DIAGNOSTIC PROCEDURES

SERVICE TOOLS

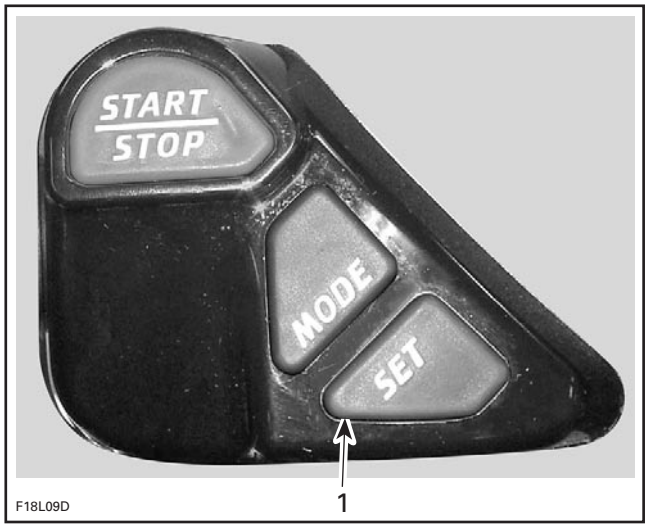
Description	Part Number	Page
VCK (Vehicle Communication Kit)	529 035 981	105

GENERAL

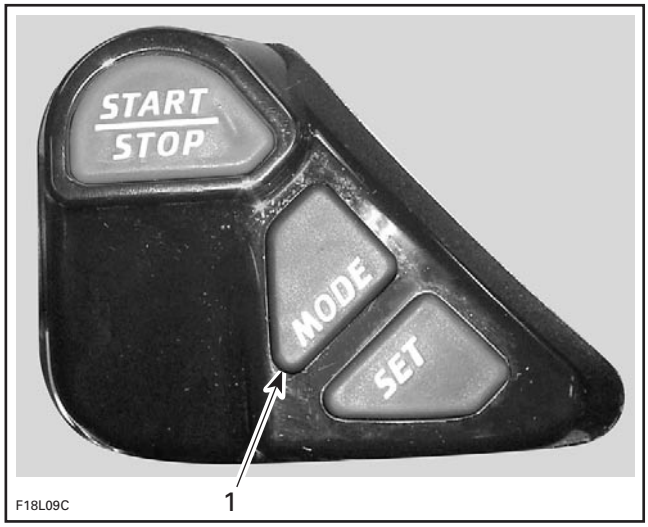
Here is the basic order suggested to diagnose a suspected engine management or fuel injection related problem.

– Check the chart in TROUBLESHOOTING section to have an overview of problems and suggested solutions.
– Check if there is a message displayed by the vehicle information center. If so, use the VCK (Vehicle Communication Kit) and look for fault codes to diagnose the trouble.

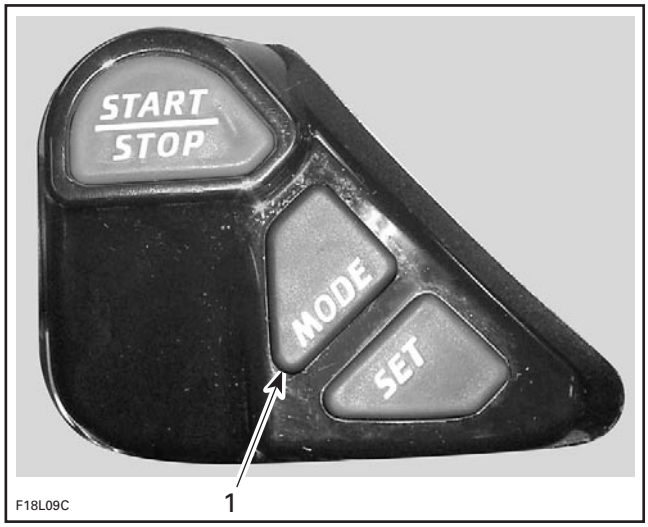
NOTE: Fault codes, the letter P — followed by 4 digits (P-1234), can be displayed in the information center for troubleshooting. With safety lanyard on its post, press 5 times the SET button to start the display of P-codes (onboard diagnostic). Press MODE to scroll codes if more than one is present. When the "list" is over, END will appear. When END appears, press MODE to exit.



1. Press 5 times to activate display of P-codes (onboard diagnostic)



1. Press to scroll if more than one P-code



1. When END appears, press MODE to exit

– Check all fuses.
– Check fuel rail pressure.
– Check spark plugs condition.
– Check fuel pump pressure.
– Check all connections of the wiring harness.

– Refer to COMPONENT INSPECTION, REPLACEMENT AND ADJUSTMENT section for procedures.

Terminology

Some documents or softwares use technical terms that may be different from the one used in this manual. The following table will help to find the equivalence.

TERMS USED IN THIS MANUAL	TERMS USED IN OTHER DOCUMENTS SOFTWARES
Camshaft	Cam
Communication link	CAN
Crankshaft	Crank
CTS (Coolant Temperature Sensor)	WTS (Water Temperature Sensor)
ECM	– ECU – Module
EGTS (Exhaust Gas Temperature sensor)	ETS (Exhaust Temperature Sensor)
Idle bypass valve	– DLA (Digital Linear Actuator) – Idle actuator – Idle valve
Information center	Cluster
MAPS (Manifold Air Pressure Sensor)	APS (Air Pressure Sensor) or (Atmospheric Pressure Sensor)
MATS (Manifold Air Temperature Sensor)	ATS (Air Temperature Sensor) or (Intake manifold Temperature Sensor)
Oil separator	Oil tank
OSPS (Oil Separator Pressure Switch)	OTPS (Oil Tank Pressure Switch)
Safety lanyard	– DESS key – key
TOPS valve (Tip-Over Protection System)	– Blow-by valve – BBV

SELF-DIAGNOSTIC MODE

Refer to the following chart. For other problems, refer to COMPONENT INSPECTION, REPLACEMENT AND ADJUSTMENT section.

CODED SIGNALS	POSSIBLE CAUSE	REMEDY
2 short beeps (while installing safety lanyard on post).	• Confirms safety lanyard signal operation.	Engine can be started.
	• Safety lanyard is recognized by the ECM.	
	• Good contact between safety lanyard and DESS post.	
1 long beep (while installing safety lanyard on post).	• Bad DESS system connection.	Reinstall safety lanyard cap correctly over post.
	• Wrong safety lanyard.	Use a safety lanyard that has been programmed for the watercraft. If it does not work, check safety lanyard condition with B.U.D.S. Replace safety lanyard if reported defective.
	• Defective safety lanyard.	Use another programmed safety lanyard.
	• Dried salt water or dirt in safety lanyard cap.	Clean safety lanyard cap to remove salt water.
	• Defective DESS post.	Refer to ENGINE MANAGEMENT section.
	• Improper operation of ECM or defective wiring harness.	Refer to ENGINE MANAGEMENT section.
1 short beep followed by 1 long beep.	• ECM has been set to onboard diagnosis mode.	Remove and reinstall safety lanyard .
4 short beeps every 3 seconds interval for 4 hours.	• Safety lanyard has been left on its post without starting engine or after engine was stopped.	To prevent battery discharge, remove the safety lanyard from its post.

