

**ITEM NO:EE-7640**

**USER MANUAL**



**KEEP THE MANUAL NEAR THE MACHINE ALL TIME AND MAKE SURE ALL USERS HAVE READ THIS.**

**FOLLOW THE INSTRUCTIONS CAREFULLY TO GRANT THE MACHINE A CORRECT FUNCTION AND LONG SERVICE LIFE.**

## I、Working Principle

The car spray booth EE-7640 consists of back wall, moving curtain and the aerator system, the adjustment system of ventilation, filter system, lighting system, control system, etc. The spray booth has two functions: Sanding Process and painting compensation Process.

- 1、Sanding process: The ventilation process is as the following chart:
- 2、The operation steps: Withdraw the sides curtain or the front curtain →Close the damper of fine filter chamber ⑤ and open the damper ④→turn on the blower②→The blower take the exhaust air into the filter system inside the generator→the dust will be absorbed into the filter system →the filtered air will be taken out from the duct

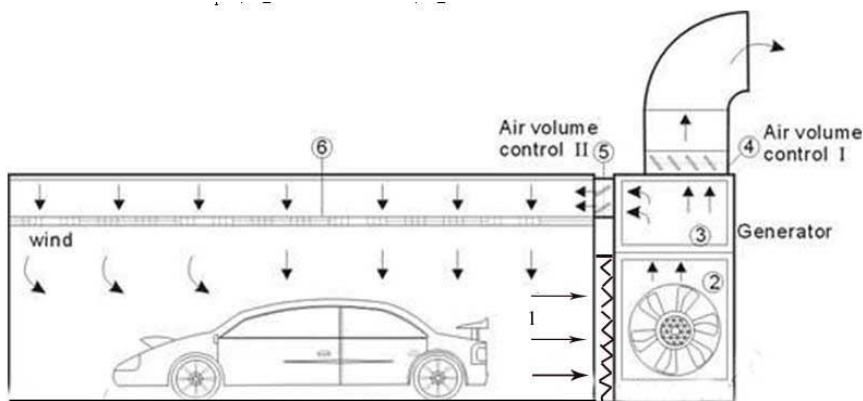


Chart of compensation

- 3、Painting repairing process is as the flowing chart:

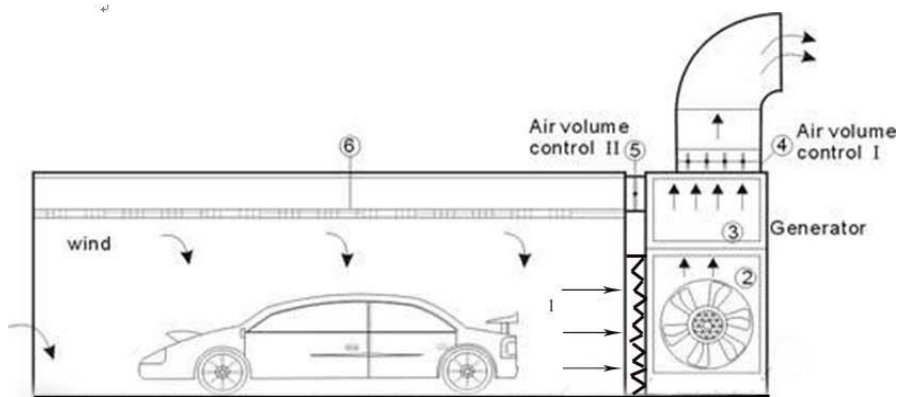


Chart of sanding

The painting repairing steps: Withdraw the sides and front curtain→Open the damper ⑤and adjust the exhaust duct④→Turn on the blower→Some waste air will enter the filtering cotton and the dust-absorber filter→flowing into ventilator chamber, then the air be take into the filter system inside the generator, through the top filter and side filter in the back wall→Some

exhausted air will be taken out from the duct and some fresh air will be taken in from the gap of the curtain.

## II、Technique Parameters

Internal size: 6.0×3.5×2.7 M(L×W×H)

External size: 7.1×3.7×3.2 M(L×W×H)

Illuminating lights: 8×4×40W=1.28 KW

Total Power: 7KW

Power of blower:1×5.5KW

Ventilation Capacity:18000 m<sup>3</sup>/h

Thickness of back wall: 50mm

Filter area: 15 m<sup>2</sup>

## III、The introduction of the control box panel

### 1. POWER

The indicator light for power on/off

### 2. BLOWER

The indicator light for blower on/off

### 3. LIGHTING

The indicator light for light on/off

### 4. POWER ON/OFF

Put key into switch, turn to “ON”,

Start loop of electrical box;

turn to “OFF” for close.

