

VOLVO

Construction Equipment

Service Information

Document Title:	Function Group:	Information Type: Service Information	Date: 12/10/2011
Profile: WLO, L90F (Volvo) [GB]			

Brake pedal, adjusting angle

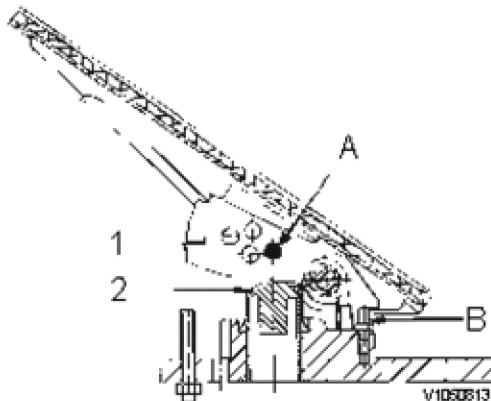


Figure 1
Adjusting brake pedal

Adjusting pedal angle

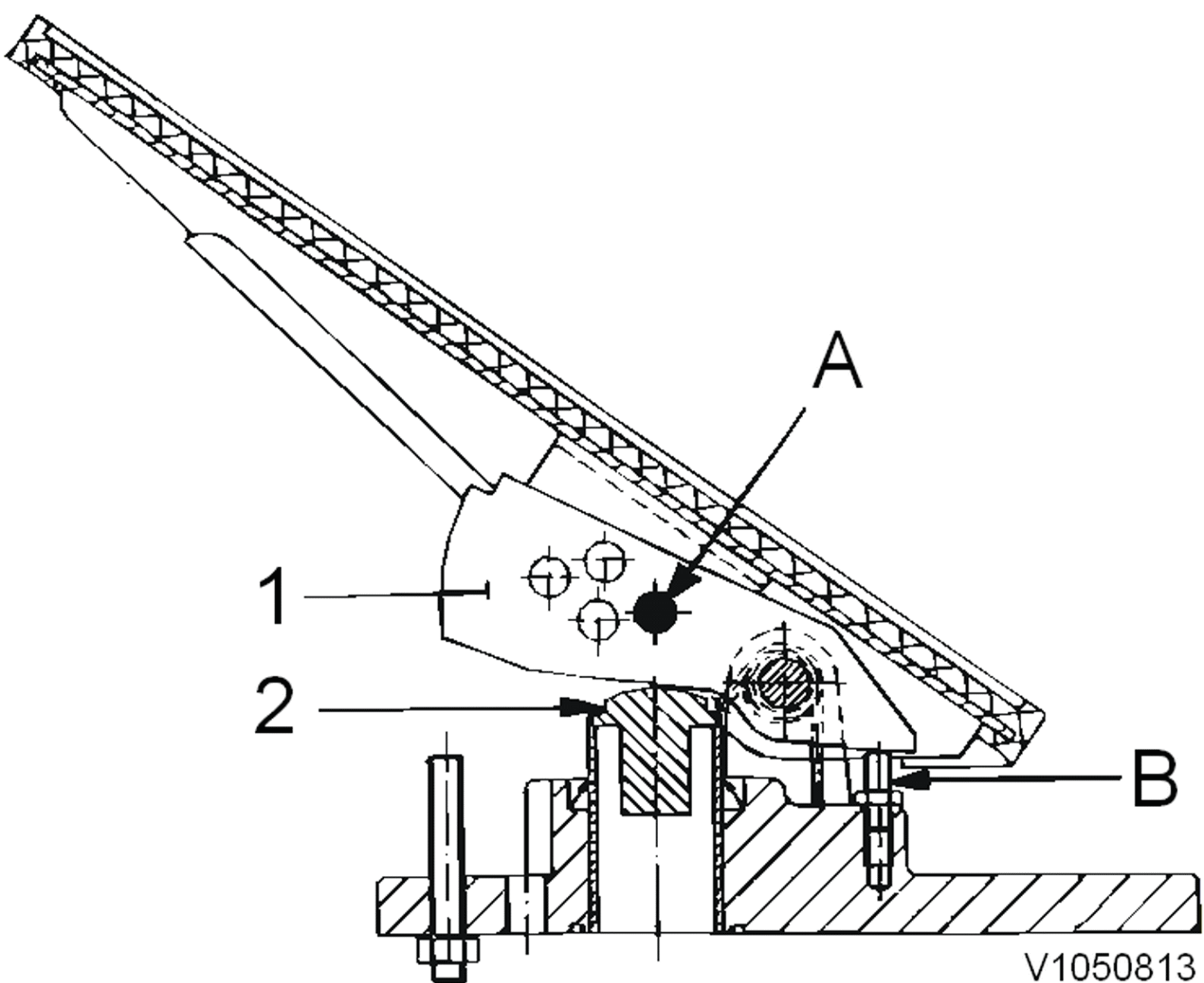
The pedal can be adjusted to an angle of 40°, 45°, 50° and 55°.

