

2/4/64

GENERAL SERVICE INFORMATION

C15 - B40 - A50 AND A65 MODEL GEARBOX

Conditions That Cause Shifting Difficulties:

1. A shifting quadrant plunger that does not slide freely in the quadrant body and does not engage in the cam plate "pick up" openings.
2. A shifting quadrant plunger that is chipped or rounded over at the "pick up" edge and does not enter the "pick up" opening in the cam plate deep enough.
3. A shifting cam plate that has "pick up" openings that are rounded over at the edges causing the plunger to slip.
4. A shifting cam plate that does not have sufficient side clearance at the pivot bushing and binds. There should be at least .020" side clearance. Grind pivot bushing to increase clearance.
5. A shifting fork that the roller has worked off resulting in incomplete engagement of the gears.
6. A mainshaft 3rd and 4th sliding gear with a driving dog broke off preventing the gear from engaging into the sprocket driven gear.
7. A sliding gear with leading edges of the driving dogs rounded over which reduces the area of engagement causing slipping out of gear.
8. Gears that bind on the shafts or bushings due to insufficient clearance.
9. Rough surface in the cam plate shifting fork rollers track.
10. Weak shifting quadrant spring.
11. A worn shifter cam plate lock spring which causes the gears to jump out of speed.
12. A shifter plate lock plunger that has a sharp point that cuts into the shifter plate. (A50 - A65 Models Only).

It will be necessary to check all the parts that are mentioned above. Replace those that are worn or not as they should be and provide clearance where the parts are binding. Any rough surfaces must be made smooth and the point must be ground flat on the A50 - A65 model shifter plate plunger. Grind off approximately 1/32".

WB/jc
Service Information #6

Walter Brown
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Service Manager