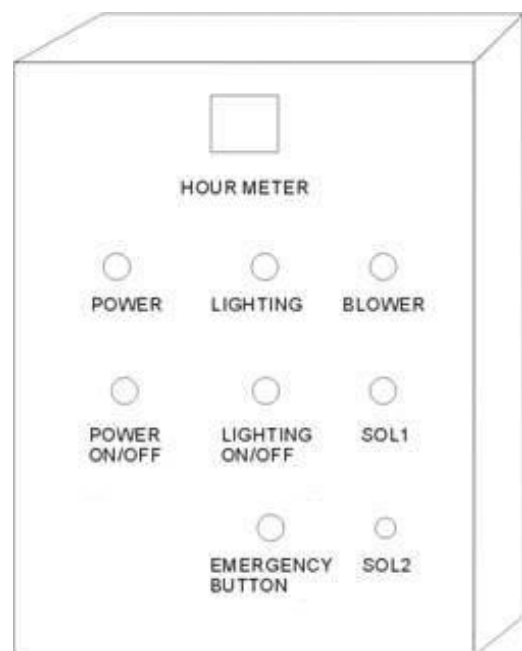
### 5. START

Press this button, blower starts, and indicator light on.

### 6. STOP

Press this button, the power of blower will be cut off and work will be stopped. Indicator light will be turned off.

### 7. SOL1、SOL2



The button for controlling the damper ④ and fine filter of it ⑤, turn clockwise to open damper for increasing the wind capacity, otherwise will decrease the wind capacity

## 8. EMERGENCY

Press the EMERGENCY key if some emergency situation happen, then the power will be cut off and the motor will be stopped.

## IV、Operation instruction and steps

- 1、 Switch on the outer electric power , indicator light on, the equipment is ready for working. Turn “POWER” switch with key clockwise to “NO”, blower start to operating, accumulative time meter begin to work, then the blower indicator turn on. Contrarotate the “Power” to “Off”, blower turn off, accumulative time meter stop to work, then the blower indicator turn off.
- 2、 Adjust damper 1 (SOL1) or damper 2 (SOL2) to finish sanding or paint mending process:
  - (1) Turn damper1 (SOL1) or damper2 (SOL2) clockwise, damper open degree will be increased till full open; Otherwise decrease till complete close.
  - (2) While sanding, withdraw movable shade(or draw back only one shade such as front shade), close damper⑤ (SOL1), start damper④ (SOL2) ,finish the whole sanding process(see sketch map of sanding work).
  - (3) Paint mending work: pull off the movable shade and start damper⑤ (SOL1) , adjust damper ④ (SOL2) to suitable position, then a part of air current will enter damper⑤ and cleaned by filter then flow down equably from the top, while other part of air will be vented outside through damper adjustment④, meanwhile some fresh air will be filled in through gap of shade. The whole paint mending process will be finished (see sketch map of paint mending work).
- 3、 Turn illumination switch “LIGHTING” to “ON”, illumination lights on and “LIGHTING”on; turn to “OFF”, lights off and “LIGHTING”off.
- 4、 Start switch with key and illumination switch are controlled independently and non-interfering; adjust damper 1 (SOL1) , adjust damper 2 (SOL2) and accumulative watch only start working after ventilator starts, or they will not work.
- 5、 “EMERGENCY BUTTON” switch. If emergent situation ,such as strange sound, lack phase, circuit failure or other abnormal ones occur inside ventilator, use this switch for emergent

turnoff: press the button vertically, all control circuit will stop working, making emergent turnoff; turn the button clockwise, it will bound back automatically for switch reposition to connect the power again. It's not allowed to use this switch to close or start for control equipments in normal situation.

#### **V、Notices for booth operation**

1. Drainpipe is needed on ground to drain unwanted seep;
2. It is not suitable to clean the sanding room by water often;
3. Keep the floor clean and clear the ground before working ;
4. Clean vehicle before entering and remove flammable or explosive danger ( except for gasoline in oil box);
5. Mending paint work is an accessorial function. Spray paint area should not be too large and spraying time should not be too long;
6. Workers must dress work clothes and change shoes before entering the sanding room. Smoking is prohibited;
7. Don't pile sundries inside the sanding room;
8. Clean or change dust collector filter and other filters termly.

