



OPERATOR'S MANUAL



SHEET METAL NOTCHER MODEL: SN-F04-MS

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THANK YOU & WARRANTY

Thank you for your purchase of a machine from Baileigh Industrial. We hope that you find it productive and useful to you for a long time to come.

Inspection & Acceptance. Buyer shall inspect all Goods within ten (10) days after receipt thereof. Buyer's payment shall constitute final acceptance of the Goods and shall act as a waiver of the Buyer's rights to inspect or reject the goods unless otherwise agreed. If Buyer rejects any merchandise, Buyer must first obtain a Returned Goods Authorization ("RGA") number before returning any goods to Seller. Goods returned without a RGA will be refused. Seller will not be responsible for any freight costs, damages to goods, or any other costs or liabilities pertaining to goods returned without a RGA. Seller shall have the right to substitute a conforming tender. Buyer will be responsible for all freight costs to and from Buyer and repackaging costs, if any, if Buyer refuses to accept shipment. If Goods are returned in unsalable condition, Buyer shall be responsible for full value of the Goods. Buyer may not return any special order Goods. Any Goods returned hereunder shall be subject to a restocking fee equal to 30% of the invoice price.

Specifications. Seller may, at its option, make changes in the designs, specifications or components of the Goods to improve the safety of such Goods, or if in Seller's judgment, such changes will be beneficial to their operation or use. Buyer may not make any changes in the specifications for the Goods unless Seller approves of such changes in writing, in which event Seller may impose additional charges to implement such changes.

Limited Warranty. Seller warrants to the original end-user that the Goods manufactured or provided by Seller under this Agreement shall be free of defects in material or workmanship for a period of twelve (12) months from the date of purchase, provided that the Goods are installed, used, and maintained in accordance with any instruction manual or technical guidelines provided by the Seller or supplied with the Goods, if applicable. The original end-user must give written notice to Seller of any suspected defect in the Goods prior to the expiration of the warranty period. The original end-user must also obtain a RGA from Seller prior to returning any Goods to Seller for warranty service under this paragraph. Seller will not accept any responsibility for Goods returned without a RGA. The original end-user shall be responsible for all costs and expenses associated with returning the Goods to Seller for warranty service. In the event of a defect, Seller, at its sole option, shall repair or replace the defective Goods or refund to the original end-user the purchase price for such defective Goods. Goods are not eligible for replacement or return after a period of 30 days from date of receipt. The foregoing warranty is Seller's sole obligation, and the original end-user's exclusive remedy, with regard to any defective Goods. This limited warranty does not apply to: (a) die sets, tooling, and saw blades; (b) periodic or routine maintenance and setup, (c) repair or replacement of the Goods due to normal wear and tear, (d) defects or damage to the Goods resulting from misuse, abuse, neglect, or accidents, (e) defects or damage to the Goods resulting from improper or unauthorized alterations, modifications, or changes; and (f) any Goods that has not been installed and/or maintained in accordance with the instruction manual or technical guidelines provided by Seller.

EXCLUSION OF OTHER WARRANTIES. THE FOREGOING LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. ANY AND ALL OTHER EXPRESS, STATUTORY OR IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED. NO WARRANTY IS MADE WHICH EXTENDS BEYOND THAT WHICH IS EXPRESSLY CONTAINED HEREIN.

Limitation of Liability. IN NO EVENT SHALL SELLER BE LIABLE TO BUYER OR ANY OTHER PARTY FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES (INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR DOWN TIME) ARISING FROM OR IN MANNER CONNECTED WITH THE GOODS, ANY BREACH BY SELLER OR ITS AGENTS OF THIS AGREEMENT, OR ANY OTHER CAUSE WHATSOEVER, WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY OF LIABILITY. BUYER'S REMEDY WITH RESPECT TO ANY CLAIM ARISING UNDER THIS AGREEMENT IS STRICTLY LIMITED TO NO MORE THAN THE AMOUNT PAID BY THE BUYER FOR THE GOODS.



Force Majeure. Seller shall not be responsible for any delay in the delivery of, or failure to deliver, Goods due to causes beyond Seller's reasonable control including, without limitation, acts of God, acts of war or terrorism, enemy actions, hostilities, strikes, labor difficulties, embargoes, non-delivery or late delivery of materials, parts and equipment or transportation delays not caused by the fault of Seller, delays caused by civil authorities, governmental regulations or orders, fire, lightening, natural disasters or any other cause beyond Seller's reasonable control. In the event of any such delay, performance will be postponed by such length of time as may be reasonably necessary to compensate for the delay.

Installation. If Buyer purchases any Goods that require installation, Buyer shall, at its expense, make all arrangements and connections necessary to install and operate the Goods. Buyer shall install the Goods in accordance with any Seller instructions and shall indemnify Seller against any and all damages, demands, suits, causes of action, claims and expenses (including actual attorneys' fees and costs) arising directly or indirectly out of Buyer's failure to properly install the Goods.

Work By Others; Safety Devices. Unless agreed to in writing by Seller, Seller has no responsibility for labor or work performed by Buyer or others, of any nature, relating to design, manufacture, fabrication, use, installation or provision of Goods. Buyer is solely responsible for furnishing, and requiring its employees and customers to use all safety devices, guards and safe operating procedures required by law and/or as set forth in manuals and instruction sheets furnished by Seller. Buyer is responsible for consulting all operator's manuals, ANSI or comparable safety standards, OSHA regulations and other sources of safety standards and regulations applicable to the use and operation of the Goods.

Remedies. Each of the rights and remedies of Seller under this Agreement is cumulative and in addition to any other or further remedies provided under this Agreement or at law or equity.

Attorney's Fees. In the event legal action is necessary to recover monies due from Buyer or to enforce any provision of this Agreement, Buyer shall be liable to Seller for all costs and expenses associated therewith, including Seller's actual attorneys' fees and costs.

Governing Law/Venue. This Agreement shall be construed and governed under the laws of the State of Wisconsin, without application of conflict of law principles. Each party agrees that all actions or proceedings arising out of or in connection with this Agreement shall be commenced, tried, and litigated only in the state courts sitting in Manitowoc County, Wisconsin or the U.S. Federal Court for the Eastern District of Wisconsin. Each party waives any right it may have to assert the doctrine of "forum non conveniens" or to object to venue to the extent that any proceeding is brought in accordance with this section. Each party consents to and waives any objection to the exercise of personal jurisdiction over it by courts described in this section. Each party waives to the fullest extent permitted by applicable law the right to a trial by jury.

Summary of Return Policy.

- 10 Day acceptance period from date of delivery. Damage claims and order discrepancies will not be accepted after this time.
- You must obtain a Baileigh issued RGA number PRIOR to returning any materials.
- Returned materials must be received at Baileigh in new condition and in original packaging.
- Altered items are not eligible for return.
- Buyer is responsible for all shipping charges.
- A 30% re-stocking fee applies to all returns.

Baileigh Industrial makes every effort to ensure that our posted specifications, images, pricing and product availability are as correct and timely as possible. We apologize for any discrepancies that may occur. Baileigh Industrial reserves the right to make any and all changes deemed necessary in the course of business including but not limited to pricing, product specifications, quantities, and product availability.

For Customer Service & Technical Support:

Please contact one of our knowledgeable Sales and Service team members at:
(920) 684-4990 or e-mail us at sales@baileigh.com



INTRODUCTION

The quality and reliability of the components assembled on a Baileigh Industrial machine guarantee near perfect functioning, free from problems, even under the most demanding working conditions. However if a situation arises, refer to the manual first. If a solution cannot be found, contact the distributor where you purchased our product. Make sure you have the serial number and production year of the machine (stamped on the nameplate). For replacement parts refer to the assembly numbers on the parts list drawings.

