

CVT System Symptom Troubleshooting Index

NOTE: Do an all DTC check with the HDS, and troubleshoot any DTCs first before following the repair procedures listed in the index.

Symptom	Probable cause(s)	Notes
When you turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode, the D indicator comes on and stays on in all shift lever positions, or it never comes on at all	<ul style="list-style-type: none"> ● F-CAN communication line error ● Gauge control module defective ● PCM defective 	<ul style="list-style-type: none"> ● Check the F-CAN communication line. ● Check the A/T gear position indicator drive circuit in the gauge control module (tach) by using the gauge control module self-diagnostic function.
A/T gear position indicator does not come on with the shift lever in that position	<ul style="list-style-type: none"> ● F-CAN communication line error ● Gauge control module defective ● Transmission range switch defective or out of adjustment ● Shift cable broken or out of adjustment ● PCM defective 	<ul style="list-style-type: none"> ● Check the F-CAN communication line. ● Check the A/T gear position indicator drive circuit in the gauge control module (tach) by using the gauge control module self-diagnostic function. ● Inspect the transmission range switch. ● Check for a loose shift cable at the shift lever and the transmission control lever.
Shift lever cannot be moved from P while pressing on the brake pedal	<ul style="list-style-type: none"> ● Shift lock solenoid defective ● Shift lock solenoid control circuit ● Shift lock mechanism defective ● Brake switch circuit ● Brake switch defective ● Accelerator pedal position sensor circuit ● Accelerator pedal position sensor defective ● Throttle body defective ● Transmission range switch ATPP switch stuck OFF ● Transmission range switch ATPP switch line opened ● Relative throttle position (TP) sensor value too high 	<ul style="list-style-type: none"> ● Inspect the APP sensor signal. ● Troubleshoot the shift lock system circuit. ● Test the shift lock solenoid. ● Inspect the transmission range switch. ● Reset the PCM.
When you press the paddle shifter + (upshift switch) in D and S, the transmission does not upshift	A problem in the paddle shifter + (upshift switch) circuit	Check the paddle shifter + (upshift switch) circuit.
When you press the paddle shifter - (downshift switch) in D and S, the transmission does not upshift	A problem in the paddle shifter - (downshift switch) circuit	Check the paddle shifter - (downshift switch) circuit.
M indicator does not come on even though the paddle shifter is operated in sequential sportshift mode.	<ul style="list-style-type: none"> ● F-CAN communication line error ● Gauge control module defective ● PCM defective ● Transmission range switch defective 	<ul style="list-style-type: none"> ● Check the F-CAN communication line. ● Check the F-CAN communication line by using the gauge control module self-diagnostic function. ● Check the indicator drive circuit in the gauge control module by using the gauge control module self-diagnostic function. ● Inspect the transmission range switch.

Symptom	Probable cause(s)	Notes
HDS does not communicate with the PCM	<ul style="list-style-type: none"> ● DLC circuit error ● PCM defective 	Troubleshooting the DLC circuit.
Engine does not start	<ul style="list-style-type: none"> ● Shift cable broken or out of adjustment ● Transmission range switch defective ● Torque converter assembly defective ● Drive plate defective 	<ul style="list-style-type: none"> ● Check for a loose shift cable at the shift lever and the transmission control lever. ● Inspect the transmission range switch. ● Inspect the torque converter assembly for wear and damage.
Engine runs, but vehicle does not move in any position	<ul style="list-style-type: none"> ● Drive pulley, driven pulley, pulley shaft, steel belt, and pulley related parts worn or damaged ● Transmission fluid feed pipe worn, damaged, or out of round ● Input shaft worn or damaged ● Secondary drive gear or secondary driven gear worn or damaged ● Final driven gear worn or damaged ● Sun gear worn or damaged ● Control shaft assembly worn or damaged ● Control lever worn or damaged ● Park pawl and pawl shaft worn or damaged ● Manual valve lever and lever pin worn or damaged ● Transmission fluid pump worn, binding, or foreign material in transmission fluid pump ● Transmission fluid pump drive chain or transmission fluid pump drive/driven sprocket worn or damaged ● Low transmission fluid (HCF-2) level ● Transmission fluid strainer or transmission fluid filter clogged ● Valve body defective ● Transmission range switch defective or out of adjustment ● Torque converter assembly defective ● Engine output low ● Stator shaft worn or damaged ● Axle damaged or worn 	<ul style="list-style-type: none"> ● Check the drive pulley, the driven pulley, the pulley shafts, the steel belt, and pulley related parts for wear and damage. If there are worn or damaged, replace the transmission housing assembly. ● Check the transmission fluid feed pipe for wear, damage, and out of round. ● Inspect the input shaft assembly for wear and damage. If the input shaft is worn or damaged, replace it and also check the related part of the input shaft assembly for wear and damage. ● Check the secondary drive gear, the secondary driven gear, and the final driven gear for wear and damage. ● Check the final driven gear for wear and damage. ● Check the sun gear for wear and damage. If the sun gear is worn or damaged, replace it and also check the planetary carrier pinion gears, the forward clutch, and the drive pulley shaft splines for wear and damage. ● Check the control shaft assembly for wear and damage. ● Check the control lever for wear and damage. ● Check the park pawl and the pawl shaft for wear and damage. If the park pawl or the pawl shaft are worn or damaged, replace them and also check the park gear for wear and damage. ● Check the manual valve lever and the lever pin for wear and damage. ● Check the transmission fluid pump assembly for wear and damage. If the transmission fluid pump assembly is worn or damaged, replace it as an assembly. ● Check the transmission fluid pump drive chain and the transmission fluid pump drive/driven sprocket for wear and damage. ● Check the transmission fluid (HCF-2) level. ● Check the transmission fluid strainer and the transmission fluid filter for debris. If the transmission fluid strainer or the transmission fluid filter is clogged, find the damaged components that caused debris. ● Check the valve body for wear and damage. ● Inspect the transmission range switch. ● Inspect the torque converter assembly for wear and damage. ● Check the stator shaft for wear and damage.

