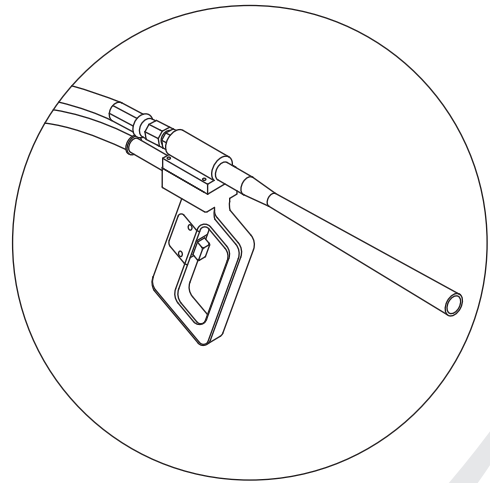
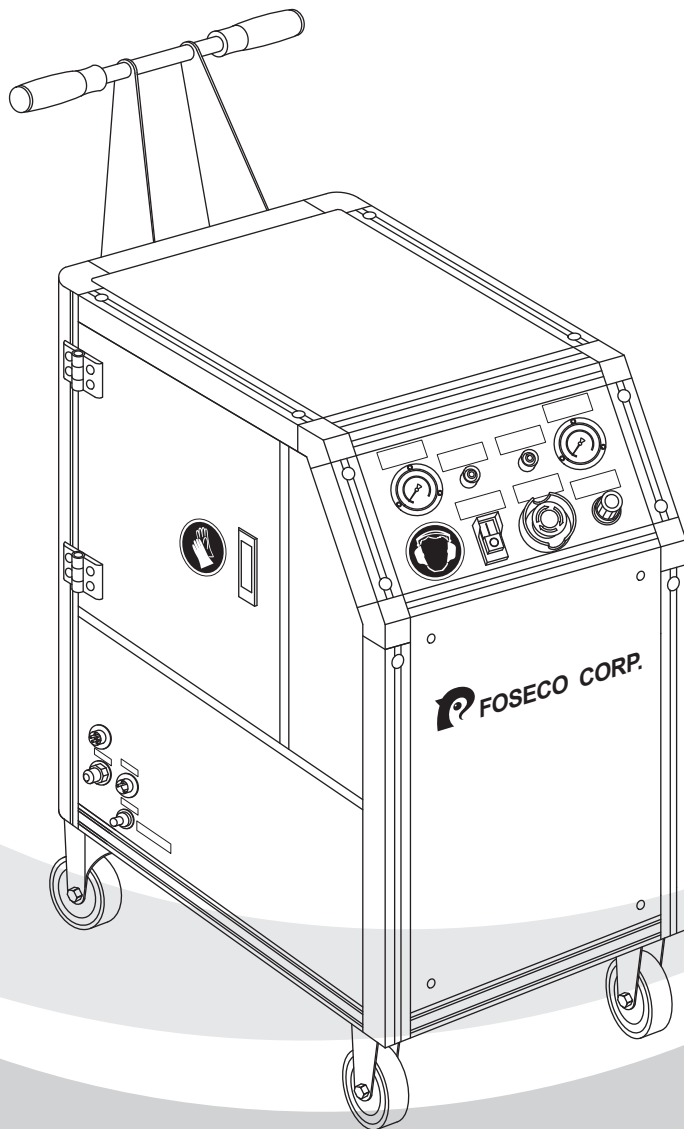


MDS-100

DRY ICE BLASTING CLEANER



貿紳有限公司
FOSECO CORP.

NO. 118-10, YUNG HO RD., TA-YA,
TACHUNG CITY, TAIWAN, 428-77
TEL:04-2568-5609 FAX:04-2568-5480





DRYICE BLASTING CLEANER OPERATION & MAINTENANCE HANDBOOK

This product – Dry Ice Blasting Cleaner, manufactured by FOSECO company, has been through rigorous quality examination before shipment, the buyer (user) to use this product, should indeed read to the "Operation Manual" and this handbook, in order to ensure the product quality and maintain the use of the normal life of the product.

◆ FOR YOUR SAFETY MUST FOLLOW ◆

Please read the "OPERATION MANUAL" provided by the Company before using this product and operate correctly.

If the label information is ignored, the level of the harm and damage occurs when use is shown as following explanation:










 WARNING	The content of this field is marked "assumes the possibility of death or injury."
 CAUTION	The content of this field is marked "the possibility of injury and only damage on articles."

FIGURES

		
Content of "Warning or Caution".	"Prohibited Items" NOT allowed.	MUST follow the "Instructions".



Due to we are not able to control the way and the environment of user's operation, we cannot guarantee the life of this product; only able to require the user to operate this product in accordance with the following recommendations.

 WARNING	
 <p>NO remodel. Do not let the disqualified person to operate or service the machine.</p> <ul style="list-style-type: none"> ◆ Electric Shock or Injury. ◆ Contact agent for repair. 	 <p>Do NOT make the wire damaged or broken, processing, excessive bending, pulling, twisting, or place heavy objects on it.</p> <ul style="list-style-type: none"> ◆ The damaged wire will lead to fire, or electric shock.
 <p>When maintenance, be sure to plug the wire uprooted, moreover, do NOT pull the plug with wet hands.</p> <ul style="list-style-type: none"> ◆ Electric Shock or Injury. 	 <p>Do NOT use the unspecified voltage.</p> <ul style="list-style-type: none"> ◆ Electric Shock, fire or Injury.
 <p>While wire or plug socket is in damage, do NOT use it.</p> <ul style="list-style-type: none"> ◆ Electric shock or short will lead to injury or fire. 	 <p>The dust on power plug should be clean periodically</p> <ul style="list-style-type: none"> ◆ Dust accumulation on plug will cause a fire by poor insulation due to moisture
 <p>Do NOT use this machine for unspecified use.</p> <ul style="list-style-type: none"> ◆ Please follow the SOP, shall not use for other purposes, in order to avoid mechanical damage or danger. 	 <p>Do NOT install the machine in a unstable place.</p> <ul style="list-style-type: none"> ◆ Easily to fall and cause a danger of injury and damage the product by earthquake or outside force.



◆ CAUTIONS & CLEANING TIPS ◆



CAUTION

<p>Note the appearance of accessories.</p> <ul style="list-style-type: none"> ◆ Check the air and blasting hoses if damaged, bended, or broken. ◆ Check the power wire if damaged. 	<p>Do NOT plug in or out with wet hands.</p> <ul style="list-style-type: none"> ◆ To avoid danger from electric shock.
<p>Do not use the stacked dry ice. (for MDS-100 series, and MDS-520 use)</p> <ul style="list-style-type: none"> ◆ Use the whole dry ice block in size of 12x12x25cm or 25x25x25cm. ◆ To cause the cutters blocked by stacked dry ice. 	<p>Do NOT put foreign objects on the top cover or dry ice chamber of this machine.</p> <ul style="list-style-type: none"> ◆ The main causes of injuries or machine shot down.
<p>Do NOT try to touch the inner parts of dry ice blasting machine in operations.</p> <ul style="list-style-type: none"> ◆ To avoid a danger of injury. 	<p>Do NOT forget while turn off this blasting cleaner:</p> <ul style="list-style-type: none"> ◆ Take out the remaining dry ice. ◆ Pull off the power wire from socket to avoid a fire.

CLEANING TIPS

<p>1. Check the air pressure and adjust to the best appropriate blasting pressure.</p>
<p>2. Timely adjust the blasting flow to avoid the unnecessary consumption of dry ice.</p>
<p>3. Aim the blasting gun at the object to be cleaned. The proper distance from nozzle to the object is 4~10cm.</p>



◆ How to Troubleshoot ◆

CONDITIONS	CHECK ITEMS	TROUBLESHOOTING
Completely unable to operate	<ul style="list-style-type: none"> ● Check the power wire is well plugged in, the power indicator is light on. ● Make sure the power switch is turn "ON". ● The power source is operated. ● Check if the dry ice chamber door is closed. If not, the Error Indicator light is on. ● Check if the power fuse or switch at workshop is operated. 	<ul style="list-style-type: none"> ➢ Well connect the power wire. ➢ Press the power switch "ON". ➢ Make sure the dry ice chamber door is certainly closed. ➢ Re-start the operation by steps after the power source at worksite is repaired.
Abnormal/error in dry ice blasting flow	<ul style="list-style-type: none"> ● Check if the dry ice remaining in the chamber room. ● Check if the dry ice block is broken. ● Check if the blasting hose (blue) is connected well on two ends between cleaner and nozzle. ● Check if the air hose (black) is well connected on two ends between the cleaner and air compressor. ● Make sure the air pressure is keeping greater than 4kg/cm². ● Check if the air hose and blasting hose are damaged, broken or bended. ● Check if the great gear is still well running. 	<ul style="list-style-type: none"> ➢ Replace a new dry ice block when dry ice is used off or broken. ➢ Well connected both blasting hose and air hose. ➢ Make sure the air compressor at workshop is running well. ➢ Replace a new blasting hose or air hose while they are broken or damaged.
Others	<ul style="list-style-type: none"> ● Check the dry ice crimped inside the cleaner. 	<ul style="list-style-type: none"> ➢ Take out the remaining dry ice, and spray air on the crimped area by air compressor until the dry ice is gasified.



◆ OTHER RECOMMENDATION ◆

WORKSHOP ENVIRONMENT LIMIT

1. The operation (cleaning) area must be provided with sufficient lighting, with a minimum illumination above 300LUX, for carrying out the cleanliness check in much easier way.
2. If the noise over to 80dB (A) during cleaning process, please wear ear protectors.
3. The machine must be operated in well-ventilated circumstances.

MACHINE SCRAP and WASTE

This machine do not need special disposal for manufacturing materials, for the treatment of scrap and waste to this machine, please be treated in accordance with the requirements of local government.

◆ IF THE MALFUNCTION IS STILL EXISTED, PLEASE CONTACT US.

◆ PLEASE SEE “OPERATION MANUAL” FOR PART NAME & OPERATION DETAILS.



