

CLEANING AND INSPECTION (Continued)

4. Working through the insert, bend the insert tang straight up and down until it breaks off at the notch.
5. Improperly installed inserts can be removed with an extractor tool. Place the extractor tool in the insert so that the blade rests against the top coil, one-quarter to one-half turn away from the end of the coil. Tap the tool sharply with a hammer so that the blade will cut into the insert. Exert downward pressure on the tool and turn it counterclockwise until the insert is removed.

Flywheel**Manual-Shift Transaxle****Tools Required:**

- Dial Indicator with Bracketry TOOL-4201-C

Inspection

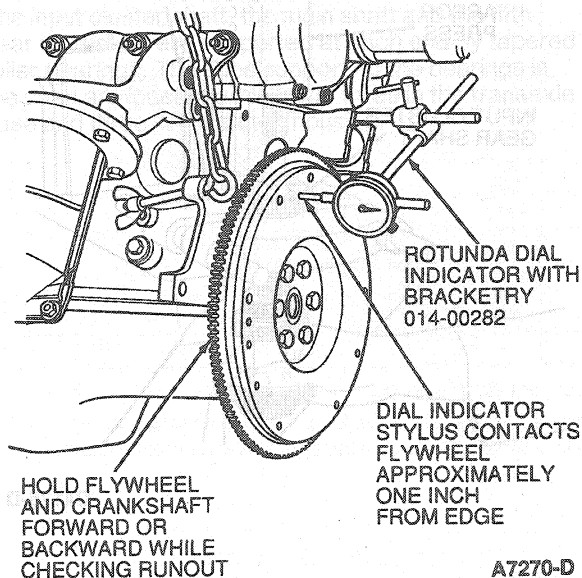
Inspect the flywheel for cracks, heat check, or other damage that would make it unfit for further service. Machine the friction surface of the flywheel if it is scored or worn. If it is necessary to remove more than 1.143mm (0.045 inch) of stock from the original thickness, replace the flywheel.

Inspect the ring gear for worn, chipped or cracked teeth. If the teeth are damaged, replace the ring gear.

With the flywheel installed on the crankshaft, check the flywheel face runout as outlined.

Flywheel Runout

1. Remove spark plugs.
2. Install Dial Indicator with Bracketry TOOL-4201-C or equivalent so indicator points rest on face of ring gear adjacent to gear teeth.



3. Hold flywheel and crankshaft forward or backward as far as possible to prevent crankshaft end play from being indicated as flywheel runout.
4. Set indicator dial on zero mark. Turn flywheel one complete revolution while observing total indicator reading (TIR). If TIR exceeds specification, flywheel and ring gear assembly must be replaced.
5. If clutch face runout exceeds specification, remove flywheel and check for burrs between flywheel and face of crankshaft mounting flange. If no burrs exist, check runout of crankshaft mounting flange. Replace flywheel or machine crankshaft flywheel mounting face sufficiently to true-up the surface. If mounting flange runout exceeds specification, replace it. Refer to Flywheel Ring Gear for replacement procedure.

The differential case assembly should be inspected after it is removed from the transaxle. Thoroughly clean all parts making sure that new solvent is used to clean bearings. Do not spin dry bearings with compressed air. Oil the bearings immediately to prevent corrosion. Avoid directly spraying the differential oil seals with solvent. Carefully wipe the seals clean.

Gears

Examine the pinion and side gears for scoring, excessive wear, nicks and chips. Worn, scored and damaged gears cannot be serviced and must be replaced.

Differential Case

The mating surfaces of the differential case halves should be inspected for any nicks and / or burrs that may prohibit proper assembly. Remove nicks or small burrs.

Ensure the differential bearing journals are smooth. Carefully examine the differential case bearing shoulders, which may have been damaged when the bearings were removed. The bearings will fail if they do not seat firmly against the shoulders. Check the fit (free rotation) of the side gears in their cavities.

Bearing Cups

Check bearing cups for scores, galling or spalling. If the bearing cups are not damaged, do not remove them from the transaxle case or the clutch housing. If the bearing cups must be replaced, remove and install them with the appropriate tools.