## V-Twin MFG. Hydraulic Lifter Gauge For use on 1953-1985 BT Models VT Part No. 16-0993

This tool should only be used by a knowledgeable and trained motorcycle technician. V-Twin Mfg. accepts no responsibility for improper use.

## **INSTALLING AND ADJUSTING PUSH RODS**

- 1. Before installing or adjusting push rods. remove and clean all hydraulic tappets. Make sure each tappet is clean and free from oil before installing in the guide. See VALVE TAPPETS AND GUIDES.
- 2. See Figure (C). Remove the spark plugs and turn the engine until the front piston is at the top of its compression stroke. With front piston in this position the advance timing mark (3) will align with the timing inspection hole.
- 3. Install front cylinder push rods and Covers. Always use new push rod cover O-rings. or quad seals when reassembling. Clean sealing surfaces with greaseless solvent. Greasy joint surfaces will make it difficult to remove O-rings, or quad seals during next disassembly.
- 4. See Figure (A). Turn one front cylinder push rod adjusting screw (2) downward until the ball end of rod is seated in hydraulic lifter and has just no noticeable shake. Hold the push rod flats (3) with one wrench to keep rod from turning and with a second wrench turn the adjusting screw down slowly until hydraulic lifter is completely compressed. The turn it up exactly 1½ turns. Lock the adjustment by turning locknut (1) against push rod and tightening the locknut to 6-11 ft-lbs torque. Repeat for the other front cylinder push rod.
- 5. See Figure (C). Now turn the engine over until the rear piston is at the top of its compression stroke. With the rear cylinder in this position the rear cylinder advance mark (4) will align with the timing inspection hole.
- 6. Repeat the procedure for the rear cylinder push rods.
- 7. Reinstall the spark plugs and tighten to 18.22 ft-lbs torque.

## CHECKING PUSH ROD ADJUSTMENT USING GAUGE

- 1. With appropriate piston at the top of the compression stroke (see installing and adjusting push rods). raise the push rod cover to expose the hydraulic lifter.
- 2. See Figure (B). Place the gauge on the lifter as shown. The top of the lifter should be even with the top of the gauge.
- 3. If gauge and lifter do not line up, follow the procedure for installing and adjusting push rods.