RECOMMEND MAINTENANCE PERIOD

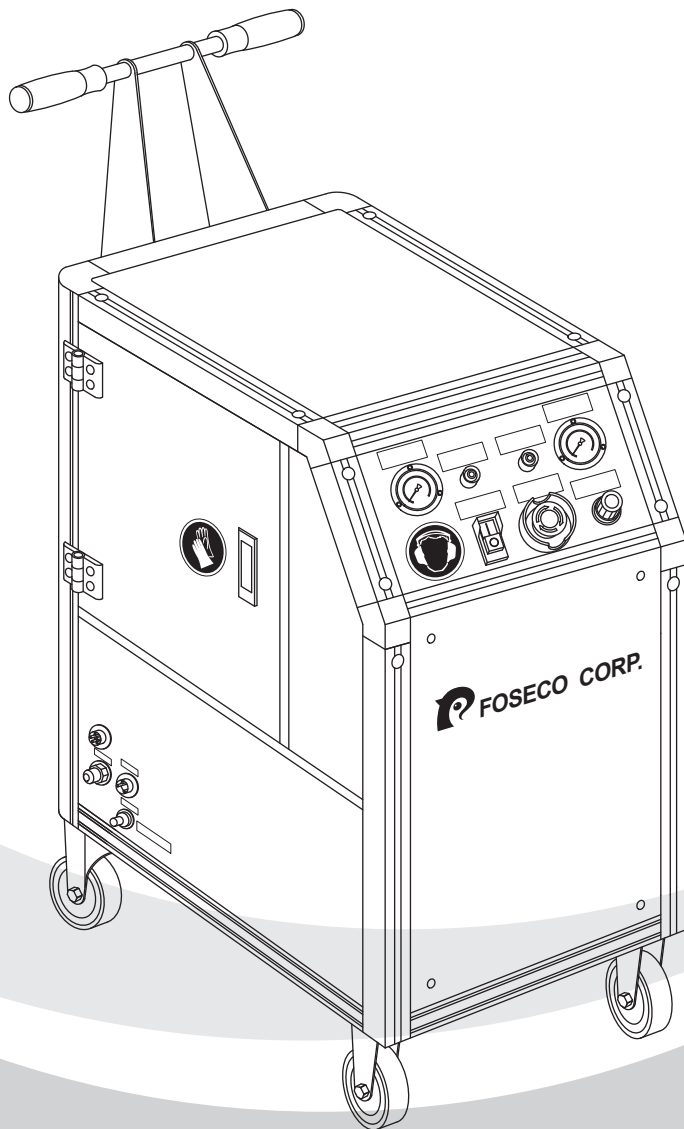
Daily			
No.	Check Item	Visual	Operate
1.	The machine wheels are running well. Check the dusts or contaminations on wheels.	☉	☉
2.	Check the blasting hose; no damaged or bended.	☉	
3.	Check the air hose; no damaged or bended.	☉	
4.	Check the power wire; no damaged.	☉	

Weekly			
No.	Check Item	Visual	Operate
1.	Check the automatic drainage system on filter of air compressor.		☉
2.	Lubricate the Cylinder and the FRL system.		☉
3.	Airing the ball valve near cutter plate		☉

Monthly			
No.	Check Item	Visual	Operate
1.	Lubricate the driving chain of motor		☉
2.	Sharpen the dry ice cutters		☉

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DRY ICE BLASTING CLEANER [OPERATION MANUAL]



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FOSECO CORP.

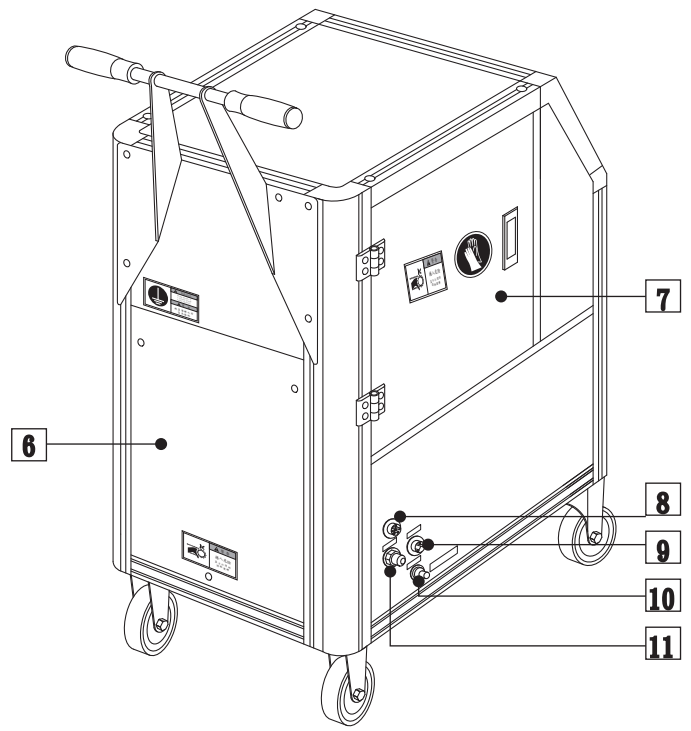
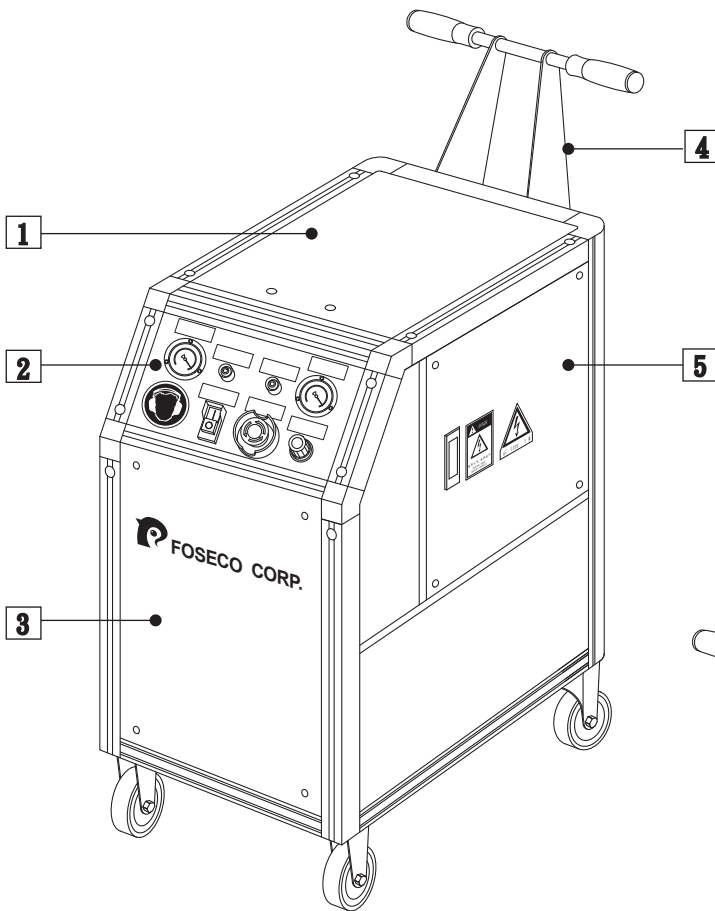
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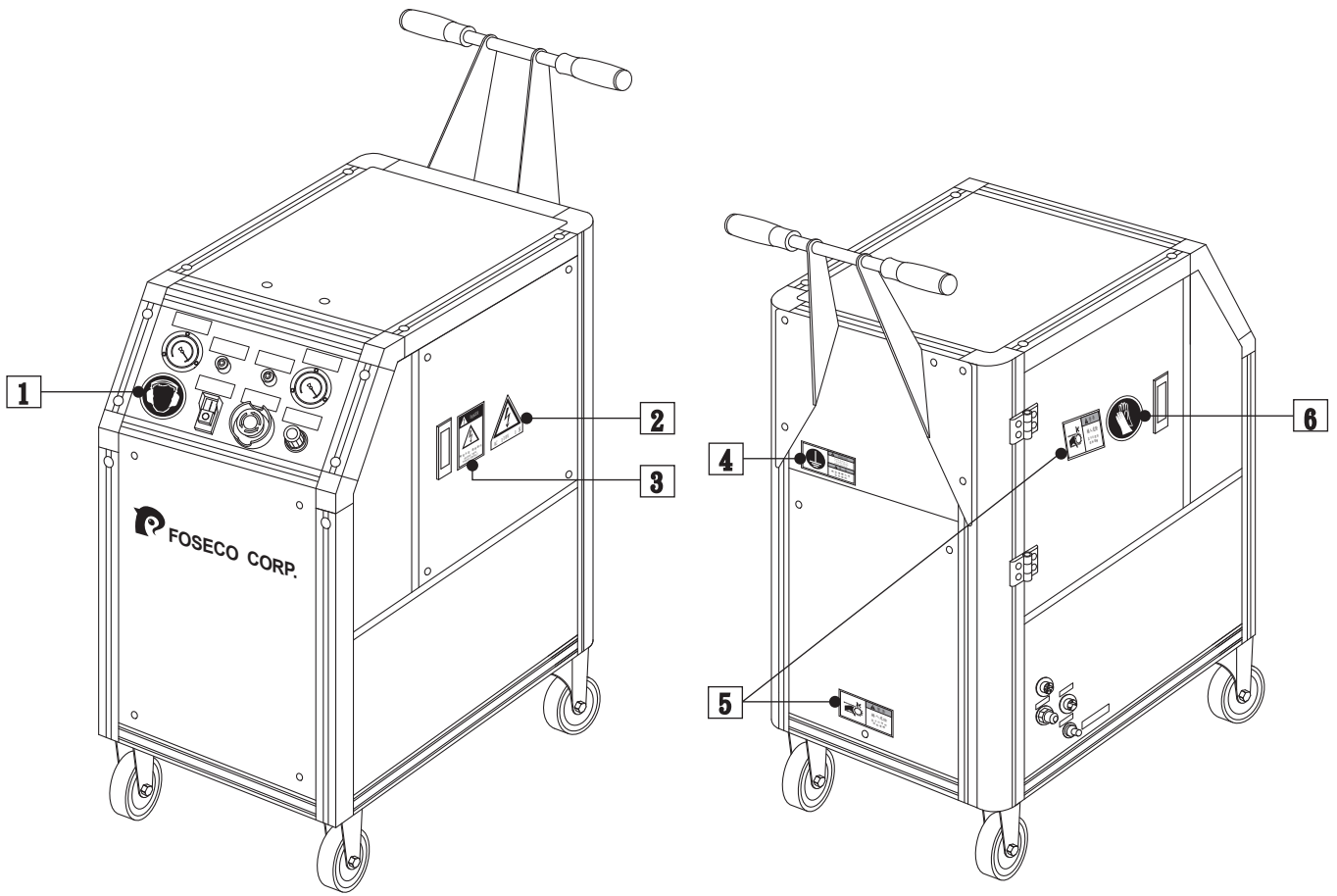
MACHINE OUTLINE



