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# Instruction Sheet For Tool No. 901

## H-D CRUISE DRIVE 6-SPEED MAIN DRIVE GEAR REMOVAL TOOL
### Use on any H-D 6-speed Cruise Drive transmission 2006 to present

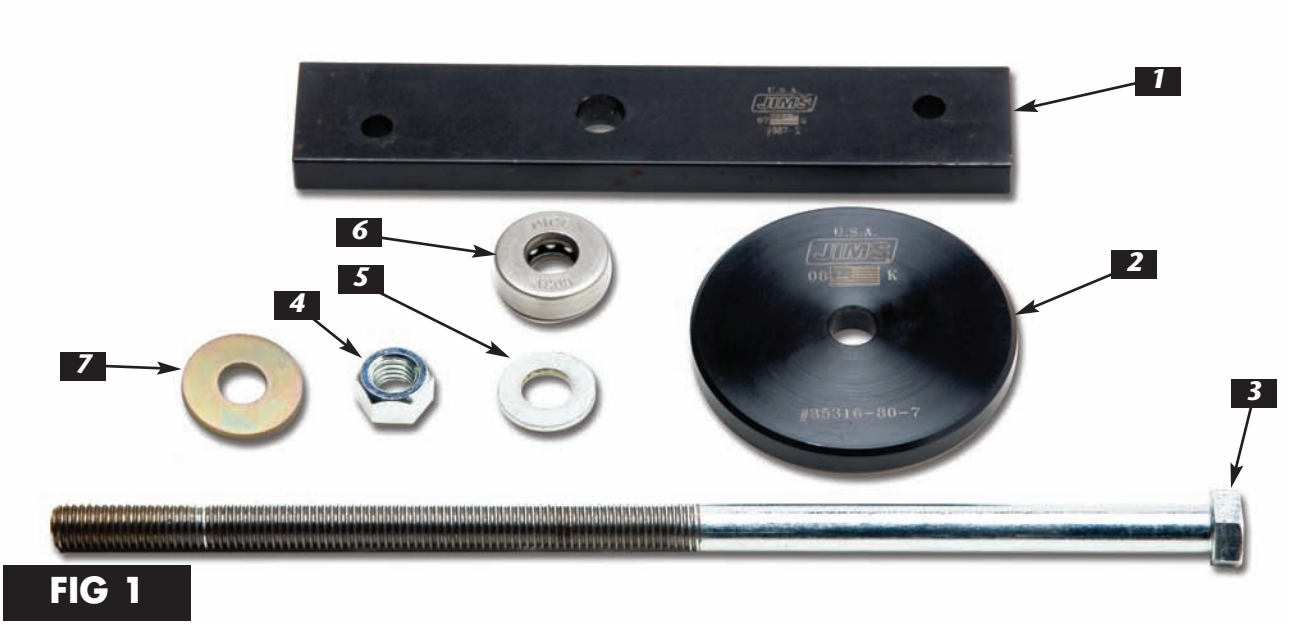



**FIG 1**

**Other recommended JIMS® tools for H-D Cruise Drive 6-speed:**

No. **989** *Mainshaft pulley locknut socket tool*
No. **911** *Trap door bearing remover tool*
No. **972** *Main drive gear seal installer tool*
No. **34902-84** *Mainshaft race remover*
No. **984** *Trap door remover tool*
No. **985** *Shift fork shaft remover tool*
No. **992** *Modular transmission stand, all Twin Cams*

**Read complete instructions thoroughly before disassembling or assembling. Refer to pictures, parts lists and reference drawings.**

**NOTE:** *IF YOU DO NOT KNOW WHAT YOU'RE DOING , DO NOT DO IT! ALWAYS WEAR SAFETY GLASSES OR OTHER FACE AND EYE PROTECTION SUCH AS A FULL FACE AND EYE PROTECTION. JIM'S IS NOT RESPONSIBLE FOR DAMAGE , INJURY, YOUR WORK, OR THE QUALITY AND SAFETY OF YOUR WORK.*

**RECOMMENDED TOOLS FOR USE WITH THIS TOOL**

2 - 3/4" Box end wrench
1 - 1/4" Allen wrench
1- Quality retaining ring pliers
1 - H-D Service Manual

