

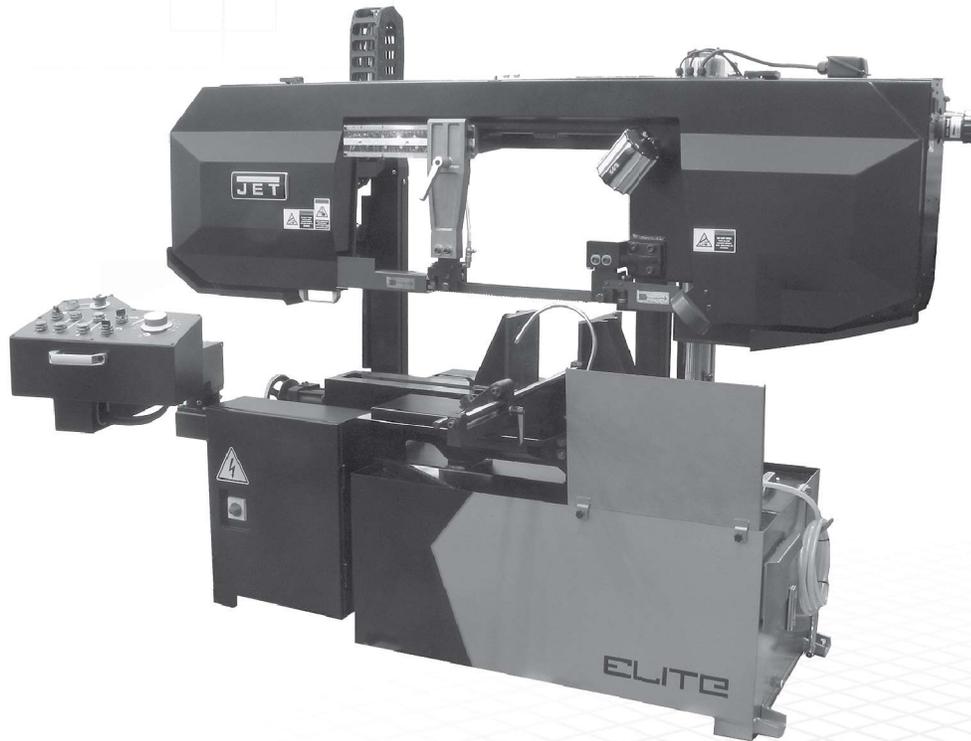
ELITE

HIGH PERFORMANCE MACHINERY

Operating Instructions and Parts Manual

Horizontal Band Saw, 14" Semi-Auto Dual-Column

Model ECB-1422V



JET®

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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.



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.

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.

JET sells through distributors only. The specifications listed in JET printed materials and on official JET website are given as general information and are not binding. JET reserves the right to effect at any time, without prior notice, those alterations to parts, fittings, and accessory equipment which they may deem necessary for any reason whatsoever. JET® branded products are not sold in Canada by JPW Industries, Inc.

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 approved safety glasses/face shields 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 stand on the machine. Serious injury could occur if the machine tips over.
31. Never leave the machine running unattended. Turn the power off and do not leave the machine until it comes to a complete stop.
32. 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.
33. Adjust left blade guide to just clear workpiece.
34. Do not open blade covers while machine is running.
35. Direction of feed — feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
36. Installation work and electrical wiring must be done by qualified electrician in accordance with all applicable codes and standards.
37. Do not remove jammed pieces until blade has stopped.
38. 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

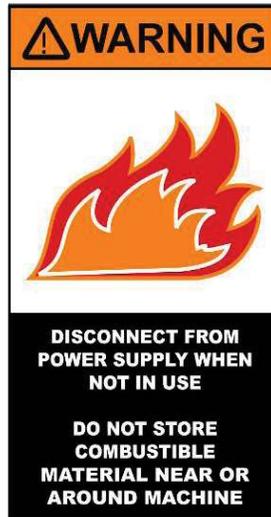
This means that if precautions are not heeded, it may result in serious or even fatal injury.

3.1 Warning Labels

Replace warning labels if they become obscured or removed.



LM000420.



LM000421



LM000422

4.0 INTRODUCTION

This manual is provided by JET® covering the safe operation and maintenance procedures for a JET Model ECB-1422V. 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. 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-1422V
Stock Number	891160
Capacities:	
Round at 90°	14 in. (360 mm)
Rectangle at 90°	14 x 22 in. (360 x 560 mm)
Square at 90°	14 x 14 in (360 x 360 mm)
Blade Size	1.3 x 0.043 x 192.13 in (34 x 1.1 x 4880 mm)
Blade Wheel Diameter	18-1/2 in. (470 mm)
Blade Wheel Speed	variable within 75-250 SFPM
Main motor	5HP, 60 Hz, 230/460V, 3PH, 4P, 12.9/6.5A
Oil Pump	1HP 230/460V 3PH 4P 60Hz, 3.3/1.65A
Coolant Pump	(180mm L) 1/6HP,230/460V,3PH, 2P, 60Hz, 0.67/0.35A
Hydraulic Vise Travel	1-3/16 in. (30 mm)
Gear ratio	1:40
Bed Height from floor	29.21 in. (742 mm)
Coolant capacity	90 L (23.8 gal)
Overall Dimensions	93.5 x 25.9 x 72.83 in. (2375x660x1850mm)
Net Weight - approx.	2266 lbs. (1030 kg)
Shipping Weight - approx.	2508 lbs. (1140 kg)

NOTE: Conversion to 460 volt will require additional purchases, and installation of parts by qualified persons only.

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
- 1 Stock Stop Assembly
- 1 Splash Plate
- 1 Test Piece
- 1 Product Manual
- 1 Product Registration Card
- 1 Tool Box Complete (#ECB-1422V-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 Hex Bolts with Nuts

7.0 INSTALLATION

For best performance, the band saw should be located on a solid and level concrete foundation. Allow room for servicing and for moving large stock around the band saw when deciding upon a location for the machine.

1. Lift machine with forklift, using lifting straps that are isolated from the band saw's finished surfaces, levers, knobs, etc.
2. Install the four leveling bolts with lock nuts on both sides of the base as shown in Fig 7-1. Lower machine to the floor.
3. Place a level on the work table surface and check side-to-side and front-to-back. When leveling side-to-side, adjust left side to be approximately 5mm higher than the right side. When leveling front-to-back, adjust back to be approximately 5mm higher than the front.
4. Adjust leveling screws as needed, then tighten nuts.



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-1422V is prewired for 230V, 3 phase, and can be converted to 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.

It is recommended that the band saw be connected to a dedicated 20 amp circuit with circuit breaker or time-delay fuse marked "D". **Local codes take precedence over recommendations.**

Before connecting to power source, be sure switch is in off position.

⚠ 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.

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.**

9.2 Converting to 460 Volt

⚠ WARNING

Voltage conversion must be done by a qualified electrician.

The Band Saw is prewired for 230 volt. To change to 460 volt operation, proceed as follows. Additional purchases will be required: see electrical box parts list for any part numbers to order.

1. Open main motor junction box cover, and change leads based on wiring diagram inside cover. This diagram is also shown in Figure 9-1. (Note: In case of discrepancy, diagram inside junction box cover takes precedence.) Reinstall cover.
2. Remove oil pump motor junction box cover, and change incoming leads for oil pump, based on diagram shown in Figure 9-2. Reinstall cover.
3. Remove coolant pump motor junction box cover, and change incoming leads for coolant pump, based on diagram shown in Figure 9-3. Reinstall cover.
4. Open the electrical box.
5. On the transformer, change the wire position from 230V to 460V
6. Replace **main motor** 230V overload relay with the 460V overload relay: Set dial to 7A.
7. Replace **oil pump** 230V overload relay with the 460V overload relay: Set dial to 1.8A.
8. Replace **coolant pump** 230V overload relay with the 460V overload relay: Set dial to 0.35A.
9. On the primary fuse block, replace the two 2A fuses with two 1A fuses.
10. Voltage conversion is now complete.

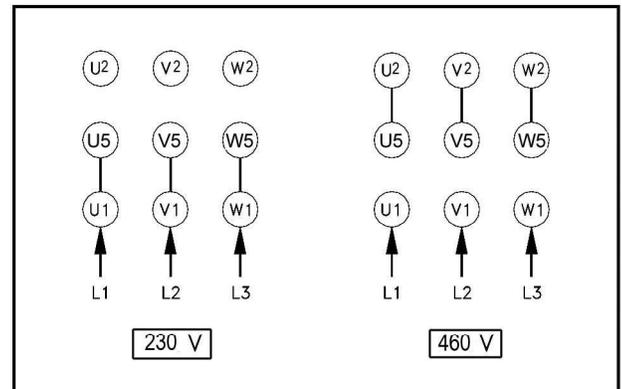


Figure 9-1: Main motor wiring

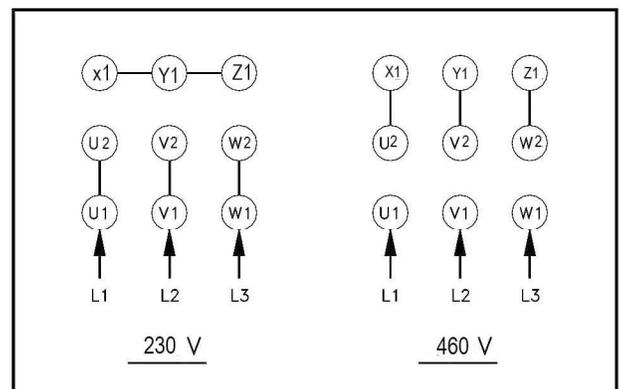


Figure 9-2: Oil pump wiring

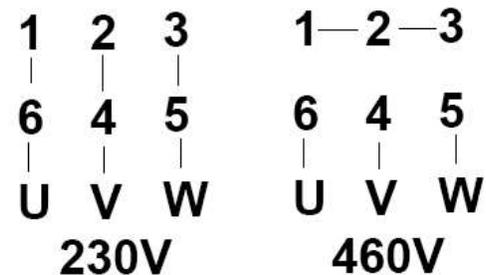


Figure 9-3: Coolant pump wiring

10.0 CONTROLS

Refer to Figure 10-1.

