DI5SD–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.

- If the instruction "Proceed to next circuit inspection shown in 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 Engine and ECT ECU.

1. CHAPTER 1: ELECTRONIC CIRCUIT MATRIX CHART

Symptom	Suspect Area	See page
No up–shift (A particular gear, from 1st to 3rd gear, is not up–shifted)	Engine and ECT ECU	IN–30
No up–shift (3rd → 4th)	1. Transmission control switch circuit 2. Engine and ECT ECU	DI–58 IN–30
No down–shift (4th → 3rd)	1. Transmission control switch circuit 2. Engine and ECT ECU	DI–58 IN–30
No down–shift (A particular gear, from 1st to 3rd gear, is not up–shifted)	Engine and ECT ECU	IN–30
No lock–up	Engine and ECT ECU	IN–30
No lock–up off	Engine and ECT ECU	IN–30
Shift point too high or too low	1. Pattern select switch circuit 2. Engine and ECT ECU	DI–55 IN–30
Up–shift to 4th from 3rd while shift lever is in 3 range	1. Transmission control switch circuit 2. Engine and ECT ECU	DI–58 IN–30
Up–shift to 4th from 3rd while engine is cold	Engine and ECT ECU	IN–30
Poor acceleration	Engine and ECT ECU	IN–30
No kick–down	1. Kick–down switch circuit 2. Engine and ECT ECU	DI–61 IN–30
No pattern select	1. Pattern select switch circuit 2. Engine and ECT ECU	DI–55 IN–30
Engine stalls when starting off or stopping	Engine and ECT ECU	IN–30

2. CHAPTER 2: ON–VEHICLE REPAIR (★:A342E AUTOMATIC TRANSMISSION SUPPLEMENT Repair Manual Pub. No. RM678E)

Symptom	Suspect Area	See page
Vehicle does not move in any forward range and reverse range	1. Transmission control rod 2. Manual valve 3. Parking lock pawl 4. Off–vehicle repair matrix chart	DI–3 ★ ★ –
Vehicle does not move in R range	1. Reverse control valve 2. Off–vehicle repair matrix chart	★ –
Vehicle does not move in particular range or ranges (except R range)	Off–vehicle repair matrix chart	–
No up–shift (1st → 2nd)	1. 1–2 shift valve 2. Off–vehicle repair matrix chart	★ –
No up–shift (2nd → 3rd)	1. 2–3 shift valve 2. Off–vehicle repair matrix chart	★ –
No up–shift (3rd → 4th)	1. 3–4 shift valve 2. Off–vehicle repair matrix chart	★ –
No down–shift (4th → 3rd)	3–4 shift valve	★
No down–shift (3rd → 2nd)	2–3 shift valve	★
No down–shift (2nd → 1st)	1. 1–2 shift valve 2. Off–vehicle repair matrix chart	★ –
No lock–up or No lock–up off	1. Lock–up control valve 2. Lock–up relay valve 3. Off–vehicle repair matrix chart	★ ★ –
Harsh engagement (N → D)	1. Accumulator control valve 2. Solenoid modulator valve 3. C_1 accumulator 4. Orifice control valve 5. Off–vehicle repair matrix chart	★ ★ ★ ★ –
Harsh engagement (Lock–up)	1. Lock–up control valve 2. Lock–up relay valve 3. Solenoid relay valve 4. Off–vehicle repair matrix chart	★ ★ ★ –
Harsh engagement (N → R)	1. Accumulator control valve 2. C_2 accumulator 3. Solenoid modulator valve 4. Off–vehicle repair matrix chart	★ ★ ★ –
Harsh engagement (N → L)	Low coast modulator valve	★
Harsh engagement (1st → 2nd: D range)	1. Accumulator control valve 2. Solenoid modulator valve 3. B_2 accumulator	★ ★ ★
Harsh engagement (1st → 2nd: 2 range)	1. Accumulator control valve 2. Solenoid modulator valve 3. 2nd coast modulator valve	★ ★ ★
Harsh engagement (1st → 2nd → 3rd → 4th)	1. Accumulator control valve 2. Solenoid modulator valve	★ ★
Harsh engagement (2nd → 3rd)	1. Accumulator control valve 2. Solenoid modulator valve 3. C_2 accumulator 4. Off–vehicle repair matrix chart	★ ★ ★ –

