

# BAKER FRANKENTRANNY BUILDER'S KIT

# FRANKENTRANNY



BAKER Drivetrain's 1999 Road King w/Part Numbers: FT106SL (Frankentranny Kit), 478-56CP-U84 (Kicker Cover), 3511-64 (Kick Arm/Pedal Assembly), 475-56P (Oil Spout Assembly), and 5011(Gates Ignition Kit)

## P/N:

**FT106P** (FRANKENTRANNY BUILDERS KIT; 01-06 FL / 01-05 DYNA® / 00-06 SOFTAIL®)

**FT106L** (FRANKENTRANNY BUILDERS KIT; 90-97 BIG TWIN MOTORCYCLES)

**FT106SL** (FRANKENTRANNY BUILDERS KIT; 98-99 SOFTAIL® / 98-00 FL, DYNA®)

# BAKER FRANKENTRANNY KIT OVERVIEW

## FEATURES

The Frankentranny Builders Kit effectively converts a factory 5-Speed into a 6-Speed overdrive with provisions for a 1936-based 4-Speed kicker. Why did we do this? Because a timeless kicker on a Big Twin looks really cool! And kick starting your bike in a crowd of button pushers is boner material.

## FITMENT

- 1990-2006 Big Twin Motorcycles (except 2006 Dyna®)

## TOOLS, RESOURCES, REQUIRED PARTS

- Touring Models Must Use A True Dual Exhaust System For Proper Fitment
- Factory Service Manual For Your Motorcycle
- Factory Parts Manual For Your Motorcycle
- Common Hand Tools (allens, sockets, hammer / chisel)
- Die Grinder or Files (if transmission case needs to be modified)
- Torque Wrench (with ft. lbs. and in. lbs.)
- Blue Loctite® (242 Removable) or Equivalent
- Red Loctite® (271 Permanent) or Equivalent
- Feeler gauges
- Main Drive Gear & Bearing Service Tools
  - BAKER P/N ToolA-56
  - H-D® Equivalent P/N 35316A
- Pulley Nut Socket
  - BAKER P/N TOOLD-56
  - H-D® Equivalent P/N 94660-37B
- Inner Primary Race Service Tool
  - BAKER P/N TOOLB-56
  - H-D® Equivalent P/N 34902A

## PARTS REQUIRED TO COMPLETE BUILD

- Kicker Cover Kit w/Kicker Gears, See Page 14.
- Kicker Arm w/Pedal, See Page 14.
- Ignition Retrofit Required On Twin Cam Models, See Page 14.
- Fuel Injected Motorcycles Must Be Converted To Carburetor.
- 1993-2006 Touring Models Require A BAKER Oil Spout. The Bulky Stock Spout Interferes With The Frankentranny Bearing Door, See Page 14.
- Touring Models Must Use A True Dual Exhaust System For Proper Fitment.



**BAKER HIGHLY RECOMMENDS THAT OUR TRANSMISSION BUILDER'S KIT'S BE INSTALLED ONLY BY A TRAINED AND OR SEASONED MECHANIC WITH PRIOR H-D® TRANSMISSION EXPERIENCE. IF YOU HAVE NEVER SERVICED AN H-D® TRANSMISSION; DO NOT ATTEMPT INSTALLING THIS BUILDERS KIT.**

# **BAKER FRANKENTRANNY BUILDER'S KIT**

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# BAKER FRANKENTRANNY EXPLODED VIEW

