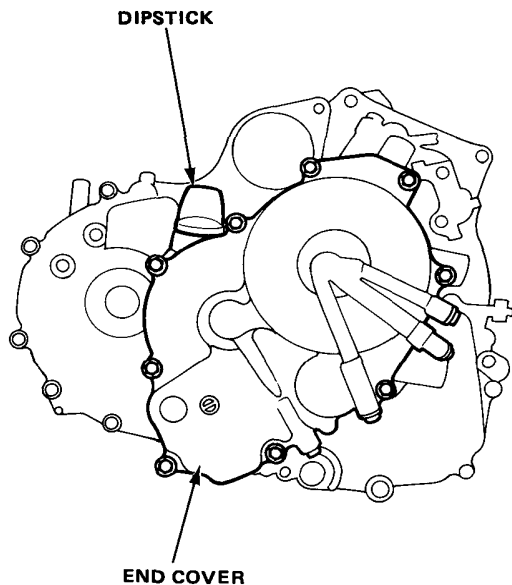


Transmission Housing

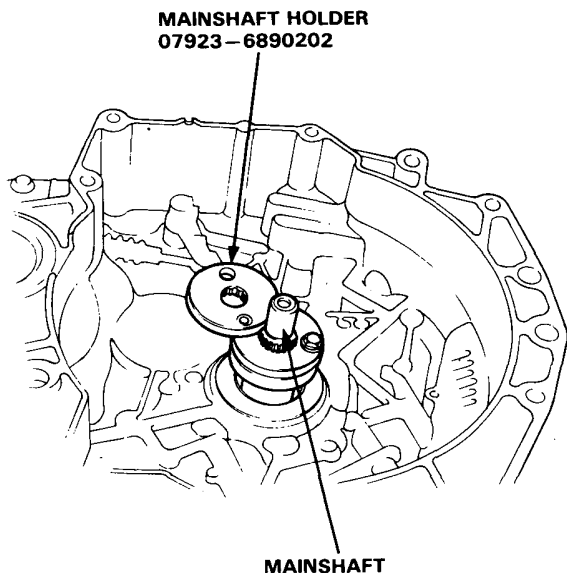


Removal

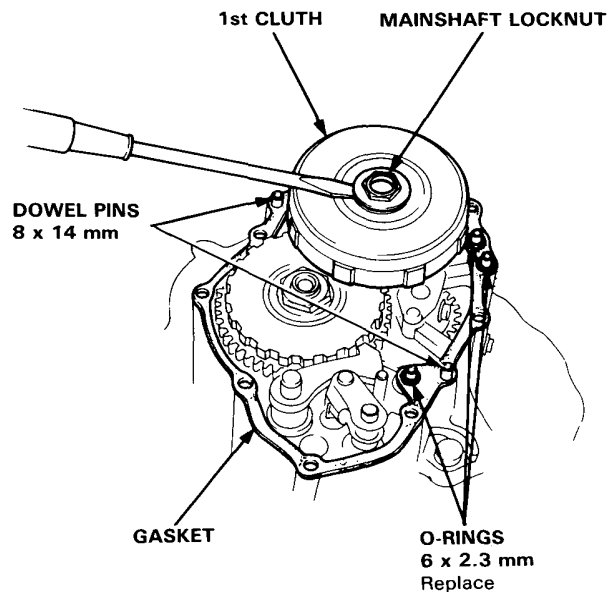
1. Remove the dipstick.
2. Remove the nine bolts from the end cover, then remove the cover.



3. Shift the transmission to PARK.
4. Lock the mainshaft using the mainshaft holder.

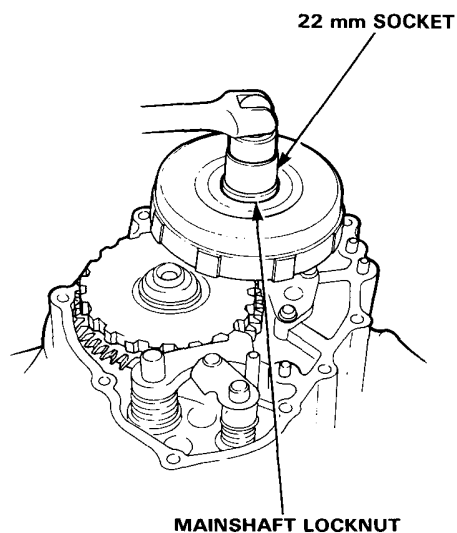


5. Remove the end cover gasket, dowel pins, and O-rings.
6. Pry the staked edge of the locknut flange out of the notch in the 1st clutch.



7. Remove the mainshaft locknut.

CAUTION: The mainshaft locknut has left-hand threads.

