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INSTRUCTION SHEET FOR JIMS® RIGHT SIDE DRIVE 6-SPEED OVERDRIVE



**JIMS® R.S.D. 6-Speed Overdrive complete
Transmissions, Super Kits and Rebuild kit.
Numbers 8235, 8236, 8248, 8249, 8250, 8251, 8252,
8253, 8259, 8260, 8266, 8267, and 8269.**

We have included this instruction sheet for reference to disassemble the transmission. Disassembly is the same as assembly, but in reverse order.

READ ALL INSTRUCTIONS BEFORE PERFORMING WORK!

Prior to installation of any of the above part numbers, please read and follow the procedures and safety precautions to reduce the risk of personal injury.

**IF YOU DO NOT KNOW WHAT YOU ARE DOING,
DO NOT DO IT!**

JIMS® IS NOT RESPONSIBLE FOR THE QUALITY AND SAFETY OF YOUR WORK!

If you are not sure about any of the procedures in these instructions, have a reputable H-D repair shop perform these procedures for you.

If you have purchased a No. **8269** Right Side Drive Rebuild kit read the complete instructions before performing any work. Refer to page 15 for the complete parts list of the rebuild kit. The kit covers a hydraulic or mechanical clutch activated system.

WARNING: Always disconnect the Battery Ground Cable (at the battery) to prevent injury. Your work area should be well lit. Wear safety glasses (over your eyes) and protective clothing when working around power tools and compressed air. Be careful with chemicals when cleaning parts. Protect your skin from solvents and use only in a well-ventilated area. Degreasers are flammable and are a fire hazard. Just use common sense and exercise good judgment. Securely mount the trans case (if not installed in Motorcycle) with JIMS Tool No. **1145** Complete Modular Engine & Transmission Stand Kit or JIMS Tool No. 1008-TS Trans Stand. This kit is relatively easy to install, but does require some special tools. (See tool list)

NOTE: Any time you see ** It is an indication to lube using Transmission Oil for a lubricant.

For replacement parts order :

- No. - **8269** Rebuild kit hydraulic or mechanical clutch
 - No. - **890** Gasket and seal kit, mechanical clutch
 - No. - **891** Gasket and seal kit, hydraulic clutch
- See JIMS sales Dept.

**Special Tools Required to install
JIMS R.S.D. 6 Speed Super Kit:**

The only special tools required are tools that are used for 5-speed installation.

JIMS® Part No....Description:

- 35316-80**5-speed Main Drive Gear Tool
- 34902-84**Mainshaft Bearing Race Tool
- 94660-37A**.....Mainshaft Sprocket Locknut Wrench
- 2260**Big Twin Sprocket Locker
- 1720**5-speed Main Bearing Remover
- 1080**Brass Hammer
- Small Lock Ring Pliers
- Large Lock Ring Pliers
- Solvent 184

Continued Next Page

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Special Tools Required (Continued)

JIMS® Part No....Description:

- 1008-TS.....Trans Stand
.....OR.....
- 1145Modular Engine & Trans. Stand Kit
- 2256Main Drive Gear Seal Protector
- 1664Shift Lever Pivot Sleeve R & I

**Special Parts Needed To install
JIMS® 6-Speed Super Kit:**

JIMS® Part No....Description:

- 8042K.....Speedo Block-Off Plate or 8102 Billet
block off plug (chrome) or 8103 (black)
(Depending on application)
- 42533-91A....Vent Hose (H-D #)
- 8126Speedo-Recalibration Module
(Depending on pulley and tire size)
- Good Quality Gear Oil
- Good Quality DOT 5 Brake Fluid

NOTE: Spacer No. 8424 is for Belt Pulley applications, if you will be using a chain Sprocket you may need to shorten or lengthen this spacer for proper Chain alignment to Rear Sprocket.

NOTE: To use Hydraulic Pulley Cover, JIMS No. 8422 you will need a Hydraulic Clutch Master Cylinder similar to H-D® No. 45232-03A, a Clutch Line (Braided Stainless Brake Line) that is about 70 inches long (depending on Handle Bars, Risers and Frame) similar to H-D® No. 38669-03, except with a Banjo fitting at each end, two Banjo Bolts like H-D® No 41747-82A and Sealing Washer (gasket) like H-D® No 41731-01.

NOTE: Refer to your Service Manual and parts book for the proper year and model you will be installing this kit in for reference. Also, Use a Late H-D 2002-05 Big Twin Service Manual and parts book for reference.

INSTRUCTIONS FOR PREPARING THE TRANSMISSION CASE TO INSTALL JIMS R.S.D. 6 SPEED SUPER KIT: (DOES NOT APPLY TO ASSEMBLED TRANSMISSION).

1. Remove Old Gear set and all Case Bearings. Refer to your H-D® service manual.
NOTE: If Dowel Pin H-D® No. 634 came out upon the Gear Set removal, it will need to be reinstalled back into the Trans Case. Refer to your Service Manual.
2. Upgrade Shifter Shaft Bushing for 1990-99 Big Twins and 1999-2000 T/C FLHT, FXR & FXD by removing the existing Shifter Shaft Bushing and installing a new longer shifter Shaft Bushing (Sleeve) JIMS No. 7514 (supplied). Follow the Instruction Sheet provided with JIMS Tool No. 1664 and refer to your Late Service Manual for Shifter Shaft Assembly.
3. Wash and rinse out the entire trans case.
4. Install Main Drive Gear Bearing JIMS No. 8996 (supplied) using JIMS Tool No. 35316-80. Follow the Instruction Sheet provided with Tool or Refer to your Service Manual.
5. Install Retaining Ring JIMS No. 11161 (supplied). Refer to your Service Manual.

NOTE: NEVER install any bearings into the Case by applying pressure to the inner race. Doing so will destroy the bearing.

6. Install new Main Seal JIMS No. 12067 (supplied) with JIMS Tool No. 95660-85 used with JIMS Tool No. 95660-42. Refer to you Service Manual.
7. Install Countershaft End Bearing JIMS No. 8977. Refer to your Service Manual.

NOTE: Install Countershaft Bearing by applying pressure to the LETTER side of bearing ONLY.

8. Install Shifter Shaft Seal JIMS No. 12045 (supplied). Refer to your Service Manual.
9. Install Shifter Assembly JIMS No. 8325 (supplied). Refer to your Late Service Manual.

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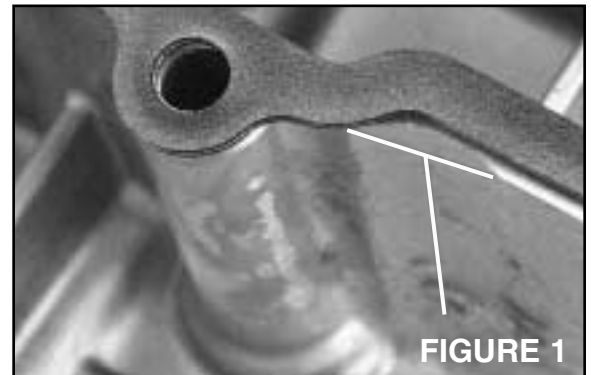
10. Install Shifter Shaft Washer JIMS No. **6497HW** and Retaining Ring JIMS No. **11150** (supplied).
Refer to your Late Service Manual.
11. Install Shifter Shaft Centering Pin (Bolt) JIMS No. **34978-00A** (supplied). Torque Bolt to 10 ft-lbs. Refer to your Late Service Manual.

