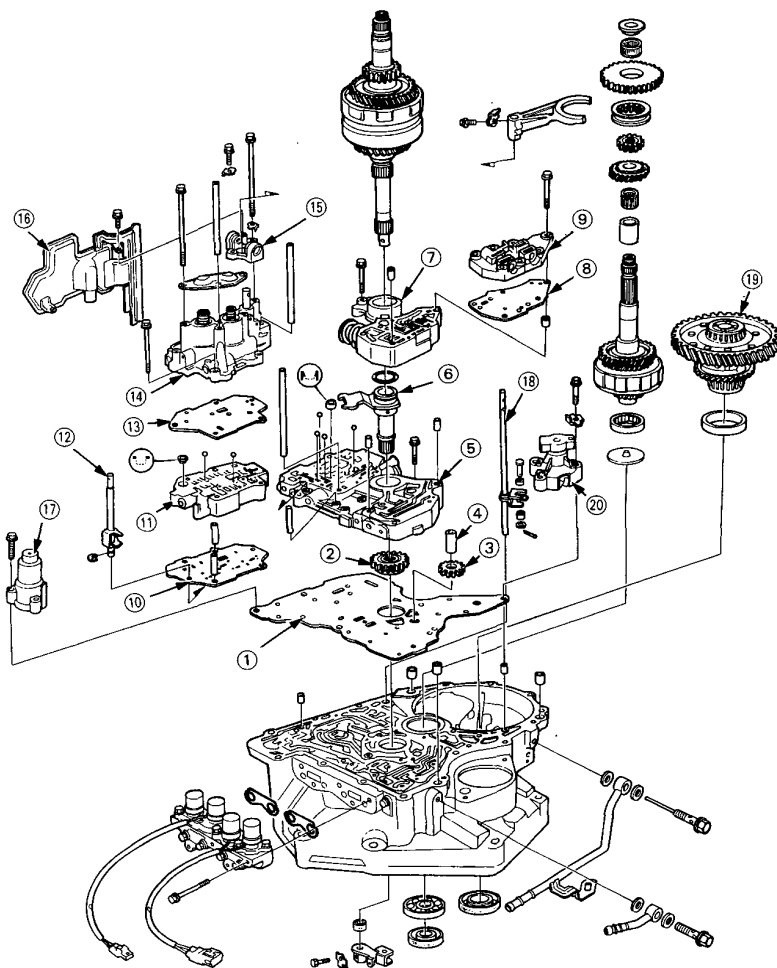


Transmission

Reassembly

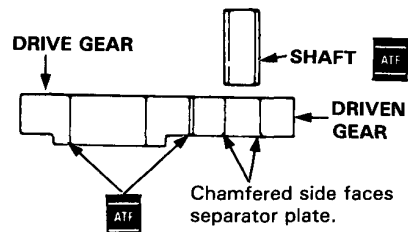
NOTE: Coat all parts with ATF.

1. Reassemble the transmission in the following numbered sequence.



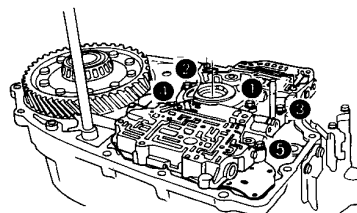
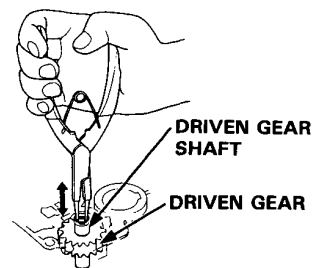
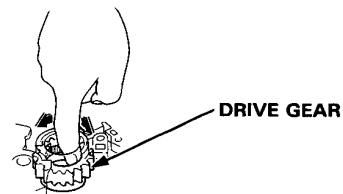
② ③ ④ ⑤

NOTE: Install the oil pump driven gear with its chamfered side facing down.



NOTE: Make sure the pump drive gear rotates smoothly in the normal operating direction and the pump shaft moves smoothly in the axial and normal operating directions.