Symptom	Probable cause(s)	Notes
Vehicle does not move in D and L	<ul style="list-style-type: none">● Forward clutch assembly defective● Reverse brake piston stuck● Sun gear worn or damaged● Shift cable broken or out of adjustment● Manual valve lever and lever pin worn or damaged● Valve body defective● Transmission range switch defective● Engine output low● Stator shaft worn or damaged	<ul style="list-style-type: none">● Inspect the clearance between the forward clutch end-plate and the top disc.● Inspect the reverse brake piston and the O-rings. Check the spring retainer for wear and damage. Inspect the clearance between the brake end-plate and the top disc. If the clearance is out of tolerance, inspect the brake discs and plates for wear and damage. If the discs and plates are worn or damaged, replace them as a set. If they are OK, adjust the clearance with the brake end-plate.● Check the sun gear for wear and damage. If the sun gear is worn or damaged, replace it and also check the planetary carrier pinion gears, the forward clutch, and the drive pulley shaft splines for wear and damage.● Check for a loose shift cable at the shift lever and the transmission control lever.● Check the manual valve lever and the lever pin for wear and damage.● Check the valve body for wear and damage.● Inspect the transmission range switch.● Check the stator shaft for wear and damage.

Symptom	Probable cause(s)	Notes
Vehicle does not move in R	<ul style="list-style-type: none"> Forward clutch assembly defective Reverse brake defective Reverse brake piston stuck Planetary carrier worn or damaged Sun gear worn or damaged Ring gear worn or damaged Thrust needle bearing on planetary carrier seized, worn, or damaged Thrust washer on planetary carrier seized, worn, or damaged Shift cable broken or out of adjustment Manual valve lever and lever pin worn or damaged Valve body defective Transmission range switch defective Stator shaft worn or damaged 	<ul style="list-style-type: none"> Inspect the clearance between the forward clutch end-plate and the top disc. Inspect the reverse brake piston and the O-rings. Check the spring retainer for wear and damage. Inspect the clearance between the brake end-plate and the top disc. If the clearance is out of tolerance, inspect the brake discs and plates for wear and damage. If the discs and plates are worn or damaged, replace them as a set. If they are OK, adjust the clearance with the brake end-plate. Check the planetary carrier for wear and damage. If the planetary carrier is worn or damaged, replace it and also check the planetary carrier pinion gears, the reverse brake, and the drive pulley shaft splines for wear and damage. Check the sun gear for wear and damage. If the sun gear is worn or damaged, replace it and also check the planetary carrier pinion gears, the forward clutch, and the drive pulley shaft splines for wear and damage. Check the ring gear for wear and damage. If the ring gear is worn or damaged, replace it and also check the planetary carrier and the reverse brake for wear and damage. Check the thrust needle bearing and the thrust washers on the planetary carrier for wear and damage. If the thrust needle bearing or the thrust washer are worn or damaged, replace them and adjust the clearance with the thrust shim. Check for a loose shift cable at the shift lever and the transmission control lever. Check the manual valve lever and the lever pin for wear and damage. Check the valve body for wear and damage. Inspect the transmission range switch. Check the stator shaft for wear and damage.
Engine stops when shifted to D from N	<ul style="list-style-type: none"> Drive pulley, driven pulley, pulley shaft, steel belt, and pulley related parts worn or damaged Reverse brake defective Reverse brake piston stuck Torque converter assembly defective Engine output low 	<ul style="list-style-type: none"> Check the drive pulley, the driven pulley, the pulley shafts, the steel belt, and pulley related parts for wear and damage. If there are worn or damaged, replace the transmission housing assembly. Inspect the reverse brake piston and the O-rings. Check the spring retainer for wear and damage. Inspect the clearance between the brake end-plate and the top disc. If the clearance is out of tolerance, inspect the brake discs and plates for wear and damage. If the discs and plates are worn or damaged, replace them as a set. If they are OK, adjust the clearance with the brake end-plate. Inspect the torque converter assembly for wear and damage.

