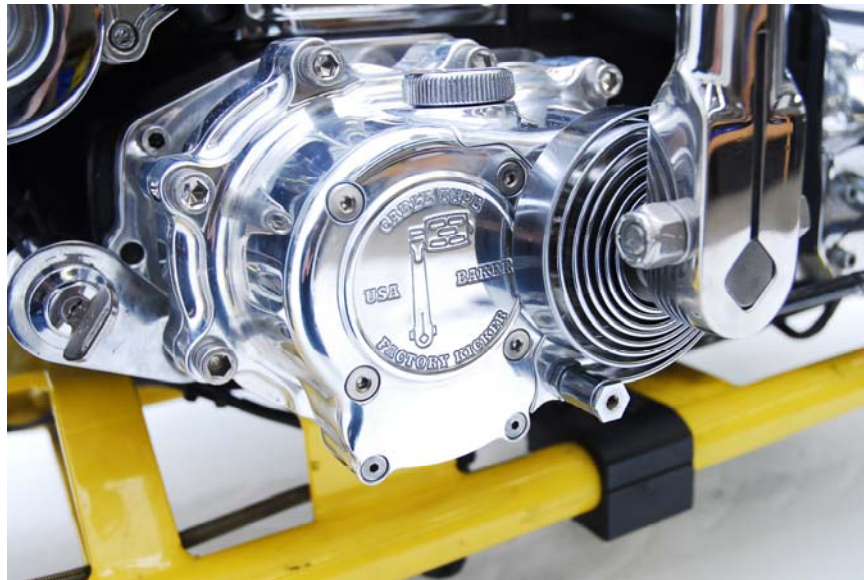


BAKER FACTORY 5 KICKER INSTALLATION INSTRUCTIONS

F5K

Factory 5-Speed Kicker kit



578-56MP-K Shown



BAKER FACTORY 5 KICKER INSTALLATION INSTRUCTIONS

FEATURES

- 6061-T6 Aluminum billet bearing boor in show polish, raw finish, black finish
- 6061-T6 Aluminum billet side cover in show polish finish
- Clutch actuation available in modern ball and ramp cable type or hydraulic
- Hardened 8620 BAKER Klassic Kicker gears
- 4140 Pinion gear quill with smooth micro finish for smooth kicker gear engagement
- Hardened 8620 ratchet hub
- Straight stainless steel straight kick arm with 5/8" 4140 spindle and bronze kicker pedal

PART NUMBERS/DESCRIPTIONS

- 578-56MR-K; F5K w/ silver door & polished kicker cover, cable type
- 578-56HR-K; F5K w/ silver door & polished kicker cover, hydraulic type
- 578-56MB-K; F5K w/ black door & polished kicker cover, cable type
- 578-56HB-K; F5K w/ black door & polished kicker cover, hydraulic type
- 578-56MP-K F5K w/ polished door & polished kicker cover, cable type
- 578-56HP-K; F5K w/ polished door & polished kicker cover, hydraulic type

APPLICATION

- 1990-2006 Softails™, FLT/FLH™, and FXR™ models
- 1991-2005 Dyna™ Models
- BAKER™ DD5 complete and builder's kits.

NOTES

- BAKER™ Factory 5 Kicker will not clear most stock exhaust systems due to the extended length of the transmission door and kicker. Most true duals usually fit FLT/FLH models. Rear pipes that route away from the right side of the transmission usually fit.
- The kicker arm will not clear the stock right side passenger floor board on FLT/FLH™ models. Installation of foot pegs or smaller foot boards are required.
- Twin Cam models require installation of a cam-based ignition. See BAKER 2008-2009 Supplement for ignition alternatives or consult a BAKER sales tech.
- Fuel injected models require retrofit to carburetor.

