TroubleShooting Guide
Electrical System

Checking the Mower

TASK	INSTRUCTIONS	NOTES
Inspect Electrical Circuit	- With the motor off: Unplug the clutch and attach a voltage meter to the connection Coming from the mower. Start the mower and Turn the PTO on (blade engage switch) Monitor the meter: 13.2vlt to 14vlt DC is normal. Turn the PTO off: 0.0 vlt is perfect.	- PTO ON = Voltage is 13.2 DC Minimum - PTO OFF = Voltage is 0.0 DC - With the PTO switch in the on position the voltage should be between 13.2 & 14VDC If the voltage is different there is a problem with the mowers' electrical system.
Inspect Electrical Connections	- Remove the wire harness connector(s) Inspect and Clean each connection going to the clutch.	
Inspect Wire Harness	- Remove the tie wraps from the wire harness Look for pinching, chaffing, fraying or tares - Check the machine wire harness for damage.	- Look closely: This is a common failure

Checking the Clutch

TASK	INSTRUCTIONS	NOTES
Checking the Clutch Coil (Basic operations)	- Apply 12vlt DC to the clutch connection & watch to see if the coil draws the armature to the rotor (pulls the pulley inward)	- Some low torque clutches may not be able to overcome the clutch brake and will require resistance testing.
Checking Clutch Resistance	- Connect a Low Resistance (ohm) meter to the clutch wire connector. Compare the results to the chart below.	- A Special "4 wire" Low Resistance (Ohms) Meter is required. Normal voltage/ohms meters cannot read ohms this low.

MODEL	TORQUE	RESISTANCE @70 F (Ohms)
MS-60 (5217-***)	60 ft. lbs (81Nm) Torque	6.82 to 7.54 Ohms
MS-80 (5217-***)	80 ft. lbs (108Nm) Torque	3.49 to 3.86 Ohms
TG2K-125 (5219-***)	125 ft. lbs (169Nm) Torque	2.70 to 2.98 Ohms
CMS-150 (5218-***)	150 ft. lbs (203Nm) Torque	2.34 to 2.59 Ohms
CMS-175 (5218-***)	175 ft. lbs (237Nm) Torque	2.18 to 2.41 Ohms
CMS-200 (5218-***)	200 ft. lbs (271Nm) Torque	1.75 to 2.00 Ohms