

**You have downloaded**

**a manual for our**

**MODEL SU-280-G BAND SAW.**

**Please read this this manual before**

**operating this band saw.**



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# **MODEL SU-280-G BAND SAW**

PRINTED NOVEMBER 2022

# **Scotchman**

## **SU-280-G**

### **Utility Band Saw**



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# **1.0 INTRODUCTION**

**Scotchman's Utility Band Saw features a metered feed rate allowing for quick and effortless cuts without operator assistance! The SU-280G (Gravity Feed) is a scaled-down but rugged metal cutting band saw that combines the cutting of a traditional band saw with the flexibility & accuracy of a cold saw. This band saw can easily cut through round material up to 8" in diameter & features a swing head with 30 degrees (right) of mitering capability without material movement.**

## **1.1 SAFETY PRECAUTIONS**

- 1. The operators of this machine must be qualified and well trained in the operation of the machine. This manual is not intended to teach untrained personnel how to operate machinery.**
- 2. All of the guards and awareness barriers must be installed on the machine and kept in good working order.**
- 3. Never place any part of your body into or under any of the machine's moving parts.**
- 4. Wear the appropriate personal protective equipment. Safety glasses are required at all times. Steel-toed shoes and leather gloves are also recommended.**
- 5. Always disconnect and lock out the power when performing maintenance work on the machine.**
- 6. Never operate this machine with a dull or damaged saw blade. Replace worn saw blades promptly.**
- 7. Practice good housekeeping. Keep the area around the machine clear and well lit.**
- 8. Never modify this machine in any way without the written permission of the manufacturer.**
- 9. Never leave this machine running unattended.**
- 10. Set up a program of routine inspections and maintenance. Make all repairs and adjustments in accordance with the manufacturer's instructions.**

## **1.2 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.**

## **2.0 GENERAL MACHINE INFORMATION**

### **2.1 MACHINE IDENTIFICATION DATA**

**MODEL** \_\_\_\_\_

**SERIAL NUMBER** \_\_\_\_\_

**YEAR OF MANUFACTURE** \_\_\_\_\_

**NOTE:** In order to request replacement parts, whether they are covered by the warranty or not, always state the model and serial number of the machine, as well as the name of the part and the code that appear in the last chapter of exploded views.

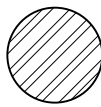
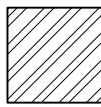
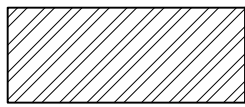
## **3.0 TECHNICAL DATA**

### **MAIN MOTOR POWER**

#### **3PH 2-SPEED 1.5 HP - SINGLE PH 1-SPEED - 1.3 HP**

<b>MOTOR FLA 3PH 230V/460V</b>	<b>5.9A/2.7A</b>
<b>MOTOR FLA SINGLE PHASE</b>	<b>6A</b>
<b>MOTOR SPEED 3PH 2-SPEED</b>	<b>3,000/1,500 RPM</b>
<b>MOTOR SPEED SINGLE PH 1-SPEED</b>	<b>1,500 RPM</b>
<b>COOLANT PUMP POWER</b>	<b>0.09 Kw/0.12 HP</b>
<b>CUTTING SPEED 3PH 2-SPEED</b>	<b>80/40 m/min - 262/131 ft/min</b>
<b>CUTTING SPEED SINGLE PH 1-SPEED</b>	<b>40 m/min - 131 ft/min</b>
<b>ANGLE OF CUT</b>	<b>30° RIGHT</b>
<b>BAND SAW BLADE DIMENSIONS</b>	<b>2450mm X 27mm / 96.5" X 1"</b>
<b>CUT THICKNESS</b>	<b>.9mm / .035"</b>
<b>CLAMP; MAXIMUM OPENING</b>	<b>290mm / 11.4"</b>

<b>DIMENSIONS</b>	
<b>WIDTH</b>	<b>55"</b>
<b>HEIGHT</b>	<b>33-1/2"</b>
<b>LENGTH</b>	<b>69"</b>
<b>WEIGHT</b>	<b>650 lbs.</b>

<b>CUTTING CAPACITY</b>			
<b>90°</b>	<b>200 - 8"</b>	<b>200 - 8"</b>	<b>280 x 180 - 11" x 7"</b>
<b>45° RIGHT</b>	<b>180 - 7"</b>	<b>160 - 6 1/4"</b>	<b>180 x 160 - 7" x 6 1/4"</b>
<b>30° RIGHT</b>	<b>100 - 4"</b>	<b>90 - 3 1/2"</b>	<b>100 x 90 - 4" x 3 1/2"</b>

## **3.1 NOISE LEVEL**

**At a distance of 60cm/24"**

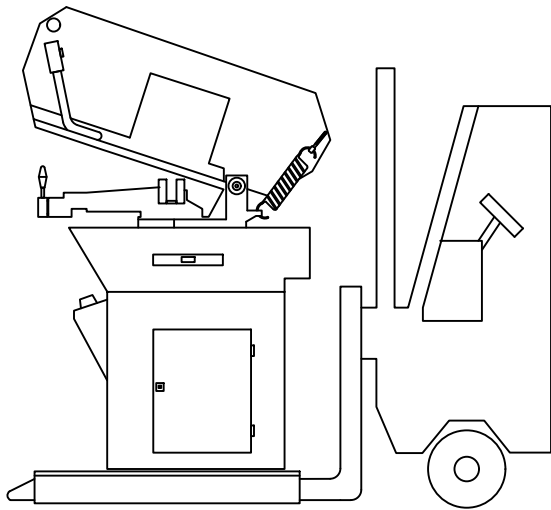
**RUNNING WITH NO-LOAD**

**62 dB (A) Leq**

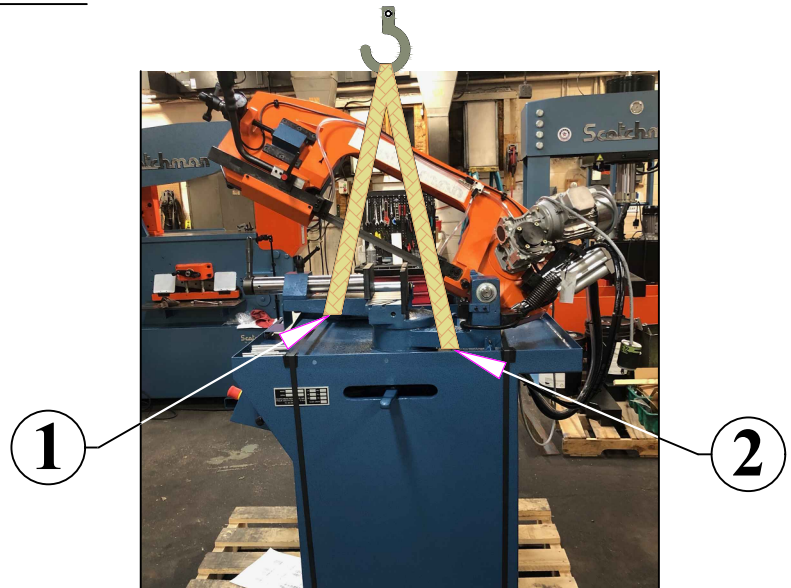
**SAWING A 70mm x 50mm PROFILE**

**83 dB (A) Leq**

## 4.0 TRANSPORT & STORAGE



In the above drawing, the machine is bolted to a pallet before it is lifted or moved with a forklift.



A sling should be placed under the vise casting on the front of the machine (1) and another under the pivot casting (2) toward the rear of the machine. The saw head should be locked in the down position (not shown).

The machine is supplied in a properly designed and sized wood crate/pallet, and it is also wrapped in plastic before it is shipped. Due to the size of the machine, it should be transported on a forklift or by a crane bridge, using slings. If the machine is left in storage for a long period of time, lubricate periodically. Do not expose to the elements.

➡ **CAUTION:** Do not improperly dispose of the packaging. Send the materials to be recycled or eliminated in accordance with current legislation.

## 5.0 ANCHORING AND SERVICE START-UP

### 5.1 ANCHORING INSTRUCTIONS

The machine must first be checked in order to ensure that it has not suffered any damage during transport. If so, immediately contact the manufacturer.

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 according to the parameters established by the manufacturer.

## **5.2 CONNECTION TO THE ELECTRIC SYSTEM**

Ensure that the power supply voltage corresponds to the voltage on the data plate of the machine.  
Connect the cable to the electric system, using a plug that is appropriate for the characteristics of the same, thereby respecting color codes.

After the machine has been connected, make sure that the rotation of the hydraulic motor matches with the direction indicated by the arrow shown. If the motor rotation is not correct, swap two of the incoming power wires and check again.

## **5.3 INSTALLING THE BAND SAW BLADE**

➡ **ATTENTION:** See the next page to help in selecting the correct blade.

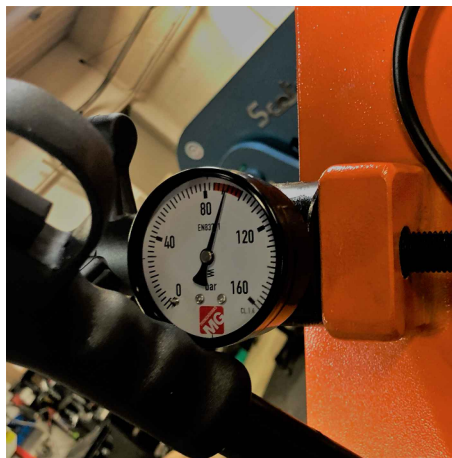
In order to install the band saw blade:

- ✓ Lift the frame guard and remove the blade guide guards.
- ✓ Loosen the tension adjuster.
- ✓ Put on the band saw blade, sending it through the interior of the guides.
- ✓ Re-tighten the tension adjuster to the colored range shown on the gauge: 90-100 bar.
- ✓ Put on all of the guards.
- ✓ Turn the saw manually and use a brush to lubricate in between the two guides, using SAE 30 lubricating oil.

➡ **ATTENTION:** When replacing the band saw blade, always use protective gloves.

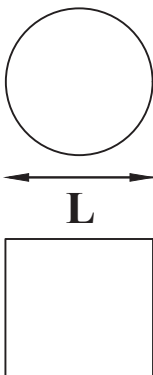
➡ **DANGER:** After changing the band saw blade, put on all guards again.  
It is absolutely prohibited to work with them removed!!

➡ **NOTE :** The Tension Adjuster is a self-contained hydraulic unit. If it won't hold pressure or if it won't adjust properly, it is low or out of oil. Remove pressure gauge and top off with hydraulic oil (ISO 32). If problem persists, inspect the unit for leaks and remove and repair as needed.



## 5.4 SELECTION OF THE BAND SAW BLADE

TO SELECT A BLADE WITH THE PROPER TEETH PER INCH, PLEASE REFER TO THE TABLES BELOW. THE TOP TABLE IS FOR SOLIDS AND THE BOTTOM IS FOR TUBE AND PROFILES.

