

Chapter 24E

BOTTOM WHEELCASE, DISMANTLING

Contents

	Page		Page
Front and rear fuel pump drives	3	Hydraulic pump drive gear	3
Fuel pump adapters	3	Oil pump drive gear	3
Fuel pump drive idler gear	1	Quillshafts and sleeves	3
Fuel pump/hydraulic pump idler gear ..	3	Miscellaneous	4
General	1	Removing the sump and sight glass ..	1

Illustrations

	Fig.		Fig.
Two internal sump securing nuts in bottom wheelcase	1	Adapter T.79049 and press block T.79048 for pressing out ball bearing, outer spacer, and roller race from fuel pump drive idler gear	4
Bottom wheelcase arrangement	2		
Oil level sight glass tube assembly	3		

THIS CHAPTER, which is applicable to the 48 Mk. 1 only, contains instructions for dismantling the bottom wheelcase after it has been removed, complete with the sump, from the engine, in accordance with the instructions given in chapter 23. To facilitate reassembly, all adjusting washers should be secured to their respective components; ball, needle, and roller bearings should be wrapped in grease-proof paper; small parts should be placed in a box marked with the engine number. The general information contained in chapter 22 should be referred to as necessary. Figures in parenthesis in the text relate to components in Fig. 2.

REMOVING THE SUMP AND SIGHT GLASS

1. Unlock and remove the two internal nuts and tab washers which secure the sump to the bottom wheelcase, Fig. 1.
2. Remove the plug, spring, spring retaining cup and seal from the sight glass upper location and carefully withdraw the sight glass and screen, Fig. 3.
3. Remove the seventeen $\frac{1}{4}$ in. B.S.F. plain nuts, seventeen spring washers, three wire locking tabs and the fourteen plain washers which secure the sump to the bottom wheelcase; separate the sump from the wheelcase.

FUEL PUMP DRIVE IDLER GEAR (7)

1. Open up the cup locking washer and using spanner T.77272, remove the ring nut.
2. Remove the gear complete with the locking

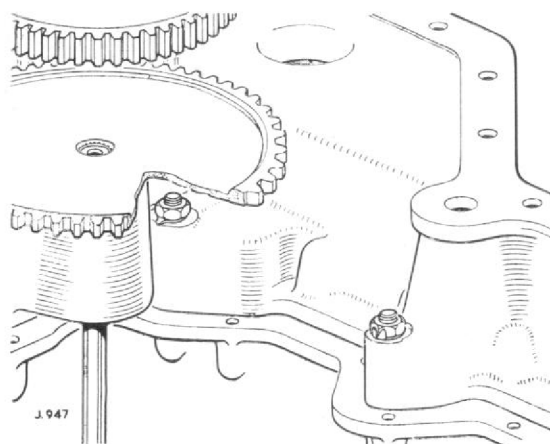


Fig. 1. The two internal nuts which assist in securing the sump to the bottom wheelcase.