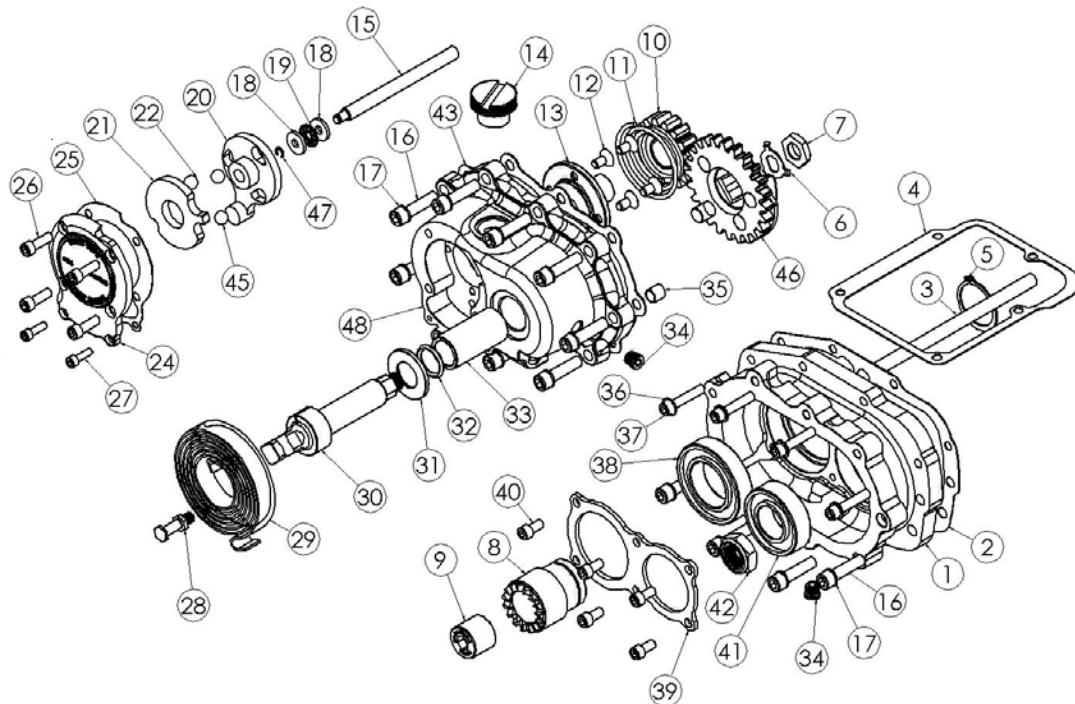
BAKER FACTORY 5 KICKER INSTALLATION INSTRUCTIONS

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- 12) Disclaimer and Customer Support.