DIMENSIONS ARE SHOWN AS INCH - MM	
	L (INCH - MM)
	3/4 - 20MM
	3/4 to 1-1/2 - 20/40MM
	1-1/2 to 2-3/4 - 40/70MM
	2-3/4 to 5-1/2 - 70/140MM
	5-1/2 to 7-3/4 - 140/200MM
	7-3/4 to 15-3/4 - 200/400MM
	15-3/4 - 400MM
TEETH PER INCH	
14/14, 8/12	
6/10, 6	
6, 4/6	
4, 3/4	
3/4, 3	
3, 2/3	
1/2, 1.25	

## TUBE SECTION

WALL THICKNESS MM INCH	OUTSIDE DIAMETER OR TUBE OR MAX. PROFILE SECTION LENGTH									
	20 25/32	40 1-37/64	60 2-3/8	80 3-3/16	100 3-15/16	120 4-23/32	150 5-29/32	200 7-7/8	300 11-13/16	
2 5/64	14	14	14	14	14	14	10-14	10-14	8-12	
3 1/8	14	14	10-14	10-14	10-14	10-14	8-12	8-12	6-10	
4 5/32	14	14	10-14	10-14	8-12	8-12	6-10	6-10	5-8	
5 13/64	14	10-14	10-14	8-12	8-12	6-10	6-10	5-8	5-8	
6 15/64	14	10-14	10-14	8-12	8-12	6-10	6-10	5-8	5-8	
8 5/16	14	10-14	8-12	8-12	6-10	6-10	5-8	5-8	4-6	
10 25/64		8-12	8-12	6-10	6-10	5-8	5-8	4-6	4-6	
12 15/32		8-12	6-10	6-10	5-8	5-8	4-6	4-6	3-4	
15 19/32			6-10	5-8	5-8	4-6	4-6	4-6	3-4	
20 25/32				5-8	4-6	4-6	4-6	3-4	3-4	
30 1-3/16					4-6	4-6	3-4	3-4	3-4	
50 1-31/32						3-4	3-4	3-4	2-3	
75 2-61/64							2-3	2-3	2-3	

## 5.5 CUTTING COOLANT

Use only pure, synthetic water-soluble sawing coolant in this saw. The saw holds 4 gallons. Coolant should be mixed in a ratio of one part coolant to seven parts water. Premixing the coolant before adding to the saw is also recommended. Add through the top of the saw. **DO NOT OVER FILL!!**



**CAUTION:** When it is necessary to empty the liquid coolant tank, please properly dispose of the old coolant.



**ATTENTION:** The use of any other kinds of coolants may cause irreparable damage to the machine, as well as diminish the quality of the cut and reduce the life of the saw.

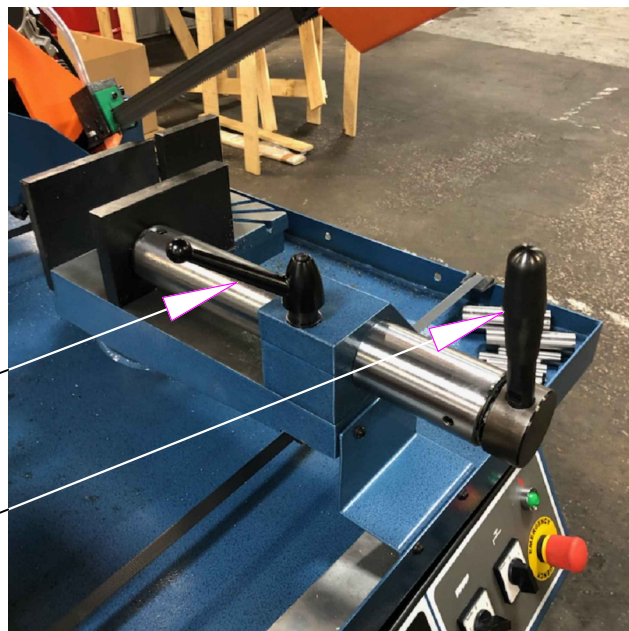
## 6.0 INSTRUCTIONS FOR USE

### 6.1 VISE ADJUSTMENT AND MITER LEVER

1. The vise is opened and closed using lever #1.  
Use lever #2 to adjust the vise jaws to less than 1/4 inch (6mm) from the material being clamped.

2

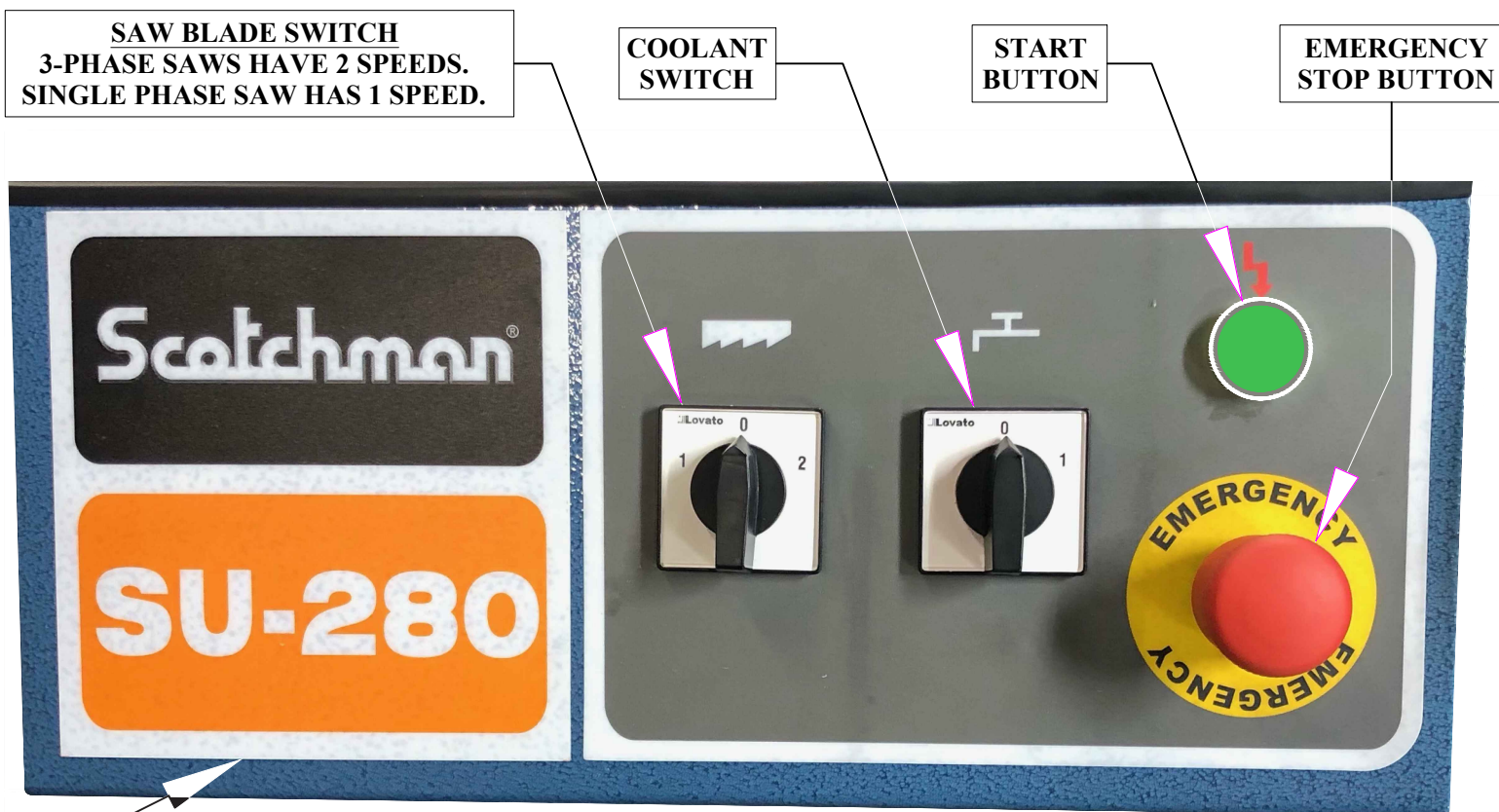
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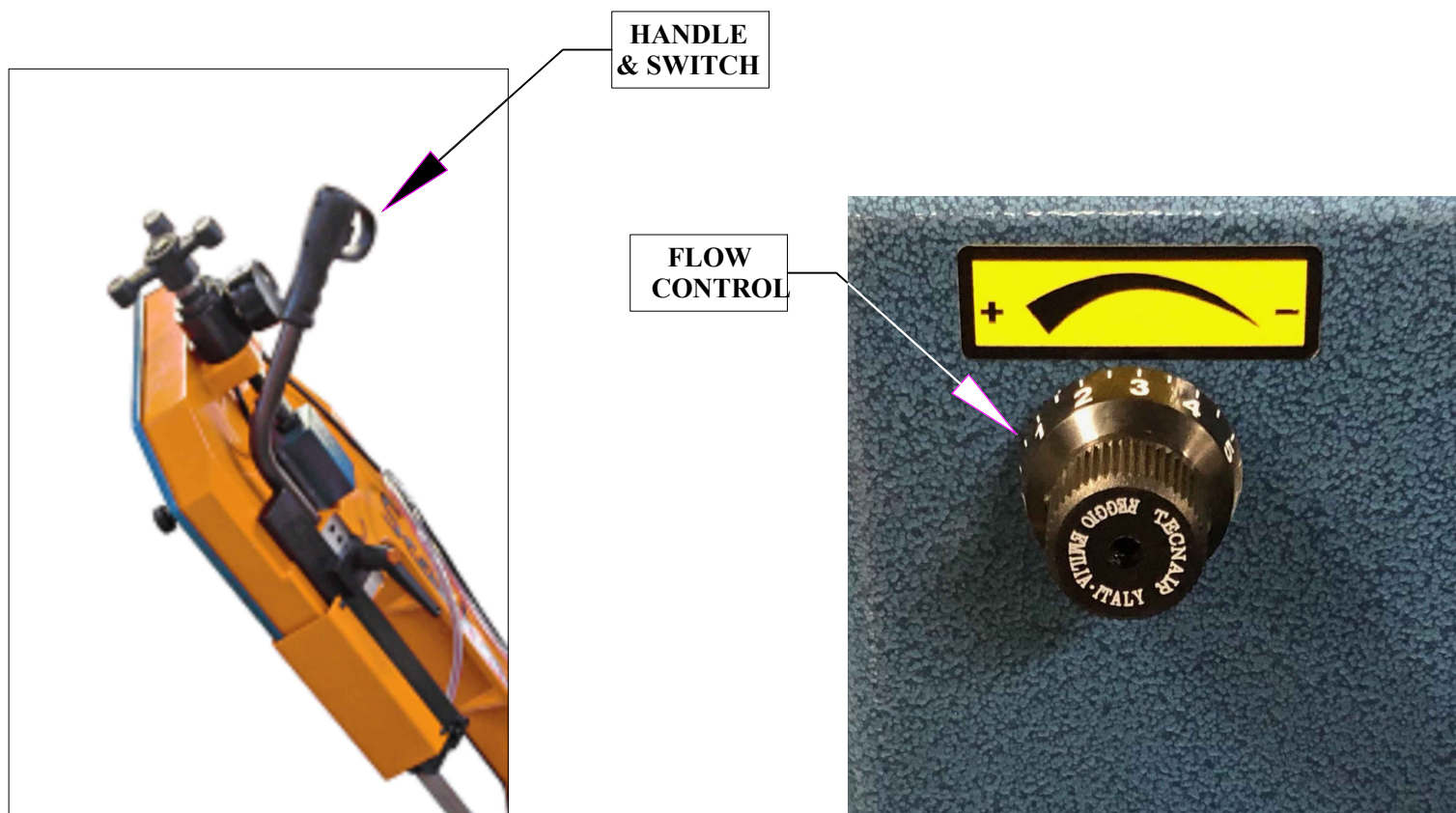
2. Use lever #3 to adjust the angle of the cut.  
Move the lever toward the rear of the machine to loosen.  
Now the blade angle can be changed.  
Move lever toward the front of the machine to lock the blade in place.