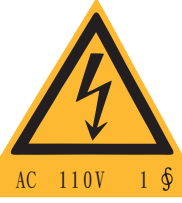
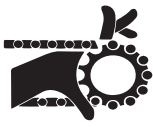
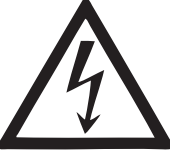



(1) TOP COVER	(5) ELECTRIC CABINET	(9) POWER CONNECTOR
(2) CONTROL PANEL	(6) BACK PLATE	(10) AIR SOURCE CONNECTOR
(3) FRONT PLATE	(7) DRYICE CHAMBER DOOR	(11) BLAST HOSE CONNECTOR
(4) MACHINE HANDLE	(8) BLAST WIRE CONNECTOR	(12)

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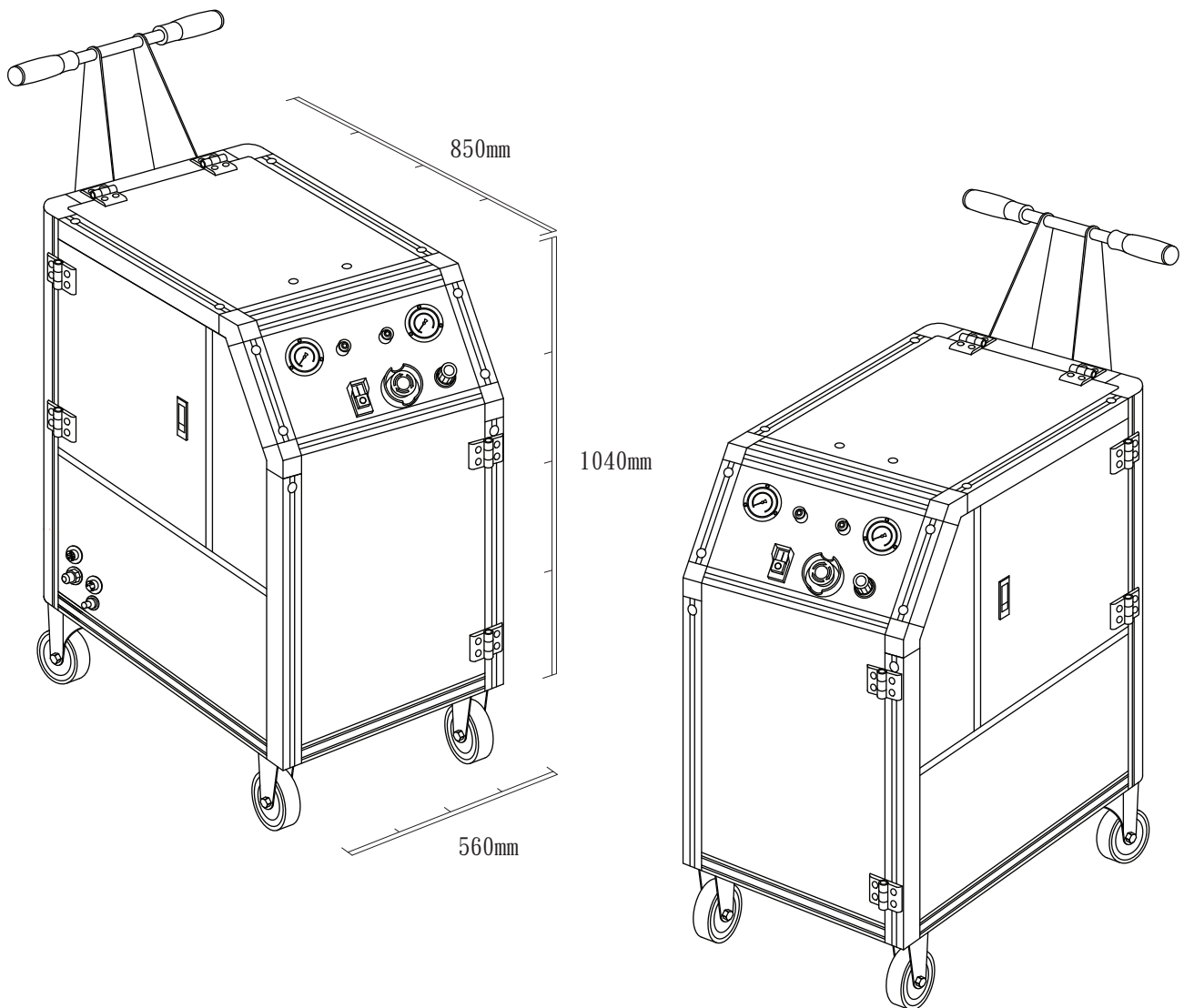
SAFETY FIGURES



<p>1</p> 	<p>EAR PROTECTORS DURING OPERATION</p> <p>操作時請佩戴耳塞</p>	<p>4</p> 	<p>⚠ WARNING</p> <p>Ground machine to a suitable ground before operation.</p> <p>⚠ 警告</p> <p>機器運轉之前 需先接地</p>
<p>2</p> 	<p>ELECTRICAL VOLTAGE</p> <p>注意電壓</p>	<p>5</p> 	<p>⚠ WARNING</p> <p>ROLLING KEEP HANDS AWAY</p> <p>⚠ 警告</p> <p>捲入危險 蓋子打開時請勿運轉</p>
<p>3</p> 	<p>⚠ WARNING</p> <p>Electric Shock Operate Carefully</p> <p>⚠ 警告</p> <p>觸電注意. 謹慎操作</p>	<p>6</p> 	<p>DRY ICE LOADING GLOVES NECESSARY</p> <p>拿取乾冰時 務必配戴防凍手套</p>

MDS-100

SPECIFICATION



Spec.	MDS-100
Dryice Storage	5 kg
Pressure	4~10 kg/cm ² ; 45scfm
Consumption rate	10kg~ 30kg/hr
Machine Dimension	850 x 560 x 1040 mm
Power	110v/220v 60hz
Air Inlet	1/2"
Dryice Dimension	125 x 125 x 250 mm
Horse Power	120 W
Machine Weight	85 kg

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CONTROL PANEL

1 AIR SUPPLY GAUGE: AIR SUPPLY MUST GREATER THAN 6 kg/cm².

2 POWER INDICATOR: CHECK POWER ON/OFF.

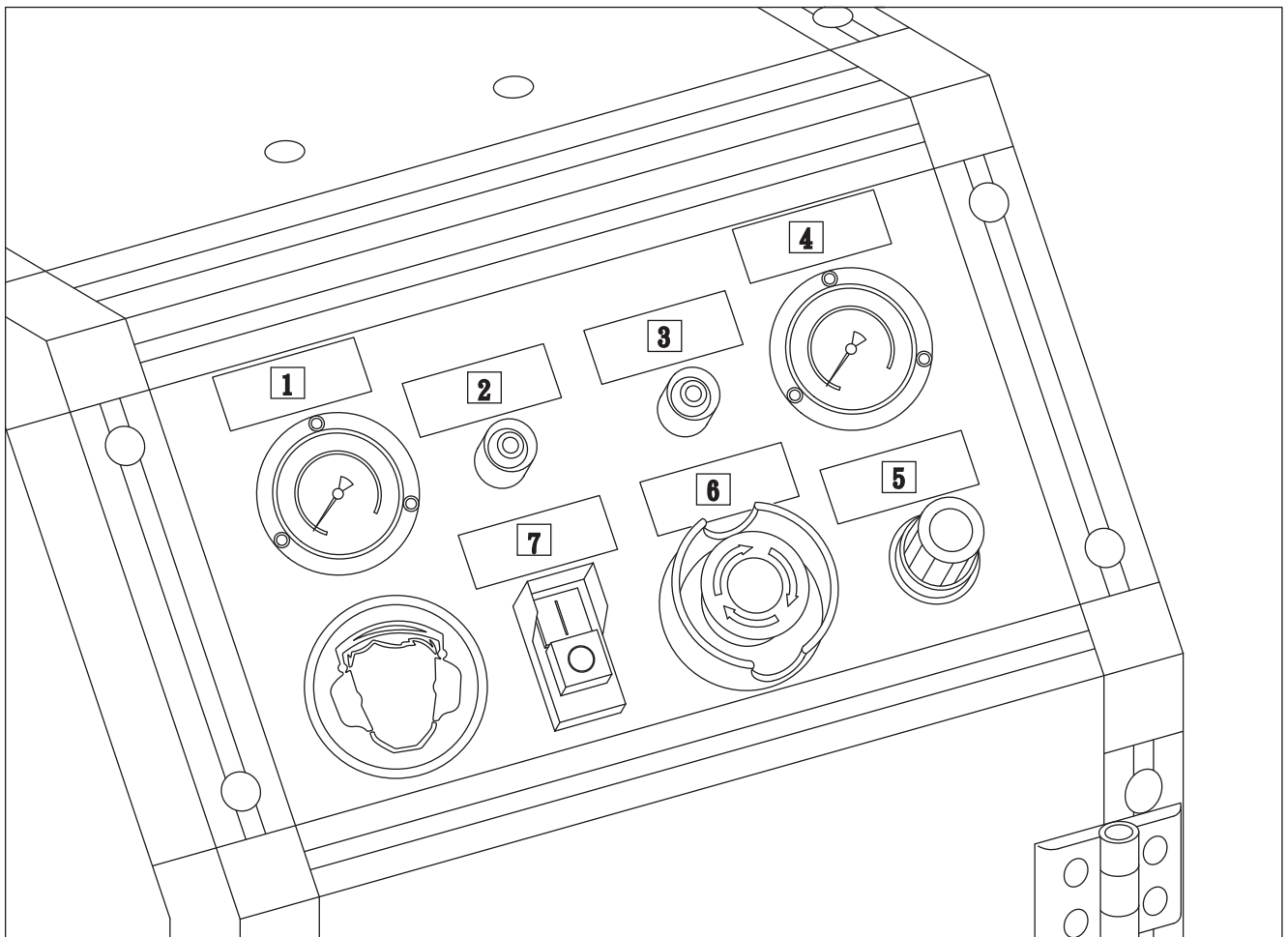
3 ERROR INDICATOR: THE DRYICE CHAMBER MUST BE SURELY CLOSED.

