

Disassembly and Reassembly of the Automatic Adjustment

Job No.
42—10

Disassembly:

1. Use Special Wrench 180 589 10 07 to unscrew the tensioning screw from the adjusting sleeve.

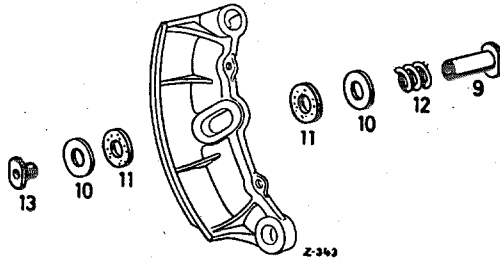


Fig. 42—10/1

Front brake shoe

- | | |
|--------------------|---------------------|
| 9 Adjusting sleeve | 12 Pressure spring |
| 10 Thrust washer | 13 Tensioning screw |
| 11 Friction washer | |

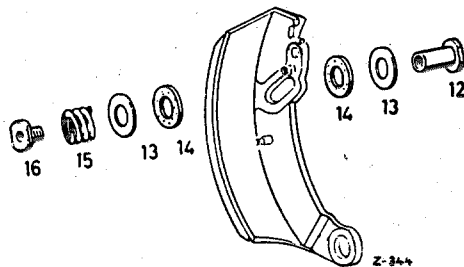


Fig. 42—10/2

Rear brake shoe

- | | |
|---------------------|---------------------|
| 12 Adjusting sleeve | 15 Pressure spring |
| 13 Thrust washer | 16 Tensioning screw |
| 14 Friction washer | |

When removing the tensioning screw, hold the adjusting sleeve steady with Special Wrench 180 589 11 07. Remove thrust washer and friction washer (Fig. 42—10/1 and Fig. 42—10/2).

Note: On the front brake shoe the pressure spring is fitted at the rear side, on the rear brake shoe at the front side.

Inspection:

2. Check the friction and thrust washers. The surfaces of the friction washers should be neither oily or damaged. Oily or broken friction washers and washers with high spots on the friction surfaces must be replaced.
3. Check the contact surfaces at the slotted hole of the brake shoe. The contact surfaces must be smooth and without scores or burrs; the web of the brake shoe must be of the same thickness at all contact surfaces.
4. Check to see whether the bolt of the automatic adjustment is bent. Bent bolts must be replaced.
5. Check the pressure spring of the automatic adjustment.

Length of spring unloaded	16.4 mm
Loaded length at 120—140 kg	13.0 mm

Dimensions and Tolerances of Automatic Adjustment in mm

Brake	Adjusting sleeve		Bolt ϕ	Clearance between bolt and adjusting sleeve
	Inside diameter	Length		
Front	$\frac{12.000}{12.058}$	36	$\frac{11.200}{11.173}$	0.800—0.885
Rear	$\frac{12.000}{12.058}$	30	$\frac{11.000}{10.973}$	1.000—1.085

Caution! Both the clearance between bolt and adjusting sleeve and the length of the adjusting sleeve are different for the rear wheel brake and the front wheel brake.

Reassembly:

6. On the rear brake shoe install thrust washer (13) and friction washer (14) on the adjusting sleeve (12) (see Fig. 42 — 10/2).

On the front brake shoe first install pressure spring (12) and then thrust washer (10) and friction washer (11) on the adjusting sleeve (9) (see Fig. 42 — 10/1).

Note: On the front wheel brake shoes the pressure spring (12) is installed at the brake anchor plate side (see Fig. 42 — 10/1). On the rear wheel brake shoes the pressure spring (15) is installed at the brake drum side (see Fig. 42 — 10/2).

The friction washer has a thickness of 2.5 ± 0.1 mm, the ground thrust washer of 2.0 ± 0.05 mm.

7. Then slide the adjusting sleeve into the slotted hole of the brake shoe.
8. On the rear brake shoe install the other friction washer (14), thrust washer (13), and pressure spring (15) on the adjusting sleeve (12) from the other side. Then install the tensioning screw (16) by hand (see Fig. 42 — 10/2).

On the front brake shoe install the other friction washer (11) and the thrust washer (10) on the adjusting sleeve (9) also from the other side.

Install the tensioning screw (13) by hand.

9. Tighten the tensioning screw by means of Special Wrench 180 589 10 07, holding the adjusting sleeve steady by means of Special Wrench 180 589 11 07.

10. Check the adjusting force required to produce the adjustment of the brake shoes. For this purpose firmly lock the brake shoe.

Then insert a suitable bolt in the adjusting sleeve and push the adjusting device back and forth three to four times, through its full travel in the slotted hole.

Attach a tension meter to the bolt and pull it with a suitable attachment in the direction of the slotted hole until the adjusting device begins to move on the brake shoe.

The adjusting force should be 60—90 kg.

If the adjusting force is smaller than 60 kg install an additional 0.5 mm washer Part No. 180 090 13 40 between the spring and the thrust washer.

If the adjusting force is greater than 90 kg install another pressure spring and check whether the adjusting force is within the prescribed limits. If the adjusting force is too great even after a new pressure spring has been installed check the installed length of the spring (13 mm). If necessary, the installed length of the spring must be adjusted by grinding down the thrust washer.

Note: As a rule it is sufficient to check the adjusting device with the brake shoes installed. Use a sturdy screw driver to press the brake shoes outward and inward several times (see Fig. 42 — 9/7).

The brake shoes must remain stationary in any position, even when they are forced outward as far as they will go. To check, lightly tap the side of the brake shoes.

On no account must the return spring overcome the frictional resistance of the automatic adjustment and pull the brake shoes inward.