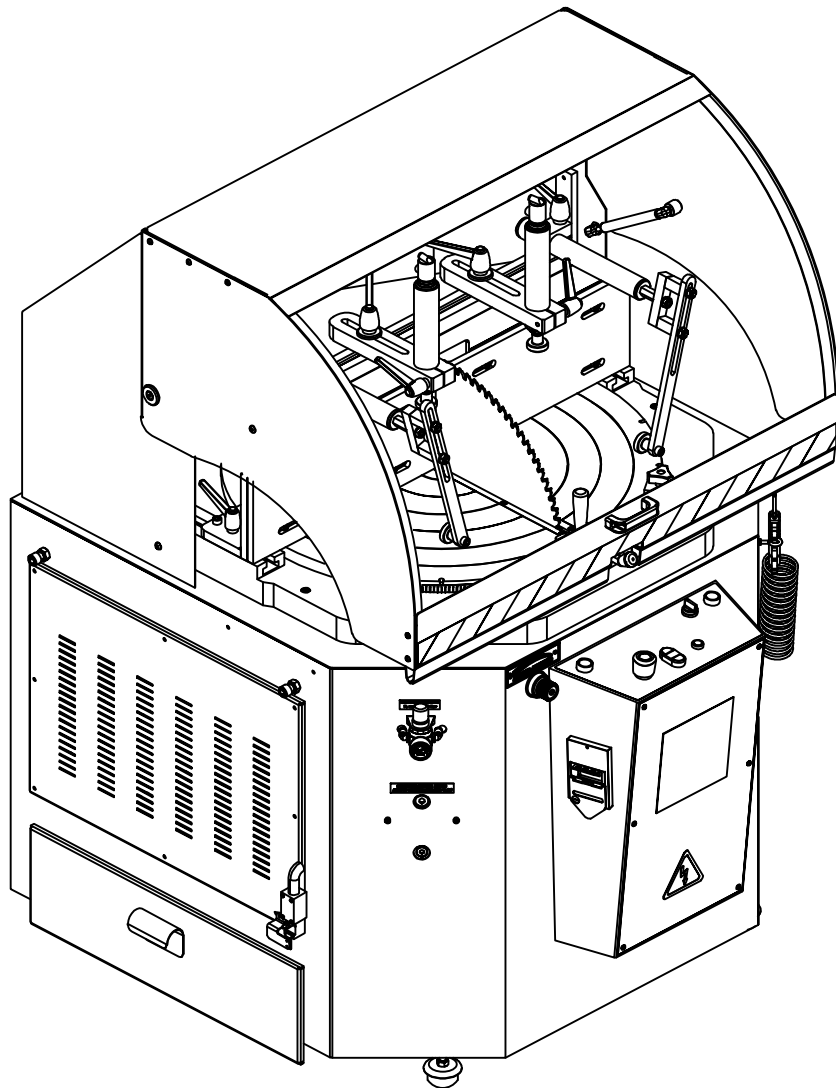


**You have downloaded a  
manual for our  
MODEL SUP-600-NF  
PRECISION MITER UP-CUT  
NON-FERROUS SAW**





[www.scotchman.com](http://www.scotchman.com)

**MODEL**

**SUP-600-NF**

**COLD SAW**

PRINTED MAY 2021

# Scotchman

Metal Fabricating Solutions

[www.scotchman.com](http://www.scotchman.com)

## SUP-600 NF SAW



FIGURE 1

# **Scotchman**

**Metal Fabricating Solutions**

[www.scotchman.com](http://www.scotchman.com)

**HYDRAULIC IRONWORKERS  
CIRCULAR COLD SAWS  
DIGITAL PROGRAMMABLE FEED SYSTEMS**



**SU-280-G BAND SAW  
66 to 176 TON PRESSPRO HYDRAULIC PRESSES**

SCOTCHMAN INDS. - 180 E US HWY 14 - PO BOX 850 - PHILIP, SD 57567  
Call Toll Free in USA: (800) 843-8844 Call Direct: 1 -605-859-2542 Fax: (800)-843-5545 Email: [info@scotchman.com](mailto:info@scotchman.com)



# TABLE OF CONTENTS

SECTION		DESCRIPTION	PAGE #
1.0		INTRODUCTION	4
	1.1	Warranty	4
2.0		GENERAL MACHINE INFORMATION	5
	2.1	Machine Identification Data	5
	2.2	Technical Data	5
	2.3	Dimensions of the Machine	6
	2.4	Cutting Capacity	7
	2.5	Electrical Data	8
	2.6	Noise Level	8
3.0		INSTRUCTIONS REGARDING TRANSPORT AND STORAGE	8
4.0		INSTRUCTIONS FOR ANCHORING AND SERVICE START-UP	9
	4.1	Anchoring Instructions	9
	4.2	Power Supply Connection	9
	4.3	Pressure Regulator	10
	4.4	Installing the Blade	10
	4.5	Cutting Coolant	11
	4.6	Priming/Adjusting the Coolant Mister	12
	4.7	Pneumatic Oil	12
5.0		INSTRUCTIONS FOR USE	13
	5.1	Proper and Improper Use	13
	5.2	Function of the Operating Mechanisms	13
	5.3	Adjusting the Digital Degrees	15
	5.4	General Rules and Safety Checks	15
6.0		RECOMMENDATIONS AND MAINTENANCE	16
	6.1	Type and Frequency of Inspections	16
	6.2	Qualified Personnel Maintenance & Repair Work	16
	6.3	Manufacturer's Recommendations	16
7.0		DRAWINGS AND SCHEMATICS	17
	7.1	General Schematic	17
	7.2	Power Circuit	19
	7.2A	Switching Power Circuit	21
	7.3	Operating Controls	23
	7.4	Pneumatic Schematic	25
	7.5	Cast Iron Table & Disc Assembly (Exploded View)	27
	7.6	Rocker Assembly (Exploded View)	29
	7.7	Turret Assembly (Exploded View)	31
	7.8	Sheet Metal Base (Exploded View)	33
	7.9	Protective Shield (Exploded View)	35
8.0		OPTIONAL EQUIPMENT	37
	8.1	Power Hood (Standard Equipment Now)	37
	8.2	Digital Control of the Cut Height	39
	8.3	Digital Angle Display (PART # 1554)	40
9.0		ANGLEMASTER WITH CHIP COLLECTOR WIRE LOCATIONS	41

# **1.0 INTRODUCTION**

The instruction manual represents an integral part of the machine. It must be consulted before, during and after the machine is put into service, as well as whenever it is considered necessary, thereby respecting its content in each and every one of its parts.

This is the only way in which the fundamental objectives that have been established on the basis of this manual will be achieved; such as, accident prevention and making optimal use of the machine features. Within the framework of this manual, all aspects regarding safety and accident prevention on the job while using the machine have been considered in every detail, herein highlighting the information that is of greatest interest to the user.

- ➡ **ATTENTION:** Carefully read this manual before installing the machine. The manual must be kept throughout the machine's lifetime in a place that is easy to find in the event that it is needed. In the event that a used machine is sold, the machine shall be sold together with this manual. In the event that the machine is scrapped, the identification plate and any other document supplied with the same shall be destroyed.

## **1.1 Warranty**

Scotchman Industries, Inc. will, within three years of the date of purchase, replace F.O.B. the factory or refund the purchase price for any goods which are defective in materials or workmanship, provided the buyer, at the seller's option, returns the defective goods freight and delivery prepaid to the seller, which shall be the buyer's sole and exclusive remedy for defective goods.

This warranty does not apply to machines and/or components which have been altered, changed or modified in any way or subjected to abuse and abnormal use, inadequate maintenance and lubrication or subjected to use beyond the seller's recommended capacities and specifications. In no event shall the seller be liable for labor cost expended on such goods or consequential damages.

The seller shall not be liable to the purchaser or any other person for loss or damage directly or indirectly arising from the use of the goods or from any other cause.

No officer, employee or agent of the seller is authorized to make any oral representations or warranty of fitness or to waive any of the foregoing terms of sale and none shall be binding on the seller.

Any electrical changes made to the standard machine due to local electrical code variation must be paid by purchaser.

As we constantly strive to improve our products, we reserve the right to make changes without notification.

This warranty is effective December 1, 2009.

## **2.0 GENERAL MACHINE INFORMATION**

### **2.1 Machine Identification Data**

<p style="text-align: center;"><b><u>MODEL - SUP-600-NF</u></b></p> <p><b><u>SERIAL NUMBER</u></b> _____</p> <p><b><u>YEAR OF MANUFACTURE</u></b> _____</p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------

⊠ **NOTE:** IN ORDER TO REQUEST SPARE PARTS, WHETHER COVERED BY THE WARRANTY OR NOT, ALWAYS INDICATE THE **MODEL AND SERIAL NUMBER OF THE MACHINE**, AS WELL AS THE NAME OF THE PART AND THE PART NUMBER THAT APPEAR IN THE LAST CHAPTER OF THE PARTS EXPLODED VIEWS.

### **2.2 Technical Data**

CHARACTERISTIC	DIMENSION
Three phase motor	5.3HP, 230/460V
Motor speed	3000 RPM
Bore Ø of blade	50mm
Maximum Ø of saw blade	600 x 50 x 4.5mm
Miter Stops / Presets	135° RIGHT 45° LEFT
Miter Max	90° RIGHT 60° LEFT
Working pressure	95-105 PSI / 6.5-7.2 Bar
Pneumatic hold-down clamps	2 vertical + 2 horizontal
Lubrication system	Pneumatic, Mist
Dimensions	52" x 48.8" x 65.4"
Weight	1,100 lbs

