

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 troubleshooting.

The Matrix Chart is divided into 3 chapters.

- 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

Symptom	Suspect Area	See page
No up-shift (A particular gear, from 1st to 3rd gear, is not up-shifted)	ECM	01-30
No up-shift (3rd → O/D)	1. O/D main switch circuit 2. Electronically controlled transmission communication circuit *1 3. O/D cancel signal circuit *1 4. ECM	05-417 05-770 05-419 01-30
No down-shift (O/D → 3rd)	1. O/D main switch circuit 2. Electronically controlled transmission communication circuit *1 3. O/D cancel signal circuit *1 4. ECM	05-417 05-770 05-419 01-30
No down-shift (A particular gear, from 3rd to 1st gear, is not down-shifted)	ECM	01-30
No lock-up or No lock-up off	ECM	01-30
Shift point too high or too low	ECM	01-30
Up-shift to O/D from 3rd while O/D main switch is OFF	1. O/D main switch circuit 2. Electronically controlled transmission communication circuit *1 3. O/D cancel signal circuit *1 4. ECM	05-417 05-770 05-419 01-30
Up-shift to O/D from 3rd while engine is cold	ECM	01-30
Harsh engagement (N → D)	ECM	01-30
Harsh engagement (Lock-up)	ECM	01-30
Harsh engagement (Any driving position)	ECM	01-30
Poor acceleration	ECM	01-30
Engine stalls when starting off or stopping	ECM	01-30
No kick-down	ECM	01-30
Malfunction in shifting	1. Park/neutral position switch circuit 2. ECM	05-379 01-30

*1: w/ Cruise control

Chapter 2: On–vehicle repair

(★ : A245E/A246E automatic transaxle repair manual Pub. No. RM941U)

Symptom	Suspect Area	See page
Does not move in any forward ranges	Off–vehicle matrix chart	–
Does not move in reverse range	Off–vehicle matrix chart	–
Does not move in any range	1. Manual valve 2. Valve body assembly (Primary regulator valve) 3. Valve body assembly (Manual valve) 4. Off–vehicle matrix chart	★ ★ ★ –
No–up shift (1st → 2nd)	1. Valve body assembly (1 – 2 shift valve) 2. Off–vehicle matrix chart	★ –
No–up shift (2nd → 3rd)	1. Valve body assembly (2 – 3 shift valve) 2. Off–vehicle matrix chart	★ –
No–up shift (3rd → O/D)	1. Valve body assembly (3 – 4 shift valve) 2. Off–vehicle matrix chart	★ –
No–down shift (O/D → 3rd)	1. Valve body assembly (3 – 4 shift valve) 2. Off–vehicle matrix chart	★ –
No–down shift (3rd → 2nd)	1. Valve body assembly (2 – 3 shift valve) 2. Off–vehicle matrix chart	★ –
No–down shift (2nd → 1st)	1. Valve body assembly (1 – 2 shift valve) 2. Off–vehicle matrix chart	★ –
Harsh engagement (N → R)	1. Valve body assembly (C ₂ accumulator) 2. Off–vehicle matrix chart	★ –
Harsh engagement (N → D)	1. Valve body assembly (C ₁ accumulator) 2. Off–vehicle matrix chart	★ –
Harsh engagement (N → L)	1. Valve body assembly (C ₁ accumulator) 2. Valve body assembly (Low coast modulator valve) 3. Off–vehicle matrix chart	★ ★ –
Harsh engagement (1st → 2nd "D" range)	1. Valve body assembly (Accumulator control valve) 2. Valve body assembly (B ₂ accumulator) 3. Off–vehicle matrix chart	★ ★ –
Harsh engagement (1st → 2nd "2" range)	1. Valve body assembly (B ₂ accumulator) 2. Valve body assembly (Accumulator control valve) 3. Valve body assembly (2nd coast modulator control) 4. Off–vehicle matrix chart	★ ★ ★ –
Harsh engagement (1st → 2nd → 3rd → O/D)	Valve body assembly (Primary regulator valve)	★
Harsh engagement (2nd → 3rd)	1. Valve body assembly (C ₂ accumulator) 2. Valve body assembly (Accumulator control valve) 3. Off–vehicle matrix chart	★ ★ –
Harsh engagement (3rd → O/D)	1. Valve body assembly (Accumulator control valve) 2. Valve body assembly (C ₃ accumulator) 3. Off–vehicle matrix chart	★ ★ –
Harsh engagement (O/D → 3rd)	1. Valve body assembly (B ₄ accumulator) 2. Off–vehicle matrix chart	★ –
Harsh engagement (3rd → 2nd)	1. Valve body assembly (C ₂ accumulator) 2. Off–vehicle matrix chart	★ –
Slip (Forward & Reverse)	1. Valve body assembly (Primary regulator valve) 2. Oil strainer 3. Off–vehicle matrix chart	★ 40–23 –
Slip ("R" range, 1st, 2nd, 3rd, O/D)	Off–vehicle matrix chart	–

