MERCRUISER ALARMS AND FAULT CODES

Applies to Mercruiser engines with PCM 555, including 496 MAG and 8.1S. Similar to ECM 555 engines (4.3, 5.0, 350, 6.2).

"Pwr Limit" = percentage of power available (may be limited by Engine Guardian).

Engine Coolant Temp (ECT) sensor (near thermostat) measures temperature of closed-circuit coolant.

Exhaust Manifold Coolant Temp (EMCT) sensors (on port and stbd manifolds) measure temperature of raw water exiting manifolds.

Alarm	#	Fault	Pwr Limit	Description
Constant	4	ECT Coolant Overheat	6-100%	Overheat condition detected by Engine Coolant Temp (ECT) circuit.
horn	13	Low Oil Pressure Strategy	0-100%	Low oil pressure strategy. Stop immediately and check engine oil.
	19	Overspeed	RPM Limit	Engine over RPM limit
	22	Port EMCT CKT Overheat	6-100%	Overheat in port Exhaust Manifold Coolant Temp (EMCT), 212°F (100°C)
	23	Sea Pump PSI Lo	6-100%	Low water pressure strategy, defaults to 43.4 psi.
	28	STB EMCT CKT Overheat	6-100%	Overheat in stbd Exhaust Manifold Coolant Temp (EMCT), 212°F (100°C)
Steady beeps	12	Low Drive Lube Strategy	0-100%	Low oil in sterndrive. Stop immediately and check drive lube bottle.
2 beeps	1	Cam Sensor	90%	Open or short in cam sensor. Engine must be cranking to set this code.
once per	2	ECT CKT HI	90%	Open in Engine Coolant Temp (ECT) circuit
minute	3	ECT CKT LO	90%	Short in Engine Coolant Temp (ECT) circuit
	5	EST 1-8 Open	100%	Open in Electronic Spark Timing (EST) circuit. Check plug wires.
	6	EST 1-8 Short	100%	Short in Electronic Spark Timing (EST) circuit. Check plug wires.
	7	Fuel Injector 1-8 Open	100%	Open in fuel injector circuit.
	8	Fuel Injector 1-8 Short	100%	Short in fuel injector circuit.
	9	IAC Output	90%	Faulty Idle Air Control (IAC) valve. Only with RPM
	10	Knock Sensor 1	90%	Alarm sounds for 20 seconds in NEUTRAL, and indefinitely in gear.
	11	Knock Sensor 2	90%	Alarm sounds for 20 seconds in NEUTRAL, and indefinitely in gear.
	14	MAP Sensor 1 Input High	90%	Short in Manifold Absolute Pressure (MAP) circuit (No visual on SC1000)
	15	MAP Sensor 1 Input Low	90%	Open in Manifold Absolute Pressure (MAP) circuit (No visual on SC1000)
	16	MAT Sensor	90%	Open or short in Manifold Air Temperature (MAT) circuit.
	17	Oil PSI CKT Hi	90%	Short in oil pressure circuit, defaults to 51.7 psi.
	18	Oil PSI CKT Lo	90%	Open in oil pressure circuit, defaults to 0 psi.
	20	Port EMCT CKT Hi	90%	Open in port Exhaust Manifold Coolant Temp (EMCT), defaults to 32°F.
	21	Port EMCT CKT Lo	90%	Short in port Exhaust Manifold Coolant Temp (EMCT), defaults to 32°F.
	24	Sea Pump CKT Hi	90%	Open in raw water pressure circuit.
	25	Sea Pump CKT Lo	90%	Short in raw water pressure circuit.
		STB EMCT CKT Hi	90%	Open in stbd Exhaust Manifold Coolant Temp (EMCT), defaults to 32°F.
	27	STB EMCT CKT Lo	90%	Short in stbd Exhaust Manifold Coolant Temp (EMCT), defaults to 32°F.
	30	TPS1 CKT Hi	90%	Short in Throttle Position Sensor (TPS) circuit, signal to 5v+, engine will not start. Refer to data monitor screen.
	31	TPS1 CKT Lo	90%	Open in Throttle Position Sensor (TPS) circuit.
	32	TPS1 Range Hi	90%	Above 4.8v, 994 counts in Throttle Position Sensor (TPS) circuit.
	33	TPS1 Range Lo	90%	Below 0.5v, 35 counts in Throttle Position Sensor (TPS) circuit.
	36	5 VDC PWR Low	varies	Short any 5v+ to ground.
No alarm	29	Steer CKT Hi	100%	Open and short in steering angle sensor circuit.
	34	Trim CKT Hi	100%	Short in trim sensor, high range, visual warning on SC1000 only.
	35	Trim CKT Lo	100%	Open in trim sensor, low range, visual warning on SC1000 only.