



Date: June 30, 2011

Project: Welding School

To: Randolph Community College

Attn: Mr. Chuck Davis

Recommended Equipment:

(6) sets standard WB-6055 (2 booths side-by-side) with 5HP, 4 cartridges top mount dust collector on booth top: 1-1/2" vacuum port, 4"D x 8"H walkway

(4) sets smaller booth WB-604.55 (2 booths side-by-side) with 5HP, 4 cartridges top mount dust collector on booth top: 1-1/2" vacuum port, 4"D x 8'H walkway

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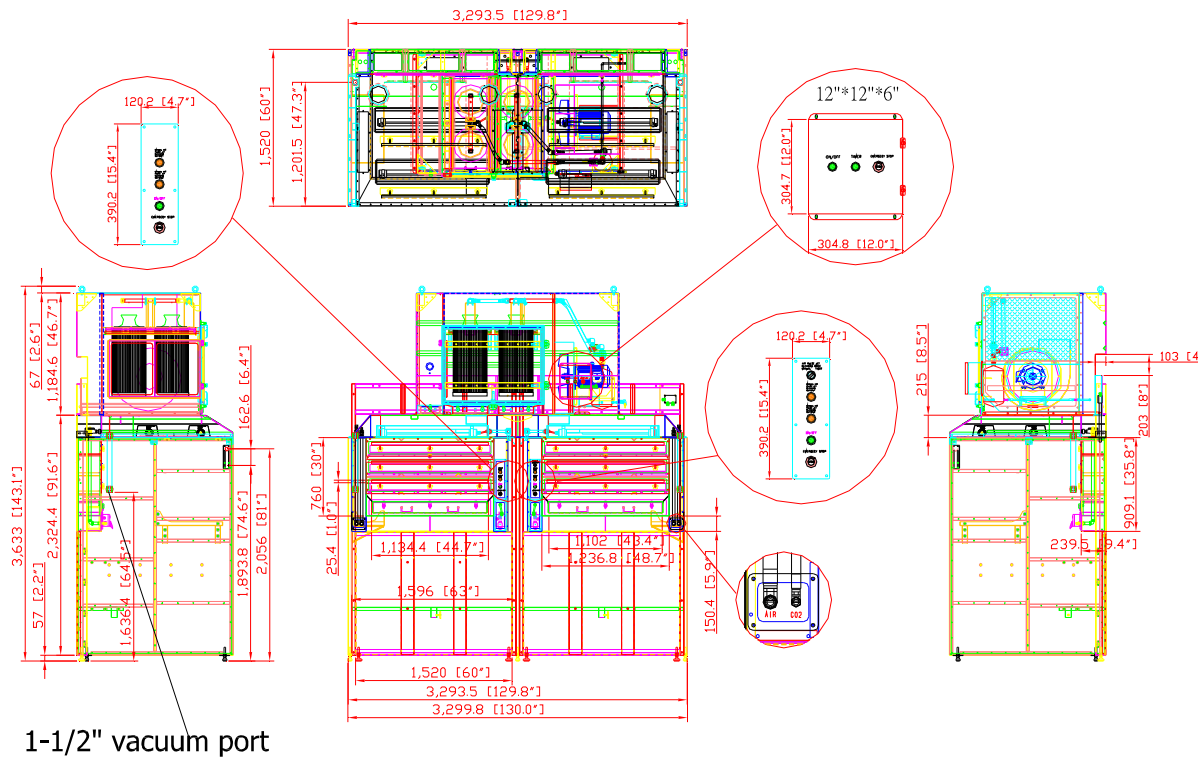
DO NOT SCALE

IF IN DOUBT ASK



Revisions			
Rev	Description	Date	Approved

standard booths



WB-6055 PREMIER WELDING BOOTH SPECIFICATIONS for Randolph Community College

- ***Hood Dimensions: 129.5" x 60" x 8.5" (for 2 hooddrafts)
- Back Draft Dimensions: 48.6" x 29.9" x 9.2"
- Hood Service Panel: Removable 7" x 23" service panel
- Back Draft Adjustable Inlet Slots: (3) 1" x 44.7"
- Hood Adjustable Inlet Slots: (2) 1" x 39.9"
- Recessed Lights: (2) Explosion Proof Lights (110V, Single Phase, 60 Hz, 20W)
- Adjustable Knobs: (15) 2 ?" Five Star Twists
- Clean Out Drawer: 3.9" x 48.4" with (3) hand twist locks
- Back Draft Shelf: 5.9" x 48.7"
- Adjustable Level System: 2 ?" Feet (maximum adjustment 5")
- Support Structure: 1 ?" x 4" steel stock welded
- Panel Construction: 14-gauge welded steel single wall with cross and up bracing
- Welding Curtain Supports: (2) adjustable welding curtain brackets
- Forklifting Lugs: total (2) 7.9"W x 3.1"H x 60"D forklifting lugs for dual booth side-by-side to set and move hood / booth / top mounted dust collector
- Fume Arm Ceiling Supports & Brackets: Built into the hood
- Fume Arm Cover Plates: (2) cover plates (6 bolt pattern) to match optional dia. 6" fume arm
- Powder Coated: Avani Safety Blue Standard (custom colors available)
- Nine Piece Configuration: (3) side panels, (2) back panels, (2) backdraft assembly, (2) hooddraft assembly to dual booth side-by-side.
- Booths can be mounted back-to-back, side-to-side or both options
- Electrical Outlets: (2) 110V Outlets (additional single or three phase outlets available)
- Light Switch: For overhead lights
- Compressed Air Connection
- CO2 or Gas Connection: (additional gas lines or compressed lines available)
- Double Wall Construction (welded)
- ***CO2 bracket
- ***Adjustable Rear Shelf: 62.7"W x 17.6"D x 1.1"H (solid with 2" hole drilled)
- ***Vacuum Port: (1) 1-1/2" @ left side panel of the left booth, (1) 1-1/2" @ right side panel of the right booth.
- ***HEPA: Avani to source locally.

OPTIONS

- Welded Nuts: Optional locations for J-Hooks
- Welding Nuts: For wire feeder or welder bracket
- Adjustable Rear Shelf (solid, grated or cutting table)
- Corner Shelves
- Viewing Windows
- Custom Welding Brackets
- Foot Lockers
- Fixtures, Lazy Suzans
- Any option that can fit inside the booth or on the booth

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Date	Name	Part Number:	Title:
2011-06-02	***	Randolph	WB-5x5P-RCC (2sets) with SDC-B-5-4
Drawn by:	Checked by:	The drawings, AutoCAD, 3-D Models, and specifications are the property of Avani Environmental Intl. Inc. (AE) and may not be reproduced, distributed, modified, or otherwise used, except provided herein, without the express written permission of AE.	Size
			E

Scale	Drawing Number:
1 =65	WB-5-5P (two S) H:12'

DO NOT SCALE

IF IN DOUBT ASK



Revisions

Rev	Description	Date	Approved
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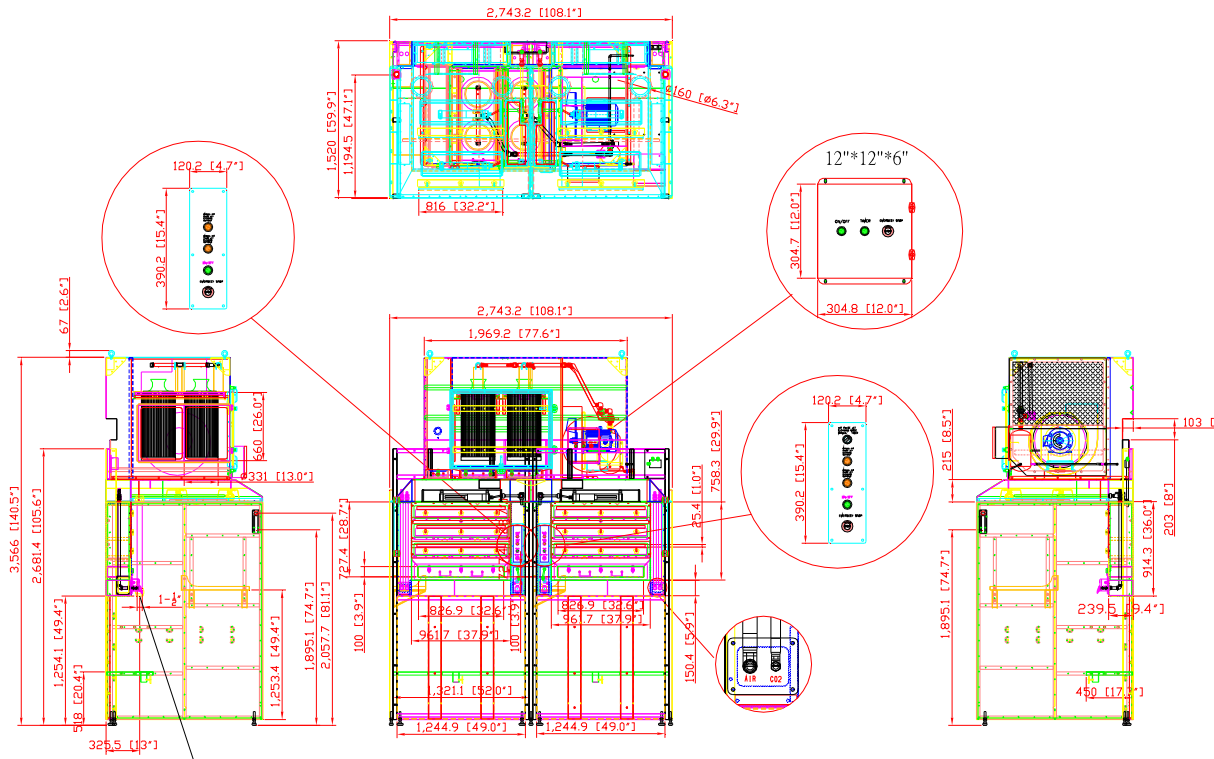
smaller booths

WB-604.55-RCC PREMIER WELDING BOOTH SPECIFICATIONS for Randolph Community College

- ***Hood Dimensions: 107.8" x 60" x 8.5" (for 2 hooddrafts)
- ***Back Draft Dimensions: 37.9" x 29.9" x 9.2" (incl. clean out drawer)
- Hood Service Panel: Removable 7" x 23" service side panels
- ***Back Draft Adjustable Inlet Slots: (3) 1" x 33.9"
- ***Hood Adjustable Inlet Slots: (2) 1" x 32.2"
- Recessed Lights: (2) Explosion Proof Lights (110V, Single Phase, 60 Hz, 18W)
- Adjustable Knobs: (15) 2 7/8" Five Star Twists
- ***Clean Out Drawer: 3.9" x 32.6" (ID) with (3) hand twist locks
- ***Back Draft Shelf: 6" x 37.9"
- Adjustable Level System: 2 7/8" Feet (maximum adjustment 5")
- Support Structure: 1 7/8" x 4" steel stock welded
- Panel Construction: 14-gauge welded steel single wall with cross and up bracing
- Welding Curtain Supports: (2) adjustable welding curtain brackets
- Forklifting Lugs: total (2) 7.9"W x 3.1"H x 60"D forklifting lugs for dual booth side-by-side to set and move hood / booth / top mounted dust collector
- Fume Arm Ceiling Supports & Brackets: Built into the hood
- Fume Arm Cover Plates: (2) cover plates (6 bolt pattern) to match optional dia. 6" fume arm
- Powder Coated: Avani Safety Blue Standard (custom colors available)
- Nine Piece Configuration: (3) side panels, (2) back panels, (2) backdraft assembly, (2) hooddraft assembly to dual booth side-by-side. (Note: hood draft assembly separated apart from the top mounted dust collector prior to shipment.)
- Booths can be mounted back-to-back, side-to-side or both options
- Electrical Outlets: (2) 110V Outlets (additional single or three phase outlets available)
- Light Switch: For overhead lights
- Compressed Air Connection
- CO2 or Gas Connection: (additional gas lines or compressed lines available)
- Double Wall Construction (welded)
- ***CO2 bracket
- ***Adjustable Rear Shelf: 52"W x 17.6"D x 1.1"H (solid with 2" hole drilled)
- ***Vacuum Port: (1) 1-1/2" @ left side panel of the left booth, (1) 1-1/2" @ right side panel of the right booth.
- ***HEPA: Avani to source locally.

OPTIONS

- Welded Nuts: Optional locations for J-Hooks
- Welding Nuts: For wire feeder or welder bracket
- Adjustable Rear Shelf (solid, grated or cutting table)
- Corner Shelves
- Viewing Windows
- Custom Welding Brackets
- Foot Lockers
- Fixtures, Lazy Suzans
- Any option that can fit inside the booth or on the booth



1-1/2" vacuum port

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Drawn by:	Date	Name	Part Number: Randolph
Checked by:	2011-06-23	***	

Title:	WB-4.5x5P-RCC (2sets) with SDC-B-5-4-RCC	
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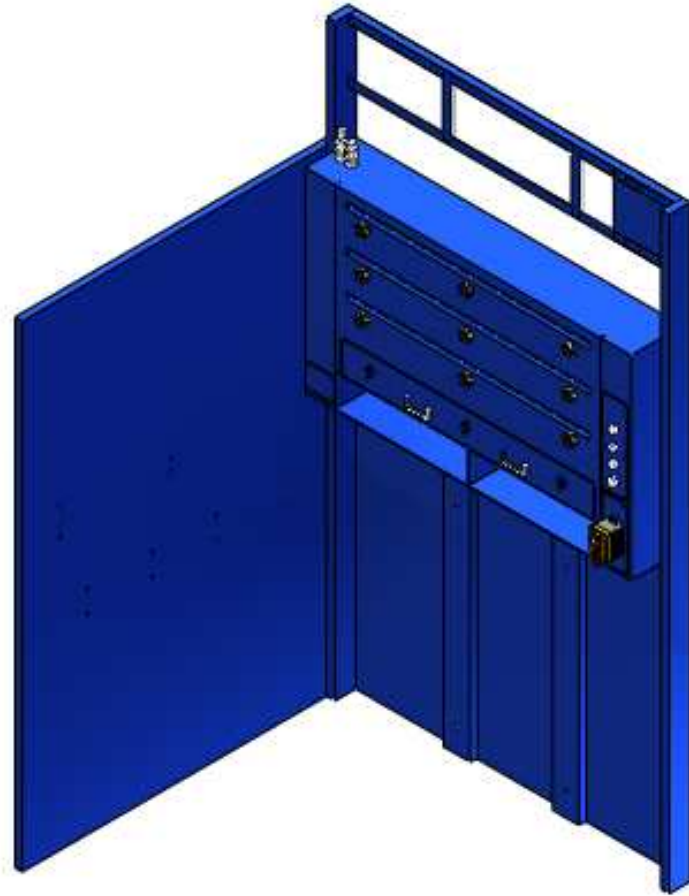
Size	Scale	Drawing Number:
E	1 = 65	WB-4.5-5P (two S) H:12'