CODED SIGNALS	POSSIBLE CAUSE	REMEDY
2 seconds beep every 1 minute interval.	• Watercraft is upside down.	Turn watercraft upright. If it does not work, check the TOPS switch. Refer to ENGINE MANAGEMENT section.
	• Engine coolant temperature sensor or circuit malfunction.	Refer to ENGINE MANAGEMENT section.
	• Exhaust temperature sensor or circuit malfunction.	Refer to ENGINE MANAGEMENT section.
	• Engine oil pressure sensor or circuit malfunction.	Refer to ENGINE MANAGEMENT section.
	• Out of range pressure in oil separator tank (engine oil leak).	Refer to ENGINE MANAGEMENT section.
	• TOPS sensor or circuit malfunction.	Refer to ENGINE MANAGEMENT section.
	• TOPS valve solenoid or circuit malfunction.	Refer to ENGINE MANAGEMENT section.
	• Starter solenoid circuit malfunction.	Refer to ENGINE MANAGEMENT section.
	• Communication link fault detected by MPEM.	Refer to ENGINE MANAGEMENT section.
	• ECM communication link message missing (detected by MPEM).	Refer to ENGINE MANAGEMENT section.
	• Information center communication link message missing (detected by MPEM).	Refer to ENGINE MANAGEMENT section.
	• Bilge pump circuit low or high voltage (**if so equipped**).	Refer to ENGINE MANAGEMENT section.
A 2 seconds beep every 5 minutes interval.	• Low fuel level.	Refer to INSTRUMENTS AND ACCESSORIES section.
	• Fuel tank level sensor or circuit malfunction.	Refer to INSTRUMENTS AND ACCESSORIES section.
Continuously beeps.	• High engine coolant temperature.	Refer to COOLING SYSTEM.
	• High exhaust temperature.	Refer to COOLING SYSTEM.

ENGINE MANAGEMENT SYSTEM FAULT CODES

General

The faults registered in the MPEM/ECM are kept when the battery is disconnected.

IMPORTANT: After a problem has been solved, ensure to clear the fault(s) in the MPEM/ECM using the VCK. This will properly reset the appropriate counter(s). This will also records that the problem has been fixed in the MPEM/ECM memory.

Many fault codes at the same time is likely to be burnt fuse(s).

For more information pertaining to the code faults (state, count, first, etc.) and report, refer to B.U.D.S. online help.

When using the service action suggested in the Fault section of B.U.D.S., the system circuits are referred as 4-23 for instance. It means Amp connector no. 4 and the circuit wire no. 23 as found in the wiring diagram.

When they are referred as A-41, it means connector "A" on the ECM and the —circuit 41.

TPS (Throttle Position Sensor) Faults

Faults which are reported in B.U.D.S. fall into two groups: TPS faults and adaptation faults. These are displayed on the B.U.D.S. system as TPS OUT OF RANGE and TPS ADAPTATION FAILURE.

TPS "OUT OF RANGE" Fault

It is caused by the sensor reading going out of its allowable range. This fault can occur during the whole range of movement of the throttle.

To diagnose this fully, it is recommended to operate the throttle through its full range. It is also recommended to release the throttle quickly as this may also show up a fault that is intermittent.

POSSIBLE CAUSES	ACTION
Check if connector is disconnected from TPS.	• Fix.
Check if sensor is loose.	• Fix and reset **Closed Throttle and Idle Actuator.**
Inspect sensor for damage or corrosion.	• Replace and reset **Closed Throttle and Idle Actuator**.
Inspect wiring (voltage test).	• Repair.
Inspect wiring and sensor (resistance test).	• If bad wiring, repair. • If bad TPS, replace and reset **Closed Throttle and Idle Actuator**.
Test sensor operation (wear test).	• Replace and reset **Closed Throttle and Idle Actuator**.

TPS "ADAPTATION FAILURE" Fault

It is caused by the idle position moving out of an acceptable range.

Following failures can be effected by a TPS "Adaptation Failure":

– Idle speed is out of range.
– Engine stops, when throttle is released quickly.
– Engine runs inconsistent in low partload or low RPM.

POSSIBLE CAUSES	ACTION
Sensor has been replaced and TPS closed position not reset.	• Reset **Closed Throttle and Idle Actuator**.
Throttle body has been replaced and TPS closed position not reset.	• Reset **Closed Throttle and Idle Actuator**.
ECM has been replaced and TPS closed position not reset.	• Reset **Closed Throttle and Idle Actuator**.
Throttle cable too tight.	• Fix and reset **Closed Throttle and Idle Actuator**.
Sensor is loose.	• Fix and reset **Closed Throttle and Idle Actuator**.
Throttle bracket is loose.	• Fix and reset **Closed Throttle and Idle Actuator**.
Adjustment screw worn or loose.	• Change throttle body.

Supplemental Information for Some Specific Faults

Communication link fault code 1681: Sometimes the information center does not synchronize fast enough for the MPEM. That brings this fault code. Simply clear the fault and try again.

ECM fault codes P0601, P0602, P0604 and P605: These codes may occur in the following situations:

- Electrical noise is picked up by the ECM. Ensure that all connections are in good condition, also grounds (battery, ECM, engine and ignition system), they are clean and well tightened and that all electronic components are genuine -- particularly in the ignition system. Installing resistive caps, non-resistive spark plugs or improper knock sensor wiring/routing may lead to generate this fault code.
- Electrical noise might also lead engine to occasional cutout without generating a fault code when engine is restarted. When looking at the fault code, pay attention to the "count" value in the software B.U.D.S. A value between 1 and 9 confirms an electrical noise problem. A value of 10 and above will generate a fault code.
- When installing a new ECM. It is not properly programmed from the factory. The ECM must be returned to be properly "activated".
- If everything is in good condition, try a new ECM.

Fault code P1202: See detailed information under OSPS in subsection COMPONENT INSPECTION, REPLACEMENT AND ADJUSTMENT.