#### **VI、Routine Maintenance for booth**

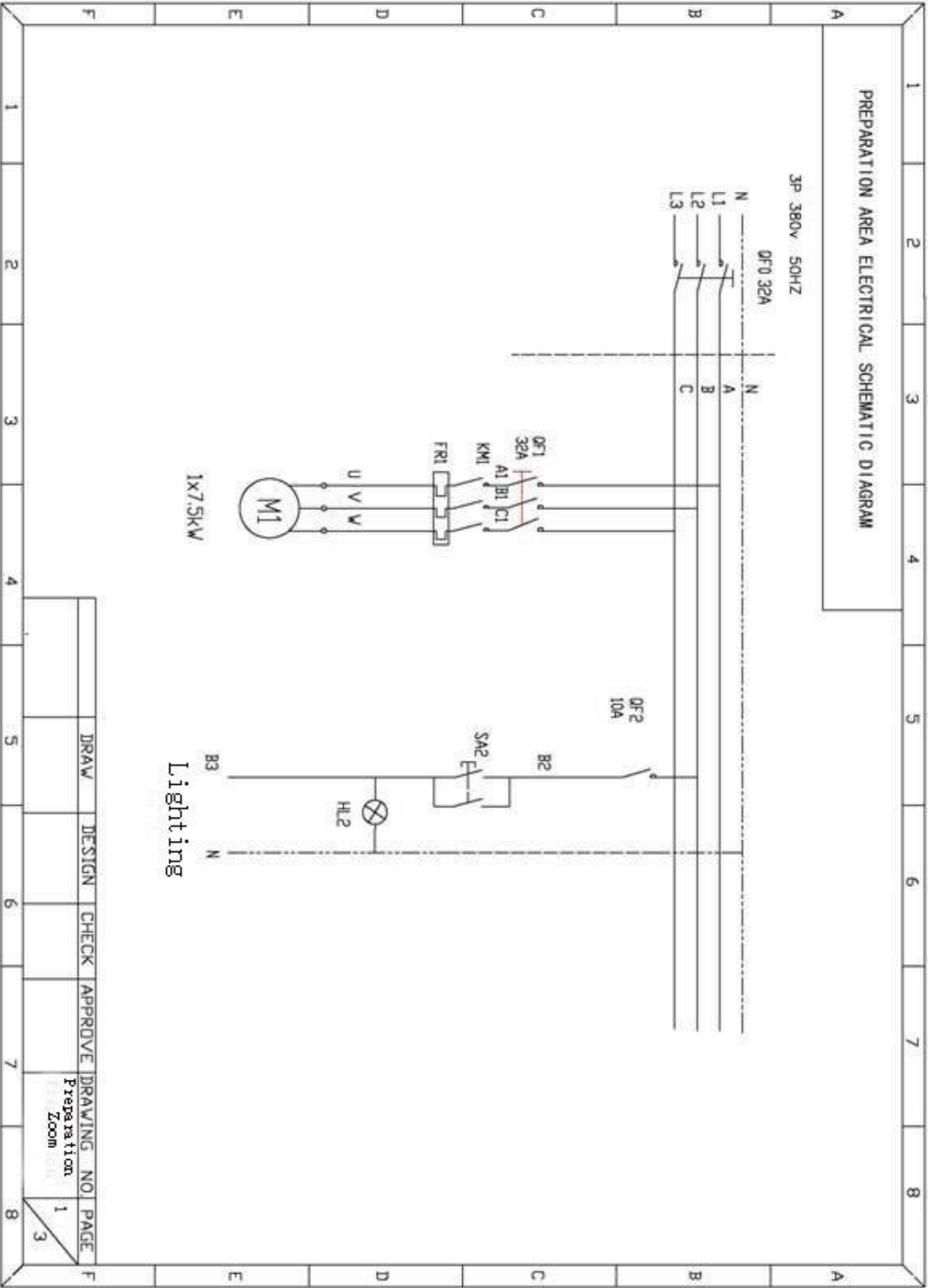
1. Clean ground filter after each work;
2. Change back filter and dust collector filter after 200 hours each work;
3. Clean dust collector filter by compress air after 40 hours work;
4. Change the top filter inside the sanding room after 200 times of spraying-work;
5. Clean dust on ventilator leaves one time after 200 times of spraying-work.