FIGURE 2

2.3 Dimensions of the Machine

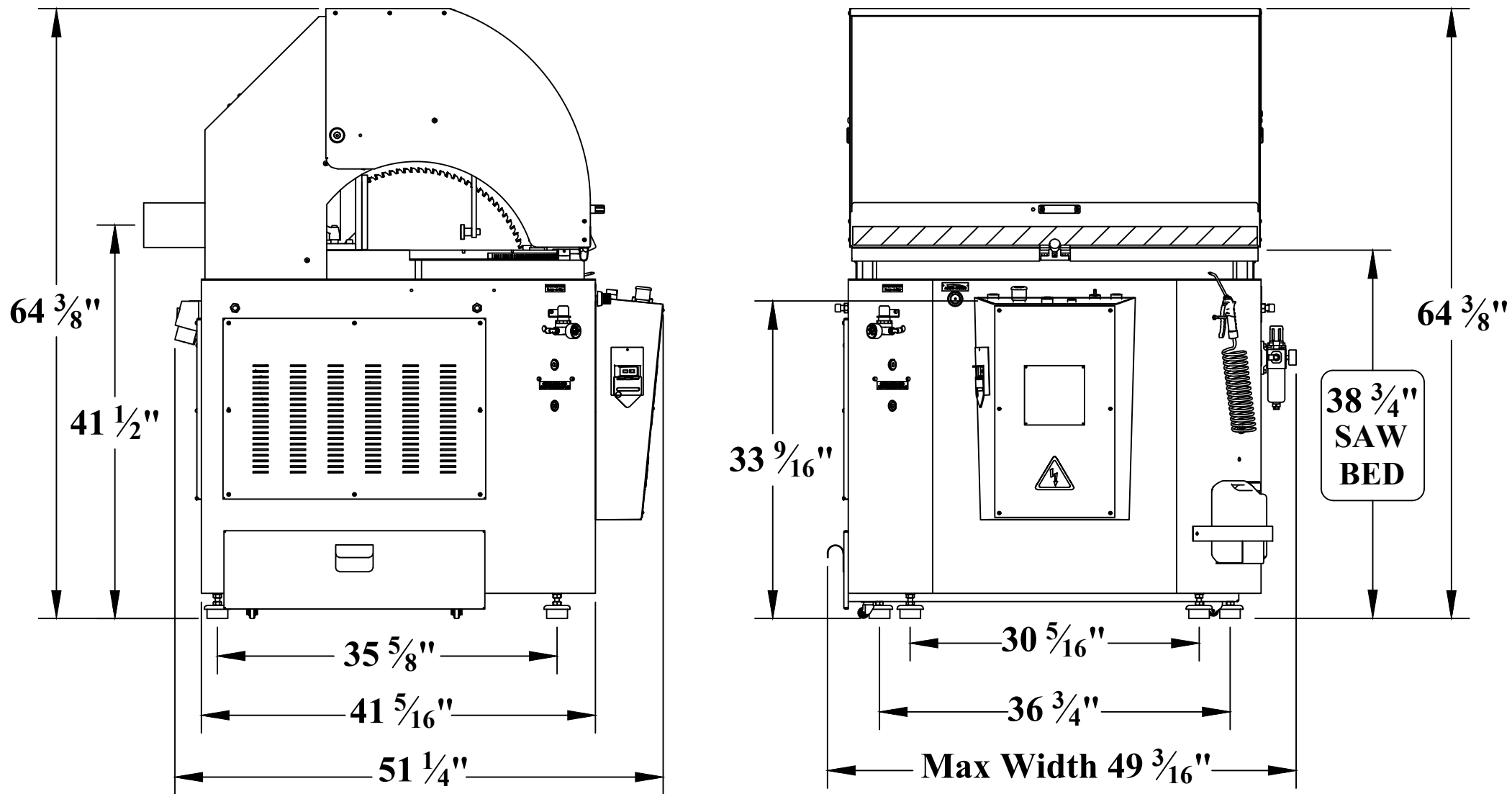


FIGURE 3

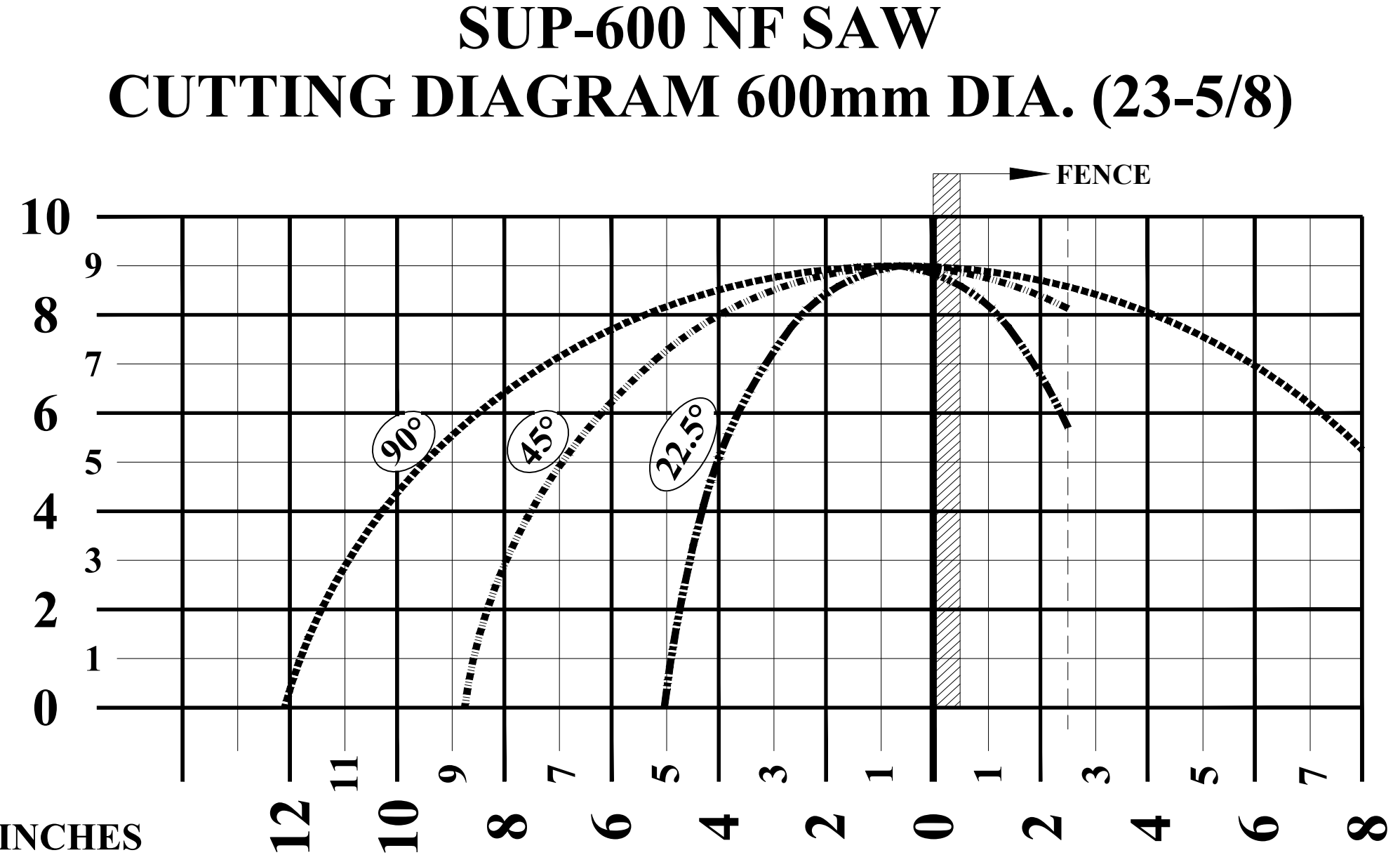


FIGURE 3

2.5 Electrical Data

Power Supply	Motor Power	Total Consumption
230 V Three phase	4 kW/5.3 HP	14 Amps at 60Hz
460 V Three phase	4 kW/5.3 HP	8.1 Amps at 60Hz

2.6 Noise Level

At a distance of 2'	RUNNING OFF-LOAD	80 dB (A)
	MACHINING A 2.75" X 2" PROFILE	120 dB (A)

⊠ ATTENTION: When working with the machine, use individual hearing protection equipment.

3.0 INSTRUCTIONS REGARDING TRANSPORT & STORAGE

Store in the vertical position. Do not stack.

If the machine remains stored for a long period of time, periodically lubricate it.

Do not expose to the elements.

The packaging is made of properly designed and sized wood and is also wrapped in plastic.

⦿ CAUTION: Do not improperly dispose of the packaging. Send this material to be recycled or disposed of in accordance with all legislation in force.

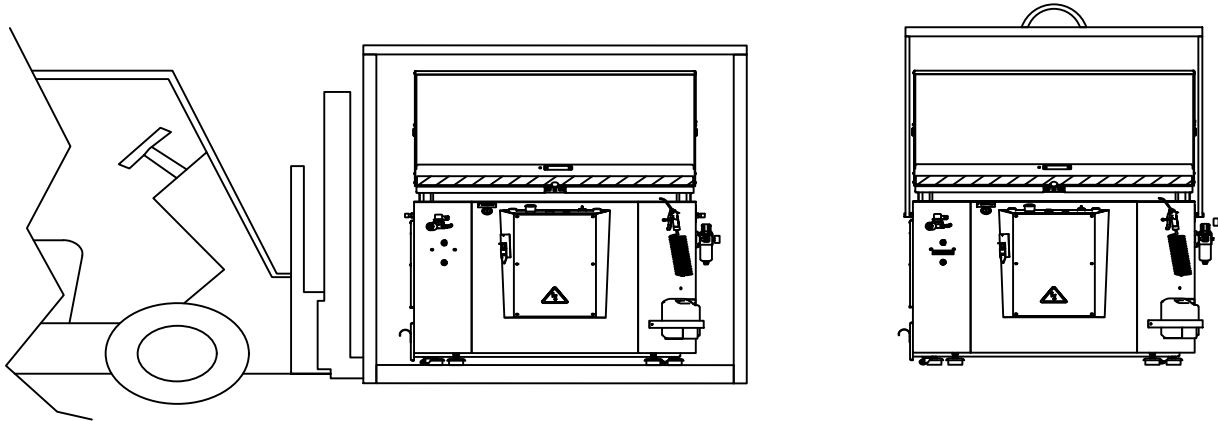


FIGURE 5

## **4. INSTRUCTIONS FOR ANCHORING / SERVICE START-UP**

### **4.1 Anchoring Instructions**

Ensure that the machine has not suffered any damage during transport by making an initial visual inspection. If damage is observed, advise the carrier immediately.

The machine must be installed on a firm surface that is as level as possible, in order to reduce vibrations during operation and so that it operates within the parameters established by the manufacturer.

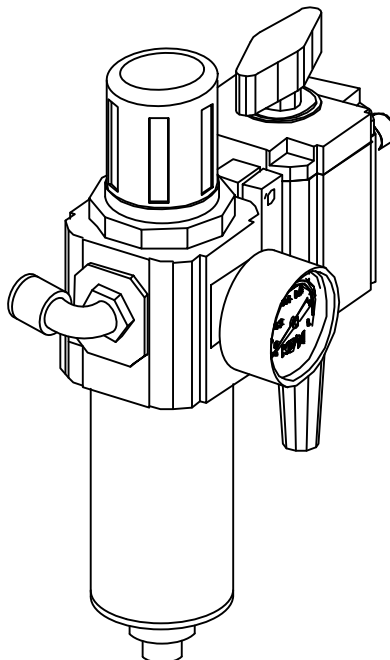
### **4.2 Power Supply Connection**

Verify that the power supply voltage corresponds to the voltage indicated on the specifications plate of the machine. Connect the cable to the power supply, using a plug that is appropriate for the characteristics of same, and complies with local and national electric codes.

Once the machine is connected, verify that the saw blade rotation is away from the operator when the operator is standing in front of the machine. If the saw blade rotation is not correct, swap two phases of the incoming power to the motor. Then, check the rotation again.

The saw must be connected to a steady supply of compressed air. The incoming air supply is connected to the Filter / Regulator. It is located on the right and toward the back of the machine. See Figure 6 on the next page.

➡ **ATTENTION:** The pneumatic working pressure must be between 6.5 to 7.2 Bar (95 to 105 PSI ).



## 4.3 Pressure Regulator

The air inlet location is shown below. The air regulator must be set at 6.5 to 7.2 Bar (95 to 105 PSI). The red knob on top is used to turn the air supply on or off.

- ➡ **ATTENTION:** The incoming air pressure must be between 6.5 to 7.2 Bar (95 to 105 PSI). If pressure is too low it can affect the accuracy and consistency of parts.

There is another smaller regulator on the front left of the saw that regulates the air pressure to the horizontal clamps. It should be set at 2-3 bar (30-45 psi). Maximum is 4 bar (60 psi).

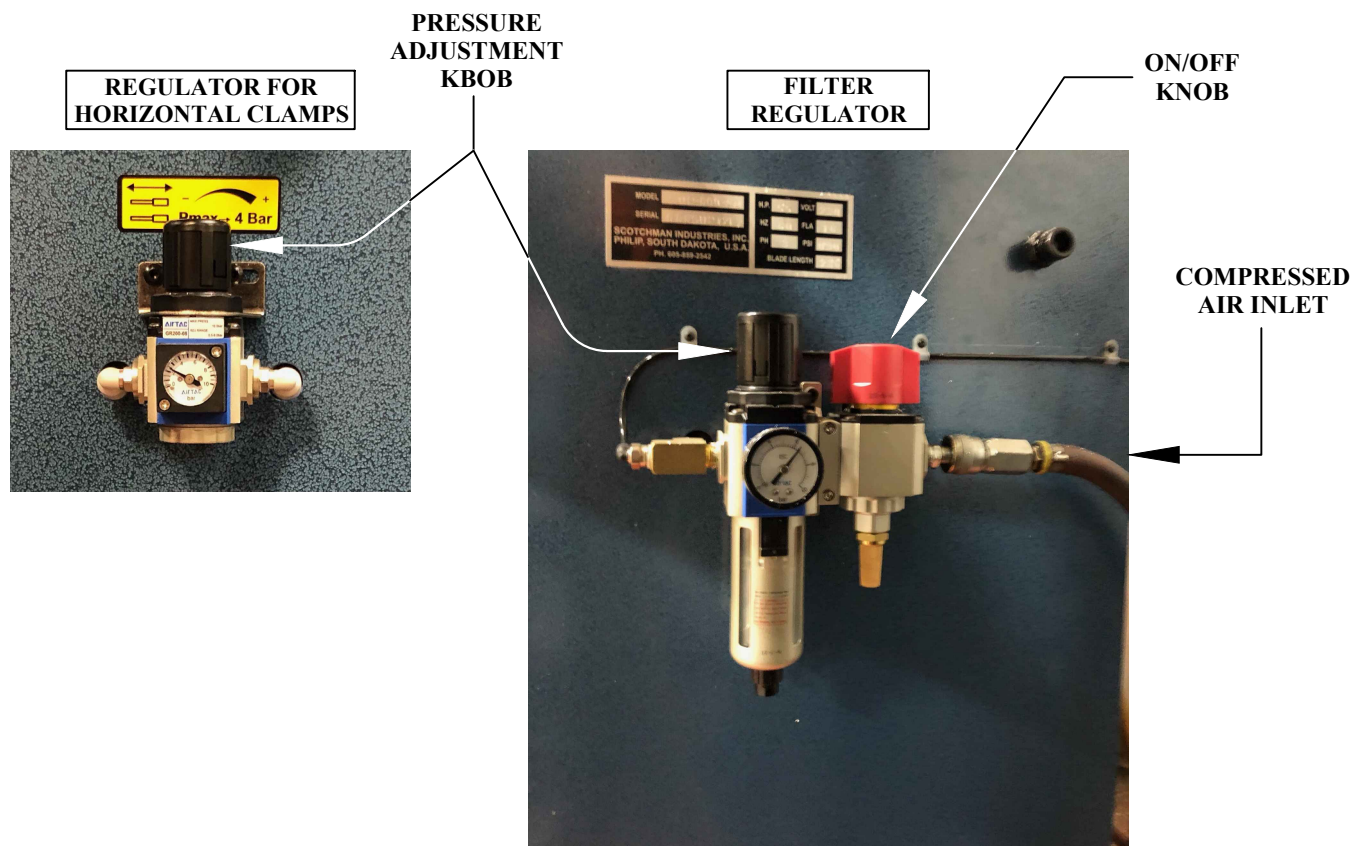


FIGURE 6

## 4.4 Installing The Blade

This machine uses a 600mm blade with a 50mm arbor.

1. Set the saw to ninety degrees and disconnect the power. Open the cabinet door and remove the existing blade.

⊠ **NOTE:** The blade nut is right hand threaded.

2. Insert the rod provided with the machine into the blade flange (1) and loosen the blade nut (2) with the wrench provided. The teeth on carbide blades are very sharp and we recommend using gloves while changing blades. Remove the blade.
3. Check the blade flange and the blade seat for any chips or nicks before installing the new blade.
4. Install the new blade and the blade flange and blade nut. The saw blade rotates counter clockwise when facing the blade from the left side of the machine.



⊠ **CAUTION:** Make sure that the blade is installed with the teeth in the right direction for the rotation and that the saw is wired for the correct rotation. If the saw is not wired for the correct rotation, the blade will come loose when the saw is powered. If the blade is not installed in the proper orientation, the teeth will be dulled almost immediately.

5. Close the access panel and reset the safety switch.

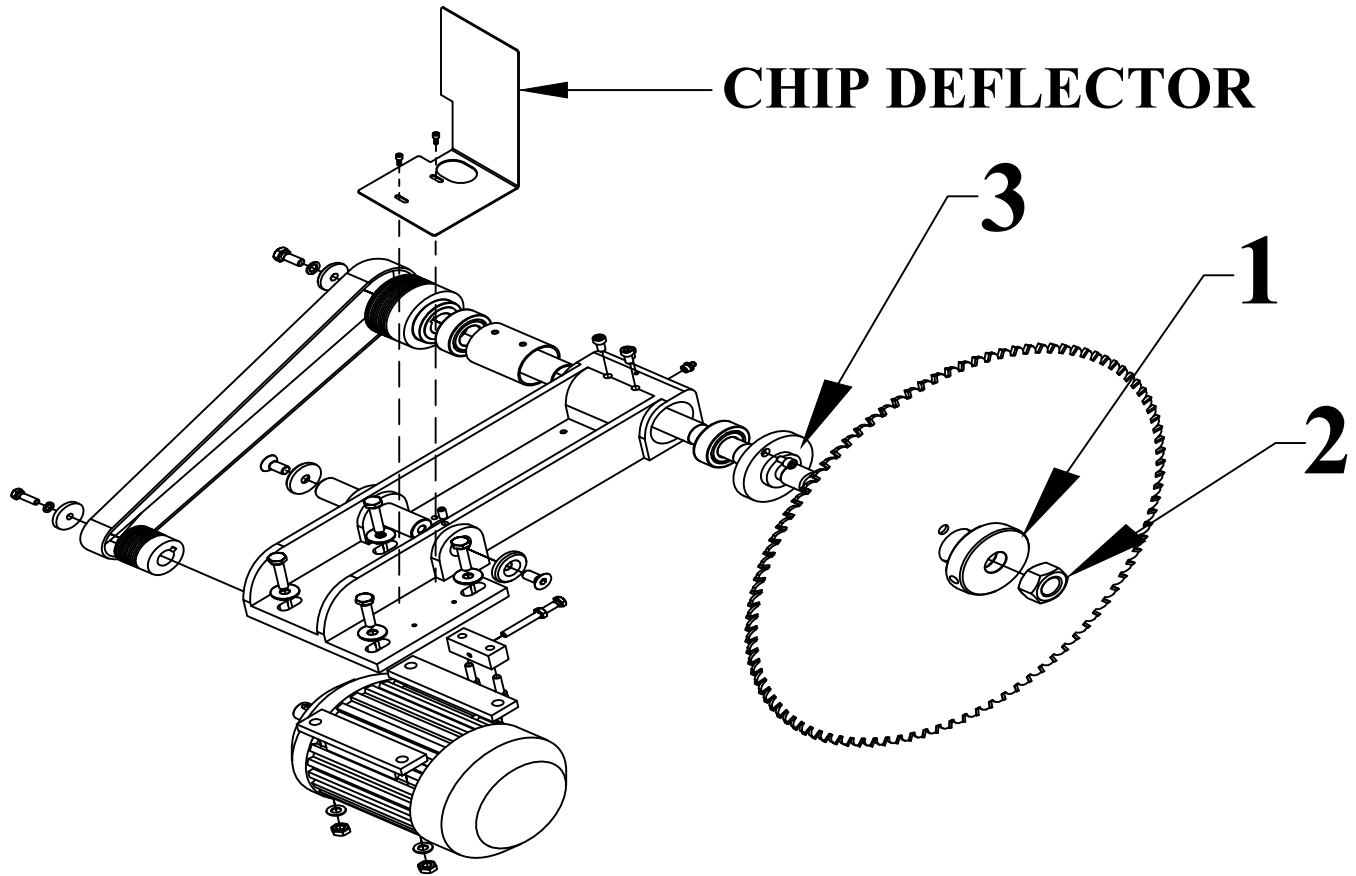


FIGURE 7

## 4.5 Cutting Coolant

In order to fill the machine with cutting coolant, open the reservoir and fill with our SYNCON 2 or equivalent. The coolant reservoir is located on the lower right under the clearing gun hose.



