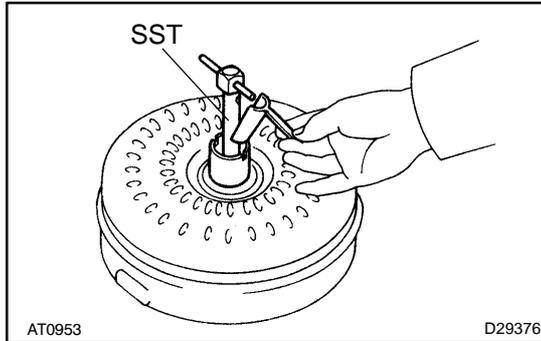


TORQUE CONVERTER CLUTCH AND DRIVE PLATE (1GR-FE)

INSPECTION

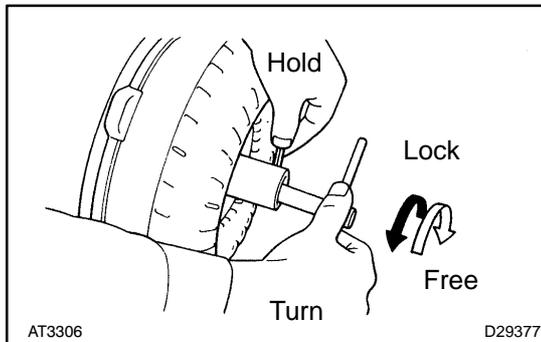
400YR-01



1. INSPECT TORQUE CONVERTER CLUTCH ASSY

(a) Inspect the one-way clutch.

- (1) Install SST in the inner race of one-way clutch.
SST 09350-32014 (09351-32010)
- (2) Set SST so that it fits in the notch of the converter hub and outer race of the one-way clutch.
SST 09350-32014 (09351-32020)

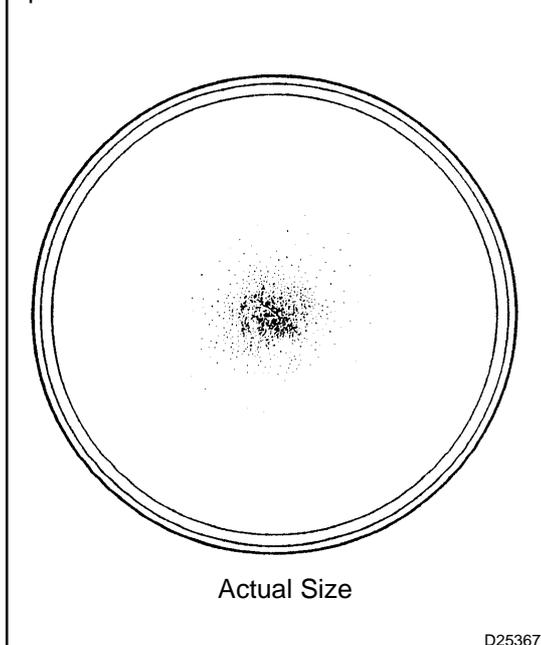


- (3) With the torque converter standing on its side, the clutch locks when turned counterclockwise and rotate freely and smoothly clockwise.

If necessary, clean the converter and retest the one-way clutch.

Replace the converter if the one-way clutch still fails the test.

Sample showing minimum amount of powders in ATF



(b) Determine the condition of the torque converter clutch assy.

- (1) If the inspection result of the torque converter clutch assy meets the following item, replace the torque converter clutch.

Malfunction item:

Any metallic sound is heard from the torque converter clutch during stall test or when the shift lever is in neutral position.

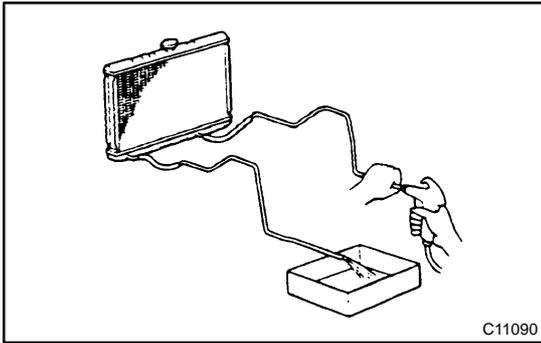
One-way clutch is free or locked in both directions. Fine powders exceeding the sample limit is identified in ATF. (See the sample.)