⚠ Caution: Center shifter assembly return spring on each side of centering bolt.

INSTRUCTIONS FOR PREPARING THE TRANSMISSION TOP COVER TO CLEAR THE NEW SHIFTING LEVER WHEN INSTALLING JIMS R.S.D. 6 SPEED SUPER KIT INTO ANY 1990-99 BIG TWINS AND 1999-2000 T/C FLHT, FXR & FXD MODELS:

NOTE: Does not apply to assembled transmissions.

NOTE: 2000-Present FXST and 2001-Present FLHT & FXD models do not need modifying.



1. Place new Top Cover Gasket JIMS No. **34904-86** on the Trans Top Cover gasket surface.
2. Use 4 of your Top Cover screws to hold Gasket in place by slipping screws thru the Gasket and into the Top Cover.
3. Mark the inside exposed portion of the surface as shown in **Figure 1**. The Material to be removed is .060 wide by 1.80 Deep. Remove Top Cover screws and Gasket.
4. With a die grinder tool, remove the casting rib until it is the same height as the adjacent surface area. Clean Top Cover of all loose material, including screw holes as shown in **Figure 1**.
5. With shifter assembly installed in transmission; Install Top Cover with gasket using only 2 screws loosely (so cover can move if Shifter Arm is making contact with Top Cover).
6. While watching to see if the Top Cover moves forward, shift the transmission into first gear firmly holding the shift lever down. If there is no forward movement of the Top Cover, then the modification is complete. If any forward movement (of Top Cover) is observed, then more of the casting rib must be removed. Repeat Step 4 as necessary.

INSTRUCTIONS FOR INSTALLING JIMS R.S.D. 6 SPEED SUPER KIT PARTS INTO CASE: (Does not apply to assembled transmissions)

Note: Remove Pulley Cover from Trap Door (set aside for final installation)

⚠ Caution: O-Rings have been installed prior to shipping.

1. Place Trap Door Gasket JIMS No. **8352**, (supplied) over the two Dowel Pins on Case. Refer to your Service Manual.

Note: Do not remove the Mainshaft Protective Cover on the Clutch Hub spline end of Mainshaft. It can be removed after Super Kit has been installed into the Trans Case.

2. Gently place the Gear Set (Trap Door Assembly) into the Trans Case by sliding the Mainshaft through the Main Drive Gear while slowly pushing the Trap Door Assembly inward until the Trap Door makes contact with the two Dowel Pins in the Trans Case. Refer to your H-D Service Manual.

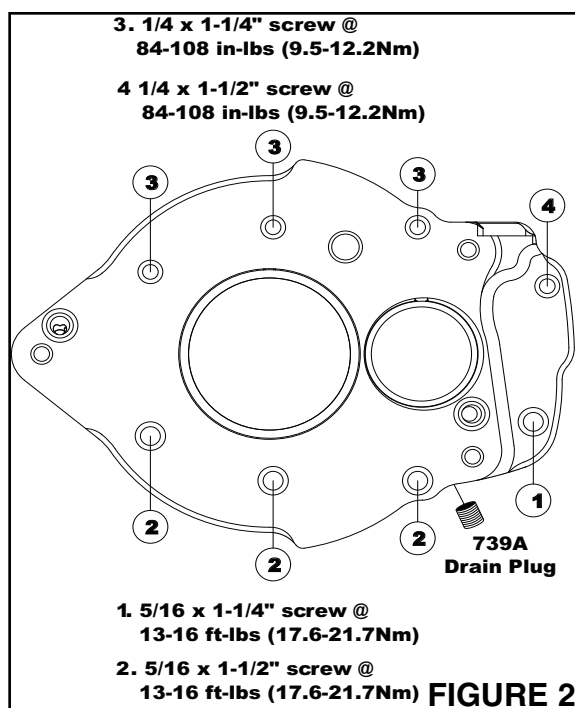
A non-marring hammer is helpful to tap the Trap Door Assembly over the Dowel Pins without risking damage to the Aluminum / Chrome of the Trap Door Assembly.

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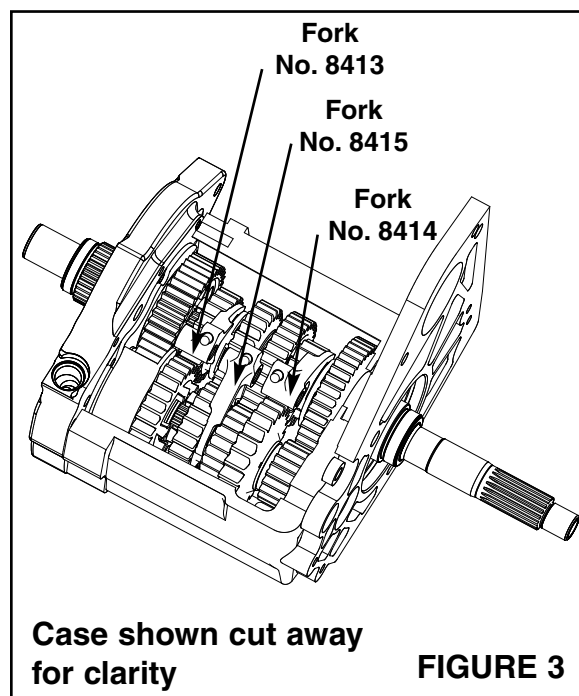
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3. Apply a small amount of Blue Loctite to the one 5/16" screw JIMS No. **1118**, three 5/16" screws JIMS No. **8092**, one 1/4" screw JIMS No. **1258** and three 1/4" screws No. **1261** (all screws supplied).
4. Thread the shorter 5/16" screw, JIMS No. **1118** into the lower front hole of the trap door.
5. Thread the three 5/16" screws, JIMS No. **8092** into the remaining lower three holes in the trap door.
6. Thread the shorter 1/4" screw, JIMS No. **1258** into the upper front hole in the trap door.
7. Thread the three 1/4" screws, JIMS No. **1261** into the remaining upper three holes in the trap door.
8. Torque all four 5/16" screws to 13-16 ft-lbs in a criss-cross pattern. Refer to **Figure 2**.
9. Torque all four 1/4" screws to 84-108 in-lbs in a criss-cross pattern. Refer to **Figure 2**.
10. Install No. **739A** plug into trap door at the position shown in **Figure 2**. This is your drain plug for servicing transmission lubricant.



INSTRUCTIONS FOR INSTALLING JIMS R.S.D. SHIFT FORKS:

1. Place the 1st-2nd gear Shift Fork, JIMS No. **8415** into Fork Slot of the 3rd-4th combo gear, JIMS No. **8405** by putting it down through the Top Cover opening and sliding into place as shown in **Figure 3**.
2. Place the 3rd-5th gear Shift Fork, JIMS No. **8413** into Fork Slot of the 2nd gear, JIMS No. **8403** by putting it down through the Top Cover opening and sliding it into place as shown in **Figure 3**.
3. Place the 4th-6th gear Shift Fork, JIMS No. **8414** into the Fork Slot of the 1st gear, JIMS No. **8401** by putting it down through the Top Cover opening and sliding it into place as shown in **Figure 3**.
4. Slide Shift Fork Shaft, JIMS No. **8446**, ** (supplied) through the hole in the trap door, all three Shift Forks and into the Left side of Trans Case. Refer to you Service Manual.
5. Install Shifter Shaft Set Screw, JIMS No. **3784**, (supplied) by first applying a small amount of Blue Loctite to threads and tightening until you have about .020 endplay on the Shifter Shaft.



