THE Indian MOTORCYCLE COMPANY
2535 S. Fairfax, Culver City, CA 90230

FACTORY SERVICE BULLETIN

Date 2/9/75

Number SVB-177

Model F500K TRANSMISSION

Subject ADJUSTMENT PROCEDURE

PROBLEM: To adjust and maintain the transmission shifter mechanism to prevent the failure of transmission gears or parts. There are THREE reasons for transmission problems in the F500K engines (listed in order of their probability).

1. COLLAPSED SHIFTER SPRINGS and "beaten" or worn receiver ball.

   A. The shifter springs can be collapsed due to hard or abusive use, or just plain wear.

      a. The proper MINIMUM "free" length of both "right" and "left" shifter springs is 16.5mm (.650).

      b. The receiver ball and shims should always be replaced when installing new springs.

   B. To remove the springs, you MUST remove the clutch and large primary gears, place the motorcycle in 5th gear, remove the snap ring and cup. Remove the springs and ball from the control rod. CAUTION: Do not get the "right" and "left" springs mixed up. (Ref: 82-WM-480, Page 46). To reinstall the springs use Indian Tool #92001222.

2. ADJUSTMENT OF SHIFTER RATCHET MECHANISM due to "out of adjustment" condition or "wear" of related ratchet mechanism parts. (Ref: Ill. #3).

   A. Adjustment procedure is to place the motorcycle on a stand, with the rear wheel off the ground. Put the motorcycle into 1st gear. Remove the control rod inspection cover from the magneto cover. "Rock" the rear wheel to "center" the gears and receiver ball. Now, gently pull the control rod "in" and "out" and note that there is some "slop" in both directions. There should be .25mm to .38mm (.010 to .015) "slop". If the movement is in ONE direction only, it means that the transmission is "out of adjustment". Before adjusting, it is necessary to then put the motorcycle in 5th gear, and check for the "slop". Go back and forth in 1st and 5th gear to determine where the "slop" is before actually adjusting. You are trying to adjust so that there is an EQUAL amount of "slop" in either direction in 1st and 5th gear. (Ref: 82-WM-480, Pages 46-51)(Ref: SVB-161).

   B. You can "set" the adjustment by measuring the distance from the back face of the magneto cover to the inside face of the "slide pin". The dust cover must be removed and the ratchet mechanism in the NEUTRAL position. Be sure to take into account the "slop" in the slide pin when you measure. (Ref: Ill. #3).

3. "OVER" OR "UNDER" SHIFT CONDITION due to foot change shaft or change key not properly "hitting" their stops in the magneto cover. (Ref: 82-WM-480, Page 47; and Ill. #1 and #2).

   A. To check for this condition you must remove the magneto cover from the motorcycle.

      a. Remove the dust cover from the back side of the magneto cover. Clean out all of the grease.


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