4 AIR SUPPLY ADJUSTOR: INDICATE THE AIR PRESSURE WHILE OPERATING.

5 AIR PRESSURE ADJUSTOR: TO ADJUST THE AIR PRESSURE FOR OPERATION.

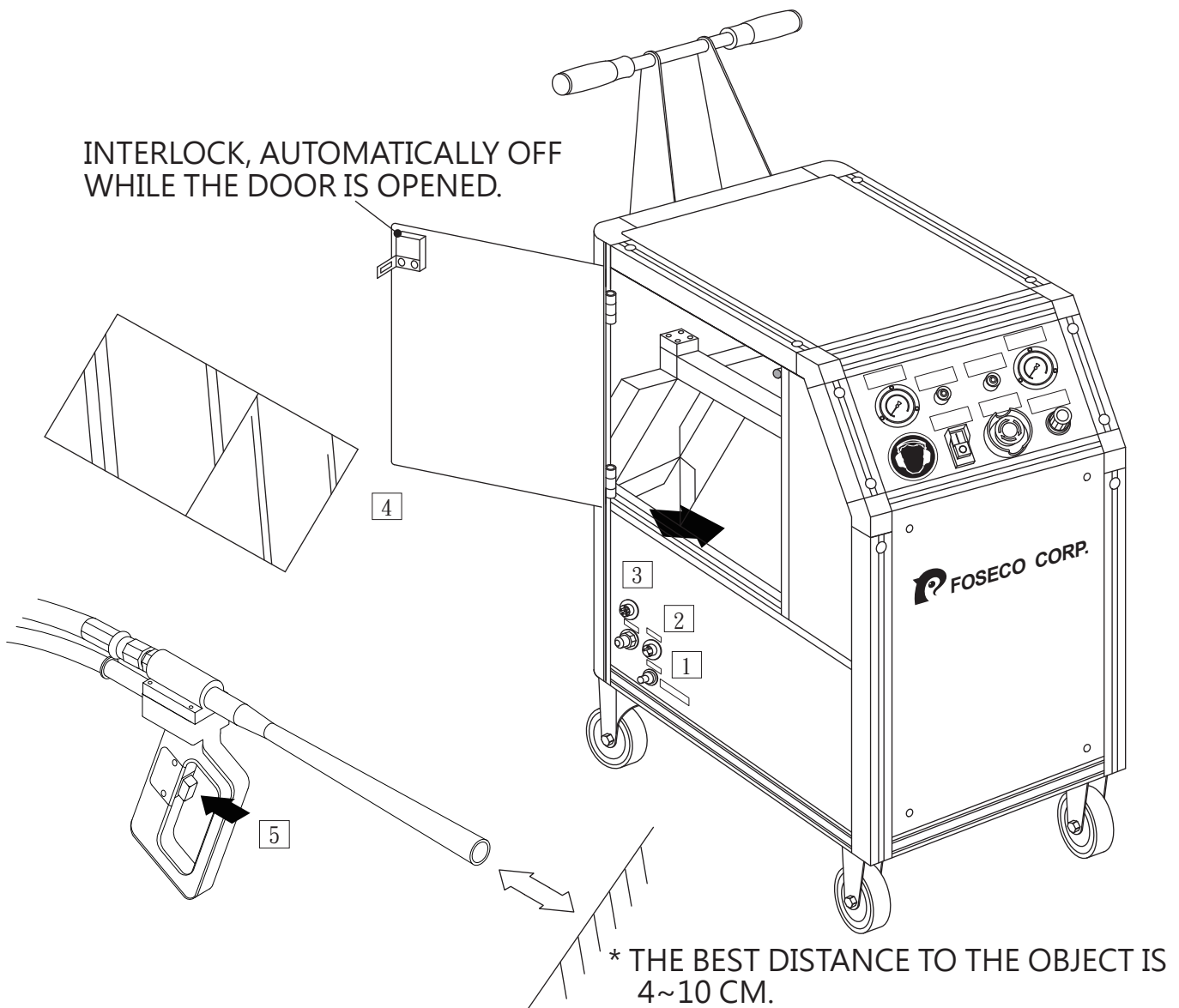
6 EMERGENCY STOP: TO STOP THE MACHINE IN EMERGENCY.

7 POWER SWITCH: POWER ON/OFF.



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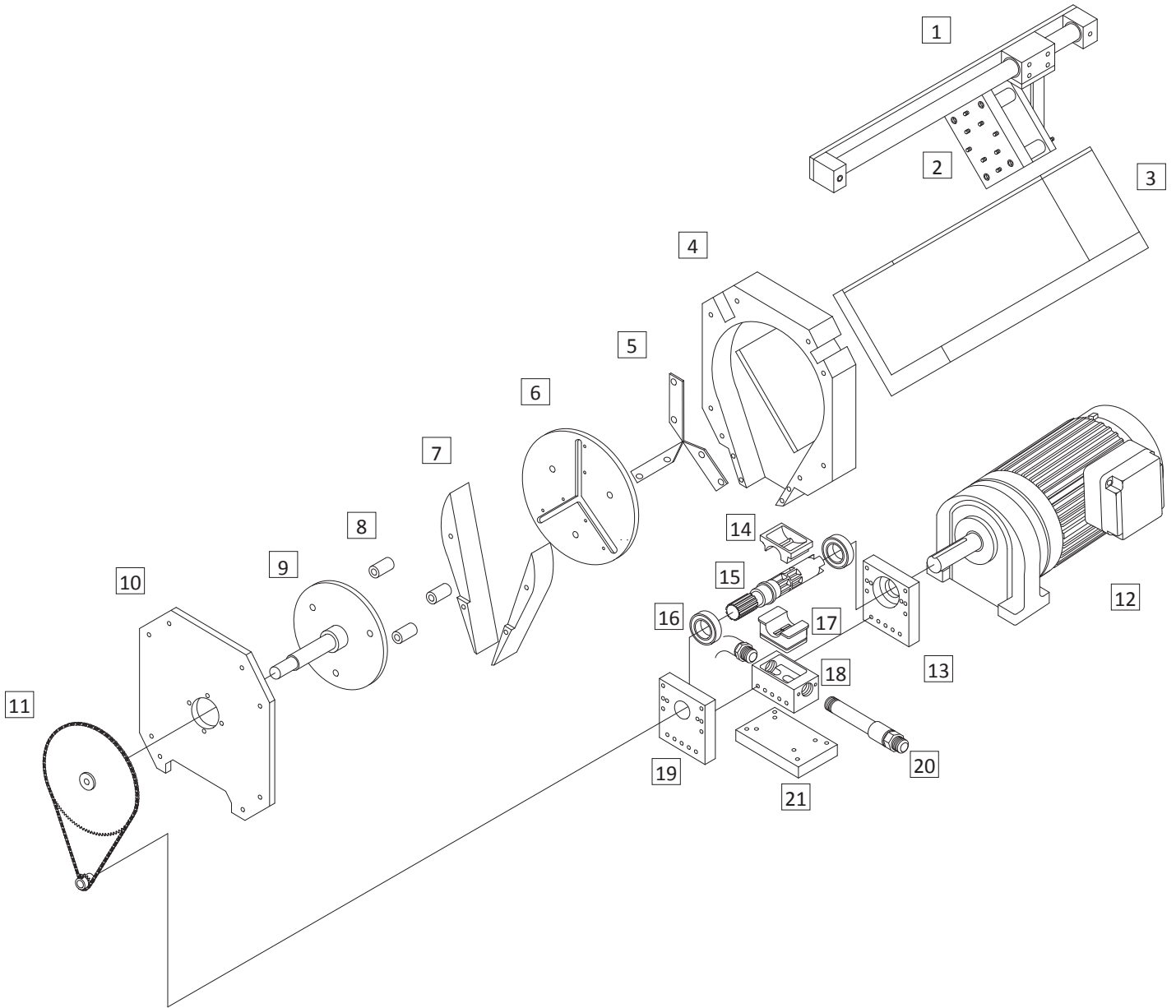
INSTRUCTIONS



1. PLUG IN THE WIRE TO THE RECEPTACLE SOK, MAKE SURE THE PE (POWER EARTHING) CONNECTED.
2. CONNECT THE AIR HOSE AND CHECK, THE AIR SUPPLY GAUGE MUST SHOW AT BETWEEN 6~8 kg/cm².
3. CONNECT THE WIRE TO THE MACHINE (5 PINS), AS WELL AS THE BLUE BLASTING HOSE.
4. SET THE DRY ICE BLOCK TO THE CHAMBER STABLY; PUSH THE BOARD TIGHTLY AND FORWARDLY CLOSE TO THE DRYICE CUTTING AREA.
5. PRESS THE BUTTON ON OF BLASTING GUN TO START; IF TO STOP, THEN PRESS AGAIN.

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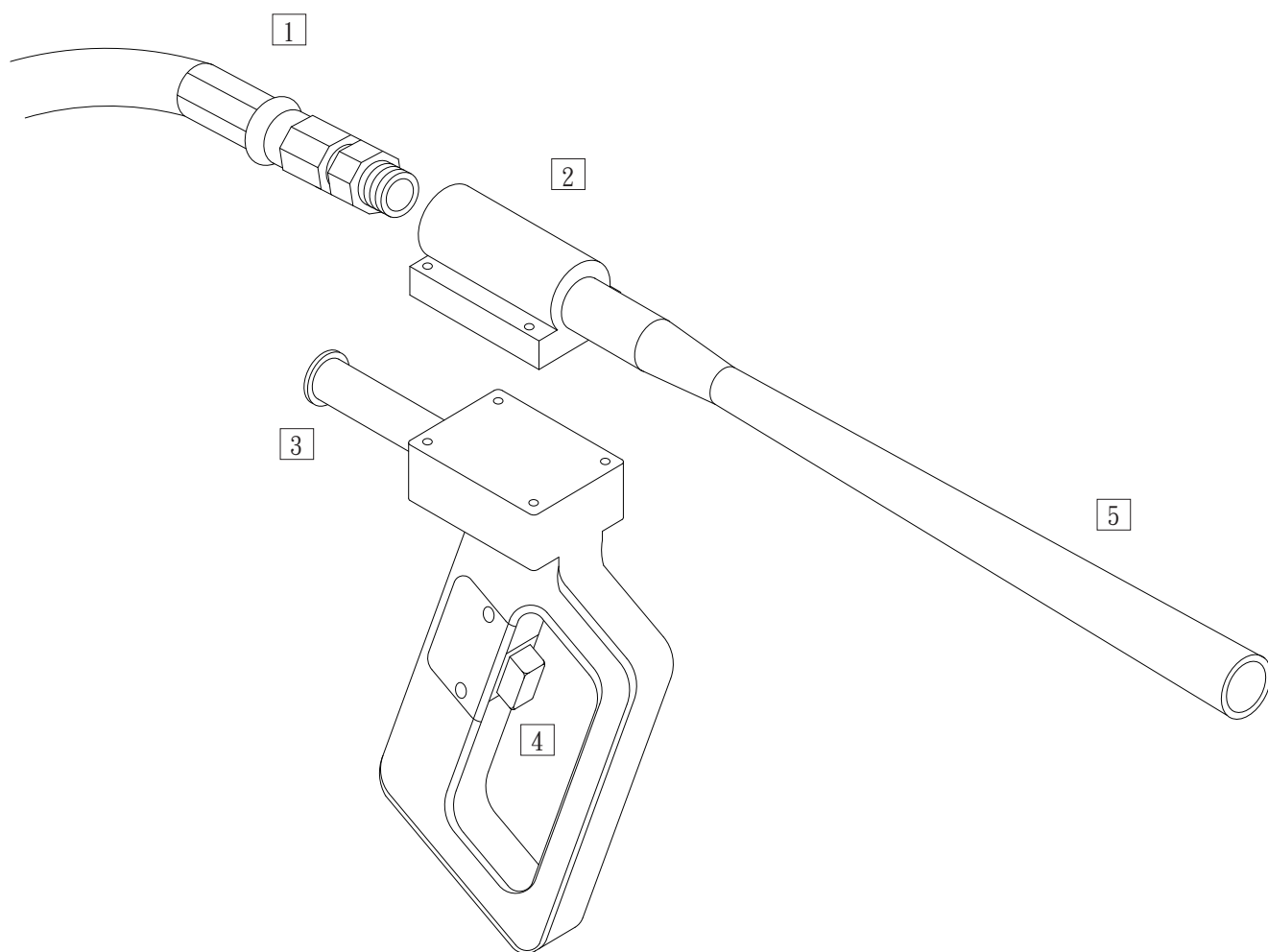
BILL OF MATERIALS(PARTS)



