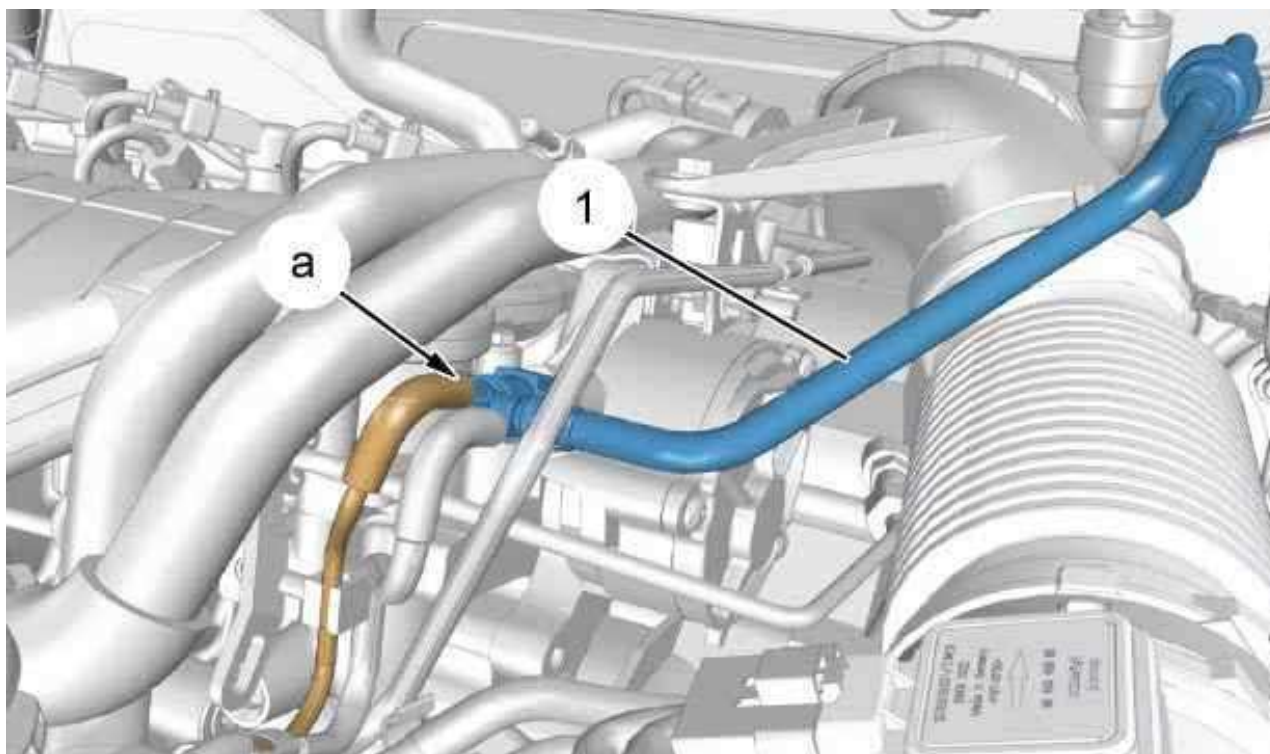


Figure : B3FD04BD

Locate the negative pressure pipe (1) between the vacuum pump and the brake servo.
Uncouple the vacuum pipe (at "a").

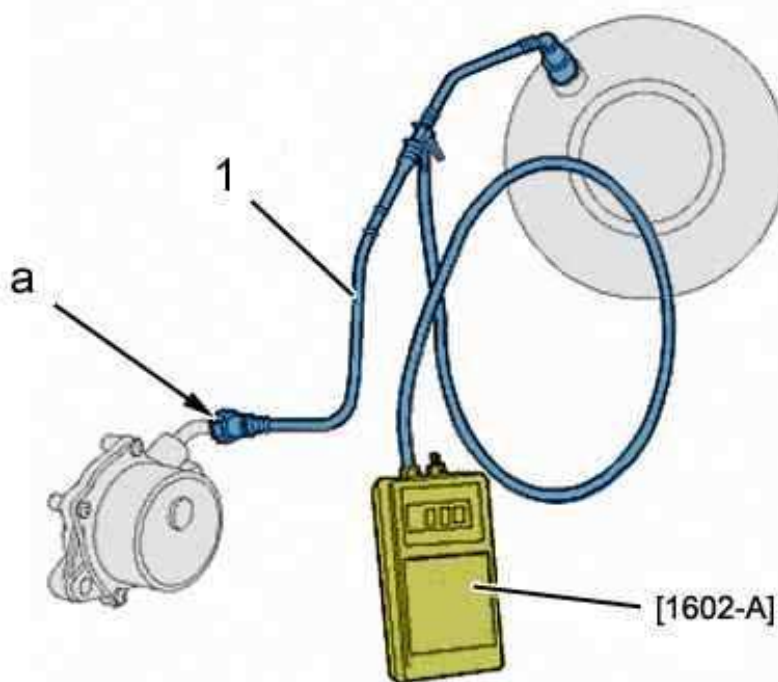


Figure : B3FD04CD

Connect :

- The pressure controller [1602-A]
- The click-on connector "a" of the tool [0820] on the vacuum pipe (1)

Start the engine to run at idle.

Check the vacuum value.

Remove :

- The click-on connector "a" of the tool [0820] on the vacuum pipe (1)
- The pressure controller [1602-A]

Connect the vacuum pipe (at "a").

Refit :

- The engine cover
- The pollen filter housing

2.2. dv6UTED4 engine

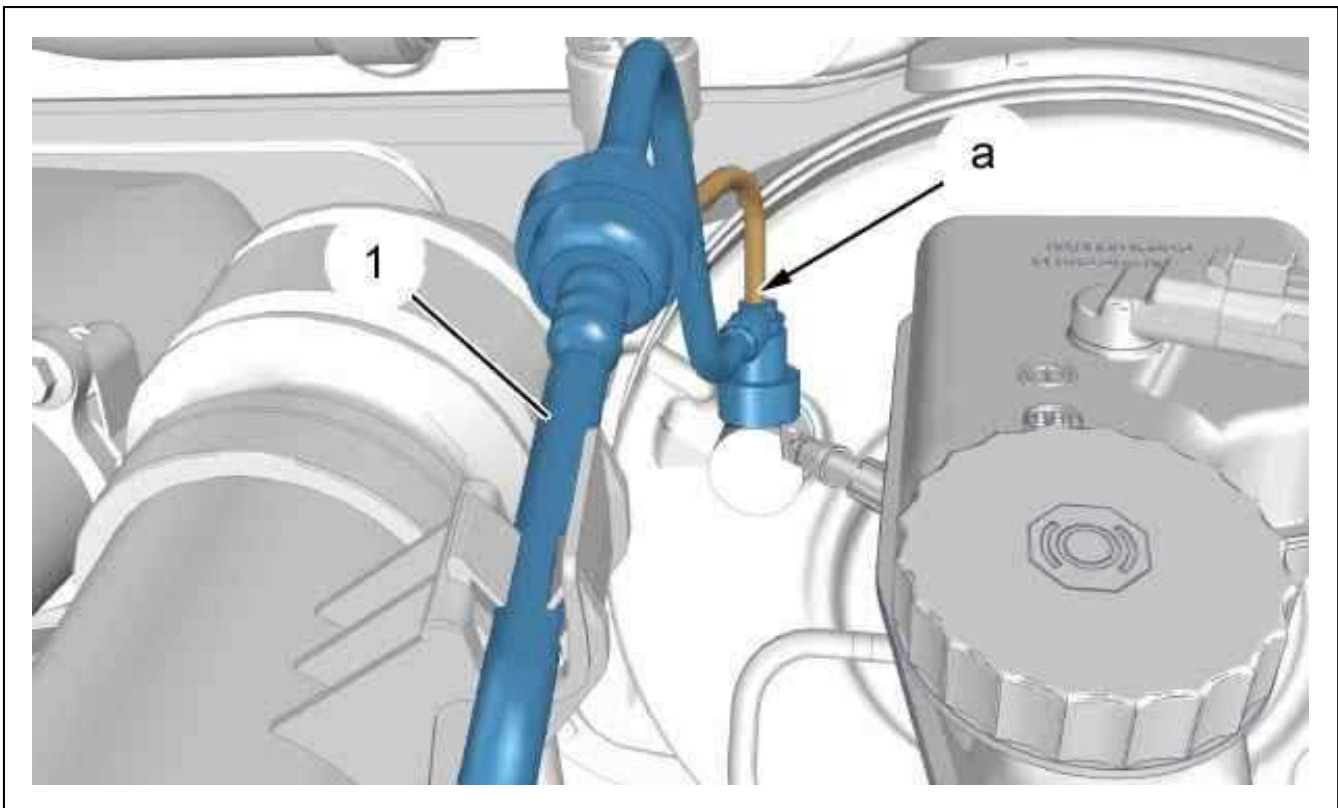


Figure : B3FD04DD

Locate the negative pressure pipe (1) between the vacuum pump and the brake servo.

Uncouple the vacuum pipe (at "a").

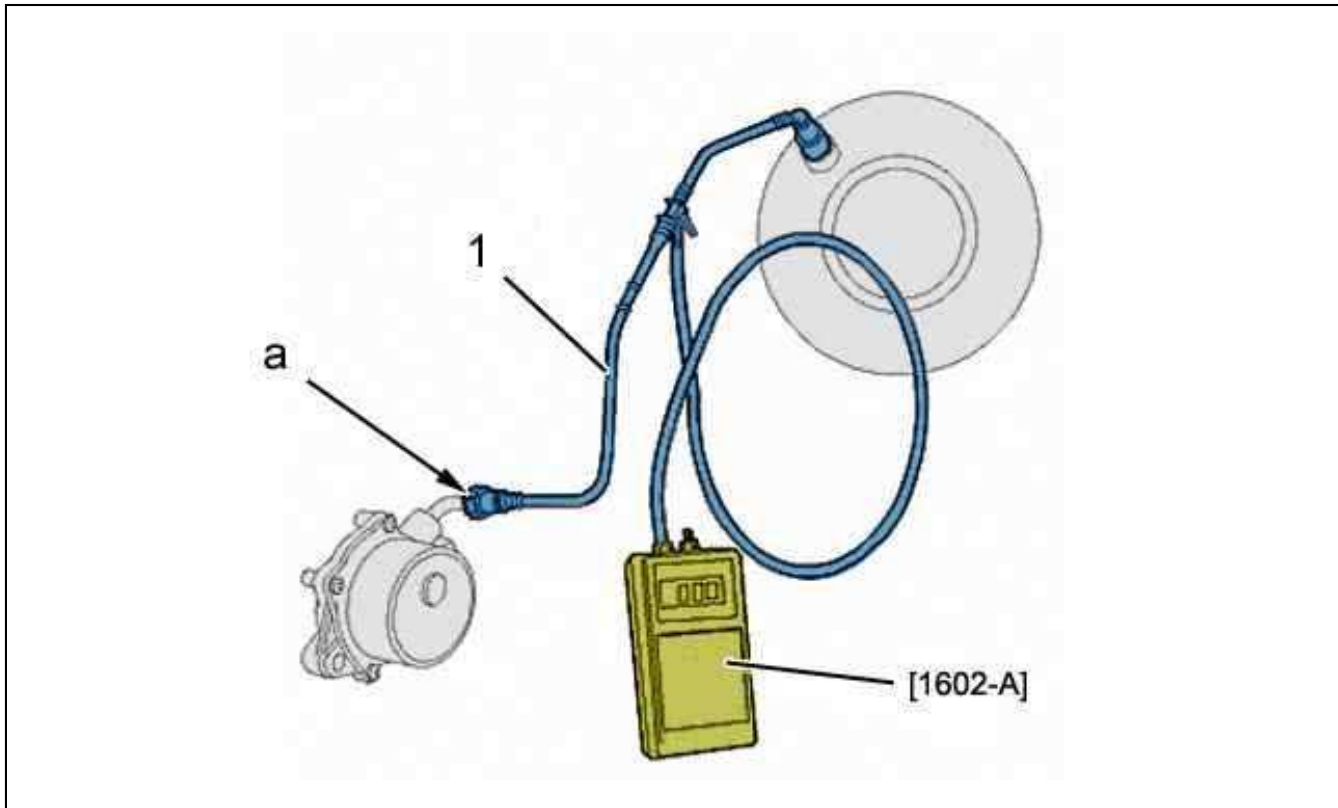


Figure : B3FD04CD

Connect :

- The pressure controller [1602-A]
- The click-on connector "a" of the tool [0820] on the vacuum pipe (1)

Start the engine to run at idle.

Check the vacuum value.

Remove :

- The click-on connector "a" of the tool [0820] on the vacuum pipe (1)
- The pressure controller [1602-A]

Connect the vacuum pipe (at "a").

3. Checking values

Check the efficiency of the vacuum pump ⓘ.

If the value is outside the tolerance, check :

- The vacuum pump directly
- Sealing of the system on the link pipes and on the brake servo

CHECKING : BRAKING SYSTEM (TECHNICAL NOTE)

ESSENTIAL : Observe the safety and cleanliness recommendations ⓘ .

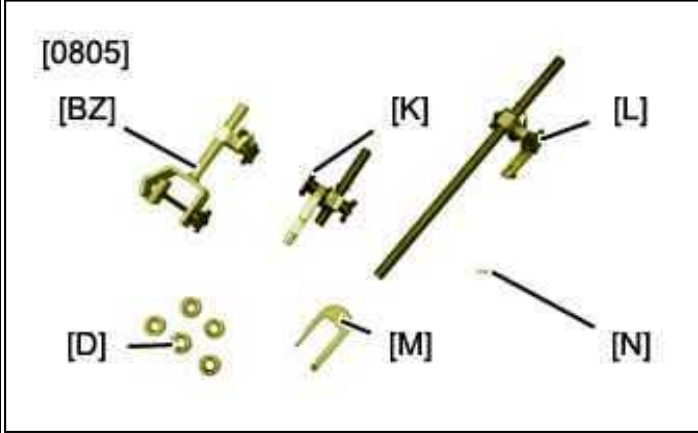
1. Foreword

This document describes a brake wear checking method, it can be printed, as can the associated methods, at the request of the customer.

2. Tooling

CAUTION : The kit [0805] is not available from replacement parts. As a replacement, a dial gauge magnetic support can be used which will guarantee the measurements.

Equipment : Dial gauge magnetic support .

Tool	Reference	Designation
	[0805]	Disc/hub run-out checking tool
	[0805-BZ]	caliper
	[0805-K]	Disc check bracket + Ventilated disc fork
	[0805-L]	Disc check bracket
	[0805-D]	Non-ventilated disc fork
	[0805-M]	Spacer
	[0805-N]	dial gauge extension
	[2437-T]	Dial gauge
	[0821]	Set of shims

[0821]



Figure : E5AB1JZT

3. Front brake disc

Check the tightening torques of the wheels.

Raise and support the vehicle on a 2-post lift.

3.1. Checking the brake disc run-out (wheel fitted) (First possibility)

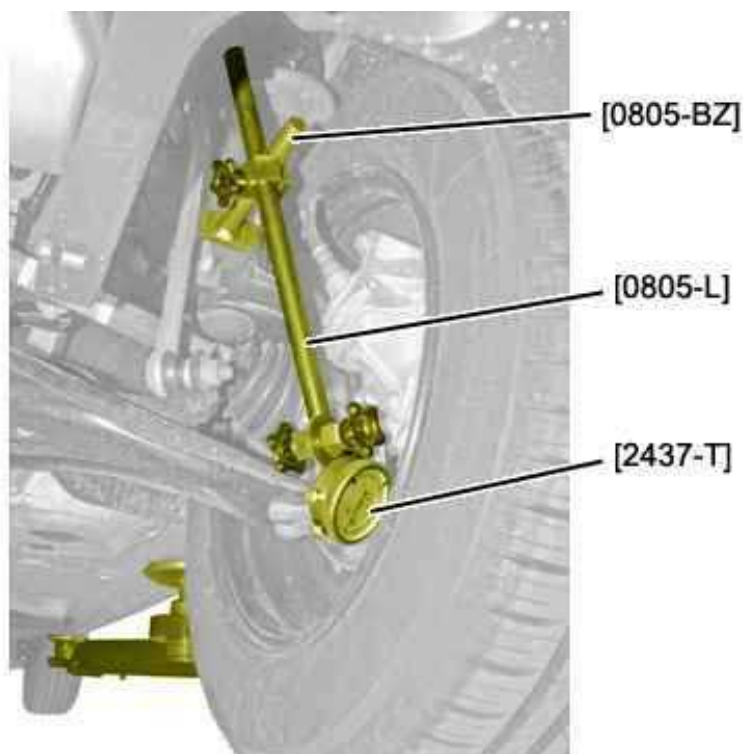


Figure : B3FD05CD

Fix :

- The assembly [0805-BZ], [0805-L] on the damper
- The dial gauge [2437-T] on the tool [0805-L]

Place the tip of the dial gauge [2437-T] in contact 10 mm from the periphery of the brake disc (the tip under the action of the spring).

CAUTION : To check the front brake disc run-out, turn the disc by means of the driveshaft.

Carry out :

- A dial gauge zero reset
- A full turn of the brake disc

Permissible brake disc assembly run-out on the hub : Less than 0,05 mm.

3.2. Checking the brake disc run-out (wheel fitted) (Second possibility)

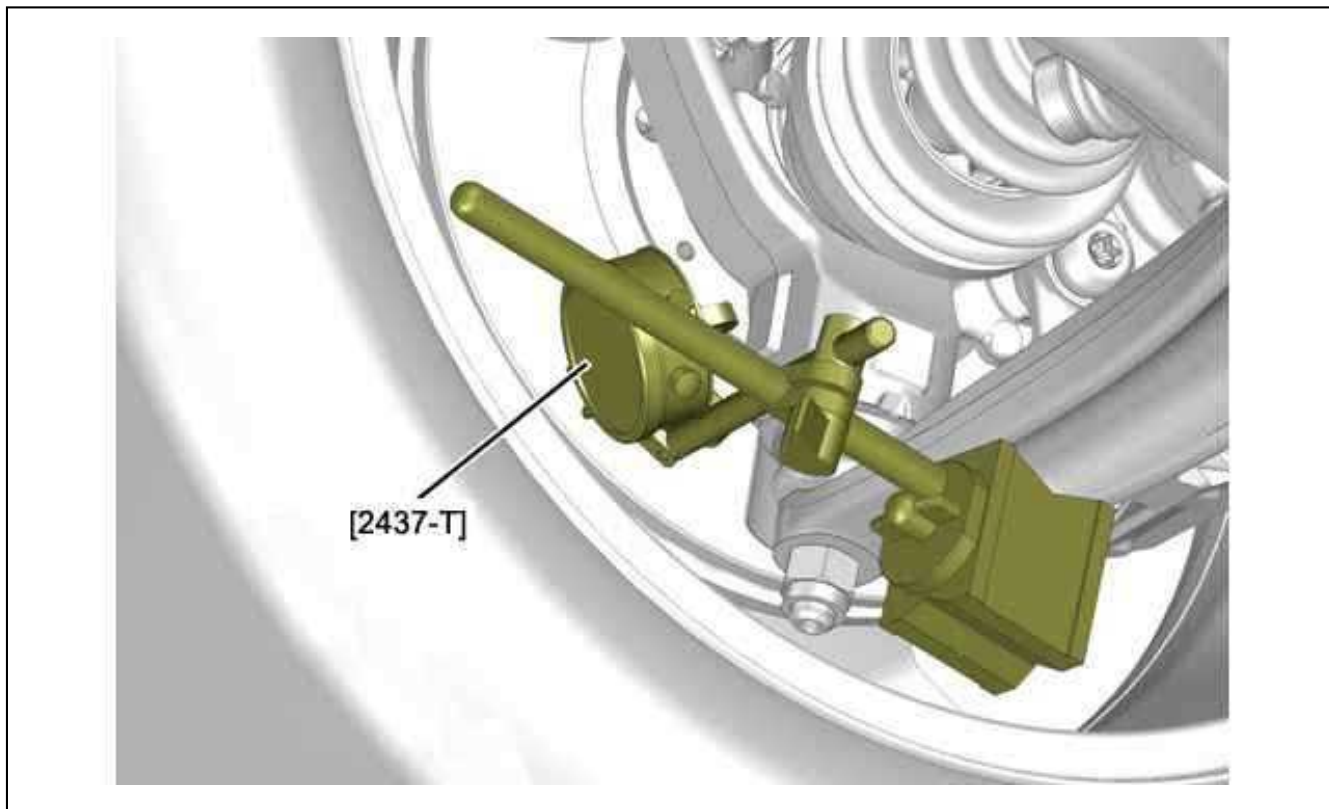


Figure : B3FD05DD

Fix the magnetic support on the lower suspension arm.

Fix the dial gauge [2437-T] on the magnetic support .

Place the tip of the dial gauge [2437-T] in contact 10 mm from the periphery of the brake disc (the tip under the action of the spring).

CAUTION : To check the front brake disc run-out, turn the disc by means of the driveshaft.

Carry out :

- A dial gauge zero reset
- A full turn of the brake disc

Permissible brake disc assembly run-out on the hub : Less than 0,05 mm.

3.3. Checking the variation in the thickness of the brake disc (Wheel removed) (First possibility)

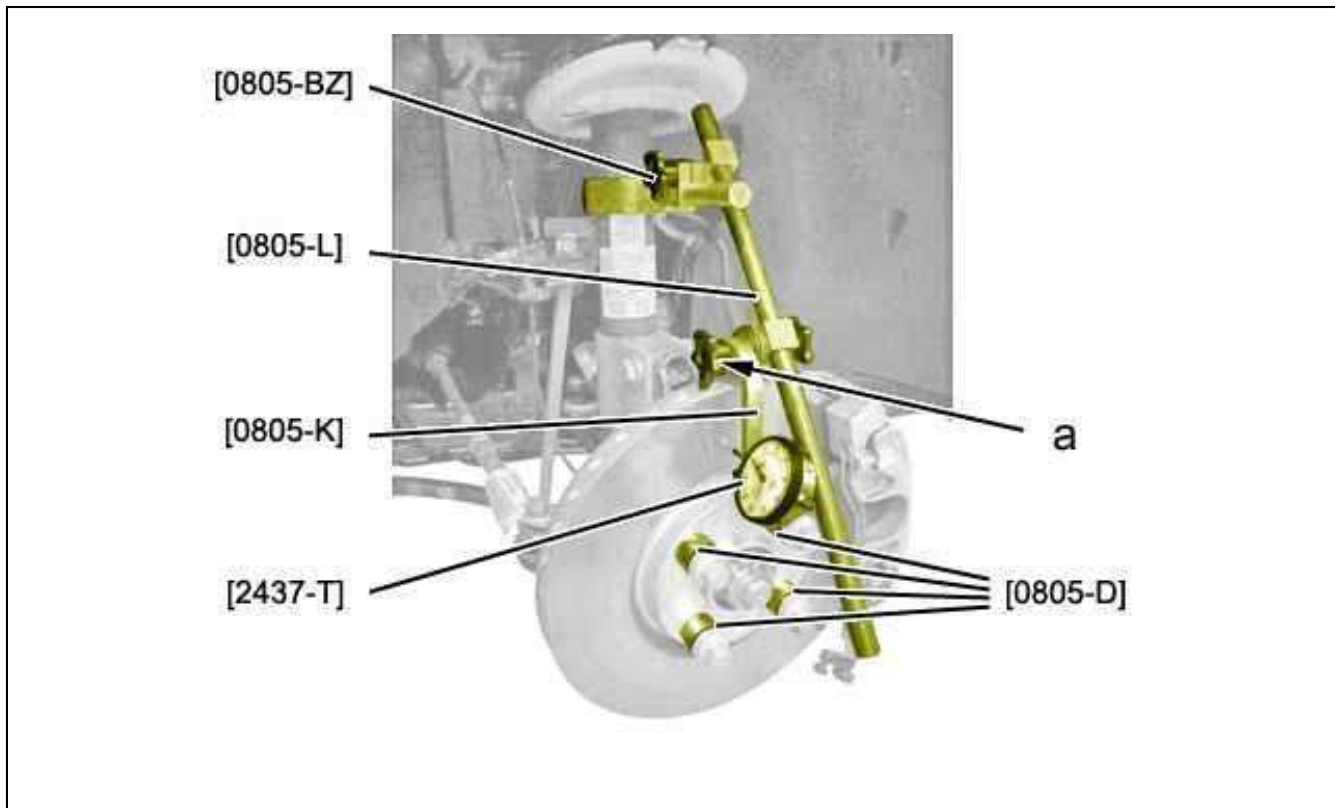


Figure : B3FD05ED

Refit and tighten the wheel bolts fitted with the tool [0805-D].

Fix :

- The assembly [0805-BZ], [0805-L] on the damper
- The dial gauge [2437-T] on the tool [0805-K]

Loosen the tool [0805-K] (at "a").

Place the tip of the dial gauge [2437-T] in contact 5 mm from the periphery of the brake disc (the tip under the action of the spring).

CAUTION : To check the variation in the thickness of the front brake disc, turn the brake disc by means of the driveshaft.

Carry out :

- A dial gauge zero reset
- A full turn of the brake disc

Permissible variation in the thickness of the brake disc over the same circumference 0,01 mm.

3.4. Checking the variation in the thickness of the brake disc (Wheel removed) (Second possibility)

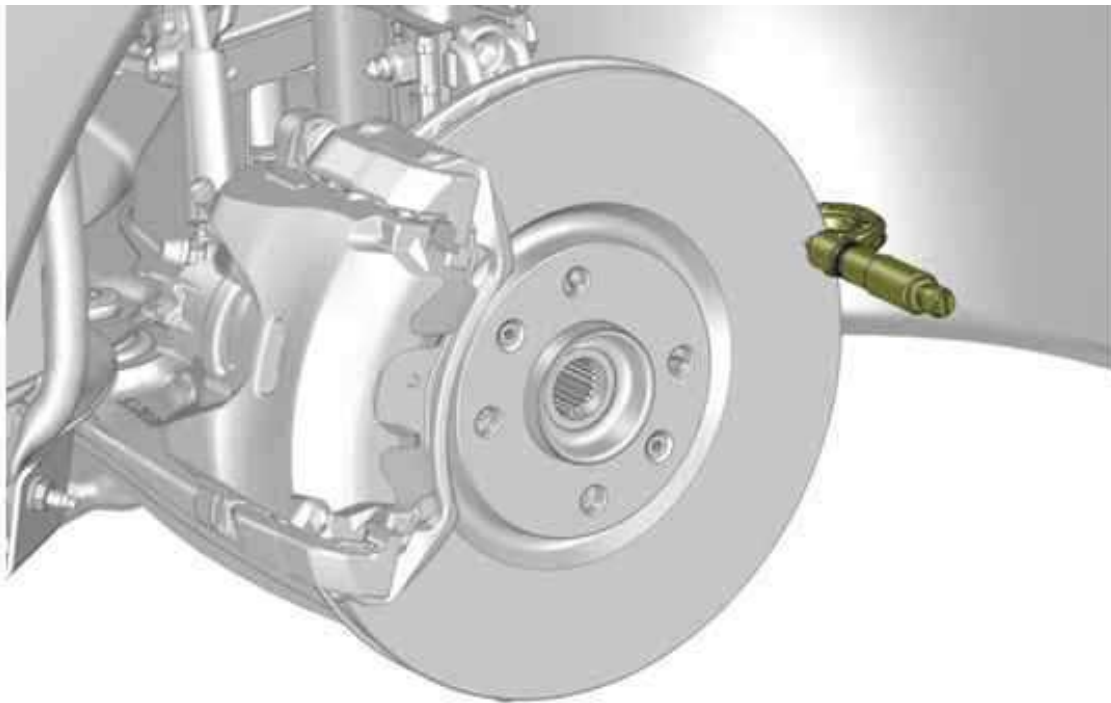


Figure : B3FD05FD

Check the variation in the thickness over the circumference of the brake disc at eight points 5 mm from the periphery of the brake disc ; Using a micrometer (Capacity: 0 - 50 mm).

Permissible variation in the thickness of the brake disc over the same circumference 0,01 mm.

3.5. Checking the thickness of the front brake disc (wheel removed)

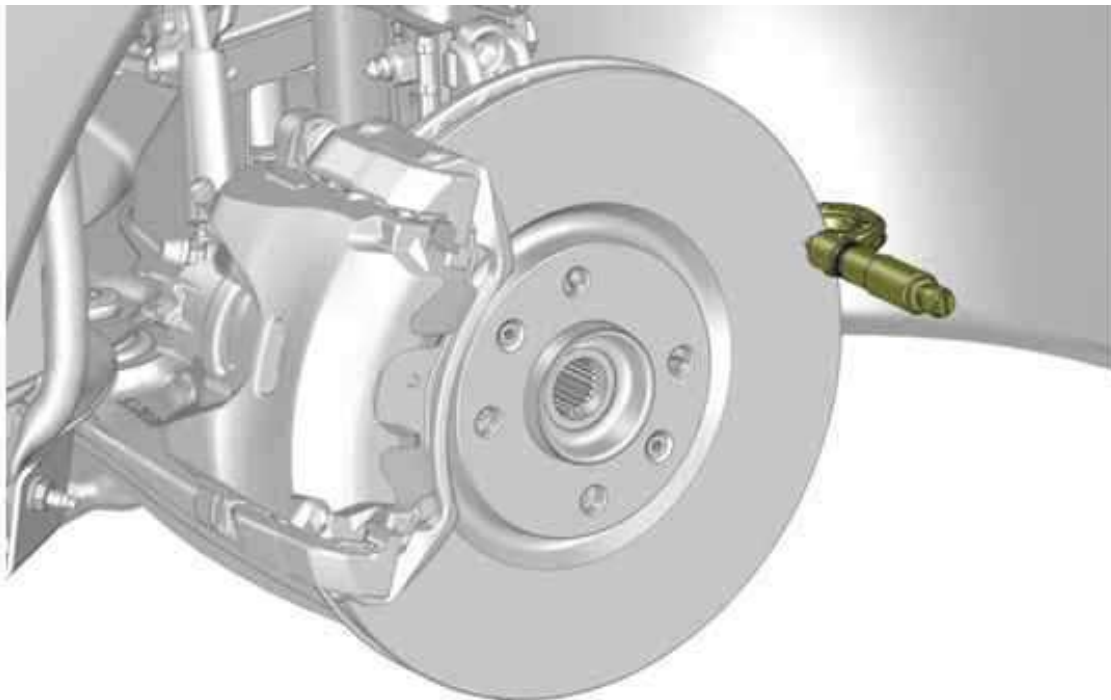


Figure : B3FD05FD

Measure the thickness of the brake discs on the friction surfaces ; Using a micrometer (Capacity: 0 - 50 mm).
See the table below.

Front discs			
Special feature	Nominal diameter of a new disc	Thickness of a new disc	Minimum permitted thickness
Solid disc	247 mm	10 mm	8 mm
	247 mm	13 mm	11 mm
	266 mm	13 mm	11 mm
Ventilated disc	247 mm	20,4 mm	18,4 mm
	257 mm	20,4 mm	18,4 mm
	257 mm	22 mm	20 mm
Ventilated disc (C-Zero)	257 mm	17 mm	15,4 mm
Ventilated disc	266 mm	20,4 mm	18,4 mm
	266 mm	22 mm	20 mm
	280 mm	24 mm	22 mm
	280 mm	28 mm	26 mm
	281 mm	26 mm	24 mm
	283 mm	26 mm	24 mm
	284 mm	22 mm	20,2 mm
	285 mm	28 mm	26 mm
	288 mm	28 mm	26 mm
	294 mm	24 mm	22,4 mm
	294 mm	26 mm	24,4 mm
	300 mm	24 mm	22 mm
	300 mm	32 mm	30 mm
	302 mm	26 mm	24 mm
	304 mm	28 mm	26 mm
	309 mm	32 mm	30 mm
	310 mm	32 mm	30 mm
	330 mm	30 mm	28 mm
	340 mm	30 mm	28 mm

4. Front hub

4.1. Checking the run-out : First possibility

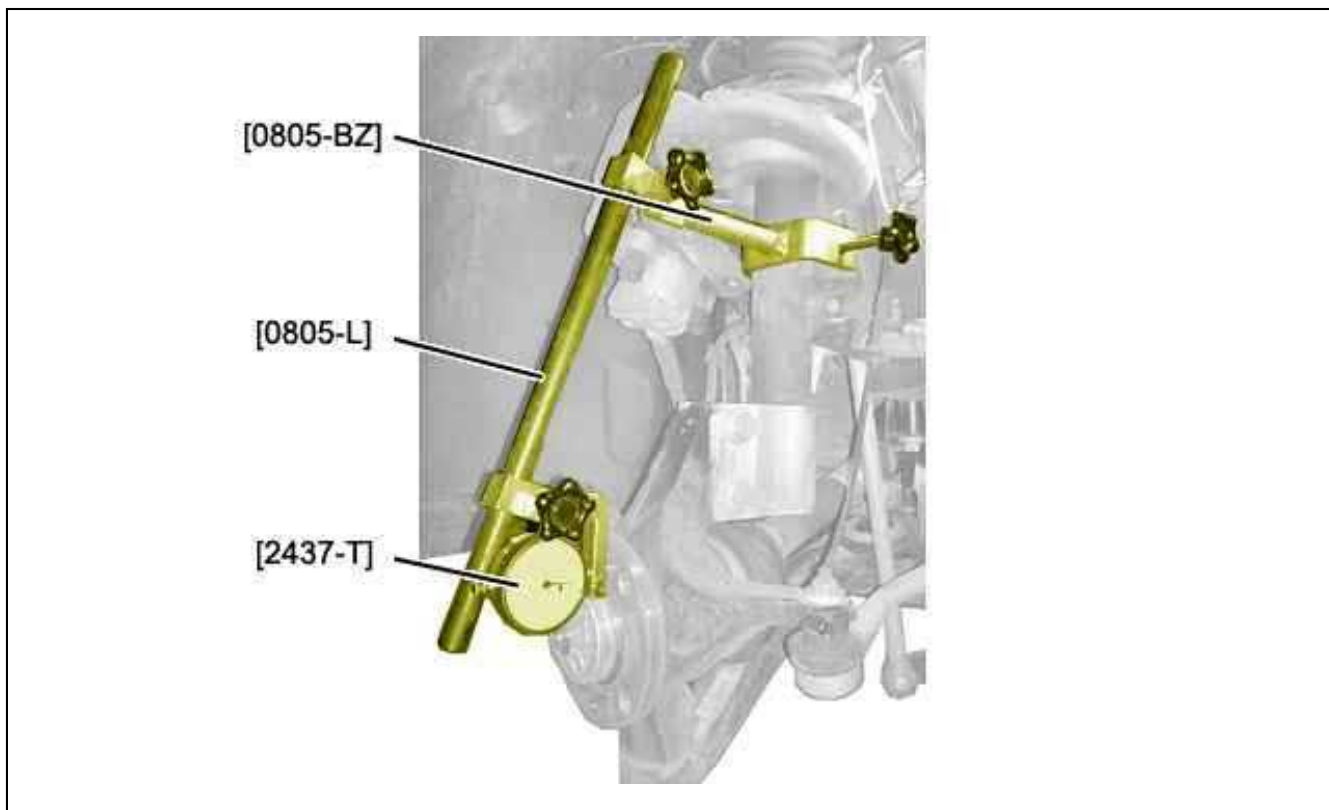


Figure : B3FD05ID

Check the tightening torque of the driveshaft nut.

Use an abrasive cloth to clean the contact surface of the brake hub/disc.

Fix :

- The assembly [0805-BZ], [0805-L] on the damper
- The dial gauge [2437-T] on the tool [0805-L]

Place the tip of the dial gauge [2437-T] in contact as close as possible to the outer edge of the front hub (the tip under the action of the spring).

