

PROBLEM SYMPTOMS TABLE

If a normal code is displayed during the diagnostic trouble code 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.

Chapter 1: Electronic Circuit Matrix Chart

Chapter 2: On-Vehicle Repair Matrix Chart

Chapter 3: Off-Vehicle repair Matrix Chart

When troubleshooting, check Chapter 1 first. If instructions are given in Chapter 1 to proceed to Chapter 2 or 3, proceed as instructed.

- 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)	1. ECM	DI-149
No up-shift (3rd → O/D)	1. O/D main switch circuit & O/D OFF indicator light circuit 2. O/D cancel signal circuit 3. ECM	DI-176 DI-174 DI-149
No down-shift (O/D → 3rd)	1. O/D main switch circuit & O/D OFF indicator light circuit 2. O/D cancel signal circuit 3. ECM	DI-176 DI-174 DI-149
No down-shift (A particular gear, from 1st to 3rd gear, is not down-shifted)	1. ECM	DI-149
No lock-up	1. ECM	DI-149
No lock-up off	1. Pattern select switch circuit 2. ECM	DI-181, DI-184 DI-149
Shift point too high or too low	1. ECM	DI-149
Up-shift to O/D from 3rd while O/D main switch is off	1. O/D main switch circuit & O/D OFF indicator light circuit 2. ECM	DI-176 DI-149
Up-shift to O/D from 3rd while engine is cold	1. ECM	DI-149
No kick down	1. ECM	DI-149
Engine stalls when starting off or stopping	1. ECM	DI-149
No pattern select	1. Pattern select switch circuit 2. ECM	DI-181, DI-184 DI-149
No 2nd start	1. Pattern select switch circuit 2. ECM	DI-181, DI-184 DI-149

Chapter 2: On-Vehicle Repair**(★: A340F, A343F AUTOMATIC TRANSMISSION Repair Manual Pub. No. RM479U)**

Symptom	Suspect Area	See page
Vehicle does not move in any forward position and reverse position	1. Throttle cable 2. Transmission control rod 3. Manual valve 4. Primary regulator valve 5. Parking lock pawl 6. Off-vehicle repair matrix chart	DI-135 DI-135 ★ ★ ★ DI-150
Vehicle does not move in R position	1. Off-vehicle repair matrix chart	DI-150
Vehicle does not move in particular position or positions (except R position)	1. Off-vehicle repair matrix chart	DI-150
No up-shift (1st → 2nd)	1. 1-2 shift valve 2. Off-vehicle repair matrix chart	★ DI-150
No up-shift (2nd → 3rd)	1. 2-3 shift valve 2. Off-vehicle repair matrix chart	★ DI-150
No up-shift (3rd → O/D)	1. 3-4 shift valve 2. Off-vehicle repair matrix chart	★ DI-150
No down-shift (O/D → 3rd)	1. 3-4 shift valve	★
No down-shift (3rd → 2nd)	1. 2-3 shift valve	★
No down-shift (2nd → 1st)	1. 1-2 shift valve 2. Off-vehicle repair matrix chart	★ DI-150
Lock-up does not engage or Lock-up does not disengage	1. Lock-up relay valve 2. Off-vehicle repair matrix chart	★ DI-150
Harsh engagement (N → D)	1. Accumulator control valve 2. Off-vehicle repair matrix chart	★ DI-150
Harsh engagement (Lock-up)	1. Lock-up control valve 2. Off-vehicle repair matrix chart	★ DI-150
Harsh engagement (N → R)	1. Accumulator control valve 2. C ₂ accumulator 3. Off-vehicle repair matrix chart	★ ★ DI-150
Harsh engagement (N → L)	1. Low coast modulator valve	★
Harsh engagement (1st → 2nd: D position)	1. Accumulator control valve 2. B ₂ accumulator	★ ★
Harsh engagement (1st → 2nd: 2 position)	1. Accumulator control valve 2. B ₂ accumulator	★ ★
Harsh engagement (2nd → 3rd → O/D)	1. Cut-back valve	★
Harsh engagement (1st → 2nd → 3rd → O/D)	1. Throttle valve 2. Accumulator control valve	★ ★
Harsh engagement (2nd → 3rd)	1. Accumulator control valve 2. C ₂ accumulator 3. Off-vehicle repair matrix chart	★ ★ DI-150
Harsh engagement (3rd → O/D)	1. Accumulator control valve 2. B ₀ accumulator 3. Off-vehicle repair matrix chart	★ ★ DI-150
Harsh engagement (O/D → 3rd)	1. Accumulator control valve 2. C ₀ accumulator 3. Off-vehicle repair matrix chart	★ ★ DI-150

