

A Division of Thiessen Products, Inc.

INSTRUCTION SHEET FOR #8100 PRECISION CUT 4/5 SUPER KIT

NO.8100 PRECISION CUT 4/5 SUPER KIT



Application/ Year	Part No.	Gears
FX & FL 1970 early '84	8001	Precision-Cut Gears

For ease of installation it is recommended to use JIMS No.8096 or 8096P 4/5 transmission cases. Before beginning the installation of this super kit transmission you should read the complete instructions and refer to the exploded parts drawing and parts list on page 3 & 4. You will need a Harley Davidson® service manual that covers OEM 5-speed transmissions (preferably 5-speed Softails 2000-2006) to assist you in assembly or disassembly of your transmission. Refer to the transmission rebuild section (In your Service Manual) for assistance with installing the gear set/trap door assembly, shift forks, shift drum and lever assembly. You will also need some special tools to perform portions of this assembly. See "JIMS® Recommended Tool List"

JIMS® Recommended Parts to complete your transmission assembly not included in this kit.

No. **8096** JIMS 4/5 Transmission Case, Plain
 No. **8096P** JIMS 4/5 Transmission Case, Polished
 No. **33715-85AC** Chrome shift lever (OEM No.33715-85)
 No. **2371CK** Chrome Side Cover Kit (OEM No.37105-87A)
 No. **8999CK** Chrome Top Cover Kit (OEM No.34468-98)
 No. **33904-00** Neutral Switch

JIMS® Recommended Tool List

No. **1008-TS** Transmission Stand
 No. **95660-85** Main Seal Installer
 No. **35316-80** Main Gear and Bearing Installer/Remover
 No. **2362** Retaining Ring Pliers
 No. **1664** Shifter Shaft Sleeve Tool

After you have completed the transmission assembly you will need to refer to the instruction sheet you received with your transmission case (JIMS® No. 8028C6-IS). If you have misplaced this instruction sheet, call JIMS® at 805-482-6913 and a representative will fax or e-mail you a copy. You may also download the instruction sheet from our web site at www.jimsusa.com. This instruction sheet will assist you with the installation of the transmission into your chassis as well as list the necessary tools needed to complete the installation.

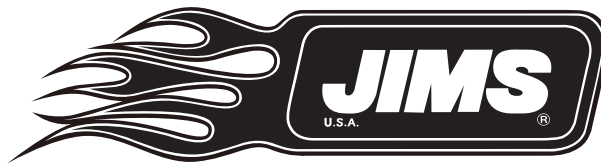
NOTE: When selecting a top lid you must use 1998 H-D® year application lid designed to work with a 1998-99 shift drum and neutral switch and wire accordingly.

You must install No.7514 shift shaft sleeve to work with the updated shift drum assembly. The late sleeve is 1.785" long.

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.

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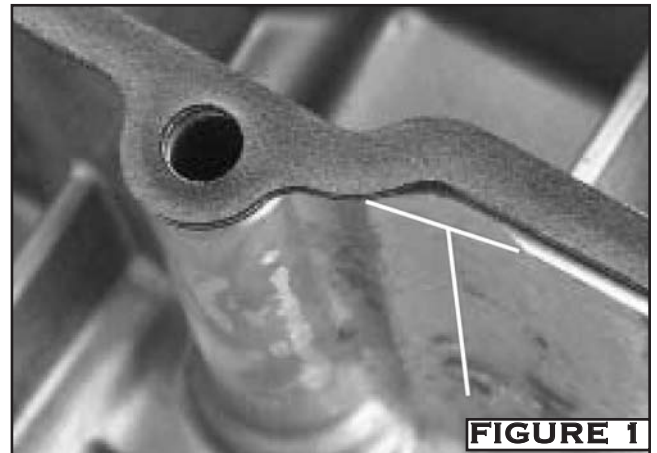
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INSTRUCTIONS FOR PREPARING THE TRANSMISSION TOP COVER TO CLEAR THE NEW SHIFTING LEVER:

NOTE: 1998-Present FXST transmission top covers do not need modifying.

1. Place new top cover gasket JIMS® No.34904-86 on the trans top cover flange.
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 flange 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 the 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 (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.