(1) PNEUMATIC CYLINDER	(9) COUPLING SHAFT	(16) BEARINGS
(2) DAMPER PLATE	(10) CUTTER FIX PLATE	(17) DRYICE GATHER GASKET
(3) DRYICE CHAMBER	(11) GREAT GEAR	(LOWER)
(4) CUTTER FIX BASE	(12) SPEED REDUCER	(18) OUTLET HOUSE
(5) CUTTER	(13) FIX PLATE	(19) FIX PLATE
(6) CUTTER PLATE	(14) DRYICE GATHER GASKET	(20) DRYICE OUTLET
(7) DRYICE GUIDE	(UPPER)	(21) OUTLET BASE
(8) CUTTER PLATE SCREWS	(15) DRYICE GENERATOR	

MDS-100

BLASTING GUN



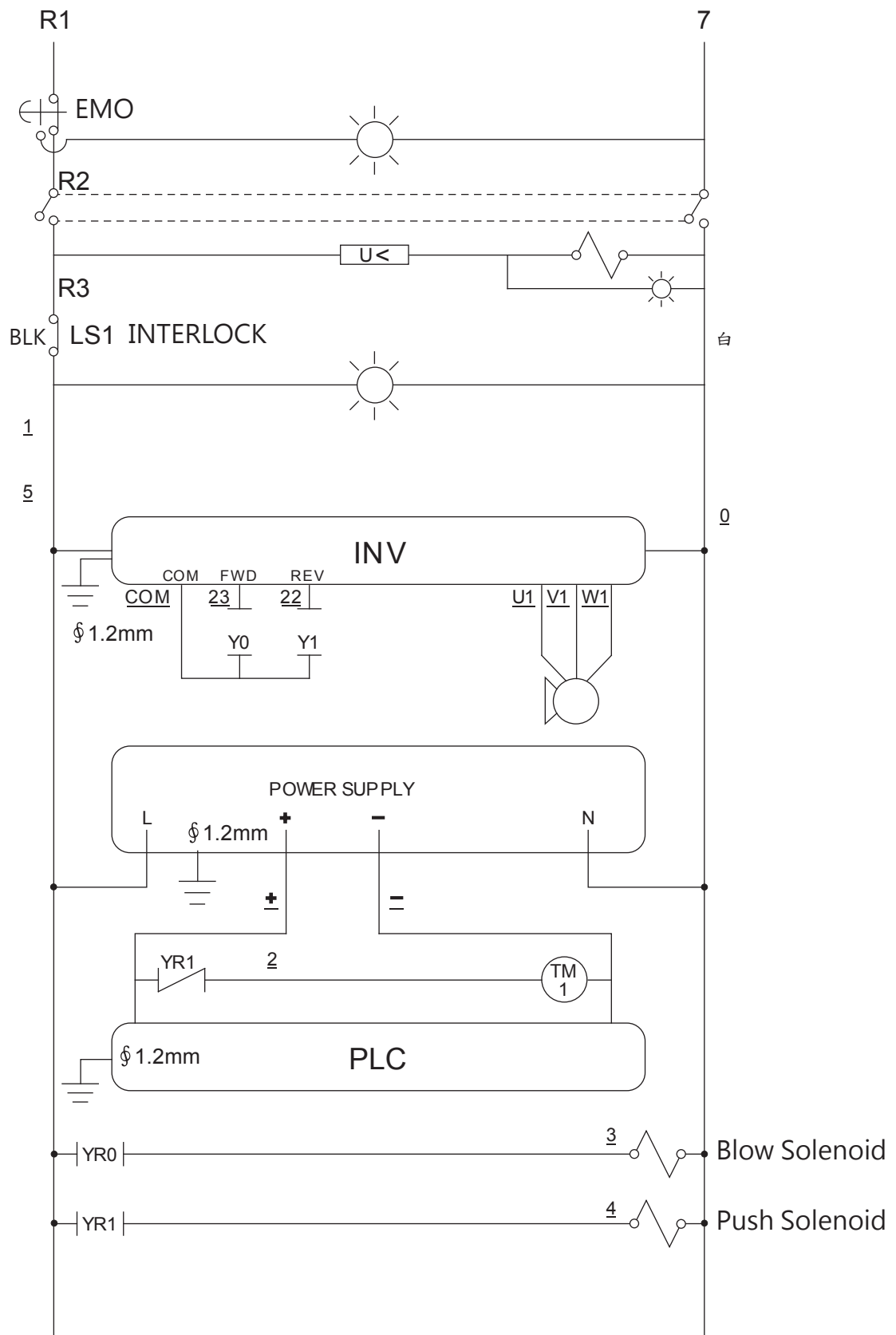
(1) BLASTING HOSE

