



**Title:**

SYNCHRO TRANSMISSION TESTS

**Issue Date:**

10.8.78

To be carried out at PDI and following gearbox repair.

1. STATIC TEST - ENGINE STOPPED

To check the detent position of the synchro packs.

Note: If following a gearbox repair, this test can best be carried out prior to filling the gearbox with oil and with the floor mats off.

- a) Move speed change lever slowly from 1st gear position to neutral - (moving towards reverse).

Detent should be heard whilst lever is in neutral position. If it occurs on passing through to the opposing gear, the selector arm must be reset or changed. If detent is biased towards any gear, it must be reset to central, neutral position.

- b) Repeat above for all speed gears.

If test (1) is carried out with no oil in gearbox, FILL WITH OIL PRIOR TO CONTINUING.

2. STATIC TEST - ENGINE RUNNING

To check for tight bushes in:

i) Synchro Gears

- a) Ensure speed change lever is in neutral.  
b) Engage low range gear and run engine up to 1000 rpm with brakes off.

Tractor should remain stationary with no change in engine rpm.

ii) Constant Mesh Gears

- a) Ensure range change lever is in neutral.  
b) Engage reverse gear and run engine up to 1000 rpm with brakes off.

Tractor should remain stationary with no change in engine rpm.

If, when carrying out tests 2(i) and 2(ii),

- partial seizure has occurred, tractor will creep.
- total seizure has occurred, tractor will move at a speed relative to the seized gear.



Title:

SYNCHRO TRANSMISSION TESTS

Issue Date:

10.8.78

(Continuation)

3. MOVEMENT TEST

To check operation.

- a) Select any range gear.
- b) Select 1st or 2nd speed gear and whilst on the move.
- c) Select reverse gear. No noise should be heard.

4. ROAD TEST