Symptom	Probable cause(s)	Notes
Engine stops when shifted to R from N	<ul style="list-style-type: none"> Drive pulley, driven pulley, pulley shaft, steel belt, and pulley related parts worn or damaged Forward clutch assembly defective Planetary carrier worn or damaged Thrust needle bearing on planetary carrier seized, worn, or damaged Thrust washer on planetary carrier seized, worn, or damaged Torque converter assembly defective Engine output low 	<ul style="list-style-type: none"> Check the drive pulley, the driven pulley, the pulley shafts, the steel belt, and pulley related parts for wear and damage. If there are worn or damaged, replace the transmission housing assembly. Inspect the clearance between the forward clutch end-plate and the top disc. Check the planetary carrier for wear and damage. If the planetary carrier is worn or damaged, replace it and also check the planetary carrier pinion gears, the reverse brake, and the drive pulley shaft splines for wear and damage. Check the thrust needle bearing and the thrust washers on the planetary carrier for wear and damage. If the thrust needle bearing or the thrust washer are worn or damaged, replace them and adjust the clearance with the thrust shim. Inspect the torque converter assembly for wear and damage.
No shift to higher ratio or lower ratio	<ul style="list-style-type: none"> Drive pulley, driven pulley, pulley shaft, steel belt, and pulley related parts worn or damaged Transmission fluid feed pipe worn, damaged, or out of round Transmission fluid pump worn, binding, or foreign material in transmission fluid pump Low transmission fluid (HCF-2) level Transmission fluid strainer or transmission fluid filter clogged Valve body defective Stator shaft worn or damaged Solenoid wire harness worn or damaged PCM defective 	<ul style="list-style-type: none"> Check the drive pulley, the driven pulley, the pulley shafts, the steel belt, and pulley related parts for wear and damage. If there are worn or damaged, replace the transmission housing assembly. Check the transmission fluid feed pipe for wear, damage, and out of round. Check the transmission fluid pump assembly for wear and damage. If the transmission fluid pump assembly is worn or damaged, replace it as an assembly. Check the transmission fluid (HCF-2) level. Check the transmission fluid strainer and the transmission fluid filter for debris. If the transmission fluid strainer or the transmission fluid filter is clogged, find the damaged components that caused debris. Check the valve body for wear and damage. Check the stator shaft for wear and damage. Inspect the solenoid wire harness for open and short.
Poor acceleration	<ul style="list-style-type: none"> Drive pulley, driven pulley, pulley shaft, steel belt, and pulley related parts worn or damaged Transmission fluid feed pipe worn, damaged, or out of round Transmission fluid pump worn, binding, or foreign material in transmission fluid pump Valve body defective CVT drive pulley speed sensor defective Torque converter assembly defective Engine output low Stator shaft worn or damaged Solenoid wire harness worn or damaged PCM defective 	<ul style="list-style-type: none"> Check the drive pulley, the driven pulley, the pulley shafts, the steel belt, and pulley related parts for wear and damage. If there are worn or damaged, replace the transmission housing assembly. Check the transmission fluid feed pipe for wear, damage, and out of round. Check the transmission fluid pump assembly for wear and damage. If the transmission fluid pump assembly is worn or damaged, replace it as an assembly. Check the valve body for wear and damage. Check the CVT drive pulley speed sensor for wear and damage, and also check the O-ring for wear and damage. Inspect the torque converter assembly for wear and damage. Check the stator shaft for wear and damage. Inspect the solenoid wire harness for open and short.

