

testing cover of the timing housing cover (see Figure 07-11/4).

24. Engage the start and stop cable control at the adjusting lever. The cable control must be installed at the fixing clip in such a way that the bolt of the adjusting lever is situated in the middle of the eye on the cable control. An exact adjustment is im-

portant, because when stopping the adjusting lever must be pulled far enough in the direction "stop" and during starting it should travel sufficiently in the direction "full".

25. Bleed the fuel system (see Job No. 00-10). Operate the engine and check all connectors for leaks.

B. OM 621

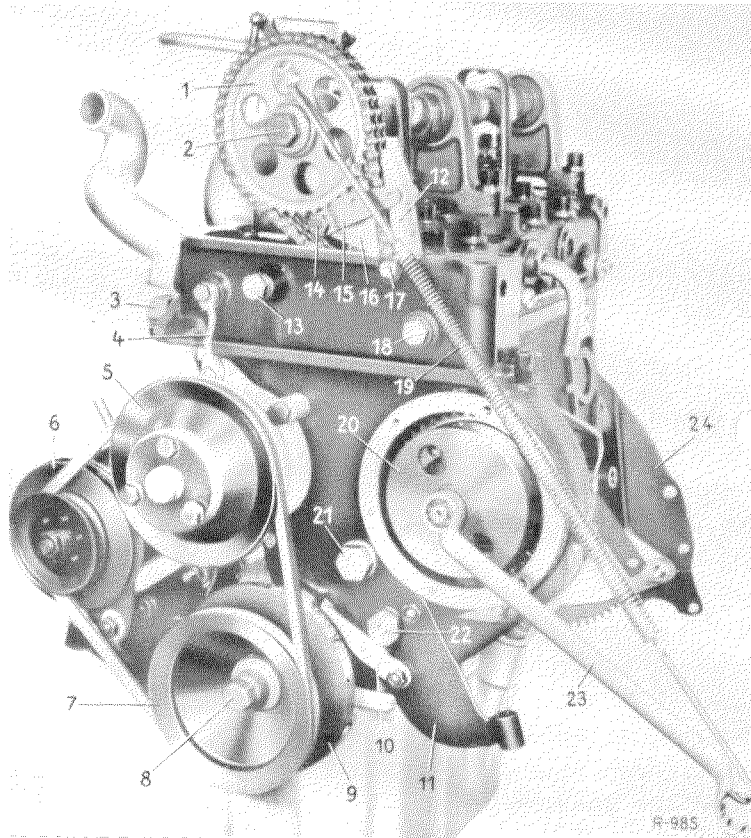


Figure 07-11/6

Engine OM 621

- | | |
|--|---|
| 1 Camshaft sprocket | 14 Hex. hd. screw M 8x50 |
| 2 Hex. hd. screw M 14x1.5x40 | 15 Holder for guide rail, inner |
| 3 Chain tightener | 16 Guide rail, inner |
| 4 Bleeder line for water pump | 17 Pivot pin for guide rail at cylinder head |
| 5 Water pump | 18 Screw plug for pivot pin for guide sprocket |
| 6 Generator | 19 Return spring |
| 7 Pulley on crankshaft | 20 Injection timing device |
| 8 Collar screw | 21 Screw plug for oil pressure relief valve |
| 9 Counterweight with gradation | 22 Screw plug with pivot pin for guide rail, bottom in cylinder crankcase |
| 10 Adjusting hand | 23 Box wrench |
| 11 Engine carrier, front, left | 24 Intermediate plate on cylinder crankcase for starter motor mounting |
| 12 Guide rail, outer | |
| 13 Screw plug for pivot pin for idler sprocket support | |

Removal:

1. Turn the crankshaft in **direction of rotation** until the **45 deg BTDC** reading on the gradation of the counterweight (9) coincides with the adjusting hand (10) (see Figure 07-11/6). Thereby the piston of cylinder 1 should be in compression stroke position.
2. Carry out operations according to section A. OM 636, items 2-6.