1. Adjustment of the pedal angle is effected by repositioning the screw under the pedal. Pos. A corresponds to a pedal angle of 50°.

NOTE The pedal must be removed in order to adjust the angle.

Adjusting pedal play

1. Screw down adjusting screw B until there is zero clearance between the brake pedal 1 and the piston (2). Then screw down the screw about half a turn.



V1050813

VOLVO

Construction Equipment

Service Information

Document Title:	Function Group:	Information Type: Service Information	Date: 12/10/2011
Profile: WLO, L90F (Volvo) [GB]			

Brake accumulator, description

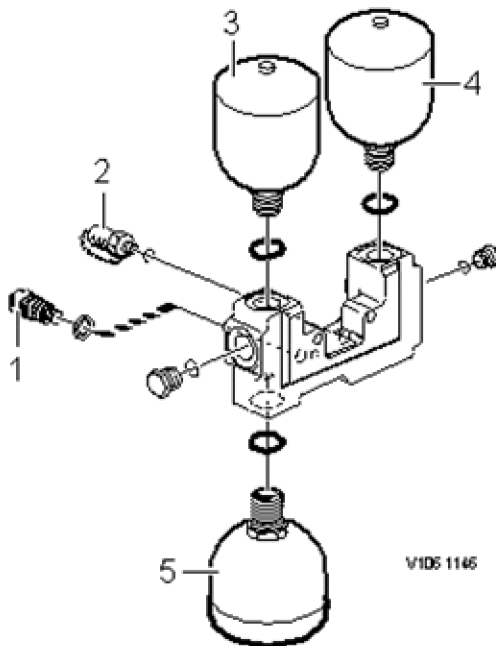


Figure 1
Accumulator block, brake

1. SE5218, sensor, brake pressure charging
2. Testing nipple, checking point
3. Accumulator, rear circuit
4. Accumulator, front circuit
5. Accumulator, in common

The accumulators, which are precharged with nitrogen, store pressure and provide safe braking within sufficiently safe limits. One accumulator is for the front circuit, one accumulator is for the rear circuit and one accumulator is in common.



Construction Equipment

Service Information

Document Title:	Function Group:	Information Type: Service Information	Date: 12/10/2011
Profile: WLO, L90F (Volvo) [GB]			

Accumulator, check

Op nbr 527-009

Removing

1. Turn the ignition key to position 1.
2. Release the pressure in the brake system by depressing the brake pedal right down several times until the resistance in the pedal ceases.
3. Remove the right side cover under the ladder.
4. Loosen the bolts retaining the accumulator block.
5. Remove the accumulators.

