## 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.
- When the circuit on which mark *1 is attached is a malfunction, DTC could be output.
Refer to the table below when the trouble cause is considered to be electrical 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.


## 1. Chapter 1: Electronic Circuit Matrix Chart

| Symptom | Suspected area | See page |
| :---: | :---: | :---: |
| No down-shift (A particular gear, from 1st to 4th gear, is not down-shifted) | ECM | IN-31 |
| No down-shift (5th -> 4th) | 1. Park/neutral position switch circuit *1 | AX-42 |
|  | 2. Shift solenoid valve (S4) circuit *1 | AX-108 |
|  | 3. ECM | IN-31 |
| No up-shift (A particular gear, from 1st to 4th gear, is not up-shifted) | ECM | IN-31 |
| No up-shift (4th -> 5th) | 1. Park/neutral position switch circuit *1 | AX-42 |
|  | 2. Shift solenoid valve (S4) circuit *1 | AX-108 |
|  | 3. ECM | IN-31 |
| No lock-up | 1. Stop light switch circuit *1 | AX-62 |
|  | 2. Engine coolant temp. sensor circuit *1 | ES-37 |
|  | 3. ECM | IN-31 |
| No lock-up off | ECM | IN-31 |
| Shift point too high or too low | 1. Throttle position sensor circuit *1 | ES-37 |
|  | 2. ECM | IN-31 |
| Up-shift to 5th from 4th while shift lever is in 4 position *2 | 1. Park/neutral position switch circuit *1 | AX-42 |
|  | 2. ECM | IN-31 |
| Up-shift to 5th from 4th while engine is cold | 1. Engine coolant temp. sensor circuit *1 | ES-37 |
|  | 2. ECM | IN-31 |
| Up-shift to 2nd from 1st while shift lever is in L position *2 | 1. Park/neutral position switch circuit *1 | AX-42 |
|  | 2. ECM | IN-31 |
| No gear change by shifting into "+" or "-" while the shifting lever is in the S position | 1. Transmission control switch circuit | AX-121 |
|  | 2. ECM | IN-31 |
| Harsh engagement ( N -> D ) | 1. Shift solenoid valve (SL1) circuit *1 | AX-75 |
|  | 2. ECM | IN-31 |
| Harsh engagement (Lock-up) | ECM | IN-31 |
| Harsh engagement (Any driving position) | ECM | IN-31 |
| Poor acceleration | 1. Pattern slsect switch circuit (ECT SNOW switch) | AX-125 |
|  | 2. Multiplex network body ECU | MP-20 |
|  | 3. ECM | IN-31 |
| No kick-down | ECM | IN-31 |
| Engine stalls when starting off or stopping | ECM | IN-31 |


| Symptom | Suspected area | See page |
| :--- | :--- | :--- |
| ECT SNOW does not operate | 1. Pattern select switch circuit (ECT SNOW switch) | AX-125 |
|  | 2. Multiplex network body ECU | MP-20 |
|  | 3. ECM | IN-31 |
| 1. Park/neutral position switch circuit *1 AX-42 <br>  2. Transmission control switch circuit *3 <br>  3. ECM | AX-121 |  |

HINT:
*1: When the circuit on which mark *1 is detective, a DTC may be output.
*2: Gate shift lever type
*3: Shift lever with Multi-mode automatic transmission type

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

| Symptom | Suspected area | See page |
| :---: | :---: | :---: |
| Vehicle does not move in any forward position and in reverse positions | 1. Valve body assembly | AX-148 |
|  | 2. U/D brake (B3) | AX-196 |
|  | 3. Torque converter clutch | AX-189 |
| Vehicle does not move in R position | 1. Valve body assembly | AX-148 |
|  | 2. Reverse clutch (C2) | AX-196 |
|  | 3. 1st and reverse brake (B2) | AX-196 |
| No up-shift (1st -> 2nd) | 1. Valve body assembly | AX-148 |
|  | 2. 2nd and O/D brake (B1) | AX-196 |
| No up-shift (2nd -> 3rd) | 1. Valve body assembly | AX-148 |
|  | 2. Direct and O/D clutch (C0) | AX-196 |
| No up-shift (3rd -> 4th) | 1. Valve body assembly | AX-148 |
|  | 2. 2nd and O/D brake (B1) | AX-196 |
| No up-shift (4th -> 5th) | 1. Shift solenoid valve (S4) | AX-79 |
|  | 2. Valve body assembly | AX-148 |
|  | 3. U/D clutch (C3) | AX-196 |
| No down-shift (5th -> 4th) | 1. Shift solenoid (S4) | AX-79 |
|  | 2. Valve body assembly | AX-148 |
| No down-shift (4th -> 3rd) | Valve body assembly | AX-148 |
| No down-shift (3rd -> 2nd) | Valve body assembly | AX-148 |
| No down-shift (2nd -> 1st) | Valve body assembly | AX-148 |
| No lock-up or No lock-up off | 1. Shift solenoid valve (DSL) | AX-65 |
|  | 2. Valve body assembly | AX-148 |
|  | 3. Torque converter clutch | AX-189 |
| Harsh engagement ( N -> D) | 1. Shift solenoid valve (SL1) | AX-71 |
|  | 2. Valve body assembly | AX-148 |
|  | 3. C1 accumulator | AX-196 |
|  | 4. Forward clutch (C1) | AX-196 |
|  | 5. One-way clutch No.1 (F1) | AX-196 |
|  | 6. U/D one-way clutch (F2) | AX-196 |
| Harsh engagement (Lock-up) | 1.Shift solenoid valve (SL2) | AX-87 |
|  | 2. Valve body assembly | AX-148 |
|  | 3. Torque converter clutch | AX-189 |
| Harsh engagement ( N -> R) | 1. Valve body assembly | AX-148 |
|  | 2. C2 accumulator | AX-196 |
|  | 3. Reverse clutch (C2) | AX-196 |
|  | 4. 1st and reverse brake (B2) | AX-196 |