EMS Fault Code Table

FAULT CODE	RESPONSIBLE MODULE			BEEPER CODE	WARNING LIGHT	MESSAGE DISPLAYED (INFO CTR)	FAULT DETECTED WHILE ENGINE NOT RUNNING	FAULT DETECTED WHILE ENGINE RUNNING	LIMP HOME MODE	NORMAL OPERATION RESUME WHEN...
	INFORMATION CENTER	MPEM	ECM							
P0106	—	—	Manifold atmospheric pressure sensor out of range	15	Flash	CHK ENG	N	Y	N	Fault is recovered
Possible cause: Sensing port dirty or blocked. Sensor failure or unexpected reading at idle. Sensor fallen out of housing or leaking inlet. **Service action:** Check system circuits A-12, A-28 and A-40. Make sure that the sensor housing is correctly inserted into the manifold. Check sensor connector for: a) 5 volts on pin 1. b) 0 volt on pin 2. c) 0 volt on pin 3.										
P0107	—	—	Manifold **atmospheric** pressure sensor shorted to ground	15	Flash	CHK ENG	N	Y	N	Fault is recovered
	—	—	Manifold **barometric** pressure sensor shorted to ground	15	Flash	CHK ENG	Y	N	N	Fault is recovered
Possible cause: Sensing port dirty or blocked. Sensor failure or unexpected reading at idle. Sensor fallen out of housing or leaking inlet. **Service action:** Check system circuits A-12, A-28 and A-40. Make sure that the sensor housing is correctly inserted into the manifold. Check sensor connector for: a) 5 volts on pin 1. b) 0 volt on pin 2. c) 0 volt on pin 3.										

FAULT CODE	RESPONSIBLE MODULE			BEEPER CODE	WARNING LIGHT	MESSAGE DISPLAYED (INFO CTR)	FAULT DETECTED WHILE ENGINE NOT RUNNING	FAULT DETECTED WHILE ENGINE RUNNING	LIMP HOME MODE	NORMAL OPERATION RESUME WHEN...
	INFORMATION CENTER	MPEM	ECM							
P0108	—	—	Manifold **atmospheric** pressure sensor shorted to 12 V or open circuit	15	Flash	CHK ENG	N	Y	N	Fault is recovered
	—	—	Manifold **barometric** pressure sensor open circuit or shorted to 12 V	15	Flash	CHK ENG	Y	N	N	Fault is recovered
Possible cause: Sensing port dirty or blocked. Sensor failure or unexpected reading at idle. Sensor fallen out of housing or leaking inlet. **Service action:** Check system circuits A-12, A-28 and A-40. Make sure that the sensor housing is correctly inserted into the manifold. Check sensor connector for: a) 5 volts on pin 1. b) 0 volt on pin 2. c) 0 volt on pin 3.										
P0111	—	—	Intake manifold temperature sensor functional problem	15	Flash	CHK ENG	N	Y	N	Fault is recovered
Possible cause: Damaged sensor, damaged circuit wires, damaged connector or damaged ECM pins. **Service action:** Check the sensor for approximately 2280 to 2736 ohms at 19 to 21°C (66 to 70°F). Check for approximately 2280 to 2736 ohms at 19 to 21°C (66 to 70°F) between ECM connector pins 7 and 21.										
P0112	—	—	Intake manifold temperature sensor shorted to ground	15	Flash	CHK ENG	N	Y	N	Fault is recovered
Possible cause: Damaged sensor, damaged circuit wires, damaged connector or damaged ECM pins. **Service action:** Check the sensor for approximately 2280 to 2736 ohms at 19 to 21°C (66 to 70°F). Check for approximately 2280 to 2736 ohms at 19 to 21°C (66 to 70°F) between ECM connector pins 7 and 21.										
P0113	—	—	Intake manifold temperature sensor shorted to 12 V or open circuit	15	Flash	CHK ENG	N	Y	N	Fault is recovered
Possible cause: Damaged sensor, damaged circuit wires, damaged connector or damaged ECM pins. **Service action:** Check the sensor for approximately 2280 to 2736 ohms at 19 to 21°C (66 to 70°F). Check for approximately 2280 to 2736 ohms at 19 to 21°C (66 to 70°F) between ECM connector pins 7 and 21.										

FAULT CODE	RESPONSIBLE MODULE			BEEPER CODE	WARNING LIGHT	MESSAGE DISPLAYED (INFO CTR)	FAULT DETECTED WHILE ENGINE NOT RUNNING	FAULT DETECTED WHILE ENGINE RUNNING	LIMP HOME MODE	NORMAL OPERATION RESUME WHEN...
	INFORMATION CENTER	MPEM	ECM							
P0116	—	—	Engine temperature sensor functional problem	5	Flash	CHK ENG	N	Y	N	Fault is recovered
Possible cause: Damaged sensor, damaged circuit wires, damaged connector or damaged ECM pins. **Service action:** Check for debris or blockage in cooling system. Check the sensor for approximately 2280 to 2736 ohms at 19 to 21°C (66 to 70°F). Check for approximately 2280 to 2736 ohms at 19 to 21°C (66 to 70°F) between ECM connector pins 11 and 27.										
P0117	—	—	Engine temperature sensor short circuit to ground	5	Flash	CHK ENG	N	Y	N	Fault is recovered
Possible cause: Damaged sensor, damaged circuit wires, damaged connector or damaged ECM pins. **Service action:** Check for debris or blockage in cooling system. Check the sensor for approximately 2280 to 2736 ohms at 19 to 21°C (66 to 70°F). Check for approximately 2280 to 2736 ohms at 19 to 21°C (66 to 70°F) between ECM connector pins 11 and 27.										
P0118	—	—	Engine temperature sensor short circuit to 12 V	5	Flash	CHK ENG	N	Y	N	Fault is recovered
			Engine temperature sensor open circuit	5	Flash	CHK ENG	N	Y	N	Fault is recovered
Possible cause: Engine overheated or damaged sensor. **Service action:** Check for debris or blockage in cooling system. Check the sensor for approximately 2280 to 2736 ohms at 19 to 21°C (66 to 70°F). Check for approximately 2280 to 2736 ohms at 19 to 21°C (66 to 70°F) between ECM connector pins 11 and 27.										

FAULT CODE	RESPONSIBLE MODULE			BEEPER CODE	WARNING LIGHT	MESSAGE DISPLAYED (INFO CTR)	FAULT DETECTED WHILE ENGINE NOT RUNNING	FAULT DETECTED WHILE ENGINE RUNNING	LIMP HOME MODE	NORMAL OPERATION RESUME WHEN...
	INFORMATION CENTER	MPEM	ECM							
P0122	—	—	Throttle position sensor out of range	15	Flash	CHK ENG	Y	Y	N	Key is removed
	—	—	Throttle position sensor short circuit to ground	15	Flash	CHK ENG	Y	Y	N	Key is removed
Possible cause: Damaged sensor, damaged circuit wires, damaged connector or damaged ECM pins. Damaged or out of alignment throttle bodies or sensor. **Service action:** Check for 0 volt on sensor connector pin 1. Check for 5 volts on sensor connector pin 2. Check for 4.5 to 5 volts on sensor connector pin 3. With throttle closed, check ECM connector for: a) 1000 to 1100 ohms between pins 24 and 39. b) 2600 to 2700 ohms between pins 24 and 25. c) 1600 to 2400 ohms between pins 125 and 39. Check for linear resistance rise when opening throttle. Check physical stops for wear.										
P0123	—	—	Throttle position sensor out of range – short-circuit to 12 V or open circuit	15	Flash	CHK ENG	N	Y	N	Key is removed
Possible cause: Damaged sensor, damaged circuit wires, damaged connector or damaged ECM pins. Damaged or out of alignment throttle bodies or sensor. **Service action:** Check for 0 volt on sensor connector pin 1. Check for 5 volts on sensor connector pin 2. Check for 4.5 to 5 volts on sensor connector pin 3. With throttle closed, check ECM connector for: a) 1000 to 1100 ohms between pins 24 and 39. b) 2600 to 2700 ohms between pins 24 and 25. c) 1600 to 2400 ohms between pins 125 and 39. Check for linear resistance rise when opening throttle. Check physical stops for wear.										
P0231	—	—	Fuel pump shorted to ground or open circuit	15	Flash	CHK ENG	Y	N	N	Fault is recovered
Possible cause: Damaged pump, damaged circuit wires, damaged connector or damaged ECM output pins. **Service action:** Check for approximately 1 ohm between pins A and D of the fuel pump connector. Check for damaged circuit wires. Check for approximately 1 ohm between pins 1-26 and B-29. Check for damaged connector, damaged ECM output pins or ECM failure.										