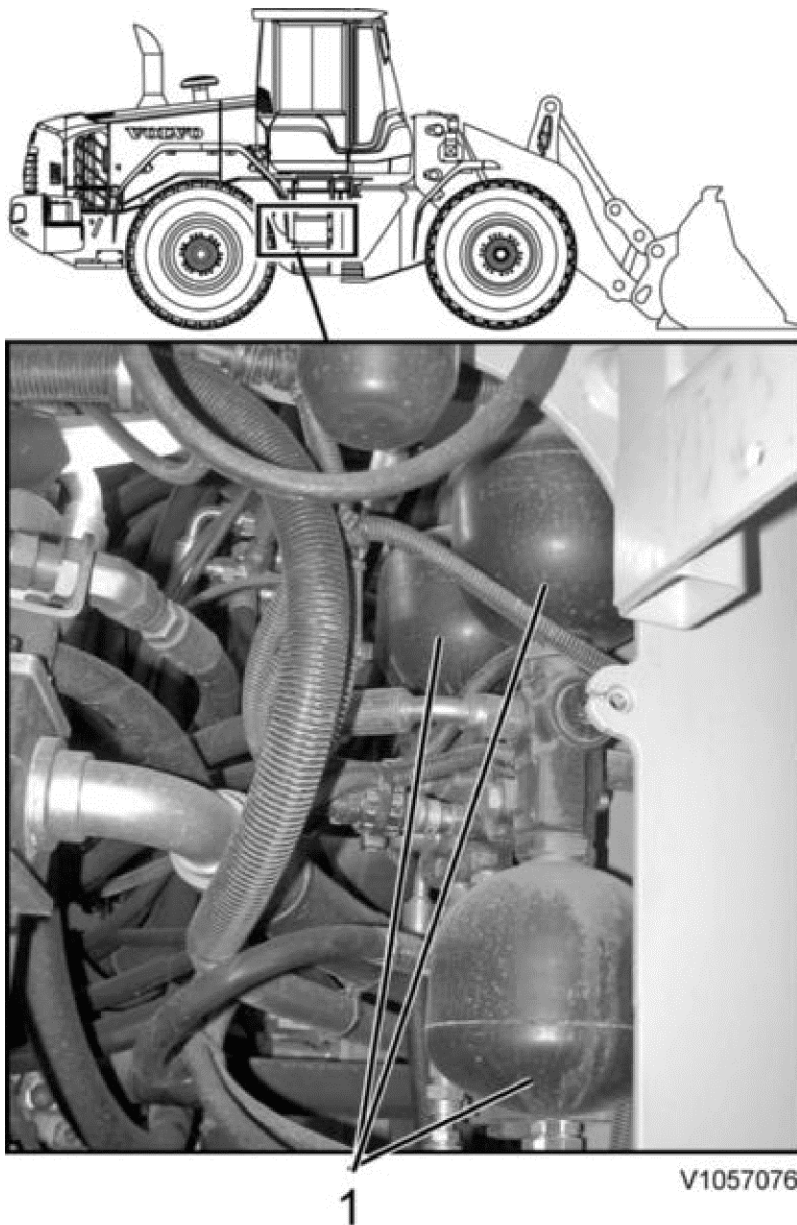


Figure 1

1. Brake accumulators

Checking

6. Pressure-test the accumulators according to [Accumulator, losstagen, kontroll](#)

Installation

7. Install the accumulators.
8. Tighten down the bolts retaining the accumulator block.
9. Install the right side cover under the ladder on the right side of the machine.
10. Bleed the brake system according to [Bromssystem, luftning](#)

VOLVO

Construction Equipment

Service Information

Document Title:	Function Group:	Information Type: Service Information	Date: 12/10/2011
Profile: WLO, L90F (Volvo) [GB]			

Accumulator removed, checking charging pressure

Op nbr 527-001

[11666041 Pump](#)
[11666051 Pressure gauge](#)
[14290266 Hose](#)

