

V-Twin MFG.  
Jims 5 Speed Main Drive Gear Bearing Tool Instructions  
VT Part No. 16-0994

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

#### Bearing Installation

1. First place Thrust Bearing on HD-35316-5 Bolt followed by HD-35316-2 Bearing Driver.
2. With cover screws, secure HD-35316-3 Cross Plate to gasket surface of transmission case opposite the Main Drive Gear side. Position HD-35316-3 Plate on transmission case so that stamp mark is facing out.
3. Start bearing in bore of transmission case.
4. Install HD-35316-5 Bolt, Thrust Bearing and Driver Assembly (refer to step 1) through Main Drive Gear Bearing\* into HD-35316-3 Cross Plate center hole.
5. Thread 1/2" nut on HD-35316-5 Bolt and turn clockwise to pull bearing into transmission case.
6. When bearing bottoms in bore, bearing is properly installed.

#### \* Note For Directional Placement of HD-35316-2 Driver:

- A. 1980-84 Small size (S) Main Drive Gear Bearing. Place side stamped (S) (equivalent for small) against Main Drive Gear Bearing.
- B. 1985 Large Size (L) Main Drive Gear Bearing. Place side stamped (L) (equivalent for large) against Main Drive Gear Bearing.

#### Main Drive Gear Removal

1. With cover screws, secure HD-35316-3 Cross Plate to gasket surface of transmission case opposite the Main Drive Gear side. Position HD-35316-3 Plate on transmission case such that stamp mark is facing out.
2. Install HD-35316-5 Bolt through HD-35316-3 Plate and through center of Main Drive Gear.
3. Place HD-35316-7 Washer (used to force gear out of bearing for this application only) over bolt and against threaded end of Main Drive Gear.
4. Place Thrust Bearing on bolt and thread on 1/2" nut. Turn nut clockwise to force Main Drive Gear out of bearing.

#### Main Drive Gear Installation

1. Install Thrust Washer onto HD-35316-4 Bolt. Place HD-35316-1 Installer Cup\* onto HD-35316-4 bolt.
2. From outside of transmission case, install assembly described in step #1 through Main Drive Gear.
3. Place HD-35316-7 Washer over HD-35316-4 Bolt and against Main Drive Gear. Then thread 1/2" nut onto bolt.
4. Turn nut clockwise to install Main Drive Gear into bearing.

\*Note: Make sure open end diameter of HD-35316-1 supports and seats on bearing inner race properly before attempting to install Main Drive Gear.