## INCLUDED PARTS DETAIL

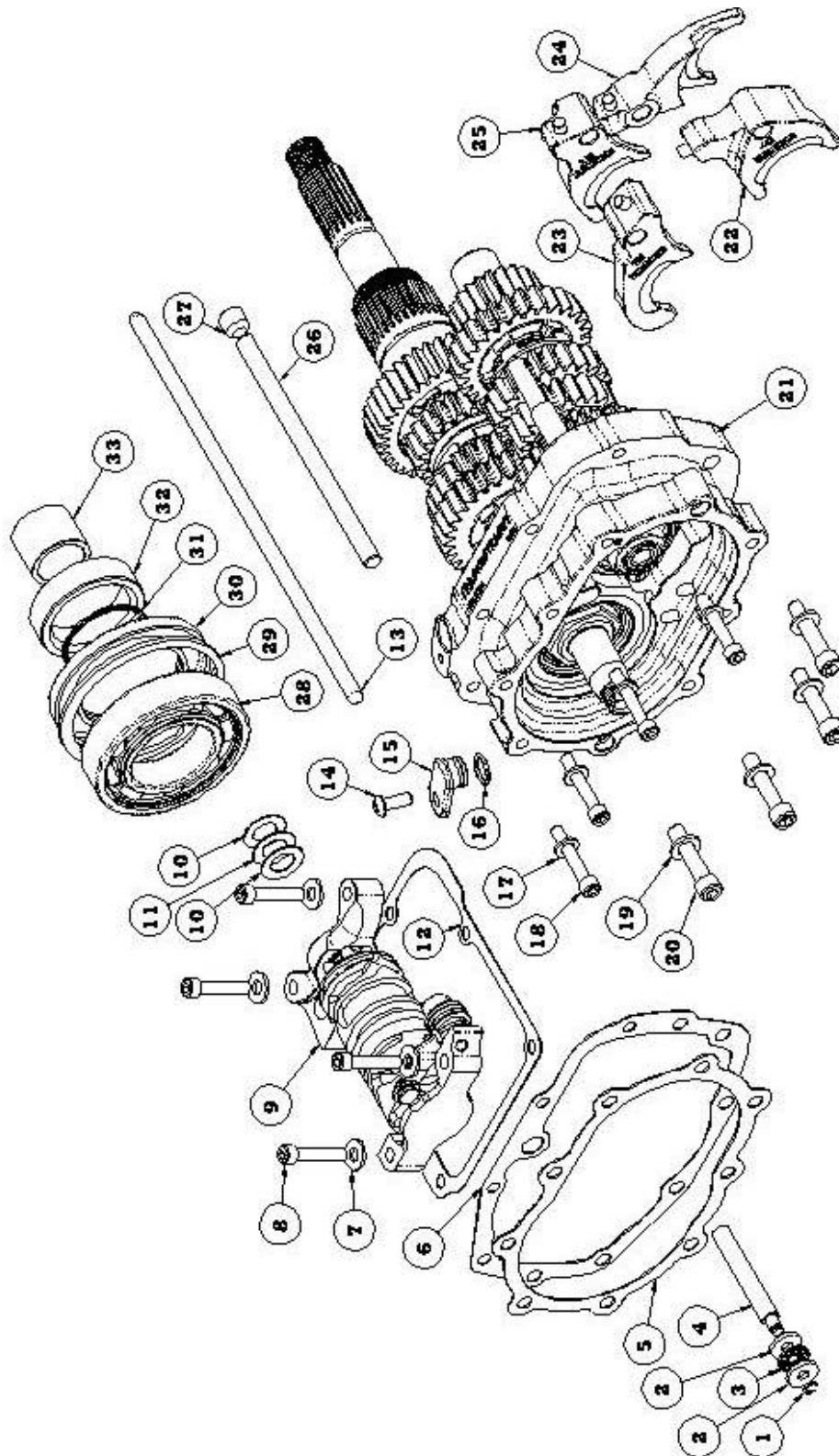


FIGURE 1

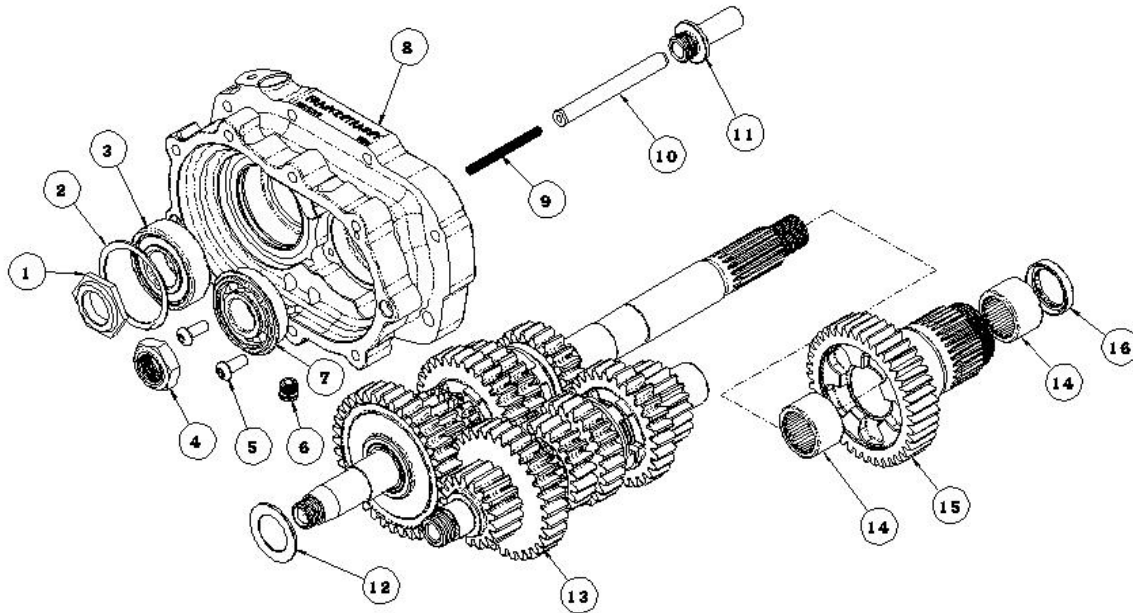
# BAKER FRANKENTRANNY EXPLODED VIEW

## INCLUDED PARTS DETAIL LEGEND

ITEM	QTY	P/N	DESCRIPTION
1	1	10705-01149	C-Clip, Actuator Rod
2	2	TWC411	Ground Washer, Actuator Rod
3	1	TC411	Thrust Washer, Actuator Rod
4	1	125-5R	Actuator Rod
5	1	6N4-SIDE	Gasket, Side Cover
6	1	35652-79B	Gasket, Bearing Door
7	4	33001	Washer, Shift System
8	4	23207	1/4-20 x 1.250" SHCS
9	1	4-6QEN / 5-6 QSN / 5-6 QLN	Shift System
10	2	98-620GA	.020" Shim, Shift System
11	1	98-625GA	.025" Shim, Shift System
12	1	34904-86E	Gasket, Top Cover
13	1	37088-90E	Rod, Clutch Release
14	1	73753	1/4-20 x .625" BHCS
15	1	108-6EP	Speedo Plug
16	1	66808	O-Ring, Buna #014
17	4	6099SS	Washer, 1/4"
18	4	25C125KCSS/P	1/4-20 x 1.250" SHCS S.S.P.
19	4	6100	Washer, 5/16"
20	4	31C150KCSS/P	5/16-18 x 1.500" SHCS S.S.P.
21	1	See Figure 2	Door / Gearset Assembly
22	1	102-6E	4 <sup>th</sup> Gear Countershaft Fork
23	1	101-6E	1 <sup>st</sup> Gear Mainshaft Fork
24	1	102-6F	3 <sup>rd</sup> Gear Countershaft Fork
25	1	101-56E	2 <sup>nd</sup> Gear Mainshaft Fork
26	1	122-64	Fork Rod (6.250" Length)
27	1	25702	1/2-20 X .500" Fork Rod Plug
28	1	6209	Bearing, Main Drive Gear
29	1	1302-334PP	Beveled Snap Ring
30	1	12067B	Seal, Main Drive Gear
31	1	11165A	Quad Seal
32	1	33344-94S	Spacer, Pulley
33	1	34091-85	Inner Bearing Race

