

ELITE

HIGH PERFORMANCE MACHINERY

Operating Instructions and Parts Manual  
Structural Dual-Miter Band Saw, 18"  
Model ECB-1833DMEVS



JET®

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Document No. M-891170

Edition 1 12/2020

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## 1.0 WARRANTY AND SERVICE

JET® warrants every product it sells against manufacturers' defects. If one of our tools needs service or repair, please contact Technical Service by calling 1-855-336-4032, 8AM to 5PM CST, Monday through Friday.

### WARRANTY PERIOD

The general warranty lasts for the time period specified in the literature included with your product or on the official JET branded website, [jettools.com](http://jettools.com).



### WHO IS COVERED?

This warranty covers only the initial purchaser of the product from the date of delivery.

### WHAT IS COVERED?

This warranty covers any defects in workmanship or materials subject to the limitations stated below. This warranty does not cover failures due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, improper repair, alterations or lack of maintenance.

### HOW TO GET TECHNICAL SUPPORT

Please contact Technical Service by calling 1-855-336-4032. Please note that you will be asked to provide proof of initial purchase when calling. If a product requires further inspection, the Technical Service representative will explain and assist with any additional action needed. JET has Authorized Service Centers located throughout the United States. For the name of an Authorized Service Center in your area call 1-855-336-4032 or use the Service Center Locator on the JET website.

### **MORE INFORMATION**

JET® is constantly adding new products. For complete, up-to-date product information, check with your local distributor or visit the JET website, [jettools.com](http://jettools.com).

### **HOW STATE LAW APPLIES**

This warranty gives you specific legal rights, subject to applicable state law.

### **LIMITATIONS ON THIS WARRANTY**

JET LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD OF THE LIMITED WARRANTY FOR EACH PRODUCT. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

JET SHALL IN NO EVENT BE LIABLE FOR DEATH, INJURIES TO PERSONS OR PROPERTY, OR FOR INCIDENTAL, CONTINGENT, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF OUR PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

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NOTE: JET is a division of JPW Industries, Inc. References in this document to JET also apply to JPW Industries, Inc., or any of its successors in interest to the JET brand.



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### 3.0 IMPORTANT SAFETY INSTRUCTIONS

#### Warning - To reduce risk of injury:

1. Read and understand the entire owner's manual before attempting assembly or operation.
2. Read and understand the warnings posted on the machine and in this manual. Failure to comply with all of these warnings may cause serious injury.
3. Replace the warning labels if they become obscured or removed.
4. This band saw is designed and intended for use by properly trained and experienced personnel only. If you are not familiar with the proper and safe operation of a band saw, do not use until proper training and knowledge have been obtained.
5. Do not use this band saw for other than its intended use. If used for other purposes, JET®, disclaims any real or implied warranty and holds itself harmless from any injury that may result from that use.
6. Always wear ANSI Z87.1 approved safety glasses or face shield while using this band saw. Also use face or dust mask if cutting operation is dusty. (Everyday eyeglasses only have impact resistant lenses; they are NOT safety glasses.)
7. Wear proper apparel: Do not wear loose clothing, necktie, rings, bracelets or other jewelry which may get caught in moving parts. Non-slip footwear or anti-skid floor strips are recommended. Wear protective hair covering to contain long hair.
8. Wear ear protectors (plugs or muffs) during extended periods of operation.
9. Do not operate this machine while tired or under the influence of drugs, alcohol or any medication.
10. Make certain the switch is in the OFF position before connecting the machine to the power supply.
11. Make certain the machine is properly grounded.
12. Make all machine adjustments or maintenance with the machine unplugged from the power source.
13. Remove adjusting keys and wrenches. Form a habit of checking to see that keys and adjusting wrenches are removed from the machine before turning it on.
14. Avoid contact with coolant, especially guarding your eyes.
15. Keep hands and fingers away from the blade when the machine is running.
16. Never hand hold the material. Always use the vise and clamp it securely.
17. Always provide adequate support for long and heavy material.
18. Keep safety guards in place at all times when the machine is in use. If removed for maintenance purposes, use extreme caution and replace the guards immediately after maintenance is complete.
19. Check damaged parts. Before further use of the machine, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
20. Do not use power tools in damp/wet locations or other dangerous environments. Do not expose them to rain. Keep work area well lighted. Provide for adequate space surrounding work area and non-glare overhead lighting.
21. Keep work area clean. Cluttered areas and benches invite accidents. Keep the floor free of scrap material, oil and grease.
22. Keep visitors a safe distance from the work area. Keep children away. Workshop should be childproof; padlocks, master switches, remove starter keys.
23. Give your work undivided attention. Looking around, carrying on a conversation and "horse-play" are careless acts that can result in serious injury.
24. Maintain a balanced stance at all times so that you do not fall or lean against the blade or other moving parts. Do not overreach or use excessive force to perform any machine operation.
25. Use the right tool at the correct speed and feed rate. Do not force a tool or attachment to do a job for which it was not designed. The right tool will do the job better and more safely.
26. Use recommended accessories; improper accessories may be hazardous.
27. Maintain tools with care. Keep blade sharp and clean for the best and safest performance. Follow instructions for lubricating and changing accessories.



28. Maintain proper adjustment of blade tension, blade guides and thrust bearings.
29. Turn off the machine and disconnect from power before cleaning. Use a brush to remove chips or debris — do not use bare hands.
30. Do not use compressed air to clean the machine. This creates flying metal debris and may wedge pieces into crevices of the machine.
31. Do not stand on the machine. Serious injury could occur if the machine tips over.
32. Never leave the machine running unattended. Turn the power off and do not leave the machine until it comes to a complete stop.
33. Be sure that the blade is not in contact with the workpiece when the motor is started. The motor shall be started and you should allow the saw to come up to full speed before bringing the saw blade into contact with the workpiece.
34. Adjust left blade guide to just clear workpiece.
35. Do not open blade covers while machine is running.
36. Direction of feed — feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
37. Installation work and electrical wiring must be done by qualified electrician in accordance with all applicable codes and standards.
38. Do not remove jammed pieces until blade has stopped.
39. Do not store combustible materials near or around machine.

**⚠ WARNING:** This product can expose you to chemicals including lead and benzene which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <http://www.p65warnings.ca.gov>.

**⚠ WARNING:** Some dust, fumes and gases created by power sanding, sawing, grinding, drilling, welding and other construction activities contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead based paint
- crystalline silica from bricks, cement and other masonry products
- arsenic and chromium from chemically treated lumber

Your risk of exposure varies, depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well-ventilated area and work with approved safety equipment, such as dust masks that are specifically designed to filter out microscopic particles. For more information go to <http://www.p65warnings.ca.gov/> and <http://www.p65warnings.ca.gov/wood>.

**Familiarize yourself with the following safety notices used in this manual:**

**⚠ CAUTION**

*This means that if precautions are not heeded, it may result in minor injury and/or possible machine damage.*

**⚠ WARNING**

*This means that if precautions are not heeded, it may result in serious or even fatal injury.*

## 4.0 INTRODUCTION

This manual is provided by JET® covering the safe operation and maintenance procedures for a JET Model ECB-1833DMEVS. This manual contains instructions on installation, safety precautions, general operating procedures, maintenance instructions and parts breakdown. Your machine has been designed and constructed to provide consistent long-term operation if used in accordance with the instructions set forth in this document.

If there are questions or comments, please contact your local supplier or JET. JET can also be reached at our web site: [www.jettools.com](http://www.jettools.com). Retain this manual for future reference. If the machine transfers ownership, the manual should accompany it.

This manual is not intended to be an exhaustive guide to band saw operation. Consult your supervisor for more detailed instruction.



## 5.0 SPECIFICATIONS

Model number	ECB-1833DMEVS	
Stock number	891170	891175
Capacities:		
Round	90°	18 in. (460 mm)
	45°	18 in. (460 mm)
	60°	15 in. (380 mm)
Rectangle	90°	18 x 31-1/2 in. W (460 x 800 mm)
	45°	18 x 20.8 in. W (460 x 530 mm)
	60°	18 x 14.9 in. W (460 x 380 mm)
Square	90°	18 x 18 in. (460 x 460 mm)
	45°	18 x 18 in. (460 x 460 mm)
	60°	14.9 x 14.9 in. (380 x 380 mm)
Blade size	1.61 x 0.051 x 240 in. (41x1.3x6100mm) M42 Wikus Bi-metal 3/4T	
Blade wheel diameter	580 mm (22.8 in.)	
Blade speed	variable within 50 ~ 300 FPM	
Main motor	7.5HP, 60Hz, 230V, 3Ph, 4P, 19.3A	7.5HP, 60Hz, 460V, 3Ph, 4P, 9.7A
Base rotary angle motor	1/5HP(150W), 60Hz, 230V, 3Ph, 4P, 1.2A	1/5HP(150W), 60Hz, 460V, 3Ph, 4P, 0.6A
Oil pump	1HP, 60Hz, 230V, 3Ph, 4P, 60Hz, 3.3A	1HP, 60Hz, 460V, 3Ph, 4P, 60Hz, 1.7A
Coolant pump	1/8HP, 230V, 3Ph, 2P, 60Hz, 0.48A (210mm)	1/8HP, 460V, 3Ph, 2P, 60Hz, 0.24A (210mm)
Cutting angles	60° right, 45° left	
Gear box ratio (main motor)	1:46	
Gear box ratio (angle motor)	1:180	
Gear box capacity	2L (1/2 Ga)	
Bed height from floor	33-1/2 in. (850 mm)	
Coolant capacity	20 L (5-1/4 gal.)	
Overall dimensions	110 x 74.8 x 82.67 in. ( 2800 x 1900 x 2100 mm)	
Shipping dimensions	126.37 x 48.22 x 95.67 in. (3210 x 1225 x 2430 mm)	
Net weight - approx.	5060 lbs. (2300 kg)	
Shipping weight - approx.	5500 lbs. (2500 kg)	

### Machine environment:

Temperature range: -10° to +50° C (14° to 122° F)

Relative humidity: ≤ 90°

*The specifications in this manual were current at time of publication, but because of our policy of continuous improvement, JET reserves the right to change specifications at any time and without prior notice, without incurring obligations.*

## 6.0 UNCRATING AND ASSEMBLY

**Note: Read and understand the entire manual before attempting setup or operation.**

1. Finish uncrating the saw and inspect for damage. Should any have occurred, contact your local distributor.
2. Remove all bolts attaching machine to shipping base.
3. Clean all rust protected surfaces with kerosene or a cleaner/degreaser to remove protective coating. Do not use gasoline, paint thinner, or mineral spirits, as these may damage painted surfaces.
4. Lubricate all slideways with SAE 10W oil.

### Shipping contents:

- 1 Band Saw
- 2 Splash Trays
- 1 Test Piece
- 1 Product Manual
- 1 Product Registration Card
- 1 Tool Box Complete (#ECB1833DMEVS-TBC), contains:
  - 1 Adjustable Wrench 12"
  - 1 Set of Open-end Wrenches
  - 1 Set of Hex Wrenches
  - 2 Screwdrivers (cross-point and flat blade)
  - 4 Leveling Bolts with Nuts

## 7.0 INSTALLATION

Use a forklift to set the band saw into position. **It is not recommended that a crane be used.** Place the machine on a flat and level foundation of reinforced concrete. Allow room for servicing and for moving large stock around the band saw when deciding upon a location for the machine. Maintain a minimum distance of 5 ft. (1500 mm) from the rear of the machine to the wall.

Level machine with the provided bolts and nuts, and anchor it to the foundation with anchor bolts. Fig. 7-1 shows hole pattern. NOTE: Accuracy and manufacturing tolerance of the machine can only be guaranteed if machine is properly installed and leveled.

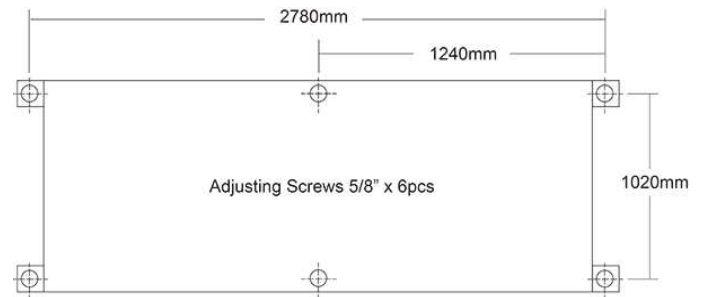


Fig. 7-1

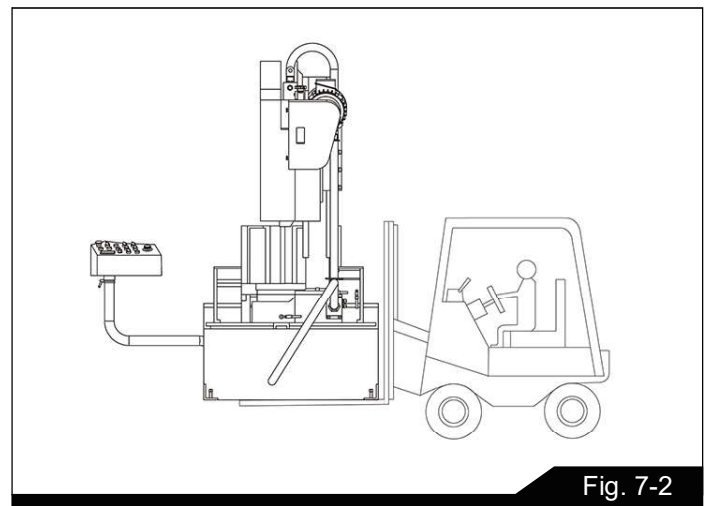


Fig. 7-2

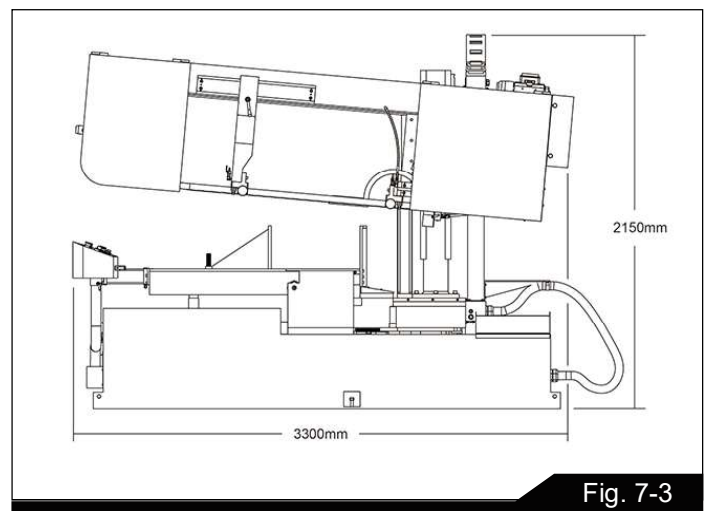


Fig. 7-3

### CAUTION

**All leveling bolts should support the weight of the machine evenly.**

## 8.0 COOLANT

Cutting fluid or coolant must be supplied by the operator. See sect. 14.4 for information.



## 9.0 ELECTRICAL CONNECTIONS

### WARNING

*Electrical connections must be made by a qualified electrician in compliance with all relevant codes. This machine must be properly grounded to help prevent electrical shock and possible fatal injury.*

### 9.1 GROUNDING INSTRUCTIONS

The ECB-1833DMEVS Band Saw is prewired for 230V, 3 phase, or 460V, 3 phase. Confirm that power available at the saw's location matches that for which the saw is wired.

The machine is not provided with an electrical plug; it can be "hardwired" directly to a service panel.

Permanently connected tools: This tool should be connected to a grounded metal permanent wiring system; or to a system having an equipment-grounding conductor. Make sure a disconnect is 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 band saw will be connected.

ALWAYS FOLLOW PROPER LOCK-OUT/TAG-OUT PROCEDURES.

### WARNING

*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. Failure to comply may cause serious or fatal injury.*

## 10.0 CONTROLS

Refer to Fig. 10-1.

The control box arm has wide swing adjustment for convenient positioning. The button functions are as follows.

**Emergency Stop Button (A)** – Press to immediately stop all machine functions. Rotate clockwise to disengage.

**Coolant Switch (B)** – Turn switch to "I" to turn on coolant flow. Turn switch to "O" to stop coolant flow. Flow is regulated at the individual valves.

**Stop Button (C)** – Press to stop operation cycle.

**Saw Head Movement (D)** - Raises or lowers saw head.

**Manual/Auto (E)** - When Manual is selected, saw head will remain down after cut. When Auto is selected, saw head will return to raised position after cut.

**Hydraulic Start Button (F)** - Press this first to activate all other functions on the panel.

**Power Indicator Light (G)** – Illuminated whenever machine is connected to power.

### WARNING

*If the bulb is out, lamp will not light, but machine may still have power.*

**Main Motor Button (H)** – Press to start motor and cutting operation.

**Vise Positioning (I)** – Turn switch to position vise table forward or back. **CAUTION: Raise saw frame higher than vise before moving vise table, to avoid machine damage.** Also, see note in Fig. 11.7 concerning removable table.

**Vise Clamping (J)** - Activates or releases clamping action of the vise. Turn to the right and hold until clamping pressure reaches 10-12 kg/cm<sup>2</sup>.

**Digital Readout (K)** - Indicates blade speed during machine operation, cutting angle when machine is stopped.

**Blade Speed (L)** - Adjusts blade cutting speed; turn clockwise to increase speed.

**Angle Adjust Switch(M)** - Turn to adjust cutting angle. **CAUTION: Be sure to raise saw frame higher than vise height before moving angle to avoid machine damage.**

**Angle Rapid Adjust (N)** - Press to quicken the angle adjustment process. (Switch M must be turned at the same time.)

**Feed Rate Control (O)** – Sets saw head speed of descent, and thus the amount of pressure placed on the workpiece by the blade. Turn counterclockwise to increase feed rate.

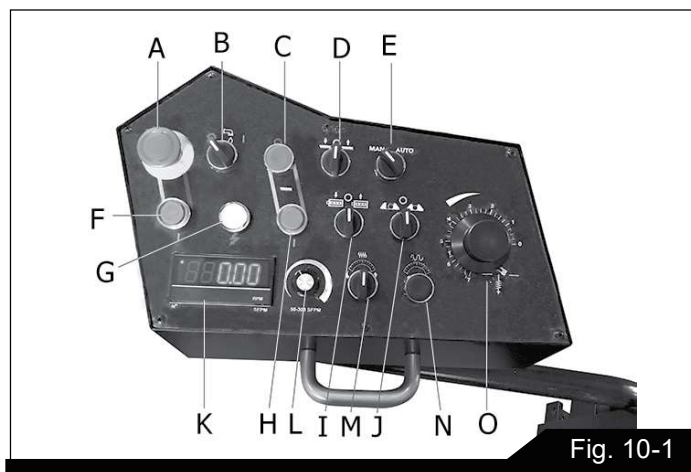


Fig. 10-1



## 10.1 AUXILIARY COOLANT HOSE

The saw is equipped with an auxiliary coolant hose and nozzle. This can be used when a larger flood of coolant must be directed at the work piece, or when cleaning off the lower sections of the saw.

## 11.0 ADJUSTMENTS

### 11.1 REMOVING AND INSTALLING BLADE

When your machine was shipped, a new blade was supplied and installed on the saw. When replacement becomes necessary, use a blade 0.051 in. (1.3mm) thick.

