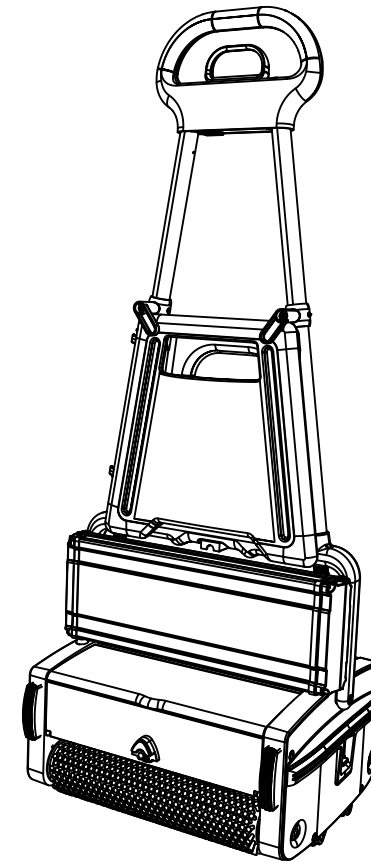




## MW340/PUMP/BATTERY

Series C

Rev 2



## Service Manual



## Warning

Before working at the machine make sure that no voltage applies (disconnect battery plug) ; except for cases of current and voltage measurements.

When replacing the blade fuses the machine should be in OFF condition.

Measure starting and operating voltage after any repair action to detect any eventual defect.

The applicable safety and accident prevention regulations as imposed by the law have to be respected when working at the machine.



-No Smoking!  
-No naked lights, embers or sparks  
in the vicinity, risk of fire and explosion!



-Keep children away from batteries



-Wear protective goggles and protective  
clothing when working on the batteries!



-Do not throw in garbage!



-Risk of fire explosion, avoid short circuits!  
-**Caution!** Metal components in the battery  
cells are always under voltage, never  
place any foreign items or tools on the  
battery!