FAULT CODE	RESPONSIBLE MODULE			BEEPER CODE	WARNING LIGHT	MESSAGE DISPLAYED (INFO CTR)	FAULT DETECTED WHILE ENGINE NOT RUNNING	FAULT DETECTED WHILE ENGINE RUNNING	LIMP HOME MODE	NORMAL OPERATION RESUME WHEN...
	INFORMATION CENTER	MPEM	ECM							
P0232	—	—	Fuel pump shorted to 12 V	15	Flash	CHK ENG	N	Y	N	Fault is recovered
Possible cause: Damaged pump, damaged circuit wires, damaged connector or damaged ECM output pins. **Service action:** Check for approximately 1 ohm between pins A and D of the fuel pump connector. Check for damaged circuit wires. Check for approximately 1 ohm between pins 1-26 and B-29. Check for damaged connector, damaged ECM output pins or ECM failure.										
P0261	—	—	Inj. #1 short-circuit to ground or open circuit	15	Flash	CHK ENG	N	Y	N	Fault is recovered
Possible cause: Damaged injector, damaged circuit wires, damaged connector or damaged ECM output pins. **Service action:** Check for 11.4 to 12.6 ohms between engine connector pin 1 and ECM connector pin 15. Check for 12 volts on pin 2 of injector connector.										
P0262	—	—	Inj. #1 short-circuit to 12 V	15	Flash	CHK ENG	N	Y	N	Fault is recovered
Possible cause: Damaged injector, damaged circuit wires, damaged connector or damaged ECM output pins. **Service action:** Check for 11.4 to 12.6 ohms between engine connector pin 1 and ECM connector pin 15. Check for 12 volts on pin 2 of injector connector.										
P0264	—	—	Inj. #2 short-circuit to ground or open circuit	15	Flash	CHK ENG	N	Y	N	Fault is recovered
Possible cause: Damaged injector, damaged circuit wires, damaged connector or damaged ECM output pins. **Service action:** Check for 11.4 to 12.6 ohms between engine connector pin 2 and ECM connector pin 33. Check for 12 volts on pin 2 of injector connector.										
P0265	—	—	Inj. #2 short-circuit to 12 V	15	Flash	CHK ENG	N	Y	N	Fault is recovered
Possible cause: Damaged injector, damaged circuit wires, damaged connector or damaged ECM output pins. **Service action:** Check for 11.4 to 12.6 ohms between engine connector pin 2 and ECM connector pin 33. Check for 12 volts on pin 2 of injector connector.										

FAULT CODE	RESPONSIBLE MODULE			BEEPER CODE	WARNING LIGHT	MESSAGE DISPLAYED (INFO CTR)	FAULT DETECTED WHILE ENGINE NOT RUNNING	FAULT DETECTED WHILE ENGINE RUNNING	LIMP HOME MODE	NORMAL OPERATION RESUME WHEN...
	INFORMATION CENTER	MPEM	ECM							
P0267	—	—	Inj. #3 short-circuit to ground or open circuit	15	Flash	CHK ENG	N	Y	N	Fault is recovered
Possible cause: Damaged injector, damaged circuit wires, damaged connector or damaged ECM output pins. **Service action:** Check for 11.4 to 12.6 ohms between engine connector pin 3 and ECM connector pin 14. Check for 12 volts on pin 2 of injector connector.										
P0268	—	—	Inj. #3 short-circuit to 12 V	15	Flash	CHK ENG	N	Y	N	Fault is recovered
Possible cause: Damaged injector, damaged circuit wires, damaged connector or damaged ECM output pins. **Service action:** Check for 11.4 to 12.6 ohms between engine connector pin 3 and ECM connector pin 14. Check for 12 volts on pin 2 of injector connector.										
P0326	—	—	Knock sensor out of range	15	Flash	CHK ENG	N	Y	N	Key is removed
Possible cause: Damaged sensor, damaged circuit wires, damaged connector or damaged ECM output pins. **Service action:** Bring engine to 5000 RPM. If fault code appears then check for approximately 5 Mohms between system circuits A-9 and A-23.										
P0336	—	—	Crank position sensor - wrong engine RPM detected	15	Flash	CHK ENG	—	—	—	—
Possible cause: Damaged sensor, damaged circuit wires, damaged connector, damaged ECM pins or damaged tooth wheel. **Service action:** For the CPS, check for 190 to 290 ohms between terminals A-5 and A-19 of ECM connector. For the CAPS, refer to camshaft position sensor. Check continuity for circuits A-20, A-34 and terminal 4 on engine connector.										
P0337	—	—	No CPS signal, but CAPS signal detected	15	Flash	CHK ENG	—	—	—	—
Possible cause: Damaged sensor, damaged circuit wires, damaged connector, damaged ECM pins or damaged tooth wheel. **Service action:** Check for 190 to 290 ohms between terminals A-5 and A-19 of ECM connector. Check for 2 volts AC while crancking the engine.										
P0337	—	—	No CPS signal, but CAPS signal detected	15	Flash	CHK ENG	N	N	N	Fault is recovered
Possible cause: Damaged sensor, damaged circuit wires, damaged connector, damaged ECM pins or damaged tooth wheel. **Service action:** Check for 190 to 290 ohms between terminals A-5 and A-19 of ECM connector.										

