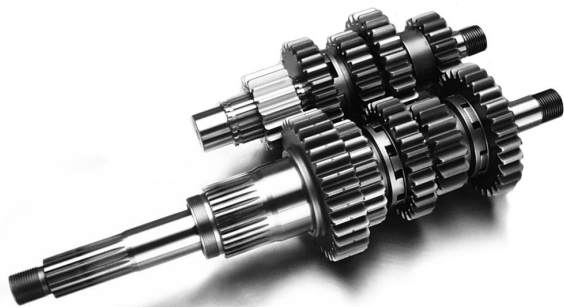




**INSTRUCTION SHEET FOR 5-SPEED PRO CUT TRANSMISSION AND GEAR SET**

THIS INSTRUCTION SHEET COVERS THE FOLLOWING PART #'S:  
8058, 8000P, 8002P, 8004P, 8001P, 8003P, 8032P, 8028P, AND 8030P.

IF YOU BOUGHT A COMPLETE JIMS® TRANSMISSION WE HAVE INCLUDED THIS INSTRUCTION SHEET AS A REFERENCE.



**JIMS® TOOLS REQUIRED:**

- #2234 Primary Drive Locking Tool
- #94660-37A Main shaft Sprocket Wrench
- #2260 Big Twin Sprocket Locker
- #34902-84 Main shaft Bearing Race Tool
- #35316-80 5-speed Transmission Main Drive Gear Tool
- #2189 5-Speed Shaft Installer
- #2283 Door puller
- #2362 Lock ring pliers
- #1078 Door Bearing Remover / Installer

Refer to H-D® Service Manual for specifications.

(NOTE: Read all instructions before performing work.)

**NOTE:**

1. Pro-Cut gears are designed and manufactured different than Clean-Cut gears.
2. Clean-cut gears are not designed to work with Pro-Cut gears. Do not mix gears.
3. Each Pro-Cut gear is identified by 3 "Pip" marks (Dots; See figure 2 page 4) on each gear and lasered with part number for each gear.

**WARRANTY**

All JIMS® parts are guaranteed to the original purchaser to be free of manufacturing defects in material and workmanship for a period of six (6) months from the date of purchase. Merchandise that fails to conform to these conditions will be repaired or replaced at JIMS® option the parts are returned within the six (6) months warranty period or within ten (10) Days thereafter.

In the event warranty service is required, the original purchaser must call or write JIMS® immediately with the problem. Some problems can be rectified by a telephone call and need no further course of action. A part suspected of being defected must not be replaced by a dealer without prior authorization by JIMS®. If it is deemed necessary for JIMS® to make an evaluation to determine whether the part is defective, it must be packaged properly to prevent further damage and be returned pre-paid to JIMS® with a copy of the original invoice of purchase and a detailed letter outlining the nature of the problem, how the part was used and the circumstances at the time of failure. If after an evaluation has been made by JIMS® and the part was found to be defective, repair, replacement or credit will be granted.

**ADDITIONAL WARRANTY PROVISIONS**

1. JIMS® shall have no obligation in the event a JIMS® part is modified by person or organization.
2. JIMS® shall have no obligation if a JIMS® part becomes defective in whole or in part as a result of improper installation, improper maintenance, improper use, abnormal operation, or any other misuse or mistreatment of the part.
3. JIMS® shall not be liable for any consequential or incidental damages resulting in the failure of a JIMS® part, the breach of any warranties, the failure to deliver, delay in delivery, delivery in nonconforming condition, or for any other breach of contract or duty between JIMS® and a customer.
4. JIMS® parts are designed exclusively for use in Harley-Davidson® motorcycles. JIMS® shall have no warranty or liability obligation if JIMS® part is used in any other application.
5. Any parts or tool replaced by JIMS® becomes the property of JIMS® and will not be returned under any circumstance.

