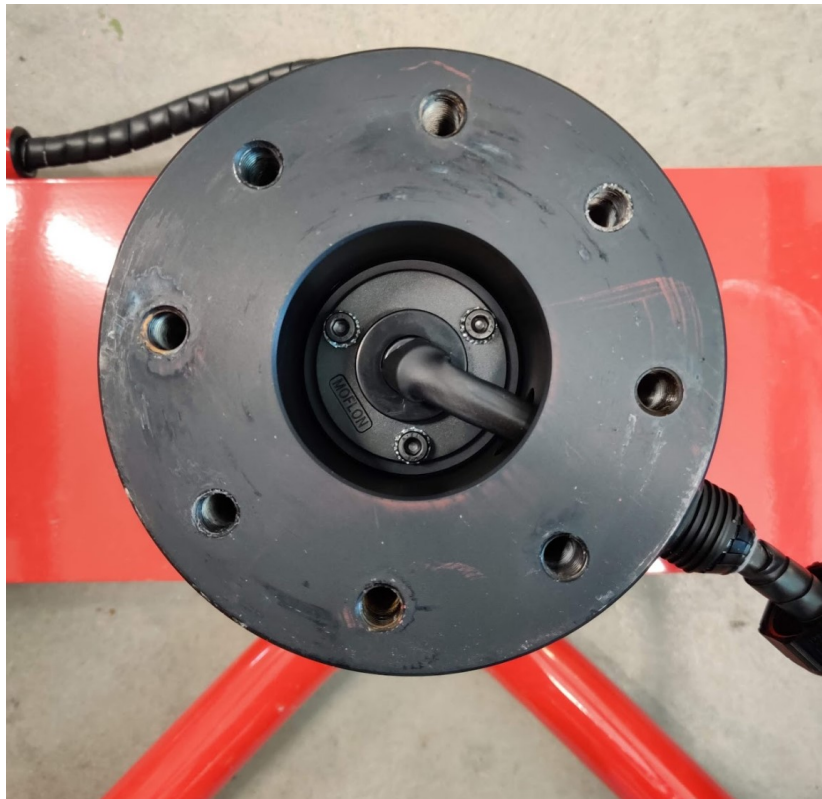


INSPECT AND REPLACE SLIP RING

SUPER MIDI | MAXI MILLER | MAXI PLUS | MAXI POWER+



GENERAL INFORMATION

This is a Technical Instruction Guide on how to inspect and replace the slip ring on a Picote Super Midi Miller, Maxi Miller, Maxi Miller Plus and Maxi Power+.

THIS DOCUMENT IS INTENDED FOR PICOTE SERVICE CENTERS ONLY

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 WARNING

Before performing any maintenance always check that the machine is fully turned off and unplugged. Only qualified electricians or an authorised Picote Service Center may undertake this work.

Only use Picote Solutions accessories and attachments with the machine described in this Technical Instruction Guide. The use of other accessories or attachments could present a risk of injury or death. The accessories or attachments should only be used in the proper and intended manner. Always follow Picote Solutions' instructions.

PLEASE NOTE: Picote Solutions accepts no liability for any failures or accidents caused by repair attempts made by non-qualified personnel. Any alterations other than those prescribed in these instructions are prohibited. Always wear appropriate PPE.

REPLACEMENT PARTS IF REQUIRED

PRODUCT NUMBER	PART NAME
900000090	Spare Slip Ring for Super Midi, Maxi Miller & Maxi Power+
9590003002	M20 Plastic Strain Relieve Gland
9590004025	M25 Strain Relieve Gland (Control Box)
9590001925	Nut for M25 Strain Relieve Gland

