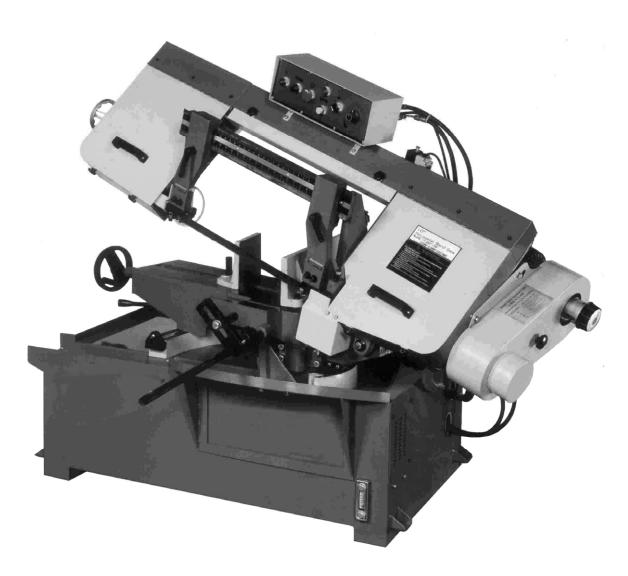
10" SEMI-AUTOMATIC **HORIZONTAL BAND SAW**

Study Carefully Before Operating MODEL: UE-250S/UE-250SSA



SPECIFICATIONS

Speeds: 25 ~ 75MPM

Motor: 50HZ 2HP 1430RPM 3PHASE

Capacity: 90° ● 10″ ■ 10″×15″ ■ 9"×16"

90° • 250mm ■ 250×385mm ■ 200×400mm

Blade:

Dimension:

 $45^{\circ} \bullet 8^{1}/_{2}^{"} \blacksquare 10^{"} \times 8^{1}/_{2}^{"}$ 45° ● 215mm ■ 250×215mm 250S L71" × W30" (L:1800mm × W:760mm) 250SSA L74"×W30" (L:1880mm×W:760mm)

 $1'' \times 0.032'' \times 130''$ (27mm $\times 0.9$ mm $\times 3300$ mm)

Blade Wheels: 14" (355mm) Diameter Shipping Weight: 250S 430kgs/500kgs 250SSA 450kgs/520kgs

WARNING

position before connecting the machine to the

power supply.

Read and understand the entire instruction 12. Give your work undivided attention. Looking around, carrying on a conversation, and manual before operating machine. "horse-play" are careless acts that can result in serious injury. Always wear approved safety glasses/face 2. shields while using this machine. 13. Keep visitors a safe distance from the work area. Make certain the machine is properly grounded. 14. Use recommended accessories, improper accessories may be hazardous. Before operating the machine, remove tie, rings, watches, other jewelry, and roll up sleeves above the elbows. Remove all loose clothing and 15. Make a habit of checking to see that keys and confine long hair. Do not wear gloves. adjusting wrenches are removed before turning on the machine. Keep the floor around the machine clean and free of scrap material, oil and grease. 16. Always keep hands and fingers away from the blade when the machine is running. Keep machine guards in place at all times when the machine is in use. If removed for 17. Never hold the material with the saw in the maintenance purposes, use extreme caution and horizontal position. Always use the vise and replace the guards immediately. clamp it securely. Do not over reach. Maintain a balanced stance at 18. Read and understand warnings posted on the all times so that you do not fall or lean against machine. blades or other moving parts. 19. Keep the belt guard and wheel covers in place Make all machine adjustments or maintenance and in working order. with the machine unplugged from the power source. 20. Always provide adequate support for long and heavy material. Use the right tool. Don't force a tool or attachment to do a job which it was not designed for. 21. Use a sharp blade and keep machine clean for best and safest performance. 10. Replace warning labels if they become obscured or removed. 22. Failure to comply with all of these warnings may cause serious injury. 11. Make certain the motor switch is in the off

Environment Requirements for Installation.

- 1. Be sure to provide sufficient light for operation according to the codes or regulations published for local area. If you do not get the information about lighting, a light intensity of 300 Lux is the least value to be supplied.
- 2. The place where machine is installed must be flat and big enough for the operation.

Noise Level

- 1. The noise level of this machine is about 75 db (A) during operation.
- 2. While taking provisions for the risk of noise, the noise level of working environment should be taken into consideration also.

Handling & Transportation of Machine

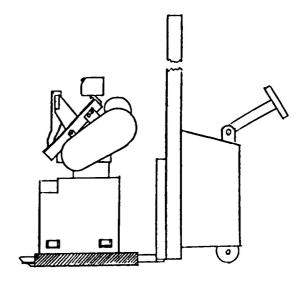
- 1. The total weight of this machine must be ensured before handling.
- 2. This machine can not be handled without help of lifting tools.

Transportation Methods



WARNING

- 1. Always keep balance of the machine in transportation. Watch the gravity!
- 2. Drive folklift slowly and carefully.



ELECTRICAL CONNECTION/DISCONNECTION.

FOR 3 PHASE

1. Electrical connection:

- a. A cable with four wire s is equi pped to con nect your ma chine into the 3 phase p ower supply. Please connect your machine into the power supply with hand-operated disconnecting device, which is in compliance with subclause 5.3 of EN 6024, such as no fuse breaker or plu g/socket combination, if your machine is not equipped with this optional device on the door of control box.
- b. For the protection of control device, we recommend the operator to supply a fuse with appropriate current rating, and the total length between fuse and connection terminal shall not exceed 1.5 m.
- c. The power supply system is TN system.
- d. The exact powe r sou rce voltage, frequency, and num ber of phase shall b e che cked according to the installation diagram and circuit diagram.
- e. The correct direction of saw blade should be checked after connecting.

2. Electrical disconnection:

- a. The disconnection is carried out by hand-o perated disconnecting device, which is on the door of control box as an option or connected before the power source.
- b. Be sure to disconnect this machine from power source, when you want to stop the job, ma intenance, and adjustment.

3. Grounding.

The groun ding of this model is carried out by connecting the ye llow/green terminal of supply cable to the grounding terminal of power source. Be sure to ground your machine before connecting machine to power source in any situation.

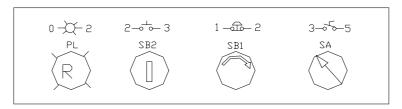
WARNING!

Do not disconnect grounding terminal before disconnecting power source.

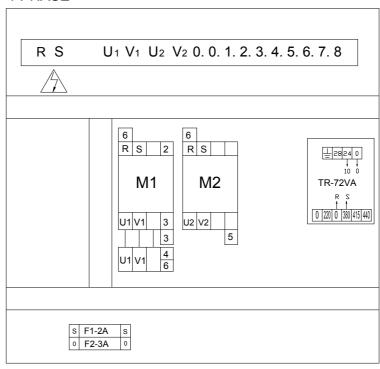
FOR SINGLE PHASE

- 1. If the power cable is no t equipped with plug, pleas e con nect and disconnect your machine with power according to the same instruction of three phase. Otherwise, Please follow the following instruction (2~4).
- 2. The connection, disconnection, and grounding is carried out through the plug, equipped on the machine. For the safety reason, Do not change this plug into any other type in any situation.
- 3. For the protection of control device, we recommend the operator to supply a fuse with appropriate current rating, and the total length between fuse and connection terminal shall not exceed 1.5 m.
- 4. The exact power source voltage, frequency, and number of phase shall be checked according to the installation diagram and circuit diagram.

