








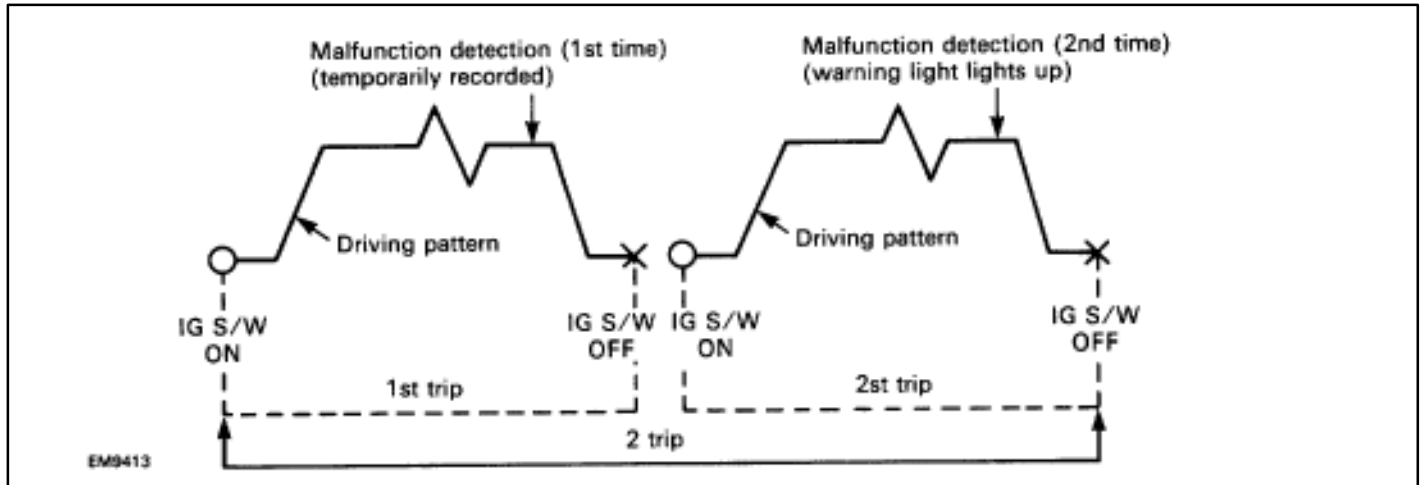
DIAGNOSTIC CODE CHART

If a malfunction code is displayed during the diagnostic code check, check the circuit listed for that code in the table below and proceed to the page given.

Code No.	Illustration	Circuit	Diag. Code Detection Condition
42	 BE3934	No. 1 speed sensor	All conditions below are detected 500 times or more continuously. (2 trip detection logic) *3 (a) No No. 1 speed sensor signal in 16 No. 2 speed sensor signal pulses. (b) Vehicle speed: 5.6 MPH (9km/h) or more for 4 secs or more (c) Neutral start switch: OFF (other than P or N range)
46	 BE3934	No. 4 solenoid valve	All conditions below are detected 500 times or more continuously. (2 trip detection logic) *3 (a) ECU output duty signal to No. 4 solenoid in 90% or higher duty ratio. (b) Current to No. 4 solenoid: 330 ± 100 mA or less
61	 BE3936	No. 2 speed sensor	All conditions below are detected 500 times or more continuously. (2 trip detection logic) *3 (a) No No. 2 speed sensor signal in 4 No. 1 speed sensor signal pulses. (b) Vehicle speed: 5.6 MPH (9km/h) or more for 4 secs or more (c) Neutral start switch: OFF (other than P or N range)
62	 BE3936	No. 1 solenoid valve	(1) Solenoid resistance of 8Ω or less is detected (*) 8 times or more when No. 1 solenoid is energized. (2) Solenoid resistance of $100 \text{ k}\Omega$ or less is detected (*) 8 times or more when No. 1 solenoid is not energized. (*) If the above failuers are detected less than 8 times, the ECU memorizes the malfuction code but the O/D OFF indicator light doesn't blink.
63	 BE3936	No. 2 solenoid valve	(1) Solenoid resistance of 8Ω or less is detected (*) 8 times or more when No. 2 solenoid is energized. (2) Solenoid resistance of $100 \text{ k}\Omega$ or less is detected (*) 8 times or more when No. 2 solenoid is not energized. (*) If the above failuers are detected less than 8 times, the ECU memorizes the malfuction code but the O/D OFF indicator light doesn't blink.
64	 BE3936	No. 3 solenoid valve	All conditions below are detected 1 sec. or more. (2 trip detection logic) *3 (a) ECU outputs duty signal to No. 4 solenoid in 90% or higher duty ratio. (b) Currenty to No. 3 solenoid: 450 ± 100 mA or less.
67	 BE3936	O/D direct clutch speed sensor	All conditions below are detected 4 secs. or more. (2 trip detection logic) *3 (a) Gear position: 1st, 2nd or 3rd (b) T/M input shaft rpm: 100 rpm or more (c) T/M output shaft rpm: less than 300 rpm (d) Neutral start switch: OFF (Other than P or N range)

