

Animation Worksheet: DCT Hydraulic and Electronic Control

Name: _____ Date: _____

1. In a Dual Clutch Transmission system, Clutch 1 is responsible for controlling the odd-numbered gears: 1, 3, 5, and _____.
2. Clutch 2 is responsible for controlling the even-numbered gears: 2, 4, and _____.
3. When you first start the engine, the _____ turns on to pump fluid and build hydraulic pressure throughout the system.
4. Fluid from the pressure regulator (PR) valve is sent directly to the transmission's _____ and lube circuits to keep the parts running cool and smooth.
5. To preselect 1st gear, Shift Solenoid _____ is activated to move the fluid through the shuttle valve.
6. After 1st gear is preselected, Clutch Solenoid 1 is activated to apply _____ to officially engage 1st gear.
7. While the vehicle is driving in 1st gear, the transmission prepares for the next shift by preselecting _____ gear using Shift Solenoid E.
8. When shifting from 1st gear to 2nd gear, Clutch 1 releases at the exact same time that Clutch _____ engages.
9. The shifting mechanisms at the very bottom of the diagram that physically slide into place to choose the gears are called Synchronizer _____.
10. Shift Solenoids A, B, C, D, and E control the hydraulic fluid lines that push against the synchronizers to select the next gear before a clutch is even _____.