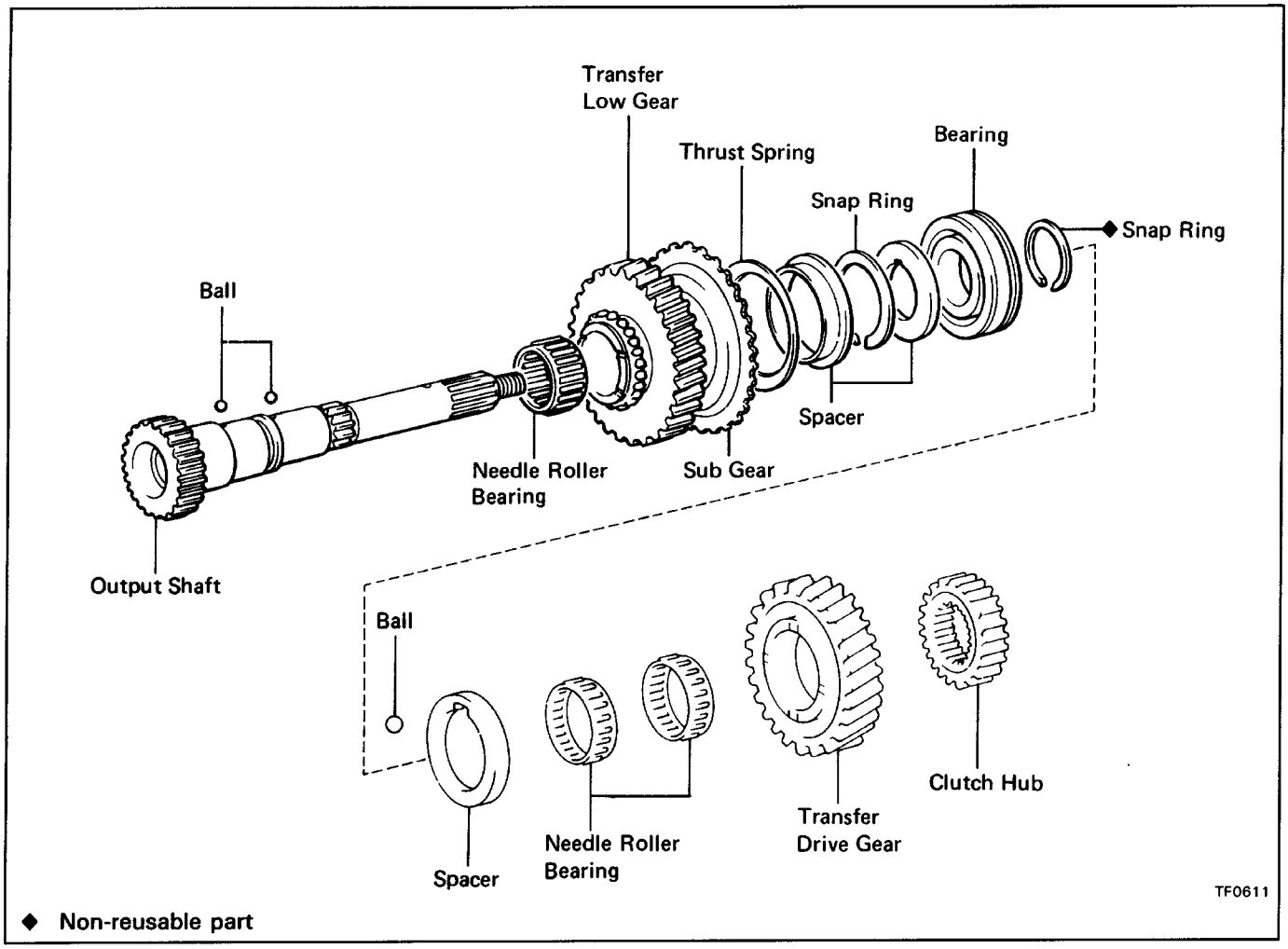
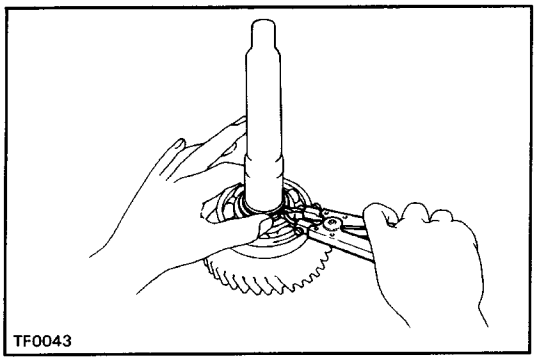
Output Shaft

