

## Diagnostic Trouble Codes

Diagnostic trouble codes (DTCs) are logged in the ECM memory when there is a confirmed fault in the system.

The codes are reported to the Triumph diagnostic software as a four digit code.

As mentioned earlier, when the system detects a fault, it begins to count the number of times the fault occurs before illuminating the MIL and storing a fault code.

Similarly, if a fault clears, the ECM also records this fact and will turn off the MIL when sufficient no fault warm-up cycles have taken place. Any fault codes will remain in the ECM memory until the required number of no fault warm-up cycles have taken place. The number of warm-up cycles required to extinguish the MIL will always be less than the number required to remove a DTC from the ECM memory. DTCs can be removed at any time using the Triumph diagnostic software.

The system will log the diagnostic trouble codes listed below/over:

Diagnostic Trouble Code (DTC)	Fault Description	Number of no-fault cycles before turning off MIL	Number of no-fault cycles before DTC is erased	MIL illuminated when fault is logged	Pinpoint test page number
P0030	Oxygen sensor 1 heater open circuit or short to ground	3	40	Yes	<a href="#">Oxygen Sensor Heater</a>
P0032	Oxygen sensor 1 heater short circuit to battery Voltage	3	40	Yes	<a href="#">Oxygen Sensor Heater</a>
P0050	Oxygen sensor 2 heater open circuit or short to ground	3	40	Yes	<a href="#">Oxygen Sensor Heater</a>
P0052	Oxygen sensor 2 heater short circuit to battery Voltage	3	40	Yes	<a href="#">Oxygen Sensor Heater</a>

Diagnostic Trouble Code (DTC)	Fault Description	Number of no-fault cycles before turning off MIL	Number of no-fault cycles before DTC is erased	MIL illuminated when fault is logged	Pinpoint test page number
P0105	Manifold absolute pressure sensor 1 open circuit or short circuit to 5 Volt sensor supply	3	40	Yes	<a href="#">Manifold Absolute Pressure (MAP) Sensor</a>
P0107	Manifold absolute pressure sensor 1 short circuit to ground	3	40	Yes	<a href="#">Manifold Absolute Pressure (MAP) Sensor</a>
P0110	Intake air temperature sensor open circuit or short circuit to 5 Volt sensor supply	3	40	Yes	<a href="#">Inlet Air Temperature Sensor</a>
P0112	Intake air temperature sensor short circuit to ground	3	40	Yes	<a href="#">Inlet Air Temperature Sensor</a>
P0115	Engine coolant temperature sensor open circuit or short circuit to 5 Volt sensor supply	3	40	Yes	<a href="#">Coolant Temperature Sensor</a>
P0117	Engine coolant temperature sensor short circuit to ground	3	40	Yes	<a href="#">Coolant Temperature Sensor</a>

Diagnostic Trouble Code (DTC)	Fault Description	Number of no-fault cycles before turning off MIL	Number of no-fault cycles before DTC is erased	MIL illuminated when fault is logged	Pinpoint test page number
P0120	Throttle position sensor 1 short circuit to battery Voltage or open circuit	3	40	Yes	<a href="#">Throttle Position Sensor</a>
P0122	Throttle position sensor 1 short circuit to ground	3	40	Yes	<a href="#">Throttle Position Sensor</a>
P0130	Oxygen sensor 1 open circuit or short circuit to battery Voltage	3	40	Yes	<a href="#">Oxygen Sensor</a>
P0131	Oxygen sensor 1 short circuit to ground	3	40	Yes	<a href="#">Oxygen Sensor</a>
P0150	Oxygen sensor 2 circuit open circuit or short circuit to battery Voltage	3	40	Yes	<a href="#">Oxygen Sensor</a>
P0151	Oxygen sensor 2 short circuit to ground	3	40	Yes	<a href="#">Oxygen Sensor</a>
P0201	Injector 1 circuit malfunction	3	40	Yes	<a href="#">Fuel Injectors</a>
P0202	Injector 2 circuit malfunction	3	40	Yes	<a href="#">Fuel Injectors</a>

