

PROBLEM:

On early H1 and H2 models, there have been problems of gear engagement resulting from excessive play in the stationary gears on both the drive and output shafts.

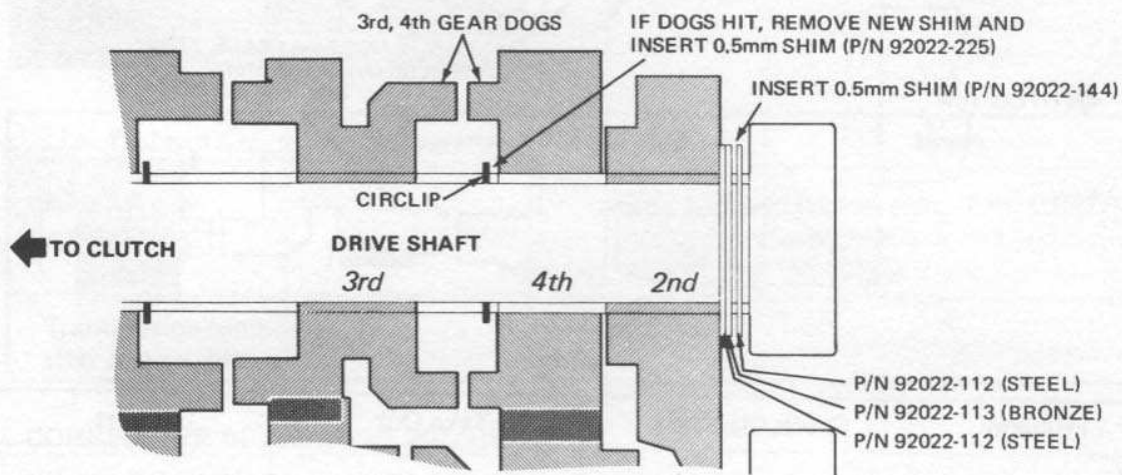
SOLUTION:

Several shims have been added on both output and drive shafts in order to eliminate specific problems. These corrections have been applied to all H1's from engine numbers KAE-59017 and up, and to all H2's from the beginning of production.

For those H1 and H2 motorcycles which jump out of gear, or fail to engage properly, corrective adjustment may be accomplished in the following manner. Corrective action is listed for each gear. All clearances are checked with the transmission in neutral.

A. CORRECTIVE ACTION FOR 4TH GEAR:

1. Insert an 0.5mm shim (P/N 92022-144) between second gear and the bearing on the drive shaft. The shim goes between the bronze and steel washers already present. This moves second and fourth gears over toward the third gear slider, making a more positive engagement of fourth. If the shaft turns hard, take the shim back out.
2. If fourth gear dogs hit third gear dogs after adding the shim, then take it back out and add a 0.5mm shim (P/N 92022-225) between 4th gear and the circlip. This keeps the sloppiness out of the gear without forcing the dogs together.



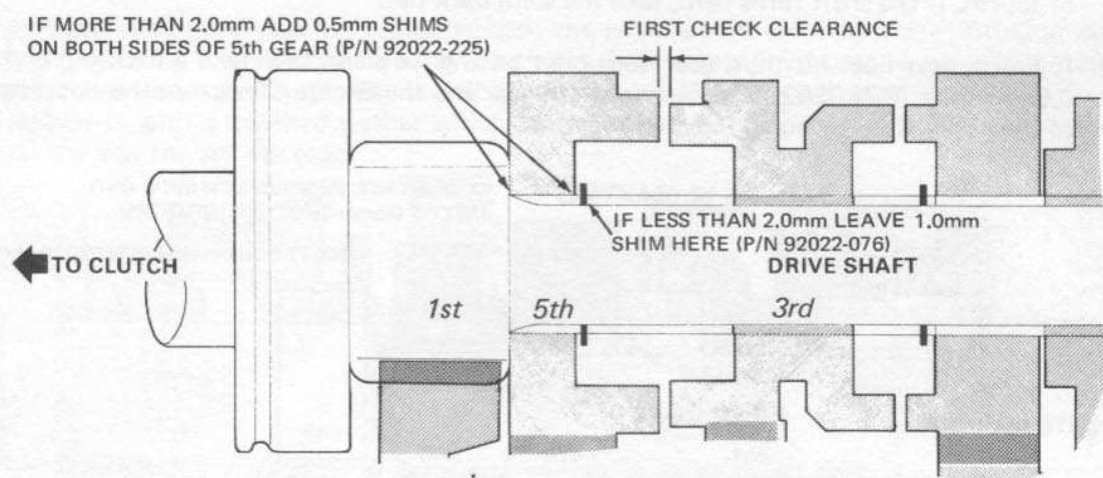
Please see reverse side for additional information.

