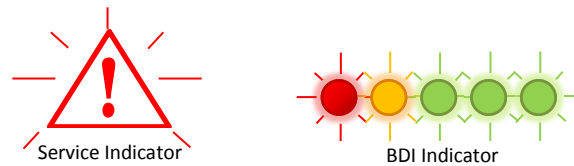


T350 Scrubber Display Fault Guide

UI Rev 1.10 or later

Machine fault codes are displayed on the Battery Discharge Indicator (BDI) when the service icon is flashing and the BDI LED's are flashing at the same rate. The table below describes the fault codes based on which BDI LED's are lit. Not all faults will be available on every machine as it varies based on the machine variant configuration. The action column is provided for reference and may not contain all possible actions.



BDI Blink Pattern	Code(s)	Fault Condition	Action
		Unknown Fault	
	0x0201	Actuator Open Warning	Wiring, connector or control board issue on the actuator.
	0x0101	Scrub Motor Open Warning	Wiring, connector or control board issue on the scrub motor.
	0x0501	Vacuum Motor Open Warning	Wiring, connector or control board issue on the vacuum.
	0x0601	Detergent Pump Open Warning	Wiring, connector or control board issue on the detergent pump.
	0x0910	Propel Breaker Tripped Fault	Disconnect battery and reset the circuit breaker. If issue persists, contact service.
	0x0901	Propel Motor Open Fault	Motor on the propel I-Drive is not connected.
	0xF102	Charger Overheat	Charger environment is not cool enough and cannot complete charge. Move machine to well-ventilated area.
	0x0301	Solution Valve Open Warning	Wiring, connector or control board issue on the solution valve.
	0x0711	EC H ₂ O Pump Open Warning	Wiring, connector or control board issue on the EcH ₂ O pump.
	0x0303	Solution Valve Over Current	Current draw higher than expected.
	0xF101	Charger No Load Warning	Battery pack may not be plugged into the charger.

T350 Scrubber Display Fault Guide

UI Rev 1.10 or later

BDI Blink Pattern	Code(s)	Fault Condition	Action
	0xF104	Charger Timer Phase I Fault	The battery is taking too long to charge. It may be in bad condition. Contact service.
	0xF103 0xFF20 0x0B04 0x0704 0xFF1F	Charger CAN Fault CAN Communication Fault Battery Watering CAN Fault EC-H ₂ O CAN Fault CAN Buffer Full Fault	Power cycle machine. If fault persists, contact service. Charger not communicating.
	0x0713 0x0714 0x0715	EC-H ₂ O Pump HW Over Current EC-H ₂ O Pump SW Over Current 1 EC-H ₂ O Pump SW Over Current 2	Current draw higher than expected. Contact service.
	0x0717	EC H ₂ O Pump FET Fault	Contact service to replace ech2O circuit board.
	0x0900 0x0903 0x0904 0x0905 0x0906 0x0907 0x0908 0x0909 0x090A 0x090B 0x090C 0x090D 0x090E 0x090F 0x0911 0x0912 0x0913 0x0914 0x0915 0x0916 0x0917 0x0918 0x0919 0x091A 0x091B 0x091C 0x091D 0x091E 0x091F 0x0920 0x0921 0x0922 0x0923 0x0924 0x0926 0x0927 0x0928 0x0929	Propel Generic Propel Communication lost Propel Power Cycle Needed Propel Current Limit Sense Propel Motor Short Low Fault Propel Motor Short High Fault Propel RAM Check Error Propel Data Check Error Propel Tiller Low Reference Propel Gone to Sleep Propel EEPROM Write Error Propel EEPROM Write Timeout Propel EEPROM Busy at Startup Propel EEPROM Address Range Propel Forward ISO Test Fail Propel Forward Input Range Propel Joystick Error Right 2 Propel Solenoid Brake Propel Brake Status Low Propel Brake Not Connected Propel Brake Interlock Fault Propel Relay Interlock Fault Propel Relay Stuck Closed Propel Relay Coil Voltage Propel Watchdog Tripped Propel Positive Current Feedback Null Propel Positive Current Feedback Out of Range Propel Negative Current Feedback Null Propel Negative Current Feedback Out of Range Propel Speed Wiper Bounds Propel Speed Control Reference Propel Throttle Trip Reference Propel High Battery Voltage Propel High Battery Voltage 2 Propel Inhibit 2 Active Propel Inhibit 3 Active Propel Watchdog Count Error Propel Bad Setting	Power cycle machine. If fault persists, contact service.