E-2000

1. Connect E-2000 to the accumulator. Connect the other tools according to the figure.

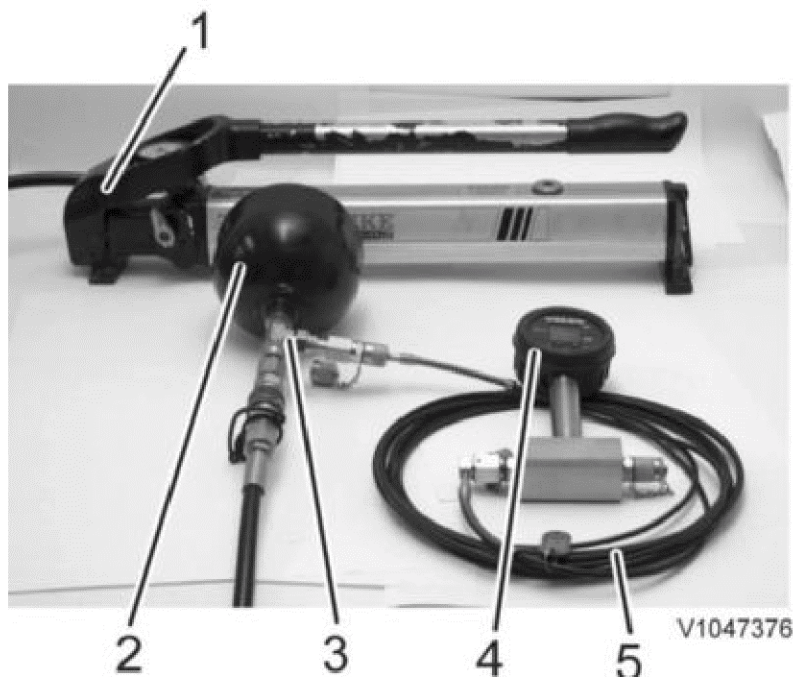


Figure 1
Checking removed accumulator

1. 11666041 Pump
 2. Accumulator
 3. E-2000
 4. 11666051 Pressure gauge
 5. 14290266 Hose
2. Pump oil into the accumulator.
After a few pump strokes the pressure will rise quickly up to the precharging pressure and then rise slowly.
Precharging pressure, see [Servosystem, specifikation](#)
If the precharging pressure is less than what is specified, it must be discarded, see [Kasserade ackumulatorer](#)

VOLVO

Construction Equipment

Service Information

Document Title:	Function Group:	Information Type: Service Information	Date: 12/10/2011
Profile: WLO, L90F (Volvo) [GB]			

Accumulator, discarding

Op nbr 900-050

**WARNING!**

A discarded accumulator which is not punctured may still contain high pressure and must always be handled with great care.

**WARNING!**

Use safety glasses.

1.

Accumulators that are to be discarded must not constitute a hazard.
This is done by carefully puncturing the accumulator with a Ø3 mm (0.118 in) drill.

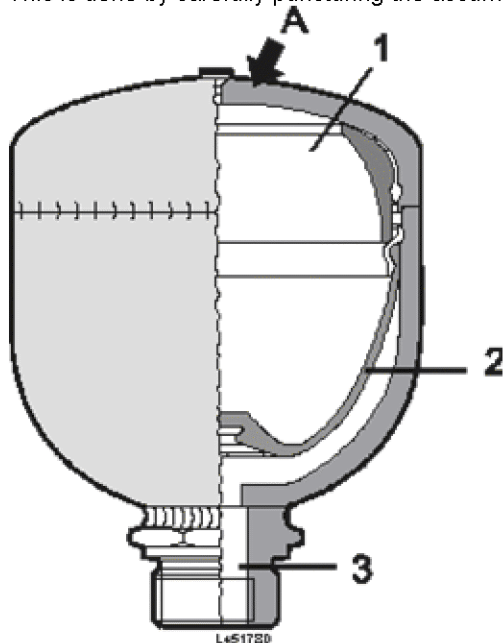


Figure 1
Accumulator

- A. Drill here with a Ø3 mm (0.118 in) drill
- 1. Nitrogen gas space
- 2. Rubber diaphragm
- 3. Connection for oil