1. Raise saw head until blade clears the table. Close feed rate dial by turning it clockwise as far as it will go.
2. Release blade tension using tension handle (see A, Fig. 11-8).
3. Press E-stop button, and disconnect machine from power.
4. Remove knurled screws and open the wheel covers.
5. Remove the two red blade guards, and back off the carbide guides by turning the knurled adjustment screws (see A Fig. 11-3).
6. Back off the chip brush on the drive wheel.
7. Remove the blade from both wheels and out of each blade guide. **CAUTION: Even dull blades are sharp to the skin. Wear leather gloves when handling blades.**
8. Clean the swarf out of the blade wheel areas.
9. Make sure teeth of the new blade are pointing in the direction of travel. If necessary, turn blade inside out.
10. Position blade on wheels. Make sure back of blade rests lightly against wheel flanges.

**MAKE SURE THAT BACK OF BLADE IS AGAINST FLANGES OF BOTH WHEELS, BUT NOT RUBBING HARD AGAINST THEM.**

11. Twist blade and slip it into the blade guides with back of blade against the top carbide guide. **NOTE:** If roller bearings need adjusting refer to sect. 11.4.
12. When you are sure the back of the blade is against the wheel flanges of both wheels and properly inserted into the guides, reconnect power to the saw and release E-stop.
13. Turn handle (A, Fig. 11-8) to tension blade.
14. Reposition chip brush so that it contacts the blade, and tighten in place.

15. Jog the blade “on” and “off” to be sure the blade is in place and tracking properly.
16. If blade is not tracking properly refer to sect. 11.11. Otherwise blade installation is done.
17. Replace all guards, close all covers, and fasten securely.
18. Follow blade break-in procedures, sect. 11.2.

### 11.2 BLADE BREAK-IN

A new blade should be “broken in” before normal, extended use. Failure to break in a new blade will shorten the service life of the blade, and result in inefficient cutting performance.

1. Reduce blade speed to 1/2 of normal setting.
2. Set feed rate at 2 to 3 times longer than normal.
3. Make 5 complete cuts at the above settings, through an 8-inch (200mm) diameter workpiece. Listen for unusual noises or metallic sounds.
4. If no unusual sounds or other issues are detected, then the blade is ready for normal operations.

### 11.3 ADJUSTING BLADE GUIDE POST

The blade guides should be set as close to the vise jaw as possible. The right blade guide bracket is not adjustable and is set at the factory to clear the right hand vise jaw. The left blade guide post can be moved left or right depending on the position of the sliding vise jaw.

To move blade guide post, loosen handle (R, Fig. 11-1), slide post into position as close to workpiece as possible without causing obstruction, then retighten handle. The accompanying scale measures distance of exposed blade between the blade guides.

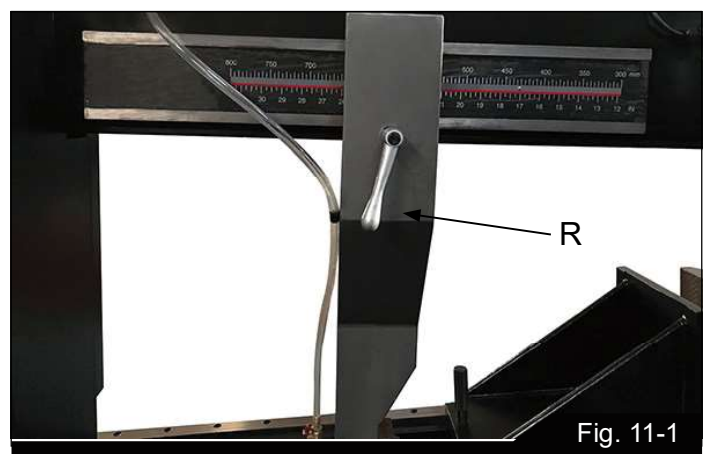


Fig. 11-1

## 11.4 ADJUSTING BLADE GUIDES

Proper adjustment of blade guide bearings is critical to efficient operation of the saw. The band saw is shipped with the blade tensioned and blade guides properly set. They will rarely require adjustment except after a blade change. Failure to maintain proper blade guide settings may cause inaccurate cuts and/or blade damage.

First verify that the blade is sharp and in good condition; properly adjusted guides will not compensate for an inferior blade.

Fig. 11-2 shows the left hand blade guide assembly; Fig. 11-3 shows the right hand. Adjustments for both are identical.

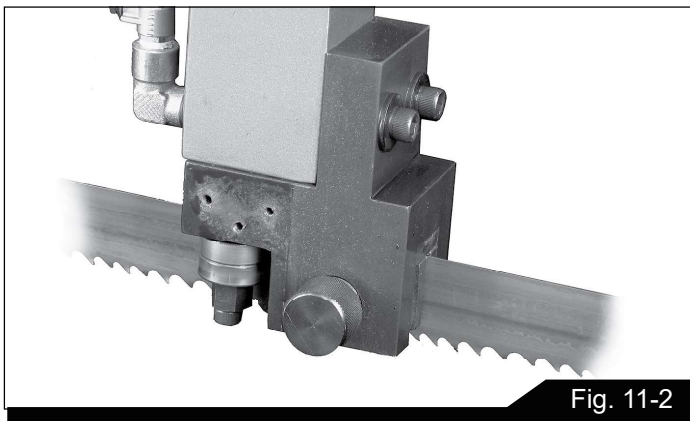


Fig. 11-2

The back of the blade should ride against the upper carbide guide (D, Fig. 11-3) which is positioned to provide greater support and prevent deflection at the back of the blade.

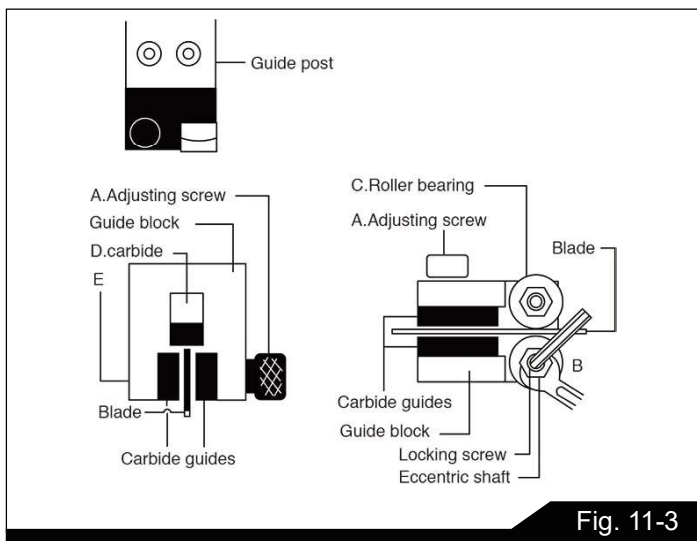


Fig. 11-3

The saw blade should also ride between the two roller bearings (B) and (C) and the carbide blocks (E).

Use the adjusting screw (A) to lightly press the carbide blocks against the surface of the blade.

The front and rear roller bearing guides are mounted to eccentric shafts. Loosen the locking screws with a 6mm hex wrench and turn the eccentric shaft with a 17mm open end wrench until the bearing just contacts the blade. See Fig. 11-3 Retighten the locking screw while holding the eccentric shaft with the wrench to prevent it from turning.

Do this for both bearings then repeat for other guide assembly.

**IMPORTANT:** If bearing positions are properly set, they should not be readjusted. Under daily operation and/or normal maintenance, make adjustments using the adjustment screws (A) to position the carbide guides against the blade. Constant adjustment of the bearings may affect longevity of the saw blade and cutting accuracy.

## 11.5 CHANGING BLADE SPEED

1. Raise cutting head approximately six inches above work piece and turn feed rate knob (O, Fig. 10-1) to zero.
2. Turn power on and turn speed adjuster knob (see L, Fig. 10-1) to match appropriate material. The LED display will show the current speed. Consult a machinery handbook for recommended speeds for various materials.

## 11.6 ADJUSTING FEED RATE

Rate of feed is adjusted with control dial (O, Fig. 10-1).

Feed rate is important to band saw performance; excessive pressure may break the blade or stall the saw. Insufficient pressure rapidly dulls the blade.

Material chips and shavings are the best indicator of proper feed pressure. The ideal chip is thin, tightly curled, and warm to the touch. Chips that range from golden brown to black indicate excessive force. Blue chips indicate extreme heat from too high a blade speed; this will shorten blade life. Thin, powdery chips indicate insufficient feed pressure.



## 11.7 VISE ADJUSTMENT

The vise system is equipped with knurled pin (A) and vise rack with 6 holes. See Fig. 11-4.

1. Place workpiece between vise jaws with required amount to be cut off extending out past the blade.
2. If clamping smaller workpiece (width less than 6in./150mm) position pin A in same hole as shown in Fig. 11-4.
3. For larger workpieces (wider than 6in./150mm), move pin A to more suitable hole, such as hole B.
4. Turn clamp switch (see J, Fig. 10-1) to the right to clamp the workpiece.
5. Perform cut.
6. Release clamping pressure by turning switch (J, Fig. 10-1) to the left.

The movable vise table can be moved forward or back to accommodate the angle of the blade. Use switch I, Fig. 10.

**IMPORTANT:** A removable steel plate is located in front of the blade, for additional support of workpieces during straight cuts. Lift out this plate before moving the vise table into forward position. If needed, return this plate to its place when vise has been returned to rear position.

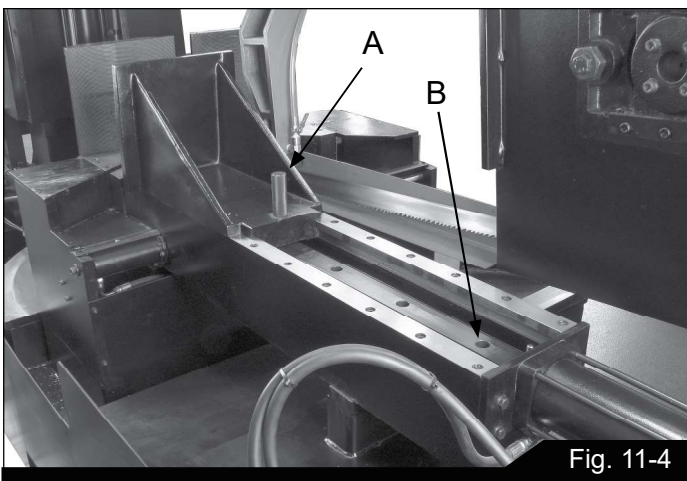


Fig. 11-4

## 11.8 SLIDING TOUCH BAR

When machine is set to Auto mode (switch E, Fig. 10-1) the saw head will return automatically to raised position.

The touch bar, shown in Fig. 11-5, rests loosely against the workpiece and alongside the cutting path, and disconnects a limit switch inside the wheel guard. As the saw head returns to raised position, the bar leaves the workpiece and contacts the limit switch. This stops

the head from rising higher than 35mm (1.8in.) from the workpiece, where it awaits control panel input for the next sequence. This results in greater efficiency of time and movement when cutting workpieces of the same size.

Also, when motor is started and feed rate is set, the head will descend rapidly until the touch bar contacts the workpiece, at which instant the head will slow to the feed rate selected on control panel.

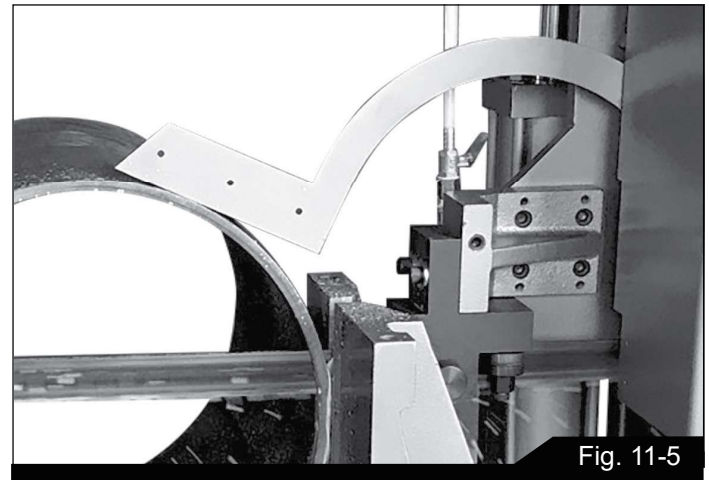


Fig. 11-5

## 11.9 CUTTING ANGLE ADJUSTMENT

### ⚠ CAUTION

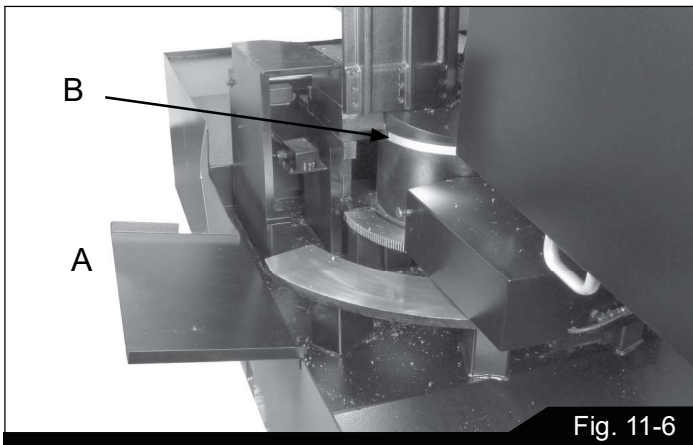
*Before adjusting angle, raise saw head/blade higher than vise to prevent collisions and possible damage to machine.*

Angle adjustment is controlled by an angle calculator and a frequency inverter.

Raise saw head to clear vise, and turn switch M, (see Fig. 10-1). Press button N simultaneously to increase speed of positioning. When desired angle nears on the LED display, release button N and use the slower speed for final positioning.

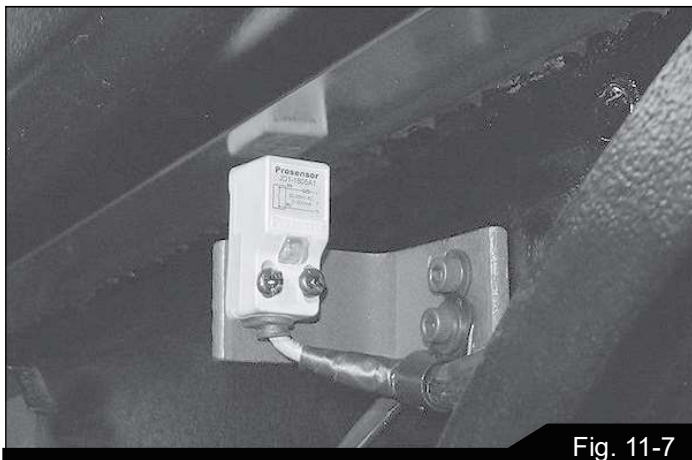
If the saw frame is moved to the greater angles, the provided splash trays can be mounted on the lip of the base at front or rear, to prevent coolant spill on the floor. See A, Fig. 11-6.

The indicator scale (B, Fig. 11-6) is an alternate method for angle measurement, and will show the same measurement as the LED display on the control panel. The LED display may have a variance of  $\pm 0.2$  degrees.



### 11.10 BLADE BREAK SENSOR

A sensor is positioned near the drive wheel. If the blade breaks or has insufficient tension, the sensor switch will shut off the saw to prevent further damage.



### 11.11 BLADE TENSION & TRACKING

Turn handle (A, Fig. 11-8) clockwise to tighten the blade, or left to detension it for blade replacement.

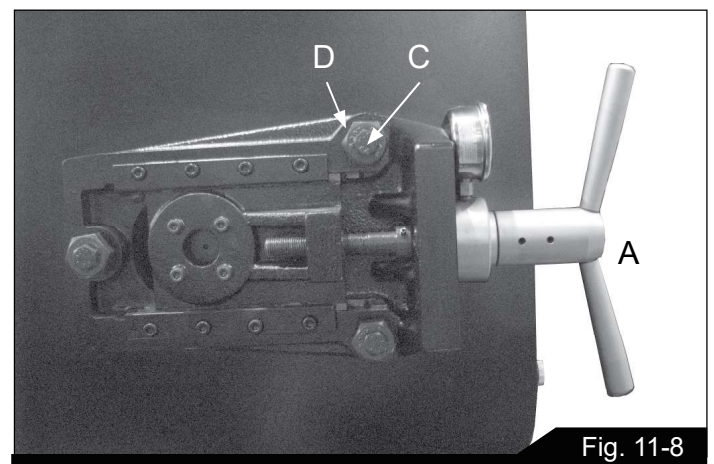
Blade tension has been preset by the manufacturer for the supplied blade. Tension is shown in the gauge above the handle; proper tension will be in the green area, about 1800~2000 kgs/cm<sup>2</sup>. Do not overtension blades.

**CAUTION: Tracking adjustments must be performed by qualified persons who are familiar with this type of adjustment and the dangers associated with it.**

The saw blade has been properly tracked from the factory. If a tracking problem occurs, proceed as follows:

1. Raise saw head to a convenient position if desired.
2. Open blade covers and inspect blade. The back edge of the blade should make light contact with the flange of the drive wheel.
3. Locate tracking adjustment bolts on the backside of the saw head behind the idler wheel (Fig. 11-8).
4. Turn on saw blade at low speed.
5. Loosen center screw (C, Fig. 11-8).
6. Turn adjustment screw (D, Fig. 11-8) until blade back is lightly contacting wheel flange. **Blade should not rub hard against the flange.**
7. When satisfied, shut off blade and tighten center screw (C) to secure setting. (Note: Hold adjustment screw with the wrench while tightening center screw to prevent further adjustment.)

**IMPORTANT:** If band saw will remain idle for an extended period, back off blade tension (A) to reduce unnecessary wear on wheels and components.



## 11.12 POWERED CHIP BRUSH

The wire brush is driven by the motor via the belt. Keep the brush in contact with the blade to prevent excess debris from entering the wheel track; this will help prolong the life of the blade. To adjust, loosen the 2 socket head screws (A, Fig. 11-9). After positioning, retighten the screws.

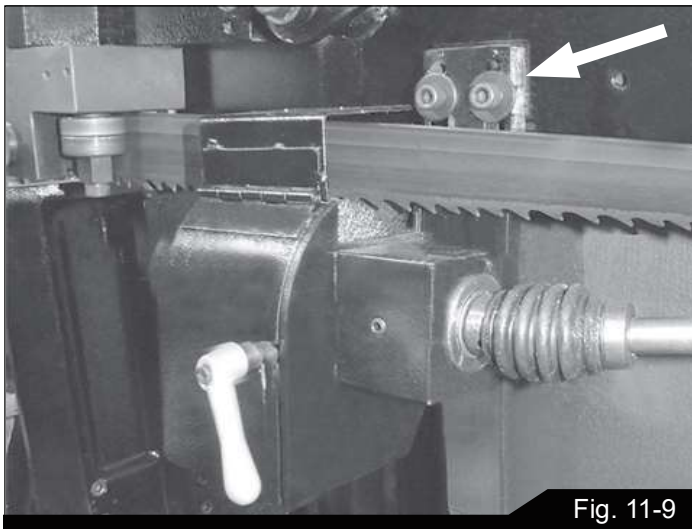


Fig. 11-9

## 12.0 PRIOR TO OPERATION

1. Verify that correct blade is installed for type of material being cut.
2. Check that blade tooth direction matches arrows on red blade guides.
3. Check to see that blade is properly seated on wheels and correct blade tension is applied.
4. Adjust carbide guides if needed. See sect. 11.4.
5. Position left blade guide as close to workpiece as possible without obstruction.
6. Select proper speed and feed rate for material being cut.
7. Material to be cut must be securely held in vise.
8. Check to see that coolant level is adequate. If needed, add coolant by pouring into chip tray so that it drains through the strainer into basin.
9. Do not start cut on a sharp edge.
10. Keep machine lubricated. See sects. 13.1 and 15.0.

