

A. Carburetor Engines

Removal

- 1 Take off cylinder head cover.
- 2 Press out the spring clamp (2) from the notch at the top of the rocker arm (3) and push the spring clamp outward over the ball cup of the rocker arm. Turn camshaft in each individual case in such a way that no load is placed on the rocker arms.

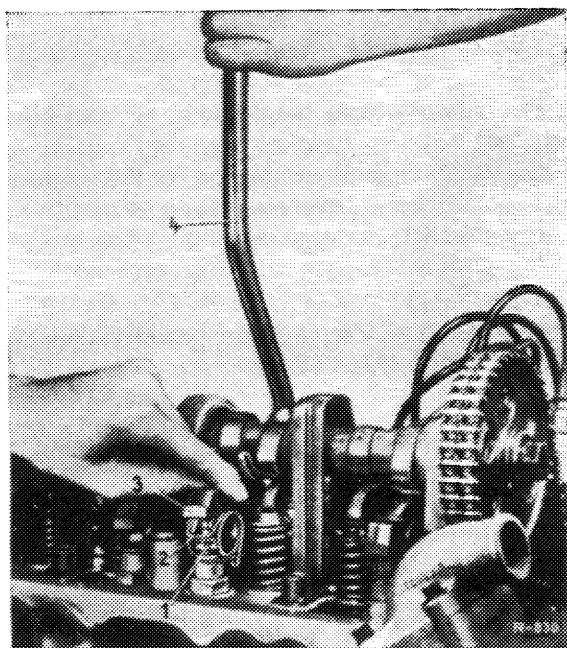


Fig. 05-2/1

1 Ball pin head
2 Spring clamp

3 Rocker arm
4 Special Tool 112 589 08 61 00

Caution: Turn the engine in its proper direction of rotation by cranking the collar bolt of the crankshaft. Do not apply crank to the hexagonal bolt of the camshaft sprocket. If this instruction is not followed overload is

likely to bend the tensioning rail of the drive chain out of place.

- 3 Apply Special Tool 112 589 08 61 00 (4) to the camshaft and to the valve spring retainer, and push the valve downward to relieve the rocker arm.
- 4 Lift the rocker arm out of the ball pin head (1) and remove it.

Note: Prior to installation, check the sliding surfaces and the ball cup of the rocker arm. Damaged rocker arms must be replaced.

Rocker arms for inlet and exhaust valves are identical.

Installation

- 5 Apply Special Tool 112 589 08 61 00 to the camshaft and to the valve spring retainer and push the valve downward until the rocker arm with its ball cup can be placed on the ball pin head.
- 6 Put rocker arm back in position.
- 7 Push the spring clamp over the ball cup of the rocker arm until it engages with the notch of the rocker arm.
- 8 Check tappet clearance and adjust, if necessary (see Job No. 00-3).
- 9 Put cylinder head cover back in place and make sure that the cylinder head gasket is seated properly.
- 10 Start engine and check cylinder head cover for leakage.

B. Diesel Engines

General Information

Rocker arms of diesel engines can only be removed together with the respective rocker arm blocks.

Removal

- 1 Detach the connecting rod for the venturi control unit from the bearing bracket reversing lever and unscrew the bearing bracket from the cylinder head cover.
- 2 Take off air vent line from cylinder head cover and remove cylinder head cover.
- 3 Unscrew stretch screws (85) for mounting the rocker arm blocks (74), and remove blocks with rocker arms (71). Turn crankshaft in each individual case in such a way that the camshaft does not put load on the rocker arms.

Caution: Turn the engine by cranking the collar bolt of the crankshaft. Do not apply crank to the hexagon bolt of the camshaft sprocket. If this instruction is not followed, overload is likely to bend the tensioning rail of the drive chain out of place.

Note: Prior to installation, check the sliding surfaces and the ball cup of the rocker arm. Damaged rocker arms must be replaced.

Installation

- 4 Install assembled rocker arm blocks and tighten stretch screws, applying the proper

tightening torque. Turn crankshaft in each individual case in such a way as to avoid camshaft load on the rocker arms if possible.

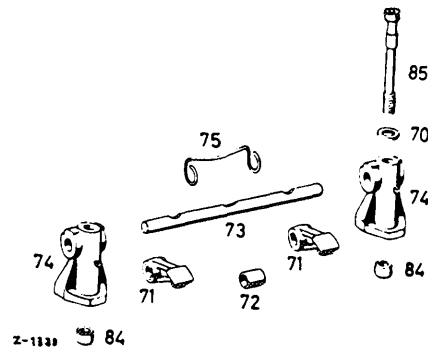


Fig. 05-2/2

70 Washer	74 Rocker arm block
71 Rocker arm (for inlet and exhaust)	75 Tension clamp
72 Rocker arm bushing	84 Fitting sleeve
73 Rocker arm shaft	85 Stretch screw

Check whether the tension clamps (75) have engaged with the notches of the rocker arm blocks (74).

- 5 Adjust tappet clearance (see Job No. 00-3).
- 6 Re-install cylinder head cover, air vent line and the bearing bracket for the reversing lever. Attach the connecting rod for the venturi control unit to the reversing lever. In addition, make sure that during acceleration the control cable can move freely in the stop lever slot.

Make sure that the cylinder head gasket is placed in its proper position.

- 7 Start engine and check cylinder head cover for leakage.