# BAKER FRANKENTRANNY EXPLODED VIEW

## INCLUDED PARTS DETAIL

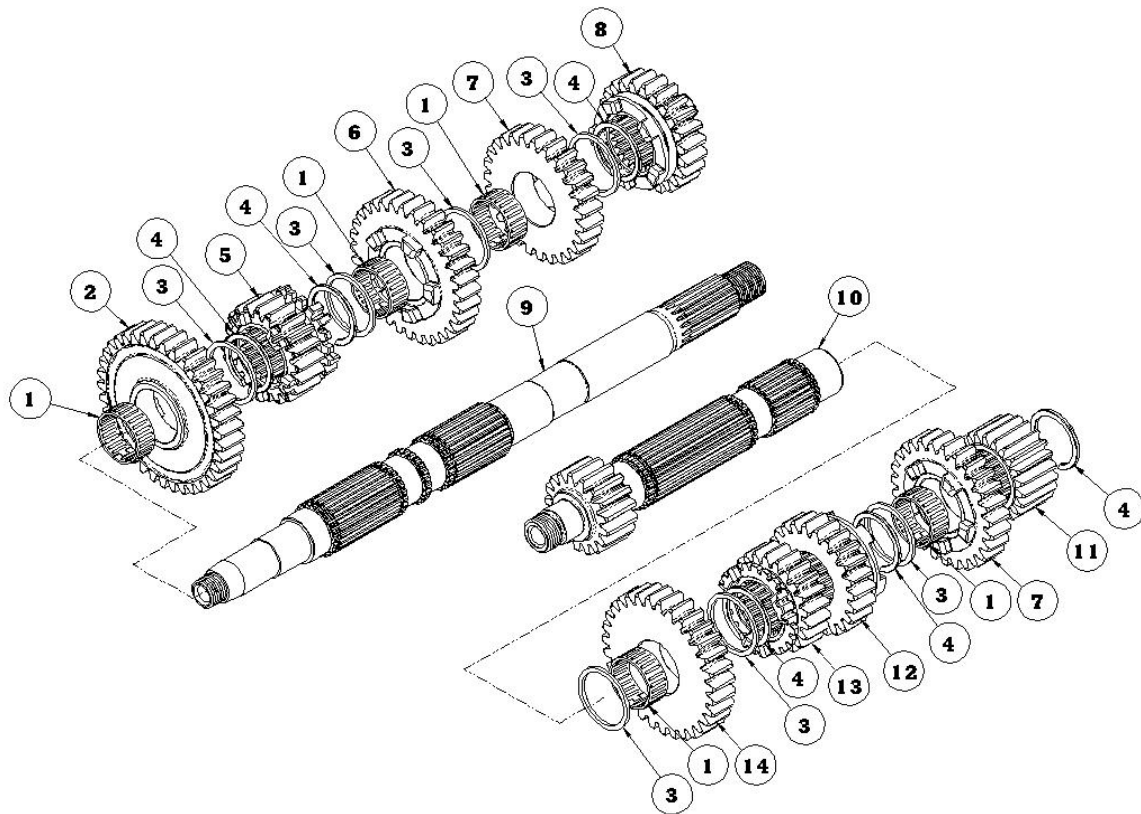


**FIGURE 2**

ITEM	QTY	P/N	DESCRIPTION
1	1	168-6N4	Nut, Mainshaft
2	1	WHM-200	2" Internal Spiral Lock
3	1	1640-DSTN	Bearing, Mainshaft
4	1	37141	3/4-16 Nylock Nut
5	2	24040	10-32 x 1.500" BHCS
6	1	51740-001	3/8-24 Zero Leak Drain Plug
7	1	204KG	Bearing, Countershaft
8	1	2-6F-P	Bearing Door
9	1	25287	10-32 x 2.000" Set Screw
10	1	112-6D	Auxiliary Fork Rod
11	1	115-6E	Support Bridge
12	1	TRB-1423	Shim, Mainshaft
13	1	See Figure 3	Gearset Assembly
14	2	HK2520	Bearing, Main Drive Gear
15	1	61005M	Main Drive Gear
16	1	12035B	Seal, Main Drive Gear

# BAKER FRANKENTRANNY EXPLODED VIEW

## INCLUDED PARTS DETAIL



**FIGURE 3**

ITEM	QTY	P/N	DESCRIPTION
1	5	8876A	Bearing, Gearset
2	1	60866M	6 <sup>th</sup> Gear, Mainshaft
3	7	6003B	Thrust Washer, Gearset
4	6	11067A	Retaining Ring, Gearset
5	1	62941M	1 <sup>st</sup> Gear, Mainshaft
6	1	61234M	4 <sup>th</sup> Gear, Mainshaft
7	2	603M2C	3 <sup>rd</sup> Gear Mainshaft / 2 <sup>nd</sup> Gear Countershaft
8	1	62212M	2 <sup>nd</sup> Gear, Mainshaft
9	1	996041-8	Mainshaft, Kicker Style
10	1	60866C	Countershaft, 6 <sup>th</sup> Gear
11	1	61005C	5 <sup>th</sup> Gear, Countershaft
12	1	61573C	3 <sup>rd</sup> Gear, Countershaft
13	1	61234C	4 <sup>th</sup> Gear, Countershaft
14	1	62941C	1 <sup>st</sup> Gear, Countershaft

# BAKER FRANKENTRANNY BUILDER'S KIT

## DISSASSEMBLY

- 1) FOR YOUR SAFETY, DISCONNECT BOTH BATTERY CABLES (FAILURE TO DO SO COULD RESULT IN PERSONAL INJURY).
- 2) With your bike securely supported on a bike lift or jack, drain the transmission fluid. Refer to your Factory Service Manual for location of your drain plug.
- 3) Refer to your Factory Service Manual for transmission gearset, main drive gear, and main drive gear bearing removal.
- 4) Remove your transmission speed sensor from the transmission case.

