

PROBLEM SYMPTOMS TABLE

HINT:

- If no DTCs are displayed during the diagnostic trouble code check although the trouble still occurs, check the electrical circuits for each symptom in the order given in the charts on the following pages and proceed to the page given for troubleshooting.
- The Matrix Chart is divided into 2 chapters.
- *1: Denotes that when there are malfunctions in the circuit, DTCs may be set.

Chapter 1: Electronic Circuit Matrix Chart

Refer to the table below when the cause of the trouble is considered to be electrical.

If the trouble still occurs even though there are no abnormalities in any of the other circuits, check and replace the ECM.

Symptom	Suspected area	See page
No up-shift (A particular gear, from 1st to 4th gear, is not up-shifted)	1. Shift solenoid valve (S1) circuit *1	AT-107
	2. Shift solenoid valve (S2) circuit *1	AT-111
	3. ECM	IN-44
No up-shift (4th to 5th)	1. Transmission control switch circuit (D - 4) *1	AT-45
	2. Engine coolant temperature sensor circuit *1	ES-57
	3. Speed sensor NT circuit *1	AT-59
	4. Shift solenoid valve (SL1) circuit *1	AT-69
	5. Shift solenoid valve (SL2) circuit *1	AT-94
	6. Shift solenoid valve (SR) circuit *1	AT-115
	7. ECM	IN-44
No up-shift (3rd to 4th)	1. Engine coolant temperature sensor circuit *1	ES-57
	2. Shift solenoid valve (S2) circuit *1	AT-111
	3. ECM	IN-44
No up-shift (1st to 2nd)	1. Transmission control switch circuit (2 - L) *1	AT-45
	2. Shift solenoid valve (S2) circuit *1	AT-111
	3. ECM	IN-44
No down-shift (5th to 4th)	1. Transmission control switch circuit (D - 4) *1	AT-45
	2. Shift solenoid valve (SL1) circuit *1	AT-69
	3. Shift solenoid valve (SL2) circuit *1	AT-94
	4. Shift solenoid valve (SR) circuit *1	AT-115
	5. ECM	IN-44
No down-shift (2nd to 1st)	1. Transmission control switch circuit (2 - L) *1	AT-45
	2. Shift solenoid valve (S2) circuit *1	AT-111
	3. ECM	IN-44
No down-shift (A particular gear, from 1st to 4th gear, is not down-shifted)	1. Shift solenoid valve (S1) circuit *1	AT-107
	2. Shift solenoid valve (S2) circuit *1	AT-111
	3. ECM	IN-44
No lock-up	1. No. 1 ATF temperature sensor circuit *1	AT-51
	2. Transfer L4 position switch circuit *1	AT-144
	3. Stop light switch circuit *1	ES-57
	4. Speed sensor NT circuit *1	AT-59
	5. Shift solenoid valve (SLU) circuit *1	AT-140
	6. Engine coolant temperature sensor circuit *1	ES-57
	7. ECM	IN-44
No lock-up off	1. Shift solenoid valve (SLU) circuit *1	AT-140
	2. ECM	IN-44