## 6.2 MACHINE CONTROLS



**P/N 3057 - Legend Plate for SU-280-G - Includes only left side (Scotchman/SU-280)**  
**THE CONTROL PANEL IS LOCATED ON THE FRONT OF THE MACHINE.**



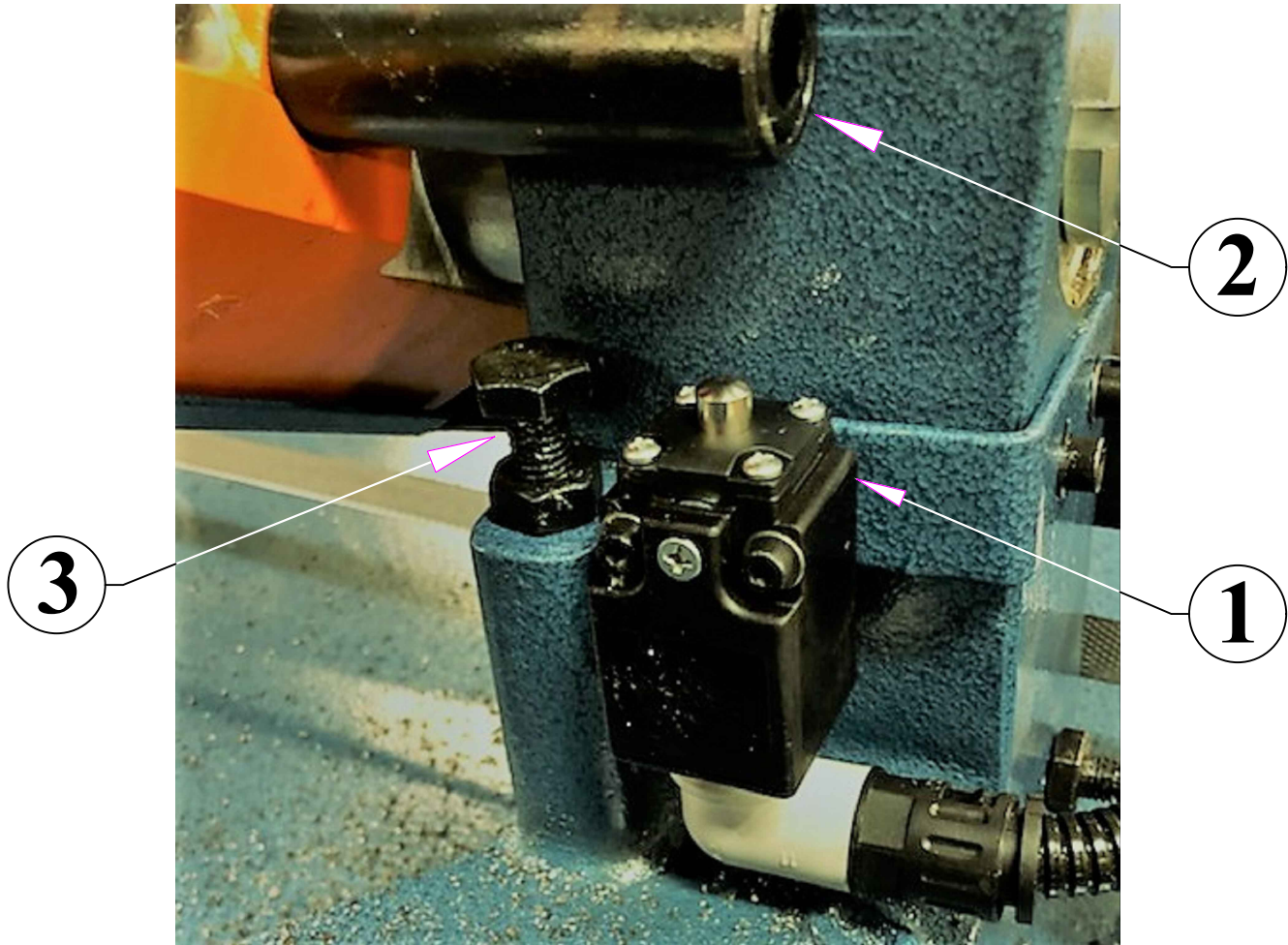
**THE SWITCH ON THE HANDLE STARTS THE SAW BLADE.**

**FLOW CONTROL IS LOCATED TO THE RIGHT OF THE CONTROL PANEL AND CONTROLS THE SAWS DESCENT SPEED.**

## 6.3 RAISING AND LOWERING THE PIVOT STOP

The electric switch (1) is activated when the moving cylindrical stop (2) contacts it. The cylindrical stop should contact the switch first and turn off the saw. The cylindrical stop should then rest on top of the adjustable hard stop (3) that completely stops the downward travel of the saw. The saw head will stay in this position until the operator manually returns the head to the up position.

When adjusted correctly, the saw should stop when the blade is just below the surface of the saw bed. Check this to make sure it is set correctly. This is set at the factory and shouldn't need to be adjusted.



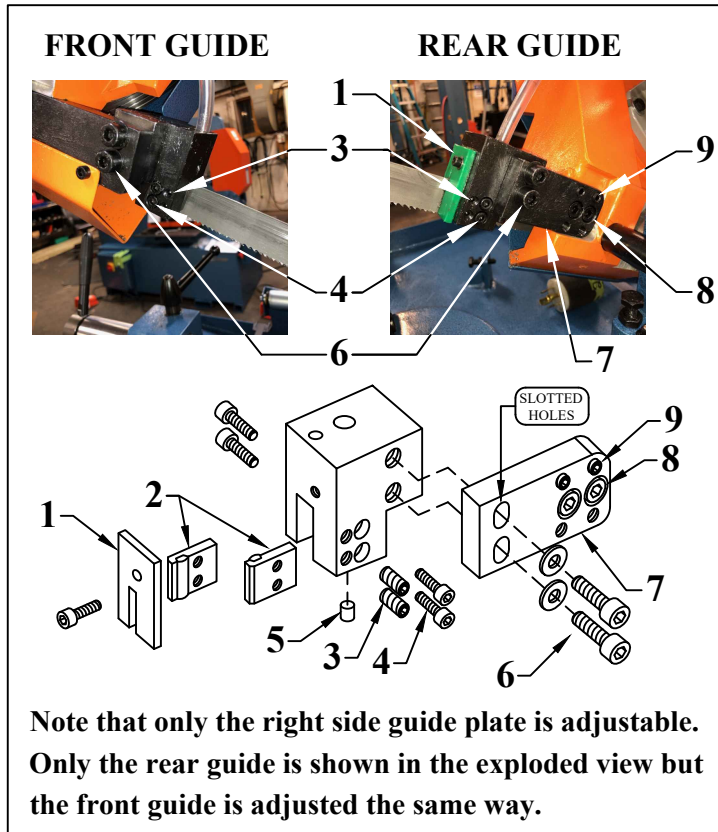
➡ **WARNING:** When the saw is cutting, it is important that the saw is fed into the material at a constant rate, with no sharp changes of down pressure. If the saw becomes jammed in the material, release the rotation control and raise the head.

➡ **IMPORTANT:** Always make sure the material is clamped securely in the vise jaws.



## 6.4 ADJUSTMENT OF CUTTING BLADE GUIDES

In order to obtain a square cut, you must make sure that there is a distance of .035 thousandths of an inch (0.9 mm) between the side guide plates (2), so that they are all in contact with the blade. To adjust this distance the blade must be removed. The exploded view below the front and rear image is to show all of the parts and their locations. Follow the instructions given below:



1. Remove the nylon blade protector (1). It is held in place with a small bolt and washer.
2. Use a feeler gauge and check between the side guide plates (2) to see what the clearance is. The clearance should match the the blade thickness. 35 thousandths of an inch (.035") is the most common size for this machine.
3. To adjust the clearance, use the two set screws (3). The gauge must slide smoothly but without wobbling. If a gauge is not available, a piece of the old blade may be used. The mounting bolts (4) may also need to be slightly loosened and re-tightened.
4. The upper guide plate (5) should have 4 thousandths of an inch (.004") clearance

between it and the top of blade. Too much pressure can cause the top of the blade to mushroom and become wider. To prevent this, the whole guide assembly can be adjusted with two bolts (6) as the holes are slotted for adjustment.

5. The rear guide support (7) can also be adjusted via the mounting bolts (8) and set screws (9).

This is set at the factory and normally does not need adjusting.

## 6.5 CHANGING THE GUIDE PLATES

Over time, the side plates (2) and the upper plate (5) may need to be replaced. To do so, follow the steps below:

1. Loosen the screws (4) on both sides of the guide and remove the guide plates.
2. Tap the upper plate (5) through the hole on top until it comes out of its housing.
3. Fit the upper plate (5) up into the housing and then the side plates (2).
4. Adjust the lateral clearance of the plates, as explained in the previous section,

**ADJUSTMENT OF CUTTING BLADE GUIDES.**

Also see  
SECT. 11.4 GUIDES  
(EXPLODED VIEW)  
for more detailed  
information

## **7.0 TROUBLESHOOTING/CORRECTIVE MAINTENANCE**

<b><u>PROBLEM</u></b>	<b><u>POSSIBLE CAUSES</u></b>
<b>The machine does not start.</b>	<b>Check the incoming power supply.</b> <b>Motor fuse has blown.</b> <b>2A fuse has blown. (located inside the Control Panel)</b> <b>Check the operating contactor, start-up control and transformer. (Above located inside the Control Panel)</b> <b>The rear arc guard has not activated the safety micro-switch, or this is not working properly.</b>
<b>Bad quality or out-of-square cut.</b>	<b>Tension too low or too high. See Section 5.3</b> <b>Condition of the saw blade.</b> <b>Coolant liquid used. We recommend pure, synthetic coolant mixed 7 to 1 with water.</b> <b>Condition of the blade guide plates.</b> <b>Guide adjustment. See Section 6.4</b>
<b>Excessive wear on blade.</b>	<b>Tension too low or too high. See Section 5.3</b> <b>Guide plates worn.</b> <b>Excessive pressure from upper plate. See Section 6.4</b> <b>Feed Rate is too high or batch cutting.</b> <b>Quality or pitch of blade unsuitable for the material or section to be cut.</b> <b>Coolant liquid used. We recommend pure, synthetic coolant mixed 7 to 1.</b>
<b>Noises when saw rotates.</b>	<b>State of blade guides. See Section 6.5</b> <b>Excessive tension on the saw blade.</b> <b>(4) Bearings # 57 Section 11.2</b> <b>State of the cutting blade.</b>
<b>The pressure gauge does not reach 100 bar.</b>	<b>Remove pressure gauge and top off with hydraulic oil (ISO 32).</b> <b>Check for oil leaks, state of internal flanges, tensing mechanism, flywheel and bearing.</b>

