

WorkBee CNC

Power Supply Assembly Instructions



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1.0 Getting Started

1.1 Check Product Contents

When you receive your kit, the first thing you should do is check the contents against the list in Appendix A. The majority of the parts will be separated into boxes that correspond to the subsections in this manual. Additional spare small parts will be included. If anything is missing or damaged (or if you have any other problems) please contact us at sales@ooznest.co.uk and we will aim to resolve the issue as quickly as possible.

1.2 Notes on Assembly

This manual has been written for the construction of a 750 x 750mm screw driven version of the WorkBee. If you have a different version everything is exactly the same, with the exception of longer V-Slot extrusions and wire routing.

It is recommended that you read through the whole manual before beginning the build in order to get a full picture of the assembly process. Before beginning each step, make sure you have studied the diagram and have the required parts in front of you. A PDF version of the manual is available on our website and this will allow you to zoom in on the diagrams if needed.

Be very careful to not over tighten the nuts and bolts on the plastic parts, otherwise they may crack. Everything should easily fit together, and so if it isn't, take a step back and re-read the instructions.

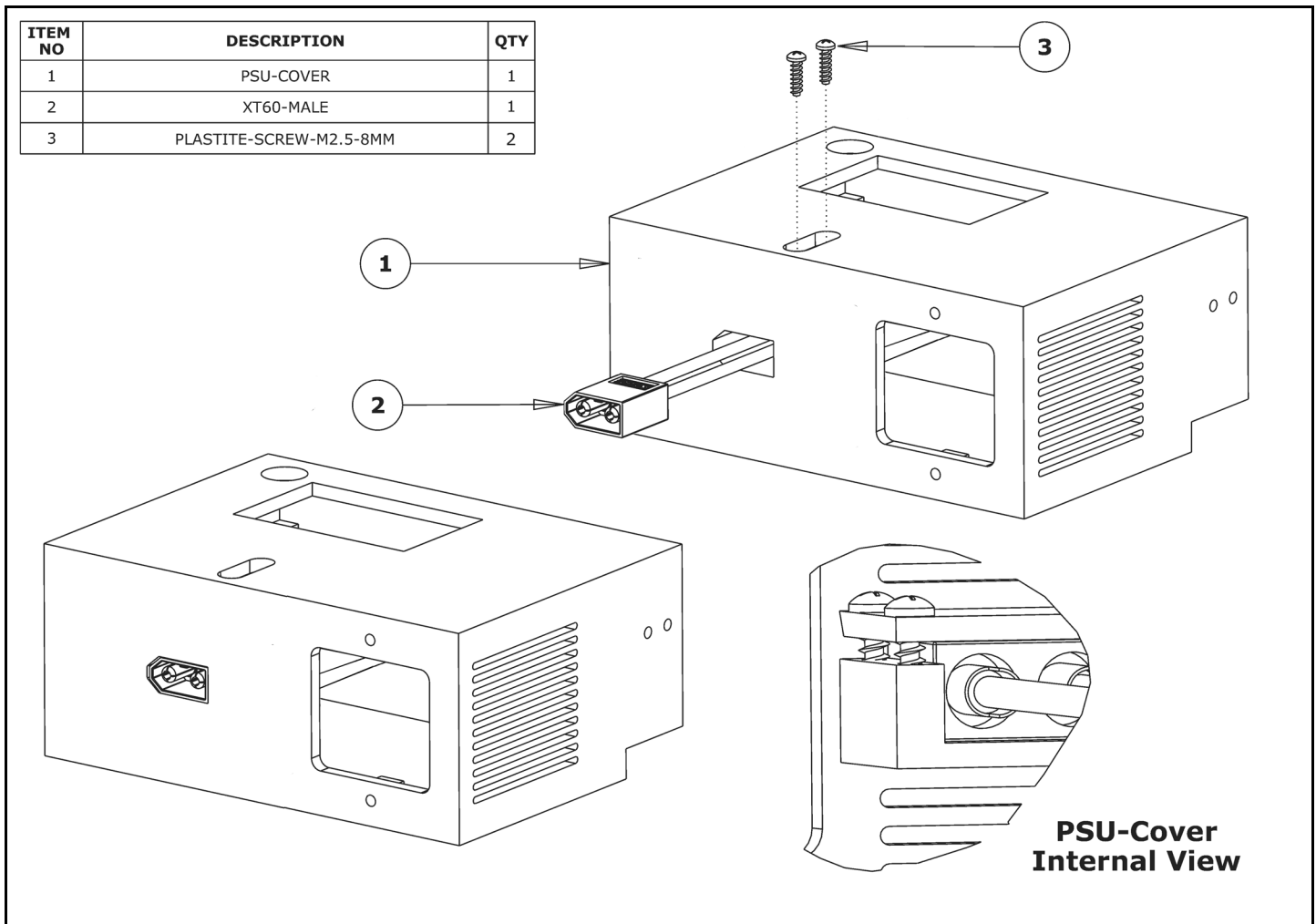
Assembly of this kit involves the use of electricity and therefore you should take appropriate precautions to ensure you are assembling the kit in a safe manner. When following wiring diagrams, double check that everything is connected correctly. Before carrying out any work on the electrics make sure that the machine is switched off.

The polarity is indicated by the color of the wire, not by the color of the connectors at each end. For the AC IEC input, the live wire is brown, neutral blue, and earth is green and yellow. For the DC Wiring of the machine a positive wire is red, negative is black, and earth is green and yellow.

2.0 Power Supply Assembly

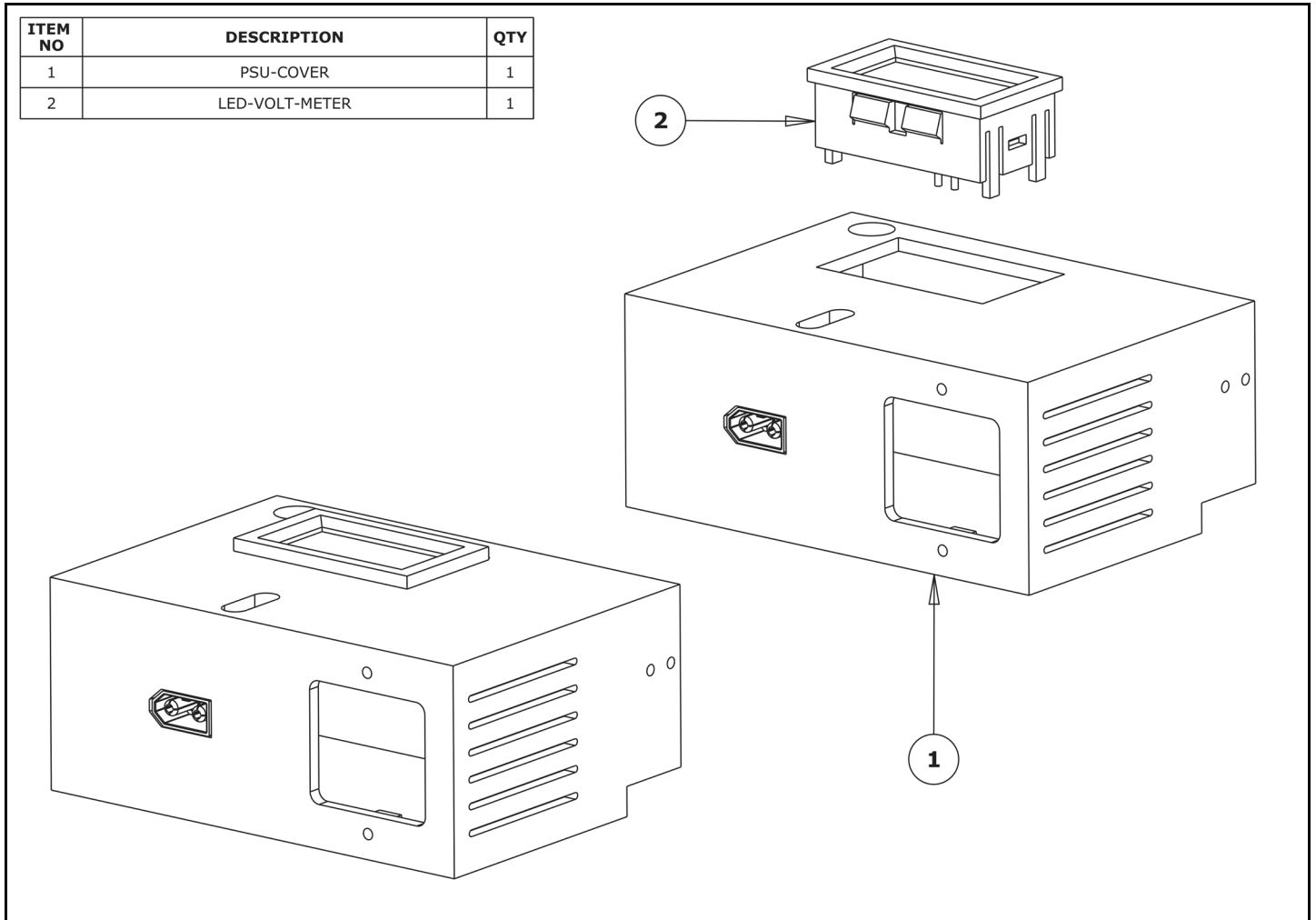
2.1 Output

2.1.1 Securing XT60-Male Outputs



- A.** Insert the XT60-Male connectors into the provided inset on the PSU-Cover. it should sit flush with the front of the PSU-Cover.
- B.** Secure the XT-Male connector using 2 x Plastite-Screw-M2.5-8mm through the holes provided on the securing tab as seen on the internal view. When initially placing the screw, it is helpful to hold each screw in place using tweezers or long nose pliers.

2.1.2 Inserting LED-Volt-Meter

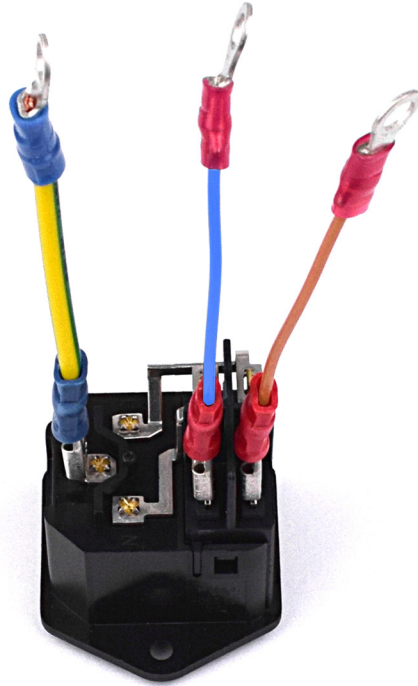


- A.** Gently push the LED-Volt-Meter into the provided gap on the top of the PSU Cover. The wires on the LED-Volt-Meter should be oriented to the front of the PSU-Cover.

2.2 Input

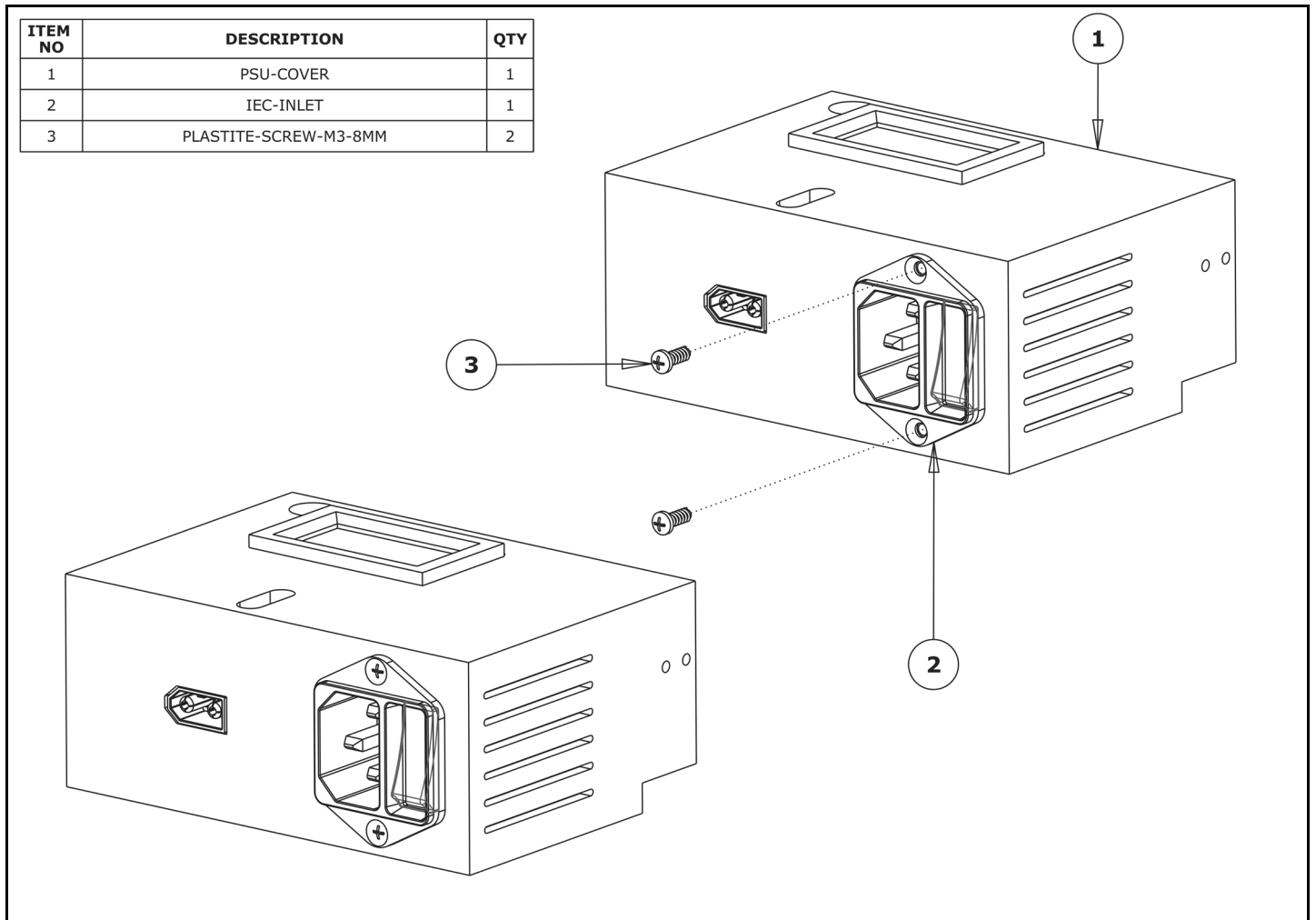
2.2.1 IEC-Inlet Wires

ITEM NO	DESCRIPTION	QTY
1	IEC-INLET	1
2	IEC-INLET-LIVE-WIRE	1
3	IEC-INLET-NEUTRAL-WIRE	1
4	IEC-INLET-EARTH-WIRE	1



- A.** Attach the receptacle end of the IEC-Inlet-Live-Wire, IEC-Inlet-Neutral-Wire & IEC-Inlet-Earth-Wire to their respective terminal tabs on the IEC-Inlet, as seen in the above image.

2.2.2 Attaching IEC-Inlet

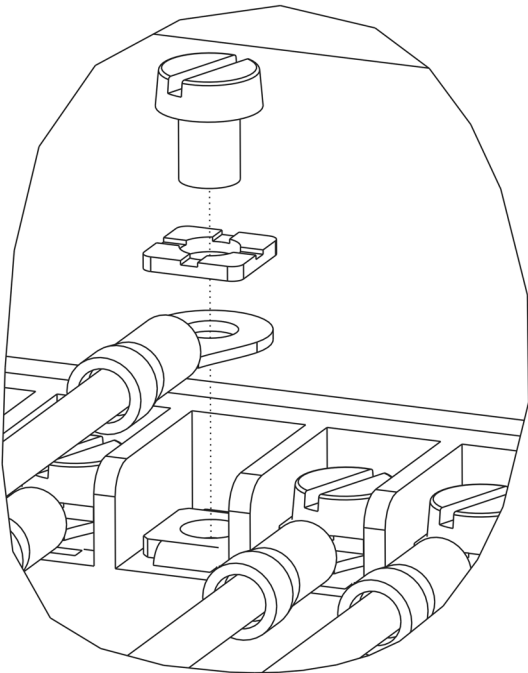
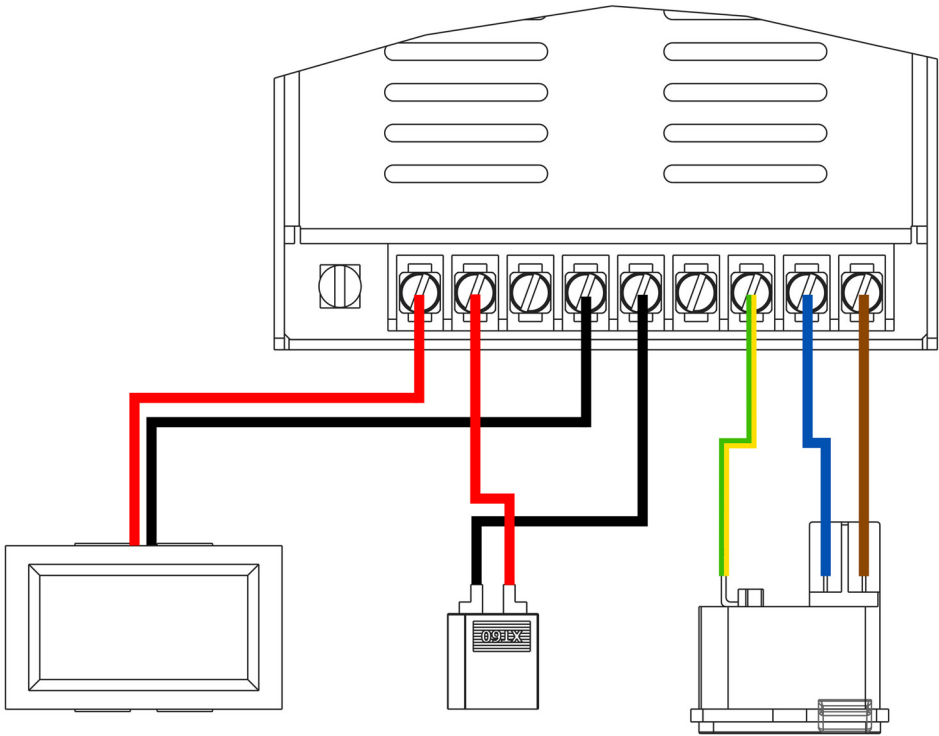


- A.** Secure the assembled IEC-Inlet to the PSU-Cover using 2 x Plastite-Screw-M3-8mm. Ensure the switch is on the right hand side.

2.3 Connecting PSU-Cover

2.3.1 Connecting Wires

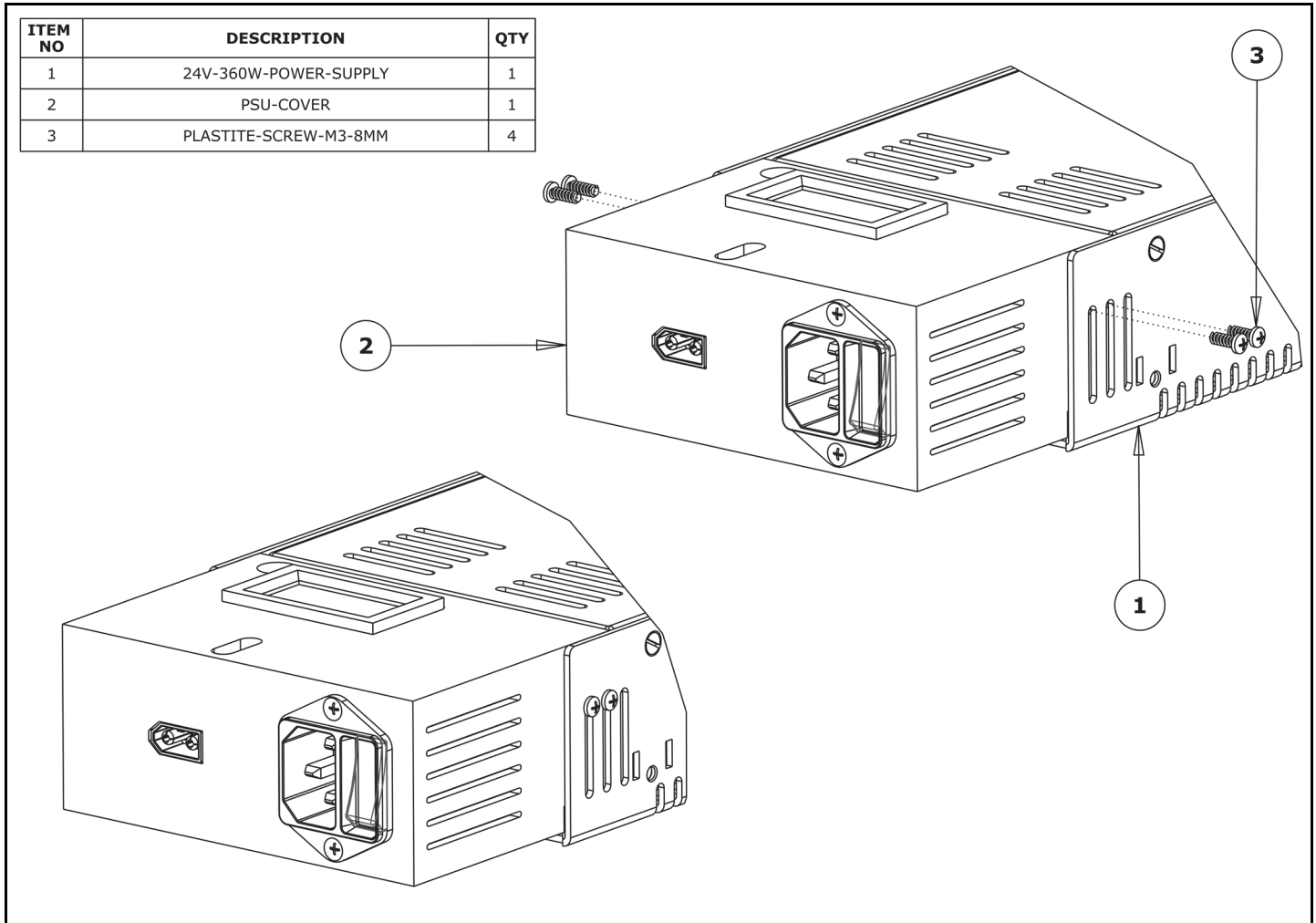
ITEM NO	DESCRIPTION	QTY
1	24V-360W-POWER-SUPPLY	1
2	PSU-COVER	1



Ring Terminal Attachment

- A.** Bring the front of the 24V-360W-Power-Supply and PSU Cover close together.
- B.** Following the wiring diagram, first connect both wires of the XT60-Male connector to the 24V-360W-Power-Supply. As seen on the ring terminal attachment view, the terminal screws on the 24V-360W-Power-Supply should first go through the terminal plate, then through the ring terminal on the wires, and then into the threaded hole on the 24V-360W-Power-Supply.
- C.** Then connect the LED-Volt-Meter to the output terminals.
- D.** Finally, connect the three IEC-Inlet wires to the 24V-360W-Power-Supply. The IEC-Inlet-Earth-Wire is very inflexible compared to the previous ones, so this wire may take some force to get into position.

2.3.2 Attaching PSU-Cover



- A.** Mate the PSU-Cover to the 24V-360W-Power-Supply. This may be very fiddly to initially get into position, so do take an extra bit of time to do so.
- B.** On each side, secure the PSU-Cover using two Plastite-Screw-M3-8mms. Go through the slots on the metal casing of the 24V-360W-Power-Supply, and then into the holes on the PSU-Cover.

2.3.3 Testing

ITEM NO	DESCRIPTION	QTY
1	24V-360W-POWER-SUPPLY	1
2	MAINS-CABLE	1



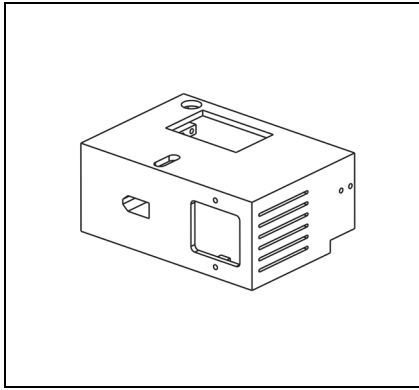
- A.** Insert the end of the Mains-Cable into the IEC-Inlet on the 24V-360W-Power-Supply. Check the switch on the side of the 24V-360W-Power-Supply is set to the supply voltage of your country.
- B.** Plug the Mains-Cable into a wall socket and switch it on. If the LED-Volt-Meter comes on, this indicates the 24V-360W-Power-Supply has power. If it doesn't come on, this is most likely because the switch on the IEC-Inlet is turned off; turn this on.
- C.** Once switched on, the LED-Volt-Meter should read 24.0. If it does not read 24.0, there is a screw through the hole towards the top left of the LCD can be used to adjust the voltage. Use a screwdriver to adjust the voltage to 24.0, and take caution to not touch any metal parts with the screwdriver.
- D.** The Power Supply assembly is now complete and can be turned off and placed towards the back left of the machine near, the Y-Axis-Fixed-End-Assembly.

3.0 Appendix

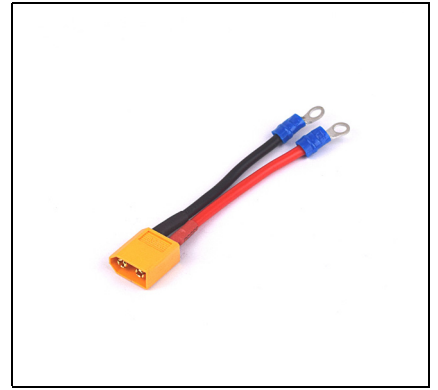
3.1 Appendix A - Kit Contents

Power Supply Assembly

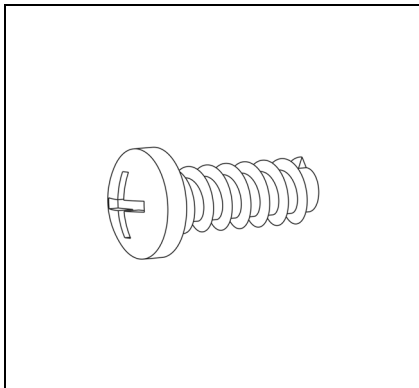
1 x PSU-Cover



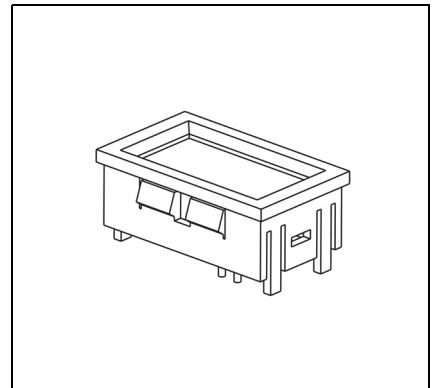
1 x XT60-Male



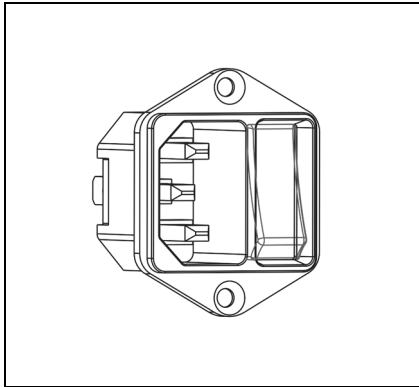
Plastite-Screws:
6 x M3-8mm
2 x M2.5 x 8mm



1 x LED-Volt-Meter



1 x IEC-Inlet



IEC-Inlet-Wires:

1 x Live
1 x Neutral
1 x Earth



1 x 24V-360W-
Power-Supply



1 x Mains-Cable



1 x PSU-Output-
Power-Cable