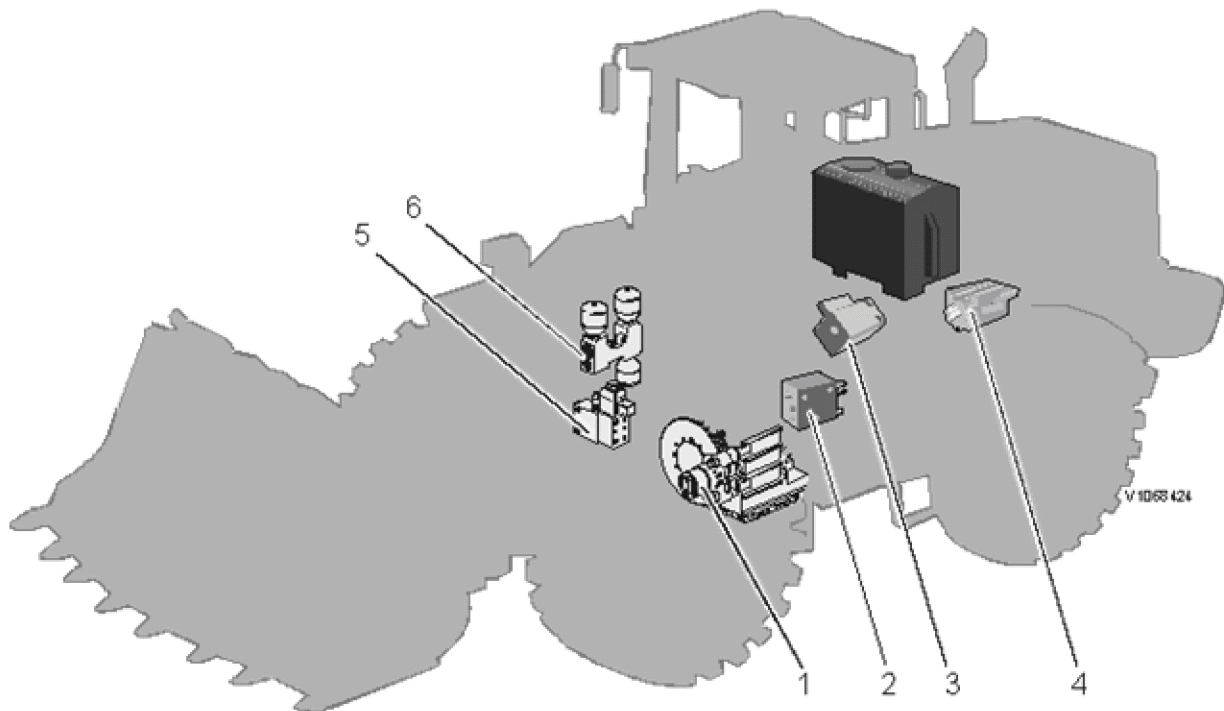


Construction Equipment

Service Information

Document Title:	Function Group:	Information Type: Service Information	Date: 12/10/2011
Profile: WLO, L90F (Volvo) [GB]			

Parking brake, component location

**Figure 1**

1. Parking brake
2. Central block
3. Pump 2
4. Pump 3
5. Valve block, MA5501, SE5503
6. Accumulator block, service brakes

For description of components, see:

- [Central valve, description](#)
- [Hydraulic pumps, description](#)



Construction Equipment

Service Information

Document Title:	Function Group:	Information Type: Service Information	Date: 12/10/2011
Profile: WLO, L90F (Volvo) [GB]			

Parking brake, description

The parking brake is a disc brake positioned externally on the transmission front output shaft.



Figure 1
SW5501

The parking brake is applied and released with switch SW5501. When the upper end of SW5501 is pressed in, the parking brake is applied. To release the parking brake, the catch on SW5501 must be released.

Regardless of the position of switch SW5501, the parking brake is applied when the engine is turned off. When the engine is started and the lower end of SW5501 is not pressed in, the switch must first be pressed in and then released, if the parking brake is to be released.

NOTE If the engine is started and the upper end of SW5501 is not pressed in, the parking brake will be released automatically, when either of the directional gears is selected and the engine speed exceeds 1600 rpm.

See also [Elschema 501](#)
and [Hydraulschema, komplett](#)



1. Central valve
2. Accumulator block, service brakes
3. Parking brake

When the upper end of SW5501 is pressed in or if the engine is turned off, MA5501 becomes de-energised. The oil from the hydraulic pumps (via the central valve and brake accumulator block) cannot pass through the parking-brake valve to the parking brake, which means that the parking brake becomes applied because of the spring force. SE5503 senses no pressure and sends signal to the V-ECU about this, which will cause the control lamp for the parking brake to light up (if the ignition is on).

When SW5501 is released, MA5501 becomes energised. The oil from the hydraulic pumps (via the central valve and brake accumulator block) can pass through the parking-brake valve and the parking brake is pressurised. The hydraulic oil pressure then overcomes the spring force and the parking brake is released. Also SE5503 registers pressure and sends signal about this to the V-ECU whereby the control lamp for the parking brake is extinguished.

Software

Electric parking brake		
Input signals	Conditions for output functions	Output functions
<ul style="list-style-type: none"> o Ignition switch, SW3301 o Speed, SE4307 	Machine stationary <ul style="list-style-type: none"> o Engine Off o Speed < 5 km/h (3 mph) 	<ul style="list-style-type: none"> o Parking brake applied "ON". MA5501 de-energised and SE5503 without pressure.