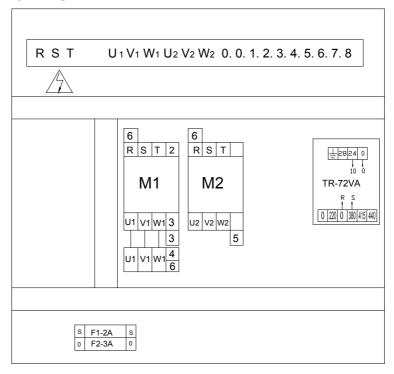
Electrical Schematic-Controls (250S)



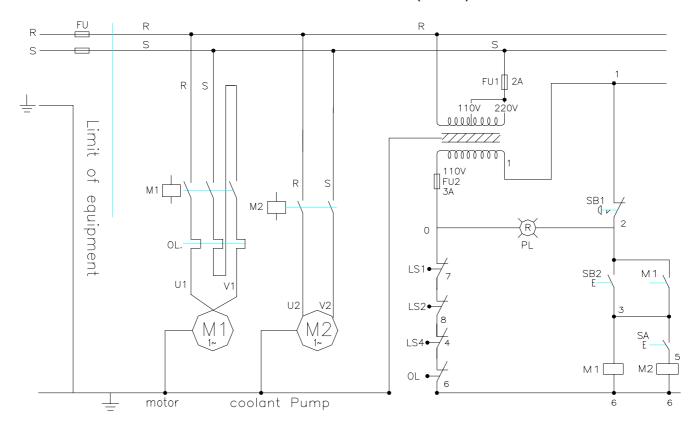
1 PHASE

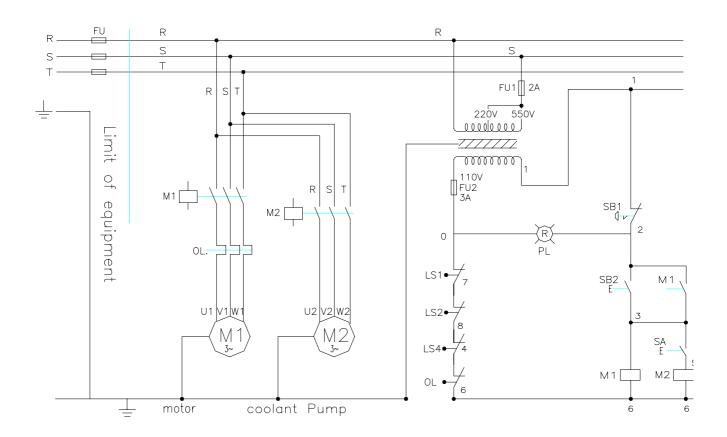


3 PHASE

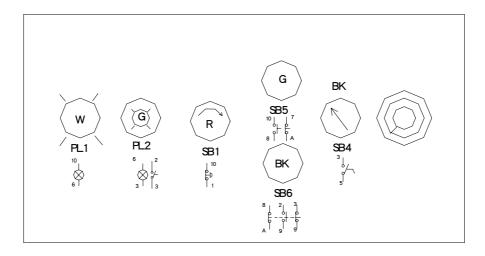


Electrical Schematic (250S)

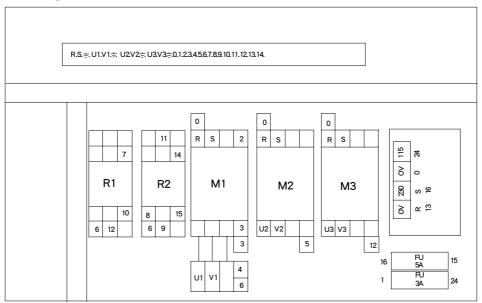




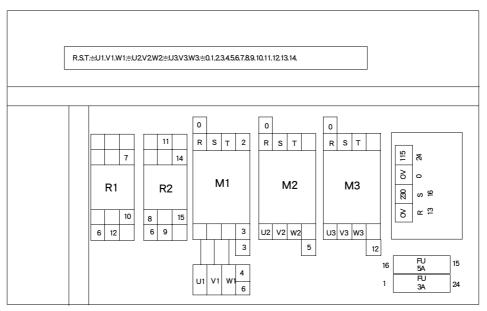
Electrical Schematic-Controls (250SSA)



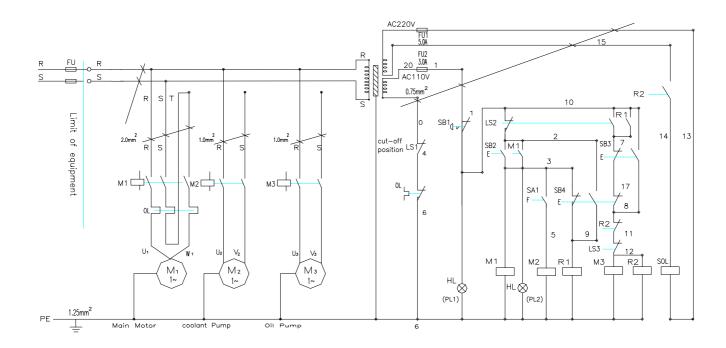
1 PHASE

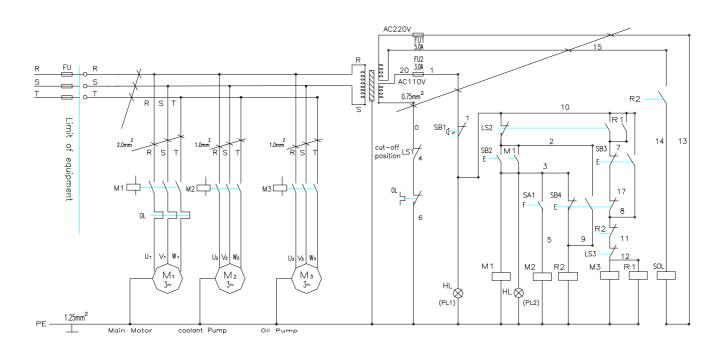


3 PHASE



Electrical Schematic (250SSA)





Electrical Connections

/ WARNING

All electrical connections must be done by a qualified electrician! Failure to comply may result in serious injury!

WARNING

Disconnect machine from the power source before changing any voltage components!
Failure to comply may cause serious injury!

- Main Motor follow diagram inside junction box cover.
- Coolant Pump Remove access panel on right side of saw, remove junction box cover on pump, and follow diagram inside junction box cover. See Fig.1
- Control Transformer Open electrical panel on rear of base and switch primary wire on transformer from 230V to 460V.

Machine must always be correctly grounded.