Symptom	Suspect Area	See page
No engine braking (1st "L" range)	1. Valve body assembly (Low coast modulator valve) 2. Off-vehicle matrix chart	★ –
No engine braking (2nd "2" range)	1. Valve body assembly (2nd coast modulator valve) 2. Off-vehicle matrix chart	★ –
No kick down	1. Valve body assembly (1 – 2 shift valve) 2. Valve body assembly (2 – 3 shift valve) 3. Valve body assembly (3 – 4 shift valve)	★ ★ ★
Poor acceleration	1. Valve body assembly (Primary regulator valve) 2. Off-vehicle matrix chart	★ –
No lock-up	1. Valve body assembly (Lock-up relay valve) 2. Off-vehicle matrix chart	★ –

Chapter 3: Off-vehicle repair

(★ : A245E/A246E automatic transaxle repair manual Pub. No. RM941U)

Symptom	Suspect Area	See page
Does not move in any forward ranges	Forward clutch (C ₁)	★
Does not move in reverse range	1. Direct clutch (C ₂) 2. 1st and reverse brake (B ₃) 3. U/D brake (B ₄)	★ ★ ★
Does not move in any ranges	1. Torque converter clutch 2. Oil pump 3. U/D one-way clutch (F ₃) 4. Front planetary gear 5. Rear planetary gear	40-20 ★ ★ ★ ★
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 → O/D)	U/D clutch (C ₃)	★
No-down shift (O/D → 3rd)	1. U/D brake (B ₄) 2. U/D one-way clutch (F ₃)	★ ★
No-down shift (3rd → 2nd)	No.1 one-way clutch (F ₁)	★
No-down shift (2nd → 1st)	No.2 one-way clutch (F ₂)	★
Harsh engagement (N → R)	1. Direct clutch (C ₂) 2. 1st and reverse brake (B ₃)	★ ★
Harsh engagement (N → D)	1. Forward clutch (C ₁) 2. On-vehicle matrix chart	★ -
Harsh engagement (N → L)	Forward clutch (C ₁)	★
Harsh engagement (1st → 2nd "D" range)	1. 2nd brake (B ₂) 2. No.1 one-way clutch (F ₁)	★ ★
Harsh engagement (1st → 2nd "2" range)	1. 2nd coast brake (B ₁) 2. 2nd brake (B ₂) 3. No.1 one-way clutch (F ₁)	★ ★ ★
Harsh engagement (2nd → 3rd)	Direct clutch (C ₂)	★
Harsh engagement (3rd → O/D)	U/D clutch (C ₃)	★
Harsh engagement (O/D → 3rd)	U/D brake (B ₄)	★
Harsh engagement (3rd → 2nd)	Direct clutch (C ₂)	★
Slip (Forward & Reverse)	1. Torque converter clutch 2. Oil pump	40-20 ★
Slip ("R" range)	1. Direct clutch (C ₂) 2. 1st and reverse brake (B ₃)	★ ★
Slip (1st)	1. Forward clutch (C ₁) 2. No.2 one-way clutch (F ₂) 3. U/D one-way clutch (F ₃)	★ ★ ★

Symptom	Suspect Area	See page
Slip (2nd)	1. Forward clutch (C ₁) 2. 2nd brake (B ₂) 3. No.1 one-way clutch (F ₁) 4. U/D one-way clutch (F ₃)	★ ★ ★ ★
Slip (3rd)	1. Forward clutch (C ₁) 2. Direct clutch (C ₂) 3. U/D one-way clutch (F ₃)	★ ★ ★
Slip (O/D)	1. Forward clutch (C ₁) 2. Direct clutch (C ₂) 3. U/D clutch (C ₃)	★ ★ ★
No engine braking (1st "L" range)	1st and reverse brake (B ₃)	★
No engine braking (2nd "2" range)	2nd coast brake (B ₁)	★
Poor acceleration	1. Torque converter clutch 2. Forward clutch (C ₁)	40-20 ★
No lock-up	Torque converter clutch	40-20
Engine stalls when starting off or stopping	Torque converter clutch	40-20