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

⚠ WARNING

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

Start Button (B) – Press to activate hydraulic pump.

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

Coolant Switch (D) – Turn switch to “I” to turn on coolant flow. Turn switch to “O” to stop coolant flow.

Feed Rate Control (E) – Sets the amount of downward force that is applied to the work piece by the blade. The feed rate is proportional to the opening of the valve. When set to zero, the saw head is locked in the raised position. Increasing the valve opening (clockwise adjustment) increases the feed rate; decreasing the valve opening (counterclockwise adjustment) reduces the feed rate.

Blade Movement (F) - Starts and stops the cutting operation cycle. When the stop is pressed, blade stops and saw head rises to start position. Press start again to resume cutting cycle.

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

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

Vise Action (J) - Activates or releases clamping action of the vise.

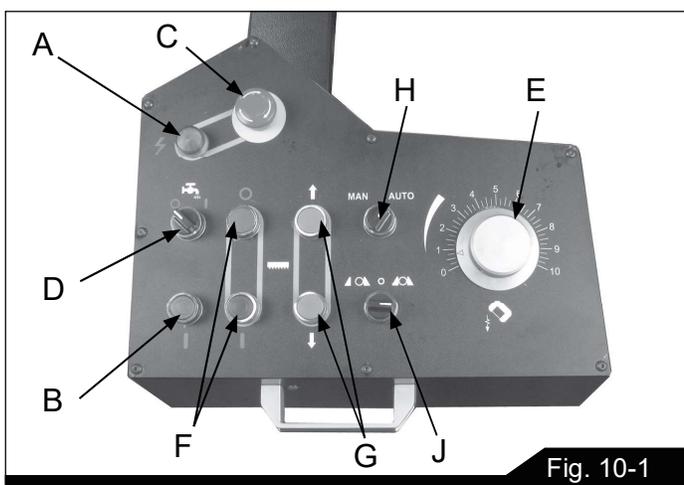


Fig. 10-1

11.0 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.

12.0 PRIOR TO OPERATION

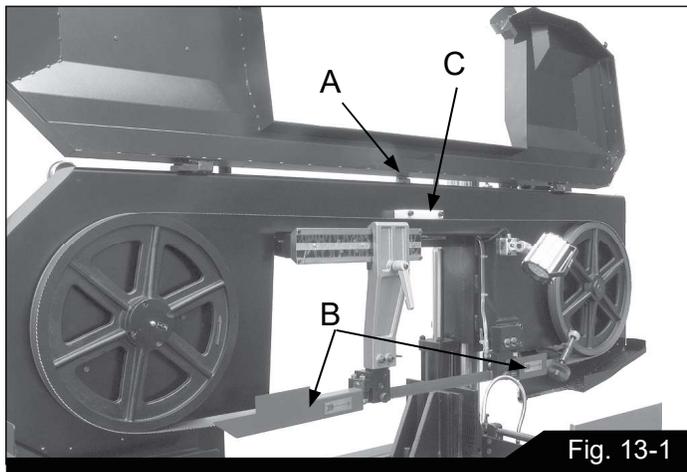
1. Check that blade tooth direction matches arrows on red blade guides.
2. Check to see that blade is properly seated on wheels and correct blade tension is applied (approximately 313 psi.).
3. Adjust blade guides and bearings. See sect. 13.4.
4. Position left blade guide as close to workpiece as possible.
5. Select proper speed and feed rate for material being cut.
6. Material to be cut must be securely held in vise.
7. Check to see that coolant level is adequate and turn on coolant pump if material to be cut requires it. Machine should be filled with four gallons of the proper coolant mixture. Follow the directions on the product maker's label and fill the coolant tank through the chip tray area.
8. Do not start cut on a sharp edge.
9. Keep machine lubricated. See sect. 14.0.

13.0 OPERATING ADJUSTMENTS

13.1 REMOVING AND INSTALLING BLADE

When your machine was shipped, a new blade was supplied and assembled to the saw. When replacement becomes necessary:

1. Raise saw head to convenient position for accessing the blade. Close the feed rate dial by turning it clockwise as far as it will go.
2. Release blade tension using the tension lever (see D, Fig. 13-8).
3. Press the E-stop button, and disconnect machine from power.
4. Open the wheel covers all the way until they are held by the ball detent (A, Fig. 13-1).
5. Remove the two red blade guards (B), and back off the carbide guides by turning the knurled knobs (see F, Fig. 13-1).
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 area.
9. Make sure the teeth of the new blade are pointing in the direction of travel. If necessary, turn the blade inside out.
10. Position the blade on the wheels and beneath the urethane block (C, Fig. 13-1). Make sure back of the blade rests lightly against wheel flanges.

MAKE SURE THAT BACK OF BLADE IS AGAINST THE WHEEL FLANGES OF BOTH WHEELS. THIS IS VERY IMPORTANT.

WARNING

Make sure the wheel cover frame fully engages the ball detent atop the machine - listen for the audible "click." Failure to comply may cause severe injury if the wheel covers fall.

11. Twist the blade and slip it into the blade guides with the back of the blade against the back-up bearing (see Fig. 13-3). **NOTE:** If roller bearings need adjusting refer to sect. 13.4.
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 lever (D, Fig. 13-8) 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. 13.11. Otherwise blade installation is done.
17. Close all covers, replace all guards, and fasten securely.
18. Follow blade break-in procedures, sect. 13.2.

13.2 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.

13.3 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 the left blade guide post, loosen handle (R, Fig. 13-2), 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.

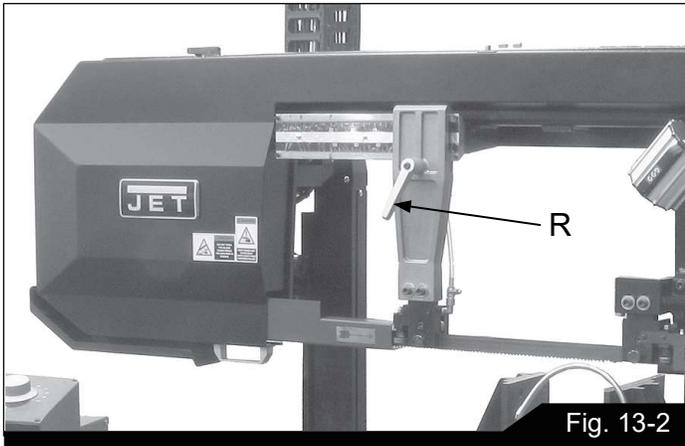


Fig. 13-2

13.4 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, but these should be confirmed by the operator. 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. 13-3 shows the left hand blade guide assembly. Adjustments for the right hand guide will be identical.

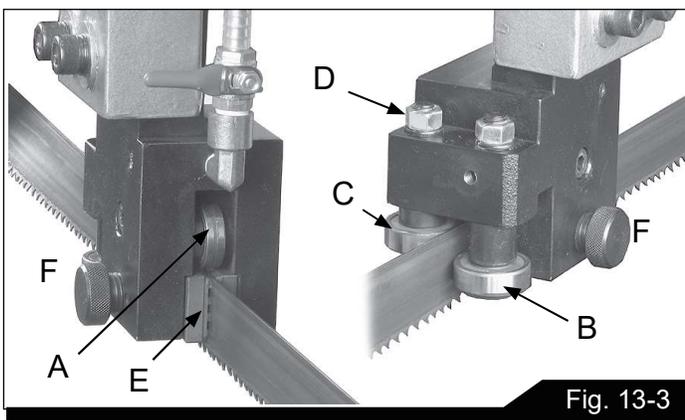


Fig. 13-3

The back of the blade should ride against the back-up support bearing (A, Fig. 13-3) which is positioned at 90-degrees to provide greater support and prevent deflection at the back of the blade.

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

Use the knobs (F) to lightly press the carbide blocks against the surface of the blade.

13.5 CHANGING BLADE SPEED

⚠ CAUTION

Only adjust speed with power on and blade turning. Failure to comply may cause damage to machine.

1. Raise cutting head approximately six inches above work piece and turn feed rate knob to zero.
2. Turn power on and turn speed adjuster knob (Fig. 13-4) to match appropriate material. The LED display will show the current speed. The adjoining chart shows general recommendations for speeds in relation to material.

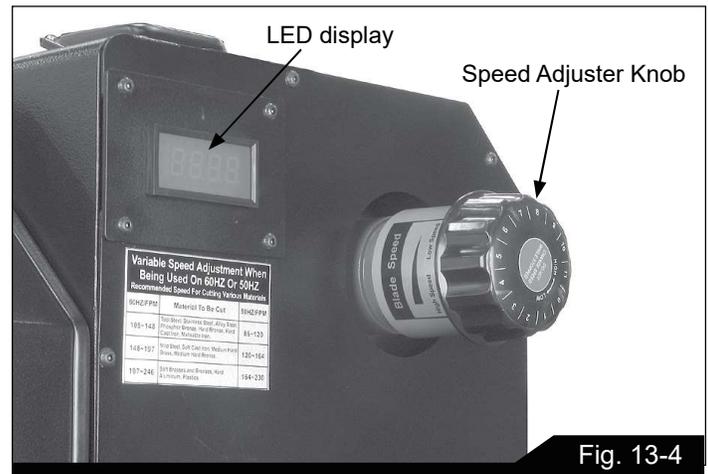


Fig. 13-4

Recommended Speed for Cutting Various Materials	
SPEED FPM	MATERIAL TO BE CUT
75-100	TOOL STEEL, STAINLESS STEEL, HARD BRONZE, HARD CAST IRON
100-150	MILD STEEL, SOFT CAST IRON, MEDIUM HARD BRASS AND BRONZE
150-200	SOFT BRASSES AND BRONZES, HARD ALUMINUM, PLASTICS
200-250	PLASTICS, SOFT ALUMINUM, WOOD, OTHER LIGHT MATERIALS

13.6 ADJUSTING FEED RATE

Rate of feed is adjusted with control dial (E, 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.

13.7 OPERATING VISE

The workpiece is placed between the vise jaws with the required amount to be cut-off extending out past the blade.