Note: The power cord end will have to be changed to one that is rated 460V when changing voltage.

Controls - Figure 2 & 3

- Power indicator Light (A) lit whenever machine is running.
- 2. **Start Button** (B) depress to start bandsaw.
- 3. **Emergency Stop Button** (C) depress to immediately stop all machine functions.
- 4. **Coolant Switch** (D) Turn arrow to "I" to turn on flow of coolant. Turn arrow to "O" to stop flow of coolant.
- 5. **Cutting Pressure Control** (E) turn clockwise to decrease cutting pressure. Turn counterclockwise to increase cutting pressure.
- 6. **Hydraulic On-Off Valve** (F) turn hydraulic cylinder on and off.
- 7. **Arm Lift Up Button** (G) Depress to lift the saw arm up.
- 8. **Arm Descent Button** (H) Depress to send the saw arm down.

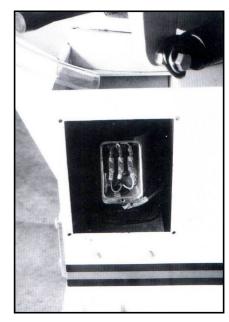


Fig. 1

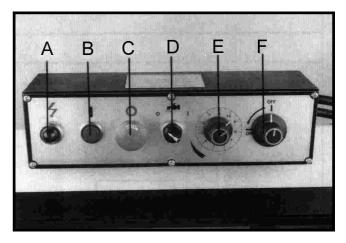


Fig. 2

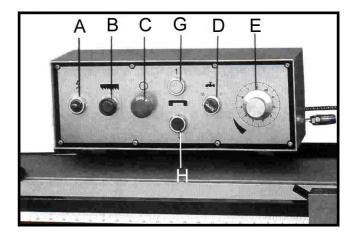


Fig. 3

Prior to Operation

- Check blade tooth direction matches diagram on blade guides.
- 2. Check to see that blade is properly seated on wheels after applying correct tension (approximately 25,000 lbs.)
- 3. Set blade holder guides for approximately 0.003" to 0.005" clearance between the guides and blade.
- Check for slight clearance between back up rollers and back of blade.
- 5. Position blade guides as close to work piece as possible.
- 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 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 makers label and fill the coolant tank through the chip tray area.
- 9. Do not start cut on a sharp edge.
- Keep machine lubricated. See "Lubrication" section.

Adjusting Vise Square to the Blade

- 1. Disconnect the machine from the power source.
- Place a machinist's square on the table against the blade and the vise. The square should lie along the entire length of the vise and blade without a gap.
- 3. If adjustment is necessary, loosen bolts holding the vise and adjust vise so square lines up properly. Tighten bolts.
- 4. Connect machine to the power source.

Adjust the Variable Speed

- 1. Raise saw arm approximately about 6".
- 2. Start machine by depressing start button (B, Fig.2).
- 3. Rotate the governor (A, Fig.4) forward or backward until the pointer reaches the correct read on speed scale (from 25M 75M) (B, Fig.4) you need for the material to be cut.
- 4. Stop machine by depressing start button (B, Fig.2)

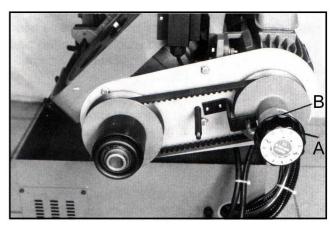


Fig. 4

Automatic Shut-Off Adjustment

The motor should shut off immediately after the blade has cut through the material and just before the head comes to rest on the horizontal stop bolt. If the machine continues to run after the workpiece has been fully cut, locate and adjust the micro switch mounting plate down. If the machine shuts off before the workpiece has been completely cut, move the micro switch mounting plate up.

Adjusting Feed Rate

Rate of feed is adjusted by turning the cutting pressure control knob on the control panel. Rate of feed is important to bandsaw performance; excessive pressure may break the blade or stall the saw . Insufficient pressure rapidly dulls the blade.

Material chips or shavings are the best indicator of proper speed and 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 band speed which will shorten blade life. Thin or powdered chips indicate insufficient feed pressure.

Changing Blades

/ WARNING

Disconnect machine from the power source before making any adjustments or repairs! Failure to comply may result in serious injury!

- 1. Disconnect machine from power source.
- 2. Raise saw arm approximately 6". Hold saw arm in place by closing cutting pressure control valve.
- Open both wheel covers and clean chips out of both wheel housings. Loosen two lock knobs below the control panel and remove upper blade guard.
- 4. Loosen set screw (A, Fig.5) and lower the blade cleaning brush.
- 5. Release blade tension by turning blade tensioning handwheel (A, Fig.6) counter-clockwise until blade is free.
- 6. Loosen lock knob (A, Fig.7) and slide left blade guide arm (B, fig.7) to the right as far as possible,
- 7. Remove old blade from both wheels and out of each blade guide. Caution: Even dull blades are sharp to the skin! Use extra caution handling bandsaw blades!
- 8. Install new blade making sure teeth are pointed downward in the proper cutting direction. If necessary, turn blade inside out.
- Position blade on band wheels and tighten just enough to hold blade on wheels. Make sure back of blade rests lightly against the wheel flange of both wheels. Twist blade slightly to allow it to slip into guides.
- Tension blade to approximately 25,000 lbs. of blade tension, as indicated on the blade tension indicator found on the tension wheel shaft housing.
- 11. Raise wire brush and tighten set screw to hold brush in place.
- 12. Close all covers and guards and fasten securely. Connect machine to power and run freely for approximately two minutes.
- 13. Turn power off and re-check blade tension and wire brush adjustment. If further adjustment is necessary, disconnect saw from power source, make adjustments, and re-connect to power.

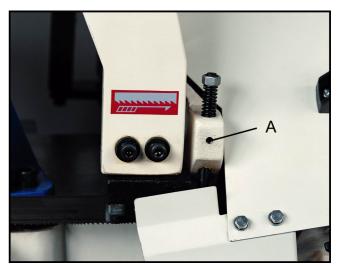


Fig. 5

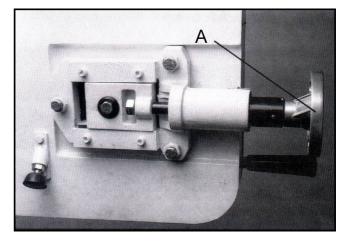


Fig. 6

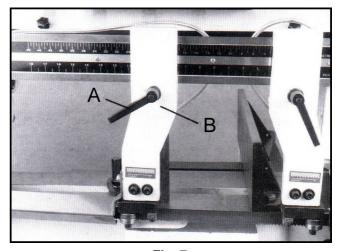


Fig. 7

Blade Tracking Adjustment

Blade tracking has been set at the factory and should require no adjustment. If a tracking problem occurs, adjust the machine as follows:

! WARNING

Tracking adjustment is done with the wheel covers open to observe the blade. Use extreme caution so as not to come into contact with the blade!

Since tracking can only be adjusted while machine is running, it is suggested that this adjustment be accomplished by qualified personnel that are familiar with this type of adjustment and the dangers associated with it.