(2) BLASTING SEAT

(3) BLASTING HANDLE

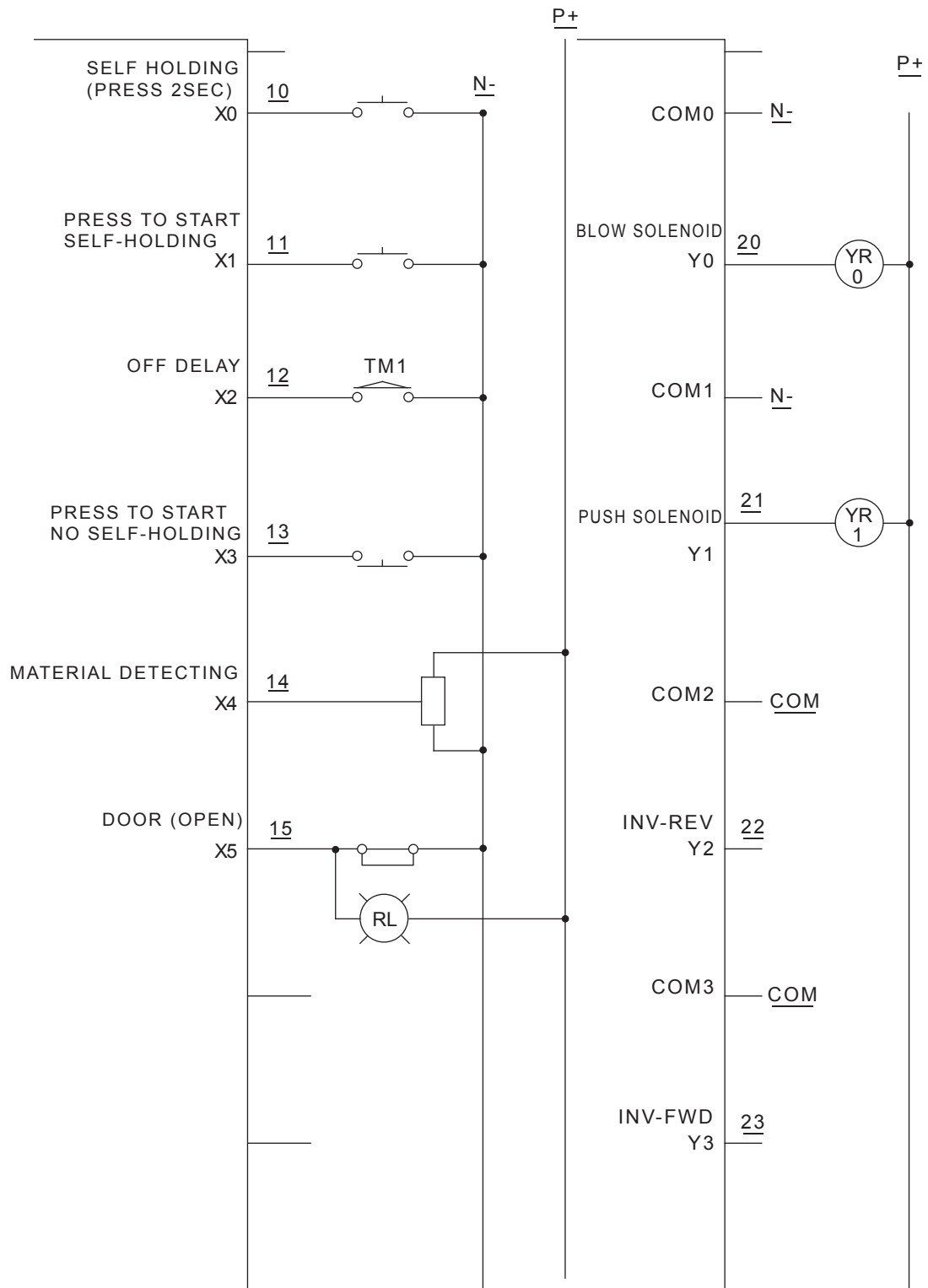
(4) BLASTING APPLICATOR

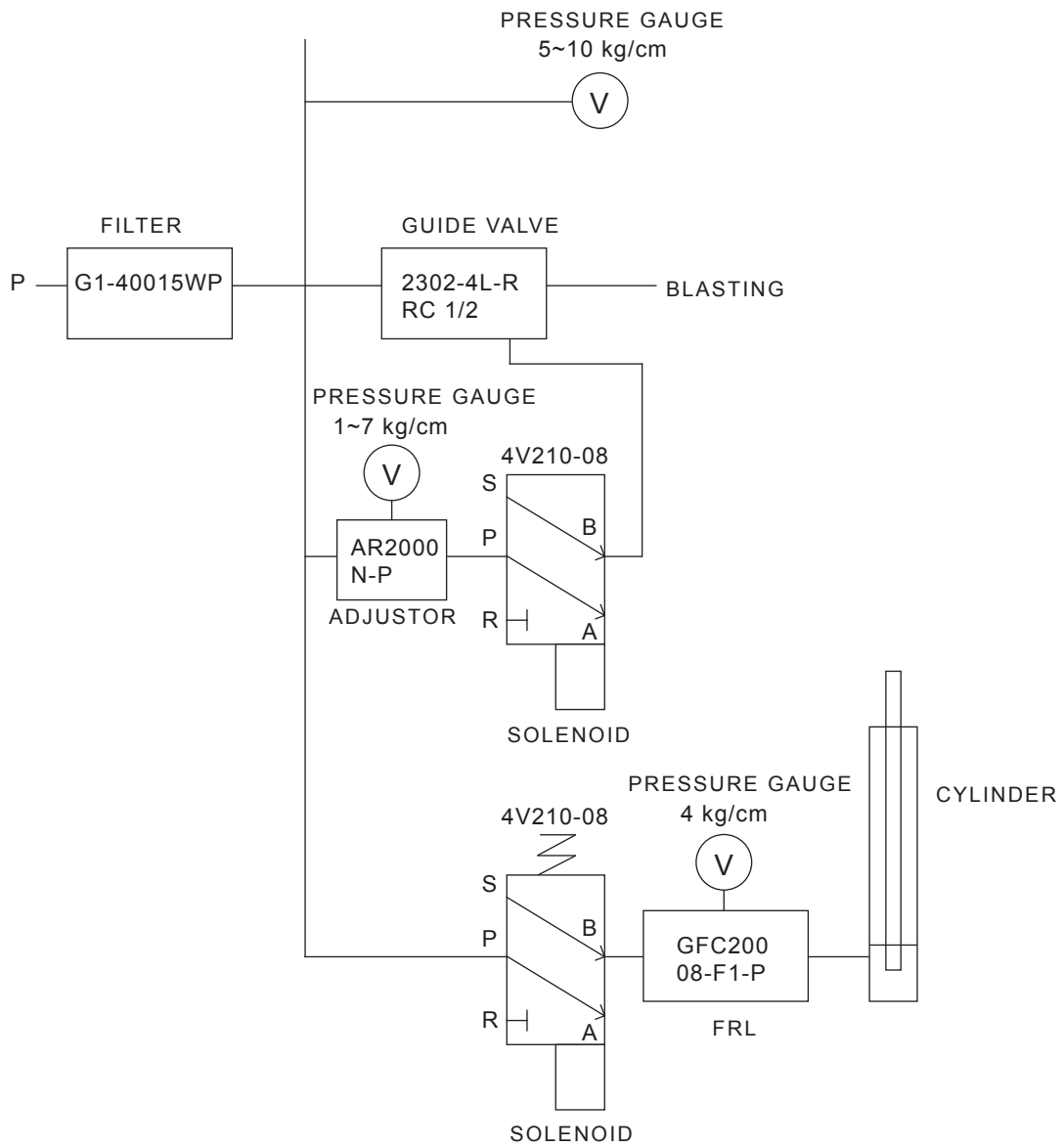
(5) BLASTING NOZZLE



MDS-100

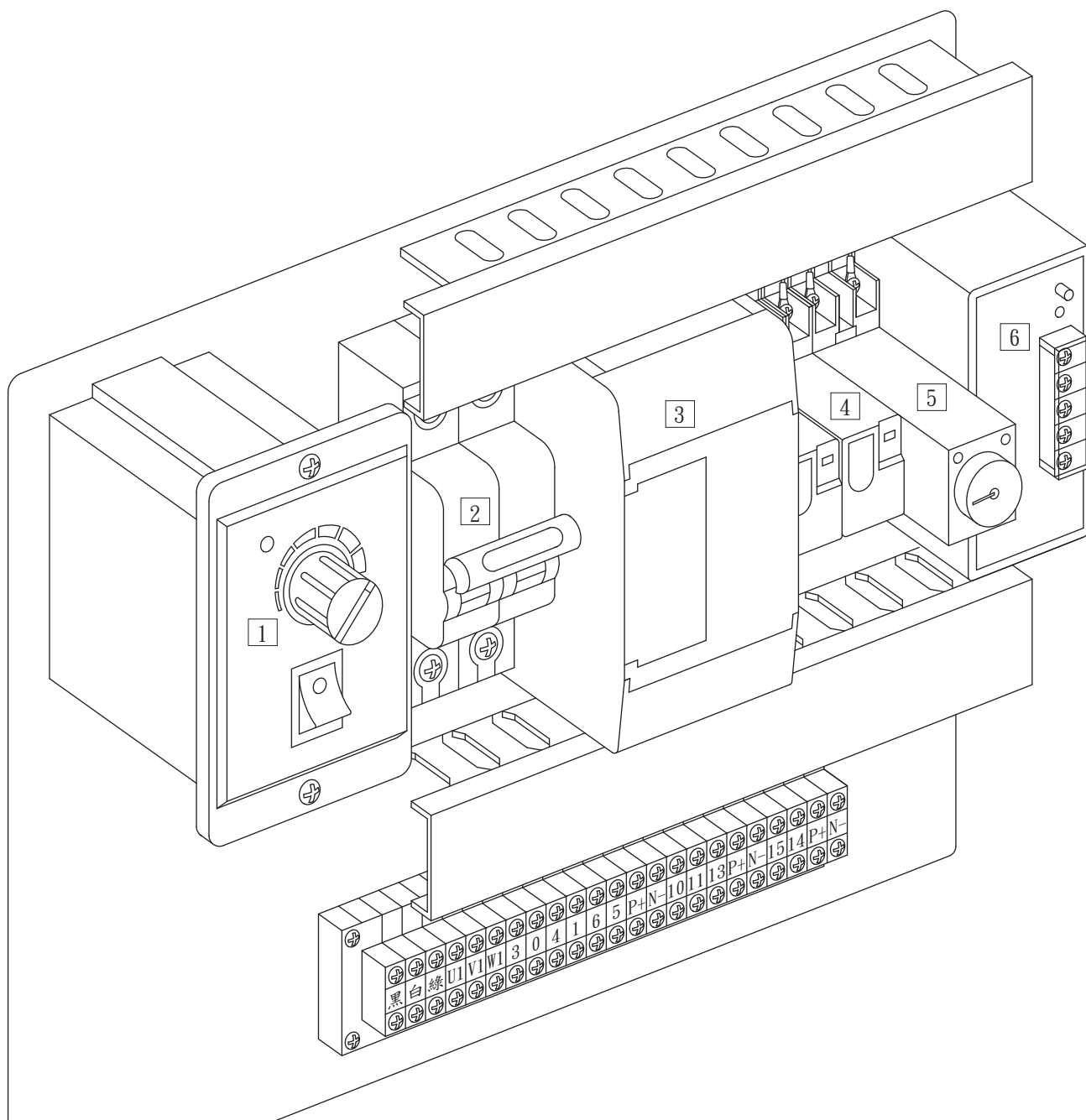
CIRCUIT DISPLAY





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WIRING DIAGRAM

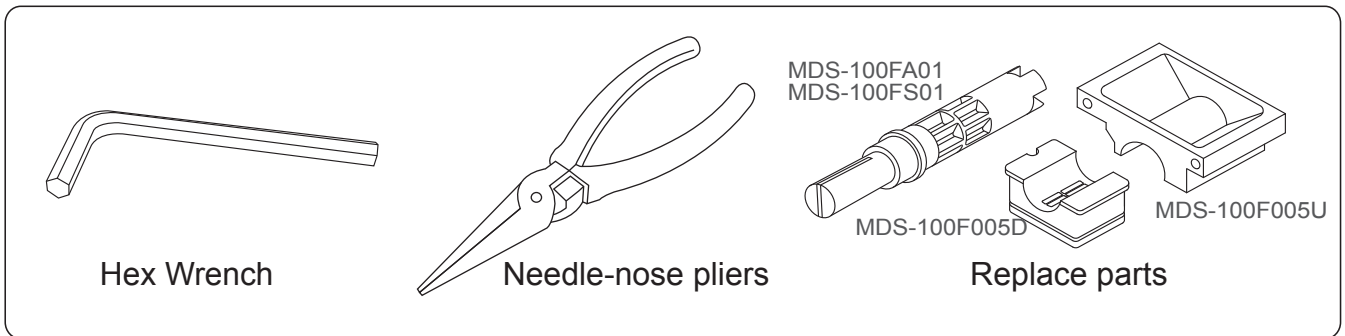


(1) MOTOR REGULATOR	(6) DC POWER SUPPLY	(11)
(2) POWER SWITCH	(7)	(12)
(3) PLC CONTROLLER	(8)	(13)
(4) RELAY	(9)	(14)
(5) TIMER	(10)	(15)