Symptom	Probable cause(s)	Notes
Engine revs up abnormally high while driving, and no acceleration	<ul style="list-style-type: none"> Drive pulley, driven pulley, pulley shaft, steel belt, and pulley related parts worn or damaged Transmission fluid feed pipe worn, damaged, or out of round Forward clutch assembly defective Reverse brake defective Reverse brake piston stuck Transmission fluid pump worn, binding, or foreign material in transmission fluid pump Transmission fluid pump drive chain or transmission fluid pump drive/driven sprocket worn or damaged Valve body defective Stator shaft worn or damaged Solenoid wire harness worn or damaged PCM defective 	<ul style="list-style-type: none"> Check the drive pulley, the driven pulley, the pulley shafts, the steel belt, and pulley related parts for wear and damage. If there are worn or damaged, replace the transmission housing assembly. Check the transmission fluid feed pipe for wear, damage, and out of round. Inspect the clearance between the forward clutch end-plate and the top disc. Inspect the reverse brake piston and the O-rings. Check the spring retainer for wear and damage. Inspect the clearance between the brake end-plate and the top disc. If the clearance is out of tolerance, inspect the brake discs and plates for wear and damage. If the discs and plates are worn or damaged, replace them as a set. If they are OK, adjust the clearance with the brake end-plate. Check the transmission fluid pump assembly for wear and damage. If the transmission fluid pump assembly is worn or damaged, replace it as an assembly. Check the transmission fluid pump drive chain and the transmission fluid pump drive/driven sprocket for wear and damage. Check the valve body for wear and damage. Check the stator shaft for wear and damage. Inspect the solenoid wire harness for open and short.
Excessive shock when accelerating and decelerating	<ul style="list-style-type: none"> Drive pulley, driven pulley, pulley shaft, steel belt, and pulley related parts worn or damaged Transmission fluid feed pipe worn, damaged, or out of round Forward clutch assembly defective Reverse brake defective Reverse brake piston stuck Low transmission fluid (HCF-2) level Transmission fluid (HCF-2) deteriorated Valve body defective Torque converter assembly defective Stator shaft worn or damaged PCM defective 	<ul style="list-style-type: none"> Check the drive pulley, the driven pulley, the pulley shafts, the steel belt, and pulley related parts for wear and damage. If there are worn or damaged, replace the transmission housing assembly. Check the transmission fluid feed pipe for wear, damage, and out of round. Inspect the clearance between the forward clutch end-plate and the top disc. Inspect the reverse brake piston and the O-rings. Check the spring retainer for wear and damage. Inspect the clearance between the brake end-plate and the top disc. If the clearance is out of tolerance, inspect the brake discs and plates for wear and damage. If the discs and plates are worn or damaged, replace them as a set. If they are OK, adjust the clearance with the brake end-plate. Check the transmission fluid (HCF-2) level. Check the transmission fluid (HCF-2) condition. If necessary, replace the transmission fluid (HCF-2). Check the valve body for wear and damage. Inspect the torque converter assembly for wear and damage. Check the stator shaft for wear and damage.

Symptom	Probable cause(s)	Notes
No engine braking	<ul style="list-style-type: none"> Drive pulley, driven pulley, pulley shaft, steel belt, and pulley related parts worn or damaged Transmission fluid feed pipe worn, damaged, or out of round Valve body defective Stator shaft worn or damaged Solenoid wire harness worn or damaged PCM defective 	<ul style="list-style-type: none"> Check the drive pulley, the driven pulley, the pulley shafts, the steel belt, and pulley related parts for wear and damage. If there are worn or damaged, replace the transmission housing assembly. Check the transmission fluid feed pipe for wear, damage, and out of round. Check the valve body for wear and damage. Check the stator shaft for wear and damage. Inspect the solenoid wire harness for open and short.
Vehicle does not creep on a flat road in D, S, and L	<ul style="list-style-type: none"> Drive pulley, driven pulley, pulley shaft, steel belt, and pulley related parts worn or damaged Transmission fluid feed pipe worn, damaged, or out of round Transmission fluid pump worn, binding, or foreign material in transmission fluid pump Low transmission fluid (HCF-2) level Transmission fluid strainer or transmission fluid filter clogged Valve body defective CVT drive pulley speed sensor defective Stator shaft worn or damaged Solenoid wire harness worn or damaged Torque converter assembly defective Engine output low PCM defective 	<ul style="list-style-type: none"> Check the drive pulley, the driven pulley, the pulley shafts, the steel belt, and pulley related parts for wear and damage. If there are worn or damaged, replace the transmission housing assembly. Check the transmission fluid feed pipe for wear, damage, and out of round. Check the transmission fluid pump assembly for wear and damage. If the transmission fluid pump assembly is worn or damaged, replace it as an assembly. Check the transmission fluid (HCF-2) level. Check the transmission fluid strainer and the transmission fluid filter for debris. If the transmission fluid strainer or the transmission fluid filter is clogged, find the damaged components that caused debris. Check the valve body for wear and damage. Check the stator shaft for wear and damage. Inspect the solenoid wire harness for open and short. Inspect the torque converter assembly for wear and damage.
Vehicle moves in N, shift cable is properly adjusted	<ul style="list-style-type: none"> Forward clutch assembly defective Reverse brake defective Reverse brake piston stuck Reverse brake return springs/retainer worn or damaged Input shaft thrust needle bearing seized, worn or damaged Manual valve lever and lever pin worn or damaged Stator shaft worn or damaged 	<ul style="list-style-type: none"> Inspect the clearance between the forward clutch end-plate and the top disc. Inspect the reverse brake piston and the O-rings. Check the spring retainer for wear and damage. Inspect the clearance between the brake end-plate and the top disc. If the clearance is out of tolerance, inspect the brake discs and plates for wear and damage. If the discs and plates are worn or damaged, replace them as a set. If they are OK, adjust the clearance with the brake end-plate. Check the manual valve lever and the lever pin for wear and damage. Check the stator shaft for wear and damage.

