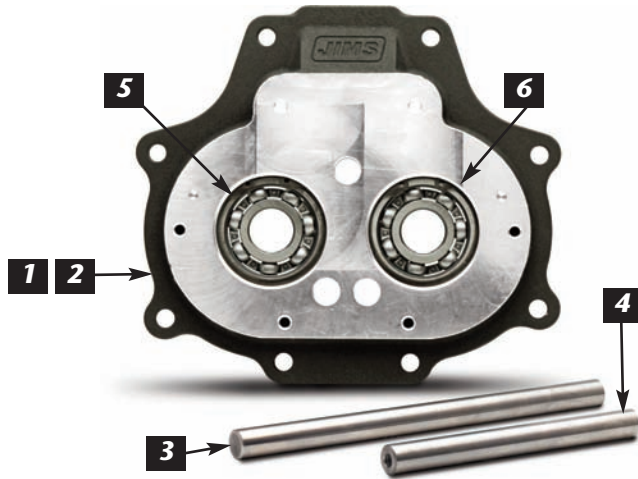




A Division of Thiessen Products, Inc.

INSTRUCTION SHEET FOR TOOL #2336 & #2340

JIMS CRUISE DRIVE WIDE BEARING TRAP DOOR & SHIFT FORK SHAFTS UPGRADE KIT



APPLICATION AND PARTS CHART

| NO. | QTY. | DESCRIPTION | PART NO. |
|-----|------|----------------------------------|----------|
| 1 | 1 | TRAP DOOR, BLACK MACHINED | 2336-1 |
| 2 | 1 | TRAP DOOR, SILVER MACHINED | 2336-2 |
| 3 | 1 | SHIFT SHAFT, LONG, CRUISE DRIVE | 2336-3 |
| 4 | 1 | SHIFT SHAFT, SHORT, CRUISE DRIVE | 2336-4 |
| 5 | 2 | BEARING, TRAP DOOR | 8992A |
| 6 | 2 | RETAINING RING, TRAP DOOR | 35087-99 |
| 7 | 1 | INSTRUCTION SHEET | 2336-IS |

The JIMS Cruise Drive trap door upgrade kit will give your transmission positive shifting and less side thrust in both the countershaft and mainshaft due to wider, heavy duty bearings and improved beveled retaining rings.

Read the instructions completely before installing this trap door.

Safety First! Always wear safety glasses or a 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. If you are unsure of how to do this job, STOP! Take your bike to a qualified H-D repair shop.

RECOMMENDED TOOLS AND SUPPLIES

- JIMS No. **985** Shift Fork Shaft Remover Tool
- JIMS No. **984** Cruise Drive Trap Door Remover Tool
- New Inner Primary Bearing Race H-D part No. 34091-06 or 34091-08
- 2 Shift Drum Retainer Screws H-D part No. 35259-06
- Arbor Press
- Assembly Lube
- H-D or Clymer Service Manual for year and model of bike you are servicing
- 2 Locknuts H-D part No. 7340
- Detent Screw H-D part No. 35244-06
- Trap Door Gasket H-D part No. 35654-06
- End Cover Gasket H-D part No. 36805-06
- Top Cover Gasket H-D part No. 34917-06
- Transmission Lubricant
- JIMS Mainshaft Bearing Race Tool No. **34902-84**
- JIMS Wheel Rotator Tool No. **936**

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.

Performance Parts For Harley-Davidson Motorcycles

555 DAWSON DRIVE, CAMARILLO, CA 93012 PHONE 805-482-6913 • FAX 805-482-9224



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GAINING ACCESS TO TRAP DOOR

Note: Before removing maxi-fuse or disconnecting battery, always disarm the optional security system (TSSM/HFSM) so the siren won't sound.

Remove Maxi-fuse or disconnect battery. Prep bike for this job by draining transmission and primary lubricant, removing the exhaust system, transmission dipstick, primary chaincase assembly, mainshaft bearing race using JIMS Tool No. 34902-84, clutch release cover, oil slinger, clutch pushrod, transmission top cover, trap door fasteners, and exhaust bracket if equipped. Leave the transmission top cover gasket in place. Refer to the H-D service manual for your particular bike.



FIG. 1

REMOVING TRAP DOOR

Before you begin, rotate the shifter pawl forward enough to raise the free end and place it on the top of the case sitting on the gasket. **See Fig. 1.** Remove the trap door using JIMS Tool No. 984 Trap Door Remover following instructions provided with tool. Use H-D service manual for the year and model motorcycle you are working on. Once out of the case, set the trap door gearset assembly on a workbench with the mainshaft and countershaft pointing up. **See Fig. 2.**

INSTALLING JIMS TRAP DOOR

Remove the shift fork shafts using JIMS Tool No. 985. Make note of the position of the shift forks for re-assembly. **See Fig. 2.** Follow instructions in the appropriate service manual to remove the main and countershafts from the stock trap door. Install the main and countershafts following service manual instructions being certain to lift the mainshaft dog ring so that it is engaging countershaft 3rd gear during the pressing procedure. Remove the shifter detent arm assembly from your stock trap door and install it on your JIMS trap door using a new detent screw. You must pry the detent arm back, relieving spring tension to remove and install the shift drum. **See Fig. 3.** Re-assemble the motorcycle in reverse of the procedure you used to disassemble following the H-D service manual. Use a high quality gear lubricant for best shifting and quiet operation. Use new fasteners on the shift drum retaining plate, shifter detent arm, and locknuts on main and countershafts. Test shift through all six gears by rotating the rear wheel using JIMS No. 936 Tire rotator tool.



FIG. 2

Photos provided by Clymer®



FIG. 3

Photos provided by Clymer®

FINAL ASSEMBLY

Adjust clutch pushrod and cable following H-D service manual. Install maxi-fuse, re-check transmission fluid level, and test ride the bike shifting through all six gears.

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