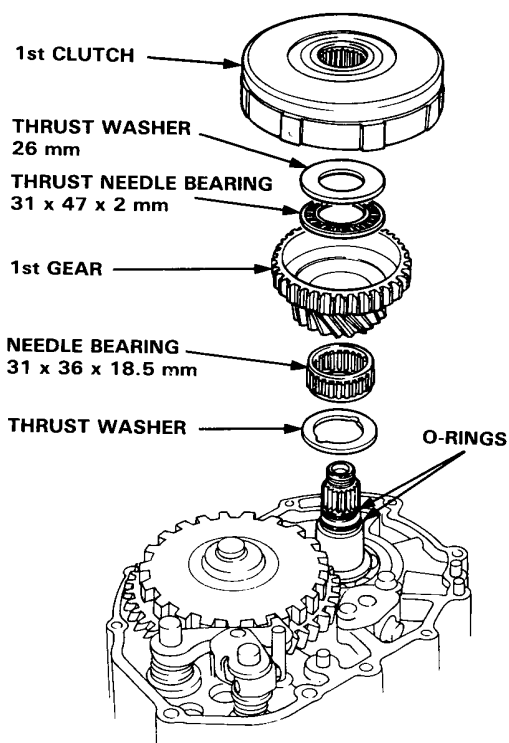


(cont'd)

Transmission Housing

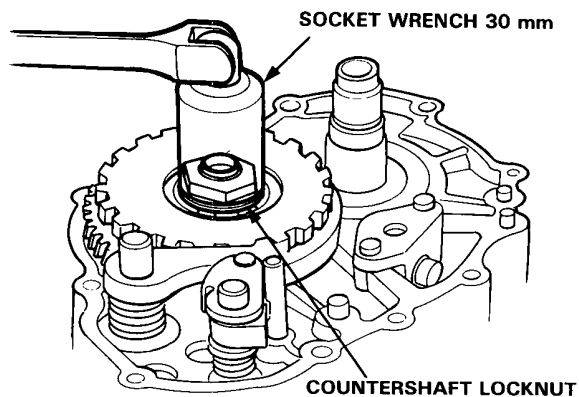
Removal (cont'd)

8. Remove the 1st clutch.
9. Remove the needle bearing and thrust washer from the mainshaft.
10. Remove the O-rings and first gear from the mainshaft.

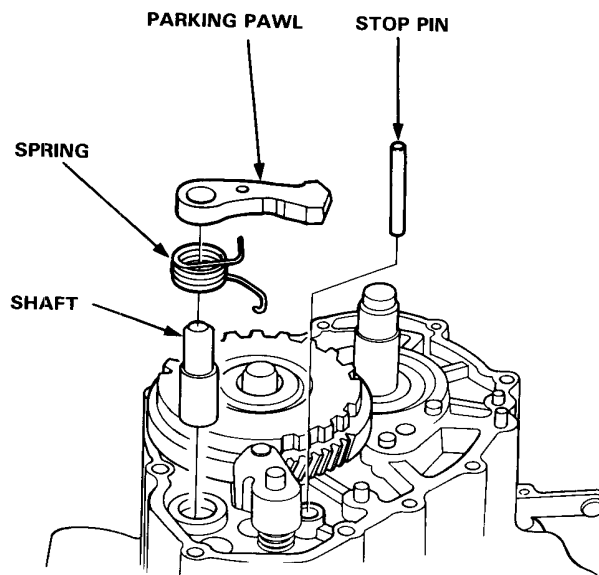


11. Pry the staked edge of the locknut out of the notch in the parking gear.

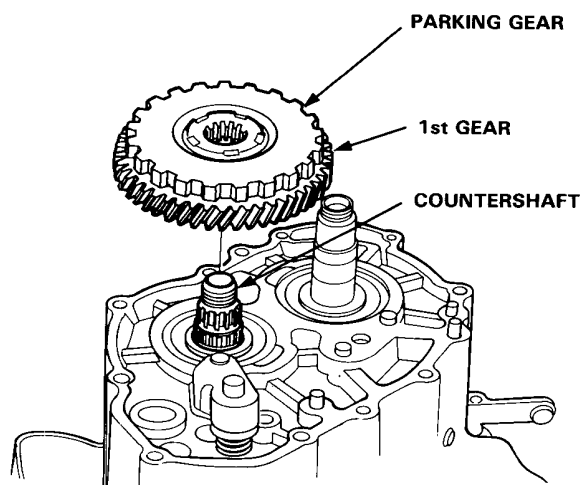
12. Remove the countershaft locknut.