Symptom	Probable cause(s)	Notes
Late shift after shifting from N to D, and return to N	<ul style="list-style-type: none"> Forward clutch assembly defective Shift cable broken or out of adjustment Manual valve lever and lever pin worn or damaged Low transmission fluid (HCF-2) level Transmission fluid strainer or transmission fluid filter clogged Valve body defective Transmission fluid feed pipe worn, damaged, or out of round Transmission range switch defective Stator shaft worn or damaged Torque converter turbine speed sensor defective PCM defective 	<ul style="list-style-type: none"> Inspect the clearance between the forward clutch end-plate and the top disc. Check for a loose shift cable at the shift lever and the transmission control lever. Check the manual valve lever and the lever pin for wear and damage. Check the transmission fluid (HCF-2) level. Check the transmission fluid strainer and the transmission fluid filter for debris. If the transmission fluid strainer or the transmission fluid filter is clogged, find the damaged components that caused debris. Check the valve body for wear and damage. Check the transmission fluid feed pipe for wear, damage, and out of round. Inspect the transmission range switch. Check the stator shaft for wear and damage. Check the torque converter turbine speed sensor for wear and damage, and also check the O-ring for wear and damage.
Late shift after shifting from N to R, and return to N	<ul style="list-style-type: none"> Reverse brake defective Reverse brake piston stuck Shift cable broken or out of adjustment Manual valve lever and lever pin worn or damaged Low transmission fluid (HCF-2) level Transmission fluid strainer or transmission fluid filter clogged Valve body defective Transmission fluid feed pipe worn, damaged, or out of round Transmission range switch defective Stator shaft worn or damaged Torque converter turbine speed sensor defective PCM defective 	<ul style="list-style-type: none"> Inspect the reverse brake piston and the O-rings. Check the spring retainer for wear and damage. Inspect the clearance between the brake end-plate and the top disc. If the clearance is out of tolerance, inspect the brake discs and plates for wear and damage. If the discs and plates are worn or damaged, replace them as a set. If they are OK, adjust the clearance with the brake end-plate. Check for a loose shift cable at the shift lever and the transmission control lever. Check the manual valve lever and the lever pin for wear and damage. Check the transmission fluid (HCF-2) level. Check the transmission fluid strainer and the transmission fluid filter for debris. If the transmission fluid strainer or the transmission fluid filter is clogged, find the damaged components that caused debris. Check the valve body for wear and damage. Check the transmission fluid feed pipe for wear, damage, and out of round. Inspect the transmission range switch. Check the stator shaft for wear and damage. Check the torque converter turbine speed sensor for wear and damage, and also check the O-ring for wear and damage.

Symptom	Probable cause(s)	Notes
Unstable engine speed	<ul style="list-style-type: none"> Drive pulley, driven pulley, pulley shaft, steel belt, and pulley related parts worn or damaged Transmission fluid feed pipe worn, damaged, or out of round Forward clutch assembly defective Reverse brake defective Transmission fluid pump worn, binding, or foreign material in transmission fluid pump Low transmission fluid (HCF-2) level Transmission fluid strainer or transmission fluid filter clogged Transmission fluid (HCF-2) deteriorated Valve body defective CVT drive pulley pressure control solenoid valve defective CVT driven pulley pressure control solenoid valve defective CVT clutch pressure control solenoid valve defective CVT lock-up clutch control solenoid valve defective Shift solenoid valve B defective Torque converter turbine speed sensor defective PCM defective 	<ul style="list-style-type: none"> Check the drive pulley, the driven pulley, the pulley shafts, the steel belt, and pulley related parts for wear and damage. If there are worn or damaged, replace the transmission housing assembly. Check the transmission fluid feed pipe for wear, damage, and out of round. Inspect the clearance between the forward clutch end-plate and the top disc. Inspect the reverse brake piston and the O-rings. Check the spring retainer for wear and damage. Inspect the clearance between the brake end-plate and the top disc. If the clearance is out of tolerance, inspect the brake discs and plates for wear and damage. If the discs and plates are worn or damaged, replace them as a set. If they are OK, adjust the clearance with the brake end-plate. Check the transmission fluid pump assembly for wear and damage. If the transmission fluid pump assembly is worn or damaged, replace it as an assembly. Check the transmission fluid (HCF-2) level. Check the transmission fluid strainer and the transmission fluid filter for debris. If the transmission fluid strainer or the transmission fluid filter is clogged, find the damaged components that caused debris. Check the valve body for wear and damage. Inspect the CVT drive pulley pressure control solenoid valve. Inspect the CVT driven pulley pressure control solenoid valve. Inspect the CVT clutch pressure control solenoid valve. Inspect the CVT lock-up clutch control solenoid valve. Inspect shift solenoid valve B. Check the torque converter turbine speed sensor for wear and damage, and also check the O-ring for wear and damage.
Excessive shock when starting off	<ul style="list-style-type: none"> Transmission fluid feed pipe worn, damaged, or out of round Forward clutch assembly defective Reverse brake defective Reverse brake piston stuck Low transmission fluid (HCF-2) level Transmission fluid strainer or transmission fluid filter clogged Transmission fluid (HCF-2) deteriorated Valve body defective PCM defective 	<ul style="list-style-type: none"> Check the transmission fluid feed pipe for wear, damage, and out of round. Inspect the clearance between the forward clutch end-plate and the top disc. Inspect the reverse brake piston and the O-rings. Check the spring retainer for wear and damage. Inspect the clearance between the brake end-plate and the top disc. If the clearance is out of tolerance, inspect the brake discs and plates for wear and damage. If the discs and plates are worn or damaged, replace them as a set. If they are OK, adjust the clearance with the brake end-plate. Check the transmission fluid (HCF-2) level. Check the transmission fluid strainer and the transmission fluid filter for debris. If the transmission fluid strainer or the transmission fluid filter is clogged, find the damaged components that caused debris. Check the transmission fluid (HCF-2) condition. If necessary, replace the transmission fluid (HCF-2). Check the valve body for wear and damage.