CAUTION : To check the run-out of the front hub, turn the hub by means of the driveshaft.

Carry out :

- A dial gauge zero reset
- A complete revolution of the front hub

Permissible run-out of the front hub : Less than 0,013 mm.

4.2. Checking the run-out : Second possibility

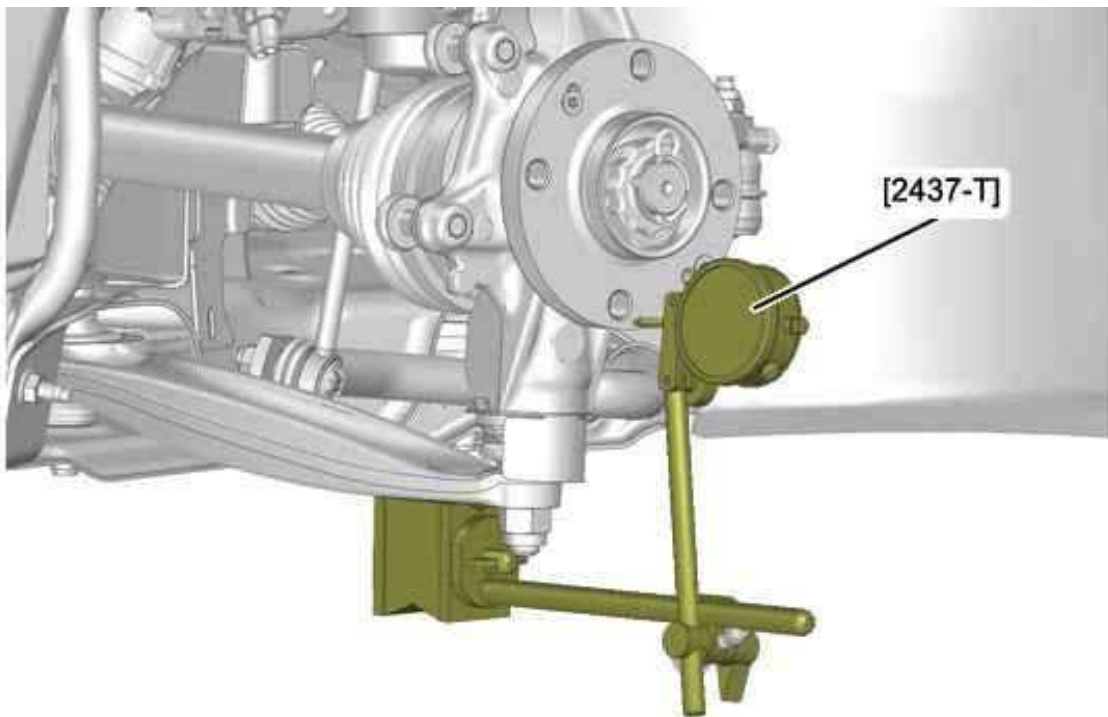


Figure : B3FD05JD

Fix :

- The magnetic support on the lower suspension arm
- The dial gauge [2437-T] on the magnetic support

Place the tip of the dial gauge [2437-T] in contact as close as possible to the outer edge of the front hub (the tip under the action of the spring).

CAUTION : To check the run-out of the front hub, turn the hub by means of the driveshaft.

Carry out :

- A dial gauge zero reset
- A complete revolution of the front hub

Permissible run-out of the front hub : Less than 0,013 mm.

5. Checking the thickness of the rear brake disc (wheel removed)

Slacken the parking brake .

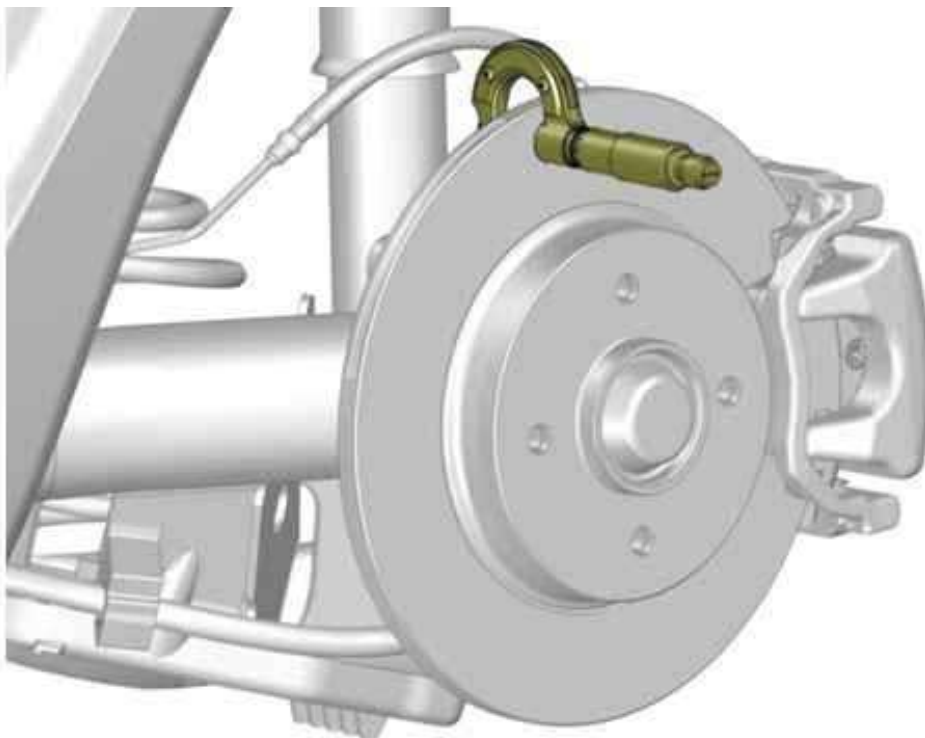


Figure : B3FD05KD

Measure the thickness of the brake discs on the friction surfaces ; Using a micrometer (Capacity: 0 - 50 mm).
See the table below.

Rear discs			
Special feature	Nominal diameter of a new disc	Thickness of a new disc	Minimum permitted thickness
Solid disc	247 mm	8 mm	6 mm
Solid disc hub	249 mm	9 mm	7 mm
	268 mm	12 mm	10 mm
Solid disc	272 mm	12 mm	10 mm
	274 mm	14 mm	12 mm
	280 mm	16 mm	14 mm
	290 mm	10 mm	8 mm
	290 mm	12 mm	10 mm
	290 mm	14 mm	12 mm
	300 mm	16 mm	14 mm
	302 mm	10 mm	8,4 mm
Ventilated disc	302 mm	22 mm	20 mm

6. Rear brake drum check

Slacken the parking brake .

Remove :

- The wheel
- The brake drum

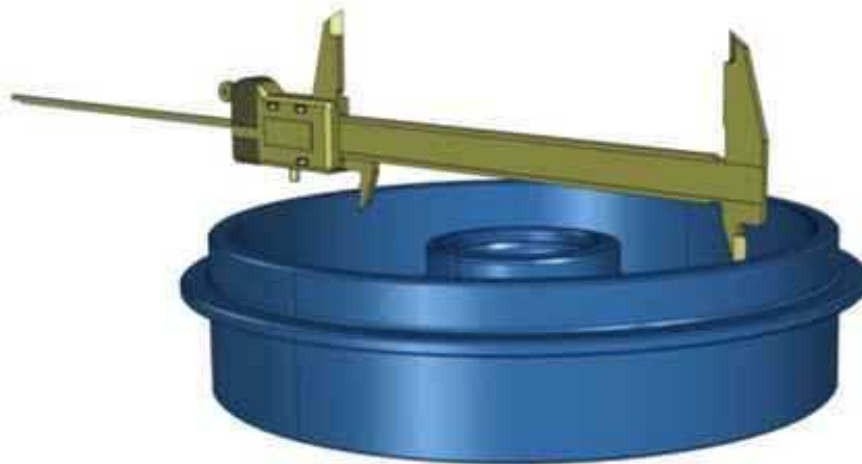


Figure : B3FD05LD

Measure the internal diameter of the brake drums on the friction surface ; Using sliding calipers .
See the table below.

Rear brake drum		
Drum	Nominal diameter of a new drum	Maximum permitted diameter
7"	180 mm	182 mm
8"	203 mm	204,4 mm
8" (C-Zero)	203 mm	205 mm
9"	228,6 mm	229,8 mm
10"	254,15 mm	256 mm

Refit :

- The brake drum
- The wheel

7. Check of the thickness of the brake pad linings and brake shoe linings

Check the wear of the brake pads : Using tool [0821].

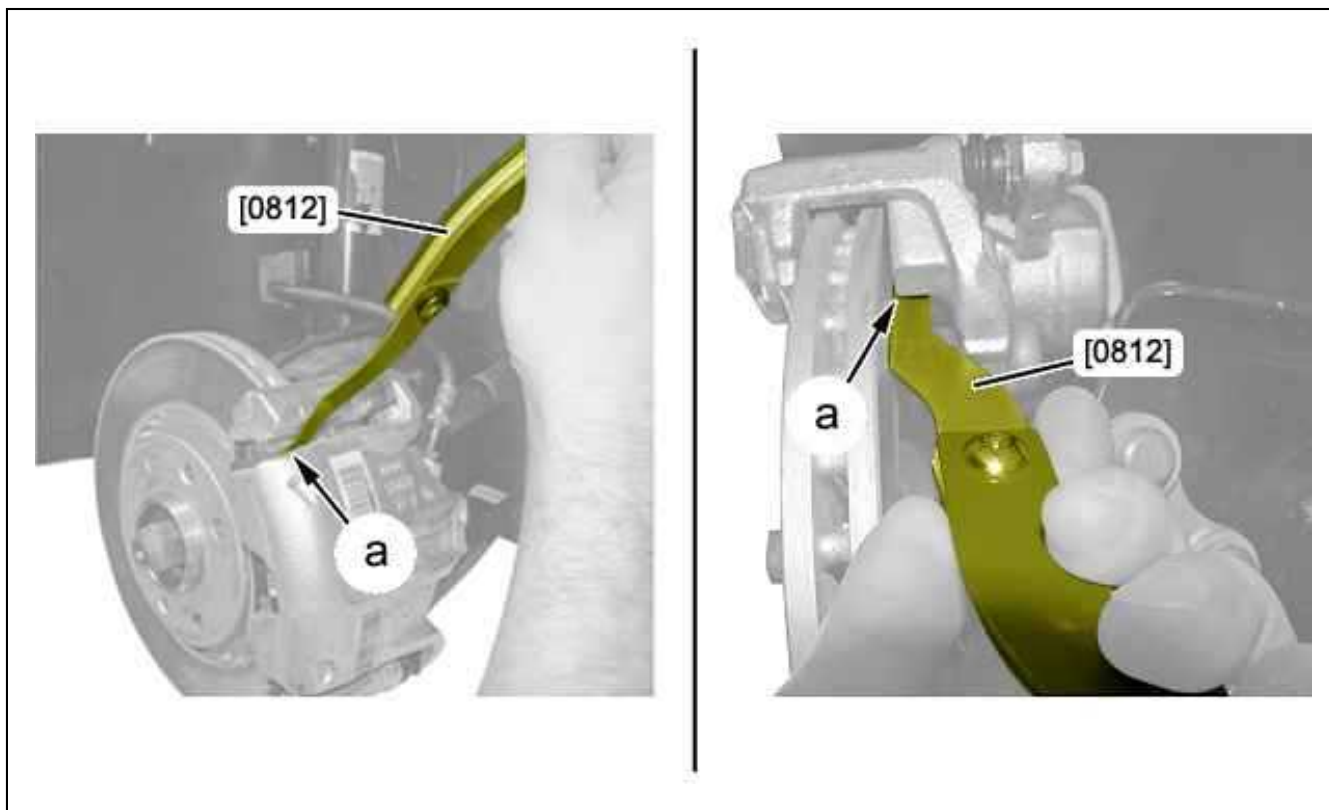


Figure : B3FD05UD

N.B. : Take several measurements at the points accessible using the tool [0821] (inside and outside) : For example a "a".

Vehicle	Minimum thickness of the brake pad linings (front)	Minimum thickness of the brake pad linings (rear)	Minimum thickness of the brake shoe linings
C-ZERO (S4)	2 mm	-	1 mm
C1 (B0)	1 mm	-	1 mm
C2 (A6)	2 mm	2 mm	1 mm
C3 (A8)			
C3 (A31)			
C3 Pluriel (A42)			
C3 (A51)			
DS3 (A55)			
C3 PICASSO (A58)	2 mm	2 mm	-
C-ELYSEE (M43)	2 mm	-	1 mm
C4 (B53)	2 mm	2 mm	-
C4 PICASSO (B58)			
C4 PICASSO B78			
C4 (B7) -DS4			
C QUATRE L Russia (B7R)			
CITROEN C5 (X3)	2 mm	2 mm	1 mm
CITROEN C5 (X4)			
CITROEN C5 (X7)	3 mm	3 mm	-

CITROEN C5 (XW)			
DS5 (B81)	2 mm	2 mm	-
C6 (X6)	2 mm	2 mm	-
C8(VV)	3 mm	2 mm	-
C4 Aircross (J4)	2 mm	2 mm	1 mm
C-Crosser (I4)	2 mm	2 mm	1 mm
NEMO (MCV)	2 mm	2 mm	1 mm
BERLINGO (M49)	2 mm	-	1 mm
BERLINGO (M59)	2 mm	-	1 mm
BERLINGO (B9)	2 mm	2 mm	1 mm
DISPATCH - SYNERGIE (U6)			
JUMPY 3 (G9)			
JUMPER 2 (U5)	2 mm	2 mm	1 mm
JUMPER 3 (U9)	2 mm	2 mm	1 mm

ESSENTIAL : Observe the safety and cleanliness recommendations  .

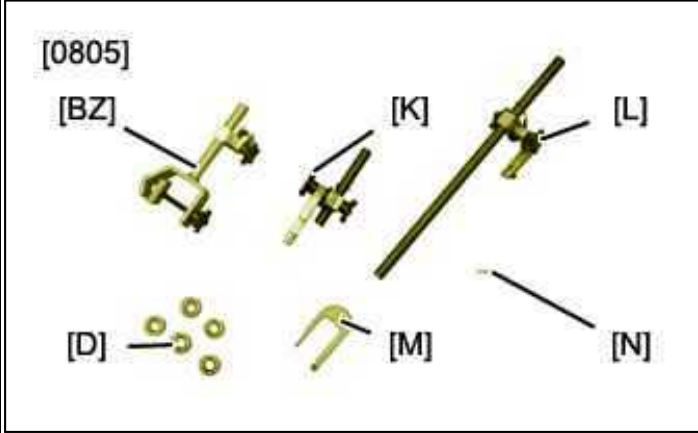
1. Foreword

This document describes a brake wear checking method, it can be printed, as can the associated methods, at the request of the customer.

2. Tooling

CAUTION : The kit [0805] is not available from replacement parts. As a replacement, a dial gauge magnetic support can be used which will guarantee the measurements.

Equipment : Dial gauge magnetic support .

Tool	Reference	Designation
	[0805]	Disc/hub run-out checking tool
	[0805-BZ]	caliper
	[0805-K]	Disc check bracket + Ventilated disc fork
	[0805-L]	Disc check bracket
	[0805-D]	Non-ventilated disc fork
	[0805-M]	Spacer
	[0805-N]	dial gauge extension
	[2437-T]	Dial gauge
	[0821]	Set of feeler gauges to measure the brake pad

wear

[0821]



Figure : E5AB1JZT

3. Front brake disc

Check the tightening torques of the wheels ⓘ.

Raise and support the vehicle on a 2-post lift.

3.1. Checking the run-out of the front brake disc (wheel fitted) (First possibility)

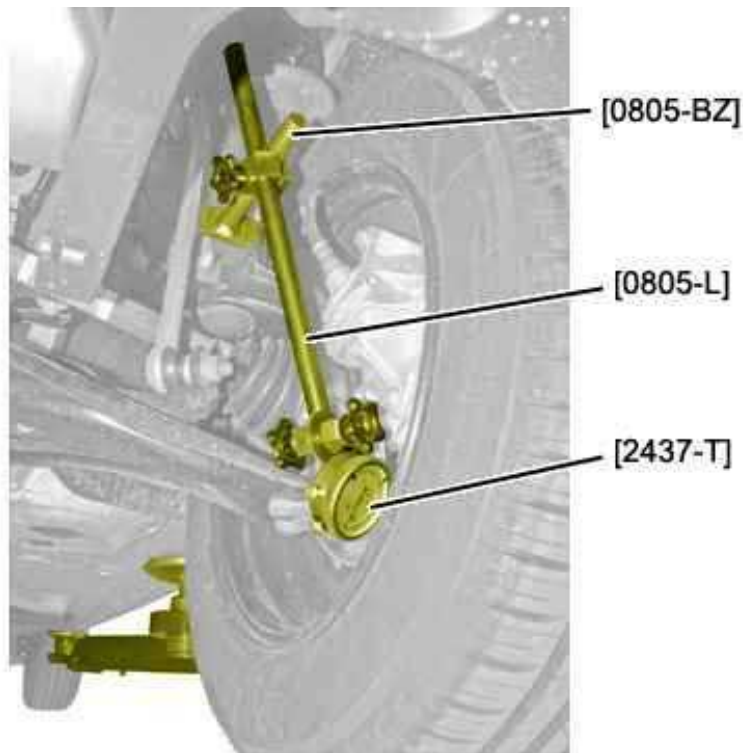


Figure : B3FD05CD

Fix :

- The assembly [0805-BZ], [0805-L] on the damper
- The dial gauge [2437-T] on the tool [0805-L]

Place the tip of the dial gauge [2437-T] in contact 10 mm from the periphery of the front brake disc (the tip under the action of the spring).

CAUTION : To check the front brake disc run-out, turn the disc by means of the driveshaft.

Carry out :

- A dial gauge zero reset
- One complete revolution of the front brake disc

Permissible run-out of the front brake disc assembled on the hub : Less than 0,05 mm.

3.2. Checking the run-out of the front brake disc (wheel fitted) (Second possibility)

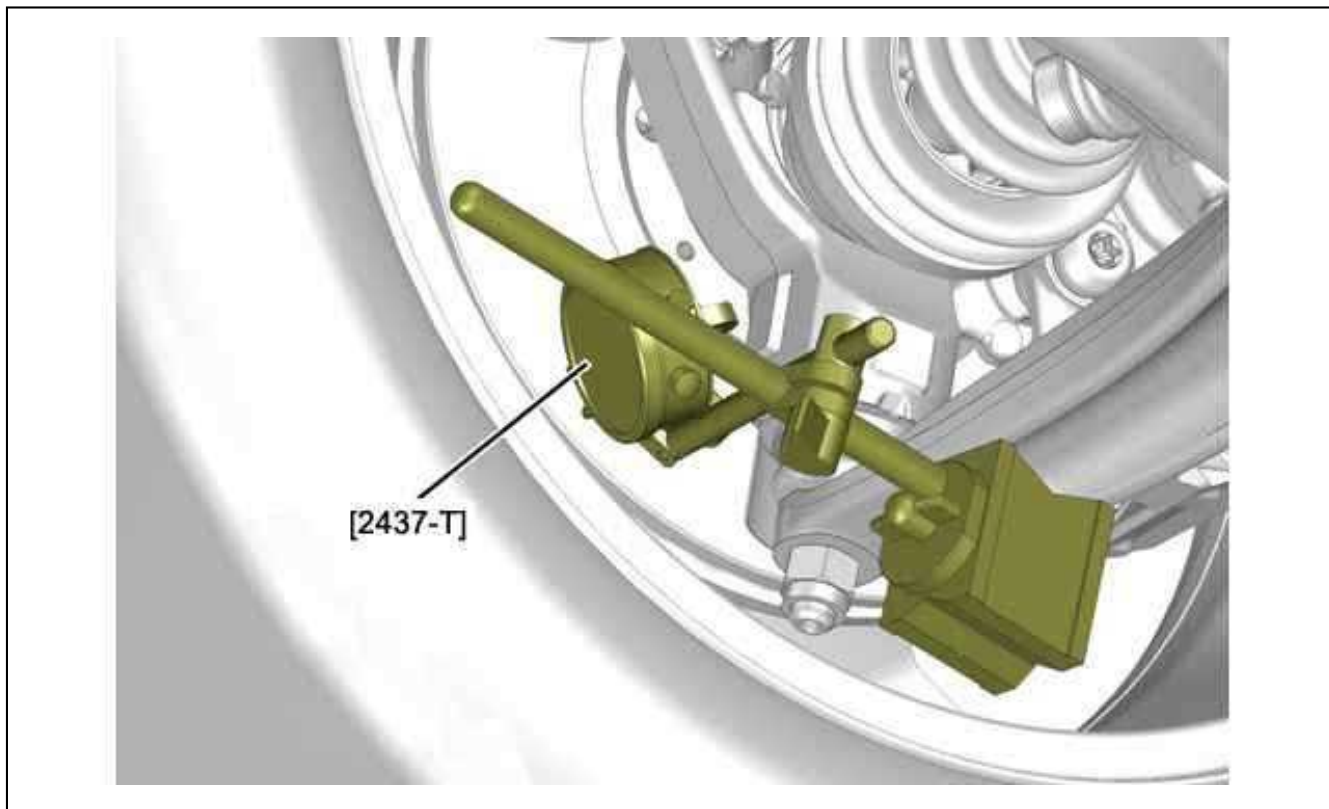


Figure : B3FD05DD

Fix the magnetic support on the lower suspension arm.

Fix the dial gauge [2437-T] on the magnetic support .

Place the tip of the dial gauge [2437-T] in contact 10 mm from the periphery of the front brake disc (the tip under the action of the spring).

CAUTION : To check the front brake disc run-out, turn the disc by means of the driveshaft.

Carry out :

- A dial gauge zero reset
- One complete revolution of the front brake disc

Permissible run-out of the front brake disc assembled on the hub : Less than 0,05 mm.

3.3. Checking the variation in the thickness of the front brake disc (Wheel removed) (First possibility)

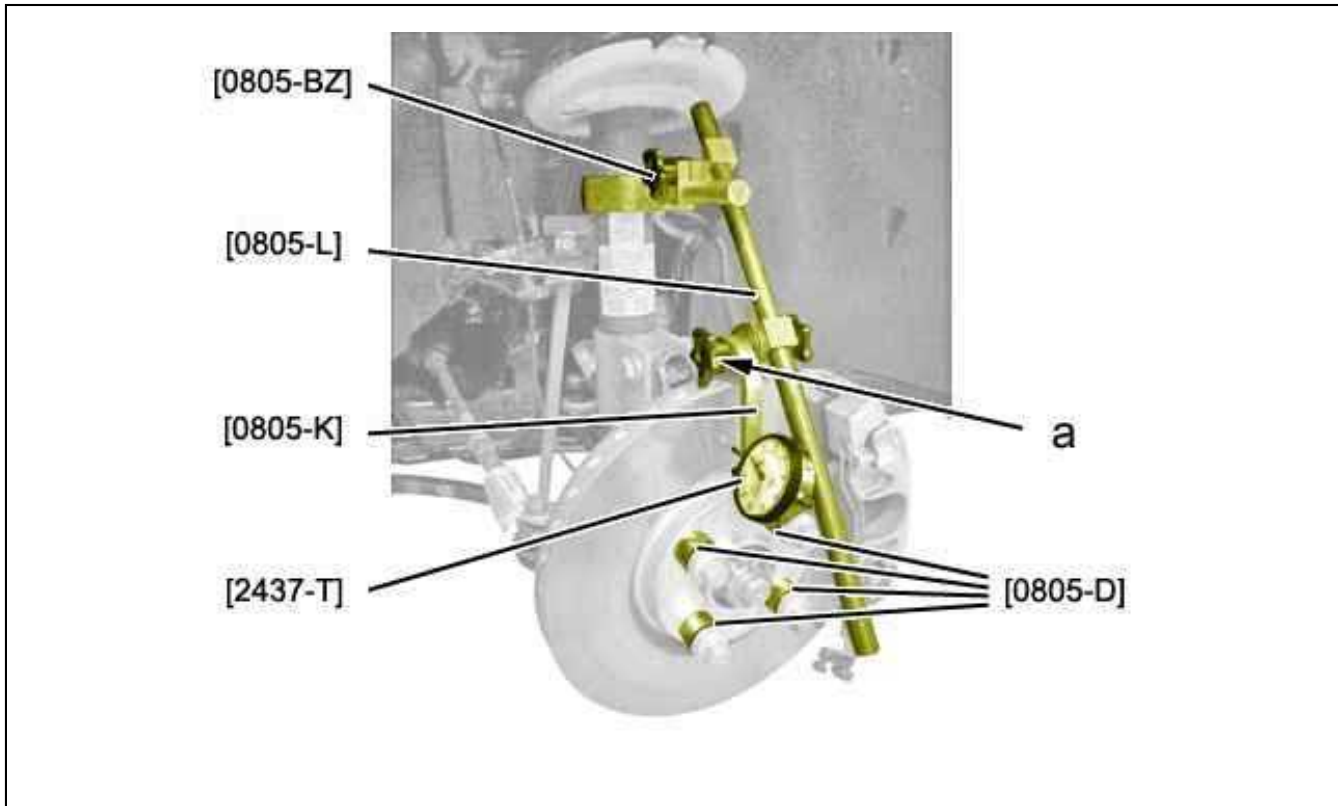


Figure : B3FD05ED

Refit and tighten the wheel bolts fitted with the tool [0805-D].

Fix :

- The assembly [0805-BZ], [0805-L] on the damper
- The dial gauge [2437-T] on the tool [0805-K]

Loosen the tool [0805-K] (at "a").

Place the tip of the dial gauge [2437-T] in contact 5 mm from the periphery of the brake disc (the tip under the action of the spring).

CAUTION : To check the variation in the thickness of the front brake disc, turn the brake disc by means of the driveshaft.

Carry out :

- A dial gauge zero reset
- One complete revolution of the front brake disc

Permissible variation in the thickness of the front brake disc over the same circumference of 0,01 mm.

3.4. Checking the variation in the thickness of the front brake disc (Wheel removed) (Second possibility)

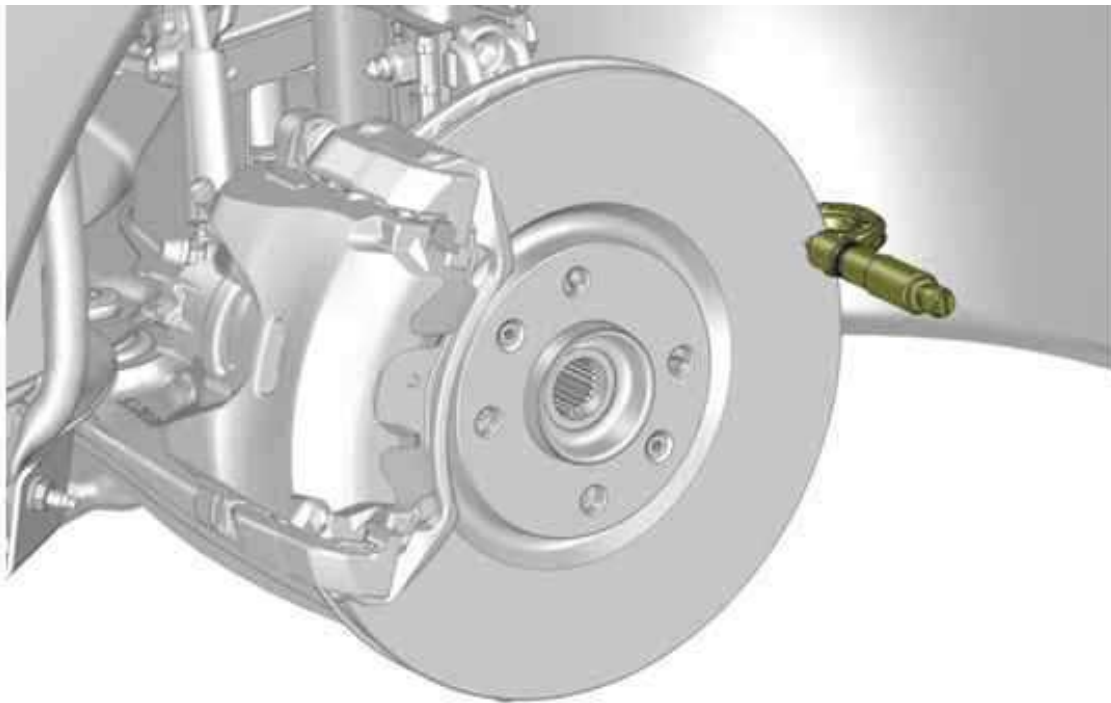


Figure : B3FD05FD

Check the variation in the thickness over the circumference at 8 points 5 mm from the periphery of the front brake disc ;
Using a micrometer (Capacity: 0 - 50 mm).
Permissible variation in the thickness of the front brake disc over the same circumference of 0,01 mm.

3.5. Checking the thickness of the front brake disc (wheel removed)

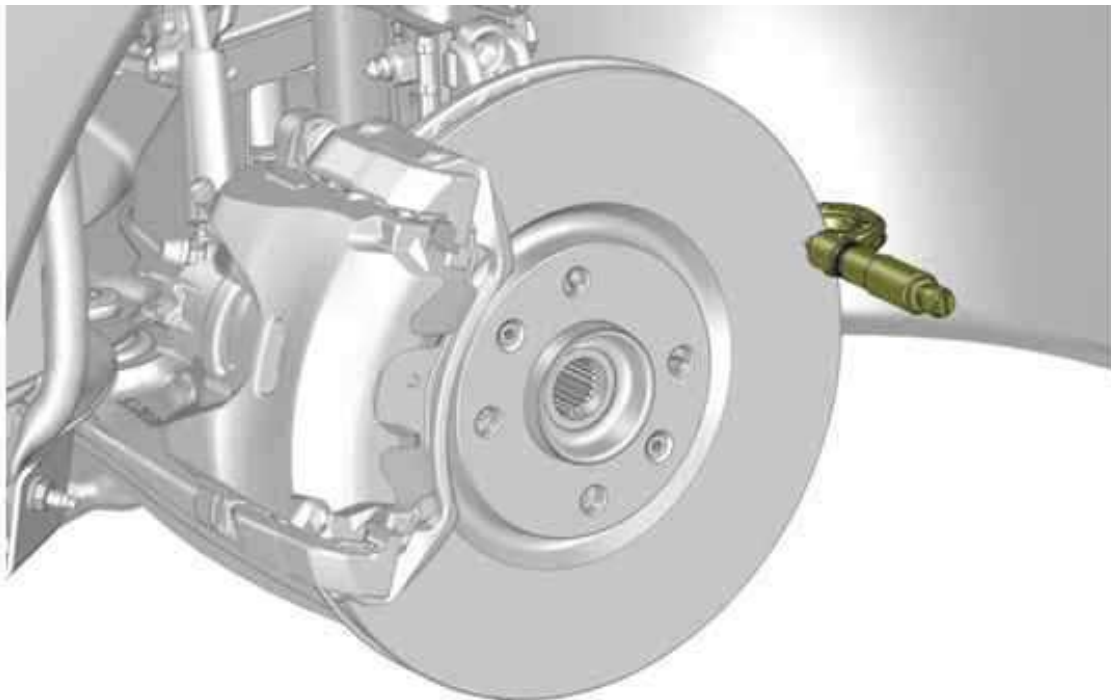


Figure : B3FD05FD

Measure the thickness of the front brake discs on the friction surfaces ; Using a micrometer (Capacity: 0 - 50 mm).
See the table below.

Front discs			
Special feature	Nominal diameter of a new disc	Thickness of a new disc	Minimum permitted thickness
Solid disc	247 mm	10 mm	8 mm
	247 mm	13 mm	11 mm
	266 mm	13 mm	11 mm
Ventilated disc	247 mm	20,4 mm	18,4 mm
	257 mm	20,4 mm	18,4 mm
	257 mm	22 mm	20 mm
Ventilated disc (ION - C-Zero)	257 mm	17 mm	15,4 mm
Ventilated disc	266 mm	20,4 mm	18,4 mm
	266 mm	22 mm	20 mm
	280 mm	24 mm	22 mm
	280 mm	28 mm	26 mm
	281 mm	26 mm	24 mm
	283 mm	26 mm	24 mm
	284 mm	22 mm	20,2 mm
	285 mm	28 mm	26 mm
	288 mm	28 mm	26 mm
	294 mm	24 mm	22,4 mm
	294 mm	26 mm	24,4 mm
	300 mm	24 mm	22 mm
	300 mm	32 mm	30 mm
	302 mm	26 mm	24 mm
	304 mm	28 mm	26 mm
	309 mm	32 mm	30 mm
	310 mm	32 mm	30 mm
	330 mm	30 mm	28 mm
	340 mm	30 mm	28 mm
	380 mm	32 mm	30 mm

4. Front hub

4.1. Checking the run-out : First possibility

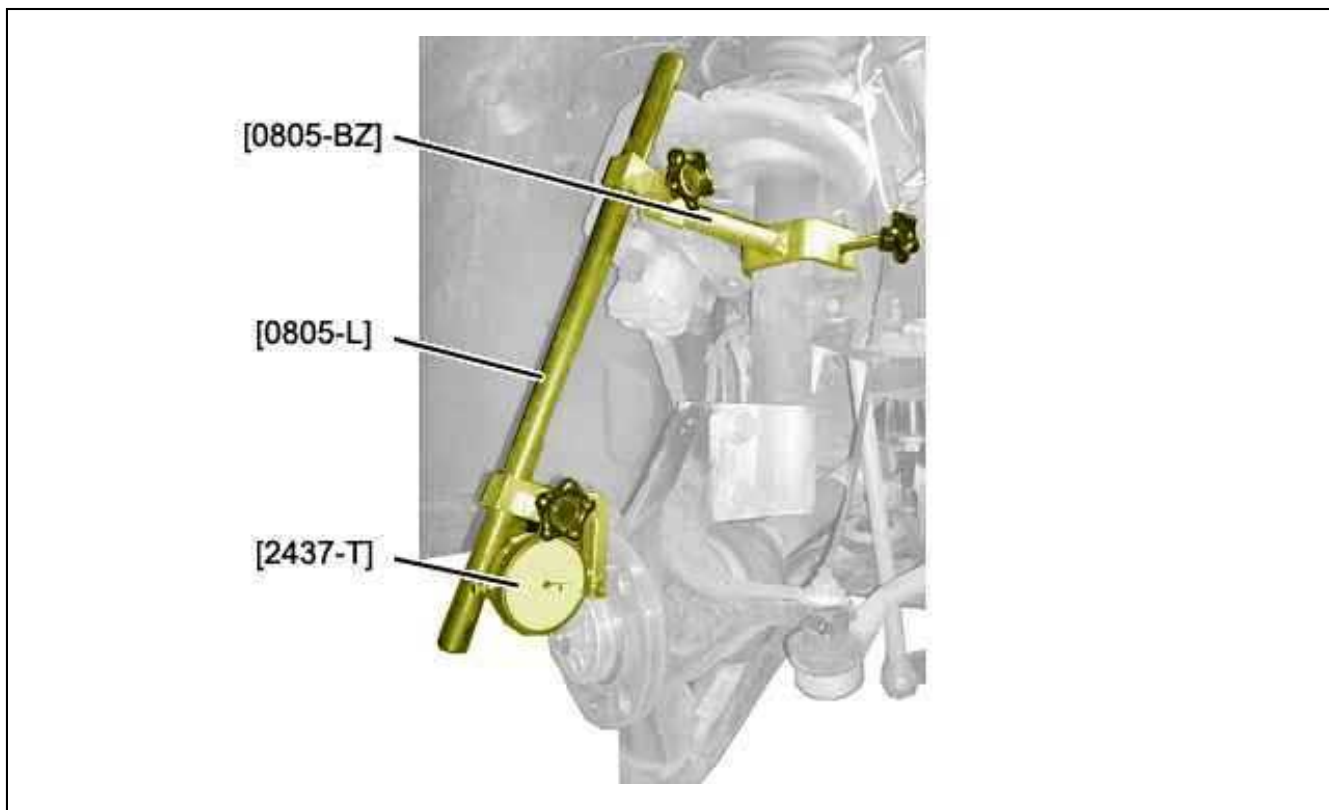


Figure : B3FD05ID

Check the tightening torque of the driveshaft nut.

