Inspection

1. Inspect the differential carrier for wear on the bearing surfaces of the pinions and side gears. Replace if necessary.

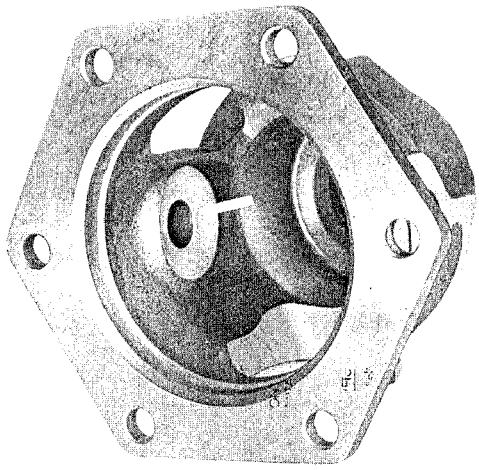

Fig. 82

2. Check rear axles and differential gears for wear and damage. Replace if necessary.

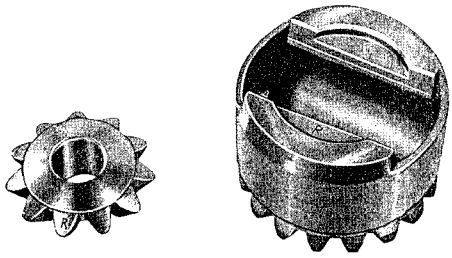

Fig. 83

Note

The number of teeth on the differential gears are as follows:

Side gear ..... 17 teeth
Pinion ..... 11 teeth

3. Inspect rear axle alignment. Small deviations may be corrected using press VW 400 with VW 405 and VW 406. Permissible run-out measured on ball bearing seat: 0.03 mm (.0012 in.).

4. Inspect ring gear for wear and damage. If necessary replace together with the pinion.

Note

The differential gears are supplied in pairs and may only be exchanged as such. The rear axle shafts and differential gears must have the same color markings.

Rear axle shafts and differential gears are divided into 3 groups:

Color marking	Differential side Gear Int. dia.	Half-axle Ext. dia.
Blue	59.97 – 60.00 mm (2.3610 – 2.3621 in.)	59.90 – 59.94 mm (2.3586 – 2.3598 in.)
Pink	60.01 – 60.04 mm (2.3626 – 2.3638 in.)	59.95 – 59.97 mm (2.3602 – 2.3610 in.)
Green	60.05 – 60.07 mm (2.3642 – 2.3650 in.)	59.98 – 60.00 mm (2.3614 – 2.3622 in.)

The marking on the differential side gear is a dot in the recess of the bearing surface, while the marking on the axle shaft is a complete ring around the axle, approximately 6 inches from the flat end.

The assembly tolerance of the rear axle (measured on the large diameter of the flat end) is 0.03 to 0.10 mm (.0012 to .0039 in.).

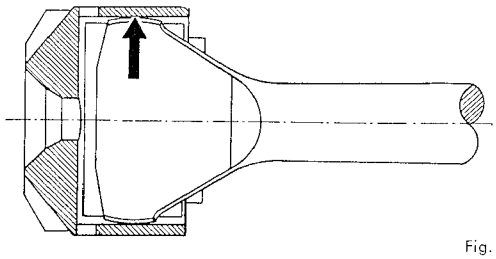

Fig. 84

Excessive clearance may cause objectionable rear axle noises.