

## PV101 Error Messages – Software Versions 2.3 and 3.2

**Note:** This list represents text descriptions for faults supported by the PowerView and does not necessarily comply with SAE J1939. For a specific engine manufacturer's explanation for codes, please consult the engine's technical manual.

SPN	FMI	Description
28	3	% ACCEL POS3 VOLT ABOVE NORM OR SHORT HIGH
28	4	% ACCEL POS3 VOLT BELOW NORM OR SHORT LOW
29	3	% ACCEL POS2 VOLT ABOVE NORM OR SHORT HIGH
29	4	% ACCEL POS2 VOLT BELOW NORM OR SHORT LOW
84	8	TACHOMETER SIGNAL FAILED, VELOCITY SIGNAL DEFECTIVE
91	2	SPEED SET POINT1 (ACCELERATOR PEDAL DEFECTIVE)
91	3	ACCEL PEDAL POS VOLT ABOVE NORM OR SHORT HIGH
91	4	ACCEL PEDAL POS VOLT BELOW NORMAL OR SHORT LOW
91	9	ACCEL PEDAL POS A VALID THROTTLE MSG NOT RCVD
91	11	ERROR HARD SET POINT 1
91	14	ACCEL PEDAL POS THROTTLE SIG VOLT OUT OF RANGE
94	1	FUEL DELIVERY PRESSURE VERY LOW
94	3	FUEL RAIL PRESSURE VOLTAGE OUT OF RANGE HIGH
94	4	FUEL RAIL PRESSURE VOLTAGE OUT OF RANGE LOW
94	10	FUEL DELIVERY PRESSURE DROPPING TOO FAST
94	13	FUEL DELIVERY PRESSURE OUT OF CALIBRATION
94	16	FUEL DELIVERY PRESSURE HIGH
94	17	NO RAIL FUEL PRESSURE
94	18	FUEL DELIVERY PRESSURE LOW
97	0	WATER IN FUEL DETECTED
97	3	WATER IN FUEL INDICATOR VOLTAGE OUT OF RANGE HIGH
97	4	WATER IN FUEL INDICATOR VOLTAGE OUT OF RANGE LOW
97	16	WATER IN FUEL DETECTED
97	31	WATER IN FUEL DETECTED
98	1	OIL LEVEL SWITCH OFF
100	1	ENGINE OIL PRESSURE LOW
100	2	OIL PRESSURE SENSOR DEFECTIVE
100	3	ENGINE OIL PRESS VOLT ABOVE NORM OR SHORT HIGH SOURCE
100	4	ENGINE OIL PRESS VOLT BELOW NORM OR SHORT LOW SOURCE
100	16	ENGINE OIL PRESSURE READING INCORRECT
100	18	ENGINE OIL PRESS LOW
102	2	CHARGE AIR PRESSURE SENSOR DEFECTIVE
105	0	INTAKE MAN1 AIR TEMP HIGH
105	2	CHARGE AIR TEMPERATURE SENSOR DEFECTIVE
105	3	INTAKE MAN1 TEMP VOLT ABOVE NORM OR SHORT HIGH SOURCE
105	4	INTAKE MAN1 TEMP VOLT BELOW NORM OR SHORT LOW SOURCE
105	16	INTAKE MAN1 AIR TEMP HIGH
107	0	AIR FILT DIFF PRESS PLUGGED AIR FILTER DETECTED
107	31	AIR FILT DIFF PRESS PLUGGED AIR FILTER DETECTED
108	12	ATMOSPHERIC PRESSURE
110	0	ENG COOL TEMP HIGH
110	2	COOLANT TEMPERATURE SENSOR DEFECTIVE
110	3	ENG COOL TEMP VOLT ABOVE NORM OR SHORT HIGH SOURCE
110	4	ENG COOL TEMP VOLT BELOW NORM OR SHORT LOW SOURCE
110	15	ENG COOL TEMP HIGH