## **8.0 MAINTENANCE SCHEDULE**

### **8.1 TYPE & FREQUENCY OF MAINTAINENCE**

<b>LUBRICATION POINTS</b>	<b>TYPE OF GREASE/OIL</b>	<b>FREQUENCY</b>
<b>Pivot Pin Sect. 11.2 #16</b>	<b>Bearing grease</b>	<b>Yearly</b>
<b>Front and Rear Blade Guides</b>	<b>SAE 30</b>	<b>Weekly</b>
<b>Bearings Sect. 11.2</b>	<b>Bearing grease</b>	<b>Weekly</b>
<b>CHECK</b>	<b>MATERIALS TO USE</b>	<b>FREQUENCY</b>
<b>Saw blade tension</b>	<b>90-100 BAR (see gauge)</b>	<b>Daily</b>
<b>Level of coolant liquid</b>	<b>Top up with WHITE COOLANT</b>	<b>Daily</b>
<b>Cleanliness of machine</b>	<b>Diluted mild degreasing fluid</b>	<b>Weekly</b>
<b>Cleanliness of coolant tank</b>	<b>Damp cloth, brush</b>	<b>Monthly</b>
<b>Condition of nylon shaving guard Sect. 11.4</b>	<b>Replace, if necessary</b>	<b>Monthly</b>
<b>Saw blade guides</b>	<b>Sections 6.5 &amp; 11.4</b>	<b>Monthly</b>

## **9.0 GENERAL RULES & SAFETY CHECKS**

- ▶ **Before using the machine, check the effectiveness and perfect operation of the safety devices. Check that the moving parts of the machine are not blocked, that there are no damaged parts and that all of the machine components are positioned correctly and that they work properly.**
- ▶ **Verify that the motor-guard switch works correctly by testing it during a no-load cycle of the machine.**
- ▶ **It is absolutely prohibited to alter any safety device.**
- ▶ **It is absolutely prohibited to work without the guards in place.**
- ▶ **It is mandatory to use gloves when changing the saw blade.**
- ▶ **Always use appropriate PPE (Personal Protective Equipment).**
- ▶ **Before starting work, the operator must be sure to remove all tools and wrenches that have been used for any maintenance or adjustments.**
- ▶ **In the event of fire, use powder extinguishers and disconnect the machine from the electric system.**

## **9.1 RECOMMENDATIONS FOR SAFETY, MAINTENANCE, & REPAIRS**

- ▶ Repairs shall be made exclusively by qualified personnel; using original replacement parts. If not, the machine may be damaged and the user may be injured.
- ▶ Maintenance and cleaning of the machine must be performed regularly. The life of the machine and its optimal operation depend on it.

If the machine is broken down or the saw blade must be replaced, a lock must be placed on the protection switch and the keys must be placed under the care of qualified personnel.

- ▶ Before performing any repairs on electrical devices, disconnect the plug from the power supply.
- ▶ In the event that extension cords are used, ensure that the cable used has the appropriate gauge for the machine's power.
- ▶ Whenever any part has to be replaced, use an original replacement part and, if applicable, use the oil recommended by the manufacturer.

⊗ **NOTE:** In case of any doubt or problem, please call us at the number below.  
SCOTCHMAN IND. Call: 1-800-843-8844

➔ **ATTENTION:** The manufacturer hereby guarantees the supply of each one of the parts or components for at least three years from the manufacturing date of the machine.

### **SU-280-G Band Saw**

**NOTE:** THERE IS A STORAGE  
AREA IN THE BASE OF THE  
SAW. THE DOOR LATCH  
DOES NOT LOCK AND CAN  
BE OPENED WITH A  
SCREWDRIVER OR A COIN.



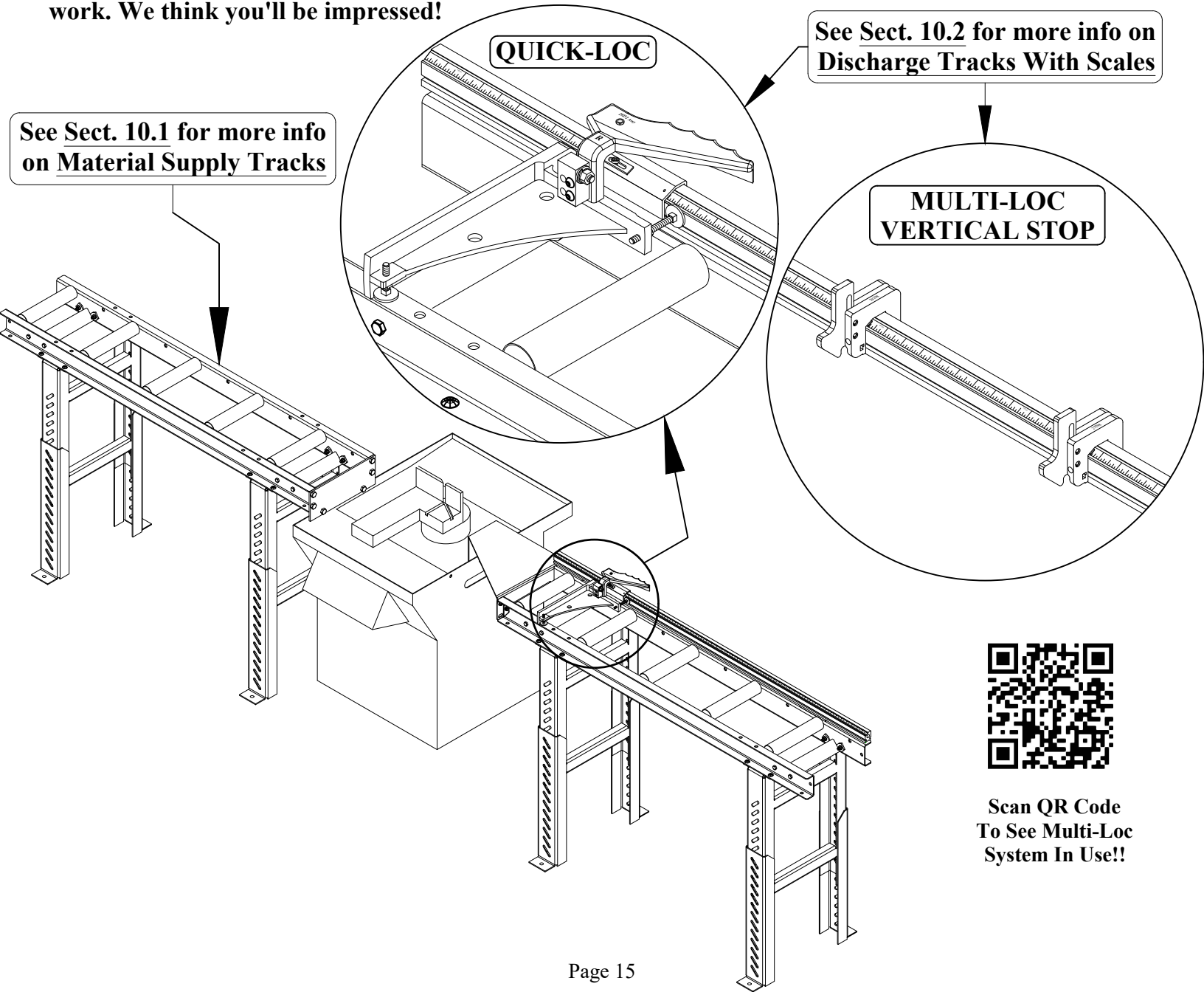
## 10.0 ACCESSORIES

Scotchman has several accessories to help with your sawing needs; the first of which are our Material Supply Tracks. They are available in 5' and 10' lengths and can be assembled to as long as needed.

The same is true for our Discharge Tracks. They are available with either our Quick-Loc or Multi-Loc measuring systems, which will save you time and increase your productivity.

The Quick-Loc can be changed quickly from one length to another. It has a 10" extension arm that can be used to cut short lengths closer to the blade. The whole stop assembly can be flipped up, out of the way, if needed.

The Multi-Loc can be set up to cut several lengths from one bar of material. These simple and efficient measuring systems can be used in many applications: drilling - tapping - punching - shearing, as well as sawing. These tracks and measuring systems can also be purchased in either Left or Right hand configuration. Please visit [Scotchman.com](http://Scotchman.com) to see a demonstration of how well our measuring systems work. We think you'll be impressed!



Scan QR Code  
To See Multi-Loc  
System In Use!!



# SCOTCHMAN RG DIGITAL QUICK STOP



Scan QR Code  
to see Digital  
Quick Stop  
video!!



This Digital Quick Stop is an entry level programmable stop and is available in 8' and 12' lengths. It is priced right, yet very durable. Setup is as easy as entering the desired cut length and pressing go!

SHOWN WITH  
OUR COLD SAW.  
QUICK STOP IS  
AVAILABLE FOR  
THE SU-280-G.

CALL TOLL FREE  
1-800-843-8844

email:  
[info@scotchman.com](mailto:info@scotchman.com)

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

## SCOTCHMAN RG STOP/PUSHER SYSTEM

The RG Stop/Pusher System can be used as a "go to" stop or as a semi-automatic push feed system. It uses Windows-based technology with touch screen controls.



The system feeds from left to right only. Available in lengths from 8' to 30'. The Stop/Pusher system can be paired with the punch stations of the Scotchman Ironworkers and Scotchman Cold Saws.



Scan QR Code  
to see RG  
Stop/Pusher  
video!!

SHOWN WITH  
OUR COLD SAW.  
THE STOP/PUSHER  
SYSTEM IS  
AVAILABLE FOR  
THE SU-280-G.