Installation:

3. Carry out operations according to section A. OM 636, items 7 and 8.
4. Remove the screw plug from the oil overflow pipe of the injection pump.
5. Set the injection pump to feed begin. To do this, turn the pump shaft until the mark or the tooth space of the follower and the mark on the injection pump coincide (see Figure 07-11/2 and Figure 07-11/7).

Note: On the injection pumps as from engine No. 621.910-10-012022, the mark on the follower was replaced by a tooth space identification (see Figure 07-11/7).

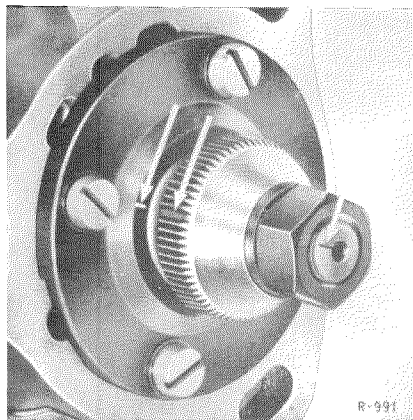


Figure 07-11/7

6. When applying slight pressure on the follower, towards left (opposite the direction of rotation), the follower jumps back by 2 teeth or the cam of the camshaft under pressure jumps back to the basic

cam circle. Now, turn the follower or the injection pump shaft resp. in clockwise direction until a resistance is felt.

Before inserting the injection pump, check again whether the piston of cylinder 1 is in the compression stroke and the crankshaft has such a position that the adjusting hand (10) on the crankcase points to **45 deg BTDC** on the gradation of the counterweight (9) (see Figure 07-11/6).

Note: The adjustment of the crankshaft to 45 deg BTDC is required because of the jumping back of the follower (by 2 teeth).

7. Unscrew the cover for the injection timing device from the cylinder crankcase. Check the centrifugal weights of the injection timing device whether they are in idling end position, i.e., the centrifugal weights should contact the inside of the sprocket wheel hub.

With the box wrench (23) and the spring (19), retain now the injection timing device opposite the direction of rotation in its idling end position (see Figure 07-11/6).

8. Apply grease to both sides of the new gasket (paper gasket) sliding it over the stud bolts for the injection pump mounting on the cylinder crankcase.
9. Insert the injection pump into the coupling sleeve so that the studs are in the centre of the oblong holes (1) of the mounting flange (see Figure 07-11/4). This allows swivelling for precision adjustment to both sides.

Note: When swivelling the injection pump, do not fail to observe that there exists a distance of approx. 80 mm from the cylinder crankcase to the centre of the pipe connection for the injection line, which is required for removing the glow plugs.

If the old injection pump is re-installed, insert it in such a way that the marks on the mounting flange of the injection pump and on the cylinder crankcase coincide.

10. Place the spacer washers and tighten the injection pump with 2 hex. nuts.
11. Turn the crankshaft in **direction of rotation** until the **26 deg** BTDC reading on the gradation of the counterweight (9) coincides with the adjusting hand (10) (see Figure 07-11/6). Thereby the piston of cylinder 1 should be in compression stroke position.
12. Unscrew the pipe connection of the 1st pump cylinder, remove the pressure valve and the pressure spring (see Figure 00-6/9). Again screw in the pipe connection and also screw on the overflow pipe (4) part No. 636 589 02 23 (see Figure 00-6/10). Connect the fuel tank (1) part No. 000 589 05 23 to the injection pump (see Figure 00-6/10), fill in clean fuel and open the stop cock (2) at the fuel tank.

Now the fuel flows out of the overflow pipe (see Figure 00-6/11).

13. Now correct the feed begin of the pump by swivelling the injection pump in the respective direction.

Swivelling of the pump to the engine results in an advanced whereas swivelling from the engine results in a retarded feed begin.

Tighten the injection pump with 2 hex. nuts and again check the adjustment.

14. If the adjustment is correct, then tighten all 3 hex. nuts for mounting the injection pump.
15. Carry out operations according to section A. OM 636, items 19-25.