



**PREMIUM DRIVETRAIN INNOVATIONS
FOR AMERICAN MOTORCYCLES**

P/N: 170-5

PARTS PROVIDED:

See Figure 1.

REQUIRED READING:

Regardless of the skill level or experience of the individual installing the Roller Shift Kit, it is highly recommended that a Factory Service Manual be available for reference for the installation. Review the part of Section 7 of your Factory Service Manual that pertains to the stock shift drum removal and installation.

INSTALLATION:

1. Remove the top cover of the transmission. Refer to your Factory Service Manual for this procedure.
2. Remove the four 7/16" hex bolts that secure the right and left pillow blocks to the case. Remove existing drum/pillow block assembly.
3. At this time, read the next section 'Modifications Required'. If modifications are required, complete them at this time.
4. See Figure 2. Note that the detent lever hangs above the top cover gasket surface. Install the new BAKER Roller Shift Kit with the cap screws and washers provided. Use some "Blue" thread lock on the 1/4-20 threads.

MODIFICATIONS REQUIRED:

Prior to installation of P/N 170-5, two modifications to your existing transmission may be required.

1. Top Cover Modification:

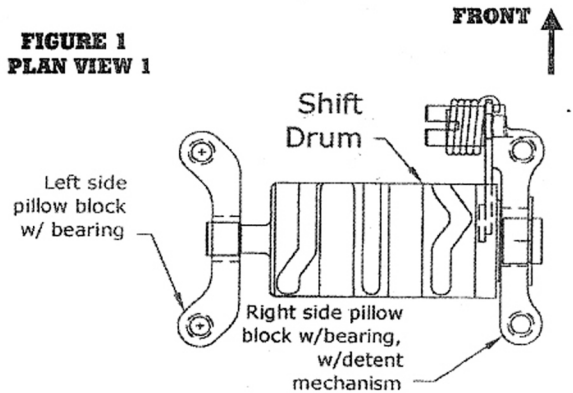
If you have the top cover with the cable bracket that mounts to it (typical from 1980-86), then you must remove material from the boss as shown in Figure 3. Measure back 1 1/2 inches from center of the screw hole as shown in Figure 4. Remove material down 7/8 inches from gasket surface as shown in Figure 5. A die grinder with a coarse rotary file works best for this task. A drill motor chucked up with a coarse rotary file can also be used.

2. Case Modification:

If you have the T-bracket style transmission case that has an intermediate bracket between the back of the motor and front of the transmission case (typical from 1980-86), then you must remove material from the front/top of the transmission case as shown in Figure 6. Get some clay or children's modeling dough and place it in the "pocket" as shown in Figure 6. (continued on next page)

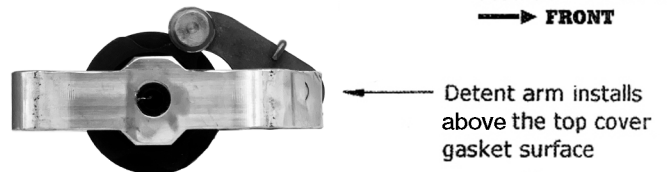
**INSTALLATION INSTRUCTIONS
FOR
BAKER 5 SPEED
ROLLER SHIFT KIT**

**FIGURE 1
PLAN VIEW 1**



* Drum comes with right side shim installed to BAKER endplay specs (.004-.008")

**FIGURE 2
RIGHT SIDE VIEW 1
FRONT**



(Continued)

Place the roller shift kit (drum and pillow blocks) in place as if you were installing it; DO NOT INSTALL THE FOUR SCREWS AT THIS TIME! Note that the detent lever hangs below the top cover gasket surface; see Figure 2. Remove the roller shift kit and note the depression (from the detent lever) left in the clay. The aluminum below the depression must be removed to allow clearance for the detent lever. A right angle die grinder with a coarse rotary file works well for this task. A coarse round file will also work.

To avoid getting aluminum chips in your transmission, cover up the gears with a clean shop towel. Remove the material as shown in Figure 7. The best way to check if you have removed enough material is to put the roller shift kit in place (do not install the 4 screws yet) and rotate it through one detent "bump". This is easier with the forks removed. If the roller shift kit jumps or is difficult to rotate, then more material must be removed. After you have removed an adequate amount of material, you can check your work by putting some clay in place and use it to check the clearance between the lever and the case, as you did in the beginning step.