Hardware Bag D



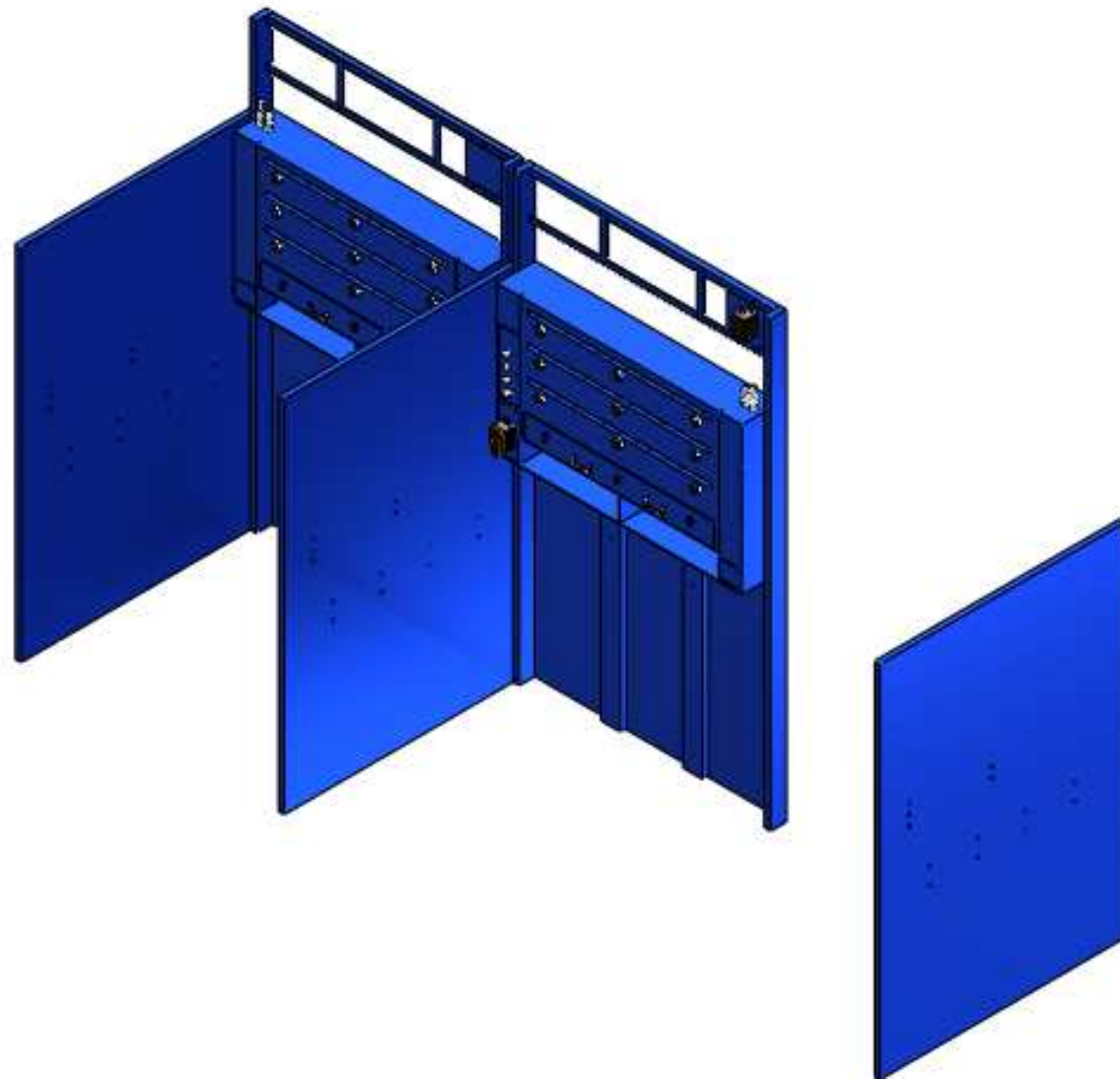


Hardware Bag E

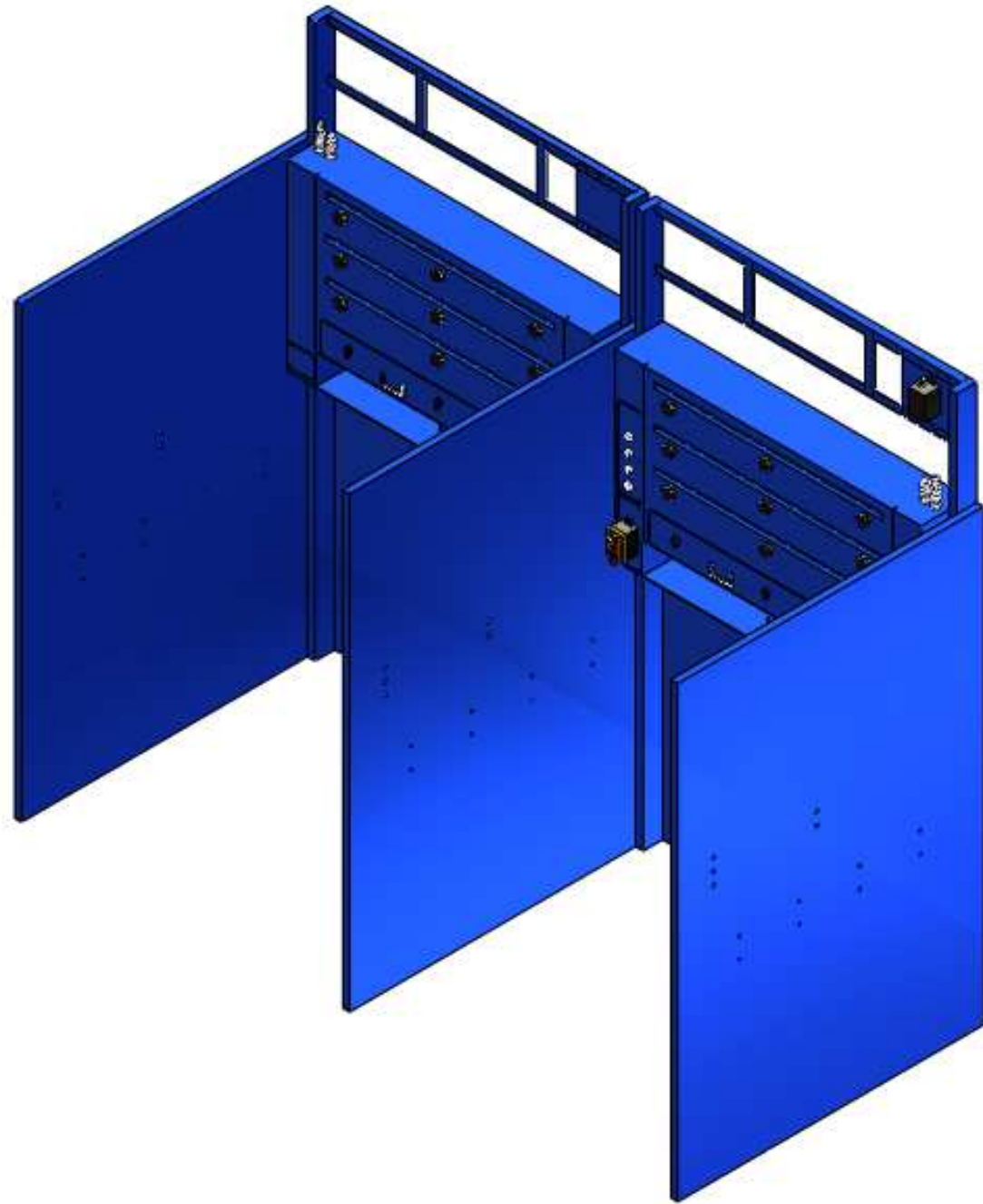


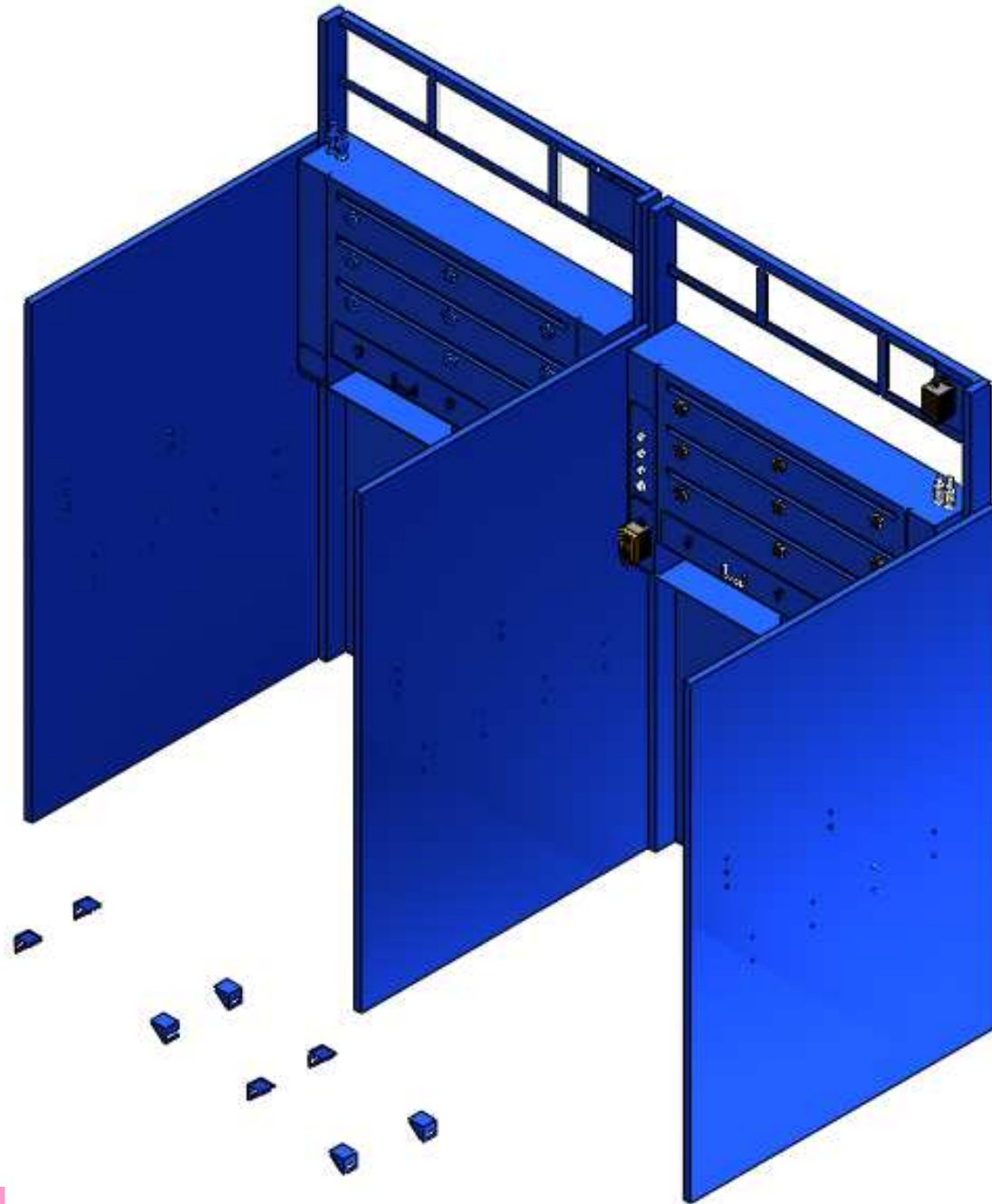






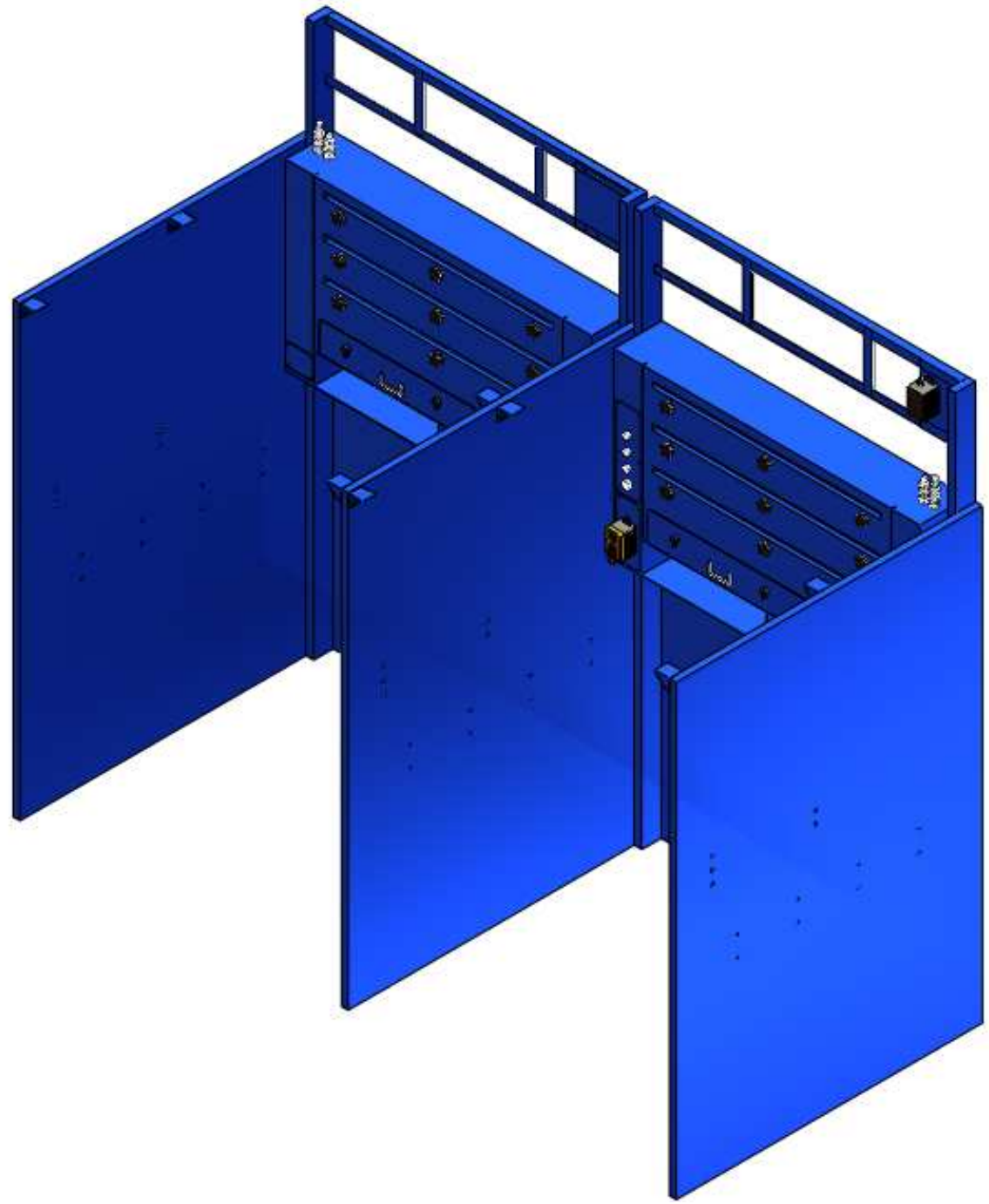
Hardware Bag C

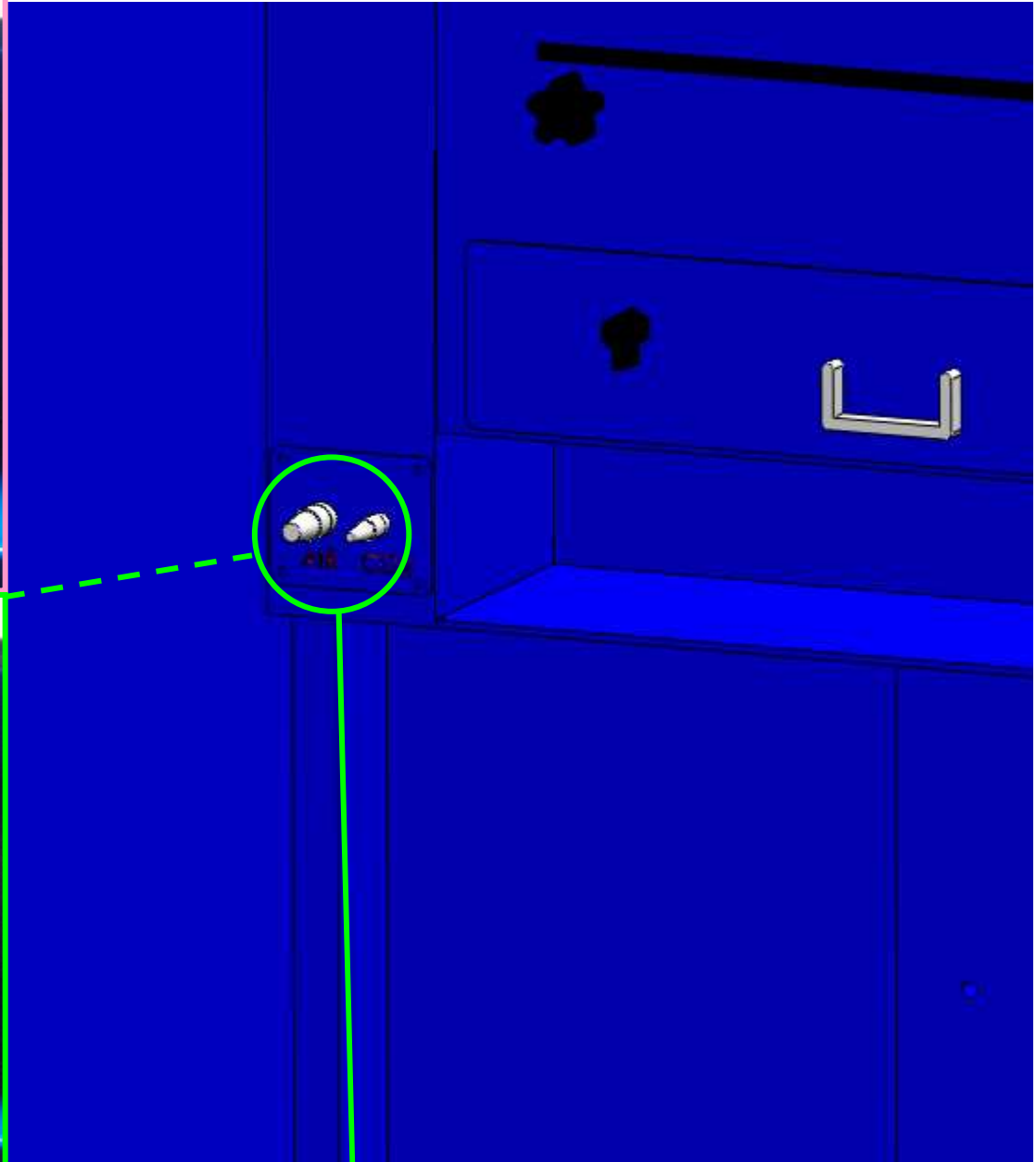




Hardware Bag K

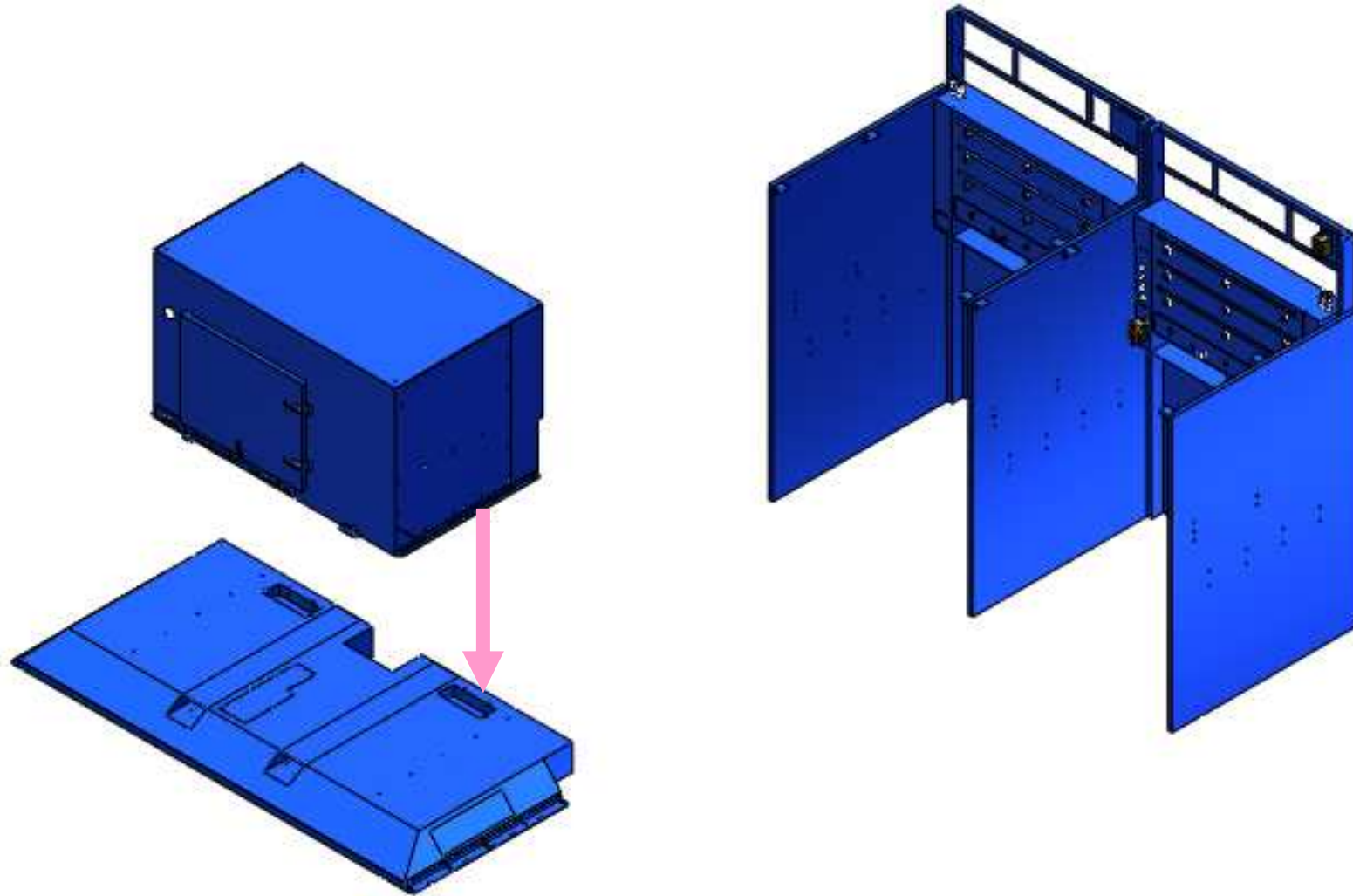
Hardware Bag M



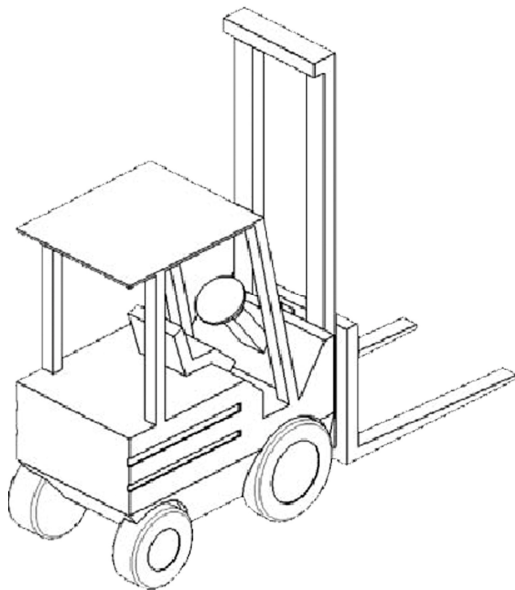
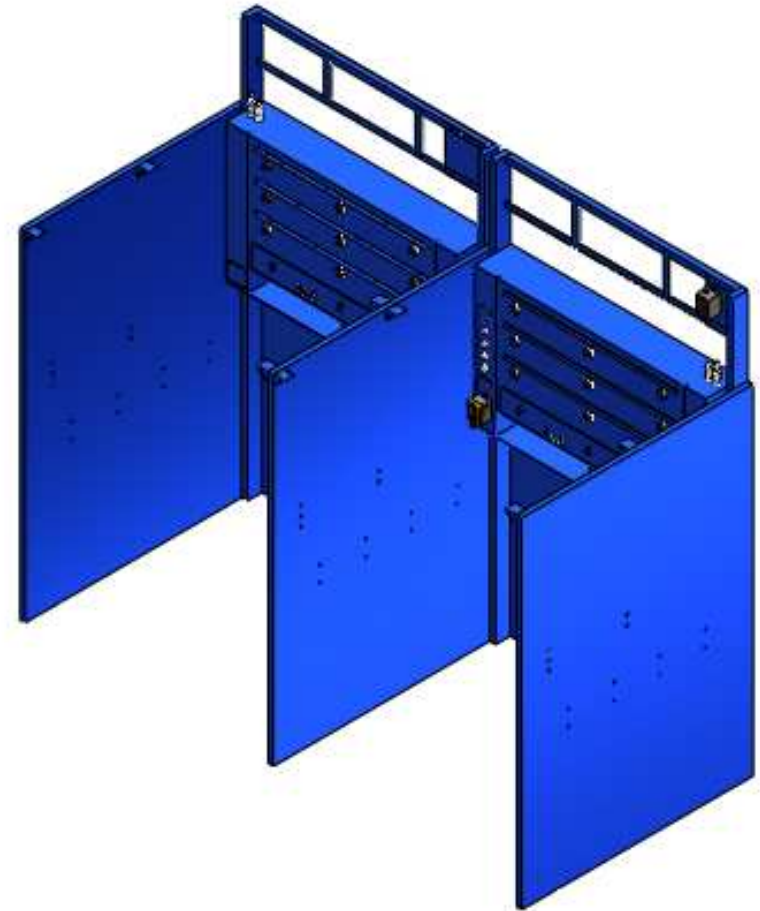