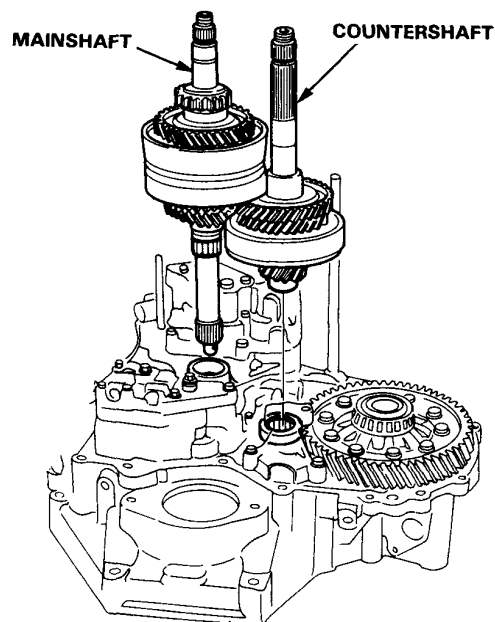
CAUTION: If the pump gear and pump shaft do not move freely, loosen the valve body bolts, realign the shaft, and then retighten to the specified torque. Failure to align the pump shaft correctly will result in seized pump gear or pump shaft.





2. Set the countershaft and mainshaft in place as an assembly.

NOTE: Do not tap on the shafts with a hammer to drive in.

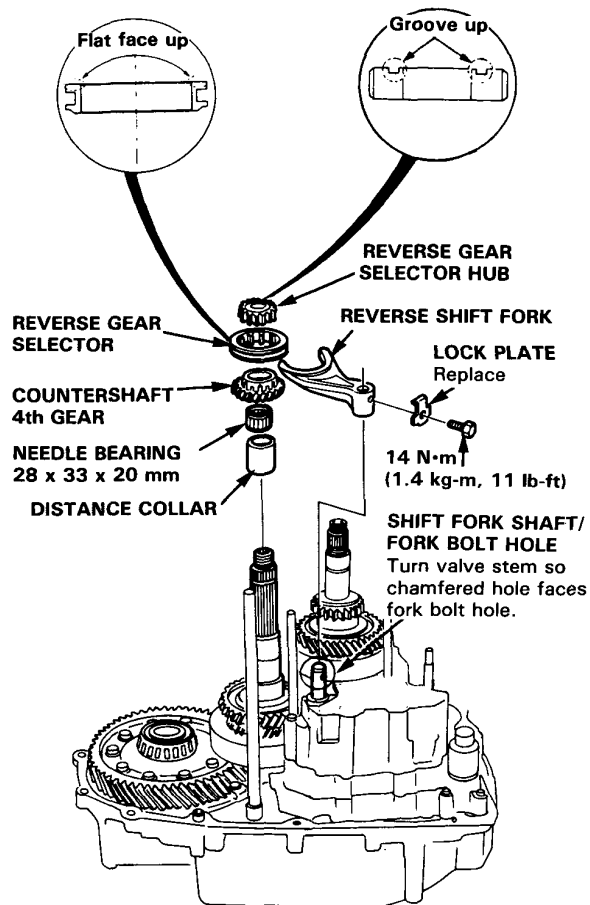


3. Install the distance collar, needle bearing, countershaft 4th gear, reverse shaft fork, reverse gear selector and reverse selector hub.

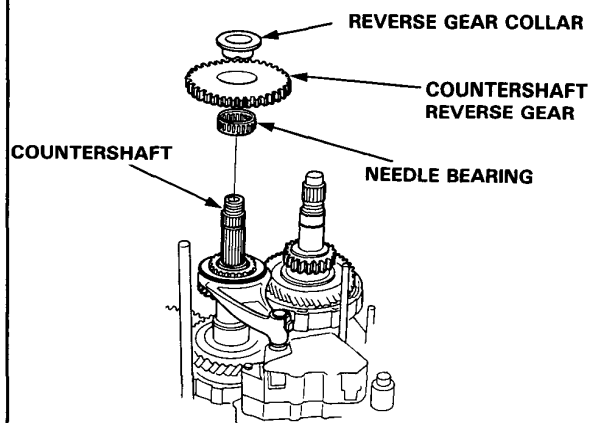
NOTE:

- Install the reverse gear selector with its flat face up.
- Install the reverse gear selector hub with the groove facing up.