REQUIRED TOOLS

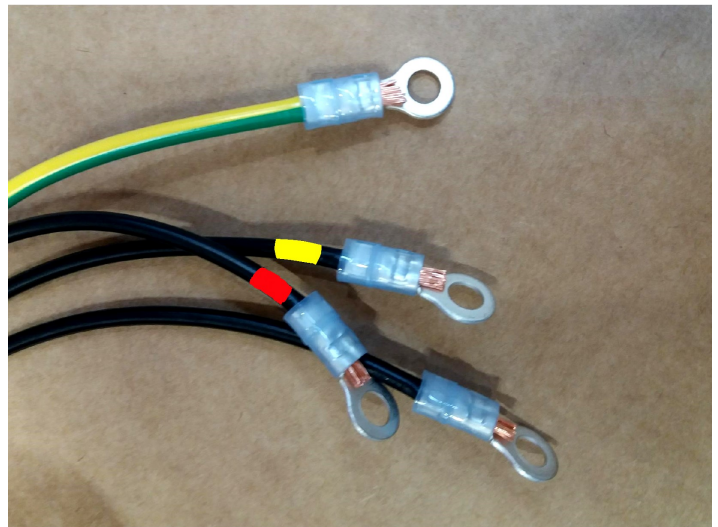
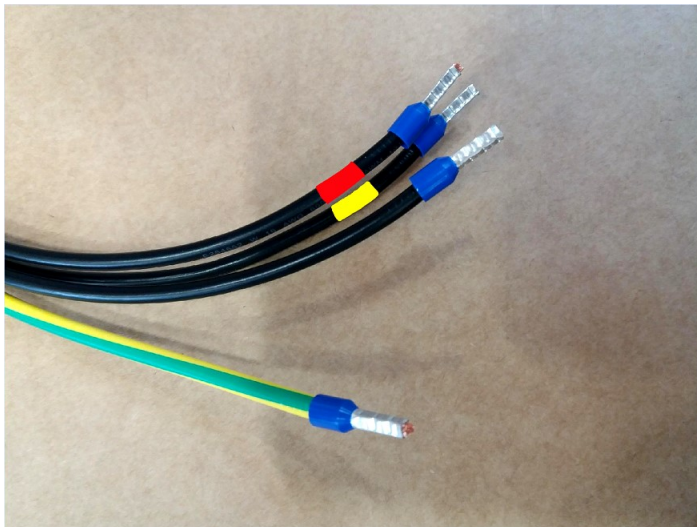
PH Screwdriver
Hex Key 2.5mm
Hex Key 5mm
Hex Key 6mm
Wrench 25mm
Wrench 27mm
Torque Wrench (17Nm)

Introduction

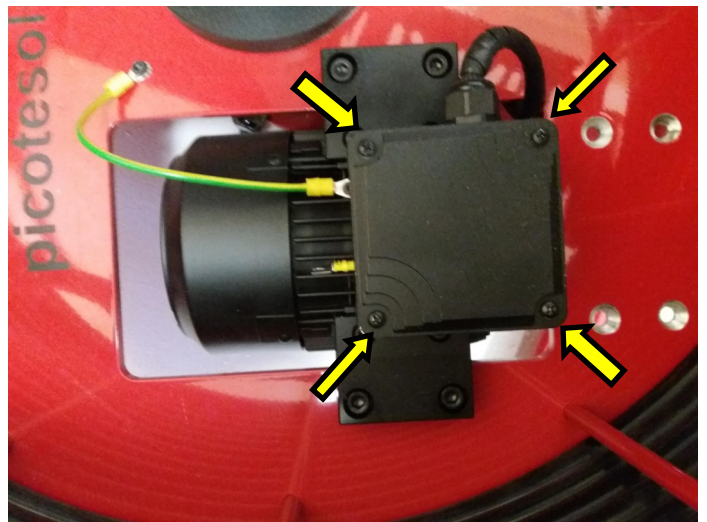
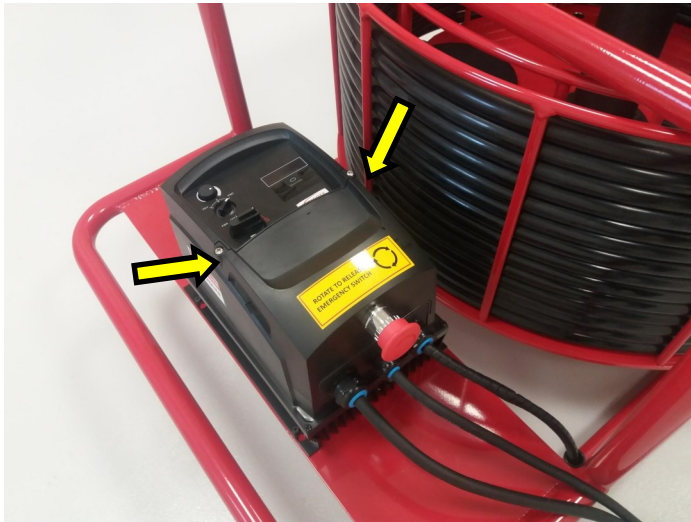
The test will be performed by connecting the control box directly to the motor with jump wires. By doing this it is possible to determine if the original slip ring is faulty.