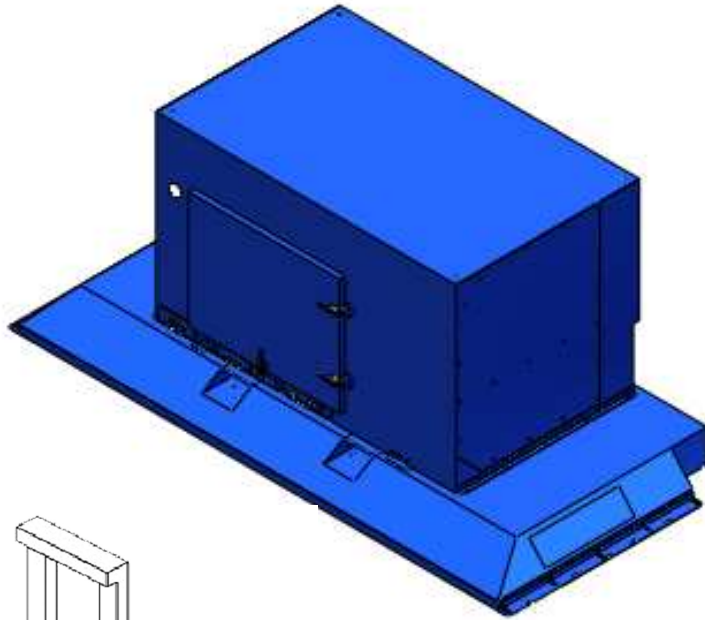


CO2 and air compressor connector

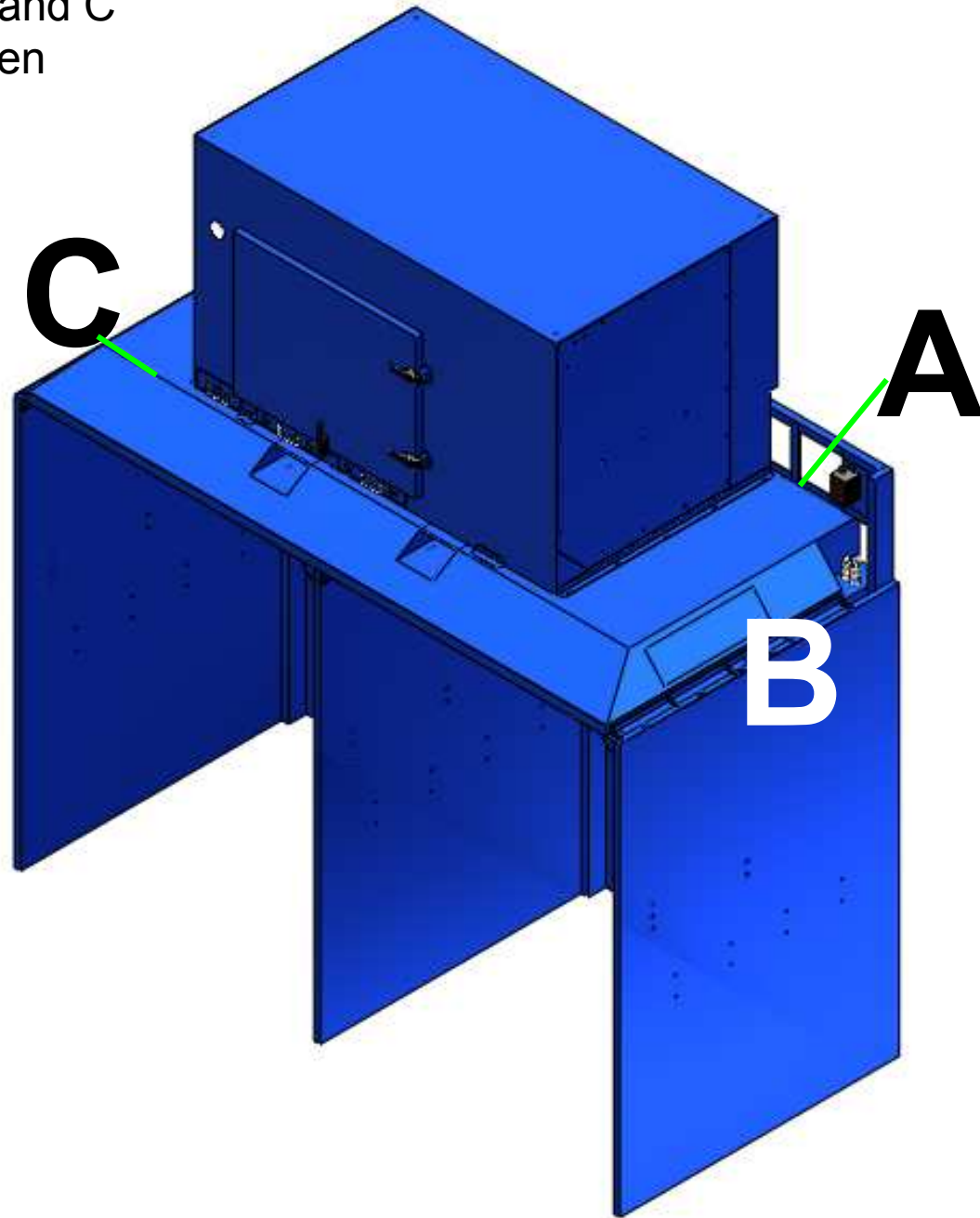
- Place the top mount dust collector TMC-5-4 on the top hood draft. Ensure that it sits properly and is secured with screws.



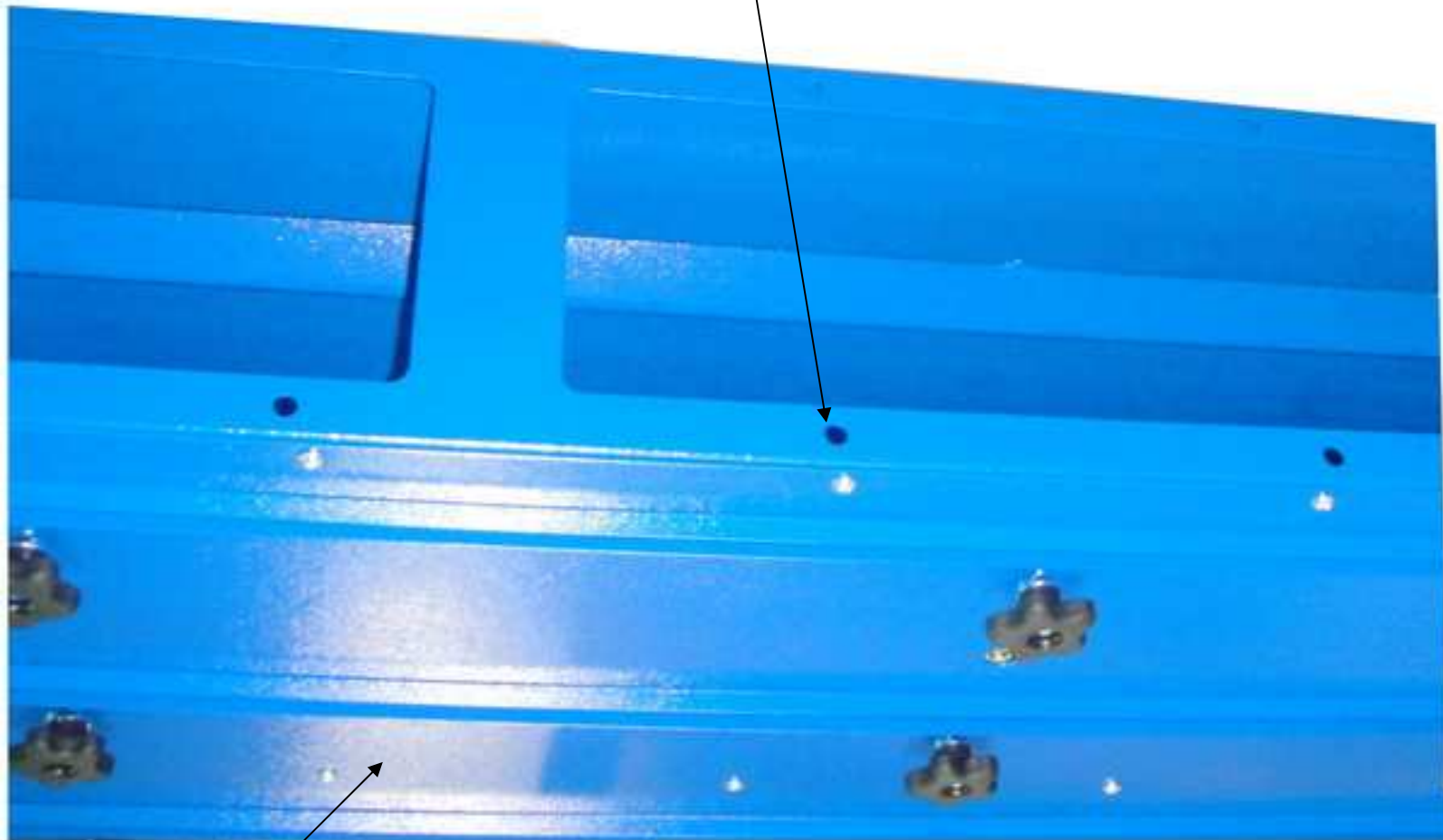
- Place the TMC-5-4 and the top hood draft above the booths.



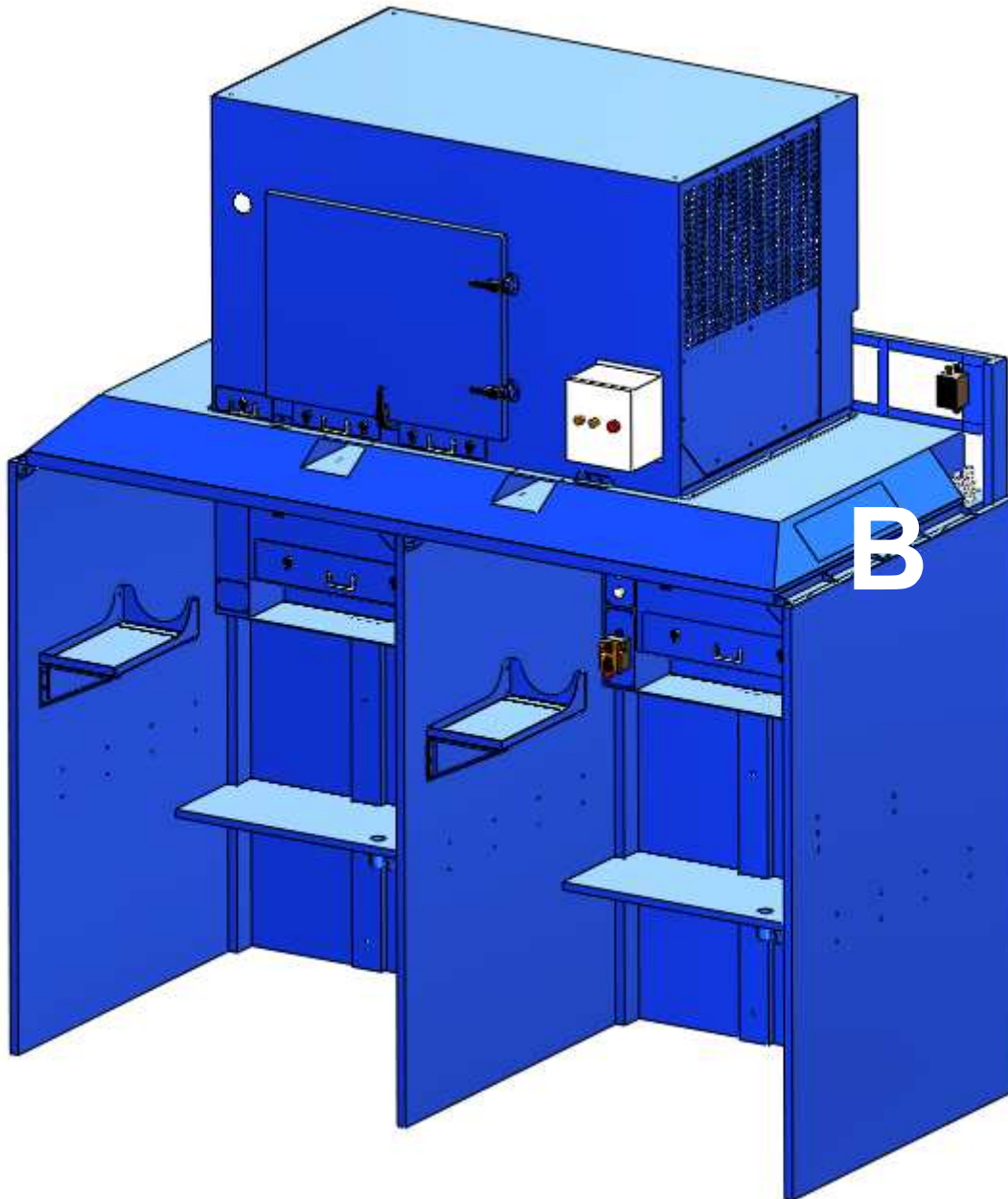
•Follow steps A, B, and C completely and fasten screws afterwards.



