

## I. Disassembly

### Procedure:

1. Fasten rear axle on assembly stand BE 10 494 and drain the oil.
2. Press brake drum off with screws 191 589 00 35 and dismount brake shoes. Unscrew cable roller housing from rear axle tube and brake anchor plate.
3. Turn out brake anchor plate fastening screws and pull rear axle shaft out with tool 136 589 18 33.
4. Pull torque arm with puller 120 589 05 33 (Fig. H 3a/4).
5. Loosen nut of wedge-type screw and drive the screw out (Fig. H 3a/5).
6. Loosen rubber boot on rear axle housing and pull it off the housing.
7. Turn out hexagonal screw for connecting pin, screw in punch 180 589 08 39 and drive connecting pin towards the rear until the rear axle suspension support can be removed. Then drive pin completely out and remove right-hand rear axle tube with adjusting washers, shims and rubber rings.
8. Loosen the sliding joint which is fastened with a tightening screw on rear axle shaft gear in differential housing by means of a socket wrench SW 14 and take out together with the adjusting washer (Fig. H 3a/8).

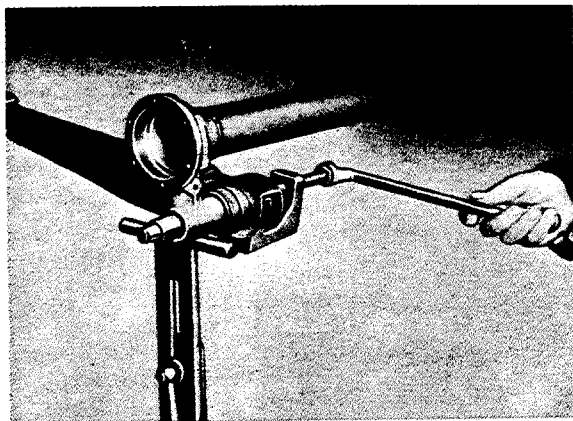


Fig. H 3a/4

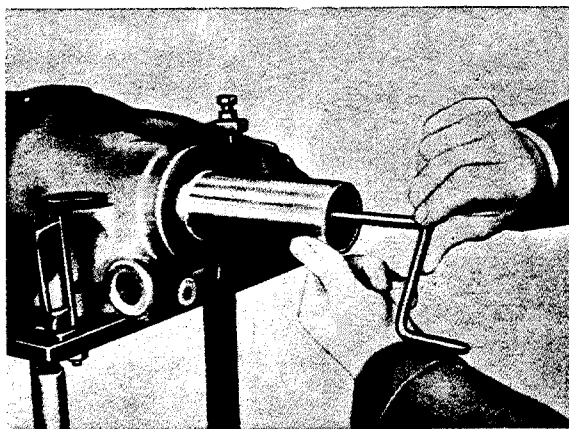


Fig. H 3a/8

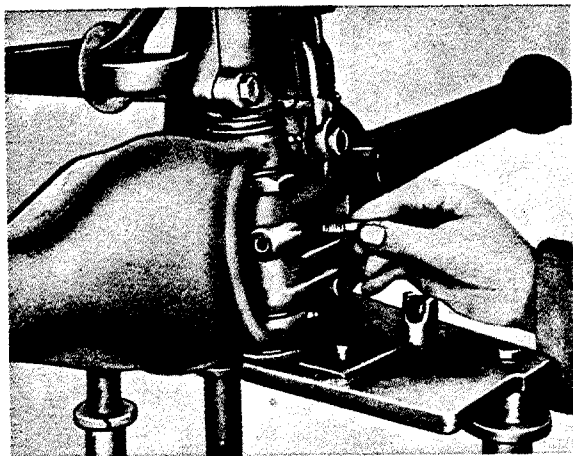


Fig. H 3a/5

9. Screw left-hand rear axle tube off rear axle housing. Now the differential housing with ring gear can be removed.
10. Free the two adjusting screws for thrust ring of inclined bearing and turn them out. Loosen screws on cover of rear axle housing and pull the entire drive assembly out. When using mounting levers, proceed with due care!

### Rear Axle Tubes:

11. Pull grease retainer out of left-hand rear axle tube, turn out bleeder and lock screw for threaded ring and press bearing ring of bevel roller bearing out with the threaded ring and wrench 180 589 02 07. If supporting tube of torque arm is damaged, force it out on a press (Fig. H 3a/11).

