056IN–24

PROBLEM SYMPTOMS TABLE

HINT:

If a normal code is displayed during the diagnostic trouble code check although the trouble still occurs, check the electrical 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.

1. **Chapter 1: Electronic Circuit Matrix Chart**

- Refer to the table below when the trouble cause is considered to be electrical.
- If the instruction ”Proceed to next circuit inspection shown on matrix chart” is given in the flow chart of 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, check and replace the TCM.

HINT:

*1: When the circuit on which mark *1 is attached is defective, DTC could be output (see page 05–1195).

Symptom	Suspected Area	See page
No up–shift (A particular gear, from 1st to 4th gear, is not up–shifted)	1. Shift solenoid valve (S1) circuit *1 2. Shift solenoid valve (S2) circuit *1 3. TCM	05–1236 05–1239 01–36
No up–shift (4th → 5th)	1. Transmission control switch circuit (D – 4) 2. Engine coolant temp. sensor circuit *1 3. Speed sensor NT circuit *1 4. Shift solenoid valve (SL1) circuit *1 5. Shift solenoid valve (SL2) circuit *1 6. Shift solenoid valve (SR) circuit *1 7. TCM	05–1259 05–477 05–1205 05–1213 05–1230 05–1242 01–36
No up–shift (3rd → 4th)	1. Engine coolant temp. sensor circuit *1 2. Shift solenoid valve (S2) circuit *1 3. TCM	05–477 05–1239 01–36
No up–shift (1st → 2nd)	1. Transmission control switch circuit (2 – L) 2. Shift solenoid valve (S2) circuit *1 3. TCM	05–1259 05–1239 01–36
No down–shift (5th → 4th)	1. Transmission control switch circuit (D – 4) 2. Shift solenoid valve (SL1) circuit *1 3. Shift solenoid valve (SL2) circuit *1 4. Shift solenoid valve (SR) circuit *1 5. TCM	05–1259 05–1213 05–1230 05–1242 01–36
No down–shift (2nd → 1st)	1. Transmission control switch circuit (2 – L) 2. Shift solenoid valve (S2) circuit *1 3. TCM	05–1259 05–1239 01–36
No down–shift (A particular gear, from 1st to 4th gear, is not down–shifted)	1. Shift solenoid valve (S1) circuit *1 2. Shift solenoid valve (S2) circuit *1 3. TCM	05–1236 05–1239 01–36
No lock–up	1. ATF temperature sensor circuit *1 2. Transfer L4 position switch circuit 3. Stop light switch circuit 4. Speed sensor NT circuit *1 5. Shift solenoid valve (SLU) circuit *1 6. Engine coolant temp. sensor circuit *1 7. TCM	05–1201 05–1275 05–1264 05–1205 05–1256 05–477 01–36
No lock–up off	1. Shift solenoid valve (SLU) circuit *1 2. TCM	05–1256 01–36

Shift point too high or too low	1. Shift solenoid valve (SLT) circuit *1 2. Speed sensor NT circuit *1 3. Speed sensor SP2 circuit *1 4. Throttle position sensor circuit *1 5. ATF temperature sensor circuit *1 6. Transfer L4 position switch circuit 7. TCM	05–1249 05–1205 05–1209 05–477 05–1201 05–1275 01–36
Up–shift to 5th from 4th while shift lever is in 4 position	1. Transmission control switch circuit (D – 4) 2. TCM	05–1259 01–36
Up–shift to 5th from 4th while engine is cold	1. Engine coolant temp. sensor circuit *1 2. TCM	05–477 01–36
Up–shift to 4th from 3rd while shift lever is in 3 position	1. Park/neutral position switch circuit *1 2. TCM	05–1259 01–36
Up–shift to 3rd from 2nd while shift lever is in 2 position	1. Park/neutral position switch circuit *1 2. TCM	05–1259 01–36
Up–shift to 2nd from 1st while shift lever is in L position	1. Transmission control switch circuit (2 – L) 2. TCM	05–1259 01–36
Harsh engagement (N → D)	1. Speed sensor NT circuit *1 2. Shift solenoid valve (SL1) circuit *1 3. Shift solenoid valve (SLT) circuit *1 4. TCM	05–1205 05–1213 05–1249 01–36
Harsh engagement (Lock–up)	1. Speed sensor NT circuit *1 2. Speed sensor SP2 circuit *1 3. Shift solenoid valve (SLU) circuit *1 4. TCM	05–1205 05–1209 05–1256 01–36
Harsh engagement (Any driving position)	TCM	01–36
Poor acceleration	1. ATF temperature sensor No.2 circuit *1 2. Engine coolant temp. sensor circuit *1 3. Shift solenoid valve (SLT) circuit *1 4. TCM	05–1252 05–477 05–1249 01–36
No engine braking	TCM	01–36
No kick–down	TCM	01–36
Engine stalls when starting off or stopping	1. Shift solenoid valve (SLU) circuit *1 2. TCM	05–1256 01–36
AT Oil Temp. warning light remains on Lock–up at 3rd gear Shift point too high	1. ATF temperature sensor No.2 circuit 2. Engine coolant temp. sensor circuit *1 3. TCM	05–1252 05–477 01–36
No 2nd start	1. Pattern select switch circuit (2nd start switch) 2. Park/neutral position switch circuit *1 3. TCM	05–1268 05–1259 01–36
A/T.P. indicator light does not light up	1. A/T.P. indicator light circuit 2. Combination meter circuit	05–1271 05–1416
Malfunction in shifting	1. Park/neutral position switch circuit *1 2. TCM	05–1259 01–36

