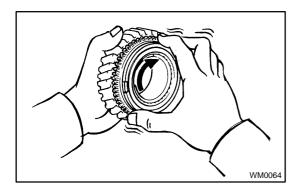
MX0AB-01



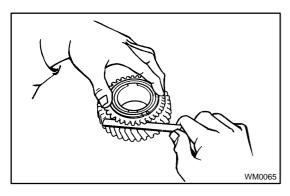
INSPECTION

- 1. INSPECT 5TH GEAR SYNCHRONIZER RING
- (a) Check for wear or damage.
- (b) 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 the braking effect is insufficient, apply a small amount of the fine lapping compound between the synchronizer ring and gear cone. Lightly rub the synchronizer ring and gear cone together. **NOTICE:**

Ensure the fine lapping compound is completely washed off after rubbing.

(c) Check again the braking effect of the synchronizer ring.



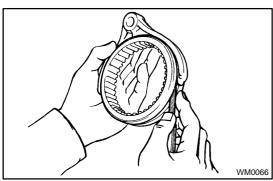
(d) Using a feeler gauge, measure the clearance between the synchronizer ring back and gear spline end.

Minimum clearance: 0.75 mm (0.0295 in.)

If the clearance is less than the minimum, replace the synchronizer ring and gear cone by applying a small amount of the fine lapping compound.

NOTICE:

Ensure the fine lapping compound is completely washed off after rubbing.



2. INSPECT SHIFT FORK AND HUB SLEEVE CLEAR-ANCE

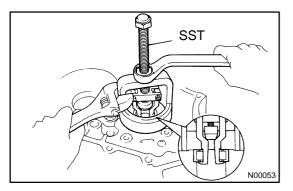
Using a feeler gauge, measure the clearance between the hub sleeve and shift fork.

Maximum clearance: 0.5 mm (0.020 in.)

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

3. REMOVE TRANSAXLE CASE RECEIVER

Remove the bolt and transaxle case receiver.

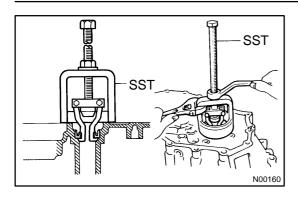


4. IF NECESSARY, REPLACE INPUT SHAFT FRONT BEARING AND OIL SEAL

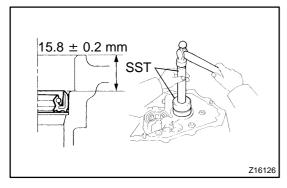
(a) Using SST, remove the input shaft front bearing. SST 09612-65014

2002 ECHO (RM884U)

Author: Date: 900



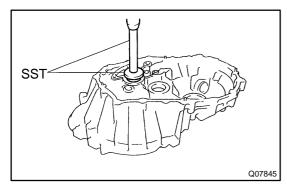
(b) Using SST, remove the oil seal. SST 09612-65014



(c) Using SST and a hammer, install a new oil seal. SST 09950-60010 (09951-00360), 09950-70010 (09951-07150)

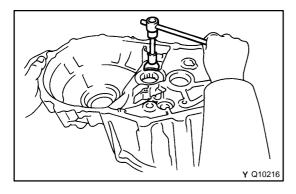
Drive in depth: $15.8 \pm 0.2 \text{ mm} (0.622 \pm 0.008 \text{ in.})$

(d) Coat the lip of the oil seal with MP grease.

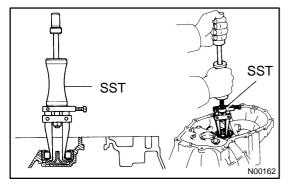


(e) Using SST and a press, install a new input shaft front bearing.

SST 09950-60010 (09951-00460), 09950-70010 (09951-07150)



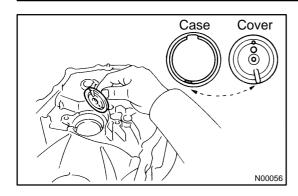
- 5. IF NECESSARY, REPLACE OUTPUT SHAFT FRONT BEARING AND OUTPUT SHAFT COVER
- (a) Remove the bolt and bearing lock plate.



(b) Using SST, pull out the output shaft front bearing. SST 09308-00010

2002 ECHO (RM884U)

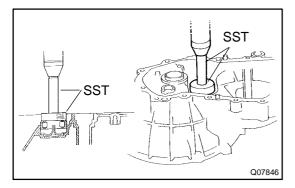
Author: Date: 901



- (c) Remove the output shaft cover.
- (d) Install the output shaft cover.

NOTICE:

Install the output shaft cover projection into the case side hollow.



(e) Using SST and a press, install a new output shaft front bearing.

SST 09950-60010 (09951-00620), 09950-70010 (09951-07150)

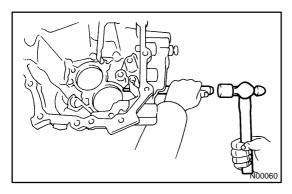
(f) Install the bearing lock plate with the bolt.

Torque: 11 N·m (115 kgf·cm, 8 ft·lbf)

6. INSTALL TRANSAXLE CASE RECEIVER

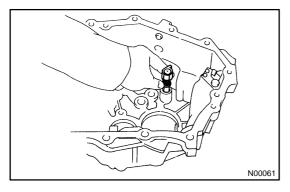
Install the transaxle case receiver with the bolt.

Torque: 11 N·m (115 kgf·cm, 8 ft·lbf)



7. IF NECESSARY, REPLACE REVERSE RESTRICT PIN

- (a) Using a hexagon wrench, remove the straight screw plug.
- (b) Using a pin punch and hammer, drive out the slotted spring pin.



- (c) Replace the reverse restrict pin.
- (d) Using a pin punch and hammer, drive in the slotted spring pin.
- (e) Apply sealant to the plug threads.

Sealant:

Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent

(f) Using a hexagon wrench, install the straight screw plug.

Torque: 13 N·m (130 kgf·cm, 9 ft·lbf)

2002 ECHO (RM884U)

Author: Date: 902