

PROBLEM SYMPTOMS TABLE

HINT:

- Use the table below to help determine the cause of the problem symptom. The potential causes of the symptoms are listed in order of probability in the "Suspected area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.
- The Matrix Chart is divided into 3 chapters. When troubleshooting, check Chapter 1 first. If instructions are given in Chapter 2 to proceed to 3, proceed as instructed.
- If the instruction "Proceed to next circuit inspection shown in problem symptoms table" is given in the flowchart for each circuit, proceed to the next suspected area in the table.
- If the problem still occurs even though there are no malfunctions in any of the circuits, check the ECM and replace it if necessary.

CHAPTER 1: ELECTRICAL CIRCUIT MATRIX CHART

Symptom	Suspected area	See page
No up-shift (a particular gear, from 1st to 3rd gear, is not up-shifted)	ECM	IN-30
No up-shift (3rd -> O/D)	1. O/D main switch circuit	AX-81
	2. ECM	IN-30
No down-shift (O/D -> 3rd)	1. O/D main switch circuit	AX-81
	2. ECM	IN-30
No down-shift (a particular gear, from 3rd to 1st gear, is not down-shifted)	ECM	IN-30
No lock-up or no lock-up off	1. Stop light switch circuit	AX-52
	2. Engine coolant temperature sensor circuit	ES-48
	3. Throttle position sensor circuit	ES-48
	4. ECM	IN-30
Shift point too high or too low	ECM	IN-30
Up-shift to 2nd while shift lever on L	ECM	IN-30
Up-shift to 3rd while shift lever on 2	ECM	IN-30
Up-shift to O/D from 3rd while O/D main switch is OFF	1. O/D main switch circuit	AX-81
	2. ECM	IN-30
Up-shift to O/D from 3rd while engine is cold	ECM	IN-30
Harsh engagement (N -> D)	ECM	IN-30
Harsh engagement (lock-up)	ECM	IN-30
Harsh engagement (any driving position)	ECM	IN-30
Poor acceleration	ECM	IN-30
Engine stalls when starting off or stopping	ECM	IN-30
No kick-down	ECM	IN-30
Malfunction in shifting	1. Park/Neutral position switch circuit	AX-39
	2. ECM	IN-30

CHAPTER 2: ON-VEHICLE REPAIR AND OFF-VEHICLE REPAIR

Symptom	Suspected area	See page
Vehicle does not move in any forward position and reverse position	1. Manual valve	AX-149
	2. Valve body assembly (primary regulator valve)	AX-99
	3. Valve body assembly (secondary regulator valve)	AX-99
	4. Off-vehicle repair matrix chart	-
Vehicle does not move with shift lever on R	1. Manual valve	AX-149
	2. Off-vehicle repair matrix chart	-
No up-shift (1st -> 2nd)	1. Valve body assembly (1-2 shift valve)	AX-99
	2. Off-vehicle repair matrix chart	-
No up-shift (2nd -> 3rd)	1. Valve body assembly (2-3 shift valve)	AX-99
	2. Off-vehicle repair matrix chart	-
No up-shift (3rd -> O/D)	1. Valve body assembly (3-4 shift valve)	AX-99
	2. Off-vehicle repair matrix chart	-
No down-shift (O/D -> 3rd)	Valve body assembly (3-4 shift valve)	AX-99
No down-shift (3rd -> 2nd)	Valve body assembly (2-3 shift valve)	AX-99
No down-shift (2nd -> 1st)	Valve body assembly (1-2 shift valve)	AX-99
No lock-up or no lock-up off	1. Valve body assembly (lock-up relay valve)	AX-99
	2. Valve body assembly (lock-up control valve)	AX-99
	3. Valve body assembly (solenoid relay valve)	AX-99
	4. Valve body assembly (solenoid modulator valve)	AX-99
	5. Off-vehicle repair matrix chart	-
Harsh engagement (N -> D)	1. Valve body assembly (C1 accumulator)	AX-99
	2. Valve body assembly (accumulator control valve)	AX-99
	3. Off-vehicle repair matrix chart	-
Harsh engagement (N -> R)	1. C3 accumulator	AX-149
	2. Valve body assembly (accumulator control valve)	AX-99
	3. Valve body assembly (reverse control valve)	AX-99
	4. Off-vehicle repair matrix chart	-
Harsh engagement (lock-up)	1. Valve body assembly (lock-up relay valve)	AX-99
	2. Valve body assembly (accumulator control valve)	AX-99
	3. Valve body assembly (lock-up control valve)	AX-99
	4. Off-vehicle repair matrix chart	-
Harsh engagement (1st -> 2nd)	1. B2 accumulator	AX-149
	2. Valve body assembly (accumulator control valve)	AX-99
Harsh engagement (2nd -> 3rd)	1. C2 accumulator	AX-149
	2. Valve body assembly (accumulator control valve)	AX-99
Harsh engagement (3rd -> O/D)	1. Valve body assembly (B1 accumulator)	AX-99
	2. Valve body assembly (accumulator control valve)	AX-99
	3. Valve body assembly (3-4 shift timing valve)	AX-99
Harsh engagement (O/D -> 3)	1. Valve body assembly (3-4 shift timing valve)	AX-99
	2. Valve body assembly (4-3 shift timing valve)	AX-99
Harsh engagement (shift lever on D, 2, L)	Valve body assembly (coast relay valve)	AX-99
Slip or shudder (forward and reverse)	1. Valve body assembly (oil strainer)	AX-99
	2. Off-vehicle repair matrix chart	-
No engine braking (1st/shift lever on L)	1. Valve body assembly (reverse control valve)	AX-99
	2. Off-vehicle repair matrix chart	-
No engine braking (2nd/shift lever on 2)	Valve body assembly (3-4 shift valve)	AX-99
No kick-down	1. Valve body assembly (1-2 shift valve)	AX-99
	2. Valve body assembly (2-3 shift valve)	AX-99
	3. Valve body assembly (3-4 shift valve)	AX-99