## 13.0 GENERAL OPERATING PROCEDURE

1. Adjust left blade guide bracket as close as possible to the left vise jaw, without causing obstruction.
2. Use the controls to raise the saw head, and turn the feed rate dial to zero.
3. Move working table forward or back into the required position based on cutting angle.
4. Adjust the angle of cut.
5. Place the stock between the vise jaws, position the stock for the desired length of cut and clamp it with the vise.
6. Start the blade and turn on coolant system. Adjust coolant flow using the individual valves.
7. Set feed rate until saw blade begins to lower at desired rate of speed.
8. Proceed to cut through the workpiece. The blade will shut off at end of cut in manual mode; the saw head will return to raised position in auto mode.

### 13.1 MANUAL LUBE SYSTEM

See Fig. 13-1.

Pump handle (A, Fig. 13-1) *once* per 8 hours of operation to circulate oil to key places on the machine.

**CAUTION:** Do not pump multiple times - this may cause the connecting hose to burst or come loose.

Check oil level daily in the sight glass (B); top off if needed with hydraulic oil. See sect. 14.0.

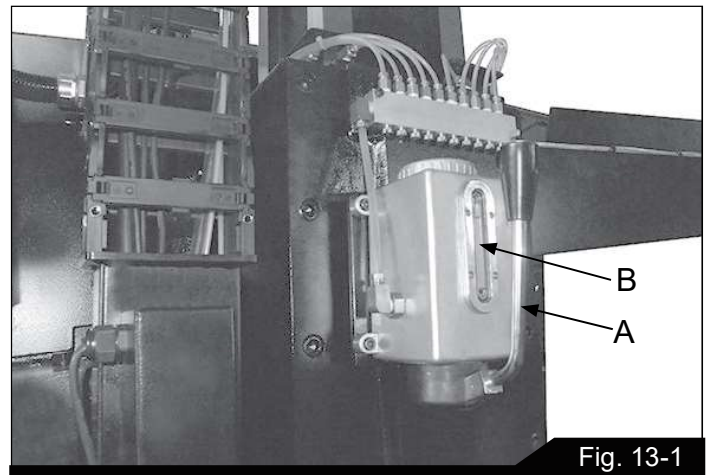


Fig. 13-1





## 14.0 USER-MAINTENANCE

### WARNING

***Before doing maintenance on the machine, disconnect it from the electrical supply by switching off the main switch. Failure to comply may cause serious injury.***

#### 14.1 GENERAL MAINTENANCE

Use a light machine oil to lubricate moving parts and contact areas, as needed.

Vacuum or brush swarf from machine. **Do not use bare hands.**

Periodically clean the sump in the machine base to extend pump life and promote efficient cutting. Change coolant regularly at intervals recommended by coolant supplier.

All ball bearings are permanently lubricated and sealed. They require no further attention.

#### 14.2 GEARBOX

After the first 50 hours of use the gear case should be drained and refilled. Change lubricant from then on every 6 months. Top off as needed.

To drain and refill:

1. Disconnect machine from power source.
2. Remove drain plug (C, Fig. 14-1) and allow gear oil to drain completely. Dispose of oil according to local regulations.
3. Wrap drain plug threads with thread sealant tape, and reinstall plug.
4. Use fill plug (D) to fill gear box with Mobilube™ HD 85W140, or equivalent. Capacity is 6L (1.58 Ga.). Do not allow the oil level to fall below the Low mark on the sight glass (E).

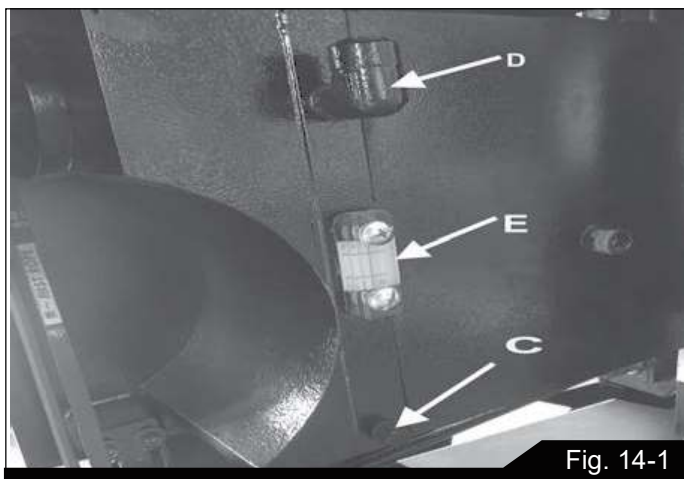


Fig. 14-1

#### 14.3 MANUAL LUBE SYSTEM

The manual lube system shown in Fig. 13-1 uses hydraulic oil. Remove the cap on top to fill.

Use clean, new hydraulic oil to fill, NOT used oil.

Correct oil type is based upon the environment. ISO 32, 46, and 68 are common viscosities for different temperature ranges. Consult a hydraulic oil manufacturer's chart when selecting oil for your location.

The discharge amount has been properly set by the manufacturer, but the amount can be adjusted if needed.

#### 14.4 COOLANT

JET offers a bio-degradable, concentrated flood coolant (not provided) formulated for band saws, lathes, and milling machines, with a 20:1 water/coolant mix ratio. See JET website for more information and to order.

414124 JET Bio-Degradable Flood Coolant, 1/2 Gal.

414126 JET Bio-Degradable Flood Coolant, 1 Gal.

414127 JET Bio-Degradable Flood Coolant, 5 Gal. Pail

#### Filling and Draining

Pour coolant mixture into chip tray so that it drains through strainer into basin. The sight glass is located on right side of base.

To drain coolant use drain plug located on right side of machine base. Follow local regulations when disposing of used machine fluids. Apply thread sealing tape to the drain plug before re-installing.

Keep the overflow hole on right side of base, clean and unobstructed.

Different brands of coolant may not mix properly. If changing to an alternate brand, first flush coolant line and sump with an industrial degreaser or cleaner that does not contain silicone or petroleum based ingredients.

#### 14.5 HYDRAULIC SYSTEM

Check fluid level using sight glass. See Fig. 14-2. If low, pull out entire tank assembly, and pour Mobil™ Hydraulic Oil ISO AW68, or equivalent, into the fill hole. Reinstall fill plug. Tank capacity = 38L (10 gal.)

#### Pressure adjustment

Oil pressure for vise operation has been correctly set by the manufacturer; no adjustment is needed.

Recommended clamping pressure should fall between 10 to 12 kg/cm<sup>2</sup> (142.2 to 170.6 psi).

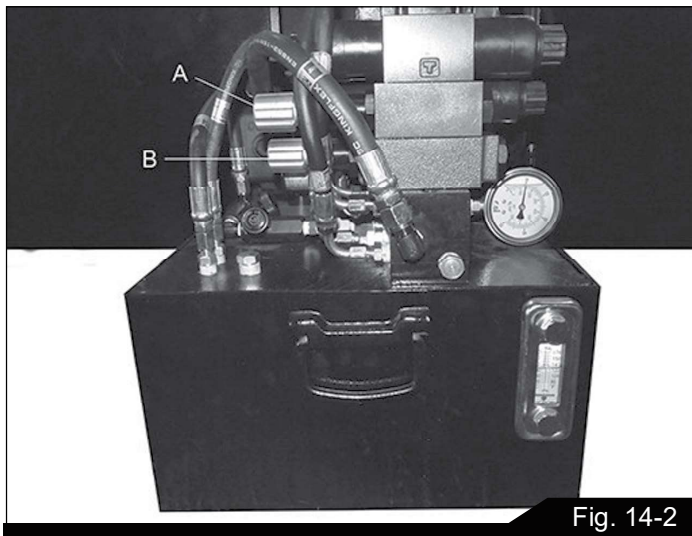


Fig. 14-2

If future adjustment becomes necessary, turn knob A counterclockwise to reduce pressure. See Fig. 14-2.

NOTE: If workpiece is thin, it is preferable to use a jig instead of adjusting the hydraulic pressure.

**⚠ CAUTION**

***DO NOT turn knob B, and DO NOT change pressure setting of hydraulic work table. The work table may move too rapidly and cause a safety hazard.***

### 14.6 MACHINE STORAGE

If the band saw is to be out of use for an extended period, the following steps are recommended:

1. Disconnect from power supply.
2. Loosen tension on the blade.
4. Empty the coolant tank.
5. Clean and grease the machine.
6. Cover the machine if needed.

### 14.7 BELT ADJUSTMENT

If pulley slips or generates noise during operation, adjust the tension knob (Fig. 14-3) clockwise to tighten the belt.

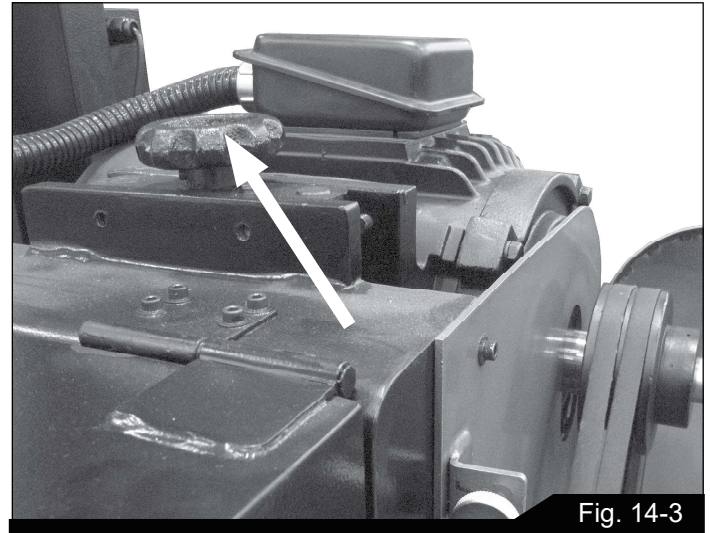


Fig. 14-3

### 14.8 ADDITIONAL SERVICING

Any additional servicing should be done by qualified service personnel.



## 14.9 MAINTENANCE SCHEDULE

If routine maintenance is neglected, the result will be premature wear and poor performance.

### DAILY:

- General cleaning of machine; remove accumulated shavings. (Note: Do not use compressed air.)
- Clean coolant drain hole to avoid excess fluid buildup in the trough.
- Top off the lubricating coolant.
- Check blade for wear.
- Raise saw head to top position and partially slacken the blade to avoid unnecessary yield stress.
- Check functioning of blade guards and E-stop button

### WEEKLY:

- Thoroughly clean the machine to remove swarf, especially from the coolant tank.
- Clean filter of pump head and suction area.
- Use brush to clean blade guides, especially the guide bearings.
- Clean strainer and hole over the coolant basin.
- Clean blade wheel housings and races.

### MONTHLY:

- Check tightness of drive wheel screws.
- Check that blade guide bearings are in perfect running condition.
- Check tightness of screws for motor, pump, and blade guards

### EVERY SIX MONTHS:

- Perform circuit continuity checks.
- Drain and refill gearbox.

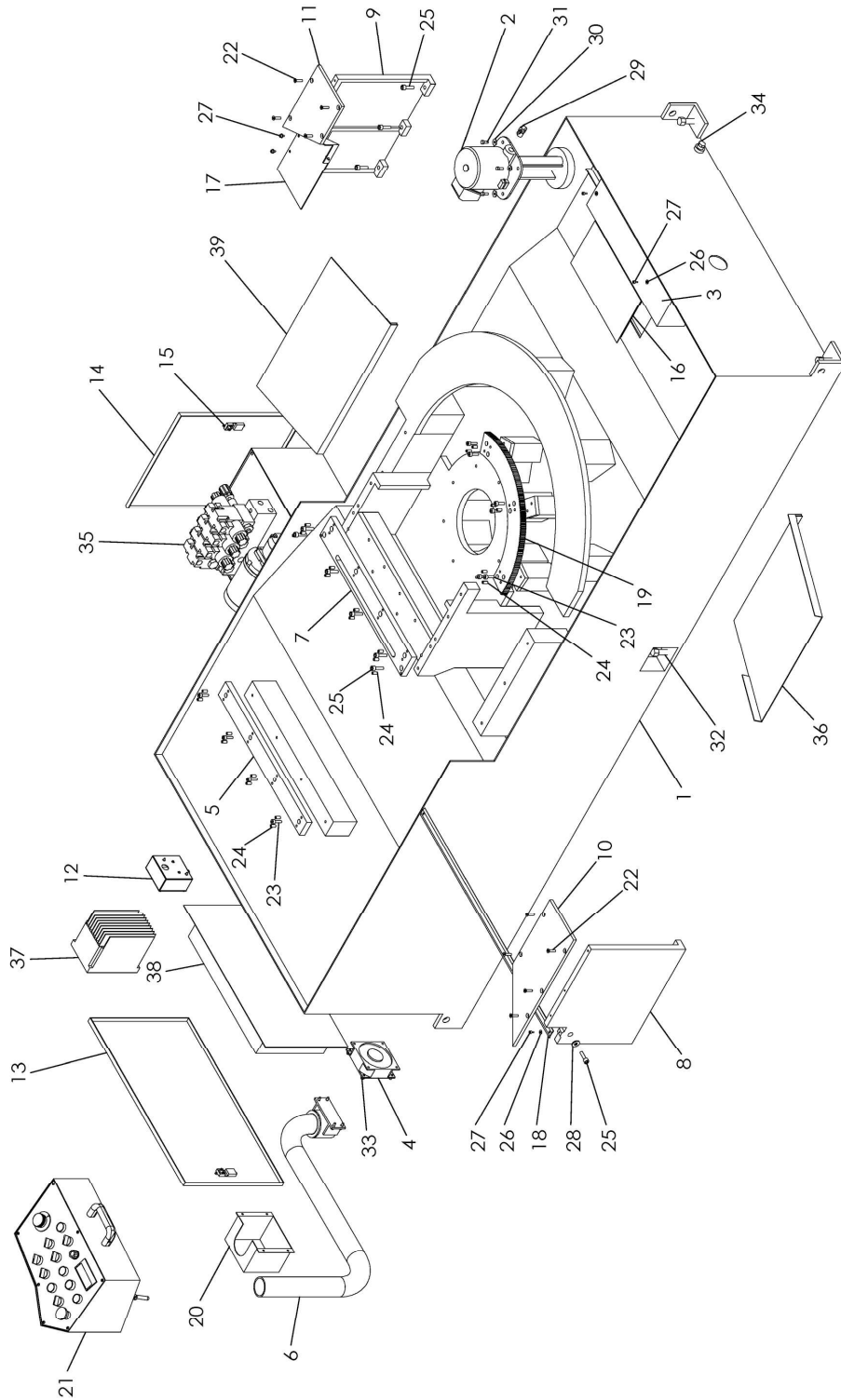
## 15.0 REPLACEMENT PARTS — ECB-1833DMEVS

Replacement parts are listed on the following pages.  
To order parts or reach our service department, call  
1-855-336-4032, Monday through Friday, 8 a.m. to 5  
p.m. CST. Having the Model Number and Serial Number  
of your machine available when you call will allow us to  
serve you quickly and accurately.

JET®  
427 New Sanford Road  
LaVergne, Tennessee 37086  
[www.jettools.com](http://www.jettools.com)  
Phone: 855-336-4032