BAKER FACTORY 5 KICKER INSTALLATION INSTRUCTIONS

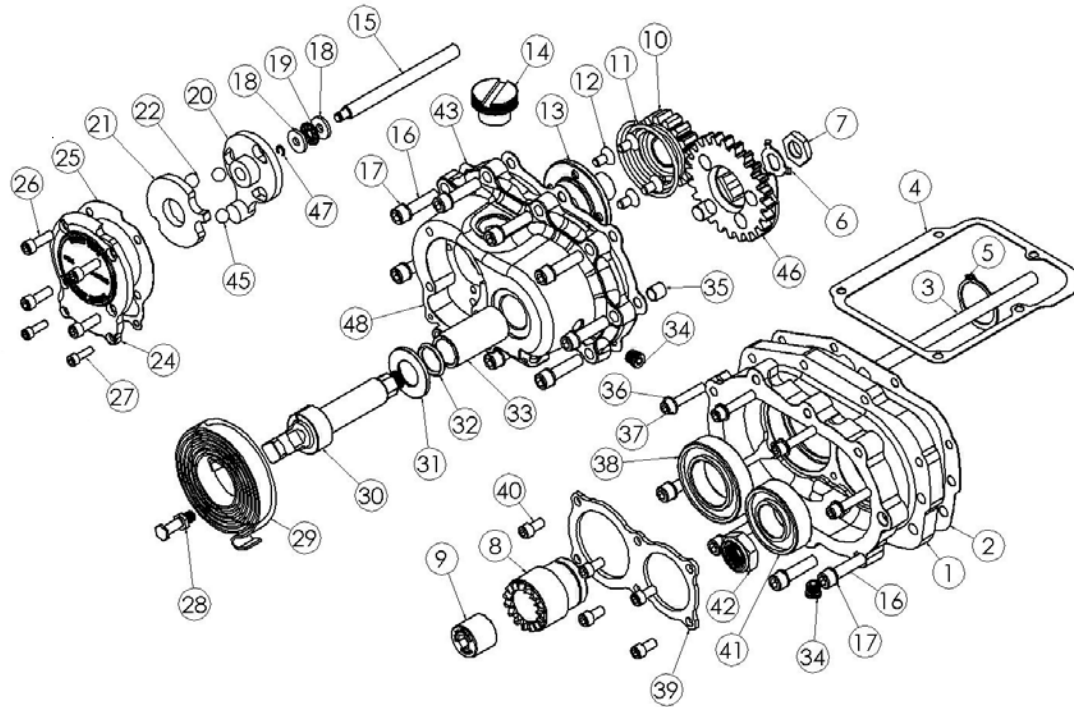
CABLE TYPE: PN 578-56M(P,R,B)-K



ITEM	QTY	PN	DESCRIPTION
1	1	1-5SK(R,P,B)	Transmission bearing door
2	1	35652-79B	Bearing door to case gasket
3	1	122-6R-FF	Transmission fork rod
4	1	34904-86E	Top cover gasket
5	1	137RRRE	External Snap ring, ratchet hub
6	1	292014	Lock Washer, crank gear
7	1	7073	Nut, Crank Gear
8	1	308-F5K	Ratchet Hub
9	1	RV-7050	Mainshaft lock nut
10	1	311-F6K	Ratchet pinion gear
11	1	290227	Pinion gear spring
12	4	25C50KFC	1/4-20 x 1/2 Flat Socket cap screws
13	1	585-5	Pinion gear quill
14	1	292032	Filler plug
15	1	125-5R	Actuator Rod
16	13	31C125KCSS/P	5/16-18 x 1 1/4 SHCS,SS
17	13	6100	5/16 Washer
18	2	TWC411	Throw out washer
19	1	TC411	Throw out bearing
20	1	WT3096B	Inner actuator ramp
21	1	WT3196B	Outer Actuator Ramp
22	3	987687	3/8" Actuator ball bearing