COMPONENTS



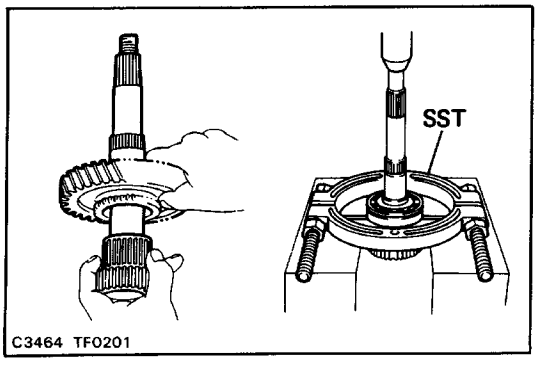
◆ Non-reusable part



DISASSEMBLY OF OUTPUT SHAFT ASSEMBLY

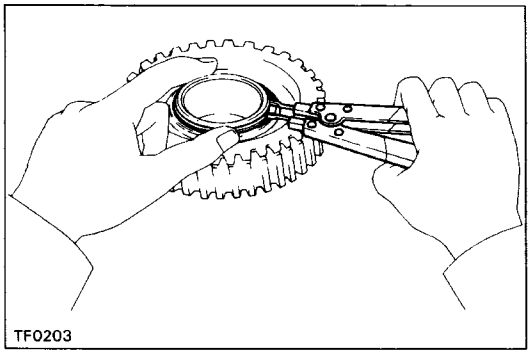
REMOVE OUTPUT SHAFT FRONT BEARING, LOW GEAR AND SUB GEAR

(a) Using snap ring pliers, remove the snap ring.



(b) Using SST and a press, remove the bearing, No. 1 spacer and low gear.
SST 09950–00020

(c) Remove the steel ball and needle roller bearing.


TF0203

(d) Using snap ring pliers, remove the snap ring from the low gear.
(e) Remove the spacer, thrust spring and sub gear.

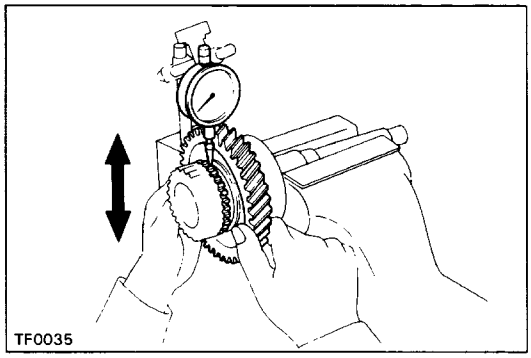
INSPECTION OF OUTPUT SHAFT ASSEMBLY

1. CHECK OIL CLEARANCE AND THRUST CLEARANCE OF TRANSFER LOW GEAR

(a) Using a dial indicator, measure the oil clearance between the gear and shaft with the needle roller bearing installed.

Standard clearance: 0.010 – 0.055 mm (0.0004 – 0.0022 in.)
Maximum clearance: 0.075 mm (0.0030 in.)

If the clearance exceeds the limit, replace the gear, needle roller bearing or shaft.

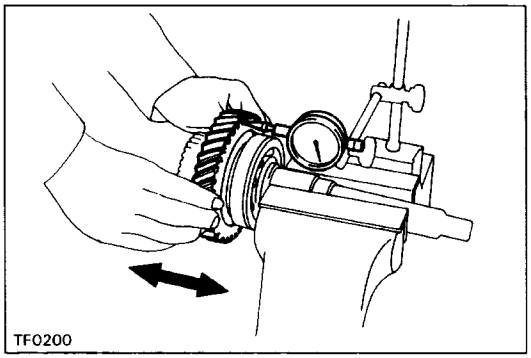

TF0035

(b) Using a dial indicator, measure the thrust clearance with the spacer and bearing installed.

HINT: Do not touch the shaft end of the dial indicator to the sub gear.

Standard clearance: 0.10 – 0.25 mm (0.0039 – 0.0098 in.)
Maximum clearance: 0.30 mm (0.0118 in.)

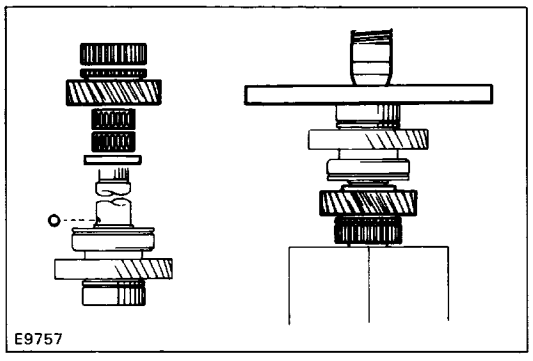
If the clearance exceeds the limit, replace the spacer.