COOLANT  
RESERVOIR

## **4.6 PRIMING/ADJUSTING THE COOLANT MISTER**

The following procedure explains how to adjust the coolant mister or prime the system if it has run out of coolant. This job requires 2 people in order to safely perform. Make sure to adhere to the following instructions. Failure to do so may result in serious injury.

1. Make sure the saw is clear of material, and the blade has been turned off.
2. Fill the coolant reservoir located on the left side of the machine with coolant.
3. Turn the 2-position switch for the clamps so that they are in "clamp mode".
4. Turn the 2-position switch for the hood to the down position. The clamps must be engaged and the saw hood down for the saw to cycle.
5. Turn the feed rate control knob on the machine clockwise until it is turned off. This will prevent the blade from raising.
6. Disengage the safety switch on the left-hand blade door by turning the knob clockwise. Once fully disengaged the door will be able to be opened.
7. Before proceeding have a second person press and hold both green buttons on the control panel briefly to engage saw. This should cause the solenoid to activate as though the the blade is trying to raise and make a cut. With the blade door open, **THE BLADE WILL NOT SPIN**. With the feed rate off, the blade will also not be able to raise out of the base cabinet. If the solenoid does not activate, check to make sure that the clamps are engaged, the hood is down, and the safety switch for the hood is functioning.
8. If the saw solenoid activates and the blade remains down, the coolant mister can now be adjusted/primed. The knob is located on the backside of the blade.
  - a. Adjust - Have the second person now press and hold the green buttons to activate the the saw solenoid. As the buttons are held, the machine will begin to spray coolant onto the blade. Adjust the spray to a satisfactory setting.
  - b. Prime - Fully open the mister knob. Have the second person now press and hold the green buttons to activate the saw solenoid. As the buttons are held, the machine should begin to purge the air out of the coolant system and then slowly turn to a heavy mist of coolant. Adjust the spray to a satisfactory setting.
9. Close the door and reset the safety switch by turning the knob counter-clockwise until tight.

## **4.7 Pneumatic Oil**

Both the oleo-pneumatic converters and the filter group lubricator must be filled with ISO VG 16 VISCOSITY PNEUMATIC OIL or AW 32, 10 weight hydraulic oil. If none is available, use hydraulic oil 16. This machine holds approximately (1) quart.

## **5. INSTRUCTIONS FOR USE**

### **5.1 Proper and Improper Use**

This is a semiautomatic cut-off machine especially designed for cutting non-ferrous profiles. The use of the machine for cutting other materials is hereby prohibited. Such use may cause damage to the machine and put the health and safety of the worker at risk.



**DANGER:** We are not responsible for any possible accident caused by the failure to comply with the aforementioned provision.

### **5.2 Function of the Operating Mechanisms**

1. Horizontal clamps

2. Vertical clamps

**NOTE:** The clamping cylinders should not be used with the rod completely extended. The stress produced when the rod of the cylinder is extended completely will reduce the life of the cylinder. It should be at a distance of 1-1/4" to 1-1/2" (30-40 mm) from the material that's being clamped.

3. Lever turn disc

4. Protective shield

5. M-10 x 40 lever

6. Filter + regulator + manometer

7. Clearing gun with hose

8. Advanced regulator 3/8"

9. Raise blade, green button

10. Two position selector

11. Green indicator light

12. Saw blade on-off

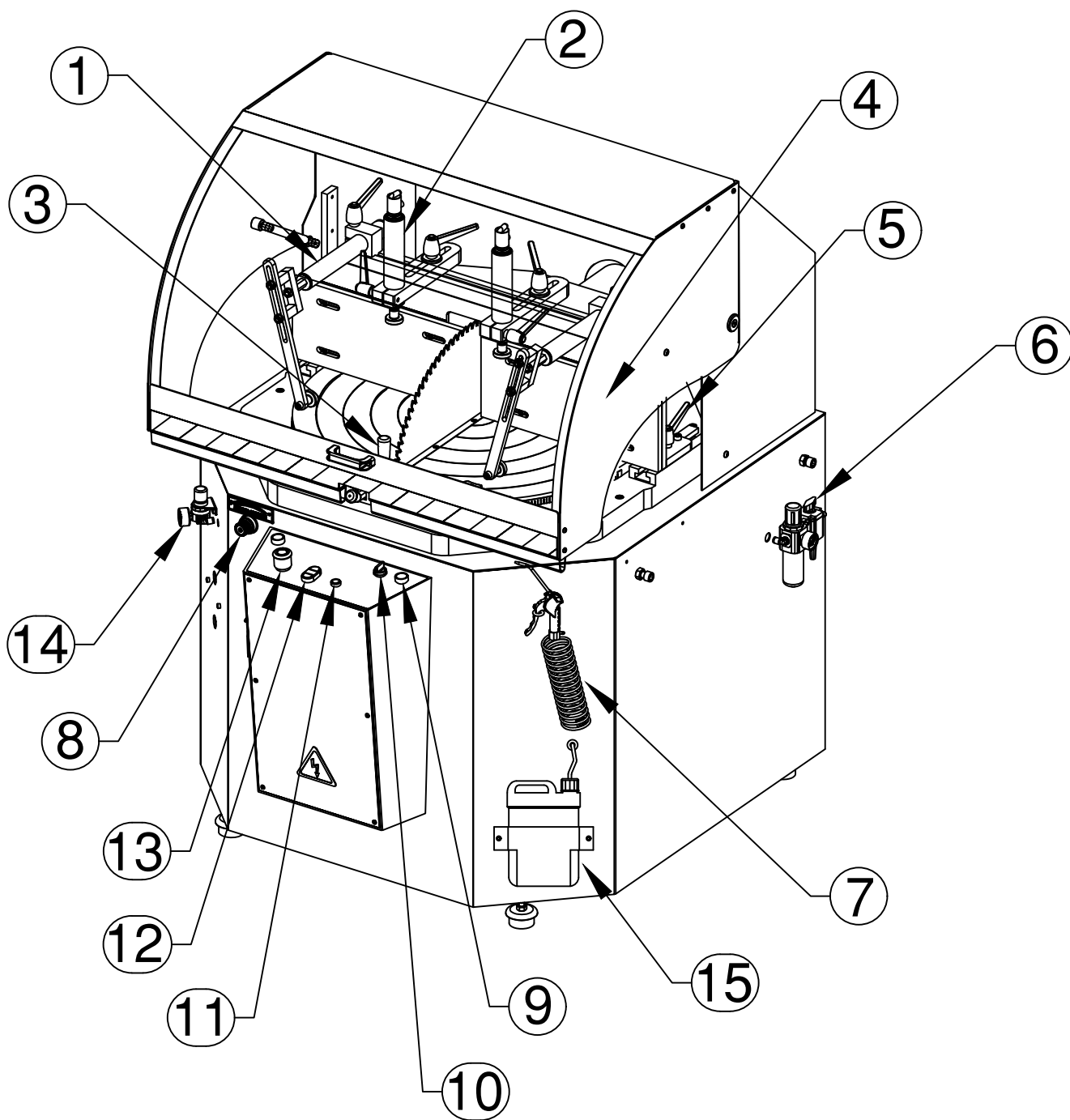
13. Emergency stop

14. Pressure regulator for horizontal clamps set at 2-3 Bar

15. Coolant reservoir.



**DANGER:** Always work with the protective shield lowered.  
**DO NOT DISCONNECT ANY SAFETY DEVICES!**



**FIGURE 8**

## 5.3 Adjusting the Digital Degrees

To zero the digital readout, press the (F) and (Set) keys. To change the way of reading of incremental to absolute, press (Inc/Abs).

- ➡ **ATTENTION:** Care must be used when cleaning the screen. The surface is plastic and is easily scratched. Also, (2) AA batteries power the display.

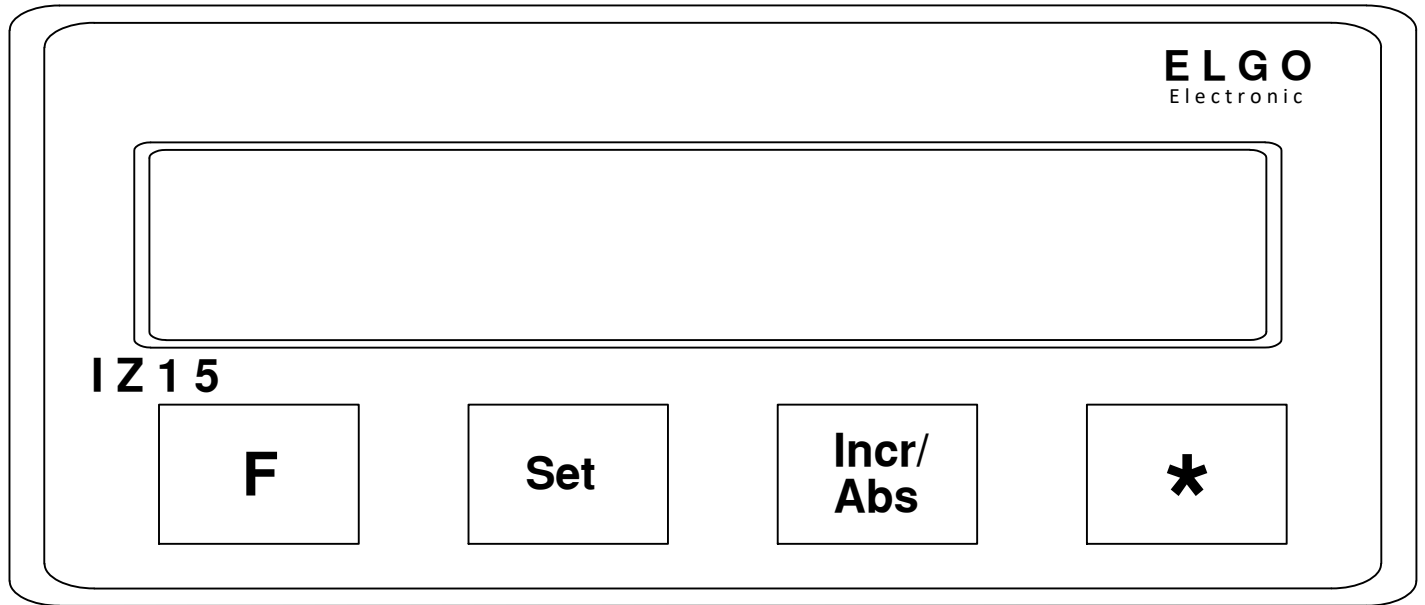


FIGURE 9

## 5.4 General Rules and Safety Checks

- ▶ Before using the machine, check the efficiency and operation of all safety devices and check that the moving parts of the machine are not blocked, that there are no damaged parts and that all machine components are positioned and working correctly.
- ▶ NEVER operate the machine with any of the safety devices disabled or removed from the machine.
- ▶ It is entirely prohibited to work without the protective shield in position.
- ▶ It is mandatory to use appropriate protective equipment.
- ▶ It is mandatory to use regulation work clothing. (It must be worn fastened.)
- ▶ Before starting work, the operator must ensure that all tools and wrenches, used for maintenance or adjustment, have been removed.
- ▶ In the event of a fire, use powder extinguishers and disconnect the machine from the electric system.

## **6.0 RECOMMENDATIONS AND MAINTENANCE**

### **6.1 Type and Frequency of Inspections**

The operator's knowledge of the machine is one of the best ways of daily control of any possible problem. If any failure is detected, work must be stopped and qualified personnel must be informed immediately.

⊗ **NOTE:** Always clean the machine and the work area at the end of the work day.

**MAINTENANCE TABLE**

<b>LUBRICATION POINTS</b>	<b>TYPE OF GREASE/OIL</b>	<b>FREQUENCY</b>
Turret travel rail	SAE 30 lubricating oil	WEEKLY
Rocker bearings	Roller bearings grease	ANNUALLY
Pneumatic cylinder	AW 32	ANNUALLY

<b>CHECK POINTS</b>	<b>FREQUENCY</b>
Machine cleaning	DAILY
Condition of the transmission belt	WEEKLY

### **6.2 Qualified Personnel for Maintenance and Repair Work**

All repairs shall be made exclusively by qualified personnel. Always use original replacement parts. If not, the machine may be damaged or the user may be injured.

