

FLYWHEEL AND TRANSMISSION HOUSING ALIGNMENT

The engine and transmission must have a common axis. The following checks must be made to locate possible misalignment. Clean all surfaces thoroughly before taking readings or checking parts.

IMPORTANT

When taking the following readings, rotate engine by hand — do not crank engine with starter. Engine may be rotated by pulley nut at front end of crankshaft, or from flywheel mounting bolts, or starter ring gear on flywheel. Release compression on diesel engines.

NOTE

Before dial indicating engine flywheel or flywheel housing, make sure engine crankshaft does not have excessive end-play. If it does, accurate readings can not be obtained. Place dial indicator finger against flywheel. Force crankshaft back and forth with pry bar. If end-play movement exceeds maximum, it will have to be corrected.

WORN HOUSINGS:

See Fig. 28. Inspect for worn or fretted pilot on both the transmission clutch housing and the engine flywheel housing. The $\frac{1}{8}$ " pilot lip of transmission clutch housing can wear into the flywheel housing either by transmission loosening up or after high mileage just from road and engine vibration. Any appreciable amount of wear on either part will cause misalignment and the part should be replaced. The wear will generally be found between the 3:00 o'clock and 8:00 o'clock positions. See Fig. 29.

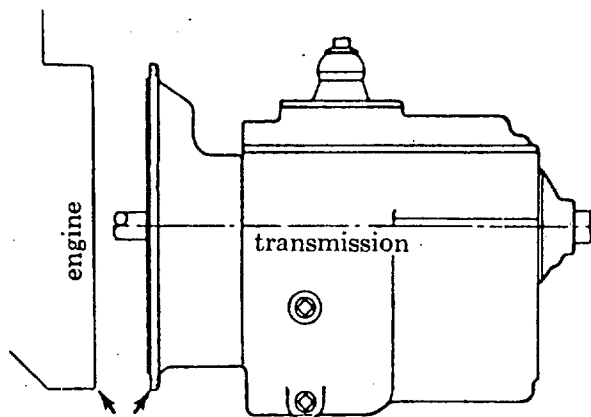


FIG. 28

Check engine and transmission for wear areas.

ENGINE FLYWHEEL HOUSING PILOT:

See Fig. 30. Dial indicate the pilot or bore of engine flywheel housing. Secure dial indicator to engine flywheel with gauge finger against housing pilot. Rotate flywheel by hand and, with chalk or soap stone, mark high and low points of indicator as it is being rotated.

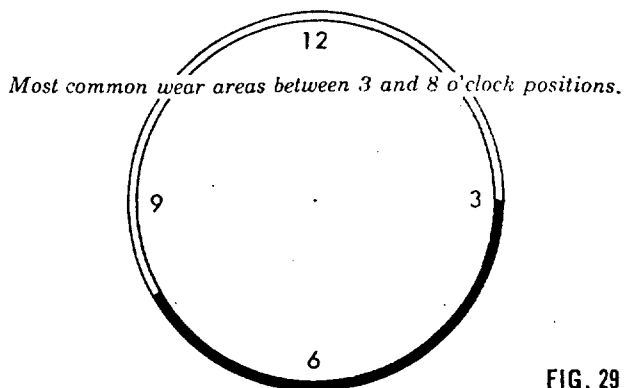
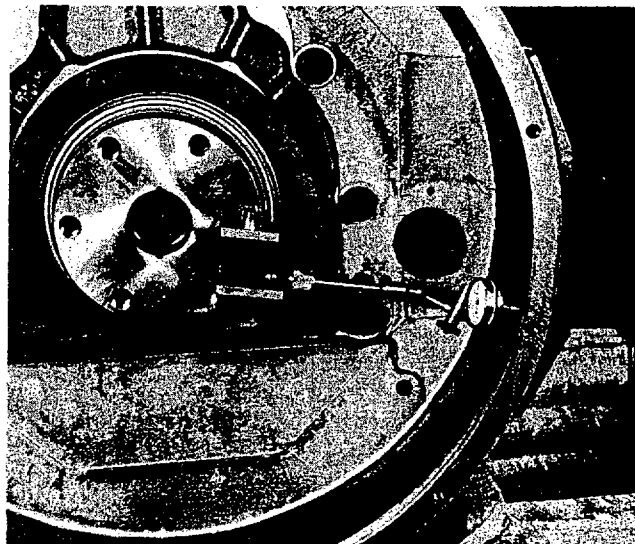


FIG. 29



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FIG. 30

Dial indicating the flywheel housing pilot.

See Fig. 31. The total runout will be the difference between the highest plus and minus readings. SAE maximum total runout for flywheel housing pilot is .008 with No. 1, No. 2 and No. 3 SAE housings.

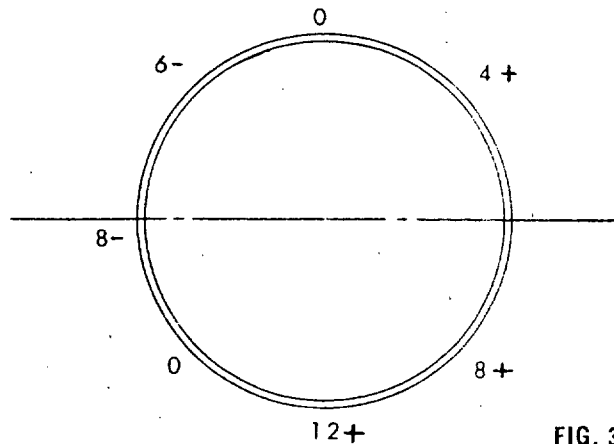


FIG. 31

Plus .012 and minus .008 gives housing a total runout of .020.