- 1. Disconnect machine from the power source.
- 2. Raise saw arm to its highest position and close cutting pressure control valve to hold saw arm in place.
- 3. Locate tracking adjustment plate on the back side of the driven blade wheel.
- 4. Loosen the three bolts (A, fig.8) located on the top of the tracking nuts.
- 5. Tracking adjustment is accomplished by either loosening or tightening three adjusting nuts (B, Fig.8).
- 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 wheel flange) will damage the blade wheel and blade.
- 7. Tighten locking bolts (A, Fig.8) once proper tracking is completed.

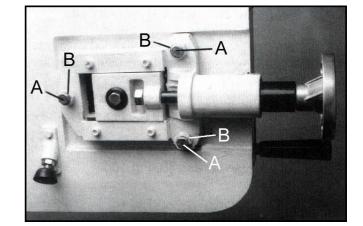


Fig. 8

Thrust Roller Adjustment

- 1. Disconnect machine from the power source.
- 2. Loosen two hex socket cap screws (A-Fig.9).
- 3. Move guide seat (B Fig.9) up or down until a clearance of 0.003" to 0.005" between back of blade and thrust roller is obtained.
- 4. Tighten two hex socket cap screws (A Fig.9).
- 5. Repeat for other blade guide assembly.
- 6. Connect machine to power source.

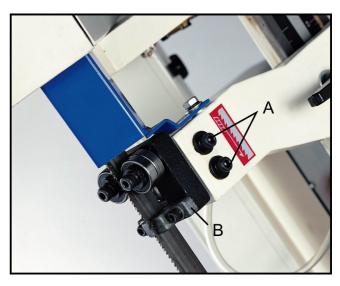


Fig. 9

Guide Roller Adjustment

- 1. Disconnect machine from the power source.
- 2. Loosen blade guides (A Fig.10) by loosening screws (B). Slide blade guides away from blade.
- 3. Loosen locking screws (C) by using a hex wrench.
- Adjust the eccentric bushings with a combination wrench until the ball bearings are snug to the blade. Note: blade should travel freely up and down between the ball bearings. Do not pinch the blade.
- 5. Tighten locking screws (C).
- 6. Slide blade guides back into contact with blade and tighten screws (B).
- 7. Connect machine to the power source.

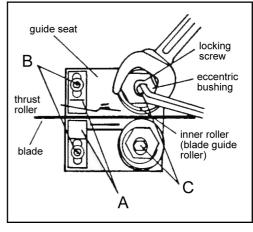


Fig. 10

Bow Weight Adjustment

Bow weight is one of the most important adjustments of the saw. If the bow weight is not set properly, one can expect poor performance, crooked cuts, tooth stripping, stalling, and the blade popping off the blade wheels. The hydraulic feed rate unit will not compensate for improper bow weight. Bow weight has been set at the factory and should not need any adjustment. If adjustment is necessary:

- 1. Disconnect the machine from the power source.
- 2. Turn hydraulic valve to on position (G, Fig.2).
- 3. Turn cutting pressure control valve (F, Fig.2) counter-clockwise until it stops.
- Place one end of a fish-type scale under the blade tension handle and lift the saw with the other end. Scale should indicate approximately 15 lbs.
- 5. Adjust tension to approximately 15 lbs. by turning the adjustable C-bolt found at the end of the coil spring on the rear of the bandsaw. See figure 11.
- 6. Connect the machine to the power source.

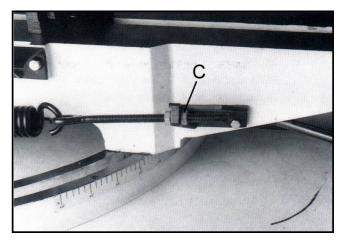


Fig. 11

Angle Adjustment

To swivel the saw arm up to a 45° angle:

- 1. Disconnect the machine from the power source.
- 2. Pull the handle (A, Fig.12) toward the front of the saw.
- 3. Rotate the upper assembly to the desire angle.
- 4. Push the handle back toward the rear of the saw to lock the upper assembly.

To adjust the 90° stop:

- 1. Disconnect the machine from the power source.
- 2. Lower saw arm completely.
- 3. Pull the lock lever toward the front of the saw and pull the saw arm assembly against the 90° stop.
- 4. Place a 90° square on the blade and the fixed vise jaw.
- 5. Loosen the lock nut (A, Fig.13).
- 6. Adjust the hex cap screw (B, Fig.13) until the blade is at a 90° angle to the fixed vise jaw.
- 7. Tighten the lock nut (A, Fig.13).

To adjust the 45° stop:

- 1. Disconnect the machine from the power source.
- 2. Lower saw arm completely.
- 3. Pull the lock lever toward the front of the saw and push the saw arm assembly against the 45° stop.
- 4. Place a 45° angle square on the blade and the fixed vise jaw.
- 5. Loosen the lock nut (A, Fig.14).
- 6. Adjust the hex cap screw (B, Fig.14) until the blade is at a 90° angle to the fixed vise jaw.
- 7. Tighten the lock nut (A, Fig.14).

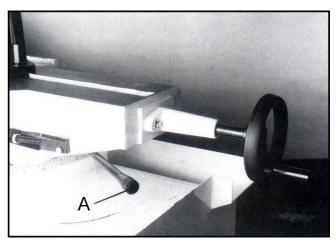


Fig. 12

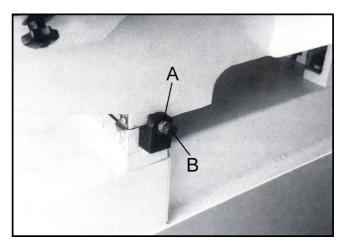


Fig. 13

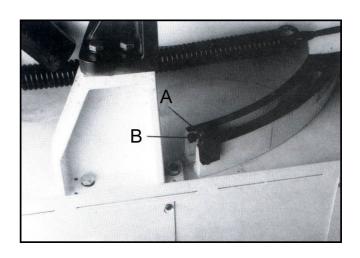


Fig. 14

Vise Adjustment

To position the moveable vise jaw:

- 1. Turn vise handwheel (A, Fig.15) counter-clockwise 1/2 revolution.
- 2. Move vise (B, Fig.15) to desired location by sliding along bed.

To adjust the vise for angle cutting:

- 1. loosen bolts (A, Fig.16) and move vise jaw to desired angle.
- 2. T ighten bolts.

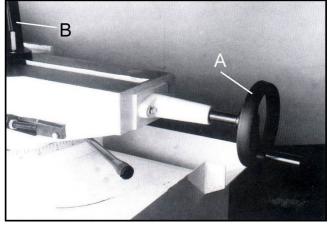


Fig. 15

Maintenance

Keep the band saw and motor clean.

Lubrication

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

The gear box lubricant should be changed after the first 50 hours of operation. Change lubricant from then on every 250 hours of operation.

To check level of gear box lubricant, place saw arm in down position and allow a few minutes to pass so that oil drains down. Check level in sight glass on side of gear casing. Correct level is the dot in the middle of sight glass.