Clean the hub/front brake disc contact surface ; Using an abrasive cloth.

Fix :

- The assembly [0805-BZ], [0805-L] on the damper
- The dial gauge [2437-T] on the tool [0805-L]

Place the tip of the dial gauge [2437-T] in contact as close as possible to the outer edge of the front hub (the tip under the action of the spring).

CAUTION : To check the run-out of the front hub, turn the hub by means of the driveshaft.

Carry out :

- A dial gauge zero reset
- A complete revolution of the front hub

Permissible run-out of the front hub : Less than 0,013 mm.

4.2. Checking the run-out : Second possibility

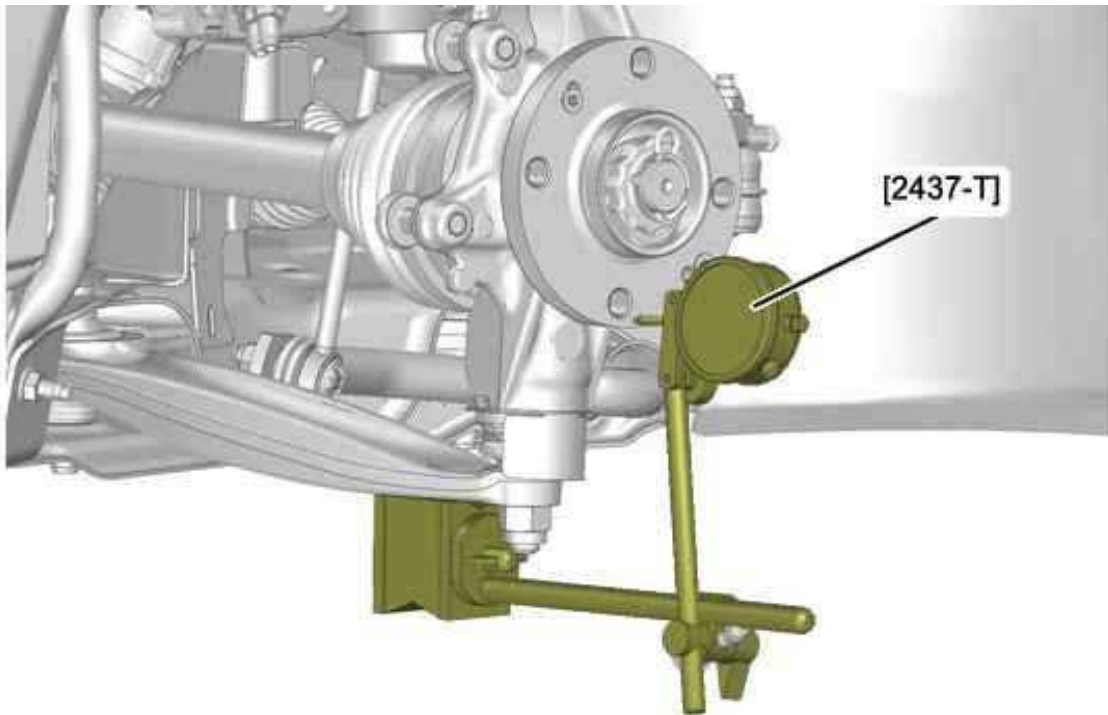


Figure : B3FD05JD

Fix :

- The magnetic support on the lower suspension arm
- The dial gauge [2437-T] on the magnetic support

Place the tip of the dial gauge [2437-T] in contact as close as possible to the outer edge of the front hub (the tip under the action of the spring).

CAUTION : To check the run-out of the front hub, turn the hub by means of the driveshaft.

Carry out :

- A dial gauge zero reset
- A complete revolution of the front hub

Permissible run-out of the front hub : Less than 0,013 mm.

5. Checking the thickness of the rear brake disc (wheel removed)

Slacken the parking brake .

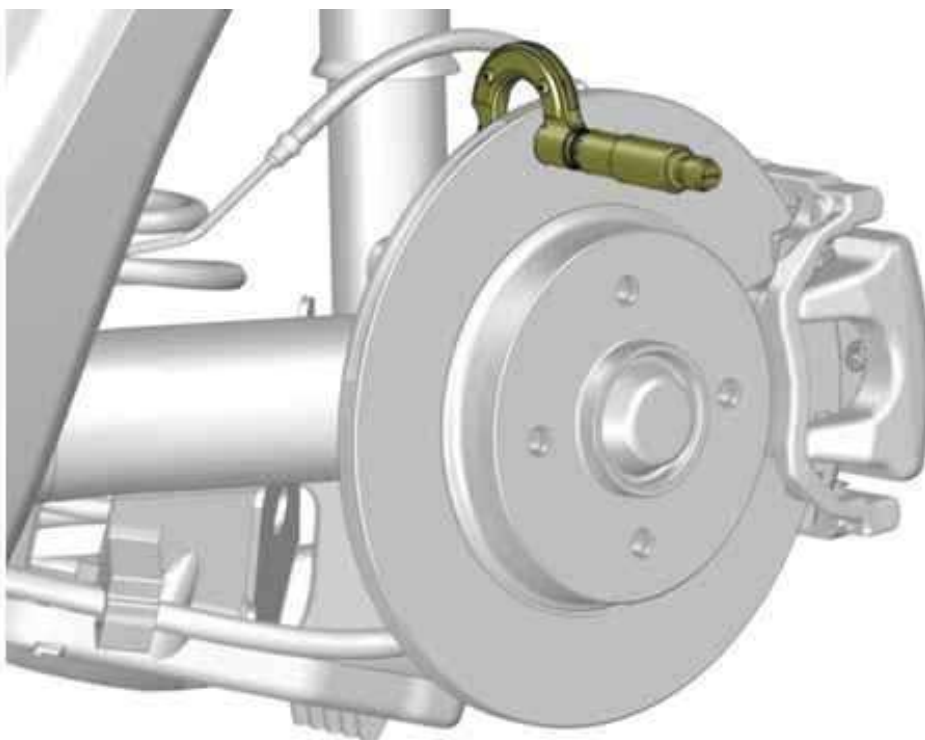


Figure : B3FD05KD

Measure the thickness of the rear brake discs on the friction surfaces ; Using a micrometer (Capacity: 0 - 50 mm).
See the table below.

Rear discs			
Special feature	Nominal diameter of a new disc	Thickness of a new disc	Minimum permitted thickness
Solid disc	247 mm	8 mm	6 mm
Solid disc hub	249 mm	9 mm	7 mm
	268 mm	12 mm	10 mm
Solid disc	272 mm	12 mm	10 mm
	274 mm	14 mm	12 mm
	280 mm	16 mm	14 mm
	290 mm	10 mm	8 mm
	290 mm	12 mm	10 mm
	290 mm	14 mm	12 mm
	300 mm	16 mm	14 mm
	302 mm	10 mm	8,4 mm
Ventilated disc	302 mm	22 mm	20 mm

6. Rear brake drum check

Slacken the parking brake .

Remove :

- The wheel
- The rear brake drum

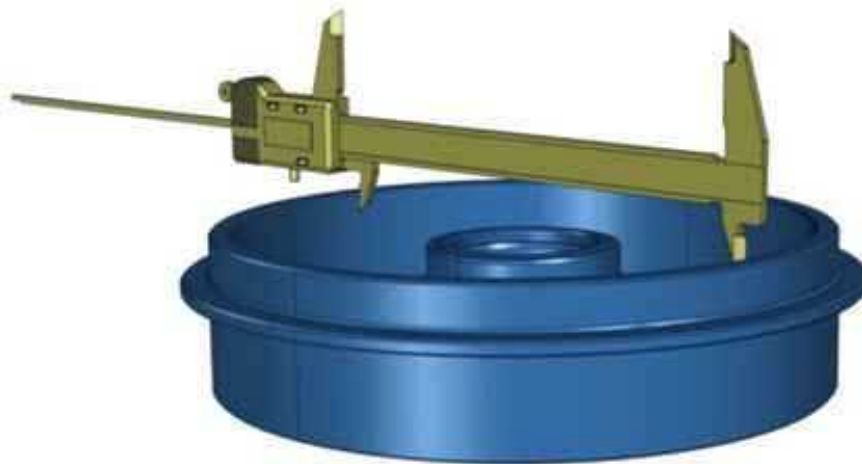


Figure : B3FD05LD

Measure the internal diameter of the rear brake drums on the friction surface ; Using sliding calipers .
See the table below.

Rear brake drum		
Drum	Nominal diameter of a new drum	Maximum permitted diameter
7"	180 mm	182 mm
8"	203 mm	204,4 mm
8" (ION - C-Zero)	203 mm	205 mm
9"	228,6 mm	229,8 mm
10"	254,15 mm	256 mm

Refit :

- The brake drum
- The wheel

7. Check of the thickness of the brake pad linings and brake shoe linings

Check the rear brake pad wear : Using tool [0821].

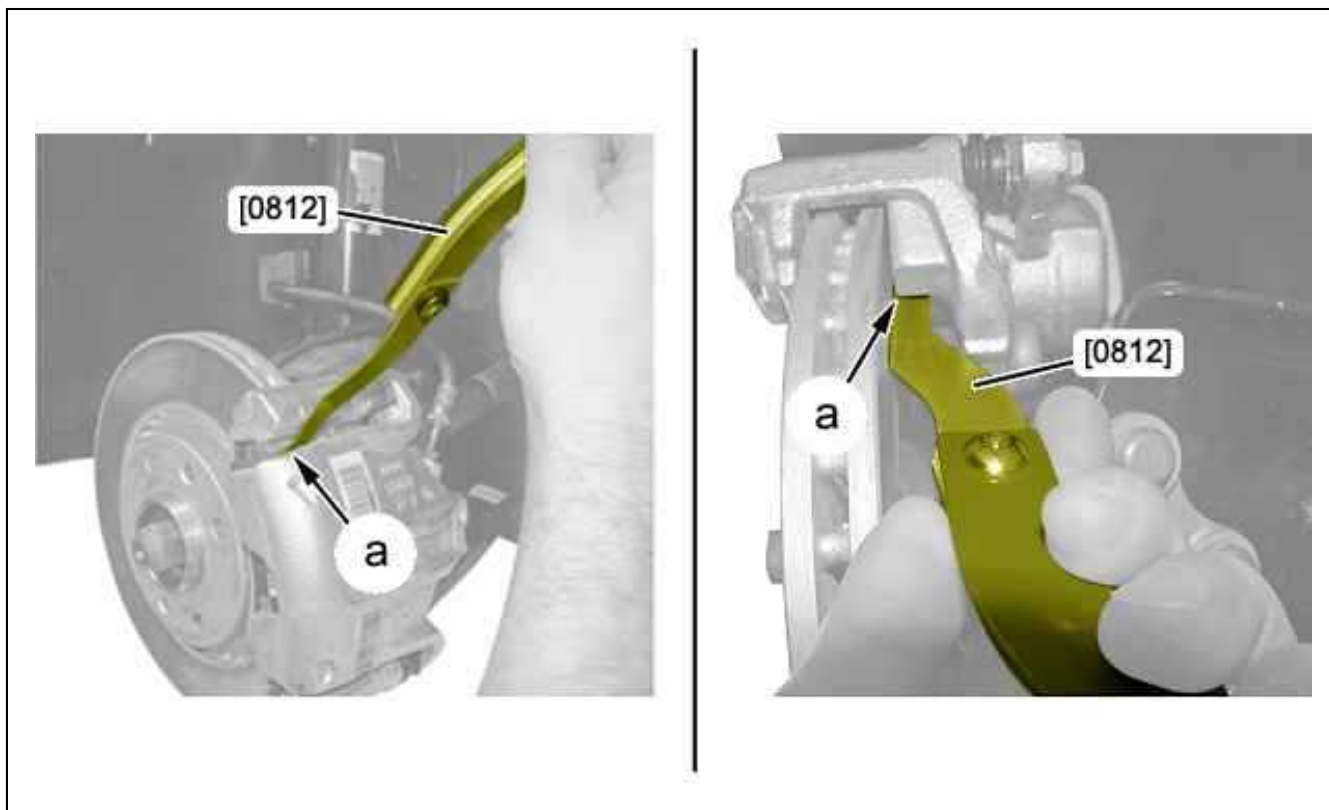


Figure : B3FD05UD

N.B. : Take several measurements at the points accessible using the tool [0821] (inside and outside) : For example a "a".

Vehicle	Minimum thickness of the brake pad linings (front)	Minimum thickness of the brake pad linings (rear)	Minimum thickness of the brake shoe linings
C-ZERO (S4)	2 mm	-	1 mm
C1 (B0)	1 mm	-	1 mm
C3 (A151)			
C2 (A6)	2 mm	2 mm	1 mm
C3 (A8)			
C3 (A31)			
C3 Pluriel (A42)			
C3 (A51)			
DS3 (A55)			
C3 Aircross (A158)	2 mm	-	1 mm
C3 Picasso (A58)	2 mm	2 mm	-
C-ELYSEE (M43)	2 mm	-	1 mm
C-ELYSEE China	2 mm	2 mm	-
C4 (B53)	2 mm	2 mm	-
C4 PICASSO (B58)			
C4 PICASSO B78			
C4 (B7) -DS4			
C4 China (BX3)			
C4 L Russia (B7R)			

CITROEN C5 (X3)	2 mm	2 mm	1 mm
CITROEN C5 (X4)			
CITROEN C5 (X7)	3 mm	3 mm	-
CITROEN C5 (XW)			
DS5 (B81)	2 mm	2 mm	-
DS5 China (B8C)	2 mm	2 mm	-
C6 (X6)	2 mm	2 mm	-
C8 (VV)	3 mm	2 mm	-
C4 Aircross (J4)	2 mm	2 mm	1 mm
C-Crosser (I4)	2 mm	2 mm	1 mm
NEMO (MCV)	2 mm	2 mm	1 mm
BERLINGO (M49)	2 mm	-	1 mm
BERLINGO (M59)	2 mm	-	1 mm
BERLINGO (B9)	2 mm	2 mm	1 mm
DISPATCH - SYNERGIE (U6)			
DISPATCH 3 (G9)			
RELAY 2 (U5)	2 mm	2 mm	1 mm
RELAY 3 (U9)	2 mm	2 mm	1 mm

REMOVING - REFITTING : VACUUM PUMP

ESSENTIAL : Observe the safety and cleanliness instructions ⓘ .

1. Removing

Disconnect the ancillaries battery.

Remove :

- The passenger compartment air inlet manifold
- The engine cover

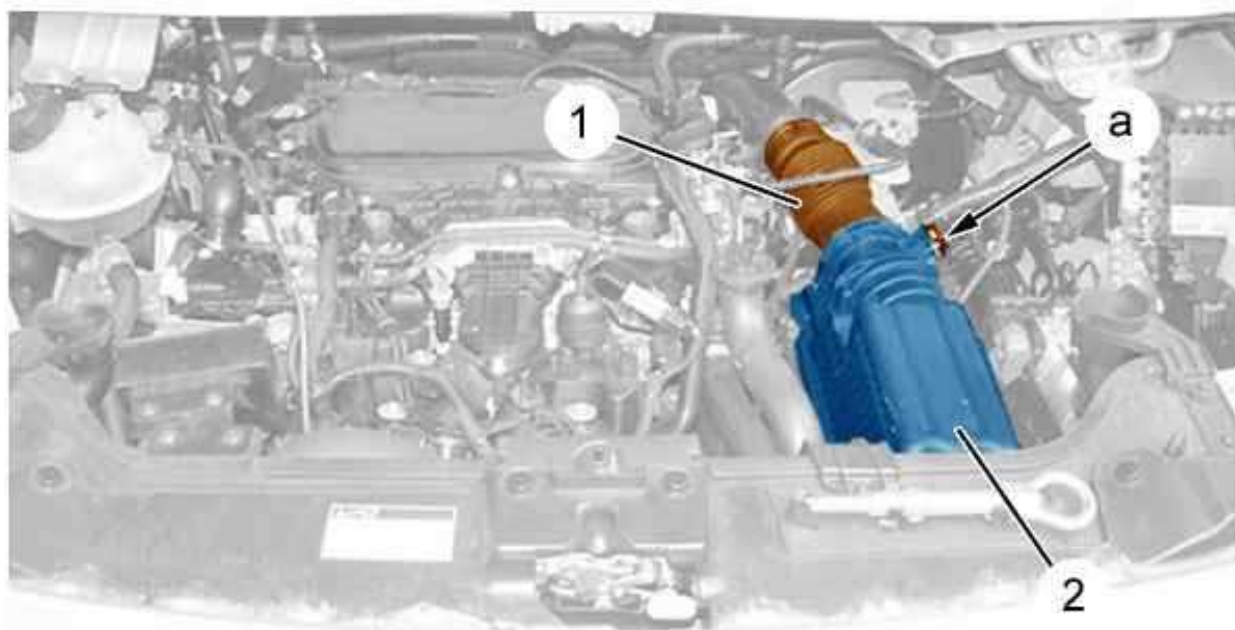


Figure : B3FG18CD

Disconnect the connector of the flowmeter (at "a").

Remove :

- The air cleaner housing (2)
- The air duct (1)

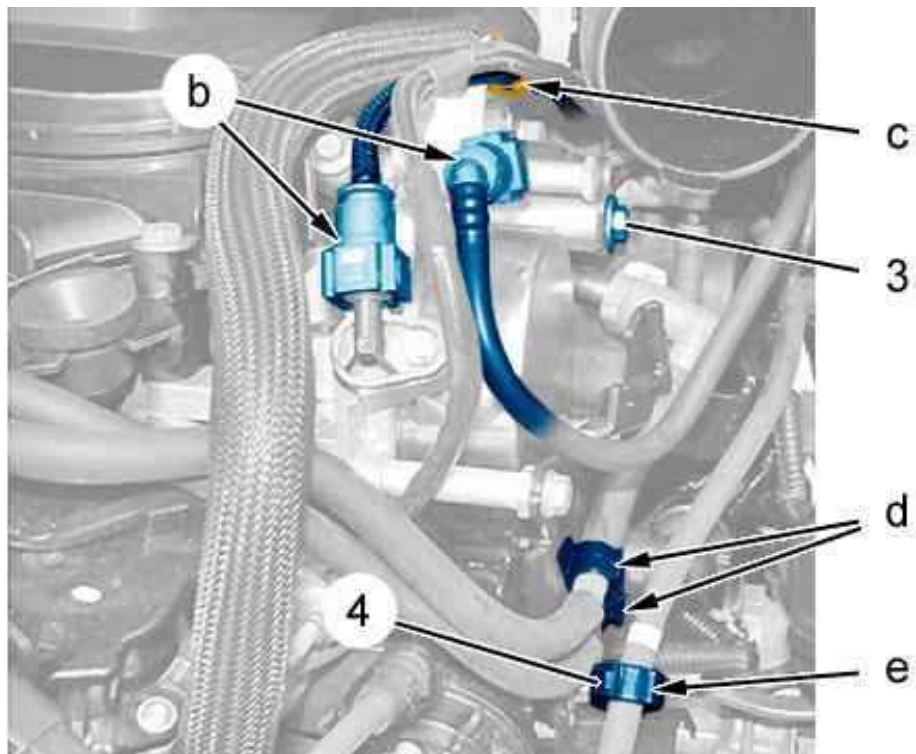


Figure : B3FG18DD

Uncouple the vacuum unions (at "b").

Release the vacuum pipe (at "c").

Remove the bolt (3) from the air duct .

Unclip :

- The fuel pipes (at "d")
- The flexible pipe (at "e")

Remove clip (4).

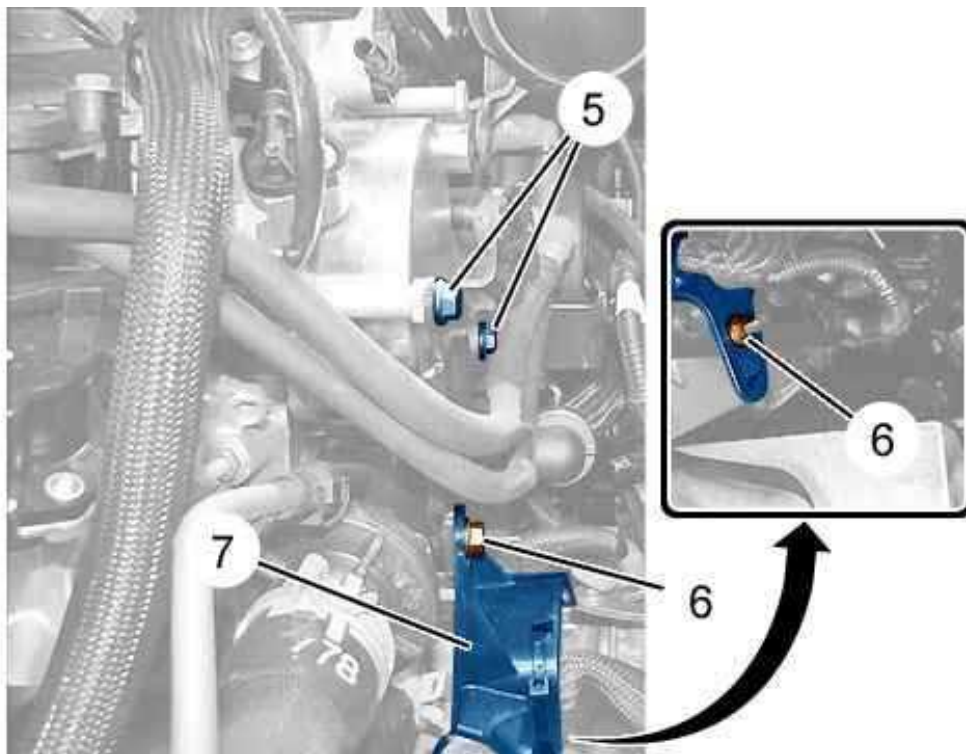


Figure : B3FG18ED

Remove the nuts (6).
Move aside the electrical harness sheathing (7).
Remove bolts (5).

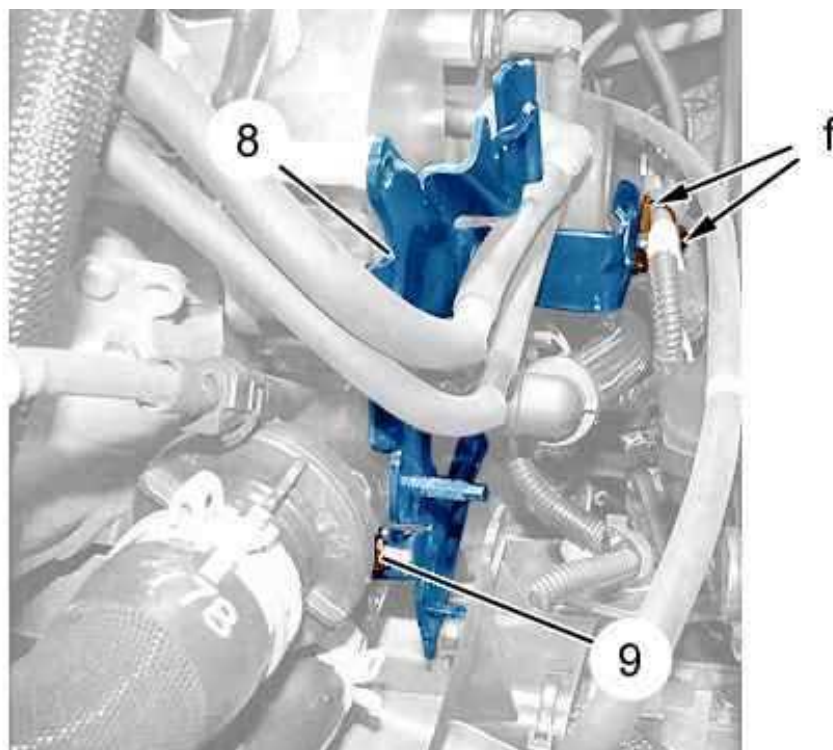


Figure : B3FG18FD

Unclip and move aside the electrical harness attached to the support (8) (at "f").

Remove the nut (9).

Move the mounting (8) aside.

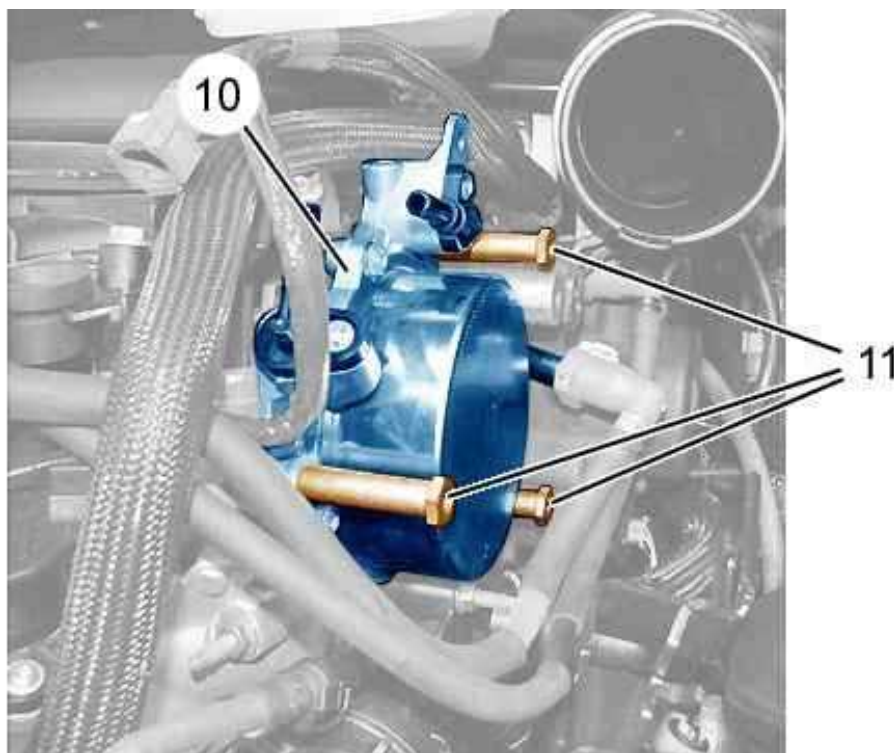


Figure : B3FG18GD

Remove :

- The screws (11)
- Vacuum pump (10)

2. Refitting

CAUTION : Adhere to the tightening torques.

CAUTION : The surfaces and joint faces must be free of any signs of knocks and scratches.

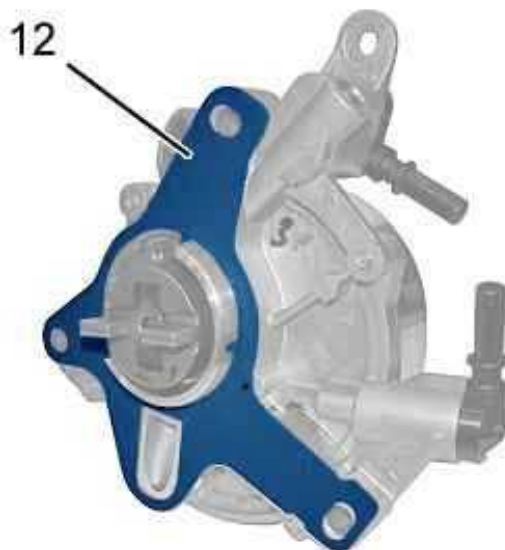


Figure : B3FG14DD

Clean the joint contact face.

Fit :

- A new seal (12)
- Vacuum pump (10)
- The screws (11)
- The bracket (8)
- The nut (9)

Clip the electrical harness and the connector on the support (8) (at "f").

Replace the bolts (5).

Position the electrical harness sheathing (7).

Fit :

- The nuts (6)
- The clip (4)

Clip :

- The flexible pipe (at "e")
- The fuel pipes (at "d")
- The vacuum pipe (at "c")

Refit the air duct bolt (3).

Connect the vacuum unions (at "b").

Fit :

- The air duct (1)
- The air cleaner housing (2)

Connect the flow meter connector (at "a").

Fit :

- The engine cover

- The passenger compartment air inlet manifold

CAUTION : Perform the operations that are required following a reconnection of the ancillaries battery.

Reconnect the ancillaries battery.

REMOVING - REFITTING : REAR BRAKE SHOES

ESSENTIAL : Observe the safety and cleanliness recommendations ⓘ .

1. Tooling

A pedal press.

1 wheel cylinder clamp (Type FACOM T.243).

1 set of pliers for removing/fitting front brake shoes (Type FACOM 196TS).

2. Preliminary operation

Lift and support the vehicle with the wheels free.

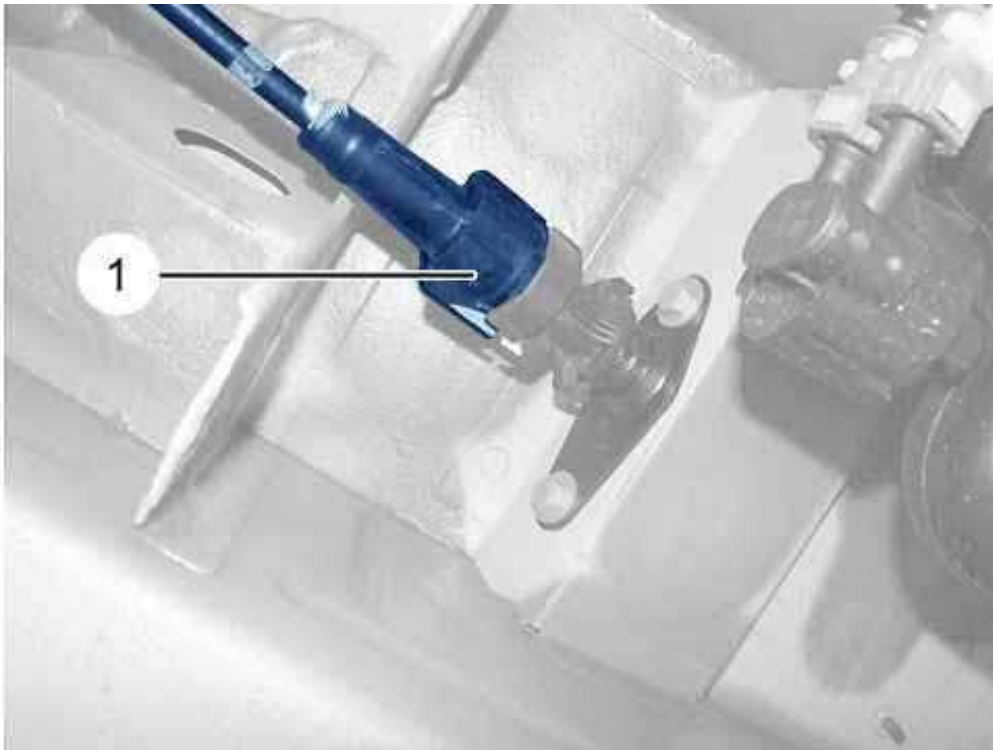


Figure : B3FG21YD

Unlock : The adjustment of the handbrake ⓘ (1).

Remove the rear brake drums ⓘ .

3. Removing

3.1. Rear brake shoes

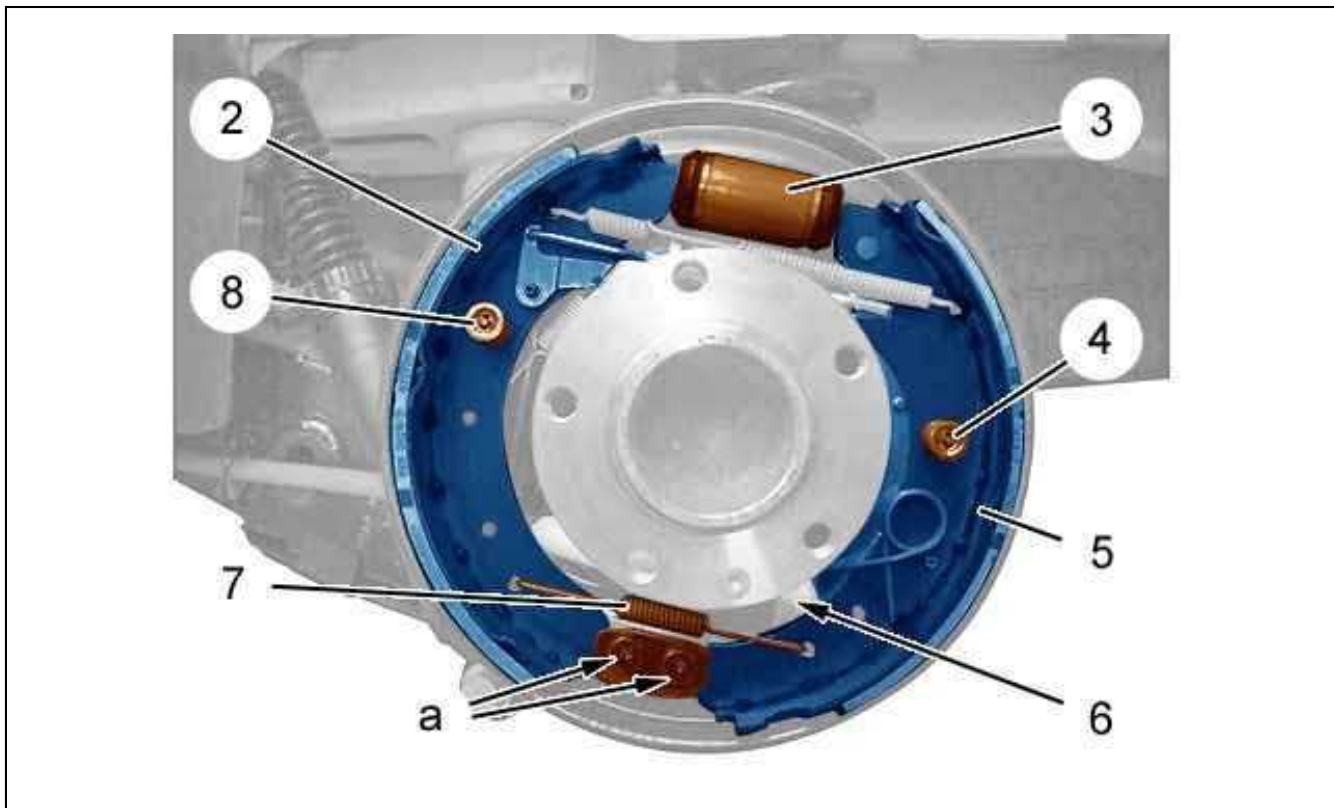


Figure : B3FG221D

Remove : Lower spring (7) ; Using pliers (Type FACOM 196TS).
 Position a retainer on the wheel cylinder (3) (Type FACOM T.243).
 Remove the fastenings (4), (8) and their springs.
 Disengage the brake shoes (2) and (5) from the brake backplate (at "a").

CAUTION : Do not damage the gaiters of the wheel cylinder (3).

Move aside the brake shoes (2) and (5) from the wheel cylinder (3).
 Tilt the brake shoes (2), (5).
 Uncouple the handbrake cable (6).

3.2. Wheel cylinder

Position : A pedal press.