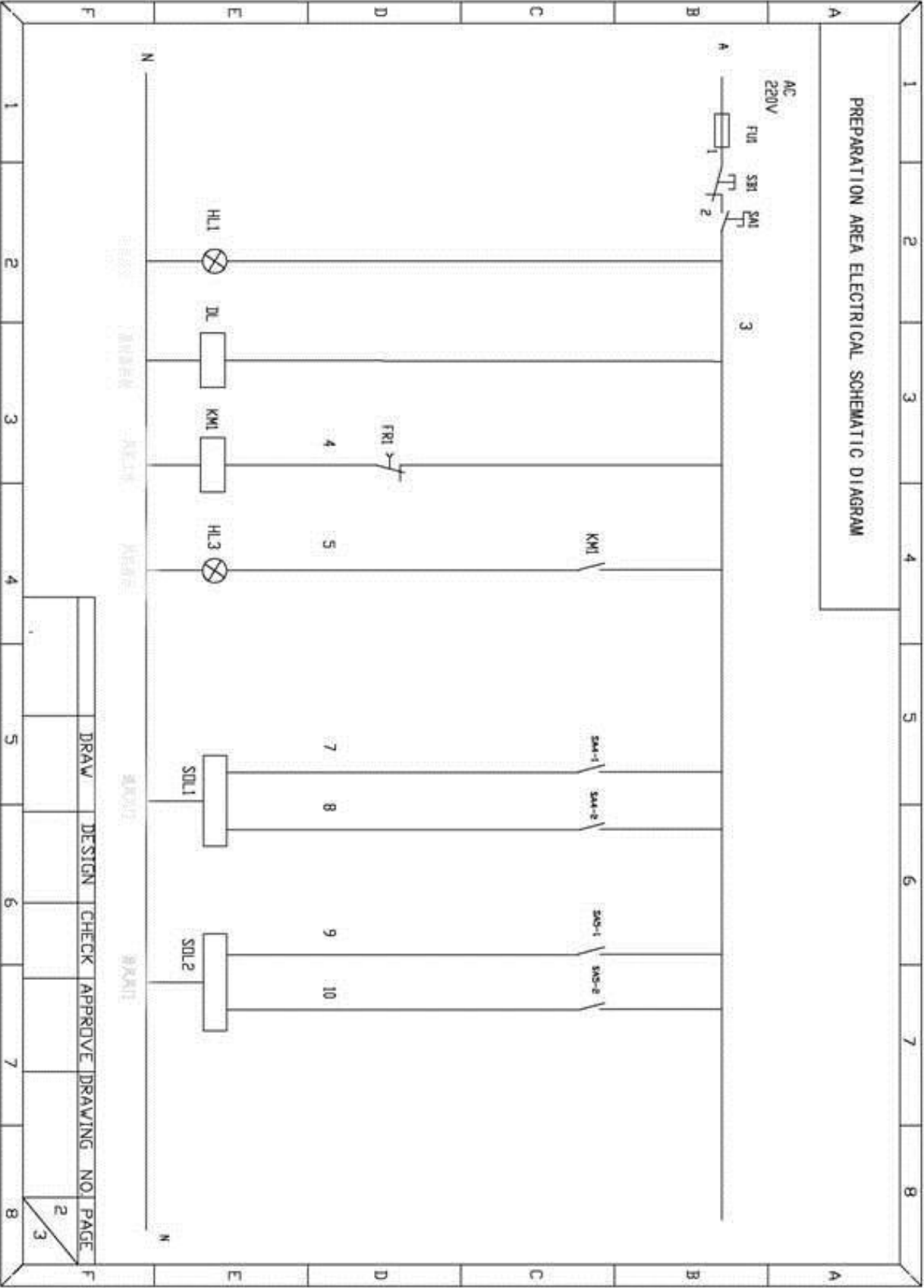
#### **VII、Frequent Malfunction and Maintenance for booth**

<b>Malfunction</b>	<b>Possible Cause</b>	<b>Solution</b>
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Fan capacity is too small while sanding	<ol style="list-style-type: none"> <li>1. Ground filter is blocked</li> <li>2. dust collector filter is blocked</li> <li>3. The damper not open completely</li> <li>4. Not enough opening for damper④</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean or change floor filter</li> <li>2. Clean or change filter of dust collector</li> <li>3. Let it open completely④</li> </ol>
Adjustment failure for wind door opening	<ol style="list-style-type: none"> <li>1、the axis of damper actuator is skidding</li> <li>2、Damper actuator is damaged</li> </ol>	<ol style="list-style-type: none"> <li>1、Fasten again</li> <li>2、Change</li> </ol>
major ventilator can started	<ol style="list-style-type: none"> <li>1. Fuse break</li> <li>2. control circuit break</li> <li>3. engine circuit break</li> </ol>	<ol style="list-style-type: none"> <li>1. Change fuse</li> <li>2、Maintain and Connect</li> <li>3、Maintain and change engine</li> </ol>
Major ventilator vibrate tempestuously	<ol style="list-style-type: none"> <li>1、screw loose</li> <li>2、wind leaves is dirty and imbalanced</li> </ol>	<ol style="list-style-type: none"> <li>1、Check and tighten it</li> <li>2、Clean and revise for balance</li> </ol>