Our technical staff will do their best to help you get your machine back in working order.

In this manual you will find: (when applicable)

- Safety procedures
- Correct installation guidelines
- Description of the functional parts of the machine
- Capacity charts
- Set-up and start-up instructions
- Machine operation
- Scheduled maintenance
- Parts lists

GENERAL NOTES

After receiving your equipment remove the protective container. Do a complete visual inspection, and if damage is noted, **photograph it for insurance claims** and contact your carrier at once, requesting inspection. Also contact Baileigh Industrial and inform them of the unexpected occurrence. Temporarily suspend installation.

Take necessary precautions while loading / unloading or moving the machine to avoid any injuries.

Your machine is designed and manufactured to work smoothly and efficiently. Following proper maintenance instructions will help ensure this. Try and use original spare parts, whenever possible, and most importantly; **DO NOT** overload the machine or make any unauthorized modifications.



Note: This symbol refers to useful information throughout the manual.



IMPORTANT **PLEASE READ THIS OPERATORS MANUAL CAREFULLY**

It contains important safety information, instructions, and necessary operating procedures. The continual observance of these procedures will help increase your production and extend the life of the equipment.



SAFETY INSTRUCTIONS

LEARN TO RECOGNIZE SAFETY INFORMATION

This is the safety alert symbol. When you see this symbol on your machine or in this manual, **BE ALERT TO THE POTENTIAL FOR PERSONAL INJURY!**

Follow recommended precautions and safe operating practices.

UNDERSTAND SIGNAL WORDS

A signal word – **DANGER**, **WARNING**, or **CAUTION** is used with the safety alert symbol. **DANGER** identifies a hazard or unsafe practice that will result in severe **Injury or Death**.

Safety signs with signal word **DANGER** or **WARNING** are typically near specific hazards.

General precautions are listed on **CAUTION** safety signs. **CAUTION** also calls attention to safety messages in this manual.



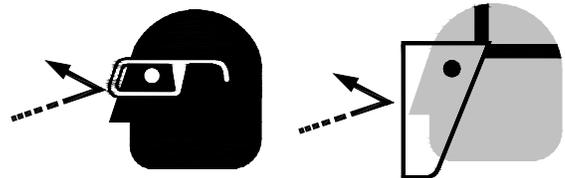


SAVE THESE INSTRUCTIONS.
Refer to them often and use them to instruct others.



PROTECT EYES

Wear safety glasses or suitable eye protection when working on or around machinery.



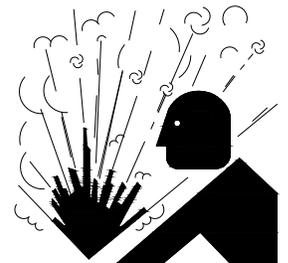
BEWARE OF SHEAR HAZARD

Lowering blade to notch position will result in loss of fingers or limbs if placed in machine. **NEVER** place your hand or any part of your body in this machine.



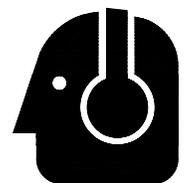
HYDRAULIC HOSE FAILURE

Exercise **CAUTION** around hydraulic hoses in case of a hose or fitting failure.



PROTECT AGAINST NOISE

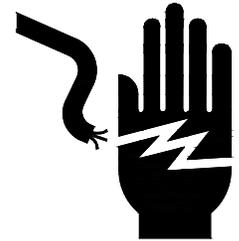
Prolonged exposure to loud noise can cause impairment or loss of hearing. Wear suitable hearing protective devices such as ear muffs or earplugs to protect against objectionable or uncomfortable loud noises.





HIGH VOLTAGE

USE CAUTION IN HIGH VOLTAGE AREAS. DO NOT assume the power to be off.
FOLLOW PROPER LOCKOUT PROCEDURES.



Follow proper lockout / tagout procedures before servicing.



EMERGENCY STOP BUTTON

In the event of incorrect operation or dangerous conditions, the machine can be stopped immediately by pressing the **E-STOP** button. Twist the emergency stop button clockwise (**cw**) to reset.
Note: Resetting the E-Stop will not start the machine.





SAFETY PRECAUTIONS



Metal working can be dangerous if safe and proper operating procedures are not followed. As with all machinery, there are certain hazards involved with the operation of the product. Using the machine with respect and caution will considerably lessen the possibility of personal injury. However, if normal safety precautions are overlooked or ignored, personal injury to the operator may result.

Safety equipment such as guards, hold-downs, safety glasses, dust masks and hearing protection can reduce your potential for injury. But even the best guard won't make up for poor judgment, carelessness or inattention. **Always use common sense** and exercise **caution** in the workshop. If a procedure feels dangerous, don't try it.

REMEMBER: Your personal safety is your responsibility.



WARNING: FAILURE TO FOLLOW THESE RULES MAY RESULT IN SERIOUS PERSONAL INJURY

1. **Only trained and qualified personnel can operate this machine.**
2. **Make sure guards are in place and in proper working order before operating machinery.**
3. **Remove any adjusting tools.** Before operating the machine, make sure any adjusting tools have been removed.
4. **Keep work area clean.** Cluttered areas invite injuries.
5. **Overloading machine.** By overloading the machine you may cause injury from flying parts. **DO NOT** exceed the specified machine capacities.
6. **Machine usage. DO NOT** use the notcher as a press or crushing tool.
7. **Do not force tool.** Your machine will do a better and safer job if used as intended. **DO NOT** use inappropriate attachments in an attempt to exceed the machines rated capacity.
8. **Use the right tool for the job. DO NOT** attempt to force a small tool or attachment to do the work of a large industrial tool. **DO NOT** use a tool for a purpose for which it was not intended.
9. **Dress appropriate. DO NOT** wear loose fitting clothing or jewelry as they can be caught in moving machine parts. Protective clothing and steel toe shoes are recommended when using machinery. Wear a restrictive hair covering to contain long hair.



SAFETY PRECAUTIONS (cont.)



10. **Use eye and ear protection.** Always wear ISO approved impact safety goggles. Wear a full-face shield if you are producing metal filings.
11. **Do not overreach.** Maintain proper footing and balance at all times. **DO NOT** reach over or across a running machine.
12. **Stay alert.** Watch what you are doing and use common sense. **DO NOT** operate any tool or machine when you are tired.
13. **Check for damaged parts.** Before using any tool or machine, carefully check any part that appears damaged. Check for alignment and binding of moving parts that may affect proper machine operation.
14. **Observe work area conditions.** **DO NOT** use machines or power tools in damp or wet locations. Do not expose to rain. Keep work area well lighted. **DO NOT** use electrically powered tools in the presence of flammable gases or liquids.
15. **Blade adjustments and maintenance.** Always keep blades sharp and properly adjusted for optimum performance.
16. **Keep children away.** Children must never be allowed in the work area. **DO NOT** let them handle machines, tools, or extension cords.
17. **Store idle equipment.** When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep them out of reach of children.
18. **DO NOT operate machine if under the influence of alcohol or drugs.** Read warning labels on prescriptions. If there is any doubt, **DO NOT** operate the machine.
19. Wear oil-free protective garments such as leather gloves, heavy shirt, high shoes or boots, cuff less trousers, and a cap.
20. **DO NOT** touch live electrical components or parts.
21. Be sure all equipment is properly installed and grounded according to national, state, and local codes.
22. Keep all electrical cords dry and free from grease and oil.
23. Inspect power and control cables periodically. Replace if damaged or bare wires are exposed. **Bare wiring can kill!**
24. **DO NOT** bypass or defeat any safety interlock systems.
25. Know the location of the **ON - OFF** switch and the "E"- **STOP** button.
26. Keep visitors a safe distance from the work area.