T350 Scrubber Display Fault Guide

UI Rev 1.10 or later

BDI Blink Pattern	Code(s)	Fault Condition	Action
	0x092A 0x092B 0x092C 0x092D 0x092E 0x092F 0x0930 0x0931 0x0932 0x0933 0x0934 0x0935 0x0936 0x0937 0x0938 0x0939 0x093A 0x093B 0x093C 0x093D 0x093E 0x093F 0x0940 0x0941 0x0942 0x0943 0x0950	Propel Direction Inputs Disagree Propel Positive Feedback Voltage Null Propel Positive Feedback Voltage Out of Range Propel Output Voltage Tracking Propel Negative Feedback Voltage Null Propel Negative Feedback Voltage Out of Range Propel ROM Check Error Propel EEPROM Check Error Propel Internal 12V Error Propel Low Battery Propel Very Low Battery Propel Out of Time Propel Low Bridge Voltage Propel Bridge Voltage Greater Than Battery Propel Stack Overflow Propel Illegal State Propel Trip Sense Active Propel Trip Sense Not Active Propel Trip Latch Not Armed Propel Failed To Arm Trip Latch Propel Trip Latch Became Unarmed Propel Left Motor Shorted Low Propel Controller Fault Propel Soft Belly Button Active Propel Internal Temperature Sensor Propel Motor Temp Sensor Propel Incorrect Profile	
	0x0B11	Battery Watering Pump Open Warning	Propel motor shorted. Check wiring.
	0x0103 0x0104 0x0105	Scrub Motor HW Over Currents Scrub Motor SW Over Current 1 Scrub Motor SW Over Current 2	Current draw higher than expected. Contact service.
	0x0703 0x0712	EC-H ₂ O Breaker Tripped EC-H ₂ O Pump Breaker Tripped	Reset Breaker. If trips again, contact service.
	0x0902	High Throttle Fault	Release bail or bail obstruction before turning on the machine.
	0x0107 0x0207 0x0307 0x0507 0x0607 0x0B17	Scrub Motor FET Fault Actuator Motor FET Fault Valve FET Fault Vacuum Motor FET Fault Detergent Pump FET Fault Battery Watering Pump FET Fault	Contact service to replace control board. FET detection includes motor, actuator, valve, detergent pump, and vacuum
	0x0503 0x0504 0x0505	Vacuum HW Over Current Fault Vacuum SW Over Current 1 Fault Vacuum SW Over Current 2 Fault	Current draw higher than expected. Contact service.
	0x0506	Vacuum Shorted Load	Vacuum shorted. Check wiring.

T350 Scrubber Display Fault Guide

UI Rev 1.10 or later



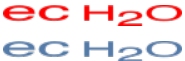
BDI Blink Pattern	Code(s)	Fault Condition	Action
	0x0603 0x0604 0x0605 0x0606	Deterg. Pump HW Over Current Deterg. Pump SW Over Current 1 Deterg. Pump SW Over Current 2 Detergent Pump Shorted Load	Current draw higher than expected. Contact service.
	0x0B01 0x0B02 0x0B13 0x0B14 0x0B15 0x0B16	ABW Timed Out ABW No Feedback Fault Battery Watering Pump HW Over Current Battery Watering Pump SW Over Current 1 Battery Watering Pump SW Over Current 2 Battery Watering Pump Shorted Load	Automated battery watering system faults.
	0x0943	Propel Motor Temp Sensor	Propel motor overheated. Let the motor cool down and power cycle machine. If fault persists, contact service.
	0xF100	Charger Fault	An error condition has occurred with the charger unit. Contact service.
	0x0106	Scrub Motor Shorted Load	Scrub Motor shorted. Check wiring.
	0x0102	Scrub Motor Voltage Loss	Inline fuse may be blown or bad.
	0xFFFF0	E-Stop Active	Release E-Stop button and power cycle machine to clear.

Icon	Code	Condition	Action
	0x0781	Detergent Tank Empty	This blinking icon indicates the detergent tank level is too low to operate correctly. Refill the detergent to clear the indicator.
	*	EC H ₂ O Issue	This icon is used for a variety of fault codes. See the table below for list of fault conditions.
 Slow blink	0x0B06	Battery Watering Tank Empty	This blinking icon indicates the battery watering tank level is too low to operate correctly. Refill the detergent to clear the indicator.
 solid	0x0B05	Battery Watering Plumbing Warning	Attempted to water batteries but didn't take water. Batteries could be full or kinked plumbing hose. Key cycle to reset.
 Fast blink	0x0B07	Battery Watering Suspend Scrub Lockout	Fast blinking icon indicates the scrub functions have been disabled as the Battery Watering tank has been empty too long.

T350 Scrubber Display Fault Guide

UI Rev 1.10 or later

EC H₂O Nanoclean Icon Faults

Icon	Code	Condition	Action
	0x0703 0x0704 0x0711 0x0712 0x0713 0x0716 0x0717 0x0727 0x072A 0x0741 0x0746	EC-H ₂ O Electrical Faults	See the Gen II EC-H ₂ O Fault List.
	0x0702 0x0708 0x0721 0x0723 0x0726 0x0728 0x072A	EC-H ₂ O Water and Plumbing Faults	See the Gen II EC-H ₂ O Fault List.
	0x0707	WCM Cartridge Expired	Replace cartridge and reset the module for new cartridge.