**INSTALLATION INSTRUCTIONS
FOR
BAKER 5 SPEED
ROLLER SHIFT KIT
FOR 1980-1987 5-SPEED
BIG TWIN**

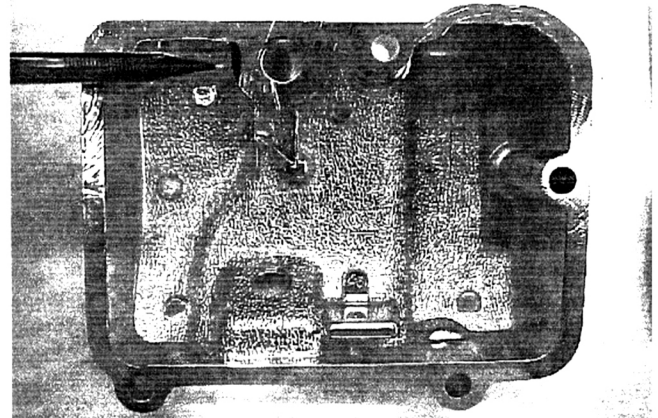


FIGURE 3

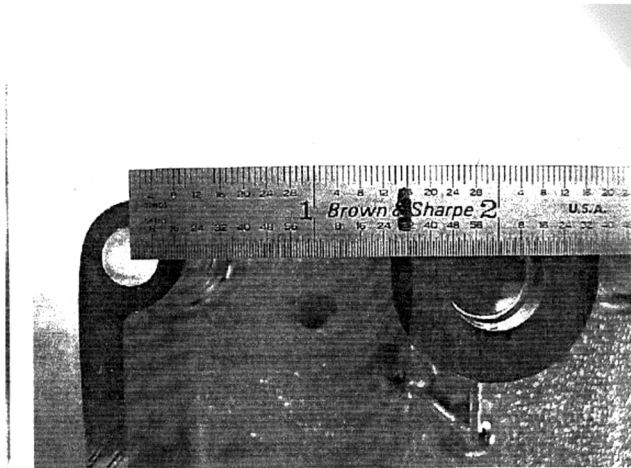


FIGURE 4



FIGURE 5

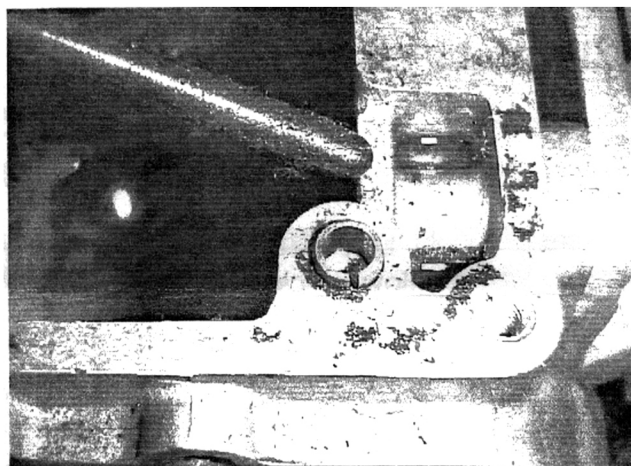


FIGURE 6

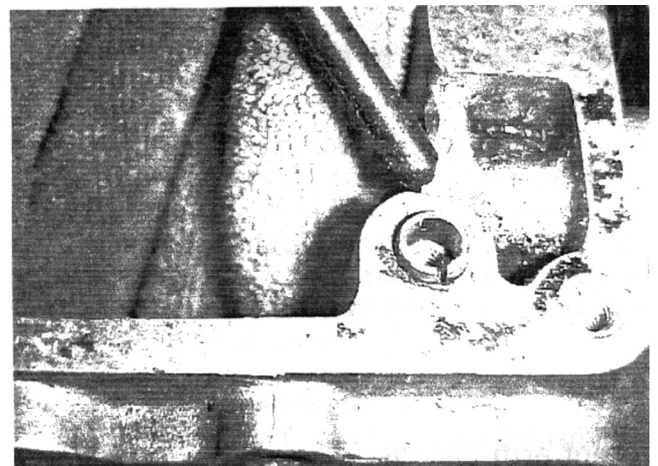


FIGURE 7

**BAKER DRIVETRAIN
9804 E. SAGINAW
HASLETT, MI. 48840
PHONE: 517-339-3835**

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 card must be returned 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 nut 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% re-stocking 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.
