



**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 below 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:

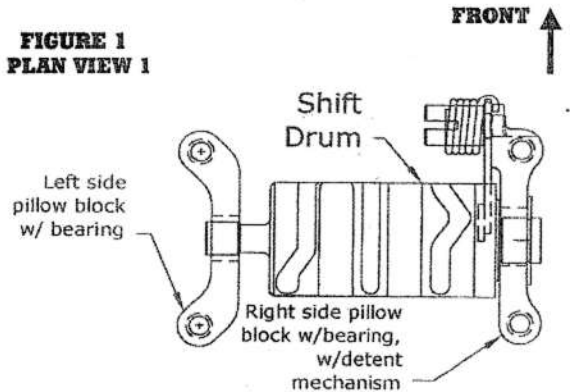
If you have the top cover with the cable bracket that mounts to it (typical from 1980-86), then you must remove material from the boss as shown in Figure 3. Measure back 1 1/2 inches from center of the screw hole as shown in Figure 4. Remove material down 7/8 inches from gasket surface as shown in Figure 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)

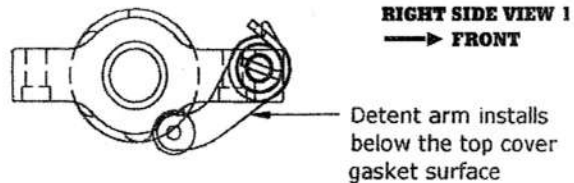
**INSTALLATION INSTRUCTIONS
FOR
BAKER 5 SPEED
ROLLER SHIFT KIT
FOR 1980-1987 5-SPEED
BIG TWIN**

**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.

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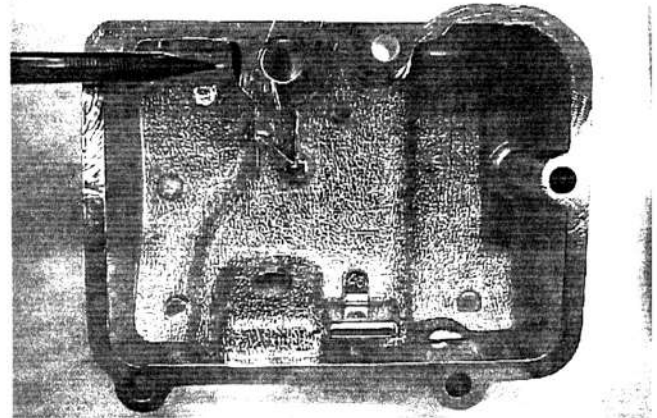


FIGURE 3

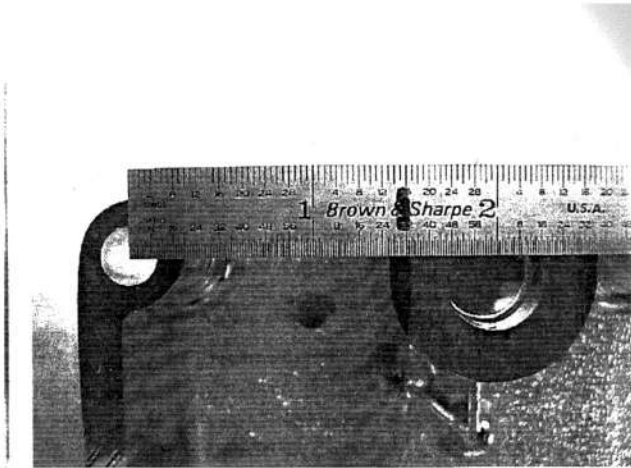


FIGURE 4



FIGURE 5

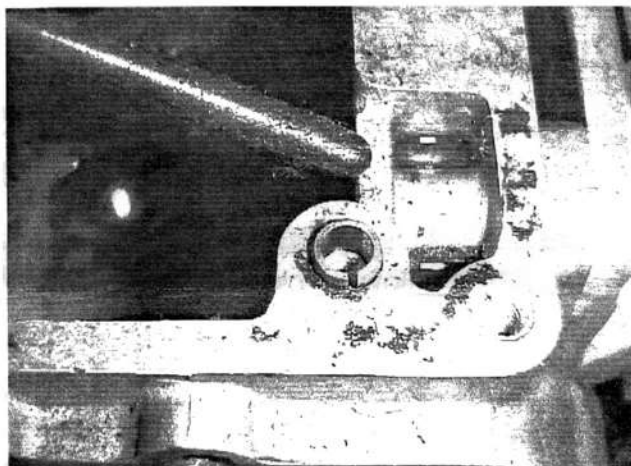


FIGURE 6

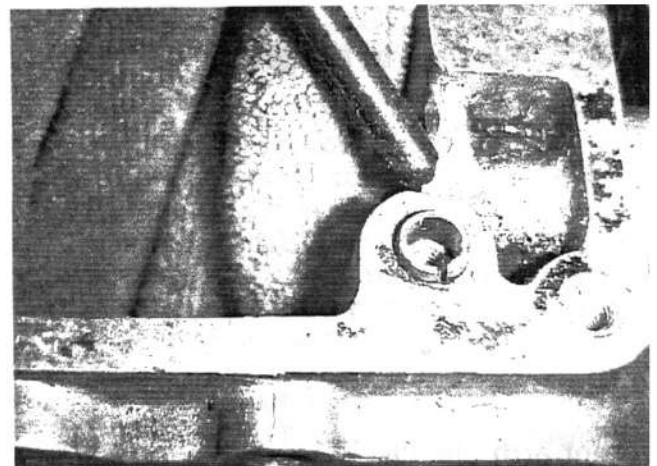


FIGURE 7