### **6.3 Manufacturer's Recommendations**

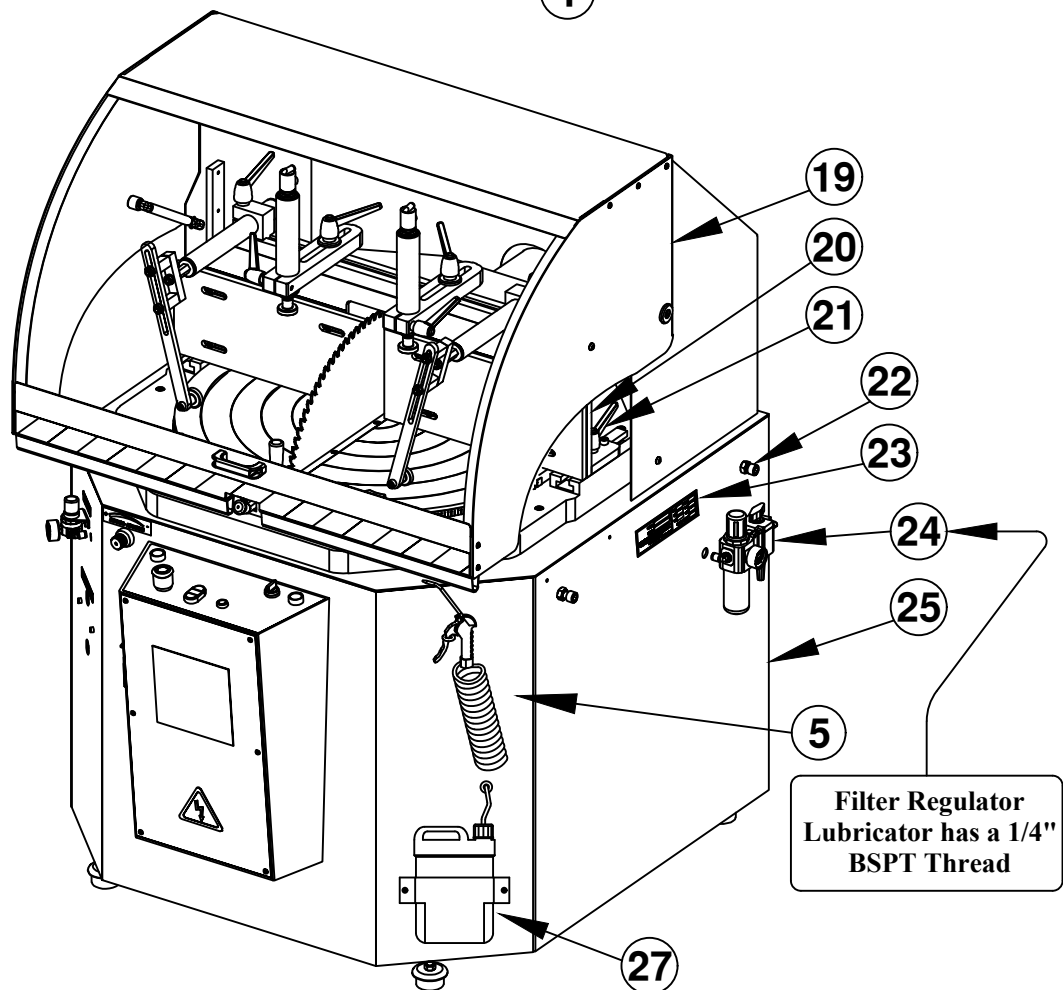
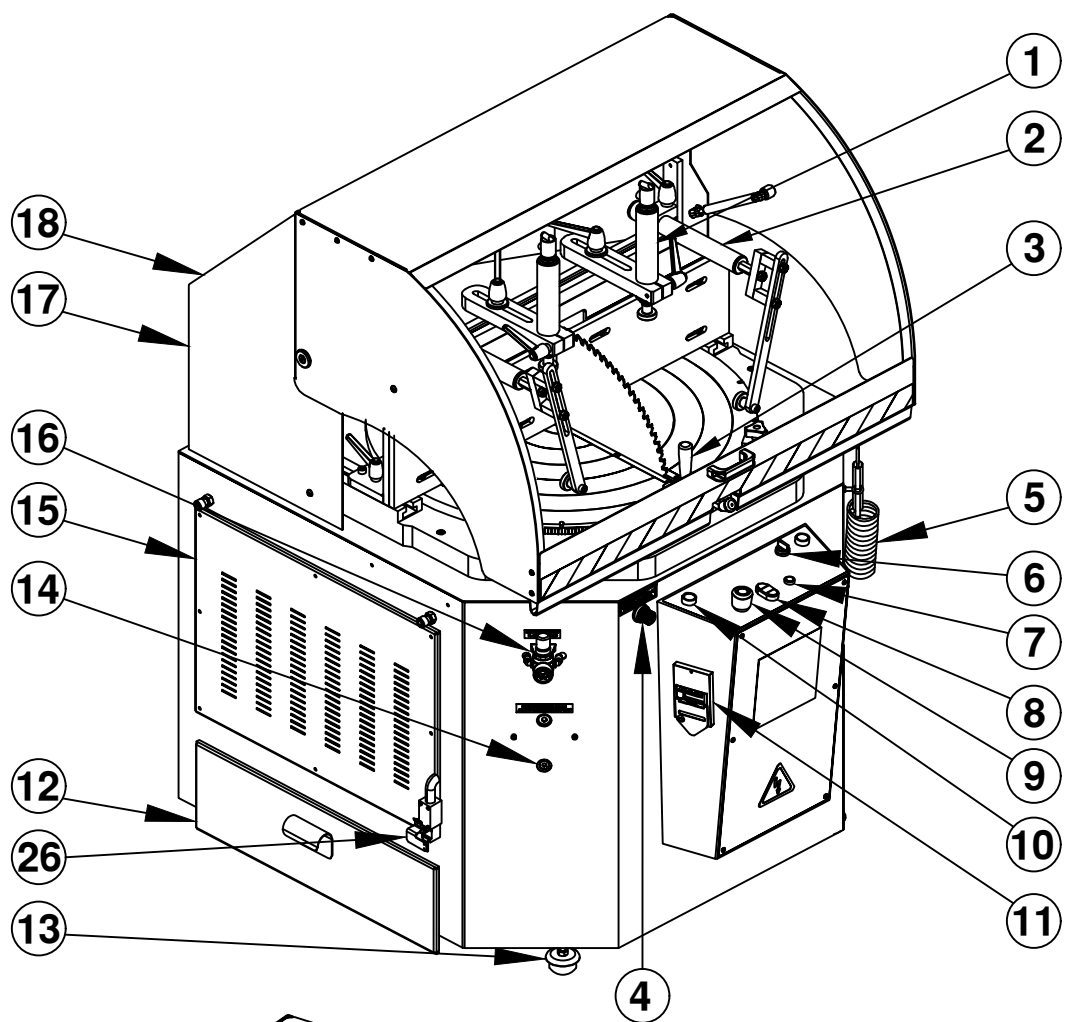
- ▶ In the event that the machine is broken down or the saw blades must be replaced, place a padlock on the protection switch and place the keys under the care of qualified personnel.
- ▶ Before working on any electrical devices, disconnect the plug from the power supply.
- ▶ If extension cords are used, ensure that the cable has the appropriate rating for the power of the machine.
- ▶ Whenever any part has to be replaced, use an original replacement part and use the oil recommended by the manufacturer.
- ▶ Once a week, all of the chips in the saw should be thoroughly cleaned out. This includes blowing out the chips in the motor fan guard.
- ▶ Once a month, check the motor belt for any wear.
- ▶ Once a month, grease the bearing hub.
- ▶ **NOTE:** In case of any doubt or problem, do not hesitate to consult the manufacturer.
- ▶ **ATTENTION:** The manufacturer hereby guarantees the supply of each of the parts or components for at least two years from the manufacturing date of the machine.

## **7.0 DRAWINGS & SCHEMATICS**

### **7.1 General Schematic**

<b>ITEM</b>	<b>PART #</b>	<b>DESCRIPTION</b>
1*	*1677	Holddown Clamp 45MM (See <u>NOTE</u> at bottom of page)
2	N00PT14050	Horizontal Clamps Ø40X220
3	2040000482	Angle Lock
4	N000000018	Advance Regulator 3/8"
5	N000000021	Cleaning Gun with Hose
6	011877	Selector Switch
7	E000000030	Green Indicator
8		Saw Blade On-Off
9		Emergency
10	N000000008	Green Vertical Alignment Button
11	000943	230V Motor Protect Switch 10-16A
11A	000940	460V Motor Protect Switch 6-10A
12		Side Drawer Cuttings
13	1156	M16 Feet Levelers
14	2040000092	Oleo Pneu Converter
15		Left Door
16	N000000030	Pressure Regulator
17		Protective Shield Support
18		Protective Shield
19	E00000BD25	Hood Switch
20		Turret
21	B0000P1040	M-10 x 40 Lever
22		M-14 x 40 Screw + M-14 Nut (x 2)
23	019100	U.S. DATA PLATE
24	N000000017	Filter + Reg. + Manom. Above has a 1/4" BSPT Thread
25		Sheet Metal Base
26	CE000000R81	Door Interlock Switch
27	077927	NF Coolant Reservoir

ITEM 1\* THIS REPLACEMENT CYLINDER WILL RANGE FROM 225MM TO 250MM IN LENGTH. IT IS 100% INTERCHANGEABLE.



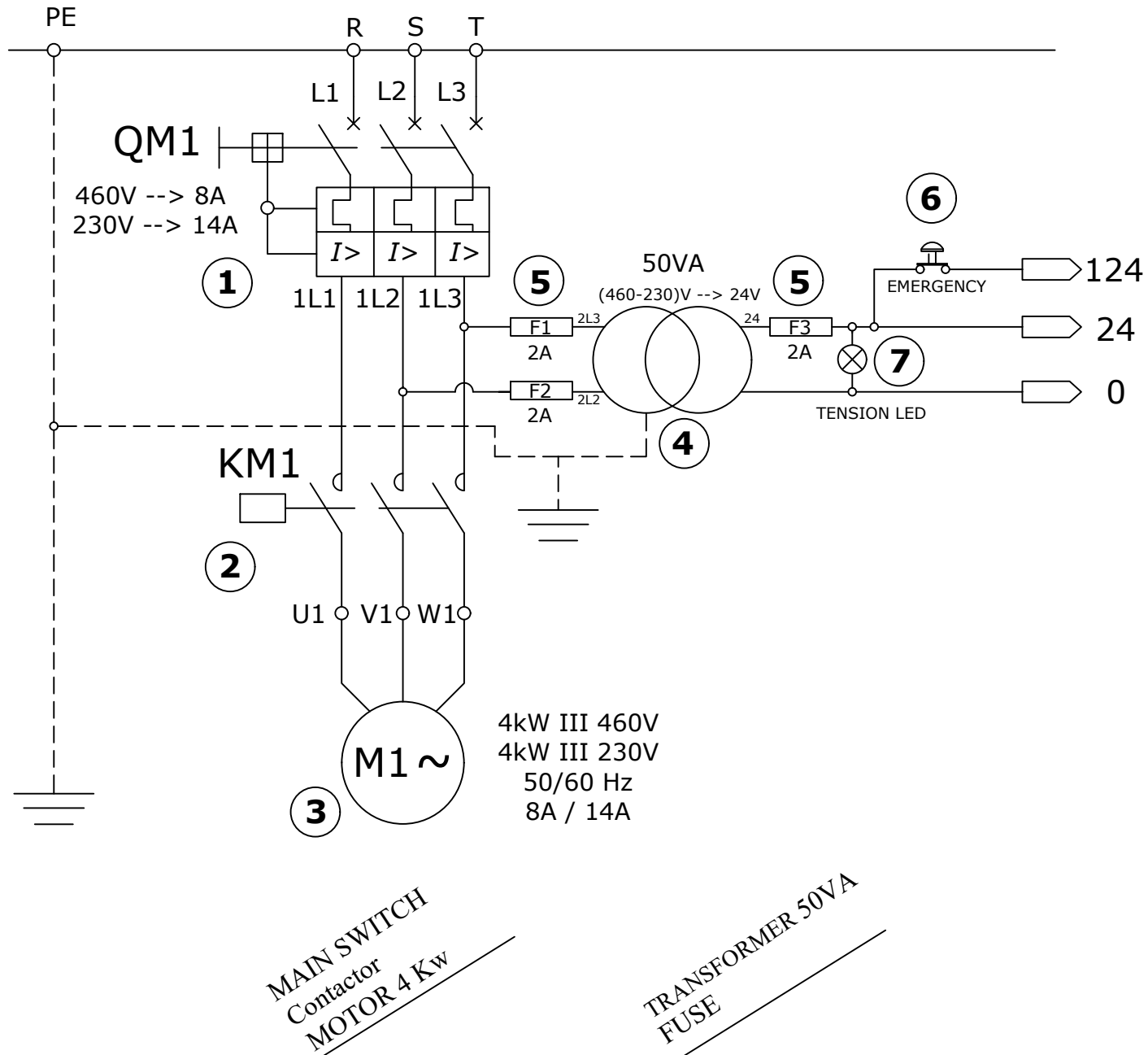
**FIGURE 10**



## **7.2 Power Circuit**

<b>ITEM</b>	<b>PART #</b>	<b>DESCRIPTION</b>
<b>1</b>	<b>000943</b> <b>000940</b>	<b>230V Motor Protect Switch 10-16A</b> <b>460V Motor Protect Switch 6-10A</b>
<b>2</b>	<b>060071</b>	<b>DILM 12-10 24VAC CONTACT</b>
<b>3*</b>	<b>(Current Motor)</b>	<b>C2050000522 NO Brake 5.5HP 230V/460V3PH Motor</b>
<b>3A</b>	<b>(Old Style Motor)</b>	<b>21690220M3 WITH Brake 4KW Motor 3PH 230V 5.5HP</b>
<b>3B</b>	<b>(Old Style Motor)</b>	<b>21690460M3 WITH Brake 4KW Motor 3PH 460V 5.5HP</b>
<b>➡ NOTE: 3A &amp; 3B - Motor Pulley is included.</b>		
<b>4</b>	<b>E000000014</b>	<b>Transformer 50VA - 460/230//24V</b>
<b>5</b>	<b>E000000024</b> <b>071085</b>	<b>Fuse 2A (if N/A use below)</b> <b>2A replacement for above</b>
<b>6</b>	<b>E000000G44</b>	<b>Emergency (NC)</b>
<b>7</b>	<b>E000000030</b>	<b>Green Indicator 24V</b>