Neutral Switch

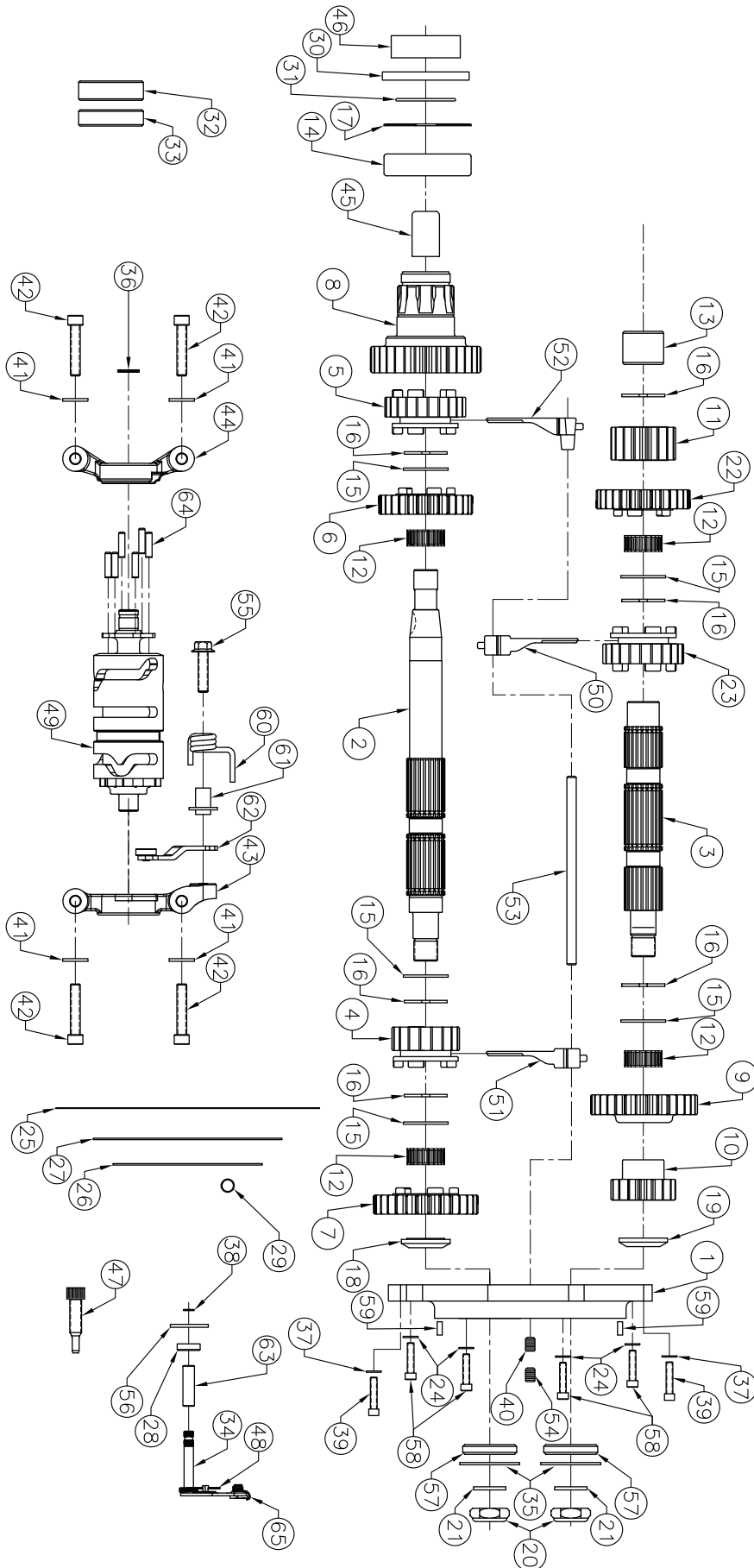
The early single post neutral switch should work fine. If for some reason your neutral switch does not work, use the late style (33904-00). You will need two connections No. 72405-98TN and 72405-98BK. Ground one connector to frame and run the other to the original neutral light wire.

