

**Triumph Tiger 800 (inc 2015+ XRn/XCn models) & Explorer – Diagnostic Trouble Codes**

Diagnostic trouble codes (DTCs) are logged in the ECM memory when there is a confirmed fault in the system & are reported as a four digit code.

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.

The system will log the diagnostic trouble codes listed below (not all are applicable to every model):-

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
P0031	Oxygen sensor heater open circuit or short to ground	3	40	Yes
P0032	Oxygen sensor heater short circuit to vBatt	3	40	Yes
P0107	Manifold absolute pressure sensor 1 short circuit to ground	3	40	Yes
P0108	Manifold absolute pressure sensor 1 open circuit or short circuit to 5 Volt sensor supply	3	40	Yes
P0112	Intake air temperature sensor short circuit to ground	3	40	Yes
P0113	Intake air temperature sensor open circuit or short circuit to 5 Volt sensor supply	3	40	Yes
P0117	Engine coolant temperature sensor short circuit to ground	3	40	Yes
P0118	Engine coolant temperature sensor open circuit or short circuit to 5 Volt sensor supply	3	40	Yes
P0122	Throttle position sensor 1 short circuit to ground or open circuit	3	40	Yes
P0123	Throttle position sensor 1 short circuit to vBatt	3	40	Yes
P0130	Oxygen sensor circuit malfunction	3	40	Yes
P0201	Injector 1 circuit malfunction	3	40	Yes
P0202	Injector 2 circuit malfunction	3	40	Yes
P0203	Injector 3 circuit malfunction	3	40	Yes
P0227	Throttle position sensor 2 short circuit to ground or open circuit	3	40	Yes
P0228	Throttle position sensor 2 short circuit to vBatt	3	40	Yes
P0335	Crankshaft sensor circuit malfunction	3	40	Yes
P0351	Ignition coil fault - coil 1	3	40	Yes
P0352	Ignition coil fault - coil 2	3	40	Yes
P0353	Ignition coil fault - coil 3	3	40	Yes
P0413	Secondary air injection system short circuit to ground or open circuit	3	40	Yes
P0414	Secondary air injection system short circuit to vBatt	3	40	Yes
P0444	Purge valve system short circuit to ground or open circuit	0	40	No
P0445	Purge valve short circuit to vBatt or over temp	3	40	Yes
P0460	Fuel level sensor circuit malfunction	3	40	Yes
P0500	Vehicle speed sensor malfunction	3	40	Yes
P0505	Idle speed control motor / air valve malfunction	3	40	Yes
P0510	Cruise cancel switch malfunction	3	40	Yes
P0560	System Voltage - battery circuit malfunction	3	40	Yes
P0571	Brake 1 switch malfunction	3	40	Yes
P0603	EEPROM error	0	40	No
P0616	Starter relay short circuit to ground or open circuit	3	40	Yes
P0617	Starter motor relay short circuit to vBatt	3	40	Yes
P0654	Tachometer circuit malfunction (supported by DTC P1690)	0	40	No
P0705	Gear position sensor circuit malfunction	3	40	Yes
P1105	Manifold absolute pressure sensor 1 pipe malfunction	3	40	Yes
P1107	Ambient pressure sensor circuit short circuit to ground	3	40	Yes
P1108	Ambient air pressure sensor circuit open circuit or short circuit to 5 Volt sensor supply	3	40	Yes
P1115	Coolant temperature gauge circuit malfunction (supported by DTC P1690)	0	40	No
P1135	Traction Control prevented due to ABS problem	3	40	Yes
P1231	Fuel pump relay short circuit to ground or open circuit	3	40	Yes
P1232	Fuel pump relay short circuit to vBatt	3	40	Yes
P1500	Vehicle speed output circuit malfunction (supported by DTC P1690)	0	40	No
P1508	Unmatched Immobiliser ECM	3	40	Flashing
P1520	Unmatched ABS	3	40	Flashing
P1521	Lost communication with ABS	3	40	Yes
P1534	Engine oil level sensor circuit malfunction	3	40	Yes
P1552	Cooling fan relay short circuit or open circuit	3	40	Yes
P1553	Cooling fan relay short to battery vBatt or over temperature	3	40	Yes
P1571	Brake 2 switch malfunction	3	40	Yes
P1574	Cruise control prevented due to other malfunction condition	3	40	Yes
P1575	Cruise control disabled until button press sequence completed	3	40	Yes
P1576	Brake 1 switch correlation error with brake switch 2	3	40	Yes
P1577	Brake 2 switch correlation error with brake switch 1	3	40	Yes
P1604	ECM tamper detected - return to Triumph	0	0	Yes
P1605	ECM locked by the tunelock function	Only if Tunelock is unlocked	N/A	Flashing
P1606	ECM internal error	3	40	Yes
P1607	ECM ride by wire internal error	3	40	Yes
P1608	ECM ride by wire internal error	3	40	Yes

