

## 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 2 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 ECM.

### HINT:

\*1: When the circuit on which mark \*1 is attached is a malfunction, DTC could be output (see page 05-560).

\*2: Europe

| Symptom                      | Suspected Area                                                                                                                                                                       | See page                                      |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| No up-shift (1st → 2nd)      | 1. Shift solenoid valve (S1) circuit *1<br>2. ECM                                                                                                                                    | 05-612<br>01-44                               |
| No up-shift (2nd → 3rd)      | 1. Shift solenoid valve (S2) circuit *1<br>2. ECM                                                                                                                                    | 05-615<br>01-44                               |
| No up-shift (3rd → 4th)      | 1. Shift solenoid valve (S3) circuit *1<br>2. Engine coolant temp. sensor circuit *1<br>3. ECM                                                                                       | 05-618<br>05-36<br>01-44                      |
| No up-shift (4th → 5th)      | 1. Shift solenoid valve (S4) circuit *1<br>2. Shift solenoid valve (SR) circuit *1<br>3. Shift solenoid valve (SL1) circuit *1<br>4. Shift solenoid valve (SL2) circuit *1<br>5. ECM | 05-621<br>05-624<br>05-586<br>05-605<br>01-44 |
| No up-shift (5th → 6th)      | 1. Park/neutral position switch circuit *1<br>2. Engine coolant temp. sensor circuit *1<br>3. Shift solenoid valve (S2) circuit *1<br>5. ECM                                         | 05-563<br>05-36<br>05-615<br>01-44            |
| No down-shift (6th → 5th)    | 1. Park/neutral position switch circuit *1<br>2. Shift solenoid valve (S2) circuit *1<br>4. ECM                                                                                      | 05-563<br>05-615<br>01-44                     |
| No down-shift (5th → 4th)    | 1. Shift solenoid valve (S4) circuit *1<br>2. Shift solenoid valve (SR) circuit *1<br>3. Shift solenoid valve (SL1) circuit *1<br>4. Shift solenoid valve (SL2) circuit *1<br>5. ECM | 05-621<br>05-624<br>05-586<br>05-605<br>01-44 |
| No down-shift (4th → 3rd)    | 1. Shift solenoid valve (S3) circuit *1<br>2. ECM                                                                                                                                    | 05-618<br>01-44                               |
| No down-shift (3rd → 2nd)    | 1. Shift solenoid valve (S2) circuit *1<br>2. ECM                                                                                                                                    | 05-615<br>01-44                               |
| No down-shift (2nd → 1st)    | 1. Shift solenoid valve (S1) circuit *1<br>2. ECM                                                                                                                                    | 05-612<br>01-44                               |
| No lock-up or No lock-up off | 1. Shift solenoid valve (SLU) circuit *1<br>2. Stop light switch circuit *1<br>3. ECM                                                                                                | 05-639<br>05-580<br>01-44                     |