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INSTRUCTIONS FOR INSTALLING MAIN SEAL SPACERS AND TORQUING MAINSHAFT NUTS: (FOR BOTH SUPER KITS AND COMPLETE TRANSMISSIONS)

- Slide all 3 Shift Forks into any gear locking the trans and keeping the gears from turning for final torquing of the mainshaft nuts.

Note: You may need to install the right side Final Drive Pulley first, this will allow the use of JIMS Tool No. 2260 Sprocket Locker to hold the Pulley and Mainshaft from turning instead of the gear set as you are Torquing both Mainshaft Nuts.

Final Drive Side (Right Side):

- Install Quad Seal, JIMS No. 11165, ** (supplied) over the Main Drive Gear on the right side of the Transmission. (If not already installed by manufacturer) Refer to **Figure 4**.
- Install Main Drive Gear Seal Spacer JIMS No. 8424 ** (supplied) over the Main Drive Gear on the right side of the transmission with the chamfered side toward the quad seal. Be sure not to roll the lip of the seal over during installation. (If not already installed by manufacturer.) Refer to **Figures 5 & 6**.
- Install final drive pulley or sprocket that you are using for your final drive system. (Not supplied).
- Install Mega Nut JIMS No. 1708 (supplied) over the main drive gear on right side of transmission. Refer to the instruction sheet that comes with the mega nut.

Primary Side:

- Install Quad Seal, JIMS No. 11165, ** (supplied) over Mainshaft Bearing Boss on the left side of Trans. (If not already installed by manufacturer) Refer to **Figure 4**.
NOTE: Left side will have a Bearing Boss, not a Main Drive Gear.
- Install Mainshaft Seal Spacer JIMS No. 8437, ** (supplied) over Mainshaft Bearing Boss on left side of Trans, with the chamfered side to the inside. Be sure not to roll the lip of the seal over during installation. (If not already installed by manufacturer.) Refer to **Figures 5 & 6**.
- Install Mainshaft Nut (Seal Spacer Lock Nut) JIMS No. 35211-91B, (supplied) over the Mainshaft Bearing Boss. Apply a small amount of Red Loctite, about 3 drops, to the I.D. threads of the Lock Nut and 3 drops to the O.D. threads of the Mainshaft Bearing Boss threads. Also apply trans lube to the Face of the Nut. Torque Nut to 150-160 ft lbs with JIMS Tool No. 94660-37A Mainshaft Sprocket Locknut Wrench. Refer to the instruction sheet that comes with the tool.
- Install Primary Drive, as indicated in your Service Manual.
- Install clutch adjusting screw, JIMS No. 8326, ** (supplied). **NOTE: For hydraulic clutch adjustment, refer to the section on connecting your hydraulic clutch line. For mechanical clutch, refer to section on connecting mechanical clutch cable.**

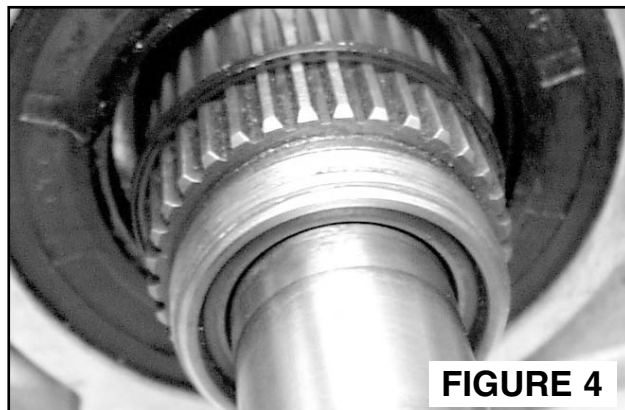


FIGURE 4

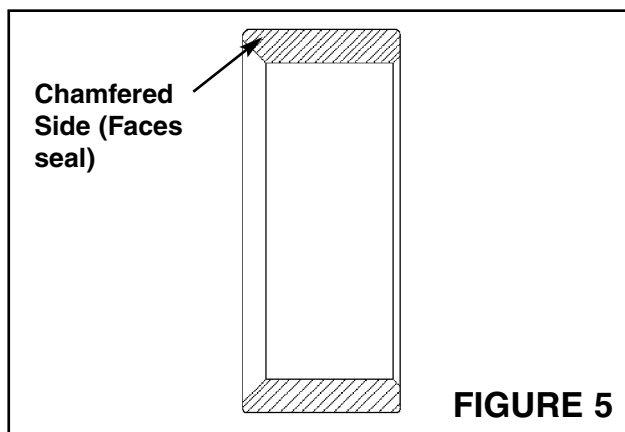


FIGURE 5

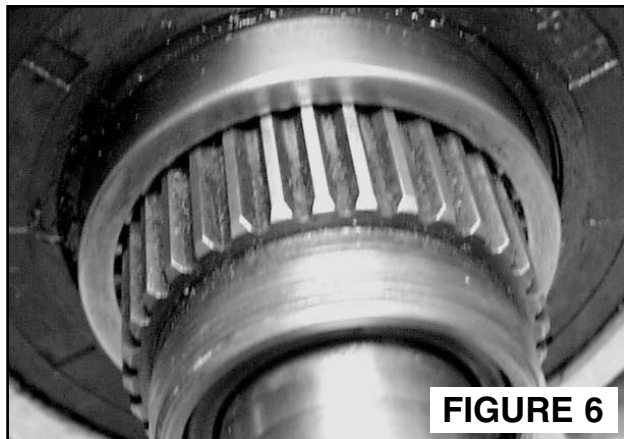


FIGURE 6

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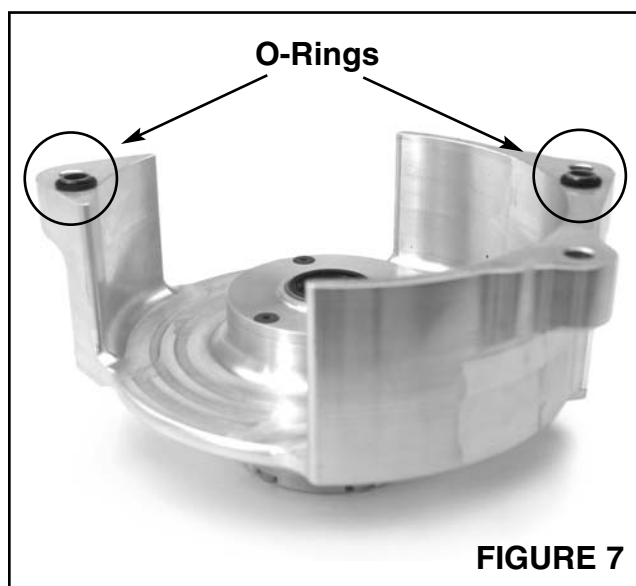
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INSTRUCTIONS FOR INSTALLING SHIFT DRUM, PILLOW BLOCKS AND TOP LID:

1. Place the Drum assembly with Pillow Blocks over the 3 Pins of Shift Forks (move forks as needed to line up with the tracks in the Shift Drum). At the same time lining the Pillow Blocks over and onto the 4 Split Dowel Pins. See your Late Service Manual.
2. Install four 1/4" Pillow Block Mounting Washers, JIMS No. **1215** over the four 1/4" Pillow Block Mounting screws, JIMS No. **2135** (both part numbers supplied). Apply a small amount of Blue Loctite to each screw and torque to 7-9 ft-lbs. in a criss cross pattern. See your Late H-D Service Manual.
3. Install Top Cover Gasket, JIMS No. **34904-86** (supplied) per your Service Manual.
4. Install your Top Cover (Lid) with your mounting hardware. See your Service Manual.
5. Install Vent Hose, No. **42533-91A** (not supplied) to your Top Lid Elbow Fitting. Refer to your Service Manual.