1. Place workpiece in cutting position. Lift up pawl (G, Fig. 13-5) and slide jaw close to workpiece.
2. Turn handwheel (H) clockwise for a fine adjustment to create a 5 to 6 mm (1/4 in.) gap with workpiece.
3. Turn clamp switch (see J, Fig. 10-1) to the right to clamp the workpiece.
4. Perform cut.
5. Release clamping pressure via the switch (J, Fig. 10-1).
6. Lift pawl (G) and manually retract vise jaw.

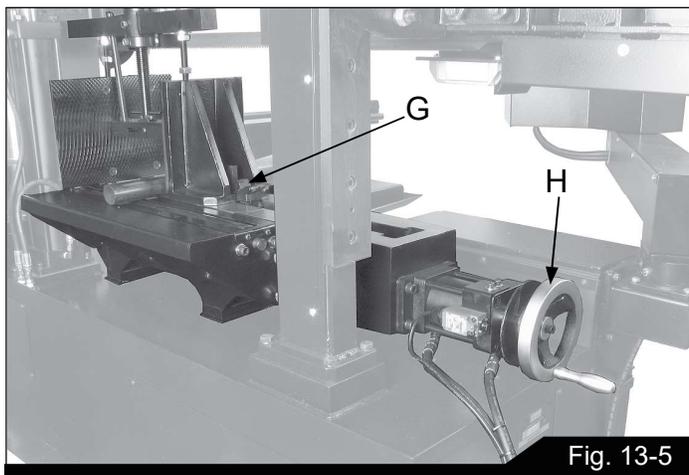


Fig. 13-5

Note: Figure 13-5 shows the 891161 Bundling Kit mounted (optional accessory, see our website).

13.8 ADJUSTING STOCK ADVANCE STOP

The Stock Stop is used mainly for repetitive cuts of the same length. Install the stock stop assembly to the machine bed with two hex bolts.

Position the stop block (J, Fig. 13-6), and adjust the rod (K) the desired distance away from the blade. Securely tighten the handle on the stop block, and the screw on the rod holder.

The stop may also be adjusted out of the way when not being used.

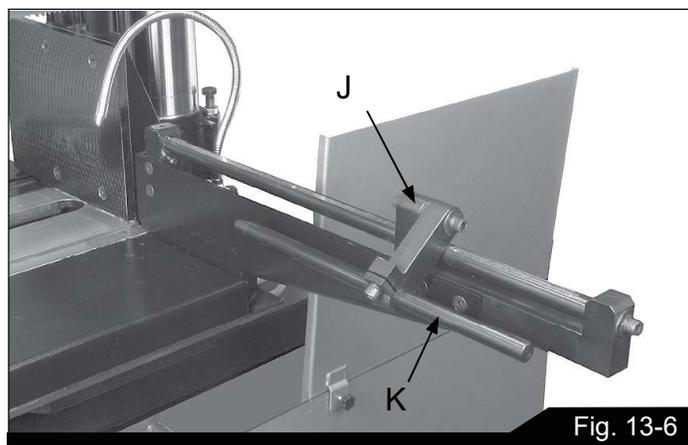


Fig. 13-6

13.9 GENERAL OPERATING PROCEDURE

1. Select the proper speed and blade for the type of material you are cutting.
2. Make sure blade tension is adjusted properly.
3. Make sure the left blade guide bracket is adjusted as close as possible to the left vise jaw, without causing obstruction.
4. Use the controls to raise the saw head, and turn the feed rate dial to zero.
5. Place the stock between the vise jaws, position the stock for the desired length of cut and tighten 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.

13.10 LIMIT SWITCHES FOR SAW HEAD

The upper limit switch (A, Fig. 13-7) stops the saw head at the height set by the upper stop (B). This should be set to stop the head just above the workpiece, to optimize cycle time.

The lower limit switch (C) stops the saw head in bottom position after the cut, when it contacts the lower stop (D).

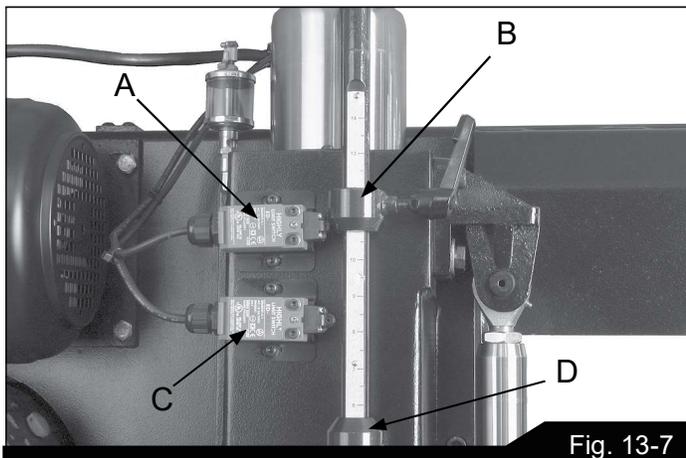


Fig. 13-7

13.11 BLADE TENSION & TRACKING

Push lever (D, Fig. 13-8) to the right to tighten the blade, or left to detension it for blade replacement. Do not overtension blades.

Blade tension has been preset by the manufacturer for the supplied blade, at 313 psi (22kg/cm²). Tension is shown in the gauge above the lever.

The safety limit switch (E) cuts power when there is a sudden loss of tension, such as when a blade breaks, to prevent further damage.

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.
2. Disconnect machine from power source.
3. Locate tracking adjustment bolts on the backside of the saw head behind the driven wheel (Figure 13-8).
4. Minor adjustment generally only requires turning the (F) screw. More significant adjustments may involve (G) and (H) screws.

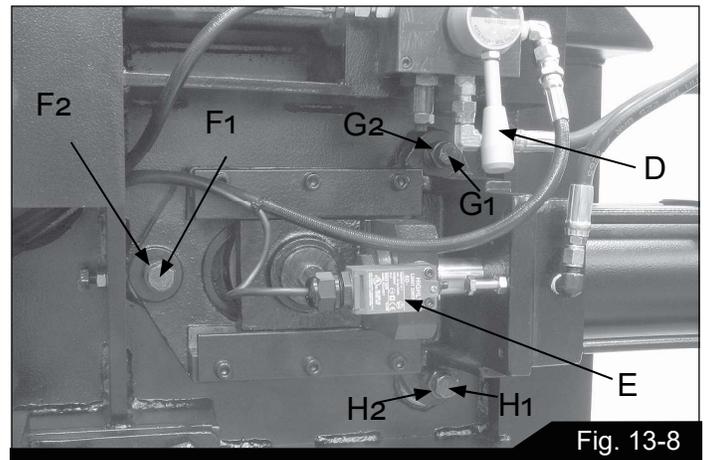


Fig. 13-8

5. Loosen the inner hex cap screw (F1) and turn the outer screw (F2) in or out as needed.
6. If blade has a tendency to come off the wheels, loosen G1 and H1 inner hex cap screws. Turn outer screws (G2, H2) as needed. Turning clockwise moves blade toward wheel; counterclockwise moves blade away from wheel.
7. Tracking is set properly when the back of the blade lightly touches the wheel flange. Note: Over tracking (allowing blade back to rub hard against the wheel flange) will damage wheels and blade.
8. Tighten inner hex cap screws (F1, G1, H1) to secure settings.

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

13.12 POWERED CHIP BRUSH

The chip brush is driven by the drive wheel. 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.

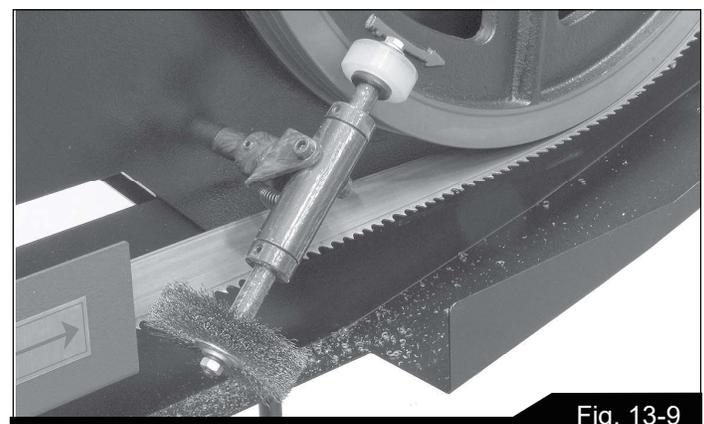


Fig. 13-9

14.0 USER-MAINTENANCE

WARNING

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

14.1 LUBRICATION

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

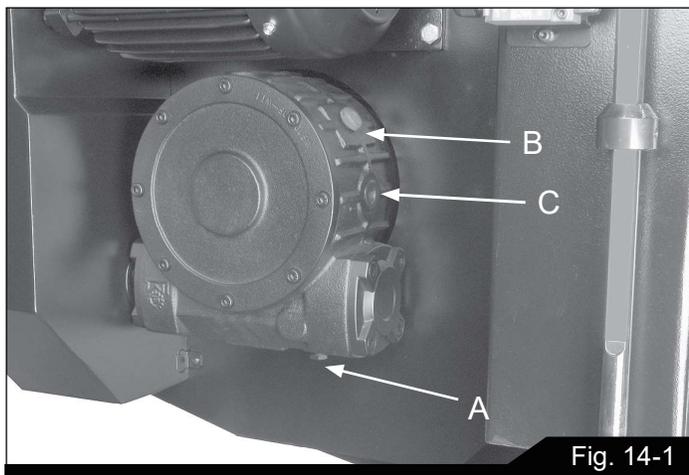
All ball bearings are permanently lubricated and sealed. They require no further attention.

14.2 GEAR CASE

After the first 50 hours of use the gear case should be drained and refilled. Change lubricant from then on every 250 hours of operation. Top off as needed.

