

Animation Vacuum Modulator Valve

Name: _____ **Date:** _____

1. The transmission vacuum modulator is an important part of older _____ transmissions, especially hydraulic ones.
2. The vacuum modulator helps regulate how firm the shifts are and when they happen based on the engine _____.
3. Inside the assembly, a flexible membrane called a _____ reacts to differences in pressure.
4. A _____ pushes against the flexible membrane inside the modulator with a set amount of force.
5. When the engine is at an idle, the throttle plate is nearly closed, making the engine manifold vacuum _____.
6. When the engine is idling, the manifold vacuum reads around 18 to 22 inches of _____.
7. As the vehicle moves off-idle and the throttle opens, the vacuum drops down to a range between _____ inches Hg.
8. When the vacuum pulls with less force against the diaphragm, it allows the modulator valve to move _____.
9. During part throttle or moderate acceleration, the vacuum drops further to around _____ inches.
10. When you step all the way down on the gas pedal at full throttle, the manifold vacuum drops very low, down to _____ inches.