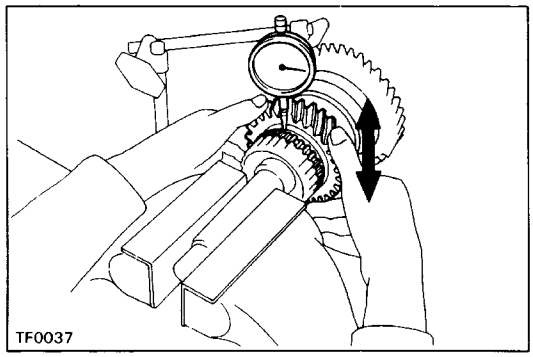

TF0200

2. CHECK OIL CLEARANCE AND THRUST CLEARANCE OF TRANSFER DRIVE GEAR

(a) Using a press, install the ball, spacer, two needle roller bearings and transfer drive gear.

HINT: Do not loosen the ball.

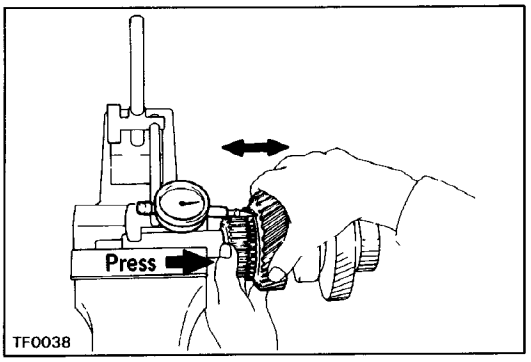

E9757


TF0037

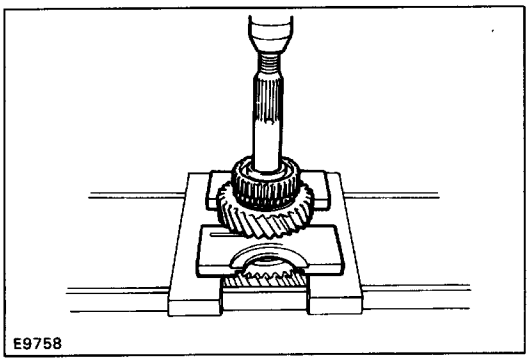
(b) Using a dial indicator, measure the oil clearance between the gear and shaft with the needle roller bearing installed.

Standard clearance: 0.009 – 0.051 mm (0.0004 – 0.0020 in.)
Maximum clearance: 0.71 mm (0.0028 in.)

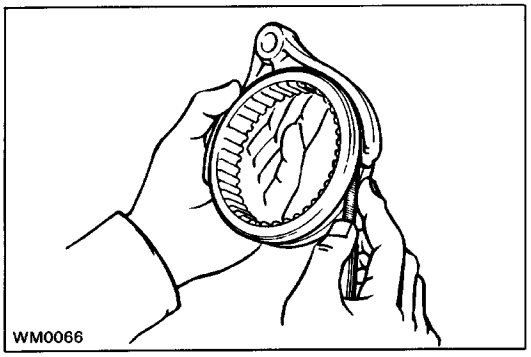
If the clearance exceeds the limit, replace the gear, needle roller bearing or shaft.



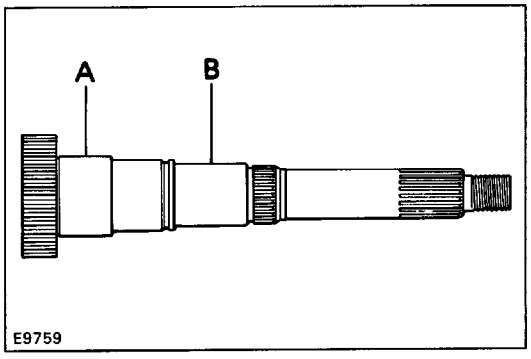
(c) Using a dial indicator, measure the thrust clearance with the clutch hub and spacer installed.
Standard clearance: 0.09 – 0.27 mm
(0.0035 – 0.0106 in.)
Maximum clearance: 0.32 mm (0.0126 in.)
If the clearance exceeds the limit, replace the spacer.



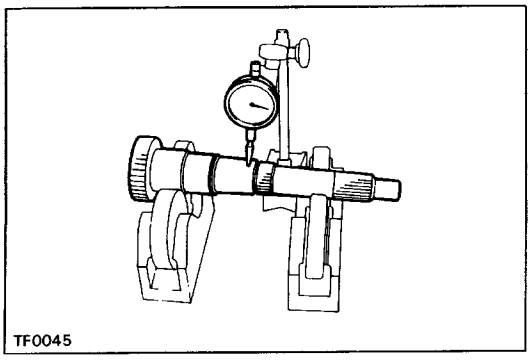
(d) Using a press, remove the ball, spacer, two needle roller bearings and transfer drive gear.