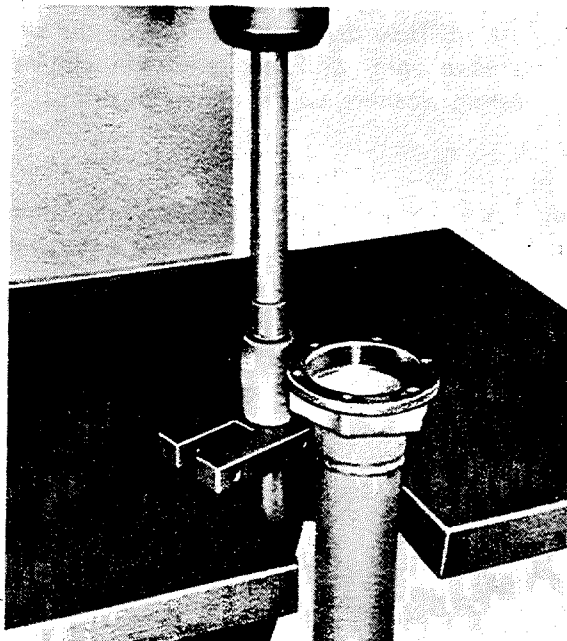


Fig. H 3a/11

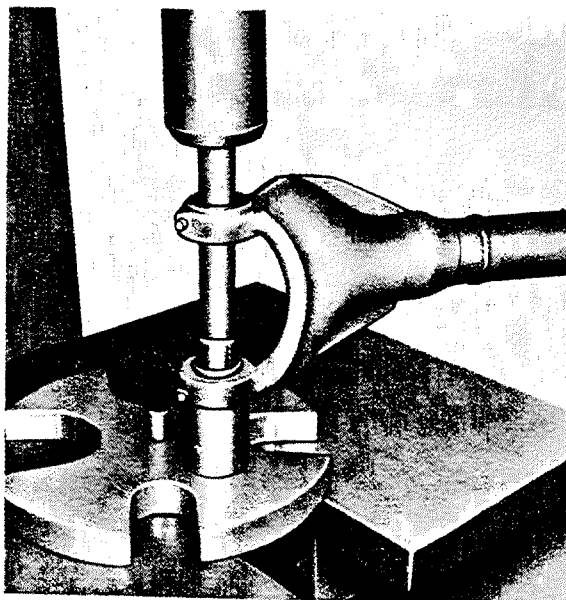


Fig. H 3a/12

12. Pull grease retainer on right-hand rear axle tube out and remove rubber boot. Press the two rear axle tube supporting bushings only out if they are worn or damaged (Fig. H 3a/12). The same applies to the supporting tube.

### Rear Axle Housing:

13. Press bearing ring of bevel roller bearing out towards the inside. Before this is done, free threaded ring and screw it out.
14. Remove the two snap rings for bearing ring of cylinder bearing and drive bearing ring out.

### Differential:

15. Pull both bevel roller bearings off differential housing with tool 180 589 01 33 (Fig. H 3a/15). If the ring gear or the differential housing are to be replaced, free ring gear screws and turn them out, then press the ring gear off.

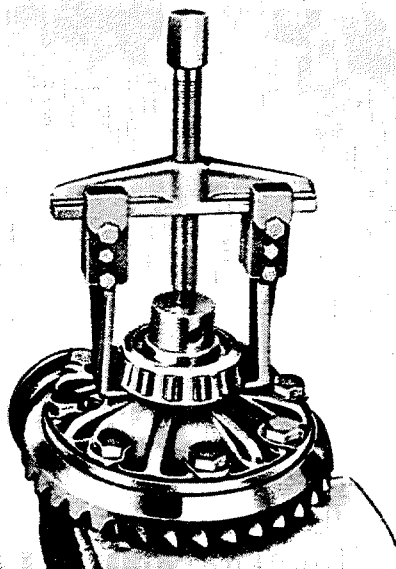


Fig. H 3a/15

16. Countersink chiseled side of retaining pin for differential bolt with an 8 mm (0.315") drill and drive the retaining pin out (Fig. H 3a/16).

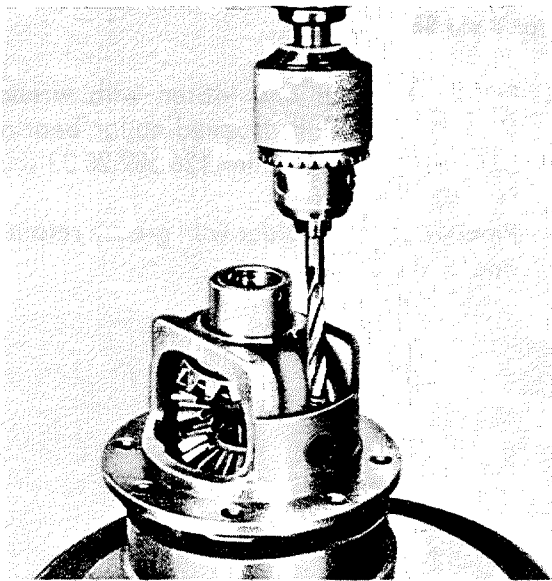


Fig. H 3a/16

Press differential pin out and remove differential bevel gears, rear axle shaft gears, contact washers and ball washers.

#### Bevel Drive Gear:

17. Free slotted nut and loosen it, pull universal joint flange and remove cover and shoulder ring. Press grease retainer out of cover.

Press differential pin out and remove differential bevel gears, rear axle shaft gears, (H 3a/18).