Harsh engagement (3rd → 4th)	1. Accumulator control valve 2. Solenoid modulator valve 3. B_0 accumulator 4. Off–vehicle repair matrix chart	★ ★ ★ –
Harsh engagement (4th → 3rd)	1. Accumulator control valve 2. Solenoid modulator valve 3. C_0 accumulator 4. Off–vehicle repair matrix chart	★ ★ ★ –
Slip or shudder (Forward and reverse)	1. Transmission control rod 2. Oil strainer 3. Pressure relief valve 4. Off–vehicle repair matrix chart	DI–3 AT–11 ★ –
Slip or shudder (Any range)	1. Transmission control rod 2. Off–vehicle repair matrix chart	DI–3 –
No engine braking (1st)	1. Low coast modulator valve 2. Off–vehicle repair matrix chart	★ –
No engine braking (2nd)	1. 2nd coast modulator valve 2. Off–vehicle repair matrix chart	★ –
No kick–down	1. 1–2 shift valve 2. 2–3 shift valve	★ ★

3. CHAPTER 3: OFF–VEHICLE REPAIR (★:A342E AUTOMATIC TRANSMISSION SUPPLEMENT Repair Manual Pub. No. RM678E)

Symptom	Suspect Area	See page
Vehicle does not move in any forward range and reverse range	1. O/D one–way clutch (F_0) 2. O/D brake (B_0) 3. O/D direct clutch (C_0) 4. O/D planetary gear unit 5. Torque converter	★ ★ ★ ★ AT–43
Vehicle does not move in R range	1. 2nd coast brake (B_1) 2. Front and rear planetary gear unit 3. Direct clutch (C_2) 4. 1st & reverse brake (B_3) 5. O/D direct clutch (C_0)	★ ★ ★ ★ ★
Vehicle does not move in D, 2 and L ranges	Forward clutch (C_1)	★
Vehicle does not move in D and 2 ranges	No. 2 one–way clutch (F_2)	★
Vehicle does not move in 2 range	1st & reverse brake (B_3)	★
Vehicle does not move in L range	1. 2nd brake (B_2) 2. 2nd coast brake (B_1) 3. Direct clutch (C_2)	★ ★ ★
No up–shift (1st → 2nd)	1. 2nd brake (B_2) 2. No. 1 one–way clutch (F_1)	★ ★
No up–shift (2nd → 3rd)	Direct clutch (C_2)	★
No up–shift (3rd → 4th)	O/D brake (B_0)	★
No down–shift (2nd → 1st)	1. 2nd coast brake (B_1) 2. 2nd brake (B_2)	★ ★
No lock–up or No lock–up off	Torque converter	AT–43
Harsh engagement (N → D)	Forward clutch (C_1)	★
Harsh engagement (N → R)	1. Direct clutch (C_2) 2. 1st & reverse brake (B_3)	★ ★
Harsh engagement (2nd → 3rd)	2nd coast brake (B_1)	★
Harsh engagement (3rd → 4th)	1. O/D direct clutch (C_0) 2. O/D brake (B_0) 3. O/D planetary gear unit	★ ★ ★
Harsh engagement (4th → 3rd)	O/D brake (B_0)	★
Harsh engagement (Lock–up)	Torque converter	AT–43
Slip or shudder (Forward and reverse: After warm–up)	1. Torque converter 2. O/D one–way clutch (F_0) 3. O/D direct clutch (C_0)	AT–43 ★ ★
Slip or shudder (Particular range: Just after engine starts)	Torque converter	AT–43
Slip or shudder (R range)	1. Direct clutch (C_2) 2. 1st & reverse brake (B_3)	★ ★
Slip or shudder (1st)	1. Forward clutch (C_1) 2. No. 2 one–way clutch (F_2)	★ ★
Slip or shudder (2nd)	1. 2nd brake (B_2) 2. 2nd coast brake (B_1) 3. No. 1 one–way clutch (F_1)	★ ★ ★
Slip or shudder (3rd)	Direct clutch (C_2)	★
Slip or shudder (4th)	O/D brake (B_0)	★
No engine braking (1st – 3rd)	O/D direct clutch (C_0)	★
No engine braking (1st)	1st & reverse brake (B_3)	★

No engine braking (2nd)	2nd coast brake (B_1)	★
Poor acceleration (All ranges)	Torque converter	AT–43
Poor acceleration (4th)	1. O/D direct clutch (C_0) 2. O/D planetary gear unit	★ ★
Poor acceleration (Other than 4th)	O/D brake (B_0)	★
Poor acceleration (Other than 2nd)	1. 2nd coast brake (B_1) 2. 2nd brake (B_2)	★ ★
Poor acceleration (1st & 2nd)	Direct clutch (C_2)	★
Poor acceleration (1st & R ranges)	1st & reverse brake (B_3)	★
Poor acceleration (R range)	Forward clutch (C_1)	★
Engine stalls when starting off or stopping	Torque converter	AT–43