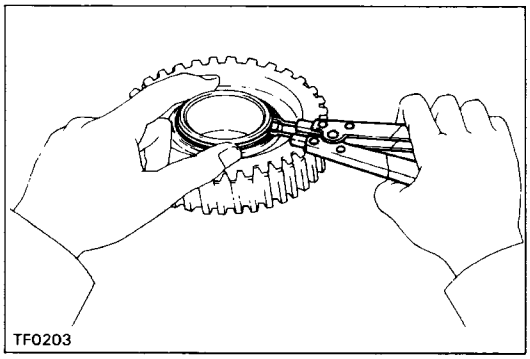
3. MEASURE CLEARANCE OF SHIFT FORKS AND HUB SLEEVES
Using a feeler gauge, measure the clearance between the hub sleeve and shift fork.
Maximum clearance: 1.0 mm (0.039 in.)
If the clearance exceeds the limit, replace the shift fork or hub sleeve.



4. INSPECT OUTPUT SHAFT
(a) Using a micrometer, measure the outer diameter of the output shaft.
Maximum outer diameter:
Part A 44.984 mm (1.7710 in.)
B 34.984 mm (1.3773 in.)



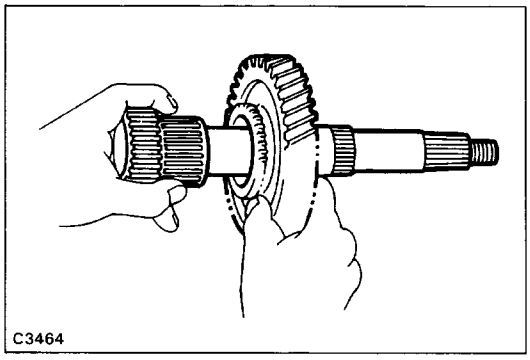
(b) Using a dial indicator, measure the shaft runout.
Maximum runout: 0.03 mm (0.0012 in.)


TF0203

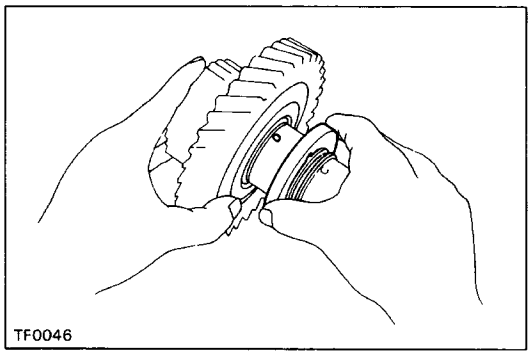
ASSEMBLY OF OUTPUT SHAFT

INSTALL OUTPUT SHAFT FRONT BEARING LOW GEAR AND SUB GEAR

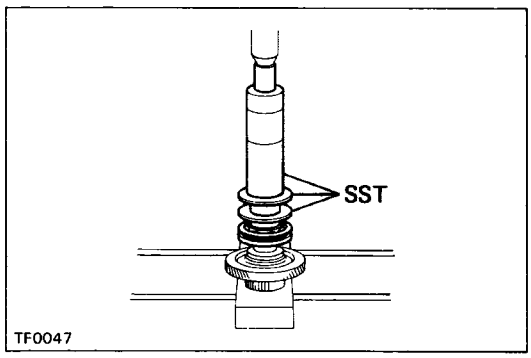
(a) Install the sub gear, thrust spring and spacer.
(b) Using snap ring pliers, install the snap ring.


C3464

(c) Apply MP grease to the needle roller bearing.
(d) Install the low gear with needle roller bearing to the output shaft.

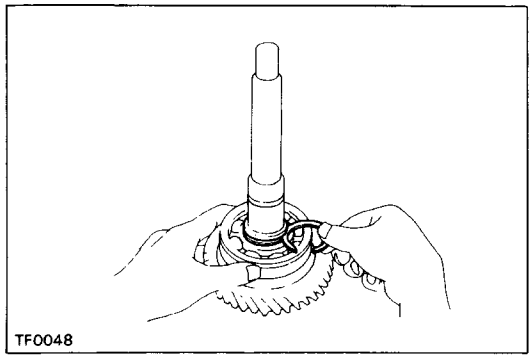

TF0046

(e) Install the steel ball on the output shaft.
(f) Install the No. 1 spacer.



TF0047

(g) Using SST and a press, install a new bearing.
SST 09316–60010 (09316–00010, 09316–00040, 09316–00050)


TF0048

(h) Select a snap ring that will allow minimum axial play and install it on the shaft.
Maximum play: 0.10 mm (0.0039 in.)

Mark	Thickness mm (in.)
0	2.40 – 2.45 (0.0945 – 0.0965)
1	2.45 – 2.50 (0.0965 – 0.0984)
2	2.50 – 2.55 (0.0984 – 0.1004)
3	2.55 – 2.60 (0.1004 – 0.1024)
4	2.60 – 2.65 (0.1024 – 0.1043)
5	2.65 – 2.70 (0.1043 – 0.1063)