Symptom	Suspected area	See page
Poor acceleration	Valve body assembly (SLT damper)	AX-99

CHAPTER 3: OFF-VEHICLE REPAIR

Symptom	Suspected area	See page
Vehicle does not move in any forward position and reverse position	1. Planetary gear unit	AX-149
	2. Forward clutch	AX-149
	3. No. 2 one-way clutch	AX-149
	4. Reverse clutch	AX-149
	5. 1st and reverse brake	AX-149
Vehicle does not move with shift lever on R	1. Planetary gear unit	AX-149
	2. Reverse clutch	AX-149
	3. 1st and reverse brake	AX-149
No up-shift (1st -> 2nd)	1. 2nd brake	AX-149
	2. No. 1 one-way clutch	AX-149
No up-shift (2nd -> 3rd)	Direct clutch	AX-149
No up-shift (3rd -> O/D)	O/D and 2nd brake	AX-149
No lock-up or no lock-up off	Torque converter clutch	AX-147
Harsh engagement (N -> D)	1. Forward clutch	AX-149
	2. No. 2 one-way clutch	AX-149
Harsh engagement (N -> R)	1. Reverse clutch	AX-149
	2. 1st and reverse brake	AX-149
Harsh engagement (lock-up)	Torque converter clutch	AX-147
Harsh engagement (1st -> 2nd)	1. 2nd brake	AX-149
	2. No. 1 one-way clutch	AX-149
Harsh engagement (2nd -> 3rd)	Direct clutch	AX-149
Harsh engagement (3rd -> O/D)	O/D and 2nd brake	AX-149
Slip or shudder (forward position)	1. Torque converter clutch	AX-147
	2. Forward clutch	AX-149
	3. Direct clutch	AX-149
	4. O/D and 2nd brake	AX-149
	5. 2nd brake	AX-149
	6. No. 1 one-way clutch	AX-149
	7. No. 2 one-way clutch	AX-149
Slip or shudder (reverse position)	1. Reverse clutch	AX-149
	2. 1st and reverse brake	AX-149
Slip or shudder (1st)	No. 2 one-way clutch	AX-149
Slip or shudder (2nd)	1. 2nd brake	AX-149
	2. No. 1 one-way clutch	AX-149
Slip or shudder (3rd)	Direct clutch	AX-149
Slip or shudder (O/D)	O/D and 2nd brake	AX-149
No engine braking (1st/shift lever on L)	1st and reverse brake	AX-149
No engine braking (2nd/shift lever on 2)	O/D and 2nd brake	AX-149
Poor acceleration (all positions)	Torque converter clutch	AX-147
Large shift shock or engine stalls when starting off or stopping	Torque converter clutch	AX-147