

Electrical servicing

PGM-FI Self-diagnosis malfunction indicator lamp (MIL) failure codes

- The PGM-FI MIL denotes the failure codes (the number of blinks from 0 to 54). When the indicator lights for 1.3 seconds, it is equivalent to ten blinks. For example; a 1.3 second illumination and two blinks (0.5 second x 2) of the indicator equals 12 blinks. Follow code 12 troubleshooting.
- When more than one failure occurs, the MIL shows the blinks in the order of lowest number to highest number. For example; if the indicator blinks once, then seven times, two failures have occurred. Follow codes 1 and 7 troubleshooting.

Number of blinks	Causes	Symptoms
0	<ul style="list-style-type: none"> • Faulty ECM 	<ul style="list-style-type: none"> • Engine does not start
No blinks	<ul style="list-style-type: none"> • Faulty ECM (PGM-FI warning indicator output) 	<ul style="list-style-type: none"> • Engine operates normally
Stay lit	<ul style="list-style-type: none"> • Short circuit in service check connector • Faulty ECM (PGM-FI warning indicator output) 	<ul style="list-style-type: none"> • Engine operates normally
1	<ul style="list-style-type: none"> • Open or short circuit in MAP sensor line (in the ECM) • Faulty MAP sensor 	<ul style="list-style-type: none"> • Poor idle
7	<ul style="list-style-type: none"> • Loose or poor contact on ECT sensor • Open or short circuit in ECT sensor wire • Faulty ECT sensor 	<ul style="list-style-type: none"> • Hard starting at a low temperature (Simulate using numerical values; 90 °C/194 °F) • Cooling fan does not stop
8	<ul style="list-style-type: none"> • Open or short circuit in TP sensor line (in the ECM) • Faulty TP sensor 	<ul style="list-style-type: none"> • Poor engine response when operating the throttle quickly (Simulate using numerical values; throttle open 0 °)
9	<ul style="list-style-type: none"> • Open or short circuit in IAT sensor line (in the ECM) 	<ul style="list-style-type: none"> • Engine operates normally (Simulate using numerical values; 25 °C/77 °F)
12	<ul style="list-style-type: none"> • Loose or poor contact on injector connector • Open or short circuit in injector wire • Faulty injector 	<ul style="list-style-type: none"> • Engine does not start
21	<ul style="list-style-type: none"> • Loose or poor contact on O2 sensor • Open or short circuit in O2 sensor wire • Faulty O2 sensor 	<ul style="list-style-type: none"> • Engine operates normally
54	<ul style="list-style-type: none"> • Loose or poor contact on bank angle sensor connector • Open circuit in bank angle sensor wire • Faulty bank angle sensor 	<ul style="list-style-type: none"> • Engine starts but stops after few seconds.