Symptom	Probable cause(s)	Notes
Vibration in all positions	<ul style="list-style-type: none"> Input shaft worn or damaged Torque converter turbine speed sensor defective Engine output low 	<ul style="list-style-type: none"> Inspect the input shaft assembly for wear and damage. If the input shaft is worn or damaged, replace it and also check the related part of the input shaft assembly for wear and damage. Check the torque converter turbine speed sensor for wear and damage, and also check the O-ring for wear and damage.
Excessive idle vibration in D, S, L, and R	<ul style="list-style-type: none"> Drive pulley, driven pulley, pulley shaft, steel belt, and pulley related parts worn or damaged Forward clutch assembly defective Input shaft worn or damaged Reverse brake defective Reverse brake piston stuck Thrust needle bearing on planetary carrier seized, worn, or damaged Valve body defective Transmission fluid feed pipe worn, damaged, or out of round Torque converter turbine speed sensor defective Engine output low Solenoid wire harness worn or damaged PCM defective 	<ul style="list-style-type: none"> Check the drive pulley, the driven pulley, the pulley shafts, the steel belt, and pulley related parts for wear and damage. If there are worn or damaged, replace the transmission housing assembly. Inspect the clearance between the forward clutch end-plate and the top disc. Inspect the input shaft assembly for wear and damage. If the input shaft is worn or damaged, replace it and also check the related part of the input shaft assembly for wear and damage. Inspect the reverse brake piston and the O-rings. Check the spring retainer for wear and damage. Inspect the clearance between the brake end-plate and the top disc. If the clearance is out of tolerance, inspect the brake discs and plates for wear and damage. If the discs and plates are worn or damaged, replace them as a set. If they are OK, adjust the clearance with the brake end-plate. Check the thrust needle bearing and the thrust washers on the planetary carrier for wear and damage. If the thrust needle bearing or the thrust washer are worn or damaged, replace them and adjust the clearance with the thrust shim. Check the valve body for wear and damage. Check the transmission fluid feed pipe for wear, damage, and out of round. Check the torque converter turbine speed sensor for wear and damage, and also check the O-ring for wear and damage. Inspect the solenoid wire harness for open and short.
Excessive idle vibration in N and P	<ul style="list-style-type: none"> Forward clutch assembly defective Input shaft worn or damaged Reverse brake defective Torque converter turbine speed sensor defective Engine output low PCM defective 	<ul style="list-style-type: none"> Inspect the clearance between the forward clutch end-plate and the top disc. Inspect the input shaft assembly for wear and damage. If the input shaft is worn or damaged, replace it and also check the related part of the input shaft assembly for wear and damage. Inspect the reverse brake piston and the O-rings. Check the spring retainer for wear and damage. Inspect the clearance between the brake end-plate and the top disc. If the clearance is out of tolerance, inspect the brake discs and plates for wear and damage. If the discs and plates are worn or damaged, replace them as a set. If they are OK, adjust the clearance with the brake end-plate. Check the torque converter turbine speed sensor for wear and damage, and also check the O-ring for wear and damage.

