

## DIAGNOSIS AND TESTING (Continued)

### Underhood

- Rocker cover gaskets
- Intake manifold gaskets
- Cylinder head gasket
- Front cover gasket
- Distributor O-ring
- Oil level indicator (dipstick) tube connection
- Oil pressure sending unit
- Cup plugs and /or pipe plugs at the end of oil passages

### Under Engine—With Vehicle on Hoist

- Oil pan gasket
- Oil pan front and rear end seals
- Crankshaft front seal
- Camshaft rear bore plug

### With Transaxle and Flywheel Removed

- Crankshaft rear seal

Air leakage in the area around a crankshaft rear oil seal does not necessarily indicate a rear seal leak. However, if no other cause can be found for oil leakage, it can be assumed that the seal is the cause of the oil leakage.

- Rear main bearing cap parting line.
- Rear main bearing cap and seals.
- Rear cup plugs and or pipe plugs at the end of oil passages.

Oil leaks at crimped seams in sheet metal parts and cracks in cast or stamped parts can be detected when pressurizing the crankcase.

**NOTE:** Light foaming (similar to beer foam) equally around rocker arm cover bolts and crankshaft seals is not detrimental and no corrections are required in such cases.

### Compression Tests

#### Tools Required:

- Rotunda Compression Tester 059-00009

#### Compression Gauge Check

1. Ensure oil in crankcase is of the correct viscosity and at proper level and battery is properly charged. Operate vehicle until engine is at normal operating temperature. Turn ignition switch to the OFF position, then remove all spark plugs.
2. Set throttle plate in wide-open position.
3. Install a compression gauge such as Rotunda Compression Tester 059-00009 or equivalent in No. 1 cylinder.
4. Install auxiliary starter switch in starting circuit. With ignition switch in OFF position, and using auxiliary starter switch, crank engine at least five compression strokes and record the highest reading. Note the approximate number of compression strokes required to obtain the highest reading.
5. Repeat test on each cylinder cranking the engine approximately the same number of compression strokes.

#### Test Conclusion

The indicated compression pressures are considered within specification if the lowest reading cylinder is within 75 percent of the highest. Refer to the Compression Pressure Limit Chart.