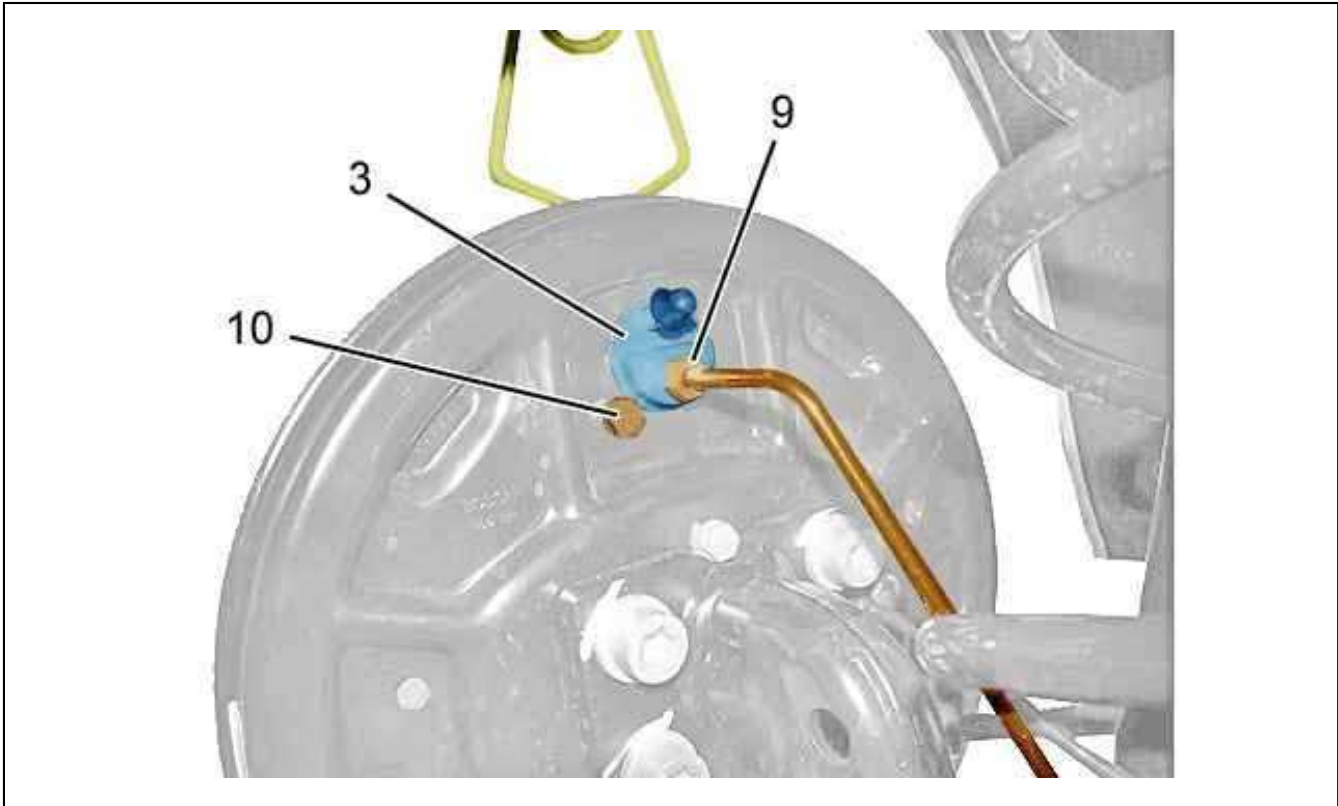


Figure : B3FG224D

Loosen and disconnect : The pipe (9).

Remove :

- The (10) bolt
- The wheel cylinder (3)

N.B. : Plug the openings using protective plugs.

4. Clean

ESSENTIAL : Do not use compressed air to clean the brakes.

4.1. 1st possibility

Clean the brake plate and brake drum using an approved brake cleaning product.

Allow to dry and to drain.

Wipe with a paper cloth.

4.2. 2nd possibility

Use an approved appliance for removing dust .

Check and/or replace (if necessary) :

- Around the pistons for leak
- Condition of the rubber protectors (Wheel cylinder (3))
- The state of wear of the brake drum

5. Refitting

ESSENTIAL : No trace of grease, oil, etc. should be tolerated on the brake drum and brake linings.

CAUTION : Adhere to the tightening torques.

Tightening torques :

- Braking system ⓘ
- Rear axle ⓘ
- Wheels ⓘ

5.1. Wheel cylinder

Refit :

- The wheel cylinder (3)
- The (10) bolt

Connect and tighten the connector (9).

Remove the pedal push .

5.2. Rear brake shoes

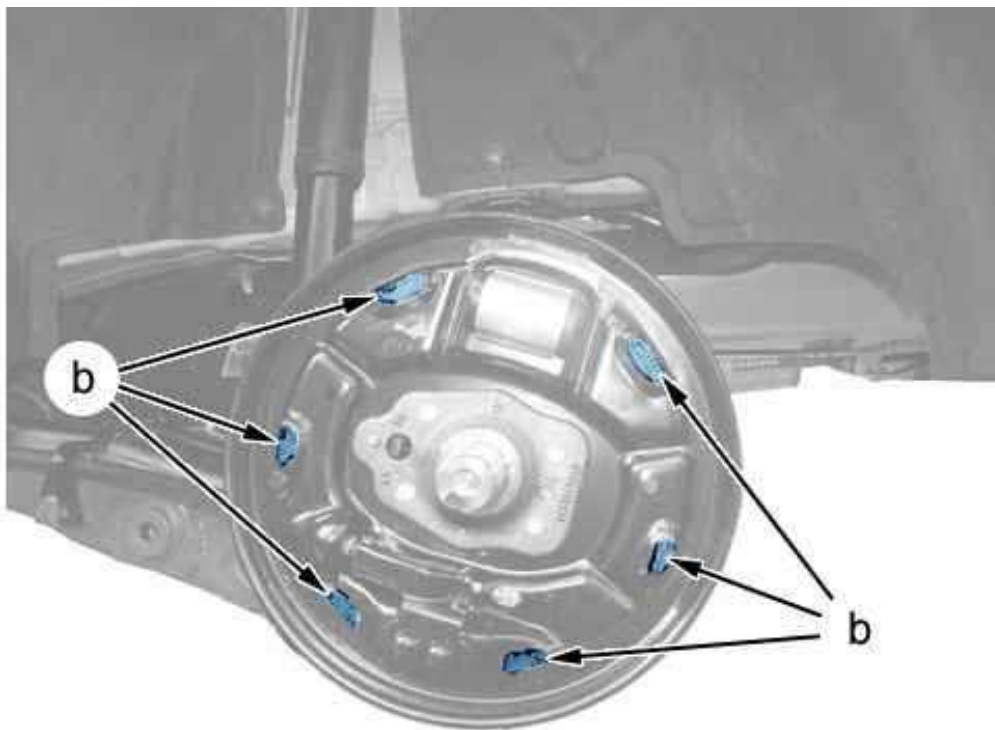


Figure : B3FG01XD

Lightly grease the 6 contact points ("b") of the brake shoes on the brake backplate ; With grease type LUBRITHERM G200.

Couple the parking brake cable (6).

N.B. : Check the locking of the handbrake cable (6).

Tilt the brake shoes (2), (5).

Engage :

- The brake shoes (2), (5) on the wheel cylinder (3)

- The brake shoes (2) and (5) on the brake backplate (at "a")

Remove the pliers of type FACOM 196TS.

Refit :

- The clips (4), (8) and their springs
- Lower spring (7)

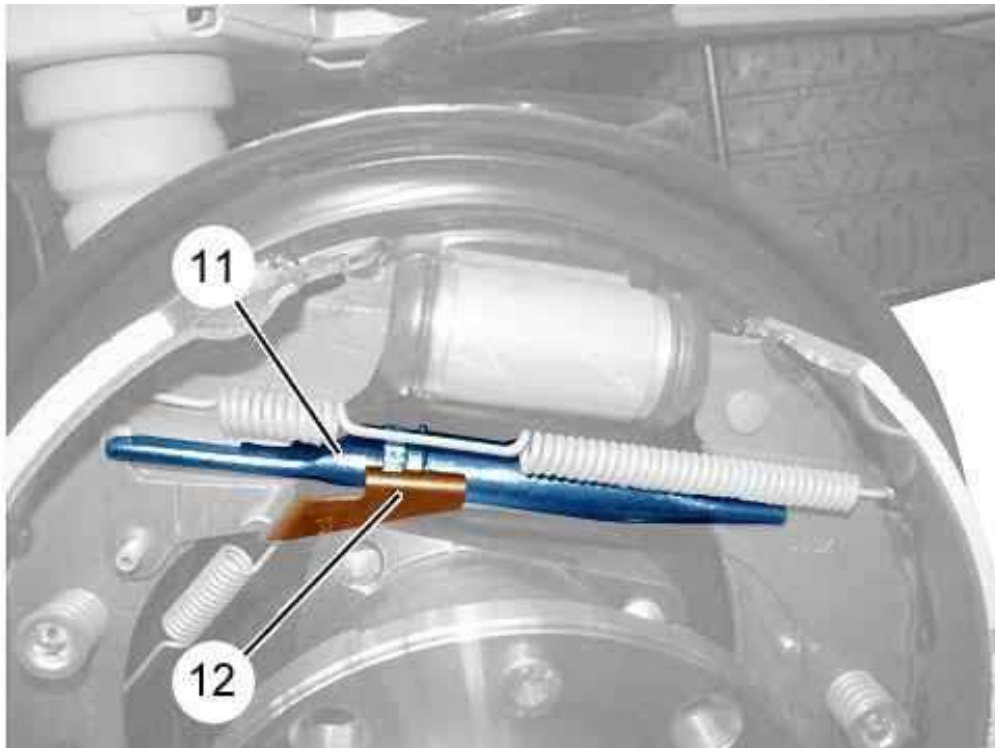


Figure : B3FG226D

Check that the control wheel (11) rotates freely.

Check the positioning of the lug (12).

Reduce the length of the play adjustment system to the maximum by actioning the control (11).

6. Additional operations

Refit the rear brake drums ⓘ .

Bleed the brake system (if necessary).

After re-assembly, press the brake pedal several times to operate the automatic adjustment mechanism.

Adjust the parking brake .

Refit :

- The wheels
- The vehicle to its wheels

REMOVING - REFITTING : REAR BRAKE DRUM

ESSENTIAL : Observe the safety and cleanliness recommendations ⓘ .

1. Removing

N.B. : Symmetrical operations : Right and left side.

Slacken the parking brake .

Untighten the rear wheel bolts.

Raise and support the vehicle, with the rear wheels hanging free.

Remove :

- The rear wheel bolts
- The rear wheels

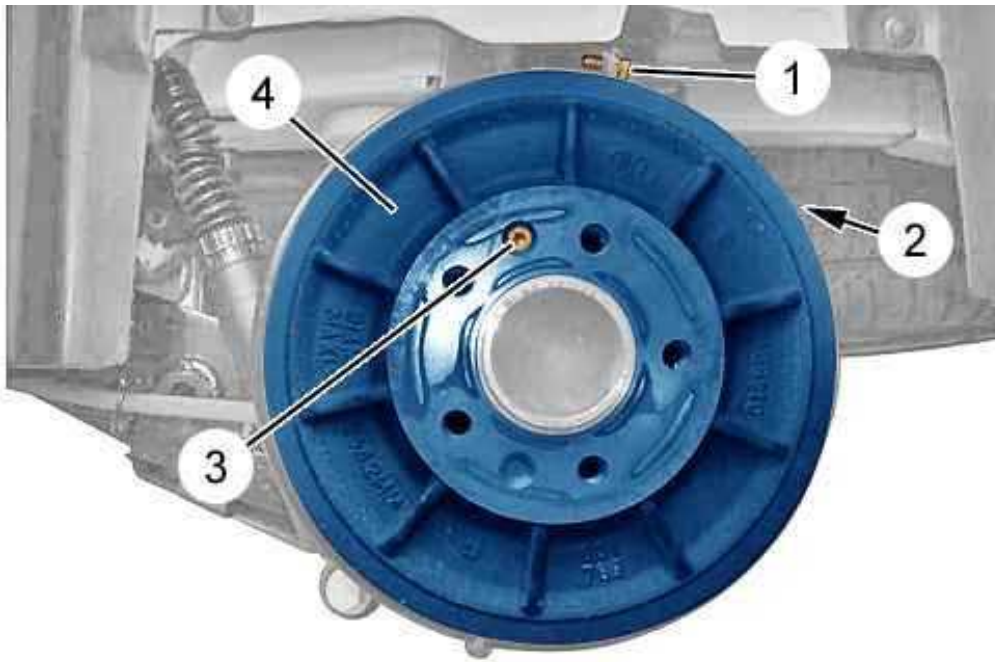


Figure : B3FG228D

Remove :

- The (1) bolt
- The drum protection (2)
- The (3) bolt
- The rear brake drum (4)

2. Checking

Visually check :

- The sealing around the wheel cylinder
- The condition of the rubber protections on the wheel cylinder
- The brake mechanism
- The state of wear of the drums

Replace any defective parts.

3. Refitting

N.B. : Symmetrical operations : Right and left side.

CAUTION : Adhere to the tightening torques.

Tightening torques :

- Braking system ⓘ
- road wheels ⓘ

CAUTION : The rear brake drum (4) and the rear brake shoes have to be free of any trace of grease or oil.

Refit :

- The rear brake drum (4)
- The bolt (3)
- The drum protection (2)
- The (1) bolt

Refit :

- The rear wheels
- The rear wheel bolts
- The vehicle to its wheels

Tighten the rear wheel bolts.

REMOVING - REFITTING : REAR WHEEL SENSOR

ESSENTIAL : Observe the safety and cleanliness recommendations ⓘ .

1. Removing

Disconnect the battery.

Lift and support the rear of the vehicle.

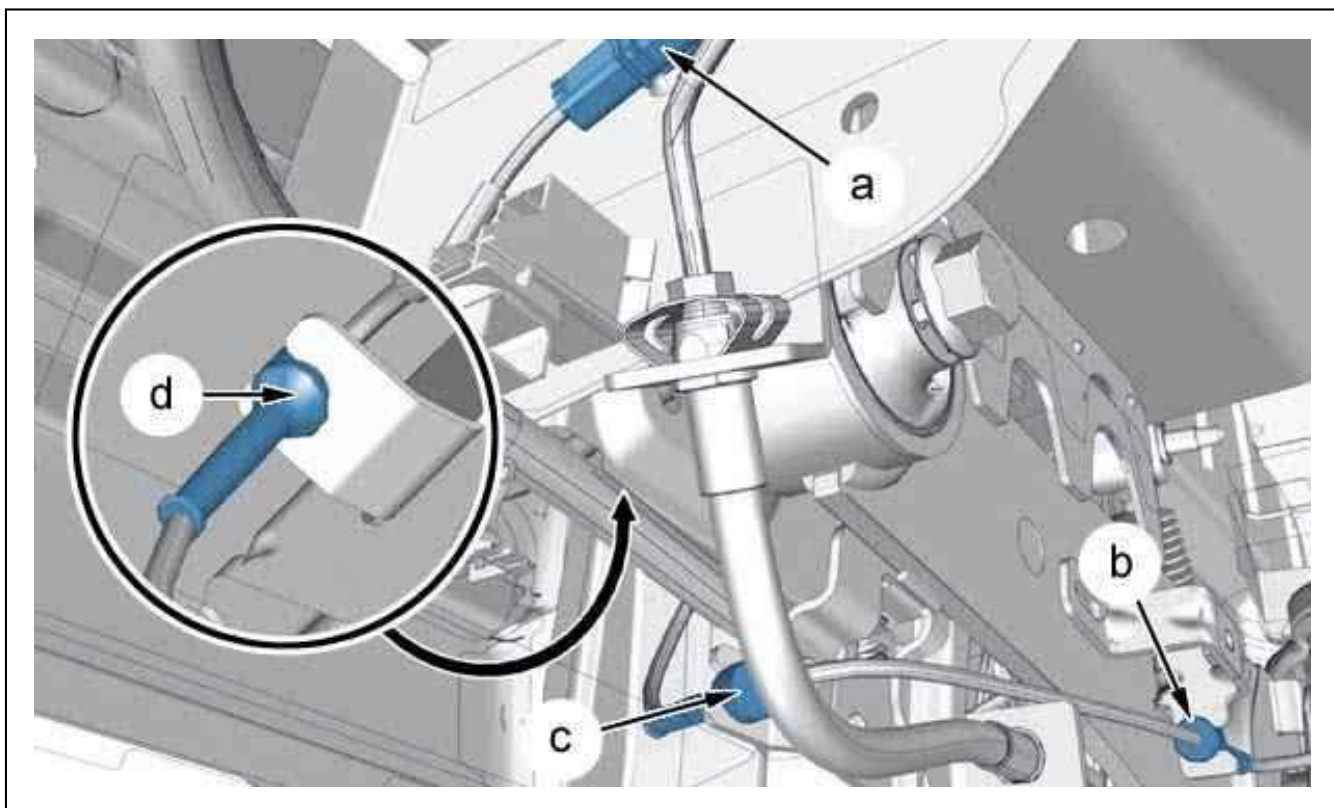


Figure : B3FP7THD

Disconnect the connector (at "a").

Unclip the harness (Rear wheel sensor) (at "b", "c", "d").

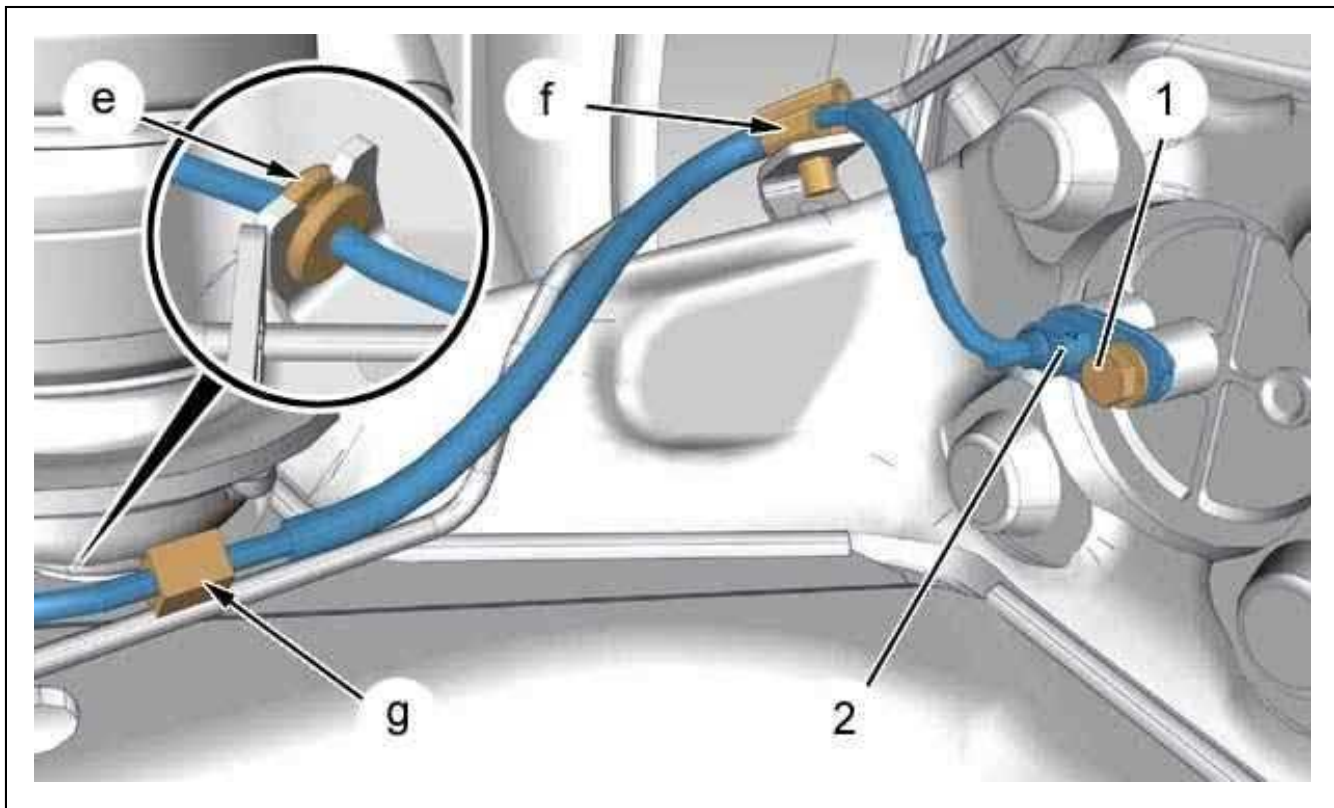


Figure : B3FP7TJD

Unclip the rear wheel sensor harness (2)) (at "e", "f", "g").

Remove :

- The (1) bolt
- The rear wheel sensor (2)

2. Refitting

ESSENTIAL : Adhere to the tightening torques .

CAUTION : Avoid impacts to the head of the rear wheel sensor (2).

Check that the rear wheel sensor (2) is clean.

Refit :

- The rear wheel sensor (2)
- The bolt (1)

Clip the rear wheel sensor harness (2)) (at "b", "c", "d", "e", "f", "g").

Reconnect the connector (at "a").

Return the vehicle to its wheels.

CAUTION : Perform the operations to be carried out following reconnection of the battery.

Reconnect the battery.

Read the fault codes ; Using the diagnostic tool.

REMOVING - REFITTING : FRONT WHEEL SENSOR

ESSENTIAL : Observe the safety and cleanliness recommendations ⓘ .

1. Removing

Release the front wheel bolts.

Lift and support the vehicle with front wheels suspended.

Remove :

- The front wheel bolts
- The front wheel

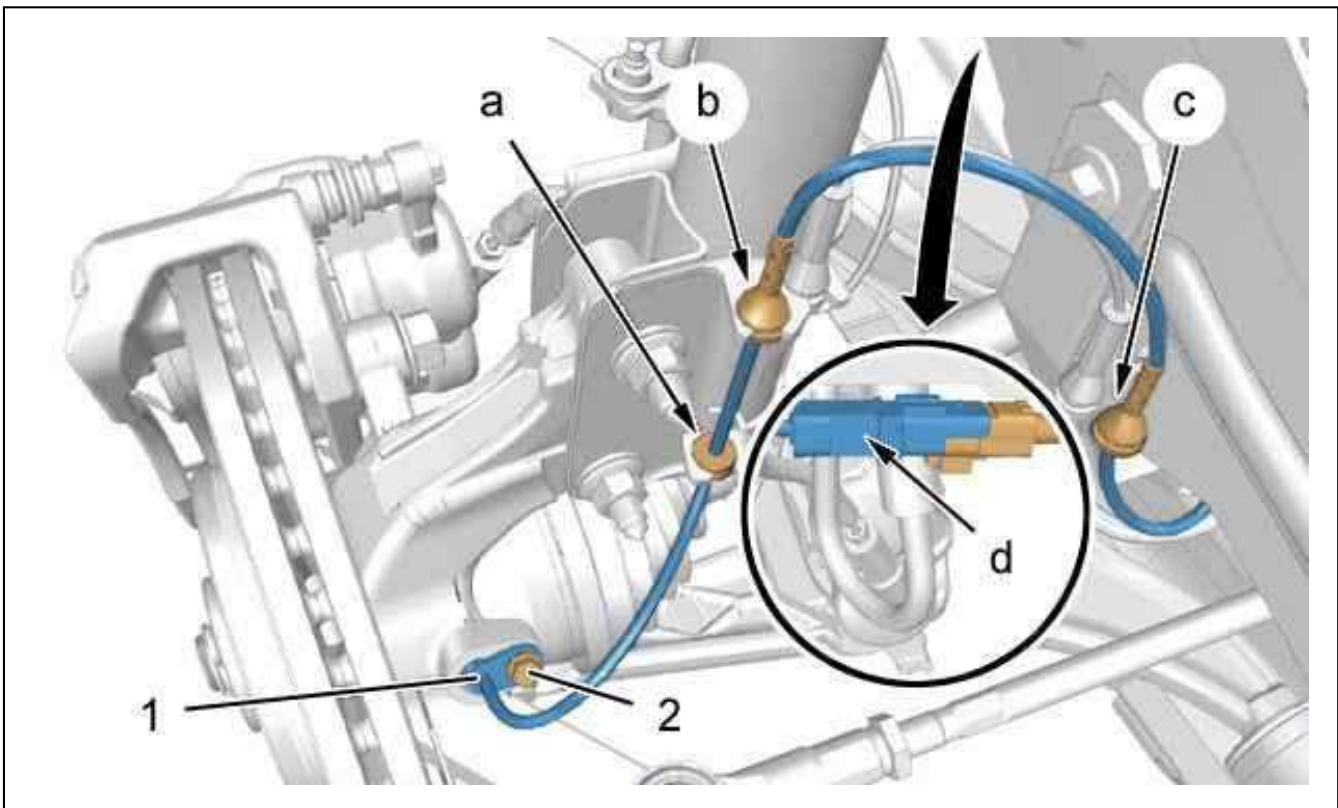


Figure : B3FG22KD

Unclip the front wheel sensor harness (at "a", "b", "c").

Disconnect the connector (at "d").

Remove :

- The (2) bolt
- The front wheel sensor (1)

2. Refitting

CAUTION : Adhere to the tightening torques ⓘ .

CAUTION : Avoid any knocks to the head of the front wheel sensor.

Check that the front wheel sensor (1) is clean.

Refit :

- The front wheel sensor (1)
- The bolt (2)

Clip the front wheel sensor harness (1) (at "a", "b", "c").

Connect the connector (at "d").

Refit :

- The front wheel
- The front wheel bolts

Return the vehicle to its wheels.

Tighten the wheel bolts .

Read the fault codes.

REMOVING - REFITTING : HANDBRAKE LEVER SWITCH

ESSENTIAL : Observe the safety and cleanliness recommendations.

1. Removing

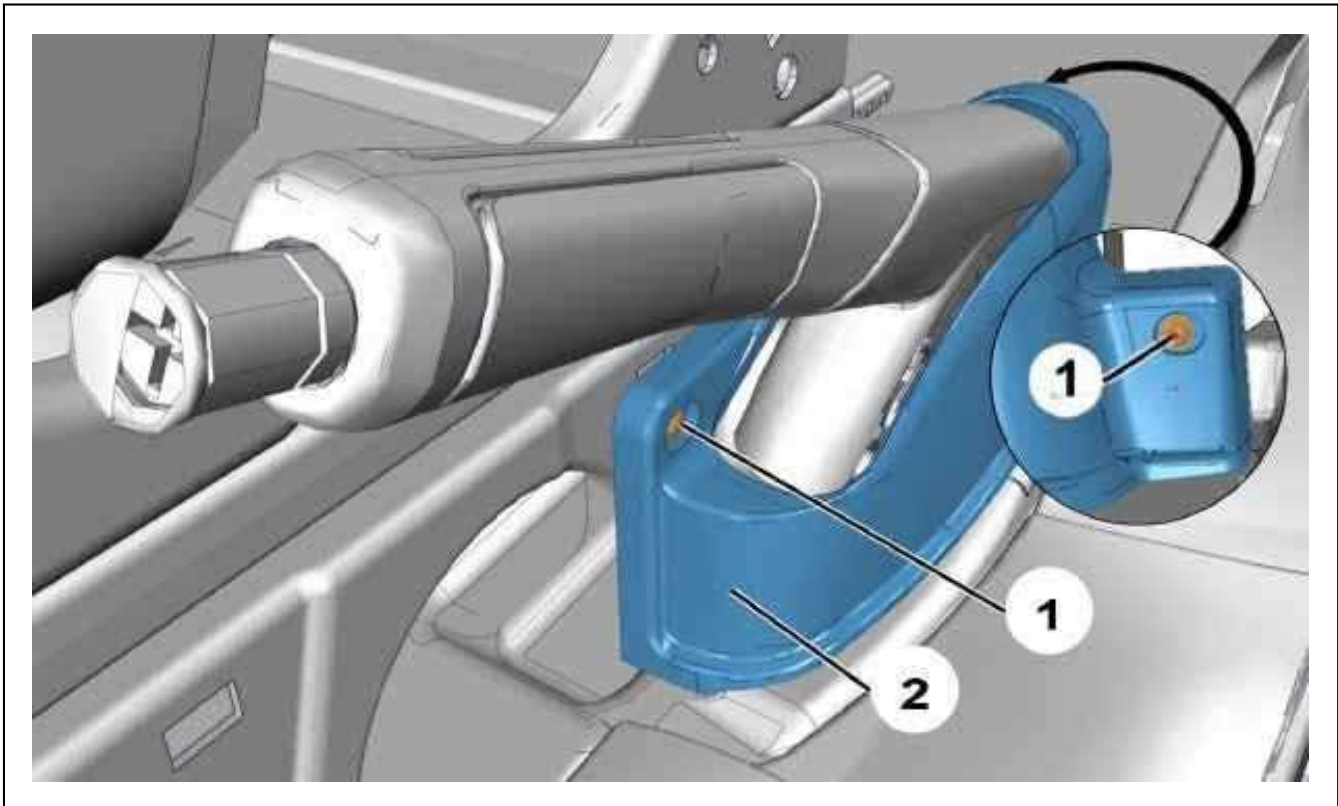


Figure : B3FP7TLD

Apply the handbrake.

Push the driver's seat all the way forward.

Remove :

- The bolts (1)
- The handbrake trim (2)

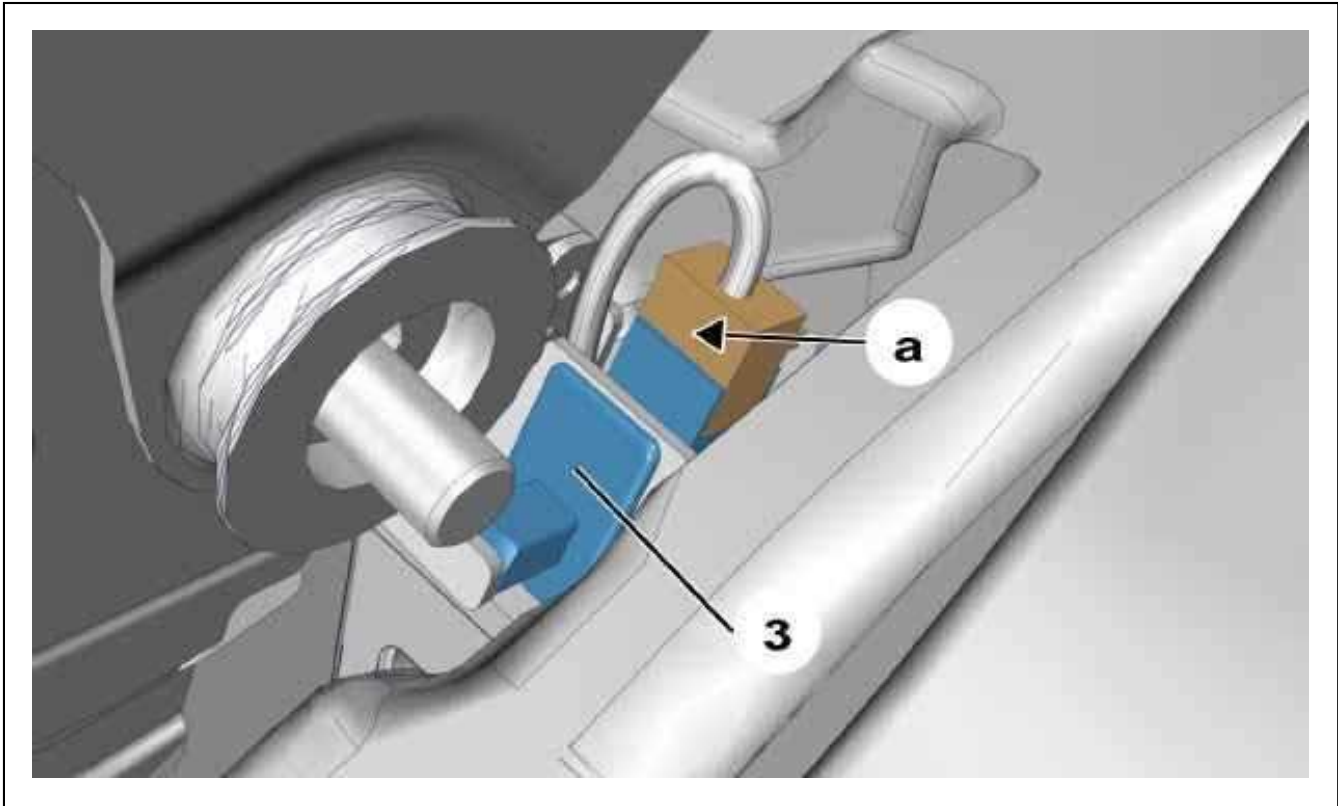


Figure : B3FP7TMD

Disconnect the handbrake lever switch (3) connector (as "a").

Remove the handbrake lever switch (3).

2. Refitting

Refit the handbrake lever switch (3).

Reconnect the handbrake lever switch (3) connector (as "a").

Refit :

- The handbrake trim (2)
- The bolts (1)

REMOVING - REFITTING : FRONT BRAKE DISC

ESSENTIAL : Observe the safety and cleanliness recommendations ⓘ .

ESSENTIAL : Always replace the brake pads if replacing the discs.

1. Tooling

Equipment : Pliers FACOM D60A (or equivalent).

2. Removing

Remove the brake fluid reservoir filter .

Partially drain brake fluid from the reservoir ; Using a clean syringe.

Refit the brake fluid reservoir filter.

Release the front wheel bolts.

Lift and support the front of the vehicle.

Remove the front wheels.

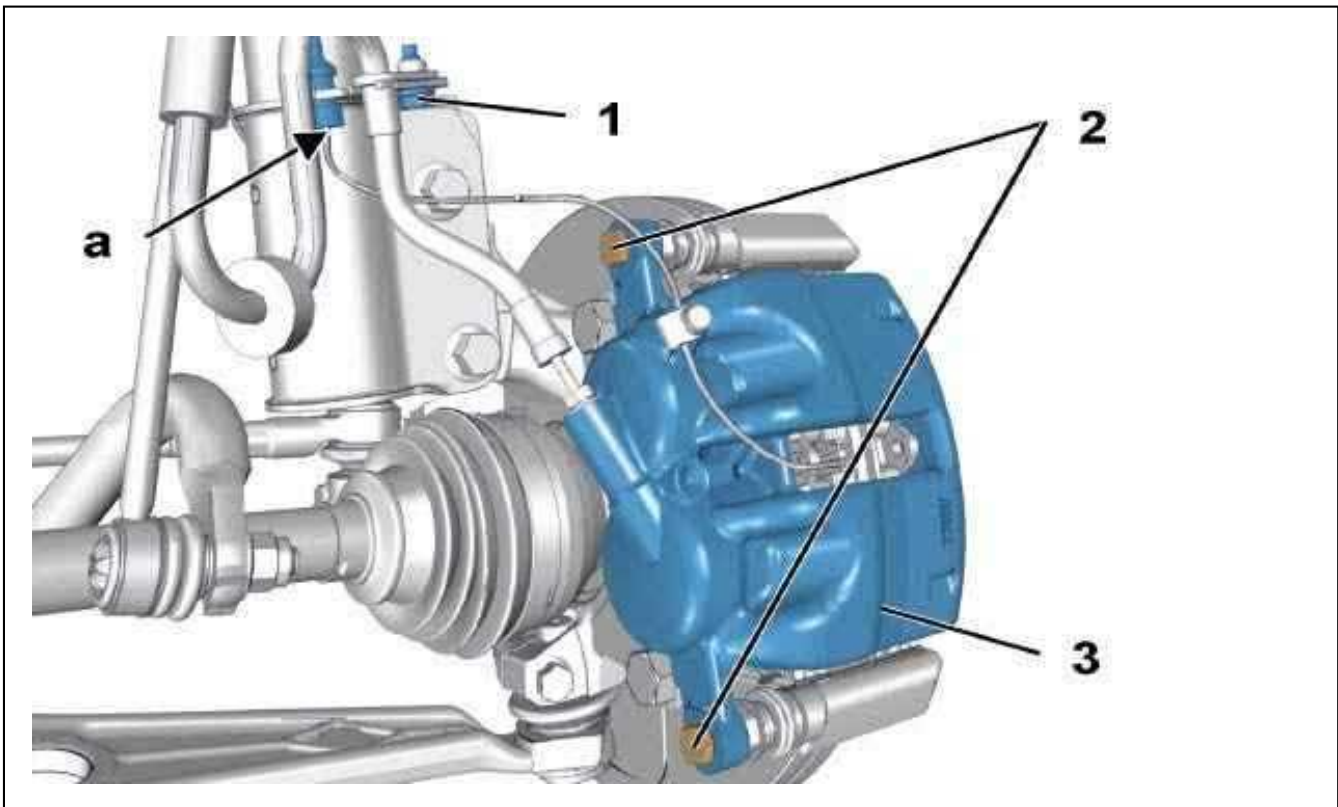


Figure : B3FP7TYD

Disconnect the brake pad wear warning lamp wire (at "a").