**CAUTION: WEAR SAFETY GLASSES. EXCESSIVE FORCE MAY DAMAGE PARTS!**

**WARNING: ALWAYS REMOVE NEGATIVE CABLE FROM BATTERY BEFORE PERFORMING ANY WORK!**

### ***Pre-assembly procedures***

1. Unpack and inspect JIMS® kit No.8058 for damaged or missing parts. Immediately notify the JIMS® dealer you purchased this kit from for appropriate actions. Use parts list one page 5 for inventory reference.
2. Disassemble the transmission according to your H.D.® service manual. Follow the instructions carefully, failure to do so may result in damage to your transmission.
3. Clean and inspect all reusable parts and replace parts as needed.
4. Press new trapdoor bearings (JIMS® No. 8998 or equivalent) with JIMS Bearing Installer tool No.1078 and JIMS® assembly lube No.1226. *Note: Always protect the trap door bearing races when pressing bearings.*

### ***Step-1 Assemble 1st and 4th gears before installing shafts to trapdoor. See figure 1.***

*CAUTION: Each gear is lasered with its part #. It must be installed as shown in figure #1 only!(Page 3)*

- a. Clip one retaining ring (16) into the first groove closest to the trapdoor on both the countershaft (3), and mainshaft (2). See Figure 1.
- b. Slide one thrust-washer (15) on each shaft and install lubed bearings (12) into bearing races. Use JIMS® Assembly Lube No.1226.
- c. Slide mainshaft 4th gear (7) over bearing with the engagement teeth facing thrust-washer (15), and retaining ring (16). Use JIMS® Assembly lube No.1226.
- d. Slide countershaft 1st gear (9) over countershaft bearing with the recessed engagement teeth facing the thrust-washer (15) and retaining ring (16).
- e. Slide mainshaft 1st gear onto mainshaft with the engagement teeth mating with 4th gear.
- f. Slide countershaft 4th (10) onto countershaft with the gear's smooth extruded portion contacting 1st gear (9).
- g. Slide tapered spacers (20) (23) on each shaft with the taper pointing away from gears. There are two style spacers, the spacer with the raised step (20) mates with the mainshaft 4th gear (7).

### ***Step-2 Press shafts into trapdoor. See figure 1.***

*Warning: When using an arbor press, the trapdoor bearing races must be supported with an adequate support method such as a socket or damage will occur to the bearings. Use a socket, or an equivalent to support races.*

- a. Use JIMS Shaft Installer tool No. 2189 to press shafts into trapdoor bearings. If using an arbor press, support races, and press mainshaft in first followed by countershaft. When pressing shafts into the trapdoor, the mainshaft is to the left of the shifter shaft hole when viewing the trapdoor from the top.
- b. Install one spacer (21) and nut (22) on each shaft and tighten the nuts finger tight. Do not tighten nuts (22) fully until remaining gears are installed.