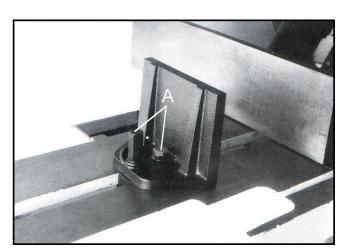


Fig. 16

To change gear box lubricant:

- 1. Disconnect machine from the power source.
- 2. Open drain plug and allow lubricant to drain completely. Drain plug may be found on lower rear of gear case. Remove drain plug with a hex wrench.
- 3. Replace drain plug.
- 4. Remove filler cap (A, Fig.17) and fill gear box with 50 weight gear oil until level reaches dot in middle of sight glass.
- 5. Repl ace filler cap.
- 6. Connect machine to thee power source.

Use a light machine oil to lubricate all other moving parts as needed.

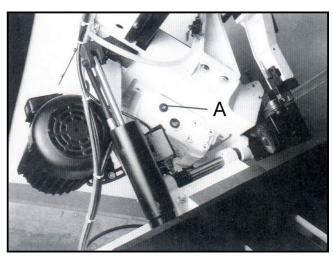


Fig. 17

Hydraulic System

The hydraulic system controls saw arm descending. If the magnetic valve (A, Fig. 18) contains sediment, the saw arm may not go down regularly. To solve the problem is to keep the inside net filter clean.

- 1. Disconnect machine from power source.
- Open magnetic valve, take the net filter out, and remove sediment carefully.
- 3. Replace the net filter and magnetic valve.

To refill oil

- 1. Disconnect machine from power saurce.
- Open oil inlet (C, Fig. 18) and fill oil (Mobil 1405 or Hydran LG 10)until level reaches the read in middle of oil gauge (B, Fig. 18)
- 3. Replace oil inlet.

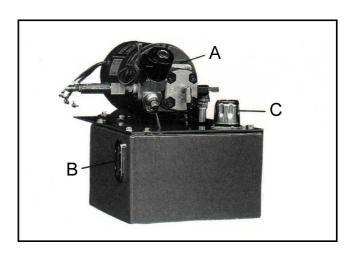


Fig. 18

Adjust Saw Arm Starting Position Set

- 1. Raise saw arm by depressing arm lift up button (G, Fig.3) to allow work piece to be loaded.
- 2. Adjust the distance to about 1.5" between blade and work piece by depressing arm descent button (H, Fig.3).
- 3. Loosen set screw (A, Fig.19), push down the limit switch (B, Fig.19) against the plate on hydraulic cylinder.
- 4. Tighten set screw (A, Fig.19)

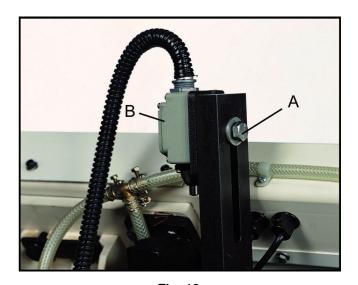


Fig. 19

PART LIST

| | | | | | | | 1 |
|-------------|------------------------|----------|------|-------------|---------------------------|----------|------|
| Part No. | Description | Size No. | Q'ty | Part No. | Description | Size No. | Q'ty |
| 1 | Base | | 1 | 55-2 | Key | 5x20 | 1 |
| 2 | Hex. Cap Bolt | M12x70 | 4 | 56-1 | Lead Screw Bracket | | 1 |
| 3 | Nut | M12 | 4 | 56-2 | Hex. Socket Cap Screw | M8x25 | 2 |
| 4 | Coolant Pump (1PH/3PH) | | 1 | 57-1 | Rack | | 1 |
| 5 | Round Head Screw | M6x16 | 2 | 57-2 | Lock Bushing | | 1 |
| 6 | Hose Fitting | | 1 | 57-3 | Hex. Socket Cap Screw | M6x25 | 1 |
| 7 | Hose Clamp | | 1 | 58-1 | Rack Block | | 1 |
| 8 | Hose | | 1 | 58-2 | Set Screw | M6x8 | 1 |
| 9 | Coolant Gauge | | 1 | 59-1 | Pin | | 1 |
| 10 | Hex. Cap Bolt | M10x30 | 2 | 60-1 | Slide Bracket | | 1 |
| 11 | Coolant Pump Bracket | | 1 | 61 | Hex. Socket Cap Screw | M6x30 | 1 |
| 12 | Panel Cover | | 1 | 61-1 | Nut | M6 | 1 |
| 13 | Hex. Socket Cap Screw | M6x8 | 4 | 62 | Electric Cabinet Box | | 1 |
| 14 | Coolant and Chip Tray | | 1 | 63 | Magnetic Switch | | 3 |
| 15 | Hex. Cap Bolt | M8x16 | 2 | 63-1 | Overload Relay | | 1 |
| 18 | Hex. Cap Bolt | M8x16 | 1 | 63-2 | Relay | | 2 |
| 19 | Washer | | 1 | 64-1 | Fuse | | 2 |
| 22 | Thrust Bearing | | 2 | 65 | Transformer | | 1 |
| 23A | Turning Slide (short) | | 1 | 66 | Pin | | 2 |
| 23-1 | Turning Slide (long) | | 1 | 67 | Terminal Strip | | 1 |
| 24 | Spring Washer | M10 | 3 | 69 | Hex. Socket Cap Screw | M6x30 | 1 |
| 24-1 | Washer | M10 | 2 | 69-1 | Nut | M6 | 1 |
| 24-2 | Set Screw | M8x10 | 6 | 70 | Electrical Panel Cover | 1110 | 1 |
| 25 | Hex. Cap Bolt | M10x40 | 3 | 70-1 | Pin | | 2 |
| 26 | Hex. Socket Cap Screw | M6x20 | 2 | 71 | Fuse | | 2 |
| 27 | Hex. Socket Cap Screw | M6x20 | 1 | 72 | Magnetic Switch (1PH/3PH) | | 1 |
| 28 | Bracket | WOXE | 1 | 72-1 | Overload Relay | | 1 |
| 29 | Washer | M10 | 3 | 73 | Transformer (1PH/3PH) | | 1 |
| 30 | Hex. Cap Bolt | M10x40 | 3 | 74 | Terminal Strip | | 1 |
| 31 | Slide | | 2 | 75 | Washer | M16 | 2 |
| 32 | Hex. Socket Cap Screw | M6x20 | 4 | 76 | Adjustable Handle | | 1 |
| 33 | Bracket | WOXE | 1 | 77 | Needle Bearing | | 2 |
| 34 | Nut | M10 | 1 | 78 | Hex. Cap Bolt | M6x12 | 2 |
| 35 | Hex. Socket Cap Screw | M10x25 | 1 | 79 | Guide Plate | WOXTE | 1 |
| 36 | Set Screw | M8x16 | 1 | 80 | Torsion Spring | | 1 |
| 37 | Bracket | WOXTO | 1 | 81 | Pivot Shaft | | 1 |
| 38 | Hex. Cap Bolt | M12x35 | 2 | 82 | Washer | M12 | 2 |
| 38-1 | Lock Washer | M12 | 2 | 83 | Bolt W/Zerk Fitting | IVIIZ | 2 |
| 39 | Lock Handle | IVIIZ | 1 | 84 | Brass Fitting | | 1 |
| 40 | Lock Knob | | 1 | 85 | Pivot Bracket | | 1 |
| 41 | Stop Bracket | | 1 | 86 | Nut | M12 | 1 |
| 42 | Work Stop | | 1 | 87 | Washer | M12 | 1 |
| | Stop Rod | | 1 | 88 | Hex. Cap Bolt | M12x40 | 1 |
| 43 | Support | | 1 | 89 | Torsion Spring Shaft | 10112340 | 1 |
| 44A | Set Screw | M8x10 | 1 | 90 | C-Ring | S-22 | 1 |
| 45 | Adjustable Handle | IVIOATO | 1 | 91 | Hex. Cap Bolt | M8x25 | 1 |
| 46 | Cylinder Pin | | 1 | 91-1 | Flat Washer | M8 | 1 |
| 47 | C-Ring | S-20 | 1 | 91-1 | Nut | M8 | 1 |
| 48 | C-Ring C-Ring | S-25 | 2 | 91-2 | Motor Tilt Plate | IVIO | 1 |
| 49 | Bed | J-20 | 1 | 92 | Limit Switch Plate | | 1 |
| 50 | | | | | | MO | |
| 51 | Hand Wheel | | 1 | 94 | Washer | M8 | 2 |
| 51-1 | Handle | Mossoc | 1 | 95 | Hex. Cap Bolt | M8x10 | 2 |
| 52 | Hex. Cap Bolt | M8x30 | 2 | 96 | Hex. Cap Bolt | M6x12 | 4 |
| 53 | Lock Washer | M8 | 2 | 97 | Limit Switch | 5102 | 1 |
| 54 | Lead Screw Seat | 500 | 1 | 98 | Plate | N440 | 1 |
| 55-1 | Lead Screw | 530mm | 1 | 99 | Washer | M12 | 2 |