# BASE ASSEMBLY — ECB-1833DMEVS



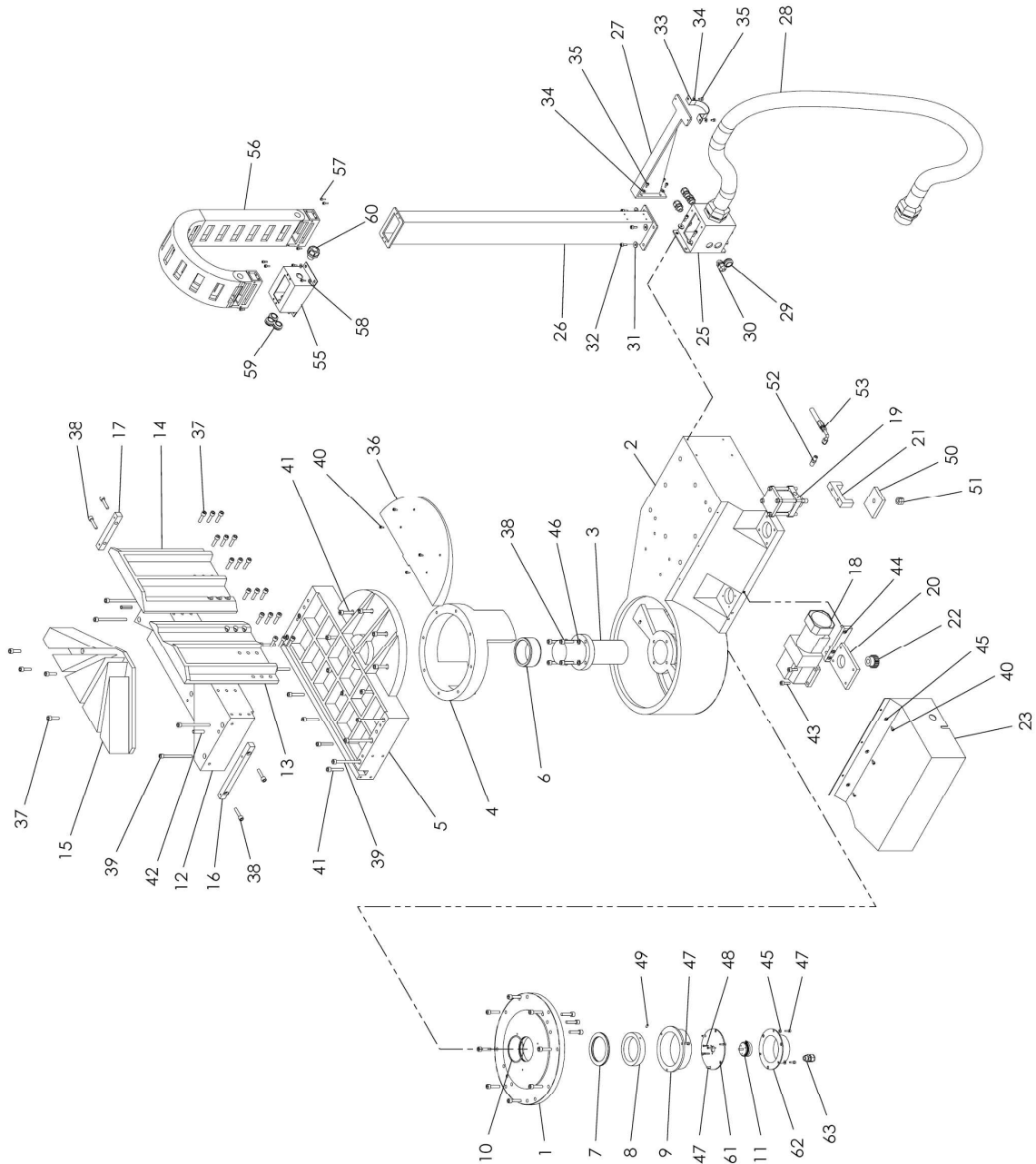


**PARTS LIST BASE ASSEMBLY — ECB-1833DMEVS**

Index No.	Part No.	Description	Size	Qty.
1	ECB1833DMEVS-A01	Base		1
2	ECB1833DMEVS-A02	Coolant Pump	1/8HP, 230/ 460V 3Ph 2P, 220L	1
3	ECB1833DMEVS-A03	Wires Sheet Metal Cover		1
4	ECB1833DMEVS-A04	Cooling Fan		1
5	ECB1833DMEVS-A05	Table Parallel Block		1
6	ECB1833DMEVS-A06	Rotary Arm		1
7	ECB1833DMEVS-A07	Adjustable Parallel Block		1
8	ECB1833DMEVS-A08	Front Auxiliary frame		1
9	ECB1833DMEVS-A09	Rear Auxiliary frame		1
10	ECB1833DMEVS-A10	Front Top Auxiliary Fram		1
11	ECB1833DMEVS-A11	Reae Top Auxiliary Fram		1
12	ECB1833DMEVS-A12	Terminal Box Set		1
13	ECB1833DMEVS-A13	Electric Box Cover		1
14	ECB1833DMEVS-A14	Oil Pump Box Cover		1
15	EHB916V-281-4	Lock W/Key		2
16	ECB1833DMEVS-A16	Chip Filter Net		1
17	ECB1833DMEVS-A17	Reae Top Auxiliary Fram		1
18	ECB1833DMEVS-A18	Dustproof Sheet		1
19	ECB1833DMEVS-A19	Turret Base ( Gears)		1
20	ECB1833DMEVS-A20	Rotary Arm Block Cover		1
21	ECB1833DMEVS-A21	Control Panel Set Assembly		1
22	ECB1833DMEVS-A22	Socket Head Flat Screw	W1/4" x 1"	9
23	TS-0208061	Socket Head Cap Screw	W5/16" x 1"	6
24	TS-0208031	Socket Head Cap Screw	W5/16" x 5/8"	22
25	TS-0209061	Socket Head Cap Screw	W3/8" x 1-1/4"	14
26	ECB1833DMEVS-A26	Washer	3/16"	9
27	ECB1833DMEVS-A27	Socket Head Cap Screw	W3/16" x 3/8"	9
28	ECB1833DMEVS-A28	Washer	W3/8" x 25 x 3.0	2
29	ECB1833DMEVS-A29	Hose Fitting	3/8"PT x 5/16"E	1
30	ECB1833DMEVS-A30	Washer	1/4"	4
31	TS-0207031	Socket Head Cap Screw	W1/4" x 5/8"	4
32	ECB1833DMEVS-A32	Leval Screw	W5/8" x 2"	6
33	ECB1833DMEVS-A33	Socket Head Cap Screw	W3/16" x 1/2"	4
34	ECB1833DMEVS-A34	Plug	1/2"P	1
35	ECB1833DMEVS-A35	Oil Pump Set Assembly		1
36	ECB1833DMEVS-A36	Front Water Tray		1
37	ECB1833DMEVS-A37	Inverter	7.5HP/230V/3PH	1
38	ECB1833DMEVS-A38	Electrical components Set		1
39	ECB1833DMEVS-A39	Back Water Tray		1



# SWIVEL SEAT ASSEMBLY — ECB-1833DMEVS



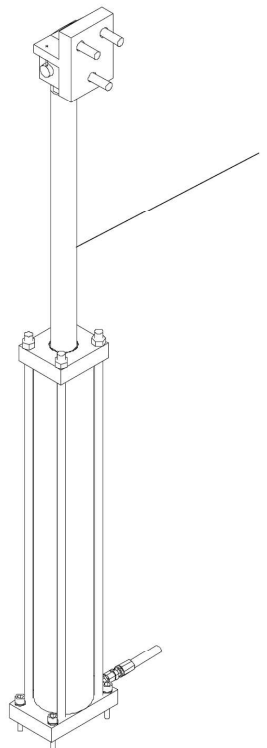
**PARTS LIST SWIVEL SEAT ASSEMBLY — ECB-1833DMEVS**

Index No.	Part No.	Description	Size	Qty.
1	ECB1833DMEVS-B01	Center Fixed Plate Of Turret		1
2	ECB1833DMEVS-B02	Turret Base		1
3	ECB1833DMEVS-B03	Turret Shaft		1
4	ECB1833DMEVS-B04	Turret Shaft Bushing		1
5	ECB1833DMEVS-B05	Top Turret Block		1
6	SPB 809640	Self Lubrication Bearing	SPB 809640	1
7	BB-80105	Thrust Bearing	80105	1
8	ECB1833DMEVS-B08	Shaft Nut		1
9	ECB1833DMEVS-B09	Top Plate		1
10	ECB1833DMEVS-G80	O-Ring	G80	1
11	ECB1833DMEVS-B11	Angle calculator	45B	1
12	ECB1833DMEVS-B12	Fixed Table		1
13	ECB1833DMEVS-B13	Front Vise		1
14	ECB1833DMEVS-B14	Back Vise		1
15	ECB1833DMEVS-B15	Auxiliary Table		1
16	ECB1833DMEVS-B16	Front Support Block		1
17	ECB1833DMEVS-B17	Back Support Block		1
18	ECB1833DMEVS-B18	Angle Motor	1/5HP(150W),230/460V,3Ph ,4P	1
19	ECB1833DMEVS-B19	Oil Hydraulic Brake System		1
20	ECB1833DMEVS-B20	Angle Motor Plate		1
21	ECB1833DMEVS-B21	Brake Block		1
22	ECB1833DMEVS-B22	Gear		1
23	ECB1833DMEVS-B23	Angle Motor Protection Cover		1
25	ECB1833DMEVS-B25	Wire Collect Box		1
26	ECB1833DMEVS-B26	Wire Tube		1
27	ECB1833DMEVS-B27	Bracket		1
28	ECB1833DMEVS-B28	Metal Hose	V2017+B2102	1
29	ECB1833DMEVS-B29	Strain Relief	7/8"	1
30	ECB1833DMEVS-B30	Strain Relief	M16B(CSA)	4
31	ECB1833DMEVS-B31	Washer	1/4"	8
32	TS-0207031	Socket Head Cap Screw	W1/4" x 5/8"	8
33	ECB1833DMEVS-B33	Hose Clamps	2"	1
34	ECB1833DMEVS-B34	Washer	3/16"	6
35	ECB1833DMEVS-B35	Socket Head Cap Screw	W3/16" x 3/8"	6
36	ECB1833DMEVS-B36	Top Protection Cover		1
37	TS-0209061	Socket Head Cap Screw	W3/8" x 1-1/4"	22
38	TS-0209071	Socket Head Cap Screw	W3/8" x 1-1/2"	8
39	TS-0209081	Socket Head Cap Screw	W3/8" x 1-3/4"	9
40	ECB1833DMEVS-B40	Socket Head Cap Screw	W3/16" x 3/8"	7
41	TS-0209091	Socket Head Cap Screw	W3/8" x 2"	14
42	ECB1833DMEVS-B42	Spring Pin	M10 x 40	2
43	TS-0208061	Socket Head Cap Screw	W5/16" x 1"	4
44	TS-0208041	Socket Head Cap Screw	W5/16" x 3/4"	4
45	ECB1833DMEVS-B45	Washer	3/16"	3
46	TS-0720091	Lock Washer	W3/8"	4
47	ECB1833DMEVS-B47	Socket Head Cap Screw	W3/16" x 5/8"	9
48	ECB1833DMEVS-B48	Round Head Machine Screw	M3 x 19	3
49	TS-0267041	Socket Set Screw	W1/4" x 3/8"	2



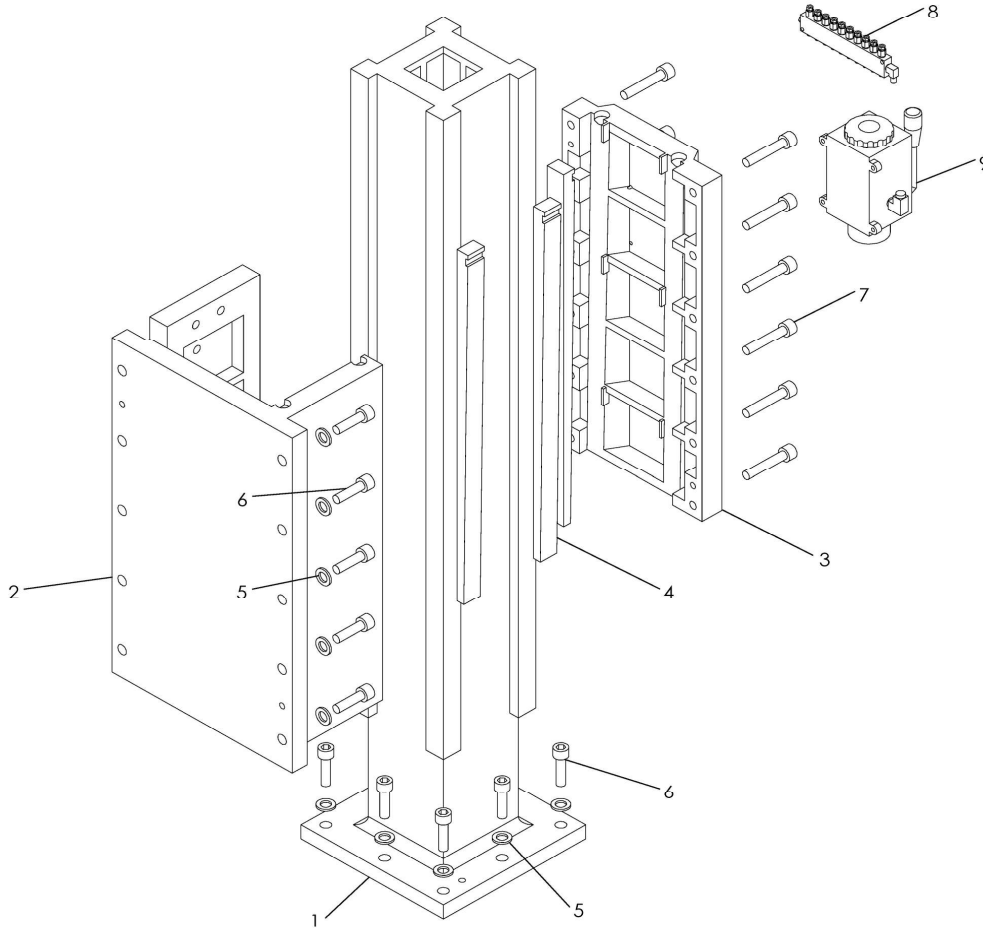
Index No.	Part No.	Description	Size	Qty.
50	ECB1833DMEVS-B50	Brake Plate	1018T/1220T	1
51	TS-0561052	Hex Nut	W1/2"	1
52	ECB1833DMEVS-B52	Oil Hose Fitting	1/4"PT x1/4"TH	1
53	ECB1833DMEVS-B53	Oil Hose	1/4" x 1200 x B.L	1
55	ECB1833DMEVS-B55	Top Wires Collect Box		1
56	ECB1833DMEVS-B56	Cable Organizer		1
57	ECB1833DMEVS-B57	Socket Head Cap Screw	W3/16" x 1/2"	12
58	ECB1833DMEVS-B58	Washer	3/16"	4
59	ECB1833DMEVS-B29	Wires Sleeve	7/8"	3
60	ECB1833DMEVS-B60	Strain Relief	PF 1/2"	1
61	ECB1833DMEVS-B61	Angle Caculator Plate		1
62	ECB1833DMEVS-B62	Buttom Plate		1
63	ECB1833DMEVS-B30	Strain Relief	M16B(CSA)	1

#### HYDRAULIC CYLINDER ASSEMBLY— ECB-1833DMEVS



Index No.	Part No.	Description	Size	Qty.
1	ECB1833DMEVS-C01	Oil HyDraulic Cylinder		1

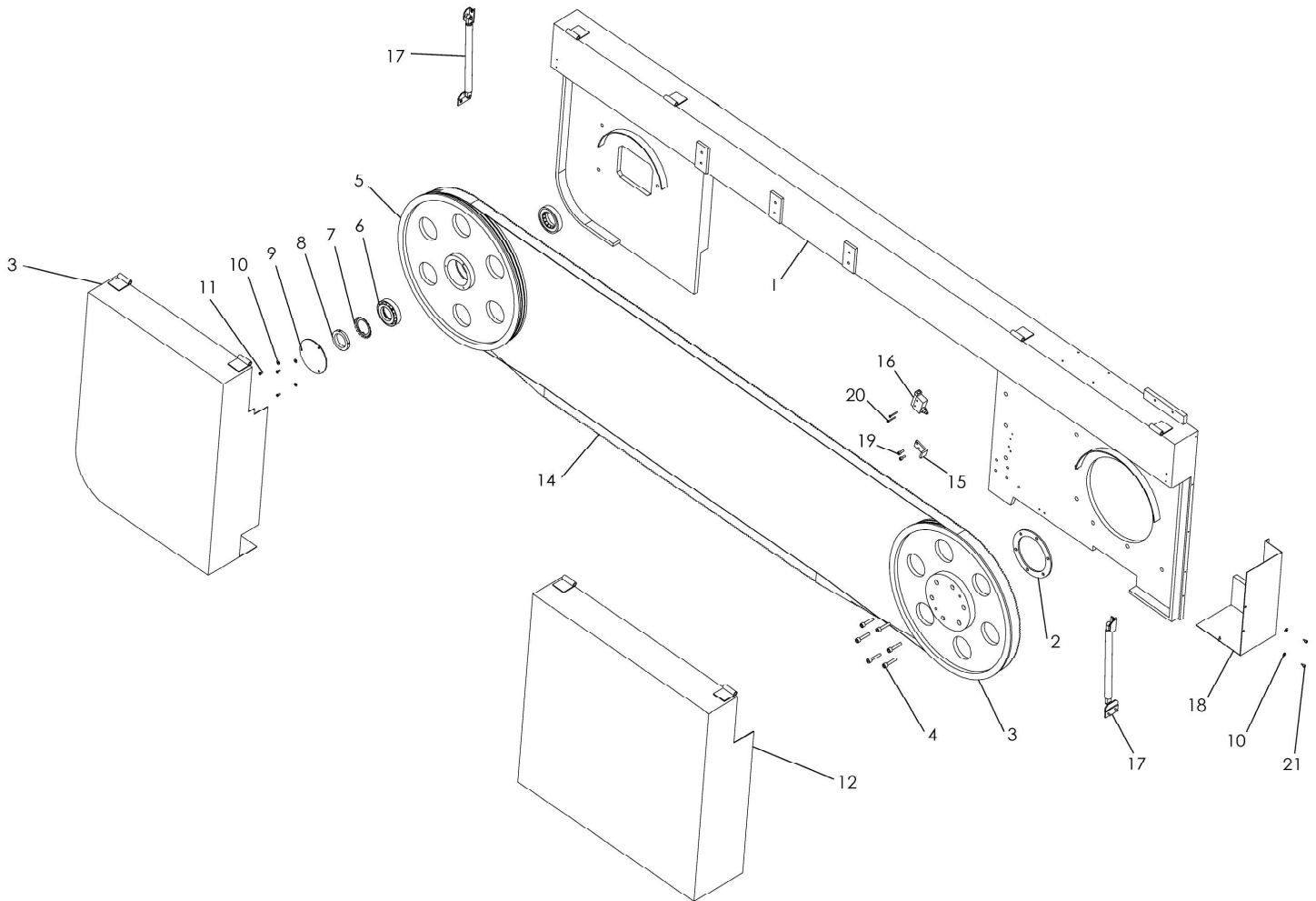
## SLIDE ASSEMBLY — ECB-1833DMEVS



Index No.	Part No.	Description	Size	Qty.
1	ECB1833DMEVS-D01	Column		1
2	ECB1833DMEVS-D02	Front Column Sliding		1
3	ECB1833DMEVS-D03	Rear Column Sliding Cover		1
4	ECB1833DMEVS-D04	Gap		4
5	TS-0720131	Lock Washer	5/8"	18
6	ECB1833DMEVS-D06	Socket Head Cap Screw	W5/8" x 2"	18
7	ECB1833DMEVS-D07	Socket Head Cap Screw	W5/8" x 2 1/2"	12
8	ECB1833DMEVS-D08	Oil Distributor		1
9	ECB1833DMEVS-D09	Manual Oil Lubrication Pump		1