Symptom	Suspected area	See page
Shift point too high or too low	1. Shift solenoid valve (SLT) circuit *1	AT-126
	2. Speed sensor NT circuit *1	AT-59
	3. Speed sensor SP2 circuit *1	AT-64
	4. Throttle position sensor circuit *1	ES-57
	5. No. 1 ATF temperature sensor circuit *1	AT-51
	6. Transfer L4 position switch circuit *1	AT-144
	7. ECM	IN-44
Up-shift from 4th to 5th while shift lever is in 4 position	1. Transmission control switch circuit (D - 4) *1	AT-45
	2. ECM	IN-44
Up-shift from 4th to 5th while engine is cold	1. Engine coolant temperature sensor circuit *1	ES-57
	2. ECM	IN-44
Up-shift from 3rd to 4th while shift lever is in 3 position	1. Park/neutral position switch circuit *1	AT-45
	2. ECM	IN-44
Up-shift from 2nd to 3rd while shift lever is in 2 position	1. Park/neutral position switch circuit *1	AT-45
	2. ECM	IN-44
Up-shift from 1st to 2nd while shift lever is in L position	1. Transmission control switch circuit (2 - L) *1	AT-45
	2. ECM	IN-44
Harsh engagement (N to D)	1. Speed sensor NT circuit *1	AT-59
	2. Shift solenoid valve (SL1) circuit *1	AT-69
	3. Shift solenoid valve (SLT) circuit *1	AT-126
	4. ECM	IN-44
Harsh engagement (Lock-up)	1. Speed sensor NT circuit *1	AT-59
	2. Speed sensor SP2 circuit *1	AT-64
	3. Shift solenoid valve (SLU) circuit *1	AT-140
	4. ECM	IN-44
Harsh engagement (Any driving position)	ECM	IN-44
Poor acceleration	1. No. 2 ATF temperature sensor circuit *1	AT-130
	2. Engine coolant temperature sensor circuit *1	ES-57
	3. Shift solenoid valve (SLT) circuit *1	AT-126
	4. ECM	IN-44
No engine braking	ECM	IN-44
No kick-down	ECM	IN-44
Engine stalls when starting off or stopping	1. Shift solenoid valve (SLU) circuit *1	AT-140
	2. ECM	IN-44
ATF temperature warning light remains on	1. No. 2 ATF temperature sensor circuit *1	AT-130
	2. Engine coolant temperature sensor circuit *1	ES-57
	3. ECM	IN-44
Lock-up at 3rd gear	1. No. 2 ATF temperature sensor circuit *1	AT-130
	2. Engine coolant temperature sensor circuit *1	ES-57
	3. ECM	IN-44
Shift point too high	1. No. 2 ATF temperature sensor circuit *1	AT-130
	2. Engine coolant temperature sensor circuit *1	ES-57
	3. ECM	IN-44

Chapter 2: On-Vehicle Repair and Off-Vehicle Repair

Symptom	Suspected area	See page
Vehicle does not move with shift lever in any forward position and reverse position	1. Transmission control cable	AT-188
	2. Manual valve	AT-193
	3. Parking lock pawl	AT-193
	4. Rear planetary gear unit	AT-193
	5. Torque converter clutch	AT-186
Vehicle does not move with shift lever in R position	1. Valve body assembly	AT-161
	2. No. 3 clutch (C3)	AT-193
	3. No. 4 brake (B4)	AT-193
	4. No. 1 one-way clutch (F1)	AT-193
No up-shift (1st to 2nd)	1. Valve body assembly	AT-161
	2. No. 3 brake (B3)	AT-193
	3. No. 1 one-way clutch (F1)	AT-193
	4. No. 2 one-way clutch (F2)	AT-193
No up-shift (2nd to 3rd)	1. Valve body assembly	AT-161
	2. No. 3 clutch (C3)	AT-193
No up-shift (3rd to 4th)	1. Valve body assembly	AT-161
	2. No. 2 clutch (C2)	AT-193
No up-shift (4th to 5th)	1. Valve body assembly	AT-161
	2. No. 1 brake (B1)	AT-193
	3. No. 1 clutch (C1)	AT-193
No down-shift (5th to 4th)	Valve body assembly	AT-161
No down-shift (4th to 3rd)	Valve body assembly	AT-161
No down-shift (3rd to 2nd)	Valve body assembly	AT-161
No down-shift (2nd to 1st)	Valve body assembly	AT-161
No lock-up or No lock-up off	1. Shift solenoid valve (SLU)	AT-135
	2. Valve body assembly	AT-161
	3. Torque converter clutch	AT-186
Harsh engagement (N to D)	1. Shift solenoid valve (SL1)	AT-84
	2. Valve body assembly	AT-161
	3. C1 accumulator	AT-193
	4. No. 1 clutch (C1)	AT-193
	5. No. 3 one-way clutch (F3)	AT-193
Harsh engagement (Lock-up)	1. Shift solenoid valve (SLU)	AT-135
	2. Valve body assembly	AT-161
	3. Torque converter clutch	AT-186
Harsh engagement (N to R)	1. Shift solenoid valve (SLT)	AT-119
	2. Shift solenoid valve (SLU)	AT-135
	3. Valve body assembly	AT-161
	4. C3 accumulator	AT-193
	5. No. 3 clutch (C3)	AT-193
	6. No. 4 brake (B4)	AT-193
	7. No. 1 one-way clutch (F1)	AT-193
Harsh engagement (1st to 2nd, 2nd to 3rd, 3rd to 4th and 4th to 5th)	1. Shift solenoid valve (SLT)	AT-119
	2. Shift solenoid valve (SL1)	AT-84
	3. Valve body assembly	AT-161

