

Automatic Transmissions / Tranaxles

Chapter 6 Review Questions

Answer the following questions onto a scantron answer sheet.

- Two technicians are discussing automatic transmission apply devices. Technician A says multiple-disc clutches can be driving devices. Technician B says multiple-disc clutches can be holding devices. Who is right?
 - Technician A only
 - Technician B only
 - Both A and B are correct
 - Neither A nor B are correct
- All of the following are automatic transmission apply devices **EXCEPT**.
 - multiple-disc clutches
 - double roller spag clutch
 - hydraulic servo
 - split band
- The amount of friction force developed between a band and the drum depends on:
 - the length and width of the band
 - the apply pressure of the servo
 - the surface area of the drum
 - the amount of force applied to the end of the band
 - all of the above answers effect band to drum friction
- Technician A says all bands use straight servo linkage. Technician B says the thick heavy band design provides the most holding power. Who is right?
 - Technician A only
 - Technician B only
 - Both A and B are correct
 - Neither A nor B are correct
- A band design that is self energizing requires more servo apply force.
 - True
 - False
- When a lever style servo linkage is used:
 - a larger servo piston is required
 - a smaller servo piston can be used
 - adjustment is never needed even during overhaul.
 - non of the above answers are correct
- Technician A says that independent piston accumulators share a bore with a transmission servo. Technician B says the accumulator softens the application of a hydraulic apply device. Who is right?
 - Technician A only
 - Technician B only
 - Both A and B are correct
 - Neither A nor B are correct
- Two technicians are discussing piston accumulators and hydraulic apply devices. Technician A says full pressure on the apply device is not achieved until accumulator piston stops moving. Technician B says full pressure on the apply device is achieved even during accumulator piston movement. Who is right?
 - Technician A only
 - Technician B only
 - Both A and B are correct
 - Neither A nor B are correct

9. The multiple-disc clutch diaphragm spring is used to:
- A. increase clutch pack holding power during hydraulic apply
 - B. push the piston back into the drum during hydraulic apply
 - C. soften servo engagement
 - D. both answers A and B are correct
10. Residual fluid trapped between a clutch piston and the drum is relieved by:
- A. the coil return springs
 - B. the apply orifice
 - C. the Belleville spring
 - D. the vent port & check ball
 - E. Answers A and B are both correct
11. The hydraulic device that allows for a slow clutch apply and a quick clutch release is:
- A. the vent port and check ball
 - B. the apply orifice and check ball
 - C. the over-center spring
 - D. the variable clutch holding force
 - E. All the above answers are correct
12. Technician A says some clutch pistons can have applied hydraulic pressure through 2 separate circuits. Technician B says that the type of clutch Technician A is talking about is used to control clutch pack holding power. Who is right?
- A. Technician A only
 - B. Technician B only
 - C. Both A and B are correct
 - D. Neither A nor B are correct
13. A one-way clutch:
- A. is always a holding clutch
 - B. is always a driving clutch
 - C. can be used to hold or drive
 - D. if it is used as a driving clutch it must be a roller design.
 - E. None of the above answers are correct
14. In order for an overrunning clutch to be effective the outer race must be:
- A. locked to a driving clutch
 - B. locked to a holding clutch
 - C. splined to the transmission case
 - D. all of these answers are correct
15. Technician A says one advantage of a one-way clutch is that it requires less hydraulic pressure. Technician B says one advantage of a one-way clutch is that it applies and releases almost instantly. Who is right?
- A. Technician A only
 - B. Technician B only
 - C. Both A and B are correct
 - D. Neither A nor B are correct