

Animation Worksheet: Hydraulic Shift Control

Name: _____ Date: _____

1. When the engine starts, transmission fluid is drawn from the pan, _____, and sent to a pump.
2. The pump pressurizes the fluid, which then flows to a _____ regulator to maintain optimal pressure.
3. In addition to providing hydraulic shift control, the transmission fluid is also used for lubricating and _____.
4. When the driver shifts to drive, the manual valve directs fluid to engage both the forward clutch and the _____ clutch to enable forward motion.
5. As vehicle speed increases, the 1-2 shift valve opens, directing fluid to apply the _____ band.
6. To transition the transmission into third gear, the 2-3 shift valve opens to allow fluid to flow to the reverse _____ clutch.
7. During third gear, the torque converter clutch engages to lock the torque converter, which improves efficiency by reducing _____.
8. The 3-4 shift valve directs fluid to the _____ clutch, which alters the gear set ratio for fourth gear.
9. The throttle valve adjusts fluid pressure based on _____ input, which influences shift timing and firmness.
10. Responding directly to vehicle speed, the _____ valve works alongside the throttle valve to trigger the shift valves.