P1614	Instrument ID incompatible	Only if Instrument ID Matching	N/A	Flashing
P1616	Accessory control relay short circuit to ground or open circuit	0	40	No
P1617	Accessory control relay short circuit to vBatt	0	40	No
P1619	Headlamp relay short circuit to ground or open circuit	0	40	No
P1620	Headlamp relay short circuit to vBatt	0	40	No
P1631	Fall detection circuit short circuit to ground	3	40	Yes
P1632	Fall detection circuit short circuit to vBatt	3	40	Yes
P1650	Lost communication with Immobiliser ECM	3	40	Yes
P1659	Ignition power supply malfunction	0	40	No
P1685	Main relay circuit malfunction	3	40	Yes
P1690	CAN fault	3	40	Yes
P1695	Lost communication with the instrument panel	3	40	Yes
P1696	5V sensor supply short circuit to ground	3	40	Yes
P1697	5V sensor supply short circuit to vBatt	3	40	Yes
P1698	5V sensor supply circuit malfunction	3	40	Yes
P2102	Throttle actuator motor short to ground or open circuit	3	40	Yes
P2103	Throttle actuator motor short to vBatt	3	40	Yes
P2107	Throttle valve drive error	3	40	Yes
P2111	Throttle valve drive error	3	40	Yes
P2119	Throttle valve drive error	3	40	Yes
P2122	Twist grip position sensor 1 short circuit to ground or open circuit	3	40	Yes
P2123	Twist grip position sensor 1 short circuit to vBatt	3	40	Yes
P2127	Twist grip position sensor 2 short circuit to ground or open circuit	3	40	Yes
P2128	Twist grip position sensor 2 short to vBatt	3	40	Yes
P2136	Throttle position sensor 1 correlation error with throttle position sensor 2	3	40	Yes
P2138	Twist grip position sensor 1 correlation error with twist grip position sensor 2	3	40	Yes

#### Immobiliser/TPMS Control Module Diagnostic Trouble Codes

Diagnostic Trouble Code (DTC)	Fault Description	Warning Light / Information
L0001	Front wheel sensor unit battery alert	For low battery Voltage - LO bAt visible in the instrument display screen, the TPMS symbol in the display screen will indicate which sensor has low battery Voltage. For zero battery Voltage - Only dashes will be visible in the instrument display screen, TPMS Warning light ON and the TPMS symbol in the display screen will flash ON and OFF
L0002	Rear wheel sensor unit battery alert	
L0003	Front wheel sensor unit fault alert	TPMS warning light ON and the TPMS Symbol in the display screen will flash ON and OFF
L0004	Rear wheel sensor unit fault alert	
L0005	Front wheel sensor unit loss of communication error	
L0006	Rear wheel sensor unit loss of communication error	
L0007	Immobiliser ECM fault	
L0008	Invalid key: Key authentication unsuccessful	
		Alarm/Immobiliser light ON

#### ABS Diagnostic Trouble Codes

DTCs are logged in the ABS ECM memory when there is a confirmed fault in the system & are reported as a four digit code.

Diagnostic Trouble Code (DTC)	Fault Description
C1611	Front wheel sensor short circuit to ground or open circuit
C1612	Front wheel sensor abnormal input or dropping out
C1613	Rear wheel sensor short circuit to ground or open circuit
C1614	Rear wheel sensor abnormal input or dropping out
C1621	Front wheel pulser gear missing teeth
C1623	Rear wheel pulser gear missing teeth
C1631	Front wheel input solenoid short circuit to ground or open circuit
C1632	Front wheel output solenoid short circuit to ground or open circuit
C1633	Rear wheel input solenoid short circuit to ground or open circuit
C1634	Rear wheel output solenoid short circuit to ground or open circuit
C1641	Front Wheel Actuator (Hydraulic Control) Wheel Lock
C1643	Rear Wheel Actuator (Hydraulic Control) Wheel Lock
C1651	Motor - Lock
C1652	Motor - Stick at OFF
C1653	Motor - Stick at ON
C1654	Solenoid relay - stick at OFF and ON
C1661	Power Source Voltage Drop
C1662	Power Source Voltage Rise
C1671	Different Tyre Diameter
C1681	Abnormal ECU