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PARTS LIST			
NO.	QTY.	TITLE OR DESCRIPTION	PART NUMBER
1	1	TRAP DOOR , CHROME	2347-75C
2	1	MAINSHAFT	35042-79
3	1	COUNTERSHAFT	35632S
4	1	GEAR, MAINSHAFT 1st, PRECISION CUT	8289
5	1	GEAR, MAINSHAFT 2nd PRECISION CUT	8291
6	1	GEAR, MAINSHAFT 3rd PRECISION CUT	8292
7	1	GEAR, MAINSHAFT 4th PRECISION CUT	8294
8	1	GEAR, MAINSHAFT 5th	8298-3
9	1	GEAR, COUNTERSHAFT 1st	8290
10	1	GEAR, COUNTERSHAFT 4th	8294
11	1	GEAR, COUNTERSHAFT 5th	8299
12	4	BEARING, MAINSHAFT & COUNTERSHAFT	8876A
13	1	BEARING, COUNTERSHAFT END	8048
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	SPACER, MAINSHAFT DOOR SIDE WITH SHOULDER	35064-79
19	1	SPACER, COUNTERSHAFT, DOOR SIDE	35629-79
20	2	LOCK NUT, MAINSHAFT & COUNTERSHAFT	35078-79
21	2	SPACER, COUNTERSHAFT/MAINSHAFT	35076-79
22	1	GEAR, COUNTERSHAFT, 2nd, PRECISION CUT	8292
23	1	GEAR, COUNTERSHAFT, 3rd, PRECISION CUT	8291
24	4	WASHER 5/16" AN, LOWER DOOR	1119
25	1	GASKET, TRAP DOOR	35652-79
26	1	GASKET, SIDE COVER	36801-87A
27	1	GASKET, LID	34904-86D
28	1	SEAL, SHIFTER SHAFT	12045
29	1	O-RING, CLUTCH CABLE	11179
30	1	SEAL, CASE, MAIN DRIVE	12067A
31	1	QUAD SEAL	11165
32	1	BEARING SLEEVE, INNER PRIMARY	8051
33	1	BEARING, INNER PRIMARY	8050
34	1	SHIFTER LEVER ASSY	8324
35	2	RETAINING RING, DOOR BEARING	11020
36	1	RETAINING RING, SHIFT DRUM	11342
37	2	WASHER, CHROME, AN, 1/4"	1114
38	1	RETAINING RING, SHIFTER LEVER	11150
39	2	ALLEN SCREW, 1/4-20 x 1-1/8", UPPER DOOR	1116
40	1	ALLEN PLUG, 1/4 NPT x 1/2", UPPER DOOR	2384C
41	4	WASHER, PLAIN, AN, 1/4", PILLOW BLOCK	1215
42	4	ALLEN SCREW, PLAIN, 1/4-20 x 1-1/4", PILLOW BLOCK	2135
43	1	SUPPORT BLOCK, ASSY, RIGHT	33304-00
44	1	SUPPORT BLOCK, ASSY, LEFT	33301-00A
45	1	SHRINK WRAP	8012-1
46	1	SPACER, MAIN SHAFT SEAL	8089
47	1	SHIFTER ARM CENTERING PIN	34978-00A
48	1	SPRING, CENTERING	34064-00B
49	1	SHIFT DRUM	8080
50	1	SHIFT FORK, 1ST & 2ND	34191-79E
51	1	SHIFT FORK, 4TH	34195-79E
52	1	SHIFT FORK, 3RD & 5TH	34193-79E
53	1	SHIFT FORK SHAFT	34088S
54	1	SET SCREW, LOWER DOOR	2389
55	1	SCREW, DETENT ARM	33376-00
56	1	WASHER, SHIFTER SHAFT	6497HW
57	2	BEARING, TRAP DOOR	8998
58	4	ALLEN SCREW 5/16-18 x 1 1/4, LOWER DOOR	1118
59	2	ROLL PIN, TRAPDOOR	609
60	1	SPRING, DETENT ARM	33374-00
61	1	SLEEVE, DETENT ARM SPRING	33375-00A
62	1	DETENT FOLLOWER ASSEMBLY	33364-00A
63	1	SLEEVE, SHIFTER SHAFT	7514
64	6	DOWEL, SHIFT DRUM	8356
65	1	SPRING, SHIFT PAWL	34977-00A



EXPLODED PARTS VIEW
PARTS LIST ON PAGE 3

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