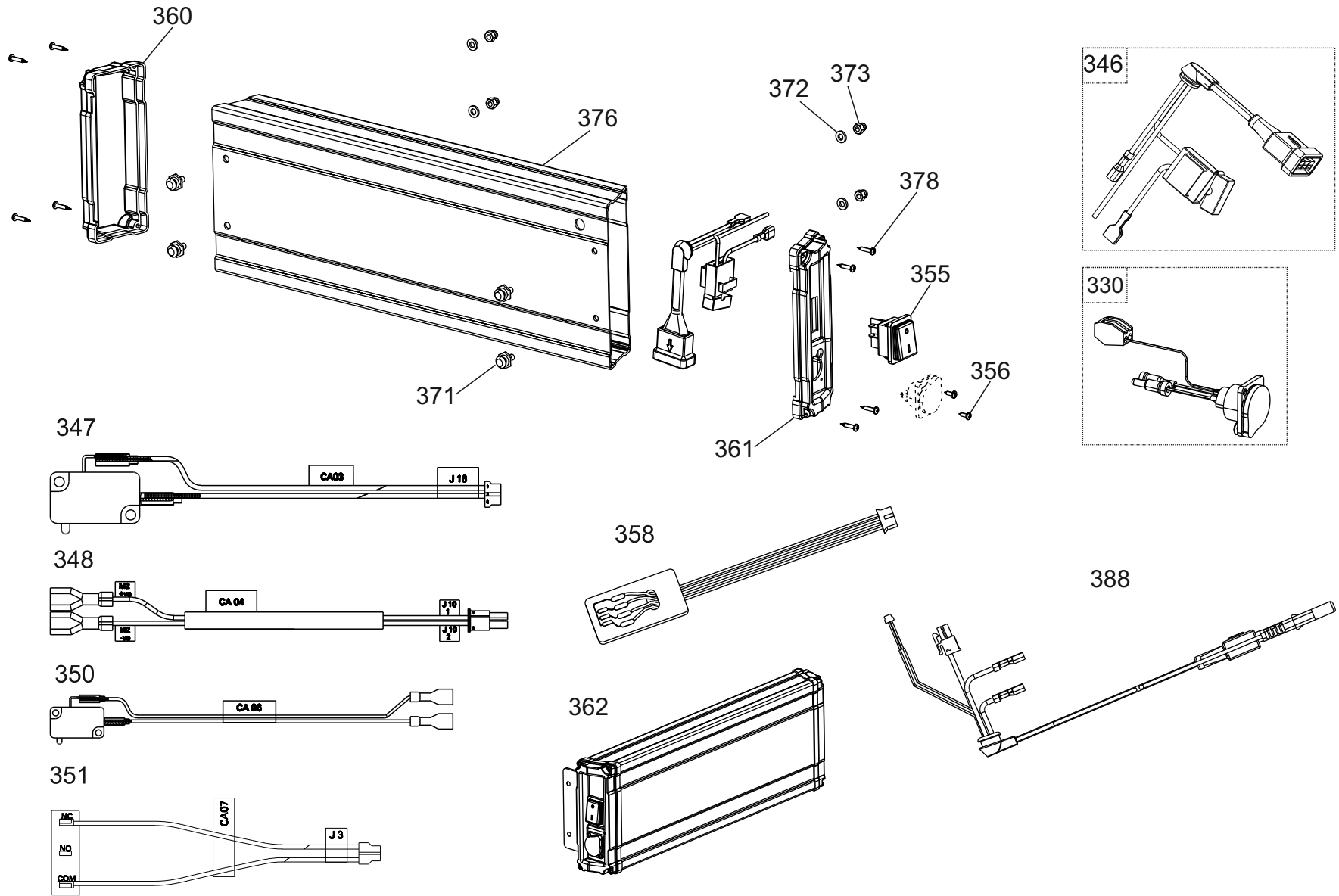


-Keep children away from batteries



**The above instructions have been established for your safety  
and have to be strictly observed.**

# Electrical Spare Parts List



Ref. no	Part no	Description	Size	QTY
330	90-0584-0000	XLR CONNECTOR		1
346	90-0543-0000	MAIN CABLE ASSY		1
347	90-0541-0000	CABLE ASSY CA03		1
348	90-0542-0000	CABLE ASSY CA04		1
350	90-0544-0000	CABLE ASSY CA06		1
351	90-0545-0000	CABLE ASSY CA07		1
355	90-0549-0000	SWITCH PUMP		1
356	90-0550-0000	CSK SELF SCREW	3x9.5	2
358	90-0552-0000	CABLE ASSY CA09		1
360	90-0554-0000	COVER BATTERY BOX LH		1
361	90-0555-0000	COVER BATTERY BOX RH		1
362	90-0556-0000	BATTERY PACK GROUP - MW34P		1
371	90-0593-0000	PIN LOCK BATTERY BOX		4
372	90-0594-0000	WASHER	5.2x10x1	4
373	90-0595-0000	DOMED CAP NUT SS304	M5	4
376	90-0600-0000	COVER BATTERY		1
378	90-0591-0000	STAR HEAD SELF TAPPING SCREW	3x16	8
388	90-0626-0000	CABLE ASSY PCB BOARD		1
399	04-4000-0000	FUSE 30A BLADE TYPE 32V dc		1

