A Division of Thiessen Products, Inc.

Instruction Sheet For No. 1658 Tool

This tool removes and installs H-D No. 35186-06 shifter shaft sleeve without removing transmission case from frame.
No. **1658** - *Use on all 2006 to present H-D 6-speed Cruise Drive transmissions.*



FIG. 1

ADDITIONAL TOOLS NEEDED:

1. 1/4" Allen wrench or Allen socket and ratchet
2. 3/4" box end wrench
3. H-D Service manual or equivalent
4. JIMS No. **1080** brass hammer or equivalent

Read the complete instruction sheet before using this tool and performing this service.

REMOVING THE SHIFTER SHAFT SLEEVE:

1. You don't have to remove the transmission case from chassis, but you will need to remove the trap door gear set assembly, the primary drive assy, and shift lever mechanism to get access to shifter shaft sleeve. Refer to H-D service manual or equivalent for proper removal of these assemblies.
2. Insert stepped remover tool JIMS No. **1658-1** into bore of the sleeve. Use a light brass hammer like JIMS No. **1080** to drive sleeve from case. **See Fig 1.**
3. Lube Allen screw, washers, bearing, installer tool No. **1658-2** and O.D. of new H-D No. 35186-06 sleeve.
4. Install washer No. **1662**, then bearing No. **1663**, then other No. **1662** washer and spacer No. **1658-3** onto Allen screw No. **1661**.
5. Insert Allen screw assembly into bore from outside the case. **See Fig 2.**
6. From inside case, hand thread small end of installer tool No. **1658-2** onto Allen screw assembly.

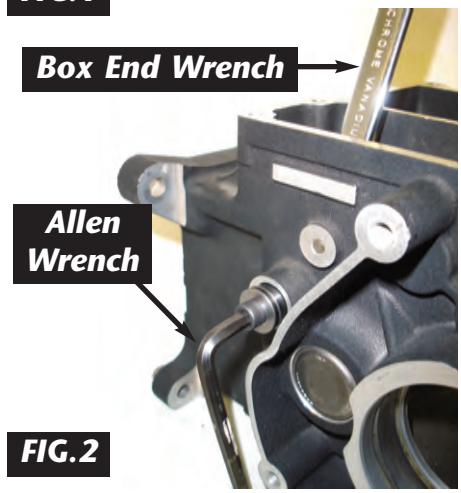
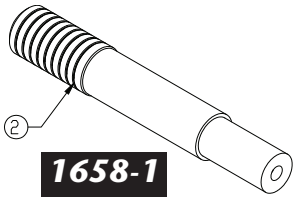


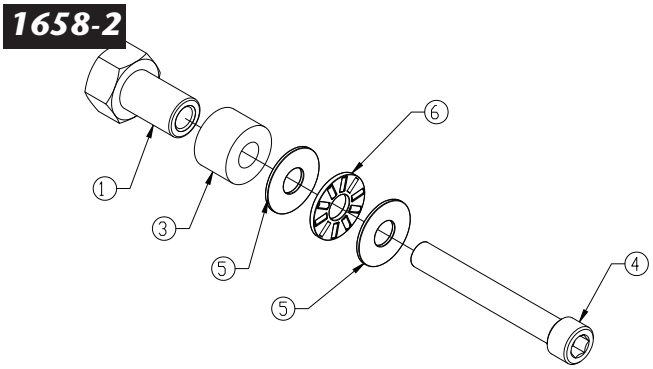
FIG. 2

7. Next use 1/4" Allen to tighten screw from outside case while holding remover with a 3/4" box wrench. Tighten Allen until it bottoms out, then remove tool from case. At this point bushing should be positioned correctly in case. **See Fig 2.**
8. Reassemble shifter mechanism, trap door gear set assembly and primary Assy.



1658-1

1658-2



PARTS AVAILABLE SEPARATELY

NO.	QTY.	DESCRIPTION	PART NO.
1	1	INSTALLER, SHIFTER SHAFT, CRUISE DRIVE	1658-2
2	1	REMOVER, SHIFTER SHAFT SLEEVE, CRUISE DRIVE	1658-1
3	1	SPACER, SHIFTER SHAFT, CRUISE DRIVE	1658-3
4	1	SCREW	1661
5	2	WASHER, THRUST	1662
6	1	BEARING, THRUST, NEEDLE	1663
7	1	INSTRUCTION SHEET	1658-IS