

Release Date:
June 21, 2024



Technical Service Bulletin

MODEL(S) AFFECTED: S780 (EMEA/ANZ) / S880 (NA/EMEA) Ride-On Sweepers

SUBJECT: Intermittent propel issue.

PURPOSE: To resolve issue, check the components involved in the potential intermittent propel as described below.
Troubleshooting check points: Interlock Switch, Inverter Board and Propel Board.

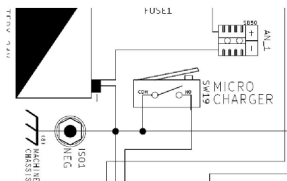
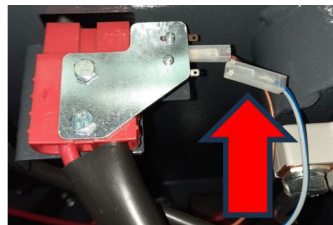
NOTES: Standard warranty terms applies.

Interlock Switch (p/n MECI00588):
Locate the Interlock tab beside the Anderson connector, it is on the RH side of the battery compartment.



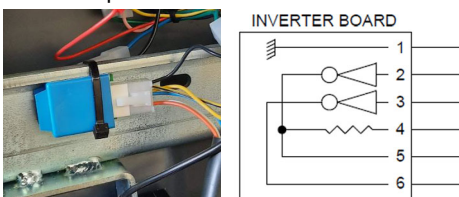
To test its functioning, use a multimeter and check the variation of continuity if tab is being pressed; by-pass the switch by disconnecting one wire, the propel operates correctly if the switch is being unplugged from the wiring.

Position on of the interlock switch on the wiring schematic.

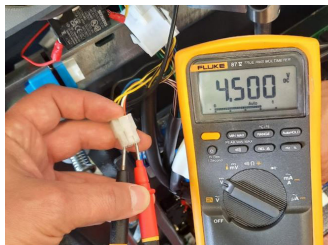


Inverter Board (p/n MECE00915):
Open the front plastic cover and locate the blue Inverter board on top LH side, underneath the direction switch. Switch on the machine.

Schematic of the Inverter board, fitted with a 6-pin connector.



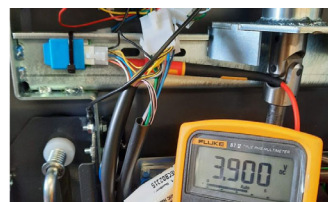
With the machine switched on, unplug the 6-pins connector and point the multi-meter between pin 1 (GND) and 3(input), the reading is about 4.5V



Point the multimeter between pin 1 and 6, the reading is about 3.6 – 3.8V



Connect the 6-pins connector with the inverter board, reading between GND and pin 3 must be around 4V, reading between GND and pin 6 must be around 0V.

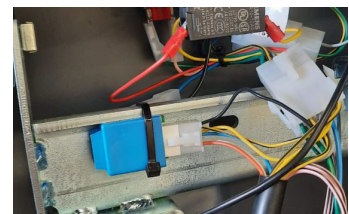


Disconnect the 6-pins connector from the inverter board, between GND and pin 2 the reading is 0V when forward direction is selected, and 24V when the backward direction is selected.

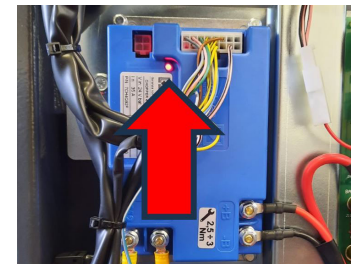


Connect the 6-pins connector with the inverter board, when forward is selected the reading between GND and pin 2 is 0V and the reading between GND and pin 4 and 5 is 24V.
When backward is selected the reading between GND and pin 2 is 24V, pin 4 is 24V and pin 5 is 0V.

NOTE: in case the inverter board is unplugged from the wiring, the machine propel only in reverse, forward direction is inhibited.



Propel Board (p/n MECE00925):
Locate the Italsea propel board in the front compartment, this board is equipped with a diagnostic red LED indicated in the picture. During correct operation the LED is steady ON, in case of any error the LED flashes. Count the number of flashes and refer to the Italsea Propel Board Manual to correct diagnose the issue.



Codes can be read using the external "7PROGLCD" handheld programmer.

Wiring Schematic and Italsea Propel Board Manual are attached.