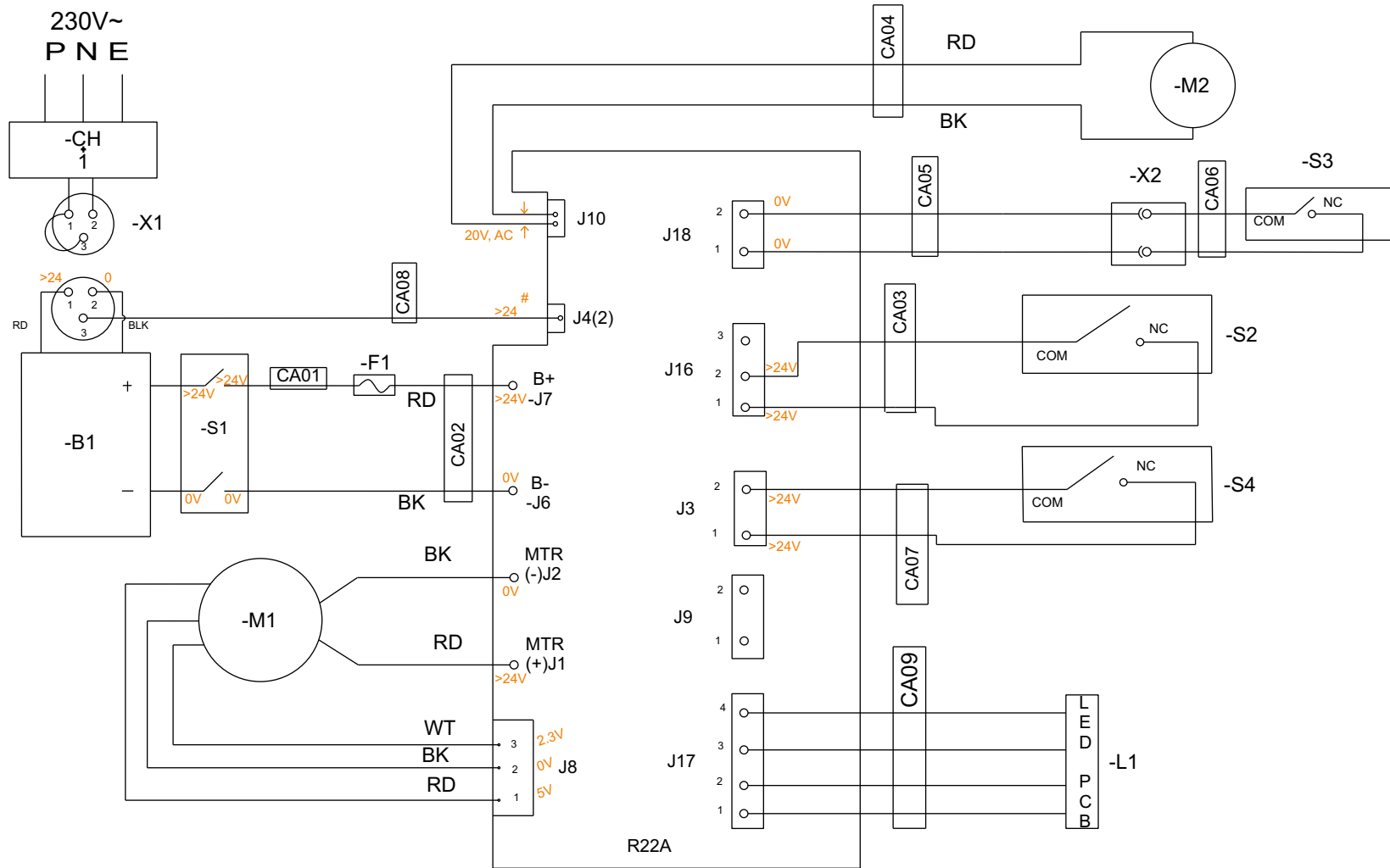
## Troubleshooting

SI.No.	Trouble	Indication	Reasons	Checking Paramater	Remedy
1)	Machine fails to start	No LED indication	(a) Transport working knob is in bottom position (Transport mode)	Transport knob position	Move to top position (operating position)
			(b) Main rocker switch (S1) on battery is in off position	Main rocker switch -S1 position	Switch ON the main rocker switch
			(c) Motor overload protector (Fuse-F1) has tripped	1. Check voltage across J6, J7 (keeping switch S1 in ON) 1a. Check Fuse (F1) 2. When fuse F1 is OK, the voltage shall be >24V.	If fuse has failed - Change fuse
			(d) If 1 (a), 1 (b), 1 © are Ok, wire assemblies from battery to PCB may be faulty.	1. Open the battery side cover & check voltage across main rocker switch (S1) inout terminals	If there is no voltage change battery
				2. Check voltage across main rocker switch (S1) output terminals (keeping switch S1 in ON)	If there is no voltage change switch S1
				3. Inspect contunity in all wires, crimping, connectors between battery & pcb.	If there are any damaged wire/connectors replace them
			Micro switches are faulty	Check Multiwash ON switch -S2. Switch Off the machine, pull down the handle at normal operating position, disconnect connector J16 from PCB and then check contunity between pin 1 & 2.	If there is no contunity, check the wires/change the switch.
	CheckDead man switch -S4. Switch Off the machine, pull down the handle at normal operating position, disconnect connector J3 from PCB and then check contunity between pin 1 & 2.	If there is no contunity, check the wires/change the switch (S4).			

SI.No.	Trouble	Indication	Reasons	Checking Paramater	Remedy
2)	Brushes not rotating	LED flashes in RED	(a) Battery Low Voltage	Check voltage across J6, J7 (keeping switch S1 in ON).	If voltage is <26V - Change the battery
			(b) Motor thermal protector has tripped because of overheating.	Nil	Wait for about 20 mins and restart. (If motor still does not run, change the motor).
3)	No Water Spray	Nil	Pump not working	(a) Voltage across pump should be approx. 20V, AC	If voltage is OK, Change the pump
				(b) Check pump switch -S3. Switch Off The machine, pull down the handle at normal operating position, disconnect connector J18 from PCB, pull the pump ON lever and then check contunity between pin 1 & 2.	If there is no contunity, check the wires & cord / Change the switch (S3).

If the above troubles persists, even after performing all the remedies listed above, Change the PCB.  
(IMPORTANT: Refer the electrical wiring diagram and connect the wires correctly)

# Voltage values



NOTE: The voltages mentioned above are the values when the machine is in "ON" (running) condition.  
 \* All the voltages mentioned above are measured with respect to Battery Negative.  
 # Only when charger connected.