PART LIST

| Part No. | Description | Size No. | Q'ty | Part No. | Description | Size No. | Q'ty |
|-------------|--------------------------------|----------|------|------------------|---------------------------|----------|------|
| 100 | Hex. Cap Bolt | M12x50 | 2 | 151 | Wheel Box-Left | | 1 |
| 101 | Nut | 1/2" | 1 | 152 | Handle (For 250S) | | 1 |
| 102 | Spring Bracket | | 1 | 153 | Nut | M12 | 1 |
| 103 | Hex. Cap Bolt | M8x30 | 2 | 154 | Handle | | 2 |
| 104 | Nut | 1/2" | 1 | 155 | Round Head Screw | M6x16 | 4 |
| 105 | Adjustable C-Bolt | | 1 | 156 | Washer | M6 | 4 |
| 106 | Spring | | 1 | 157 | Lock Knob | | 4 |
| 107 | Vise Jaw-Left | | 1 | 158 | Blade Wheel Cover-Left | | 1 |
| 108 | Hex. Cap Bolt | M12x35 | 1 | 159 | Hex. Socket Cap Screw | M6x8 | 12 |
| 109 | Lock Knob | | 1 | 160 | Hex. Cap Bolt | M12x25 | 2 |
| 110 | Lock Washer | M12 | 1 | 161 | Washer | M12 | 1 |
| 111 | Cutter Pin | | 1 | 162 | Ball Bearing | | 3 |
| 112 | Fixed Vise Jaw | | 1 | 163 | Idler Wheel | | 1 |
| 113 | Hex. Cap Bolt | M12x40 | 3 | 164 | Hex. Cap Bolt | M6x12 | 2 |
| 114 | Lock Washer | M12 | 3 | 165 | Lock Washer | M6 | 2 |
| 115 | Spring Cover | | 1 | 166 | Washer | M6 | 2 |
| 116 | Lock Washer | M10 | 2 | 167 | Wire Brush Guard | | 1 |
| 117 | Hex. Cap Bolt | | 2 | 168 | Blade Wheel Cover-Right | | 1 |
| 118 | Hex. Socket Cap Screw | M8x30 | 2 | 169 | Washer | | 1 |
| 119 | Spring | | 1 | 170 | Drive Wheel | | 1 |
| 120 | Hydraulic Cylinder Assembly | | 1 | 171 | Bushing | | 1 |
| 121 | Spring Cover | N440 | 1 | 172 | Blade Wheel Box-Right | N5 40 | 1 |
| 122 | Lock Washer | M10 | 2 | 173 | Round Head Screw | M5x10 | 2 |
| 123 | Hex. Cap Bolt | M10x30 | 2 | 174 | Filter Screen | | 1 |
| 124 | Hydraulic Mounting Plate-Top | | 1 | 175 | Connector | 1440 | 1 |
| 125 | Cutter Pin | | 1 | 176 | Lock Washer | M12 | 4 |
| 126 | Cylinder Pin-Top | M6x12 | 1 | 177 | Hex. Cap Bolt | M12x35 | 4 |
| 127 | Hex. Cap Bolt Lock Washer | | 2 | V178 V178-1 | Pulley Cover Plate | M8x16 | 1 |
| 128 129 | Metal Sheet Small | M6 | 2 | V178-1 | | M8 | 3 |
| 130 | Hex. Cap Bolt | M6x12 | 4 | V178-2 V178-3 | | M8 | 6 |
| 131 | Rod of Micro Switch for Length | IVIOX 12 | 1 | 179 | Hose Clamp | IVIO | 1 |
| 132 | Limit Switch | 5101 | 1 | 180 | Hose | 1" | 1 |
| 133 | Limit Switch Plate | 3101 | 1 | V181 | Pulley Cover | 1 | 1 |
| 134 | Hex. Cap Bolt | M8x50 | 1 | V181-1 | - | 3/8" | 1 |
| 135 | Nut | M8 | 1 | | Washer | M10 | 1 |
| 136 | Washer | M10 | 1 | | Support Shaft | IVIIO | 1 |
| 137 | Hex. Cap Bolt | M10x25 | 1 | | Lock Washer | M8 | 1 |
| 138 | Power Cord (1PH/3PH) | | 1 | V181-5 | | 5/16" | 1 |
| 139 | Hydraulic Pump Set | | 1 | V182 | Gear Box Pulley | 0.10 | 1 |
| 139-1 | Motor | | 1 | V183 | V-Belt | 400mm | 1 |
| 139-2 | Pump | | 1 | V184 | Variable Speed Adjustable | | 1 |
| 139-3 | Solenoid Valve | | 1 | V184-1 | · | | 1 |
| 140 | Door | | 1 | V184-2 | Washer | M6 | 2 |
| 141 | Hex. Socket Cap Screw | M6x8 | 4 | V184-3 | | M6 | 2 |
| 142 | Column | | 1 | V184-4 | | M6x12 | 2 |
| 143 | Hex. Socket Cap Screw | M12x20 | 6 | 185 | Gear Box Assembly | | 1 |
| 144 | Hex. Cap Bolt | M12x30 | 4 | 186 | Key | 7mm | 1 |
| 145 | Lock Washer | M12 | 4 | 186-1 | Key | 8mm | 1 |
| 145-1 | Washer | M12 | 2 | 187 | Support Shaft | | 1 |
| 146 | Stand Bolt | M12x50 | 1 | 188 | Motor Mount Bracket | | 1 |
| 147 | Nut | M12 | 1 | 189 | Hex. Cap Bolt | M12x30 | 2 |
| 148 | Lock Knob | | 2 | 190 | Washer | M12 | 1 |
| 149 | Blade Guard | | 1 | 191 | Nut | M12 | 1 |
| 150 | Blade Guard-Down | | 1 | 192 | Hose | | 1 |