To drain and refill:

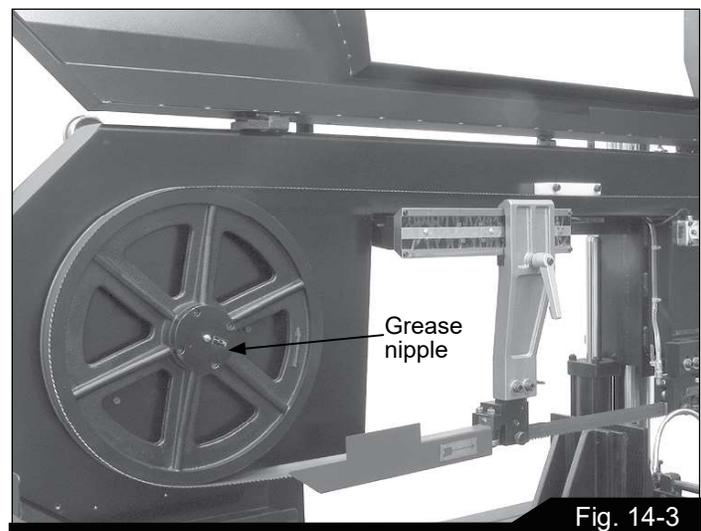
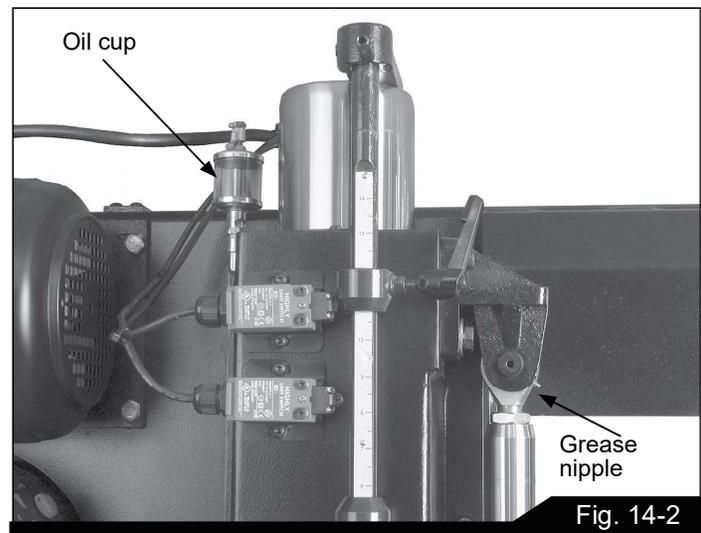
1. Disconnect machine from power source.
2. Remove drain plug (A, Fig. 14-1) and allow gear oil to drain completely. Dispose of oil according to local regulations.
3. Replace drain plug.
4. Remove filler cap (B) and fill gear box with a good quality gear oil, such as Mobil® SHC Gear Oil 460 or equivalent, until level reaches dot in middle of sight glass (C).
5. Replace filler cap.



14.3 ADDITIONAL GREASE/OIL POINTS

See Figures 14-2 and 14-3.

- Column oil cup - Top off as needed with Mobil DTE® Oil Heavy Medium, or equivalent.
- Grease nipple, cylinder pivot - Mobil Mobilux® 1, or equivalent.
- Grease nipple, center of driven wheel - Mobil Mobilux® 1, or equivalent.



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 new brand, first flush coolant line and sump with an industrial degreaser or cleaner that does not contain silicone or petroleum based ingredients.

14.5 ADDITIONAL SERVICING

Any additional servicing should be done by qualified service personnel.

14.6 MAINTENANCE SCHEDULE

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

DAILY:

- General cleaning of machine; remove accumulated shavings. (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 the coolant tank.
- Remove pump from its housing, clean the suction filter and suction zone.
- Clean filter of pump section head and suction area.
- Use brush to clean blade guides, especially the guide bearings. Clean drain hole over the coolant tank.
- 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.



15.0 OPTIONAL ACCESSORIES

The following accessories are available for your saw. Contact your dealer to order.

891161 - Bundling Kit for ECB-1422V

891162 - Infeed Roller Table for ECB-1422V

891163 - Outfeed Roller Table for ECB-1422V

16.0 REPLACEMENT PARTS — ECB1422V

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®

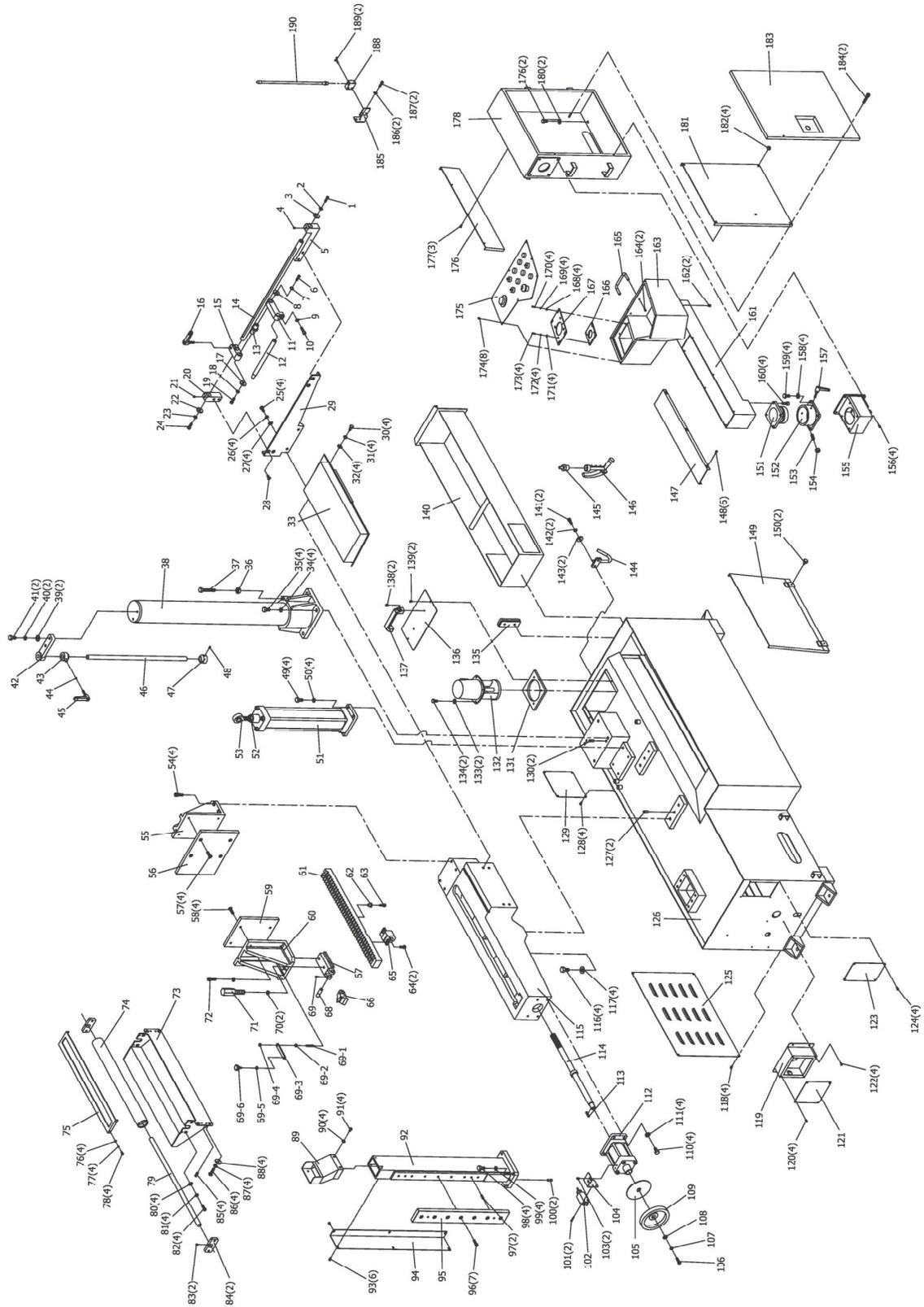
427 New Sanford Road

LaVergne, Tennessee 37086

www.jettools.com

Phone: 855-336-4032

BASE ASSEMBLY — ECB1422V





PARTS LIST BASE ASSEMBLY — ECB1422V

Index No.	Part No.	Description	Size	Qty.
1	TS-0209051	Socket Hd Cap Screw	3/8"-16x1"L	1
2	TS-0720091	Lock Washer	3/8"	1
3	ECB-1422V-A03	Length Rod Washer		1
4	TS-0270021	Socket Set Screw	5/16"-18x5/16"L	1
5	ECB-1422V-A05	Length Rod Right Bracket		1
6	TS-0209051	Socket Hd Cap Screw	3/8"-16x1"L	1
7	TS-0720091	Lock Washer	3/8"	1
8	ECB-1422V-A08	Length Rod Washer		1
9	TS-0720091	Lock Washer	3/8"	1
10	TS-0209051	Socket Hd Cap Screw	3/8"-16x1"L	1
11	ECB-1422V-A11	Stopper Bracket		1
12	ECB-1422V-A12	Length Stopper		1
13	ECB-1422V-A13	Welding Rod		1
14	ECB-1422V-A14	Length Rod		1
15	ECB-1422V-A15	Length Setting Bracket		1
16	ECB-1422V-A16	Handle	3/8"x30mmL	1
17	ECB-1422V-A17	Length Rod Washer		1
18	TS-0720091	Lock Washer	3/8"	1
19	TS-0209051	Socket Hd Cap Screw	3/8"-16x1"L	1
20	ECB-1422V-A20	Length Rod Left Bracket		1
21	TS-0270021	Socket Set Screw	5/16"-18x5/16"L	1
22	ECB-1422V-A22	Length Rod Washer		1
23	TS-0720091	Lock Washer	3/8"	1
24	TS-0209051	Socket Hd Cap Screw	3/8"-16x1"L	1
25	TS-1491031	Hex Cap Screw	M10x25L	4
26	TS-2361101	Lock Washer	M10	4
27	TS-1550071	Flat Washer	M10	4
28	TS-0246031	Socket Head Flat Screw	5/16"-18x3/4"L	4
29	ECB-1422V-A29	Side Plate		1
30	ECB-1422V-A30	Hex Cap Screw	M12x20L	4
31	TS-2361121	Lock Washer	M12	4
32	TS-2360121	Flat Washer	M12	4
33	ECB-1422V-A33	Front Table		1
34	TS-2361141	Lock Washer	M14	4
35	5515366	Hex Cap Screw	M14x50L	4
36	TS-2310142	Nut	M14	1
37	5515452	Hex Cap Screw	M14x60L	1
38	ECB-1422V-A38	Large Column		1
39	TS-1550071	Flat Washer	M10	2
40	TS-2361101	Lock Washer	M10	2
41	TS-1491061	Hex Cap Screw	M10x40L	2
42	ECB-1422V-A42	Scale Bracket		1
43	ECB-1422V-A43	Down Adjusting Sleeve		1
44	ECB-1422V-A44	Down Adjusting Copper Bushing		1
45	ECB-1422V-A45	Handle	M8x30	1
46	ECB-1422V-A46	Height Scale		1
47	ECB-1422V-A47	Adjusting Sleeve		1
48	TS-2276081	Socket Set Screw	M6x8L	1