4. Install the reverse shift fork over the servo valve stem. Align the hole in the stem with hole in fork as shown, and install the bolt and new lock plate. Bend the lock tab against the bolt head.



5. Install the countershaft reverse gear, needle bearing, and reverse gear collar.



6. Install the new gasket and three dowel pins in the torque converter housing.

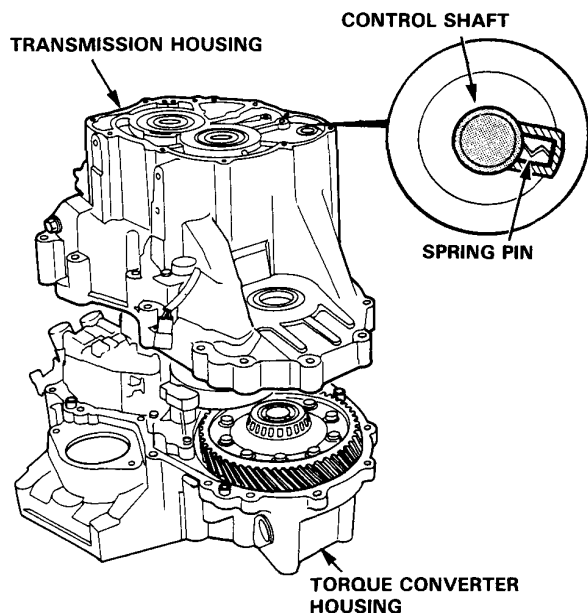
(cont'd)

Transmission

Reassembly (cont'd)

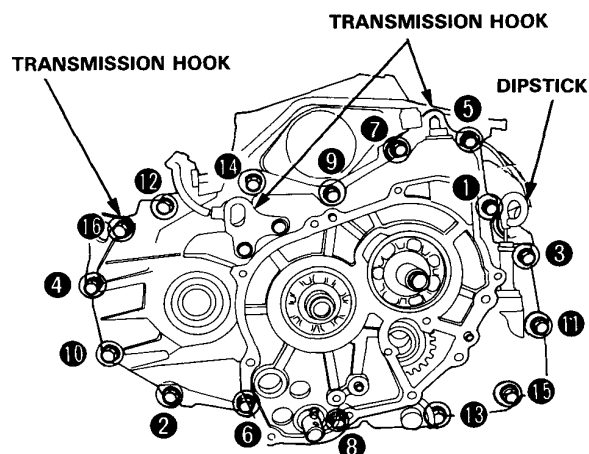
7. Place the transmission housing on the torque converter housing.

NOTE: Be sure that the spring pin of the control shaft lines up with the hole in the housing and that the reverse idler gear meshes with the mainshaft and countershaft, or the housing will not go on.



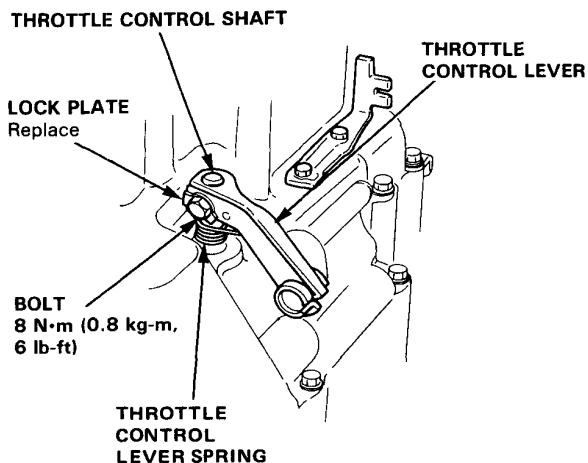
8. Torque bolts to 55 N·m (5.5 kg-m, 40 lb-ft) in order of (1) thru (16) in two or more steps. Install the dipstick.

NOTE: When tightening the transmission housing bolts, take care that you do not distort or damage the throttle control bracket; distortion or damage to the bracket will change transmission shift points.



