DATE: March 2009

TO: AUTHORIZED portable electric tool SERVICE STATIONS

factory SERVICE CENTERS

TOOL(S) \ PRODUCT(S) AFFECTED: 2401-20 M12 Screwdriver, 48-11-2401 12V Compact Lithium-Ion

Battery Pack, 23-66-1095 Electronic Switch Module Assembly

SUBJECT: "23-66-1095 Electronic Switch Module Assy versus 48-11-2401 12V Compact

Lithium-Ion Battery Pack"

Symptom	Possible Cause(s)	Solution(s)
switch - trigger 'quick-pull' – no power	Battery Pack	An aged / used 48-11-2401 12V battery Pack can lead to the impression of a bad 23-66-1095 Switch in the M12 Screwdriver – if the trigger can be pulled slowly and deliberately versus a 'quick-pull' allowing the tool to turn-on and run – the battery pack is to blame.
switch no power	Switch electronics FET	Switch electronics FET may be faulty – attempt to run screwdriver with known-good battery pack.
Battery Pack connected to Charger - alternately flashing red/green Charger lights	Bad connection between Battery Pack and Charger battery pack only part- way-in-charging-bay and/or 'rocked'/ moved during charge cycle	FULLY seat battery pack into charger – a slight tap on the battery pack may be needed to fully seat pack. NOTE: with alternately flashing red/green Charger lights unplug the Charger from power source and let it sit until the lights stop flashing – this allows circuit board capacitor to self discharge.
	Aged / Used Battery Pack -	A fully charged aged / used battery pack can cause a flashing red/green condition; run/drain battery pack and retry charging on known good Charger. If Battery Pack takes a normal charge it is functional - if the period of run time becomes noticeably shorter with a normal charge, this indicates the end of the Lithium Ion battery packs service life; customer should replace battery pack with a new Lithium Ion battery pack.
	Faulty Battery Pack -	Pack may not be accepting charge or switch electronics FET may be faulty. Attempt to charge Battery Pack on known-good Charger.
Tool's Battery Pack fuel gauge drops to NO lights after one or two screw insertions – no LEDs lit or blinking.	DEFECTIVE Battery Pack	Battery Pack shows four lights, and then – battery pack is 'dead'– fuel gauge drops to NO lights after one or two screw insertions and fails to rebound after 30 seconds of non-use
	Battery Pack Protection	Battery Pack Protection - to protect itself from damage and extend its life, the <u>battery pack's intelligent circuit monitors</u> current draw and temperature. In extremely high torque, binding, stalling, and short circuit situations, the <u>battery pack will turn OFF the tool if the current draw becomes too high</u> . In these situations, the tool will "buzz" for about 5 seconds before it turns OFF. To reset, pull and release the trigger. Under extreme circumstances, the internal temperature of the battery could become too high; the battery pack will then shut off.

This bulletin is for informational purposes. PLEASE NOTE ON SERVICE PARTS LIST: 54-04-2400, 54-42-2400