SAFETY LABEL LOCATIONS

CAUTION

Before make any service or maintenance, **please make sure air or electric power supply is disconnected.**
Failure to follow caution may result in serious injury.

WARNING

DO NOT'S:
NEVER OPERATE MACHINE UNLESS PROPERLY TRAINED.
NEVER OPEN OR REMOVE GUARDS UNTIL MACHINE IS STOPPED.
NEVER PLACE HANDS IN AREA NEAR MOVING PARTS OR MOVING MATERIAL.
DO NOT OPERATE WHILE UNDER INFLUENCE OF DRUGS, ALCOHOL, OR MEDICATION.
NEVER SERVICE MACHINE WITH MOTOR ON
READ AND UNSTAND THE INSTRUCTION MANUAL BEFORE OPERATION.

FAILURE TO HEED THESE WARNINGS CAN RESULT IN SERIOUS INJURY.

CAUTION

Loud noise hazard.
Ear protection is required when operating this machine.

MANUFACTURED FOR:

BAILEIGH INDUSTRIAL, INC.
P.O. BOX 531
MANITOWOC, WI 54221-0531
PHONE (920) 694-4950
www.bil1.com

MODEL: _____
SERIAL: _____
DATE: _____
PHASE: _____
VOLTS: _____
AMPS: _____
HERTZ: _____

MADE IN TAIWAN



CAUTION

- Read and understand operator's manual before using this machine. Failure to follow operating instructions could result in death or serious injury.
- Loud noise hazard.** Ear protection is required when operating this machine.
- Flying objects hazard.** Eye protection is required when operating this machine.
- Respiratory hazard.** Wear approved respirator in this area.

Trouble Shooting

switch

If the head set can not move up and down, please switch the wiring L1 & L2 of the power cord.
(For 3 phase motor only)

CT-M001

ATTENTION

Please inject the hydraulic oil into the oil tank before first time operation!!!

Hydraulic Oil Replacement:

A. After first 3000 hours operation, please replace the new oil and filter.

B. Then after every 5000 hours operation, please replace the new oil and filter.



TECHNICAL SPECIFICATIONS

Specifications	Imperial	Metric
Maximum Capacity	.237"	6mm
Max. Notch Dimensions	8 1/2" x 8 1/2"	215mm x 215mm
Notch Angle	90° Fixed	
Strokes / Minute	15	
Blade Gap Adjustment	Manual	
Table Dimensions	25.5" x 25.5"	647mm x 647mm
Motor	4hp	2.98 kw
Power	220V, 3ph, 60hz	
Shipping Dimensions L x W x H	60" x 44" x 68"	1524mm x 1118mm x 1727mm
Shipping Weight	1,200 lbs.	544 kg.

TECHNICAL SUPPORT

Our technical support department can be reached at 920.684.4990, and asking for the support desk for purchased machines. Tech Support handles questions on machine setup, schematics, warranty issues, and individual parts needs: (other than die sets and blades).

For specific application needs or future machine purchases contact the Sales Department at: sales@baileigh.com, Phone: 920.684.4990, or Fax: 920.684.3944.



Note: *The photos illustrations using in this manual are representative only and may not depict the actual color, labeling or accessories and may be intended to illustrate technique only.*



Note: *The specifications and dimensions presented here are subject to change without prior notice due to improvements of our products.*



UNPACKING AND CHECKING CONTENTS

Your Baileigh machine is shipped complete in one crate. Separate all parts from the packing material and check each item carefully. Make certain all items are accounted for before discarding any packing material.

⚠ WARNING: If any parts are missing, do not plug in the power cable, or turn the power switch on until the missing parts are obtained and installed correctly.

Cleaning

Your machine may be shipped with a rustproof waxy oil coating and grease on the exposed unpainted metal surfaces. To remove this protective coating, use a degreaser or solvent cleaner. For a more thorough cleaning, some parts will occasionally have to be removed. **DO NOT USE** acetone or brake cleaner as they may damage painted surfaces. Follow manufacturer's label instructions when using any type of cleaning product. After cleaning, wipe unpainted metal surfaces with a light coating of quality oil or grease for protection.

⚠ WARNING: DO NOT USE gasoline or other petroleum products to clean the machine. They have low flash points and can explode or cause fire.

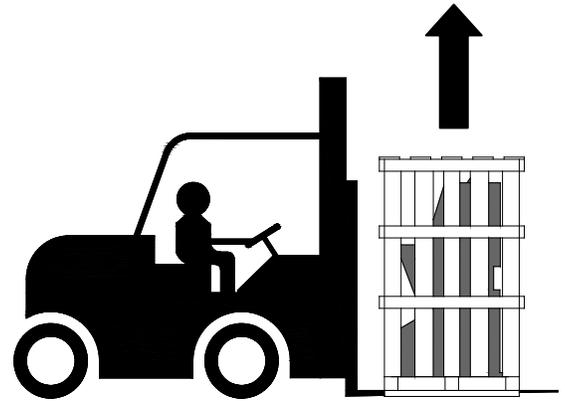
⚠ CAUTION: When using cleaning solvents work in a well-ventilated area. Many cleaning solvents are toxic if inhaled.





TRANSPORTING AND LIFTING

⚠ CAUTION: Lifting and carrying operations should be carried out by skilled workers, such as a truck operator, crane operator, etc. If a crane is used to lift the machine, attach the lifting chain carefully, making sure the machine is well balanced. Choose a location that will keep the machine free from vibration and dust from other machinery. Keep in mind that having a large clearance area around the machine is important for safe and efficient working conditions.



Follow these guidelines when lifting:

- Attach lifting eye to the tapped lifting hole provided at the top of the machine.
- Use lift equipment such as straps, chains, capable of lifting 1.5 to 2 times the weight of the machine.
- Take proper precautions for handling and lifting.
- Check if the load is properly balanced by lifting it an inch or two.
- Lift the machine, avoiding sudden accelerations or quick changes of direction.
- Locate the machine where it is to be installed, and lower slowly until it touches the floor.
- The lift truck must be able to lift at least 1.5 – 2 times the machines gross weight.
- Make sure the machine is balanced. While transporting, avoid rough or jerky motion, and maintain a safe clearance zone around the transport area.
- Use a fork lift with sufficient lifting capacity and forks that are long enough to reach the complete width of the machine.
- Remove the securing bolts that attach the machine to the pallet.
- Move the machine to the required position and lower gently to the floor.
- Level the machine so that all the supporting feet are taking the weight of the machine and no rocking is taking place.