# SAW FRAME ASSEMBLY — ECB-1833DMEVS

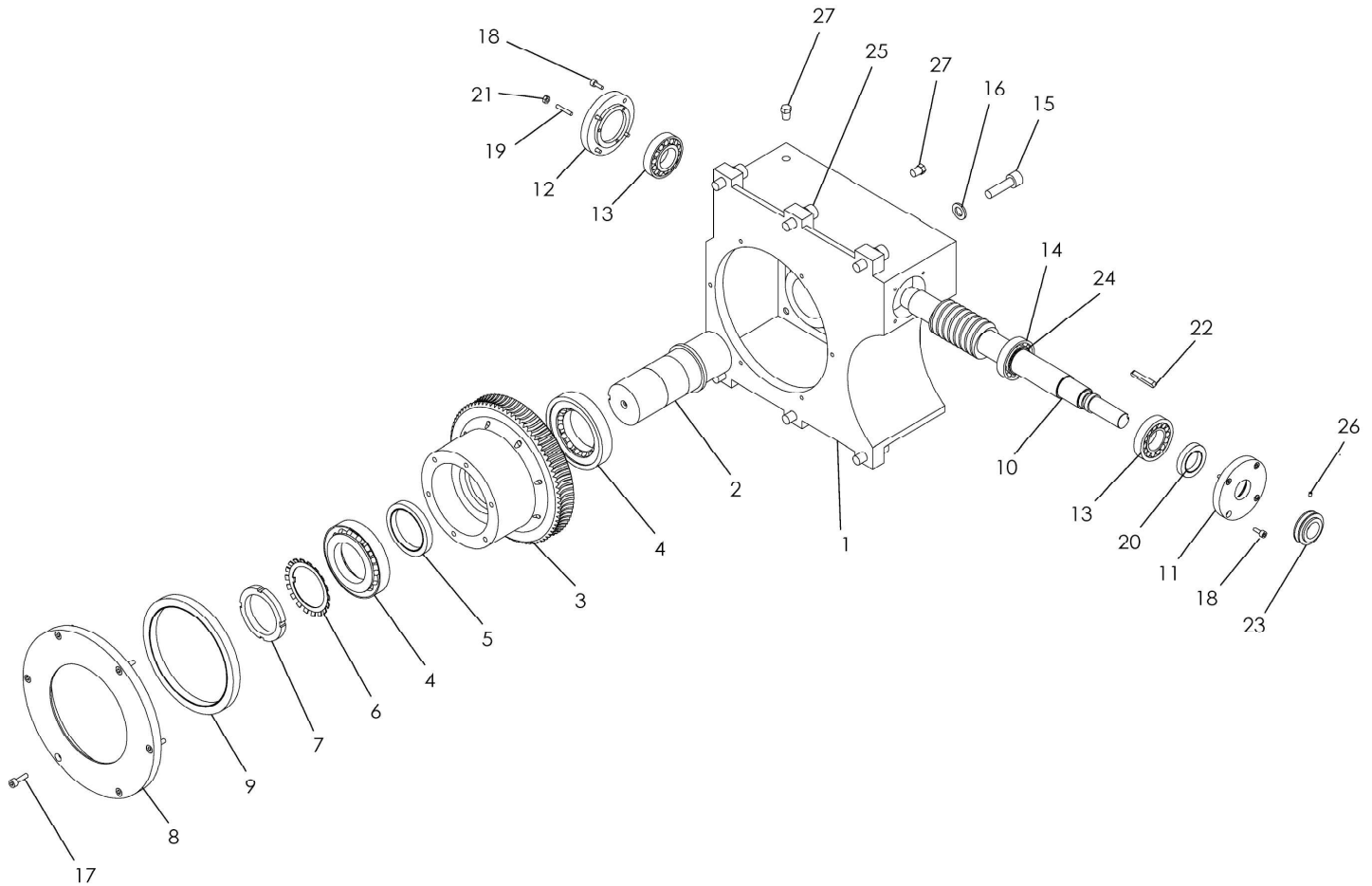


**PARTS LIST SAW FRAME ASSEMBLY — ECB-1833DMEVS**

Index No.	Part No.	Description	Size	Qty.
1	ECB1833DMEVS-E01	Saw Bow		1
2	ECB1833DMEVS-E02	Driving Wheel Gasket		1
3	ECB1833DMEVS-E03	Driving Wheel		1
4	TS-0209081	Socket Head Cap Screw	W3/8" x 1-3/4"	6
5	ECB1833DMEVS-E05	Idler Wheel		1
6	BB30210	Tapper Roller Bearing	30210	2
7	ECB1833DMEVS-AW10	Star Washer	AW10	1
8	ECB1833DMEVS-AN10	Precision Nut	AN10	1
9	ECB1833DMEVS-E09	Idler Wheel Dust Cover		1
10	ECB1833DMEVS-E10	Flat Washer	3/16"	7
11	ECB1833DMEVS-E11	Round Head Machine Screw	W3/16" x 3/8"	3
12	ECB1833DMEVS-E12	Driven Wheel Cover		1
13	ECB1833DMEVS-E13	Idler Wheel Cover		1
14	891172	Blade	41x1.3x6100x3/4T	1
15	ECB1833DMEVS-E15	Limit Fixed Bracket		1
16	ECB1833DMEVS-E16	Limit Switch	MN 5310	1
17	ECB1833DMEVS-E17	Air Hydraulic Set	600 N	2
18	ECB1833DMEVS-E18	Brush Wheel Cover		1
19	TS-0207031	Socket Head Cap Screw	W1/4" x 5/8"	2
20	ECB1833DMEVS-E20	Round Head Machine Screw	W5/32" x1-1/4"	2
21	ECB1833DMEVS-E21	Socket Head Cap Screw	W3/16" x 3/8"	4



# GEAR BOX ASSEMBLY — ECB-1833DMEVS



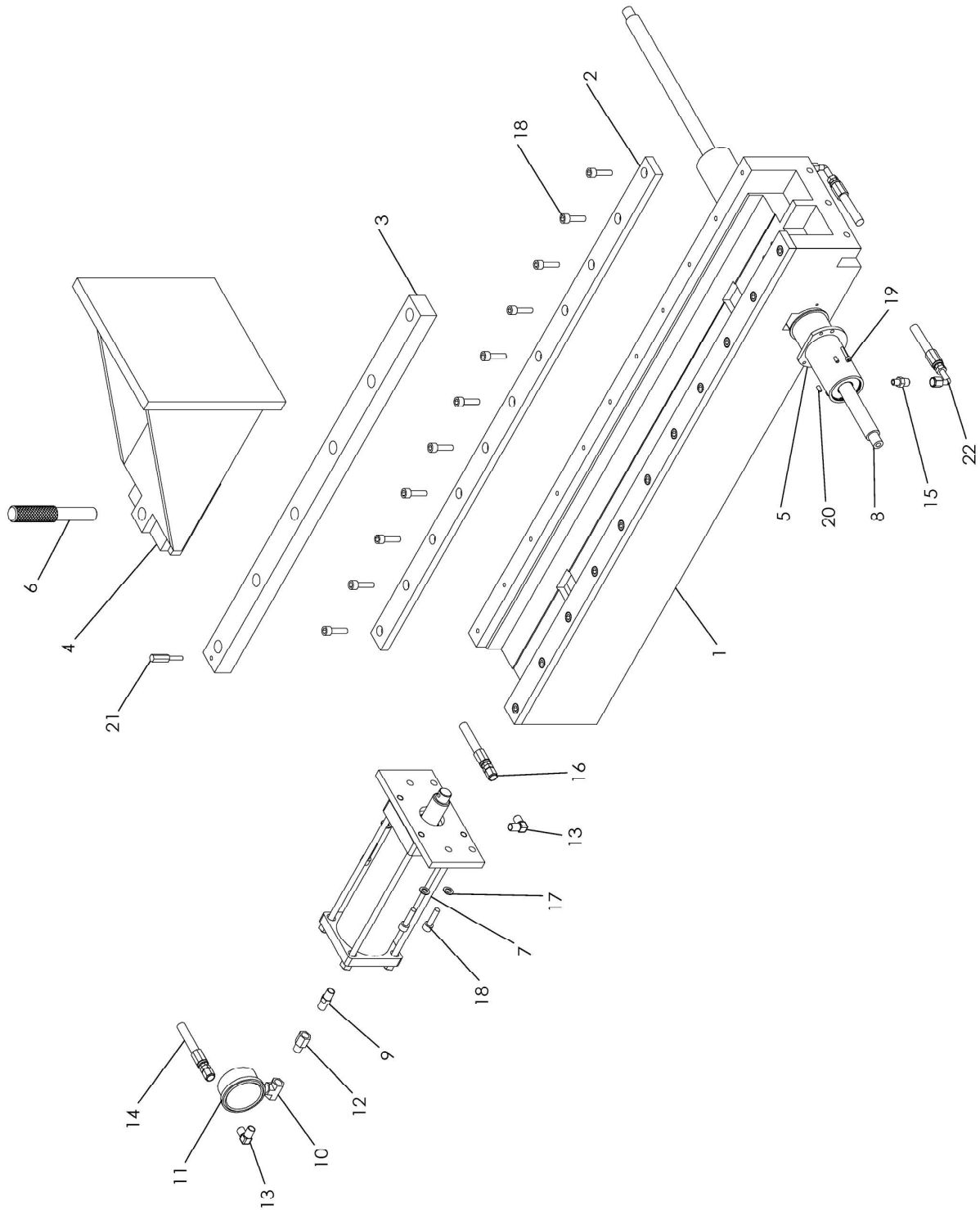


**PARTS LIST GEAR BOX ASSEMBLY — ECB-1833DMEVS**

Index No.	Part No.	Description	Size	Qty.
1	ECB1833DMEVS-F01	Gear Box		1
2	ECB1833DMEVS-F02	Shaft		1
3	ECB1833DMEVS-F03	Worm Gear		1
4	BB30214	Tapper Roller Bearing	30214	2
5	ECB1833DMEVS-F05	Oil Seal	709012	1
6	ECB1833DMEVS-AW14	Star Washer	AW14	1
7	ECB1833DMEVS-AN14	Precision Nut	AN14	1
8	ECB1833DMEVS-F08	Gear Box Cover		1
9	TC17020015	Oil Seal	17020015	1
10	ECB1833DMEVS-F10	Worm Shaft		1
11	ECB1833DMEVS-F11	Front Cover		1
12	ECB1833DMEVS-F12	Back Cover		1
13	BB30207	Tapper Roller Bearing	30207	2
14	BB6008	Ball Bearing	6008	1
15	ECB1833DMEVS-F15	Socket Head Cap Screw	W5/8" x 2"	1
16	ECB1833DMEVS-F16		5/8"	7
17	TS-0208061	Socket Head Cap Screw	W5/16" x 1"	6
18	TS-0207031	Socket Head Cap Screw	W1/4" x 5/8"	8
19	TS-0207072	Socket Head Cap Screw	W1/4" x 1-1/4"	3
20	ECB1833DMEVS-F20	Oil Seal	355510	1
21	TS-0561082	Hex Nut	W3/4"	3
22	ECB1833DMEVS-F22	Double Round Key	7 x 7 x 50	1
23	ECB1833DMEVS-F23	Pulley		1
24	ECB1833DMEVS-S40	C-Ring	S-40	1
25	ECB1833DMEVS-F25	Socket Head Cap Screw	W5/8" x 1-3/4"	6
26	ECB1833DMEVS-F26	Socket Set Screw	W3/16" x 3/16"	1
27	ECB1833DMEVS-F27	Plug	PT1/4"	2



# MOVEABLE SEAT ASSEMBLY — ECB-1833DMEVS

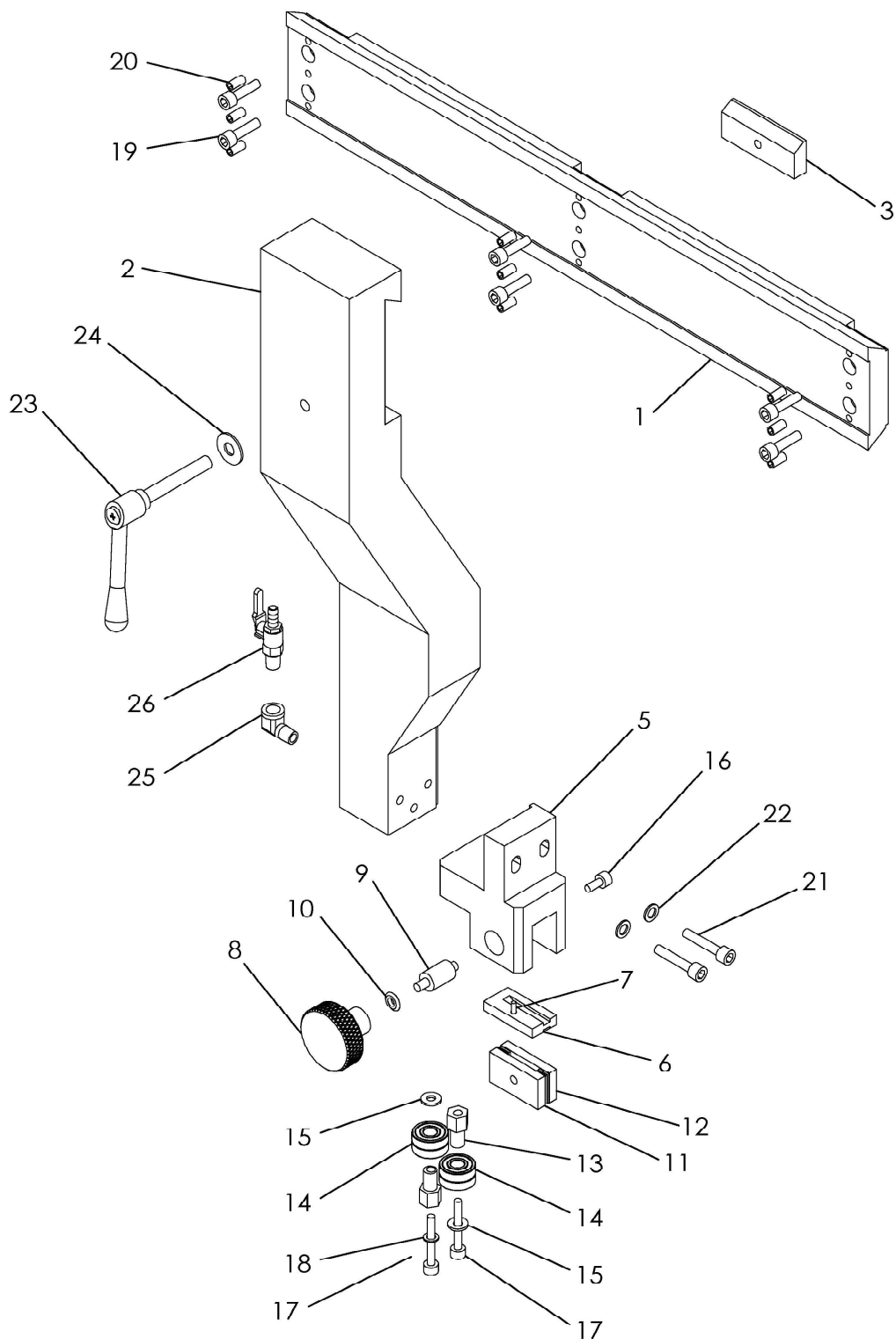


**PARTS LIST MOVEABLE SEAT ASSEMBLY — ECB-1833DMEVS**

Index No.	Part No.	Description	Size	Qty.
1	ECB1833DMEVS-G01	Moveable Table		1
2	ECB1833DMEVS-G02	Wear-Resistant Plate		2
3	ECB1833DMEVS-G03	Vise Rack		1
4	ECB1833DMEVS-G04	Moveable Vise		1
5	ECB1833DMEVS-G05	Oil Hydraulic Cylinder Fixed bracket		2
6	ECB1833DMEVS-G06	Vise Fixed Pin		1
7	ECB1833DMEVS-G07	Oil Hydraulic Cylinder Set for Vise Clamp		1
8	ECB1833DMEVS-G08	Oil Hydraulic Cylinder Set for Moveable Table		1
9	ECB1833DMEVS-G09	Oil Hose Fitting	1/4"PT x 1/4"PT	1
10	ECB1833DMEVS-G10	3-Way Oil Distributor	1/4"PT x 3	1
11	ECB1833DMEVS-G11	Oil Pressure Meter	2.5AT-50KG	1
12	ECB1833DMEVS-G12	Oil Hose Fitting	1/4"P x1/4"P	1
13	ECB1833DMEVS-G13	90-deg. Oil Hose Fitting	1/4"PT x 1/4"TH	2
14	ECB1833DMEVS-G14	Hi-Pressure Oil Hose	1/4" x 1500 x B.L	1
15	ECB1833DMEVS-G15	Oil Hose Fitting	1/8"PT x1/4"TH	2
16	ECB1833DMEVS-B53	Oil Hose	1/4" x 1200 x B.L	1
17	TS-0720091	Lock Washer	W3/8"	4
18	TS-0209061	Socket Head Cap Screw	W3/8" x 1-1/4"	26
19	ECB1833DMEVS-G19	Socket Head Cap Screw	W3/16" x 7/8"	4
20	TS-0267041	Socket Set Screw	W1/4" x 3/8"	6
21	ECB1833DMEVS-G21	Oil Hydraulic Cylinder Pin		1
22	ECB1833DMEVS-B53	Oil Hose	1/4" x 1200 x B.L	2



# LEFT SIDE GUIDE ASSEMBLY — ECB-1833DMEVS

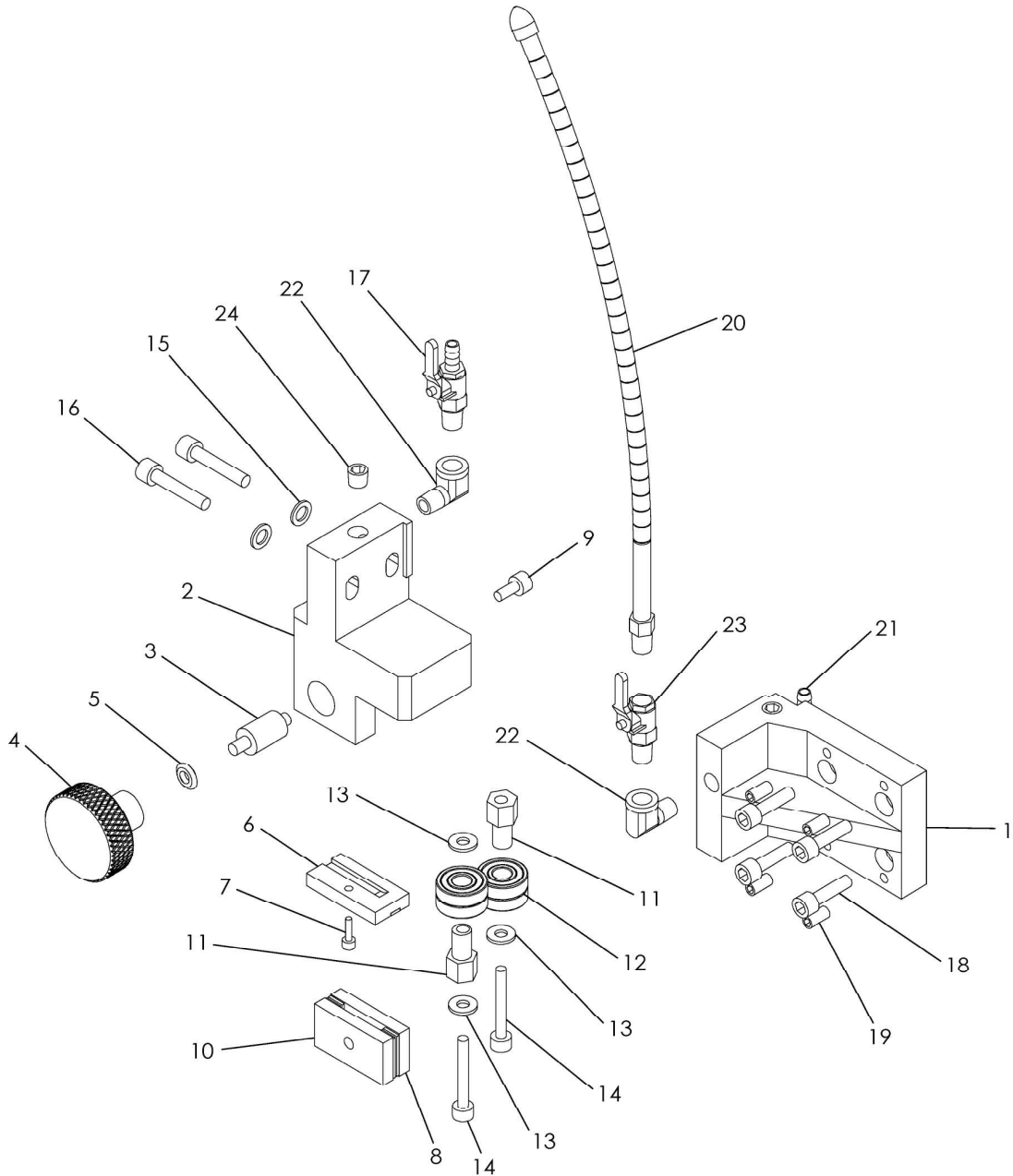


**PARTS LIST LEFT SIDE GUIDE ASSEMBLY — ECB-1833DMEVS**

Index No.	Part No.	Description	Size	Qty.
1	ECB1833DMEVS-H01	Slide Plate		1
2	ECB1833DMEVS-H02	Left Bearing Guide		1
3	ECB1833DMEVS-H03	Lock Block		1
	ECB1833DMEVS-LBGA	Left Bearing Guide Assembly	Index no.5-18	1
5	ECB1833DMEVS-H05	Bearing Guide Bracket - left		1
6	ECB1833DMEVS-H06	Top Carbide Guide - left		1
7	ECB1833DMEVS-H07	Socket Head Cap Screw	W3/16" x 5/8"	1
8	ECB1833DMEVS-H08	Lock Knob		1
9	ECB1833DMEVS-H09	Lock Shaft		1
10	ECB1833DMEVS-H10	Disc Spring		2
11	ECB1833DMEVS-H11	Carbide ( Front)		1
12	ECB1833DMEVS-H12	Carbide ( Rear)		1
13	ECB1833DMEVS-H13	Adjustable screw		2
14	BB-6201ZZ	Ball Bearing	6201 ZZ	4
15	ECB1833DMEVS-H15	Flat Washer	W5/16"	2
16	TS-0208031	Socket Head Cap Screw	W5/16" x 5/8"	1
17	TS-0208102	Socket Head Cap Screw	W5/16" x 2"	2
18	TS-0720081	Lock Washer	W5/16"	1
19	TS-0209061	Socket Head Cap Screw	W3/8" x 1-1/4"	6
20	TS-0270041	Socket Set Screw	W5/16" x 5/8"	9
21	TS-0209081	Socket Head Cap Screw	W3/8" x 1-3/4"	2
22	TS-0720091	Lock Washer	W3/8"	2
23	ECB1833DMEVS-H23	Lock Handle	M12 x 80	1
24	ECB1833DMEVS-H24	Flat Washer	W1/2"	1
25	ECB1833DMEVS-H25	Connect Plug	1/4"P x 1/4"P	1
26	ECB1833DMEVS-H26	Adjusting Valve	1/4"P x 5/16"E	1



