

Animation Worksheet: Pressure Regulator Valve

Name: _____ Date: _____

1. In an automatic transmission, the pressure regulator valve is a crucial component in the _____ control system.
2. The main pressure used to operate clutches, bands, and servos is called _____ pressure.
3. The regulator valve is a _____ type valve found inside the valve body.
4. The regulator valve slides in a bore and routes hydraulic fluid based on different _____ forces.
5. When the engine is at an idle, the _____ opposes pump pressure and holds the valve in a position that maintains minimum line pressure.
6. When the engine starts, the pump draws fluid from the transmission _____ and sends it under pressure to the regulator valve.
7. The regular line pressure is balanced by three forces: pump pressure, spring force, and either TV pressure or manual _____ pressure.
8. A portion of the regulated fluid is directed to the _____ circuit to keep it charged and supply cooling.
9. To prevent over-pressure, the valve opens a passage that sends excess fluid back to the _____ side of the pump.
10. When the transmission is moved into _____ or a low range, manual boost pressure increases to prevent the clutches or bands from slipping under heavy loads.