## VIII、Circuitry Theory Fig for Sanding Room

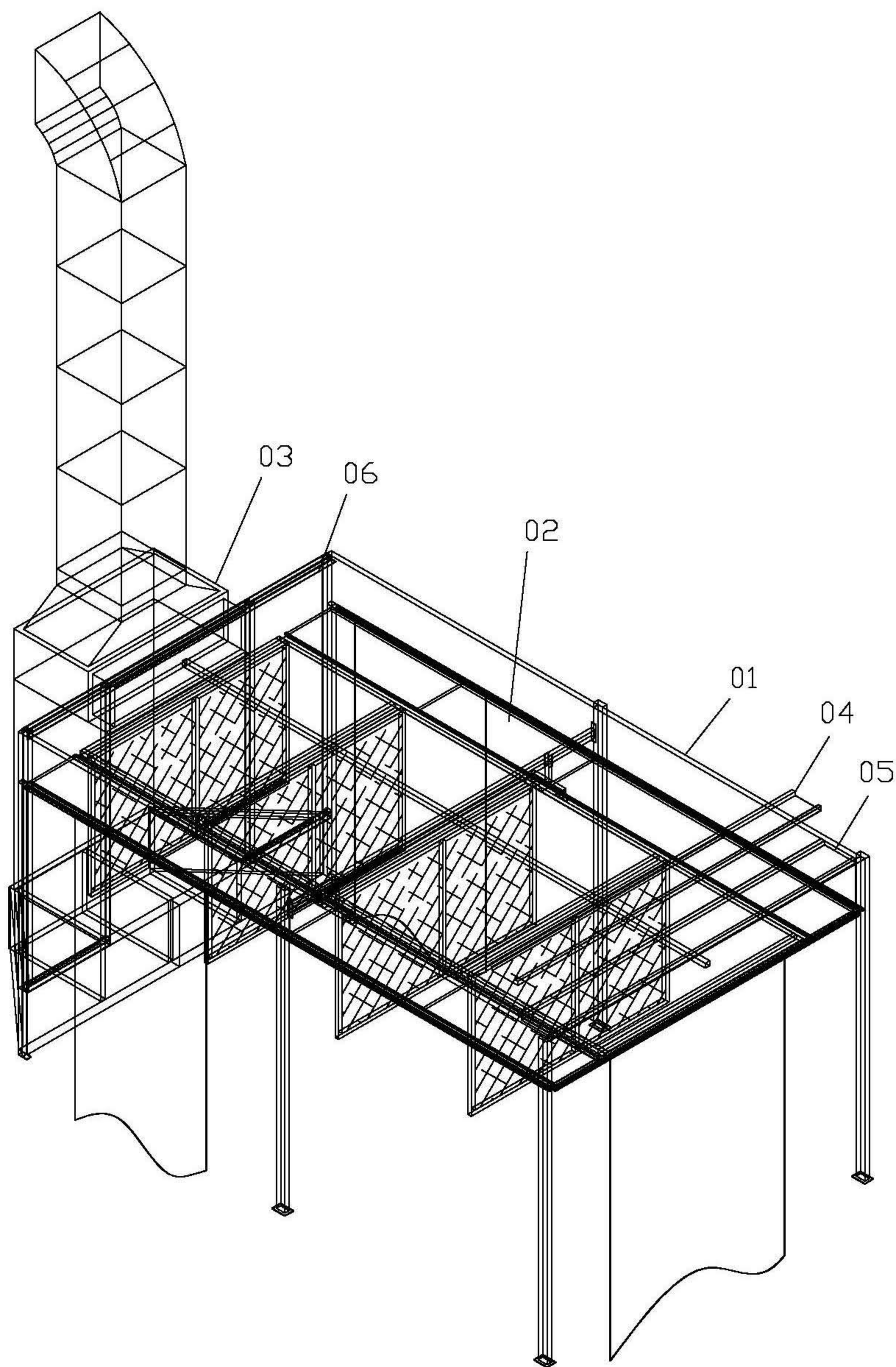






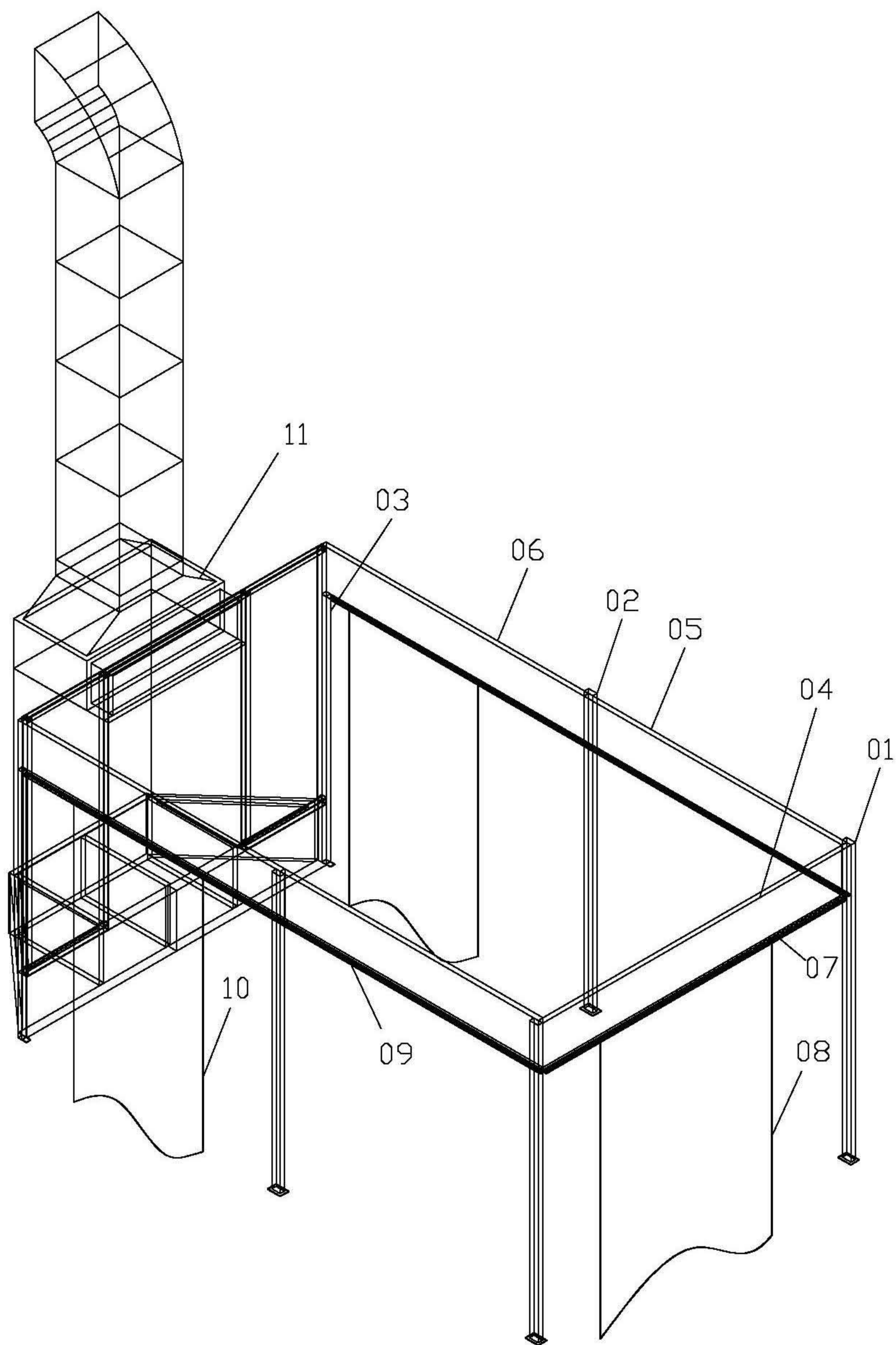
### Wiring Diagram:

PREPARATION AREA ELECTRICAL SCHEMATIC DIAGRAM																																																									
<table border="1"> <tr> <td>A</td> <td>B</td> <td>C</td> <td>N</td> <td>U1</td> <td>V1</td> <td>W1</td> <td>E</td> <td>B3</td> <td>N</td> <td>N</td> <td>7</td> <td>8</td> <td>N</td> <td>9</td> <td>10</td> </tr> <tr> <td colspan="4">POWER</td> <td colspan="3">MOTOR1</td> <td colspan="2">LIGHTING</td> <td colspan="2">SOL1</td> <td colspan="5">SOL2</td> </tr> <tr> <td colspan="4">3X6MM+4MM'</td> <td colspan="3">3X4MM+4MM'</td> <td colspan="2">2X2.5MM'</td> <td colspan="2">3X0.75MM'</td> <td colspan="5">3X0.75MM'</td> </tr> </table>										A	B	C	N	U1	V1	W1	E	B3	N	N	7	8	N	9	10	POWER				MOTOR1			LIGHTING		SOL1		SOL2					3X6MM+4MM'				3X4MM+4MM'			2X2.5MM'		3X0.75MM'		3X0.75MM'				
A	B	C	N	U1	V1	W1	E	B3	N	N	7	8	N	9	10																																										
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<table border="1"> <tr> <td>DRAW</td> <td>DESIGN</td> <td>CHECK</td> <td>APPROVE</td> <td>DRAWING NO.</td> <td>PAGE</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>3 / 3</td> </tr> </table>										DRAW	DESIGN	CHECK	APPROVE	DRAWING NO.	PAGE						3 / 3																																				
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9				
8				
7				
6	edge for roof panel	25*25*3480	1pcs	
5	roof panel	0.6*360*3470	1pcs	
4	roof panel	0.6*313*3470	18pcs	
3	generator	combination	1 set	
2	light box,filter supporter	combination	1 set	
1	body	combination	1 set	
序号	items	spec	qty	备注