INSTRUCTIONS FOR INSTALLING PULLEY COVER (HYDRAULIC AND MECHANICAL CLUTCH):

1. Install Center Clutch Pushrod, JIMS No. **37088-90** (supplied). First grease both ends of the pushrod, then slide it into the Mainshaft until it is flush with the end of the mainshaft threads (pushrod may be installed in either direction).
2. Install sealed bearing JIMS No. **8451** onto the end of the Right Clutch Pushrod, JIMS No. **8452** (both supplied).
3. Install retaining ring, JIMS No. **8453** (supplied) into the groove onto the end of the right pushrod so that it holds the sealed bearing in place.
4. Install the Right Pushrod assembly from above steps. First grease the end without a bearing and slide the greased end into the end of the Mainshaft until the bearing is against the Mainshaft.
5. Inspect that both O-Rings, JIMS No. **11273** (supplied) have stayed in place over the Hollow Dowels in the pulley cover. Refer to **Figure 7**.
6. Install Pulley Cover over the end of Mainshaft. Apply a small amount of Trans Lube to both the inner and outer sealing surfaces of each Seal and the sealing surface of the Mainshaft.
7. Install the three 5/16" screws, JIMS No. **1118** (supplied). Apply a small amount of Blue Loctite to each screw. Torque each screw to 13-16 ft-lbs in a criss-cross pattern.

**FIGURE 7****INSTRUCTIONS FOR CONNECTING HYDRAULIC CLUTCH LINE:**

1. Connect your Hydraulic Clutch Line, Fill the Master Cylinder with clean DOT 5 Brake Fluid and bleed the system. Refer to your Service Manual Brake Bleeding section.
2. Fill Trans with high quality Gear Oil. Change Oil after the first 500 Miles. Refer to your Service Manual.
3. After installing the clutch adjusting screw, JIMS No. **8326**, ** (supplied) into the clutch hub, thread the adjusting screw clockwise until all free play has been removed from both pushrods and Hydraulic Piston.
4. Turn adjusting screw counterclockwise one full turn and tighten lock nut. Bleed the system as performed in Brake Bleeding section of your Service Manual.

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INSTRUCTIONS FOR CONNECTING MECHANICAL CLUTCH CABLE:

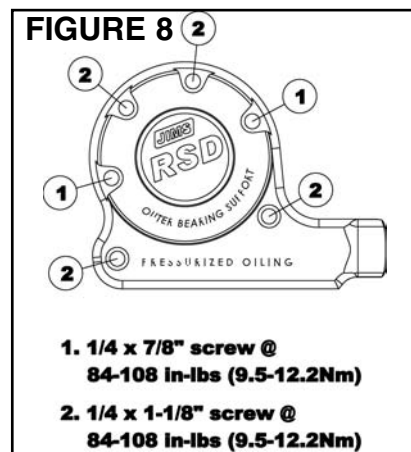
You need to remove the Actuator Cover to install your Clutch Cable.

Note: Two of the screws are shorter. Be sure to note their locations.

1. Remove the six screws that hold the Actuator Cover to the Pulley Cover.
2. Connect your Clutch Cable with O-Ring (not supplied), Clutch Cable coupling and Ramp Assembly (supplied) according to your Service Manual.
3. Install the connected assembly into the Actuator Cover, JIMS No. **8442** according to your Service Manual.
4. Place Actuator Cover Gasket JIMS No. **8443** and Actuator Cover onto the end of the Pulley Cover.

Note: Install gasket dry.

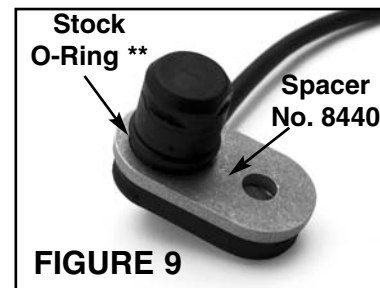
5. Install the two short (7/8") screws JIMS No. **1074** and the four (1-1/8") screws JIMS No. **1116** that hold the Actuator Cover. Apply a small amount of Blue Loctite to each screw. Thread the six screws into their correct locations as shown in **Figure 8**. Torque screws to 84-108 in-lbs in a criss-cross pattern.
6. Adjust Clutch according to your H-D Service Manual.
7. Fill Trans with high quality Gear Oil to the same level as a H-D 5 speed. Change Oil after the first 500 Miles. Refer to your H-D Service Manual.

**INSTRUCTIONS FOR INSTALLING ELECTRONIC SPEED SENSOR:**

Note: If you will be running an Electronic Speed Sensor you will need to place a Speed Sensor Spacer JIMS No. **8440** (supplied) over the O-Ring of your Speed Sensor. If you are not using an electronic speed sensor, use block-off plate JIMS No. **8042K** on the case.

If you use JIMS billet block off plate No. **8102** or **8103**, use the spacer No. **8440**.

1. Place the Speed Sensor with the spacer into the trans case with the O-Ring ** side down so that the mounting screw hole lines up with the threaded hole in the case. Refer to **Figure 9**.
2. Install Mounting Screw JIMS No. **1259** (supplied). Apply a small amount of Blue Loctite to the screw and thread the screw into the hole in the case. Torque to 7-9 ft-lbs. Refer to **Figure 9**.

**DISASSEMBLY**

In the unlikely event that you would need to disassemble your complete Transmission we have provided some instructions that will help you.

This kit is basically easy to Disassemble, but does require some special tools.

For replacement parts, see materials list.

NOTE: Read all instructions before performing work. The transmission disassembly is the same as assembly, but in reverse order. Always disconnect the Battery Ground Cable (at the battery) to prevent injury. Your work area should be well lit. Wear Safety glasses (over your eyes) and protective clothing when working around power tools and compressed air. Protect your skin from solvents and use only in a well-ventilated area. Degreasers are flammable and are a fire hazard. Use common sense and exercise good judgment. Securely mount the trans Case (if not installed in Motorcycle) with JIMS Tool No. 1145 Complete Modular Engine & Transmission Stand Kit or JIMS Tool No. 1008-TS Trans Stand.