BAKER FACTORY 5 KICKER INSTALLATION INSTRUCTIONS

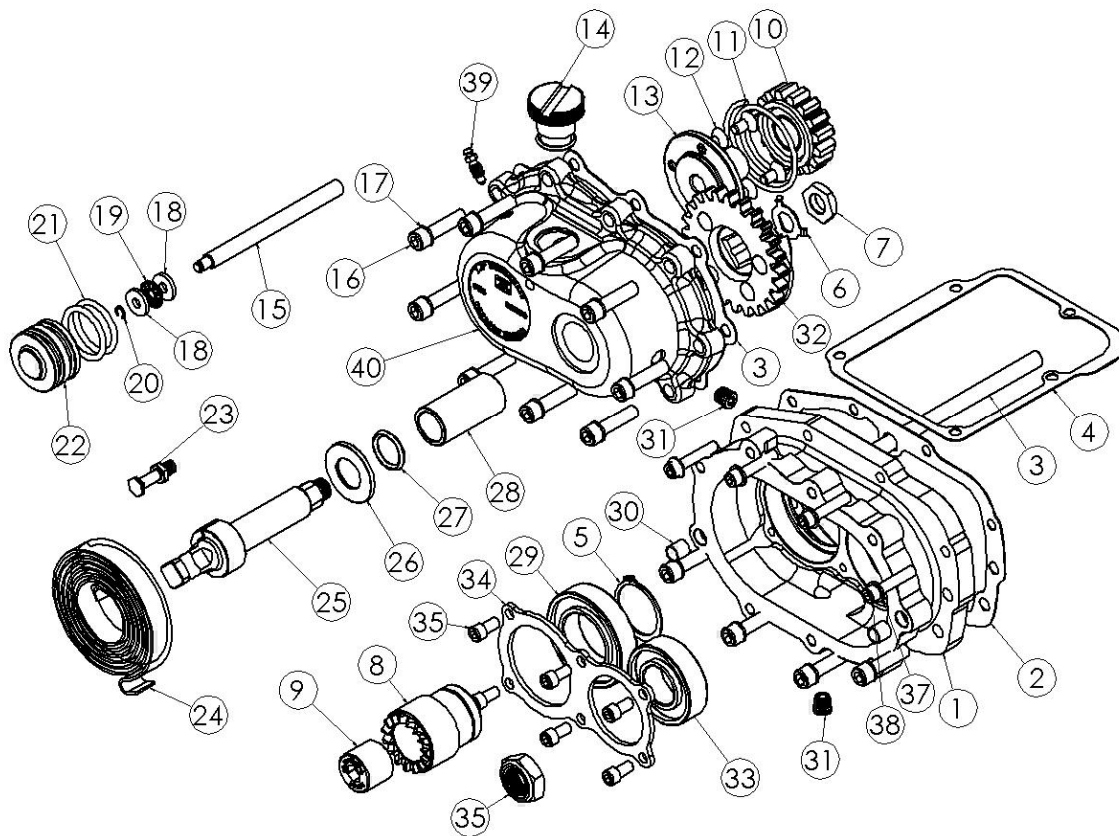
CABLE TYPE: PN 578-56M(P,R,B)-K



ITEM	QTY	PN	DESCRIPTION
24	1	587-56	Ball ramp cover gasket
25	1	584-56	Ball ramp cover plate
26	4	25C50KLHS	1/4-20 x 1/2 Low head cap screw
27	2	10C50KLHS	#10-24 x 1/2 Low head cap screw
28	1	292013	Kicker return spring bolt
29	1	291222	Spring, kick arm return
30	1	33096-54	Shaft, kicker
31	1	292016	Washer, kick shaft
32	1	9452K29	O-ring, kicker shaft
33	1	6391K269	Bushing, kicker shaft
34	2	51740-001	3/8-24 Drain plug
35	2	16583-67	10mm dowels
36	4	6099SS	1/4 Washer
37	4	25C125KCSS/P	1/4-20 x 1 1/4 SHCS, SS
38	1	6007	Mainshaft bearing
39	1	581-5	Bearing retainer plate
40	6	24050	1/4-20 x 5/8 BHCS
41	1	6304	Countershaft bearing
42	1	7340BD	Nut, countershaft retainer
43	1	6N4-Side	Side cover gasket
44	1	578-56M-P	Mechanical kicker side cover
45	1	3094-DSSC	Actuator ferrule
46	1	33350-56	Crank gear assembly
47	1	10705-01149	C-clip, throw out assembly
48	1	578-56M(P,R,B)	Kicker cover, cable type