**Note:** *Do not use impact wrench on this tool.*

***PARTS AVAILABLE SEPARATELY***

| No. | Qty. | Description | Part No. |
|---|---|---|---|
| 1 | 1 | INSTALLATION BAR | 987-2 |
| 2 | 1 | MAINDRIVE GEAR WASHER | 35316-80-7 |
| 3 | 1 | SCREW 12" LG | 2138 |
| 4 | 1 | NUT | 2136 |
| 5 | 1 | WASHER | 2038 |
| 6 | 1 | BEARING | 2010 |
| 7 | 1 | WASHER | 1735 |

**REMOVING THE MAIN DRIVE GEAR**

**1.** Refer to H-D Service Manual for tear down of the transmission assembly to the point of removing the main drive gear.

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**2.** Attach the installation bar tool No. **987-2** to the trap door side of case. Use two allen screws with washers H-D No.**3249** from existing trap door mounting hardware. **See Fig 2** for door mounting holes to locate plate correctly on case. Also, the plate has been laser marked with "Top" on the plate and should face you. **See Fig 2.**

**3.** Install No. **1735** onto No. **2138** 12" long screw then insert through center hole of No. **987-2** installation bar and into case, through the mainshaft gear. **See Fig 2.**

**4.** Lube threads on end of screw No. **2138** hanging out of main drive gear. Install No.**35316-80-7** maindrive gear washer, bearing No. **2010**, No. **2038** washer and then No. **2136** nut on screw end. **See Fig 3.**

**5.** Use two 3/4" box end wrenches to remove gear. Hold No. **2138** screw with one wrench while using the other to tighten nut No. **2136** clockwise and the gear will come loose from the bearing.

**Caution:** ***When performing the next step of removing the gear from the bearing you may encounter some resistance beyond what this tool can handle and could damage the case. If you feel a binding stop and apply heat to the bearing race as shown. Do not exceed 210 degrees. This should free up the gear. If that doesn't work it will be your decision on how to extract the main drive gear and bearing.*** **See Fig 2 & 4**

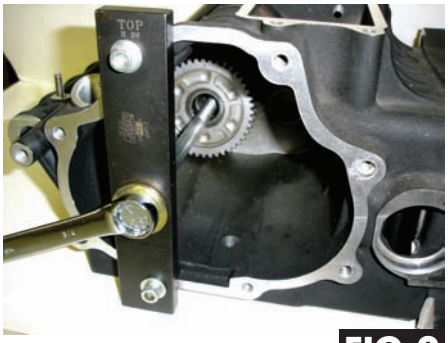
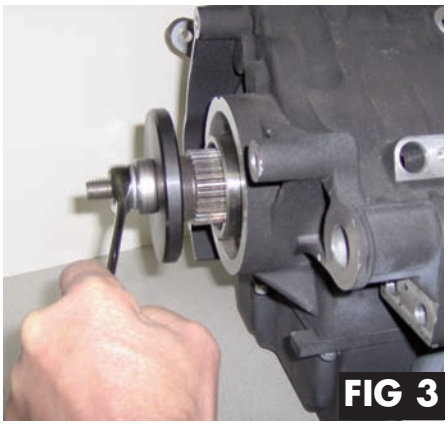


FIG 2


FIG 3

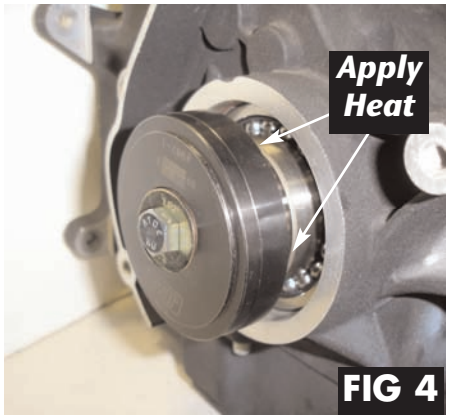


FIG 4

CAUTION: Wear safety glasses over your eyes.
See JIMS® catalog for Hundreds of top quality professional tools.
The last tools you will ever need to buy.