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INSTRUCTIONS FOR DISASSEMBLY OF YOUR JIMS R.S.D. 6 SPEED OVERDRIVE

1. Remove Primary Covers and Clutch components as shown in your H-D Service Manual.
2. Drain the oil from Transmission by removing Drain Plug from the trap door, JIMS No. **739A** (or if your Trans Case has other means of Oil Drain you may use that)
3. Remove Pulley Cover in the reverse order of assembly. Refer to instructions for Installing Pulley Covers.
4. Remove Top cover and Shift Drum. Slide the three Shift Forks into any gear (to lock the Trans, to keep the gears from turning for removal of the Mainshaft Nuts and Countershaft Bearing Lock Screw).
5. Remove Countershaft Bearing Seal Cover, JIMS No. **8421** and Discard.
6. Remove Countershaft Bearing Lock Screw, JIMS No. **1727**.

NOTE: You may need to apply heat to remove the 1727 countershaft lock screw.

NOTE: For re-assembly of countershaft Bearing Lock Screw, re-torque to 12 ft-lbs with a 1/2 drop of Blue Loctite applied to threads of the screw.

7. Remove Shifter Shaft Set Screw, JIMS No. **3784**.
8. Remove Shifter Shaft JIMS No. **8446**.
9. Remove the three Shift Forks JIMS No's **8413, 8414** and **8415**.
10. Remove all trap door hardware holding the trap door to the Transmission Case.
11. Remove trap door from Trans Case using the trap door Puller Tool JIMS No. **998**. Refer to the instruction sheet that comes with the tool.
12. Remove the Oiling Trough JIMS No. **8417** by removing the two mounting screws JIMS No. **8426**.

NOTE: For assembly of the Oiling Trough screws, torque to 60 in-lbs with one drop of Red Loctite.

13. Re-install trap door without the gear set onto the case in order to remove the Main Drive Gear from the trap door using the Main Drive Gear Bearing remover JIMS No. **35316-80**.

NOTE: The Main Drive Gear Main Bearing JIMS No. 8978 and Lock Ring No. 11057 will need to be replaced after the Main Drive Gear has been removed from the bearing.

14. Remove both trap door bearings as you would for any 5-speed rebuild.

NOTE: Take note of the Lock Ring locations before removing them from the trap door.

15. Replace Countershaft and Main Drive Gear Bearings and Lock Rings. Be sure to install them in the same positions as the ones that were removed.
16. Remove all Gears from the Main and Countershafts the same as you would for any 5-Speed Transmission following the Parts List as laid out in this Instruction Sheet.
17. Remove any other Parts, Bearings or Seals from the Transmission Case as you would for any 5-Speed.

Special Tools Required to remove JIMS R.S.D. 6 Speed Super Kit:

JIMS® Part No....Description:

35316-80	5-speed Maindrive Gear Tool
34902-84	Mainshaft Bearing Race Tool
94660-37A ..	Mainshaft Sprocket Locknut Wrench
38515-90	Clutch Spring Compressor 1990-97
2260	Big Twin Sprocket Locker
2362	External Lock Ring Pliers
2234	Primary drive Locking Tool
1720	5-speed Main Bearing Remover
2189	Main and Counter Shaft Installer
1080	Brass Hammer
1008TS	Trans Stand
1145	Modular Engine & Trans. Stand Kit
998	Door Puller Tool
	Small Lock Ring Pliers
	Large Lock Ring Pliers
	Solvent 184 (Valco)



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INSTRUCTIONS FOR REPAIRING PULLEY COVER BEARINGS AND SEALS (HYDRAULIC & MECHANICAL CLUTCH)

1. To replace outboard Bearing Support (JIMS No. **8419**)(Hydraulic & Mechanical):

- a. Remove all 3 Screws, JIMS No. **1112**, holding the Seal Retaining Plate, JIMS No. **8428** and remove the Seal Retaining Plate
- b. Remove Seal, JIMS No. **12035B**.

NOTE: There are two No. 12035B seals. The "outer" seal can only be removed from the clutch activator side. For the Hydraulic Clutch version, you must first remove the slave cylinder piston. For mechanical, you must first remove the clutch actuator cover.

- c. Remove Outboard Bearing JIMS No. **8419** from the same side as the Seal Retaining Plate.
- d. Install new Outboard Bearing with the sealing side facing the Trans Case.
- e. Reinstall new Seal with JIMS Tool No. **2256**.

Note: Do not press new Seal in too far.

- f. Place the Seal Retainer Plate over the seal aligning the 3 holes.
- g. Apply one drop of Blue Loctite onto the threads of each Seal Retainer Plate Screw, JIMS No. **1112**. Thread the screws into the holes in the pulley cover and torque to 60 in-lbs.

2. To repair the Mechanical Clutch Pulley Cover:

- a. Follow instructions found above under assembly of Mechanical Clutch Pulley Cover in reverse order.

3. To repair the Hydraulic Clutch Pulley Cover:

- a. Remove the six screws, JIMS No. **8430**, holding the Hydraulic End Cover onto the Pulley Cover.
- b. Remove the three Screws, JIMS No. **1112**, holding the Seal Retaining Plate, JIMS No. **8428** and remove the Seal Retaining Plate & Seal.
- c. From the inside of Pulley Cover push on the end of the Piston, JIMS No. **8429**, until it is pushed free from the Pulley Cover.
- d. Replace any Seals or O-rings that you deem not serviceable. See Parts list in this Instruction sheet.

Note: Replace Seal and O-rings one at a time so that sealing direction can be maintained.

Apply DOT 5 Brake Fluid to all working surfaces.

- e. Reinstall new Seal with JIMS Tool No. **2256**.

Note: Do not press new Seal in too far or damage to cover may occur.

- f. Place the Seal Retainer Plate over the seal aligning the 3 holes.
- g. Apply one drop of Blue Loctite onto the threads of each Seal Retainer Plate Screw, JIMS No. **1112**. Thread the screws into the holes in the pulley cover and torque to 60 in-lbs.
- h. Apply one drop of Blue Loctite onto the threads of each Hydraulic End Cover screw, JIMS No. **8430**. Thread the screws into the holes in the pulley cover and torque in a criss-cross pattern.

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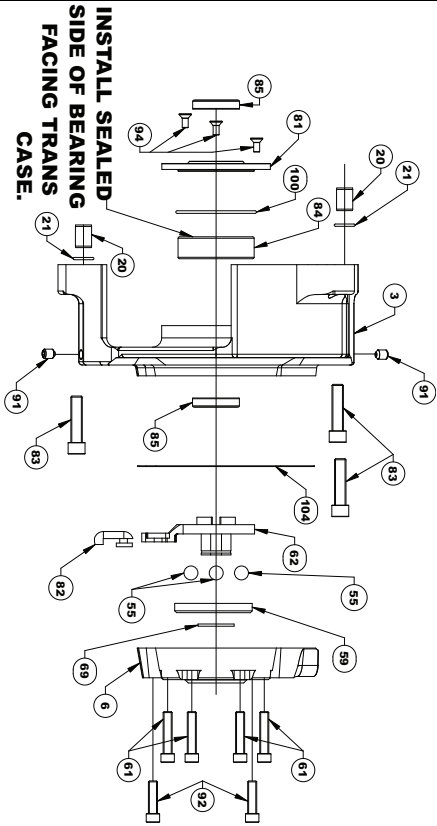
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MECHANICAL PULLEY COVER