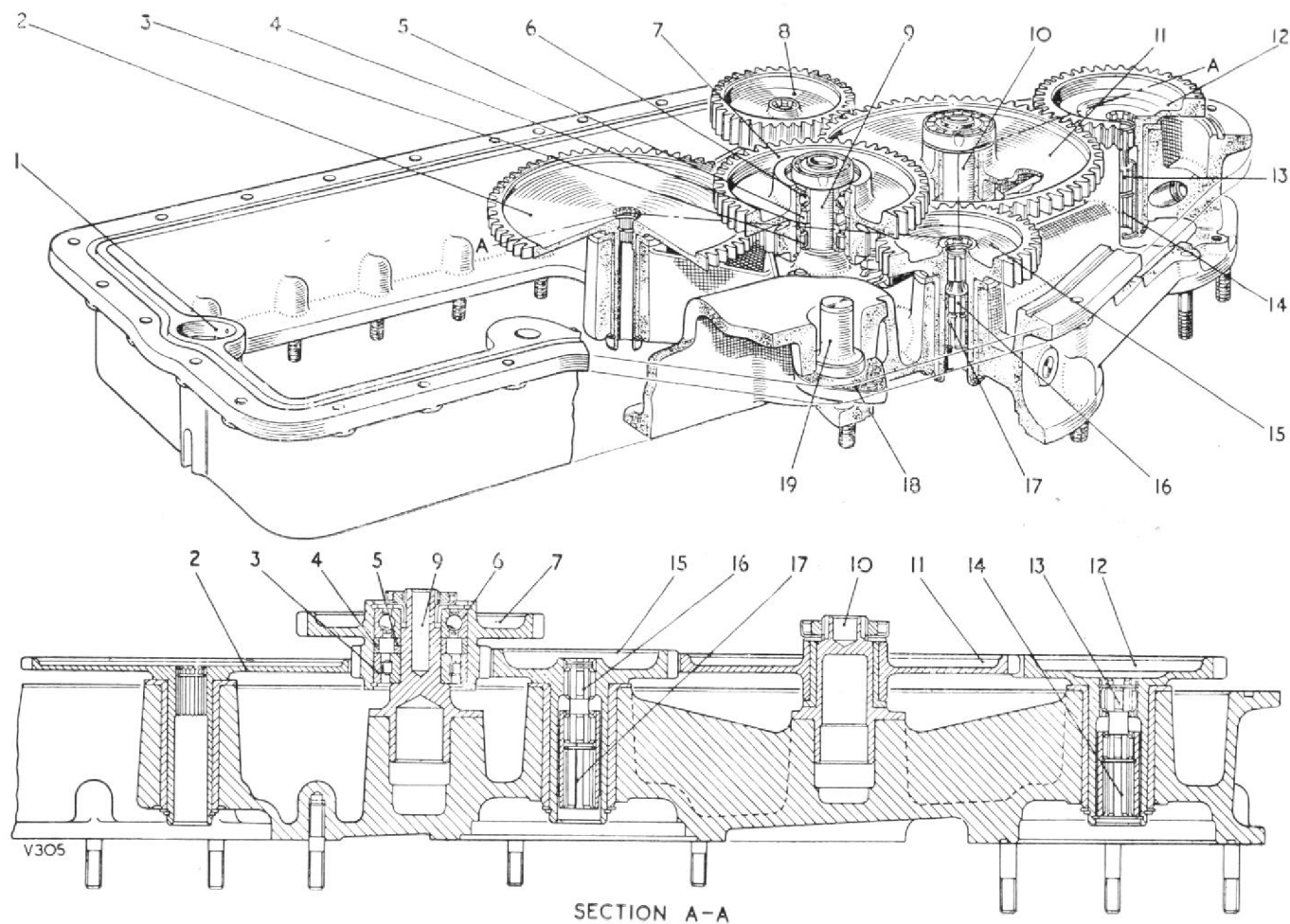
washer, and plain washer, Fig. 2.

When mod. 383 has been embodied, the fuel pump idler gear Part No. 91483 must be dismantled in the following manner.

(a) Open up the cup locking washer and, using spanner T.77272, remove the ring nut.

(b) Remove the locking washer and plain washer and withdraw the gear complete with the two retaining rings, the ball bearing, the outer spacer, and the outer race of the roller bearing.

(c) Remove the inner race of the roller



KEY TO FIG. 2

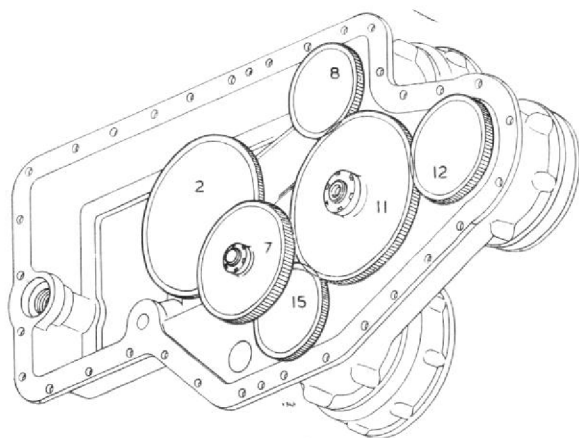


Fig. 2. Ghost 48 Mk. 1 bottom wheelcase arrangement.

- | | |
|---|--|
| 1. Sight glass aperture. | 11. Fuel and hydraulic pump idler gear. |
| 2. Oil pump drive gear. | 12. Hydraulic pump drive gear. |
| 3. Roller race. | 13. Quill shaft. |
| 4. Outer spacer. | 14. Splined sleeve. |
| 5. Inner spacer. | 15. Front fuel pump drive gear. |
| 6. Ball bearing. | 16. Quill shaft. |
| 7. Fuel pump idler gear. | 17. Splined sleeve. |
| 8. Rear fuel pump drive gear. | 18. Vertical shaft cover and support washer. |
| 9. Fuel pump idler gear spindle. | 19. Vertical shaft cover and support. |
| 10. Fuel and hydraulic pump idler gear spindle. | |

bearing and the inner spacer from the idler gear spindle.