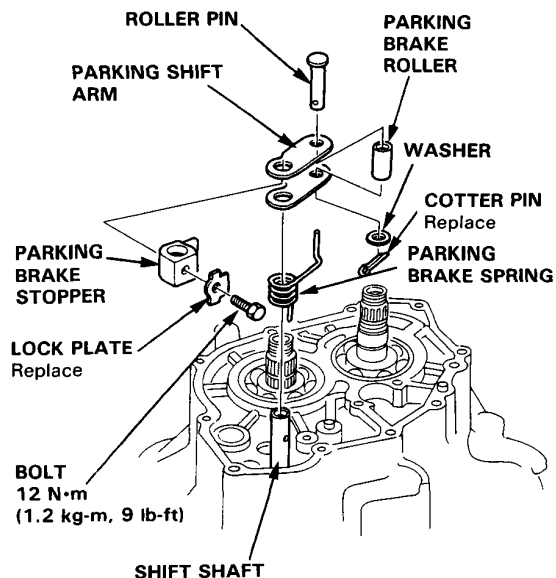
9. Install the throttle control lever and spring on the throttle control shaft.

10. Install the bolt and a new lock plate. Bend the lock tab against the bolt head.



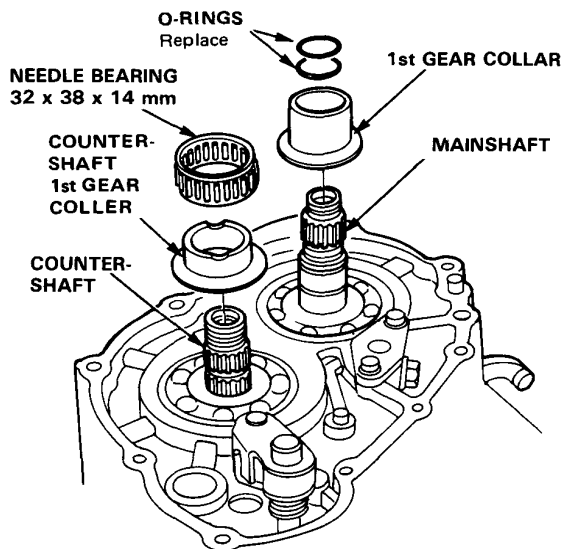
11. Install the parking brake roller, roller pin and washer on the parking shift arm and secure with a new cotter pin.

12. Install the parking brake spring, parking shift arm and parking brake stopper on the shift shaft with the bolt. Bend the lock tab against the bolt head.



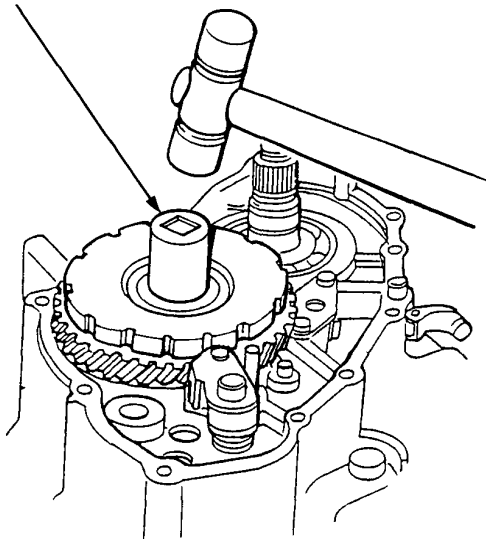


13. Install the countershaft 1st gear collar and needle bearing on the countershaft. Install the 1st gear collar and new O-rings on the mainshaft.

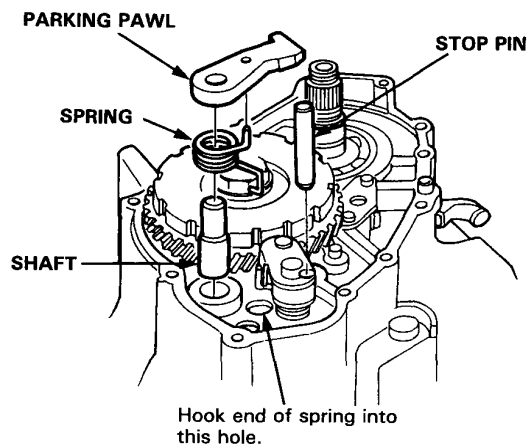


14. Install the parking gear and countershaft 1st gear on the countershaft with a 34 mm socket wrench and mallet. Loosely install a new lock nut on the countershaft.

