

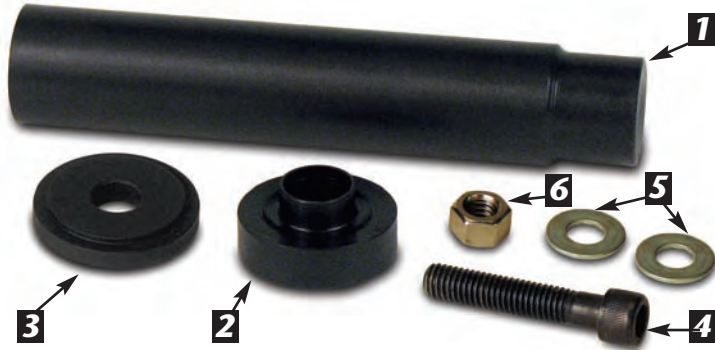


INSTRUCTION SHEET FOR TOOL #966

STARTER JACKSHAFT SEAL REMOVER AND INSTALLER TOOL

USE ON TWIN CAM MODELS 1999-06 FL, 2000-06 FXST, & 1999-05 FXD.

USE ON BIG TWIN EVO MODELS 1994-00.



PARTS AVAILABLE SEPARATELY

No.	Qty.	Description	Part No.
1	1	Seal Remover	966-1
2	1	Seal Installer	966-2
3	1	Backing Plate	966-3
4	1	Allen Screw	1696
5	2	Washer	2031
6	1	Nut	2035

NOTE: PLEASE READ ALL INSTRUCTIONS COMPLETELY PERFORMING ANY WORK! IF YOU DO NOT KNOW WHAT YOU ARE DOING, DO NOT DO IT!

No information in this instruction sheet pertaining to motorcycle repair is represented as foolproof or even altogether safe. Even something safe, done incorrectly or incompletely can and will backfire. You and only you are responsible for the safety of your repair work and for your understanding the application and use of repair equipment, components, methods and concepts.

Each and every step that this tool is designed to do must be carefully and systematically performed safely by you. All information listed in this instruction sheet has been tested, re-tested and used daily in JIMS® Research and Development Department.

ALWAYS WEAR SAFETY GLASSES OR OTHER FACE AND EYE PROTECTION SUCH AS FULL FACE SHIELD. JIMS® IS NOT RESPONSIBLE FOR DAMAGE , INJURY, OR YOUR WORK. JIMS® IS NOT RESPONSIBLE FOR THE QUALITY AND SAFETY OF YOUR WORK.

JIM'S TOOLS NEEDED TO PERFORM THIS SERVICE:

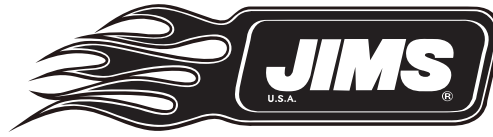
1) See JIMS catalog for a complete listing of all Primary Chain Locker Tools and all other primary and transmission tools.

OTHER HAND TOOLS NEEDED TO PERFORM THIS SERVICE:

- 1) 3/4" Wrench, for primary drain bolt on most all-early models or T-40 Torx wrench, for primary drain screw on most late models.
- 2) 3/16" Allen wrench, for primary cover screws on most years.
- 3) 9/16" Socket primary adjuster for most early models and 1/2" socket for most - late models also use 8" wire tie.
- 4) 3/4" Socket to remove front compensating nut (bolt) for most late models.
- 5) 1-3/16" Socket to remove clutch hub nut, all models.
- 6) 8mm Socket to install or remove starter shaft bolt.
- 7) Torque wrench ft-lb 3/8" drive, use to install new seal.
- 8) 9/16" Deep socket 3/8" drive, use to install new seal. 5/16" Allen wrench, use to install new seal.

**CAUTION: WEAR SAFETY GLASSES. EXCESSIVE FORCE MAY DAMAGE PARTS!
SEE JIMS® CATALOG FOR HUNDREDS OF TOP QUALITY PROFESSIONAL TOOLS.
THE LAST TOOLS YOU WILL EVER NEED TO BUY.**

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INSTRUCTION SHEET FOR TOOL #966



REMOVAL PROCEDURES

Warning: Disconnect the negative ground cable at the battery

- 1) Remove inner and outer primary covers. Refer to H-D service manual for the appropriate year and model motorcycle your repairing.
- 2) Place inner primary cover on a clean flat non-marring surface, with the backside facing up.
Note: Check the way the old seal is installed. It should have been installed with sealing side facing the inside of primary.
- 3) Place jackshaft remover pilot tool No.966-1 into the jackshaft seal I.D. Use a brass hammer to tap on the end of the tool with light but firm tap, until old seal is free of primary housing. Discard old seal. See FIG. 1.
- 4) Check the seal bore hole and wipe clean of any foreign material and check that the bore is in serviceable condition to keep the new seal from coming out or from leaking around the O.D. of new seal.

INSTALLER PROCEDURES

INSTALLING NEW SEAL

- 1) Apply lube to the allen screw threads.
Note: Most new seals have a lock sealer applied to the O.D., if your seal is without this sealant, apply a small amount of lube to the O.D.
- 2) Place new seal over the end of installer plate tool No. 966-2.
Note: Make sure that the open end of seal is facing tool No. 966-2.
See FIG. 2.
- 3) Install washer No.2031 on bolt No.1696 and insert thru installer plate from lasered marked side of tool No. 966-2 with new seal as shown in FIG 2.
- 4) Locate this assembly into the seals hole until it stops at the start of it's bore. Next place seal installer backing plate No.966-3 with step side located over allen screw against the primary cover. Then install washer No.2031 and lubed nut No.2035 onto the allen screw No.1696 from the other side of the seal hole against primary cover.
- 5) **Note:** Make sure that seal is started straight into it's bore, before applying torque. Tighten nut with your 9/16" socket and torque wrench set at 30 ft-lb, at the same time holding the bolt with your 5/16" allen wrench.

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