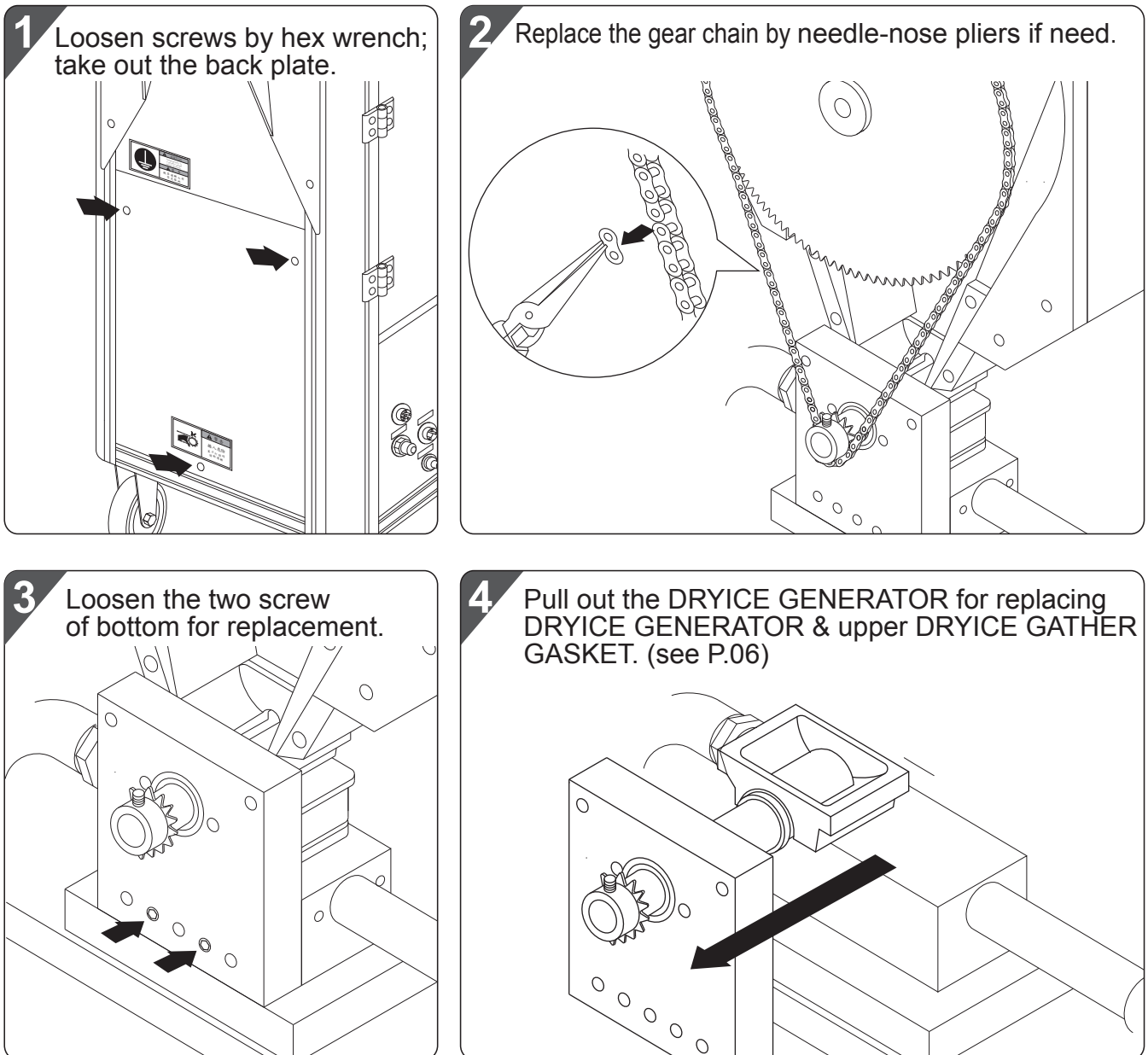
MDS-100

PARTS REPLACEMENT

1. Preparation



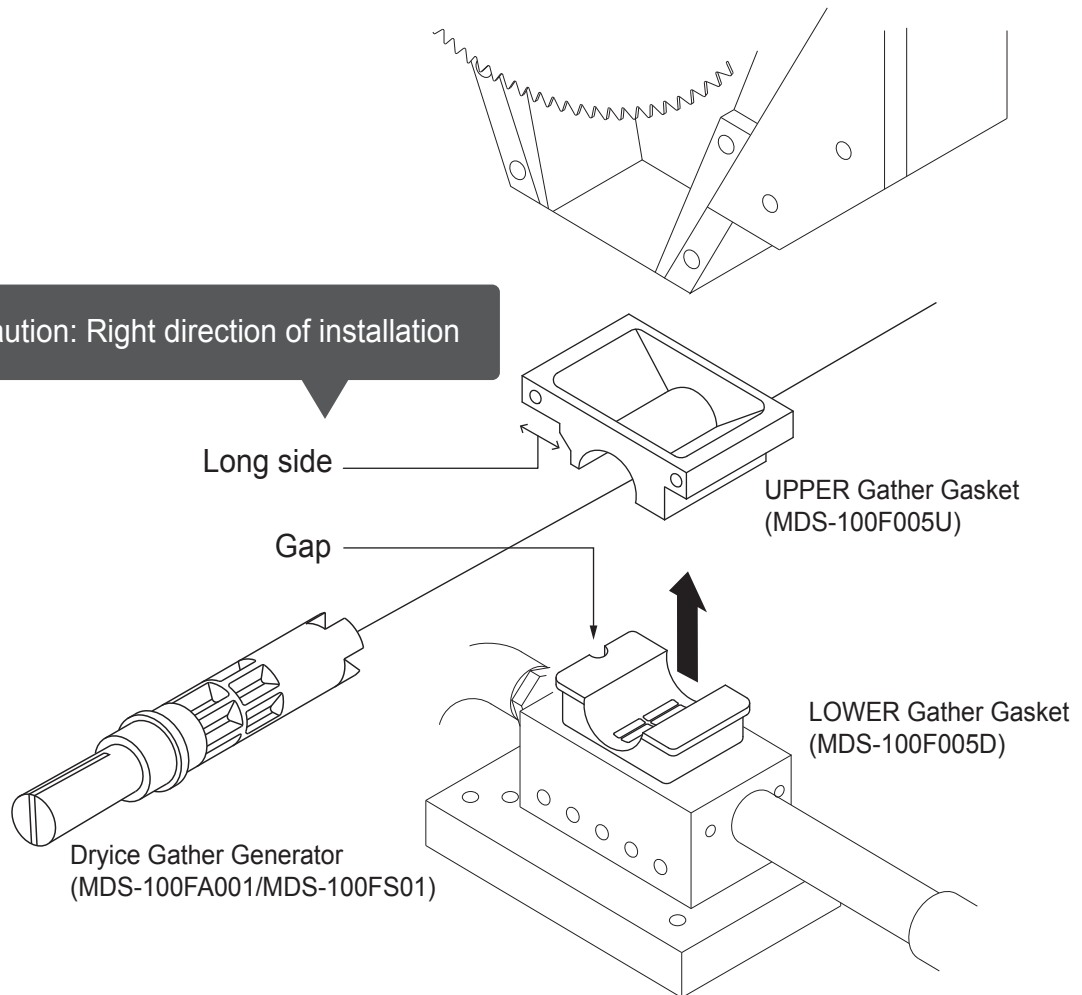
2. Parts replacement



5 Take out the GENERATOR (MDS-100FA01/MDS-100FS01) by step 4, push up to replace the lower DRYICE GATHER GASKET (MDS-100F004).



Caution: Right direction of installation



6

After replacement, reinstall all parts counter-clockwise, and screw up the back plate.

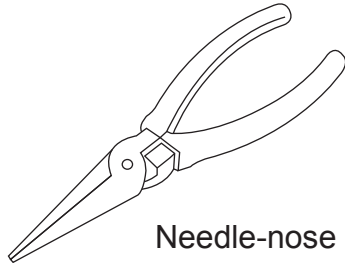
MDS-100

CUTTER REPLACEMENT

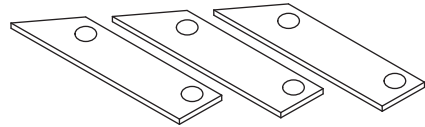
1. Preparation



Hex Wrench



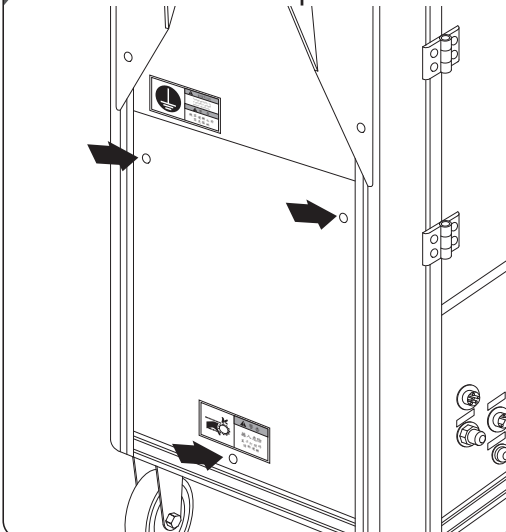
Needle-nose pliers



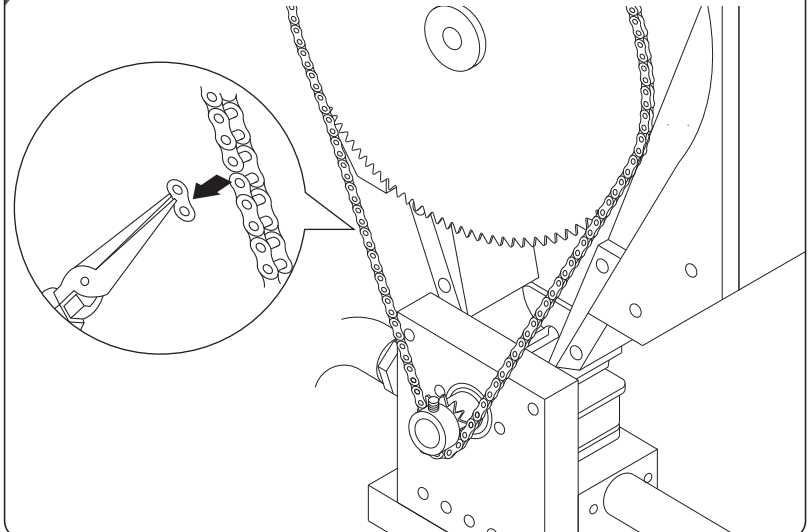
Replace cutters

2. Replacement

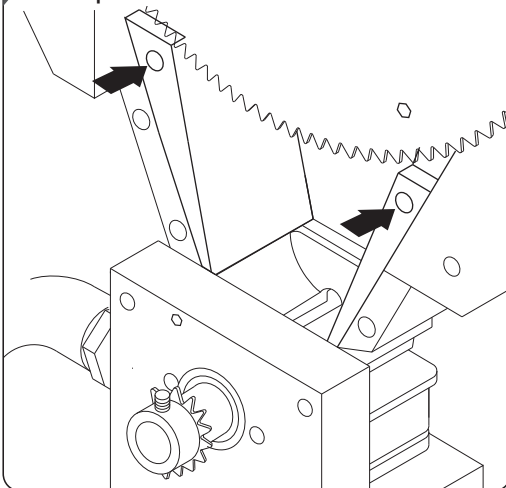
1 Loosen screws by hex wrench; take out the back plate.