Index No.	Part No.	Description	Size	Qty.
49	TS-1491061	Hex Cap Screw	M10x40L	4
50	TS-2361101	Lock Washer	M10	4
51	ECB-1422V-A51	Lift Cylinder		1
52	TS-154012	Nut	M20xP1.5	1
53	ECB-1422V-A53	Universal Joint	BB2038A/ Pos20	1
54	TS-1506041	Socket Hd Cap Screw	M12x35L	4
55	ECB-1422V-A55	Rear Vise		1
56	ECB-1422V-A56	Rear Vise Steel Plate		1
57	TS-1515041	Socket Head Flat Screw	M8x30L	4
58	TS-1515041	Socket Head Flat Screw	M8x30L	4
59	ECB-1422V-A59	Front Vise Steel Plate		1
60	ECB-1422V-A60	Front Vise		1
61	ECB-1422V-A61	Rack		1
62	ECB-1422V-A62	Rack Slider		1
63	TS-1504051	Socket Hd Cap Screw	M8x25L	1
64	TS-1504031	Socket Hd Cap Screw	M8x16L	2
65	ECB-1422V-A65	Lead Screw Nut		1
66	ECB-1422V-A66	Pawl		1
67	ECB-1422V-A67	Vise Base		1
68	ECB-1422V-A68	Vise Base Shaft		1
69	TS-2276081	Socket Set Screw	M6x8L	1
69-1	ECB-1422V-A69-1	Set Screw	M8x40L	1
69-2	TS-1540061	Hex Nut	M8	1
69-3	ECB-1422V-A69-3	Plate		1
69-4	ECB-1422V-A69-4	Nylon Nut	M8	1
69-5	TS-1540061	Hex Nut	M8	1
69-6	ECB-1422V-A69-6	Torx Screw	M8x30L	1
70	TS-2361121	Lock Washer	M12	2
71	ECB-1422V-A71	Front Vise Bolt		1
72	TS-2211451	Hex Cap Screw	M12x45L	1
73	ECB-1422V-A73	Roller Holder		1
74	ECB-1422V-A74	Auxiliary Roller		1
75	ECB-1422V-A75	Roller Cover		1
76	TS-1550031	Flat Washer	M5	4
77	TS-2361051	Lock Washer	M5	4
78	TS-1481011	Hex Cap Screw	M5x8L	4
79	ECB-1422V-A79	Auxiliary Shaft		1
80	TS-1550071	Flat Washer	M10	4
81	TS-2361101	Lock Washer	M10	4
82	TS-1505021	Socket Hd Cap Screw	M10x20L	4
83	TS-2276081	Socket Set Screw	M6x8L	2
84	ECB-1422V-A84	Roller Setting Bracket		2
85	TS-1524021	Socket Set Screw	M8x10L	4
86	F008871	Hex Cap Screw	M12x20L	4
87	TS-2361121	Lock Washer	M12	4
88	TS-2360121	Flat Washer	M12	4
89	ECB-1422V-A89	Cover Bracket		1
90	TS-1550041	Flat Washer	M6	4



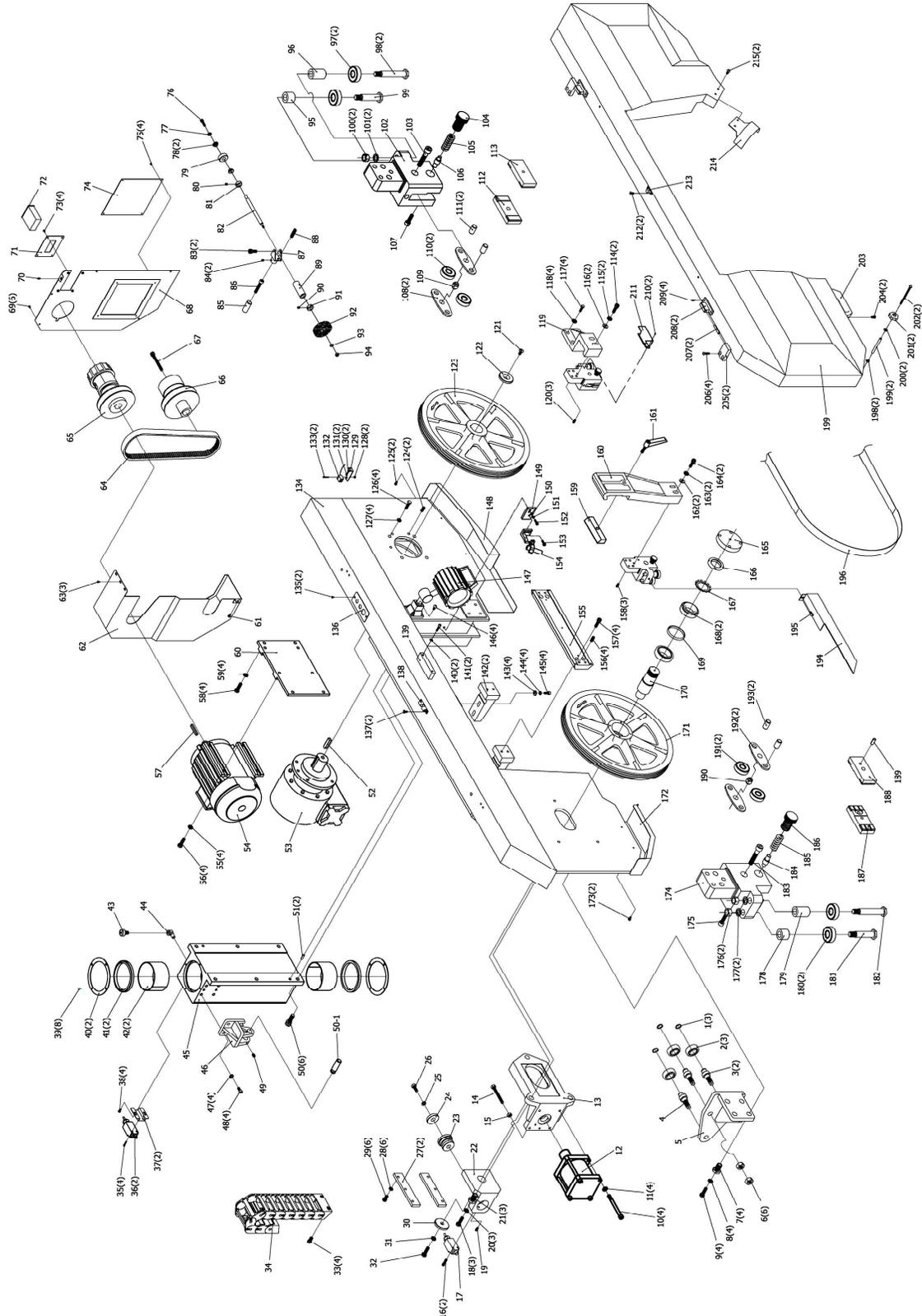
Index No.	Part No.	Description	Size	Qty.
91	TS-2246082	Socket HD Button Screw	M6x8L	4
92	ECB-1422V-A92	Small Column		1
93	TS-2246082	Socket HD Button Screw	M6x8L	6
94	ECB-1422V-A94	Small Column Cover		1
95	ECB-1422V-A95	Guide Block		1
96	TS-1505031	Socket Hd Cap Screw	M10x25L	7
97	F012105	Roll Pin	M8x20L	2
98	TS-1492051	Hex Cap Screw	M12x50L	4
99	TS-2361121	Lock Washer	M12	4
100	F012106	Roll Pin M10x20L	10x20L	2
101	TS-1501081	Socket Hd Cap Screw	M4x30L	2
102	ECB-1422V-A102	Limit Switch		1
103	TS-2246082	Socket HD Button Screw	M6x8L	2
104	ECB-1422V-A104	Limit Switch Cover		1
105	ECB-1422V-A105	Limit Switch Contact Plate		1
106	TS-1504051	Socket Hd Cap Screw	M8x25L	1
107	TS-2361081	Lock Washer	M8	1
108	TS-1550061	Flat Washer	M8	1
109	ECB-1422V-A109	Handle Wheel		1
110	TS-149105	Hex Cap Screw	M10x35L	4
111	TS-2361101	Lock Washer	M10	4
112	ECB-1422V-A112	Vise Cylinder		1
113	EGH1740-B20	Key, Dbl Rd Hd	6x6x25L	1
114	ECB-1422V-A114	Lead Screw		1
115	ECB-1422V-A115	Work Table		1
116	ECB-1422V-A116	Hex Cap Screw	M14x45L	4
117	TS-2361141	Lock Washer	M14	4
118	F009884	Socket HD Button Screw	M5x8L	4
119	ECB-1422V-A119	Outlet Box		1
120	F009884	Socket HD Button Screw	M5x8L	4
121	ECB-1422V-A121	Outlet Box Cover		1
122	TS-2246082	Socket HD Button Screw	M6x8L	4
123	ECB-1422V-A123	Machine Base A Sealing Plate		1
124	TS-2246082	Socket HD Button Screw	M6x8L	4
125	ECB-1422V-A125	Hydraulic Unit Cover		1
126	ECB-1422V-A126	Machine Base		1
127	F012106	Roll Pin	10x20L	2
128	F009884	Socket HD Button Screw	M5x8L	4
129	ECB-1422V-A129	Machine Base Small Sealing Plate		1
130	F012106	Roll Pin	10x20L	2
131	ECB-1422V-A131	Coolant Pump Plate		1
132	ECB-1422V-A132	Coolant Pump	1/6"X210l	1
133	TS-2361061	Lock Washer	M6	2
134	TS-1482031	Hex Cap Screw	M6x16L	2
135	ECB-1422V-A135	Oil Gauge		1
136	ECB-1422V-A136	Coolant Pump Sealing Plate		1
137	ECB-1422V-A137	Handle		1
138	TS-2246122	Socket HD Button Screw	M6x12L	2