PART LIST

| 197 Hex. Cap Bolt | Part No. | Description | Size No. | Q'ty | Part No. | Description | Size No. | Q'ty |
|---|-------------|-------------------------|----------|------|-------------|-------------------------------------|----------|--|
| Hose Clamp | 192-1 | Hose | | 1 | 247 | Guide Bracket-Right | | 1 |
| Hex. Cap Bolt | 193 | Connecting Tube | | 1 | 248 | Connector | | 2 |
| 196 | 194 | Hose Clamp | | 5 | 249 | Hose | | 1 |
| 197 Hex. Cap Bolt | 195 | Hex. Cap Bolt | M8x25 | 1 | 250 | Blade Bracket-Right | | 1 |
| 199 Motor Mount Plate | | | M8 | 1 | 251 | Round Head Screw | M5x10 | 6 |
| Motor Mount Plate | 197 | Hex. Cap Bolt | M8x45 | 4 | 251-1 | Round Head Screw | M5x10 | 8 |
| Motor | 198 | Washer | M8 | 4 | 252 | Control Panel | | 1 |
| 201 | 199 | Motor Mount Plate | | 1 | 253 | Power Indicator Light | | 1 |
| Dec | 200 | Motor | | 1 | 254 | Start Switch | | 1 |
| 203 Nut | 201 | Washer | M8 | 4 | 255 | Emergency Stop Switch | | 1 |
| 204 Key | 202 | Lock Washer | M8 | 4 | 257 | Bow Up Switch | | 1 |
| December December | 203 | Nut | M8 | 4 | 258 | Bow Down Switch | | 1 |
| 206 Washer M6 | | <u> </u> | 7mm | 1 | 259 | Pump Start Switch | | 1 |
| 207 Wire Brush 1 261 Control Box | | • | M6x10 | 1 | 260 | Feed Control-Hydraulic On/Off Valve | | 1 |
| 208 Wire Brush Rod 1 262 Slide Bracket 209 Set Screw M6x8 1 263 Indicator Scale 210 Spring 1 264 Round Head Screw M5x10 211 Nut M10 1 265 Lock Washer 213 Hex. Cap Bolt M8x16 1 266 Lock Washer 214 Lock Washer M8 1 268 Wheel Shaft 215 Washer M8 1 269 Slide 216 Knob 2 270 Washer M12 217 Washer M10 2 271 Hex. Socket Cap Screw M8x21 M8x16 4 272 Hex. Socket Cap Screw M8x21 M8x16 M8x16 M8x16 M8x16 M12 | 206 | Washer | M6 | 1 | 260-1 | Feed Control-Hydraulic On/Off Valve | | 1 |
| 209 Set Screw M6x8 | 207 | Wire Brush | | 1 | 261 | Control Box | | 1 |
| 210 Spring | 208 | Wire Brush Rod | | 1 | 262 | Slide Bracket | | 1 |
| 211 Nut | 209 | Set Screw | M6x8 | 1 | 263 | Indicator Scale | | 1 |
| 212 Blade Guard 1 266 Lock Washer 213 Hex. Cap Bolt M8x16 1 267 Screw Assembly 214 Lock Washer M8 1 268 Wheel Shaft 215 Washer M8 1 268 Wheel Shaft 215 Washer M8 1 269 Slide 216 Knob 2 270 Washer M12 217 Washer M10 2 271 Hex. Socket Cap Screw M8x22 218 Hex. Socket Cap Screw M8x40 4 272 Hex. Socket Cap Screw M8x22 219 Lock Washer M8 4 273 Gib M12 220 Washer M8 4 274 Nut M12 221 Adjustable Bracket-Left 1 275 Set Screw M6x8 222 Scale 1 276 Tension Shaft M6x8 223 Hex. Socket Cap Screw | 210 | Spring | | 1 | 264 | Round Head Screw | M5x10 | 2 |
| 213 Hex. Cap Bolt M8x16 1 267 Screw Assembly 214 Lock Washer M8 1 268 Wheel Shaft 215 Washer M8 1 269 Slide 216 Knob 2 270 Washer M12 217 Washer M10 2 271 Hex. Socket Cap Screw M8x2 218 Hex. Socket Cap Screw M8x40 4 272 Hex. Socket Cap Screw M8x2 219 Lock Washer M8 4 273 Gib Gib 220 Washer M8 4 274 Nut M12 221 Adjustable Bracket-Left 1 275 Set Screw M6x8 222 Scale 1 276 Tension Shaft Extension Bar 223 Hex. Socket Cap Screw M10x25 2 277 Extension Bar 223 Hex. Socket Cap Screw M8x10 4 278 Key 5mm <tr< td=""><td>211</td><td>Nut</td><td>M10</td><td>1</td><td>265</td><td>Hex. Cap Bolt</td><td></td><td>3</td></tr<> | 211 | Nut | M10 | 1 | 265 | Hex. Cap Bolt | | 3 |
| 214 Lock Washer M8 1 268 Wheel Shaft 215 Washer M8 1 269 Slide 216 Knob 2 270 Washer M12 217 Washer M10 2 271 Hex. Socket Cap Screw M8x21 218 Hex. Socket Cap Screw M8x40 4 272 Hex. Socket Cap Screw M8x22 219 Lock Washer M8 4 273 Gib Gib 220 Washer M8 4 274 Nut M12 221 Adjustable Bracket-Left 1 275 Set Screw M6x8 222 Scale 1 276 Tension Shaft Tension Shaft 222 Scale 1 276 Textension Bar Textension Bar 223 Hex. Socket Cap Screw M8x10 4 278 Key 5mm 224 Set Screw M8x10 4 278 Key 5mm <t< td=""><td>212</td><td>Blade Guard</td><td></td><td>1</td><td>266</td><td>Lock Washer</td><td></td><td>3</td></t<> | 212 | Blade Guard | | 1 | 266 | Lock Washer | | 3 |
| 215 Washer M8 1 269 Slide 216 Knob 2 270 Washer M12 217 Washer M10 2 271 Hex. Socket Cap Screw M8x2 218 Hex. Socket Cap Screw M8x40 4 272 Hex. Socket Cap Screw M8x2 219 Lock Washer M8 4 273 Gib M12 220 Washer M8 4 274 Nut M12 221 Adjustable Bracket-Left 1 275 Set Screw M6x8 222 Scale 1 276 Tension Shaft M6x8 222 Scale 1 276 Tension Bar 223 Hex. Socket Cap Screw M10x25 2 277 Extension Bar 223 Hex. Socket Cap Screw M8x10 4 278 Key 5mm 224 Set Screw M8x10 4 278 Key 5mm 225 | 213 | Hex. Cap Bolt | M8x16 | 1 | 267 | Screw Assembly | | 3 |