## **10.1 MATERIAL SUPPLY TRACKS**

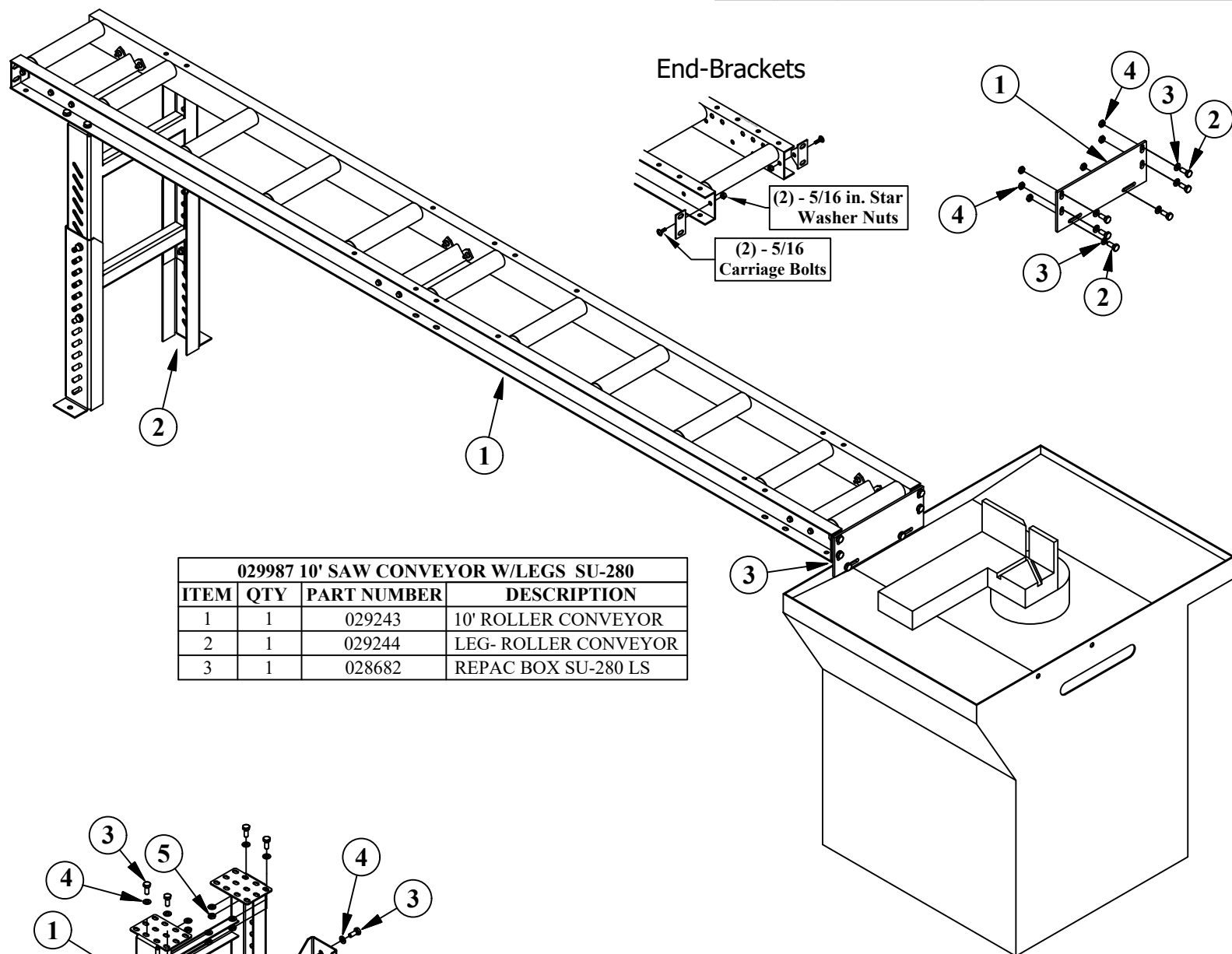
A 10' and 20' roller supply track is an available option for this saw. They can be bolted to the input side of the saw (either the left or right hand side) to support longer pieces of material. If a longer supply track is needed, these can be bolted together, end to end. The ten foot supply track shown here bolts to the left side of the machine, to the base casting.

**SEE THE DRAWING ON THE FOLLOWING PAGE.**

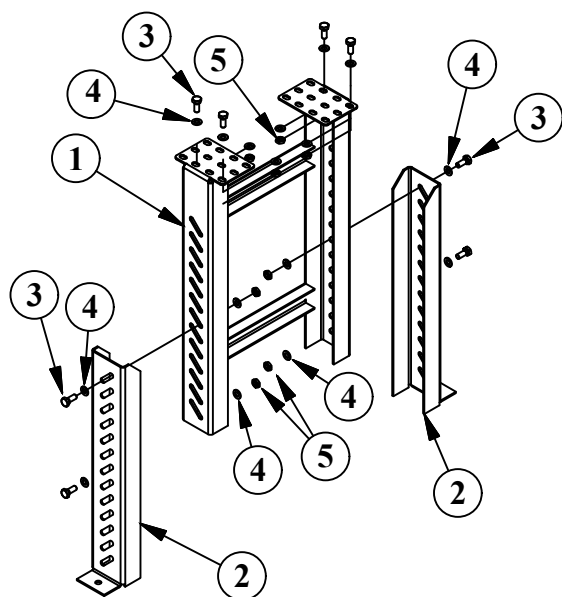
- 1. Attach the Conveyor Connector to the left side of the base casting of the saw, as shown on the next page. The Right-Side version has a different Support Bracket, but everything else is the same.**
- 2. Bolt the Upper Leg to the Conveyor. The easiest way is to lay the Conveyor on the floor, top-side down, and bolt the Upper Leg on. See the Upper parts group. The Upper Leg can be positioned anywhere along the Conveyor, but further from the saw is better.**
- 3. Measure from the floor up to the Top of the Conveyor Connector.**
- 4. Bolt the Lower Leg to the Upper Leg, using this measurement. With the Conveyor still top-side down, measure up from the floor to the bottom of the Lower Leg - where it will contact the floor - and bolt the Lower Leg on. Final adjustment is done when it is attached to the saw.**
- 5. With the Conveyor/Leg Assembly right-side up, bolt it to the saw via the Conveyor Connector, as shown on the next page. End Brackets may have to be mounted on the Conveyor as shown, first.**
- 6. Adjust the Leg so that the Conveyor is Level and Square to the saw. Make sure that the rollers on the Conveyor are the same height as the Saw Bed. Adjust where needed.**
- 7. The Legs may be anchored to the floor, using the mounting bolts provided.**

**P/N 029994 - 5' Saw Conv. W/Legs SU-280 LS**  
**P/N 029987 - 10' Saw Conv. W/Legs SU-280 LS**  
**P/N 029988 - 20' Saw Conv. W/Legs SU-280 LS**  
**P/N 029993 - 5' Saw Conv. W/Legs SU-280 RS**  
**P/N 029989 - 10' Saw Conv. W/Legs SU-280 RS**  
**P/N 029995 - 20' Saw Conv. W/Legs SU-280 RS**

028682 REPAC BOX SU-280 LS			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	028636	CONVEYOR CONNECTOR
2	6	203210	M10x25 DIN933 HHCS
3	6	214012	M10 DIN125 FLAT WASHER
4	6	208012	M10 DIN 934 HEX NUT



029987 10' SAW CONVEYOR W/LEGS SU-280			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	029243	10' ROLLER CONVEYOR
2	1	029244	LEG- ROLLER CONVEYOR
3	1	028682	REPAC BOX SU-280 LS



029244 LEG-ROLLER CONVEYOR			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	29244.2	UPPER LEG
2	2	029244.1	LOWER LEG
3	8	203210	M10x25 DIN933 HHCS
4	16	214012	M10 DIN125 FLAT WASHER
5	8	208012	M10 DIN 934 HEX NUT



## **10.2 DISCHARGE TRACKS WITH SCALES**

Roller discharge tracks, equipped with either a Right or Left-Hand Quick-Loc, are available in 5' and 10' lengths. Part numbers are shown on the next page.

The discharge tracks allow fast set-up and accuracy for various lengths of cuts. Explained in detail below and shown on the next page is our popular Quick-Loc measuring system mounted to our roller conveyor.

**SEE THE DRAWING ON THE FOLLOWING PAGE.**

1. Bolt the Support Bracket to the right side of the base casting, with one of the (3) M-10 bolts, washers and nuts. The other two are used to attach the Conveyor to the Support Bracket. The above are contained in the P/N 028656 - REPAC BOX SU-280 RS (Right-Side). P/N 028682 REPAC BOX SU-280 LS (Left side) has a different Support Bracket, but everything else is the same.
2. Bolt the Upper Legs to the Conveyor. The easiest way is to lay the Conveyor on the floor, top-side down, and bolt the Upper Legs on. The Legs can be mounted anywhere along the Conveyor, but should be mounted towards the end of it.
3. Use a straight edge and hold it flat down on the bed of the saw. Measure from the floor up to the bottom of the straight edge. Use this measurement when bolting the Lower Legs to the Upper Legs. With the Conveyor still top-side down, measure from the floor up to the bottom of the lower legs -where they will contact the floor - and bolt the Lower Legs on. Final adjustment is made when the Conveyor is mounted to the Saw.
4. With the Conveyor/Leg Assembly right-side up, bolt it to the Support Bracket, as shown on the next page. End Brackets may have to be mounted on the Conveyor as shown, first. It is Very Important that the Conveyor is Square and Level to the saw. Make adjustments where needed.
5. Next, the (4) Aluminum Brackets should be bolted to the bottom of the Aluminum Rail. The Carriage Bolt goes in the Center Slot of the Aluminum Bracket and is encapsulated when the Bracket is bolted to the bottom of the Rail - but still moves, allowing adjustment. Two Brackets are located 10-1/2" in from the ends of the Aluminum Rail and two Brackets are 10-1/2" out from the center of the Aluminum Rail. Make sure that the serrations (or teeth) on the Aluminum Rail face towards the back and insert the Carriage Bolts in the holes in the Conveyor. Use the Flat Washers and loosely thread the Nuts onto the Carriage Bolts. Make sure that the Aluminum Rail is Square to the Saw and the Conveyor; then, tighten the nuts.
6. Next, assemble the Quick-Loc Arm as shown in the drawing. The P/N 029114 - 10" Quick-Loc Arm is for cutting short pieces and is not needed for now. Do not over-tighten Item 4 - Shoulder Bolt. Item 3 - 12 x 2 Extension - should flip up with a little tension. When the Quick-Loc Arm Assembly is assembled, squeeze the handle and slide it onto the Aluminum Rail. Make sure that Items 1 and 10 are adjusted correctly. 1 is to limit the movement of the Stop when the material is pushed against it. 10 is to keep the Stop Level.
7. Next, the Measuring Tape needs to be applied to the Aluminum Rail and should be done as follows: Securely set the Quick-Loc Arm about 20" from the Saw Blade. Cut a piece of material at this length, making sure that there are no burrs or metal chips on the material. This is a critical cut as it will be used to determine the position of the Measuring Tape. Do NOT move the -L Stop Assembly after you have made the cut. Measure the length of the cut. Slide the Measuring Tape under the Q-L Stop Assembly in the groove on the Aluminum Rail, with backer still attached to the Measuring Tape. Remove 3 or 4 inches of the backer and align the Tape to the Pointer on the Q-L Stop Assembly to the length of the cut material.,
8. Set the rest of the Measuring Tape in the Groove (with backer still on) and remove the Quick-Loc Arm Assembly from the Aluminum Rail. Remove the backer from the rest of the tape and, using only light tension, apply the remainder of the Measuring Tape to the Groove. Trim unused Measuring Tape from the ends of the Aluminum Rail.
9. Reinstall the Quick-Loc Arm Assembly and make a test cut to verify that the Measuring Tape is accurate. The Pointer on the Q-L Stop Assembly is adjustable (about 3/4") if you're off a little. Once you verify that the Measuring Tape is correctly installed, you're done. The Quick-Loc is ready for use.