In total four (4) wires are required and each one should be at least 2,5mm² / 14 AWG thick and have a ring terminal in one end and a wire ferrule in the other.

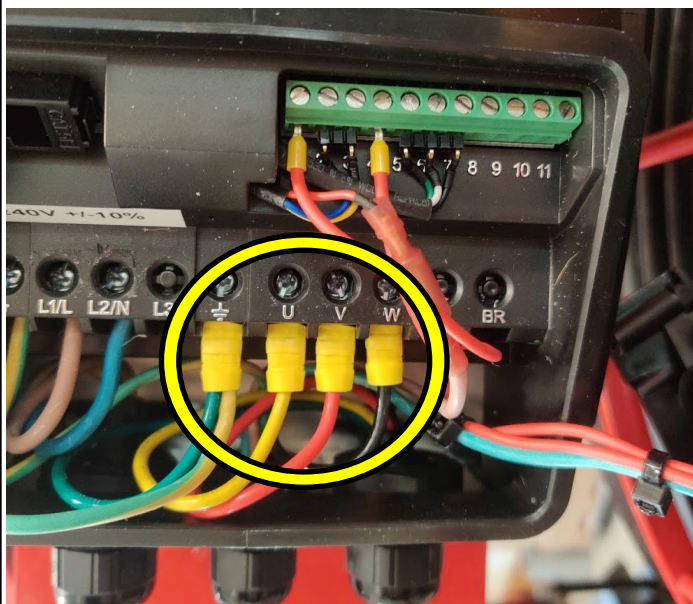
Use a green-yellow wire for the protective earth wire.