Symptom	Probable cause(s)	Notes
Noise from transmission in N and P	<ul style="list-style-type: none"> Forward clutch assembly defective Input shaft worn or damaged Reverse brake defective Planetary carrier worn or damaged Sun gear worn or damaged Ring gear worn or damaged Thrust needle bearing on planetary carrier seized, worn, or damaged Thrust washer on planetary carrier seized, worn, or damaged Transmission fluid pump worn, binding, or foreign material in transmission fluid pump PCM defective 	<ul style="list-style-type: none"> Inspect the clearance between the forward clutch end-plate and the top disc. Inspect the input shaft assembly for wear and damage. If the input shaft is worn or damaged, replace it and also check the related part of the input shaft assembly for wear and damage. Inspect the reverse brake piston and the O-rings. Check the spring retainer for wear and damage. Inspect the clearance between the brake end-plate and the top disc. If the clearance is out of tolerance, inspect the brake discs and plates for wear and damage. If the discs and plates are worn or damaged, replace them as a set. If they are OK, adjust the clearance with the brake end-plate. Check the planetary carrier for wear and damage. If the planetary carrier is worn or damaged, replace it and also check the planetary carrier pinion gears, the reverse brake, and the drive pulley shaft splines for wear and damage. Check the sun gear for wear and damage. If the sun gear is worn or damaged, replace it and also check the planetary carrier pinion gears, the forward clutch, and the drive pulley shaft splines for wear and damage. Check the ring gear for wear and damage. If the ring gear is worn or damaged, replace it and also check the planetary carrier and the reverse brake for wear and damage. Check the thrust needle bearing and the thrust washers on the planetary carrier for wear and damage. If the thrust needle bearing or the thrust washer are worn or damaged, replace them and adjust the clearance with the thrust shim. Check the transmission fluid pump assembly for wear and damage. If the transmission fluid pump assembly is worn or damaged, replace it as an assembly.

Symptom	Probable cause(s)	Notes
Stall speed high	<ul style="list-style-type: none"> Forward clutch assembly defective Input shaft worn or damaged Reverse brake defective Transmission fluid pump worn, binding, or foreign material in transmission fluid pump Low transmission fluid (HCF-2) level Transmission fluid (HCF-2) deteriorated Valve body defective Transmission fluid feed pipe worn, damaged, or out of round Torque converter turbine speed sensor defective Stator shaft worn or damaged PCM defective 	<ul style="list-style-type: none"> Inspect the clearance between the forward clutch end-plate and the top disc. Inspect the input shaft assembly for wear and damage. If the input shaft is worn or damaged, replace it and also check the related part of the input shaft assembly for wear and damage. Inspect the reverse brake piston and the O-rings. Check the spring retainer for wear and damage. Inspect the clearance between the brake end-plate and the top disc. If the clearance is out of tolerance, inspect the brake discs and plates for wear and damage. If the discs and plates are worn or damaged, replace them as a set. If they are OK, adjust the clearance with the brake end-plate. Check the transmission fluid pump assembly for wear and damage. If the transmission fluid pump assembly is worn or damaged, replace it as an assembly. Check the transmission fluid (HCF-2) level. Check the transmission fluid (HCF-2) condition. If necessary, replace the transmission fluid (HCF-2). Check the valve body for wear and damage. Check the transmission fluid feed pipe for wear, damage, and out of round. Check the torque converter turbine speed sensor for wear and damage, and also check the O-ring for wear and damage. Check the stator shaft for wear and damage.
Stall speed low	<ul style="list-style-type: none"> Valve body defective Transmission fluid feed pipe worn, damaged, or out of round Torque converter turbine speed sensor defective Engine output low Stator shaft worn or damaged PCM defective 	<ul style="list-style-type: none"> Check the valve body for wear and damage. Check the transmission fluid feed pipe for wear, damage, and out of round. Check the torque converter turbine speed sensor for wear and damage, and also check the O-ring for wear and damage. Check the stator shaft for wear and damage.
Judder when starting off	<ul style="list-style-type: none"> Transmission fluid pump worn, binding, or foreign material in transmission fluid pump Low transmission fluid (HCF-2) level Transmission fluid strainer or transmission fluid filter clogged Transmission fluid (HCF-2) deteriorated Valve body defective Transmission fluid feed pipe worn, damaged, or out of round 	<ul style="list-style-type: none"> Check the transmission fluid pump assembly for wear and damage. If the transmission fluid pump assembly is worn or damaged, replace it as an assembly. Check the transmission fluid (HCF-2) level. Check the transmission fluid strainer and the transmission fluid filter for debris. If the transmission fluid strainer or the transmission fluid filter is clogged, find the damaged components that caused debris. Check the transmission fluid (HCF-2) condition. If necessary, replace the transmission fluid (HCF-2). Check the valve body for wear and damage. Check the transmission fluid feed pipe for wear, damage, and out of round.