P/N 029996 - 5' Saw Conveyor RHE Quick Loc SU-280  
P/N 029998 - 5' Saw Conveyor LHE Quick Loc SU-280  
P/N 029990 - 10' Saw Conveyor RHE Quick Loc SU-280  
P/N 029992 - 10' Saw Conveyor LHE Quick Loc SU-280

## Conveyor End-Brackets

028656 - REPAC  
BOX SU-280 RS

**Support  
Bracket**

029206 - 10'  
MAIN RAIL

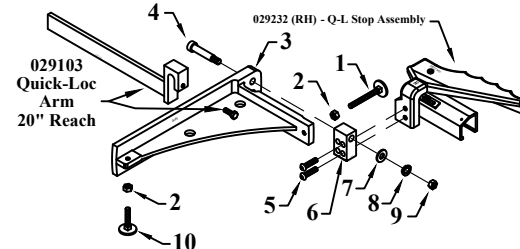
029226 - RH Tape

(2) - 5/16 in. Star  
Washer Nuts

(2) - 5/16  
Carriage Bolts

Tape Detail  
Groove

## 029232 - RH QUICK-LOC STOP ASS'Y



Item	Qty.	Part #	Description
1	1	029183	1/4 - 20 x 2-1/2 Level B
2	2	108010	1/4 - 20 Hex Nut
3	1	029181	12 x 2 Extension Cast Mach.
4	1	029184	3/8 x 1-1/2 Shoulder Bolt
5	2	120027	1/4 - 20 x 1 BHSCS
6	1	029186	Adjustment Block Q/L Ext.
7	1	114010	1/4 Flat Washer
8	1	029185	3/8 SS Lock Washer
9	1	108011	5/16 - 18 Hex Nut
10	1	029182	1/4 - 20 x 1-1/2 Level B

(4) 029174 - QUICK LOC  
CONVEYOR MOUNT PACK

**Aluminum  
Bracket Detail**

029243  
ROLLER  
CONVEYOR

(2) 029244  
LEG ROLLER  
CONVEYOR

## 029244 LEG-ROLLER CONVEYOR

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	29244.2	UPPER LEG
2	2	029244.1	LOWER LEG
3	8	203210	M10x25 DIN933 HHCS
4	16	214012	M10 DIN125 FLAT WASHER
5	8	208012	M10 DIN 934 HEX NUT

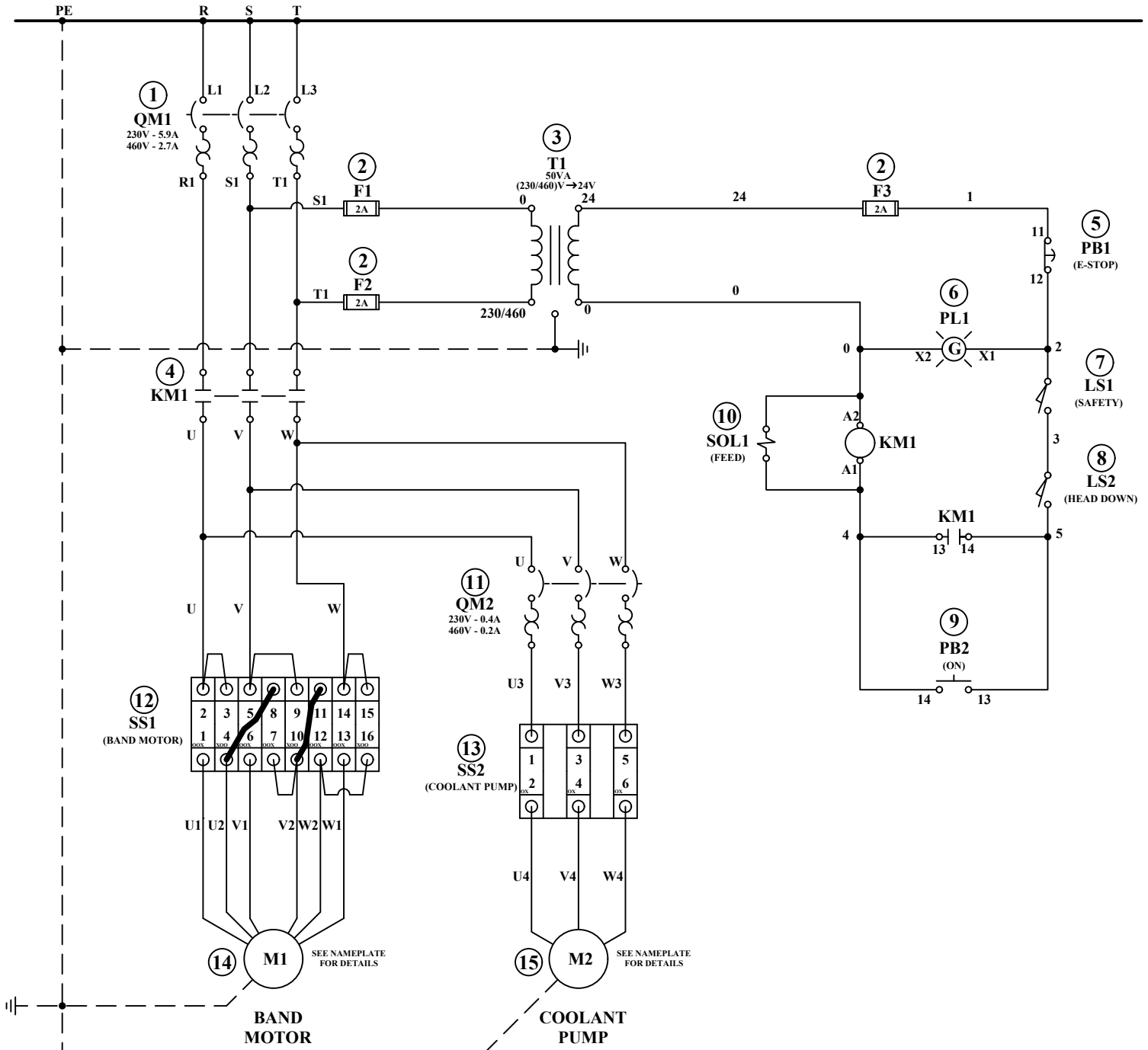
## **11.0 DRAWINGS & SCHEMATICS**

### **11.1 ELECTRICAL SCHEMATIC**

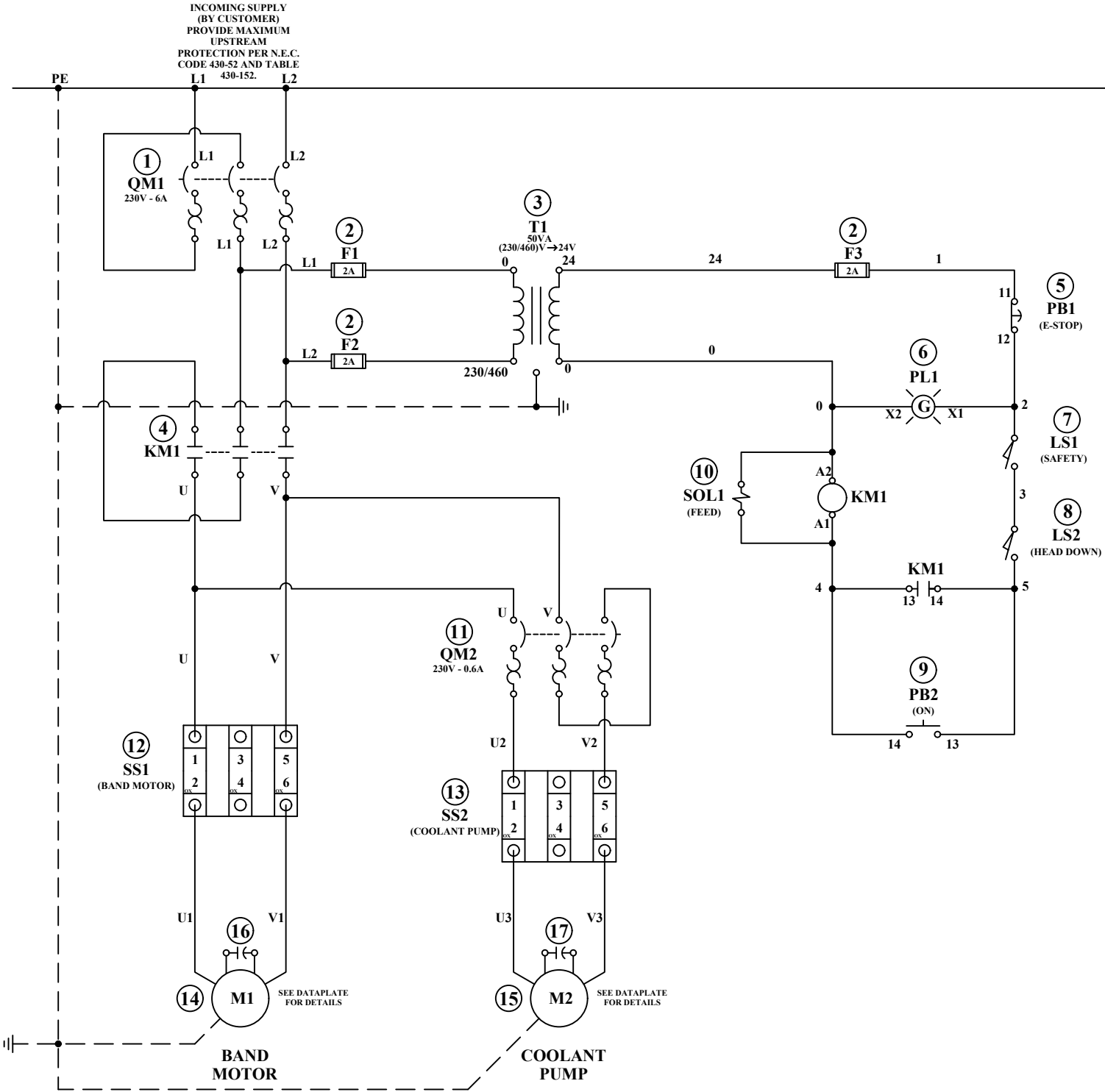
<b>ITEM</b>	<b>DESCRIPTION</b>	<b>PART #</b>
<b>1</b>	<b>BAND MOTOR PROTECT SWITCH 230V 3PH/1PH</b>	<b>000944</b>
<b>1A</b>	<b>BAND MOTOR PROTECT SWITCH 460V 3PH</b>	<b>072522</b>
<b>2</b>	<b>FUSE - 2 AMP</b>	<b>071085</b>
<b>3</b>	<b>TRANSFORMER 50KVA (BLUE)</b>	<b>E000000014</b>
<b>3A</b>	<b>TRANSFORMER 30KVA (GOLD)</b>	<b>E000000021</b>
<b>4</b>	<b>DILM 12-10 24VAC CONTACTOR</b>	<b>060071</b>
<b>5</b>	<b>EMERGENCY STOP BUTTON</b>	<b>011862</b>
<b>5A</b>	<b>NC CONTACT</b>	<b>011867</b>
<b>6</b>	<b>GREEN INDICATOR 24V</b>	<b>E000000030</b>
<b>7</b>	<b>DOOR INTERLOCK SWITCH</b>	<b>E00000D681</b>
<b>8</b>	<b>END OF TRAVEL SWITCH</b>	<b>E000000025</b>
<b>9</b>	<b>HANDLE + SWITCH</b>	<b>2K20000071</b>
<b>10</b>	<b>HYDRAULIC DOWN FEED SOLENOID</b>	<b>4383</b>
<b>11</b>	<b>COOLANT PUMP PROTECT SWITCH - 230V/460V 3PH</b>	<b>048039</b>
<b>11A</b>	<b>COOLANT PUMP PROTECT SWITCH - 230V 1PH</b>	<b>072533</b>
<b>12</b>	<b>BAND MOTOR SWITCH 3PH</b>	<b>2K30000141</b>
<b>12A</b>	<b>BAND MOTOR SWITCH 1PH</b>	<b>2K30000131</b>
<b>13</b>	<b>COOLANT PUMP SWITCH</b>	<b>2K30000131</b>
<b>14</b>	<b>1.5HP 1500 RPM MOTOR - 460V 3PH</b>	<b>2K280000M1</b>
<b>14A</b>	<b>1.5HP 1500 RPM MOTOR - 230V 3PH</b>	<b>2K280000M2</b>
<b>14B</b>	<b>1.5HP 1500 RPM MOTOR - 230V 1PH</b>	<b>2K280000M3</b>
<b>15</b>	<b>COOLANT PUMP</b>	<b>2K20000051</b>
<b>16</b>	<b>BAND MOTOR 1PH CAPACITOR</b>	<b>7288</b>
<b>17</b>	<b>COOLANT PUMP 1PH CAPACITOR</b>	<b>2K20000361</b>