# RIGHT SIDE GUIDE ASSEMBLY — ECB-1833DMEVS

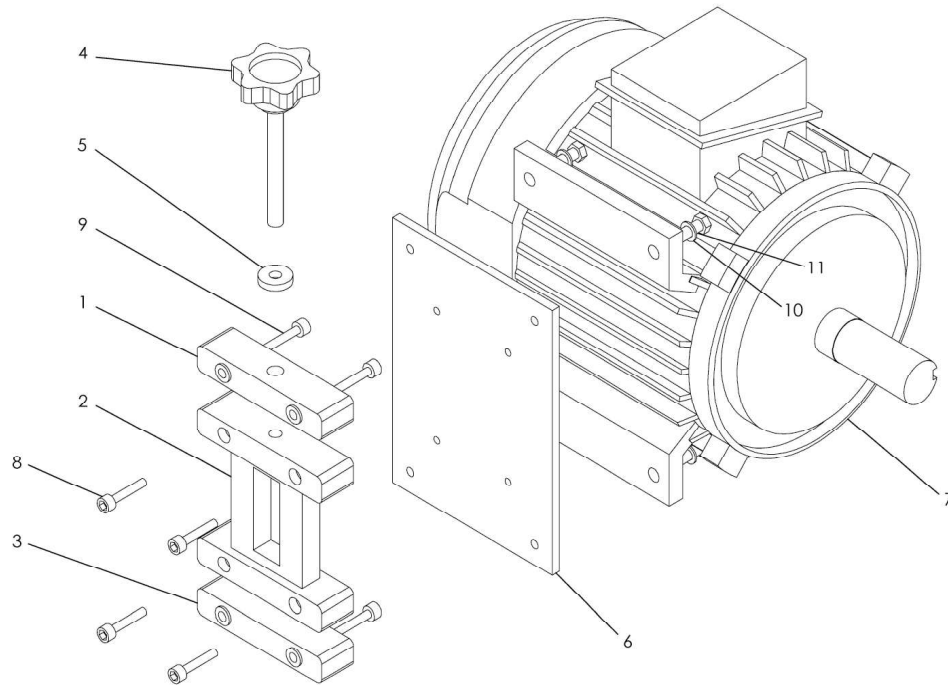


**PARTS LIST RIGHT SIDE GUIDE ASSEMBLY — ECB-1833DMEVS**

Index No.	Part No.	Description	Size	Qty.
1	ECB1833DMEVS-I01	Bearing Guide Block Seat		1
2	ECB1833DMEVS-I02	Bearing Guide Block		1
3	ECB1833DMEVS-H09	Lock Shaft		1
4	ECB1833DMEVS-H08	Lock Knob		1
5	ECB1833DMEVS-H10	Disc Spring		2
6	ECB1833DMEVS-I06	Top Carbide Guide, right		1
7	ECB1833DMEVS-I07	Socket Head Cap Screw	W3/16" x 5/8"	1
8	ECB1833DMEVS-H12	Carbide ( Rear)		1
9	TS-0208031	Socket Head Cap Screw	W5/16" x 5/8"	1
10	ECB1833DMEVS-H11	Carbide ( Front)		1
11	ECB1833DMEVS-H13	Adjustable screw		2
12	BB6201ZZ	Ball Bearing	6201 ZZ	4
13	ECB1833DMEVS-I13	Flat Washer	W5/16"	3
14	TS-0208102	Socket Head Cap Screw	W5/16" x 2"	2
15	TS-0720091	Lock Washer	W3/8"	2
16	TS-0209081	Socket Head Cap Screw	W3/8" x 1-3/4"	2
17	ECB1833DMEVS-H26	Adjusting Valve	1/4"P x 5/16"E	1
18	TS-0209061	Socket Head Cap Screw	W3/8" x 1-1/4"	4
19	TS-0270071	Socket Set Screw	W5/16" x 3/4"	4
20	ECB1833DMEVS-I20	Coolant Hose	1/4" x 16"	1
21	ECB1833DMEVS-I21	Hose Connector	1/4"PT x 5/16"E	1
22	ECB1833DMEVS-H25	Connect Plug	1/4"P x 1/4"P	2
23	ECB1833DMEVS-I23	Adjusting Valve	1/4"P x 5/16"E	1
24	ECB1833DMEVS-I24	Stopper	1/4"PT	2



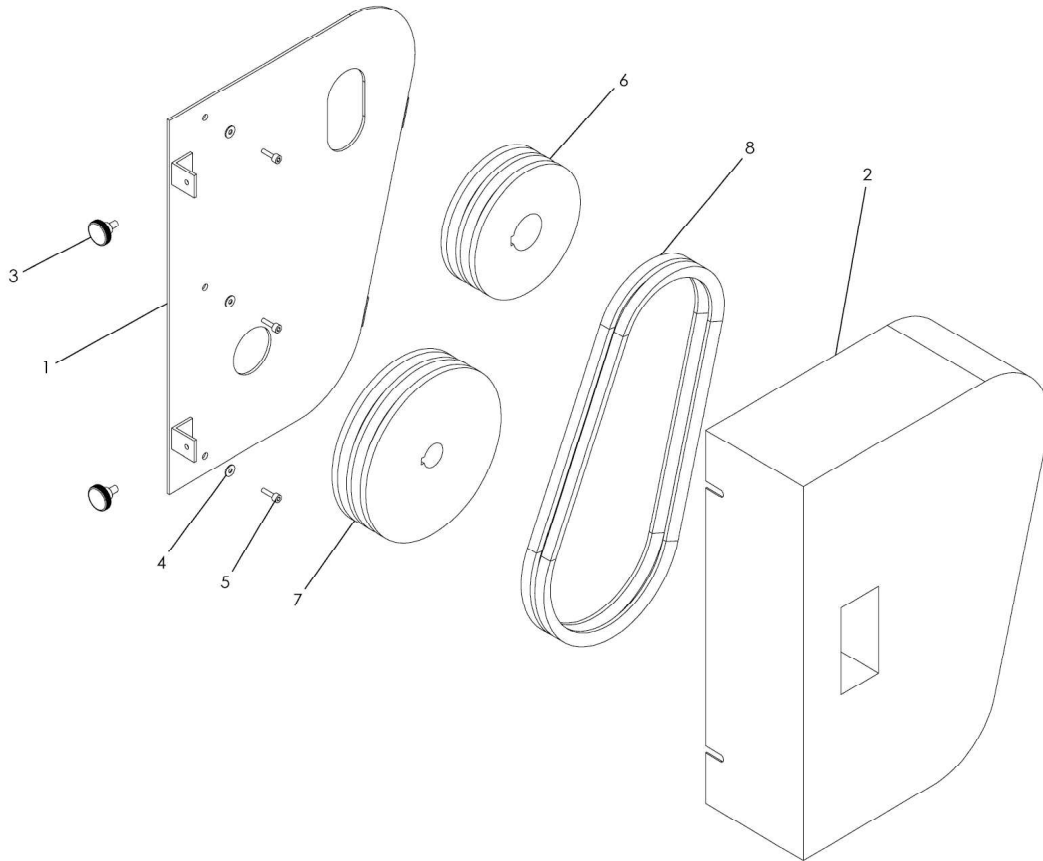
**MOTOR ASSEMBLY — ECB-1833DMEVS**



Index No.	Part No.	Description	Size	Qty.
1	ECB1833DMEVS-J01	Upper Bracket		1
2	ECB1833DMEVS-J02	Middle Bracket		1
3	ECB1833DMEVS-J03	Buttom Bracket		1
4	ECB1833DMEVS-J04	Tension Knob		1
5	ECB1833DMEVS-J05	Flat Washer	1/2"	1
6	ECB1833DMEVS-J06	Motor Support Plate		1
7	ECB1833DMEVS-J07	Main Motor	7.5HP/ 230/460V, 3Ph ,4P	1
8	TS-0208081	Socket Head Cap Screw	W5/16" x 1-1/2"	4
9	TS-0208092	Socket Head Cap Screw	W5/16" x 1-3/4"	4
10	TS-0720091	Lock Washer	W3/8"	4
11	TS-0060051	Hex Cap Screw	W3/8" x 1"	4



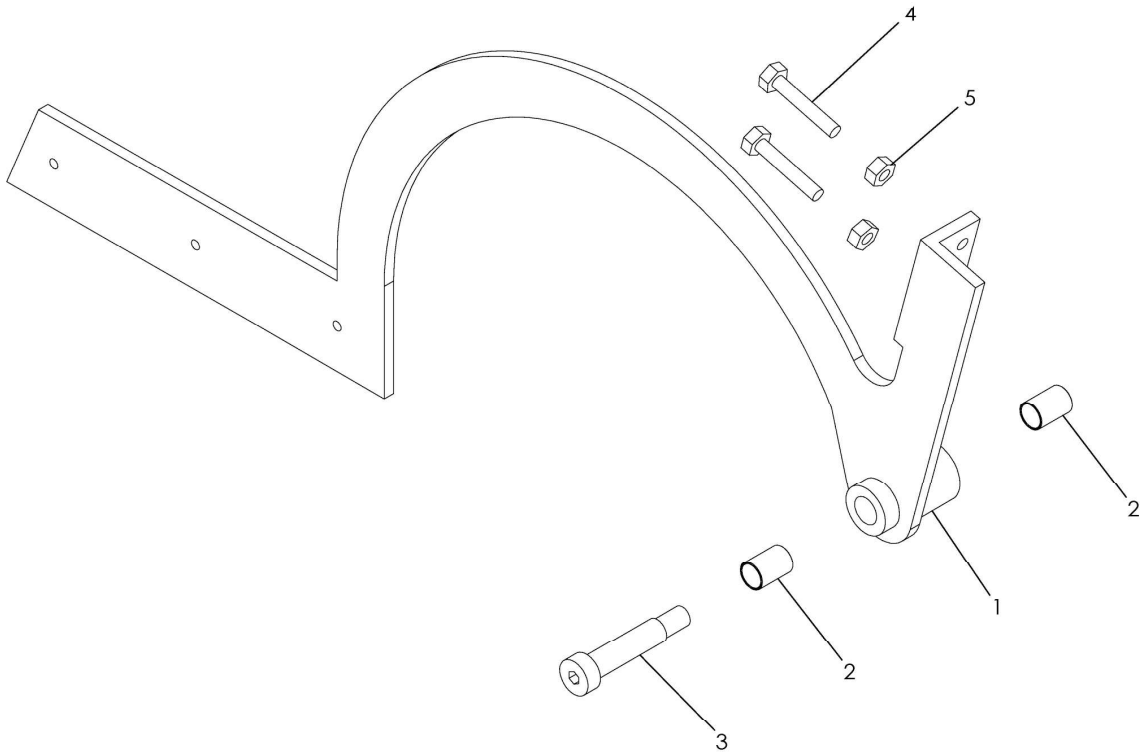
## PULLEY ASSEMBLY — ECB-1833DMEVS



Index No.	Part No.	Description	Size	Qty.
1	ECB1833DMEVS-K01	PulleyBox- Bottom		1
2	ECB1833DMEVS-K02	Pulley Box-Cover		1
3	ECB1833DMEVS-K03	Lock Knob		2
4	ECB1833DMEVS-K04	Flat Washer	3/16"	3
5	ECB1833DMEVS-I07	Socket Head Cap Screw	W3/16" x 5/8"	3
6	ECB1833DMEVS-K06	Motor pulley		1
7	ECB1833DMEVS-K07	Gear Box pulley		1
8	VB-A37	V Belt	A37	2

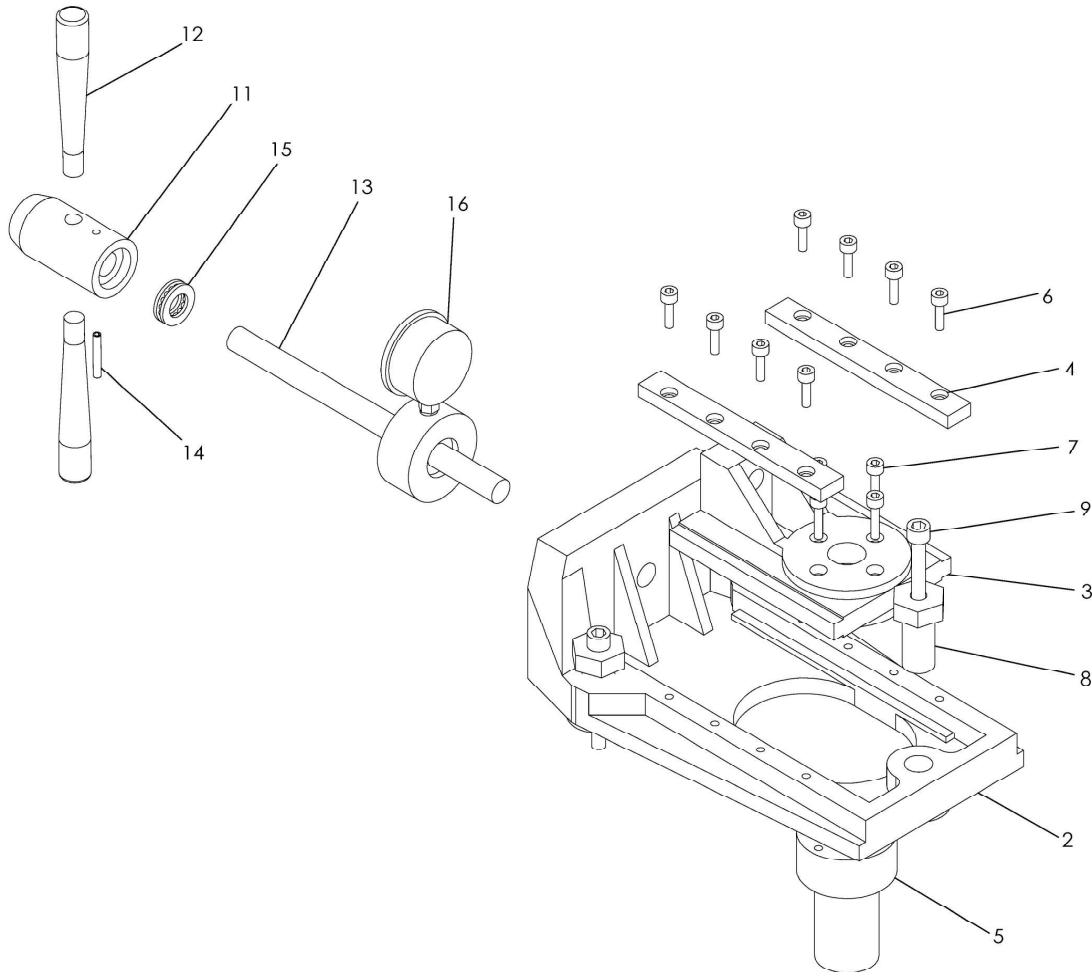


**SLIDING TOUCH BAR ASSEMBLY — ECB-1833DMEVS**



Index No.	Part No.	Description	Size	Qty.
1	ECB1833DMEVS-L01	Rapid Down Feed Measuring Rod		1
2	ECB1833DMEVS-L02	Self- Lubrication Bearing	CB1220	2
3	ECB1833DMEVS-L03	Contour Screw	M12 x 45	1
4	TS-0051071	Hex Cap Screw	W5/16" x 1-1/2"	2
5	TS-0570021	Hex Nut	W5/16"	2

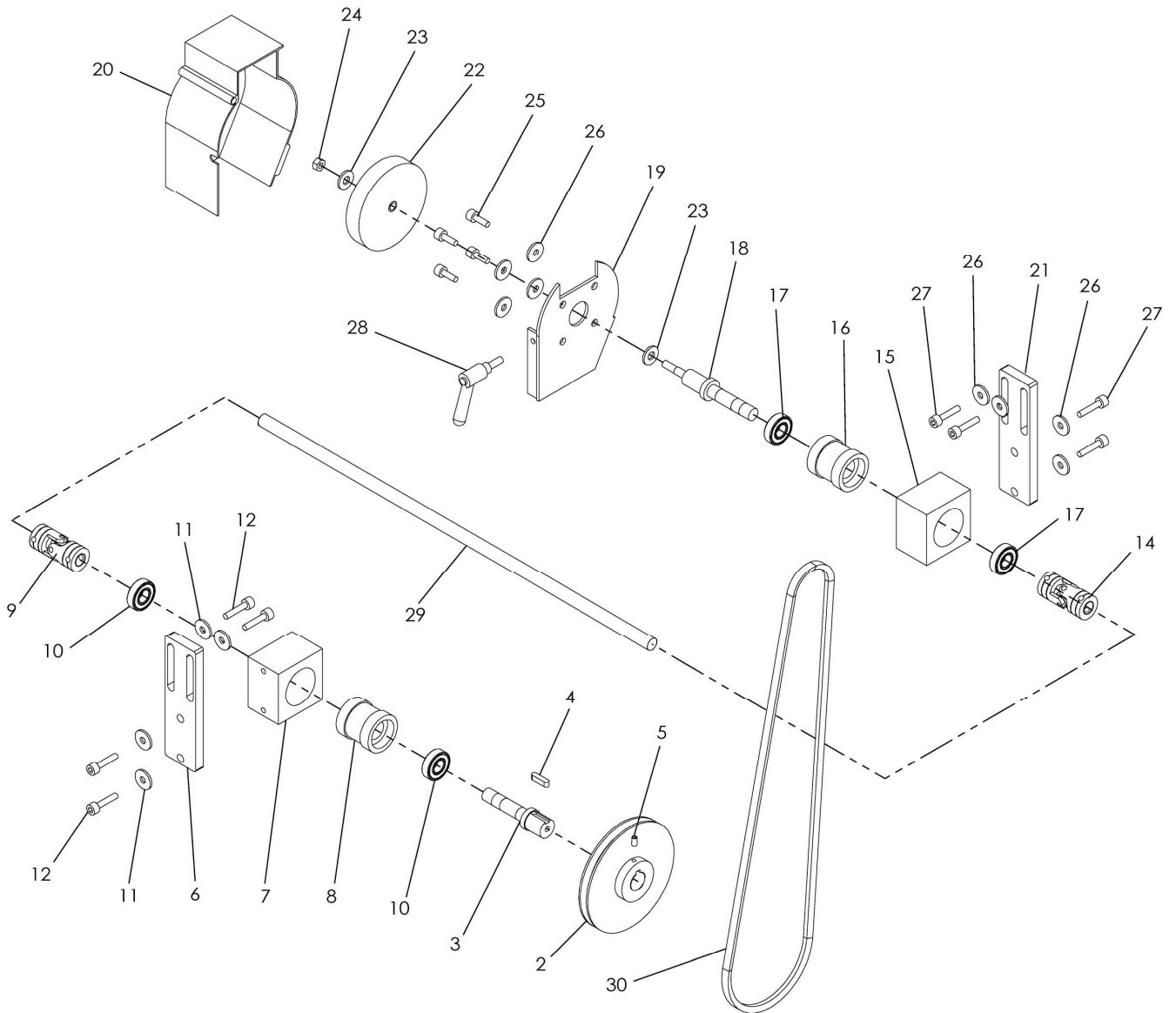
## BLADE TENSIONER ASSEMBLY — ECB-1833DMEVS