Trouble Area	O/D OFF Light* ¹ Blinks	Memory* ²	See Page
<ul style="list-style-type: none"> • Harness or connector between No. 1 speed sensor and ECU. • No. 1 speed sensor. • Combination meter. • ECU 	O	O	AT-78
<ul style="list-style-type: none"> • Harness or connector between No. 4 solenoid and ECU. • No. 4 solenoid. • ECU 	X	O	AT-80
<ul style="list-style-type: none"> • Harness or connector between No. 2 speed sensor and ECU. • No. 2 speed sensor. • ECU 	O	O	AT-84
<ul style="list-style-type: none"> • Harness or connector between No. 1 solenoid and ECU. • No. 1 solenoid. • ECU 	O	O	AT-86
<ul style="list-style-type: none"> • Harness or connector between No. 2 solenoid and ECU. • No. 2 solenoid. • ECU 	O	O	AT-86
<ul style="list-style-type: none"> • Harness or connector between No. 3 solenoid valve and ECU. • No. 3 solenoid valve. • ECU 	X	O	AT-90
<ul style="list-style-type: none"> • Harness or connector between O/D direct clutch speed sensor and ECU. • O/D direct clutch speed sensor. • ECU 	O	O	AT-94

- *1: "O" mark means "O/D OFF" light blinks once per two seconds.
"X" mark means "O/D OFF" light never blinks.
- *2 "O" mark means the ECU memorizes the malfunction code if the ECU detects the diag. code detection condition.
- *3: This indicates items for which "2 trip detection logic" is used. With this logic, when a logic malfunction is first detected, the malfunction is temporarily stored in the ECU memory. If the same case is detected again during the second drive test, this second detection causes the O/F OFF Light to blink.
The 2 trip repeats the same mode twice. (However, the IG switch must be turned OFF between the 1st trip and 2nd trip.)



- HINT:**
- If the malfunction returns to normal while a malfunction warning is being output, the O/D OFF indicator light stops blinking and goes off.
However, the malfunction code is retained in memory until it is cleared from memory.
 - If the diagnosis system output a malfunction code even though the O/D OFF indicator was not blinking, there is intermittent trouble. Check all the connections in the circuits corresponding to that code.
 - If the speed sensors No. 1 and No. 2 happen to fail simultaneously, the ECU will neither alert the driver by blinking the O/D OFF indicator nor record any diagnostic code. It will, however, decide that the vehicle can be driven only in 1st and none of the other gears, shifting upward will then be prohibited.
 - Codes 46, 62, 63 and 64 are limited to short or open circuits in the electrical system comprised of the solenoids, wire harness and connectors. The ECU is unable to detect mechanical trouble (sticking, for example) in the solenoid valves.

–MEMO–