Index No.	Part No.	Description	Size	Qty.
139	TS-2246082	Socket HD Button Screw	M6x8L	2
140	ECB-1422V-A140	Chip Collector		1
141	TS-1503051	Socket Hd Cap Screw	M6x20L	4
142	TS-2361061	Lock Washer	M6	4
143	TS-1550041	Flat Washer	M6	4
144	ECB-1422V-A144	Water Gun Hanger		1
145	ECB-1422V-A145	Waterjet Joint		1
146	ECB-1422V-A146	Water Gun, non-Zinc	5-1/2"	1
147	ECB-1422V-A147	Control Box Support Cover		1
148	TS-2246082	Socket HD Button Screw	M6x8L	6
149	ECB-1422V-A149	Splash Guard		1
150	ECB-1422V-A150	Hexalobular Socket Screw	M6x8L	2
151	ECB-1422V-A151	Control Box Support Screw Axis		1
152	ECB-1422V-A152	Control Box Support Bushing		1
153	TS-1524051	Socket Set Screw	M8x20L	1
154	TS-1540061	Nut	M8	1
155	ECB-1422V-A155	Control Box Fixed Support		1
156	TS-2228161	Hex Cap Screw	M8x16L	4
157	ECB-1422V-A157	Handle	M8x35L	1
158	TS-2361081	Lock Washer	M8	4
159	TS-2228161	Hex Cap Screw	M8x16L	4
160	TS-1503041	Socket Hd Cap Screw	M6x16L	4
161	ECB-1422V-A161	Control Box Support		1
162	TS-1481011	Hex Cap Screw	M5x8L	4
163	ECB-1422V-A163	Control Box		1
164	TS-1503011	Socket HD Button Screw	M6x8L	2
165	ECB-1422V-A165	Handle	HPU-120AL	1
166	ECB-1422V-A166	Flow Control Fixed Support		1
167	ECB-1422V-A167	Flow Control Plate		1
168	TS-1550041	Flat Washer	M6	4
169	TS-2361061	Lock Washer	M6	4
170	TS-1503041	Socket Hd Cap Screw	M6x16L	4
171	TS-1550031	Flat Washer	M5	4
172	TS-2361051	Lock Washer	M5	4
173	TS-1502041	Socket Hd Cap Screw	M5x16L	4
174	F009884	Socket HD Button Screw	M5x8L	8
175	ECB-1422V-A175	Control Panel		1
176	ECB-1422V-A176	Control Box Splash Guard		1
177	TS-1503011	Socket HD Button Screw	M6x8L	3
178	ECB-1422V-A178	Control Box		1
179	TS-1482031	Hex Cap Screw	M6x16L	2
180	TS-1550041	Flat Washer	M6	2
181	ECB-1422V-A181	Control Box Bottom Plate		1
182	TS-2311061	Nut	M6	4
183	ECB-1422V-A183	Control Box Door		1
184	TS-1503071	Socket Hd Cap Screw	M6x30	2
185	ECB-1422V-A185	Hose Seat Fixed Plate		1
186	TS-2361061	Lock Washer	M6	2
187	TS-1503041	Socket Hd Cap Screw	M6x16L	2



Index No.	Part No.	Description	Size	Qty.
188	ECB-1422V-A188	Hose Seat		1
189	ECB-1422V-A189	Wing Screw	M6x30L	2
190	ECB-1422V-A190	Hose	Sp105*1/4"X18"	1
	LM000423	ID-Warning Label, ECB-1422V (not shown)		1
	ECB-1422V-TBC	Tool Box Complete (not shown)		1

SAW HEAD ASSEMBLY — ECB1422V





PARTS LIST SAW HEAD ASSEMBLY — ECB1422V

Index No.	Part No.	Description	Size	Qty.
1	F006047	C-Retaining Ring, Ext	S20	3
2	BB-6304	Bearing	BB-6304	3
3	ECB-1422V-B03	Adjustable Shaft		2
4	ECB-1422V-B04	Eccentric Shaft		1
5	ECB-1422V-B05	Adjusting Bracket		1
6	TS-154010	Hex Nut	M16	6
7	ECB-1422V-B07	45° Steel Screw		4
8	TS-2361121	Lock Washer	M12	4
9	TS-1492051	Hex Cap Screw	M12x50L	4
10	F005679	Socket Hd Cap Screw	M12x135L	4
11	TS-2361121	Lock Washer	M12	4
12	ECB-1422V-B12	Blade Tension Cylinder		1
13	ECB-1422V-B13	Tension Slider		1
14	TS-1490081	Hex Cap Screw	M8x45L	1
15	TS-1540061	Hex Nut	M8	1
16	TS-1501081	Socket Hd Cap Screw	M4x30L	2
17	ECB-1422V-B17	Limit Switch		1
18	TS-1492051	Hex Cap Screw	M12x50L	3
19	TS-1525021	Socket Set Screw	M10x12L	1
20	TS-2361121	Lock Washer	M12	3
21	ECB-1422V-B21	Adjusting Screw		3
22	ECB-1422V-B22	Tension Slider		1
23	ECB-1422V-B23	Bolt Bushing		1
24	ECB-1422V-B24	Bushing Washer		1
25	TS-2361121	Lock Washer	M12	1
26	TS-1492021	Hex Cap Screw	M12x30L	1
27	ECB-1422V-B27	Cover Plate		2
28	TS-2361081	Lock Washer	M8	6
29	TS-1504051	Socket Hd Cap Screw	M8x25L	6
30	ECB-1422V-B30	Blade Wheel Guide Arm Washer		1
31	TS-2361121	Lock Washer	M12	1
32	TS-1492021	Hex Cap Screw	M12x30L	1
33	TS-1504051	Socket Hd Cap Screw	M8x25L	4
34	ECB-1422V-B34	Cable Carrier	SQ604V*KR40*808L*NO1	1
35	TS-1501081	Socket Hd Cap Screw	M4x30L	4
36	ECB-1422V-B36	Limit Switch		2
37	ECB-1422V-B37	Limit Switch Fixed Plate		2
38	TS-2246202	Socket Hd Button Screw	M6x20L	4
39	TS-2246082	Socket Hd Button Screw	M6x8L	8
40	ECB-1422V-B40	Large Column Plate		2
41	ECB-1422V-B41	Oil Seal	DKB-110*126*9/12	2
42	ECB-1422V-B42	Oil less Bushing	11070	2
43	ECB-1422V-B43	Filling Cup		1
44	ECB-1422V-B44	90° Fitting	1/8"x1/8"	1
45	ECB-1422V-B45	Column Slider		1
46	ECB-1422V-B46	Upper Holder		1

Index No.	Part No.	Description	Size	Qty.
47	TS-2361101	Lock Washer	M10	4
48	TS-1505041	Socket Hd Cap Screw	M10x30L	4
49	TS-1523011	Socket Set Screw	M6x6L	1
50	TS-1506031	Socket Hd Cap Screw	M12x30L	6
50-1	ECB-1422V-B50-1	Saw Bow Upper Shaft		1
51	F012107	Roll Pin	10x30L	2
52	ECB-1422V-B52	Key, Dbl Rd Hd	14x9x50L	1
53	ECB-1422V-B53	Speed Reducer	100#1/40WT	1
54	ECB-1422V-B54	Motor	5HP 230/460V 3PH 4P	1
55	TS-2361101	Lock Washer	M10	4
56	TS-1491041	Hex Cap Screw	M10x30L	4
57	ECB-1422V-B57	Key, Dbl Rd Hd	8x7x50L	1
58	TS-1491031	Hex Cap Screw	M10x25L	4
59	TS-2361101	Lock Washer	M10	4
60	ECB-1422V-B60	Motor Fixed Plate		1
61	TS-2245102	Socket Hd Button Screw	M5x8L	1
62	ECB-1422V-B62	Reducer Guard		1
63	TS-2245102	Socket Hd Button Screw	M5x8L	3
64	ECB-1422V-B64	Belt	1922V426	1
65	ECB-1422V-B65	Adjustable Pulley		1
66	ECB-1422V-B66	Fixed Pulley		1
67	ECB-1422V-B67	Socket Hd Cap Screw	M8x65L	1
68	ECB-1422V-B68	Cover Plate		1
69	TS-2245102	Socket Hd Button Screw	M5x8L	6
70	TS-2245102	Socket Hd Button Screw	M5x8L	1
71	ECB-1422V-B71	Speed Bracket		1
72	ECB-1422V-B72	Speed Display		1
73	TS-2245102	Socket Hd Button Screw	M5x8L	4
74	ECB-1422V-B74	Wheel Cover Plate		1
75	TS-2245102	Socket Hd Button Screw	M5x8L	4
76	TS-1503041	Socket Hd Cap Screw	M6x16L	1
77	TS-2361061	Lock Washer	M6	1
78	ECB-1422V-B78	Brush Pulley Sleeve		2
79	ECB-1422V-B79	Brush Pulley		1
80	TS-1523011	Socket Set Screw	M6x6L	1
81	ECB-1422V-B81	Position Shaft		1
82	ECB-1422V-B82	Brush Guide Wheel Shaft		1
83	TS-1503011	Socket Hd Cap Screw	M6x8L	2
84	TS-1523011	Socket Set Screw	M6x6L	2
85	ECB-1422V-B85	Fixed Shaft		1
86	TS-1504081	Socket Hd Cap Screw	M8x40L	1
87	ECB-1422V-B87	Brush Bracket		1
88	ECB-1422V-B88	Brush Spring		1
89	ECB-1422V-B89	Brush Shaft Bushing		1
90	TS-1523011	Socket Set Screw	M6x6L	1
91	ECB-1422V-B91	Position Sleeve		1
92	ECB-1422V-B92	Brush		1