13. Remove the parking pawl, shaft, stop pin and spring.



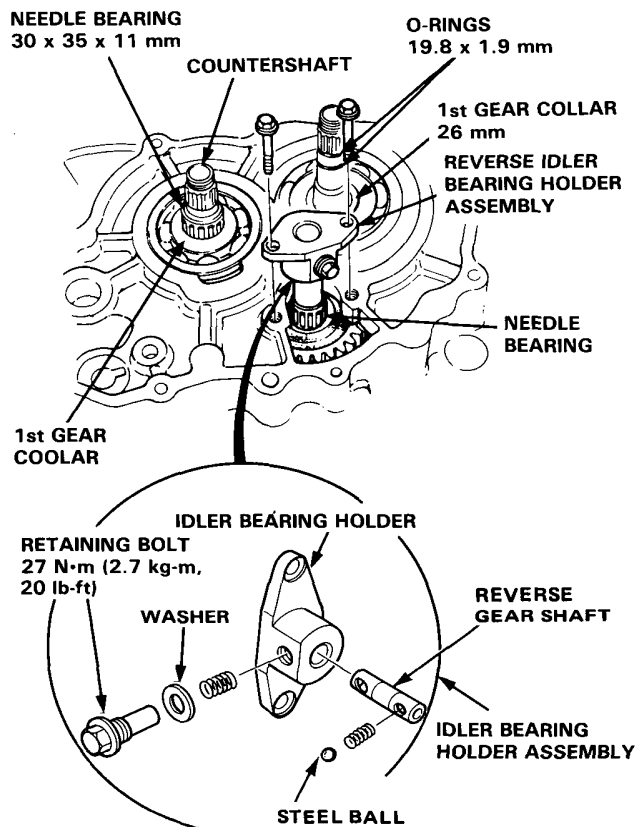
14. Remove the parking gear and countershaft 1st gear as a unit.





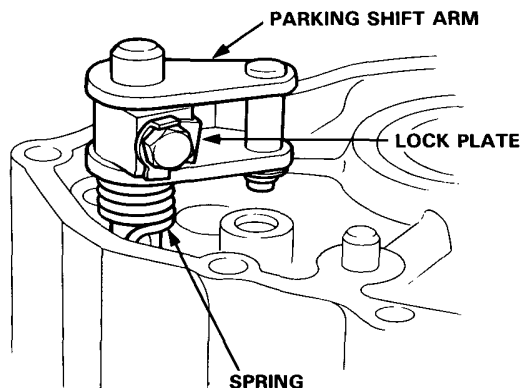
15. From the countershaft, remove the needle bearing and 1st gear collar. From the mainshaft, remove the 1st gear collar.

16. Remove the reverse idler bearing holder assembly.

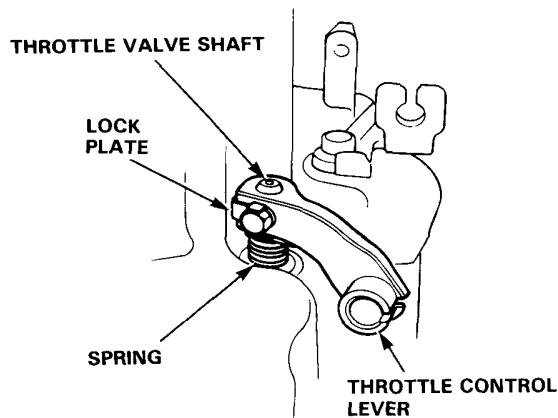


17. Bend down the tab on the lock plate under the parking shift arm bolt.

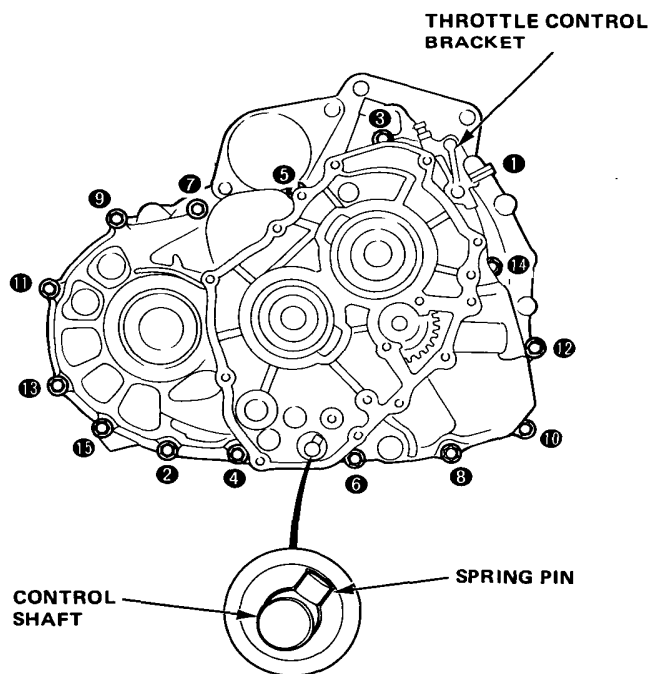
18. Remove the bolt, then remove the parking shift arm.



