

6.1 Engine.

a. Compression.

(1) Compression test may be used for diagnostic purpose when engine test run indicates serious cylinder unserviceability.

(2) Blowby may also be used to judge cylinder and ring condition. Normal blowby, with a slight amount of vapor issuing from the breather cap and vent tube, that decreases when engine is accelerated is acceptable. Severe blowby which coats the area around the breather cap with a film of oil and flows from the vent tube in a stream when engine is idling and at normal operating temperature, is not acceptable.

b. Oil Pressure.

(1) With engine at idle and normal operating temperature, oil pressure will be at least 50% of normal as listed in pertinent TM or Manufacturer's Manual.

Example: On Chevrolet 235 cu. in. engines 1953 model and earlier and all 216 cu. in. engines, acceptable operating oil pressure will be 11 P.S.I. and acceptable idle pressure will be 5 P.S.I.

c. Vacuum.

(1) Vacuum gage readings may be used as an indication of valve condition. Ignition system must be in good operating condition and ignition timing correctly adjusted before attempting to analyze the valve system with a vacuum gage. Readings should be steady with very little needle wander if carburetor is correctly adjusted. A steady drop of needle at one-half crankshaft speed indicates a faulty valve.

(2) Do not attempt to take a vacuum reading through a vacuum booster fuel pump.

(3) Engines with hydraulic lifters will give in idle vacuum reading several points lower than an engine with mechanical lifters. This is not a malfunction but readings must be steady.