|                                                                                                 |                                                                                                                                                                                                                                                                   |                                                                                          |
|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| No lock-up                                                                                      | 1. Shift solenoid valve (SLU) circuit *1<br>2. Engine coolant temp. sensor circuit *1<br>3. Stop light switch circuit *1<br>4. Speed sensor NT circuit *1<br>5. ECM                                                                                               | 05-639<br>05-36<br>05-580<br>05-576<br>01- <del>4</del>                                  |
| No lock-up off                                                                                  | 1. Shift solenoid valve (SLU) circuit *1<br>2. ECM                                                                                                                                                                                                                | 05-639<br>01- <del>4</del>                                                               |
| Shift point too high or too low                                                                 | 1. Shift solenoid valve (SLT) circuit *1<br>2. Speed sensor NT circuit *1<br>3. Speed sensor SP2 circuit *1<br>4. Throttle position sensor circuit *1<br>5. Pattern select (PWR) switch circuit<br>6. ATF temperature sensor circuit *1<br>7. ECM                 | 05-631<br>05-576<br>05-1 <del>7</del> 2<br>05-36<br>05-648<br>05-569<br>01- <del>4</del> |
| Up-shift to 4th from 3rd while engine is cold                                                   | 1. Engine coolant temp. sensor circuit *1<br>2. ECM                                                                                                                                                                                                               | 05-36<br>01- <del>4</del>                                                                |
| Up-shift to 5th from 4th while engine is cold                                                   | 1. Engine coolant temp. sensor circuit *1<br>2. ECM                                                                                                                                                                                                               | 05-36<br>01- <del>4</del>                                                                |
| No gear change by shifting into "+" or "-" while the shift lever is in the S position           | 1. Transmission control switch circuit<br>2. ECM                                                                                                                                                                                                                  | 05-642<br>01- <del>4</del>                                                               |
| Harsh engagement (N → D)                                                                        | 1. Shift solenoid valve (SLT) circuit *1<br>2. Speed sensor NT circuit *1<br>3. ECM                                                                                                                                                                               | 05-631<br>05-576<br>01- <del>4</del>                                                     |
| Harsh engagement (Lock-up)                                                                      | 1. Speed sensor NT circuit *1<br>2. Speed sensor SP2 circuit *1<br>3. Shift solenoid valve (SLU) circuit *1<br>4. ECM                                                                                                                                             | 05-576<br>05-1 <del>7</del> 2<br>05-639<br>01- <del>4</del>                              |
| Harsh engagement (Any driving position)                                                         | 1. Throttle position sensor circuit *1<br>2. Shift solenoid valve (SL1) circuit *1<br>3. Shift solenoid valve (SL2) circuit *1<br>4. Shift solenoid valve (SLU) circuit *1<br>5. Shift solenoid valve (SLT) circuit *1<br>6. Speed sensor NT circuit *1<br>7. ECM | 05-36<br>05-586<br>05-605<br>05-639<br>05-631<br>05-576<br>01- <del>4</del>              |
| Poor acceleration                                                                               | 1. Shift solenoid valve (SLT) circuit *1<br>2. Pattern select (SNOW/ECTS) switch circuit<br>3. ECM                                                                                                                                                                | 05-631<br>05-651<br>01- <del>4</del>                                                     |
| No engine braking                                                                               | ECM                                                                                                                                                                                                                                                               | 01- <del>4</del>                                                                         |
| No kick-down                                                                                    | 1. Kick-down switch circuit *2<br>2. ECM                                                                                                                                                                                                                          | 05-655<br>01- <del>4</del>                                                               |
| Engine stalls when starting off or stopping                                                     | 1. Shift solenoid valve (SLU) circuit *1<br>2. ECM                                                                                                                                                                                                                | 05-639<br>01- <del>4</del>                                                               |
| ECT SNOW (ECTS) does not operate                                                                | 1. Shift solenoid valve (SLT) circuit *1<br>2. Pattern select (SNOW/ECTS) switch circuit<br>3. ECM                                                                                                                                                                | 05-631<br>05-651<br>01- <del>4</del>                                                     |
| Malfunction in shifting                                                                         | 1. Park/neutral position switch circuit *1<br>2. Transmission control switch circuit<br>3. ECM                                                                                                                                                                    | 05-563<br>05-642<br>01- <del>4</del>                                                     |
| • Harsh engagement (1st → 2nd → 3rd → 4th → 5th)<br>• Slip or shudder (5th → 6th and 6th → 5th) | Shift solenoid valve (SR) circuit *1                                                                                                                                                                                                                              | 05-624                                                                                   |

