

## INSPECTION

### 1. INSPECT TRANSMISSION HUB SLEEVE NO. 2 CLEARANCE

- (a) Using vernier calipers, measure thickness claw of 3rd and 4th shift fork.

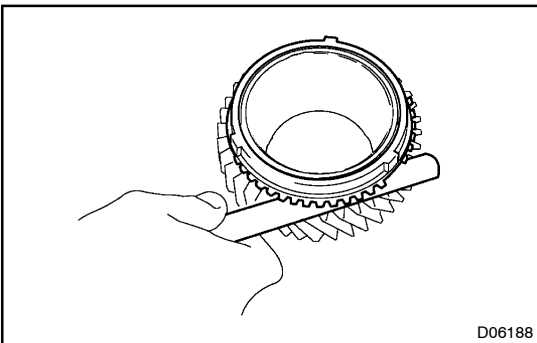
**Standard thickness: 7.8 – 8.0 mm (0.307 – 0.315 in.)**

- (b) Using vernier calipers, measure the groove of hub sleeve No. 2 and subtract the shift fork claw thickness from hub sleeve groove.

**Maximum clearance:**

**0.15 – 0.35 mm (0.0059 – 0.138 in.)**

If the clearance exceeds the maximum, replace the shift fork or hub sleeve.



### 2. INSPECT SYNCHRONIZER RING NO. 1

- (a) Apply the gear oil to cone of 3rd gear and synchronizer ring No. 1.

- (b) Install the synchronizer ring to 3rd gear.

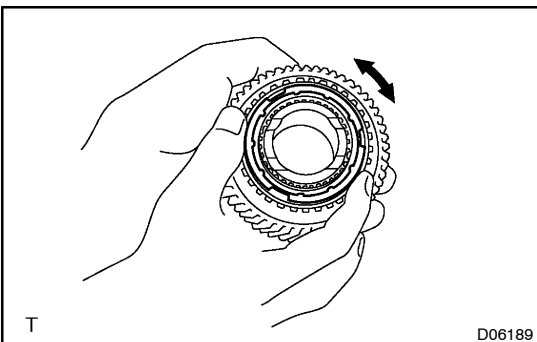
- (c) Using a feeler gauge, measure the clearance between the synchronizer ring back and gear spline end.

**Standard clearance:**

**3rd gear: 0.9 – 1.7 mm (0.0354 – 0.0669 in.)**

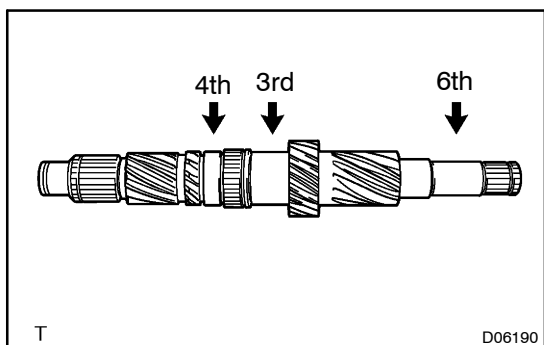
**4th gear: 0.8 – 1.6 mm (0.031 – 0.062 in.)**

If the clearance is not as standard, replace the synchronizer ring.



- (d) Check the braking effect of the synchronizer ring. Turn the synchronizer ring in one direction while pushing it to the gear cone. Check that the ring locks.

If it does not lock, replace the synchronizer ring.



### 3. INSPECT COUNTER SHAFT

- (a) Using a micrometer, measure outer diameter of counter gear journal.

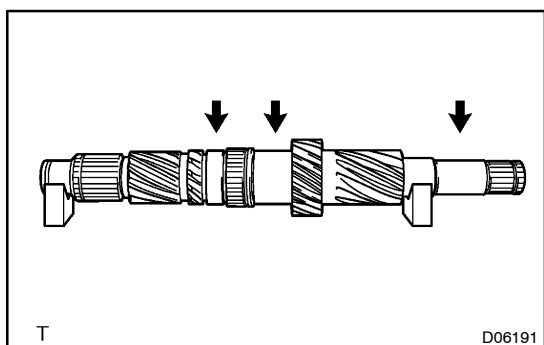
**Standard diameter:**

**3rd gear: 39.284 – 39.300 mm (1.5466 – 1.5472 in.)**

**4th gear: 37.984 – 38.000 mm (1.495 – 1.496 in.)**

**6th gear: 24.987 – 25.000 mm (0.9837 – 0.9842 in.)**

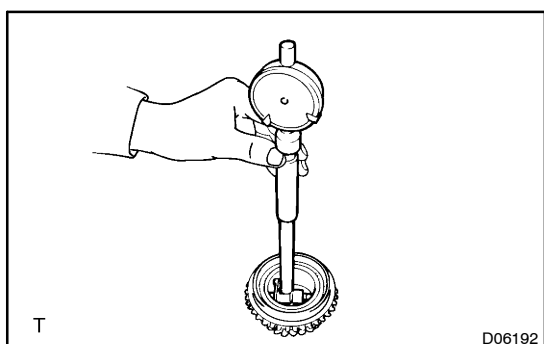
If the outer diameter is not as standard, replace the counter shaft.