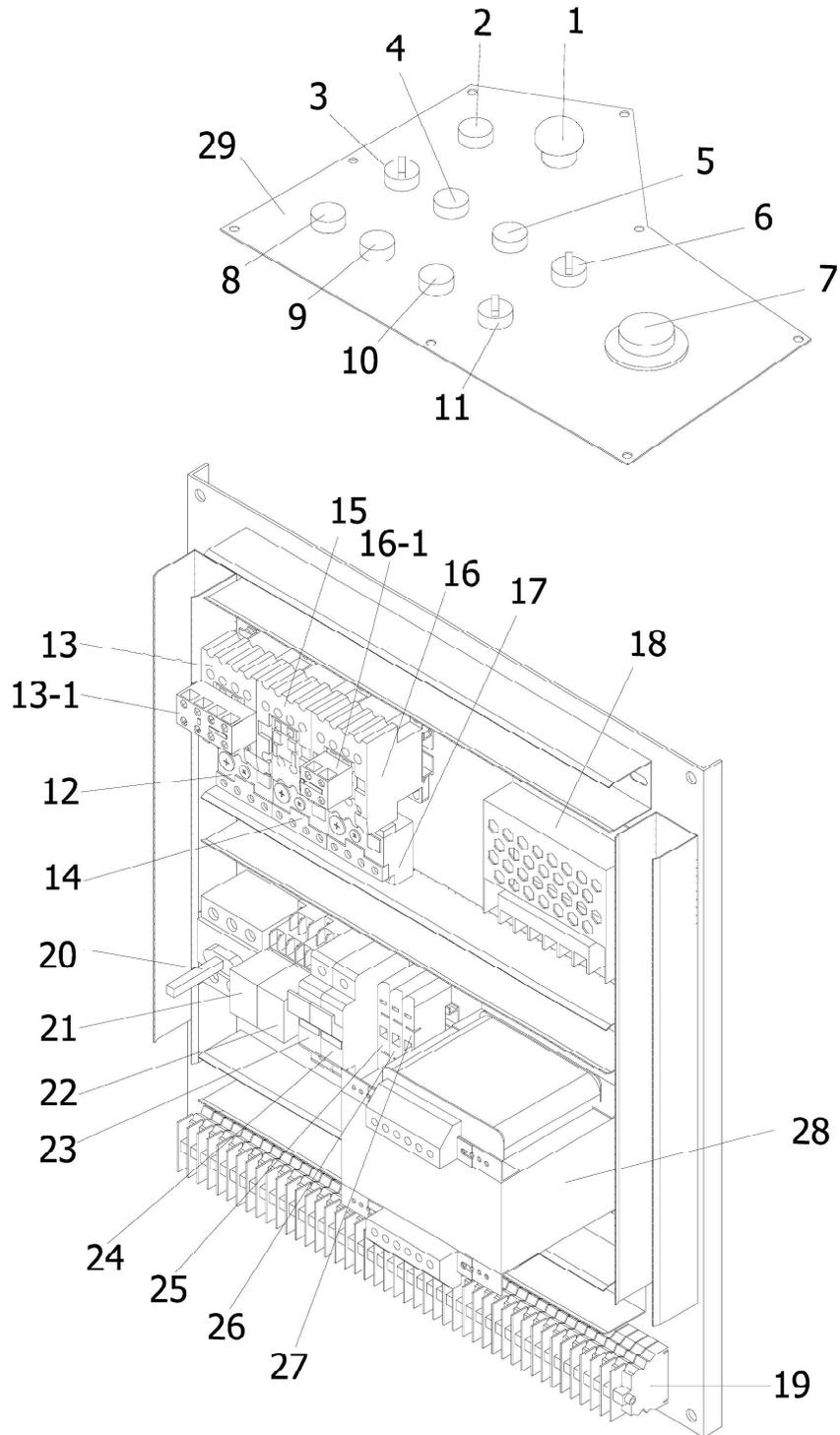
Index No.	Part No.	Description	Size	Qty.
93	TS-2361101	Lock Washer	M10	1
94	TS-1540071	Hex Nut	M10	1
95	ECB-1422V-B95	Bearing Bushing (Short)		1
96	ECB-1422V-B96	Bearing Bushing (Long)		1
97	BB-6201	Bearing	BB-6201	2
98	ECB-1422V-B98	Bearing Shaft (Long)		1
99	ECB-1422V-B99	Bearing Shaft (Short)		1
100	TS-1540071	Hex Nut	M10	2
101	TS-2361101	Lock Washer	M10	2
102	ECB-1422V-B102	Blade Guide Block (Rear)		1
103	TS-1504091	Socket Hd Cap Screw	M8x45L	1
104	ECB-1422V-B104	Guide Screw		1
105	ECB-1422V-B105	Guide Spring		1
106	ECB-1422V-B106	Guide Pin		1
107	TS-1503041	Socket Hd Cap Screw	M6x16L	1
108	ECB-1422V-B108	Upper Bracket		2
109	ECB-1422V-B109	Bracket Shaft		1
110	BB-6000	Bearing	BB-6000	2
111	ECB-1422V-B111	Bearing Shaft		2
112	ECB-1422V-B112	Carbide Guide (L/R)		1
113	ECB-1422V-B113	Carbide Guide (R/R)		1
114	TS-1505051	Socket Hd Cap Screw	M10x35L	2
115	TS-2361101	Lock Washer	M10	2
116	TS-1550071	Flat Washer	M10	2
117	TS-1492021	Hex Cap Screw	M12x30L	4
118	TS-2361121	Lock Washer	M12	4
119	ECB-1422V-B119	Guide Arm (Rear)		1
120	ECB-1422V-B120	Socket Set Screw	M8x30L	3
121	TS-1517011	Socket Hd Flat Screw	M12x25L	1
122	ECB-1422V-B122	Wheel Washer		1
123	ECB-1422V-B123	Drive Wheel		1
124	TS-1526041	Socket Set Screw	M12x25L	2
125	TS-2246082	Socket Hd Button Screw	M6x8L	2
126	TS-2211451	Hex Cap Screw	M12x45L	4
127	TS-2361121	Lock Washer	M12	4
128	TS-1540021	Hex Nut	M4	2
129	ECB-1422V-B129	Speed Sensor Bracket		1
130	TS-2361061	Lock Washer	M6	2
131	TS-2246122	Socket Hd Button Screw	M6x12L	2
132	ECB-1422V-B132	Speed Sensor		1
133	F001186	Pan Hd Machine Screw	M4x25L	2
134	ECB-1422V-B134	Saw Head		1
135	TS-2246082	Socket Hd Button Screw	M6x8L	2
136	ECB-1422V-B136	Wires Locking Plate		1
137	TS-1512011	Socket Hd Flat Screw	M4x10L	2
138	ECB-1422V-B138	Cover Hook		1
139	ECB-1422V-B139	Blade Press Cake (Plastic)		1
140	TS-2361081	Lock Washer	M8	2
141	TS-1504081	Socket Hd Cap Screw	M8x40L	2

Index No.	Part No.	Description	Size	Qty.
142	ECB-1422V-B142	Holder Plates		2
143	TS-1550071	Flat Washer	M10	4
144	TS-2361101	Lock Washer	M10	4
145	TS-1505041	Socket Hd Cap Screw	M10x30	4
146	TS-2246162	Socket Hd Button Screw	M6x16L	4
147	ECB-1422V-B147	Work Light	9W/ 24VAC	1
148	ECB-1422V-B148	Rear Coolant Tray		1
149	ECB-1422V-B149	Laser Fixed Plate		1
150	TS-1550031	Flat Washer	M5	1
151	TS-2361051	Lock Washer	M5	1
152	TS-1502041	Socket Hd Cap Screw	M5x16L	1
153	ECB-1422V-B153	Hex Washer Head Screw	M6x12L	1
154	ECB-1422V-B154	Laser Line Projector		1
155	ECB-1422V-B155	Guide Arm Holder		1
156	TS-1525031	Socket Set Screw	M10x16L	4
157	TS-1505031	Socket Hd Cap Screw	M10x25L	4
158	ECB-1422V-B158	Socket Set Screw	M8x16L	3
159	ECB-1422V-B159	Locking Block		1
160	ECB-1422V-B160	Guide Arm (Front)		1
161	ECB-1422V-B161	Handle	M12x45L	1
162	TS-1550071	Flat Washer	M10	2
163	TS-2361101	Lock Washer	M10	2
164	TS-1505051	Socket Hd Cap Screw	M10x35L	2
165	ECB-1422V-B165	Bearing Cover		1
166	ECB-1422V-B166	Bearing Nut	AN09	1
167	ECB-1422V-B167	Gear Washer	AW09	1
168	BB-32009	Taper Bearing	32009	2
169	ECB-1422V-B169	Spacer		1
170	ECB-1422V-B170	Driven Shaft		1
171	ECB-1422V-B171	Driven Wheel		1
172	ECB-1422V-B172	Front Coolant Tray		1
173	TS-2246082	Socket Hd Button Screw	M6x8L	2
174	ECB-1422V-B174	Blade Guide Block (Front)		1
175	TS-1503041	Socket Hd Cap Screw	M6x16L	1
176	TS-1540071	Hex Nut	M10	2
177	TS-2361101	Lock Washer	M10	2
178	ECB-1422V-B95	Bearing Bushing (Short)		1
179	ECB-1422V-B96	Bearing Bushing (Long)		1
180	BB-6201	Bearing	BB6201	2
181	ECB-1422V-B98	Bearing Shaft (Long)		1
182	ECB-1422V-B99	Bearing Shaft (Short)		1
183	TS-1504091	Socket Hd Cap Screw	M8x45L	1
184	ECB-1422V-B184	Guide Pin		1
185	ECB-1422V-B185	Guide Spring		1
186	ECB-1422V-B186	Guide Screw		1
187	ECB-1422V-B187	Carbide Guide (L/F)		1
188	ECB-1422V-B188	Carbide Guide (R/F)		1
189	SP-515	Spring Pin	5x15L	1
190	ECB-1422V-B190	Bracket Shaft		1