2. Chapter 2: On–Vehicle Repair (★: A750E, A750F AUTOMATIC TRANSMISSION Repair Manual Pub. No. RM999U)

Symptom	Suspected Area	See page
Vehicle does not move with shift lever in any forward position and reverse position	1. Transmission control cable 2. Manual valve 3. Parking lock pawl 4. Off–vehicle repair matrix chart	40–84 ★ ★ –
Vehicle does not move with shift lever in R position	1. Valve body assy 2. Off–vehicle repair matrix chart	40–71 –
No up–shift (1st → 2nd)	1. Valve body assy 2. Off–vehicle repair matrix chart	40–71 –
No up–shift (2nd → 3rd)	1. Valve body assy 2. Off–vehicle repair matrix chart	40–71 –
No up–shift (3rd → 4th)	1. Valve body assy 2. Off–vehicle repair matrix chart	40–71 –
No up–shift (4th → 5th)	1. Valve body assy 2. Off–vehicle repair matrix chart	40–71 –
No down–shift (5th → 4th)	1. Valve body assy 2. Off–vehicle repair matrix chart	40–71 –
No down–shift (4th → 3rd)	1. Valve body assy 2. Off–vehicle repair matrix chart	40–71 –
No down–shift (3rd → 2nd)	1. Valve body assy 2. Off–vehicle repair matrix chart	40–71 –
No down–shift (2nd → 1st)	1. Valve body assy 2. Off–vehicle repair matrix chart	40–71 –
No lock–up or No lock–up off	1. Shift solenoid valve (SLU) 2. Valve body assy 3. Off–vehicle repair matrix chart	05–1256 40–71 –
Harsh engagement (N → D)	1. Shift solenoid valve (SL1) 2. Valve body assy 3. C_1 accumulator 4. Off–vehicle repair matrix chart	05–1213 40–71 ★ –
Harsh engagement (Lock–up)	1. Shift solenoid valve (SLU) 2. Valve body assy 3. Off–vehicle repair matrix chart	05–1256 40–71 –
Harsh engagement (N → R)	1. Shift solenoid valve (SLT) 2. Shift solenoid valve (SLU) 3. Valve body assy 4. C_3 accumulator 5. Off–vehicle repair matrix chart	05–1245 05–1256 40–71 ★ –
Harsh engagement (1st →2nd → 3rd → 4th → 5th)	1. Shift solenoid valve (SLT) 2. Shift solenoid valve (SL1) 3. Valve body assy	05–1245 05–1213 40–71
Harsh engagement (1st → 2nd)	1. Valve body assy 2. B_3 accumulator 3. Off–vehicle repair matrix chart	40–71 ★ –
Harsh engagement (2nd → 3rd)	1. Valve body assy 2. C_3 accumulator 3. Off–vehicle repair matrix chart	40–71 ★ –
Harsh engagement (3rd → 4th)	1. Valve body assy 2. C_2 accumulator 3. Off–vehicle repair matrix chart	40–71 ★ –

