

Animation Worksheet: Manual Valve

Name: _____ Date: _____

1. The manual valve is a machined _____ valve that is connected directly to the external shift lever.
2. Within the valve body, the manual valve directs line pressure from the pressure _____ to selected hydraulic circuits based on the gear selected.
3. The _____ comb (also called the shift cam) is a notched, comb-like component that guides the lever to lock into detent positions.
4. To keep the shift lever locked in place until it is manually moved, a detent _____ and spring assembly rests against the notches.
5. When the shift lever is placed in the Park (P) position, the manual valve completely _____ fluid from flowing to the input clutches.
6. Shifting into Reverse (R) directs line pressure to the input clutch circuit and the reverse _____, which applies the reverse band.
7. In Neutral (N), no clutches or bands are applied, but the lubrication and _____ flow circuits remain active so the engine can idle safely.
8. In Overdrive, fluid passes through chambers called _____ to help smooth out the clutch engagement.
9. In Manual Third, the transmission cuts off overdrive fluid or vents the fourth gear _____ circuit to block or force a downshift.
10. When the selector is placed in Manual Low, the manual valve directs fluid to apply the low clutch and block the _____ shift valve.