## **Troubleshooting the Gladiator**

ref.	Display Error Code	Brush	Vacuum	Traction	Error Source	Cause	Solution
1	Traction Problem	Off	Off	Off	Power Card	a- Traction card failure, short circuit inside the Mos- fet	a- Check if traction motor runs smoothly. Check power consumption is ≈10-12A on flat surface. Replace the power card.
	Motor Temperature Pause	Off	Off	Off	Traction Motor Temperature Sensor >95°C	a-Traction motor temperature is >95°C	a-Wait $\approx$ 30' for the machine temperature to go down
2						b- Thermic sensor is defective, cable is interrupted.	b- Check with a multimeter the continuity of the wires.
						c-The display card is defective.	c- Replace display card.
	Traction Temperature Pause	Off	Off	Off	Power Card	a- Power card temperature sensor >85°C	a- Wait $\approx$ 30' that the main board temperature go down
3						b- Charge pump in the display card is defective, error appear $\approx$ every 15 min	b- Check the parameter charge pump (after enabling UPB1 in tech menu) it must be 36V, if no replace the card.
	Brush Worn Out	On	On	On	Brush, Actuator	a-The bottom limit switch inside actuator is pressed by the shaft.	a- Check that the limit switch works correctly and is not stuck.
4						b-The bristles are short and the actuator reach limit range.	b- Replace the main brush.
						c- Pressure is too high for the surface.	c- Reduce the pressure in the 3 programs.
						a- Accelerator potentiometer is interrupted.	a- Replace the potentiometer.
5	Accelerator Cable	Off	Off	Off	Potentiometer	b- Wires between card and potentiometer are interrupted.	b- Check the wires with a digital multimeter.
6	Brush Current	Off	Off	On	Brush Motor	a- Central brush is not free to rotate.	a- Remove the central brush and clean the area.
						b- Brush motor is locked.	b- Check the rotation of the brush motor, replace bearings.
						c- Carbon brush are worn out completely.	c- Remove the motor and replace the carbons.
	Err Mart Discesa	Off	Off	On	Contactor	a- No tension on the power card.	a- Check the wires between the main fuse and traction card.
7						b- Main contactor does not close completely.	b- Remove the main contactor, open to check the contacting surface and clean. If still not working, replace the contactor.
8	Err Mart Salita	Off	Off	On	Actuator	a- Over current on brush actuator.	a- Remove the actuator, check the correct functionning of top limit switch and eventually adjust with the register.
						a- Display card internal failure.	a- Replace the display card.
9	Charge Pump	Off	Off	Off	Display Card		