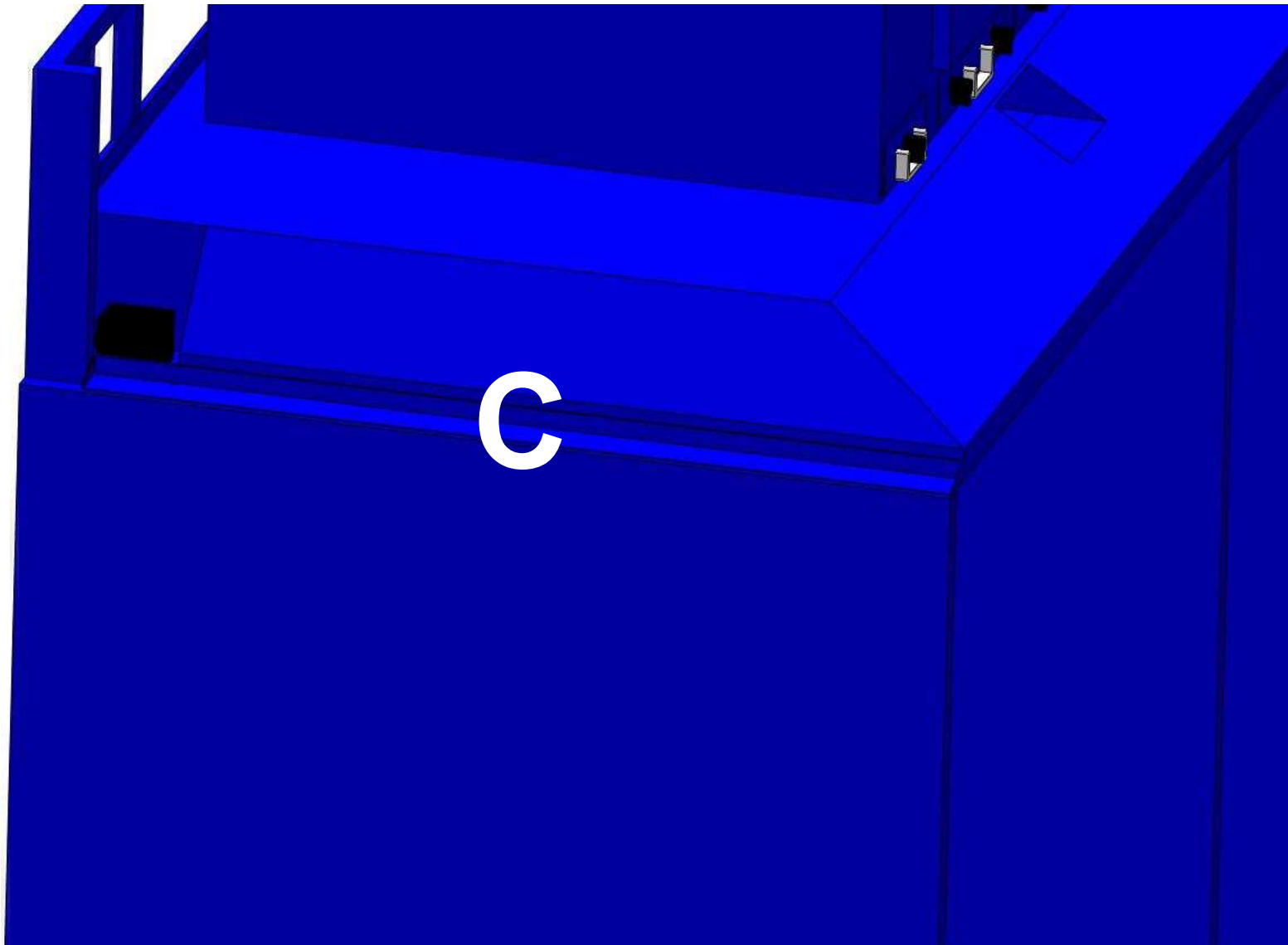
A2: Match the bolt patterns of the upper part of the backdraft to the bolt patterns of the TMC-5-4.



A1: Take off the front panel of the backdraft module.

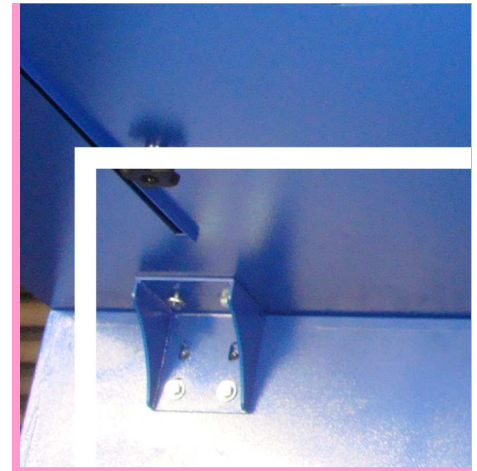


B: adjust the feet to ensure that the bolt patterns of the side panel match to the bolt patterns of the top hood draft.

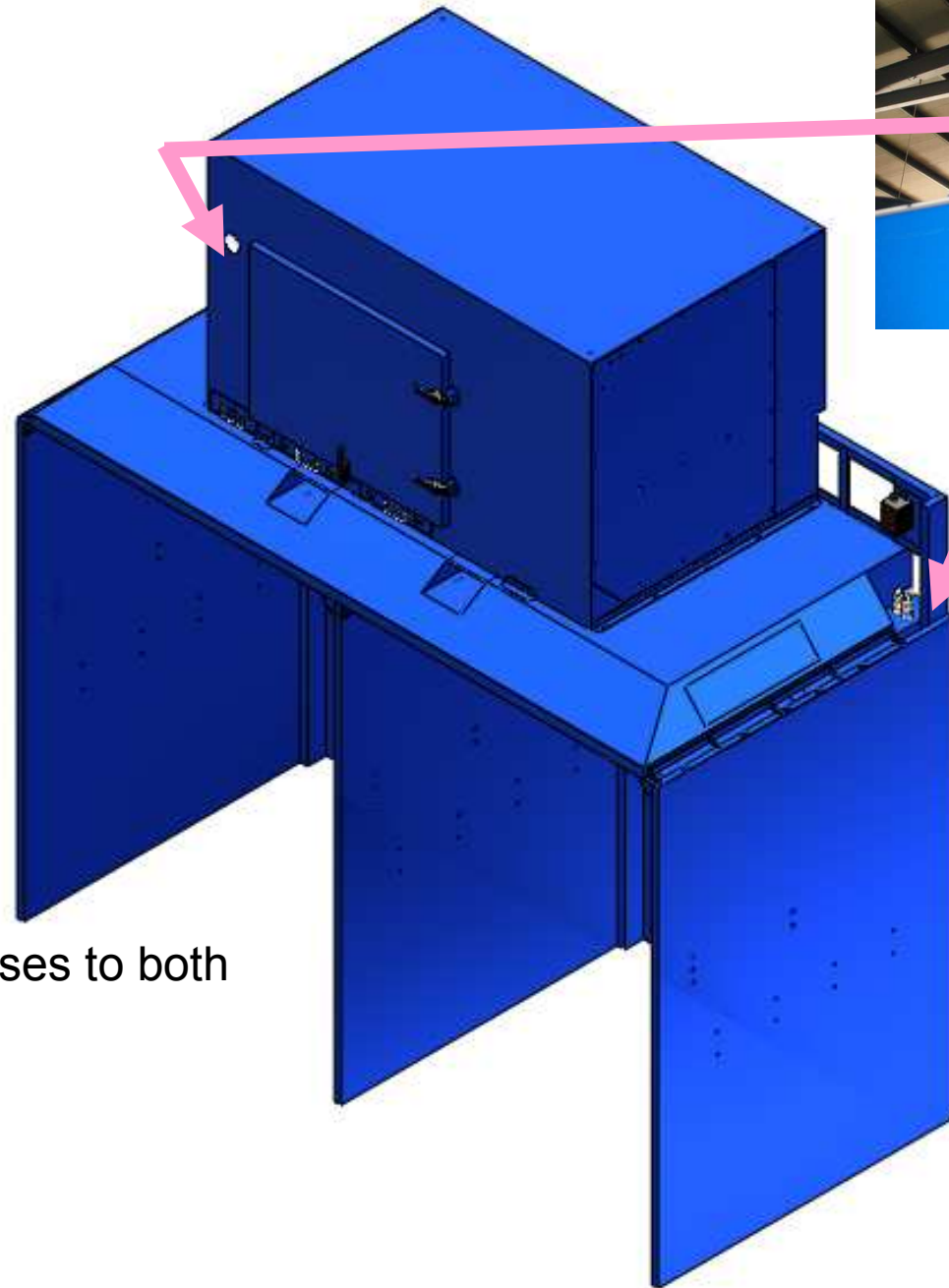


C: adjust the feet to ensure that the bolt patterns of the side panel match to the bolt patterns of the top hood draft.

- Attach the hypotenuse corner gussets bases at the panels, below the top hood draft, 2 pcs on each panel side, total 8 pcs for the two booths sitting together (pink circles).



Hardware Bag K, M

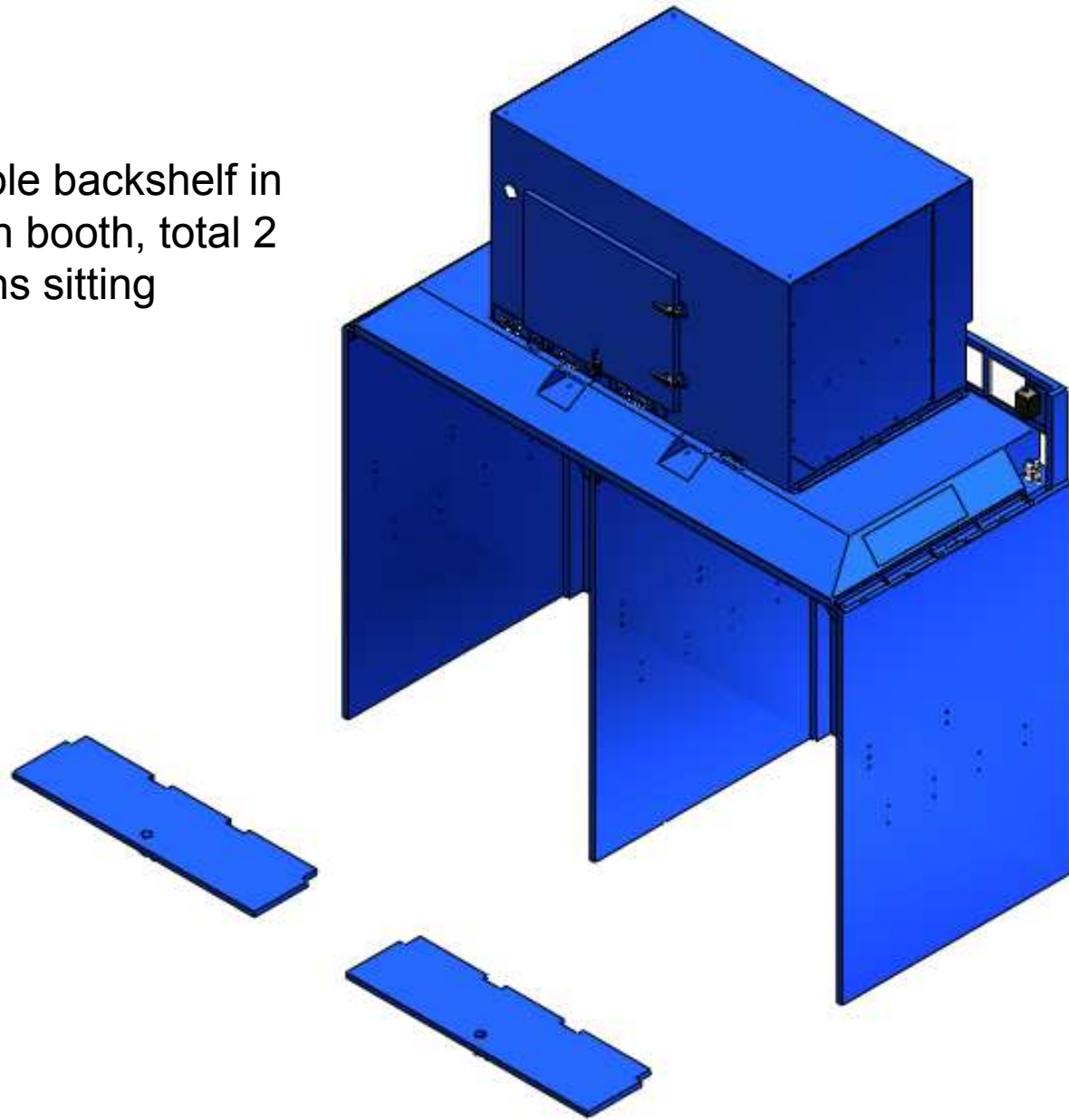


•Attach the fixing bases to both sides (pink arrows).

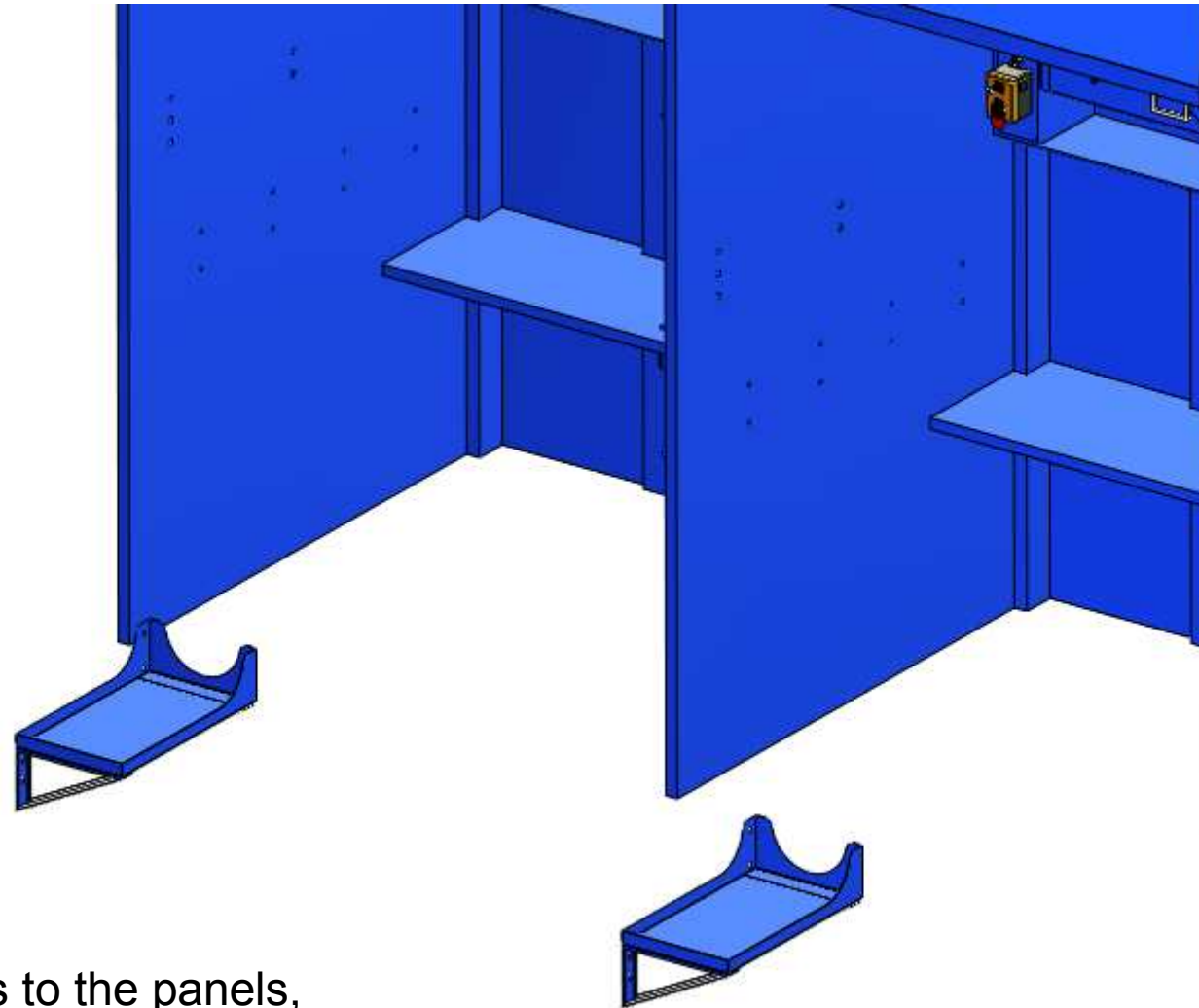
Hardware Bag A

Hardware Bag B

•Secure the adjustable backshelf in position, 1 pc in each booth, total 2 pcs for the two booths sitting together.