Index No.	Part No.	Description	Size	Qty.
	ECB1833DMEVS-N01	Blade Tension Mechanism Set	Index no.2-9	1
2	ECB1833DMEVS-N02	Blade Tension Bracket		1
3	ECB1833DMEVS-N03	Blade Tension Sliding Block		1
4	ECB1833DMEVS-N04	Slider Fixed Plate		2
5	ECB1833DMEVS-N05	Idler Shaft		1
6	TS-0208061	Socket Head Cap Screw	W5/16" x 1"	8
7	TS-0208072	Socket Head Cap Screw	W5/16" x 1-1/4"	4
8	ECB1833DMEVS-N08	Adjustable Screw		3
9	ECB1833DMEVS-N09	Socket Head Cap Screw	W1/2" x 3-1/2"	3
11	ECB1833DMEVS-N11	Blade Tension Block		1
12	ECB1833DMEVS-N12	Handle		2
13	ECB1833DMEVS-N13	Shaft		1
14	ECB1833DMEVS-N14	Spring Pin	M6 x 40	1
15	BB51104	Thrust Bearing	51104	1
16	ECB1833DMEVS-N16	Blade Tension Gauge		1



# WIRE BRUSH ASSEMBLY — ECB-1833DMEVS

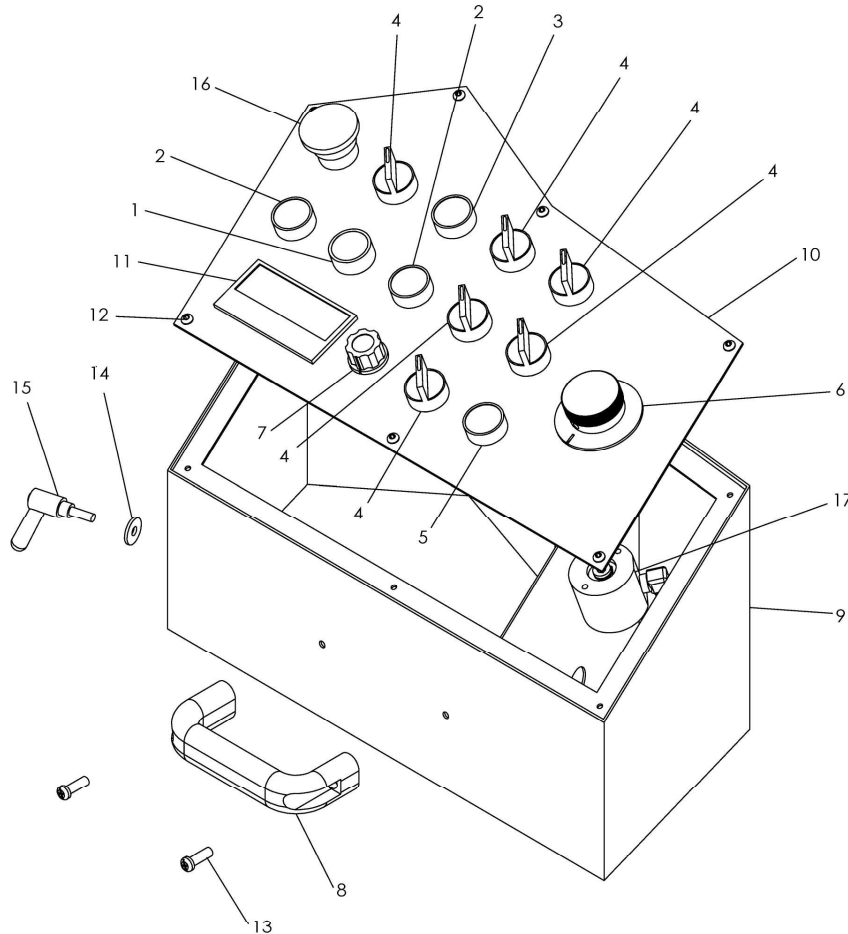


**PARTS LIST WIRE BRUSH ASSEMBLY — ECB-1833DMEVS**

Index No.	Part No.	Description	Size	Qty.
1	ECB1833DMEVS-M01	Driven Brush Wheel set	Index No 2-12	1
2	ECB1833DMEVS-M02	Pulley		1
3	ECB1833DMEVS-M03	Shaft		1
4	ECB1833DMEVS-M04	Double Round Key	5 x 5 x 20	1
5	ECB1833DMEVS-M05	Socket Set Screw	W3/16" x 5/16"	1
6	ECB1833DMEVS-M06	Fixed Plate		1
7	ECB1833DMEVS-M07	Fixed Bracket		1
8	ECB1833DMEVS-M08	Shaft Fixed Seat		1
9	ECB1833DMEVS-SJ12	Universal Joint	SJ-12	1
10	BB6001ZZ	Ball Bearing	6001 ZZ	2
11	ECB1833DMEVS-M11	Flat Washer	1/4"	4
12	TS-0207061	Socket Head Cap Screw	W1/4" x 1"	4
13	ECB1833DMEVS-M13	Idler brush Wheel Set	Index no.14-28	1
14	ECB1833DMEVS-SJ12	Universal Joint	SJ-12	1
15	ECB1833DMEVS-M15	Brush Wheel Bracket		1
16	ECB1833DMEVS-M08	Shaft Fixed Seat		1
17	BB6001ZZ	Ball Bearing	6001 ZZ	2
18	ECB1833DMEVS-M18	Brush Wheel Shaft		1
19	ECB1833DMEVS-M19	Brush Wheel Bracket		1
20	ECB1833DMEVS-M20	Brush Wheel Cover		1
21	ECB1833DMEVS-M06	Fixed Plate		1
22	ECB1833DMEVS-M22	Steel Brush	D85xd7xB16 x0.3mm	1
23	ECB1833DMEVS-M23	Flat Washer	5/16"	2
24	TS-0570011	Hex Nut	W1/4"	1
25	TS-0207031	Socket Head Cap Screw	W1/4" x 5/8"	4
26	ECB1833DMEVS-M26	Flat Washer	1/4"	8
27	TS-0207061	Socket Head Cap Screw	W1/4" x 1"	4
28	ECB1833DMEVS-M28	Handle	W1/4" x 3/4"	1
29	ECB1833DMEVS-M29	Connect Rod		1
30	VB-K40	Belt	K40	1

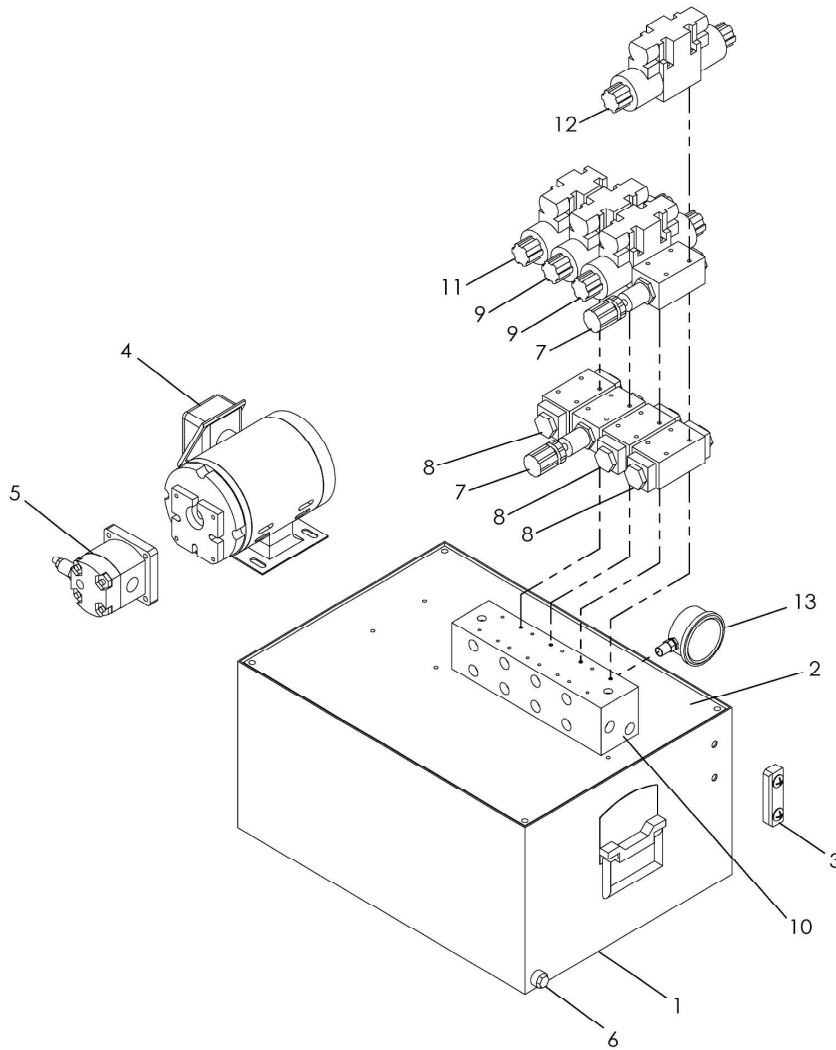


## CONTROL BOX ASSEMBLY — ECB-1833DMEVS



Index No.	Part No.	Description	Size	Qty.
1	ECB1833DMEVS-O01	Indicator Lamp		1
2	ECB1833DMEVS-O02	Green Push Button -light		2
3	ECB1833DMEVS-O03	Red Push Button		1
4	ECB1833DMEVS-O04	Select Switch		6
5	ECB1833DMEVS-O05	Black Push Button		1
6	ECB1833DMEVS-O06	Valve Regulator Knob		1
7	ECB1833DMEVS-O07	Blade Speed Knob		1
8	ECB1833DMEVS-O08	Handle		1
9	ECB1833DMEVS-O09	Control Panel Box		1
10	ECB1833DMEVS-O10	Control Panel		1
11	ECB1833DMEVS-O11	Digital Readout Monitor		1
12	ECB1833DMEVS-O12	Socket Head Button Screw		7
13	ECB1833DMEVS-O13	Round Head Machine Screw	W1/4" x 3/4"	2
14	ECB1833DMEVS-O14	Flat Washer		1
15	ECB1833DMEVS-O15	Lock Handle		1
16	ECB1833DMEVS-O16	Emergency Stop Button		1
17	ECB1833DMEVS-O17	Valve Regulator		1

## HYDRAULIC UNIT ASSEMBLY — ECB-1833DMEVS

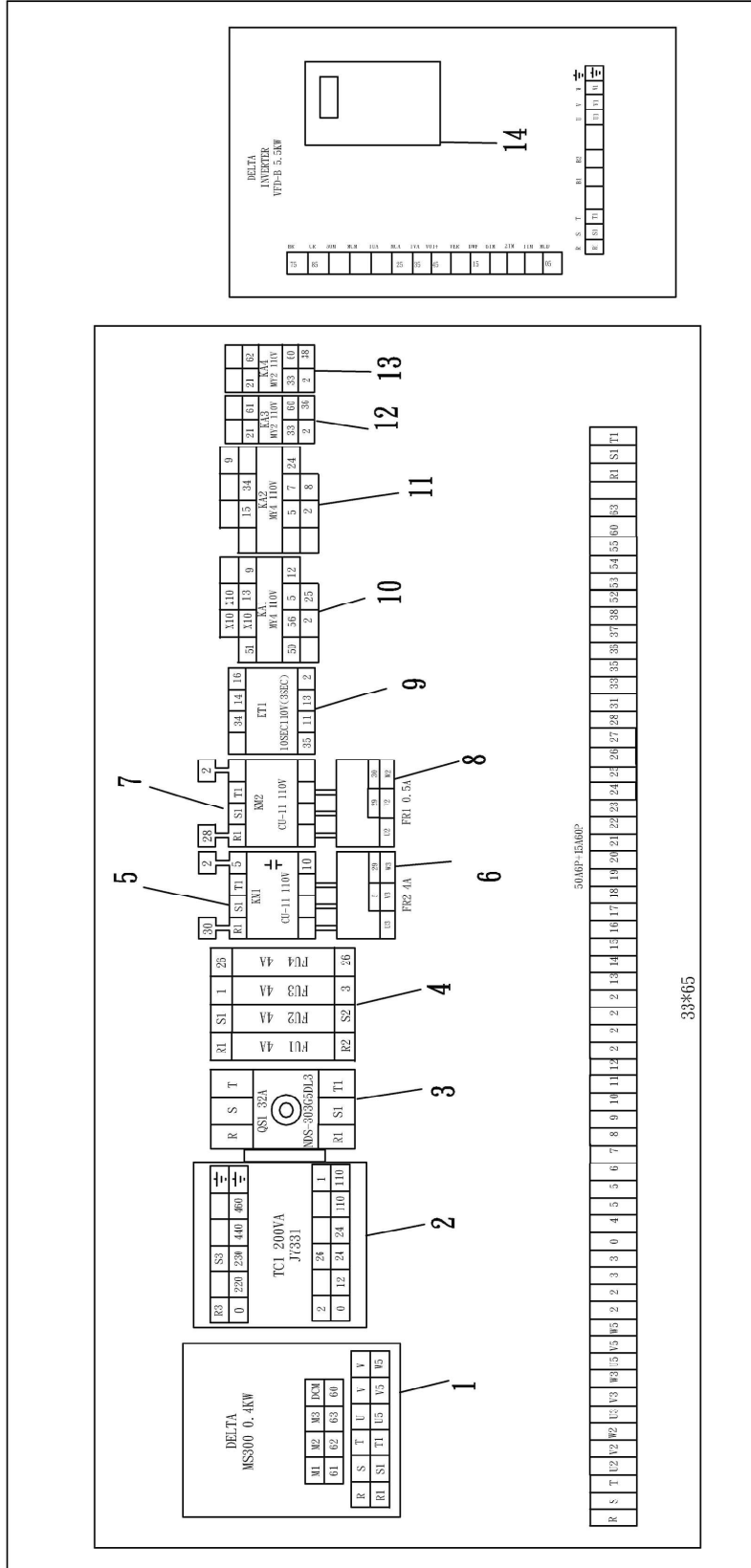


Index No.	Part No.	Description	Size	Qty.
1	ECB1833DMEVS-P01	Oil Tank		1
2	ECB1833DMEVS-P02	Oil Tank Cover		1
3	ECB1833DMEVS-P06	Oil level Gauge		1
4	ECB1833DMEVS-P07	Oil Motor		1
5	ECB1833DMEVS-P10	Oil Pump		1
6	ECB1833DMEVS-F27	Plug		1
7	ECB1833DMEVS-P03	Reduce Valve Regulator		2
8	ECB1833DMEVS-P05	Check Valve		3
9	ECB1833DMEVS-P04	Solenoid Valve		2
10	ECB1833DMEVS-P08	Oil Circuit Board		1
11	ECB1833DMEVS-P09	Check Valve		1
12	ECB1833DMEVS-P12	Check Valve		1
13	ECB1833DMEVS-G11	Oil Pressure Gauge	2.5AT-50KG	1