4th Gear Problem	Clearance	Take Out	Insert
Jumps out of 4th gear.			0.5mm shim (92022-144) along with shims already present between second gear and end bearing on drive shaft.
4th gear dogs hit 3rd gear dogs in neutral after adding shim.		Remove new 0.5mm shim between 2nd gear and end bearing on drive shaft.	Add 0.5mm shim (P/N 92022-225) between 4th gear and circlip on drive shaft.

NOTE: Refer to Bulletin Ser 74 H-26 for further information.

B. CORRECTIVE ACTION FOR 5TH GEAR:

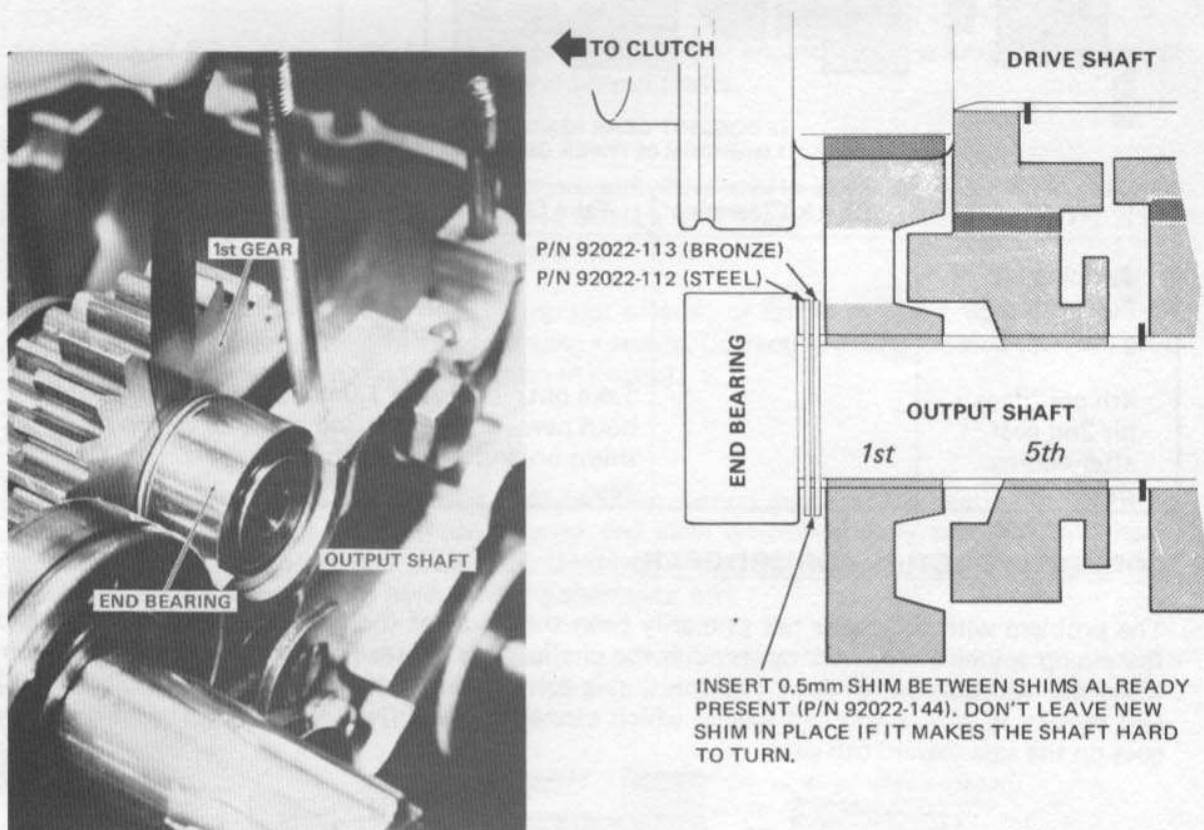
- To eliminate jumping out of fifth gear, measure the clearance between fifth and third gear dogs on the drive shaft. If the clearance is over 2.0mm, remove the factory installed 1.0mm shim (P/N 92022-076) between fifth gear and the circlip, and add a 0.5mm (92022-225) shim on either side of fifth gear. This moves fifth gear 0.5mm closer to the slider gear, assuring a more positive engagement. If the clearance is less than 2.0mm between dogs on the two gears, then leave the 1.0mm shim where it is.