CAUTION : Always remove the bolt (1) to avoid damaging the hose .

Remove :

- The (1) bolt

- The pillar screws (2)

CAUTION : Take care not to twist the brake hose .

Move aside the brake caliper (3).

Secure the brake caliper (3).

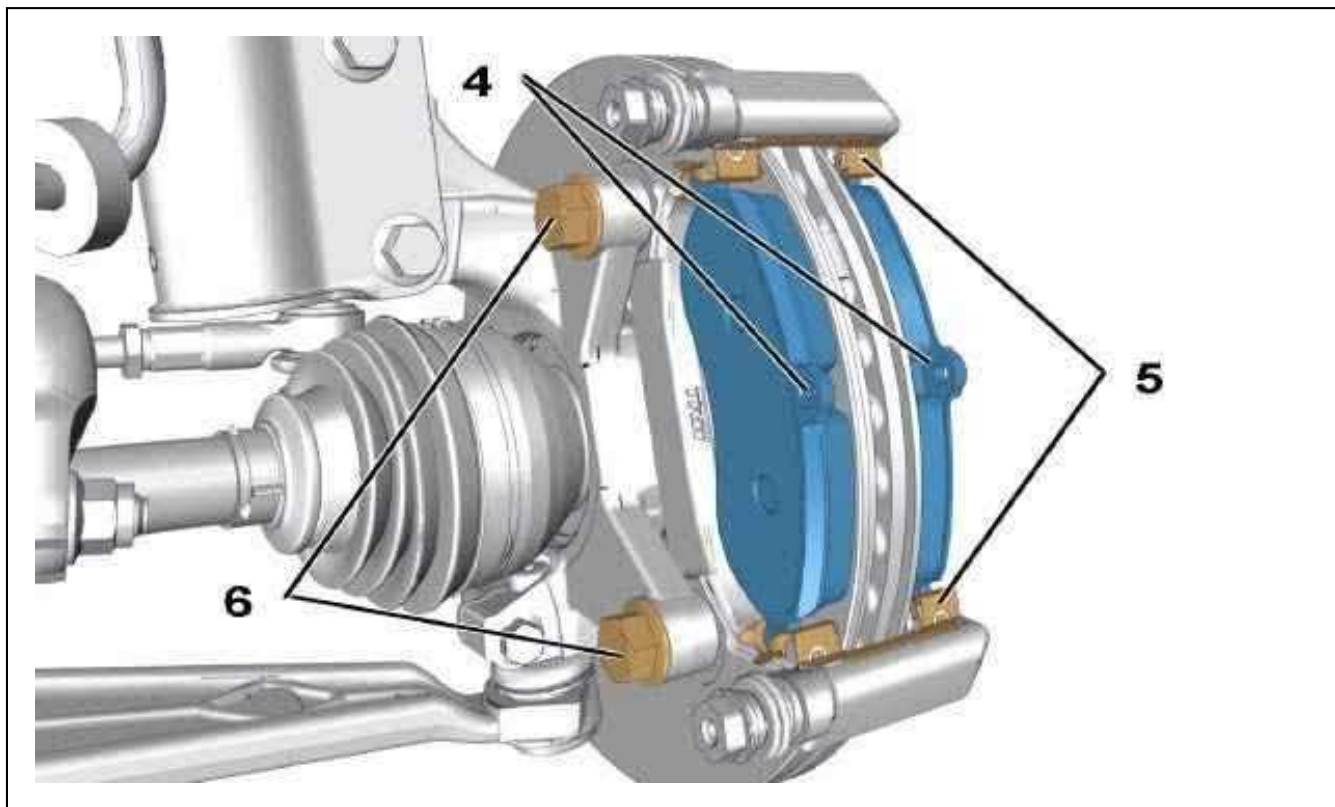


Figure : B3FP7TZD

Remove :

- The brake pads (4)
- The brake pad support shims (5)
- The bolts (6)
- The caliper bracket

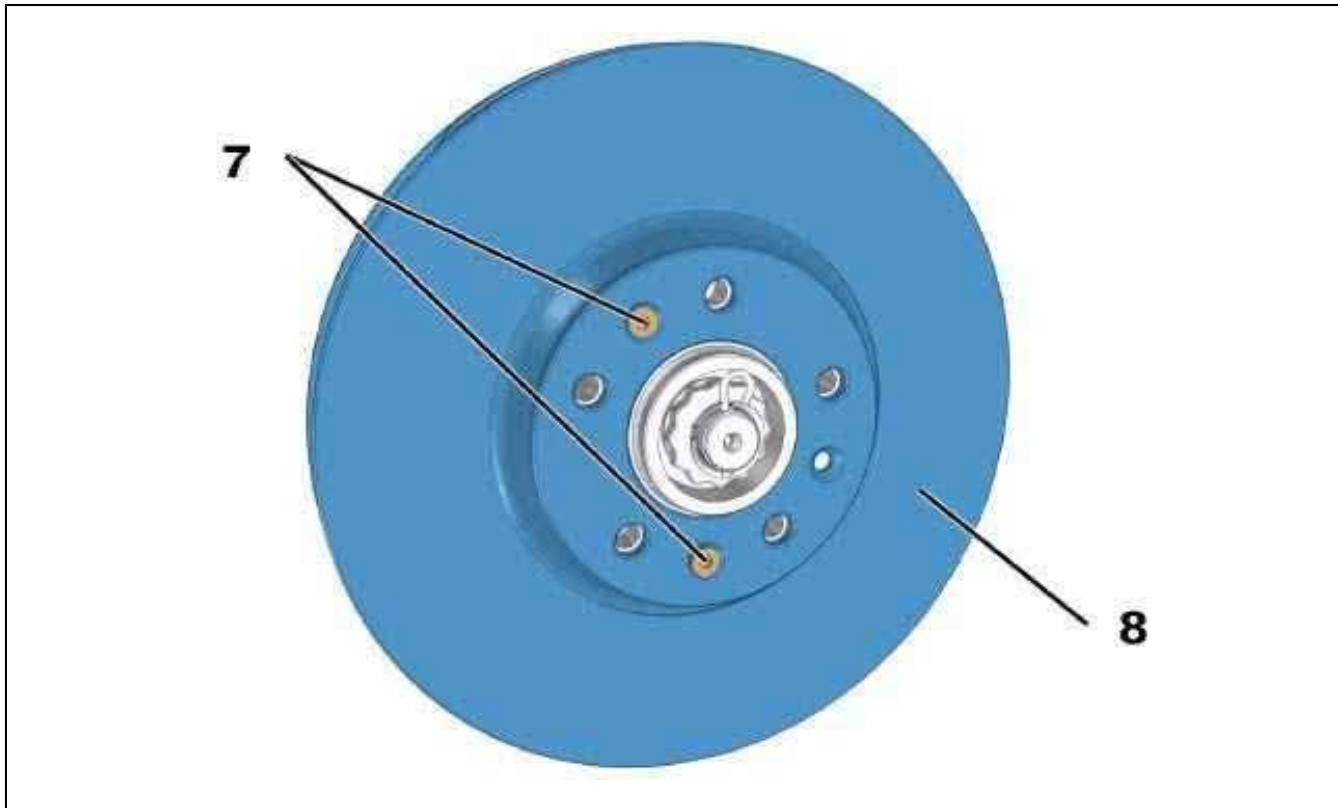


Figure : B3FP7U0D

Remove :

- The bolts (7)
- The brake disc (8)

3. Cleaning

CAUTION : Do not use compressed air to clean the brakes.

3.1. 1st possibility

Clean the brake disc (8) and the brake caliper (3) ; With a recommended brake cleaning product.

Allow to dry and to drain.

Wipe with a paper towel.

3.2. 2nd possibility

Use dedusting equipment approved by the manufacturer .

4. Refitting

CAUTION : Adhere to the tightening torques ⓘ .

N.B. : Use an abrasive cloth to clean the contact surface of the brake hub/disc.

Refit :

- The brake disc (8)
- The bolts (7)

CAUTION : No trace of grease, oil or lubricant can be tolerated on the brake pads.

Push back the brake caliper pistons (3) ; Using FACOM D60A pliers (Place a block between the FACOM D60A pliers and the pad to push the pistons right back into their housing).

N.B. : At each removal, systematically replace the bolts (6).

N.B. : At each removal, always clean the thread of the screws (6).

Refit :

- The caliper bracket
- The bolts (6) (new)
- The brake pad support shims (5)
- The brake pads (4)
- The caliper (3)

N.B. : Always replace the studs (2) following each removal.

Refit :

- The pillar screws (2) (new)
- The bolt (1)

Reconnect the brake pad wear warning lamp wire (at "a").

Refit :

- The front wheels
- The wheel bolts

Return the vehicle to its wheels.

Tighten the wheel bolts .

CAUTION : Apply the brakes several times, gently and progressively, with the engine running, before driving the vehicle.

Check the brake fluid level and top up if necessary.

REMOVING - REFITTING : FRONT BRAKE CALIPER

ESSENTIAL : Observe the safety and cleanliness recommendations ⓘ .

1. Tooling

Equipment :

- Pliers FACOM D60A (or equivalent)
- A pedal press

2. Removing

Release the front wheel bolts.

Lift and support the vehicle with front wheels suspended.

Remove :

- The front wheel bolts
- The front wheels

CAUTION : Prepare for the flow of brake fluid.

Depress the brake pedal ; Using a pedal depressor.

Couple a transparent pipe on the bleed screw of the brake caliper.

Open the bleed screw of the brake caliper : Collect the brake fluid.

Close the bleed screw of the brake caliper.

Uncouple the transparent pipe from the bleed screw of the brake caliper.

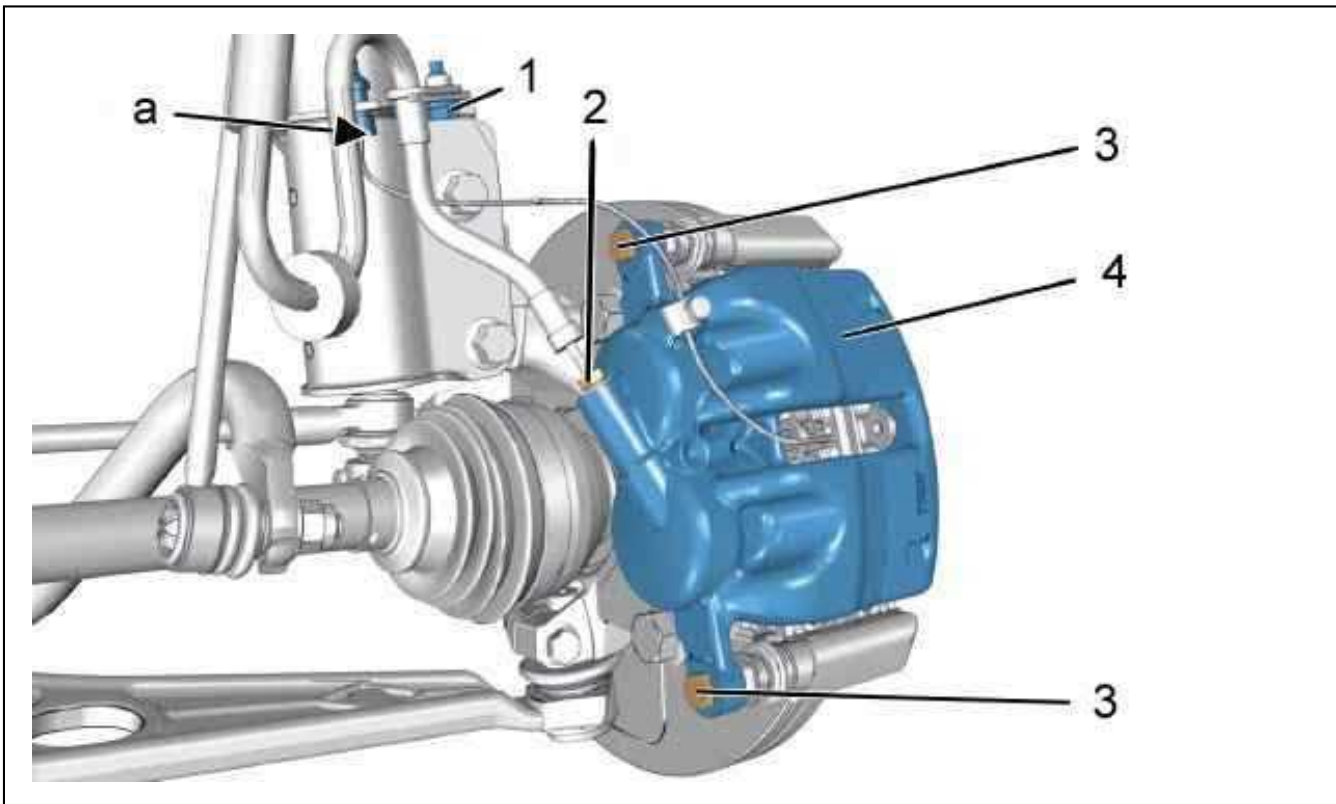


Figure : B3FP7U1D

CAUTION : Always remove the bolt (1) to avoid damaging the hose .

Remove the bolt (1).

CAUTION : Take care not to twist the brake hose .

CAUTION : Prepare for the flow of brake fluid.

Uncouple the brake hose (2).

Move aside the brake hose (2).

N.B. : Plug the openings of the brake hose (2) and of the brake caliper (4); Using cleanliness plugs.

Disconnect the brake pad wear warning lamp wire (at "a").

Remove :

- The pillar screws (3)
- The brake caliper (4)

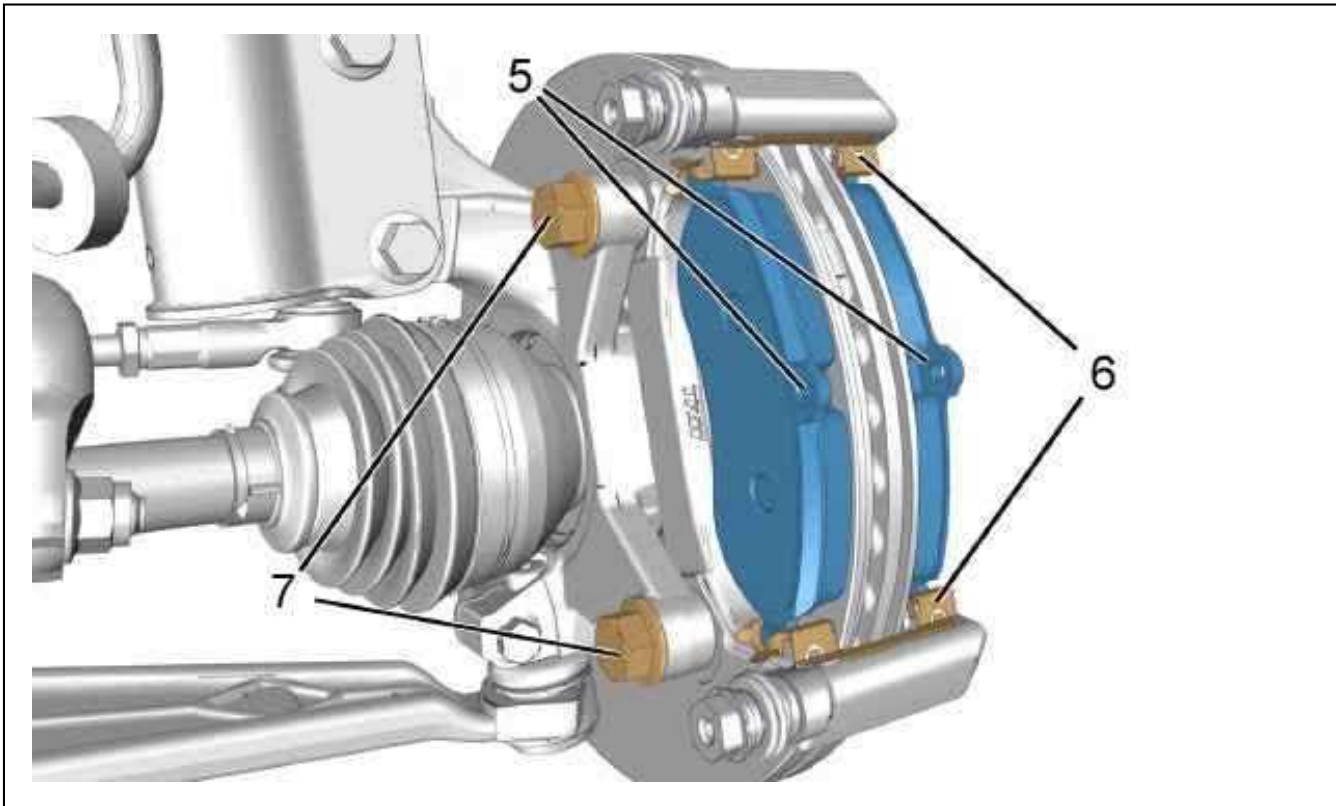


Figure : B3FP7U2D

Remove :

- The brake pads (5) ⓘ
- The support shims (6) of the brake pads (5)
- The bolts (7)
- The caliper (4) bracket

3. Cleaning

CAUTION : Do not use compressed air to clean the brakes.

3.1. 1st possibility

Clean the brake disc and caliper (4) ; With a recommended brake cleaning product.

Allow to dry and to drain.

Wipe the brake disc and the brake caliper (4) ; Using a paper cloth.

3.2. 2nd possibility

Use dedusting equipment approved by the manufacturer .

4. Refitting

CAUTION : Adhere to the tightening torques  .

Visually check :

- The sealing around the brake caliper piston (4)
- That the protective gaiters are in good condition and correctly adjusted
- **Wear of the brake discs** 

Replace any defective parts.

CAUTION : No trace of grease, of oil or of any lubricant is tolerated on the brake pads (5).

Push back the brake caliper pistons (4); Using tool [FACOM D60A] (insert a shim between tool [FACOM D60A] and the pad to push the pistons fully back in their housings).

N.B. : At each removal, systematically replace the bolts (7) ; At each removal, always clean the thread of the screws (7).

Refit :

- The caliper (4) bracket
- The bolts (7) (new)
- The new brake pad (5) support shims (6)
- **The brake pads (5)** 
- The brake caliper (4)

Remove the plugs from the openings of the brake hose (2) and of the brake caliper (4).

N.B. : Always replace the studs (3) following each removal.

Fit the new studs (3).

Reconnect the brake pad (5) wear warning lamp wire (at "a").

Uncouple the brake hose (2).

Refit bolt (1).

Visually inspect the routing and condition of the brake hoses and pipes.

CAUTION : With the engine running, press gently and progressively on the brake pedal several times before driving the vehicle.

Fill and bleed the braking system  .

Refit :

- The front wheel

- The wheel bolts

Return the vehicle to its wheels.

Tighten the wheel bolts  .

REMOVING - REFITTING : FRONT BRAKE PADS

CAUTION : Observe the safety and cleanliness recommendations ⓘ .

1. Tooling

Equipment : Pliers FACOM D60A (or equivalent).

2. Removing

Remove the brake fluid reservoir filter .

Partially drain brake fluid from the reservoir ; Using a clean syringe.

Refit the brake fluid reservoir filter.

Untighten the wheel screws.

Lift and support the front of the vehicle.

Remove the front wheels.

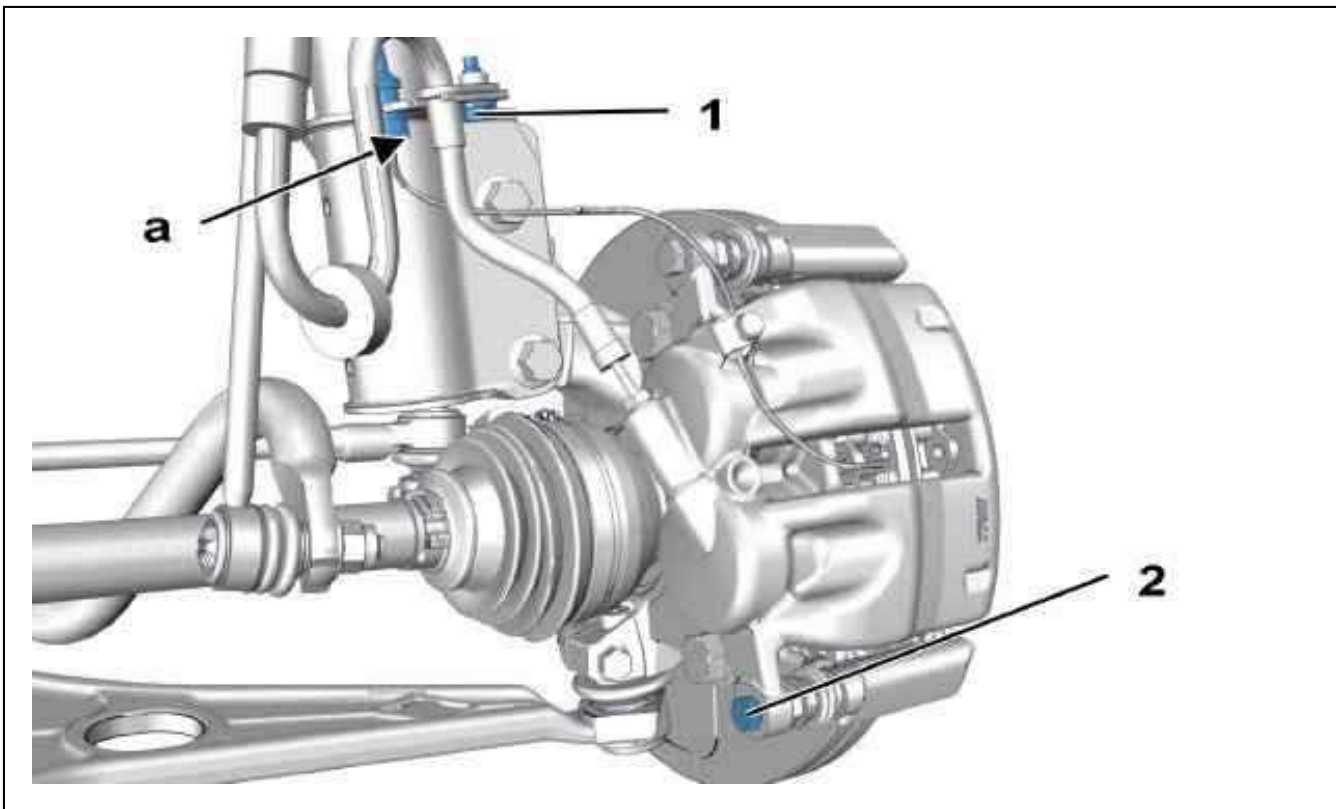


Figure : B3FP7U3D

Disconnect the brake pad wear warning lamp wire (as "a").

CAUTION : Always remove the bolt (1) to avoid damaging the hose .

Remove the bolt (1).

CAUTION : Take care not to twist the brake hose .

Remove the bolt (2).

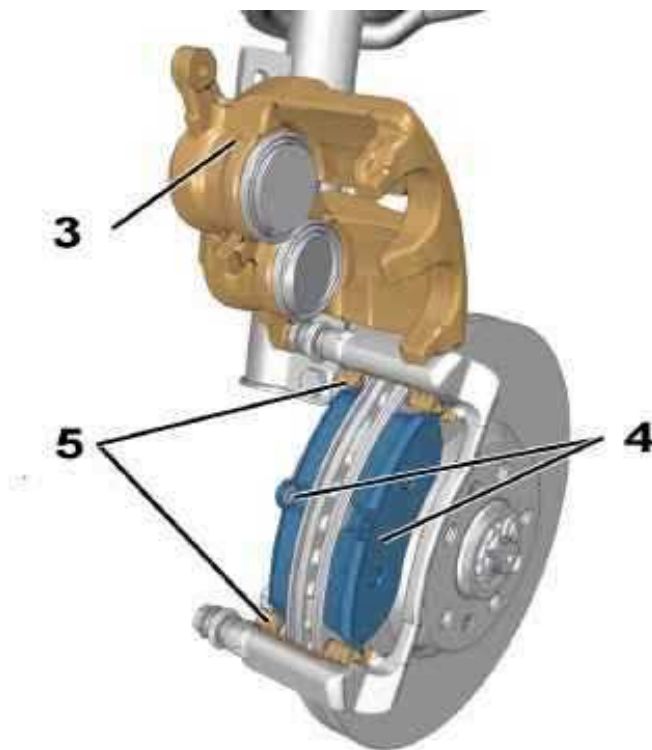


Figure : B3FP7U4D

Pivot the brake caliper (3).

Remove :

- The brake pads (4)
- The support shims (5) of the brake pads (4)

3. Cleaning

CAUTION : Do not use compressed air to clean the brakes.

3.1. 1st possibility

Clean the brake disc and caliper (3) ; With a recommended brake cleaning product.

Allow to dry and to drain.

Wipe with a paper towel.

3.2. 2nd possibility

Use dedusting equipment approved by the manufacturer .

4. Refitting

CAUTION : Adhere to the tightening torques  .

Visually check :

- The seal around the piston
- That the protective gaiters are in good condition and correctly adjusted
- **Wear of the brake discs** 

Replace any defective parts.

CAUTION : No trace of grease, of oil or of any lubricant is tolerated on the brake pads (4).

Push back the brake caliper pistons (3); Using FACOM D60A pliers (Place a block between the FACOM D60A pliers and the pad to push the pistons right back into their housing).

Refit :

- The support shims (5) of the brake pads (4) (new)
- The brake pads (4) (new)

CAUTION : Handle the brake caliper (3) carefully so that you do not stress the upper pin.

Fold back the brake caliper (3).

N.B. : On each removal ; Always replace the stud (2).

Refit :

- The bolt (2) (new)
- The bolt (1)

Reconnect the brake pad wear warning lamp wire (as "a").

Refit :

- The front wheels
- The wheel bolts

Return the vehicle to its wheels.

Tighten the wheel bolts  .

CAUTION : Apply the brakes several times, gently and progressively, with the engine running, before driving the vehicle.

Check the brake fluid level and top up if necessary.

REMOVING - REFITTING : REAR BRAKE DISC

ESSENTIAL : Deactivate the pneumatic suspension before lifting the vehicle ⓘ (2 or 4 post lift, workshop jack or vehicle jack ⓘ).

ESSENTIAL : Observe the safety and cleanliness recommendations ⓘ.

ESSENTIAL : Always replace the brake pads if replacing the discs.

1. Removing

Slacken the parking brake .

Untighten the rear wheel bolts.

Raise and support the vehicle, with the rear wheels hanging free.

Remove :

- The rear wheel bolts
- The rear wheels
- The rear brake pads ⓘ

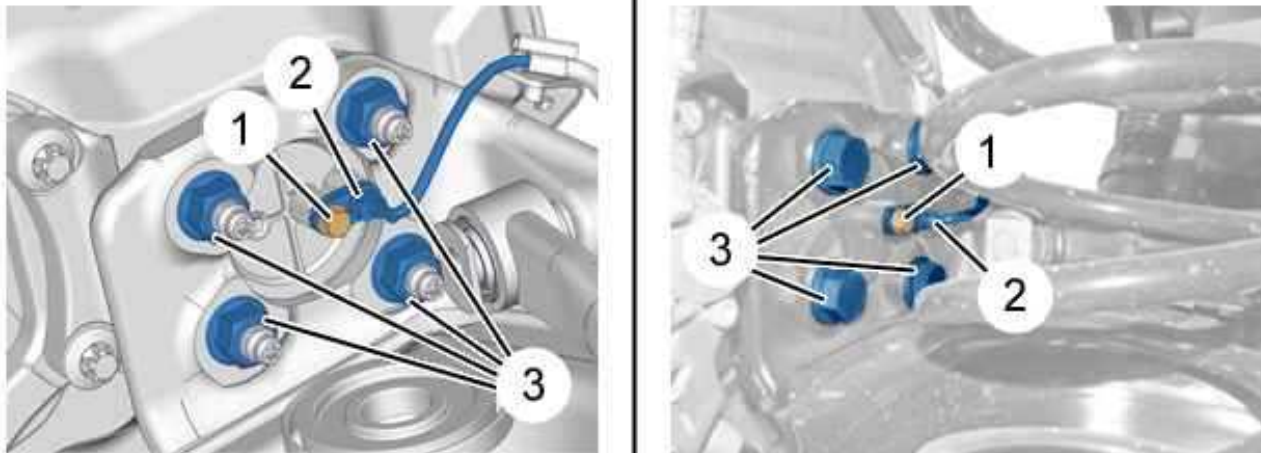


Figure : B3FG21SD

Remove :

- The (1) bolt
- The wheel sensor (2)
- The nuts (3) (according to assembly)

- The bolts (3) (according to assembly)
- The assembly : Hub/bearing/Brake disc

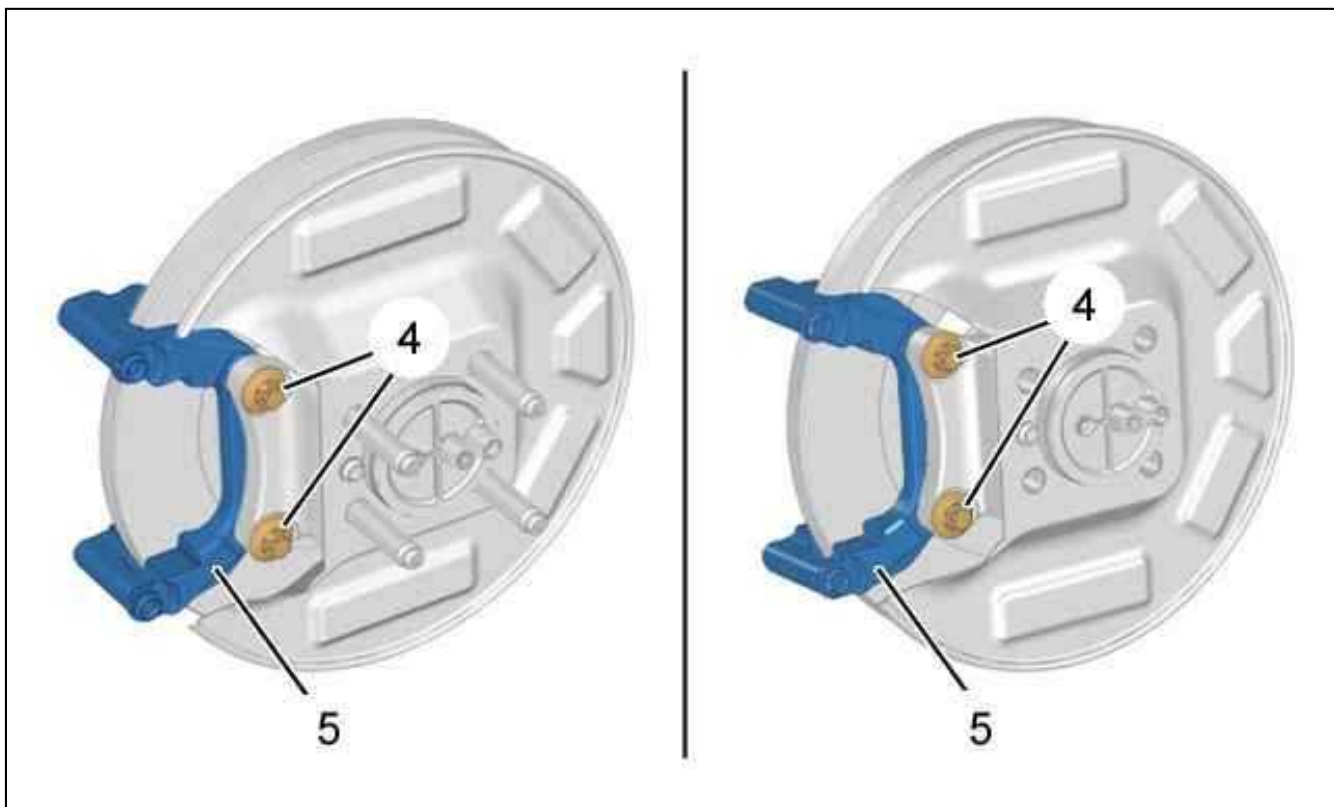


Figure : B3FG21TD

Remove :

- The bolts (4)
- The caliper (5) bracket

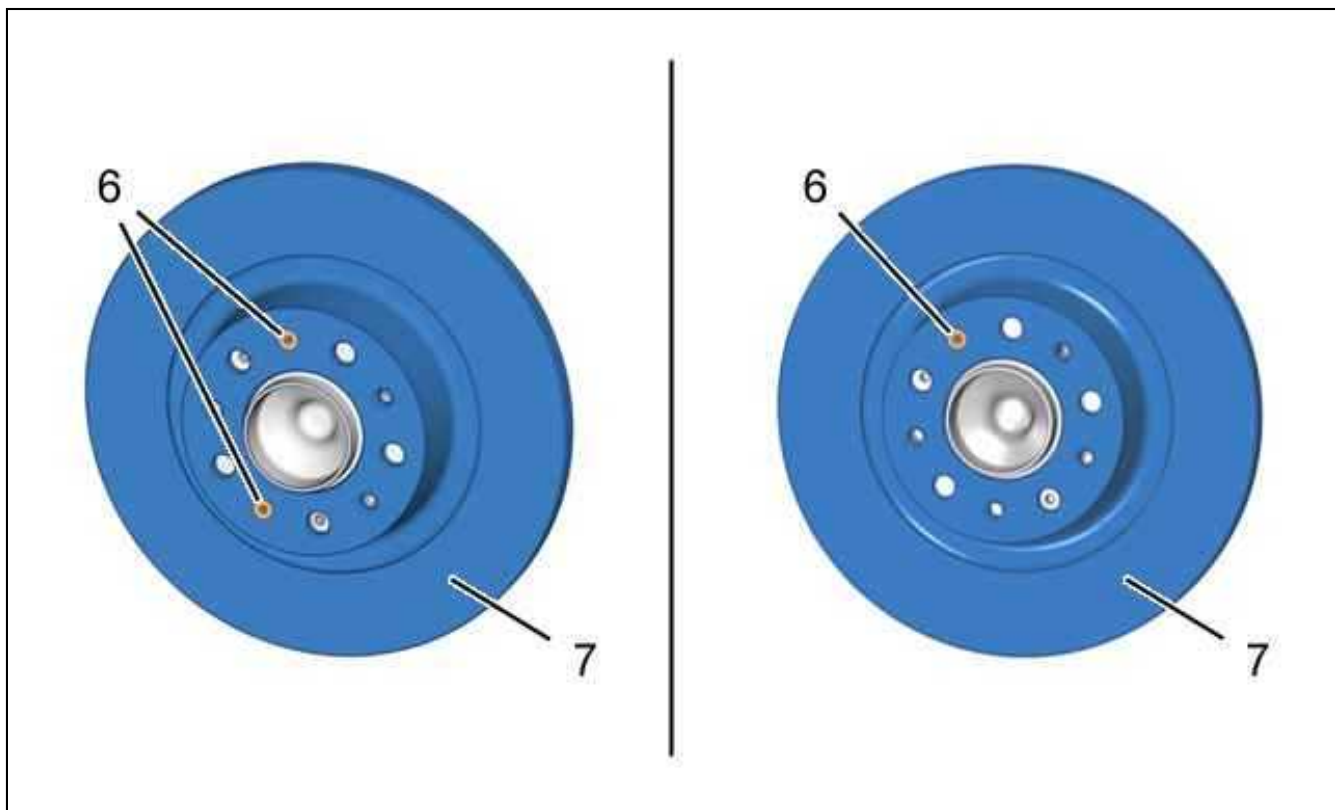


Figure : B3FG21UD

Remove :

- The bolts (6) (according to equipment)
- The brake disc (7)

2. Refitting

CAUTION : Adhere to the tightening torques.