Diagnostic Trouble Code (DTC)	Fault Description	Number of no-fault cycles before turning off MIL	Number of no-fault cycles before DTC is erased	MIL illuminated when fault is logged	Pinpoint test page number
P0220	Throttle position sensor 2 short circuit to battery Voltage or open circuit	3	40	Yes	<a href="#">Throttle Position Sensor</a>
P0222	Throttle position sensor 2 short circuit to ground	3	40	Yes	<a href="#">Throttle Position Sensor</a>
P0335	Crankshaft sensor circuit malfunction	3	40	Yes	<a href="#">Crankshaft Sensor</a>
P0351	Ignition coil 1 malfunction	3	40	Yes	<a href="#">Ignition Coils</a>
P0352	Ignition coil 2 malfunction	3	40	Yes	<a href="#">Ignition Coils</a>
P0443	Purge valve short circuit to ground or open circuit	3	40	Yes	<a href="#">Purge Valve</a>
P0459	Purge valve short circuit to battery Voltage	3	40	Yes	<a href="#">Purge Valve</a>
P0460	Fuel level sensor circuit malfunction	3	40	No	<a href="#">Fuel Level Sensor Circuit</a>
P0500	Vehicle speed sensor malfunction	3	40	Yes	<a href="#">Vehicle Speed Sensor</a>

Diagnostic Trouble Code (DTC)	Fault Description	Number of no-fault cycles before turning off MIL	Number of no-fault cycles before DTC is erased	MIL illuminated when fault is logged	Pinpoint test page number
P0560	System voltage - battery circuit malfunction	3	40	Yes	<a href="#">System Voltage</a>
P0571	Brake 1 switch malfunction	3	40	Yes	<a href="#">Brake Switches</a>
P0603	EEPROM Error	0	40	No	<a href="#">EEPROM Error</a>
P0606	ECM internal error	0	0	Yes	<a href="#">Engine ECM Internal Error</a>
P0616	Starter relay short circuit to ground or open circuit	3	40	Yes	<a href="#">Starter Motor Relay</a>
P0617	Starter relay short circuit to battery Voltage	3	40	Yes	<a href="#">Starter Motor Relay</a>
P0914	Gear position sensor short circuit to ground or open circuit	3	40	Yes	<a href="#">Gear Position Sensor</a>
P0917	Gear position sensor short circuit to 5 Volt sensor supply	3	40	Yes	<a href="#">Gear Position Sensor</a>
P1105	Manifold absolute pressure sensor 1 pipe malfunction	3	40	Yes	<a href="#">Manifold Absolute Pressure (MAP) Sensor</a>

Diagnostic Trouble Code (DTC)	Fault Description	Number of no-fault cycles before turning off MIL	Number of no-fault cycles before DTC is erased	MIL illuminated when fault is logged	Pinpoint test page number
P1131	Oxygen sensor circuits reversed	3	40	Yes	<a href="#">Oxygen Sensor Reverse Connection</a>
P1135	Traction Control prevented due to ABS malfunction	3	40	Yes	<a href="#">Traction Control Prevented Due to ABS Malfunction</a>
P1231	Fuel pump relay short circuit to ground or open circuit	3	40	Yes	<a href="#">Fuel Pump Relay</a>
P1232	Fuel pump relay short circuit to battery Voltage	3	40	Yes	<a href="#">Fuel Pump Relay</a>
P1508	Unmatched immobiliser ECM	3	40	Flashing	<a href="#">Immobiliser and TPMS Control Module ID Incompatible</a>
P1520	Unmatched ABS module	3	40	Flashing	<a href="#">ABS Modulator ID Incompatible</a>
P1521	CAN fault - lost communication with ABS module or ABS system status error	3	40	Yes	<a href="#">ABS Modulator Communication</a>
P1552	Cooling fan relay short circuit to ground or open circuit	3	40	Yes	<a href="#">Cooling Fan Relay</a>

Diagnostic Trouble Code (DTC)	Fault Description	Number of no-fault cycles before turning off MIL	Number of no-fault cycles before DTC is erased	MIL illuminated when fault is logged	Pinpoint test page number
P1553	Cooling fan relay short circuit to battery Voltage or over temp	3	40	Yes	<a href="#">Cooling Fan Relay</a>
P1571	Brake 2 switch malfunction	3	40	Yes	<a href="#">Brake Switches</a>
P1576	Brake 1 switch correlation error with brake switch 2	3	40	Yes	<a href="#">Brake Switches</a>
P1577	Brake 2 switch correlation error with brake switch 1	3	40	Yes	<a href="#">Brake Switches</a>
P1604	ECM tamper detected - return to Triumph	0	0	Yes	<a href="#">Engine ECM Tamper Detected</a>
P1605	ECM locked by the tune lock function	Only if tune lock is unlocked		Flashing	<a href="#">Tune Lock</a>
P1607	ECM ride by wire internal error	3	40	Yes	<a href="#">Engine ECM Internal Error</a>
P1608	ECM ride by wire internal error	3	40	Yes	<a href="#">Engine ECM Internal Error</a>