Harsh engagement (4th → 5th)	1. Shift solenoid valve (SL1) 2. Shift solenoid valve (SL2) 3. Valve body assy 4. Off–vehicle repair matrix chart	05–1213 05–1226 40–71 –
Harsh engagement (5th → 4th)	1. Shift solenoid valve (SL1) 2. Shift solenoid valve (SL2) 3. Valve body assy 4. Off–vehicle repair matrix chart	05–1213 05–1226 40–71 –
Slip or shudder (Forward and reverse)	1. Transmission control cable 2. Valve body assy 3. Oil strainer 4. Off–vehicle repair matrix chart	40–84 40–71 40–71 –
No engine braking (1st: L position)	1. Valve body assy 2. Off–vehicle repair matrix chart	40–71 –
No engine braking (2nd: 2 position)	1. Valve body assy 2. Off–vehicle repair matrix chart	40–71 –
No kick–down	Valve body assy	40–71
Shift point too high or too low	1. Shift solenoid valve (SLT) 2. Shift solenoid valve (SL1) 3. Valve body assy	05–1245 05–1213 40–71
Poor acceleration	1. Shift solenoid valve (SLT) 2. Valve body assy	05–1245 40–71
Engine stalls when starting off or stopping	1. Shift solenoid valve (SLU) 2. Valve body assy	05–1256 40–71

3. Chapter 3: Off–Vehicle Repair (★: A750E, A750F AUTOMATIC TRANSMISSION Repair Manual Pub. No. RM999U)

Symptom	Suspected Area	See page
Vehicle does not move with shift lever in any forward position and reverse position	1. Rear planetary gear unit 2. Torque converter clutch	★ 40–64
Vehicle does not move with shift lever in R position	1. Brake No.4 (B_4) 2. Clutch No.3 (C_3) 3. One–way clutch No.1 (F_1)	★ ★ ★
No up–shift (1st → 2nd)	1. Brake No.3 (B_3) 2. One–way clutch No.1 (F_1) 3. One–way clutch No.2 (F_2)	★ ★ ★
No up–shift (2nd → 3rd)	Clutch No.3 (C_3)	★
No up–shift (3rd → 4th)	Clutch No.2 (C_2)	★
No up–shift (4th → 5th)	1. Brake No.1 (B_1) 2. Clutch No.1 (C_1)	★ ★
No lock–up or No lock–up off	Torque converter clutch	40–64
Harsh engagement (N → D)	1. Clutch No.1 (C_1) 2. One–way clutch No.3 (F_3)	★ ★
Harsh engagement (N → R)	1. Clutch No.3 (C_3) 2. Brake No.4 (B_4) 3. One–way clutch No.1 (F_1)	★ ★ ★
Harsh engagement (1 → 2)	1. Brake No.3 (B_3) 2. One–way clutch No.1 (F_1) 3. One–way clutch No.2 (F_2)	★ ★ ★
Harsh engagement (2 → 3)	Clutch No.3 (C_3)	★
Harsh engagement (3 → 4)	Clutch No.2 (C_2)	★
Harsh engagement (4 → 5th)	1. Brake No.1 (B_1) 2. Clutch No.1 (C_1)	★ ★
Harsh engagement (Lock–up)	Torque converter clutch	40–64
Slip or shudder (Forward and reverse: After warm–up)	1. One–way clutch No.1 (F_1) 2. Clutch No.3 (C_3) 3. Torque converter clutch clutch	★ ★ ★
Slip or shudder (Particular position: Just after engine starts)	Torque converter clutch	40–64
Slip or shudder (R position)	1. Brake No.4 (B_4) 2. One–way clutch No.1 (F_1) 3. Clutch No.3 (C_3)	★ ★ ★
Slip or shudder (1st)	1. Clutch No.1 (C_1) 2. One–way clutch No.3 (F_3)	★ ★
Slip or shudder (2nd)	1. Clutch No.1 (C_1) 2. Brake No.3 (B_3) 3. One–way clutch No.1 (F_1) 4. One–way clutch No.2 (F_2)	★ ★ ★ ★
Slip or shudder (3rd)	1. Clutch No.1 (C_1) 2. Clutch No.3 (C_3) 3. One–way clutch No.1 (F_1)	★ ★ ★
Slip or shudder (4th)	1. Clutch No.1 (C_1) 2. Clutch No.2 (C_2)	★ ★
Slip or shudder (5th)	1. Clutch No.2 (C_2) 2. Clutch No.3 (C_3) 3. Brake No.1 (B_1)	★ ★ ★
No engine braking (1st ± 4th: D position)	Clutch No.1 (C_1)	★

No engine braking (1st: L position)	Brake No.4 (B_4)	★
No engine braking (2nd: 2 position)	Brake No.2 (B_2)	★
No engine braking (3rd: 3 position)	Brake No.1 (B_1)	★
Poor acceleration (All positions)	Torque converter clutch	40–64
Poor acceleration (5th)	1. Clutch No.1 (C_1) 2. Clutch No.3 (C_3) 3. Brake No.1 (B_1) 4. Front planetary gear unit	★ ★ ★ ★
Engine stalls when starting off or stopping	Torque converter clutch	40–64