# **BAKER CD6 SMOOTH SHIFT KIT**



P/N CD6-602 P/N CD6N1-602 P/N CD6-602-M8 P/N CD6N1-602-M8



## BAKER CD6 SMOOTH SHIFT KIT OVERVIEW

## **FEATURES**

- **Easier to find neutral** Redundant neutral feature, and improved geometry assist the rider in finding neutral the first time, every time.
- **Smoother, more positive shifting** Smoother, positive shifting is achieved by incorporating advanced geometry in the fork pin groves, and the integration of a linear detent bearing on the right side mounting plate.
- **Reduced shift effort** The fixed spindle drum design offers lower friction as the drum rotates, reducing the effort required by the rider to complete a shift.
- Less shift clunk All of the CD6 design improvements are systemically engineered to achieve a precise mechanical choreography that is inherently silent.
- Easy installation Just remove the stock gearset from the case and swap out the stock shift drum for the BAKER Smooth Shift Kit Drum. There is no need to disassemble the stock gearset from the bearing door.
- No adjustments Direct bolt-in design requires no adjustments...

## **FITMENT**

- P/N CD6-602 and CD6N1-602
  - 2006 2017 Dyna Twin Cam Models
  - 2007 2017 Softail Twin Cam Models
  - 2007 2016 Touring Twin Cam Models
- P/N CD6-602-M8 and CD6N1-602-M8
  - 2017 Later Touring Milwaukee-Eight Models
  - 2018 Later Softail Milwaukee-Eight Models
  - \*\* DOES NOT FIT 2023 AND LATER CVO® MODELS

## **TOOLS REQUIRED**

- Torque wrench (reads both in-lbs and ft-lbs)
- Common hand tools (allen wrenches, sockets, snap ring pliers, etc.)
- Transmission fluid and primary fluid
- Primary gaskets
- Inner race puller / installation tool
- H-D factory service manual

# BAKER CD6 SMOOTH SHIFT KIT DETAIL VIEW

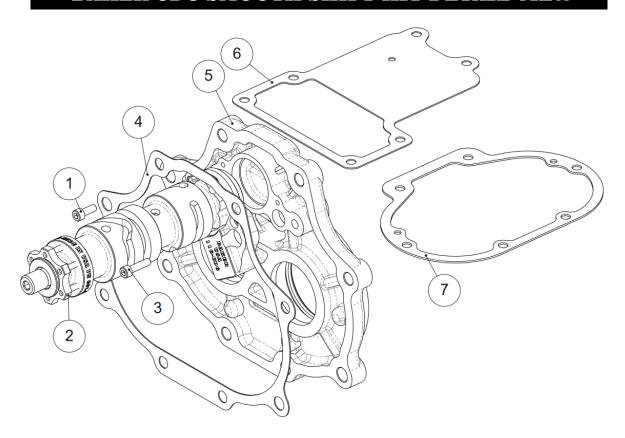


FIGURE 1

ITEM	QTY	P/N	DESCRIPTION
1	1	10C50KCS	Fastener, 10-24 x .500" SHCS
2	1	601-CD6	Shift drum, standard pattern
		601-CD6-17	Shift drum, standard pattern, M8
		601-CD6N1	Shift drum, N1 pattern
		601-CD6N1-17	Shift drum, N1 pattern, M8
3	1	10C75KCS	Fastener, 10-24 x .750" SHCS
4	1	35654-67	Gasket, bearing door
5	**	Visual Aid	Stock bearing door (not included)
6	1	34917-06-F	Gasket, top cover
		25700453	Gasket, top cover, M8 models
7	1	36805-06-F	Gasket, side Cover

## **BAKER CD6 SMOOTH SHIFT KIT INSTALLATION**

## **PREPARATION**

- Remove the exhaust system, primary, clutch and transmission gearset from the motorcycle chassis per your H-D factory service manual. See figure 2.
- Remove the stock shift forks, rods, shift system and detent spring assembly. See figure 3.



THOROUGHLY CLEAN THE THREADED SHIFT DRUM MOUNTING HOLES ON THE BEARING DOOR. USE BRAKE CLEANER OR EQUIVALENT. BLOW OUT DEBRIS / CLEANER USING SHOP AIR. WEAR EYE PROTECTION.