BAKER FACTORY 5 KICKER INSTALLATION INSTRUCTIONS

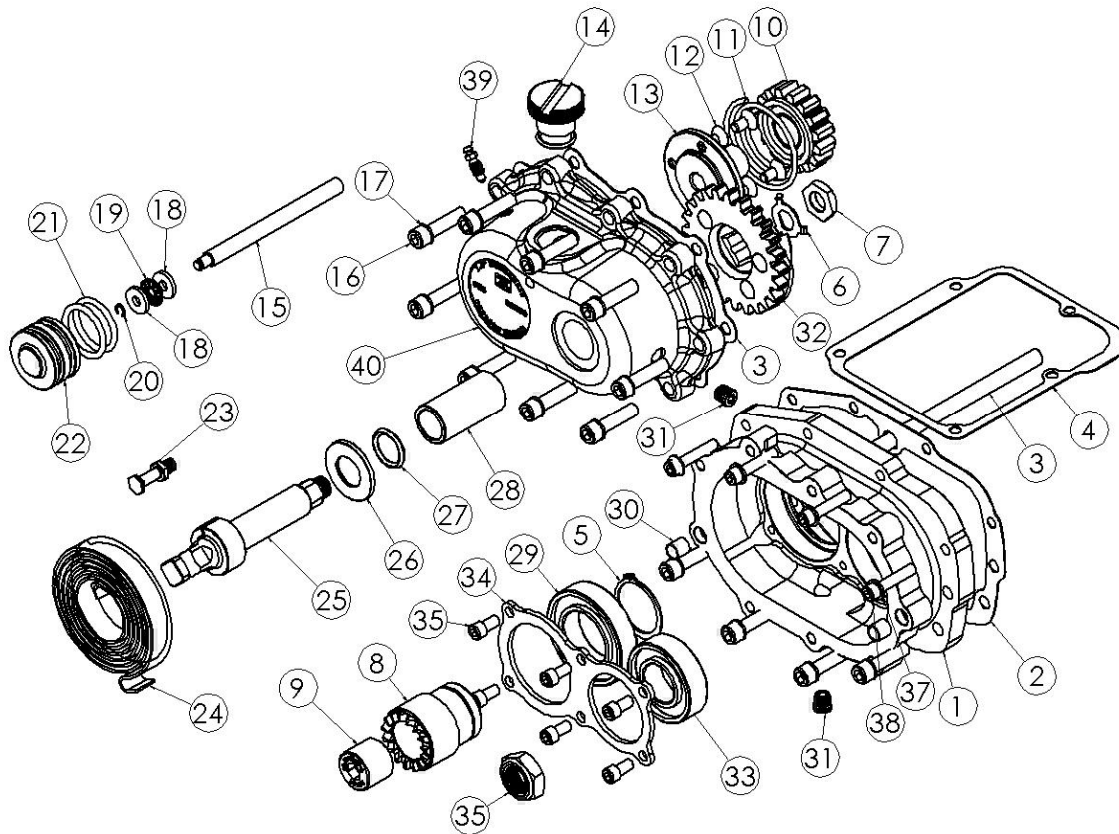
HYDRAULIC TYPE: PN 578-56H(P,R,B)-K



ITEM	QTY	PN	DESCRIPTION
1	1	5SK(R,P)	Transmission bearing door
2	1	35652-79B	Bearing door to case gasket
3	1	5))	Transmission fork rod
4	1	34904-86(Top cover gasket
5	1	137RRRE	External Snap ring, ratchet hub
6	1	292014	Lock Washer, crank gear
7	1		Nut, Crank Gear
8	1)	Ratchet Hub
9	1	RV-7050	Mainshaft lock nut
10	1	31).	Ratchet pinion gear
11	1		Pinion gear spring
12	4	25C50KFC	1/4-20 x 1/2 Flat Socket cap screws
13	1	585-5	Pinion gear quill
14	1	292032	Filler plug
15	1	125-5R	Actuator Rod
16	13	&. &663	5/16-18 x 1 1/4 SHCS,SS
17	13	6100	5/16 Washer
18	2	%	Throw out washer
19	1)17	Throw out bearing
20	1	10705-01149	C-clip
21	2	66855	O-ring, hydraulic slave piston
		%	WRDGD\$WHU\$DFHU

BAKER FACTORY 5 KICKER INSTALLATION INSTRUCTIONS

HYDRAULIC TYPE: PN 578-56H(P,R,B)-K



ITEM	QTY	PN	DESCRIPTION
22	1	124-56LA	Piston, slave cylinder
23	1	292013	Kicker return spring bolt
24	1	291222	Spring, kick arm return
25	1	292003	Shaft, kicker
26	1	292016	Washer, kick shaft
27	1	9452K29	O-ring, kicker shaft
28	1	6391K269	Bushing, kicker shaft
29	1	6007	Mainshaft bearing
30	2	16583-00	10mm dowels
31	2	51740-001	3/8-24 Drain plug
32	1	33350-56	Crank gear assembly
33	1	6304	Countershaft bearing
34	1	581-5	Bearing retainer plate
35	6	24050	1/4-20 x 5/8 BHCS
36	1	37141	Nut, countershaft retainer
37	4	6099SS	1/4 Washer
38	4	73463	1/4-20 x 1 1/4 SHCS, SS
39	1	45-9404	1/4-28 Bleeder screw
40	1	578-56H(P,B,R)	Kicker cover, hydraulic type
41	1	6N4-SIDE	Kicker cover gasket

BAKER FACTORY 5 KICKER INSTALLATION INSTRUCTIONS

GETTING STARTED

The BAKER™ Factory 5 Kicker kit is designed to be easily installed by any competent mechanic or dealership technician. Having your H-D™ factory service manual is required for this installation as it is referred to in many sections of the instructions. While this kit is made to be as easy as possible to install there is no substitution for experience. To install the F5K kit, disassembly of the transmission down to the gearset is required. We recommend reading through these instructions, to the end, before proceeding with installation process.