Symptom	Probable cause(s)	Notes
Noise from transmission in D, S, and L	<ul style="list-style-type: none"> Input shaft worn or damaged Secondary drive gear or secondary driven gear worn or damaged Final driven gear worn or damaged Control shaft assembly worn or damaged Park pawl and pawl shaft worn or damaged 	<ul style="list-style-type: none"> Inspect the input shaft assembly for wear and damage. If the input shaft is worn or damaged, replace it and also check the related part of the input shaft assembly for wear and damage. Check the secondary drive gear, the secondary driven gear, and the final driven gear for wear and damage. Check the final driven gear for wear and damage. Check the control shaft assembly for wear and damage. Check the park pawl and the pawl shaft for wear and damage. If the park pawl or the pawl shaft are worn or damaged, replace them and also check the park gear for wear and damage.
Noise from transmission in R	<ul style="list-style-type: none"> Input shaft worn or damaged Reverse brake defective Reverse brake piston stuck Reverse brake return springs/retainer worn or damaged Input shaft thrust needle bearing seized, worn, or damaged Planetary carrier worn or damaged Sun gear worn or damaged Ring gear worn or damaged Thrust needle bearing on planetary carrier seized, worn, or damaged Thrust washer on planetary carrier seized, worn, or damaged Control shaft assembly worn or damaged Park pawl and pawl shaft worn or damaged 	<ul style="list-style-type: none"> Inspect the input shaft assembly for wear and damage. If the input shaft is worn or damaged, replace it and also check the related part of the input shaft assembly for wear and damage. Inspect the reverse brake piston and the O-rings. Check the spring retainer for wear and damage. Inspect the clearance between the brake end-plate and the top disc. If the clearance is out of tolerance, inspect the brake discs and plates for wear and damage. If the discs and plates are worn or damaged, replace them as a set. If they are OK, adjust the clearance with the brake end-plate. Check the planetary carrier for wear and damage. If the planetary carrier is worn or damaged, replace it and also check the planetary carrier pinion gears, the reverse brake, and the drive pulley shaft splines for wear and damage. Check the sun gear for wear and damage. If the sun gear is worn or damaged, replace it and also check the planetary carrier pinion gears, the forward clutch, and the drive pulley shaft splines for wear and damage. Check the ring gear for wear and damage. If the ring gear is worn or damaged, replace it and also check the planetary carrier and the reverse brake for wear and damage. Check the thrust needle bearing and the thrust washers on the planetary carrier for wear and damage. If the thrust needle bearing or the thrust washer are worn or damaged, replace them and adjust the clearance with the thrust shim. Check the control shaft assembly for wear and damage. Check the park pawl and the pawl shaft for wear and damage. If the park pawl or the pawl shaft are worn or damaged, replace them and also check the park gear for wear and damage.

Symptom	Probable cause(s)	Notes
Shift lever does not operate smoothly	<ul style="list-style-type: none"> Control shaft assembly worn or damaged Control lever worn or damaged Park pawl and pawl shaft worn or damaged Shift cable broken or out of adjustment Manual valve lever and lever pin worn or damaged Transmission range switch defective Stator shaft worn or damaged 	<ul style="list-style-type: none"> Check the control shaft assembly for wear and damage. Check the control lever for wear and damage. Check the park pawl and the pawl shaft for wear and damage. If the park pawl or the pawl shaft are worn or damaged, replace them and also check the park gear for wear and damage. Check for a loose shift cable at the shift lever and the transmission control lever. Check the manual valve lever and the lever pin for wear and damage. Inspect the transmission range switch. Check the stator shaft for wear and damage.
Transmission will not shift into P, or transmission cannot shift out of P	<ul style="list-style-type: none"> Control shaft assembly worn or damaged Control lever worn or damaged Park pawl and pawl shaft worn or damaged Parking gear worn or damaged Shift cable broken or out of adjustment Manual valve lever and lever pin worn or damaged Valve body defective Transmission range switch defective Stator shaft worn or damaged PCM defective 	<ul style="list-style-type: none"> Check the control shaft assembly for wear and damage. Check the control lever for wear and damage. Check the park pawl and the pawl shaft for wear and damage. If the park pawl or the pawl shaft are worn or damaged, replace them and also check the park gear for wear and damage. Check the parking gear for wear and damage. Check for a loose shift cable at the shift lever and the transmission control lever. Check the manual valve lever and the lever pin for wear and damage. Check the valve body for wear and damage. Inspect the transmission range switch. Check the stator shaft for wear and damage.
A/T gear position indicator does not indicate shift lever positions	<ul style="list-style-type: none"> Control shaft assembly worn or damaged Shift cable broken or out of adjustment Transmission range switch defective PCM defective 	<ul style="list-style-type: none"> Check the control shaft assembly for wear and damage. Check for a loose shift cable at the shift lever and the transmission control lever. Inspect the transmission range switch.