SOCKET WRENCH
34 mm



15. Install the stop pin, parking pawl shaft, pawl release spring and parking pawl.



NOTE:

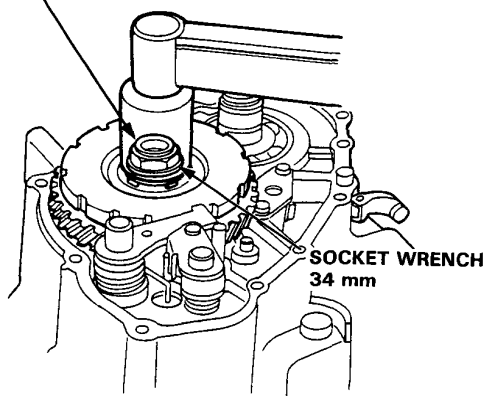
- One end of the parking pawl release spring fits into the hole in the parking pawl, the other end into the hole in the transmission housing as shown.
- The release spring should put clockwise tension on the pawl, forcing it away from the parking gear.

16. Shift to PARK and install the mainshaft holder.

17. Install and torque the new countershaft locknut. Tighten to specified torque, then loosen and retighten to same torque.

COUNTERSHAFT LOCK NUT

140 → 0 → 140 N·m
(14.0 → 0 → 14.0 kg-m, 102 → 0 → 102 lb-ft)

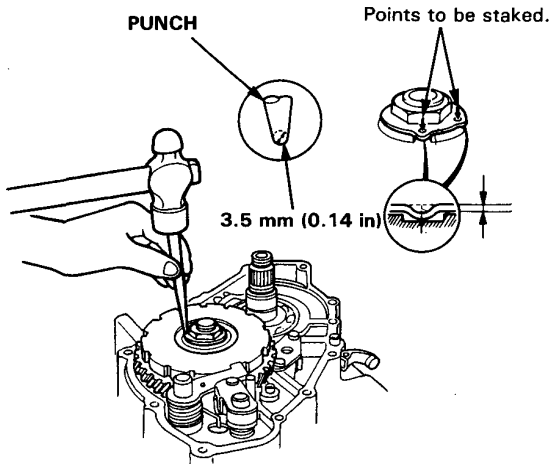


(cont'd)

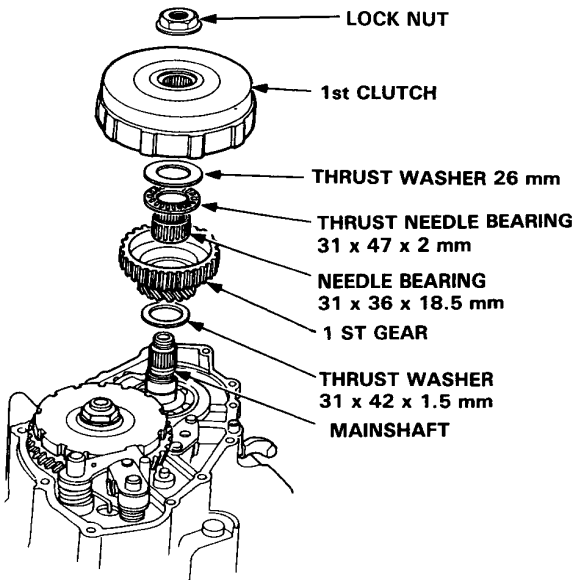
Transmission

Reassembly (cont'd)

18. Stake the lock nut flange at two places into the gear grooves using a 3.5 mm punch.



19. Install the thrust washer, 1st gear and 31 x 36 x 18.5 mm needle bearing on the mainshaft.
20. Install the thrust needle bearing, and the thrust washer on the mainshaft.