<b>SPN</b>	<b>FMI</b>	<b>Description</b>
110	16	ENG COOL TEMP HIGH
111	1	LOW COOLANT LEVEL
120	15	RETARDER OIL TEMPERATURE ABOVE NORMAL
158	2	KEYSWITCH INTERMITTENT
158	17	KEYSWITCH CIRCUIT PROBLEM
171	12	INTERNAL TEMPERATURE
174	0	FUEL TEMP HIGH
174	2	FUEL TEMPERATURE SENSOR DEFECTIVE
174	3	FUEL TEMP VOLT ABOVE NORM OR SHORT HIGH SOURCE
174	4	FUEL TEMP VOLT BELOW NORM OR SHORT LOW SOURCE
174	15	FUEL TEMP HIGH
174	16	FUEL TEMP HIGH
174	31	FUEL TEMP VOLT OUT OF RANGE
177	15	TRANSMISSION OIL TEMPERATURE ABOVE NORMAL
189	31	ENG SPEED DERATE CONDITION EXISTS DUE TO FAULT
190	0	ENGINE OVERSPEED
190	2	ENG SPD DATA ERRATIC, INTERMITTENT OR INCORRECT
190	3	ENG SPD VOLT ABOVE NORMAL OR SHORT HIGH
190	4	ENG SPD VOLT BELOW NORMAL OR SHORT LOW
190	5	ENG SPD CIRCUIT IS OPEN
190	8	ENGINE SPEED SENSOR DEFECTIVE
190	16	ENGINE OVERSPEED
201	2	SPEED SET POINT 2 (HAND THROTTLE DEFECTIVE)
441	0	AUXILIARY TEMPERATURE #1 HIGH (MOST SEVERE)
535	7	CONTROL TRAVEL DIFFERENCE
535	13	AUTO CALIBRATION BOSCH-EDC-PUMP UNSUCCESSFUL
536	12	FEEDBACK RACK POSITION
536	13	REFERENCE FEEDBACK RACK POSITION
563	2	DIGITAL OUTPUT 3 SUPERVISION (STOP SOLENOID)
563	6	EXCESS CURRENT DIGITAL OUTPUT 3 (STOP SOLENOID)
572	2	DIGITAL OUTPUT 6 SUPERVISION
611	3	INJ WIRING SHORTED TO BATTERY
611	4	INJ WIRING SHORTED TO GROUND
620	3	SENSOR VOLT1 (+5VDC) ABOVE NORMAL OR SHORT HIGH
620	4	SENSOR VOLT1 (+5VDC) BELOW NORMAL OR SHORT LOW
627	1	POWER SUPPLY LOW VOLT TO INJECTORS
627	4	POWER SUPPLY INTERRUPTION
629	13	REPROGRAM CONTROLLER ECU PROBLEM
629	19	ECU NOT RECEIVING MSG FROM PUMP
632	2	FUEL SHUTOFF VALVE ERR DETECTED
632	5	FUEL SHUTOFF VALVE NON-FUNCTIONAL
632	11	FUEL SHUTOFF VALVE SOLENOID CKT OPEN OR SHORTED
636	2	ENG POS SENSOR TIMING SIGNAL ERROR
636	8	ENG POS SENSOR TIMING SIGNAL ERROR
636	10	ENG POS SENSOR TIMING SIGNAL ERROR
637	2	TIMING (CRANK) SENSOR TIMING SIGNAL ERROR

<b>SPN</b>	<b>FMI</b>	<b>Description</b>
637	7	TIMING (CRANK) SENSOR TIMING SIGNAL ERROR
637	8	TIMING (CRANK) SENSOR TIMING SIGNAL ERROR
637	10	TIMING (CRANK) SENSOR TIMING SIGNAL ERROR
639	13	CAN BUS FAILURE
651	5	INJ CYLINDER1 CURRENT LESS THAN EXPECTED
651	6	INJ CYLINDER1 CURRENT INCREASES TOO RAPIDLY
651	7	INJ CYLINDER1 FUEL FLOW LOWER THAN EXPECTED
652	5	INJ CYLINDER2 CURRENT LESS THAN EXPECTED
652	6	INJ CYLINDER2 CURRENT INCREASES TOO RAPIDLY
652	7	INJ CYLINDER2 FUEL FLOW LOWER THAN EXPECTED
653	5	INJ CYLINDER3 CURRENT LESS THAN EXPECTED
653	6	INJ CYLINDER3 CURRENT INCREASES TOO RAPIDLY
653	7	INJ CYLINDER3 FUEL FLOW LOWER THAN EXPECTED
654	5	INJ CYLINDER4 CURRENT LESS THAN EXPECTED
654	6	INJ CYLINDER4 CURRENT INCREASES TOO RAPIDLY
654	7	INJ CYLINDER4 FUEL FLOW LOWER THAN EXPECTED
655	5	INJ CYLINDER5 CURRENT LESS THAN EXPECTED
655	6	INJ CYLINDER5 CURRENT INCREASES TOO RAPIDLY
655	7	INJ CYLINDER5 FUEL FLOW LOWER THAN EXPECTED
656	5	INJ CYLINDER6 CURRENT LESS THAN EXPECTED
656	6	INJ CYLINDER6 CURRENT INCREASES TOO RAPIDLY
656	7	INJ CYLINDER6 FUEL FLOW LOWER THAN EXPECTED
676	3	GLOW PLUG RELAY STUCK ON
676	5	GLOW PLUG RELAY WILL NOT TURN ON
702	14	SPEED (THRUST MODE) WARNING
729	3	INLET AIR HEATER DRIVER1 STUCK ON
729	5	INLET AIR HEATER DRIVER1 WILL NOT TURN ON
743	9	CAN COMMUNICATION SAE J1939, RECEIVE MESSAGES MISSING
743	12	CAN CONTROLLER, BUS OFF
743	14	LINE BREAK, SHORT OR HEAVY BUS LOAD (CAN BUS PASSIVE)
752	2	STACK-OVERFLOW
752	12	CYCLIC FLASH TEST
765	2	PARAMETER ERROR (EEPROM CHECKSUM INCORRECT)
765	12	PARAMETER PROGRAMMING (EEPROM WRITING ERROR)
766	2	INTERNAL ERROR
833	2	RACK POSITION SENSOR ERROR
833	3	RACK POSITION SENSOR VOLT ABOVE NORMAL
833	4	RACK POSITION SENSOR VOLT BELOW NORMAL
834	2	RACK ACTUATOR ERROR BLEED AIR IN FUEL SYSTEM
834	3	RACK ACTUATOR CKT VOLT ABOVE NORMAL
834	5	RACK ACTUATOR CKT OPEN
834	6	RACK ACTUATOR CKT GROUNDED
834	7	RACK ACTUATOR POSITION ERROR
898	2	ERROR CAN SET POINT 1
970	2	EXT AUX ENG SHUTDOWN SWITCH INTERMITTENT
970	11	EXT ENG PROTECTION SHUTDOWN ACTIVE