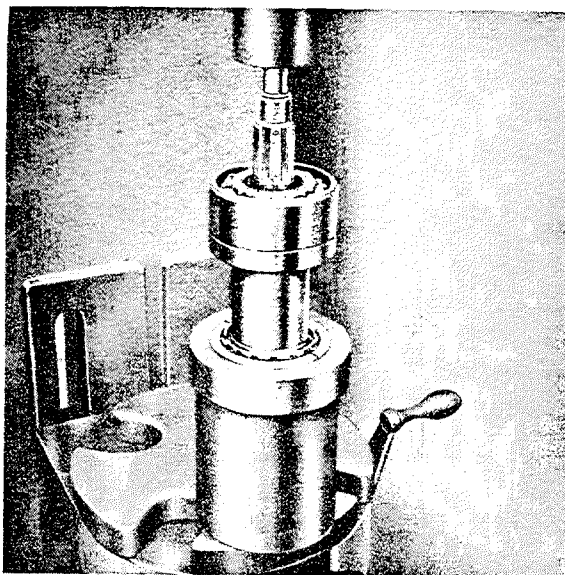


Fig. H 3a/18

**Note:** The inclined bearing must not be removed alone, otherwise it will be damaged.

#### Sliding Joint:

19. Remove retaining ring and washer of outer joint fork and take sliding sleeve out; be careful not to lose any of the cylinder rollers (132 pieces). Remove cylinder rollers and dismount deflection washers.
20. If the needle bearing bushings are worn out, they must be pressed off the spider star after the snap rings have been removed. Be careful to provide a good support so the fork will not be damaged (Figs. H 3a/20 and 20a).

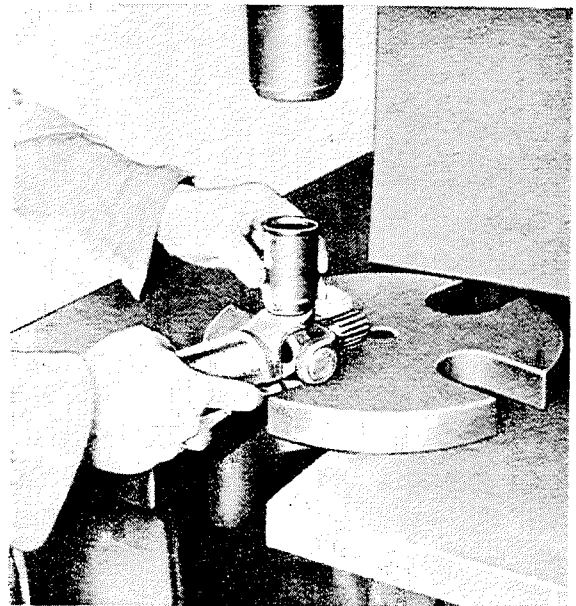


Fig. H 3a/20

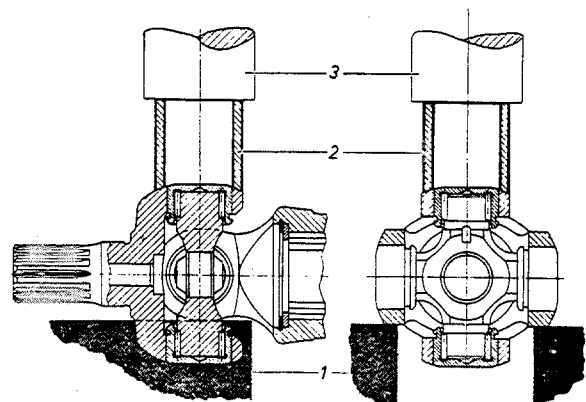


Fig. H 3a/20a

1 Support    2 Length of tube    3 Ram of press

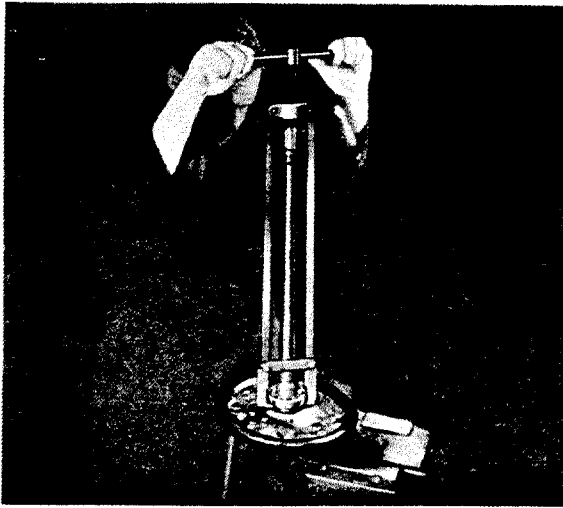


Fig. H 3a/21

#### **Rear Axle Shafts:**

21. Free slotted nut and loosen with wrench 136 589 09 07. Pull grooved collar bearing off the shaft with puller 136 589 20 33 (Fig. H 3a/21).

Remove sealing holder with grease retainer and brake anchor plate.