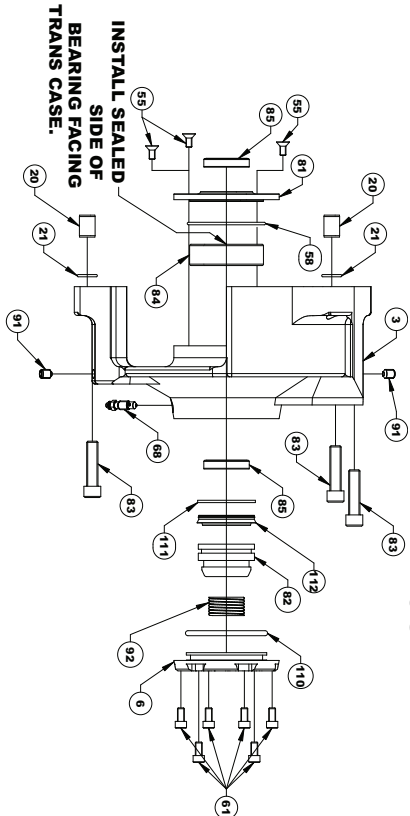
FIGURE 10



NO. QTY	JIMS P/N	DESCRIPTION
3	8441-1	PULLEY COVER, MECHANICAL, CHROMED, RSD
6	8442-1	END COVER, MECHANICAL, CHROMED, RSD
20	16595-99A	DOWEL, END COVER TO TRAPDOOR
21	11273	O-RING, END COVER DOWEL TO TRAPDOOR
55	8873	BALL 3/8" RAMP
59	25453-87A	RAMP, OUTER
61	1116	SCREW, 1/4-20 x 1-1/8" SHCS, CHROME, END COVER
62	25409-94B	RAMP, INNER
69	11250	RETAINER, RAMP
81	8428	SEAL RETAINER, RSD
82	34920-86	COUPLER, CLUTCH CABLE
83	1118	SCREW, 5/16-18 x 1-1/4" SHCS, CHROME
84	8419	BEARING, PULLEY COVER, RSD
85	12035B	SEAL (2), PULLEY COVER (1) MAIN DRIVE GEAR
91	8433	SET SCREW, 1/16 NPT, x 5/16", STAINLESS STEEL
92	1074	SCREW, 1/4-20 x 7/8, SHCS, CHROME, END CVR
94	1112	SCREW, 8-32 x 3/8" FHSS, SEAL RETAINER
100	8444	O-RING, SEAL RETAINER, RSD
104	8443	GASKET, MECH END COVER, RSD

HYDRAULIC PULLEY COVER

FIGURE 11



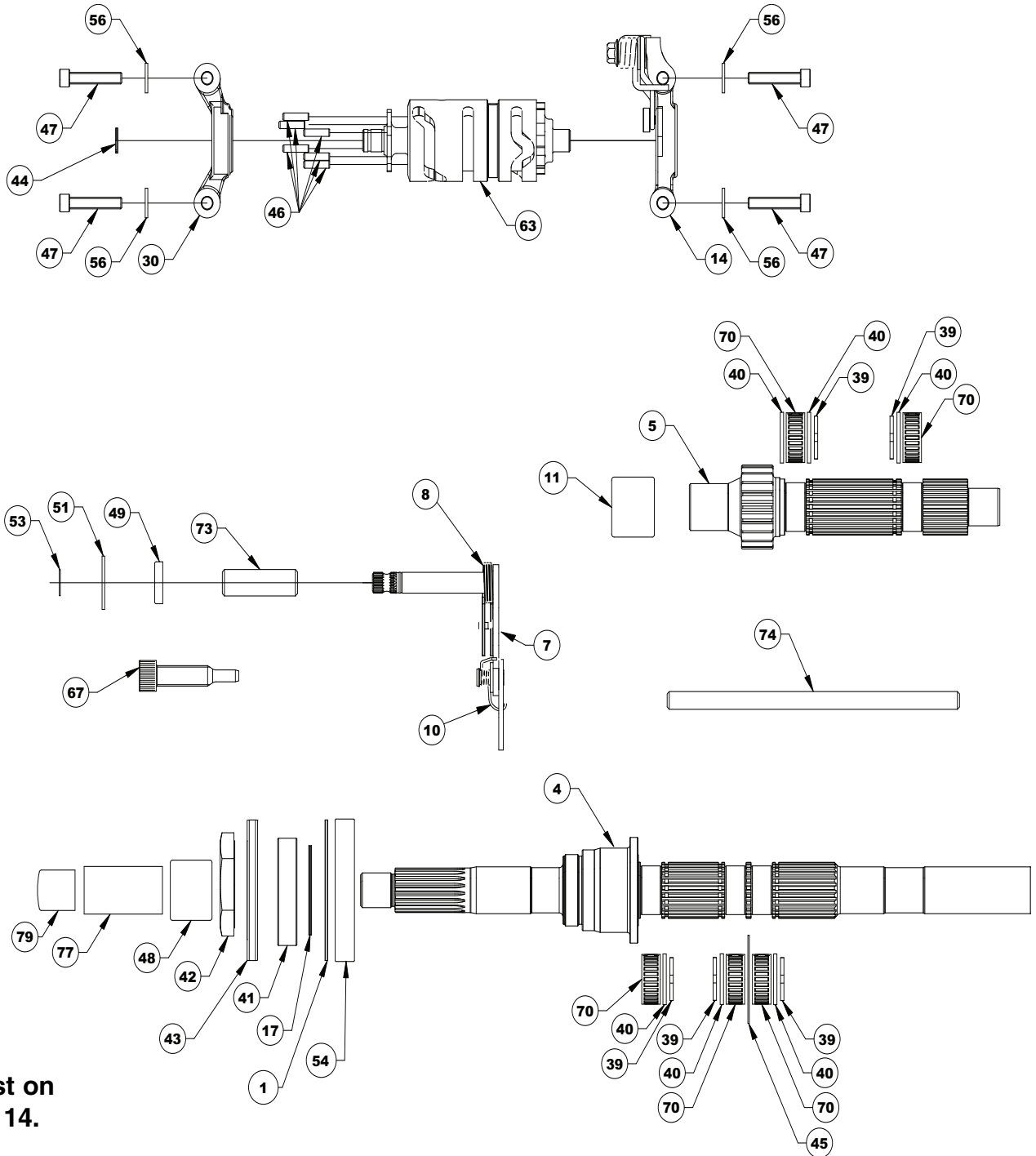
NO. QTY	JIMS P/N	DESCRIPTION
3	8422-1	PULLEY COVER, HYDRAULIC, CHROMED, RSD
6	8423-1	END COVER, HYDRAULIC, CHROMED, RSD
20	16595-99A	DOWEL, END COVER TO TRAPDOOR
21	11273	O-RING, END COVER DOWEL TO TRAPDOOR
55	1112	SCREW, 8-32 x 3/8" FHSS, SEAL RETAINER
58	8444	O-RING, SEAL, RETAINER, RSD
61	8430	SCREW, 10-24 x 3/8" SHCS, CHROME, END COVER
68	8431	BLEEDER, SCREW 1/4-28 x 1, CHROME
81	8428	SEAL RETAINER, RSD
82	8429	PISTON, HYDRAULIC
83	1118	SCREW, 5/16-18 x 1-1/4" SHCS, CHROME
84	8419	BEARING, PULLEY COVER, RSD
85	12035B	SEAL, PULLEY COVER
91	8433	SET SCREW, 1/16 NPT, x 5/16", STAINLESS STEEL
92	8432	SPRING, HYDRAULIC PISTON
110	8434	O-RING, END COVER
111	8435	O-RING, HYDRAULIC PISTON
112	8436	U-SEAL, HYDRAULIC PISTON

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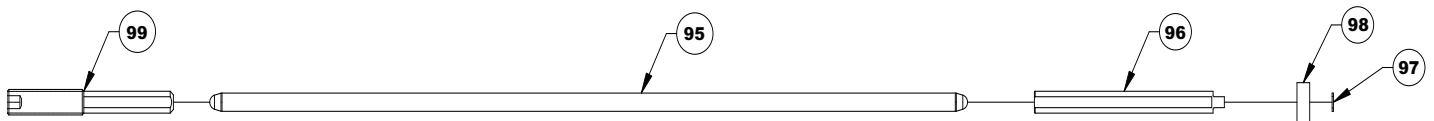


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PARTS DIAGRAM FOR: PILLOW BLOCK ASSEMBLY, COUNTERSHAFT ASSEMBLY, SHIFTER ASSEMBLY, MAINSHAFT ASSEMBLY WITH CLUTCH PUSHROD.