HINT:

The sample shows the auto fluid of approx. 0.25 liters (0.26 US qts, 0.22 Imp. qts) that is taken out from the removed torque converter clutch.

(c) Replace the ATF in the torque converter clutch.

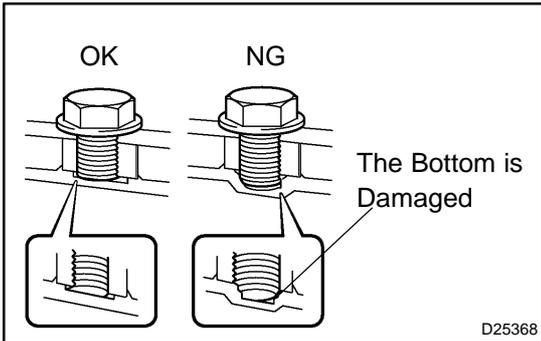
- (1) If the ATF is discolored and/or has a foul odor, completely stir the ATF in the torque converter clutch and drain it with the face for installation facing up.



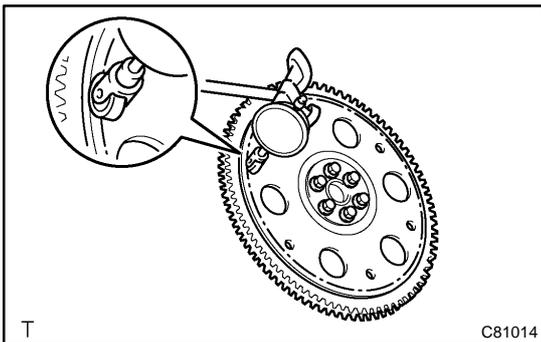
- (d) Clean and check the oil cooler and oil pipe line.
 (1) If the torque converter clutch is inspected or the ATF is exchanged, clean the oil cooler and oil pipe line.

HINT:

- Spray compressed air of 196 kPa (2 kgf/cm², 28 psi) from the inlet hose.
 - If plenty of fine powders are identified in the ATF, add new ATF using a bucket pump and clean it again.
- (2) If the ATF is cloudy, inspect the oil cooler (radiator).



- (e) Prevent deformation of the torque converter clutch and damage to the oil pump gear.
 (1) When any marks due to interference are found on the end of the bolt for the torque converter clutch and on the bottom of the bolt hole, replace the bolt and the torque converter clutch.
 (2) All of the bolts should have the same length.
 (3) No missing spring washer.



2. **INSPECT RUNOUT OF DRIVE PLATE & RING GEAR SUB-ASSY**

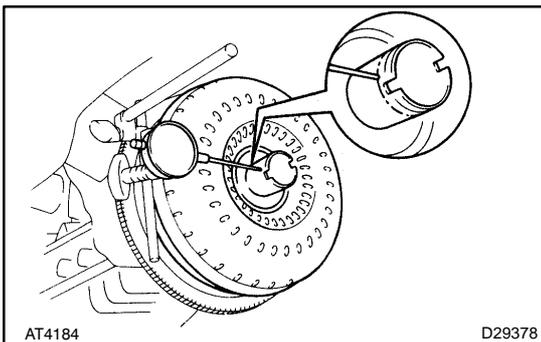
- (a) Set up a dial indicator and measure the drive plate runout.
 (b) Check the damage of the ring gear.

Maximum runout: 0.20 mm (0.0079 in.)

If the runout is not within the specification or ring gear is damaged, replace the drive plate.

Torque:

178 N·m (1,820 kgf·cm, 132 ft·lbf)



3. **INSPECT RUNOUT OF TORQUE CONVERTER CLUTCH ASSY**

- (a) Temporarily mount the torque converter to the drive plate, set up a dial indicator and measure the torque converter sleeve run out.

Maximum runout: 0.30 mm (0.0118 in.)

If run out is not within the specification, try to correct by reorienting the installation of the converter.

HINT:

Mark the position of the converter to ensure the correct installation.