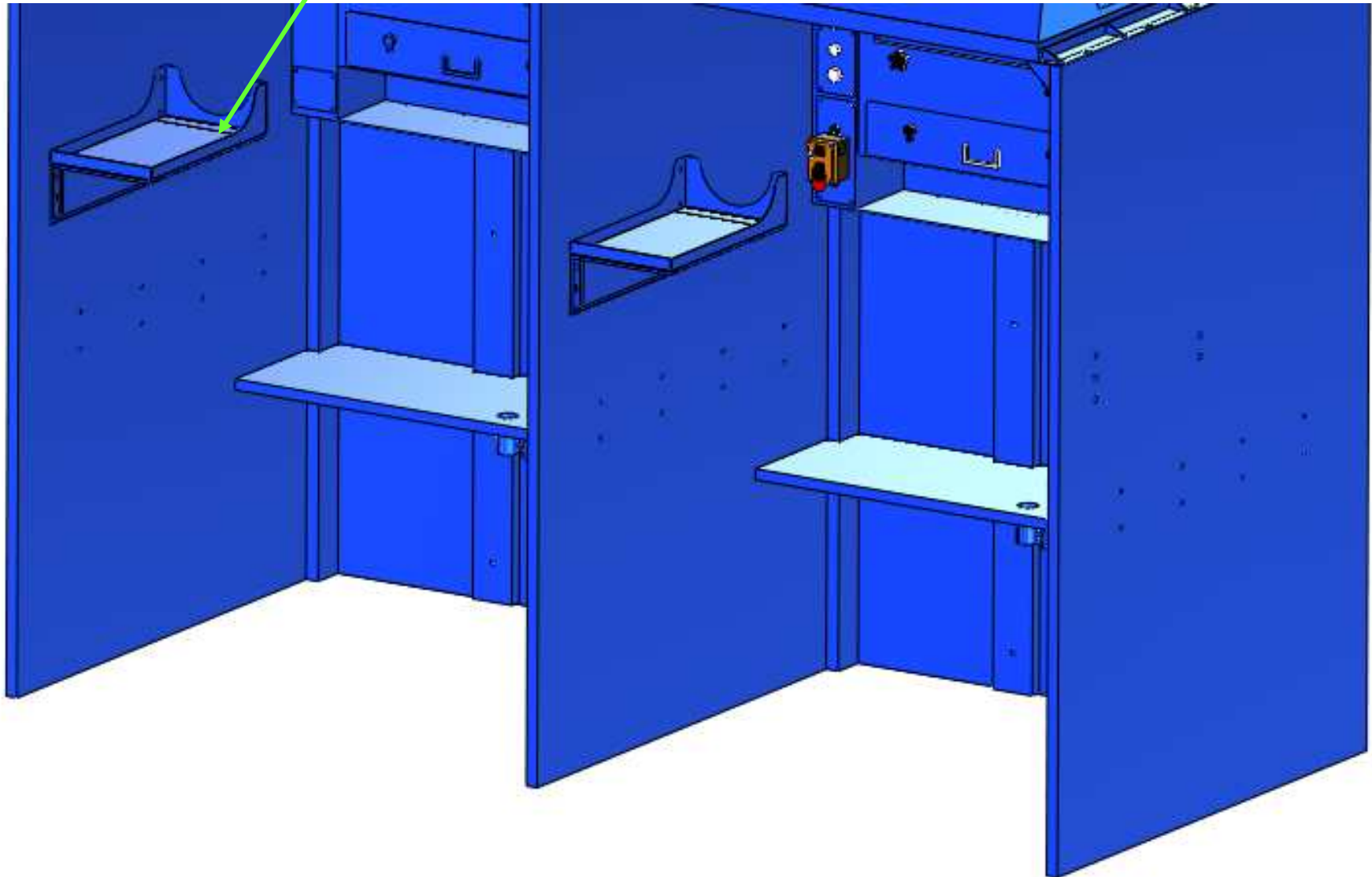


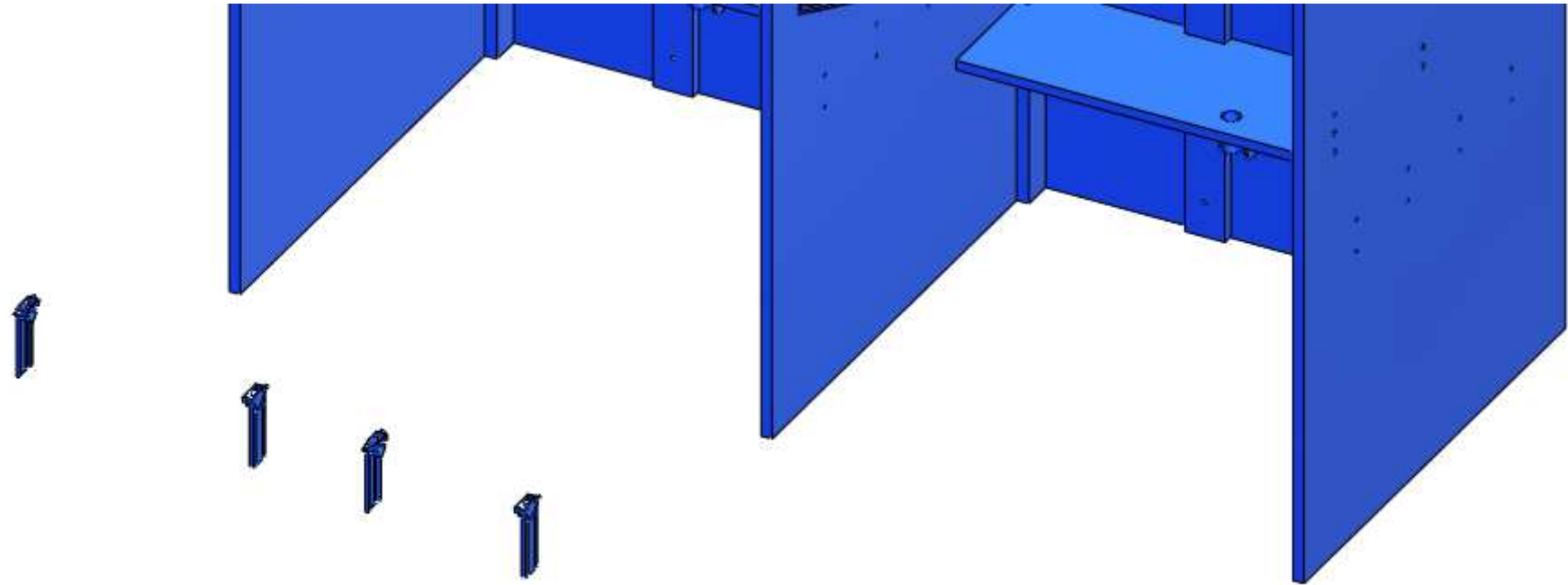
Hardware Bag F



- Attach CO2 brackets to the panels, 1 pc in each booth, total 2 pcs for the two booths sitting together.

CO2 bracket

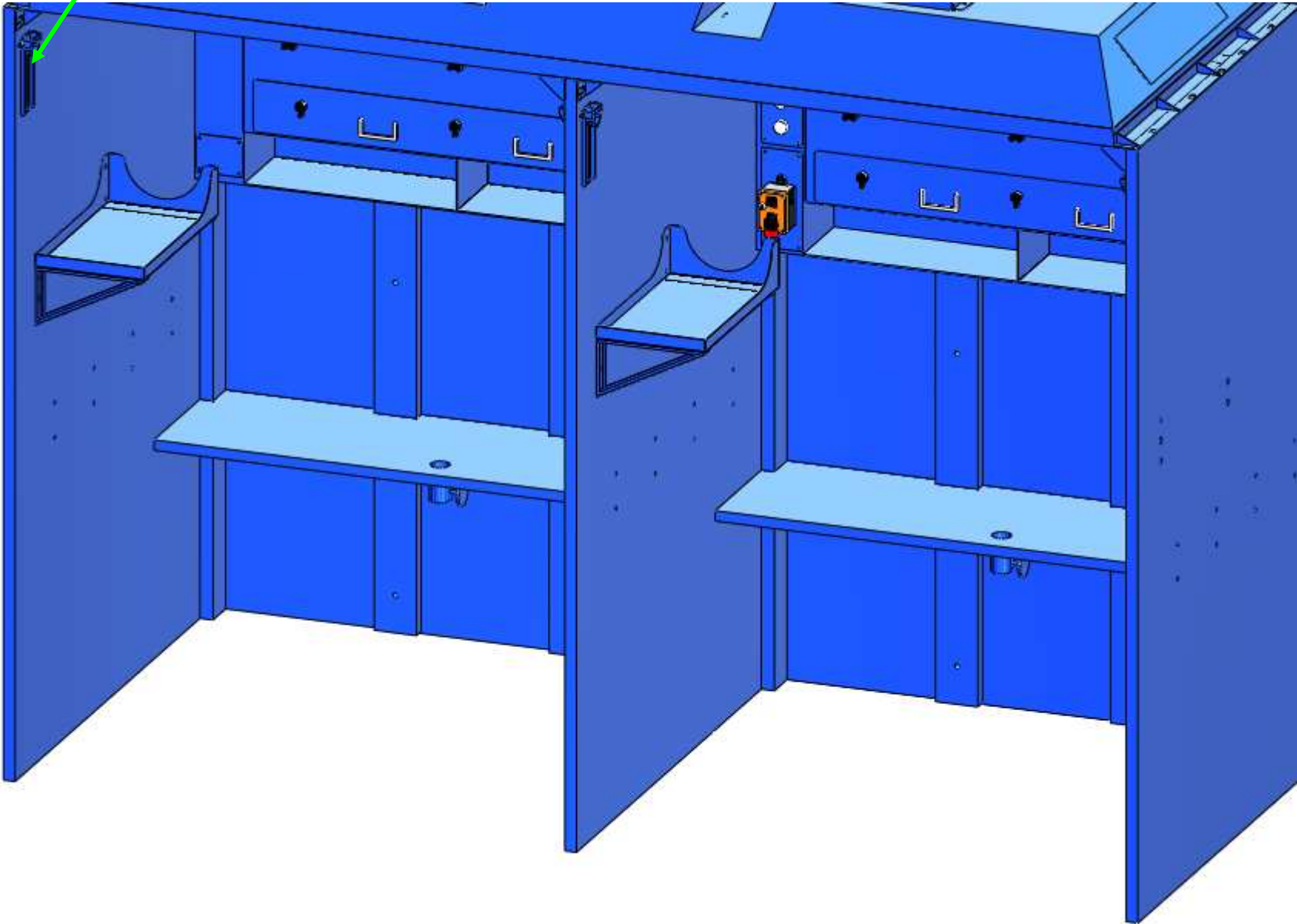


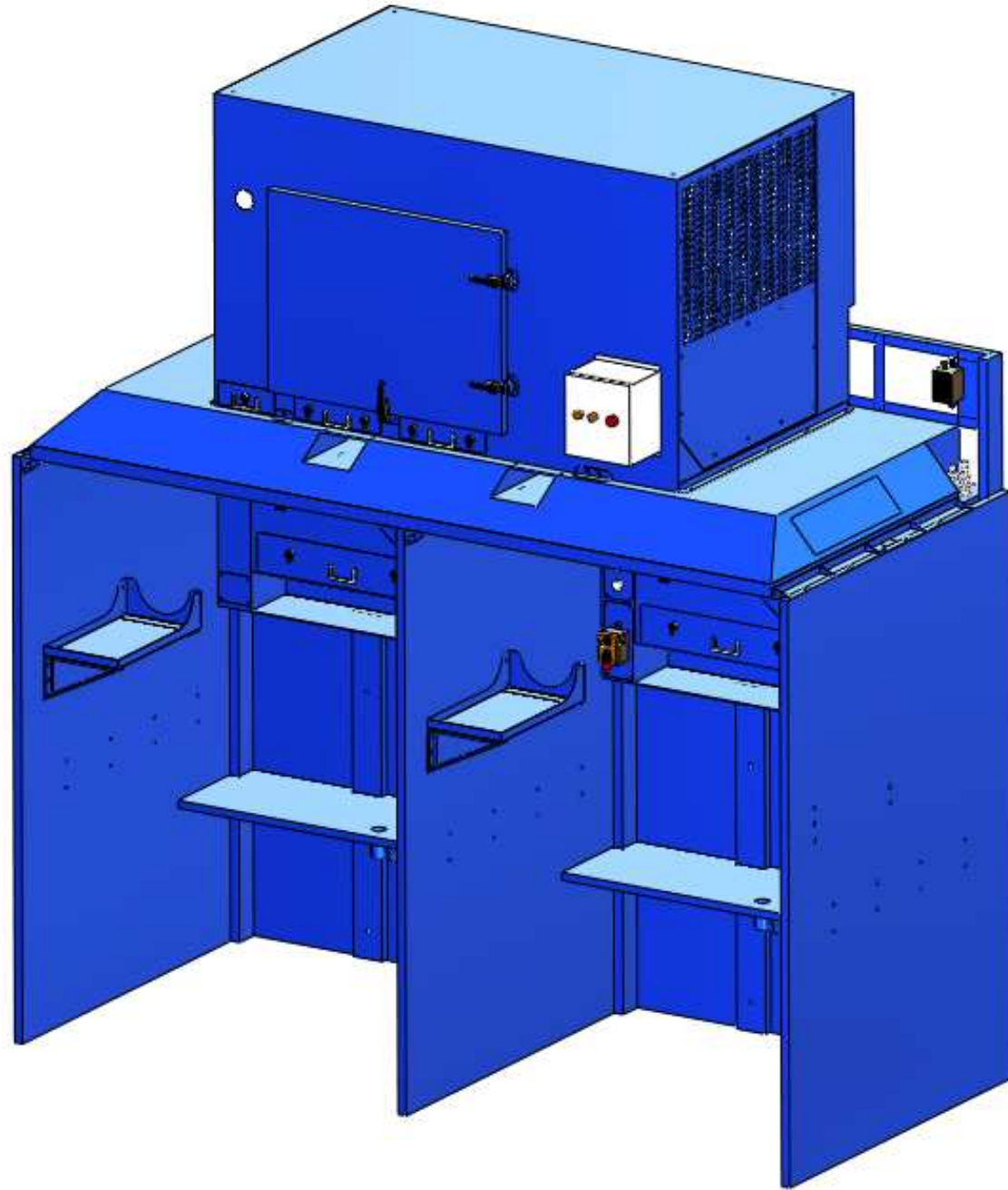


- Attach adjustable curtain rods to the side panels, 2 pcs in each booth, total 4 pcs for the two booths sitting together.

Hardware Bag O

adjustable curtain rod

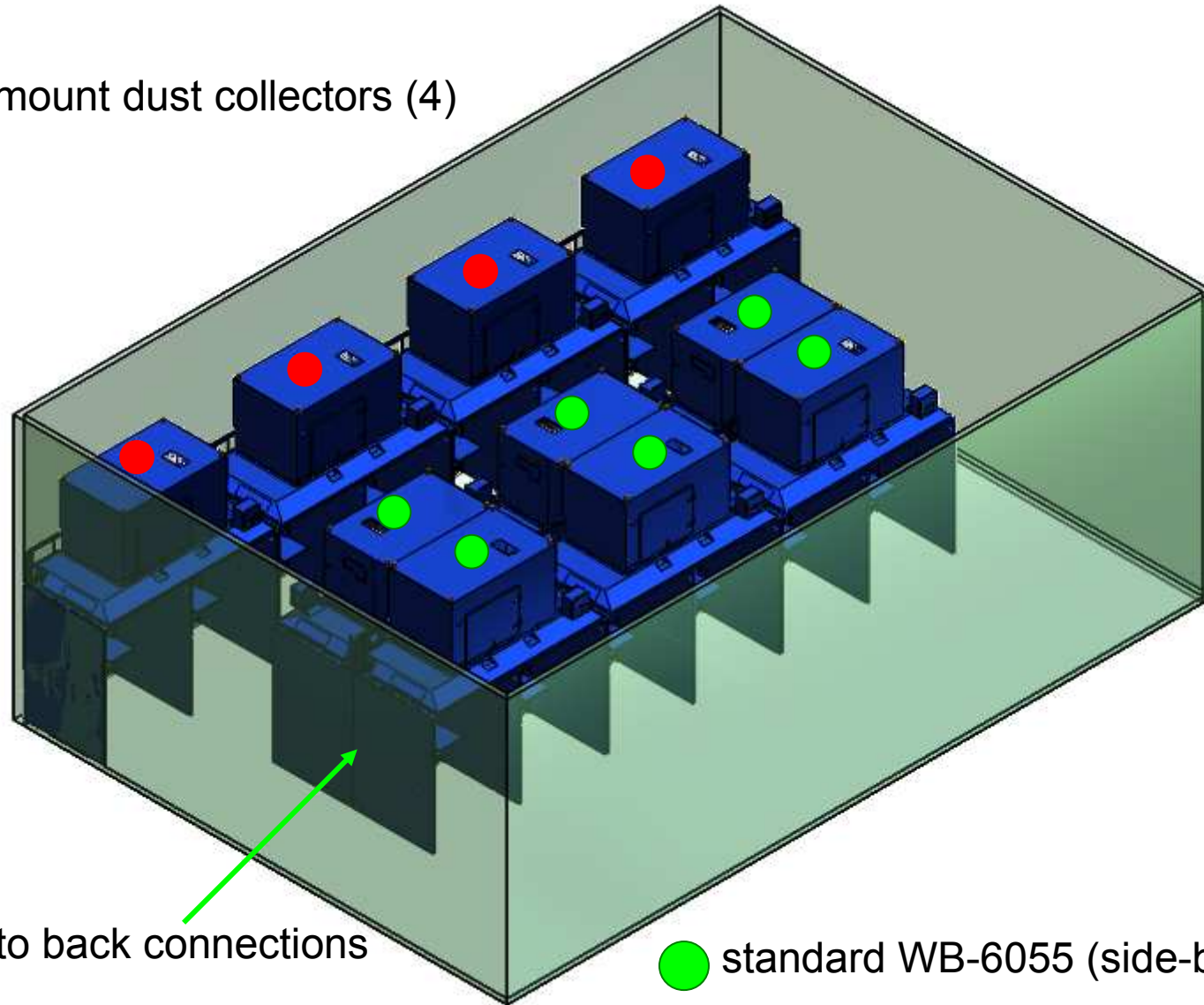




● smaller booth WB-604.55 (side-by-side):

•booth (8)