21. Install the 1st clutch assembly on the mainshaft.

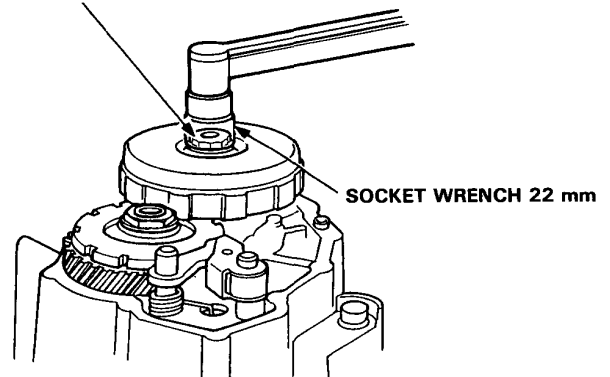
22. Attach the mainshaft holder from the underside of the torque converter case.

NOTE: Refer to page 9-78 for the mainshaft holder.

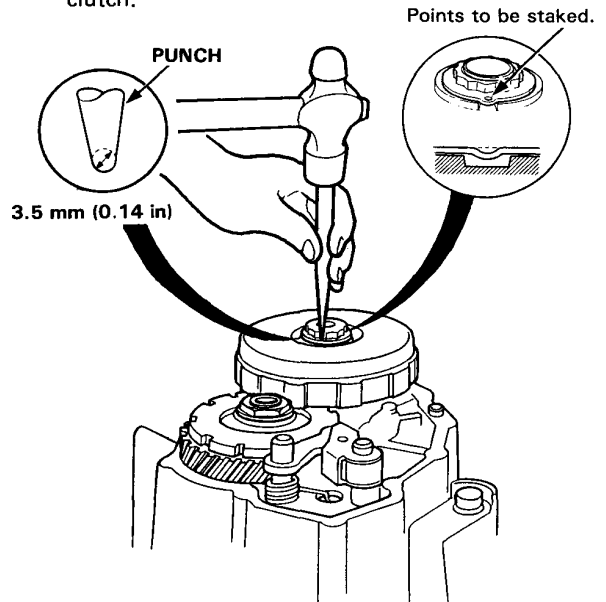
23. Torque the new mainshaft lock nut. Tighten to specified torque, then loosen and retighten to same torque.

CAUTION: Lock nut has left-hand threads.

LOCK NUT 19 mm
 95 → 0 → 95 N·m
 (9.5 → 0 → 9.5 kg-m, 70 → 0 → 70 lb-ft)

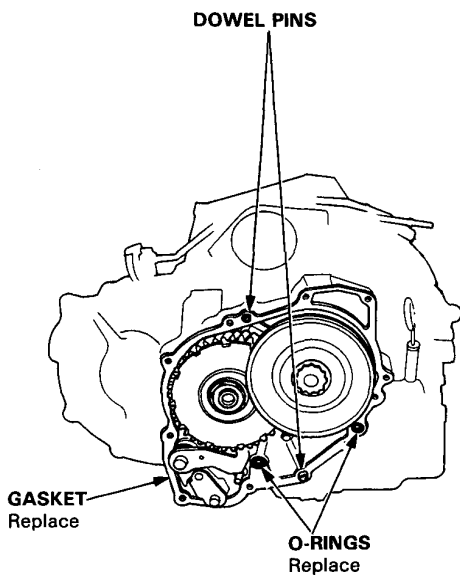


24. After tightening the nut, make sure that the 1st gear does not turn and clutch drum turns smoothly. Stake the lock nut flange into the groove in the 1st clutch.

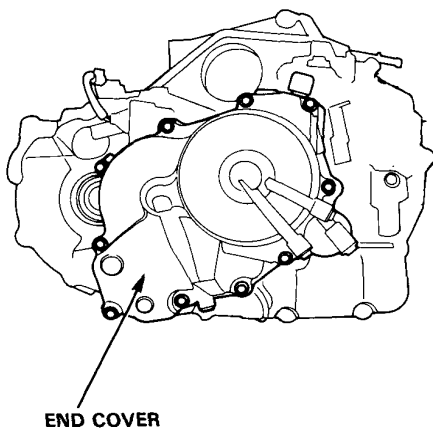




25. Install a new gasket, dowel pins, and new O-rings on the transmission housing.



26. Install the end cover and torque all 10 bolts to 12 N·m (1.2 kg-m, 9 lb-ft).



27. Install the transmission oil cooler pipes A and B on the transmission housing with new sealing washers.