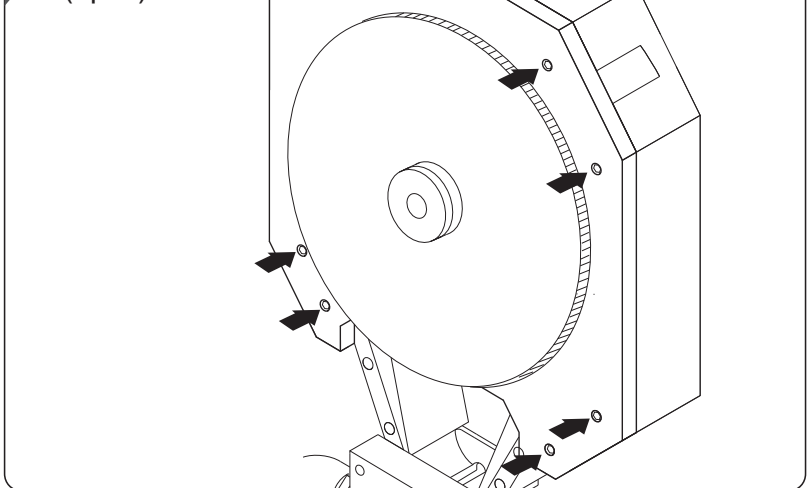
2 Take out the gear chain.



3 Loosen screws (4pcs) for replacement.



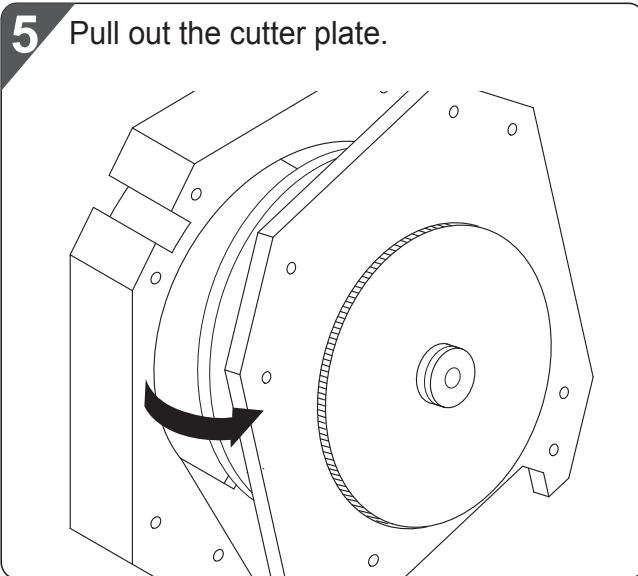
4 Loosen screws (8pcs).



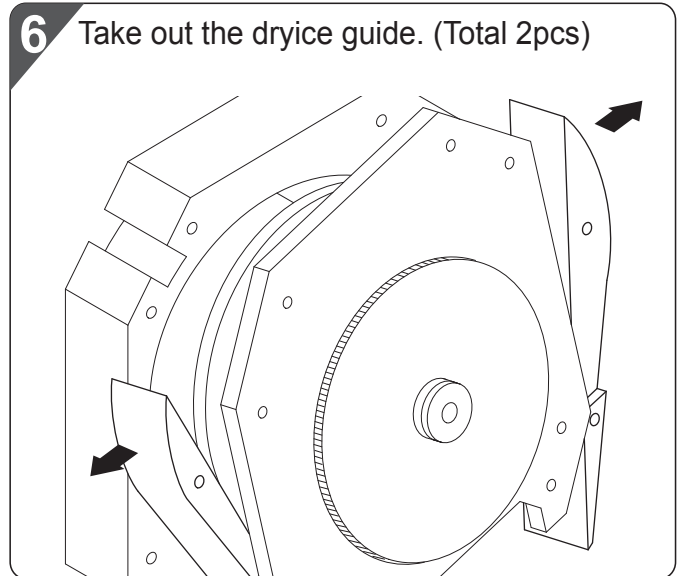
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CUTTER REPLACEMENT

5 Pull out the cutter plate.

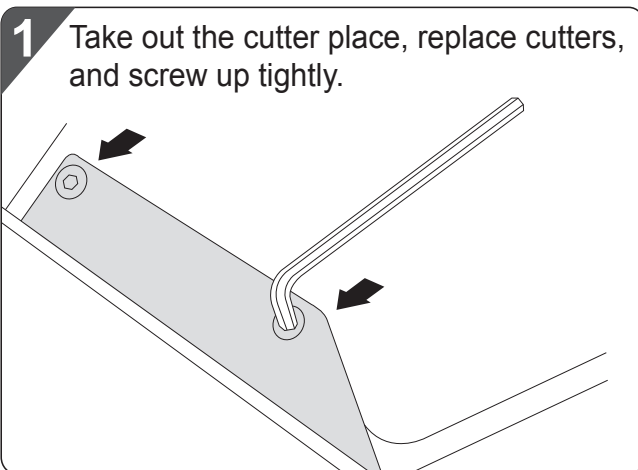


6 Take out the dryice guide. (Total 2pcs)



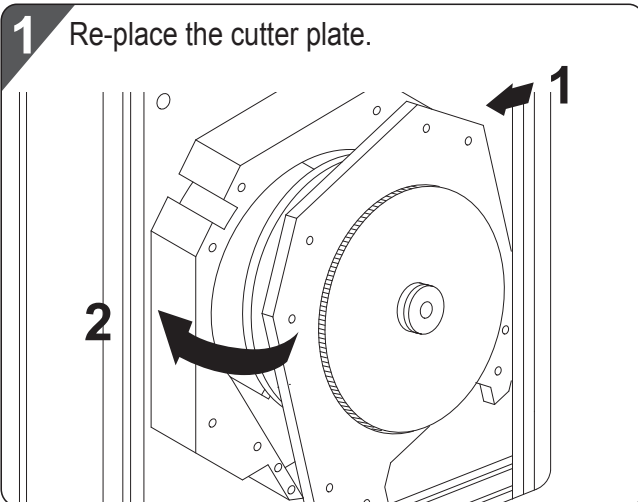
3. Replace the cutters

1 Take out the cutter place, replace cutters, and screw up tightly.

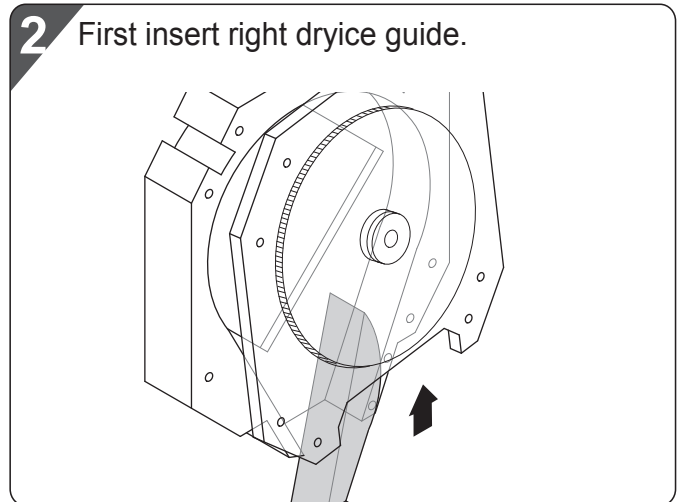


4. Re-assemble parts

1 Re-place the cutter plate.



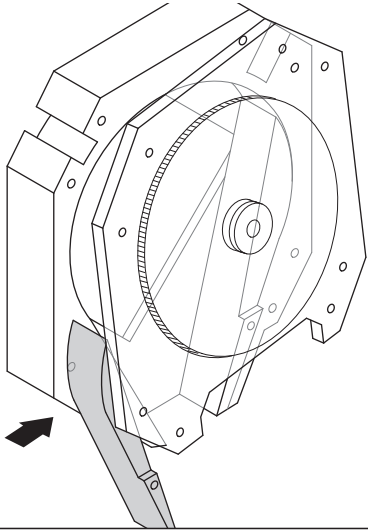
2 First insert right dryice guide.



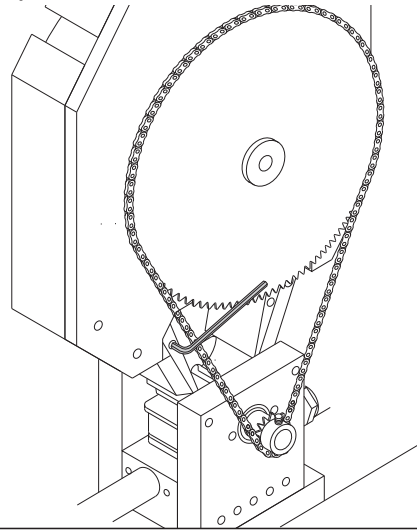
MDS-100

CUTTER REPLACEMENT

3 Then insert the left dryice guide.



4 Screwing back all screws to complete the replacement.



Product Warranty Certificate

Thank you for purchasing FOSECO'S DRYICE BLASTING CLEANER.
We hereby guarantee that if the machine is proved defective or malfunction due to faulty materials or workmanship, we will provide instant after-sales services to you according to the warranty clauses below:

MODEL NO :	M D S - 1 0 0	
SERIAL NO :		
PURCHASE DATE:		
CUSTOMER NAME:		
CUSTOMER TEL:		
CUSTOMER ADD.:		
貿紳有限公司 FOSECO CORP. NO.118-10, YONG HO RD., DA YA, TAICHUNG, TAIWAN 428-77 TEL: +886-4-2568-5609 FAX: +886-4-2568-5480 E-MAIL: dryice@dryice.com.tw	QC PASSED	

Warranty Clauses:

<p>FOSECO CORP. hereby guarantees that the machine is warranted against defects in workmanship and material for a period of one (1) year from the delivery date. As per the clauses below, FOSECO will either repair or replace any part of the machine that is proved to be defective due to faulty materials or workmanship.</p> <p>1. The warranty will be effective only under the following situations:</p> <p>(1) The machine is operated and maintained in accordance with FOSECO's "OPERATION MANUAL".</p> <p>(2) The warranty is contingent upon proper use of the machine only. The warranty does not cover any defects arising from improper installation, misuse, unauthorized repair, user's neglect, accident, natural disaster, or any unauthorized modification and disassembly.</p> <p>2. FOSECO CORP has no liability for any indirect damages or losses caused by this machine. In case we think it is necessary, the maximum compensation amount is limited to the equivalence of the machine value.</p> <p>3. This warranty certificate should be kept properly. If necessary, present this warranty certificate to protect your interests.</p>
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