•5HP top mount dust collectors (4)



back to back connections

● standard WB-6055 (side-by-side):

•booth (12)

•5HP top mount dust collectors (6)

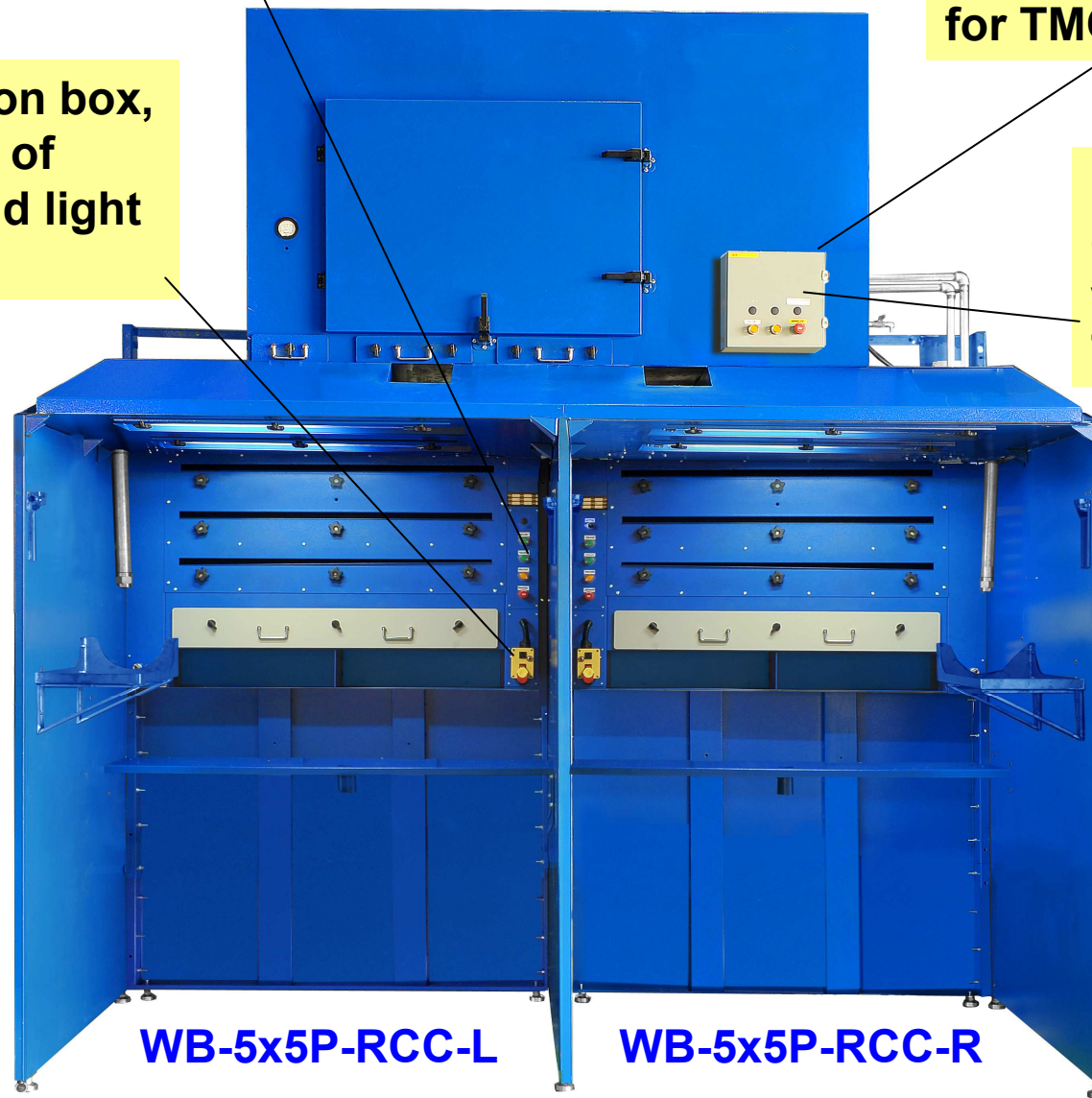
Hardware Bag G

D: control panels inside the booths

E: electrical junction box, cable connections of overhead lights and light switch

F: main power supply outsourcing for TMC-5-4

G: main electrical box wiring for TMC-5-4



WB-5x5P-RCC-L

(left booth when facing the unit)

WB-5x5P-RCC-R

(right booth when facing the unit)



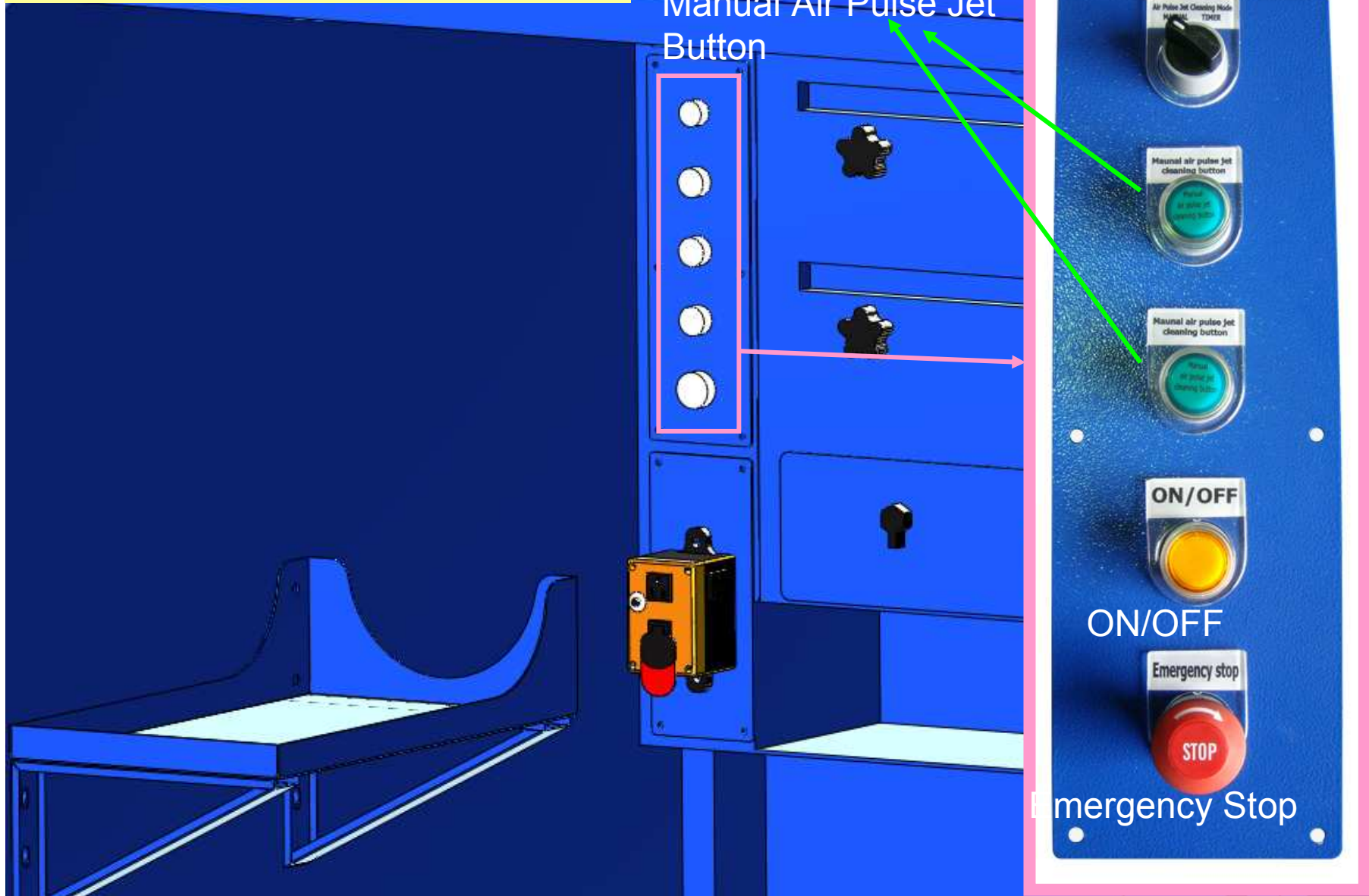
- ◆ Number 1: The control panel of the right booth.
- ◆ Number 2: The light switch of the right booth.
- ◆ Number 3: The control panel of the left booth.
- ◆ Number 4: The light switch of left booth.
- ◆ Number 5: The tube:1-1/2" connecting with the hydraulic hose adapter.

D: control panels inside the booths

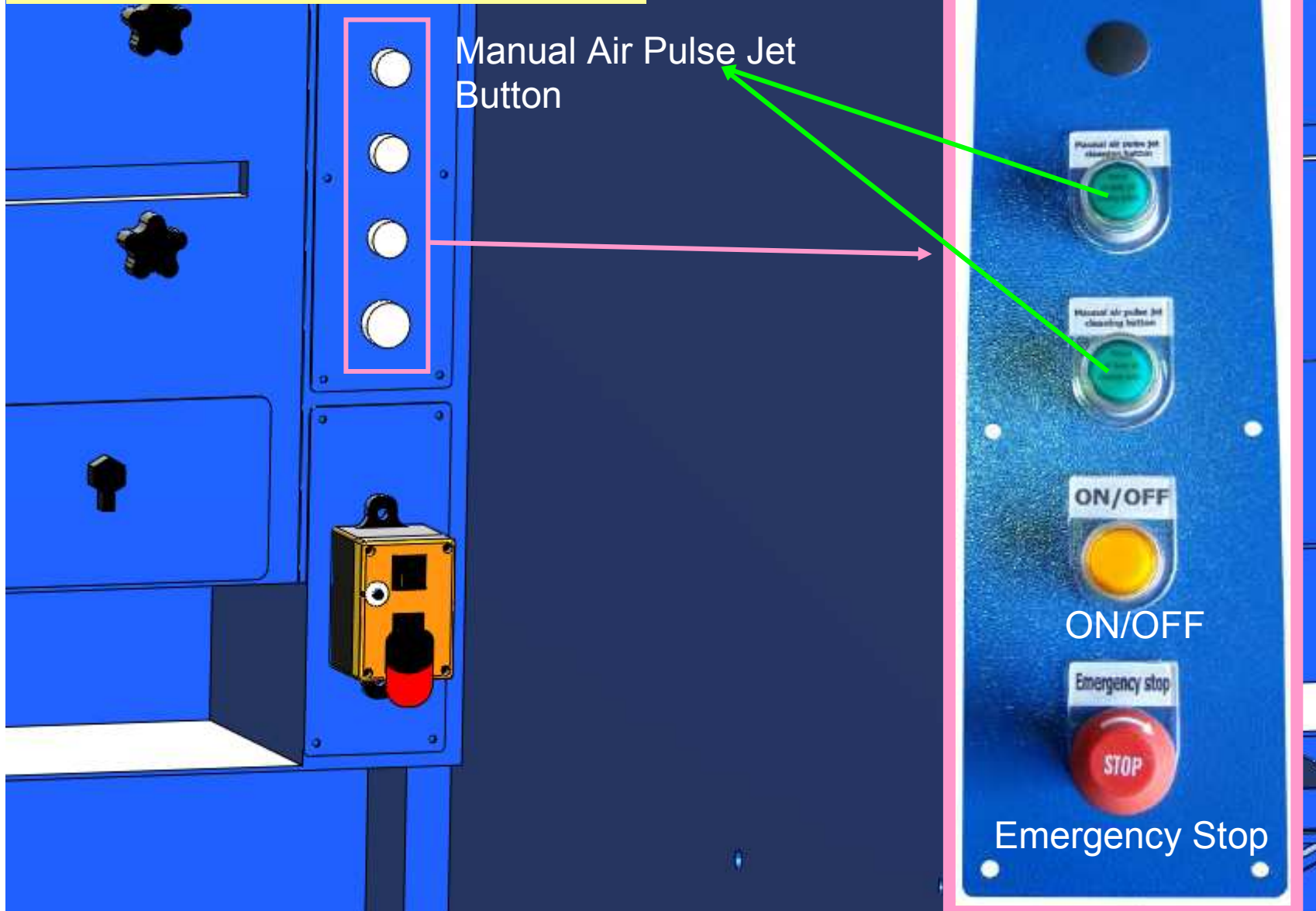




**D1: WB-5x5P-RCC-R control panel
(right booth when facing the unit)**



**D1: WB-5x5P-RCC-L control panel
(left booth when facing the unit)**



Manual Air Pulse Jet Button

ON/OFF
ON/OFF

Emergency stop
STOP

E: electrical junction box, cable connections of overhead lights and light switch



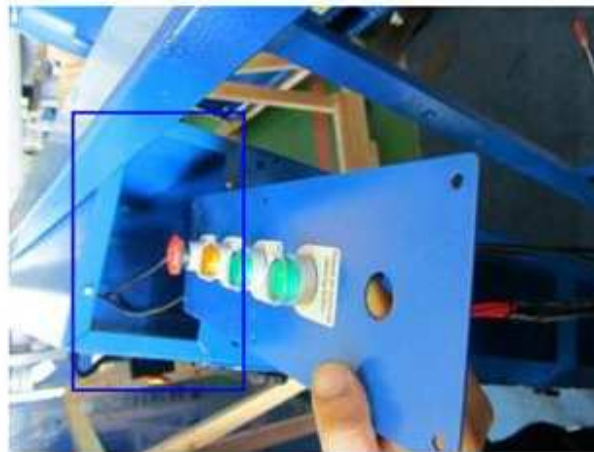
- ◆ Take out the light switch from packing.
(number: 2 and 4)

- ◆ Put the light power cord into the hole.
- ◆ Have the light power cord go into the wireway blue circled and up through to booth top opening.

- ◆ Use the screwdriver to match the Philips Head Screw and lock the light switch on the booth.



- ◆ Take out the control panel from packing.
(number: 1 and 3)



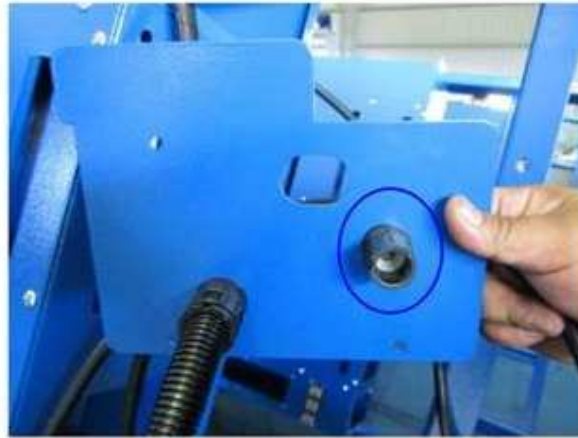
- ◆ Have the control panel go through the wireway and take out it from the wireway.



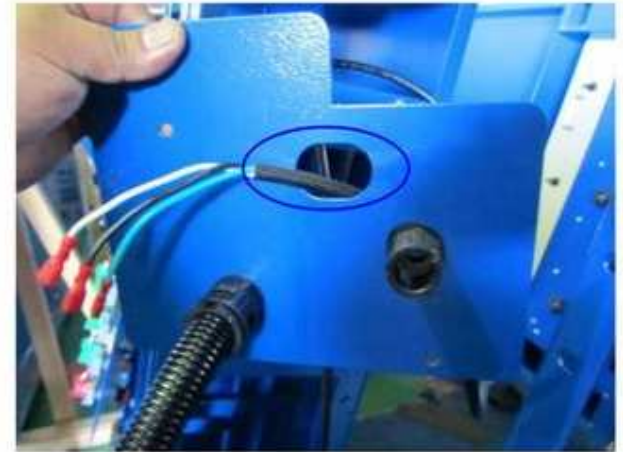
- ◆ Use the screwdriver to match the Philips Head Screw and lock the control panel on the booth.



◆ Take out the iron plate from packing.



◆ Take out the corrugated plastic tubing from plastic connection.



◆ Have the cord of the light switch go through the iron plate.



◆ Have the cord of light switch go through the plastic connection.



◆ Have the cord of light switch go through the plastic tubing.

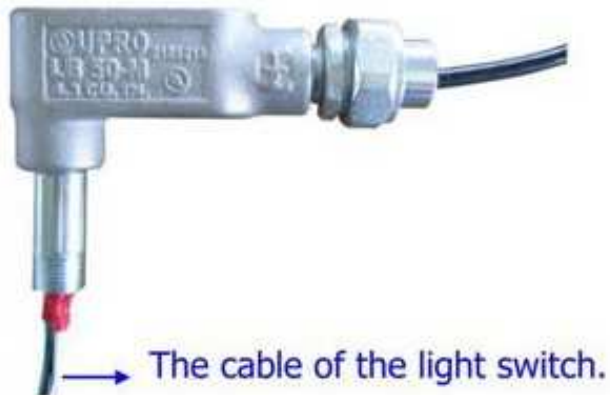


◆ Lock the plastic tubing into the plastic connection.

