

FAIL-SAFE CHART

If any of the following codes are recorded, the ECM enters the fail-safe mode.

DTC No.	Fail-Safe Operation	Fail-Safe Deactivation Conditions
P0031 P0032 P0037 P0038 P0051 P0052 P0057 P0058	The heater circuit in which an abnormality is detected is turned off	Ignition switch OFF
P0100 P0102 P0103	Ignition timing is calculated from engine RPM and TP (Throttle Position)	"Pass" condition detected
P0110 P0112 P0113	IAT (Intake Air Temperature) is fixed at 20°C (68°F)	"Pass" condition detected
P0115 P0117 P0118	ECT (Engine Coolant Temperature) is fixed at 80°C (176°F)	"Pass" condition detected
P0120 P0121 P0122 P0123 P0220 P0222 P0223 P2102 P2103 P2111 P2112 P2118 P2119 P2135	If the Electronic Throttle Control System (ETCS) has a malfunction, the ECM cuts off current to the throttle control motor. The throttle control valve returns to a predetermined opening angle (approximately 16°) by the force of the return spring. The ECM then adjusts the engine output by controlling the fuel injection (intermittent fuel-cut) and ignition timing in accordance with the accelerator pedal opening angle to enable the vehicle to continue at a minimal speed. If the accelerator pedal is depressed firmly and slowly, the vehicle can be driven slowly. If the accelerator pedal is depressed quickly, the vehicle may speed up and slow down erratically.	"Pass" condition detected and then the ignition switch turned OFF
P0325 P0327 P0328 P0330 P0332 P0333	Maximum ignition timing retardation	Ignition switch OFF
P0351 P0352 P0353 P0354 P0355 P0356 P0357 P0358	Fuel is cut	"Pass" condition detected
P2120 P2121 P2122 P2123 P2125 P2127 P2128 P2138	The accelerator pedal position sensor has two (main and sub) sensor circuits. If a malfunction occurs in either of the sensor circuits, the ECM detects the abnormal signal voltage difference between the two sensor circuits and switches to limp mode. In limp mode, the functioning circuit is used to calculate the accelerator pedal opening angle to allow the vehicle to continue driving. If both circuits malfunction, the ECM regards the opening angle of the accelerator pedal to be fully closed. In this case, the throttle valve will remain closed as if the engine is idling.	"Pass" condition detected and then the ignition switch turned OFF

DIAGNOSTICS - SFI SYSTEM (2UZ-FE)

DTC No.	Fail-Safe Operation	Fail-Safe Deactivation Conditions
P2440 and P1441 and/or P1444	Restrict the throttle opening angle: $G_a \leq 30$ g/s	"Pass" condition detected
P1441 and P1444	Restrict the throttle opening angle: $G_a \leq 50$ g/s	"Pass" condition detected
P1441 P1444	Restrict the throttle opening angle: $G_a \leq 100$ g/s	"Pass" condition detected
P2430 P2431 P2432 P2433	Restrict the throttle opening angle: $G_a \leq 50$ g/s	"Pass" condition detected