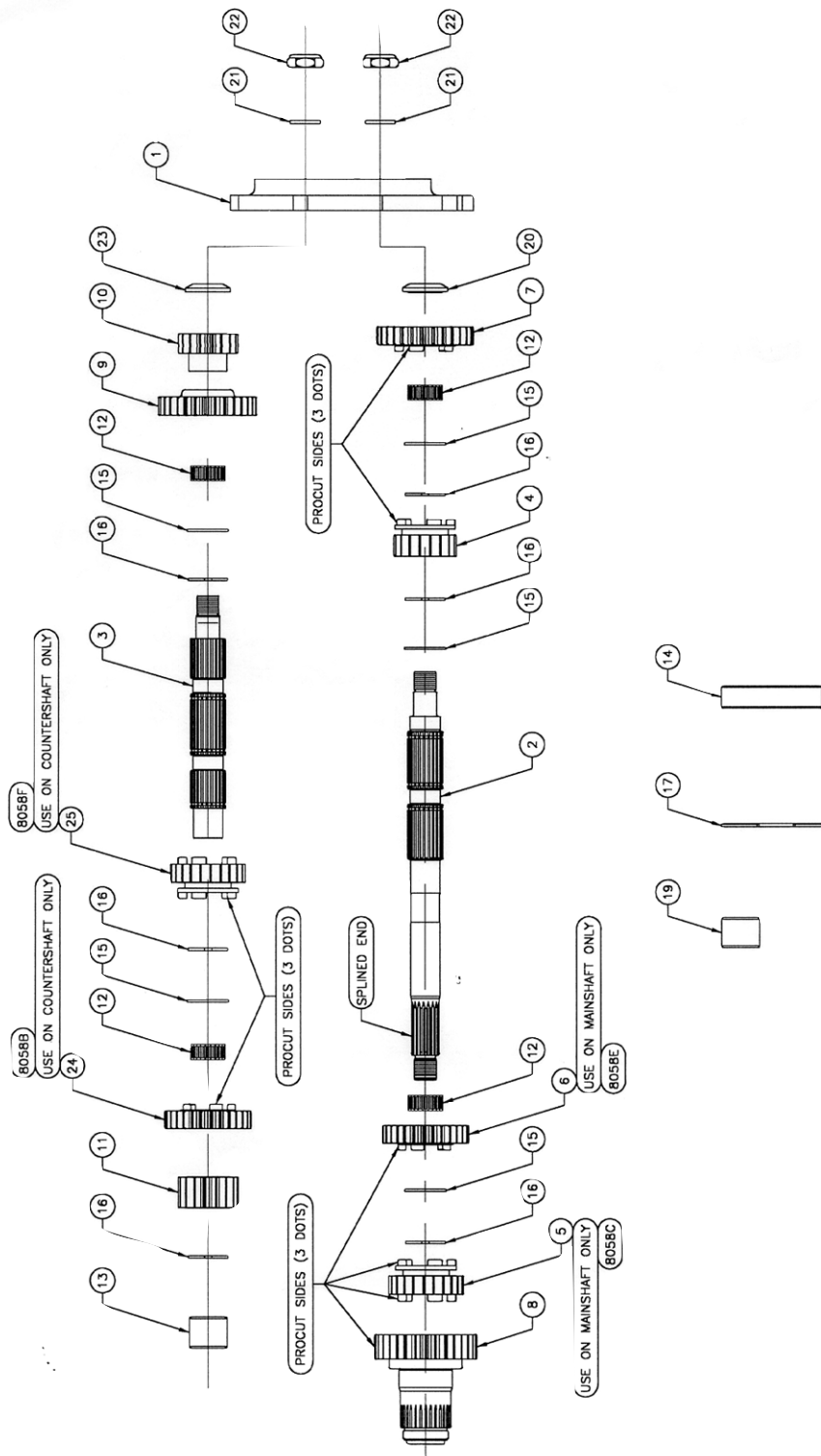
### ***Step-3 Assemble remaining gears and install transmission. See figure 1.***

*CAUTION: Each gear is lasered with its part #. It must be installed as shown in figure #1 only!(Page 3)*

- a. Slide on and clip a retaining ring (16) into the mainshaft groove just above the 1st gear along with the thrust-washer (15). Lube and install bearing (12). Use JIMS® Assembly Lube No.1226.
- b. Slide on mainshaft 3rd gear (6) over bearing (12) with engagement teeth facing away from trapdoor and secure it with a thrust-washer (15) and retaining ring (16).
- c. Slide on mainshaft 2nd gear (5) with shifter fork groove facing 3rd gear (6).
- d. Slide on countershaft 3rd with the shifter fork groove facing away from the trapdoor.
- e. Slide on and clip a retaining ring (16) into the countershaft groove just above 3rd gear (25). Then position the thrust-washer (15) and bearing (12). Use JIMS® Assembly Lube No.1226.
- f. Slide on countershaft 2nd (24) gear over bearing (12) with engagement teeth facing 3rd gear (25).
- g. Slide on countershaft 5th (11) and secure it with a thrust-washer (15) and retaining ring (16).
- h. Engage two gears together to lock the transmission and tighten the trapdoor nuts to 33-45 ft-lbs of torque.