Symptom	Suspected area	See page
Harsh engagement (1st to 2nd)	1. Valve body assembly	AT-161
	2. B3 accumulator	AT-193
	3. No. 3 brake (B3)	AT-193
	4. No. 1 one-way clutch (F1)	AT-193
	5. No. 2 one-way clutch (F2)	AT-193
Harsh engagement (2nd to 3rd)	1. Valve body assembly	AT-161
	2. C3 accumulator	AT-193
	3. No. 3 clutch (C3)	AT-193
Harsh engagement (3rd to 4th)	1. Valve body assembly	AT-161
	2. C2 accumulator	AT-193
	3. No. 2 clutch (C2)	AT-193
Harsh engagement (4th to 5th)	1. Shift solenoid valve (SL1)	AT-84
	2. Shift solenoid valve (SL2)	AT-89
	3. Valve body assembly	AT-161
	4. No. 1 brake (B1)	AT-193
	5. No. 1 clutch (C1)	AT-193
Slippage or shuddering (Forward and reverse: After warm-up)	1. Valve body assembly	AT-161
	2. Oil strainer	AT-161
	3. No. 1 one-way clutch (F1)	AT-193
	4. No. 3 clutch (C3)	AT-193
	5. Torque converter clutch	AT-186
Slippage or shuddering (Particular position: Just after engine starts)	Torque converter clutch	AT-186
Slippage or shuddering (R position)	1. No. 4 brake (B4)	AT-193
	2. No. 1 one-way clutch (F1)	AT-193
	3. No. 3 clutch (C3)	AT-193
Slippage or shuddering (1st)	1. No. 1 clutch (C1)	AT-193
	2. No. 3 one-way clutch (F3)	AT-193
Slippage or shuddering (2nd)	1. No. 1 clutch (C1)	AT-193
	2. No. 3 brake (B3)	AT-193
	3. No. 1 one-way clutch (F1)	AT-193
	4. No. 2 one-way clutch (F2)	AT-193
Slippage or shuddering (3rd)	1. No. 1 clutch (C1)	AT-193
	2. No. 3 clutch (C3)	AT-193
	3. No. 1 one-way clutch (F1)	AT-193
Slippage or shuddering (4th)	1. No. 1 clutch (C1)	AT-193
	2. No. 2 clutch (C2)	AT-193
Slippage or shuddering (5th)	1. No. 2 clutch (C2)	AT-193
	2. No. 3 clutch (C3)	AT-193
	3. No. 1 brake (B1)	AT-193
Engine brake does not work only in 1st to 4th gear in D position	No. 1 clutch (C1)	AT-193
Engine brake does not work only in 1st gear in L position	1. Valve body assembly	AT-161
	2. No. 4 brake (B4)	AT-193
Engine brake does not work only in 2nd gear in 2 position	1. Valve body assembly	AT-161
	2. Brake No. 2 (B2)	AT-193
Engine brake does not work only in 3rd gear in 3 position	1. Valve body assembly	AT-161
	2. No. 1 brake (B1)	AT-193
No kick-down	Valve body assembly	AT-161

Symptom	Suspected area	See page
Shift point too high or too low	1. Shift solenoid valve (SLT)	AT-119
	2. Shift solenoid valve (SL1)	AT-84
	3. Valve body assembly	AT-161
Poor acceleration (All positions)	1. Shift solenoid valve (SLT)	AT-119
	2. Valve body assembly	AT-161
	3. Torque converter clutch	AT-186
Poor acceleration (5th)	1. No. 1 clutch (C1)	AT-193
	2. No. 3 clutch (C3)	AT-193
	3. No. 1 brake (B1)	AT-193
	4. Front planetary gear unit	AT-193
Engine stalls when starting off or stopping	1. Shift solenoid valve (SLU)	AT-135
	2. Valve body assembly	AT-161
	3. Torque converter clutch	AT-186