(d) Remove the two internal retaining rings from the gear.

(e) Position the gear, large gear downwards, on press block T.79048 and, using adapter T.79049, press the outer spacer, the outer roller race and the ball bearing clear of the gear, Fig. 4.

(f) Remove the gear and loose parts from the press block and wrap the bearings in grease-proof paper.

FUEL PUMP/HYDRAULIC PUMP IDLER GEAR (11)

1. Open up the cup locking washer and using spanner T.74762, remove the ring nut.
2. Remove the gear complete with the locking washer and plain washer.

HYDRAULIC PUMP DRIVE GEAR (12)

1. Remove the six $\frac{1}{4}$ in. B.S.F. plain nuts, spring and plain washers which retain the hydraulic pump drive blank and remove the blank.
2. Remove the two set-screws which retain the

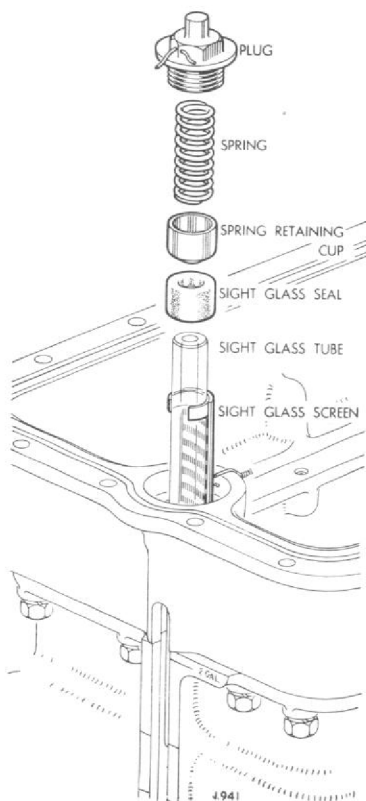


Fig. 3. Oil level sight glass tube assembly.

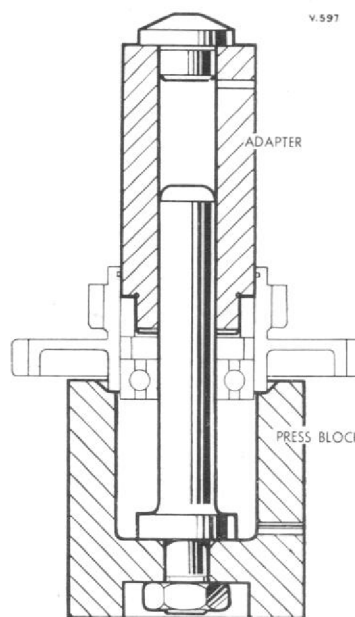


Fig. 4. Pressing ball bearing, outer spacer, and roller race clear of fuel pump drive idler gear.

hydraulic pump adapter; remove the adapter and discard the sealing ring.

3. Using Seeger pliers remove the Seeger circlip from the outer end of the gear shank; remove the bush retaining washer and withdraw the gear.

FRONT AND REAR FUEL PUMP DRIVES (8 and 15)

1. Using Seeger pliers remove the Seeger circlips from the outer ends of the gear shanks; remove the bush retaining washers and withdraw the gears.

OIL PUMP DRIVE GEAR (2)

1. Remove the circlip from the outer end of the gear shank; remove the bush retaining washer and withdraw the gear.

QUILLSHAFTS AND SLEEVES (16)

1. Remove the internal sleeve retaining circlip from the two fuel pump drive gears and the hydraulic pump drive gear; remove the sleeves and quills shafts.

FUEL PUMP ADAPTERS

1. Unlock and remove the six $\frac{1}{4}$ in. B.S.F. plain nuts and tab washers which secure the front fuel pump adapter to its attachment face on the bottom wheelcase.
2. Draw the adapter off the studs; remove and discard the sealing ring situated between the

adapter and the bottom wheelcase attachment face. MISCELLANEOUS

3. Repeat the above operations to remove the rear fuel adapter; the two units and their attachment are identical.
1. Cut the wire locking the three oil gallery sealing plugs introduced by mod. 1097; remove the three plugs and sealing washers.

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