REELMASTER 3500, 3550, 3555, 3575

DIAGNOSTIC FAULT CODE QUICK REFERENCE TABLE

TORO Count on it.

Fault Number	Fault Title	Controller Affected	Fault Condition/Circuit Description	Additional Notes	Service Actions
13	Master Board Internal Error	Master	This fault is reported when the master TEC inputs are below 5.5 volts and cannot be trusted.	The master TEC will shut the engine down when this fault occurs.	1) Replace the TEC if the fault continuously repeats.
15	Overtemp Bulb-Current High	Master	This fault is reported when the current through the overtemp bulb circuit (master TEC output pin 12) exceeds 5 Amps.		1) Test the output circuit to ensure it is not shorted. 2) Test the overtemp bulb circuit (output pin 12)
16	Engine Temperature Warning	Master	This fault is reported when the engine coolant temperature has been above 105 °C (220 °F) for at least 3 seconds.	The PTO will be shut down when this fault is reported.	1) Allow the machine to cool. 2) Check the cooling fan function. 3) Ensure the airflow passages are clear. 4) Check the engine coolant level to ensure it is within specifications.
17	Engine Temperature Shutdown	Master	This fault is reported when the engine coolant temperature has been above 115 °C (240 °F) for at least 10 seconds.	The master TEC will shut the engine down when this fault occurs.	1) Allow the machine to cool. 2) Check the cooling fan function. 3) Ensure the airflow passages are clear. 4) Check the engine coolant level to ensure it is within specifications.
18	Engine Oil Pressure	Master	This fault is reported when the engine is running and the oil pressure circuit (master TEC input pin 10) is not active.		1) Check the engine oil level. 2) Test the engine oil pressure to ensure it is within specification.

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19	Alternator Fault	Master	This fault is reported when the alternator fault circuit (master TEC input pin 9) is active.	If the engine oil pressure is high and the fault is still reporting, the alternator may require service.	1) Test the battery voltage. 2) Test the charging system function. 3) Inspect the charging system wiring and connectors.
21	Charging System Fault- High Voltage	Master	This fault is reported when the charging system voltage rises above 16.3 volts.		1) Test the alternator function. 2) Inspect the alternator wiring and connectors. 3) Test the master TEC input at pin 9.
22	Charging System Fault- Low Voltage	Master	This fault is reported when the charging system voltage drops below 8.8 volts.		1) Test the alternator function. 2) Inspect the alternator wiring and connectors. 3) Test the master TEC input at pin 9.
23	Output Fuse A Fault	Master	This fault is reported when Fuse A fails on the power supply circuit of the master TEC.		1) Inspect the 7.5 amp fuse 2) Replace the TEC if everything else checks out and the fault continuously repeats.
24	Output Fuse B Fault	Master	This fault is reported when fuse B fails on the power supply circuit of the master TEC.		1) Inspect the 7.5 amp fuse. 2) Replace the TEC if everything else checks out and the fault continuously repeats.
25	Output Fuse C Fault	Master	This fault is reported when fuse C fails on the power supply circuit of the master TEC.		1) Inspect the 7.5 amp fuses. 2) Replace the TEC if everything else checks out and the fault continuously repeats.
26	Main Power Relay Fault	Master	This fault is reported when the TEC 5002 detects all three of the 12 Vdc battery voltage circuits to the master TEC are open.	Use Toro DIAG to save the machine timers and counter file before replacing the TEC-5002 controller.	1) Check all 3 of the 7.5 amp fuses. 2) Test the main power relay. 3) Test the wiring harness. 4) Replace the TEC if everything else checks out and the fault continuously repeats.

Fault Number	Fault Title	Controller Affected	Fault Condition/Circuit Description	Additional Notes	Service Actions
31	Starter Relay Current High	Master	The current through the starter relay circuit (master TEC output pin 1) is more than 5 amps.		1) Check that the output circuit (pin 1) is not shorted. 2) Test the starter relay function. 3) Inspect the starter relay wiring and connectors. 4) Replace the TEC if everything else checks out and the fault continuously repeats.
33	ETR – High Current	Master	The current through the ETR circuit (master TEC output pin 2) is more than 5 amps.		1) Check that the output circuit (pin 2) is not shorted. 2) Test the fuel pump. 3) Inspect the fuel pump wiring and connectors. 4) Replace the TEC if everything else checks out and the fault continuously repeats.
35	Preheat Relay – High Current	Master	The current through the preheat relay circuit (master TEC output pin 3) is more than 5 amps.		1) Check that the output circuit (pin 3) is not shorted. 2) Test the preheat relay function. 3) Inspect the glow relay
41	Front PTO solenoid – High Current	Master	The current through the front PTO circuit (master TEC output pin 7) is more than 2.3 amps.		1) Check that the output circuit (pin 7) is not shorted. 2) Test the front PTO solenoid function. 3) Inspect the front PTO solenoid wiring and connectors. 4) Replace the TEC if everything else checks out and the fault continuously repeats.
51	Lift/Lower Enable (SV1) solenoid – High Current	Master	The current through the SV1 circuit (master TEC output pin 5) is more than 5 amps.		1) Check that the output circuit (pin 5) is not shorted. 2) Test the lift/lower enable (SV1) solenoid function. 3) Inspect the lift/lower (SV1) solenoid wiring and connectors. 4) Replace the TEC if everything else checks out and the fault continuously repeats.

Fault Number	Fault Title	Controller Affected	Fault Condition/Circuit Description	Additional Notes	Service Actions
53	Lift (SV2) solenoid – High Current	Master	The current through the SV2 circuit (master TEC output pin 8) is more than 5 amps.		1) Check that the output circuit (pin 8) is not shorted. 2) Test the lift (SV2) solenoid function. 3) Inspect the lift (SV2) solenoid wiring and connectors. 4) Replace the TEC if everything else checks out and the fault continuously repeats.
55	Front Enable (SV3) solenoid – High Current	Master	The current through the SV3 circuit (master TEC output pin 9) is more than 5 amps.		1) Check that the output circuit (pin 9) is not shorted. 2) Test the front enable (SV3) solenoid function. 3) Inspect the front enable (SV3) wiring and connectors. 4) Replace the TEC if everything else checks out and the fault continuously repeats.
57	Rear Enable (SV4) Solenoid – Current High	Master	The current through the SV4 circuit (master TEC output pin 10) is more than 5 amps.		1) Check that the output circuit (pin 10) is not shorted. 2) Test the rear enable (SV4) solenoid function. 3) Inspect the rear enable (SV4) wiring and connectors. 4) Replace the TEC if everything else checks out and the fault continuously repeats.
62	Coolant Sensor - Short	Master	The coolant sensor circuit is shorted.		1) Test the coolant sensor. 2) Inspect the wiring and connectors in the coolant sensor circuit.
63	Coolant Sensor - Open	Master	The coolant sensor circuit is open.		1) Test the coolant sensor. 2) Inspect the wiring and connectors in the coolant sensor circuit.

Fault Number	Fault Title	Controller Affected	Fault Condition/Circuit Description	Additional Notes	Service Actions
131	Node Error 131	Master	This fault is reported when high current is detected, but cannot be associated with any specific output channel.		1) Test the functionality of the machine. 2) If any additional fault codes are reported, address them first and see if Fault 131 still reports after those repairs are complete. 3) Replace the TEC if everything else checks out and the fault continuously repeats.