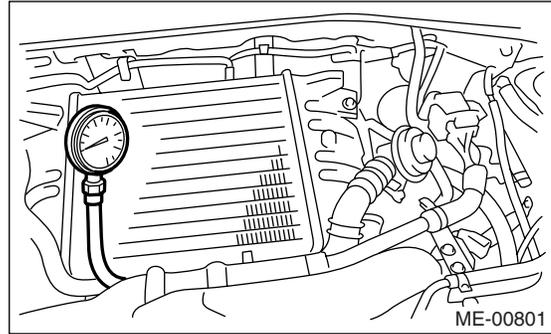


5. Intake Manifold Vacuum

A: INSPECTION

- 1) Remove the collector cover.
- 2) Idle the engine.
- 3) Disconnect the brake vacuum hose from intake manifold, and then install the vacuum gauge.
- 4) Keep the engine at idle speed and read the vacuum gauge indication.

By observing the gauge needle movement, internal condition of the engine can be diagnosed as described below.



Vacuum pressure (at idling, A/C "OFF"):
-60.0 kPa (-450 mmHg, -17.72 inHg) or less

Diagnosis of engine condition by measurement of intake manifold vacuum	
Vacuum gauge indication	Possible engine condition
1. Needle motion is steady but lower than normal position. This tendency becomes more evident as engine temperature rises.	Leakage around intake manifold gasket, or disconnected or damaged vacuum hose
2. When engine speed is reduced slowly from higher speed, needle stops temporarily when it is lowering or becomes steady above normal position.	Back pressure too high, or exhaust system clogged
3. Needle intermittently drops to the lower position than normal.	Leakage around cylinder
4. Needle drops suddenly and intermittently from normal position.	Sticky valve
5. When engine speed is gradually increased, needle begins to vibrate rapidly at certain speed, and then vibration increases as engine speed increases.	Weak or broken valve springs
6. Needle vibrates above and below normal position in narrow range.	Defective ignition system or throttle chamber idle adjustment