## 2. Chapter 2: On-Vehicle Repair and Off-Vehicle Repair

### (★: A761E AUTOMATIC TRANSMISSION Repair Manual Pub. No. RM1050U)

| Symptom                                                             | Suspected Area                                                                                                                                                                  | See page                      |
|---------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Vehicle does not move in any forward position and reverse positions | 1. Transmission control rod<br>2. Manual valve<br>3. Parking lock pawl<br>4. Rear planetary gear unit<br>5. Torque converter clutch                                             | 40-53<br>★<br>★<br>★<br>40-26 |
| Vehicle does not move in R position                                 | 1. Valve body assy<br>2. Brake No. 4 (B <sub>4</sub> )                                                                                                                          | 40-32<br>★                    |
| No up-shift (1st → 2nd)                                             | 1. Valve body assy<br>2. Brake No.3 (B <sub>3</sub> )<br>3. One-way clutch No.1 (F <sub>1</sub> )<br>4. One-way clutch No.2 (F <sub>2</sub> )                                   | 40-32<br>★<br>★<br>★          |
| No up-shift (2nd → 3rd)                                             | 1. Valve body assy<br>2. Clutch No.3 (C <sub>3</sub> )                                                                                                                          | 40-32<br>★                    |
| No up-shift (3rd → 4th)                                             | 1. Valve body assy<br>2. Clutch No.2 (C <sub>2</sub> )                                                                                                                          | 40-32<br>★                    |
| No up-shift (4th → 5th)                                             | 1. Valve body assy<br>2. Brake No.1 (B <sub>1</sub> )                                                                                                                           | 40-32<br>★                    |
| No up-shift (5th → 6th)                                             | 1. Valve body assy<br>2. Brake No.2 (B <sub>2</sub> )                                                                                                                           | 40-32<br>★                    |
| No down-shift (6th → 5th)                                           | Valve body assy                                                                                                                                                                 | 40-32                         |
| No down-shift (5th → 4th)                                           | Valve body assy                                                                                                                                                                 | 40-32                         |
| No down-shift (4th → 3rd)                                           | Valve body assy                                                                                                                                                                 | 40-32                         |
| No down-shift (3rd → 2nd)                                           | Valve body assy                                                                                                                                                                 | 40-32                         |
| No down-shift (2nd → 1st)                                           | Valve body assy                                                                                                                                                                 | 40-32                         |
| No lock-up or No lock-up off                                        | 1. Valve body assy<br>2. Torque converter clutch                                                                                                                                | 40-32<br>40-26                |
| Harsh engagement (N → D)                                            | 1. Valve body assy<br>2. C <sub>1</sub> accumulator<br>3. Clutch No.1 (C <sub>1</sub> )<br>4. One-way clutch No.3 (F <sub>3</sub> )<br>5. One-way clutch No.4 (F <sub>4</sub> ) | 40-32<br>★<br>★<br>★<br>★     |
| Harsh engagement (Lock-up)                                          | 1. Valve body assy<br>2. Torque converter clutch                                                                                                                                | 40-32<br>40-26                |
| Harsh engagement (N → R)                                            | 1. Valve body assy<br>2. C <sub>3</sub> accumulator<br>3. Clutch No.3 (C <sub>3</sub> )<br>4. Brake No.4 (B <sub>4</sub> )<br>5. One-way clutch No.1 (F <sub>1</sub> )          | 40-32<br>★<br>★<br>★<br>★     |
| Harsh engagement (1st → 2nd → 3rd → 4th → 5th → 6th)                | Valve body assy                                                                                                                                                                 | 40-32                         |
| Harsh engagement (1st → 2nd)                                        | 1. Valve body assy<br>2. B <sub>3</sub> accumulator<br>3. Brake No.3 (B <sub>3</sub> )<br>4. One-way clutch No.1 (F <sub>1</sub> )<br>5. One-way clutch No.2 (F <sub>2</sub> )  | 40-32<br>★<br>★<br>★<br>★     |
| Harsh engagement (2nd → 3rd)                                        | 1. Valve body assy<br>2. C <sub>3</sub> accumulator<br>3. Clutch No.3 (C <sub>3</sub> )                                                                                         | 40-32<br>★<br>★               |

