

Service Bulletin.

BRAKES
PV

Sheet 1 of 3

New type brakes on PV 445, PV 544 and P 1200

In order further to improve braking effect, we have fitted new type brakes on the above vehicles. The modifications have been introduced in production as follows:

P 4450	chassis No.	27154 onwards
P 4451	" "	3831 "
P 544	" "	205370-205374, 207045-207173, 207212-207801, 207866 onwards.
P 1200	" "	14986-14987, 15069-15072, 15075-15081, 15084, 15097-15105, 15178-15185, 15239 onwards.

Description

The wheel brakes, the design of which is shown in figs. 1 and 2, are of the Duo-servo type and self-centring. The servo effect, by means of which less pedal pressure is required, is obtained through the action of the primary (front) shoe which, when applied, transfers force through the adjusting device to the secondary (rear) shoe and helps to apply this.

The linings are riveted and have a total effective area of 157.5 sq. in. (1016cm²) for PV 445 and PV 544 and 165.5 sq. in. (1068cm²) for P 1200. In order to ensure that the brake linings have the greatest possible length of life, the rear (secondary) shoes on the front wheel brakes are provided with thicker and eccentrically ground linings.

The front wheel brakes on PV 1200 have been increased in size to 10" and thus have new brake drums. The other brakes are 9" diameter. Wheel unit cylinders on the front wheel brakes have a bore of 1" and on the rear wheel brakes, 13/16".

The attachment of the hand brake cable at the brake backing plate has also been altered. In addition, the handbrake cables fitted on PV 544 and P 1200 are of somewhat modified type.

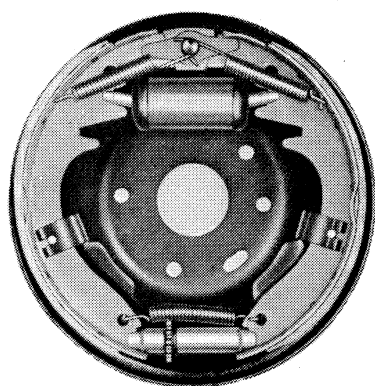


Fig.1 Front wheel brake

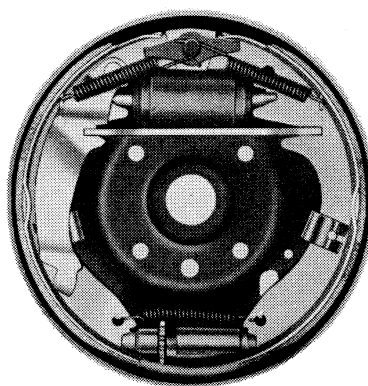


Fig.2 Rear wheel brake

Adjusting

The brake should be adjusted whenever necessary. If it is suspected that the linings are worn down the brake drums should first be removed for checking. The linings should be examined regularly every 12,000 miles (20000 km). Adjusting is carried out as follows:

1. Lift up the vehicle and place blocks under the control arms and rear axle respectively. Release the handbrake.
2. Remove the rubber seals, insert a screwdriver in the aperture and apply the brake shoes as shown in fig. 3. Turn the adjusting screw toothed wheel until the brake drum is locked.
3. Turn back the adjusting screw 8 teeth. Then check that the brake drums can rotate freely. If not, depress the brake pedal to centre the shoes. If this does not help, turn back the adjusting screw a further 2 teeth. Repeat this procedure until the drum can rotate freely. Refit the rubber seal.
4. Check that the handbrake gives full braking effect at the 4th - 5th notch on PV 544 and P1200 and at the 6th - 8th notch on PV 445. If not, adjust the handbrake in the usual way.

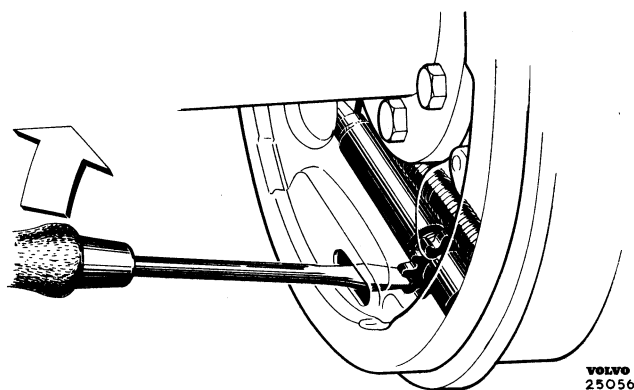


Fig.3 Adjusting the brake

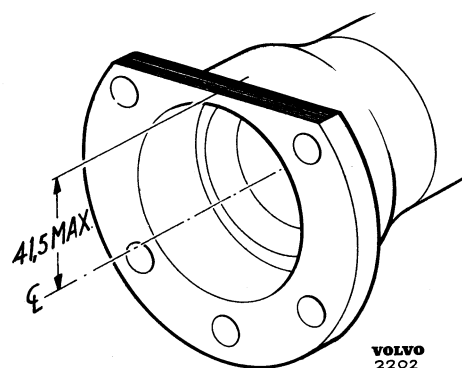


Fig.4 Flange height

The new brakes can also be fitted on older vehicles. They must be fitted on all the wheels. Before fitting the rear wheel brakes the flange height on the rear axle housing is measured as shown in fig.4. If the measurement exceeds 1.63" (41.5 mm) the flange must be ground down to this. If necessary the shims must be cut and trimmed.

The following material required for conversion to the new type brakes can be ordered from our Spare Parts Department.

<u>Description</u>	<u>Part No.</u>	<u>Quantity per vehicle</u>
<u>PV 445</u>		
Front wheel brake complete, left	658838	1
right	658839	1
Rear wheel brake complete, left	658840	1
right	658841	1
Splash guard for front wheel hub,		
left	658949	1
right	658950	1
Clamp complete for cable attachment,		
left	658952	1
right	658953	1
Bolt 1/4" - 28 UNF x 7/16"	191260	4
<u>PV 444 and PV 544</u>		
Front wheel brake complete, left	658838	1
right	658839	1
Rear wheel brake complete, left	658840	1
right	658841	1
Handbrake cable complete,	658842 ¹⁾	2
Clamp for cable attachment, left	658843 ¹⁾	1
right	658844 ¹⁾	1
Bolt 1/4" - 28 UNF x 7/16"	191260	4
<u>P 1200</u>		
Front wheel brake complete, left	658959	1
right	658960	1
Rear wheel brake complete, left	658840	1
right	658841	1
Handbrake cable complete.	658842 ¹⁾	2
Clamp for cable attachment, left	658843 ¹⁾	1
right	658844 ¹⁾	1
Bolt 1/4" - 28 UNF x 7/16"	191260	4
Front wheel hub with brake drum	658956	2

Note: For vehicles having handbrake cables without protective casings, clamps 658952 and 658953 should be fitted instead of parts marked 1).