



| Symptom | Probable cause(s) | Notes |
|---|--|--|
| The transmission does not shift | <ol style="list-style-type: none"> 1. Input shaft (mainshaft) speed sensor defective 2. Output shaft (countershaft) speed sensor defective | <ul style="list-style-type: none"> • Check for a stored DTC, and check for loose connectors. • Check the input shaft (mainshaft) and output shaft (countershaft) speed sensor installation. |
| Excessive shock or flares on all upshifts and downshifts | <ol style="list-style-type: none"> 1. A/T clutch pressure control solenoid valve B defective 2. A/T clutch pressure control solenoid valve C defective 3. Input shaft (mainshaft) speed sensor defective 4. Output shaft (countershaft) speed sensor defective 5. ATF temperature sensor defective 6. Foreign material in separator plate orifice | <ul style="list-style-type: none"> • Check for a stored DTC, and check for loose connectors. • Inspect the solenoid valve filter/gasket and O-rings for wear and damage, and inspect the solenoid valves for seizure. • Check the input shaft (mainshaft) speed sensor and output shaft (countershaft) speed sensor installation. |
| Excessive shock or flares on 1-2 upshift or 2-1 downshift | <ol style="list-style-type: none"> 1. Shift solenoid valve E defective 2. A/T clutch pressure control solenoid valve A defective 3. A/T clutch pressure control solenoid valve B defective 4. A/T clutch pressure control solenoid valve C defective 5. 2nd clutch transmission fluid pressure switch defective 6. Foreign material in separator plate orifice 7. 1st accumulator defective 8. 2nd accumulator defective 9. 1st check ball stuck 10. 2nd check ball stuck 11. Lock-up shift valve defective 12. 1st clutch defective 13. 2nd clutch defective | <ul style="list-style-type: none"> • Check for a stored DTC, and check for loose connectors. • Inspect the solenoid valve filter/gasket and O-rings for wear and damage, and inspect the solenoid valves for seizure. • Check the 1st and 2nd clutch pressures. • Inspect the clutch piston, clutch piston check valve, and O-rings. Check the spring retainer and retainer seal for wear and damage. Inspect the clutch end-plate-to-top disc clearance. If the clearance is out of tolerance, inspect the clutch discs and plates for wear and damage. If the discs are worn or damaged, replace the discs as a set. Inspect the clutch wave-plate height. If the height is out of tolerance, replace the wave-plate. If the discs and plates are OK, adjust the clearance with the clutch end-plate. • Inspect the 1st clutch feed pipe. If the 1st clutch feed pipe is scored, replace the end cover. • Replace the secondary shaft if the bushing for the 3rd clutch feed pipe is loose or damaged. |

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