TOOLS, RESOURCES, REQUIRED PARTS

- Factory Service Manual For Your Motorcycle
- Factory Parts Manual For Your Motorcycle
- Common American sockets and open end wrenches
- ToolB-56, BAKER™ Inner Race Service Kit or H-D® equivalent
- Hydraulic Press
- In-lbs Torque Wrench
- Brake Bleeder Pump (for hydraulic type)

NOTES: HYDRAULIC VERSION ONLY

To complete the Installation of the hydraulic F5K, the following parts will have to be procured to complete the job:

- Hydraulic Fluid, BAKER™ Recommends:
H-D™ Dot 5 Brake Fluid, PN 99902-77
- Correct length AN -3 Brake Line
- 10mm Banjo Fitting & washers for both ends of brake line
- 3/8"-24 Banjo Bolt for the side cover end of the brake line
- 11/16" Diameter Bore Hydraulic Clutch Lever Assembly or H-D

BAKER FACTORY 5 KICKER INSTALLATION INSTRUCTIONS

GEARSET REMOVAL

To remove your existing gearset, refer to your Factory Service Manual in section 7, Mainshaft/Countershaft removal. Follow the trap door/gearset removal procedure. Hint: with the stock side cover off, remove the nyloc jam nuts from the ends of the shafts BEFORE the trap door/gearset assembly is drawn out of the transmission case. A ½" impact gun works really keen for this task. Leave the main drive gear in the case.

DISASSEMBLING GEARSET

Once the trap door/gearset assembly is out of the transmission case, put it on a soft towel on a clean bench. If that pesky right 'C' dowel is stuck in the door, remove it by tapping it through with a hammer and a punch or pulling it through with a pair of vise grips. This will allow the gasket side of the door to sit flat on the support beam of the hydraulic press. With the gearset facing down and the gasket side of the door of the support beam of the hydraulic press, press the end of the mainshaft down 1/8" and then do the same to the countershaft. Alternate pressing on the ends of both shafts (1/8" at a time) until the shafts fall out. IT IS VERY HANDY TO HAVE A SECOND PERSON CATCHING THE SHAFTS AS THEY FALL OUT. Do not allow the shafts to fall and hit the ground. Remove the conical thrust washer on the mainshaft as the ratchet hub (PN 308-5) will replace this part during the re-assembly process. Keep the stock conical thrust washer (the one without the step on the back side) on the counter shaft (see figure1). Put the 'prepared' gear clusters on the soft towel on the bench.



Figure 1

BAKER FACTORY 5 KICKER INSTALLATION INSTRUCTIONS

BEARING DOOR ASSEMBLY

- 1.) Remove the Factory 5 Kicker bearing door (PN 1-5SK(P,R,B)) assembly from the package. Clean your mainshaft and countershaft threads with lacquer thinner and dry them completely before pressing the shafts into the door. Now take your mainshaft assembly and support it vertically in the press with the clutch end of the mainshaft at the facing down. Insure that the cage bearing is still on the cluster with first gear around it. Now take your Factory 5 Kicker bearing door (PN 1-5SK(P,R,B)) assembly and press the mainshaft into the ratchet hub (PN 308-5) while using the ratchet hub (PN 308-5) as your press point (figure 2). Make sure your mainshaft is perfectly vertical before pressing it in, damage to threads could incur if not vertical. Remove assembly from press. Apply thread 'Red' thread lock to the mainshaft retainer nut (PN RV-7050) and torque to 45-55 ft/lbs.
- 2.) Take the countershaft assembly with the threads facing up. Make sure the thick washer is still in place and place in the press supported vertically. Now take the Factory 5 Kicker bearing door (PN 1-5SK(P,R,B)) assembly and place it on to the countershaft. You will have to angle it on to get the gears to line up properly (figure 3). Once the mainshaft is parallel with the countershaft place the countershaft press tool on to the countershaft bearing in the assembly (see picture). Slowly press the countershaft into the bearing door making sure all the gears spin freely. Once the countershaft is seated, clean the threads with lacquer thinner and blow dry completely. Apply 'Red' thread lock to the countershaft retainer nut and torque to 45-55 ft/lbs. Your bearing door assembly is complete.