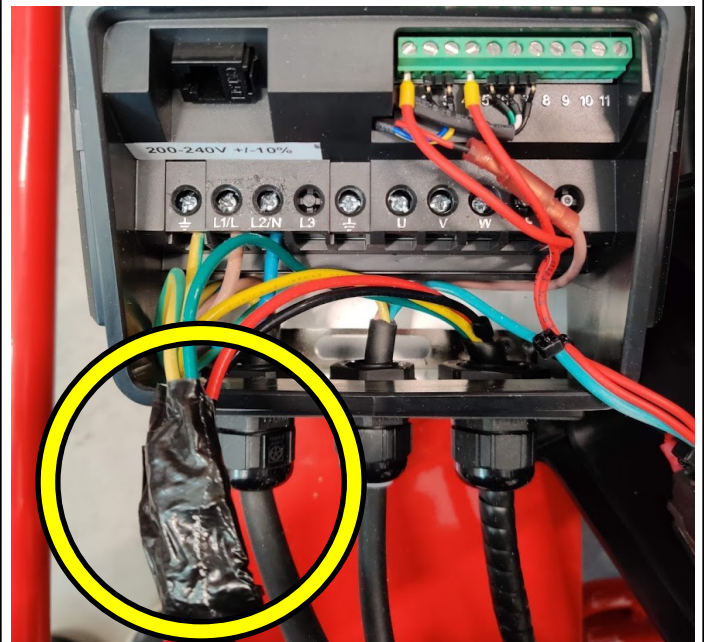
1. REMOVE THE COVERS FROM BOTH THE CONTROL BOX AND THE MOTOR OF THE MILLER



2. INSIDE THE CONTROL BOX DISCONNECT THE FOUR (4) MOTOR WIRES (GREEN/YELLOW, BLACK, YELLOW & RED)



3. INSULATE THE WIRES WITH ELECTRIC TAPE AND MOVE SO THAT THEY ARE NOT TOUCHING ANYTHING

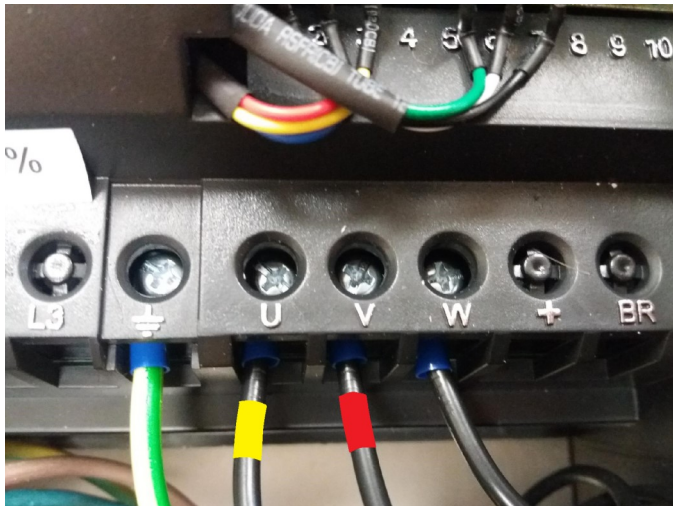


4. REMOVE MOTOR WIRES AND CONNECT THE TEST WIRES BETWEEN THE NEW CONTROL BOX AND THE MOTOR AS FOLLOWS:

Maxi Miller, Maxi Miller Plus & Maxi Power+:

Control box — motor

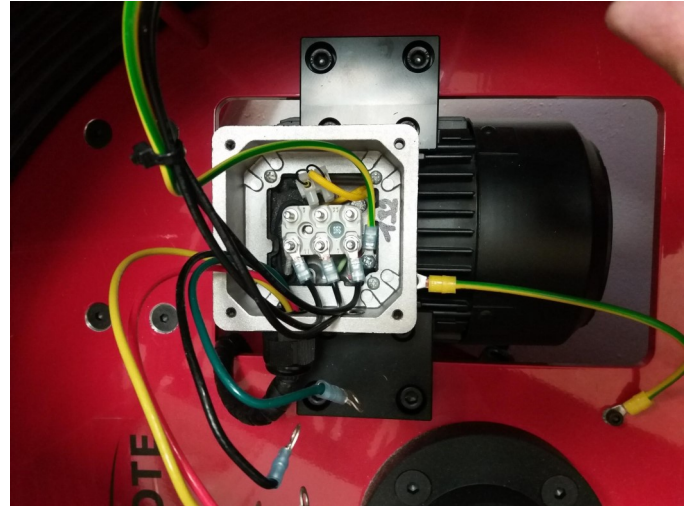
U — U1
V — W1
W — V1
GND — GND



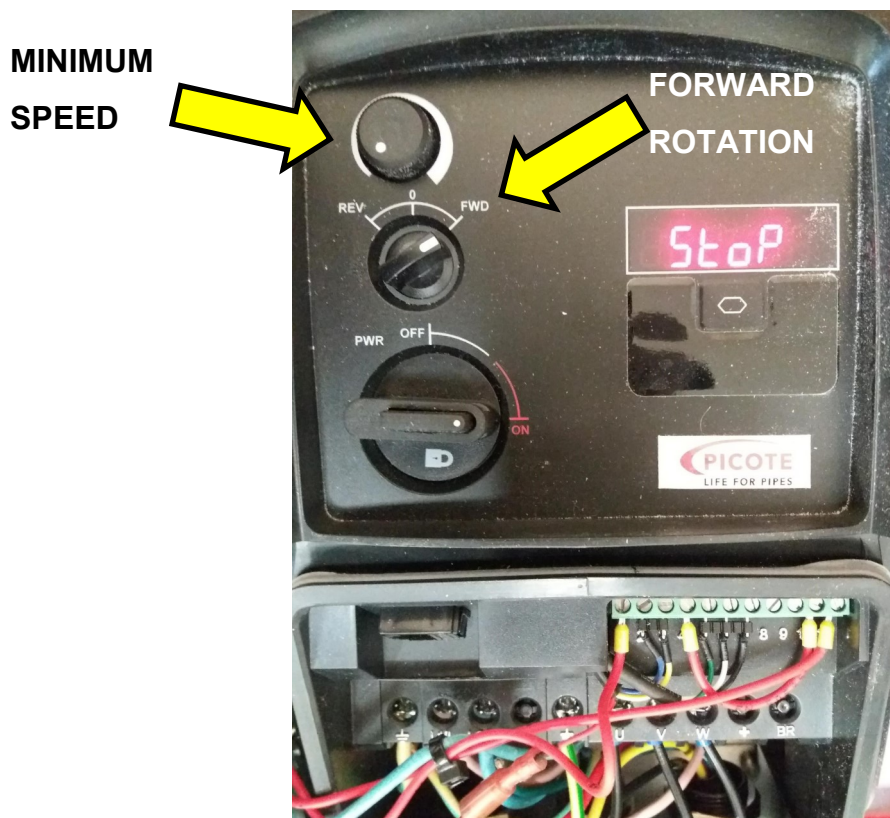
Super Midi:

Control box — motor

U — U1
V — V1
W — W1
GND — GND

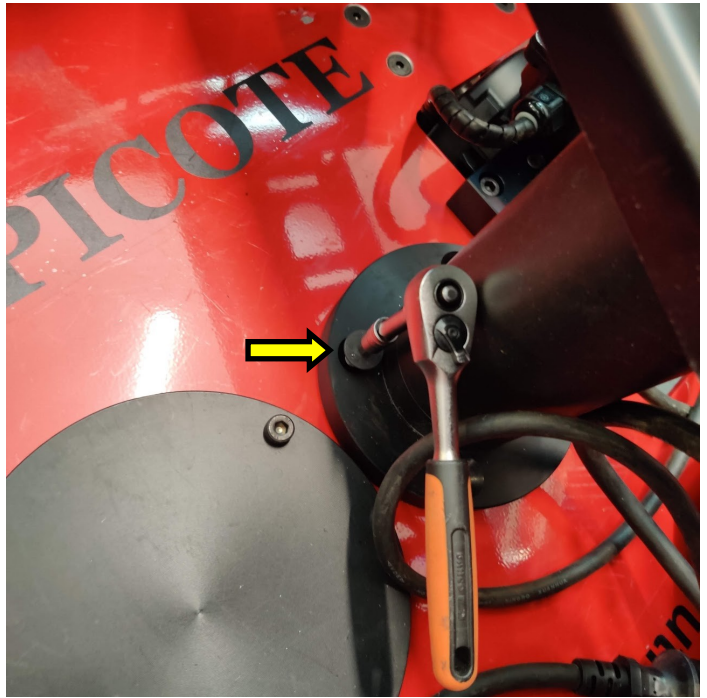


**5. CHECK ALL WIRINGS AND ALSO THE EARTH CONTINUITY BETWEEN THE SLAVE CONTROL BOX AND THE MACHINE.
PLUG THE MILLER INTO A POWER SOURCE AND TURN ON THE CONTROL BOX. SET ROTATION TO THE **FORWARD** POSITION AND THE ROTATION SPEED ON **MINIMUM**. PRESS THE FOOT PEDAL**