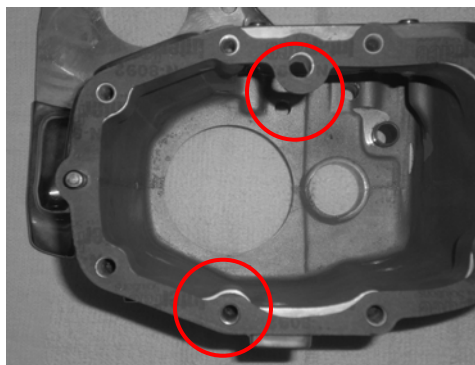
## CASE PREPERATION

The BAKER FrankenTranny Builder Kit hardware is designed to fit in a stock H-D® and aftermarket transmission cases without modification to the case or Six-Speed components, but there are exceptions. The internal walls of transmission cases float around occasionally, this is not a quality problem, but rather is inherent in the casting process. With that in mind the following steps are a number of checks to make sure that your new builders kit will function and perform flawlessly.



**IT IS CRITICAL THAT BEFORE YOU DO ANY MODIFICATION TO YOUR TRANSMISSION CASE THAT YOU THOROUGHLY CLEAN OUT THE CASE WITH BRAKE CLEANER OR LACQUER THINNER IN A WELL VENTILATED AREA, DRY OUT, THEN TAPE OFF THE COUNTER SHAFT BEARING WITH DUCT TAPE TO PREVENT ANY DEBRIS FROM ENTERING THE BEARING AS YOU WILL NOT BE REPLACING IT. IF YOU NOTICE THAT THE BEARING IS DAMAGED IN ANYWAY PLEASE REFER TO YOUR FACTORY SERVICE MANUAL FOR REPLACING THE BEARING. COUNTER SHAFT BEARING H-D® P/N 8977 OR BAKER P/N BK2526.**

- 1) Checking for 6<sup>th</sup> gear (P/N: 60866M) Mainshaft clearance.
  - A. Place the provided door gasket onto the transmission case. The gasket is going to act like a template.
  - B. If the meat of the boss around the 5/16-18 screw hole and fork rod boss hole is above or below the profile of the door gasket. Mark the area with a black marker; from roughly the 10 o'clock to 2 o'clock position on the 5/16-18 screw hole boss and the 6 o'clock to 8 o'clock position on the fork rod boss, shown in figure 4. If the meat of the boss is below or the same as the profile of the door gasket proceed to step 2.
  - C. After marking the area of concern in step 1B, remove the door gasket, then remove the case material using a coarse flat file or die grinder. Remove only the marked material roughly a 1/2" back from the door gasket surface.



SHOWN IN RED ARE THE AREAS OF CONCERN **FIGURE 4**

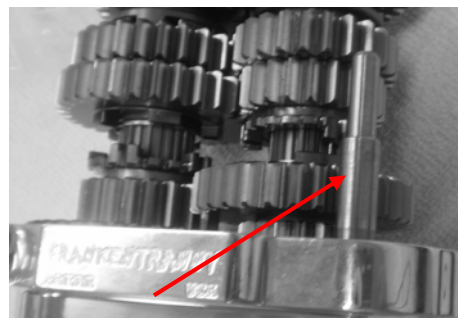
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## BAKER FRANKENTRANNY BUILDER'S KIT

### 2) Checking for Auxiliary Fork Rod bridge clearance.

- A. The auxiliary fork rod bridge comes installed on the inside of the bearing door shown in figure 5. The bridge functions as the support for the 4<sup>th</sup> gear counter shaft fork.
- B. Using the door gasket as a template again, as in step 1A. If any transmission case material is below the profile of the door gasket, mark with a black marker see figure 6.
- C. If case material is not below the gasket profile proceed to step 3. Remove the marked material with a coarse round file or die grinder. Remove the material inward (perpendicular to gasket surface) roughly 1-3/8" from the gasket surface.



SHOWING AUXILIARY FORK ROD **FIGURE 5**

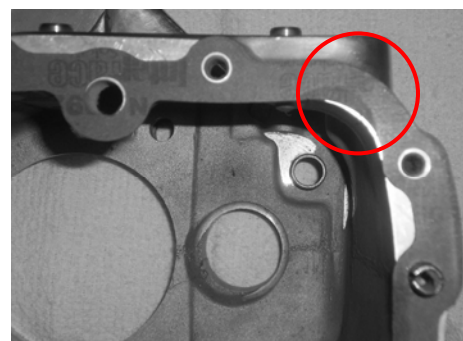
### 3) Checking right side pillow block clearance.

- A. Install the shift system on the transmission case. Install the four 1/4-20 SHCS bolts with washers; snug the bolts down evenly working in a circular pattern until all four bolts are tight.