FAULT CODE	RESPONSIBLE MODULE			BEEPER CODE	WARNING LIGHT	MESSAGE DISPLAYED (INFO CTR)	FAULT DETECTED WHILE ENGINE NOT RUNNING	FAULT DETECTED WHILE ENGINE RUNNING	LIMP HOME MODE	NORMAL OPERATION RESUME WHEN...
	INFORMATION CENTER	MPEM	ECM							
P0339	—	—	Crank signal fault not plausible with cam signal	15	Flash	CHK ENG	—	—	—	—
Possible cause: Damaged sensor, damaged circuit wires, damaged connector, damaged ECM pins or damaged tooth wheel. **Service action:** For the CPS, check for 190 to 290 ohms between terminals A-5 and A-19 of ECM connector. For the CAPS, check for 12 volts on sensor connector pin 3. Check continuity for circuits A-20, A-34 and terminal 4 on engine connector.										
P0344	—	—	Cam phase sensor signal missing	15	Flash	CHK ENG	N	Y	N	Engine is stopped
Possible cause: Damaged sensor, damaged circuit wires, damaged connector, damaged ECM pins or damaged tooth wheel. **Service action:** For the CPS, check for 190 to 290 ohms between terminals A-5 and A-19 of ECM connector. For the CAPS, check for 12 volts on sensor connector pin 3. Check continuity for circuits A-20, A-34 and terminal 4 on engine connector.										
P0351	—	—	Ignition coil #1 open circuit or shorted to ground or to 12 V	15	Flash	CHK ENG	N	Y	5000	Engine is stopped
Possible cause: Damaged coil, damaged circuit wires, damaged connector or damaged ECM output pins. **Service action:** Check for 0.85 to 1.15 ohms between engine connector pin 1 and ECM connector pin A-41. Check for 12 volts on pin 2 of coil connector.										
P0352	—	—	Ignition coil #2 open circuit or shorted to ground or to 12 V	15	Flash	CHK ENG	N	Y	5000	Engine is stopped
Possible cause: Damaged coil, damaged circuit wires, damaged connector or damaged ECM output pins. **Service action:** Check for 0.85 to 1.15 ohms between engine connector pin 2 and ECM connector pin A-1. Check for 12 volts on pin 2 of coil connector.										
P0353	—	—	Ignition coil #3 open circuit or shorted to ground or to 12 V	15	Flash	CHK ENG	N	Y	5000	Engine is stopped
Possible cause: Damaged coil, damaged circuit wires, damaged connector or damaged ECM output pins. **Service action:** Check for 0.85 to 1.15 ohms between engine connector pin 3 and ECM connector pin A-29. Check for 12 volts on pin 2 of coil connector.										

FAULT CODE	RESPONSIBLE MODULE			BEEPER CODE	WARNING LIGHT	MESSAGE DISPLAYED (INFO CTR)	FAULT DETECTED WHILE ENGINE NOT RUNNING	FAULT DETECTED WHILE ENGINE RUNNING	LIMP HOME MODE	NORMAL OPERATION RESUME WHEN...
	INFORMATION CENTER	MPEM	ECM							
P0461	—	Fuel level sensor circuit out of range	—	4	Flash	SENSOR	Y	Y	N	Fault is recovered
Possible cause: Damaged sensor, damaged circuit wires, damaged connector or damaged MPEM output pins. **Service action:** Check for 2.6 (full tank) to 93.6 ohms (empty tank) between system circuits 1-1 and 1-21.										
P0462	—	Fuel level sensor shorted to ground	—	4	Flash	SENSOR	Y	Y	N	Fault is recovered
Possible cause: Damaged sensor, damaged circuit wires, damaged connector or damaged MPEM output pins. **Service action:** Check for no continuity between system circuit 1-21 and battery ground.										
P0463	—	Fuel level sensor circuit shorted to 12 V or open circuit	—	4	Flash	SENSOR	Y	Y	N	Fault is recovered
Possible cause: Damaged sensor, damaged circuit wires, damaged connector or damaged MPEM output pins. **Service action:** Check voltage between system circuit 1-21 and battery ground.										
P0505	—	—	DLA output stage cutoff memory difference	15	Off	CHK ENG	—	—	—	—
	—	—	DLA output stage fault	15	Off	N/A	Y	N	N	Fault is recovered
	—	—	DLA open circuit	15	Off	N/A	Y	N	N	Fault is recovered
	—	—	DLA short circuit to 12 V	15	Off	N/A	Y	N	N	Fault is recovered
Possible cause: Damaged actuator, damaged circuit wires, damaged connector or damaged ECM output pins. **Service action:** Check for approximately 50 ohms between pins A and D and also between pins B and C of the idle bypass valve. Check for damaged circuit wires. Check for approximately 50 ohms between pins A-36 and A-35 and also between pins A-37 and A-38. Check for damaged connector, damaged ECM output pins or ECM failure.										
P0513	—	—	DESS® incorrect key	15	Off	N/A	Y	N/A	N/A	N/A
Possible cause: DESS key not programmed. Wrong DESS key used. DESS key failure. **Service action:** Program the DESS key. Clean DESS key and DESS post contacts.										

FAULT CODE	RESPONSIBLE MODULE			BEEPER CODE	WARNING LIGHT	MESSAGE DISPLAYED (INFO CTR)	FAULT DETECTED WHILE ENGINE NOT RUNNING	FAULT DETECTED WHILE ENGINE RUNNING	LIMP HOME MODE	NORMAL OPERATION RESUME WHEN...
	INFORMATION CENTER	MPEM	ECM							
P0520	—	—	Oil pressure switch functional problem	5	Off	CHK ENG	Y	Y	2500	Fault is recovered
Possible cause: Engine leak, oil pump failure, damaged sensor, damaged circuit wires, damaged connector or damaged ECM pins. **Service action:** Check resistance at 0 RPM and above 3500 RPM. When blow-by pressure exceeds 40 kPa (6 PSI), the resistance is infinitely high.										
P0544	—	—	Exhaust gas temperature sensor functional problem	5	Flash	CHK ENG	N	Y	N	Fault is recovered
Possible cause: Damaged sensor, damaged circuit wires, damaged connector or damaged ECM output pins. **Service action:** Check for approximately 2280 to 2736 ohms at temperature of 19 to 21°C (66 to 70°F) between system circuits A-10 and A-26.										
P0545	—	—	Exhaust gas temperature sensor shorted to ground	5	Flash	CHK ENG	Y/N	Y	N	Fault is recovered
Possible cause: Damaged sensor, damaged circuit wires, damaged connector or damaged ECM output pins. **Service action:** Check for approximately 2280 to 2736 ohms at temperature of 19 to 21°C (66 to 70°F) between system circuits A-10 and A-26.										
P0546	—	—	Exhaust gas temperature sensor shorted to 12 V	5	Flash	CHK ENG	N	Y	N	Fault is recovered
	—	—	Exhaust gas temperature open circuit	5	Flash	CHK ENG	Y/N	Y	N	Fault is recovered
Possible cause: Damaged sensor, damaged circuit wires, damaged connector or damaged ECM output pins. **Service action:** Check for approximately 2280 to 2736 ohms at temperature of 19 to 21°C (66 to 70°F) between system circuits A-10 and A-26.										
P0562	—	—	Battery voltage too low	15	Flash	N/A	N	Y	N	Fault is recovered
Possible cause: Battery failure, rectifier failure, damaged circuit wires, battery terminal connection, damaged AC generator or damaged connectors. **Service action:** Check fuses. Check system circuits 1-25 to positive (+) battery terminal. Check system circuits 1-24 to negative (-) battery terminal.										