| Symptom | Suspected area | See page |
| :---: | :---: | :---: |
| Harsh engagement (1st -> 2nd -> 3rd -> 4th -> 5th) | 1. Shift solenoid valve (SLT) | AX-114 |
|  | 2. Valve body assembly | AX-148 |
| Harsh engagement (1st -> 2nd) | 1. Valve body assembly | AX-148 |
|  | 2. 2nd and O/D brake (B1) | AX-196 |
| Harsh engagement (2nd -> 3rd) | 1. Valve body assembly | AX-148 |
|  | 2. CO accumulator | AX-196 |
|  | 3. Direct and O/D clutch (C0) | AX-196 |
| Harsh engagement (3rd -> 4th) | 1. Valve body assembly | AX-148 |
|  | 2. 2nd and O/D brake (B1) | AX-196 |
| Harsh engagement (4th -> 5th) | 1. Valve body assembly | AX-148 |
|  | 2. C3 accumulator | AX-196 |
|  | 3. U/D clutch (B3) | AX-196 |
| Harsh engagement (5th -> 4th) | 1. Valve body assembly | AX-148 |
|  | 2. B3 accumulator | AX-196 |
| Slip or shudder (Forward and reverse: After warm-up) | 1. Valve body assembly | AX-148 |
|  | 2. Oil strainer | AX-148 |
|  | 3. Direct and O/D clutch (C0) | AX-196 |
|  | 4. Forward clutch (C1) | AX-196 |
|  | 5. U/D clutch (C3) | AX-196 |
|  | 6. 2nd and brake (B1) | AX-196 |
|  | 7. U/D brake (B3) | AX-196 |
|  | 8. One-way clutch No.1 (F1) | AX-196 |
|  | 9. U/D one-way clutch (F2) | AX-196 |
|  | 10. Torque converter clutch | AX-189 |
| Slip or shudder (Particular position: Just after engine starts) | Torque converter clutch | AX-189 |
| Slip or shudder (R position) | 1. Reverse clutch (C2) | AX-196 |
|  | 2. 1st and reverse brake (B2) | AX-196 |
| Slip or shudder (1st) | 1. Forward clutch (C1) | AX-196 |
|  | 2. One-way clutch No. 1 (F1) | AX-196 |
|  | 3. U/D one-way clutch (F2) | AX-196 |
| Slip or shudder (2nd) | 2nd and O/D brake (B1) | AX-196 |
| Slip or shudder (3rd) | Direct and O/D clutch (C0) | AX-196 |
| Slip or shudder (4th) | 2nd and O/D brake (B1) | AX-196 |
| Slip or shudder (5th) | U/D clutch (C3) | AX-196 |
| Shift position too high or too low | Shift solenoid valve (SLT) | AX-114 |
| No engine braking (1st +- 4th: D position) | U/D brake (B3) | AX-196 |
| No engine braking (1st: L (1) position) | 1. Valve body assembly | AX-148 |
|  | 2. 1st and reverse brake (B2) | AX-196 |
| No engine braking (2nd: 2 position) | 1. Valve body assembly | AX-148 |
|  | 2. 2nd and O/D brake (B1) | AX-196 |
| No engine braking (3rd: 3 position) | U/D brake (B3) | AX-196 |
| No kick-down | Valve body assembly | AX-148 |
| Poor acceleration (All positions) | 1. Shift solenoid valve (SLT) | AX-114 |
|  | 2. Torque converter clutch | AX-189 |
| Poor acceleration (5th) | 1. U/D clutch (C3) | AX-196 |
|  | 2. U/D planetary gear unit | AX-196 |
| Engine stalls when starting off or stopping | 1. Shift solenoid valve DSL) | AX-65 |
|  | 2. Torque converter clutch | AX-189 |