# ELECTRICAL BOX DIAGRAM — ECB-1833DMEVS

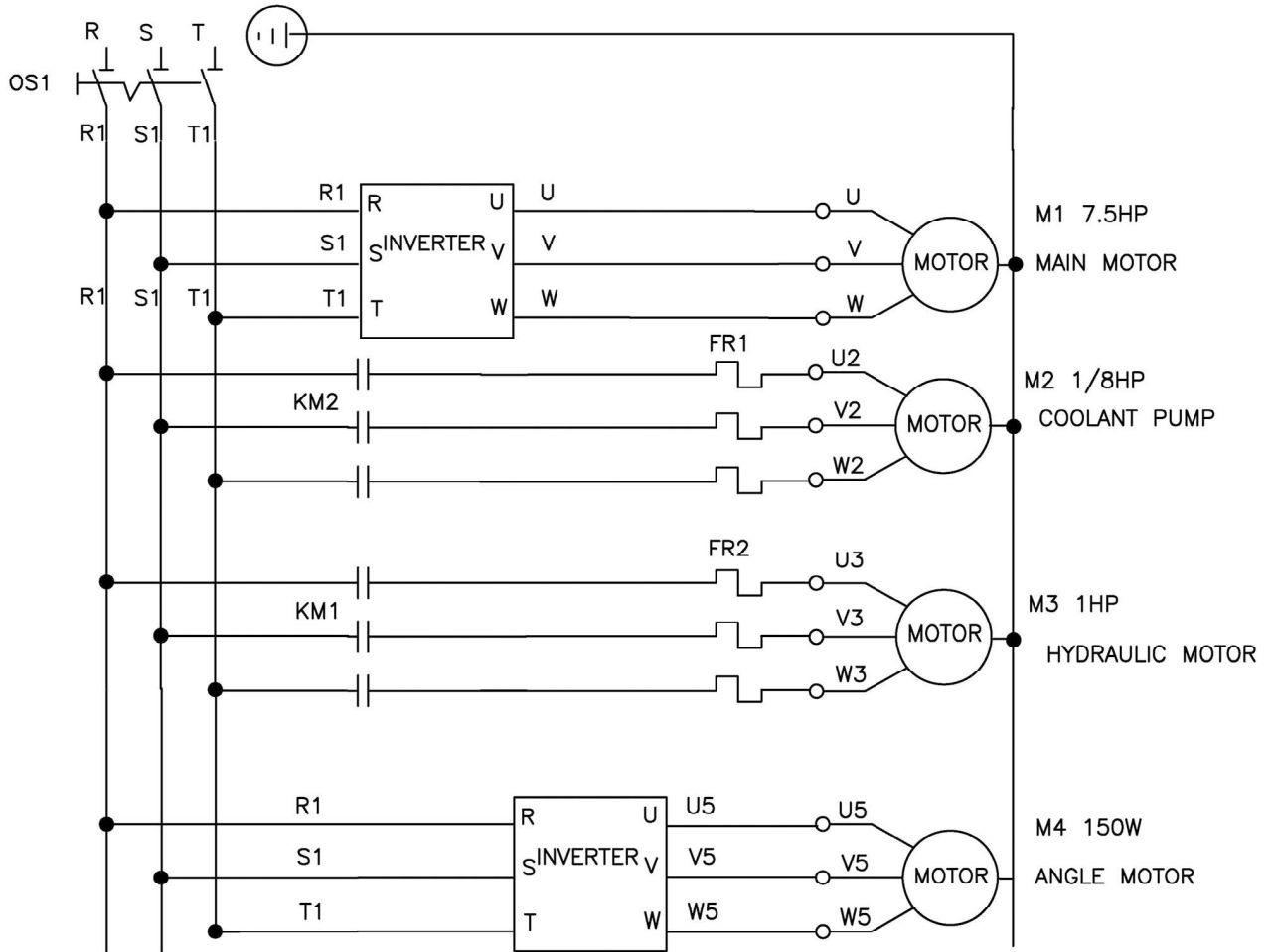


## PARTS LIST ELECTRICAL BOX — ECB-1833DMEVS

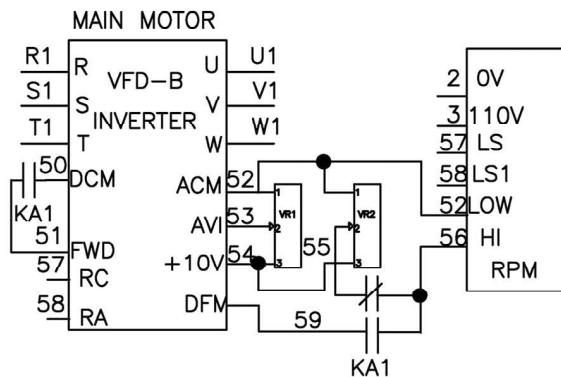
Index No.	Part No.	Description	Size	Qty.
1	VFDS1-INV	Inverter	S1 230V	1
	VFDS1-INV460	Inverter	S1 460V	1
2	EHB1833DMEVS-TC1	Transformer	200VA	1
3	EHB1833DMEVS-QS1	Door Switch		1
4	EHB1833DMEVS-FU1-2	Fuse	4A/230V	1
	EHB1833DMEVS-FU1-4	Fuse	2A/460V	1
	EHB1833DMEVS-FU2-2	Fuse	4A/230V	1
	EHB1833DMEVS-FU2-4	Fuse	2A/460V	1
	EHB1833DMEVS-FU3	Fuse	4A	1
	EHB1833DMEVS-FU4	Fuse	4A	1
5	EHB1833DMEVS-KM1	Magnetic Switch	CU-11/ 110V	1
6	EHB1833DMEVS-FR1-2	Overload for Coolant Pump	0.35-0.5A( 230V)	1
	EHB1833DMEVS-FR1-4	Overload for Coolant Pump	0.16-0.25A( 460V)	1
7	EHB1833DMEVS-KM2	Magnetic Switch	CU-11/ 110V	1
8	EHB1833DMEVS-FR2-2	Overload for Hydraulic Motor	2.5-4A(230V)	1
	EHB1833DMEVS-FR2-4	Overload for Hydraulic Motor	1.4-2A(460V)	1
9	EHB1833DMEVS-KT1	Timer	10Sec/ 110V	1
10	EHB1833DMEVS-KA1	Relay	MY4/ 110V	1
11	EHB1833DMEVS-KA2	Relay	MY4/ 110V	1
12	EHB1833DMEVS-KA3	Relay	MY2/ 110V	1
13	EHB1833DMEVS-KA4	Relay	MY2/ 110V	1
14	ECB1833DMEVS-A37-2	Inverter	7.5HP/230V/3PH	1
	ECB1833DMEVS-A37-4	Inverter	7.5HP/460V/3PH	1



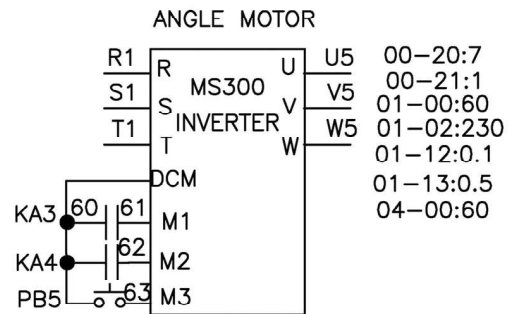
## 16.0 WIRING DIAGRAM



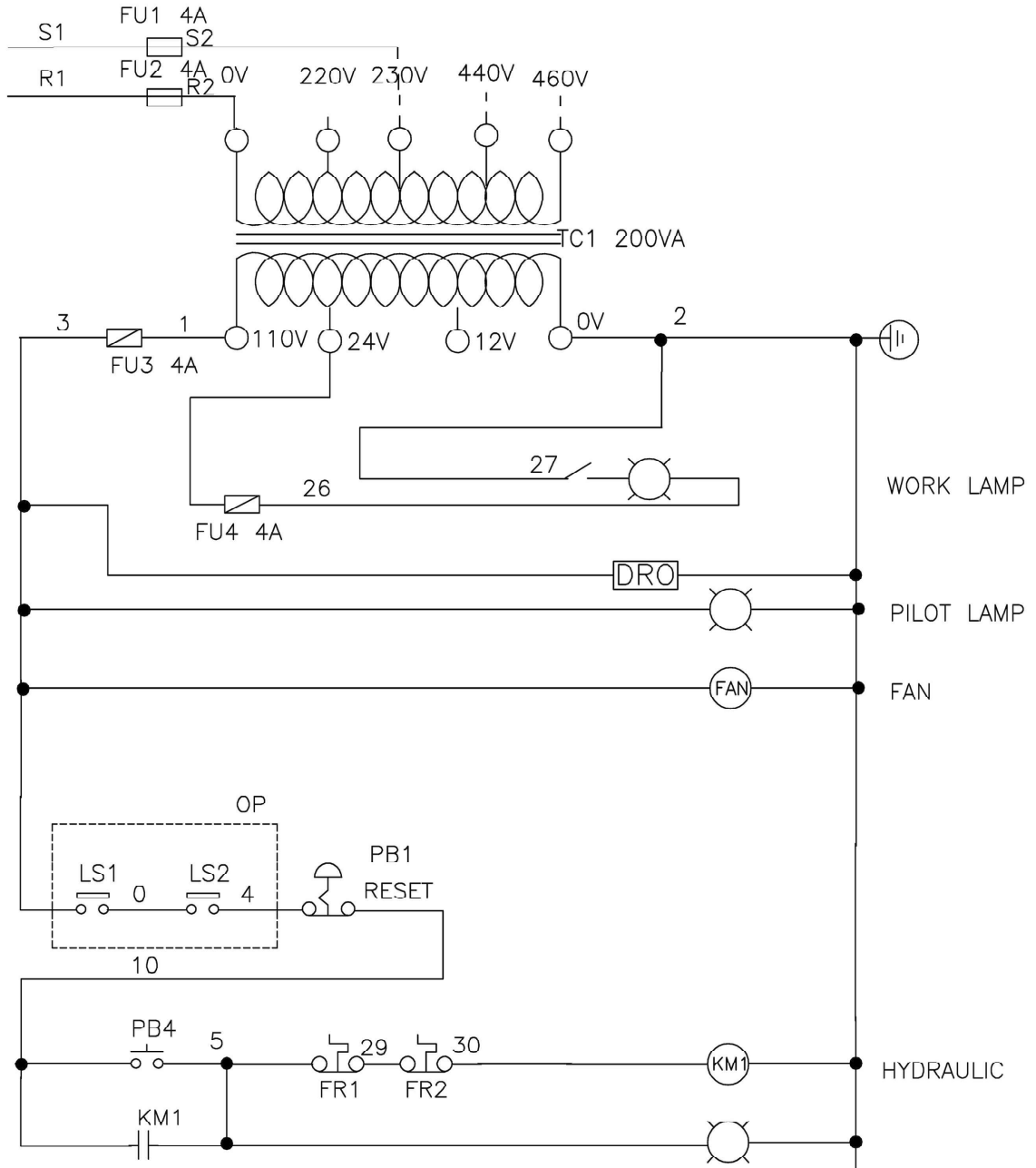
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- 00-05:3.92
- 00-07:0
- 00-08:1
- 01-00:76.6
- 01-02:230
- 01-09:3
- 01-10:4
- 02-00:1
- 02-01:1
- 02-02:1
- 03-00:1
- 04-00:16.9

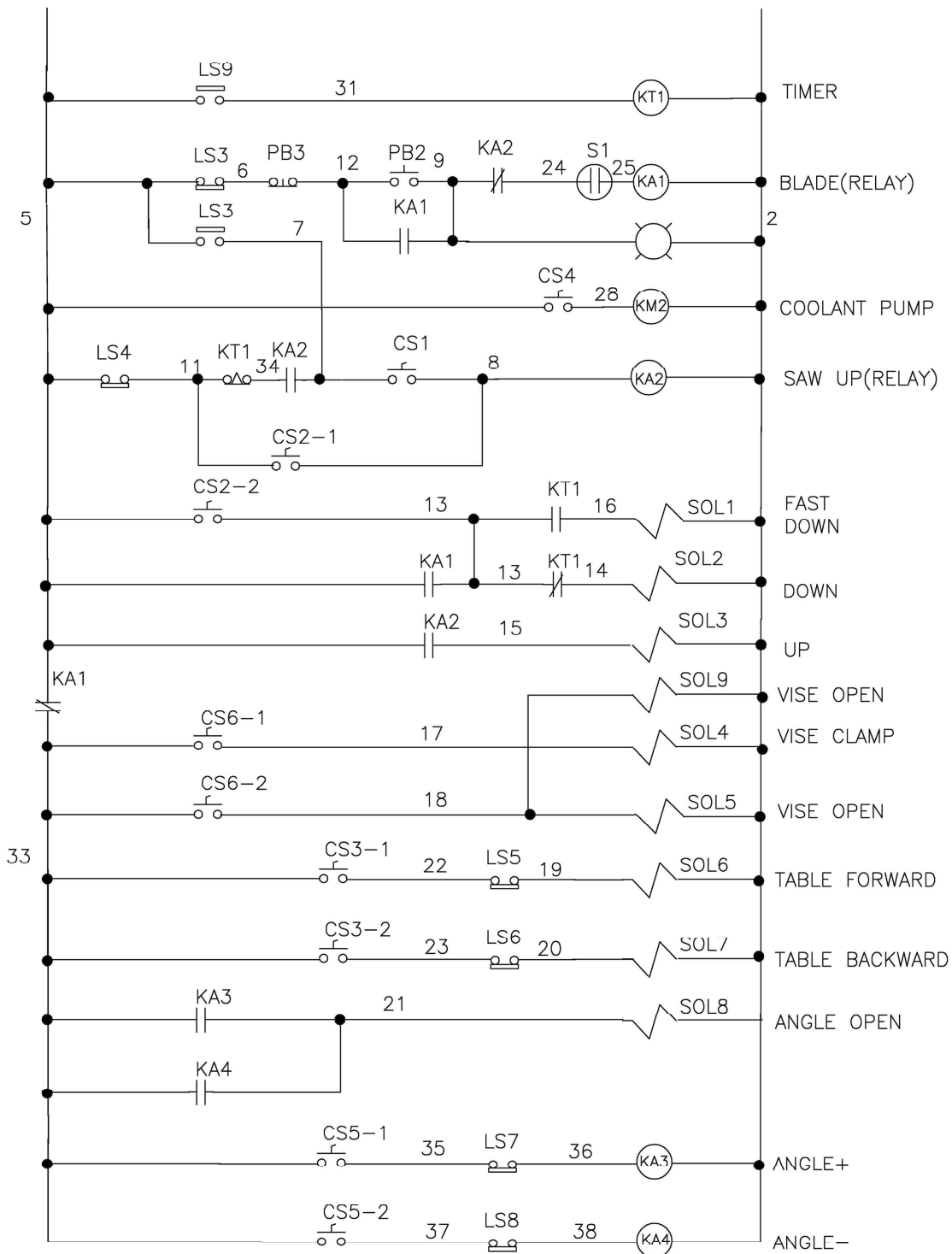


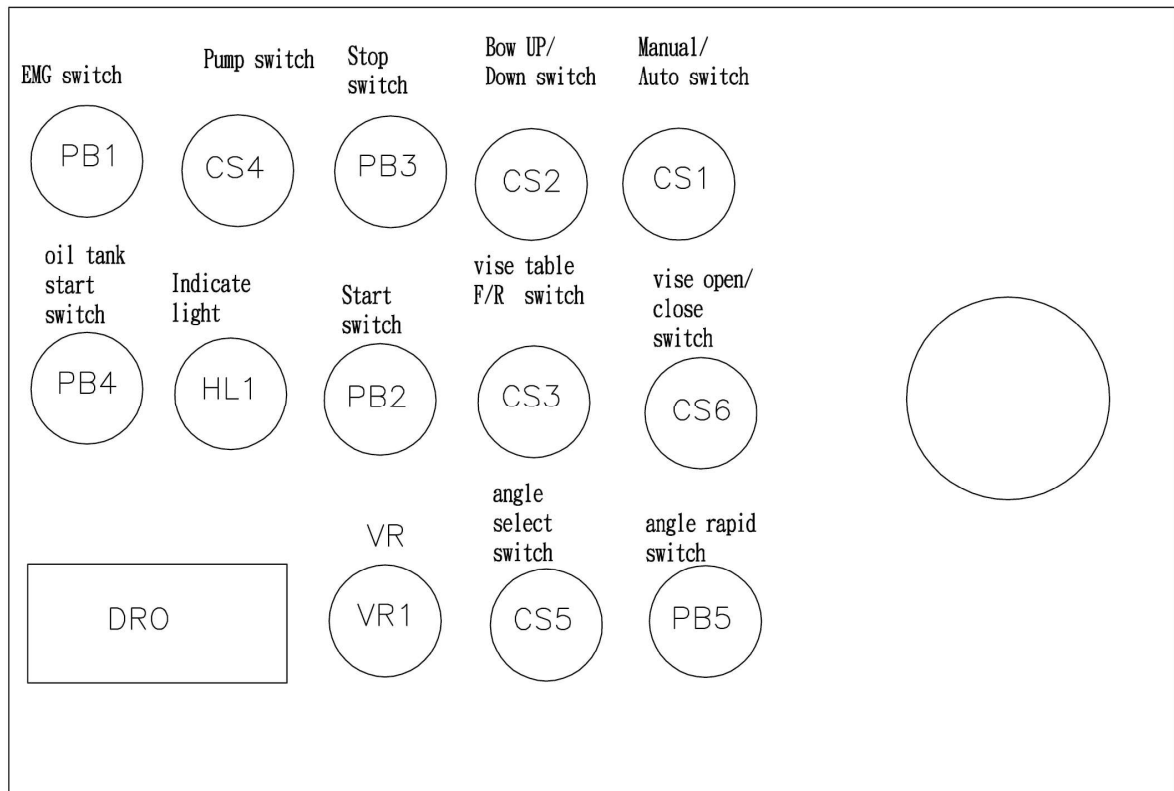
\*01-02:460 (for 460V)



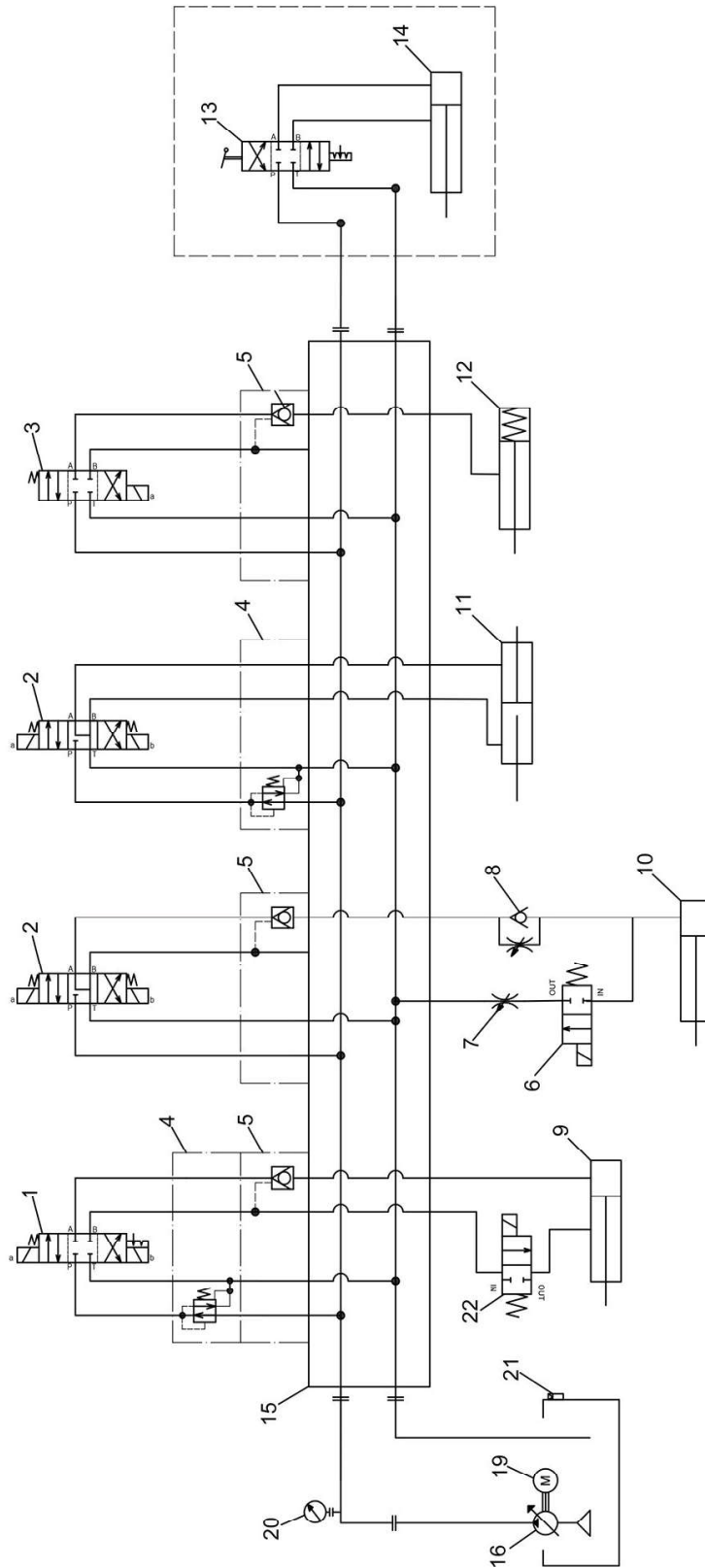
\*01-02: 460(for 460V)







CS1	MANUAL/AUTO
CS2	UP DOWN SWITCH
CS3	TABLE FOR BACKWARD SWITCH
CS4	COOLANT PUMP SWITCH
CS5	ANGLE +/- SWITCH
CS6	WISE CLAMP OPEN SWITCH
PB1	EMERGENCY STOP
PB2	BLADE START SWITCH
PB3	BLADE STOP SWITCH
PB4	HYDRAULIC START SWITCH
PB5	ANGLE RAPID SWITCH
S1	BLADE BREAK SENSOR
LS3	LOWER END LIMIT SWITCH
LS4	UPPER LIMIT SWITCH
LS5	TABLE FORWARD LIMIT SWITCH
LS6	TABLE BACKWARD LIMIT SWITCH
LS7	ANGLE+ LIMIT SWITCH
LS8	ANGLE- LIMIT SWITCH
LS9	RAISE HEAD LIMIT SWITCH





## NOTES