**ITEM 3\* can replace 3A & 3B - However, the Brake Will Be Eliminated.**

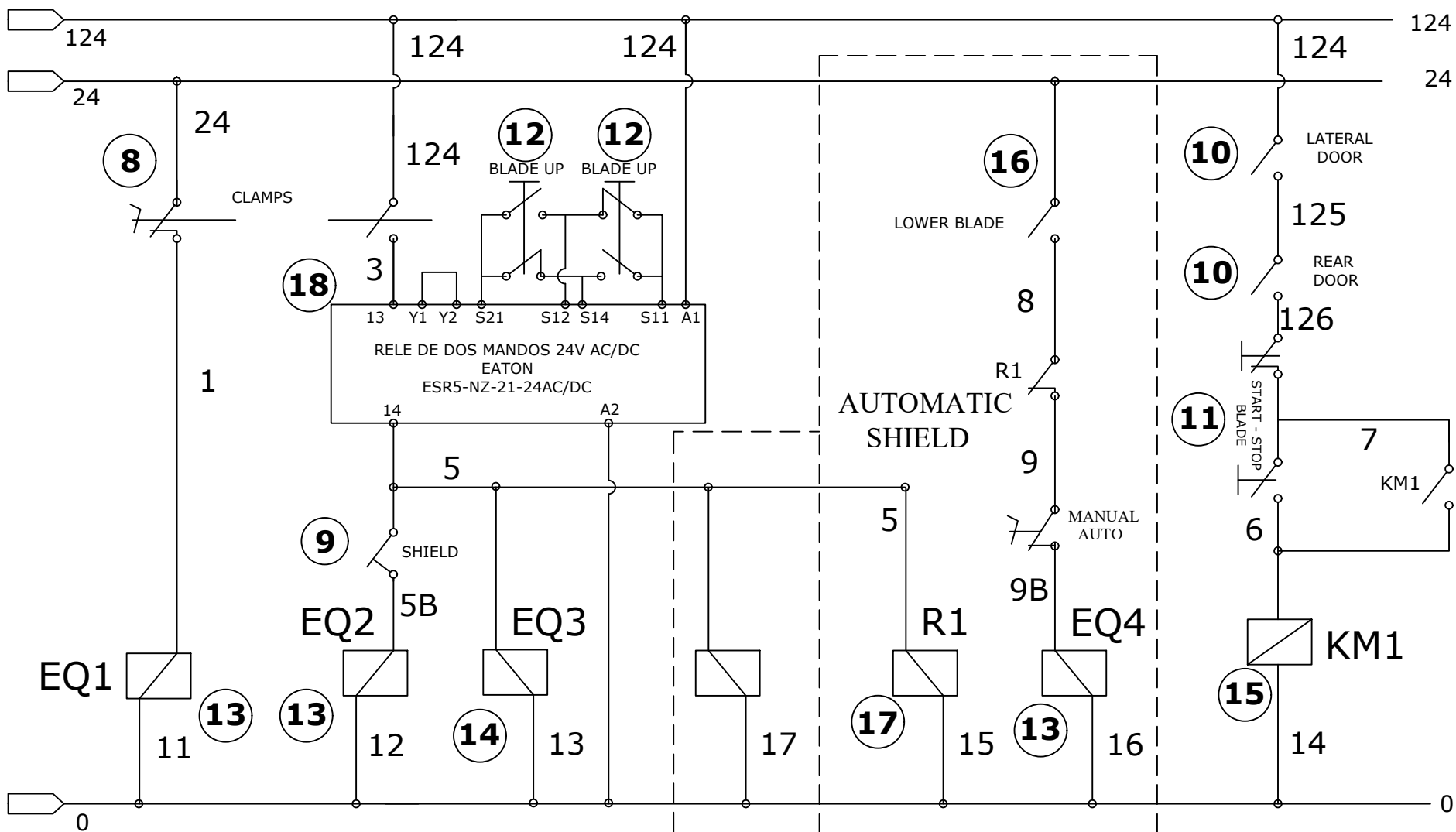


**FIGURE 11**

## **7.2A Switching Power Circuit**

<b>ITEM</b>	<b>PART #</b>	<b>DESCRIPTION</b>
<b>8</b>	<b>011877 562023</b>	<b>2-Pos. Sel. (without RazorGage) 2-Pos. Sel. (with RazorGage)</b>
<b>9</b>	<b>E00000BD25</b>	<b>Hood Switch</b>
<b>10</b>	<b>12152</b>	<b>End-of-Travel M-12</b>
<b>11</b>	<b>E000000011</b>	<b>Blade ON/OFF Switch Operator Only (Add 011867 &amp; 011874 for complete switch)</b>
<b>12</b>	<b>N000000008</b>	<b>Green Vertical Align Operator Only</b>
<b>13</b>	<b>1618</b>	<b>KPM Valve With Coil</b>
<b>13A</b>	<b>1620</b>	<b>KPM Coil 24VAC</b>
<b>14</b>	<b>1440</b>	<b>High + Low Pneumatic</b>
<b>15</b>	<b>060071</b>	<b>DILM 12-10 24VAC Contact</b>
<b>16</b>	<b>1724</b>	<b>Magnetic Sensor Power Hood (Must Specify KT-50R or KT50-P)</b>
<b>17</b>	<b>E000000095</b>	<b>Omron Relay SUP500/SUP600</b>
<b>18</b>	<b>078557</b>	<b>ESR5-NZ-21-24VAC-DC</b>

# SWITCHING POWER CIRCUIT



OPEN CLAMPS

BLADE UP

MAX-MIN PRESURE

LUBETOOLS

RELAY OF RAISE

OPEN SHIELD

BLADE ROTATION

FIGURE 12

## **7.3 Operating Controls**

- 6        Emergency button with interlock.**
- 7        Green indicator light; power supplied to the machine.**
- 8        011877 - Selector Switch, Hold down clamp - WITH OUT RazorGage**
- 8A      562023 - 2 Pos. Selector Ass'y - WITH RazorGage**

**Below is included with 562023:**

- (1) Switch (Part # 011878)**
- (1) NC Contact (Part # 011867)**
- (1) Mounting Adaptor (Part # 011872)**
- (2) NO contact (Part # 011874)**

- 11       Saw blade on-off; On, green colored symbol, I. Off, red O.**
- 12       Push buttons, for raising the saw blade.**
- 18       Auto-manual selector for the pneumatic protective shield operation; optional.**
- 19       P/N 677 - LEGEND PLATE SUP-500 & SUP-600**

19. P/N 677 - LEGEND PLATE

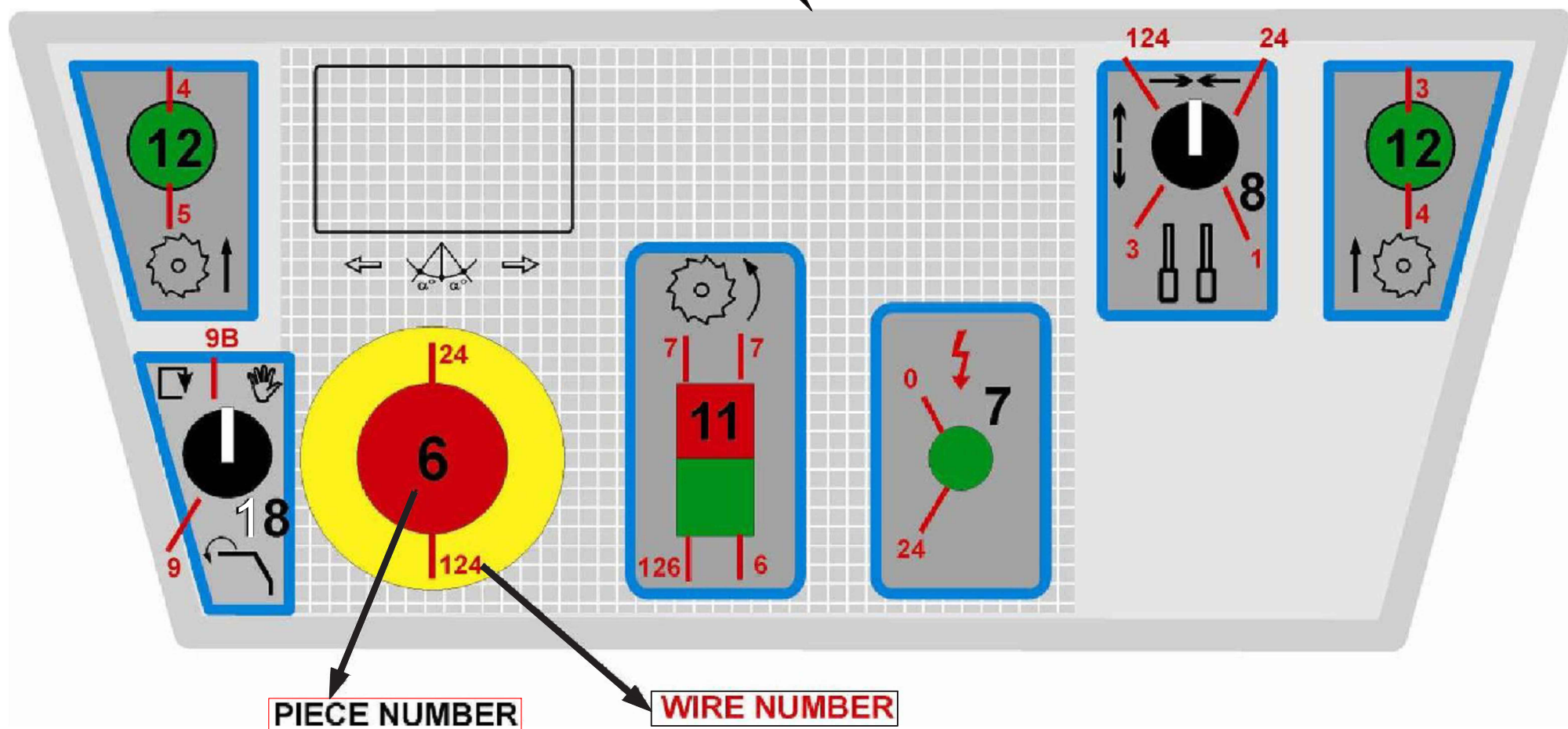
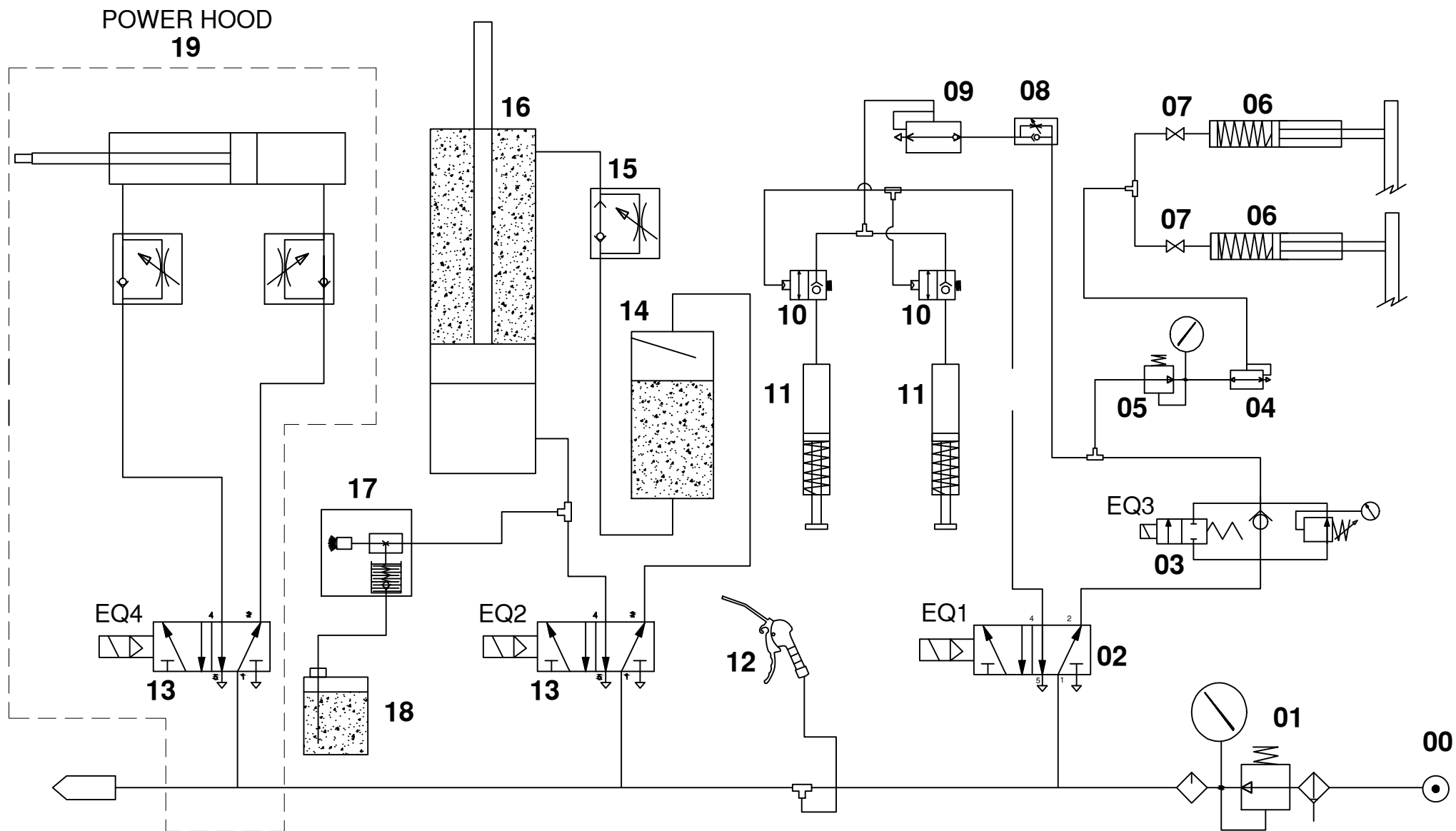


FIGURE 13

## 7.4 Pneumatic Schematic

ITEM	PART #	DESCRIPTION
00		Line
01	N000000017	F + R + L 1/4"
02	1620	KPM Coil 24VAC
03	1440	High + Low Pneumatic
04	N000000038	Quick Exhaust Valve 1/8"
05	N000000030	Pressure Regulator 1/4"
06	N02PT14050	Horiz Clamps Ø40 x 320
07	2K20000281	Mini Ball Valve 1/8" M-H
08	N0CCRC1806	Flow Regulation 1/8" Ø6 CIL.
09	N000000038	Quick Exhaust Valve 1/8"
10	N000000015	Uni Directional Valve
11	*1677	Holddown Clamp 45MM
12	N000000021	Blow Air Duster
13	1618	KPM Valve With Coil
14	2040000092	Oleo Pneumatic Converter
15	N000000018	Advance Regulator 3/8"
15A	1667	Speed Regulator Knob (for above)
16	N000000025	Cylinder ISO 50 x 200
17	N000000036	Venturi Sprayer
18	077927	NF Coolant Resivoir (USA only)
19	1353	POWERHOOD SUP-600 (see Section 8.1)

\*ITEM 11: THIS REPLACEMENT CYLINDER WILL RANGE FROM 225MM TO 250MM IN LENGTH. IT IS 100% INTERCHANGEABLE.