See Part List on
Pages 13 & 14.



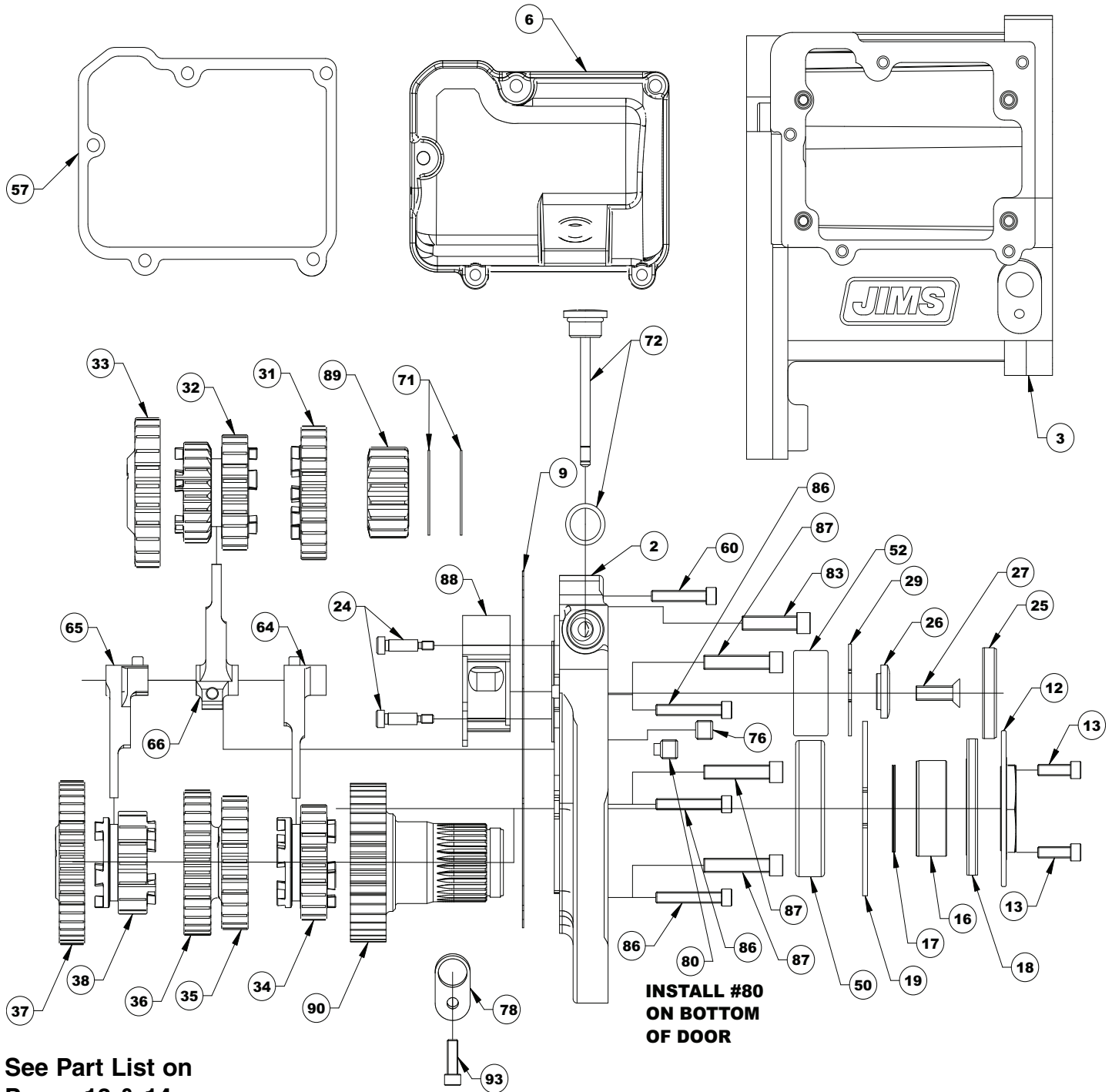
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PARTS DIAGRAM FOR: TOP LID, GEARS, SHIFT FORKS AND TRAP DOOR ASSEMBLY



See Part List on
Pages 13 & 14.

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PARTS LIST FOR: TOP LID, GEARS, SHIFT FORKS AND TRAP DOOR ASSEMBLY

NO.	QTY	JIMS P/N	DESCRIPTION
1	1	11161	RETAINER CASE
2	1	8416-1	TRAPDOOR, CHROME, RSD
3	1	7999M3	CASE, FXST, EVO, POLISHED
4	1	8412-1	MAINSHAFT ASSEMBLY, RSD
5	1	8409-1	COUNTERSHAFT, WITH 6TH GEAR, RSD
6	1	8999C	LID, TOP, CHROME
7	1	8324	ASSEMBLY, LEVER, SHIFTER
8	1	34064-00C	SPRING, SHIFTER SHAFT
9	1	8352	GASKET, TRAPDOOR
10	1	34977-02A	SPRING, RATCHET
11	1	8977	BEARING, COUNTER SHAFT
12	1	1708-1	MEGA NUT
13	2	1207	SCREW, 1/4-20 x 3/4" SHCS, PLAIN
14	1	33304-00	RIGHT PILLOW BLOCK WITH BEARING & RETAINER
16	1	8424	SPACER, RIGHT, PULLEY
17	2	11165	QUAD SEAL
18	1	12044A	SEAL, MAINSHAFT, TRAPDOOR, RSD
19	1	11057	RETAINER, CASE BEARING, SMALL
24	2	8426	SHOULDER BOLT, 10-24, .250 x 3/4"
25	1	8421	SEAL, END CA P, 50MM x 8MM
26	1	8427	RETAINER, COUNTERSHAFT BEARING, RSD
27	1	1727	SCREW, 5/16-18 x 1" FHSS
29	1	11020	RETAINER, DOOR BEARING, SMALL
30	1	33301-00A	LEFT PILLOW BLOCK WITH BEARING & RETAINER
31	1	8404-1	GEAR, 2ND COUNTERSHAFT, RSD
32	1	8405-1	GEAR, 3RD & 4TH, COUNTERSHAFT, RSD
33	1	8402-1	GEAR, 1ST, COUNTERSHAFT, RSD
34	1	8403-1	GEAR, 2ND, MAINSHAFT, RSD
35	1	8407-1	GEAR, 3RD, MAINSHAFT, RSD
36	1	8406-1	GEAR, 4TH, MAINSHAFT, RSD
37	1	8408-1	GEAR, 6TH, MAINSHAFT, RSD
38	1	8401-1	GEAR, 1ST, MAINSHAFT, RSD
39	5	11067	RETAINER, MAINSHAFT/COUNTERSHAFT
40	6	6003	THRUST WASHER, MAINSHAFT/COUNTERSHAFT
41	1	8437	SPACER, PRIMARY SIDE
42	1	35211-91B	NUT, LEFT MAINSHAFT, RSD
43	1	12067	SEAL, MAIN CASE
44	1	11342	RETAINING RING, SHIFT DRUM

