

(3) Invert tappet body and remove plunger cap, plunger, flat check valve, check valve spring, check valve retainer and plunger spring.

Cleaning and Assembly

- (1) Clean all tappet parts in a solvent that will remove all varnish and carbon.
- (2) Replace tappets that are unfit for further service with new assemblies.
- (3) If plunger shows signs of scoring or wear and valve is pitted, or if valve seat on end of plunger indicates any condition that would prevent valve from seating, install a new tappet assembly.
- (4) Assemble tappets (Fig. 20).

Testing

- (1) Fill a pan with clean kerosene.
 - (2) Remove cap from plunger and plunger from tappet body.
 - (3) Fill tappet body with kerosene and install plunger.
 - (4) Unseat check valve with a brass rod to permit complete installation of plunger. Replace cap.
 - (5) Hold tappet in an upright position and insert lower jaw of pliers, Tool C-3160, in the groove of tappet body (Fig. 21).
 - (6) Engage jaw of pliers with top of tappet plunger. Test leakdown by compressing the pliers. If plunger collapses almost instantly as pressure is applied, disassemble tappet, clean and test again (Fig. 21).
 - (7) If tappet still does not operate satisfactorily after cleaning, install a new tappet assembly.
- If the tappet or bore in cylinder block is scored, scuffed, or shows signs of sticking, ream the bore to next oversize.

Installation

- (1) Lubricate tappets.
- (2) Install tappets and push rods in their original positions.
- (3) Install rocker arm and shaft assembly.
- (4) Start and operate engine. Warm up to normal

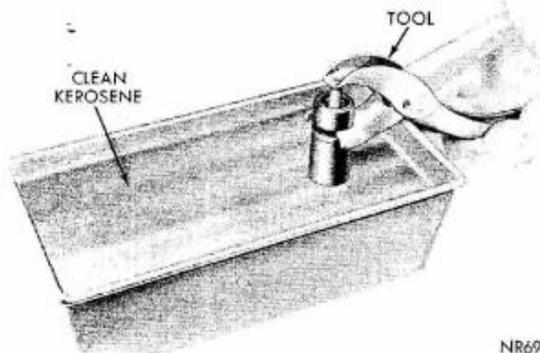


Fig. 21—Testing Tappet Using Tool C-3160

operating temperature.

CAUTION: To prevent damage to valve mechanism, engine must not be run above fast idle until all hydraulic tappets have filled with oil and have become quiet.

VALVE TIMING

- (1) Turn crankshaft until the NO. 6 exhaust valve is closing and NO. 6 intake valve is opening.
- (2) Insert a 1/4 inch spacer between rocker arm pad and stem tip of No. 1 intake valve. Allow spring load to bleed tappet down giving in effect a solid tappet.
- (3) Install a dial indicator so plunger contacts valve spring retainer as nearly perpendicular as possible. Zero the indicator.
- (4) Rotate crankshaft clockwise (normal running direction) until the valve has lifted .010 inch for 318 cubic inch engines or .030 inch for 340 cubic inch engine.

CAUTION: Do not turn crankshaft any further clockwise as valve spring might bottom and result in serious damage.

The timing of the crankshaft pulley should now read from 10 degrees before top dead center to 2 degrees after top dead center. Remove spacer.

- (5) If reading is not within specified limits:
 - (a) Check sprocket index marks.
 - (b) Inspect timing chain for wear.
 - (c) Check accuracy of DC mark on timing indicator.

TIMING CHAIN COVER, OIL SEAL AND CHAIN

Cover Removal

- (1) Drain cooling system and remove radiator, fan belt and water pump assembly.
- (2) Remove pulley from vibration damper and bolt and washer securing vibration damper on crankshaft.
- (3) Install Tool C-3688 and pull vibration damper from end of crankshaft (Fig. 22).
- (4) Remove fuel lines and fuel pump.

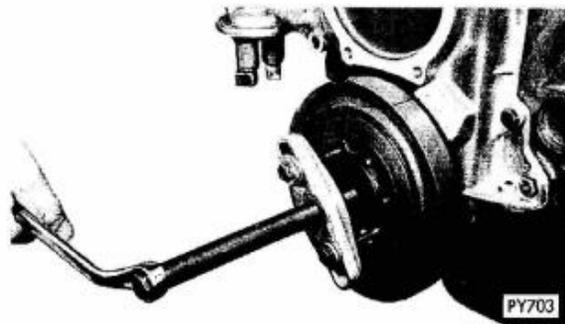


Fig. 22—Removing Vibration Damper Assembly