INSTALLATION

IMPORTANT:

Consider the following when looking for a suitable location to place the machine:

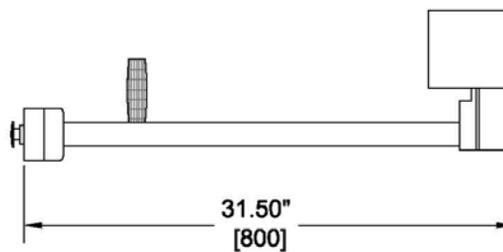
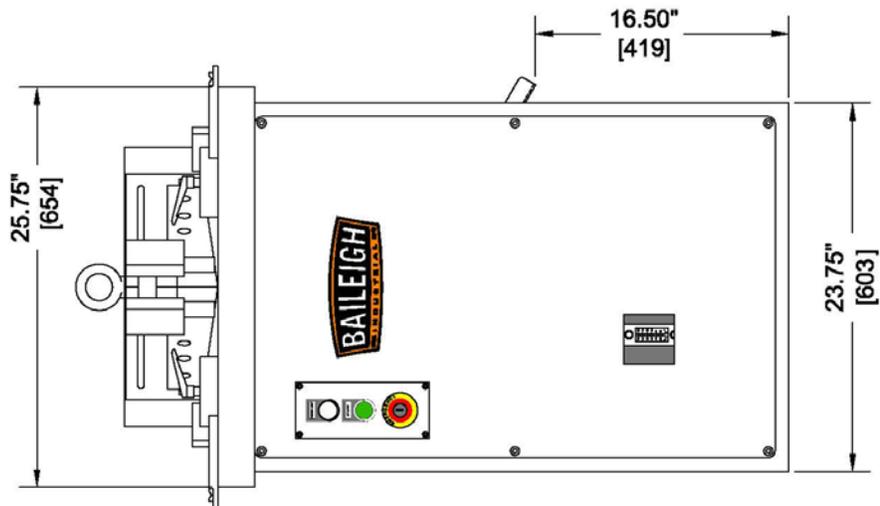
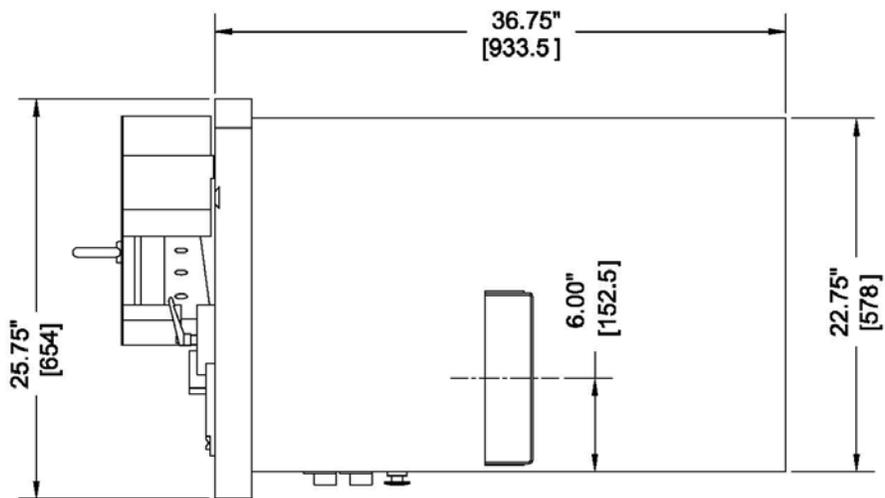
- Overall weight of the machine.
- Weight of material being processed.
- Sizes of material to be processed through the machine.
- Space needed for auxiliary stands, work tables, or other machinery.
- Clearance from walls and other obstacles.
- Maintain an adequate working area around the machine for safety.
- Have the work area well illuminated with proper lighting.
- Keep the floor free of oil and make sure it is not slippery.
- Remove scrap and waste materials regularly, and make sure the work area is free from obstructing objects.
- If long lengths of material are to be fed into the machine, make sure that they will not extend into any aisles.

Before beginning assembly, take note of the following precautions and suggestions.

- Is the machine bolted to the pallet? Before attempting any of the assembly procedures remove all of the loose parts and hardware and unbolt the machine from the pallet.
- **LEVELING:** The machine should be sited on a level, concrete floor. Provisions for securing it should be in position prior to placing the machine. The accuracy of any machine depends on the precise placement of it to the mounting surface.
- **FLOOR:** This tool distributes a large amount of weight over a small area. Make certain that the floor is capable of supporting the weight of the machine, work stock, and the operator. The floor should also be a level surface. If the unit wobbles or rocks once in place, be sure to eliminate by using shims.
- **WORKING CLEARANCES:** Take into consideration the size of the material to be processed. Make sure that you allow enough space for you to operate the machine freely.
- **POWER SUPPLY PLACEMENT:** The power supply should be located close enough to the machine so that the power cord is not in an area where it would cause a tripping hazard. Be sure to observe all electrical codes if installing new circuits and/or outlets.
- Check that all guards and panels are in place and secure and read the operation manual.
- Place the foot pedal control at the best position for operation.
- Unscrew and remove the front cover to check and fill the hydraulic reservoir. Leave the cover off until the electrical circuit has been connected to check for correct motor rotation.
- Fill the hydraulic reservoir to about 4/5 (90%) full as read on the sight gauge.