# THREE PHASE SCHEMATIC

INCOMING SUPPLY  
(BY CUSTOMER)  
PROVIDE MAXIMUM  
UPSTREAM  
PROTECTION PER N.E.C.  
CODE 430-52 AND TABLE  
430-152.

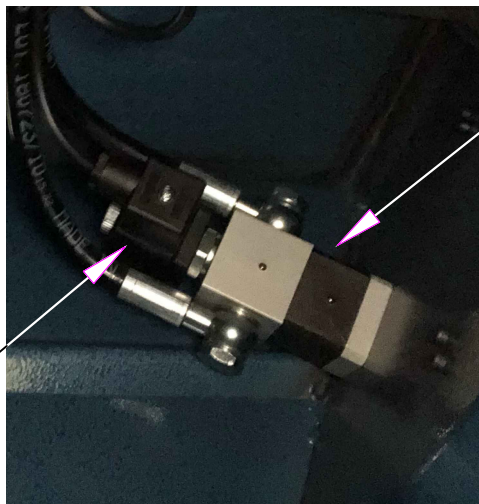


# SINGLE PHASE SCHEMATIC



## **11.2 ELECTRICAL COMPONENTS LOCATION**

**Remove a bolt on the left side of the control panel and it will swing out allowing access to the electrical components.**



**FLOW  
CONTROL  
VALVE**

**SOLENOID**

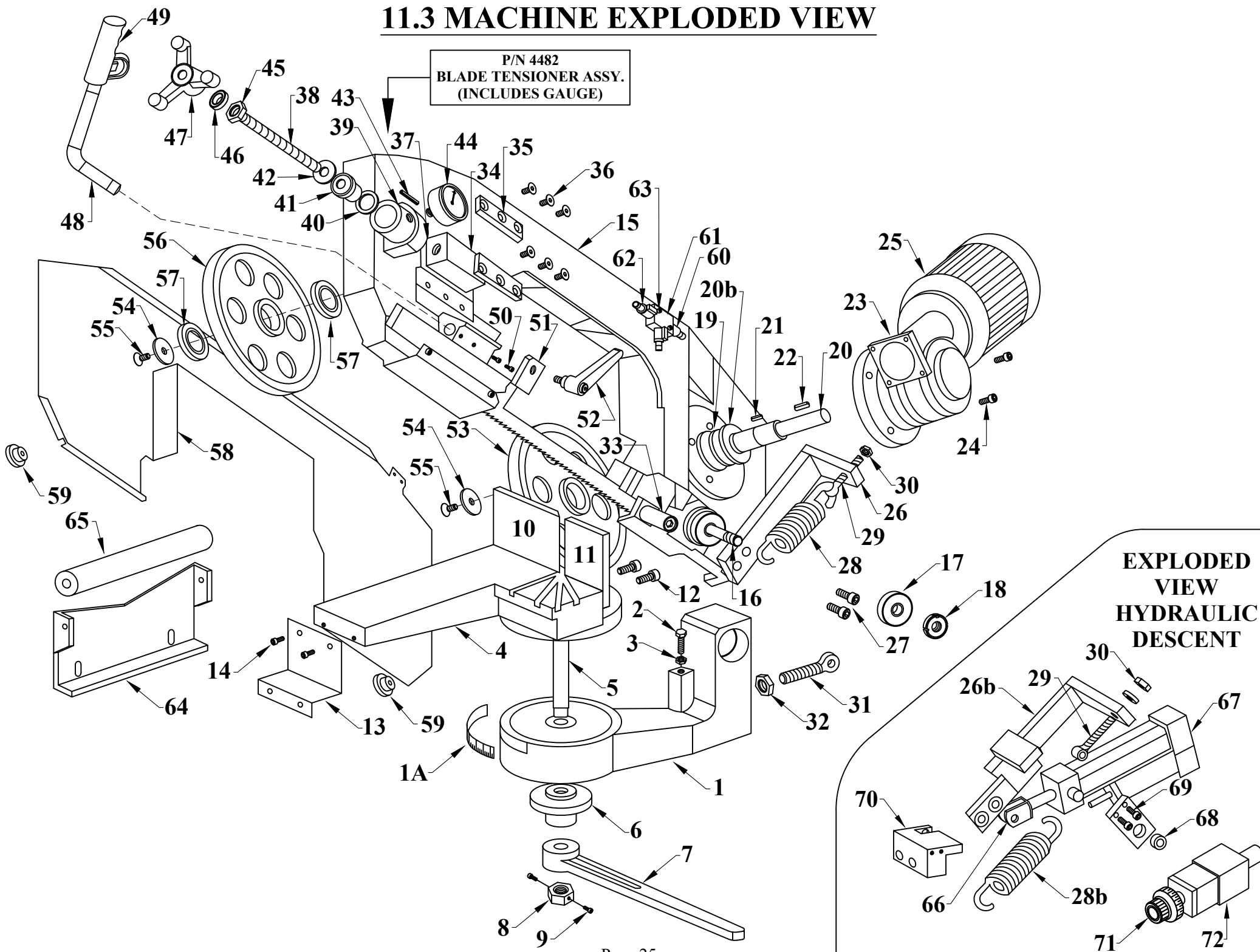
**The flow control valve has an electrical solenoid attached to it. The valve and solenoid is located inside the cabinet and is shown in the image on the left.**

**There is a safety switch for the saw blade cover. It is located toward the rear and on top of the saw as shown in the image on the right. The saw will not run with the cover removed.**