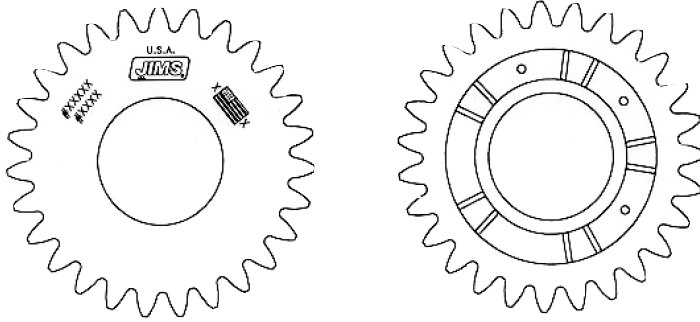
### ***Step-4 Install transmission assembly into to case.***

*Note: To prevent damage to main drive oil seal, wrap mainshaft splines with tape or use JIMS Mainshaft sleeve tool No.2256-2. Install the assembly in the transmission case as per H-D® Service Manual.*



**FIGURE 1**  
**5-SPEED PRO-CUT GEARS**

CAUTION: WEAR SAFETY GLASSES. EXCESSIVE FORCE MAY DAMAGE PARTS!  
SEE JIMS® CATALOG FOR OVER 100 OTHER TOP QUALITY PROFESSIONAL TOOLS.  
THE LAST TOOLS YOU WILL EVER NEED TO BUY.



**FIGURE 2  
PRO-CUT GEARS**  
Each Pro-Cut gear is identified by 3  
PIP Marks (Dots) and lasered with part  
number

## PARTS LIST

No.	QTY	TITLE OR DESCRIPTION	PART NUMBER	INCLUDED IN 8058 5-SPEED ONLY
1	1	TRAP DOOR	SEE CATALOG	
2	1	MAINSHAFT	35042-91	X
3	1	COUNTERSHAFT	35632-79	X
4	1	GEAR, MAINSHAFT 1ST, PRO CUT	8058A	X
5	1	GEAR, MAINSHAFT 2ND, PRO CUT	8058C	X
6	1	GEAR, MAINSHAFT 3RD, PRO CUT	8058E	X
7	1	GEAR, MAINSHAFT 4TH, PRO CUT	8058G	X
8	1	GEAR, MAINSHAFT 5TH, PRO CUT	8058D	X
9	1	GEAR, COUNTERSHAFT 1ST	35622-CR	X
10	1	GEAR, COUNTERSHAFT 4TH	35625-79B	X
11	1	GEAR, COUNTERSHAFT 5TH	35626-79B	X
12	4	BEARING, MAINSHAFT & COUNTERSHAFT	8876A	
13	1	BEARING, COUNTERSHAFT END	8977	
14	1	BEARING, TRANSMISSION CASE	8996	
15	5	THRUST WASHER, MAINSHAFT & COUNTERSHAFT	6003	
16	6	RETAINING RING, MAINSHAFT & COUNTERSHAFT	11067	
17	1	RETAINING RING, MAIN DRIVE GEAR	11161	
18	1	GASKET & SEAL KIT	33031-91	
19	1	RACE, MAINSHAFT INNER PRIMARY	34091-85	
20	1	SPACER, MAINSHAFT DOOR SIDE WITH SHOULDER	35064-79	
21	2	SPACER, WASHER, MAINSHAFT & COUNTERSHAFT	35076-79	
22	2	LOCK NUT, MAINSHAFT & COUNTERSHAFT	35078-79	
23	1	SPACER, COUNTERSHAFT	35629-79	
24	1	GEAR, COUNTERSHAFT, 2ND, PRO CUT	8058B	X
25	1	GEAR, COUNTERSHAFT, 3RD, PRO CUT	8058F	X
26	1	INSTRUCTION SHEET	8058-IS	X

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