FAULT CODE	RESPONSIBLE MODULE			BEEPER CODE	WARNING LIGHT	MESSAGE DISPLAYED (INFO CTR)	FAULT DETECTED WHILE ENGINE NOT RUNNING	FAULT DETECTED WHILE ENGINE RUNNING	LIMP HOME MODE	NORMAL OPERATION RESUME WHEN...
	INFORMATION CENTER	MPEM	ECM							
P0563	—	—	Battery voltage too high	15	Flash	N/A	N	Y	N	Fault is recovered
Possible cause: Battery failure, rectifier failure or battery terminal connection. **Service action:** Check for regulator-rectifier failure.										
P0600	—	—	CAN communication problem detected by EMS	15	Flash	N/A	Y	Y	N	Fault is recovered
Possible cause: Damaged circuit wires, damaged connector, damaged ECM output pins. Diagnostic connector cap not connected. **Service action:** Check system circuits 1-16 & 1-17, 1-10 & 1-11, 2-10 & 2-11. Connect diagnostic connector cap.										
P0600	—	—	CAN communication problem MPEM message missing	15	Flash	N/A	Y	Y	N	Fault is recovered
Possible cause: Damaged circuit wires, damaged connector or damaged ECM output pins. **Service action:** Check system circuits 2-10 & 2-11.										
P0601	—	—	TPS learns unlikely or checksum fault	15	Flash	CHK ENG	—	—	—	—
Possible cause: ECM not coded, damaged ECM or TPS not initialized. **Service action:** Check cable adjustment. Check idle stop for wear. Check throttle angle at idle. Reset closed TPS.										
P0601	—	—	Module call monitoring	15	Flash	CHK ENG	—	—	—	—
Possible cause: Damaged ECM. **Service action:** Key on and off. Reset closed TPS. Check battery voltage. Replace TPS.										

FAULT CODE	RESPONSIBLE MODULE			BEEPER CODE	WARNING LIGHT	MESSAGE DISPLAYED (INFO CTR)	FAULT DETECTED WHILE ENGINE NOT RUNNING	FAULT DETECTED WHILE ENGINE RUNNING	LIMP HOME MODE	NORMAL OPERATION RESUME WHEN...
	INFORMATION CENTER	MPEM	ECM							
P0602	—	—	ECU not coded	15	Flash	CHK ENG	—	—	—	—
Possible cause: ECM not coded or damaged ECM. **Service action:** No service action available for fault P0602, symptom 142.										
P0604	—	—	RAM faulty	15	Flash	CHK ENG	—	—	—	—
Possible cause: Damaged ECM. **Service action:** No service action available for fault P0604, symptom 136.										
P0605	—	—	EEPROM faulty	15	Flash	CHK ENG	—	—	—	—
Possible cause: Damaged ECM. **Service action:** No service action available for fault P0605, symptom 137.										
P0605	—	—	Checksum fault EEPROM	15	Flash	CHK ENG	—	—	—	—
Possible cause: Damaged ECM. **Service action:** No service action available for fault P0605, symptom 143										
P0605	—	—	Coding ID checksum fault	15	Flash	CHK ENG	—	—	—	—
Possible cause: Damaged ECM. **Service action:** No service action available for fault P0605, symptom 144.										
P0605	—	—	Coding checksum fault	15	Flash	CHK ENG	—	—	—	—
Possible cause: Damaged ECM. **Service action:** No service action available for fault P0605, symptom 145.										
P0605	—	—	Programming checksum fault	15	Flash	CHK ENG	—	—	—	—
Possible cause: Damaged ECM. **Service action:** No service action available for fault P0605, symptom 146.										

FAULT CODE	RESPONSIBLE MODULE			BEEPER CODE	WARNING LIGHT	MESSAGE DISPLAYED (INFO CTR)	FAULT DETECTED WHILE ENGINE NOT RUNNING	FAULT DETECTED WHILE ENGINE RUNNING	LIMP HOME MODE	NORMAL OPERATION RESUME WHEN...
	INFORMATION CENTER	MPEM	ECM							
P0608	—	—	Sensor 5 V power supply short to ground	15	Flash	CHK ENG	Y	Y	N	Fault is recovered
Possible cause: Intake pressure sensor or TPS failure. Sensors power line shorted to ground. **Service action:** Check for MAPS or TPS failure. Check for MAPS or TPS circuit failure.										
P0608	—	—	Sensor 5 V power supply short to 12 V	15	Flash	CHK ENG	Y	Y	N	Fault is recovered
Possible cause: Intake pressure sensor or TPS failure. Sensors power line shorted to battery. **Service action:** Check for MAPS or TPS failure. Check for MAPS or TPS circuit failure.										
P0616	—	—	Starter relay shorted to ground	5	Flash	CHK ENG	N (fault detected while cranking)	Y	N	Fault is recovered
	—	—	Starter relay open circuit	5	Flash	CHK ENG	Y	Y	N	Key is removed
Possible cause: Damaged solenoid, damaged circuit wires, damaged connector or damaged ECM output pins. **Service action:** Verify 10 A fuse. Check for 12 volts on pin 2 of the starter relay.										
P0617	—	—	Starter relay shorted to 12 V	5	Flash	CHK ENG	Y/N (sometimes when pressing the Start/Stop switch)	N	N	Fault is recovered
Possible cause: Damaged solenoid, damaged circuit wires, damaged connector or damaged ECM output pins. **Service action:** Verify if system circuit B-31 is shorted to 12 V.										
P1102	—	—	Throttle position sensor adaption failure	15	Flash	CHK ENG	—	—	—	—
Possible cause: No initialisation after throttle body or ECM replacement or throttle idle stop drifted. **Service action:** Check cable adjustment. Check idle stop for wear. Make sure that the throttle plate is against the throttle stop. Check throttle angle at idle. Reset closed TPS.										

FAULT CODE	RESPONSIBLE MODULE			BEEPER CODE	WARNING LIGHT	MESSAGE DISPLAYED (INFO CTR)	FAULT DETECTED WHILE ENGINE NOT RUNNING	FAULT DETECTED WHILE ENGINE RUNNING	LIMP HOME MODE	NORMAL OPERATION RESUME WHEN...
	INFORMATION CENTER	MPEM	ECM							
P1104	—	—	Throttle position sensor adaptation canceled	15	Flash	CHK ENG	—	—	—	—
Possible cause: No initialisation after throttle body or ECM replacement or throttle idle stop drifted. **Service action:** Check cable adjustment. Check idle stop for wear. Make sure that the throttle plate is against the throttle stop. Check throttle angle at idle. Reset closed TPS.										
P1148	—	—	Fuel injector 1, 2 or 3 - safety fuel cut off detected	15	Off	CHK ENG	—	—	—	—
Possible cause: Idle bypass valve wrong reference, TPS adaptation failure, TPS failure or battery voltage out of range. **Service action:** Key on and off. Reset closed TPS. Check battery voltage. Replace TPS. Replace idle bypass valve.										
P1200	—	—	Blow by valve shorted to ground or open circuit	5	Flash	CHK ENG	Y/N	Y	5000	Fault is recovered
Possible cause: Blow-by valve failure, damaged circuit wires, damaged connector, damaged ECM pins or ECM failure. **Service action:** Check for 1.27 to 2.47 ohms on component.										
P1201	—	—	Blow by valve shorted to 12 V	5	Flash	CHK ENG	N	N	N	N/A
Possible cause: Blow-by valve failure, damaged circuit wires, damaged connector, damaged ECM pins or ECM failure. **Service action:** Check for 1.27 to 2.47 ohms on component.										
P1202	—	—	Oil tank pressure switch implausible or blow-by valve still closed	5	Flash	CHK ENG	N	N	N	N/A
Possible cause: Damaged oil pressure switch, blow-by valve failure, damaged circuit wires, damaged connector or damaged ECM pins. **Service action:** Check for 1.27 to 2.47 ohms between terminals. Check if TOPS is connected to wiring harness. Check resistance at 0 RPM and above 3500 RPM. At high RPM the resistance should be close to 0 ohm. Check for 12 volts on pin 1 of the blow-by valve.										
P1203	—	—	Unused	—	—	—	—	—	—	—