Figure 2



Figure 3

BAKER FACTORY 5 KICKER INSTALLATION INSTRUCTIONS

GEARSET INSTALLATION

- 1.) Refer to your Factory Service Manual for proper gearset installation.
- 2.) You will need to use the supplied fork rod (PN 122-56K) for installation.
- 3.) Replace the bearing door assembly with the supplied gasket (PN 35652-79B).
- 4.) Once the gearset is in the transmission case. Use the four supplied 5/16-18 x 1-1/4 SHCS (PN 73496) and 5/16 washers (PN 6100) in the lower four holes of the bearing door. Using 'Blue' thread lock, torque the bolts to 13-16 ft/lbs. Install the four supplied 1/4-20 x 1-1/4 SHCS (PN 73463) and 1/4 washers (PN 609SS) in the upper four holes of the bearing door. Using 'Blue' thread lock, torque the bolts to 7-9 ft/lbs (84-108 in/lbs)
- 5.) Install your top cover per your Factory Service Manual using the supplied top cover gasket (PN 34904-86C)

CABLE TYPE KICKER COVER INSTALLATION:

PN 578-56M(P,B,R)-K

Refer to your Factory Service Manual to remove your clutch cable from your side cover ball and ramp assembly.

- 1.) Place the side cover gasket on the two 10mm dowels (PN 16583-00) on the bearing door assembly.
- 2.) While making sure the ratchet gear (PN 310-56K) is still retained by the kicker crank gear (PN 33350-56), place the side cover on to the two 10mm dowels (PN 16583-00). While holding the cover in place take the nine supplied 5/16-18 x 1 1/4 SHCS (PN 73496) with 5/16 washers (PN 6100) and apply 'blue' thread lock to the threads. Now torque the fasteners to 13-16 ft/lbs (156-192 in/lbs).
- 3.) Remove the six fasteners holding the ball and ramp cover on. Remove the ball and ramp cover and gasket at this time as well.
- 4.) Install the supplied clutch throw out rod (PN 125-5R) at this time through the pinion gear quill (PN 585-5)
- 5.) Thread your clutch cable into the side cover. Loosen the clutch cable adjustment all the way so there is maximum cable exposed in the side cover.
- 6.) With the cable fully extended in the side cover take the supplied ball and ramp assembly and slide it over the cable. Install the clutch cable ferrule (PN 3094-DSSC) and 'seat' the cable.
- 7.) Install the ball and ramp assembly with outer ramps 'tab' in the 2 'o'clock position.
- 8.) Now place the ball and ramp cover plate with gasket back into position.
- 9.) Using 'Blue' thread lock, install the six bolts. Torque the four 1/4-20 x 3/4 (PN 25C50KLHS) to 7-9 ft/lbs (84-108 in/lbs). Torque the two #10-24 x 5/8 (PN 10C50KLHS) to 4-5 ft/lbs (54-60 in/lbs).

BAKER FACTORY 5 KICKER INSTALLATION INSTRUCTIONS

HYDRAULIC KICKER COVER INSTALLATION:

PN 578-56H(P,R,B)-K

- 1) Place the side cover gasket on the two 10mm dowels (PN 16583-00) on the bearing door assembly.
- 2) Insure that the clutch throw out rod (PN 125-5R) moves freely in the ratchet gear quill (PN 585-5).
- 3) While making sure the ratchet gear is still retained by the kicker crank gear (see picture), place the side cover on to the two 10mm dowels (PN 16583-00). While holding the cover in place take the nine supplied 5/16-18 x 1 ¼ SHCS with 5/16 washers (PN 6100) and apply 'blue' thread lock to the threads. Now torque the fasteners to 13-16 ft/lbs
- 4) Install your 3/8-24 banjo bolt and 3AN brake line at this time.

KICK ARM INSTALLATION

- 1) Install the kick arm on to the kicker crank gear shaft.
- 2) Tighten the pinch bolt on the kicker crank gear shaft so that there is no sloppy movement in the kicker arm assembly.
- 3) Either with your hand or leg, 'kick' the kick arm and run it through its motion to make sure everything is working properly.

FINAL ASSEMBLY

- 1.) Install your primary and adjust your clutch per your Factory Service Manual at this time.
- 2.) With the bike vertical fill your transmission with the supplied 23oz. bottle of Spectro™ 75W140.
- 3.) Follow your Factory Service Manual to finish assembly on your motorcycle.
- 4.) Your BAKER™ Factory 5 Kicker installation is complete

BAKER FACTORY 5 KICKER INSTALLATION INSTRUCTIONS

TERMS:

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™ F5K and F6K kits are guaranteed to the original purchaser to be free of manufacturing defects in materials and workmanship for a period of 2 years from the date of purchase

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.

BAKER FACTORY 5 KICKER INSTALLATION INSTRUCTIONS

DISCLAIMER

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.



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