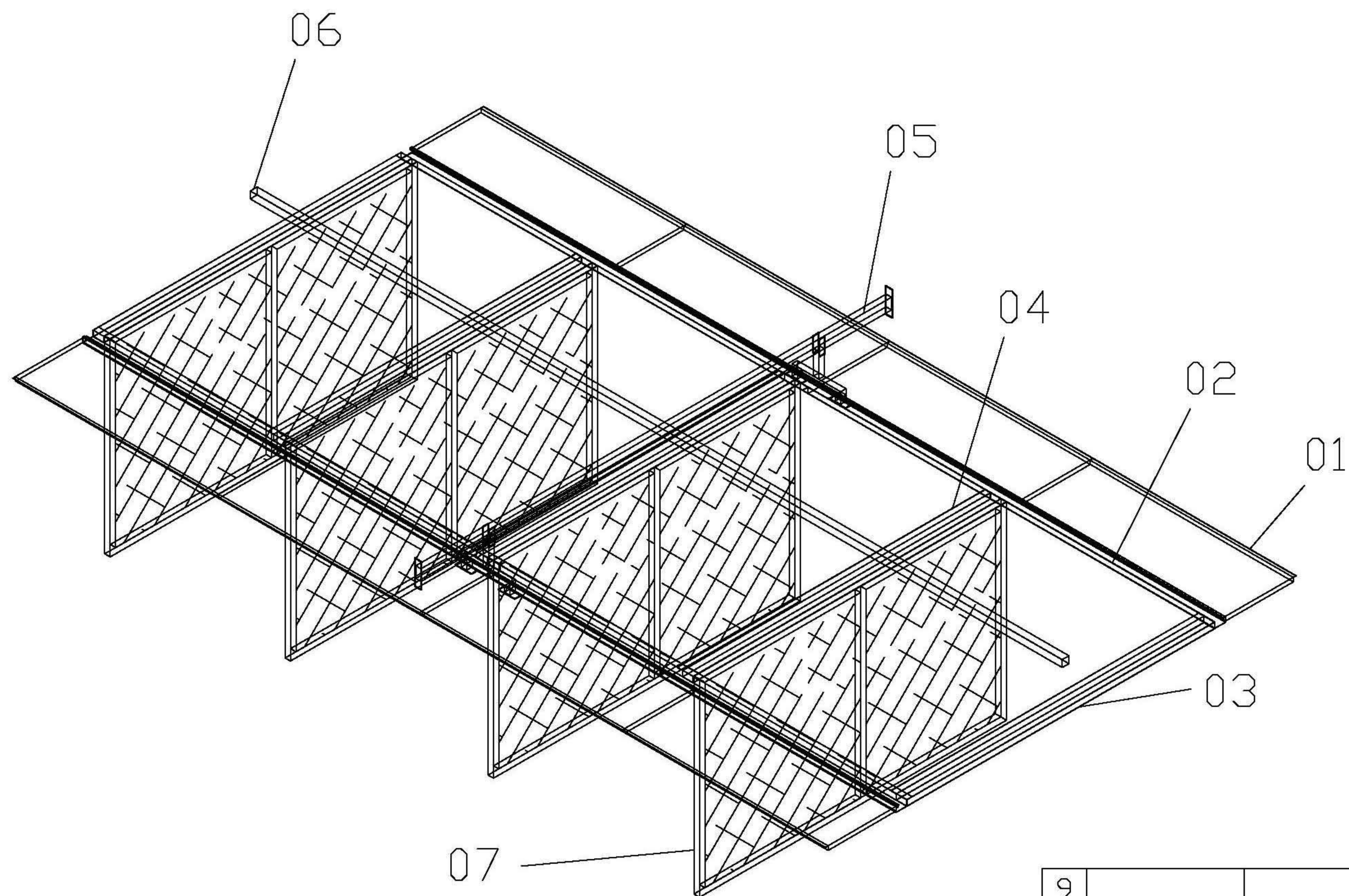
设计		EE-7640 General View		图号	
描图				标记	
审核				重量	数量
更改					
日期		材料			



11	generator	combination	1	
10	curtain	6800*2650	2	
9	Al rail for curtain	6020*30*30	2	
8	curtain	2100*2650	2	
7	Al rail for curtain	3480*30*30	1	
6	side panels for roof back	3052*53*471	2	
5	side panels for roof front	3000*53*471	2	
4	head panel	3586*53*472	1	
3	rear post	2700*50*50方管	2	
2	middle post	3172*100*50方管	2	
1	front post	3172*100*50方管	2	