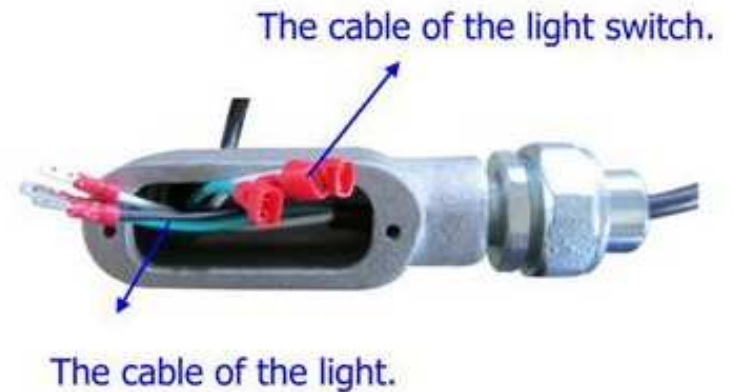
E1: cable connections of light switch to overhead lights for WB-5x5P-RCC



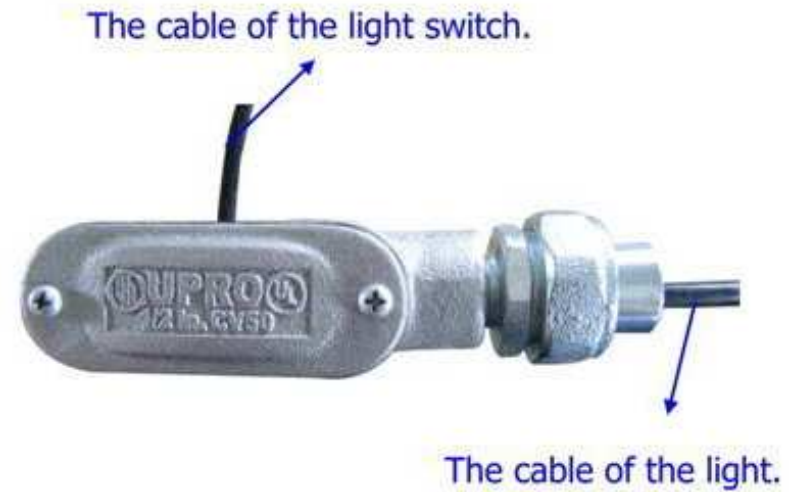
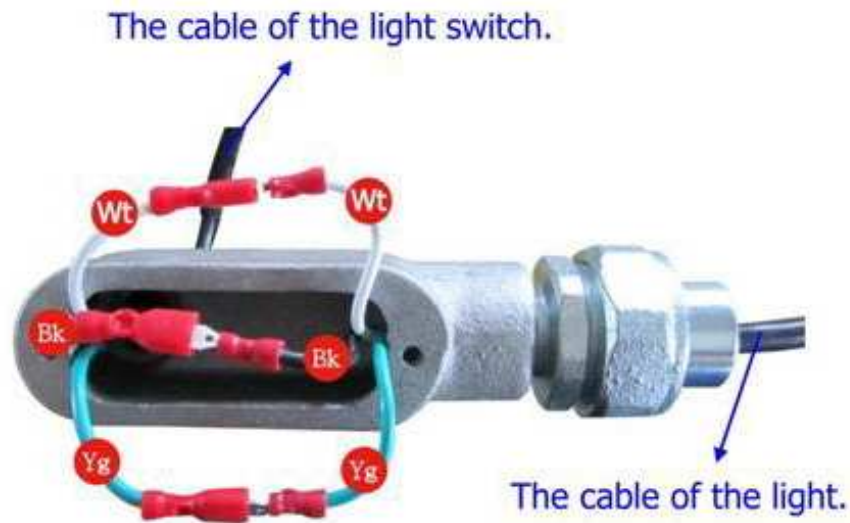
- ◆ Take out the cord of light from the steel adapter box.



- ◆ Have the cord of the light switch go through the tube into the steel adapter box.



- ◆ Take out the cord of the light switch from the steel adapter box.



- ◆ Connection the white electrical wire with the white electrical wire.
- ◆ Connection the black electrical wire with the black electrical wire.
- ◆ Connection the green electrical wire with the green electrical wire.

- ◆ Lock the cover of the steel adapter box.

E2: cable connections of electrical junction box for WB-5x5P-RCC



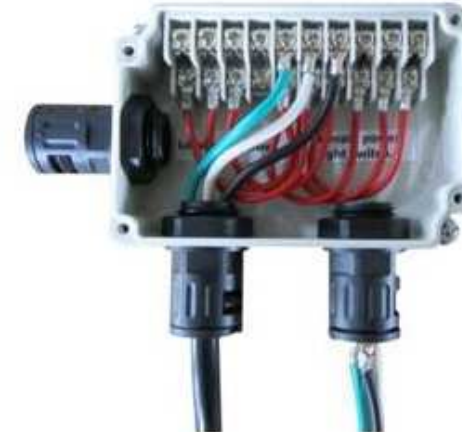
- ◆ Open the cover of the electrical junction box.



- ◆ Have the cable go through the plastic connection into the electrical junction box.



- ◆ Connection the cable with the terminal blocks for the electrical junction box.



- ◆ Have the cable go through the plastic connection into the electrical junction box.

Local main power supply coming in.

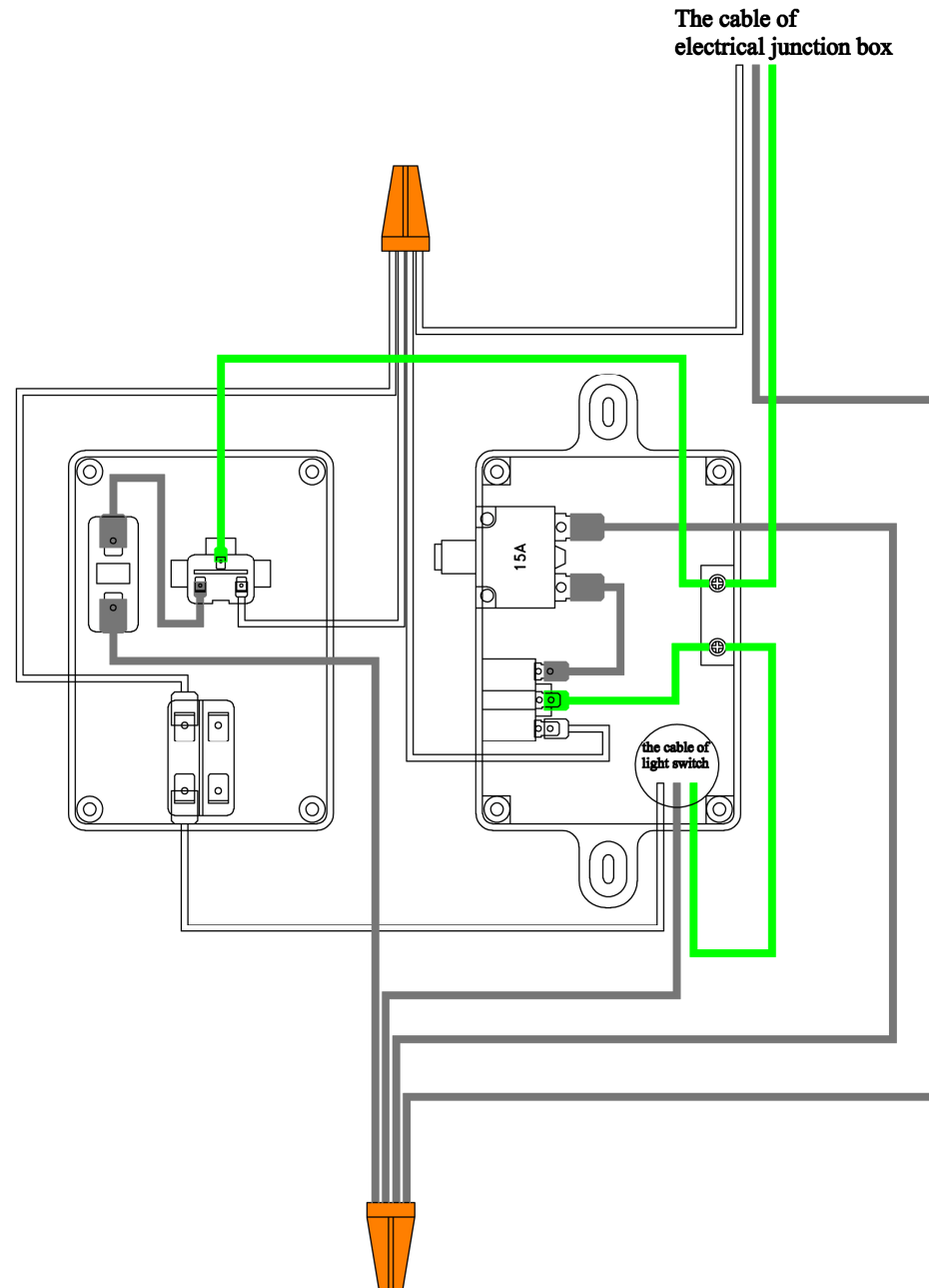


- ◆ Connection the cable with the terminal blocks for the electrical junction box.
- ◆ Link this set to local main power supply.

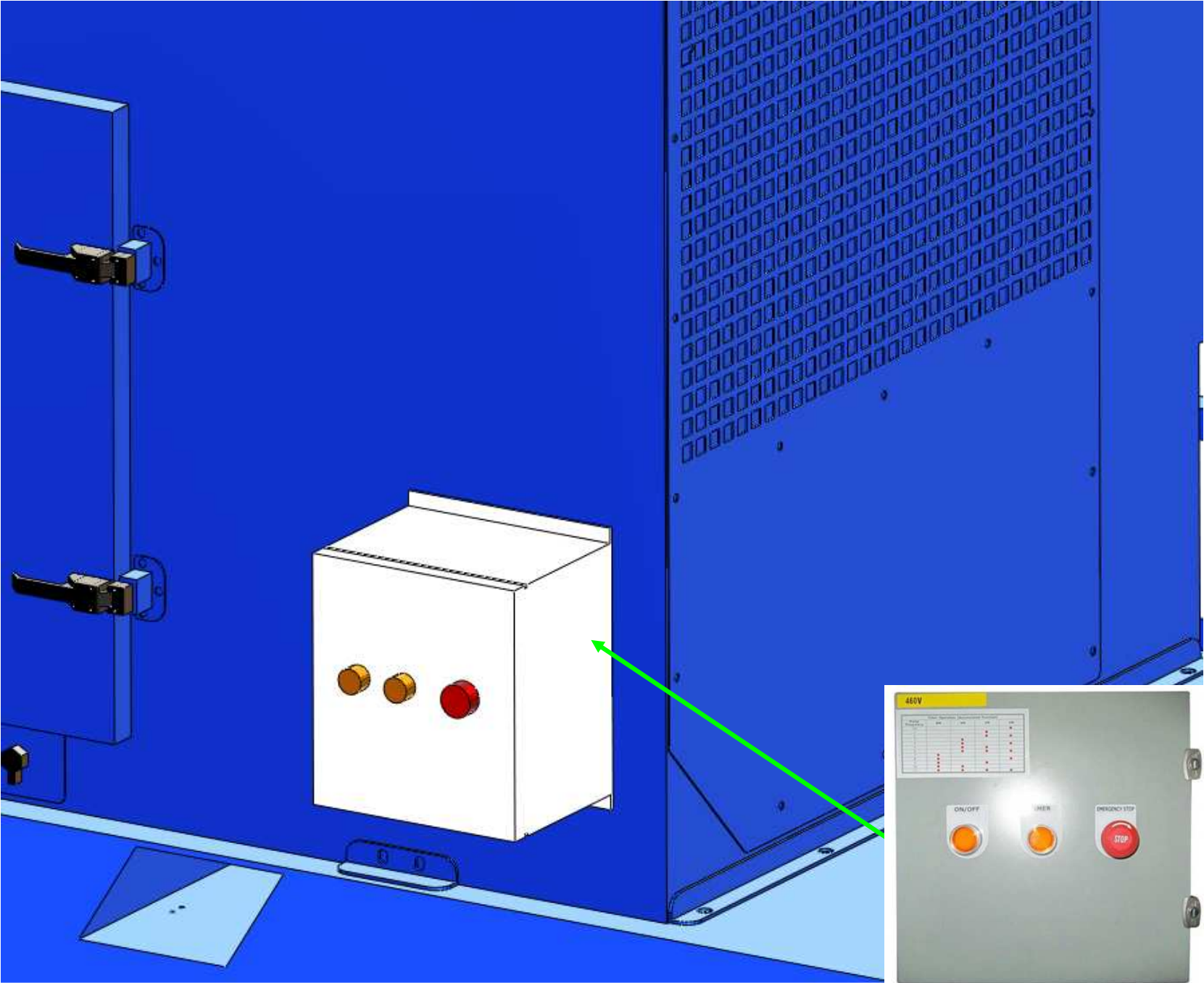


- ◆ Lock the cover of the electrical junction box.

E3: wirings for light switch and 2-plugs sockets for WB-5x5P-RCC-L (left booth when facing the unit) and WB-5x5P-RCC-R (right booth when facing the unit)

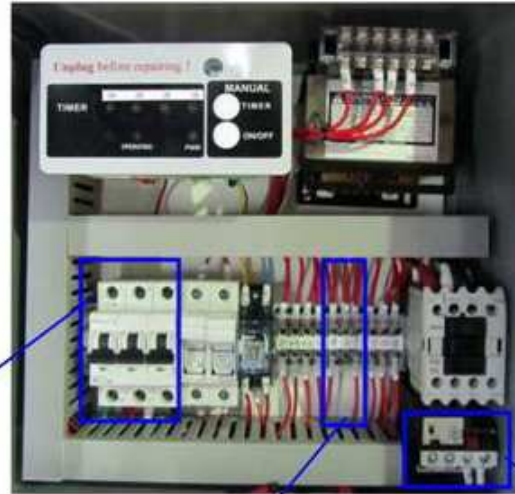


UL approved control box



F: main power supply outsourcing for TMC-5-4

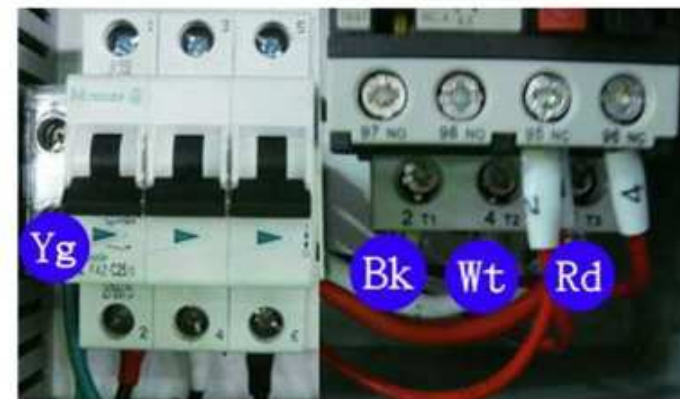
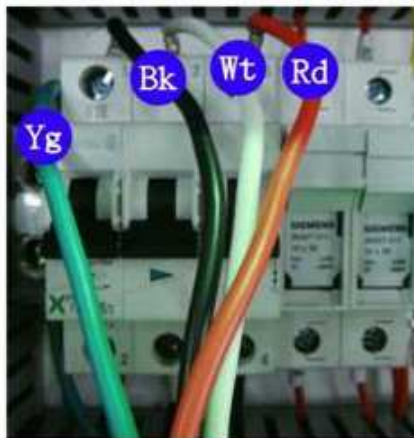
Control Box for TMC-5-4



➤ Connect to main power supply for TMC-5-4.

➤ Magnetic valve wirings for TMC-5-4.

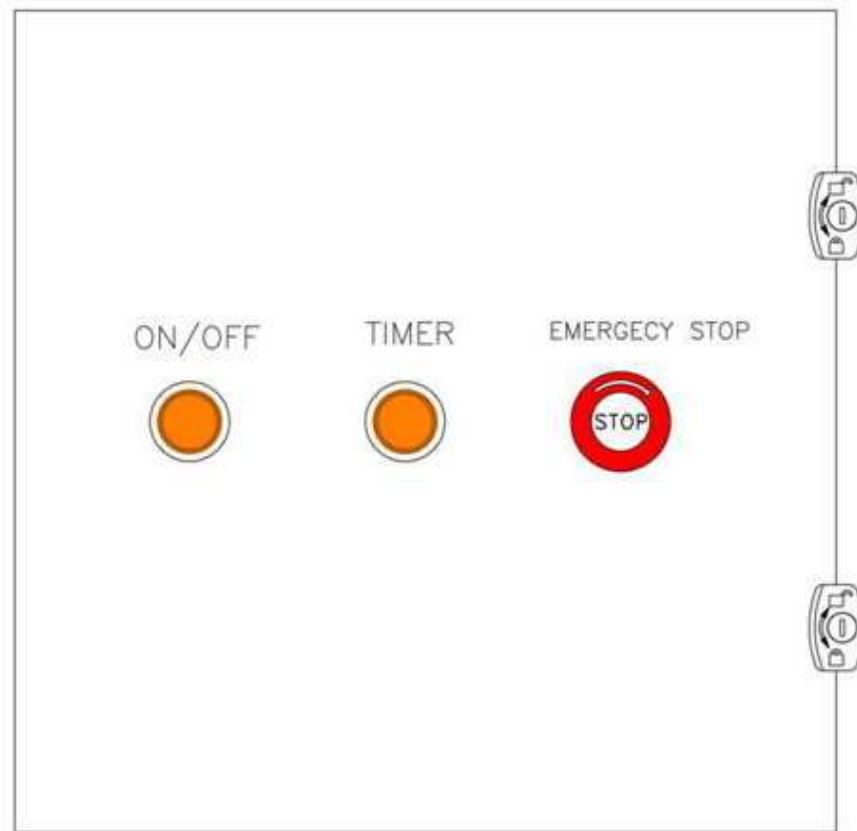
➤ Connect to motor power supply for TMC-5-4.