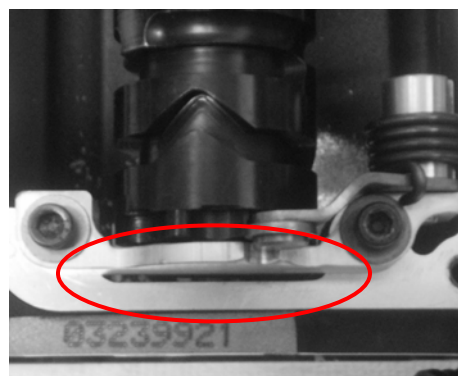


**NEVER RUN ONE CAP SCREW ALL THE WAY DOWN WITHOUT SEQUENTIALLY TIGHTENING THE OTHER THREE AS SPECIFIED; IRREPARABLE DAMAGE WILL RESULT.**

- B. Any clearance greater than zero is acceptable, figure 7.
- C. If you are installing this builder's kit into a Delkron® Softail® case, install the shift system onto the case and mark where the right side pillow block hits. You will have to remove some material as shown in figure 8 using a coarse file or die grinder.



SHOWN IN RED IS AREA OF CONCERN **FIGURE 6**



CLEARANCE BETWEEN PILLOW BLOCK AND CASE **FIGURE 7**

### 4) Checking top cover fitment.

- A. If you are installing an aftermarket top cover, you will have to check for proper fitment around the shift system. Some grinding on the casting webs might be necessary for correct function of the shift drum. All checks should be made with the shift system installed on the transmission.

**IF YOU HAVE A 2000-2006 SOFTAIL®, 2001-2005 DYNA®, OR A 2001-2006 FLT / FLH YOU MUST MODIFY YOUR STOCK SHIFTER PAWL (RATCHET PAWL). AS SHOWN ON THE NEXT PAGE.**

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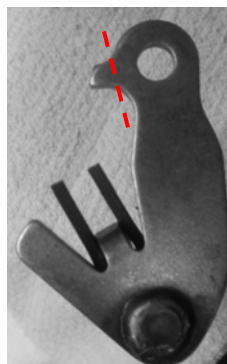


SHOWN IS THE AREA OF CONCERN **FIGURE 8**

## BAKER FRANKENTRANNY BUILDER'S KIT

### 5) Shifter Pawl modification.

- A. Proceed to gearset installation if the year and model specified on page 9 does not match your motorcycle.
- B. Following the procedures in your Factory Service Manual, remove the ratchet pawl from the transmission case.
- C. Remove the spring-loaded pawl from the arm to gain clear access to the "beak" on the arm. Using figures 9-10, remove the material as shown with a bench grinder or D.A. Grinder.
- D. Reassemble the ratchet pawl per your Factory Service Manual into the transmission case.



**FIGURE 9**



**FIGURE 10**

FIGURES SHOWING BEFORE AND AFTER PAWL MODIFICATION

## GEARSET INSTALLATION

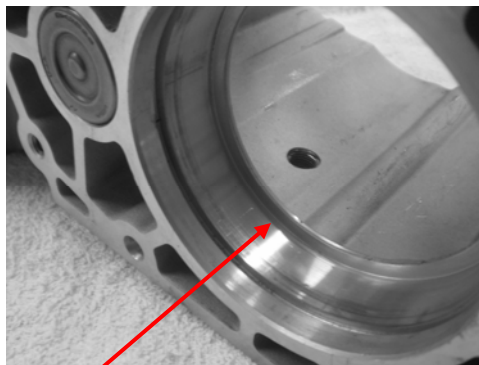


**IT IS CRITICAL THAT THE TRANSMISSION CASE BE FREE OF DEBRIS AND DIRT. USING BRAKE CLEANER OR LACQUER THINNER IN A WELL VENTILATED AREA, CLEAN OUT THE TRANSMISSION CASE. ANY DEBRIS LEFT IN CASE MIGHT CAUSE SEVERE DAMAGE TO THE GEARSET AND / OR BEARINGS.**

1) Install the provided main bearing (P/N: 6209) into the case with snap ring (P/N: 1302-334PP), bevel side facing out. Refer to your Factory Service Manual for guidelines and proper tools required.



**SPECIAL NOTE – 2000-UP 88B SOFTAIL® TRANSMISSION CASES HAVE A NOTED DEFECT TO THE LANDING THAT SUPPORTS THE 8996A (MAIN BEARING). THIS LANDING COMES STRAIGHT FROM THE FACTORY WITH A VERY THIN WALL THICKNESS AND CRACKS IN THE CORNER BETWEEN THE LANDING AND THE 8996A BEARING BORE. INSPECT CAREFULLY FOR THIS SITUATION, FIGURE 11. WHEN INSTALLING THE NEW BEARING, PRESS IT IN CAREFULLY AND DO NOT CRACK THE LANDING OFF OF THE CASE.**



ARROW POINTING TO THE AREA OF CONCERN **FIGURE 11**

- 2) Remove the 5<sup>th</sup> main gear (P/N: 61005M) from the mainshaft on your new gearset by sliding it off the end.
- 3) Install the 5<sup>th</sup> main gear into the transmission case referencing your Factory Service Manual for guidelines and proper installation tools.
- 4) Install the bearing door gasket (P/N: 35652-79B) onto the transmission, making sure the gasket is fully seated on the dowels and is against the case gasket surface.
- 5) Apply some WD40® or equivalent to the main drive gear seal and the mainshaft on the gearset assembly. Install the gearset by sliding the mainshaft through the main drive gear and slowly pushing the whole trap door / gearset assembly until the case dowels pins contact the dowel holes in the bearing door.

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## BAKER FRANKENTRANNY BUILDER'S KIT



**IT IS CRITICAL THAT YOU DO NOT DRAG THE MAINSHAFT THREADS OR SPLINES ACROSS THE MAIN GEAR SEAL; THIS WILL CAUSE DAMAGE TO THE SEAL CAUSING FUTURE LEAK ISSUES.**

6) Using a rubber mallet tap the side of the bearing door (area over the dowels) on each side slowly walking in the trap door / gearset assembly until its flush and up against the gasket. **NEVER HAMMER ON THE BEARINGS TO FULLY SEAT THE BEARING DOOR; THIS WILL CAUSE BEARING FAILURE AND DAMAGE YOUR GEARSET.**

7) Install the bottom four 5/16-18 SHCS and washers with Blue Loctite®. Torque the four bottom bolts, starting in the center and working your way out to the sides to 16-18 ft-lbs (200-225 in-lbs).