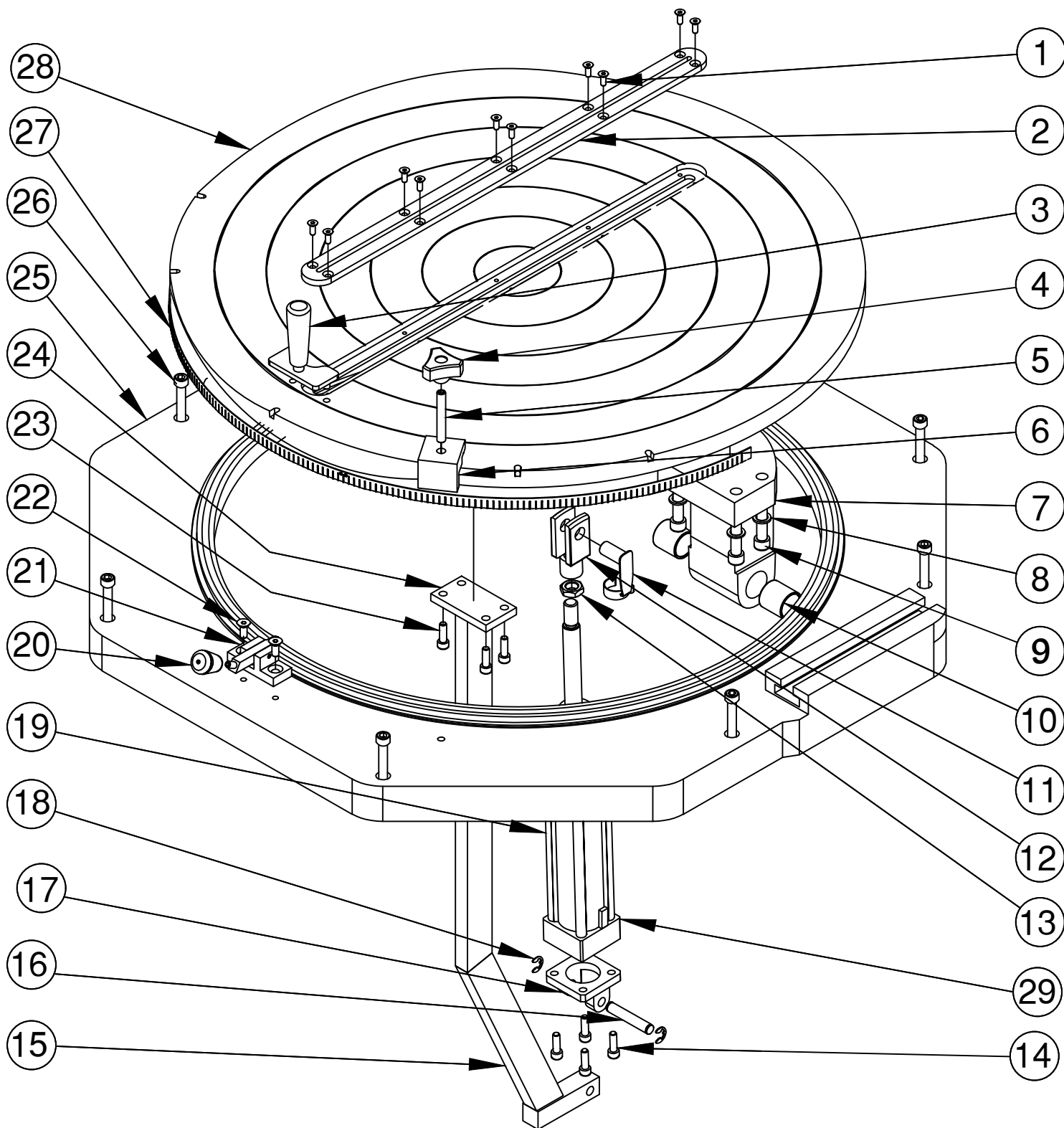
**FIGURE 14**



## **7.5 Cast Iron Table & Disc Assembly (Exploded View)**

<b>ITEM</b>	<b>PART #</b>	<b>DESCRIPTION</b>
<b>1</b>	<b>230007</b>	<b>M6 X 16 DIN 7991 FSHCS</b>
<b>2</b>	<b>1892</b>	<b>Alum Blade Groove SUP-600</b>
<b>3</b>	<b>2352000171</b>	<b>Degrees Turn Lever</b>
<b>4</b>	<b>B0000000H2</b>	<b>M10 Knob</b>
<b>5</b>	<b>201230</b>	<b>M10 X 70MM DIN931 HHCS</b>
<b>6</b>	<b>2042000181</b>	<b>Nylon Brake Cleat</b>
<b>7</b>		<b>Rocker Support</b>
<b>8</b>	<b>212014</b>	<b>M12 DIN127 Lock Washer</b>
<b>9</b>	<b>221320</b>	<b>M12 X 50MM DIN912 SHCS</b>
<b>10</b>		<b>Autolubricated Tip 30-35-35</b>
<b>11</b>	<b>N000000059</b>	<b>ISO 50 Cyl. Yoke</b>
<b>12</b>	<b>N000000059</b>	<b>ISO 50 Cyl. Yoke</b>
<b>13</b>	<b>208016</b>	<b>M16 DIN 934 Hex Nut</b>
<b>14</b>	<b>221120</b>	<b>M8 X 25 DIN912 12.9 SHCS</b>
<b>15</b>		<b>Post</b>
<b>16</b>	<b>N000000057</b>	<b>50MM Cyl. Female Pin Joint</b>
<b>17</b>	<b>N000000057</b>	<b>50MM Cyl. Female Pin Joint</b>
<b>18</b>	<b>N000000057</b>	<b>50MM Cyl. Female Pin Joint</b>
<b>19</b>	<b>N000000025</b>	<b>ISO 50 x 200 Cylinder</b>
<b>20</b>	<b>B000000011</b>	<b>M-8 Knob (included with #21)</b>
<b>21</b>	<b>2040000482</b>	<b>Angle Lock</b>
<b>22</b>	<b>230110</b>	<b>M8 X 20 DIN7991 FSHCS</b>
<b>23</b>	<b>221120</b>	<b>M8 X 25 DIN912 12.9 SHCS</b>
<b>24</b>		<b>Lever Support</b>
<b>25</b>	<b>216000F012</b>	<b>Cast Iron Table</b>
<b>26*</b>	<b>201230</b>	<b>M10 X 70MM DIN931 HHCS</b>
<b>27</b>	<b>2160000CG2</b>	<b>Degree Tape SUP-600</b>
<b>28</b>	<b>2160000022</b>	<b>Cast Iron Disc</b>
<b>29</b>	<b>1724</b>	<b>Magnetic Sensor</b>

**ITEM 26\* Replacement HHCS bolt - original is a SHCS**



**FIGURE 15**

## 7.6 Rocker Assembly (Exploded View)

ITEM	PART #	DESCRIPTION
1	2040000232	Blade Shaft Nut M-30 Nut
2	2050000032	Blade Washer
3	74505	Blade Ø 600 x Ø 50 x 5 - 72 Tooth
	74510	Blade Ø 600 x Ø 50 x 5 - 132 Tooth
4	073660	M8 X 12MM DIN912 SHCS
5	2050000162	FAG 4206 BB-TVH Bearing
6	2050000092	Ø 30 Shaft
7	2070000012	Lubricator 1/8" Zerk
8	073458	M6 X 10MM DIN 912 SHCS
9	073420	M8 X 16 DIN912 SHCS
10	2040025582	Ø 36 Separator
11	2040060582	Ø 60 Separator
12	2050000162	FAG 4206 BB-TVH Bearing
13	2050000132	Rocker Shaft Pulley
14	C2160000012	1092 J12 Poly-V Belt
15	204000A401	Ø40 X Ø10 X 6MM Washer
16	212012	M10 DIN127 Lock Washer
17	203210	M10 X 25MM DIN933 HHCS
18	TD91308016	DIN913 M8 x 16 Screw
19		Connecting Rod Pin
20	216000A452	Ø 45x7 Avell. M-12 Washer
21	TD79911225	DIN7991 M-12 x 25 Screw
22	2160000032	Cast Iron rocker TL-600
23*	201220	M10 X 50MM DIN931 HHCS
24	204000A401	Ø40 X Ø10 X 6MM Washer
25	201145	M8 X 25 DIN933 HHCS
26	073108	M8 DIN127B Lock Washer
27	204000A402	Ø 40xØ 8x6mm Washer
28	2050000142	Motor Pulley
29	TD93308080	DIN933 M-8 x 80 Screw
30	208010	M8 DIN934 Hex Nut
31		Belt Tension Adjuster
32*	073326	M8 X 30 DIN 933 HHCS
33* (Current Motor)	C2050000522	<u>NO Brake</u> 5.5HP 230V/460V3PH Motor
33A (Old Style Motor)	21690220M3	<u>WITH</u> Brake 4KW Motor 3PH 230V 5.5HP
33B (Old Style Motor)	21690460M3	<u>WITH</u> Brake 4KW Motor 3PH 460V 5.5HP
34	214012	M10 DIN125 Regular Washer
35	208012	M10 DIN 934 Hex Nut
36	027600	SUP 600 Chip Deflector

ITEM 23\* Replacement bolt is not a full threaded bolt.

ITEM 32\* Replacement bolt is HHCS.

ITEM 33\* can replace 33A & 33B - However, the Brake will be eliminated.

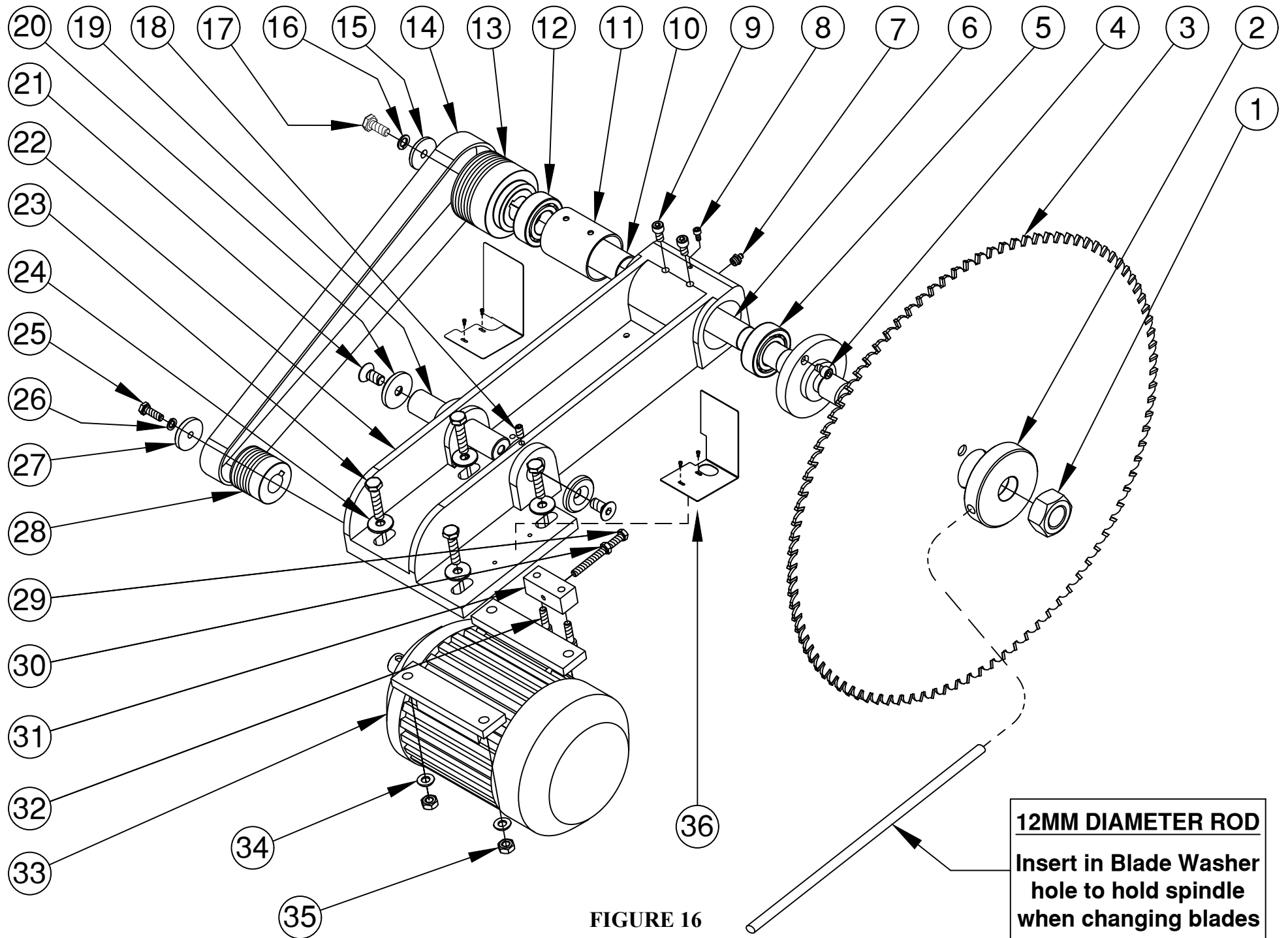


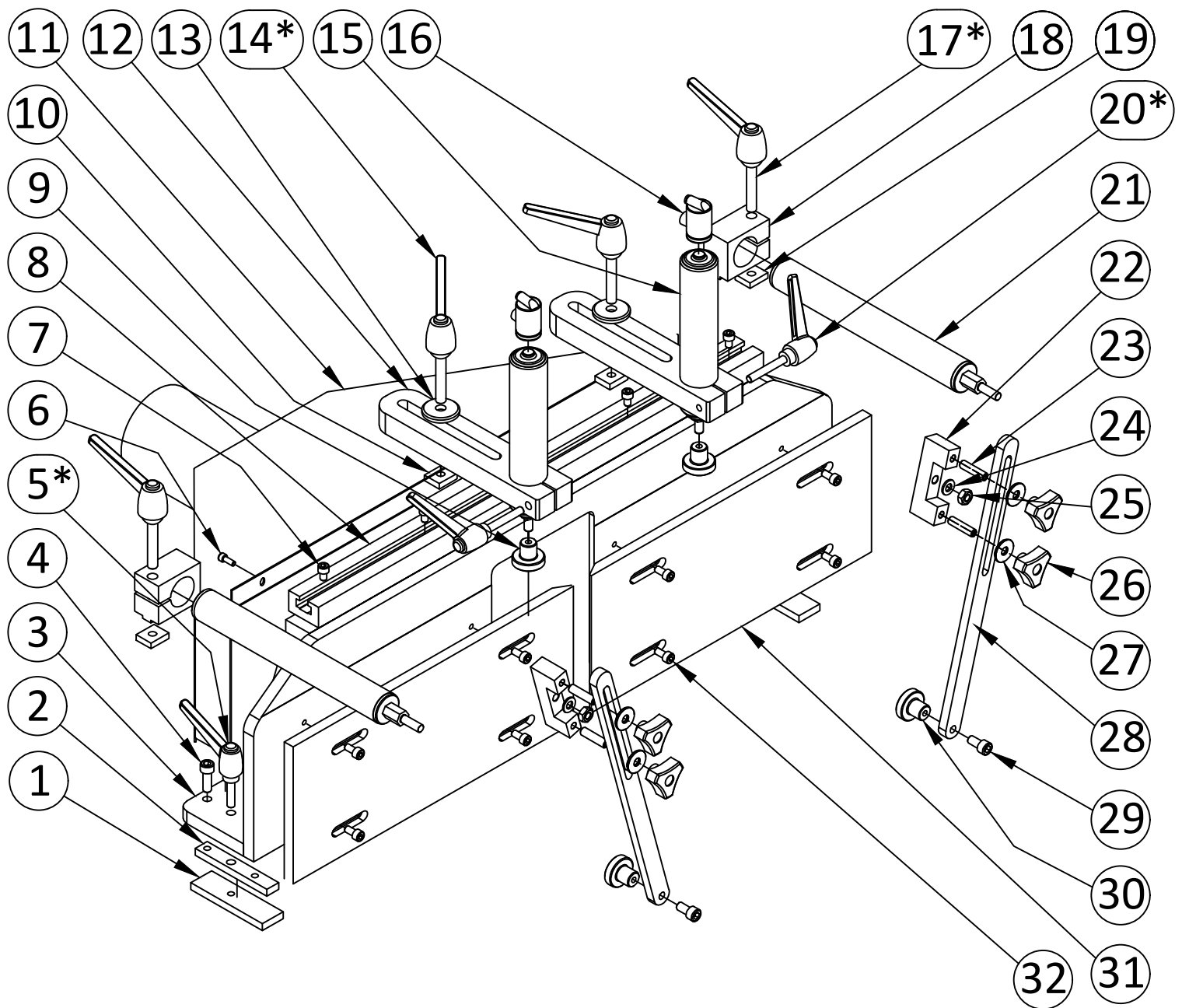
FIGURE 16

## 7.7 Turret Assembly (Exploded View)

ITEM	PART #	DESCRIPTION
1		Lock Guide Plate
2		Turret Cotter
3		Iron Turret
4	221212	M10 X 30MM DIN912 SHCS
5*	B0000P1040	M-10 x 40 Lever
6	221010	M6 X 16MM DIN912 SHCS
7	073660	M8 X 12MM DIN912 SHCS
8		Clamps Aluminum Guide
9	2350000131	Nylon Cleat Black M-10
10	2040001512	Flat Nut M-12
11		Turret Protector
12	661	Aluminum Holder 45MM DIA.
13	204000A452	Ø45 X 12MM Washer
14*	025361	M12 X 50MM Adjustment Handle
15**	1677	Holddown Clamp 45MM
16	N000000015	Uni-Direc. Valve
17*	B0000P1270	M12 X 70MM Lever
18	204000A502	Alum Rod Holder Clamp 40mm
19	2040001512	Flat Nut M-12
20*	B0000P1060	M-10 x 60 Lever
21	N02PT14050	Horizontal Clamps Ø40 x 320
22		Clamp Arm Adapter
23	TD93310040	D913 M10 x 40
24	214012	M10 DIN125 Regular Washer
25	208012	M10 DIN 934 Hex Nut
26	B0000000H2	M10 KNOB
27	214012	M10 DIN125 Regular Washer
28	1808	Horizontal Clamps Arm SUP-600
29	073626	M10 X 20MM DIN912 SHCS
30	2350000131	Nylon Cleat M-10
31	P2160000102	Aluminum Plates SUP-600
32	073420	M8 X 16 DIN912 SHCS

\* SEE NOTE ON THE NEXT PAGE

ITEM 15\*\* THIS REPLACEMENT CYLINDER WILL RANGE FROM 225MM TO 250MM IN LENGTH. IT IS 100% INTERCHANGEABLE.