Tightening torques :

- **Braking** ⓘ
- **Rear suspension** ⓘ

N.B. : At each removal, systematically replace the bolts (4), (6). At each removal, always clean the thread of the screws (4) Use an abrasive cloth to clean the contact surface of the brake hub/disc.

Refit :

- The brake disc (7)
- The bolts (6) (according to equipment)
- The caliper (5) bracket
- The bolts (4)
- The assembly : Hub/bearing/Brake disc
- The nuts (3) (according to assembly)
- The bolts (3) (according to assembly)
- The wheel sensor (2)
- The (1) bolt
- **The rear brake pads** ⓘ
- The rear wheels

- The rear wheel bolts

Return the vehicle to its wheels.

Tighten the wheel bolts  .

REMOVING - REFITTING : REAR BRAKE CALIPER

ESSENTIAL : Deactivate the pneumatic suspension before lifting the vehicle ⓘ (2 or 4 post lift, workshop jack or customer's jack).

ESSENTIAL : Observe the safety and cleanliness recommendations ⓘ .

1. Tooling

A pedal press.

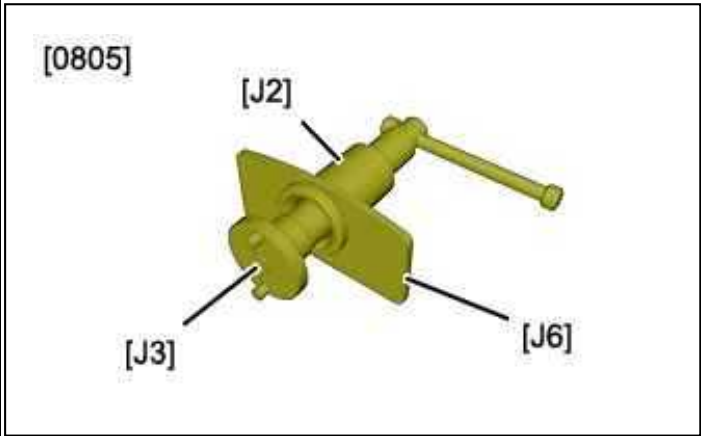
tool	Reference	Designation
	[0805-J2]	Piston and support nut
	[0805-J6]	Thrust plate
	[0805-J3]	adaptor

Figure : E5AG03YT

2. Removing

Untighten the rear wheel bolts.

Raise and support the vehicle, with the rear wheels hanging free.

Slacken the parking brake .

Place the pedal press on the brake pedal to prevent any flow of brake fluid when the brake hoses are uncoupled.

Remove the rear wheel.

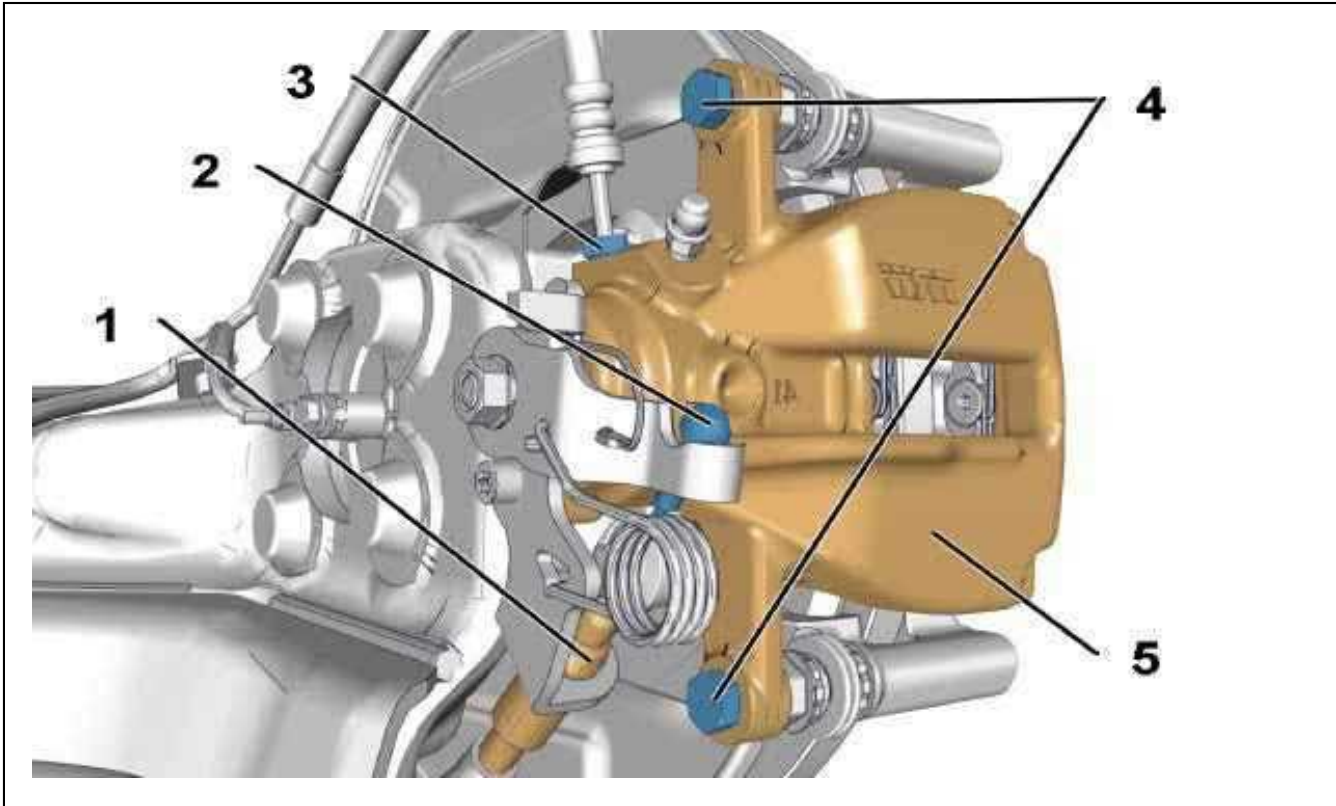


Figure : B3FP7U8D

Remove the parking brake cable (2) retaining clip (1).
 Uncouple the parking brake cable (2) from the brake caliper (5).
 Extract the parking brake cable (2) from its location .

CAUTION : Prepare for the flow of brake fluid.

Uncouple the brake hose (3).
 Remove the bolts (4).

CAUTION : Take care not to twist the brake hose (3).

Remove :

- The brake caliper (5)
- The brake pads

3. Cleaning

CAUTION : Do not use compressed air to clean the brakes.

3.1. 1st possibility

Clean the brake disc and caliper (5) ; With a recommended brake cleaning product.
 Allow to dry and to drain.
 Wipe with a paper towel.

3.2. 2nd possibility

Use dedusting equipment approved by the manufacturer .

4. Refitting

Visually check :

- The sealing around the brake caliper piston (5)
- That the protective gaiters are in good condition and correctly adjusted
- The wear of the brake disc 

CAUTION : Adhere to the tightening torques .

Check that the caliper slides move freely (5).

Replace any defective parts.

CAUTION : No trace of grease, oil or lubricant can be tolerated on the brake pads.

Push back the rear brake piston, forcing it to turn in a clockwise direction ; Using the tools [0805-J2 / 0805-J3] / 0805-J6

Check the brake fluid level.

N.B. : On each removal ; Always replace the bolts (4).

Refit :

- The brake pads
- The brake caliper (5)
- The bolts (4) (new)

Couple up : The brake hose (3).

Couple the parking brake cable (2) to the brake caliper (5).

Refit the parking brake cable (2) retaining clip (1).

Visually inspect the routing and condition of the brake hoses and pipes.

Remove the pedal push .

Fill and bleed the braking system .

Adjust the parking brake .

Check that the parking brake operates correctly.

Refit :

- The rear wheel
- The wheel bolts

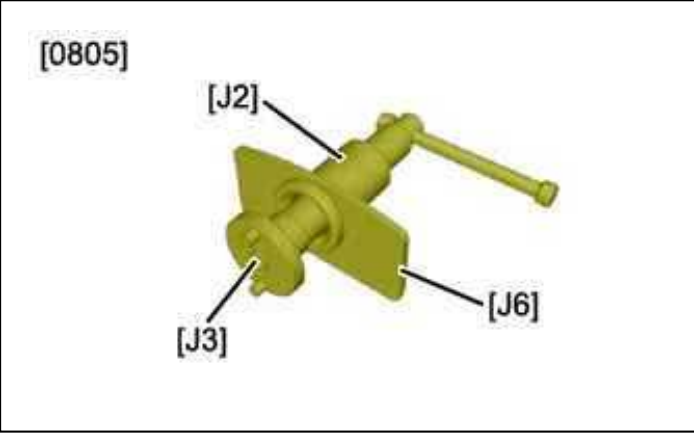
Return the vehicle to its wheels.

Tighten the wheel bolts .

REMOVING - REFITTING : REAR BRAKE PADS

ESSENTIAL : Observe the safety and cleanliness recommendations ⓘ .

1. Tooling

tool	Reference	Designation
 Figure : E5AG06YT	[0805-J2]	Piston and support nut
	[0805-J6]	Thrust plate
	[0805-J3]	adaptor

2. Removing

Remove the brake fluid reservoir filter .
 Partially drain brake fluid from the reservoir ; Using a clean syringe.
 Refit the brake fluid reservoir filter.
 Untighten the rear wheel bolts.
 Raise and support the vehicle, with the rear wheels hanging free.
 Slacken the parking brake .
 Remove the rear wheels.

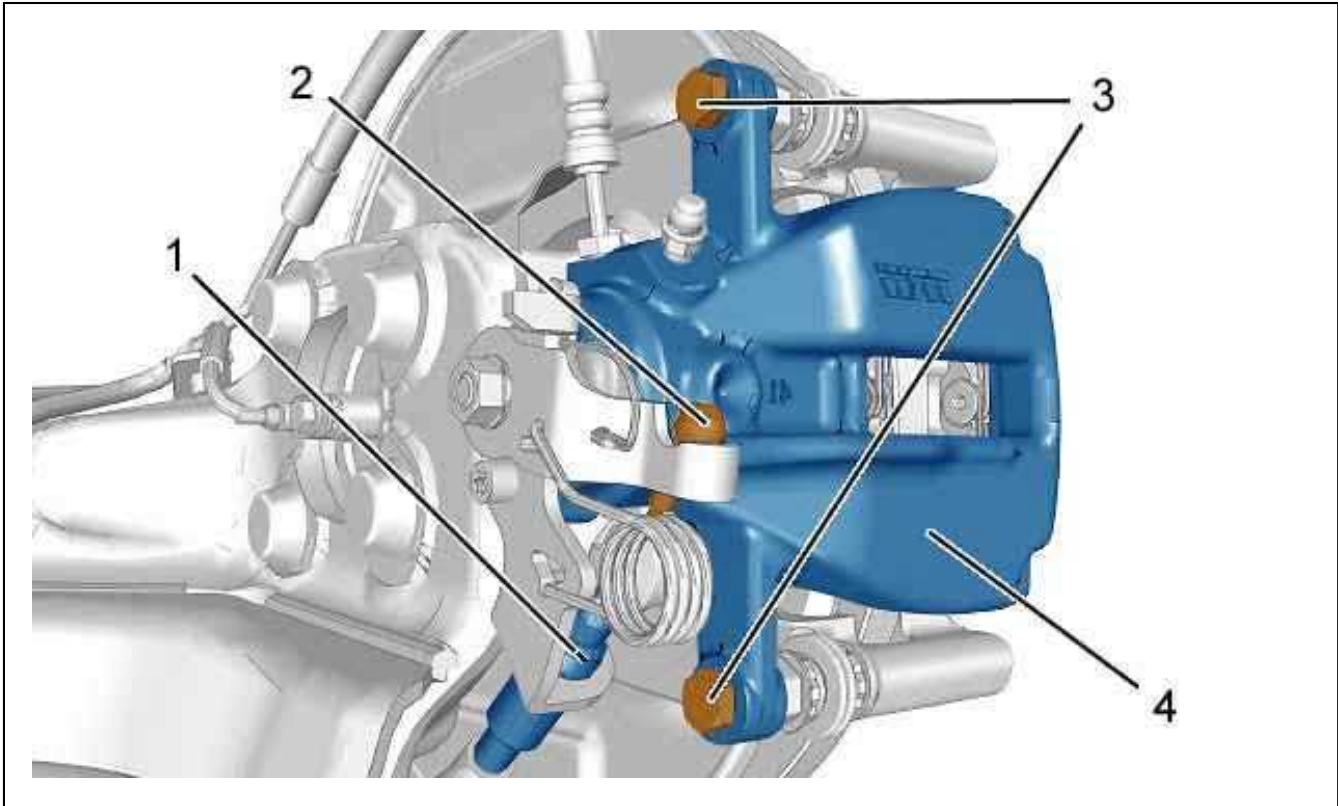


Figure : B3FP7U5D

Remove the parking brake cable (2) retaining clip (1).
Uncouple the parking brake cable (2) from the brake caliper (4).
Extract the parking brake cable (2) from its location .
Remove the studs (3).

CAUTION : Take care not to twist the brake hose .

Move aside the brake caliper (4).
Secure the brake caliper (4).

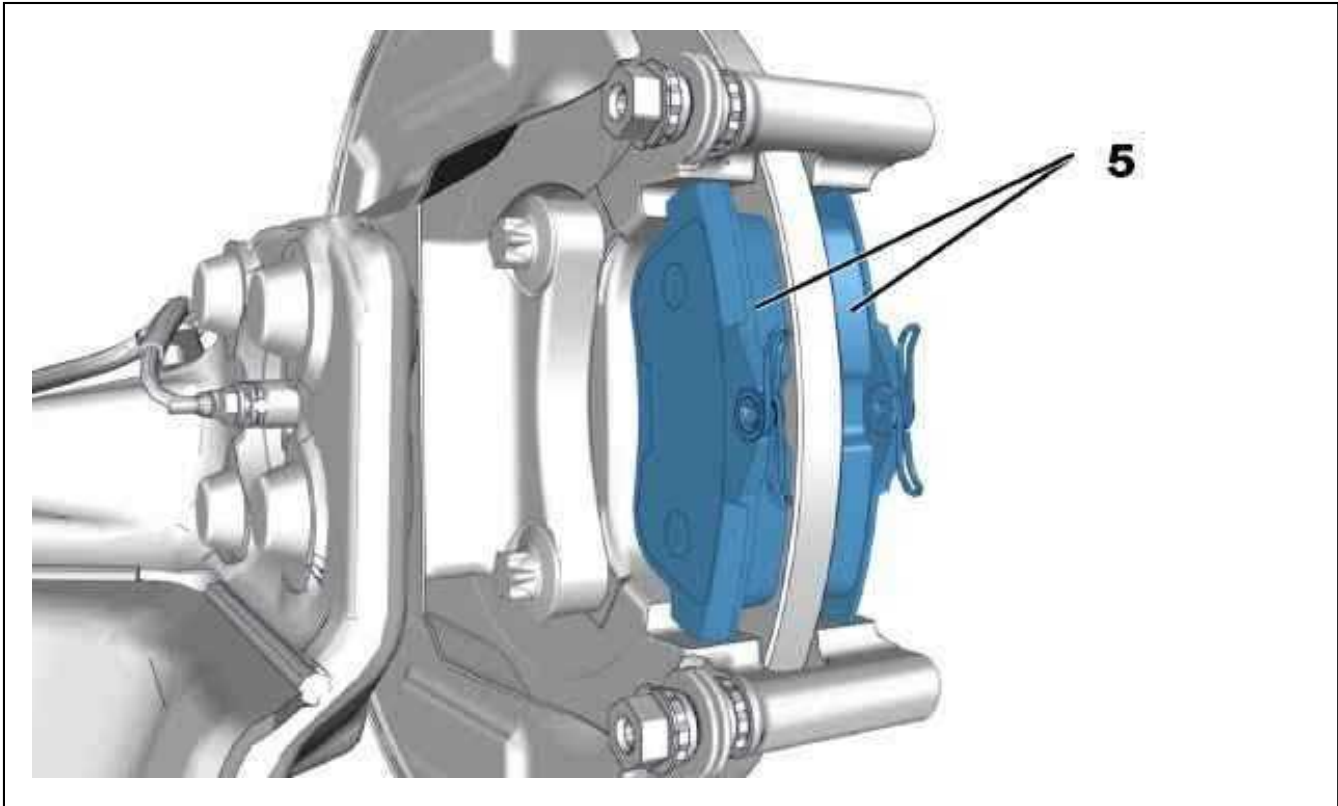


Figure : B3FP7UAD

Remove the brake pads (5).

3. Cleaning

CAUTION : Do not use compressed air to clean the brakes.

3.1. 1st possibility

Clean the brake disc and caliper (4) ; With a recommended brake cleaning product.
Allow to dry and to drain.
Wipe with a paper towel.

3.2. 2nd possibility

Use dedusting equipment approved by the manufacturer .

4. Refitting

CAUTION : Adhere to the tightening torques ⓘ.

Visually check :

- The sealing around the brake caliper piston
- That the protective gaiters are in good condition and correctly adjusted
- **Wear of the brake discs** ⓘ

Check that the caliper slides move freely.

Replace any defective parts.

Push back the rear brake piston, forcing it to turn in a clockwise direction ; Using the tools [0805-J2 / 0805-J3 / 0805-J6]

Check the brake fluid level.

CAUTION : No trace of grease, oil or lubricant can be tolerated on the brake pads.

N.B. : On each removal ; Always replace the studs (3).

Refit :

- The new brake pads (5)
- The brake caliper (4)
- The pillar screws (3)

Couple the parking brake cable (2) to the brake caliper (4).

Refit the parking brake cable (2) retaining clip (1).

Check that the parking brake operates correctly.

Refit :

- The rear wheels
- The wheel bolts

Return the vehicle to its wheels.

Tighten the wheel bolts  .

CAUTION : Apply the brakes several times, gently and progressively, with the engine running, before driving the vehicle.

Check the brake fluid level and top up if necessary.

REMOVING - REFITTING : MASTER CYLINDER

ESSENTIAL : Observe the safety and cleanliness recommendations ⓘ .

1. Removing

Disconnect the battery.

Fit the brake pedal depressing tool in order to reduce the loss of fluid when the brake pipes are disconnected.

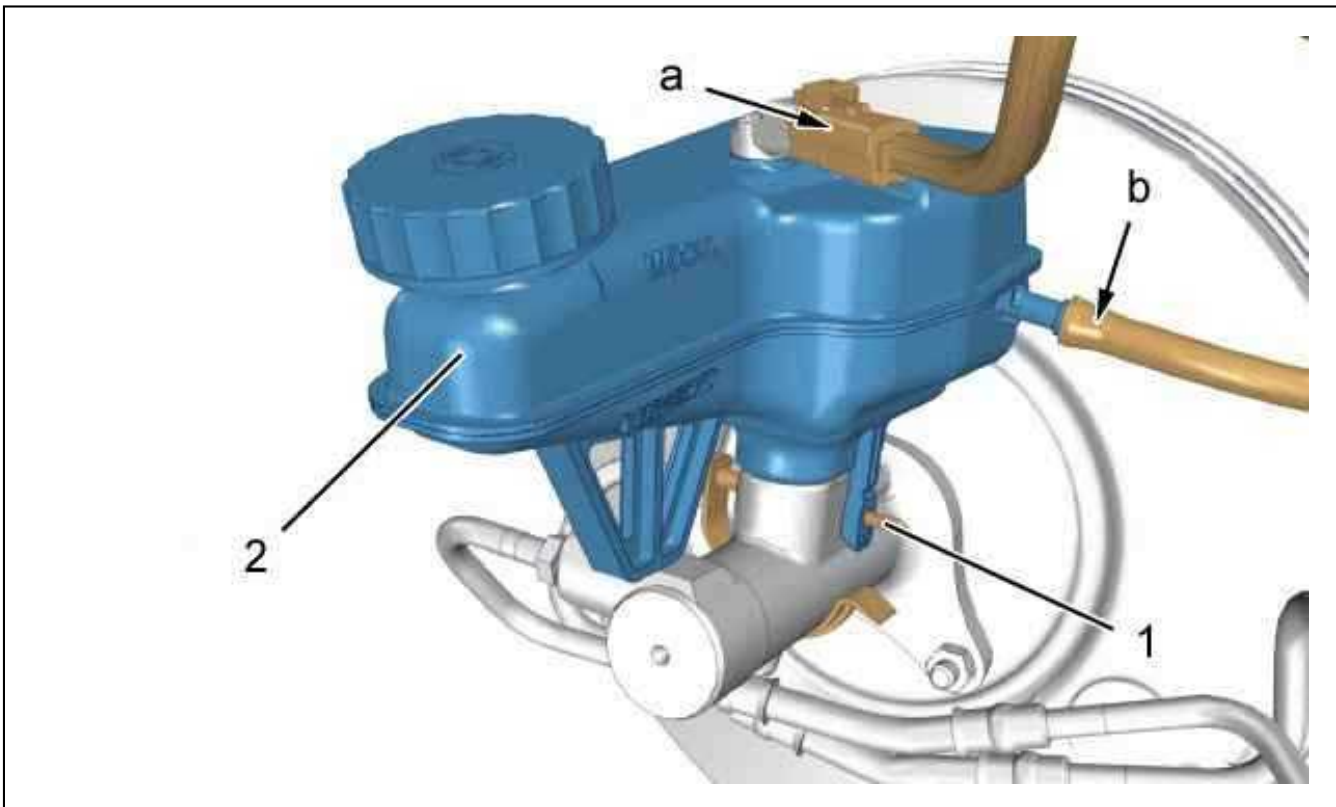


Figure : B3FG233D

CAUTION : Protect the components under the master cylinder from brake fluid splashes.

Remove the brake fluid reservoir filter (2).

Drain the brake fluid reservoir (2) as much as possible ; Using a clean syringe.

Disconnect the connector (at "a").

CAUTION : Prepare for the flow of brake fluid.

Uncouple the clutch master cylinder supply pipe (at "b") (vehicle fitted with a mechanical gearbox).

Plug the clutch control opening .

Remove :

- The brake fluid reservoir (2) fixing pin (1)
- The brake fluid reservoir (2)

Clean the brake fluid reservoir (2).

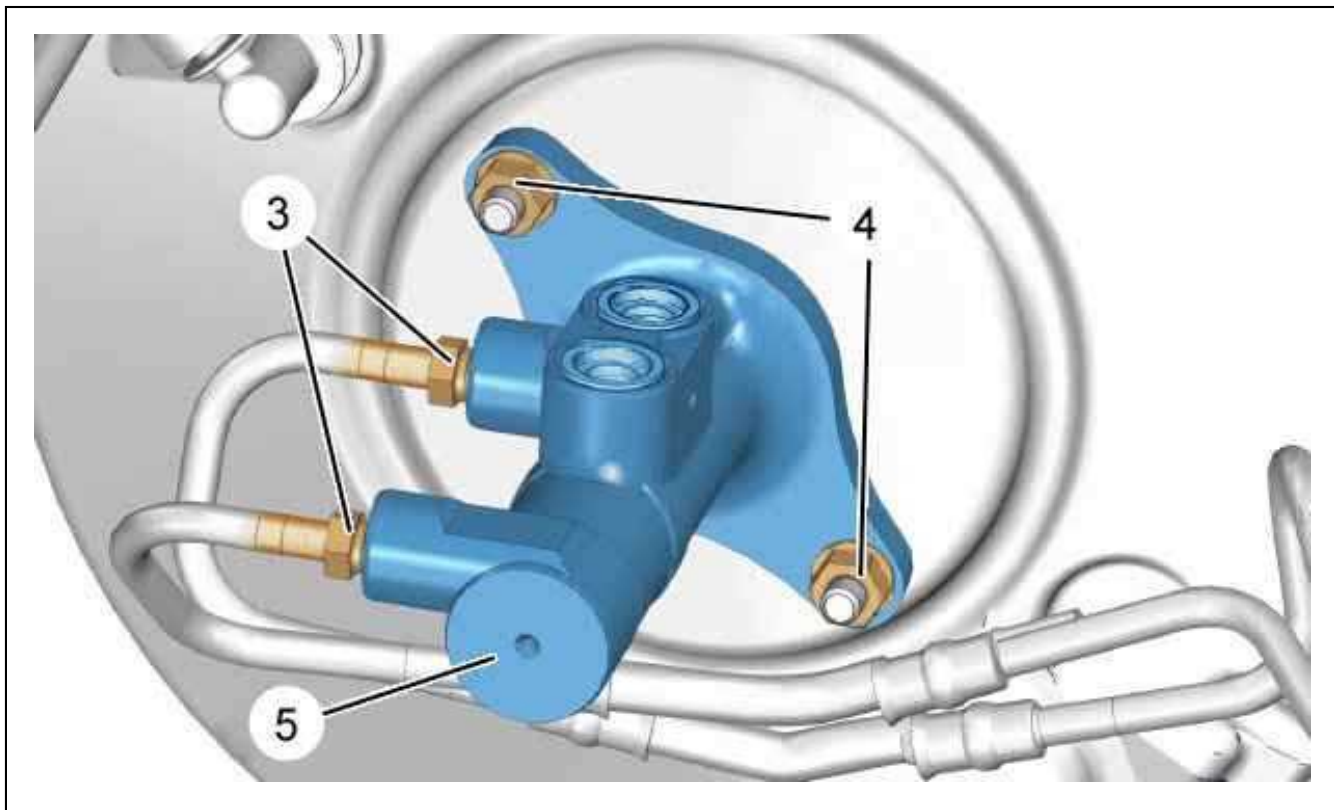


Figure : B3FG234D

Disconnect the brake pipes (3).

Plug the openings of the master cylinder and brake pipes (3).

Remove :

- The nuts (4)
- The master-cylinder (5)

2. Refitting

CAUTION : Adhere to the tightening torques ⓘ.

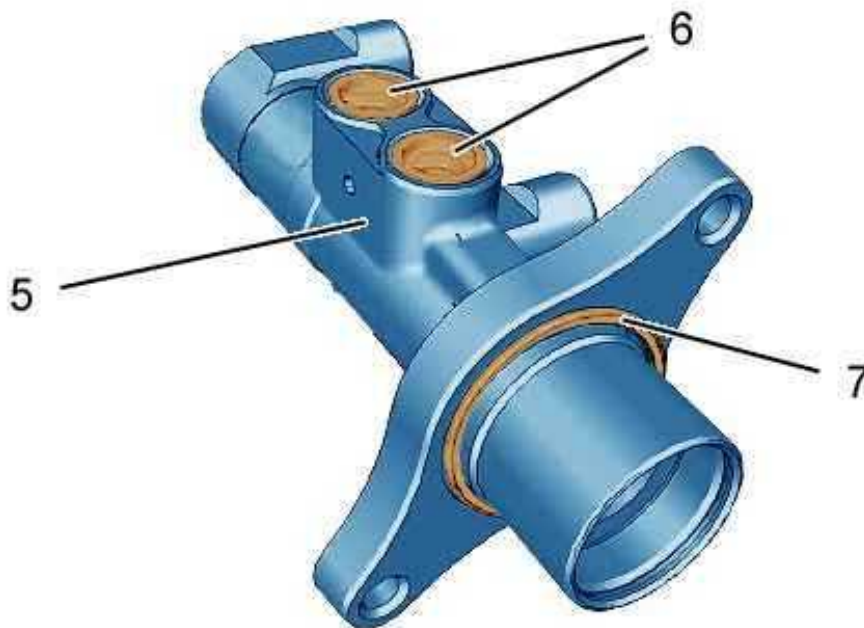


Figure : B3FG235D

CAUTION : Always replace the seals (6), (7).

Refit :

- The master-cylinder (5)
- The nuts (4)

Couple up, then tighten : The brake pipes (3).

Refit :

- The brake fluid reservoir (2)
- The brake fluid reservoir (2) fixing pin (1)

Couple up : The clutch master cylinder supply pipe (at "b") (vehicle fitted with a mechanical gearbox).

Reconnect the connector (at "a").

CAUTION : Replace the brake fluid reservoir filter (2) with a new filter.

Refit the new brake fluid reservoir filter (2).

CAUTION : Perform the operations to be carried out following reconnection of the battery.

Reconnect the battery.

Fill and bleed the braking system ⓘ.

Bleed the hydraulic clutch control ⓘ (vehicle fitted with a mechanical gearbox).

REMOVING - REFITTING : STOP LAMP SWITCH

ESSENTIAL : Observe the safety and cleanliness recommendations ⓘ .

CAUTION : According to vehicle, there may be two types of brake switch assembly : Either a brake switch assembly with manual adjustment, or a brake switch assembly with automatic adjustment.

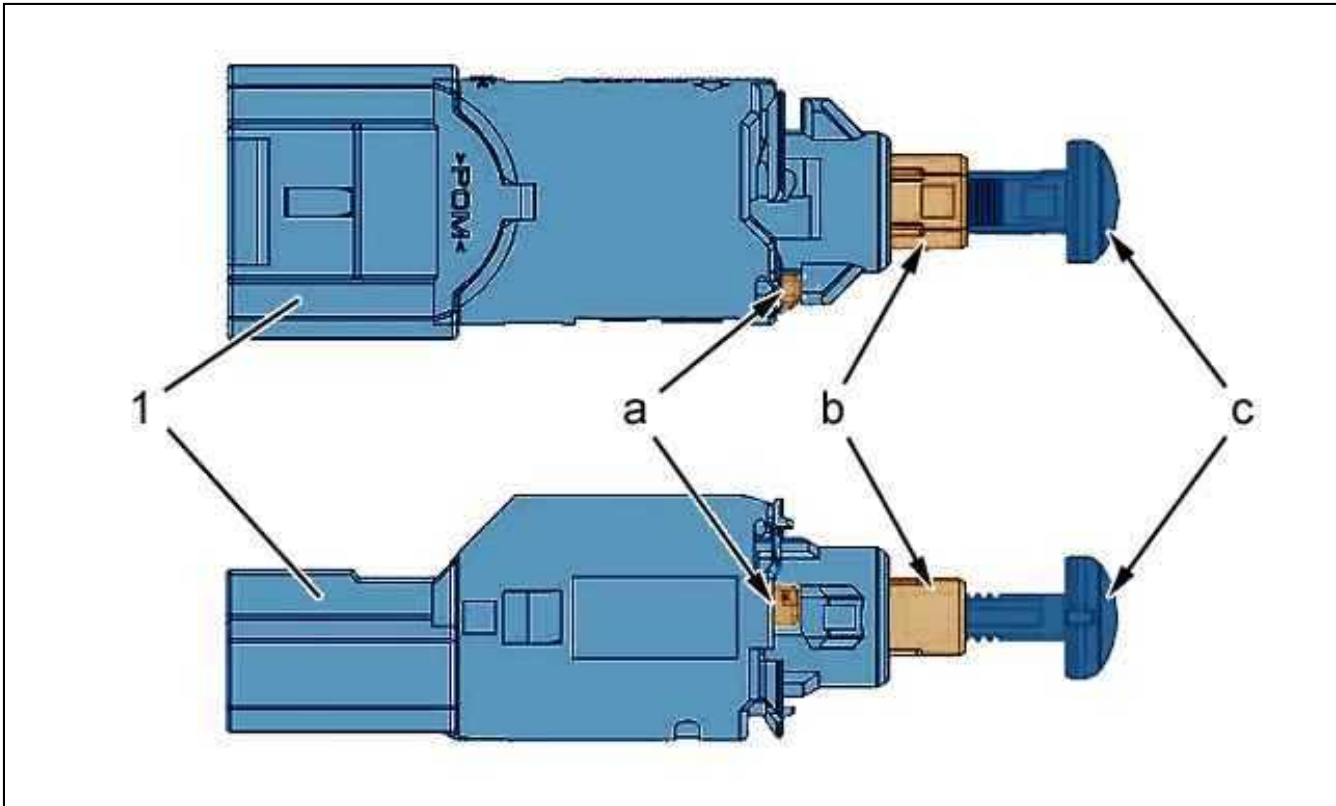


Figure : B3FG247D

(1) Stop lamp switch .

"a" Locking key.

"b" Push rod support .

"c" Thrust pad .

1. Stop lamp switch (With manual adjustment)

1.1. Removing

Disconnect the connector of the stop lamp switch (1).

Rotate the stop lamp switch (1) a quarter turn to the left to unlock it.

Take out the stop lamp switch (1).

1.2. Refitting

CAUTION : Make sure that the brake pedal is in the rest position and that it remains so throughout the operation.

Make sure that the locking latch "a" on the push rod support "b" is inside the extension of the stop lamp switch centring lug (1).

If this is so, the travel of the plunger support "b" within the brake light switch (1) is limited.
 Present the stop lamp switch (1) to its support, with the thrust pad "c" against the brake pedal.
 Press firmly on the brake light switch (1) in the centreline to set the piston "c" in the plunger support "b" until the base of the brake light switch (1) is in contact with its support.
 Rotate the stop lamp switch (1) a good quarter turn to the right to lock it.
 Reconnect the connector of the stop lamp switch (1).
 Switch on the ignition.
 Check that the brake lights come on.