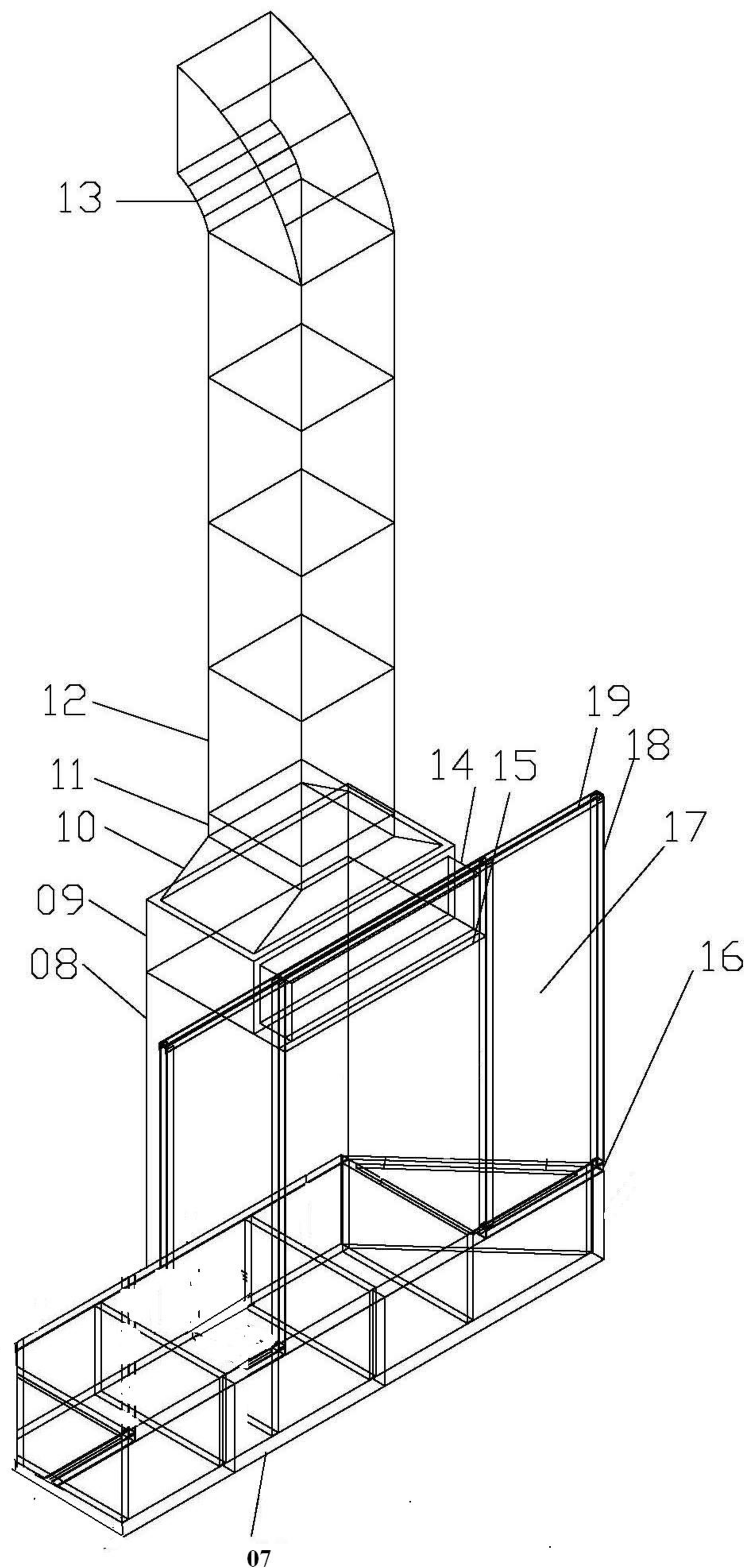
序号	items	spec	qty	备注			
设计		EE-7640 BODY ASSEMBLE		图号			
描图				标记			
审核				重量		数量	
更改							
日期		材料					





9				
8				
7	filter mesh	2356*1394	4	
6	support beam	50*50方管*6000	1	
5	support beam	40*80方管*3480	1	
4	filter support	1. 5*2363*80	3	
3	filter support	1. 5*2363*80	2	
2	sealing panel	1. 5*3000*80	4	
1	light box	1498*456*80	8	
序号	items	spec	qty	备注

设计		EE-7640  Light box, Filter supporter Assembly		图号	
描图				标记	
审核				重量	数量
更改					
日期		材料			



20				
19	edge for back wall panel	3480*50*53	1	
18	U edge for back wall panel	2540*53*30	2	
17	back wall panel	2535*985*50	2	
16	U edge for back wall panel	960*53*30	2	
15	frame for air outlet	1500*480*50	1	
14	VCD damper	1400*400*200	1	
13	90° bend duct	0.6*740*740	1	
12	air duct	0.6*740*740*1000	4	
11	VCD damper	740*740*160	1	
10	duct in bell shape	1400*700-740*740	1	
9	top frame of generator	1500*800*480	1	
8	middle frame of generator	1500*1055*2060	1	
7	basement of generator	3480*1055*630	1	

序号	items	spec	qty	备注		
设计		EE-7640 Generator Assembly		图号		
描图				标记		
审核				重量	数量	
更改						
日期		材料				