8) Install the top four 1/4-20 SHCS and washers with Blue Loctite®. Torque the four top bolts, starting in the center and working your way out to the sides to 8-10 ft-lbs (100-120 in-lbs).

9) In your builders kit we supply a speed sensor plug with O-ring and bolt; install the speed sensor plug on your transmission case. Using WD40® on the O-Ring

will aid in installing the plug. Using Blue Loctite® on the stock speed sensor bolt torque to 8-10 ft-lbs (100-120 in-lbs).

10) Install your motorcycle speed sensor on the new bearing door using the provided button head bolt with Blue Loctite®, torque to 8-10 ft-lbs (100-120 in-lbs), figure 12.

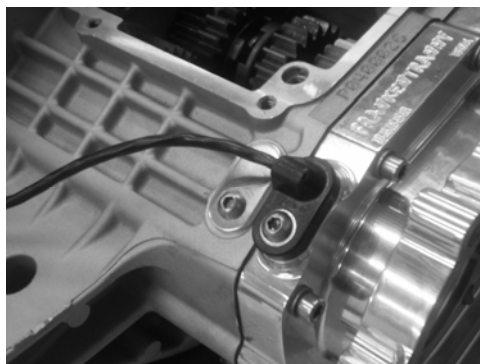
### SHIFT FORK INSTALLATION

Reference the included parts, figure 1 on page 4 and legend on page 5. You will notice that the 3<sup>rd</sup> (P/N 102-6F), 2<sup>nd</sup> (P/N 101-56E), and 1<sup>st</sup> (P/N 101-6E) gear forks will ride on the primary fork rod (like your stock 5-Speed). The 4<sup>th</sup> (P/N 102-6E) gear fork will ride on an auxiliary fork rod connected to the bearing door.

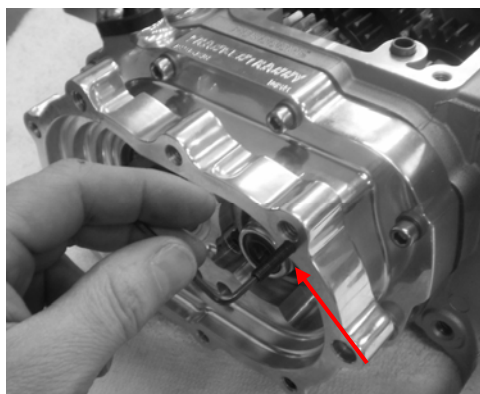
1) Using a 3/32" Allen, back out the auxiliary fork rod turning it counter clockwise, until a little over 3/4" is sticking out of the bearing door (past the side cover gasket surface), figure 13.

2) Install the 1<sup>st</sup> (P/N 101-6E) gear mainshaft fork. You must slide the 1<sup>st</sup> gear away from the bearing door and engage the dog teeth of the adjacent gear (4<sup>th</sup>) to allow room for the fork to slide into position figure 14.

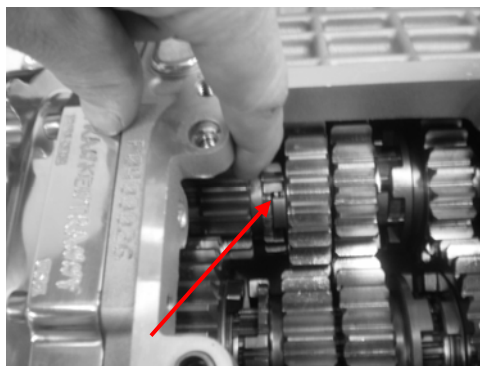
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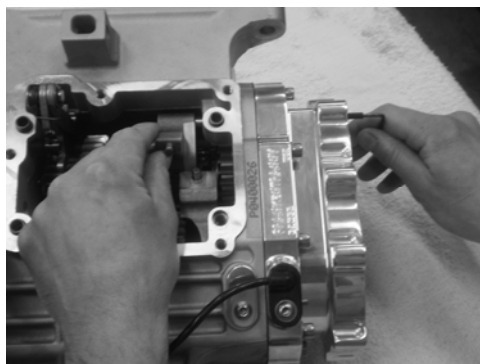
SHOWING SPEED SENSOR INSTALLED **FIGURE 12**



AUXILIARY ROD ADJUSTER **FIGURE 13**



SHOWING 1ST GEAR ENGAGED **FIGURE 14**



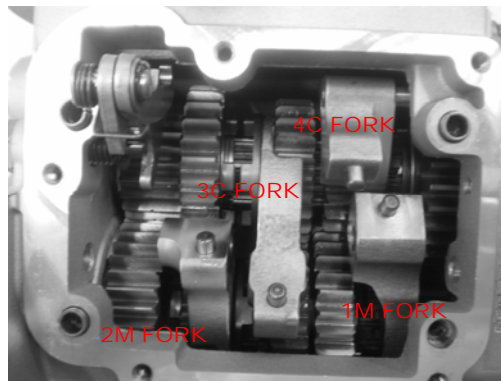
INSTALLING 4TH GEAR SHIFT FORK **FIGURE 15**

## BAKER FRANKENTRANNY BUILDER'S KIT

3) Install the 4<sup>th</sup> (P/N 102-6E) gear shift fork onto the 4<sup>th</sup> (P/N 61234C) countershaft gear. While holding the shift fork into position, screw back in the set screw for the auxiliary fork rod until it is flush with the side cover gasket surface, figure 15.