Slip or shudder (Forward and reverse)	1. Throttle cable 2. Transmission control rod 3. Oil strainer 4. Pressure relief valve 5. Off-vehicle repair matrix chart	DI-135 DI-135 ★ ★ DI-150
Slip or shudder (Particular position)	1. Throttle cable 2. Transmission control rod 3. Off-vehicle repair matrix chart	DI-135 DI-135 DI-150
No engine braking (1st: L position)	1. Low coast modulator 2. Off-vehicle repair matrix chart	★ DI-150
No engine braking (2nd: 2 position)	1. 2nd coast modulator 2. Off-vehicle repair matrix chart	★ DI-150
No kick-down	1. 1-2 shift valve 2. 2-3 shift valve	★ ★

Chapter 3: Off-Vehicle Repair

(★: A340F, A343F AUTOMATIC TRANSMISSION Repair Manual Pub. No. RM479U)

Symptom	Suspect Area	See page
Vehicle does not move in any forward position and reverse position	1. O/D one-way clutch (F ₀) 2. O/D planetary gear unit 3. Torque converter clutch	★ ★ ★
Vehicle does not move in R position	1. 2nd coast brake (B ₁) 2. Front and rear planetary gear unit 3. Direct clutch (C ₂) 4. 1st and reverse brake (B ₃)	★ ★ ★ ★
Vehicle does not move in D, 2 and L positions	1. Forward clutch (C ₁)	★
Vehicle does not move in D and 2 positions	1. No. 2 one-way clutch (F ₂)	★
Vehicle does not move in 2 position	1. 1st and reverse brake (B ₃)	★
Vehicle does not move in L position	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 → 1st)	1. 2nd brake (B ₂)	★
No up-shift (2nd → 3rd)	1. Direct clutch (C ₂)	★
No up-shift (3rd → O/D)	1. O/D brake (B ₀)	★
No down-shift (2nd → 1st)	1. 2nd brake (B ₂)	★
Lock-up does not engage or Lock-up does not disengage	1. Torque converter clutch	AT-26
Harsh engagement (N → D)	1. Forward clutch (C ₁) 2. O/D one-way clutch (F ₀) 3. No. 2 one-way clutch (F ₂)	★ ★ ★
Harsh engagement (N → R)	1. Direct clutch (C ₂) 2. 1st and reverse brake (B ₃) 3. O/D one-way clutch (F ₀)	★ ★ ★
Harsh engagement (2nd → 3rd)	1. Direct clutch (C ₂)	★
Harsh engagement (3rd → O/D)	1. O/D brake (B ₀) 2. O/D planetary gear unit	★ ★
Harsh engagement (O/D → 3rd)	1. O/D one-way clutch (F ₀)	★
Harsh engagement (Lock-up)	1. Torque converter clutch	★
Slip or shudder (Forward and reverse: After warm-up)	1. Torque converter clutch 2. O/D one-way clutch (F ₀) 3. O/D direct clutch (C ₀)	AT-26 ★ ★

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Slip or shudder (Just after engine starts)	1. Torque converter clutch	AT-26
Slip or shudder (R position)	1. Direct clutch (C ₂) 2. 1st and reverse brake (B ₃) 3. O/D one-way clutch (F ₀)	★ ★ ★
Slip or shudder (1st)	1. Forward clutch (C ₁) 2. No. 2 one-way clutch (F ₂) 3. O/D one-way clutch (F ₀)	★ ★ ★
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)	1. Direct clutch (C ₂)	★
Slip or shudder (O/D)	1. O/D brake (B ₀)	★
No engine braking (1st ~ 3rd)	1. O/D direct clutch (C ₀)	★
No engine braking (1st)	1. 1st and reverse brake (B ₃)	★
No engine braking (2nd)	1. 2nd coast brake (B ₁)	★
Poor acceleration (All positions)	1. Torque converter clutch	AT-26
Poor acceleration (O/D)	1. O/D brake (B ₀) 2. O/D planetary gear unit	★ ★
Poor acceleration (Other than O/D)	1. O/D brake (B ₀)	★
Poor acceleration (Other than 2nd)	1. 2nd coast brake (B ₁) 2. No. 1 one-way clutch (F ₁)	★ ★
Poor acceleration (1st and 2nd)	1. O/D one-way clutch (F ₀)	★
Poor acceleration (L and R positions)	1. 1st and reverse brake (B ₃)	★
Poor acceleration (R position)	1. Forward clutch (C ₁)	★
Engine stalls when starting off or stopping	1. Torque converter clutch	AT-26