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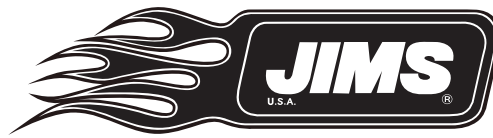
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PARTS LIST FOR: PILLOW BLOCK ASSEMBLY, COUNTERSHAFT ASSEMBLY, SHIFTER ASSEMBLY, MAINSHAFT ASSEMBLY WITH CLUTCH PUSHROD.

NO.	QTY	JIMS P/N	DESCRIPTION
45	1	8420	THRUST WASHER, 30MM x 47MM x .034
46	6	8356	PIN, SHIFT DRUM
47	4	2135	SCREW, PILLOW BLOCK, ALLEN
48	1	34091-85	RACE, MAINSHAFT
49	1	12045	SEAL, SHIFTER
50	1	8978A	BEARING, TRAPDOOR, SMALL
51	1	6497HW	WASHER, SHIFTER SEAL
52	1	8418	BEARING, TRAPDOOR, COUNTERSHAFT, RSD
53	1	11150	RETAINER, SHIFTER SHAFT
54	1	8996	BEARING, MAIN CASE
56	4	1215	WASHER, PLAIN, SPECIAL, PILLOW BLOCK
57	1	34904-86	GASKET, LID, (FXST & FLHT)
60	1	1258	SCREW, 1/4-20 x 1-1/4" SHCS, TRAP DOOR
63	1	8425	SHIFT DRUM, RSD
64	1	8413	SHIFT FORK, 3RD/5TH, RSD
65	1	8414	SHIFT FORK, 4TH/6TH, RSD
66	1	8415	SHIFT FORK, 1ST/2ND, RSD
67	1	34978-00A	SCREW, CENTERING PIN
70	5	8876A	BEARING, SPLIT CAGE
71	2	8081	SHAFT, SPACER
72	1	37075-87	DIPSTICK, W/O-RING, CHROME
73	1	7514	SLEEVE, SHIFTER SHAFT (34979-00)
74	1	8446	SHAFT, SHIFT FORK
76	1	3784	SET SCREW, SHIFT FORK SHAFT
77	1	8012-1	SHRINKWRAP, 1" x 2-1/2"
78	1	8440	SPACER, SENSOR
79	1	2401	CAP, BLK PLASTIC
80	1	739A	PLUG, TRAPDOOR
86	3	1261	SCREW, 1/4-20 x 1-1/2, SHCS, CHROME, DOOR
87	3	8092	SCREW, 5/16-18 x 1-1/2" SHCS, CHROME, DOOR
88	1	8417	TROUGH, OIL PICK-UP, RSD
89	1	8299	GEAR, 5TH, COUNTERSHAFT 17T
90	1	8296	GEAR, 5TH, MAINSHAFT 32T
93	1	1259	SCREW, 1/4-20x3/4, SHCS, CHROME, SENSOR PLATE
95	1	37088-90	PUSHROD, CENTER
96	1	8452	RIGHT PUSHROD
97	1	8453	RETAINER, PUSHROD
98	1	8451	BEARING, PUSHROD
99	1	8326	SCREW, ADJUSTER, CLUTCH HUB
101	1	1708-IS	INSTRUCTION SHEET, MEGA NUT (NOT SHOWN)
113	1	11289	O-RING, SPEEDO SENSOR (NOT SHOWN)
114	1	34904-00	NEUTRAL SWITCH (NOT SHOWN)
115	1	11290	O-RING NEUTRAL SWITCH (NOT SHOWN)
116	1	35051-82	BEARING, M.D.G (NOT SHOWN)

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No. 8269 RIGHT SIDE DRIVE REBUILD KIT PARTS

Refer to parts drawings on pages 10,11, & 12 that will match up to the item numbers on the parts list.

NO.	QTY	JIMS #	Description
1	1	11161	RETAINER RING, MDG
8	1	34064-00C	SPRING , SHIFTER SHAFT
9	1	8352	GASKET, TRAPDOOR, RSD
11	1	8977	NEEDLE BEARING, C/S END
17	2	11165	QUAD SEAL
18	1	12044A	MAIN SEAL, RSD TRAPDOOR
19	1	11057	RETAINING RING, MDG
21	2	11273	O-RING, DOWEL PIN
25	1	8421	SEAL, C/S END CAP.
29	1	11020	RETAINING RING, DOOR
39	5	11067	RETAINING RING, M/S, C/S
40	6	6003	THRUST WASHER, M/S, C/S
43	1	12067	SEAL MAINSHAFT
44	1	11342	RETAINER, SHIFT DRUM
45	1	8420	THRUST WASHER, M/S, RSD
48	6	8356	DOWEL PIN, SHIFT DRUM
48	1	34091-85	RACE, MAINSHAFT
49	1	12045	SEAL, SHIFTER SHIFT
50	1	8978A	BEARING, M/S RSD, TRAPDOOR
52	1	8418	BEARING, CS RSD, TRAPDOOR
53	1	11150	RETAINER, SHIFTER SHAFT
54	1	8996	BEARING, CASE MAIN DRIVE
55	3	8873	BALL BEARING, CLUTCH RAMP
57	1	34904-86	GASKET, TRANS TOP LID
57	1	867	34904-86C TOP COVER GASKET
69	1	11250	RETAINER RING, RAMP, MECHANICAL
70	5	8876A	BEARING, MS, CS
72	1	11132	O-RING, DIPSTICK
74	1	8446	SHIFT FORK SHAFT
84	1	8419	BEARING, PULLEY COVER
85	3	12035B	SEAL, (1) MAIN DRIVE. GEAR, (2) RSD PULLEY CVR.
97	1	8453	RETAINER, RSD CLUTCH PUSHROD
98	1	8451	BEARING, RSD CLUTCH PUSHROD
100	1	8444	O-RING, SEAL, RETAINER , RSD
104	1	8443	GASKET MECHANICAL END COVER
110	1	8434	O-RING, SEAL, END CAP, RSD
111	1	8435	O-RING, HYDRAULIC PISTON
112	1	8436	O-RING, U-SEAL HYDRAULIC PISTON
113	1	11289	O-RING, SPEEDO SENSOR
115	1	11290	O-RING, NEUTRAL SWITCH
116	2	35051-89	BEARING, LATE 5TH GEAR

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1. JIMS® shall have no obligation in the event a JIMS® part is modified by any other person or organization.
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5. Any JIMS® parts or tools that are returned and replaced become the property of JIMS® and will not be Returned under any circumstance.

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