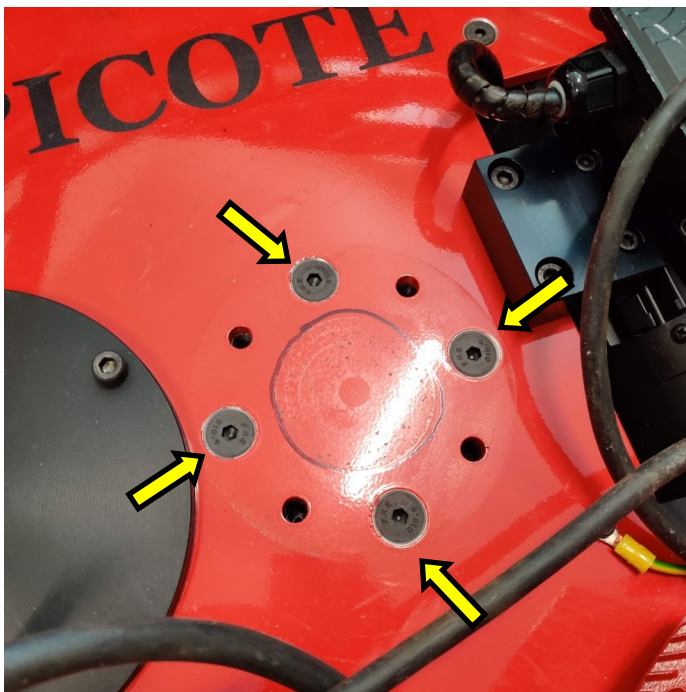


PLEASE NOTE! IF THE MOTOR IS NOW RUNNING IT INDICATES THAT THE SLIP RING IS FAULTY AND NEEDS TO BE REPLACED

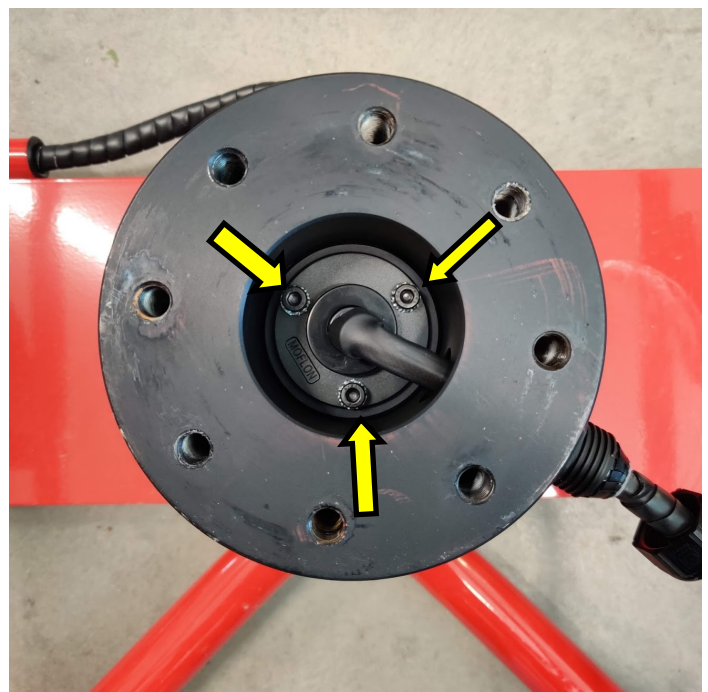
6. UNSCREW NAMEPLATE AND UPPER AXLE BOLTS. REMOVE NAMEPLATE AND AXLE PACKAGE



7. UNSCREW THE SCREW UNDER UPPER AXLE PACKAGE TO REMOVE THE REEL. REMOVING THE SHAFT FROM THE REEL IS RECOMMENDED SEE INSTRUCTIONS S2.8



8. AFTER MOVING THE REEL ASIDE, UNSCREW THE SCREWS INSIDE THE AXLE PACKAGE AND PULL OUT THE SLIP RING. SAVE THE SCREWS AND WASHERS

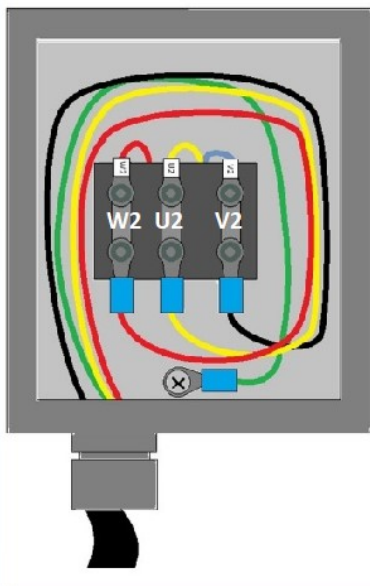


9. ASSEMBLE IN REVERSE ORDER AND REWIRE THE NEW SLIP RING. REPLACE GLANDS IF NECESSARY. USE LOCTITE 542 ON THE NAMEPLATE SCREWS AND CONTROL BOX GLANDS IF REPLACED (IF PLASTIC, USE LOCTITE 5331). NOTICE THE AXLE'S GLAND POSITION IN RELATION TO MOTOR (STEP 5). TORQUE UP THE AXLE COUNTERSUNK SCREWS TO 17 Nm WITH A TORQUE WRENCH

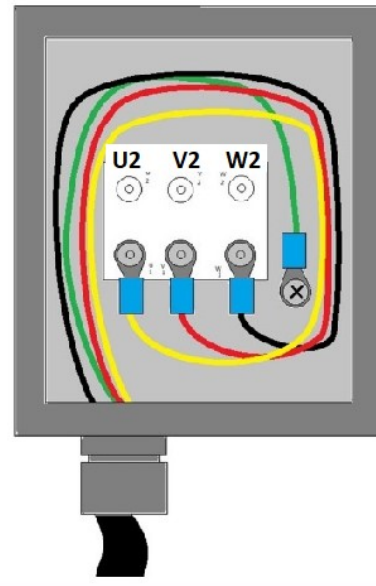
WHEN YOU HAVE COMPLETED THIS TEST: REMOVE THE TEST WIRES AND RECONNECT THE ORIGINAL WIRES. PERFORM EARTHING TESTS IN ACCORDANCE WITH LOCAL REGULATIONS

MOTOR WIRING DIAGRAM:

MAXI | MAXI PLUS | MAXI POWER+



SUPER MIDI



CONTROL BOX WIRING DIAGRAM:

