

CNC PLASMA CUTTING SYSTEM KIT ASSEMBLY INSTRUCTIONS



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Safety Precautions

Read entire section before starting assembly

WARNING! Electric Shock can kill.



Only qualified personnel should perform this installation. Turn off input power at the fuse box before working on this equipment. Do not touch electrically live parts. Always connect the machine to an earthed mains supply as per national recommended standards.

WARNING! Transport Unloading



Never underestimate the weight of equipment, never move or leave suspended in the air above people. Use recommended lifting equipment at all times.

WARNING! FUMES AND GASES can be dangerous



Keep your head out of fumes & gases produced from cuting. Use ventilation or exhaust to remove fumes & gases from breathing zone and general area.

WARNING! WELDING SPARKS can cause fire or explosion



Keep flammable material away from work area. Do not weld on containers that have held combustibles

WARNING! ARC RAYS can burn



Wear eye, ear and body protection Make sure work area is protected by proper shielding to avoid injury to passers by.

Package Contents

A: LH SIDE ASSY - Inc 2 x legs, main beam, drive motor & rail

B: RH SIDE ASSY - Inc 2 x legs, main beam, drive motor & rail

C: CENTRE BEAMS x 2

D: CENTRE MOTOR RAIL - beam, rail and drive motor & CNC torch bracket & motor Support arm (for torch cable and motor cables) - not shown.

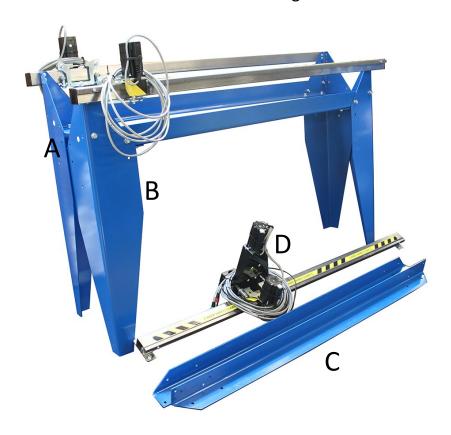
E: CNC controller unit with advanced torch height controller (Price)

F: Console (frame pre-assembled)

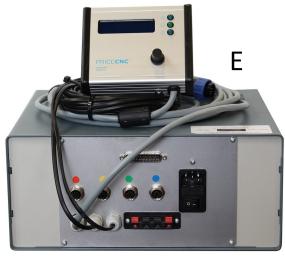
PC, Monitor, Mouse, Keyboard

18 x Slats for table - not shown

R-Tech P50 CNC Plasma Cutter Package 240V - not shown







Step 1. Build main table assembly using LH and RH side assy and 2 x centre beams.

Note:

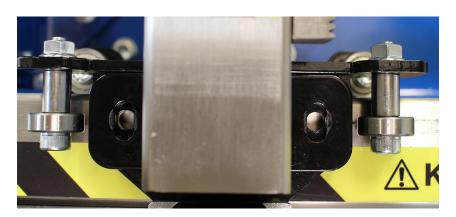
Ensure white dots are at front when assembling.
Ensure ground is flat, if need-be use shims to ensure table I level.



Fit 4 x Allen key bolts, nuts and washer at points show per each corner

Step 2. Fit main centre beam assy

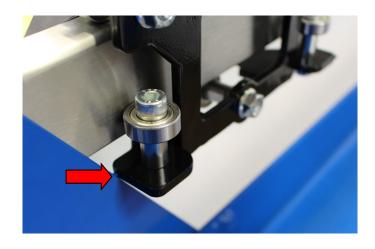




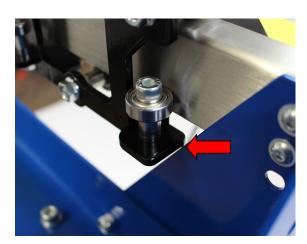
Locate each end bracket onto side rails ensuring torch holder is towards the front.

Fit 4 x Allen head bolts, nuts and washers - DO NOT TIGHTEN YET

You now need slowly bring centre beam forward so each side motor bracket touches the front arms of frame.



Once both are touching now tighten the 4 x securing bolts - This ensures table will be square.





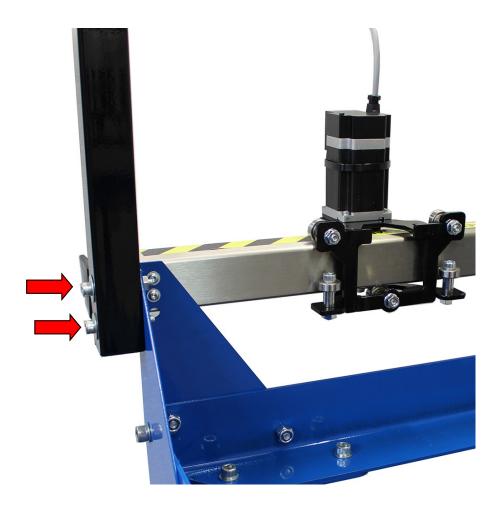


Left side fitted - Shows option water table front beam (A)



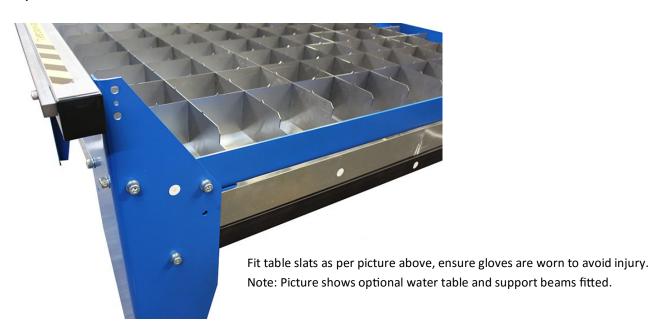
Right side fitted - Shows option water table front beam (A)

Step 3. Fit cable support arm



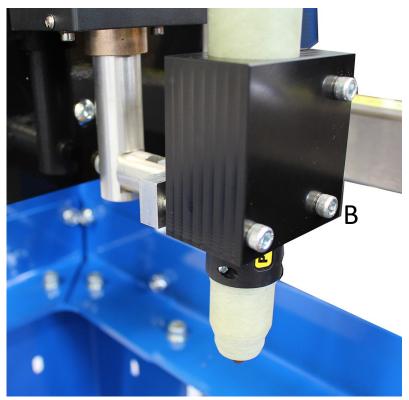
Fit the cable support beam using the 2 long allen head bolts, buts and washers to the front left leg of main table.

Step 4. Fit table slats

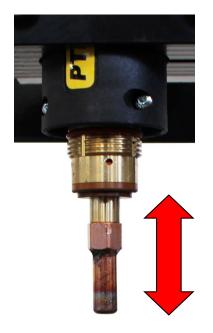


Step 5. Fit torch to torch bracket on centre beam

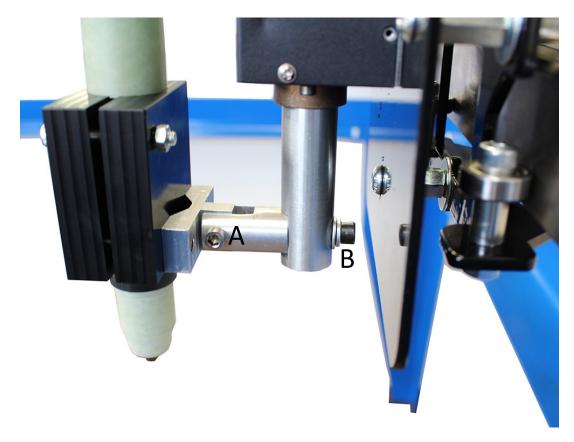




Fit torch bracket to mounting point on centre rail. Note: Do not overtighten bolt B as this can cause restriction to electrode movement - See below



After fitting torch bracket to centre torch mounting - move the centre electrode up and down, when pushed up and let go it should move down quickly, if it is slow to move down, slacken of the bottom right bolt B on torch bracket until it moves freely.



After fitting torch head assy, ensure torch alignment is true by adjusting either point A or B

Step 6. Fit wiring to CNC Controller



CNC Control Box



A B

Connect two wires from centre torch bracket to point A -it does not matter which way wires go as they are not polarity dependant.

Connect two wires from safety stop button on console to B -it does not matter which way wires go as they are not polarity dependant. Note: Fit safety switch to console first so wires go through hole in console.





Connect the 4 x motor plugs into sockets which are all colour coded - locate by using alignment lugs on plug and socket, then turn the end ring E on plug to screw it into socket.

Connect parallel cable into socket C and connect 240v mains cable into D - DO NOT PLUG INTO MAINS SUPPLY YET

Step 7. Console Setup





Put PC and CNC control box on rear stand of console.

Fit monitor to console using mounting points and bolts supplied.

Fit CNC control box onto console using points and bolts supplied A.

Fit Stop switch to console using points and bolts supplied B.

Fit Parallel port cable from CNC console to parallel port on PC.

Plug keyboard, mouse and monitor into PC unit

R-Tech Plasma 50CNC rear CNC connection



The CNC table, console and PC assembly is now complete, all you need to do now is connect the CNC interface cable A to rear of R-Tech Plasma Cutter, then setup the Plasma Cutter as per the owners manual instructions supplied with P50HF.

Now refer to guides on how to use the CNC software to start cutting.