**NOTE:**

**ITEMS - 5\*, 14\*, 17\*, & 20\* are all handles and are all different sizes. Please measure the diameter and length of threads before ordering to make sure you get the right size.**

**FIGURE 17**

## 7.8 Sheet Metal Base (Exploded View)

ITEM	PART #	DESCRIPTION
1		Left Door
2	073615	M6 X 20 ISO 7380 BHSCS
3	073211	M14 DIN934 HEX NUT
4	2050000262	Connect Ø 6-Ø 6
5		Back Door
6	073615	M6 X 20 ISO 7380 BHSCS
7	E000000022	Plastic Junction Box
8		Oleoneumatic Conv.
9	N00RHM1412	Reduction 1/2M - 1/4H
10	N000CC1408	Male Stud Elbow 1/4 - Ø 8
11	073444	M4 X 10 DIN912 SHCS
12	073211	M14 DIN934 HEX NUT
13	TD91214040	D912 M-14 x 40 Screw
14	N0000E0914	Adaptor 1/4" Æ8
15	N000000017	Filter Regulator - Manometer
16	N000000020	1/8" BSPT Gauge 160 PSI
17	073455	M5 X 20MM DIN912 SHCS
18	073105	M5 DIN127B Lock Washer
19	N000CC1408	Male Stud Elbow 1/4 - Ø 8
20	073211	M14 DIN934 HEX NUT
21	N000000018	Advance Regulator 3/8"
22	N000000021	Cleaning Gun with Hose
23	T0000000H6	Support M-6
24	073206	M6 DIN934 Hex Nut
25	1667	Speed Regulator Knob
26		Control Panel
27		Control Panel Cover
28*	077864	M5 X 12 DIN912 SHCS
29	214014	M12 DIN125 Regular Washer
30	208014	M12 DIN934 Hex Nut
31	B000121001	Foot leveler M12
31A	1156	Foot Leveler M16
32	E0000000M6	Box for Switch
33		Box Switch Cover
34		Closing Padlocks
35	216000030F	Wheel Fixes PP Ø 30
36	N000CC1406	1/4 NPT To 6M Elbow
37	N000000E30	Square Regulator
38*	077864	M5 X 12 DIN912 SHCS
39	N000000030	Pressure Regulator 1/4"
40	N000000020	1/8" BSPT Gauge 160 PSI
41	N0000TA012	3/8" Sight Glass
42	N0000TA012	3/8" Metal Plug
43	221010	M6 X 16MM DIN912 SHCS
44	N000CC1406	1/4 NPT To 6M Elbow
45		Chip Drawer
46	216000030P	Wheel Ø 30
47	CE000000R81	Door Interlock Switch

ITEM 28\* & 38\* Replacement different than original.

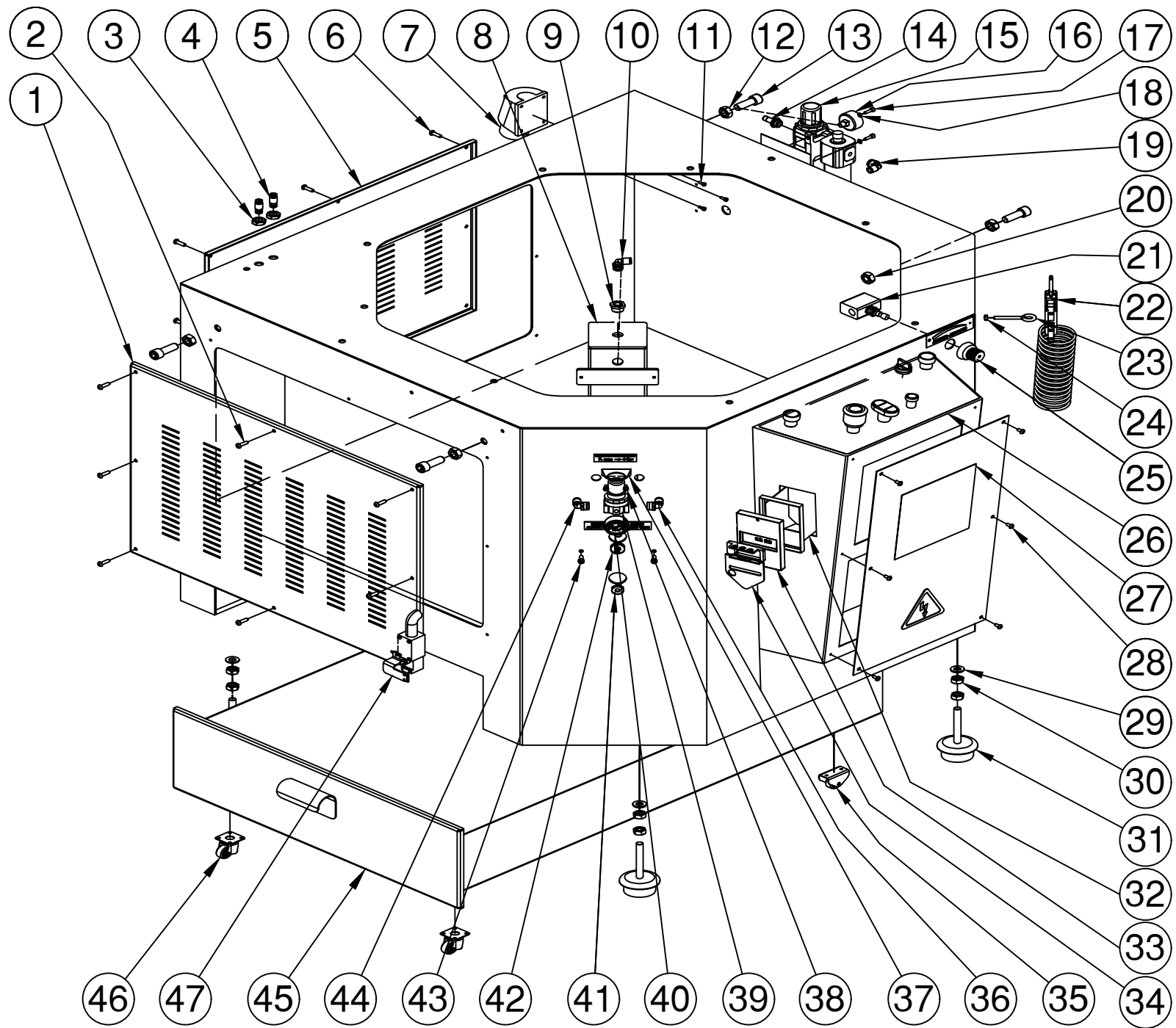


FIGURE 18

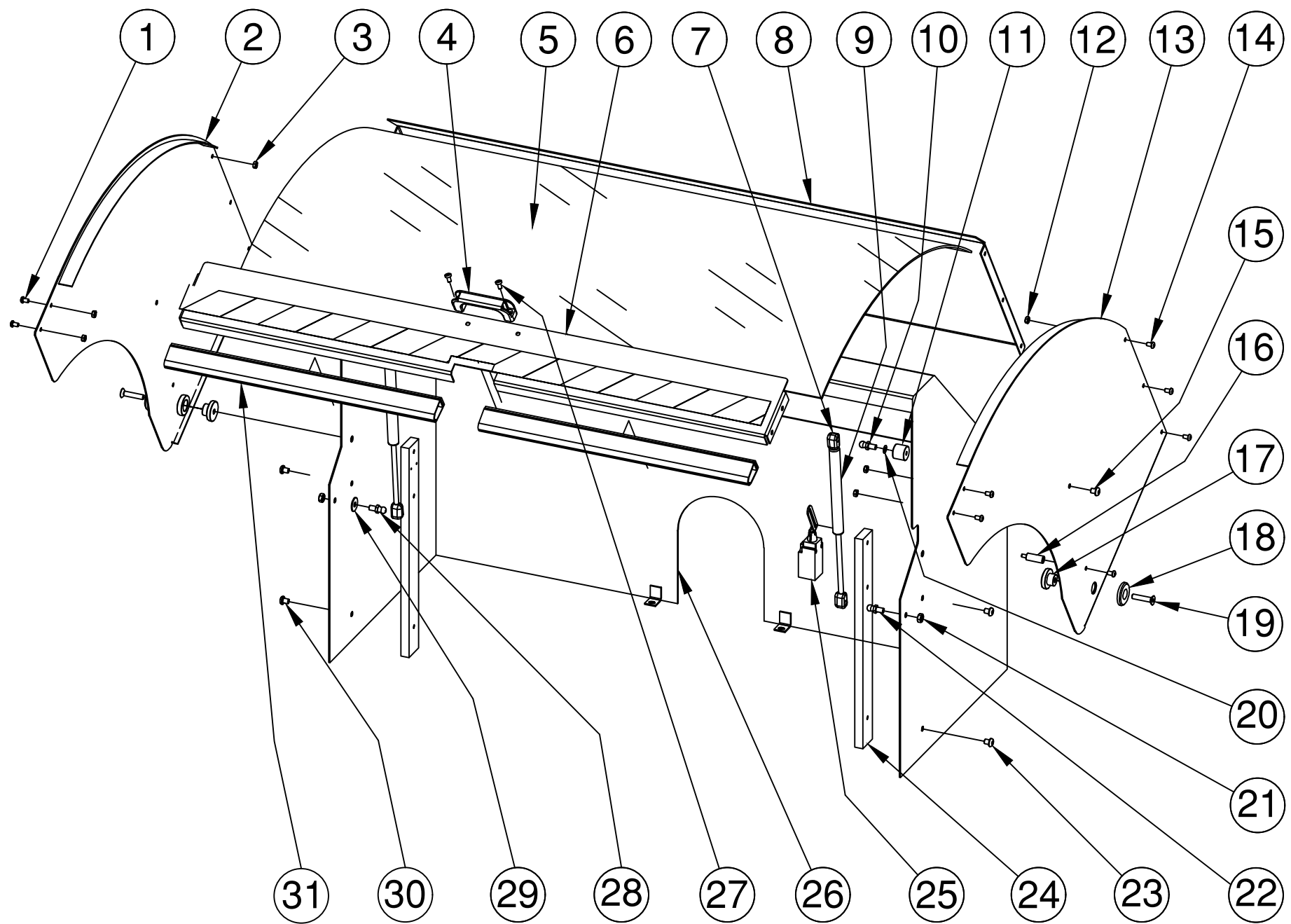


## **7.9 Protective Shield (Exploded View)**

<b>ITEM</b>	<b>PART #</b>	<b>DESCRIPTION</b>
1	220014	M6 X 10MM DIN BN19 BHCS
2		Left Protective Shield
3	073206	M6 DIN934 Hex Nut
4	B000000015	Handle For SUP 600 Hood
5	2160000142	Hood Window SUP600
6		Front Protective Shield
7	204000R452	Swivel Joint
8		Top Protective Shield
9	2160000300	M8X20 ØEXT 25 CYL (SUP-600 Only)
10	20400TB452	Ball Stud Ø10 M8
11		Spacer M8 x 20 Ø 25mm
12	073206	M6 Hex Nut DIN934
13		Right Protective Shield
14*	073617	ISO-7380 M6 x 12 BHCS
15*	220026	ISO-7380 M8 x 12 BHCS
16		Final Guide of End-of-Travel
17		Connecting Rod Pin P. Shield
18	204000A401	Ø40 X Ø10 X 6MM Washer
19	TD79910840	DIN7991 FSHCS M8 x 40 Screw
20	214011	M8 DIN125 Regular Washer
21	215013	M8 DIN985 GREER NUT
22	20400TB452	Ball Stud Ø10 M8
23	073617	M6 X 12 ISO 7380 BHSCS
24		Shield Post
25	E00000BD25	Hood Switch
26		Protective Shield Support
27*	073619 & 73206	DIN912 M6 x 20 Bolt & DIN934 M6 Nut
28	20400TB452	Ball Screw Ø10 M8
29	214011	M8 DIN125 Regular Washer
30	073617	ISO-7380 M6 x 12 BHCS
31	4884	Hood Rubber SUP Saws (1 meter)

14\* & 15\* These replacement bolts are 2mm longer.

27\* This replacement bolt is 4mm longer.