1.3. Check the adjustment : Stop lamp switch (Brake pedal at rest)

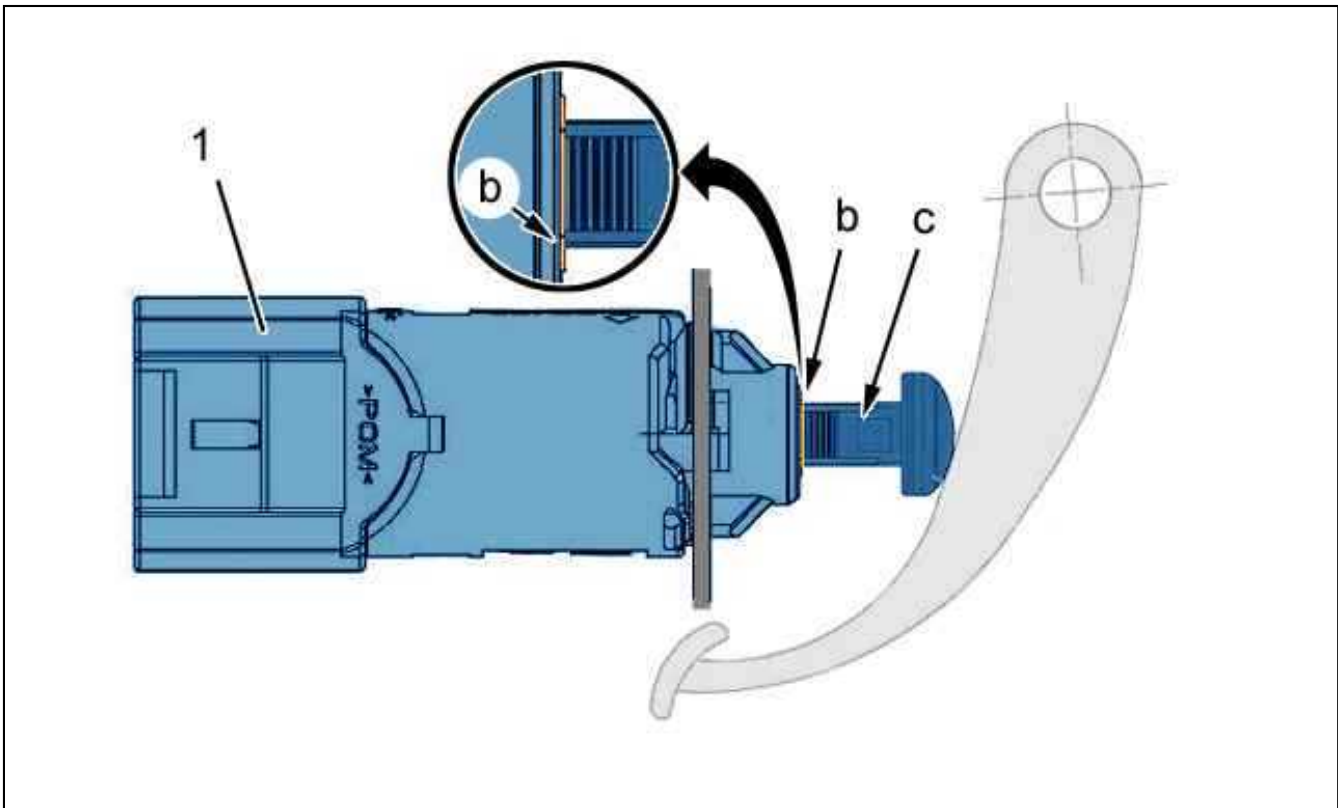


Figure : B3FG248D

Check the position of the plunger support "b" in the brake light switch (1).
 The plunger support "b" should be flush with the body of the brake light switch (1) and the plunger "c" should be in contact with the brake pedal.

N.B. : The brake light switch (1) must not be used as a stop for the brake pedal.

1.4. Check the adjustment : Stop lamp switch (Brake pedal pressed down)

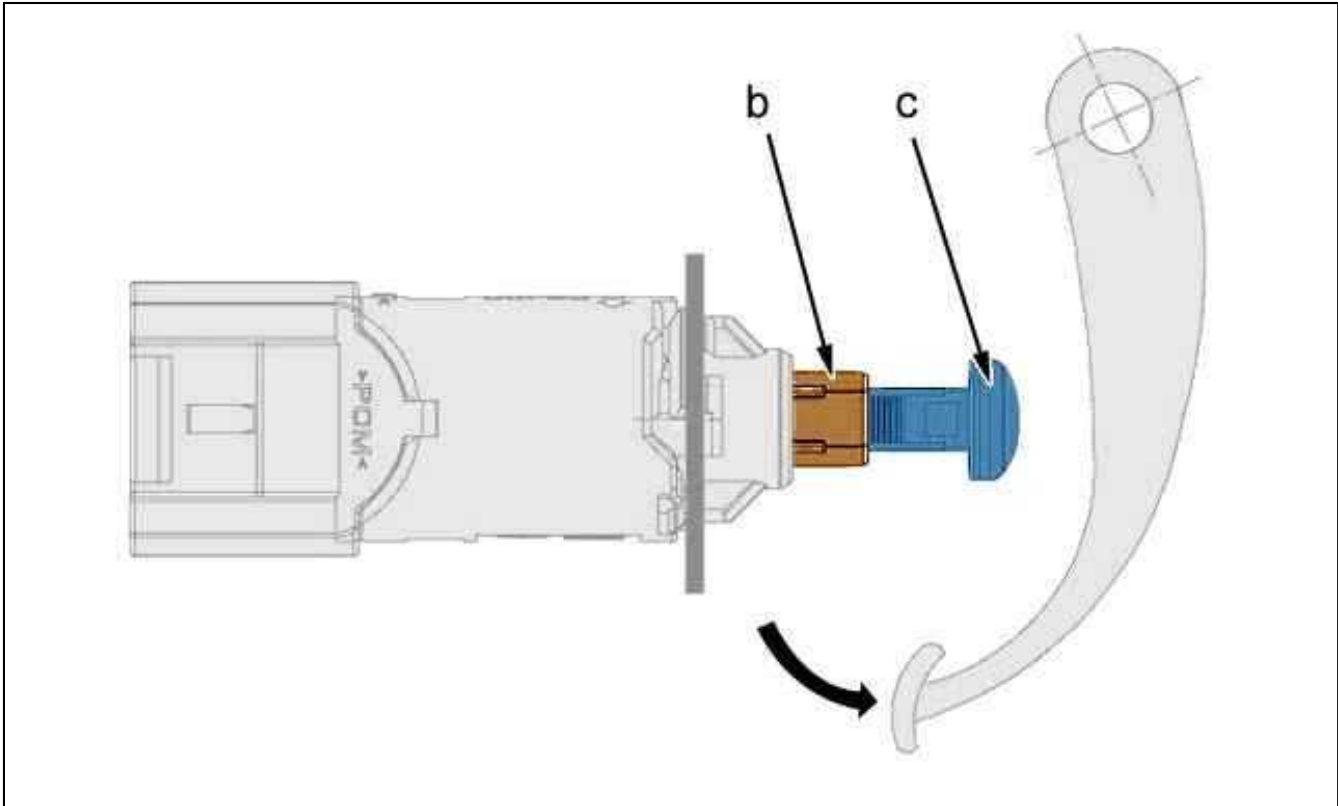


Figure : B3FG249D

The push rod support "b" is free and the push rod "c" is no longer in contact with the brake pedal .

2. Stop lamp switch (With automatic adjustment)

2.1. Removing

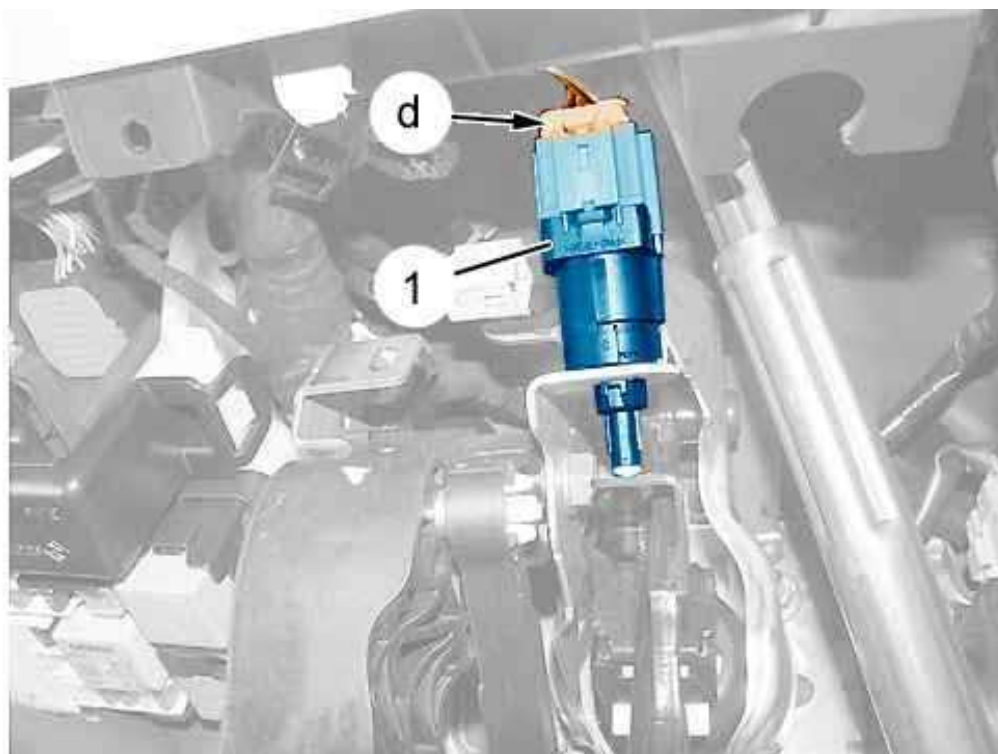


Figure : B3FG24AD

Disconnect the connector of the stop lamp switch (1) (at "d").

Rotate the stop lamp switch (1) a quarter turn anti-clockwise to unlock it.

Remove the stoplamp switch (1).

2.2. Refitting

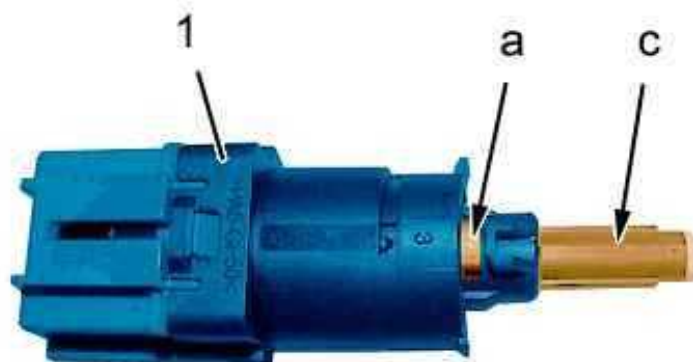


Figure : B3FG24BD

(1) Stop lamp switch .

"a" Locking key.

"c" Thrust pad .

CAUTION : Make sure that the brake pedal is in the rest position and that it remains so throughout the operation. Do not support the brake pedal while fitting the brake light switch (1), risk of incorrect setting.

Check that the locking key "a" is inside the extension of the stoplamp switch centring lug (1).

Present the stop lamp switch (1) to its support, with the thrust pad "c" against the brake pedal.

Turn the brake light switch (1) one quarter of a turn clockwise to the stop.

N.B. : Adjustment of the stoplamp switch (1) is automatic once it is locked.

Re-connect the connector (at "d").

Check that the brake lights come on.

REMOVING - REFITTING : PARKING BRAKE CABLES (DISC BRAKES AND DRUM BRAKES)

ESSENTIAL : Deactivate the pneumatic suspension before lifting the vehicle ⓘ (2 or 4 post lift, workshop jack or customer's jack ⓘ).

ESSENTIAL : Observe the safety and cleanliness recommendations ⓘ .

ESSENTIAL : Wait for the exhaust heat shield to cool to avoid any risk of burns.

1. Removing the primary handbrake cable

Lift and support the vehicle with the wheels free.

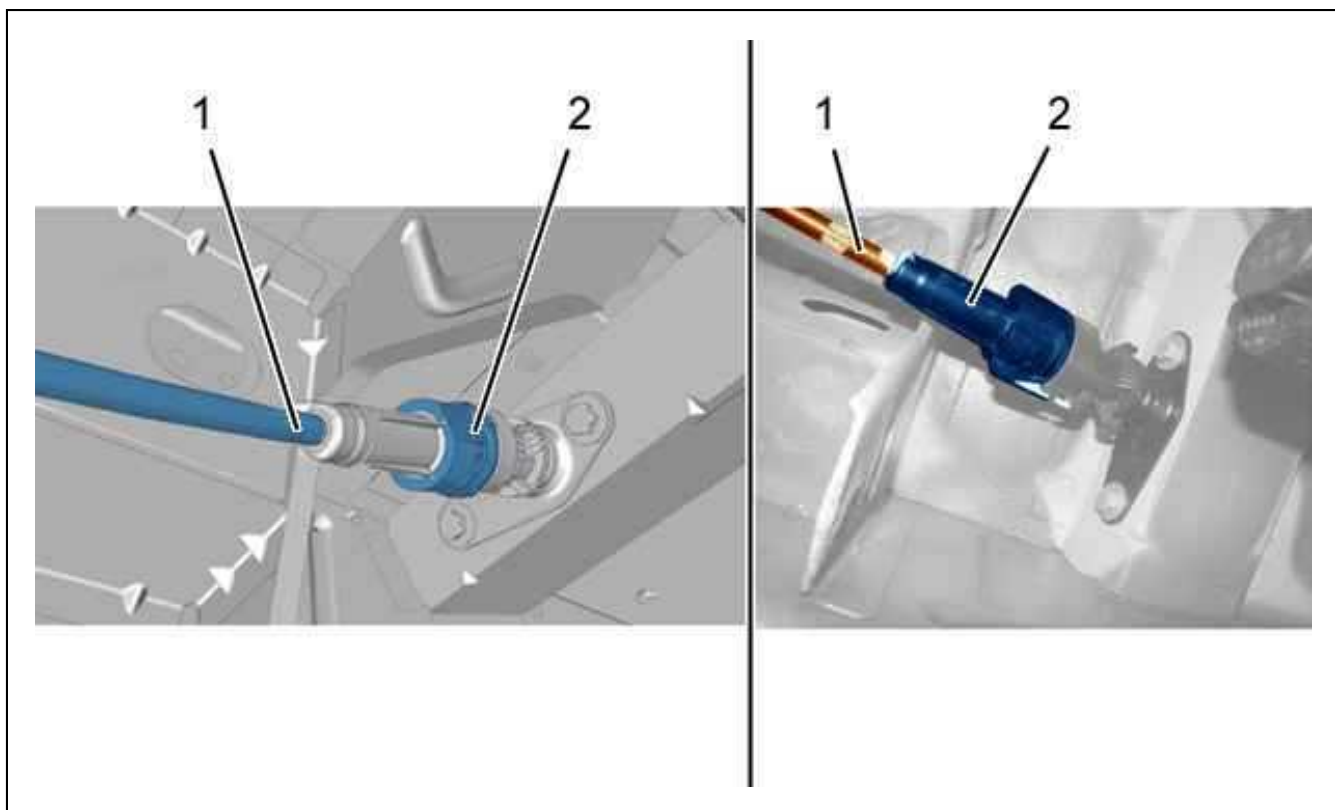


Figure : B3FG229D

Place the parking brake lever at rest.

Turn the ring (2) anticlockwise to the stop to release the handbrake cable (1).

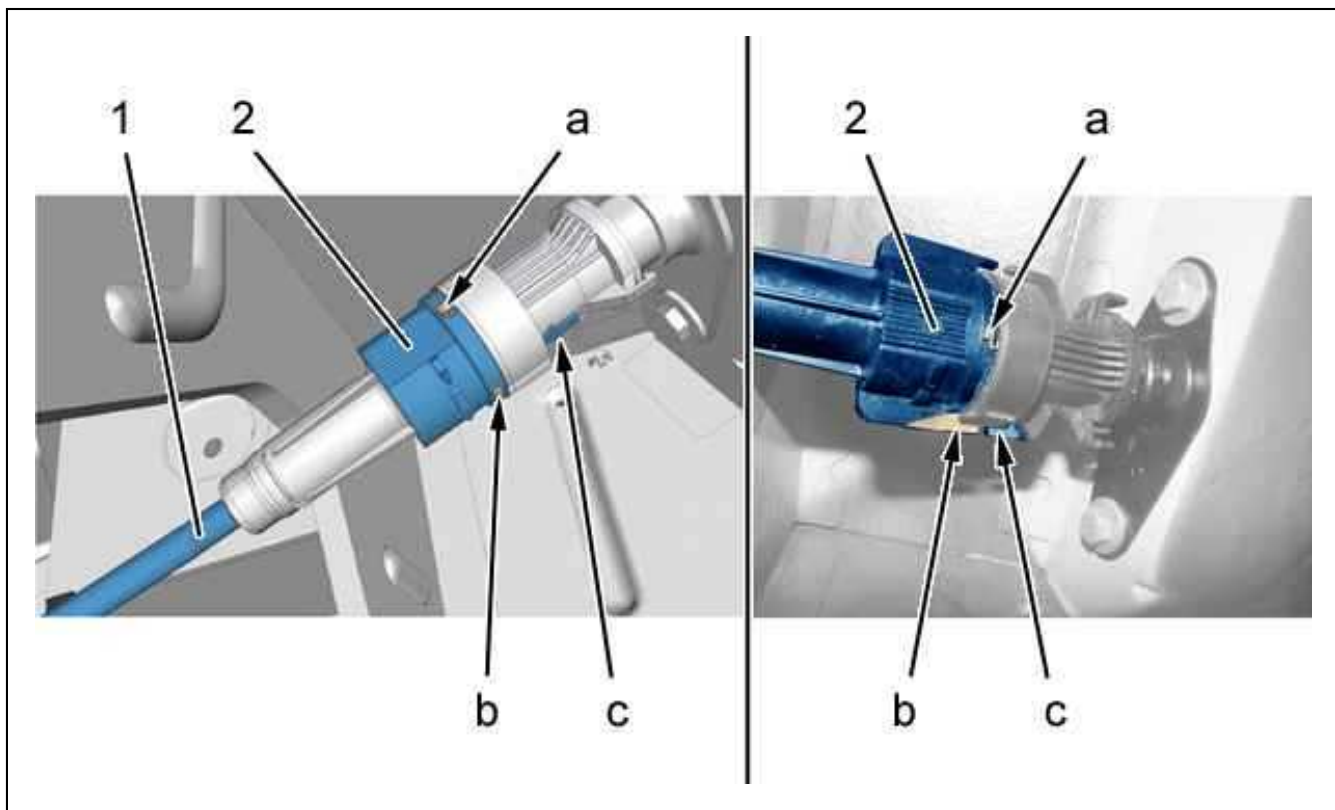


Figure : B3FG22AD

The mark "c" is aligned with the mark "b" : The handbrake cable (1) is locked in the ring (2) (according to assembly).
 The mark "a" is aligned with the mark "c" : The handbrake cable (1) is released in the ring (2) (according to assembly).

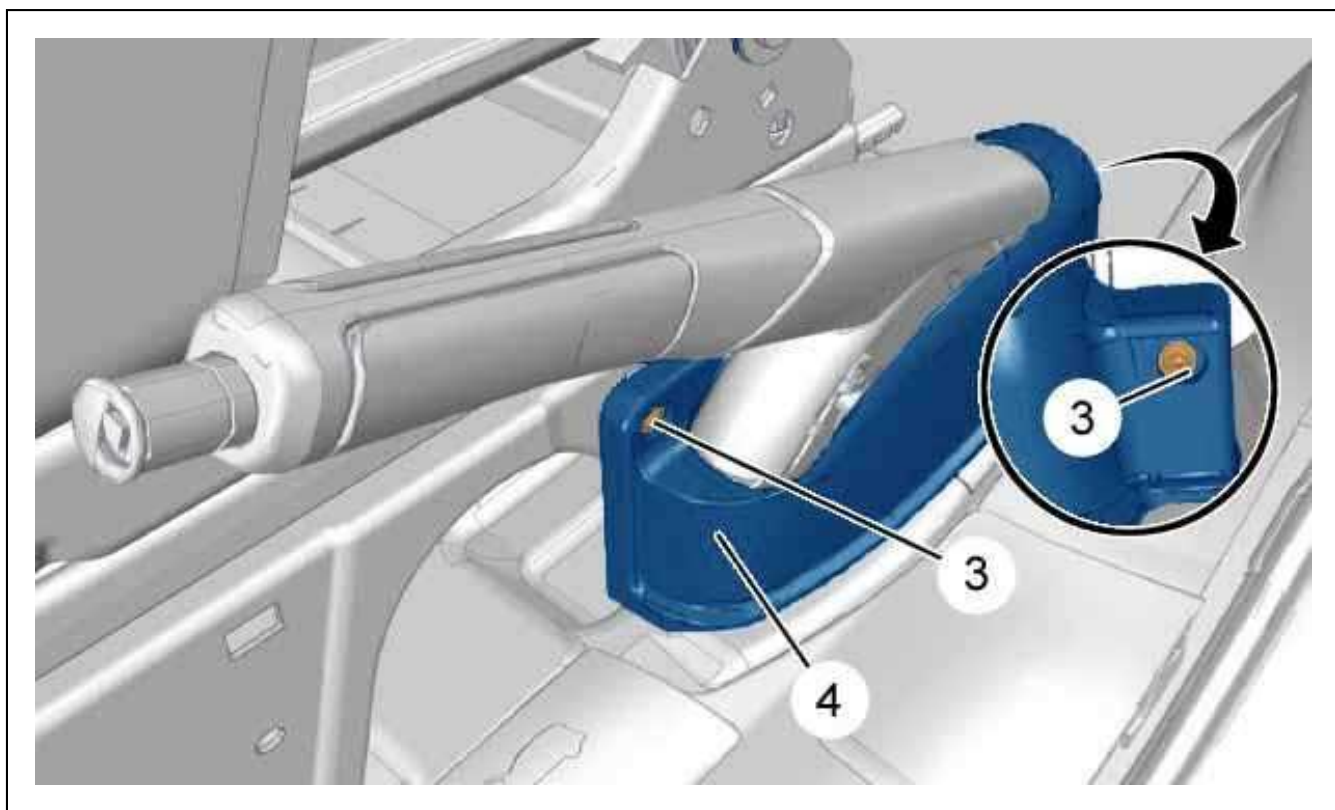


Figure : B3FG22BD

Pull the handbrake lever to the stop .

Push the driver's seat all the way forward.

Remove :

- The bolts (3)
- The protector (4)

Turn the ring (2) clockwise to the stop to lock the handbrake cable (1).

Place the parking brake lever at rest.

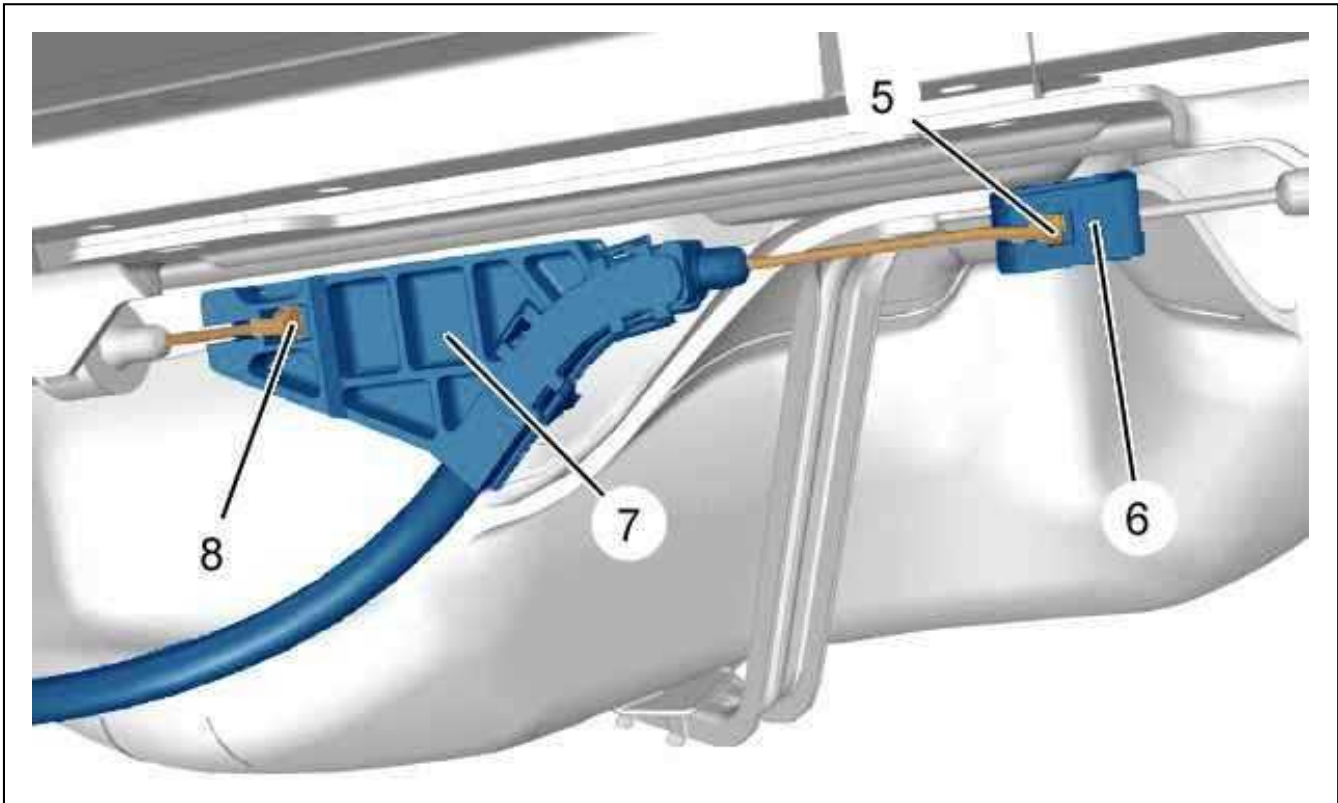


Figure : B3FG22CD

Detach the cable end piece (5) from the yoke (6).

Pivot and relocate the manifold (7) then unhook the cable end piece (8).

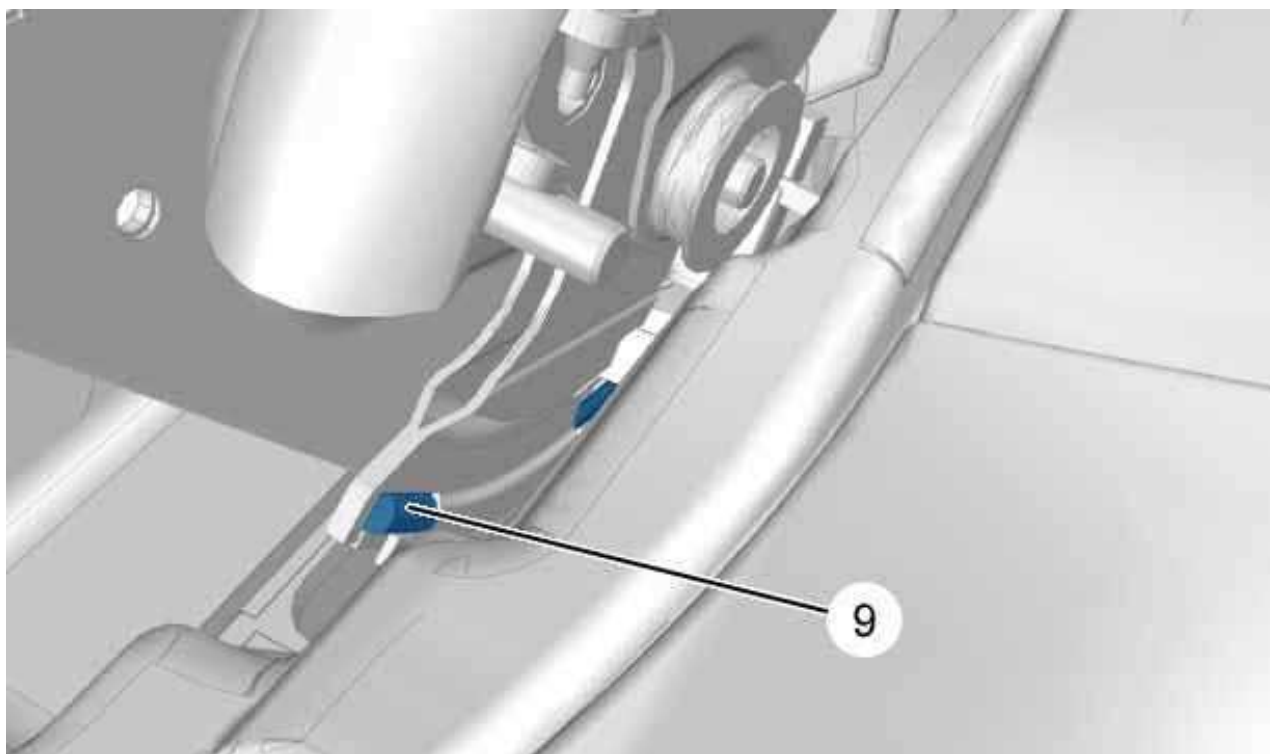


Figure : B3FG22DD

Disengage the cable end piece (9) from the handbrake lever .

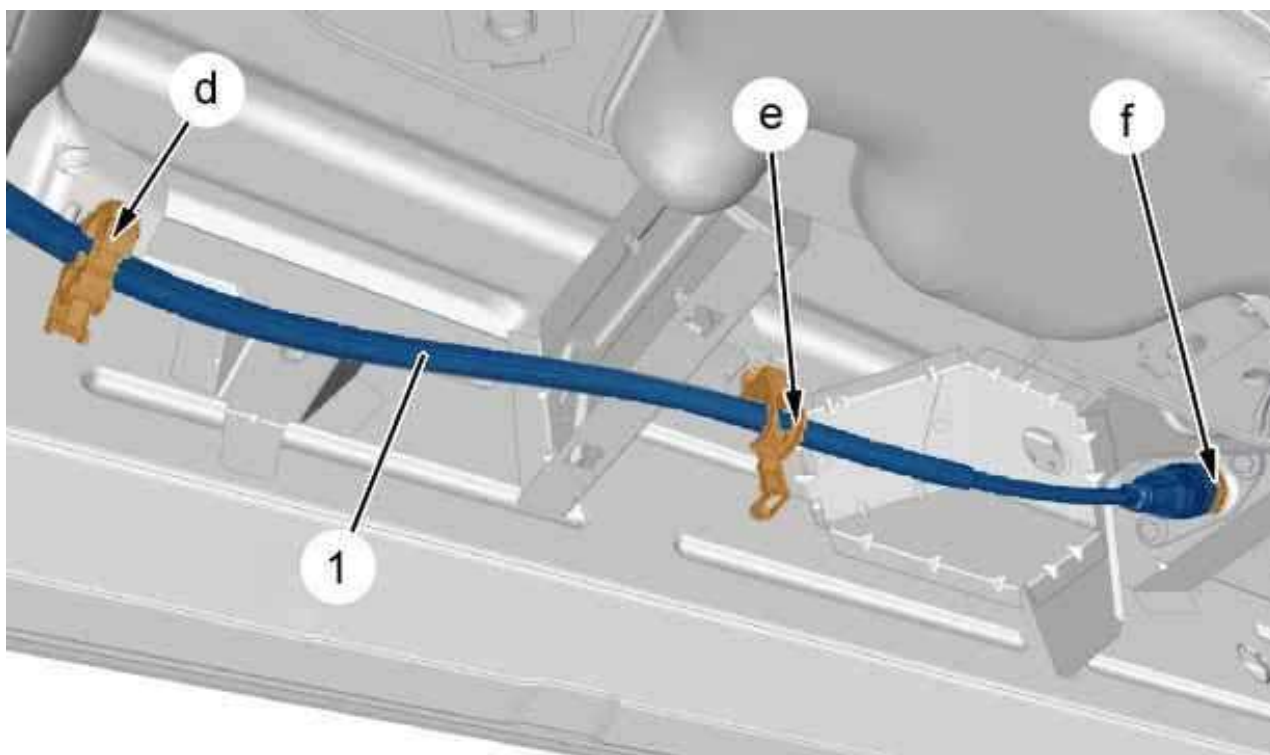


Figure : B3FG22ED

Unclip the parking brake cable (1) (at "d, e, f").
Remove the primary handbrake cable assembly .

2. Removing the secondary handbrake cables

2.1. Common operations

Lift and support the vehicle with the wheels free.

Place the parking brake lever at rest.

Turn the ring (2) anticlockwise to the stop to release the handbrake cable (1).

Pull the handbrake lever to the stop .

Turn the ring (2) clockwise to the stop to lock the handbrake cable (1).

Place the parking brake lever at rest.

2.2. Left-hand secondary handbrake cable

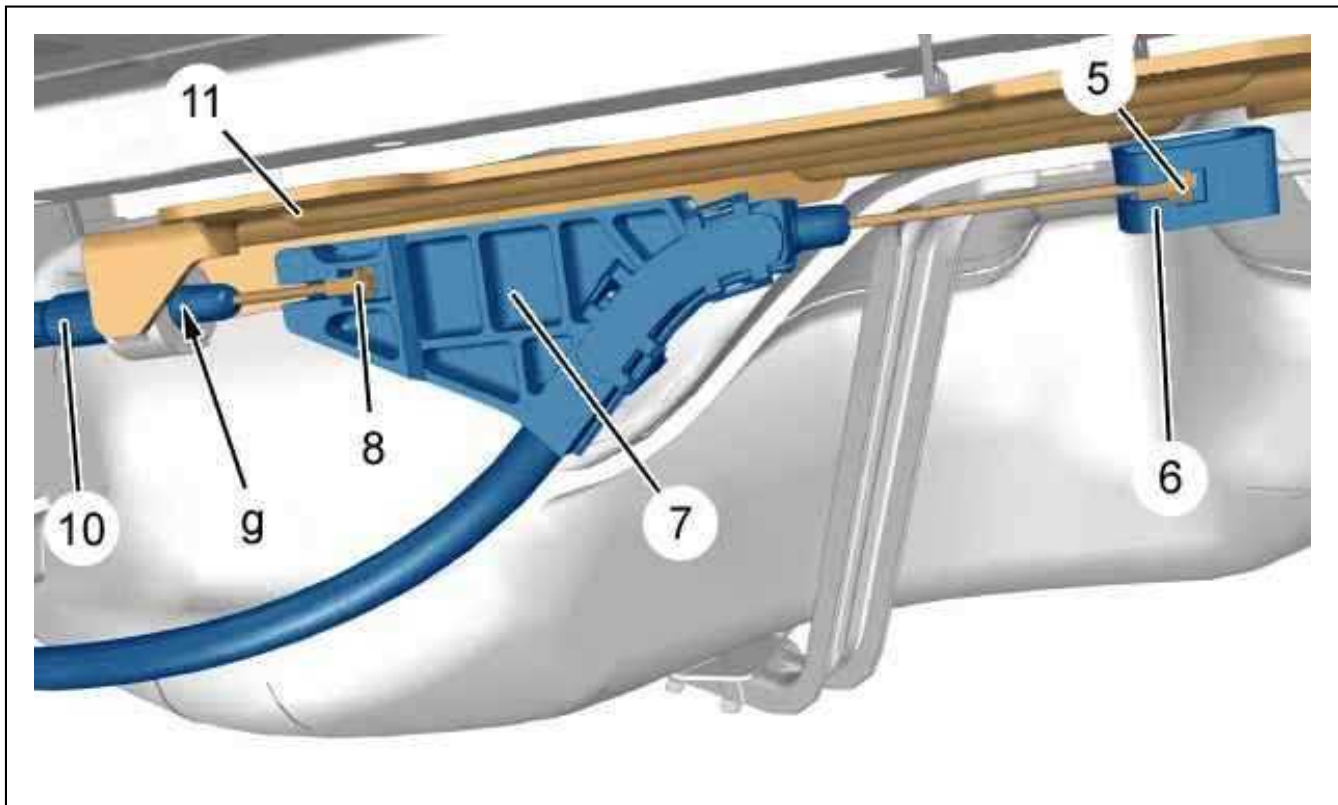


Figure : B3FG22FD

Detach the cable end piece (5) from the yoke (6).

Pivot and relocate the manifold (7) then unhook the cable end piece (8).

Unclip the left-hand secondary handbrake cable (10) from the support (11) applying pressure to the tabs (at "g").

