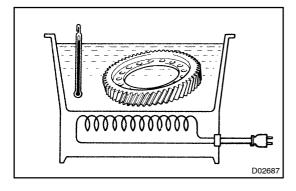
#### TD044 05

# REASSEMBLY

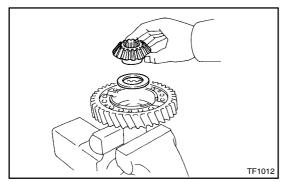
## HINT:

Coat all of the sliding and rotating surfaces with gear oil before reassembly.



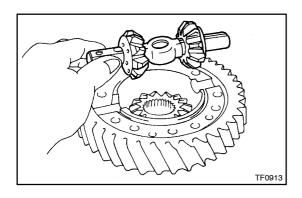
#### 1. INSTALL LOW GEAR

- (a) Clean the contact surface of the differential case.
- (b) Heat the low gear in boiling water.
- (c) Carefully remove the low gear from the water.
- (d) After the moisture on the low gear has completely evaporated, quickly install the low gear to the differential case.

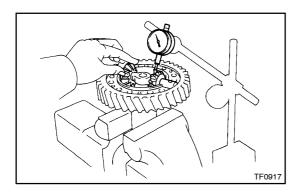


# 2. INSTALL PINION SHAFT, PINION GEAR AND THRUST WASHER

(a) Install the front side gear and thrust washer to the differential front case.



(b) Install the pinion shaft, 2 pinion gears and thrust washers to the differential front case.



(c) Using a dial indicator, measure the front case backlash. HINT:

Push the pinion shaft.

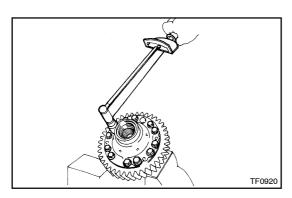
# Maximum backlash: 0.05 mm (0.0020 in.)

If the backlash is not within the specification, replace the thrust washer with one of the correct size and reinstall the thrust washer.

Thickness mm (in.)	Thickness mm (in.)	
1.70 (0.0669)	2.45 (0.0965)	
1.85 (0.0728)	2.60 (0. 1024)	
2.00 (0.0787)	2.75 (0. 1083)	
2.15 (0.0846)	2.90 (0. 1142)	
2.30 (0.0906)	3.05 (0. 1201)	

- (d) In the same way, measure the rear case backlash.
- 3. INSTALL STRAIGHT PIN TO PINION SHAFT
- 4. INSTALL REAR SIDE GEAR AND THRUST WASHER
- 5. INSTALL DIFFERENTIAL REAR CASE

Install the differential rear case and 12 set bolts.



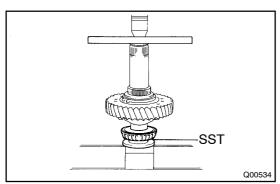
#### 6. TORQUE REAR CASE SET BOLT

(a) Torque the 12 rear case set bolts.

Torque: 88 N·m (900 kgf·cm, 65 ft·lbf)

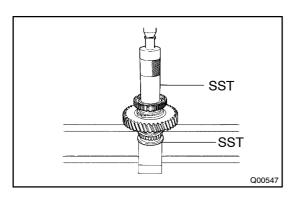
- (b) Turn the pinion gear.
- (c) Loosenthe 12 rear case set bolts.
- (d) Torque the 12 rear case set bolts.

Torque: 98 N·m ( 1,000 kgf·cm, 72 ft·lbf)



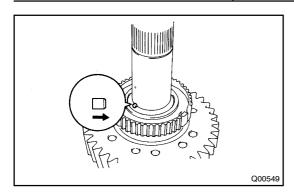
#### 7. INSTALL REAR TAPER ROLLER BEARING

Using SST and a press, install the rear taper roller bearing. SST 093 16–12010



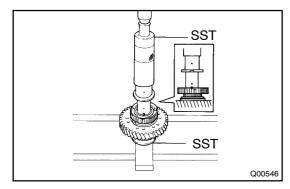
# 8. INSTALL CLUTCH HUB

Using SST and a press, install the clutch hub. SST 093 16–12010, 093 16–60011 (09316–00011)



#### 9. INSTALL HIGH SPEED OUTPUT GEAR BUSHING

- (a) Apply MP grease to the straight pin.
- (b) Install the straight pin, as shown.

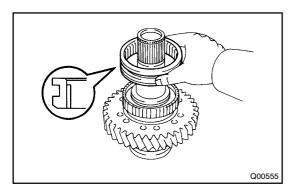


(c) Using SST and a press, install the high speed output gear bushing.

SST093 16-12010,093 16-60011 (09316-00011)

## **NOTICE:**

Before pressing, align the holes on the bushing and shaft so that the pin on the shaft is aligned with the cut—out of the bushing.



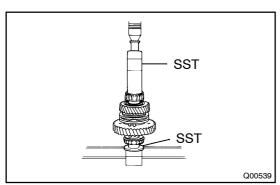
#### 10. INSTALL HIGH AND LOW CLUTCH SLEEVE

HINT:

Make sure to install the high and low clutch sleeve in the correct direction.

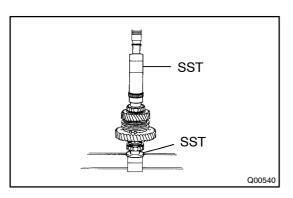
# 11. INSTALL HIGH SPEED OUTPUT GEAR AND NEEDLE ROLLER BEARING

- (a) Apply gear oil to the needle roller bearing.
- (b) Install the high speed output gear and needle roller bearing.



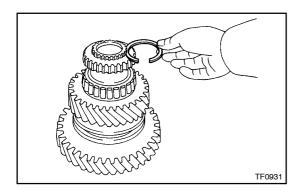
#### 12. INSTALL FRONT TAPER ROLLER BEARING

Using SST and a press, install the front taper roller bearing. SST 093 16–12010, 093 16–60011 (09316–00011)



# 13. INSTALL FRONT DRIVE GEAR PIECE

Using SST and a press, install the front drive gear piece. SST 093 16–12010, 093 16–60011 (09316–00011)



## 14. INSTALL SNAP RING

(a) Select a snap ring that will allow the minimum axial play.

Mark	Thickness mm (in.)	Mark	Thickness mm (in.)
Α	2.00 (0.0787)	G	2.60 (0.1024)
В	2.10 (0.0827)	Н	2.70 (0.1063)
С	2.20 (0.0866)	J	2.80 (0.1102)
D	2.30 (0.0906)	K	1.80 (0.0709)
Е	2.40 (0.0945)	L	1.90 (0.0748)
F	2.50 (0.0984)	-	-

- (b) Using a snap ring expander, install a new snap ring.
- 15. INSPECT HIGH SPEED OUTPUT GEAR RADIAL AND THRUST CLEARANCE (See page TR-29)