OVERALL DIMENSIONS

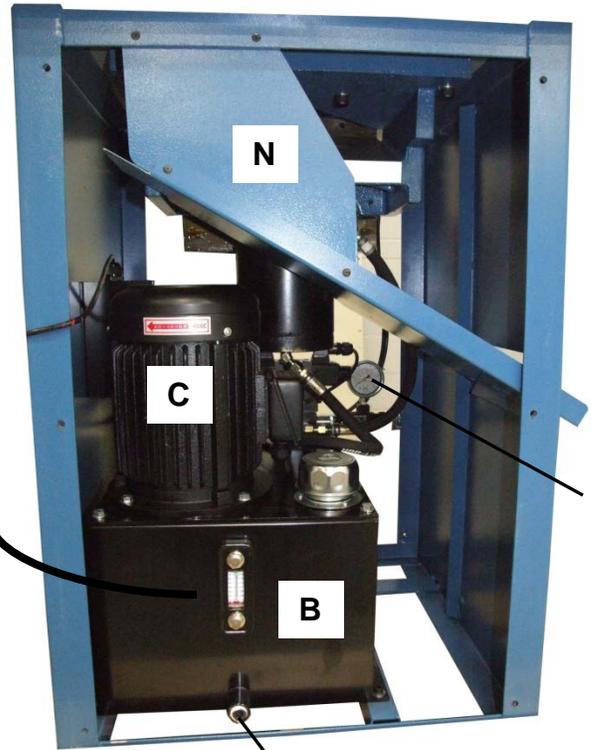




GETTING TO KNOW YOUR MACHINE



A



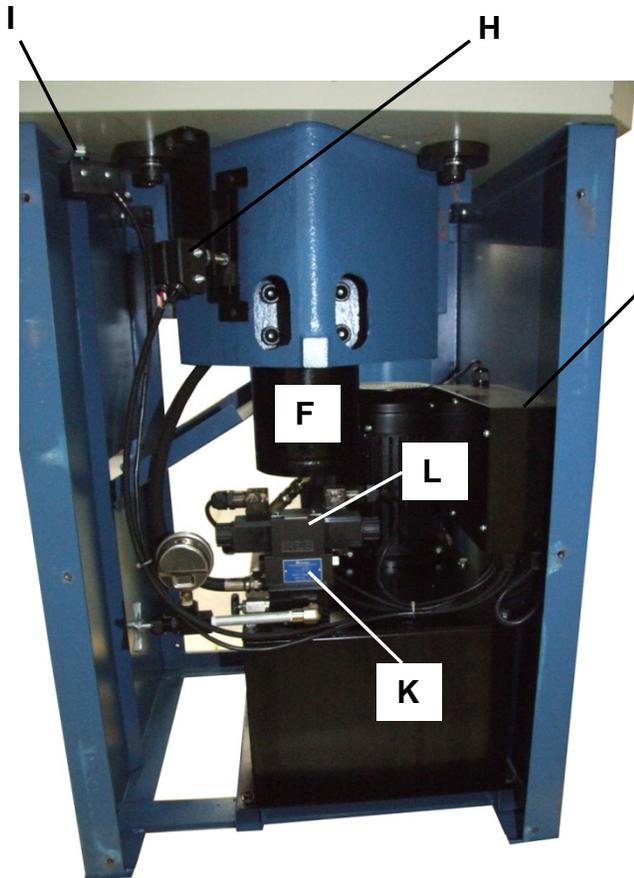
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Item	Description	Function
A	Oil Sight Gauge	Indicates how much hydraulic oil is in the tank
B	Hydraulic Tank	Container to hold the hydraulic oil
C	4 Hp Motor.	Provides power to the pump to circulate the oil
D	Oil Fill Cap	Used to close the fill hole
E	Fill Strainer Basket	Collects contaminants when filling tank
F	Hydraulic Cylinder	Provides force to notching mechanism
G	Pressure gauge	Shows hydraulic system pressure
H	Position Switches	Preset to control motion of notching blade
I	Cover Switch	When cover is removed the machine will not run
J	Tank Drain	Used to empty the hydraulic oil from the tank
K	Pilot Check Valve	Can be opened with external pilot pressure
L	Solenoid valve	Controls pilot check valve
M	Electrical enclosure	Houses electrical components
N	Parts / scrap trough	Directs cut material to exit machine
O	Control pedestal	Foot pedal to initiate cut and E-stop button at top
P	Cabinet mounted E-stop	After pressing button, key is needed to reset
Q	Power lamp	White light indicating power is ON
R	Start button	Press green button to start machine pump
S	Cover	Disables power to machine when removed
T	Material guides	Can slide and rotate to accommodate various angles
U	Guard	Clear plexiglass attaches to cover to view cut



ELECTRICAL

 **WARNING:** Baileigh Industrial is not responsible for any damage caused by wiring up to an alternative 3-phase power source other than direct 3-phase. If you are using an alternate power source, consult a certified electrician or contact Baileigh Industrial prior to energizing the machine.

 **CAUTION:** HAVE ELECTRICAL UTILITIES CONNECTED TO MACHINE BY A CERTIFIED ELECTRICIAN!
Check if the available power supply is the same as listed on the machine nameplate.

 **WARNING:** Make sure the grounding wire (green) is properly connected to avoid electric shock. DO NOT switch the position of the green grounding wire if any electrical plug wires are switched during hookup.

Considerations

- Observe local electrical codes when connecting the machine.
- The circuit should be protected with a time delay fuse or circuit breaker with a amperage rating slightly higher than the full load current of machine.
- A separate electrical circuit should be used for your tools. Before connecting the motor to the power line, make sure the switch is in the “OFF” position and be sure that the electric current is of the same characteristics as indicated on the machine nameplate.
- All line connections should make good contact. Running on low voltage will damage the motor.

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This machine is equipped with an electric cord having an equipment-grounding conductor. When attaching a plug, make sure it matches an outlet that is properly installed and grounded in accordance with all local codes and ordinances. **Check for correct rotation of the motor**

 **WARNING:** In all cases, make certain the receptacle in question is properly grounded. If you are not sure, have a qualified electrician check the receptacle.



- Improper connection of the equipment-grounding conductor can result in risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.
- Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.
- Repair or replace damaged or worn cord immediately.

Connecting Power Supply

This machine is pre-wired for 220 volt. You may either install a plug or “hard-wire” the machine directly to the control panel.

- If you are connecting a plug, use a proper UL/CSA listed 3-pole, 4-wire grounding plug suitable for 220 volt operation.
 - If the machine is to be hard-wired to a panel, make sure a disconnect switch is readily available for the operator.
 - During hard-wiring of the machine, make sure the fuses have been removed or the breakers have been tripped in the circuit to which the machine will be connected. Place a warning placard on the fuse holder or circuit breaker to prevent it being turned on while the machine is being wired. **Always follow proper lockout /tagout procedures.**
1. **Three Phase.** Connect the three power wires to terminals **L1, L2, & L3**.
 2. Connect the ground wire (typically green) to the “**PE**” (Safety Ground) terminal.
 3. Check for correct rotation of motor and pump.
 4. Reset both “E”-STOP buttons.
 5. Press the start button and quickly check motor rotation.
 6. The motor must rotate as indicated by the arrow on the motor end cover.
 7. If not, disconnect power to the machine, and switch the **L1 & L2** wires.
 8. **DO NOT** move the ground wire **PE**.
- Improper rotation can severely damage the hydraulic pump.**



Extension Cord Safety

Extension cord should be in good condition and meet the minimum wire gauge requirements listed below:

AMP RATING	LENGTH		
	25ft	50ft	100ft
0-6	16	16	16
7-10	16	16	14
11-12	16	16	14
13-16	14	12	12
17-20	12	12	10
21-30	10	10	No
WIRE GAUGE			

An undersized cord decreases line voltage, causing loss of power and overheating. All cords should use a ground wire and plug pin.

MACHINE SETUP

THIS MACHINE IS SUPPLIED WITHOUT OIL !

- 1) Unscrew and remove the front cover to access the hydraulic tank.
- 2) Remove the fill cap and fill the tank with 5.3 gal. (20 liters) of a #32 or #64 hydraulic oil so the level on the sight glass shows about 4/5 (90%) full.
- 3) The pressure gauge is pre-set at about 2,100 psi (150kg/cm²).

⚠ CAUTION: Always wear proper eye protection with side shields, safety footwear, and leather gloves to protect from burrs and sharp edges.

⚠ CAUTION: Keep hands and fingers clear of the notching blade.

⚠ CAUTION: When handling large heavy sheets make sure they are properly supported.

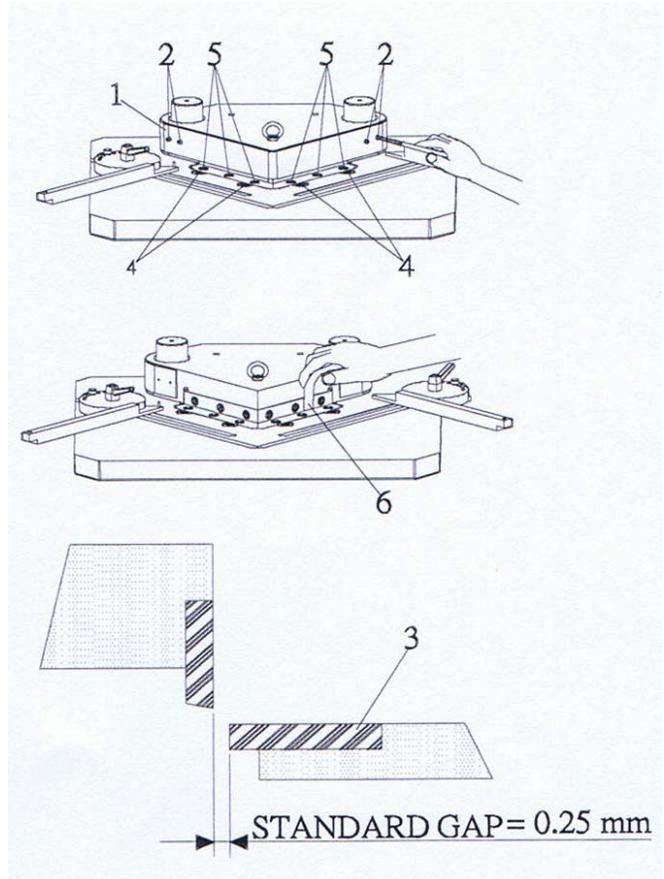
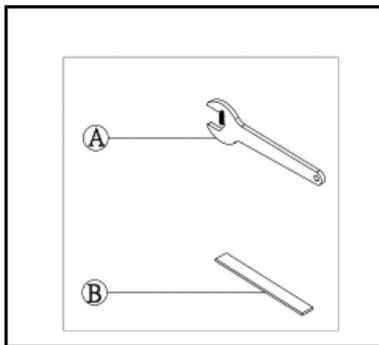