4) Install the 3<sup>rd</sup> (P/N 102-6F) gear counter shaft and 2<sup>nd</sup> (101-56E) gear mainshaft forks, reference figure 1 and 16 for correct placement of shift forks.

5) If you did not remove the 1/2-20 fork rod set screw from the left side of the case during removal of your stock gearset due so now. Slide the provided fork rod (P/N 122-64; 6.250" rod length) through the primary side of the transmission making sure you go through all shift forks; 1<sup>st</sup> mainshaft (P/N 101-6E), 3<sup>rd</sup> countershaft (P/N 102-6F), and 2<sup>nd</sup> mainshaft (P/N 101-56E) forks.



SHIFT FORK PLACEMENT **FIGURE 16**

6) Install the 1/2-20 fork rod set screw with Blue Loctite®; thread into case until it bottoms out then back off a 1/2 turn. Reinstall your transmission drain plug.

7) Apply a generous amount of transmission oil to the forks and fork rods. With all the forks installed, check to make sure that all forks slide freely on the fork rods by moving them back and forth. If you experience any binding in the 4<sup>th</sup> gear counter shaft fork, you need to go back and perform a clearance check of the auxiliary fork rod / bridge; located in step 2 of the case preparation.



INSTALLING DRUM SHIM **FIGURE 17**

### SHIFT SYSTEM INSTALLATION

The shift system comes with 3 shims (one .025" thick and two .020" thick), start by installing the .020" thick shim on the shifter pawl side of the drum, shown in figure 17.

1) Install the shift system onto the transmission; making sure to line up the fork pins with the grooves in the shift drum.

2) Install the four 1/4-20 SHCS bolts with washers; snug the bolts down evenly working in a circular pattern until all four bolts are tight.



CHECKING DRUM END PLAY **FIGURE 18**



**NEVER RUN ONE CAP SCREW ALL THE WAY DOWN WITHOUT SEQUENTIALLY TIGHTENING THE OTHER THREE AS SPECIFIED; IRREPARABLE DAMAGE WILL RESULT.**

3) Check shift drum end play by using a feeler gauge as shown in figure 18. Shift drum end play is .002" - .010".

- A. Place the feeler gage in between the shift drum shim and pillow block ; holding the drum all the way toward the exhaust side. If the measurement is within the specification listed above proceed to step 4.

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## BAKER FRANKENTRANNY BUILDER'S KIT

- B. If the measurement is greater than .010" remove the shift system and add one of the other shims and reinstall the shift system as specified in step 2. Re-measure the drum end play until the measurement is within the specification listed (.002"-.010").
- C. In the unlikely event that the drum end play is less than the lower limit of .002"; which could be due to variation in your transmission housing or stack up of the BAKER components, give us a call toll free @ 1-877-640-2004. Please have a set of vernier calipers available to take measurements during your conversation to assist us with diagnosis over the phone. If we determine that the issue lies with your transmission case, we will assist you on how to remedy the problem. If the issue lies with our BAKER components we will ship overnight the replacement hardware necessary to remedy the problem.

4) Now that the shift drum end play is set; remove the four bolts and apply Blue Loctite® re-install bolts with washers. Snug down as specified in step 2 and then torque to 8-10 ft-lbs (100-120 in-lbs).

5) Set the shifter pawl adjustment per your Factory Service Manual found in section 7 under, Shifter Linkage Adjustment. Adjustment should be made in 3<sup>rd</sup> gear; measurement must be equal to within .010" between pins, see figure 19. Shift through all gears while spinning the mainshaft to make sure everything is functioning correctly.



SHIFTER PAWL PIN ADJUSTMENT **FIGURE 19**

6) Install the top cover gasket and top cover with bolts referring to your Factory Service Manual.

### FINISH LINE

- 1) Install the supplied inner bearing race onto the mainshaft, P/N 34091-85 following your Factory Service Manual and using the Inner Primary Race Service Tool BAKER P/N TOOLB-56 or H-D® Equivalent P/N 34902A. An optional BAKER High Torque Bearing Kit is available P/N 189-56. The BAKER High Torque Bearing Kit replaces the factory roller bearing and race with a precision honed ball bearing and seal. This will eliminate the possibility of the race moving and potentially causing leaks or damage to the transmission.
- 2) Install the provided clutch release and actuator rod into the mainshaft.
- 3) Re-install all primary components, rear belt, sprocket or pulley; that you removed to disassemble the transmission following your Factory Service Manual.
- 4) Install the kicker cover of your choice, and it's components per the manufacturer's instruction sheets.
- 5) Install your exhaust and double check that all fasteners are tight on the motorcycle and any ancillary parts that you removed to perform this installation are back in their intended place on the motorcycle.
- 6) Fill the transmission with fluid. The BAKER Frankentranny Builders Kit comes with its own 23 fl-oz bottle of Heavy Duty Platinum Spectro® Transmission Fluid.

Once the maiden voyage had been made around the block or down the road. Take the time to double check all fasteners and hydraulic fittings for tightness. Also with the bike as close to level as you can safely get it and the transmission fluid warmed up, double check the level of the fluid. Drain off any excess fluid if the transmission is overly full. Level should be at the bottom of the hole. Re-install the oil level plug with; snug. You are complete....