- (b) Using a dial indicator, check the counter shaft runout.

**Maximum runout: 0.3 mm (0.00012in.)**

If the runout exceeds the maximum, replace the counter shaft.



### 4. INSPECT 3RD AND COUNTER SHAFT 4TH SPEED GEAR

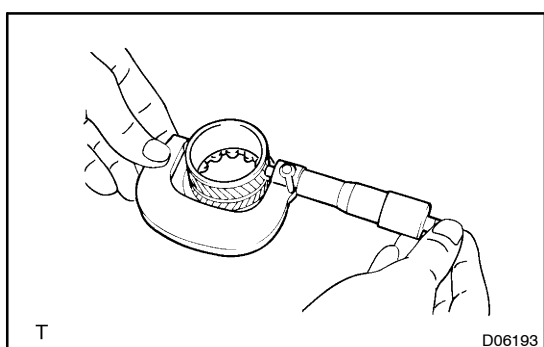
Using a cylinder gauge, measure the inner diameter of each gear.

**Standard diameter:**

**3rd gear: 43.015 – 43.040 mm (1.6935 – 1.6945 in.)**

**4th gear: 46.315 – 46.340 mm (1.8234 – 1.8244 in.)**

If the inner diameter is not as standard, replace the gear.



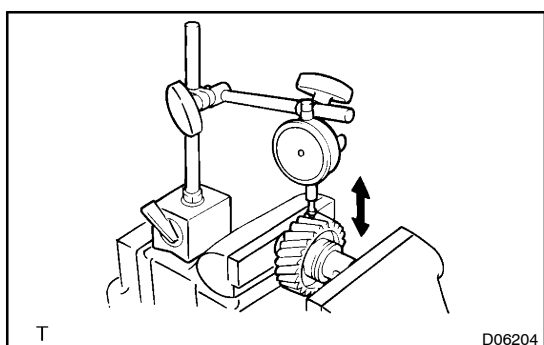
### 5. INSPECT 4TH GEAR BEARING INNER RACE

Using a micrometer, measure the outer diameter of 4th gear inner race.

**Standard diameter:**

**46.225 – 46.250 mm (1.8199 – 1.8207 in.)**

If the outer diameter is not as standard, replace the 4th gear bearing inner race.



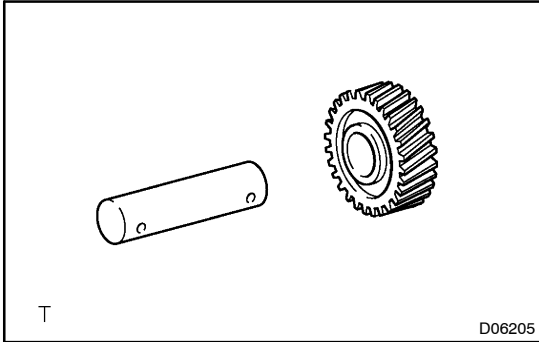
### 6. INSPECT REVERSE IDLER GEAR RADIAL CLEARANCE

Using a dial indicator, measure the radial clearance.

**Standard clearance:**

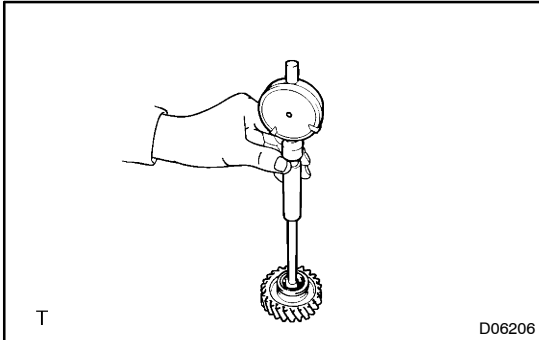
**0.040 – 0.082 mm (0.00157 – 0.00323 in.)**

If the clearance is not as standard, replace the idler gear or shaft.



## 7. INSPECT REVERSE IDLER GEAR

- (a) Remove the reverse idler gear from the idler gear shaft.

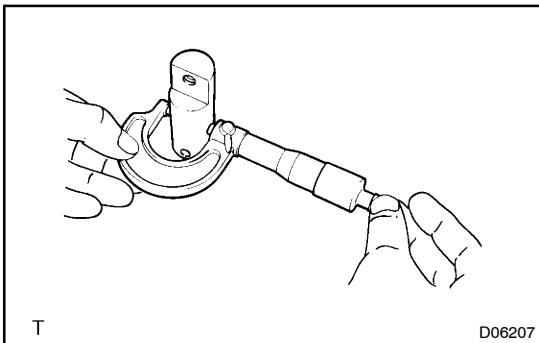


- (b) Using a cylinder gauge, measure the inner diameter of reverse idler gear.

**Standard diameter:**

**22.04 – 22.06 mm (0.868 – 0.869 in.)**

If the inner diameter is not as standard, replace the gear.



## 8. INSPECT REVERSE IDLER SHAFT

Using a micrometer, measure the outer diameter of the shaft.

**Standard diameter:**

**21.979 – 22.000 mm (0.865 – 0.866 in.)**

If the outer diameter is not as standard, replace the shaft.