Problem	Check Clearance	Take Out	Insert
Jumping out of 5th gear.	Ck clearance between 5th and 3rd gear dogs on drive shaft.	If clearance is greater than 2.0mm take out 1.0mm shim between 5th and circlip.	Insert 0.5mm shim (P/N 92022-225) on either side of 5th gear on the drive shaft.
		If less than 2.0mm leave shim where it is.	

C. CORRECTIVE ACTION FOR 1ST GEAR:

To correct poor engagement of 1st gear, insert an 0.5mm shim (P/N 92022-144) between first gear and the end bearing on the output shaft. This is in addition to the shims already present (P/N 92022-112, -113). This moves 1st gear slightly closer to the slider gear and eliminates play which may have contributed to jumping out of gear. If adding this shim makes the output shaft hard to turn, then take it back out.

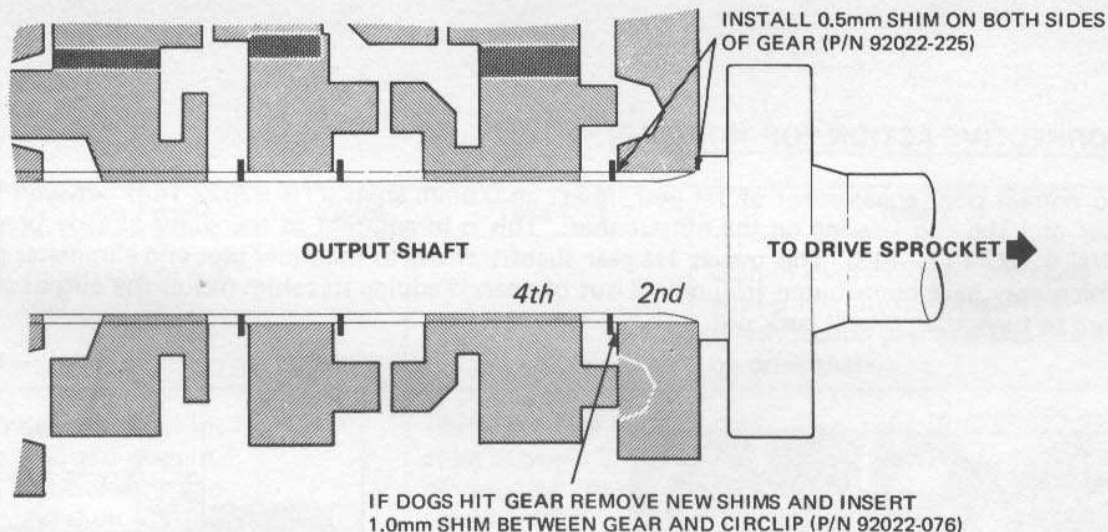


Problem	Check Clearance	Take Out	Insert
Poor 1st gear engagement.			Add 0.5mm shim (P/N 92022-144) between first gear and end bearing on the output shaft.
Transmission binds after adding shim.		Take out new shims.	