## BAKER FRANKENTRANNY BUILDER'S KIT

### BAKER OFFERS THE FOLLOWING ANCILLARY PRODUCTS FOR THE FRANKENTRANNY BUILDER'S KIT:

<u>P/N</u>	<u>DESCRIPTION</u>
478-56HP-U84	Kicker cover with polished finish, hydraulic type including Klassic Kicker Gears & 1.5" piston. Requires an H-D master cylinder or applicable aftermarket unit with 11/16" piston diameter. Hydraulic clutch actuation is the aesthetically cleanest setup because hydraulic line can be easily hidden.
478-56CP-U84	Kicker cover with polished finish, cable type including Klassic Kicker Gears and actuator ball ramps. As shown on front of these instructions. Compatible with 1990-2006 stock clutch cables and is the easiest to install and most economical clutch actuation setup.
479-56P-U84	Function Formed Hydraulic Kicker Cover with polished finish, including Klassic Kicker Gears & 1.5" Piston. Requires an H-D master cylinder or applicable aftermarket unit with 11/16" piston diameter. Hydraulic clutch actuation is the aesthetically cleanest setup because hydraulic line can be easily hidden.
3510-64P	Kick arm assembly, straight design, polished stainless steel, with bronze pedal
3511-64P	Kick arm assembly, straight design, +1" length, polished stainless steel, w/ bronze pedal
474-56C-E	Oil spout assembly, FF type, chrome, 1993-99 FL
474-56P-E	Oil spout assembly, FF type, polished, 1993-99 FL
474-56C-T	Oil spout assembly, FF type, chrome, 2000-01 FL
474-56P-T	Oil spout assembly, FF type, polished, 2000-01 FL
475-56C	Oil spout assembly, FF type, chrome, 2002-06 FL, includes polished stainless steel breather line
475-56P	Oil spout assembly, FF type, polished, 2002-06 FL, includes polished stainless steel breather line

### FOR TWIN CAM MODELS, ONE OF THE FOLLOWING IGNITION RETROFIT CHOICES IS REQUIRED FOR FUNCTIONAL KICKER OPERATION.

<u>P/N</u>	<u>DESCRIPTION</u>
T5	Morris Magneto nose cone assembly, polished. Fits 1999-2006 TC88A & 2000-06 TC88B * Specify gear or chain cam drive system when ordering to get the correct worm drive gearset.
3757	Vulcan Ignition conversion kit for chain cams, chrome. Fits 1999-05 Dyna, 1999-06 FL & Softail
3886	Vulcan Ignition conversion kit for gear cams, chrome. Fits 1999-05 Dyna, 1999-06 FL & Softail
4365	Vulcan Ignition conversion kit for chain cams, chrome. Fits 2006-up Dyna, 2007-up FL & Softail * Includes ignition module.
5011	Gates Ignition conversion kit, polished. Fits 1999-05 Dyna, 1999-06 FL & Softail * Specify gear or chain cam drive system when ordering; does not include ignition module but utilizes any EVO era nose cone mounted module.

# BAKER FRANKENTRANNY BUILDER'S KIT

## **SPECIAL ORDERS**

A minimum \$500 deposit is required with all special orders. Special orders include unique case finishes, unique side door requests (i.e.; wrinkle black door or no logo).

## **ALL OTHER ORDERS**

Orders can be pre-paid using VISA, MasterCard or American Express.

Prices shown are F.O.B. Haslett, MI. BAKER™ provides free UPS ground shipping on all retail orders for complete transmissions or transmission kit. UPS air shipment is available upon request. Customer is responsible for air shipment premiums.

## **LIMITED WARRANTY**

BAKER™ Inc. transmission assemblies, transmission kits, and wide tire kits are guaranteed to the original purchaser to be free of manufacturing defects in materials and workmanship for a period of 5 years from the date of purchase or up to 50,000 miles - whichever is sooner.

If the product is found by BAKER™ to be defective, such products will, at the option of BAKER™, be replaced or repaired at cost to BAKER™.

In the event warranty service is required, the original purchaser must call or write BAKER™ immediately with the problem. If it is deemed necessary for BAKER™ to make an evaluation to determine whether the transmission assembly or transmission kit is defective, the entire transmission assembly, whether originally purchased as an assembly or kit, must be properly packaged and returned prepaid to BAKER™ with a copy of the original invoice of purchase.

If after an evaluation has been made by BAKER™ and a defect in materials and/or workmanship is found, BAKER™ will, at BAKER™ option, repair or replace the defective part of the assembly.

Warranty card must be returned within 45 days of purchase to be valid.

## **ADDITIONAL WARRANTY PROVISIONS**

This limited warranty does not cover labor or other costs or expenses incidental to the repair and or replacement of BAKER™ products. This warranty does not apply if one or more of the following situations is judged by BAKER™ to be relevant: improper installation, accident, modification (including but not limited to use of unauthorized parts), racing, high performance application, mishandling, misapplication, neglect (including but not limited to improper maintenance), or improper repair.

BAKER™ shall not be liable for any consequential or incidental damages arising out of or in connection with a BAKER™ transmission assembly, transmission kit, swingarm, fender, component or part. Consequential damages shall include without limitation, loss of use, income or profit, or losses sustained as the result of injury (including death) to any person or loss of or damage to property.

BAKER™ transmissions, transmission kits, and Wide Tire Kits are designed exclusively for use in Harley-Davidson® motorcycles. BAKER™ shall have no warranty or liability obligation if a BAKER™ part is used in any other application.

If it is determined that a BAKER™ transmission assembly has been disassembled during the warranty period for any reason, this limited warranty will no longer apply.

## **BAKER FRANKENTRANNY BUILDER'S KIT**

The words Harley and H-D are registered trademarks and are for reference only. Use of H-D model designations and part numbers are for reference only. BAKER Drivetrain has no association with, and makes no claim against, these words, trademarks, or companies.

It is the sole responsibility of the user to determine the suitability of this product for his or her use, and the user shall assume all legal, personal injury risk and liability and all other as well as all other obligations, duties and risks associated therewith.

### **CUSTOMER SUPPORT**

For any installation or service questions, please contact our BAKER technical department toll free: 1-877-640-2004.

