

T. Removal and Installation of Twin Roller Chain with Engine installed in Vehicle

Removal:

Note: If repair should be necessary, a chain with a jointing link (spare link) can be installed as a substitute for the endless chain. This enables the chain to be replaced without disassembling the engine.

When the engine is being overhauled, however, an endless chain should always be fitted.

1. Unscrew the cap nuts on the vent line at the cylinder head cover and unfasten the hose clip on the connecting hose at the air intake silencer. Unscrew the fixing nuts for the air intake silencer brackets and remove the air intake silencer together with brackets.
2. Unscrew the clamp screws and take off the cylinder head.
3. Unscrew stretch screws for fixing the rocker arm blocks and remove blocks together with rocker arms. When removing the rocker arm blocks, turn camshaft each time to the position where the rocker arms are not under load (see Fig. 01—4/17).

Note: Removal of the rocker arm blocks is necessary in order to avoid damage to the valves, pistons etc. in the event of the chain sliding off a sprocket when the crankshaft is turned.

Installation:

4. To remove the old chain, file off one of the rivet heads and press the rivet out with Link Extractor 000 589 03 35. Connect the new chain to the old one by means of a jointing link (spare link).

Fit spring clip (locking clip).

5. Now turn the crankshaft slowly and feed the new chain in.

Note: The crankshaft can be turned over at the hexagon shoulder screw which attaches the pulley. Use Box Wrench SW 22 for this.

6. Depress the chain tension sprocket and turn engine until the jointing link with the spring clip can be fitted at the other end of the new chain.

Caution!

Insert jointing link (2) from front to rear (contrary to direction of travel). Fit spring clip (1) with its closed end pointing in the direction the timing gear turns (Fig. 01—4/53).

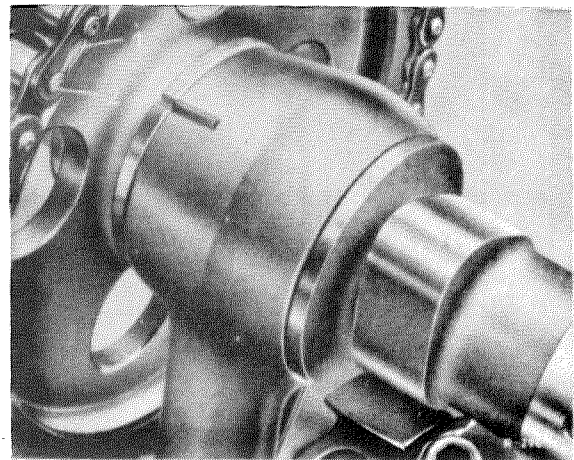


Fig. 01—4/53

1 Spring clip
2 Jointing link

7. Press back the tension sprocket bearing as far as it will go, using Bleeder Lever 187 589 02 63, or, if necessary, with a screwdriver, at the same time continually topping up the oil case in the cylinder head with warm engine oil (see Fig. 01—4/14). Now gradually release the sprocket bearing with the lever or screwdriver, at the same time continually topping up with oil, so that the oil case is always full of oil and the chain tensioner cannot suck in any air. Then "pump" the tension sprocket bearing until no more air bubbles can be seen at the chain tensioner. The important thing is to maintain the necessary oil level during the bleeding process.

When the chain tensioner is perfectly bled further pumping becomes impossible. Considerable force is required to depress the

chain tensioner even at the beginning of the bleeding operation. Bleeding of the chain tensioner should be carried out with great care, since imperfect bleeding leads to chain noises when the engine is idling. See also "Checking of Chain Tensioner" (Job No. 05—5, Section F).

8. Insert the rocker arm block guide sleeves in the bores in the cylinder head and drive them in. The guide sleeves must be seated firmly.

Install the assembled rocker arm blocks and tighten up the stretch screws to 3.75 mkg.

Check whether the spring clamps have engaged in the notches in the rocker arm blocks (see arrow in Fig. 01—4/15).

When installing the assembled rocker arms, turn the camshaft to the position where the rocker arms are not under load (Fig. 01—4/17).

9. Check the ignition adjustment and the timing (see Job No. 01—3, Sections E and L).
10. Install the cylinder head cover and the air intake silencer.