19. Bend down the tab on the throttle control lever bolt lock plate, then remove the bolt. Now, remove the throttle control lever and spring from the throttle valve shaft.



20. Remove the 8 x 1.25 mm bolts, (1) thru (15), in the sequence shown.



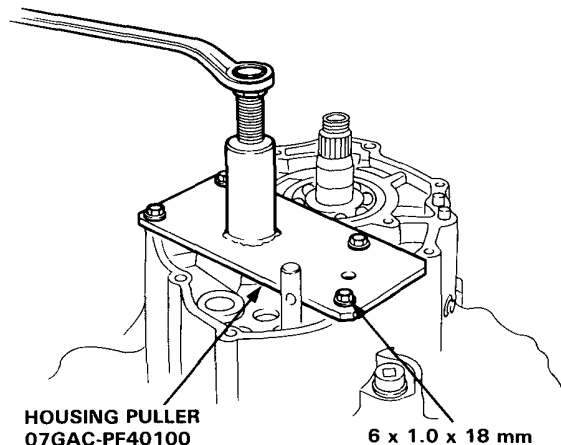
21. Align the control shaft spring pin with the cutout in the transmission housing.

(cont'd)

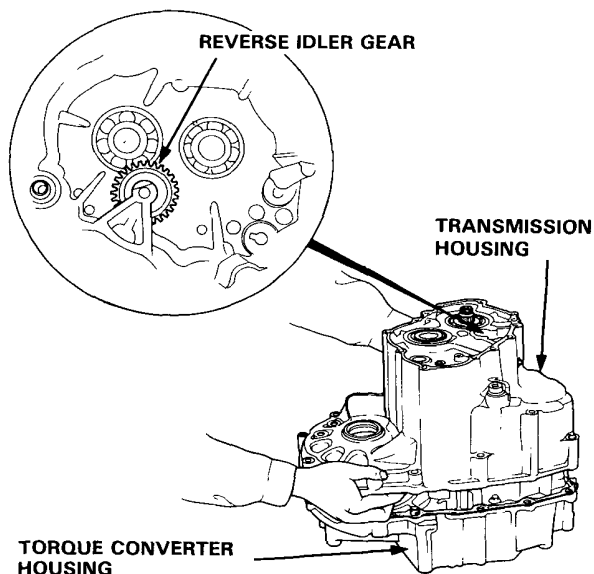
Transmission Housing

Removal (cont'd)

22. Install the transmission housing puller over the countershaft with four bolts and tighten securely. Then screw in the puller bolt against the end of the countershaft until the transmission housing comes loose.



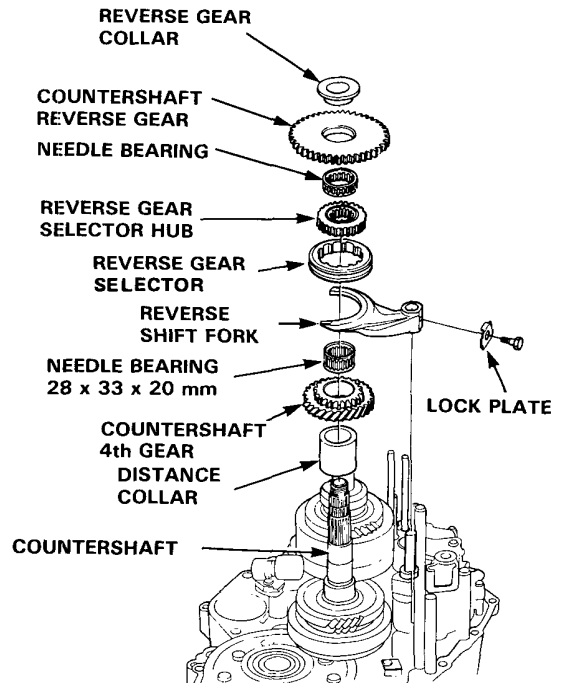
23. Remove the puller and separate the housings. Remove the reverse idler gear and needle bearing from the transmission housing.
24. Remove the gasket and the dowel pins.



Mainshaft/ Countershaft

Removal

1. Remove the reverse gear collar, countershaft reverse gear and needle bearing.



2. Bend down the tab on the lock plate and remove the bolt from the reverse shift fork.
3. Remove the reverse shift fork and reverse gear selector as a unit.
4. Remove the selector hub, countershaft 4th gear, needle bearing and distance collar.
5. Remove the mainshaft and countershaft together. NOTE: It will be necessary to pull up the countershaft at a slight angle to clear the governor.