ADJUSTMENTS

Setting the blade gap tolerance

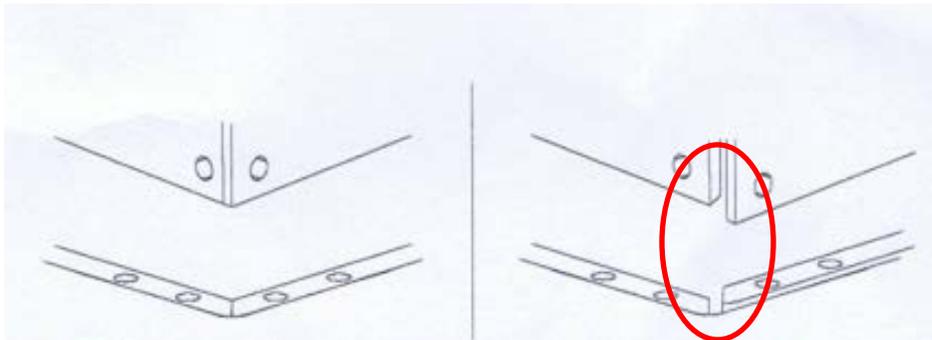
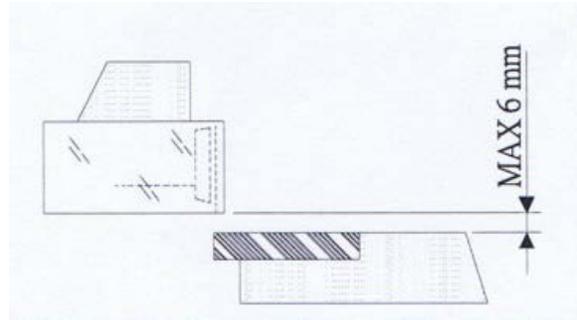
- 1) Disconnect the power supply.
- 2) Remove the screws (#2) holding on the safety plexiglass cover. Remove each cover plate held on with (four) flat head screws. Loosen the bias screws (4) using a small open end wrench and an allen wrench to loosen the blade screws (5). To measure the gap tolerance use a .009" (.25mm) thickness gauge (6) for .237" (6mm) thick material.
- 3) Adjust the upper and lower blades against the thickness gauge. Make it so the thickness gauge can be removed smoothly.
- 4) Tighten all the screws.

- A** Open wrench for bias screw
B 0.25 mm thickness gauge (for 6mm)





Maximum Cutting Thickness - .237" (6mm)

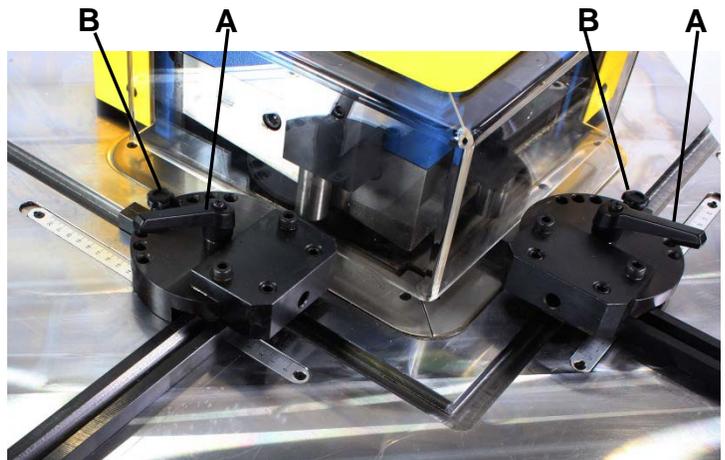


Yes

NO!

Adjustment of Mobile Reference Square

Loosen the adjustable handle (A) and remove pin (B) which will then allow you to position the material guide as needed. Adjust both the left side and the right side to hold the material for a controlled notch.





MATERIAL SELECTION

⚠ CAUTION: It must be determined by the customer that materials being processed through the machine are **NOT** potentially hazardous to operator or personnel working nearby.

When selecting materials keep these instructions in mind:

- Material must be clean and dry. (without oil)
- Material should have a smooth surface so it processes easily.
- Dimensional properties of material must be consistent and not exceed the machine capacity values.
- Chemical structure of material must be consistent.
- Buy certificated steel from the same vendor when possible.

LUBRICATION AND MAINTENANCE

⚠ WARNING: Make sure the electrical disconnect is OFF before working on the machine.
Maintenance should be performed on a regular basis by qualified personnel.
Always follow proper safety precautions when working on or around any machinery.

- Check daily for any unsafe conditions and fix immediately.
- Check that all nuts and bolts are properly tightened.
- On a weekly basis clean the machine and the area around it.
- Lubricate threaded components and sliding devices.
- Apply rust inhibitive lubricant to all non-painted surfaces.



Note: *Proper maintenance can increase the life expectancy of your machine.*

Hydraulic Oil

The hydraulic oil is the primary medium for transmitting pressure and also must lubricate the running parts of the pump. Keep tank filled with 5.3 gal. (20 liters) of a #32 or #64 hydraulic oil

1. 2. Keep hydraulic reservoir filled to 90% of capacity.



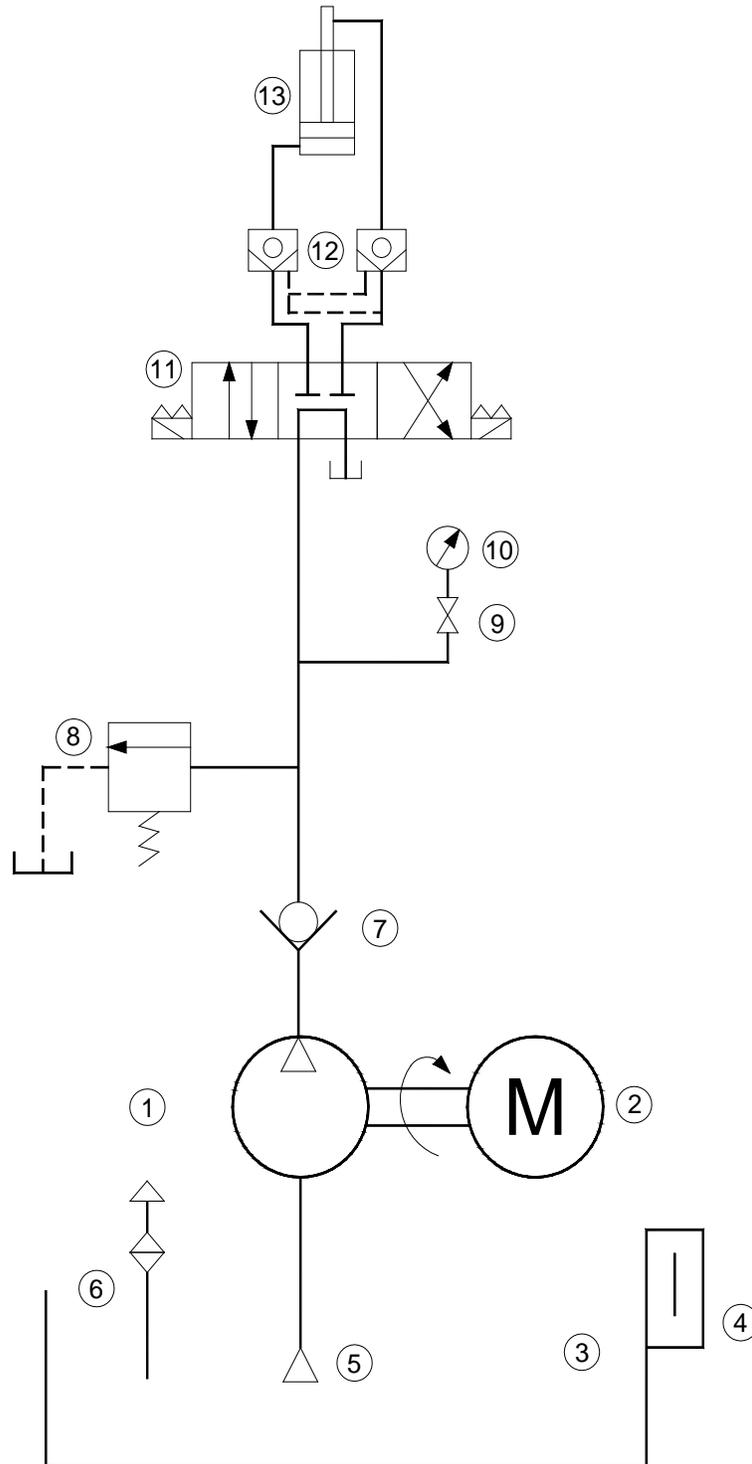
3. **DO NOT** rely totally on the oil gauge as they can sometimes indicate an incorrect level reading. Do a visual inspection with the oil fill cap and strainer basket removed as well.
4. A shortage of hydraulic oil will cause hydraulic system breakdown to major mechanical components due to overheating.
5. The hydraulic oil and filter need to be replaced after the first 3,000 hours and then after every 5,000 hours of operation..

