

Throttle Position Sensor

Fault Code	Possible cause	Action
P0120	Throttle position sensor 1 short circuit to battery Voltage or open circuit	View and note diagnostic software 'freeze-frame' data if available. View and note diagnostic software 'sensor' data. Ensure throttle position sensor connector is secure. Disconnect the engine ECM and proceed to pinpoint test 1:
P0122	Throttle position sensor 1 short circuit to ground	
P0220	Throttle position sensor 2 short circuit to battery Voltage or open circuit	
P0222	Throttle position sensor 2 short circuit to ground	
P2135	Throttle position sensor 1 correlation error with throttle position sensor 2	

Pinpoint Tests

Test	Result	Action	
1	Check cable and terminal integrity: - ECM pin B19 - ECM pin B33 - ECM pin B20 - ECM pin B26	OK	Disconnect sensor and proceed to test 2
		Faulty	Rectify fault, proceed to test 5
2	Check cable for short circuit: - ECM pin B20 to ground - ECM pin B26 to ground	OK	Proceed to test 3
		Short circuit	Locate and rectify wiring fault, proceed to test 5
3	Check cable continuity: - ECM pin B20 to throttle body connector pin 6 - ECM pin B20 to throttle position sensor connector pin 1 - ECM pin B26 throttle position sensor connector pin 4 - ECM pin B19 to throttle position sensor connector pin 2	OK	Proceed to test 4

Test	ECM pin B33 to throttle position sensor connector pin 3	Result	Action
		Open circuit	Locate and rectify wiring fault, proceed to test 5
4	Check cable for short circuit: - ECM pin B33 to ECM pin B20 - ECM pin B33 to ECM pin B26	OK	Renew the throttle body, proceed to test 5
		Short circuit	Locate and rectify wiring fault, proceed to test 5
5	Reconnect harness, clear fault code and run engine to verify fault cleared.	OK	Action complete - quit test
		Fault still present	Contact Triumph service

Circuit Diagram

