

MOTORCYCLE SERVICE NEWS

NUMBER

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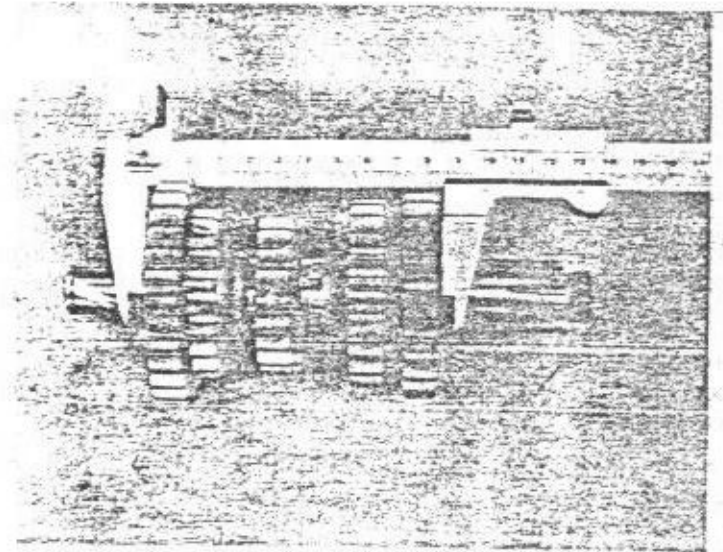
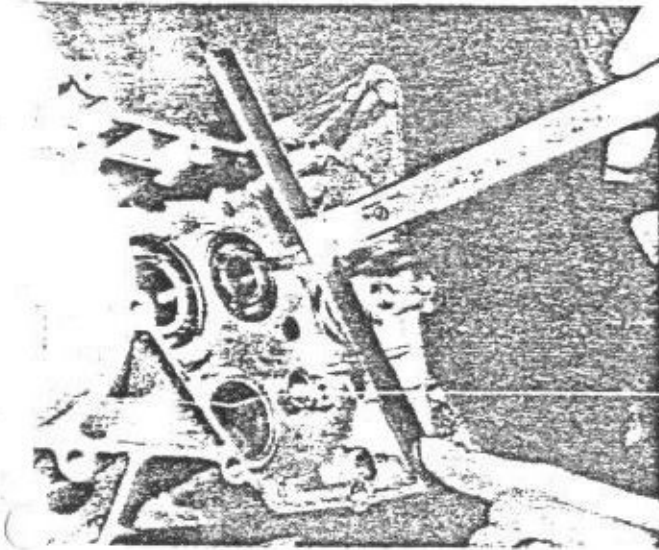
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YAMAHA INTERNATIONAL CORPORATION
MONTEBELLO, CALIFORNIA

DATE 1-15-71

ALL MODELS

SPACING TRANSMISSION AXLES AND GEARS - continued



2. Measure transmission shaft length. Measure transmission axle length from one bearing contact surface to the other bearing contact surface (across gears and circlips, if any on the outer ends). Include standard shims usually included in the engine and listed in the parts book.
3. Combine measurements to determine side play. Subtract transmission axle length from total case depth. The remainder will be the amount of the side play.

Example:

Total case depth = 6.111"
Axle length = 6.100"
Side-to-side play = .011"

Results:

.011" is excessive
-.003" recommended side play
.008" must be taken up

As a general rule, half the excessive side play should be taken up at each end of the axle. Select the proper shims from the page 4 list, combining some if necessary. If the model in question is not listed, then measure the diameter of the axle and match it with a shim of similar ID and appropriate thickness.

4. Final transmission spacing check. Whenever possible, install assembled gears and shift drum assembly into a case and rotate through all gears. Check that you have 50 - 75% penetration of the engagement dogs into the slots (or holes).

Amount of engagement can be adjusted, either by shimming the individual gear more toward the sliding gear, or, shimming the drive axle. As the axle moves over, it carries the circlipped spinning gear (or gears) toward the sliding gear(s).

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