SPN	FMI	Description
970	31	EXT AUX ENG SHUTDOWN SWITCH ACTIVE
971	31	ENG DERATE SWITCH ACTIVATED
1041	2	START SIGNAL MISSING
1041	3	START SIGNAL ALWAYS ACTIVE
1076	0	FUEL INJ PUMP CONT VALVE ERROR
1076	1	FUEL INJ PUMP CONT VALVE ERROR
1076	2	FUEL INJ PUMP CONT VALVE ERROR
1076	3	FUEL INJ PUMP CONT VALVE ERROR
1076	5	FUEL INJ PUMP CONT VALVE ERROR
1076	6	FUEL INJ PUMP CONT VALVE ERROR
1076	7	FUEL INJ PUMP CONT VALVE ERROR
1076	10	FUEL INJ PUMP CONT VALVE ERROR
1076	13	FUEL INJ PUMP CONT VALVE ERROR
1077	7	FUEL INJ PUMP ERROR
1077	11	FUEL INJ PUMP CONT VP44 INPUT VOLT OUT OF RANGE
1077	12	FUEL INJ PUMP CONT VP44 SELF TEST ERROR
1077	19	FUEL INJ PUMP CONT VP44 DETECTED CAN BUS FAILURE
1077	31	FUEL INJ PUMP CONT POWER DERATED
1078	7	FUEL INJ PUMP SPD/POS SENSOR ERROR
1078	11	FUEL INJ PUMP SPD/POS SENSOR ERROR
1078	31	FUEL INJ PUMP SPD/POS VP44 UNABLE TO ACHIEVE TIMING
1079	3	SENSOR VOLT1 (+5VDC) ABOVE NORM OR SHORT HIGH
1079	4	SENSOR VOLT1 (+5VDC) BELOW NORM OR SHORT LOW
1080	3	SENSOR VOLT2 (+5VDC) ABOVE NORM OR SHORT HIGH
1080	4	SENSOR VOLT2 (+5VDC) BELOW NORM OR SHORT LOW
1081	31	ENGINE WAIT TO START LAMP
1109	31	ENG PROT SYSTEM APPROACHING SHUTDOWN
1110	31	ENG PROT SYSTEM SHUT ENG DOWN
1347	5	FUEL PUMP ASSY 1 CKT OPEN, SHORTED GROUND OR OVLOAD
1347	7	FUEL PUMP ASSY 1 RAIL PRESSURE CONT MISMATCH
1347	10	FUEL PUMP ASSY 1 LOW FUEL FLOW
1348	5	FUEL PUMP ASSY 2 CKT OPEN, SHORTED GROUND OR OVLOAD
1348	10	FUEL PUMP ASSY 2 LOW FUEL FLOW
1387	1	AUXILIARY PRESSURE #1 LOW (MOST SEVERE)
1485	2	ECU MAIN RELAY PUMP POWER RELAY FAULT
1569	31	ENG PROT TORQ FUEL DERATE LIMIT CONDITION EXIST
2000	6	FUEL INJECTION PUMP CONT VALVE ERROR
2000	13	SECURITY VIOLATION PROPER CONT NOT INSTALLED
2003	31	GENERAL TRANSMISSION FAULT UNKNOWN

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Printed in the USA