HYDRAULIC PARTS IDENTIFICATION

Item	Description	Qty
1	Hydraulic Motor	1
2	Motor 4hp (3kw)	1
3	Hydraulic Tank	1
4	Sight Gauge 250kg	1
5	Suction Filter 1/2"	1
6	Tank Cap	1
7	Check Valve	1
8	Pressure Regulator 082	1
9	Shut-off Valve 1R-08L-02	1
10	Pressure Gauge 3"	1
11	Direction Valve D5G-02-3C60-A2-N	1
12	Modular Pilot Check Valve MPC-02W-40	1
13	Hydraulic Cylinder	1

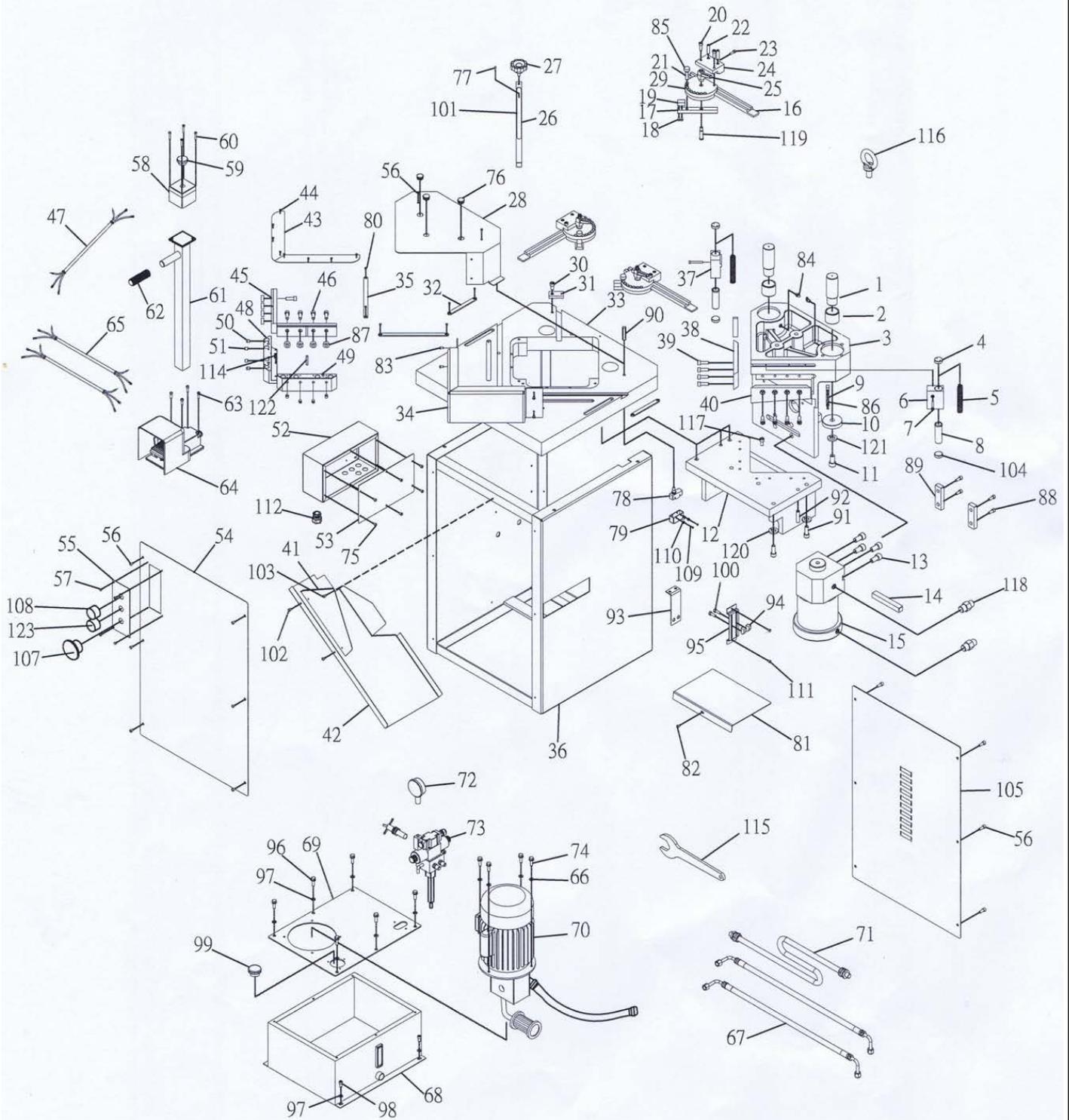


HYDRAULIC SCHEMATIC





PARTS IDENTIFICATION DRAWING





PARTS IDENTIFICATION LIST

Item	Description	Qty
1	Spindle	2
2	Copper Rod	2
3	Head Set	1
4	Cap	2
5	Spring	2
6	Fixing Block (Right)	1
7	Cap screw M6 x 45mm	2
8	Fixing Rod	2
9	Block	2
10	Spindle Packing	2
11	Cap screw M16 x 30mm	2
12	Lower Set	1
13	Cap screw M16 x 40mm	4
14	Cylinder Key 20 x 20 x 150mm	1
15	Cylinder	2
16	Angle Block	2
17	Block	2
18	Cap Screw M5 x 12	4
19	Fixing Block	2
20	Cap Screw M8 x 25mm	4
21	Adjust Pin	2
22	Set Screw M10 x 25mm	4
23	Cap Screw Cap Screw M6 x 20mm	2
24	Angle Fixing Plate	2
25	Handle M10	2
26	Rear Block	1
27	Knob M8 x 15mm	1
28	Head Set Cover	1
29	Angle Block	2
30	Cap Screw M10 x 20mm	1
31	Fixing Plate	1
32-1	Short Left Indicator	1
32-2	Short Right Indicator	1