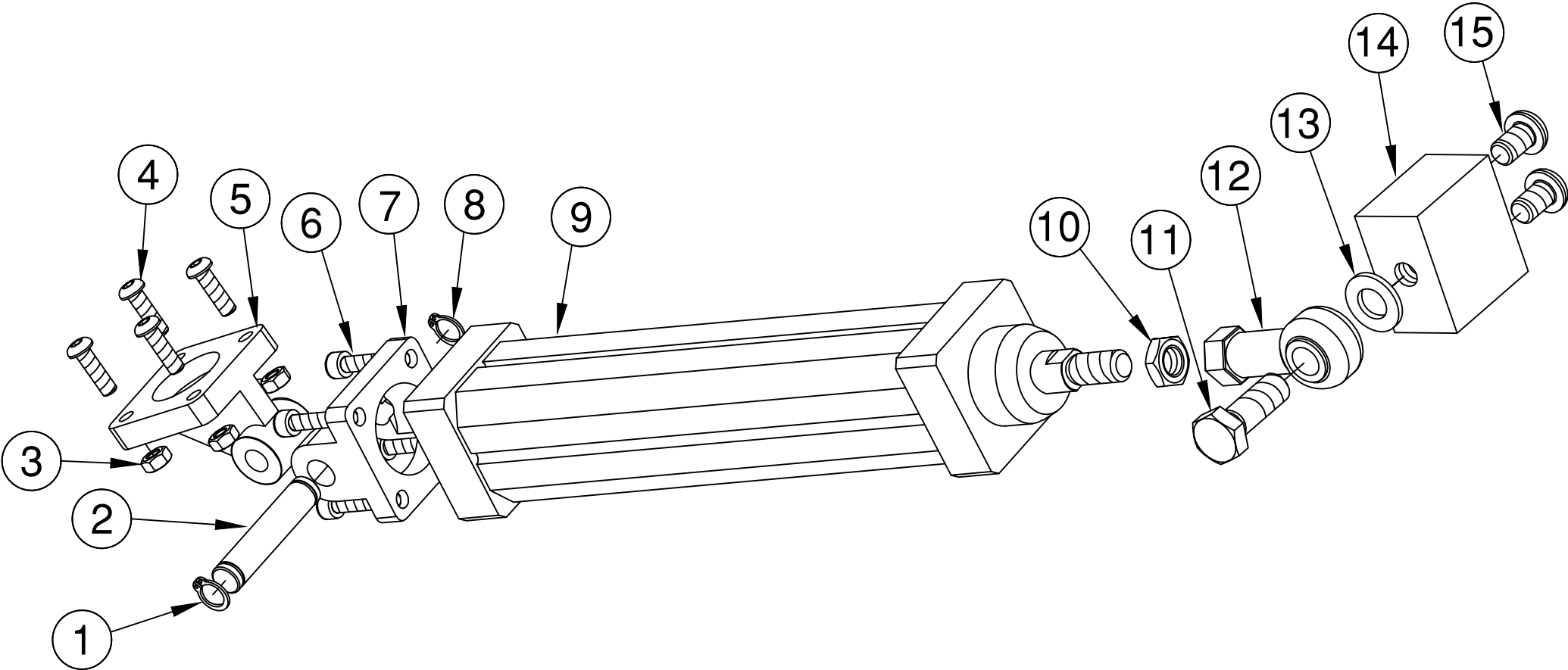


**FIGURE 19**

## **8.0 OPTIONAL EQUIPMENT**

### **8.1 Power Hood (Standard Equipment Now)**

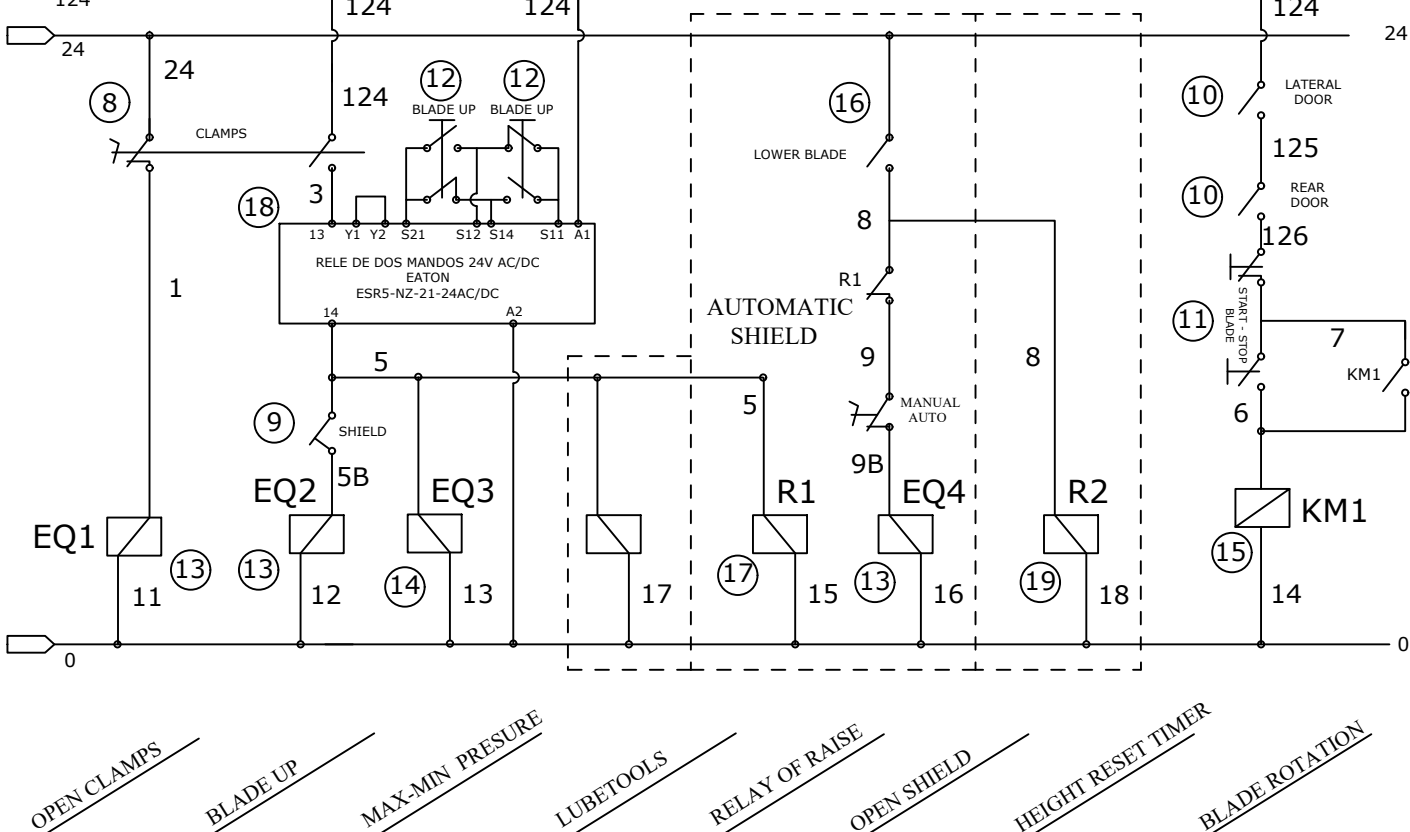
<b>ITEM</b>	<b>PART #</b>	<b>DESCRIPTION</b>
<b>1</b>		<b>DIN-471 Ø 12</b>
<b>2</b>		<b>ISO-40 Pin</b>
<b>3</b>	<b>073206</b>	<b>M6 Nut DIN934</b>
<b>4</b>	<b>073615</b>	<b>M6 X 20 ISO 7380 BHSCS</b>
<b>5</b>	<b>CN000904059</b>	<b>90° Swivel Flange ISO-40</b>
<b>6</b>	<b>221120</b>	<b>M8 x 25 Screw DIN-912</b>
<b>7</b>	<b>CN000004059</b>	<b>ISO-40 Swivel Flange</b>
<b>8</b>		<b>DIN-471 Ø 12</b>
<b>9</b>	<b>N000000025 1735</b>	<b>ISO 50 x 200 Cylinder - SUP-600 Cylinder For Hood Kit #1353</b>
<b>10</b>	<b>210012</b>	<b>M10 DIN439 Jam Nut</b>
<b>11</b>	<b>203415</b>	<b>M12 X 35MM DIN933 HHCS</b>
<b>12</b>	<b>N000012125</b>	<b>M-12 ISO 40 Joint</b>
<b>13</b>	<b>214014</b>	<b>M12 DIN125 Regular Washer</b>
<b>14</b>		<b>Joint Support</b>
<b>15</b>	<b>T173801016</b>	<b>ISO-7380 M-10 x 16 Screw</b>
<b>16</b>	<b>1353</b>	<b>Hood Kit Pneumatic</b>



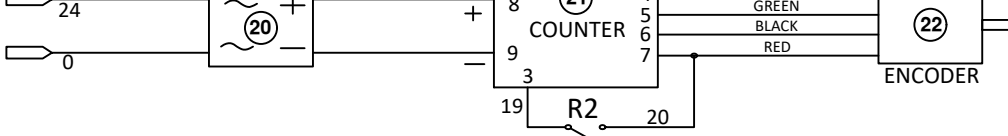
**FIGURE 20**

**To change the value with the key, Press SET + Up + RESET.**

Press **PRESET** to finish the edition.



Page 21 of 21



**FIGURE 21**

## **8.3 DIGITAL ANGLE DISPLAY (PART # 1554)**

### **SETTING AN ELGO DIGITAL READOUT TO READ 90 DEGREES:**

**Turn the saw head to 90 degrees.**

**Press and hold the "F" key until the screen reads "P 01".**

**Press the "F" key until the screen reads "P 09".**

**Press the "F" key one more time so the screen will read "00000.00".**

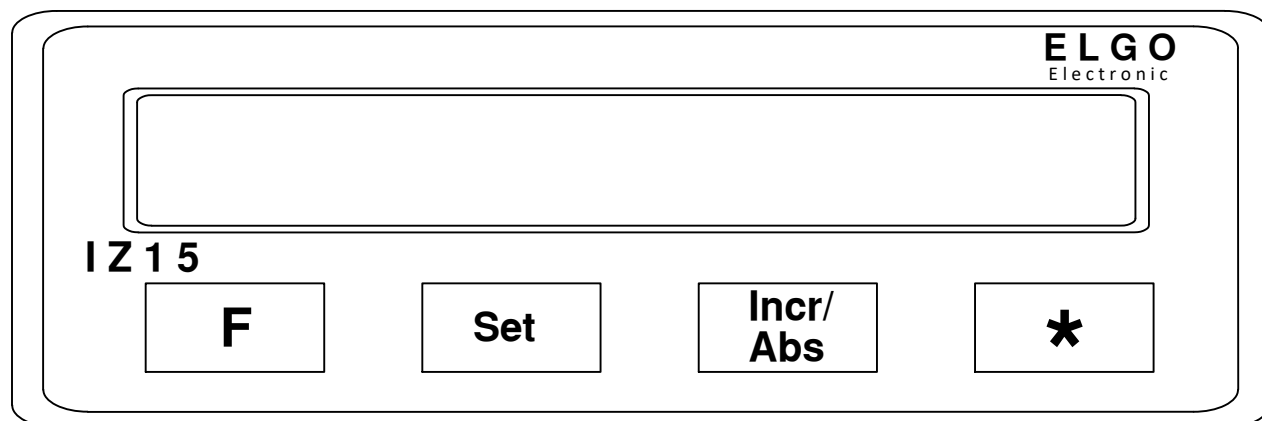
**Press the "Set" key three times so the tens number is flashing.**

**Press the "Incr/Abs" key until the screen reads "00090.00".**

**Press and hold the "F" key for 3 seconds until the screen reads an angle.**

**Press and hold both the "F" key and the "Set" key until the screen reads 90.00° .**

⊗ **NOTE:** This is a battery operated readout. When the battery goes dead, or is removed, the screen will go blank. Or, when the battery is replaced, the readout will default to its original setting. If it was programmed, like above to 90 degrees, you will simply need to set the saw at 90 degrees. Press the "F" key and the "Set" key and it will re-set to 90 degrees.



**FIGURE 22**

## **9.0 ANGLEMASTER W/CHIP COLLECTOR WIRE LOCATIONS**

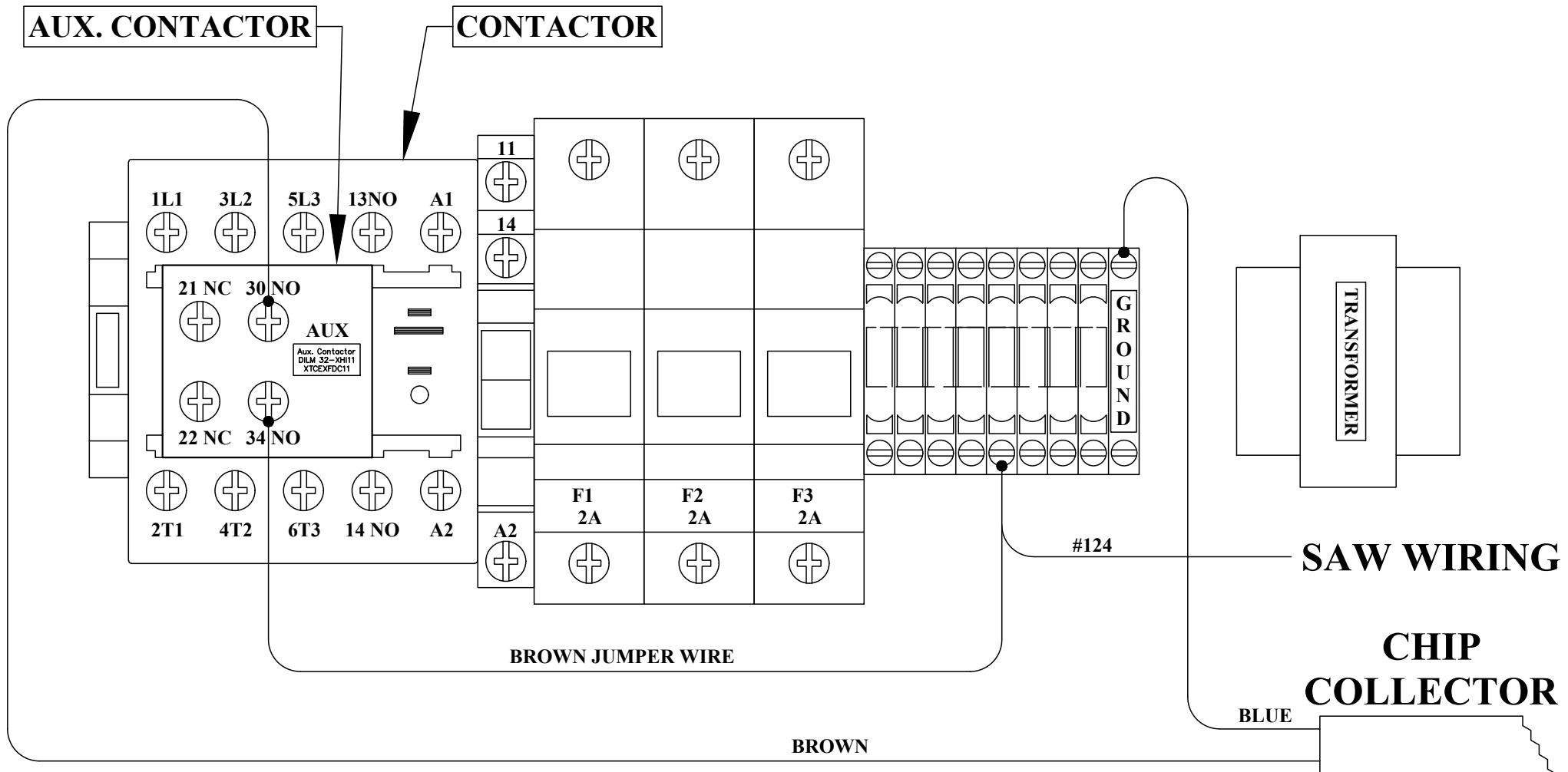
**These are instructions on how to wire the Chip Collector  
(P/N 829230 - 230V 3PH or P/N 829460 - 460V 3PH)  
to our SUP-500 or SUP-600 NF Upcut Anglemaster saws.**

**TO MAKE THE CHIP COLLECTOR START WITH THE ANGLEMASTER, READ THE BELOW  
AND USE THE WIRE LOCATIONS DRAWING ON THE FOLLOWING PAGE.**

- 1. Attach the Auxiliary Contact (P/N 011981) to the top of the saw contactor.**
- 2. Attach the Brown Wire from the Chip Collector to the #33 NO on the Auxiliary Contact.**
- 3. Attach a Brown Jumper Wire from #34 NO on the Auxiliary Contact to the bottom of the terminal strip where the #124 wire is.**
- 4. Attach the Blue Wire to the top of the Ground Terminal on the right end. The Ground Terminal is yellow and green.**
- 5. It should now be able to run with the Remote Setting on the Chip Collector.**

# ANGLEMASTER WITH CHIP COLLECTOR WIRE LOCATIONS

## SUP-500 & SUP-600 SAWS



**FIGURE 23**