FAULT CODE	RESPONSIBLE MODULE			BEEPER CODE	WARNING LIGHT	MESSAGE DISPLAYED (INFO CTR)	FAULT DETECTED WHILE ENGINE NOT RUNNING	FAULT DETECTED WHILE ENGINE RUNNING	LIMP HOME MODE	NORMAL OPERATION RESUME WHEN...
	INFORMATION CENTER	MPEM	ECM							
P1502	—	—	TOPS functional problem	5	Flash	CHK ENG	Y	N/A	5000	Engine is stopped
Possible cause: Boat or sensor upside down, damaged circuit wires, damaged connector or damaged ECM output pins. **Service action:** Check for circuit continuity between pins 2-2 and B-9.										
P1509	—	Lake temperature sensor circuit out of range	—	15	Off	SENSOR	Y	Y	N	N/A
Possible cause: Damaged sensor, damaged circuit wires, damaged connector or damaged MPEM output pins. **Service action:** Check for 6528.3 to 25403.3 ohms between system circuits 2-13 and 2-4.										
P1510	—	Lake temperature sensor circuit low voltage	—	15	Flash	SENSOR	Y	Y	N	N/A
Possible cause: Damaged sensor, damaged circuit wires, damaged connector or damaged MPEM output pins. **Service action:** Check for no continuity between system circuit 2-13 and battery ground. Connect or disable lake water temperature sensor in setting page.										
P1511	—	Lake temperature sensor circuit high voltage	—	15	Off	SENSOR	Y	Y	N	N/A
Possible cause: Damaged sensor, damaged circuit wires, damaged connector or damaged MPEM output pins. **Service action:** Check for 6528.3 to 25403.3 ohms between system circuits 2-13 and 2-4. Connect or disable lake water temperature sensor in setting page.										
P1513	Exterior temperature sensor circuit low voltage	—	—	15	Off	SENSOR	Y	Y	N	N/A
Possible cause: Damaged sensor, damaged circuit wires, damaged connector or damaged MPEM output pins. **Service action:** Check for 200 to 24000 ohms between pins 1 and 9 of the instrument cluster harness connector. Connect or disable exterior air temperature sensor in setting page.										
P1514	Exterior temperature sensor circuit high voltage	—	—	15	Off	SENSOR	Y	Y	N	N/A
Possible cause: Damaged sensor, damaged circuit wires, damaged connector or damaged MPEM output pins. **Service action:** Check for 200 to 24000 ohms between pins 1 and 9 of the instrument cluster harness connector. Connect or disable exterior air temperature sensor in setting page.										

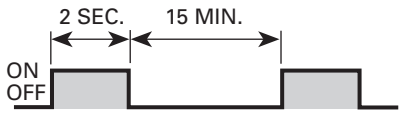
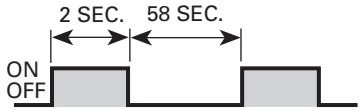
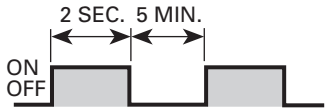
FAULT CODE	RESPONSIBLE MODULE			BEEPER CODE	WARNING LIGHT	MESSAGE DISPLAYED (INFO CTR)	FAULT DETECTED WHILE ENGINE NOT RUNNING	FAULT DETECTED WHILE ENGINE RUNNING	LIMP HOME MODE	NORMAL OPERATION RESUME WHEN...
	INFORMATION CENTER	MPEM	ECM							
P1517	Compass out of range	—	—	15	Off	SENSOR	Y	Y	N	N/A
Possible cause: Damaged sensor, damaged circuit wires, damaged connector or damaged MPEM output pins. **Service action:** Check compass connection. Connect or disable compass in setting page.										
P1590	—	VTS Position Sensor Circuit – Out of Range	—	15	Off	SENSOR	—	—	N	—
Possible cause: Damaged sensor, damaged circuit wires, damaged connector or damaged MPEM output pins. **Service action:** Check for 24 to 167.5 ohms between system circuits 2-8 and 2-9. Connect or disable VTS in setting page.										
P1591	—	VTS Position Sensor Circuit – Low Voltage	—	15	Off	SENSOR	—	—	N	—
Possible cause: Damaged sensor, damaged circuit wires, damaged connector or damaged MPEM output pins. **Service action:** Check for 24 to 167.5 ohms between system circuits 2-8 and 2-9. Connect or disable VTS in setting page.										
P1592	—	VTS Position Sensor Circuit – High Voltage	—	15	Off	SENSOR	—	—	N	—
Possible cause: Damaged sensor, damaged circuit wires, damaged connector or damaged MPEM output pins. **Service action:** Check for 24 to 167.5 ohms between system circuits 2-8 and 2-9. Connect or disable VTS in setting page.										
P1593	—	VTS Malfunction	—	15	Off	SENSOR	—	—	N	—
Possible cause: Mechanical failure on VTS or VTS mechanically immobilized. **Service action:** Check VTS rod.										
P1607	—	MPEM FAULT	—	15	N/A	—	—	—	N	—
Possible cause: Damaged MPEM. **Service action:** No service action available for fault P1607.										