Item	Description	Qty
33	Table	1
34	Safety Cover	1
35-1	Long Left Indicator	1
35-2	Long Right Indicator	1
36	Base	1
37	Left Fixing Block	1
38	Left Upper Cutter	1
39	Cap Screw M10 x 20mm	8
40	Right Upper Cutter	1
41	Side Cover Board	1
42	Scrap Discharge Chute	1
43	Cover	2
44	Button Head Screw M4 x 8mm	8
45	Cutter	2
46	Cap Screw M10 x 30mm	8
47	Wire	1
48	Left Cutter Set	1
49	Right Cutter Set	1
50	Square Set Screw M10 x 12mm	4
51	Set Screw M10 x 12mm	4
52	Control Box	1
53	Control Box Cover	1
54	Front Cover	1
55	Switch Fixing Plate	1
56	Button Head Screw M6 x 12mm	14
57	Button Head Screw M5 x 10mm	4
58	Emergency Stop Switch Box	1
59	Emergency Stop Switch	1
60	Phillips Head Screw M4 x 45mm	4
61	Emergency Stop Switch Rod	1
62	Handle Cap	1
63	Phillips Head Screw M5 x 15mm	4
64	Footpad Control Switch	1



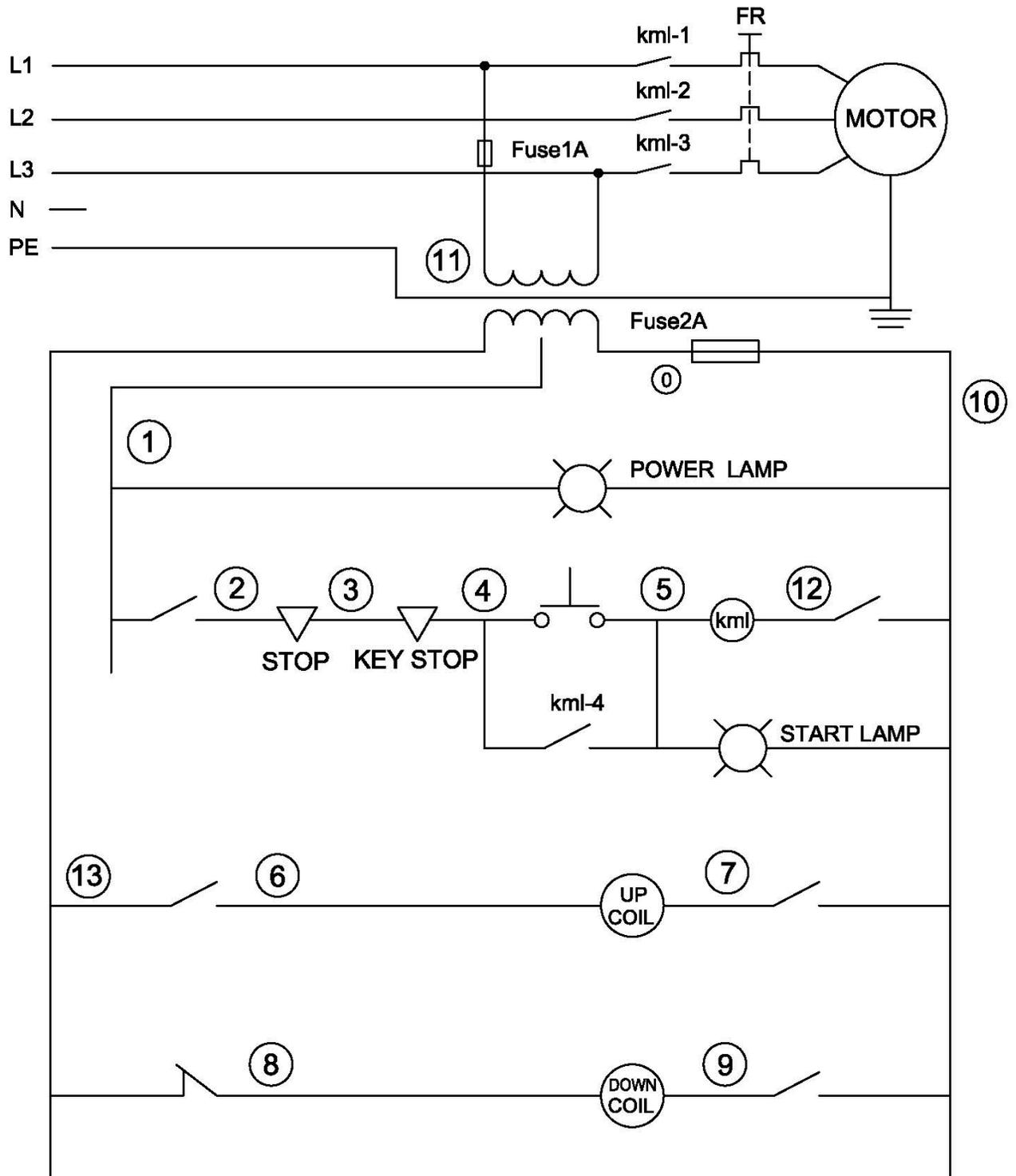
Item	Description	Qty
65	Cord	2
66	Washer Ø8.6 x Ø18 x 1.5	4
67	Oil Tube 90° x PT 3/8"	2
68	Oil Tank	1
69	Oil Tank Cover	1
70	Motor	1
71	Wire Tube ½" x 2M	1
72	Oil Pressure Indicator	1
73	Electric Distributor	1
74	Hex Head Bolt M10 x 25mm	4
75	Phillips Head Screw M5 x 10mm	6
76	Cap 22	3
77	Cap Screw M4 x 8mm	1
78	Limit Switch	3
79	Switch Cover	3
80	Button Head Screw M4 x 10mm	8
81	Lead Plate	1
82	Button Head Screw M6 x 12mm	1
83	Button Head Screw M6 x 12mm	4
84	Injection Hole PT 1/8"	2
85	Knob M6 x 10mm	2
86	Flat Head Screw M4 x30mm	4
87	PU Rod	8
88	Cap Screw M8 x 20mm	4
89	Packing	2
90	Stop Pin	1
91	Cap Screw M12 x 50mm	6
92	Fixing Pin Ø12 x 70mm	2
93	Limit Switch Board	1
94	Set Block	2
95	Limit Switch Plate	1
96	Hex Head Bolt M8 x 10mm	6
97	Washer Ø8.6 x Ø18 x 1.0	10



Item	Description	Qty
98	Cap Screw M8 x 10mm	4
99	Oil Tank Cap	1
100	Cap Screw	2
101	Indicator	1
102	Button Head Screw M5 x 10mm	2
103	Button Head Screw M4 x 8mm	1
104	Pad	2
105	Rear Cover	1
106	Lock Switch	1
107	Emergency Stop Switch	1
108	Power Light	1
109	Phillips Head Screw M4 x 30mm	6
110	Nut M4	6
111	Button Head Screw M5 x 10mm	2
112	Bushing M20	8
113	Wire Tube	2
114	Fixing Pin Ø6 x 20mm	6
115	Open Wrench M8	1
116	Hook	1
117	Cap Screw M16 x 30mm	1
118	Oil Bushing PT3/8" x H3/8"	4
119	Pin	2
120	Spring Washer M12	6
121	Spring Washer M16	2
122	Key 6 x 6 x 40mm	2
123	Start Button	1



ELECTRICAL SCHEMATIC





NOTES



NOTES



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