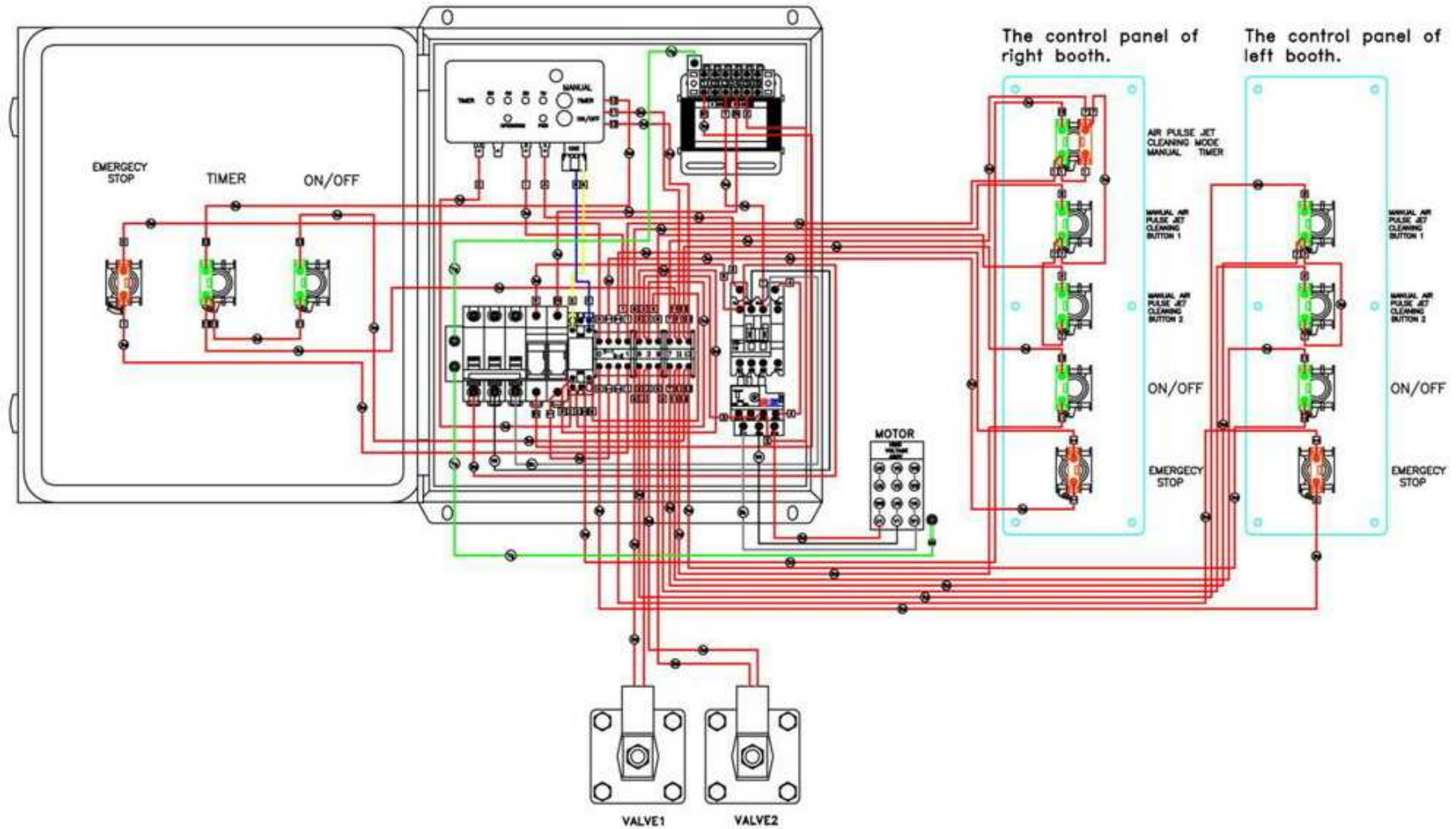
G: main electrical box wiring for TMC-5-4

(control box: 5HP / 230/460V / 60Hz / 3Ph, **connected to 460V**)

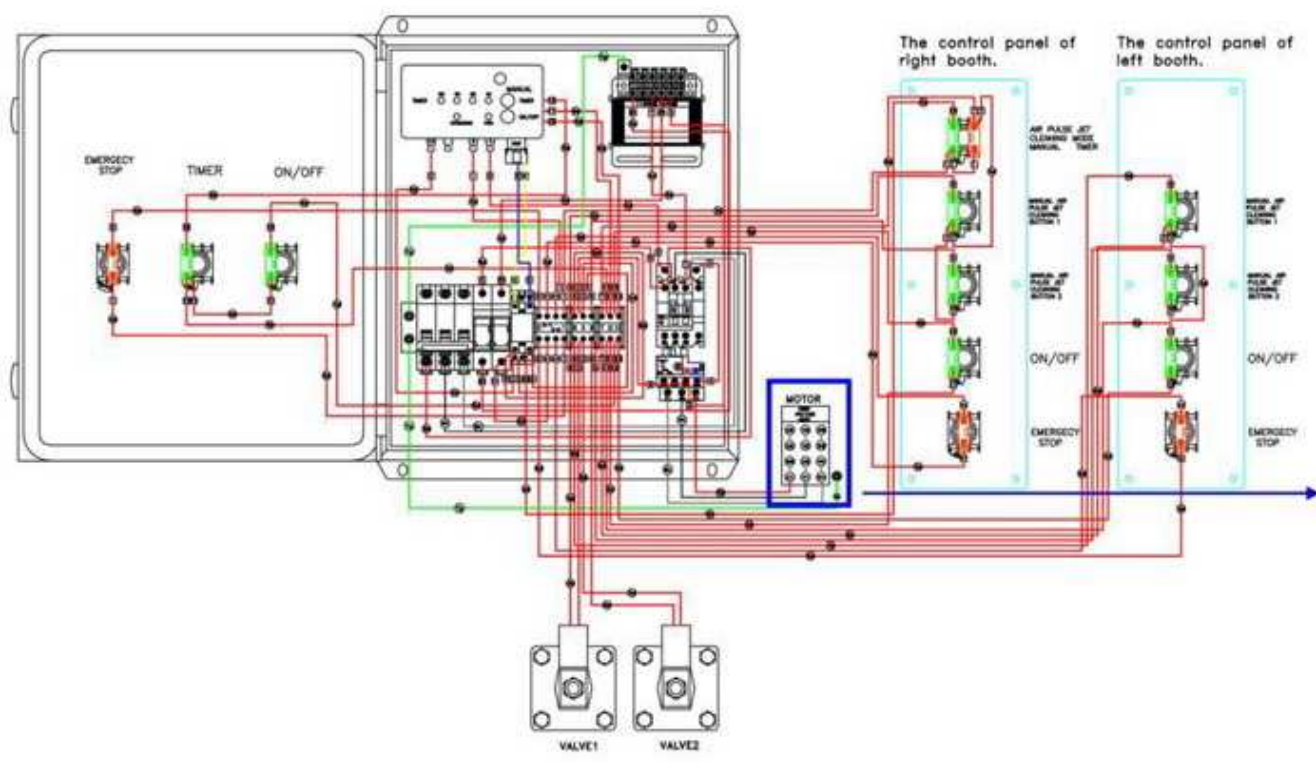
Main Electrical Box Wiring For TMC-5-4



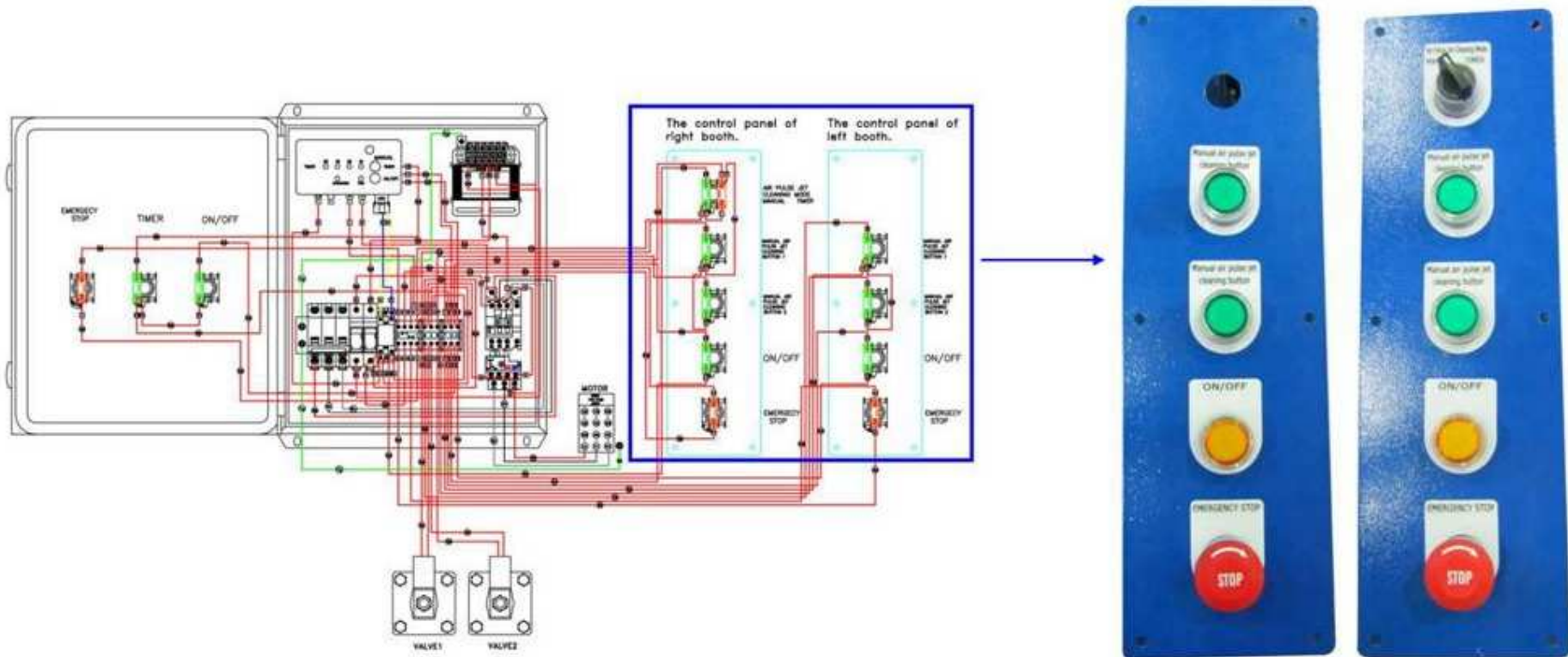
Main Electrical Box Wiring For TMC-5-4



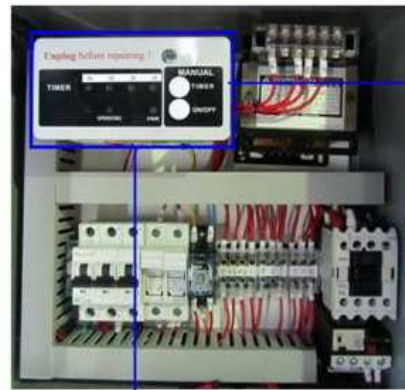
Main Electrical Box Components for TMC-5-4



Main Electrical Box Components for TMC-5-4



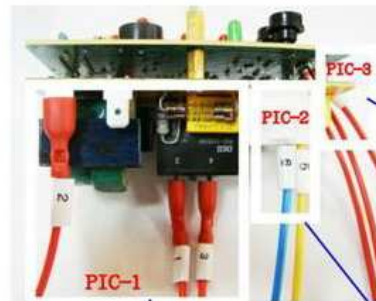
Main Electrical Box Components for TMC-5-4



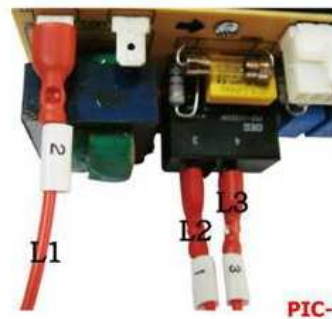
◆ IC Board (Front)



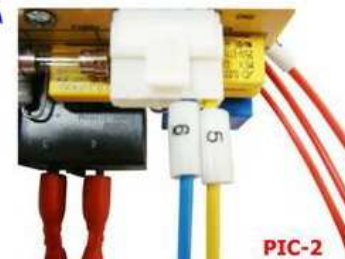
◆ IC Board (Back)



- ◆ 12 : TIMER.
- ◆ 13 : ON/OFF



- ◆ L1/L2 : The main power.
- ◆ L3 : The blower.



- ◆ Air pulse jet system.

Main Electrical Box Components for TMC-5-4



◆ Magnetic contactor.



◆ Input relay.



◆ Fuse bus.



◆ Relay.



◆ Thermal Relay.



Main Electrical Box Components for TMC-5-4



◆ Transformer for 460V.



◆ Air pulse jet system.



◆ Valve.



Hardware bags detailed list:

Randolph WB-6055 & WB-604.55 (dual booths side-by-side, total 10 sets)

A	Fixing Base (left)			# of pack required	10
	Part Name	Specification	Q'ty	Total	
1	Hex Screw	3/8"*2-1/2"	2	20	
2	Hex Screw	3/8"*3/4"	1	10	
3	Hex Screw	5/16"*3/4"	1	10	
4	Lock Nut	3/8"	2	20	
5	Flat Washer	3/8"*OD23*2t	5	50	
6	Flat Washer	5/16"*OD23*2t	1	10	

B	Fixing Base (right)			# of pack required	10
	Part Name	Specification	Q'ty	Total	
1	Hex Screw	3/8"*2-1/2"	2	20	
2	Hex Screw	3/8"*3/4"	1	10	
3	Hex Screw	5/16"*3/4"	1	10	
4	Lock Nut	3/8"	2	20	
5	Flat Washer	3/8"*OD23*2t	5	50	
6	Flat Washer	5/16"*OD23*2t	1	10	

C	Right Side Panel to Main Set			# of pack required	10
	Part Name	Specification	Q'ty	Total	
1	Half-threaded Screw	3/8"*4"	8	80	
2	Lock Nut	3/8"	8	80	
3	Flat Washer	3/8"*OD23*2t	16	160	

D	Left Side Panel to Main Set			# of pack required	10
	Part Name	Specification	Q'ty	Total	
1	Half-threaded Screw	3/8"*4"	8	80	
2	Lock Nut	3/8"	8	80	
3	Flat Washer	3/8"*OD23*2t	16	160	

E	Middle Panel to Main Set			# of pack required	10
	Part Name	Specification	Q'ty	Total	
1	Half-threaded Screw	3/8"*5-1/2"	10	100	
2	Lock Nut	3/8"	10	100	
3	Flat Washer	3/8"*OD23*2t	20	200	

F	Adjustable Backshelf (solid)			# of pack required	20
	Part Name	Specification	Q'ty	Total	
1	Hex Screw	5/16"*3/4"	8	160	
2	Flat Washer	5/16"*OD18*2t	8	160	

K	Left Side Panel Top Joints			# of pack required	40
	Part Name	Specification	Q'ty	Total	
1	Hex Screw	5/16"*3/4"	2	80	
2	Flat Washer	5/16"*OD23*2t	2	80	

M	Right Side Panel Top Joints			# of pack required	40
	Part Name	Specification	Q'ty	Total	
1	Hex Screw	5/16"*3/4"	2	80	
2	Flat Washer	5/16"*OD23*2t	2	80	

O	Curtain Rod			# of pack required	40
	Part Name	Specification	Q'ty	Total	
1	Hex Screw	1/4"*3/4"	4	160	
2	Flat Washer	1/4"*OD19*2t	4	160	

V	CO2 Bracket			# of pack required	20
	Part Name	Specification	Q'ty	Total	
1	Hex Screw	5/16"*3/4"	7	140	
2	Flat Washer	5/16"*OD23*2t	7	140	

G	Hardware for Backdraft & Back Panels Back-to-Back Connections			# of pack required	3
	Part Name	Specification	Q'ty	Total	
1	Half-threaded Screw	3/8"*9"	6	18	
2	Lock Nut	3/8"	6	18	
3	Flat Washer	3/8"*OD23*2t	12	36	

Hardware bags detailed list:

Randolph TMC-5-4 above WB-6055 (6/9)

R	Adjacence of the Top Hood Draft (back part) and Upper Part of the Backdraft Module - 1	# of pack required	1	
	Part Name	Specification	Q'ty	Total
1	Hex Screw	5/16"*3/4"	38	38
2	Hex Nut	5/16"	38	38
3	Flat Washer	5/16"*OD23*2t	76	76

S	Adjacence of the Top Hood Draft (back part) and Upper Part of the Backdraft Module - 2	# of pack required	1	
	Part Name	Specification	Q'ty	Total
1	Hex Screw	5/16"*3/4"	10	10
2	Flat Washer	5/16"*OD23*2t	10	10

Randolph TMC-5-4 above WB-6055 (6/23)

S	Adjacence of the Top Hood Draft (back part) and Upper Part of the Backdraft Module - 2	# of pack required	5	
	Part Name	Specification	Q'ty	Total
1	Hex Screw	5/16"*3/4"	10	50
2	Flat Washer	5/16"*OD23*2t	10	50

R	Adjacence of the Top Hood Draft (back part) and Upper Part of the Backdraft Module - 1	# of pack required	5	
	Part Name	Specification	Q'ty	Total
1	Hex Screw	5/16"*3/4"	38	190
2	Hex Nut	5/16"	38	190
3	Flat Washer	5/16"*OD23*2t	76	380

T	Adjacence of the Top Hood Draft (back part) and Upper Part of the Backdraft Module - 3	# of pack required	5	
	Part Name	Specification	Q'ty	Total
1	Hex Screw	5/16"*3/4"	35	175
2	Flat Washer	5/16"*OD23*2t	35	175

Randolph TMC-5-4 above WB-604.55 (6/23)

S	Adjacence of the Top Hood Draft (back part) and Upper Part of the Backdraft Module - 2	# of pack required	4	
	Part Name	Specification	Q'ty	Total
1	Hex Screw	5/16"*3/4"	10	40
2	Flat Washer	5/16"*OD23*2t	10	40

R	Adjacence of the Top Hood Draft (back part) and Upper Part of the Backdraft Module - 1	# of pack required	4	
	Part Name	Specification	Q'ty	Total
1	Hex Screw	5/16"*3/4"	34	136
2	Hex Nut	5/16"	34	136
3	Flat Washer	5/16"*OD23*2t	68	272

T	Adjacence of the Top Hood Draft (back part) and Upper Part of the Backdraft Module - 3	# of pack required	4	
	Part Name	Specification	Q'ty	Total
1	Hex Screw	5/16"*3/4"	35	140
2	Flat Washer	5/16"*OD23*2t	35	140