2.3. Right-hand secondary handbrake cable

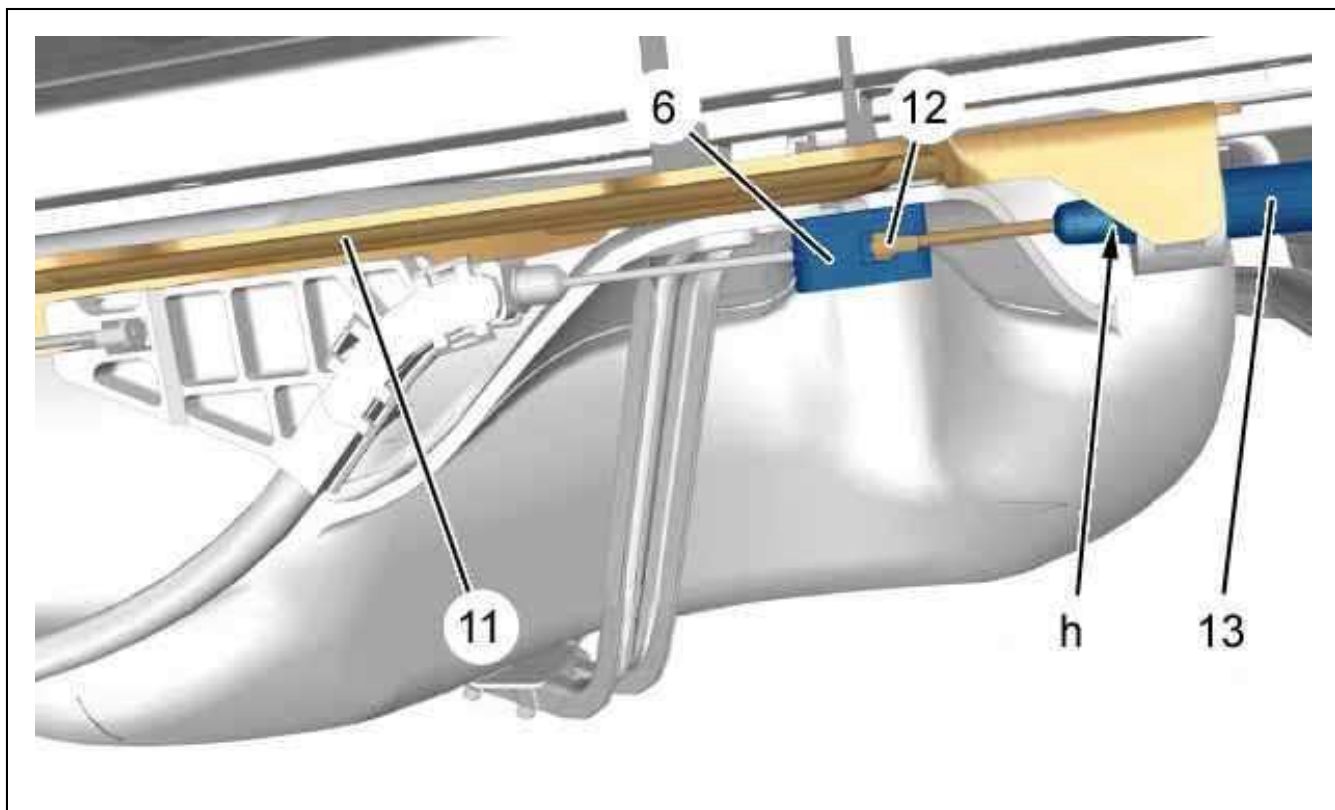


Figure : B3FG22GD

Detach the cable end piece (12) from the yoke (6).

Unclip the right-hand secondary handbrake cable (13) from the support (11) applying pressure to the tabs (at "h").

2.4. disc brakes (on each side)

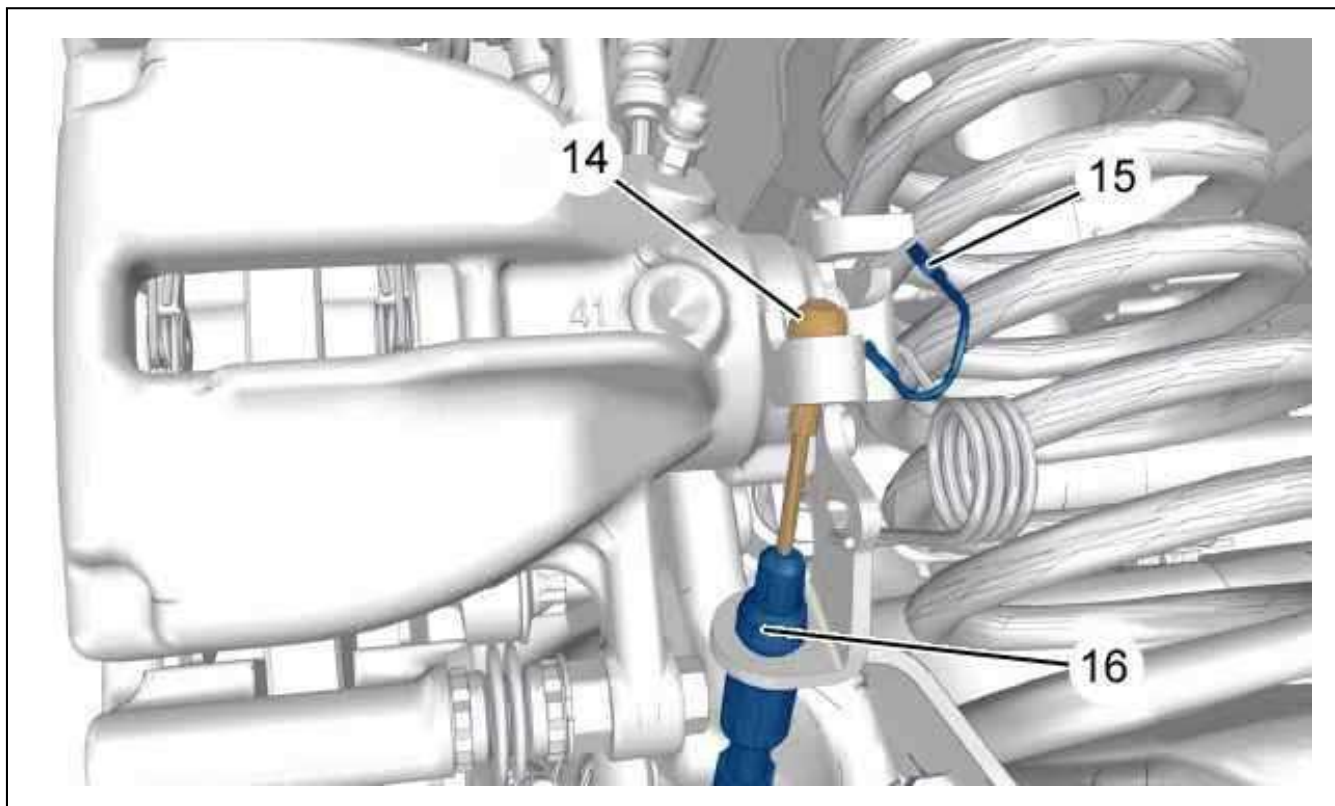


Figure : B3FG22HD

Detach the cable end piece (14) from the brake caliper .

Remove the bush (16).

CAUTION : If necessary, pull out the shim (15) from the brake caliper lever (on each side).

Disengage the secondary handbrake cable from its guides .

Remove the secondary handbrake cable .

2.5. Drum brakes (on each side)

Remove the rear brake drum  .

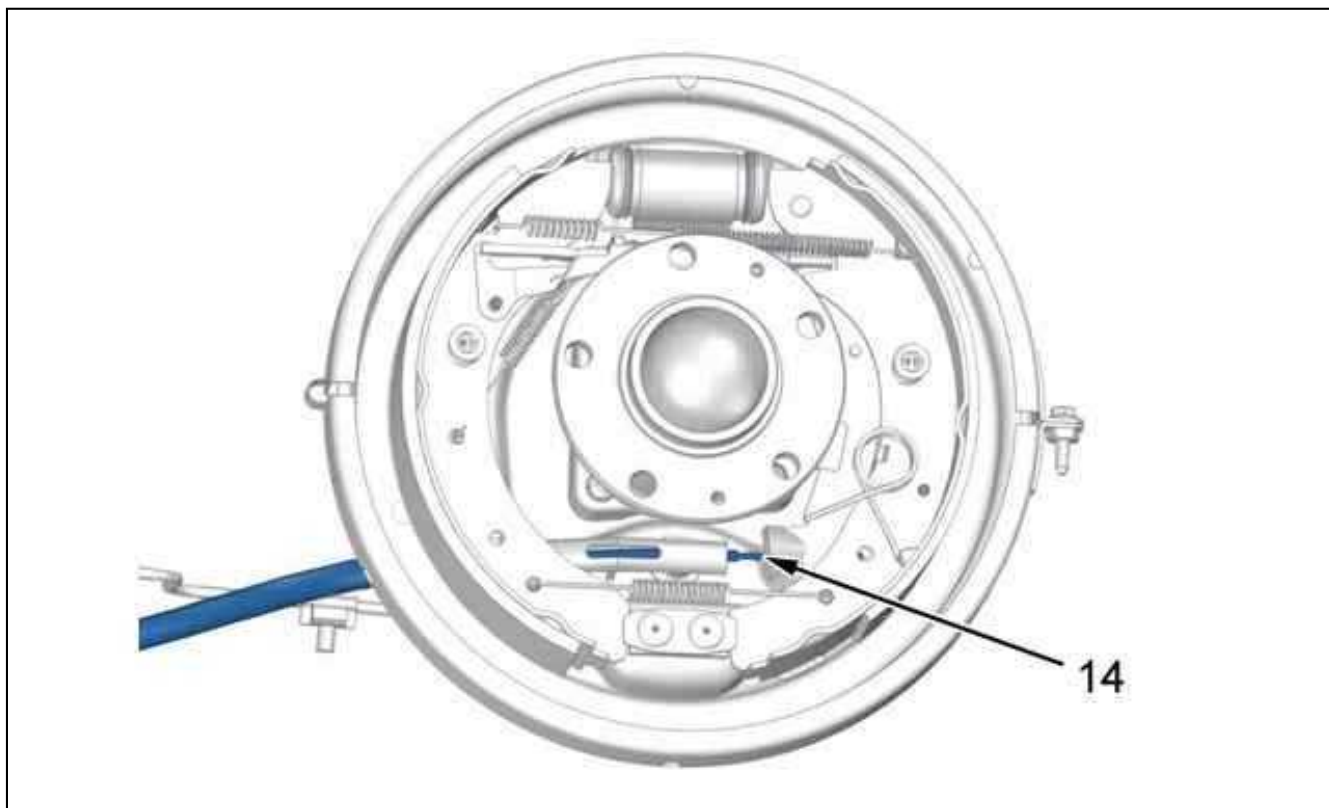


Figure : B3FG23JD

Release the cable end (14) from its mounting.

Disengage the secondary handbrake cable from its guides .

Remove the secondary handbrake cable .

3. Refitting the secondary handbrake cables

3.1. Drum brakes (on each side)

Refit the secondary handbrake cable .

Engage the secondary handbrake cable in its guides .

Engage the cable end (14) in its mounting.

Refit the rear brake drum  .

3.2. disc brakes (on each side)

Refit the secondary handbrake cable .

Engage the secondary handbrake cable in its guides .

Refit the bush (16).

Engage the cable end piece (14) on the brake caliper .

3.3. Right-hand secondary handbrake cable

Engage the right-hand secondary handbrake cable (13) in the support (11) and clip it (at "h").

Check the locking of the secondary handbrake cable (13) in the support (11).

Engage the cable end piece (12) in the yoke (6).

3.4. Left-hand secondary handbrake cable

Engage the left-hand secondary handbrake cable (10) in the support (11) and clip it (at "g").

Check the locking of the secondary handbrake cable (10) in the support (11).

Engage the cable end piece (8) in the manifold (7).

Engage the cable end piece (5) in the yoke (6).

3.5. Common operations

Pack the secondary handbrake cables .

4. Refitting the primary handbrake cable assembly

4.1. Under the vehicle

Refit the primary handbrake cable assembly .

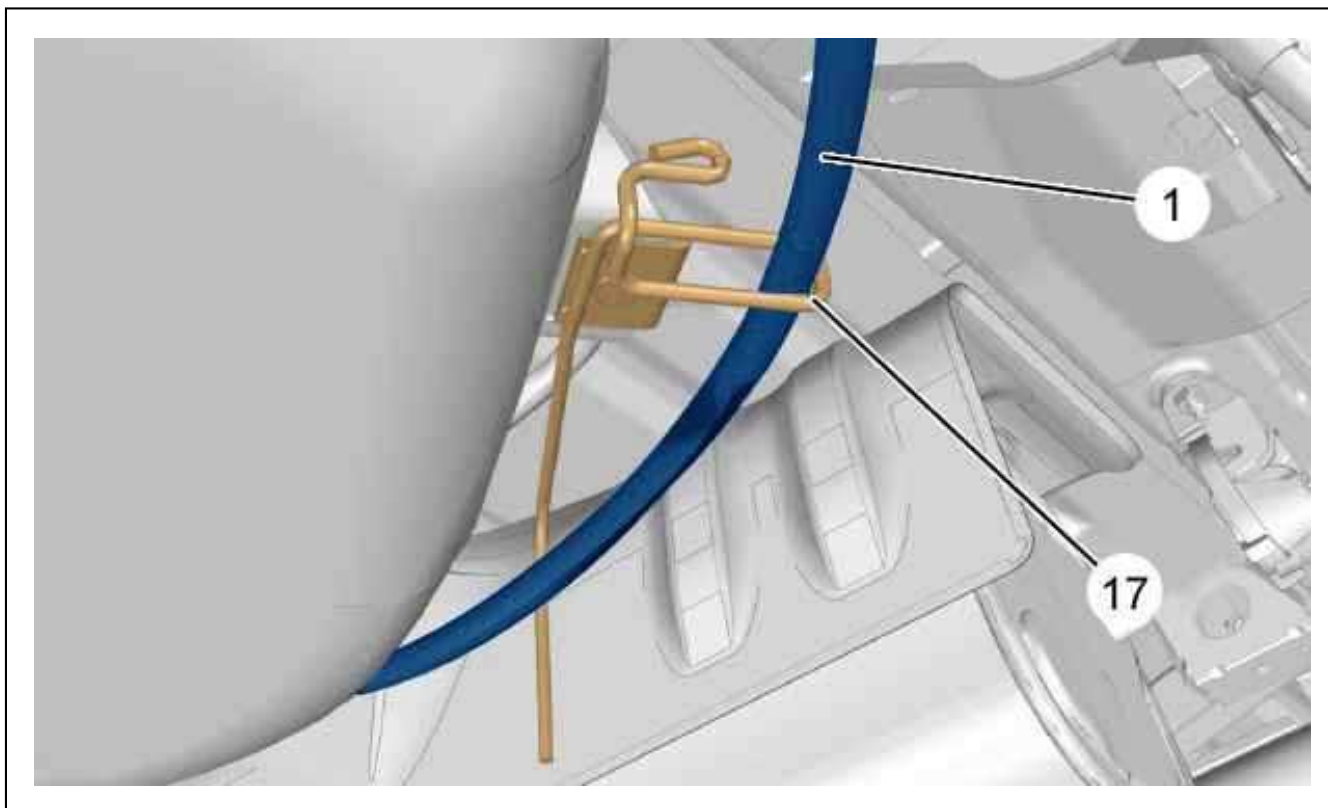


Figure : B3FG22ID

CAUTION : Position the handbrake cable (1) in front of the hook (17) in order to avoid it contacting with the exhaust heat shield.

Clip the parking brake cable (1) (at "d, e, f").

Engage the cable end piece (9) at the handbrake lever .

Engage :

- The cable end piece (8) in the manifold (7)
- The cable end piece (5) in the yoke (6)

Refit :

- The protector (4)
- The bolts (3)

4.2. Packing the handbrake cables

CAUTION : In order to pack the handbrake cables , check that the caliper lever shim (15) is pulled out (on each side).

Turn :

- The ring (2) anticlockwise to the stop to release the handbrake cable (1)
- The ring (2) clockwise to the stop to lock the handbrake cable (1)

Pull the handbrake lever at least ten times.

Place the parking brake lever at rest.

Turn :

- The ring (2) anticlockwise to the stop to release the handbrake cable (1)
- The ring (2) clockwise to the stop to lock the handbrake cable (1)

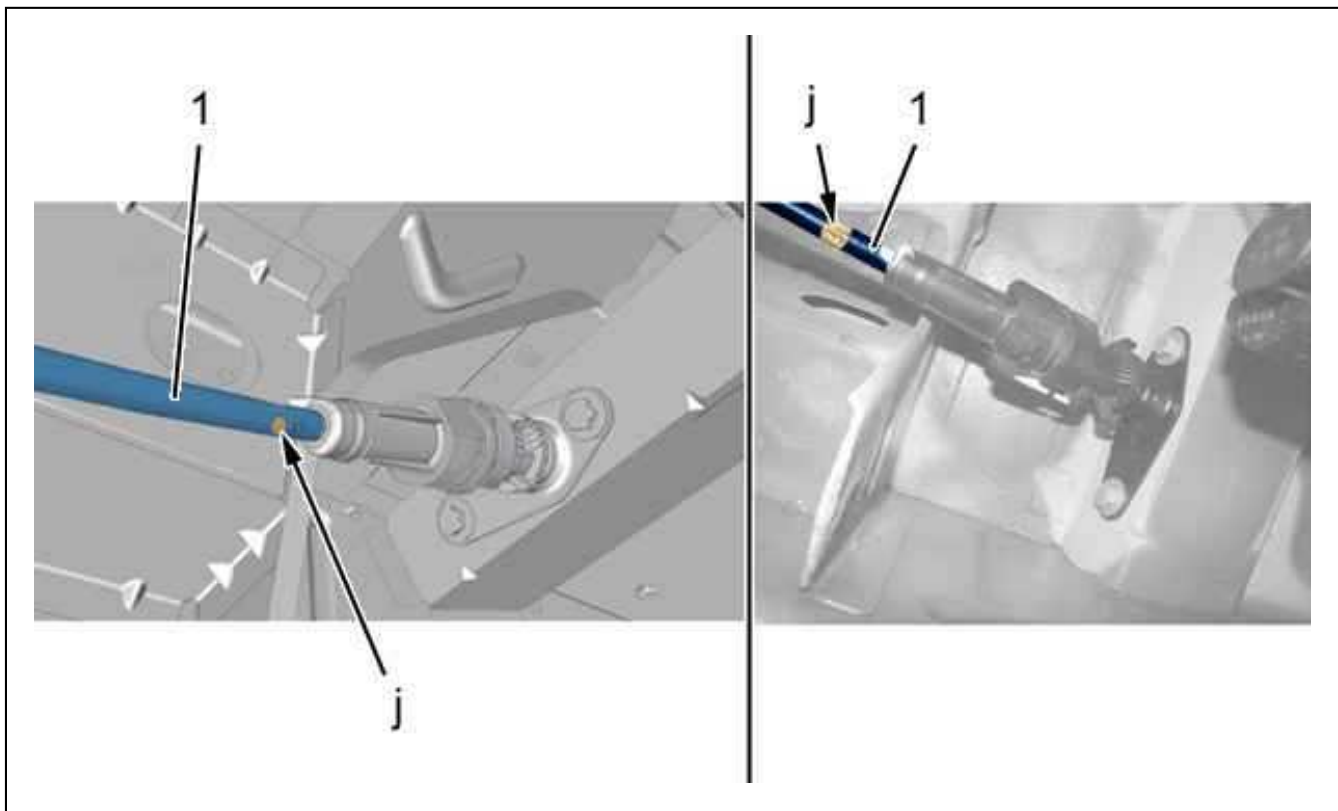


Figure : B3FG22JD

CAUTION : The yellow mark "j" must be visible and away from the ring .

The handbrake cable (1) is locked.

4.3. Checking the packing of the handbrake cables

Raise the vehicle, with wheels suspended.

Place the parking brake lever at rest ; Check that the wheels turn freely by hand.

Check that pad friction begins to occur from the first notch.

Check that the handbrake warning lamp comes on from the first notch of the total travel of the handbrake lever .

Check that the wheels are immobilised from the fourth notch.

Return the vehicle to its wheels.

DRAINING - FILLING - BLEEDING : BRAKE CIRCUIT

ESSENTIAL : Deactivate the pneumatic suspension before lifting the vehicle ⓘ (2 or 4 post lift, workshop jack or customer's jack ⓘ).

ESSENTIAL : Observe the safety and cleanliness recommendations ⓘ .

1. Tooling

A bleed unit approved by the manufacturer.

A diagnostic tool.

2. Draining the brake fluid reservoir

Lift and support the vehicle with the wheels free.

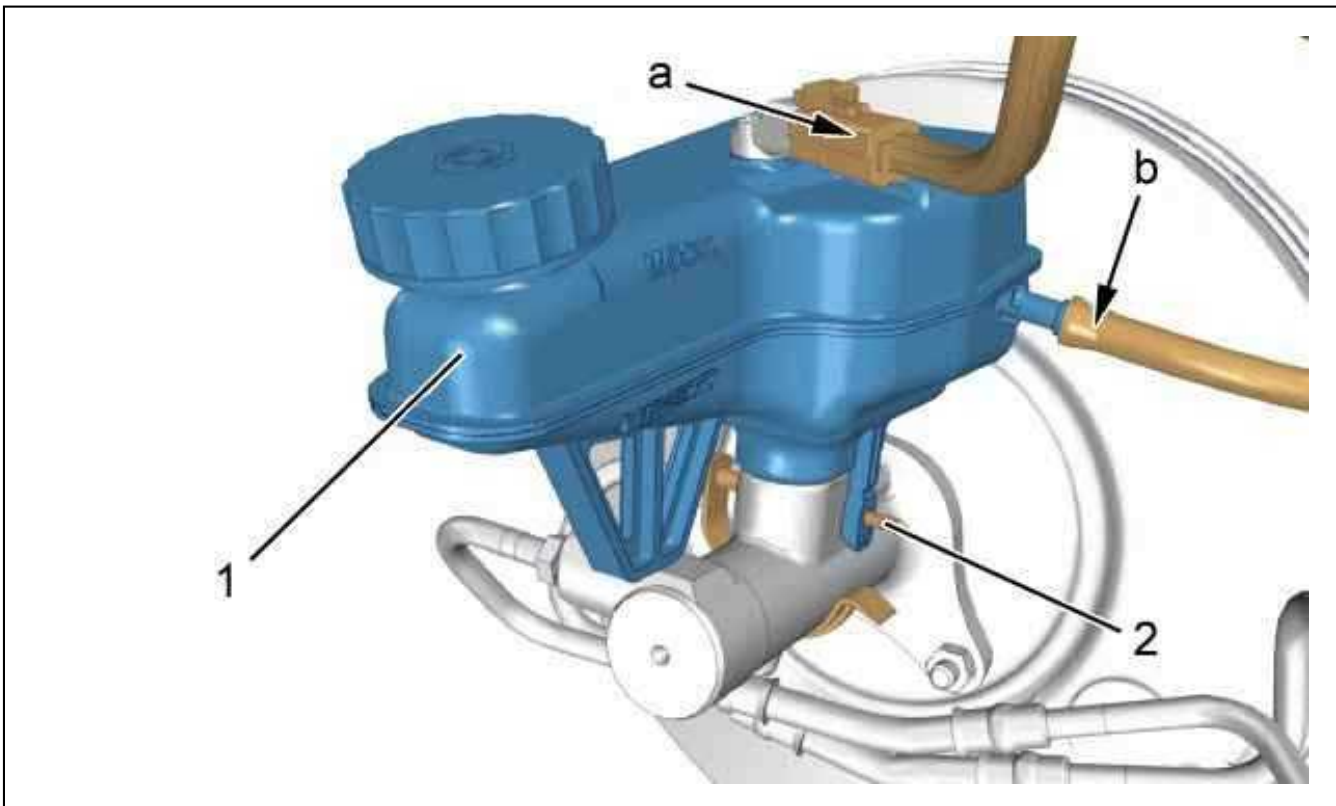


Figure : B3FI009D

Remove the brake fluid reservoir filter .

Drain the brake fluid reservoir (1) ; Using a clean syringe.

Disconnect the connector (as "a").

CAUTION : Prepare for the flow of brake fluid.

Uncouple the hydraulic clutch circuit supply pipe (as "b").

Remove :

- The pin (2)

- The brake fluid reservoir (1)

Clean the brake fluid reservoir (1).

Refit :

- The brake fluid reservoir (1)
- The pin (2)

Couple the hydraulic clutch circuit supply pipe onto the brake fluid reservoir (as "b").

Connect the connector (as "a").

Refit the brake fluid reservoir filter.

3. Refilling

CAUTION : Use only clean fluid free from bubbles. Avoid any introduction of impurities into the hydraulic system.

Use only approved and recommended hydraulic fluid(s) : DOT4.

Fill the brake fluid reservoir (1) to its maximum capacity.

Renew the brake fluid in the calipers by bleeding the circuit until clean fluid flows out (See below).

CAUTION : During the bleeding operation : Keep the fluid topped up in the reservoir and complete it.

4. Precautions to be taken before bleeding a brake circuit

Vehicles fitted with ABS or ESP have a system consisting of 2 brake circuits :

- The primary brake circuit which is the main circuit pressurised directly by the brake pedal
- The secondary brake circuit inside the hydraulic block

This braking system must be bled in 2 stages.

Following work on the master cylinder or the abs unit , bleed in sequence :

- The front left-hand wheel
- The front right wheel
- The left hand rear wheel
- The right hand rear wheel

Following work on a caliper or a wheel cylinder, bleed in the following order :

- With the caliper or the wheel cylinder removed
- The front left-hand wheel
- The front right wheel
- The left hand rear wheel
- The right hand rear wheel

N.B. : If the master cylinder is removed-refitted, it is advisable to complete the automatic bleed with a manual bleed.

5. Bleed procedure

CAUTION : Follow the order of opening of the bleed screws (See above).

N.B. : There are two procedures for bleeding the braking system.

5.1. Automatic bleeding

Connect the bleeding apparatus on the brake fluid reservoir (1).

Bleed the circuit following the instructions for use of the equipment.

When bleeding of the braking circuit is complete, check the pedal travel.

If the travel is long and spongy, repeat the bleed procedure.

5.2. Manual bleeding (at the pedal)

N.B. : Two operators are necessary.

CAUTION : Switch off the ignition.

Couple a transparent pipe on the bleed screw.

Press the brake pedal slowly.

Open the bleed screw .

Hold the pedal fully down.

Close the bleed screw .

Allow the brake pedal to return naturally.

Repeat the operation until the fluid running out is clean and free from air bubbles.

Proceed in the same way for the other wheels.

When bleeding of the braking circuit is complete, check the pedal travel.

If the travel is long and spongy, repeat the bleed procedure.

CAUTION : Check that the wheels rotate freely when the parking brake is released .

6. Bleeding following the replacement of a component

6.1. Replacement of a component of the braking system (With the exception of the ABS/ESP hydraulic block)

Carry out an automatic bleed or a manual bleed (at the pedal) (In the following cases) :

- Brake fluid replacement
- Replacement of the master cylinder
- Replacement of a brake caliper
- Replacement of a wheel cylinder

6.2. Replacement of the ABS/ESP hydraulic block

If the ABS/ESP hydraulic unit has been replaced, proceed in 2 stages :

- Carry out an automatic bleed or a manual bleed (at the pedal) (Primary circuit)
- Finish bleeding (secondary circuit) referring exclusively to procedure of the diagnostic unit

7. Bleed the hydraulic clutch control

Bleed the hydraulic clutch control  .

REMOVING - REFITTING : HYDRAULIC VALVE BLOCK (ABS/ESP)

ESSENTIAL : Observe the safety and cleanliness recommendations ⓘ .

1. Recommended tools

A pedal press.

The fault finding tool.

2. Removing

Raise and support the vehicle on a 2 -post lift.

Place the pedal press on the brake pedal to prevent any flow of brake fluid when the brake hoses are uncoupled.

Disconnect the battery.

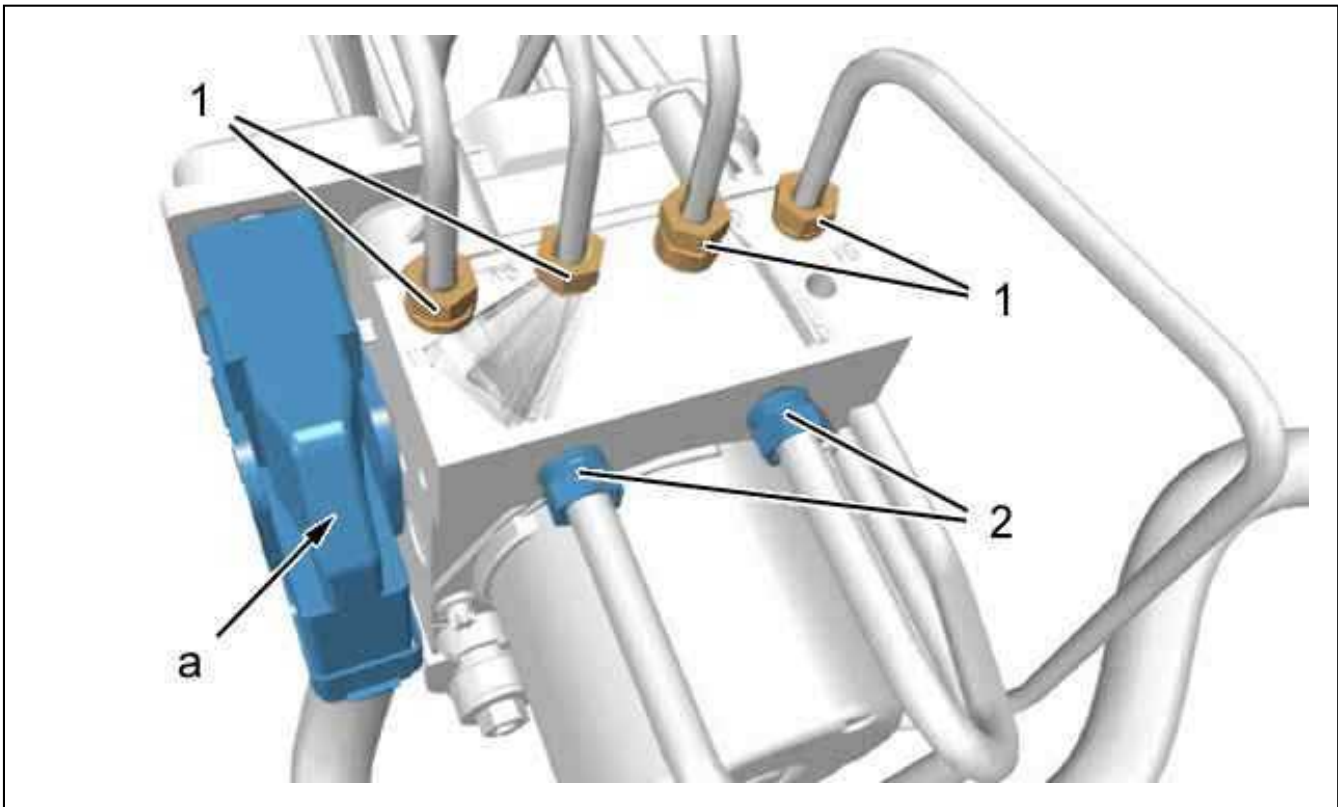


Figure : B3FP7TWD

Disconnect the connector (as "a").

CAUTION : Prepare for the flow of brake fluid.

Unscrew :

- The unions (1)
- The unions (2)

Uncouple : The unions (1), (2).

CAUTION : Plug the inlets and outlets of the hydraulic block to prevent any entry of foreign bodies.

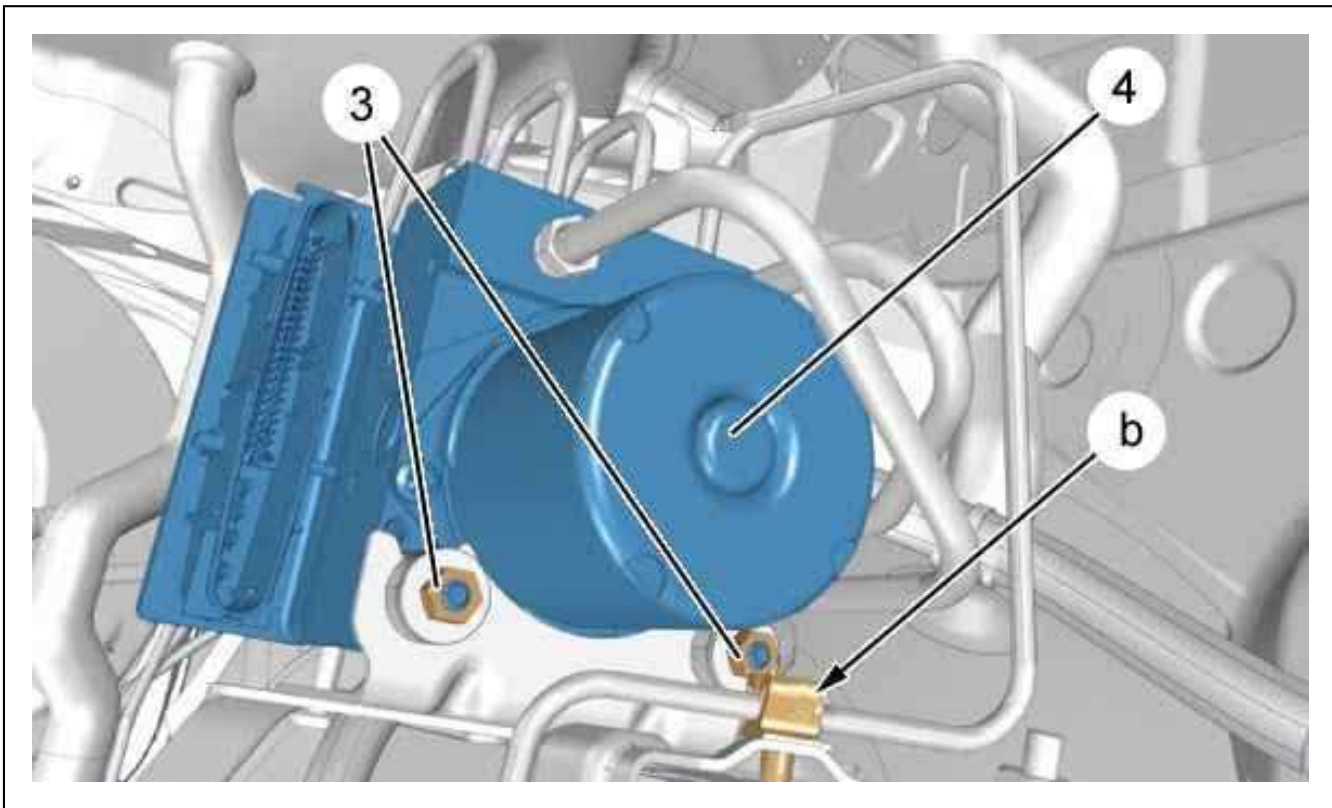


Figure : B3FP7TXD

Unclip the hydraulic pipe (as "b").

Remove :

- The nuts (3)
- The hydraulic valve block (4)

3. Refitting

CAUTION : Adhere to the tightening torques ⓘ .

CAUTION : Remove the blanks from the openings of the hydraulic block (4), just before fitting the brake pipes .

The hydraulic valve block (4) is delivered full of brake fluid .

Refit :

- The hydraulic valve block (4)
- The nuts (3)

Couple up : The unions (1), (2).

Tighten the unions (1), (2).

Clip the hydraulic pipe (as "b").

Reconnect the connector (as "a").

Fill and bleed the braking system ⓘ .

CAUTION : Perform the operations to be carried out following reconnection of the battery ⓘ .

Reconnect the battery.

4. Configuration of ECU

Use the diagnostic tool.

Configure the ECU.

Select the ECU configuration menu .

Follow the instructions on the diagnostic tool.

Configure :

- The vehicle's engine
- The body
- The type of tyres
- The gearbox type
- The type of electronic architecture

Read the fault codes.