3) Clean gasket surfaces, threaded holes, and all fasteners removed from the transmission case during gearset removal.

## **INSTALLATION**

- Clean the supplied 10-24 x .500" and 10-24 x .750" fasteners before installing the new shift system. Use brake cleaner or equivalent.
- 2) Install the new shift system on the bearing door as shown in figure 4.
- 3) There are two fasteners that secure the shift system to the bearing door. Install the 10-24 x .500" fastener on the thinner countershaft side and the 10-24 x .750" fastener on the thicker mainshaft side.
- 4) Torque the two fasteners to 57-63 in-lbs.
- 5) Reinstall the factory shift forks and rods referencing your H-D factory service manual.

(Continued on next page)



FIGURE 2 | STOCK GEARSET REMOVED



FIGURE 3 | STOCK SHIFT SYSTEM REMOVED



FIGURE 4 | INSTALLING BAKER SHIFT SYSTEM

# BAKER CD6 SMOOTH SHIFT KIT INSTALLATION

## **INSTALLATION (CONTINUED)**

6) Reinstall the transmission gearset using the new gaskets supplied in your kit. Then reinstall your primary and exhaust components, following your H-D factory service manual.

## MAKE SURE YOUR SHIFTER PAWL LEVER IS OUT OF THE WAY PER THE FACTORY SERVICE MANUAL.

7) Installation is complete. Make sure to add the proper fluids as stated in your H-D factory service manual. Check fluid levels and ensure that there are no leaks after your initial test ride.



FIGURE 5 | NEW BAKER SHIFT SYSTEM INSTALLED

## **BAKER DRIVETRAIN TERMS & CONDITIONS**

#### **ORDERS**

Orders can be pre-paid using VISA, MasterCard, American Express, and Discover or via wire transfer (\$30 wire transfer fee applies). All orders not pre-paid will be sent C.O.D. certified check or money order only unless pre-approved for company check acceptance. Any orders from outside the USA must be pre-paid in US funds via wire transfer (\$30 transfer fee applies).

Prices shown are F.O.B. Haslett, MI. BAKER™ ships via UPS Ground or USPS Parcel Post for all orders. UPS air shipment or USPS Priority/ Express services are available upon request. Customer is responsible for all shipping charges unless otherwise arranged at the time of sale.

### **CUSTOMER SUPPORT**

For any installation or service questions, please contact our BAKER technical department: 1-517-339-3835.

#### LIMITED WARRANTY

NOTE: Warranty registration must be submitted within 45 days of purchase for your warranty to be valid.

BAKER™ transmission assemblies and transmission builder 's 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 occurs first. All other BAKER products 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 or up to 24,000 miles, whichever occurs first, except for the following; Warranty does not cover clutch plate wear, throw out bearing failures or mainshaft breakage due to improper clutch put installation

Electrical components carry a 30-day warranty; cosmetic finishes (chrome plating, hard anodizing, powder coating) are covered for 60 days. Certain promotional products may carry a shorter warranty as specified at the time 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 a description of the problem. If it is deemed necessary for BAKER to make an evaluation to determine whether the transmission assembly or transmission kit or accessory 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 purchase invoice. If after evaluation by BAKER a defect in materials and/or workmanship is found, BAKER will, at their option, repair or replace the defective part of the assembly.

### **RETURNS AND EXCHANGES**

Any merchandise returned for any reason (exchange, credit or modification) must be accompanied by a Return Goods Authorization (RGA) number or it will be refused. Call BAKER to obtain this number prior to returning goods for any reason. There is a 15% restocking fee for all returned items.

BAKER is not liable for any shipping.

### ADDITIONAL WARRANTY PROVISIONS

NOTE: 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: BAKER OEM transmissions; (these are subject to the OEM manufacturers warranty only), Improper installation, accident, modification

(including but not limited to use of unauthorized parts, transmission oils or lubricants), 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, 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 accessories are designed exclusively for use in American V-Twin motorcycles. BAKER shall have no warranty or liability obligation if BAKER parts are used in any other application.

If it is determined that a BAKER product has been disassembled during the warranty period for any reason, this limited warranty will no longer apply unless you were instructed to do so by a BAKER Drivetrain technician for diagnostic purposes.

#### DISCLAIMER

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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.