|                                                                 |                                                                                                                                                                                                         |                                   |
|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| Harsh engagement (3rd → 4th)                                    | 1. Valve body assy<br>2. C <sub>2</sub> accumulator<br>3. Clutch No.2 (C <sub>2</sub> )                                                                                                                 | 40-32<br>★<br>★                   |
| Harsh engagement (4th → 5th)                                    | 1. Valve body assy<br>2. B <sub>1</sub> accumulator<br>3. Brake No.1 (B <sub>1</sub> )                                                                                                                  | 40-32<br>★<br>★                   |
| Harsh engagement (5th → 6th)                                    | 1. Valve body assy<br>2. B <sub>2</sub> accumulator<br>3. Brake No.2 (B <sub>2</sub> )                                                                                                                  | 40-32<br>★<br>★                   |
| Harsh engagement (6th → 5th)                                    | 1. Valve body assy<br>2. C <sub>3</sub> accumulator<br>3. Clutch No.3 (C <sub>3</sub> )                                                                                                                 | 40-32<br>★<br>★                   |
| Slip or shudder (Forward and reverse: After warm-up)            | 1. Valve body assy<br>2. Oil strainer<br>3. One-way clutch No.1 (F <sub>1</sub> )<br>4. Clutch No.3 (C <sub>3</sub> )<br>5. Torque converter clutch                                                     | 40-32<br>40-32<br>★<br>★<br>40-26 |
| Slip or shudder (Particular position: Just after engine starts) | Torque converter clutch                                                                                                                                                                                 | 40-26                             |
| Slip or shudder (R position)                                    | 1. Brake No.4 (B <sub>4</sub> )<br>2. One-way clutch No.1 (F <sub>1</sub> )<br>3. Clutch No.3 (C <sub>3</sub> )                                                                                         | ★<br>★<br>★                       |
| Slip or shudder (1st)                                           | 1. Clutch No.1 (C <sub>1</sub> )<br>2. One-way clutch No.3 (F <sub>3</sub> )<br>3. One-way clutch No.4 (F <sub>4</sub> )                                                                                | ★<br>★<br>★                       |
| Slip or shudder (2nd)                                           | 1. Clutch No.1 (C <sub>1</sub> )<br>2. Brake No.3 (B <sub>3</sub> )<br>3. One-way clutch No.1 (F <sub>1</sub> )<br>4. One-way clutch No.2 (F <sub>2</sub> )<br>5. One-way clutch No.4 (F <sub>4</sub> ) | ★<br>★<br>★<br>★<br>★             |
| Slip or shudder (3rd)                                           | 1. Clutch No.1 (C <sub>1</sub> )<br>2. Clutch No.3 (C <sub>3</sub> )<br>3. One-way clutch No.1 (F <sub>1</sub> )<br>4. One-way clutch No.4 (F <sub>4</sub> )                                            | ★<br>★<br>★<br>★                  |
| Slip or shudder (4th)                                           | 1. Clutch No.1 (C <sub>1</sub> )<br>2. Clutch No.2 (C <sub>2</sub> )<br>3. One-way clutch No.4 (F <sub>4</sub> )                                                                                        | ★<br>★<br>★                       |
| Slip or shudder (5th)                                           | 1. Clutch No.2 (C <sub>2</sub> )<br>2. Clutch No.3 (C <sub>3</sub> )<br>3. Brake No.1 (B <sub>1</sub> )                                                                                                 | ★<br>★<br>★                       |
| Slip or shudder (6th)                                           | 1. Clutch No.2 (C <sub>2</sub> )<br>2. Brake No.2 (B <sub>2</sub> )                                                                                                                                     | ★<br>★                            |
| No engine braking (1st – 4th: S position)                       | Clutch No.4 (C <sub>4</sub> )                                                                                                                                                                           | ★                                 |
| No engine braking (1st: 1 position)                             | 1. Valve body assy<br>2. Brake No.4 (B <sub>4</sub> )                                                                                                                                                   | 40-32<br>★                        |
| No engine braking (2nd: 2 position)                             | 1. Valve body assy<br>2. Brake No.2 (B <sub>2</sub> )                                                                                                                                                   | 40-32<br>★                        |
| No engine braking (3rd: 3 position)                             | 1. Valve body assy<br>2. Brake No.1 (B <sub>1</sub> )                                                                                                                                                   | 40-32<br>★                        |
| No engine braking (4th: 4 position)                             | Valve body assy                                                                                                                                                                                         | 40-32                             |
| No kick-down                                                    | Valve body assy                                                                                                                                                                                         | 40-32                             |
| Shift point too high or too low                                 | Valve body assy                                                                                                                                                                                         | 40-32                             |
| Poor acceleration (All positions)                               | 1. Valve body assy<br>2. Torque converter clutch                                                                                                                                                        | 40-32<br>40-26                    |

|                                             |                                                                                                     |                                                |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------------|
| Poor acceleration (6th)                     | 1. Brake No.2 (B <sub>2</sub> )<br>2. Clutch No.2 (C <sub>2</sub> )<br>3. Front planetary gear unit | ★<br>★<br>★                                    |
| Engine stalls when starting off or stopping | 1. Valve body assy<br>2. Torque converter clutch                                                    | <a href="#">40-32</a><br><a href="#">40-26</a> |