Diagnostic Trouble Code (DTC)	Fault Description	Number of no-fault cycles before turning off MIL	Number of no-fault cycles before DTC is erased	MIL illuminated when fault is logged	Pinpoint test page number
P1614	Instrument ID incompatible	Only if Instrument ID Matching		Flashing	<a href="#">Instrument ID Incompatible</a>
P1619	Headlamp relay short circuit to ground or open circuit	0	40	No	<a href="#">Headlight Relay</a>
P1620	Headlamp relay short circuit to battery Voltage	0	40	No	<a href="#">Headlight Relay</a>
P1631	Fall detection circuit short circuit to ground	3	40	Yes	<a href="#">Fall Detection Switch</a>
P1632	Fall detection circuit short circuit to battery Voltage	3	40	Yes	<a href="#">Fall Detection Switch</a>
P1650	CAN fault - lost communication with Immobiliser ECM	3	40	Yes	<a href="#">Immobiliser Control Module Communication</a>
P1659	Ignition power supply malfunction	3	40	Yes	<a href="#">EMS Ignition Voltage Input Circuit</a>
P1685	Main relay circuit malfunction	3	40	Yes	<a href="#">EMS Main Relay Circuit</a>



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P1690	CAN Fault	3	40	Yes	<a href="#">CAN Communication</a>
P1695	CAN fault - lost communication with Instrument panel	0	40	No	<a href="#">Instrument Communication (CAN)</a>
P1698	5 Volt sensor supply malfunction	3	40	Yes	<a href="#">5 Volt Sensor Supply Circuit</a>
P2100	Throttle actuator control motor open circuit	3	40	Yes	<a href="#">Throttle Actuator Motor</a>
P2102	Throttle actuator control internal motor relay does not operate	3	40	Yes	<a href="#">Throttle Valve Drive Error</a>
P2103	Throttle actuator control internal motor relay operates continually	3	40	Yes	<a href="#">Throttle Valve Drive Error</a>
P2111	Throttle valve drive error (stuck open)	3	40	Yes	<a href="#">Throttle Valve Drive Error</a>
P2119	Throttle valve drive error	3	40	Yes	<a href="#">Throttle Valve Drive Error</a>

Diagnostic Trouble Code (DTC)	Fault Description	Number of no-fault cycles before turning off MIL	Number of no-fault cycles before DTC is erased	MIL illuminated when fault is logged	Pinpoint test page number
2120	Twist grip position sensor 1 short circuit to ground or open circuit	3	40	Yes	<a href="#">Twist Grip Position 1</a>
P2123	Twist grip position sensor 1 short circuit to battery Voltage	3	40	Yes	<a href="#">Twist Grip Position 1</a>
P2125	Twist grip position sensor 2 short circuit to ground or open circuit	3	40	Yes	<a href="#">Twist Grip Position 2</a>
P2128	Twist grip position sensor 2 short circuit to battery Voltage	3	40	Yes	<a href="#">Twist Grip Position 2</a>
P2135	Throttle position sensor 1 correlation error with throttle position sensor 2	3	40	Yes	<a href="#">Throttle Position Sensor</a>
P2138	Twist grip position sensor 1 correlation error with twist grip position sensor 2	3	40	Yes	<a href="#">Twist Grip Position Sensor 1 Correlation Error with Twist Grip Position 2</a>

Diagnostic Trouble Code (DTC)	Fault Description	Number of no-fault cycles before turning off MIL	Number of no-fault cycles before DTC is erased	MIL illuminated when fault is logged	Pinpoint test page number
P2226	Ambient air pressure sensor circuit open circuit or short circuit to 5 Volt sensor supply	3	40	Yes	<a href="#">Ambient Air Pressure Sensor</a>
P2228	Ambient air pressure sensor circuit short circuit to ground	3	40	Yes	<a href="#">Ambient Air Pressure Sensor</a>