**SAFETY  
SWITCH**

# 11.3 MACHINE EXPLODED VIEW



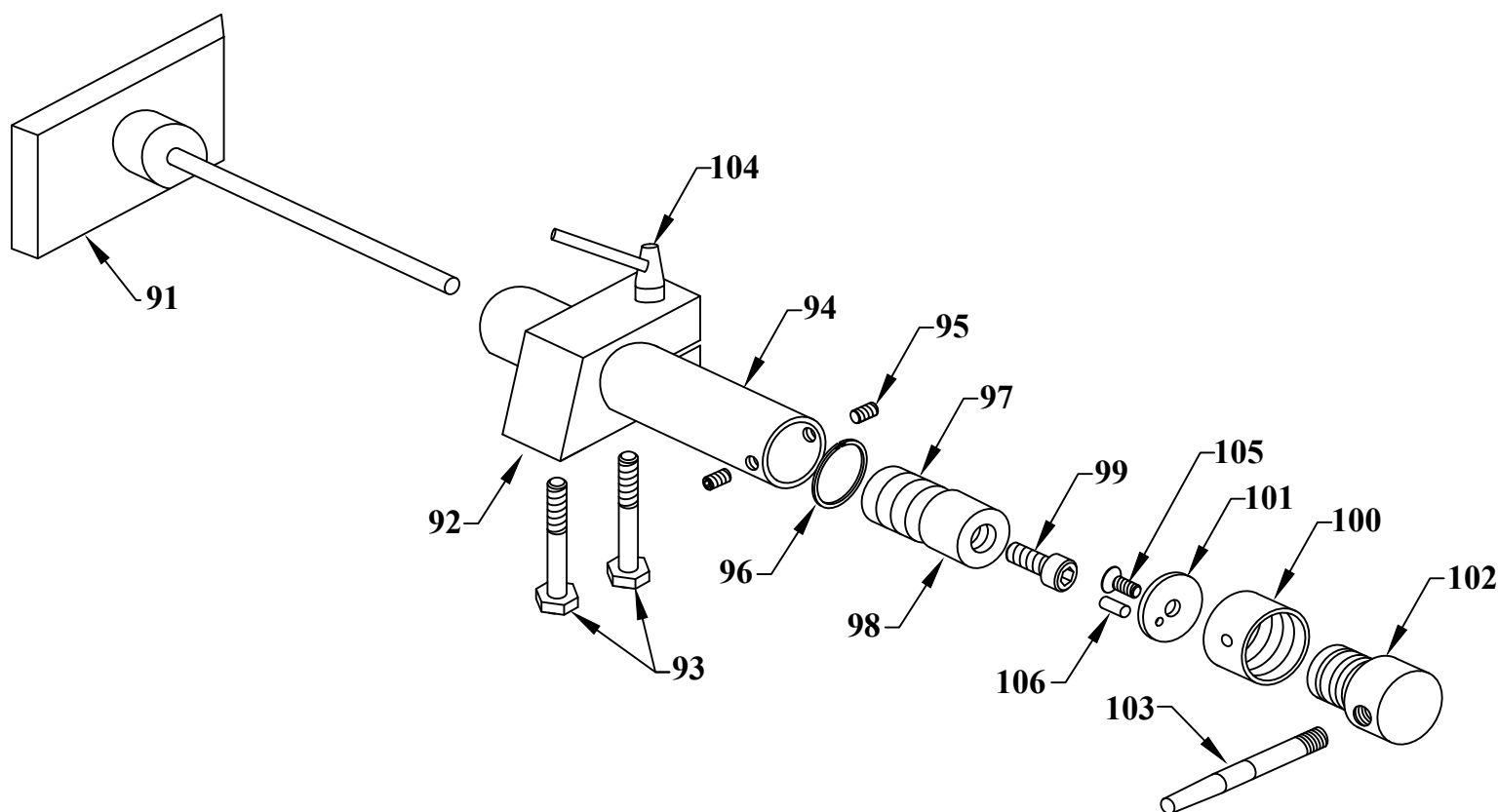
ITEM	DESCRIPTION	PART #	ITEM	DESCRIPTION	PART #
1	PEDESTAL SU-280	2K28000061	34	TENSION ADJUSTER CARRIAGE	2K28000291
1A	SU-280 PIVOT SCALE	4110	35	ADJUST GUIDES	2K20000461
2	M10 X 40 DIN 933 SCREW	TD93310040	36	M8 X 20 DIN7991 SCREW	TZ79910820
3	NUT DIN 934 M10	208012	37	M16 DIN 934 NUT	TD93400016
4	CLAMP BASE SU-280	2K28000011	38	TENSION SHAFT M16 X 215	2K26000101
5	BLOCKADE AXIS K-280	2K28000021	39	TENSION CYLINDER-BODY ONLY	2K37005311
6	ECCENTRIC LOCK LEVER SU280	2K20000681	40	SEAL FOR SU-280 TENSIONER Ø22X28X4.5	2K26000741
7	BLOCKADE LEVER DEGREES	2K28000281	41	TENSION CYLINDER PISTON	2K37005321
8	BLOCKADE NUT DEGREES	2K28000671	42	SEAL FOR SU-280 TENSIONER Ø35X45X6	2K26001741
9	M6 X 10 DIN 912 SCREW	TD91206010	43	ROLL PIN	T00000MB14
10	LEFT REST PLATE SU-280	2K28000171	44	MANOMETER 0 - 160-1/4" - <sup>Tension Gauge</sup>	2K30000121
11	RIGHT REST PLATE SU-280	2K28000181	45	SPRING SOCKET SU-280	2K3700MU31
12*	M12 X 20MM DIN933 HHCS	201405	46	51103 SKF BEARING	2K26000721
13	CLAMP FIX PLATE	2K28000151	47	BLADE TENSION HANDLE SU-280	B000000140
14	M6 X 16 DIN 912 SHCS	221010	48	HANDLE SHAFT SU-280	2K20000061
15	ALUMINUM ARCH K-280	2K28000101	49	SU-280 HANDLE + SWITCH	2K20000071
16	ARCH BOLT	2K28000005	50	M8 X 10 SCREW	TD93308010
17	30206 BEARING	2C30000031	51	MOBIL GUIDE BRAKE	2K20000481
18	M30 X 1.5 GN1804.1 SPANNER NUT	215100	52	ADJUSTABLE HANDLE	B0000P1025
19	6206 2RS BEARING	2K20000291	53	REDUCER WHEEL (no bearings)	2K280003R1
20	REDUCER SHAFT	2K20000151	54	Ø40 X 6 WASHER	2K2600A402
20b	REDUCER BEARING COVER	2K26000121	55	M10 X 20 DIN 7991 SCREW	230207
21	NF KEY 8-7-25	077902	56	TENSION WHEEL (no bearings)	2K280003T1
22	8X7X35 KEYWAY	2K20000451	57	RADIAL BALL BEARING (6006 2RS)	072456
23	GEARBOX 1/30 3PH SU-280-REF# 9115 GEARBOX 1/15 1PH SU-280 REF# 9467	2K26000041 2K20000041	58	ARCH PROTECTION COVER	2K28000331
24	M8 X 25 DIN 933 SCREW	TD93308025	59	KNOB FOR SU-280	B000000005
25	1.5/1.1 HP 3000/1500 RPM 3Ph 460V MOTOR 1.5/1.1 HP 3000/1500 RPM 3Ph 230V MOTOR 1.3 HP 1500 RPM SINGLE Ph 230V MOTOR	2K280000M1	60	1/8" DISTRIBUTOR	N00000RC18
		2K280000M2	61	1/8" Ø12 SCREW	N0000E1218
		2K280000M3			
26	TENSION ADJUSTER, SPRING	2K28000145	62*	1/8" M-H MINI BALL VALVE	2K20000281
26b	TENSION ADJUSTER, SPRING B.H.	2K28000475	63	1/8" Ø8 SCREW	N0000E0818
27	M12 X 20 DIN 912 SCREW	TD91212020	64	ROLLER SUPPORT FOR SU-280	2K28000461
28	SPRING SU-280M ONLY	2K2800R008	65	ROLLER FOR SU-280	2230000111
28b	SPRING SU-280G ONLY	2K20000011	66	ISO 40 FEMALE PIN JOINT	N000004057
29	M10 X 75 DIN 444 SCREW	TD44401075	67	CYLINDER UX32/100 C/REG. T.750MM	C2K3000741
30	M10 DIN 943 HEX NUT	208012	68	A-16-20-15 BRONZE TIP	2K37R02016
31	M12 X 60 DIN 444 SCREW	TD44401260	69	M6 X 20 DIN 912 SCREW	073619
32	M12 DIN934 HEX NUT	208014	70	CYLINDER YOKE SU-280	2K28000501
33	MANUAL END-OF-TRAVEL ARCH	2K28000161	71	SPEED REGULATOR KNOB	1667
33b	MANUAL END OF TRAVEL	2K28016BH1	72	HYDR. DOWN REGULATOR SU-280	CHID00RF132

12\* - Was SHCS

62\* - WAS P/N 2K3700R281

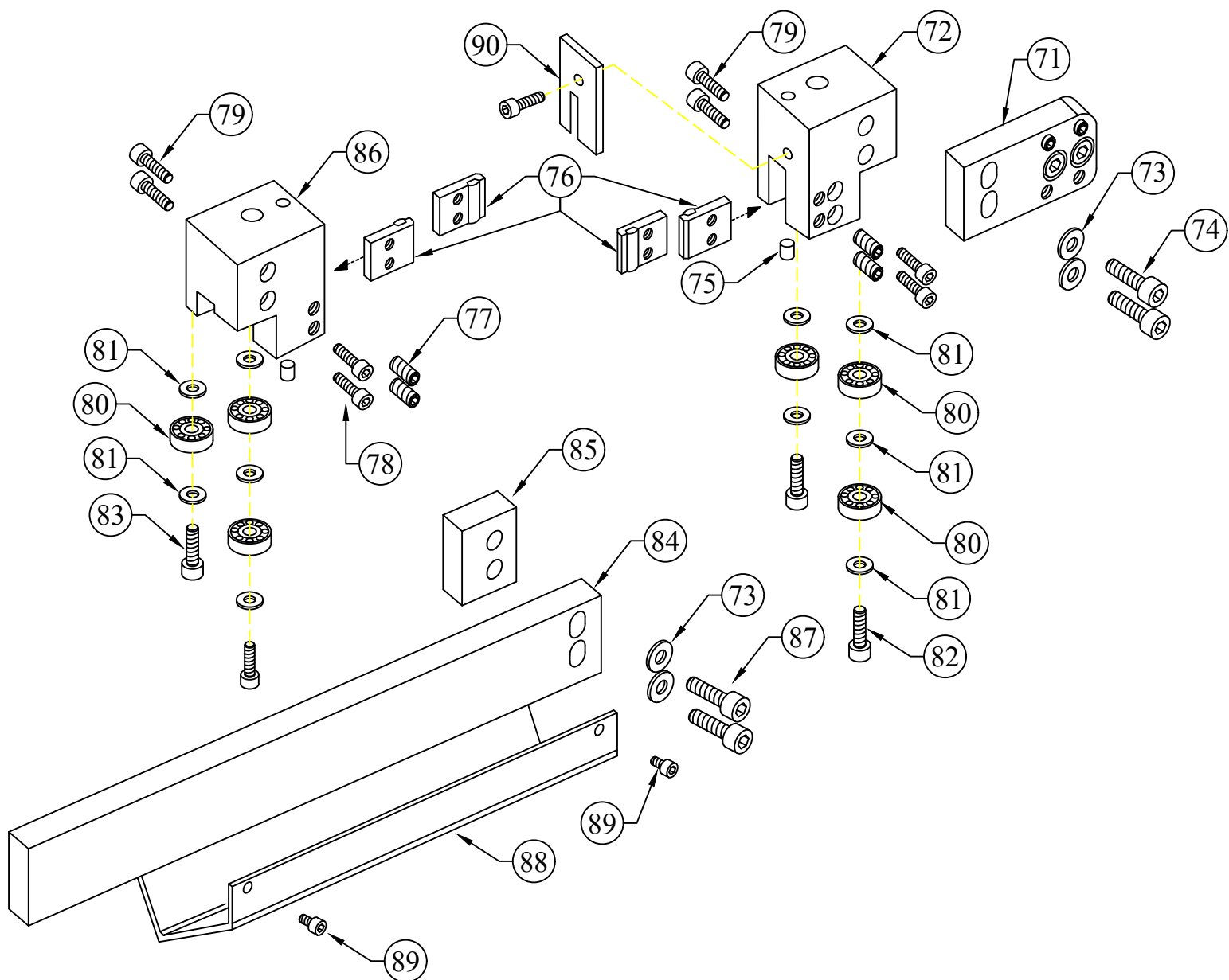


## 11.4 CLAMP (EXPLODED VIEW)



ITEM	DESCRIPTION	PART #	ITEM	DESCRIPTION	PART #
91	SU-280 CLAMP PISTON	2K28000045	99	M10X25 DIN 912 SCREW	221210
92	CAST IRON TWEEZER	2K20000401	100	CAST IRON NUT	2K20000741
93	M14 SCREW	TD93101460	101	TOP ROUND	2K2600A403
94	SU-280 CLAMP	2K28000351	102	CLAMP SCREW	2K20000711
95	M8X10 DIN 913 SCREW	TD91300810	103	CLAMP LEVER	2K20000531
96	Ø50 DIN 472	TD47200150	104	M14 X 50 LEVER	2K20000611
97	VICE SPRING SU-280 SPRING	2K20000091	105	M8 X 20 DIN7991 FSHCS	230110
98	HOOP OF PUSH	2K2600A372	106	Ø 5X20 ELASTIC PIN	TD14810520

## 11.5 GUIDES (EXPLODED VIEW)



ITEM	DESCRIPTION	PART #	ITEM	DESCRIPTION	PART #
71	FIXED GUIDE SUPPORT	2K2800019A	81	M5 SMALL WASHER	214005
72	FIXED GUIDE SU280	2K2600007F	82	M5 x 20 SHCS	073455
73	M8 REG. WASHER	214011	83	M5 x 15 SHCS	YD91205015
74	M8 X25 SHCS	221120	84	MOBILE GUIDE SUPPORT	2K2800019B
75	CARBIDE ROUND GUIDE PLATES	2K26000131	85	GUIDE SEPARATOR	2K280019G1
76	CARBIDE GUIDE PLATES	2K26000301	86	MOBILE GUIDE SU280	2K2600007M
77	M5 X 15 FPSS	TD91305015	87	M8 X 40 SHCS	073690
78	M5 X 20 SHCS	073455	88	GUIDE PROTECTOR SU-280	2K28000311
79	M5 X 10 SHCS	TD91205010	89	M5 X 10 SHCS	TD91205010
80	BEARING 635ZZ	2K2800R001	90	NYLON BAND SAW PROTECTOR	2K26000701