## **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 2 chapters. When troubleshooting, check Chapter 1 first. If instructions are given in Chapter 1 to proceed to 2, 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 (1st -> 2nd)	ECM	IN-37
No up-shift (2nd -> 3rd)	ECM	IN-37
No up-shift (3rd -> O/D)	1. Park/Neutral position switch circuit*	AX-39
	2. ECM	IN-37
No down-shift (O/D -> 3rd)	ECM	IN-37
No down-shift (3rd -> 2nd)	ECM	IN-37
No down-shift (2nd -> 1st)	ECM	IN-37
No lock-up or no lock-up off	ECM	IN-37
Shift point too high or too low	ECM	IN-37
Up-shift to O/D from 3rd while shift lever is on 3	1. Park/Neutral position switch circuit*	AX-39
	2. ECM	IN-37
Up-shift to O/D from 3rd while engine is cold	1. Engine coolant temp. sensor circuit*	ES-51
	2. ECM	IN-37
Harsh engagement (N -> D)	ECM	IN-37
Harsh engagement (lock-up)	ECM	IN-37
Harsh engagement (any driving position)	ECM	IN-37
Poor acceleration	ECM	IN-37
Engine stalls when starting off or stopping	ECM	IN-37
Malfunction in shifting	1. Park/Neutral position switch circuit*	AX-39
	2. ECM	IN-37

HINT:

\*: When the circuit is defective, a DTC may be output.

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

Symptom	Suspected area	See page
Vehicle does not move in all positions other than P and N	1. Manual valve	AX-154
	2. Primary regulator valve	AX-154
	3. Front and rear planetary gear	AX-154
	4. U/D planetary gear	AX-154
	5. F2 U/D one-way clutch	AX-154
	6. C1 forward clutch	AX-154
	7. B3 U/D brake	AX-154

Symptom	Suspected area	See page
	1. Front and rear planetary gear	AX-154
	2. U/D planetary gear	AX-154
ehicle does not move with shift lever on R	3. C2 direct clutch	AX-154
	4. C3 U/D brake	AX-154
	5. B2 1st and reverse brake	AX-154
	1. Valve body assembly	AX-118
o up-shift (1st -> 2nd)	2. F1 No. 1 one-way clutch	AX-154
	3. B1 2nd brake	AX-154
	1. Valve body assembly	AX-118
o up-shift (2nd -> 3rd)	2. C2 direct clutch	AX-154
	1. 3-4 shift valve	AX-154
o up-shift (3rd -> O/D)	2. C3 U/D clutch	AX-154
o down-shift (O/D -> 3rd)	3-4 shift valve	AX-154
o down-shift (3rd -> 2nd)	Valve body assembly	AX-118
o down-shift (2nd -> 1st)	Valve body assembly	AX-118
	1. Lock-up relay valve	AX-154
o lock-up or no lock-up off	2. Torque converter clutch	AX-152
	1. C1 accumulator	AX-154
	2. Valve body assembly	AX-118
arsh engagement (N -> D)	3. C1 forward clutch	AX-154
	4. F2 U/D one-way clutch	AX-154
	5. F1 No. 1 one-way clutch	AX-154
	1. Valve body assembly	AX-118
arsh engagement (N -> R)	2. C2 direct clutch	AX-110
	3. B2 1st and reverse brake	AX-154
	1. Lock-up relay valve	AX-154
arsh engagement (Lock-up)	2. Torque converter clutch	AX-152
arsh engagement (2nd -> 3rd)	Valve body assembly	AX-152 AX-118
arsh engagement (3rd -> O/D)	Valve body assembly Valve body assembly	AX-118
arsh engagement (O/D -> O/D)	Valve body assembly Valve body assembly	AX-118 AX-118
	1. Oil strainer	AX-118 AX-118
	2. Torque converter clutch	AX-118 AX-152
		AX-152 AX-154
lin or obudder /forward position often warry	3. C1 forward clutch 4. C2 direct clutch	-
lip or shudder (forward position, after warm-up)		AX-154
	5. C3 U/D brake	AX-154
	6. F1 No. 1 one-way clutch	AX-154
	7. F2 U/D one-way clutch	AX-154
	1. Oil strainer	AX-118
ip or shudder (shift lever on R)	2. C2 direct clutch	AX-154
	3. B2 1st and reverse brake	AX-154
p or shudder (1st)	F1 No. 1 one-way clutch	AX-154
ip or shudder (2nd)	1. F2 U/D one-way clutch	AX-154
· · · · ·	2. B1 2nd brake	AX-154
lip or shudder (3rd)	C2 direct clutch	AX-154
lip or shudder (O/D)	C3 U/D clutch	AX-154
o engine braking (1st to 3rd/shift lever on D)	B3 U/D brake	AX-154
lo engine braking (1st/shift lever on L)	B2 1st and reverse brake	AX-154
lo engine braking (2nd/shift lever on 2)	B1 2nd brake	AX-154

## U241E AUTOMATIC TRANSAXLE – AUTOMATIC TRANSAXLE SYSTEM

Symptom	Suspected area	See page
Poor acceleration (all positions)	1. Torque converter clutch	AX-152
	2. U/D planetary gear	AX-154
Poor acceleration (O/D)	1. C3 U/D clutch	AX-154
	2. U/D planetary gear	AX-154
Large shift shock or engine stalls when starting off or stopping	Torque converter clutch	AX-152
No kick-down	Valve body assembly	AX-118