D. CORRECTIVE ACTION FOR 2ND GEAR:

To eliminate play at second gear on the output shaft, install a 0.5mm washer (P/N 92022-225) on both sides of the gear. This moves the gear slightly closer to the fourth gear slider as well as reducing play. If the dogs on fourth gear hit second gear after the shims are added, remove both new shims and add a 1.0mm shim (92022-076) between second gear and the circlip. This will keep the dogs from hitting, while eliminating play at second gear.

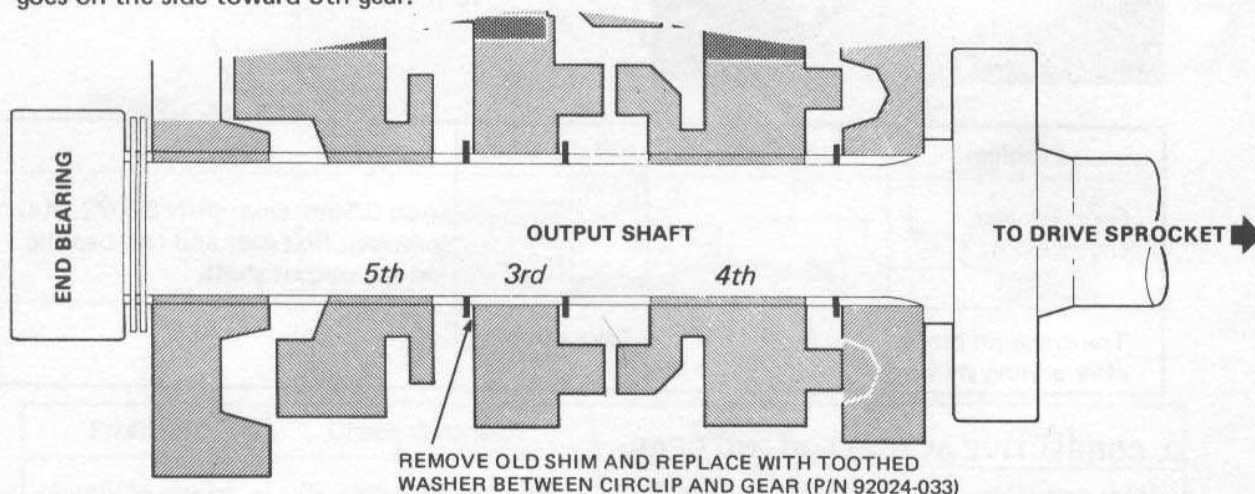
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Problem	Check Clearance	Take Out	Insert
Jumping out of 2nd gear.			Add 0.5mm shim (92022-225) on both sides of 2nd gear on the output shaft.
4th gear dogs hit 2nd gear after adding shims.		Take out both new shims on 2nd gear.	Add 1.0mm shim (92022-076) between 2nd gear and circlip on output shaft.

E. CORRECTIVE ACTION FOR 3RD GEAR:

The problem with third gear has primarily been the result of the shim between 3rd gear and the circlip spinning and wearing through the circlip. This causes third gear to move away from the slider and hop out of gear. The solution is to remove the standard shim (P/N 92022-076) and replace it with a toothed washer which cannot rotate (P/N 92024-033). The new washer goes on the side toward 5th gear.



Problem	Take Out	Insert
Jumps out of 3rd gear.	Remove 1.0mm shim between 3rd gear and circlip on output shaft.	Insert 1.0mm toothed thrust washer (P/N 92024-033) between 3rd gear and circlip (5th gear side).

WARRANTY INFORMATION:

This bulletin is for service information only, not for warranty authorization. ■