Index No.	Part No.	Description	Size	Qty.
191	BB-6000	Bearing	6000	2
192	ECB-1422V-B192	Upper Bracket		2
193	ECB-1422V-B193	Bearing Shaft		2
194	ECB-1422V-B194	Blade Guard		1
195	TS-2246082	Socket Hd Button Screw	M6x8L	1
196	ECB-1422V-B196	Blade	34Wx4880L	1
197	ECB-1422V-B197	Blade Cover		1
198	TS-1540041	Hex Nut	M6	2
199	ECB-1422V-B199	Screw Casing	8x80L	2
200	TS-1550041	Flat Washer	M6	2
201	ECB-1422V-B201	Handle	SK34	2
202	ECB-1422V-B202	Hex Cap Screw	M6x100L	2
203	ECB-1422V-B203	Handle		1
204	TS-2246122	Socket Hd Button Screw	M6x12L	2
205	ECB-1422V-B205	Fixed Block		2
206	TS-2248302	Socket Hd Button Screw	M8x30L	4
207	ECB-1422V-B207	Pin	8x70	2
208	ECB-1422V-B208	Swiveling Latch		2
209	TS-2246162	Socket Hd Button Screw	M6x16	4
210	TS-2245102	Socket Hd Button Screw	M5x8L	2
211	ECB-1422V-B211	Blade Guard		1
212	TS-1512011	Socket Hd Flat Screw	M4x10L	2
213	ECB-1422V-B213	Locking Latch		1
214	ECB-1422V-B214	Brush Cover		1
215	TS-2246082	Socket Hd Button Screw	M6x8L	2

ELECTRICAL BOX ASSEMBLY — ECB1422V

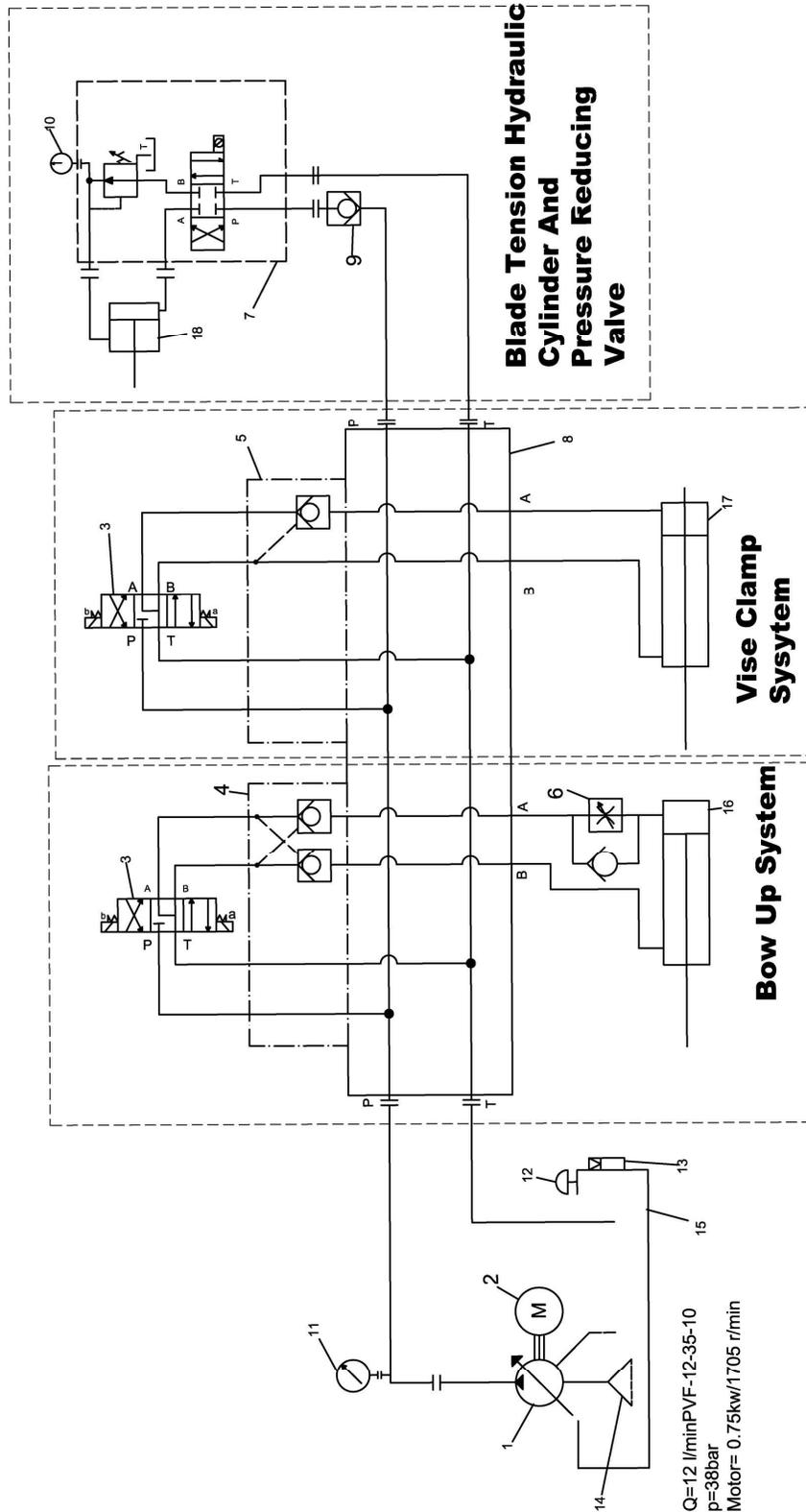




PARTS LIST ELECTRICAL BOX ASSEMBLY — ECB1422V

Index No.	Part No.	Description	Size	Qty.
1	ECB1422V-SB6	Emergency Stop Switch (SB6)		1
2	ECB1422V-PL	Power Lamp (PL)		1
3	ECB1422V-SA2	Coolant Pump Selectric Switch (SA2)		1
4	ECB1422V-SB1	Blade Off Push Button Switch (SB1)		1
5	ECB1422V-SB3	Bow Up Push Button Switch (SB3)		1
6	ECB1422V-SA4	Main/ Auto Switch (SA4)		1
7	ECB1422V-E7	Bow Feed Valve		
8	ECB1422V-SB5	Oil Pump Push Button Switch (SB5)		1
9	ECB1422V-SB2	Blade On Push Button Switch (SB2)		1
10	ECB1422V-SB4	Bow Down Push Button Switch (SB4)		1
11	ECB1422V-SA3	Vise Open/ Close Selectric Switch (SA3)		1
12	ECB1422V-FR	Overload Relay For Main Motor (FR1)	NTH-17	1
	ECB1422V-FR-460	Overload Relay For Main Motor - 460V	NTH-8	
13	ECB1422V-KMC18D	Magnetic Switch (KM1)	C18D	1
15,16	ECB1422V-KMC12D	Magnetic Switch (KM 2,3)	C12D	2
13-1	ECB1422V-KM1-A	Auxiliary Block (KM1-A)	CA1-D22(2A2B)	1
14	ECB1422V-FR2	Overload Relay For Coolant Pump (FR2)	NTH-0.75	1
	ECB1422V-FR2-460	Overload Relay For Coolant Pump - 460V	NTH-0.5	
16-1	ECB1422V-KM3-A	Auxiliary Block (KM3-A)	CA1-D11(1A1B)	1
17	ECB1422V-FR3	Overload Relay For Oil Pump (FR3)	NTH-4	1
	ECB1422V-FR3-460	Overload Relay For Oil Pump - 460V	NTH-2.5	
18	ECB1422V-QC	Power Supply (PC)	110 to DC24V	1
19	ECB1422V-TB	Terminal Block (TB)	2.5mm2 /20A/600V	1
20	ECB1422V-QS	Safety Door Lock Main Switch (QS)	2ABB OT-25F3	1
21-22	ECB1422V-KR	Relay (KR1/ KR2)	MY2N-AC24V	2
23-24	ECB1422V-FU1	Fuse (FU1,2)	2A	2
25	ECB1422V-FU3	Fuse (FU3)	3A	1
26	ECB1422V-FU4	Fuse (FU4)	5A	1
27	ECB1422V-FU5	Fuse (FU5)	1A	1
28	ECB1422V-TR	Transformer (TR)	262VA INPUT 230/460, OUTPUT: 110V/24V	1
	ECB1422V-FTB	Fuse Terminal Blocks For Primary Side (FTB not shown)		2
	ECB1422V-FTB1	Fuse Terminal Blocks For Secondary Side (FTB not shown)		3
29	ECB1422V-CPP	Control Panel Plate		1

HYDRAULIC SYSTEM — ECB1422V





PARTS LIST HYDRAULIC SYSTEM — ECB1422V

Index No.	Part No.	Description	Size	Qty.
1	ECB-1422V-D1	Motor	1HP/4P/230/460V 3Ph	1
2	ECB-1422V-D2	Oil Pump	PVF-12-35-10	1
3	ECB-1422V-D3	Oil Pressure Valve	DFA-02-3C4-A110V	2
4	ECB-1422V-D4	Check Valve	MPC-02W	1
5	ECB-1422V-D5	Check Valve	MPC-02A	1
6	ECB-1422V-D6	Bow Down Control Valve	FNC-G02-6	1
7	ECB-1422V-D7	Blade Tension Control Valve	RDH-P02-H	1
8	ECB-1422V-D8	Oil Board	G02-2	1
9	ECB-1422V-D9	Check Valve Fitting	1/4PF*1/4P	1
10	ECB-1422V-D10	Blade Tension Gauge	2.5"-100KG/cm2	1
11	ECB-1422V-D11	Oil Pressure Gauge	124.21.222-100KG/cm2	1
12	ECB-1422V-D12	Cover For Oil Tank	FB-06S	1
13	ECB-1422V-D13	Oil Level Meter	LA-40	1
14	ECB-1422V-D14	Oil Filter Net	MFC-03	1
15	ECB-1422V-D15	Oil Tank	20L	1
16	ECB-1422V-D16	Bow Up/ Down Oil Hydraulic Cylinder		1
17	ECB-1422V-D17	Vise Oil Hydraulic Cylinder		1
18	ECB-1422V-D18	Blade Tension Oil Hydraulic Cylinder		1

17.0 WIRING DIAGRAM

