

Diagnostics with Phenomenon

CONTINUOUSLY VARIABLE TRANSMISSION

47. Diagnostics with Phenomenon

A: INSPECTION

Symptoms	Faulty parts
Stall speed is low after warming-up, with select lever in "D" or "R" range.	Engine control system
Vehicle does not move despite engine speed rising up, with select lever in "D" or "R" range.	<ul style="list-style-type: none"> • Engine control system • Select cable • CVTF • Secondary pressure circuit • Pulley, gear and variator chain • Forward/reverse changeover section • TCM • Control valve body • Inhibitor switch
Vehicle does not move by engine stall, with select lever in "D" or "R" range.	<ul style="list-style-type: none"> • Parking mechanism • Select cable • Bearing • Forward/reverse changeover section
Excessive shock occurs at starting, with select lever in "D" or "R" range.	<ul style="list-style-type: none"> • Secondary pressure circuit • Pulley, gear and variator chain
Acceleration speed from standstill is insufficient, with select lever in "D" or "R" range.	<ul style="list-style-type: none"> • Control valve body • Forward/reverse changeover section
Engine speed suddenly rises up during driving, with select lever in "D" or "R" range.	<ul style="list-style-type: none"> • Control valve body • Secondary pressure circuit • Primary pressure circuit
Vibration occurs during driving, with select lever in "D" or "R" range.	<ul style="list-style-type: none"> • Secondary pressure circuit • Primary pressure circuit • Forward/reverse changeover section • Pulley and variator chain • Torque converter assembly • Hydraulic pressure circuit to torque converter • Control valve body
Sudden braking occurs during driving, with select lever in "D" or "R" range.	<ul style="list-style-type: none"> • Secondary pressure circuit • Primary pressure circuit • Control valve body
During deceleration, lockup clutch does not disengage until just before halting, with select lever in "D" or "R" range.	<ul style="list-style-type: none"> • Control valve body • Torque converter assembly
Engine stalls with vehicle at a standstill, with select lever in "D" or "R" range.	<ul style="list-style-type: none"> • Engine control system • Control valve body
Excessive lockup shock occurs during driving, with select lever in "D" range.	Control valve body
Slipping occurs at lockup, or lockup does not occur during driving, with select lever in "D" range.	<ul style="list-style-type: none"> • Control valve body • Lockup hydraulic line • Torque converter assembly
Excessive shift shock occurs when shifting the select lever from "N" range to "D" range, or from "N" range to "R" range.	<ul style="list-style-type: none"> • Inhibitor switch • Control valve body • Forward/reverse changeover section
Vehicle does not keep at standstill with select lever in "P" range, or parking cannot be released when shifting from "P" range to another range.	<ul style="list-style-type: none"> • Select cable • Parking mechanism
Select lever does not shift smoothly.	<ul style="list-style-type: none"> • Select cable • Inhibitor switch • Detent spring • Manual plate

CONTINUOUSLY VARIABLE TRANSMISSION

CVT(TR690)

	Page
1. General Description	3
2. CVTF	36
3. Differential Gear Oil	41
4. Variator Chain Break-in	44
5. AWD ON/OFF Switching Mode	45
6. Road Test	46
7. Stall Test	48
8. Time Lag Test	49
9. Secondary Pressure (Line Pressure) Test	50
10. Transfer Clutch Pressure Test	53
11. Automatic Transmission Assembly	55
12. Transmission Mounting System	82
13. Extension Case Oil Seal	86
14. Differential Side Retainer Oil Seal	88
15. Inhibitor Switch	91
16. Secondary Speed Sensor	98
17. Primary Speed Sensor	101
18. Front Wheel Speed Sensor	104
19. Secondary Pressure Sensor	106
20. Control Valve Body	108
21. Transmission Harness	118
22. X MODE Switch	121
23. Transmission Control Module (TCM)	123
24. CVTF Cooler (With Warmer Function)	125
25. Air Breather Hose	132
26. Drive Plate	133
27. Preparation for Overhaul	135
28. Torque Converter Assembly	136
29. Extension Case	138
30. Rear Drive Shaft	141
31. Transfer Clutch	146
32. Transfer Reduction Driven Gear	158
33. Parking Pawl	163
34. Intermediate Case	165
35. CVTF Filter	170
36. Reverse Brake Assembly	171
37. Forward Clutch Assembly	180
38. Reduction Driven Gear	200
39. Transmission Control Device	207
40. Transmission Case	211
41. Primary Pulley and Secondary Pulley	227
42. Variator Chain	242
43. Drive Pinion Shaft Assembly	243

CONTINUOUSLY VARIABLE TRANSMISSION

44.	Front Differential Assembly	265
45.	Oil Pump	283
46.	Oil Pump Chain	284
47.	Converter Case Cover	291
48.	Front Reduction Drive Gear	301
49.	Front Reduction Driven Gear	309
50.	Converter Case	317
51.	Diagnostics with Phenomenon	321