FAULT CODE	RESPONSIBLE MODULE			BEEPER CODE	WARNING LIGHT	MESSAGE DISPLAYED (INFO CTR)	FAULT DETECTED WHILE ENGINE NOT RUNNING	FAULT DETECTED WHILE ENGINE RUNNING	LIMP HOME MODE	NORMAL OPERATION RESUME WHEN...
	INFORMATION CENTER	MPEM	ECM							
P1611	—	—	P+ Test of ISC output signal failed	15	Off	CHK ENG	Y	Y	N	Fault is recovered
Possible cause: Intake pressure sensor or TPS failure. Sensors power line shorted to ground or to battery. Damaged ECM. **Service action:** Key on and off. Reset closed TPS. Check battery voltage. Replace TPS. Replace idle bypass valve.										
P1655	—	—	DESS line shorted to 12 V	15	Flash	CHK ENG	Y	N	N	N/A
Possible cause: Damaged safety switch, damaged circuit wires, damaged connector or damaged ECM output pins. **Service action:** Remove DESS key and check for an open circuit on system circuit B-38.										
P1656	—	—	DESS line shorted to ground	15	Flash	CHK ENG	Y	N	N	N/A
Possible cause: Damaged safety switch, damaged circuit wires, damaged connector or damaged ECM output pins. **Service action:** Remove DESS key and check for an open circuit on system circuit B-38.										
P1660	—	Bilge pump shorted to ground or open circuit	—	5	N/A	N/A	Y	N	N	N/A
Possible cause: Damaged bilge pump, damaged circuit wires, damaged connector or damaged MPEM output pins. **Service action:** Check system circuits 2-20 and 2-3. Connect or disable bilge pump in setting page.										
P1661	—	Bilge pump shorted to 12 V	—	5	N/A	N/A	Y	Y	N	N/A
Possible cause: Damaged bilge pump, damaged circuit wires, damaged connector or damaged MPEM output pins. **Service action:** Check system circuits 2-20 and 2-3.										
P1670	—	Buzzer – Short to Battery Voltage	—	15	N/A	N/A	Y	Y	N	N/A
Possible cause: Damaged connector or damaged MPEM output pins. **Service action:** Check system circuit 1-20.										

FAULT CODE	RESPONSIBLE MODULE			BEEPER CODE	WARNING LIGHT	MESSAGE DISPLAYED (INFO CTR)	FAULT DETECTED WHILE ENGINE NOT RUNNING	FAULT DETECTED WHILE ENGINE RUNNING	LIMP HOME MODE	NORMAL OPERATION RESUME WHEN...
	INFORMATION CENTER	MPEM	ECM							
P1675	—	Spare output 1 shorted to ground or open circuit	—	15	N/A	N/A	Y	Y	N	N/A
Possible cause: Damaged component, damaged circuit wires, damaged connector or damaged MPEM output pins. **Service action:** Connect component or disable spare output 1 in setting page.										
P1676	—	Spare output 1 shorted to 12 V	—	15	N/A	N/A	Y	Y	N	N/A
Possible cause: Damaged component, damaged circuit wires, damaged connector or damaged MPEM output pins. **Service action:** Connect component or disable spare output 1 in setting page.										
P1678	—	Spare output 2 shorted to ground or open circuit	—	15	N/A	N/A	Y	Y	N	N/A
Possible cause: Damaged component, damaged circuit wires, damaged connector or damaged MPEM output pins. **Service action:** Connect component or disable spare output 2 in setting page.										
P1679	—	Spare output 2 shorted to 12 V	—	15	N/A	N/A	Y	Y	N	N/A
Possible cause: Damaged component, damaged circuit wires, damaged connector or damaged MPEM output pins. **Service action:** Connect component or disable spare output 2 in setting page.										
P1680	—	Communication problem detected by MPEM	—	5	N/A	N/A	Y	Y	N	N/A
Possible cause: Damaged circuit wires, damaged connector, damaged MPEM output pins. Diagnostic connector cap not connected. **Service action:** Connect diagnostic connector cap.										
P1681	—	Communication problem – instrument cluster message missing	—	5	N/A	N/A	Y	Y	N	N/A
Possible cause: Damaged circuit wires, damaged connector, damaged MPEM output pins. Instrument cluster not connected. **Service action:** Check system circuits 1-10 and 1-11. Check for 12 volts between pins 7 and 8 on the instrument cluster harness connector. Check 1A fuse. Connect instrument cluster.										

FAULT CODE	RESPONSIBLE MODULE			BEEPER CODE	WARNING LIGHT	MESSAGE DISPLAYED (INFO CTR)	FAULT DETECTED WHILE ENGINE NOT RUNNING	FAULT DETECTED WHILE ENGINE RUNNING	LIMP HOME MODE	NORMAL OPERATION RESUME WHEN...
	INFORMATION CENTER	MPEM	ECM							
P1682	—	Communication problem - EMS message missing	—	5	N/A	N/A	Y	Y	N	N/A
Possible cause: Damaged circuit wires, damaged connector, damaged MPEM output pins. ECM not connected. **Service action:** Check system circuits 2-10 and 2-11. Check for 12 volts between system circuit A-11 and ground. Check 5A fuses. Check connection.										
P1683	—	—	COM RAM Fault	15	Flash	N/A	—	—	—	—
Possible cause: Damaged ECM. **Service action:** No service action available for fault P1683, symptom 88.										
P1690	—	VTS control up circuit open circuit or shorted to ground	—	15	Off	N/A	Y	Y	N	N/A
Possible cause: Damaged VTS, damaged circuit wires, damaged connector or damaged MPEM output pins. **Service action:** Check for 12 volts between system circuits 2-7 and 2-1 when VTS UP is activated.										
P1691	—	VTS control up circuit shorted to battery	—	15	Off	N/A	Y	Y	N	N/A
Possible cause: Damaged VTS, damaged circuit wires, damaged connector or damaged MPEM output pins. **Service action:** Check for 12 volts between system circuits 2-7 and 2-1 when VTS UP is activated.										
P1692	—	VTS control down circuit open circuit or shorted to ground	—	15	Off	N/A	y	y	N	N/A
Possible cause: Damaged VTS, damaged circuit wires, damaged connector or damaged MPEM output pins. **Service action:** Check for 12 volts between system circuits 2-6 and 2-1 when VTS DOWN is activated.										
P1693	—	VTS control down circuit shorted to battery	—	15	Off	N/A	y	y	N	N/A
Possible cause: Damaged VTS, damaged circuit wires, damaged connector or damaged MPEM output pins. **Service action:** Check for 12 volts between system circuits 2-6 and 2-1 when VTS DOWN is activated.										

Beeper Code Explanation

BEEPER CODE	BEEPER PATTERN	NOTE
15		Always OFF
6		2 second beep every 15 minutes
5		2 second beep every 58 seconds
4		2 second beep every 5 minutes
2		Always ON (continuously beep)

F18R0GS

Fuse and Related Fault Code

FUSE	RATING (A)	FAULT CODE	FAULT DETECTED WHILE ENGINE NOT RUNNING
TOPS	10	P0344, P1200	N
Depth gauge (if so equipped) or spare fuse	2	P1675	Y
Cylinder #3 ignition coil and injection	10	P0353, P0267	N
Information center	1	P1680, P1681	N
Cylinder #2 ignition coil and injection	10	P0352, P0264	N
Cylinder #1 ignition coil and injection	10	P0351, P0261	N
Bilge pump (optional), beeper, diagnostic connector	3	P0616	Y
Spare fuse	5	P1678	Y
Electric starter, fuel pump	10	P0231	Y
MPEM	2	P0600	N
VTS (if so equipped)	7.5	P1690, P1692	N
EMS, start/stop circuit	5	None	N