

## VT No. 20-0447, 20-0432 Transmission Sprocket Kit

### General

These kits are designed for installation on motorcycles equipped with a secondary drive belt and 5- speed transmission. Each kit contains the following components:

QTY	DESCRIPTION
1	Transmission sprocket
1	Transmission sprocket nut
1	Lockplate
2	Screw, socket head
1	Spacer sleeve
1	Oil seal
1	Quad seal

### Installation

1. Remove original transmission sprocket using procedures in the appropriate Service Manual.

#### NOTE Oil seal

**Spacer sleeve Main drive gear Transmission sprocket**

Transmission sprocket nut has left-hand threads; turn nut clockwise to remove from main drive gear.

2. Remove original spacer sleeve from main drive gear and remove original oil seal from transmission housing, according to procedures in the appropriate Service Manual.

3. See Figure 1. Install new oil seal (1) in bore of transmission housing. Concave (hollow) side of seal faces inboard.

4. Install quad seal (8) on main drive gear shaft (3). Apply a small amount of appropriate transmission lubricant to outside diameter surface of new spacer sleeve (2). Install new spacer sleeve (2), with chamfer facing inboard, over main drive gear (3)

6. Apply a few drops of Loctite Threadlocker 262 (red) to the left-handed threads of new transmission sprocket nut (5). Apply a light film of oil to the flanged side (mating surface) of sprocket nut (5). Do not let oil contaminate the thread locking compound.

7. Lock transmission sprocket with SPROCKET LOCKING TOOL, Part No. 16-0649. Position nut (5) with flanged side facing transmission sprocket (4). Turn the nut counterclockwise to install it onto main drive gear (3). Using MAINSHAFT LOCKNUT WRENCH, Part No. 16-0821 and a torque wrench, tighten the nut to 50 ft-lbs.

8. See Figure 2. Scribe a line on the transmission sprocket nut and continue the line on the transmission sprocket as shown.

9. Tighten the transmission sprocket nut an additional 30°- 40°.

10. See Figure 1. Install lockplate (6) over nut (5) such that two of lockplate's four drilled holes (diagonally opposite) align with sprocket's (4) two tapped holes. Lockplate is shaped to fit around the six corners of nut. Lockplate can be rotated to a number of positions, and can be positioned with either side facing sprockets, to allow for easy alignment.

11. If lockplate will not align with holes, tighten nut to 45° maximum as shown in Figure 2.

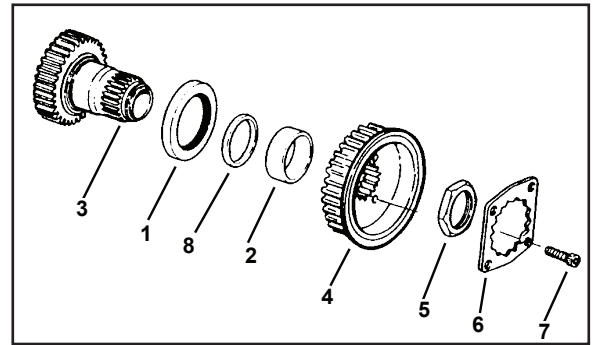
#### CAUTION

Maximum allowable tightening of sprocket nut is 45° of counterclockwise rotation after an initial tightening to 50 ft-lbs. Do not loosen sprocket nut while attempting to align the screw holes. If you cannot align lockplate and sprocket screw holes, nut may be additionally tightened until screw holes line up, but, do not exceed 45° as specified above.

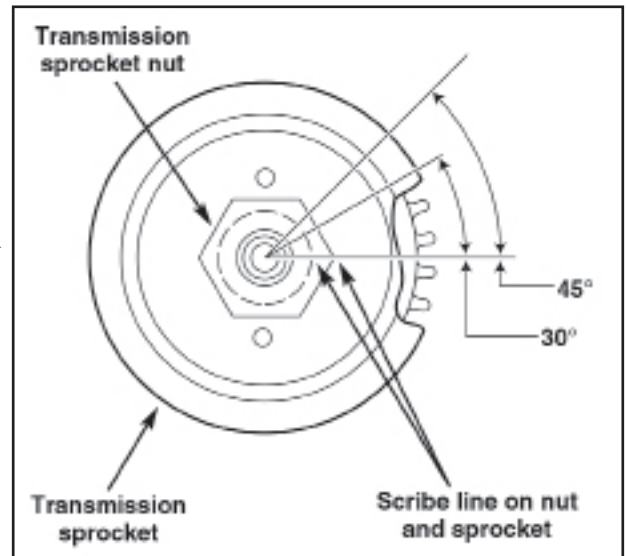
12. Install two new socket head screws (7) through aligned holes of lockplate and into tapped holes of sprocket. Tighten screws to 90-110 in-lbs.

11. If lockplate will not align with holes, tighten nut to 45° maximum as shown in Figure 2.

13. Install the remaining removed components according to the appropriate Service Manual procedures. Perform all the required adjustments, including the secondary drive belt tension adjustment. Fill transmission compartment to proper level with the appropriate lubricant. (See Service Manual.)



1. Oil seal  
2. Spacer sleeve  
3. Main drive gear  
4. Transmission sprocket  
5. Transmission sprocket nut  
6. Lockplate  
7. Socket head screw  
8. Quad seal  
**Figure 1. Transmission Sprocket Components**



**Figure 2. Final Tightening Of Transmission Sprocket Nut**