DI6UQ-01

PROBLEM SYMPTOMS TABLE

HINT:

If a normal code is displayed during the DTC check but the trouble still occurs, check the circuits for each symptom in the order given in the charts on the following pages and proceed to the page given for trouble-shooting.

The Matrix Chart is divided into 3 chapters.

Chapter 1: Electronic circuit matrix chart

Chapter 2: On-vehicle repair matrix chart

Chapter 3: Off-vehicle repair matrix chart

If the instruction "Proceed to next circuit inspection shown on matrix chart" is given in the flow chart for each circuit, proceed to the circuit with the next highest number in the table to continue the check.

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

Chapter 1: Electronic Circuit Matrix Chart

2002 ECHO (RM884U)

Symptom	Suspect Area	See page
No up-shift (A particular gear, from 1st to 3rd gear, is not up-shifted)	ECM	-
No up-shift $(3rd \rightarrow O/D)$	O/D main switch and O/D OFF indicator light circuit ECM	DI-196 -
No down-shift (A particular gear, from 1st to 3rd gear, is not down-shifted)	ECM	-
No down-shift $(O/D \rightarrow 3rd)$	O/D main switch and O/D OFF indicator light circuit ECM	DI-196 -
No lock-up	ECM	-
No lock-up OFF	ECM	-
Shift point too high or too low	ECM	-
Up-shift to O/D from 3rd while O/D main switch is OFF	ECM	-
Up-shift to O/D from 3rd while engine is cold	ECM	-
No kick-down	ECM	-
Engine stalls when starting off or stopping	ECM	-

Chapter 2: On-vehicle Repair (★: U340E, U341E AUTOMATIC TRANSAXLE Repair Manual Pub. No. RM735U)

Symptom	Suspect Area	See page
Vehicle does not move in any forward position and reverse position	 Manual valve Primary regulator valve Secondary regulator valve Off-vehicle repair matrix chart 	* * *
Vehicle does not move in R position	Manual valve Off-vehicle repair matrix chart	* -
No up-shift (1st \rightarrow 2nd)	 1. 1-2 shift valve 2. Off-vehicle repair matrix chart 	* -
No up-shift (2nd \rightarrow 3rd)	 2-3 shift valve Off-vehicle repair matrix chart 	* -
No up-shift (3rd \rightarrow O/D)	3-4 shift valve Off-vehicle repair matrix chart	* -
No down-shift (O/D \rightarrow 3rd)	3-4 shift valve	*
No down-shift (3rd \rightarrow 2nd)	2-3 shift valve	*
No down-shift (2nd \rightarrow 1st)	1-2 shift valve	*
No lock-up or No lock-up off	 Lock-up relay valve Lock-up control valve Solenoid relay valve Solenoid modulator valve Off-vehicle repair matrix chart 	* * * *
Harsh engagement (N $ ightarrow$ D)	C ₁ accumulator Accumulator control valve Off-vehicle repair matrix chart	* * -
Harsh engagement (N \rightarrow R)	 C₃ accumulator Accumulator control valve Reverse control valve Off-vehicle repair matrix chart 	* * *
Harsh engagement (Lock-up)	Lock-up relay valve Accumulator control valve Lock-up control valve Off-vehicle repair matrix chart	* * * -
Harsh engagement (1st \rightarrow 2nd)	B ₂ accumulator Accumulator control valve	* *
Harsh engagement (2nd \rightarrow 3rd)	C ₂ accumulator Accumulator control valve	*
Harsh engagement (3rd \rightarrow O/D)	B ₁ accumulator Accumulator control valve 3. 3-4 shift timing valve	* * *
Harsh engagement (O/D \rightarrow 3)	 4-3 shift timing valve 4-3 shift timing valve 	* *
Harsh engagement (D, 2, L position)	Coat relay valve	*
Slip or shudder (Forward and reverse)	Oil strainer Off-vehicle repair matrix chart	AX-9 -
No engine braking (1st: L position)	Reverse control valve Off-vehicle repair matrix chart	* -
No engine braking (2nd: 2 position)	3-4 shift valve	*

2002 ECHO (RM884U)

DIAGNOSTICS - AUTOMATIC TRANSAXLE

No kick-down	1. 1-2 shift valve 2. 2-3 shift valve	*
	3. 3-4 shift valve	*
Poor acceleration	SLT damper	*

2002 ECHO (RM884U)

Chapter 3: Off-vehicle Repair (★: U340E, U341E AUTOMATIC TRANSAXLE Repair Manual Pub. No. RM735U)

Symptom	Suspect Area	See page
Vehicle does not move in any forward position and reverse position	 Planetary gear unit Forward clutch One-way clutch No. 2 Reverse Clutch 1st and reverse brake 	* * * *
Vehicle does not move in R position	 Planetary gear unit Reverse Clutch 1st and reverse brake 	* *
No up-shift (1st \rightarrow 2nd)	2nd brake One-way clutch No. 1	*
No up-shift (2nd \rightarrow 3rd)	Direct clutch	*
No up-shift (3rd \rightarrow O/D)	O/D and 2nd brake	*
No lock-up or No lock-up off	Torque converter clutch	AX-34
Harsh engagement (N \rightarrow D)	Forward clutch One-way clutch No. 2	* *
Harsh engagement (N \rightarrow R)	Reverse clutch 1. Ist and reverse brake	*
Harsh engagement (Lock-up)	Torque converter clutch	AX-34
Harsh engagement (1st \rightarrow 2nd)	2nd brake One-way clutch No. 1	*
Harsh engagement (2nd → 3rd)	Direct clutch	*
Harsh engagement (3rd → O/D)	O/D and 2nd brake	*
Slip or shudder (Forward position)	 Torque converter clutch Forward clutch Direct clutch O/D and 2nd brake 2nd brake One-way clutch No. 1 One-way clutch No. 2 	AX-34 * * * * * * * *
Slip or shudder (Reverse position)	Reverse clutch 1. Ist and reverse brake	*
Slip or shudder (1st)	One-way clutch No. 2	*
Slip or shudder (2nd)	2nd brake One-way clutch No. 1	*
Slip or shudder (3rd)	Direct clutch	*
Slip or shudder (O/D)	O/D and 2nd brake	*
No engine braking (1st: L position)	1st and reverse brake	*
No engine braking (2nd: 2 position)	O/D and 2nd brake	*
Poor acceleration (All position)	Torque converter clutch	AX-34
Large shift shock or engine stalls when starting off or stopping	Torque converter clutch	AX-34

2002 ECHO (RM884U)