| 216 Knob 2 270 Washer M12 217 Washer M10 2 271 Hex. Socket Cap Screw M8x21 218 Hex. Socket Cap Screw M8x40 4 272 Hex. Socket Cap Screw M8x22 219 Lock Washer M8 4 273 Gib M8x22 220 Washer M8 4 274 Nut M12 221 Adjustable Bracket-Left 1 275 Set Screw M6x8 222 Scale 1 276 Tension Shaft M6x8 222 Scale 1 276 Tension Shaft M6x8 223 Hex. Socket Cap Screw M10x25 2 277 Extension Bar 223 Hex. Socket Cap Screw M8x10 4 278 Key 5mm 224 Set Screw M8x10 4 278 Key 5mm 225 Slide 1 280 Set Screw M8x11 | 214 | Lock Washer | M8 | 1 | 268 | Wheel Shaft | | 1 |
| 217 Washer M10 2 271 Hex. Socket Cap Screw M8x20 218 Hex. Socket Cap Screw M8x40 4 272 Hex. Socket Cap Screw M8x20 219 Lock Washer M8 4 273 Gib 220 Washer M8 4 274 Nut M12 221 Adjustable Bracket-Left 1 275 Set Screw M6x8 222 Scale 1 276 Tension Shaft 223 Hex. Socket Cap Screw M10x25 2 277 Extension Bar 223 Hex. Socket Cap Screw M8x10 4 278 Key 5mm 224 Set Screw M8x10 4 278 Key 5mm 225 Slide 1 279 Handwheel 5mm 226 Blade (Local Purchase) 1 280 Set Screw M8x10 227 Blade Bracket-Left 1 281 Thrust Bearing 51104 | 215 | Washer | M8 | 1 | 269 | Slide | | 1 |
| 218 Hex. Socket Cap Screw M8x40 4 272 Hex. Socket Cap Screw M8x29 219 Lock Washer M8 4 273 Gib 220 Washer M8 4 274 Nut M12 221 Adjustable Bracket-Left 1 275 Set Screw M6x8 222 Scale 1 276 Tension Shaft 223 Hex. Socket Cap Screw M10x25 2 277 Extension Bar 224 Set Screw M8x10 4 278 Key 5mm 225 Slide 1 279 Handwheel 2 281 Set Screw M8x10 4 278 Key 5mm 226 Blade (Local Purchase) 1 280 Set Screw M8x10 4 278 Key 5mm 226 Blade Bracket-Left 1 281 Thrust Bearing 51104 281 Thrust Bearing 51104 282 Tension Indicator 282 | 216 | Knob | | 2 | 270 | Washer | M12 | 1 |
| 218 Hex. Socket Cap Screw M8x40 4 272 Hex. Socket Cap Screw M8x25 219 Lock Washer M8 4 273 Gib 220 Washer M8 4 274 Nut M12 221 Adjustable Bracket-Left 1 275 Set Screw M6x8 222 Scale 1 276 Tension Shaft 223 Hex. Socket Cap Screw M10x25 2 277 Extension Bar 224 Set Screw M8x10 4 278 Key 5mm 225 Slide 1 279 Handwheel 5mm 225 Slide 1 279 Handwheel 5mm 226 Blade (Local Purchase) 1 280 Set Screw M8x10 227 Blade Bracket-Left 1 281 Thrust Bearing 51104 228 Clamp 2 282 Tension Indicator 289 Lock Washer 289 Pulley Cover | 217 | Washer | M10 | 2 | 271 | Hex. Socket Cap Screw | M8x25 | 1 |
| 219 Lock Washer M8 4 273 Gib 220 Washer M8 4 274 Nut M12 221 Adjustable Bracket-Left 1 275 Set Screw M6x8 222 Scale 1 276 Tension Shaft 223 Hex. Socket Cap Screw M10x25 2 277 Extension Bar 224 Set Screw M8x10 4 278 Key 5mm 225 Slide 1 279 Handwheel 5mm 226 Blade (Local Purchase) 1 280 Set Screw M8x10 226 Blade Bracket-Left 1 281 Thrust Bearing 51104 227 Blade Bracket-Left 1 281 Thrust Bearing 51104 228 Clamp 2 282 Tension Indicator 230 Clamp 2 283 Flat Steel Washer 231 Lock Washer M6 4 289 Pulley C | 218 | Hex. Socket Cap Screw | M8x40 | 4 | 272 | - | M8x25 | 4 |
| 221 Adjustable Bracket-Left 1 275 Set Screw M6x8 222 Scale 1 276 Tension Shaft 223 Hex. Socket Cap Screw M10x25 2 277 Extension Bar 224 Set Screw M8x10 4 278 Key 5mm 225 Slide 1 279 Handwheel 226 Blade (Local Purchase) 1 280 Set Screw M8x10 227 Blade Bracket-Left 1 281 Thrust Bearing 51104 228 Clamp 2 282 Tension Indicator 229 Adjusting Valve 2 283 Flat Steel Washer 230 Clamp 2 284 Disc Spring 231 Lock Washer M6 4 289 Pulley Cover 232 Hex. Cap Bolt M6x12 4 290 Lock Knob 1/4" 233 Hose 1 291 Gear Box Pulley 234 <td></td> <td></td> <td>M8</td> <td>4</td> <td>273</td> <td></td> <td></td> <td>2</td> | | | M8 | 4 | 273 | | | 2 |
| 222 Scale 1 276 Tension Shaft 223 Hex. Socket Cap Screw M10x25 2 277 Extension Bar 224 Set Screw M8x10 4 278 Key 5mm 225 Slide 1 279 Handwheel 5mm 226 Blade (Local Purchase) 1 280 Set Screw M8x10 227 Blade Bracket-Left 1 281 Thrust Bearing 51104 228 Clamp 2 282 Tension Indicator 229 Adjusting Valve 2 283 Flat Steel Washer 230 Clamp 2 284 Disc Spring 231 Lock Washer M6 4 289 Pulley Cover 232 Hex. Cap Bolt M6x12 4 290 Lock Knob 1/4" 233 Hose 1 291 Gear Box Pulley 234 Guide Bracket-Left 1 292 Belt A-39 | 220 | Washer | M8 | 4 | 274 | Nut | M12 | 1 |
| 222 Scale 1 276 Tension Shaft 223 Hex. Socket Cap Screw M10x25 2 277 Extension Bar 224 Set Screw M8x10 4 278 Key 5mm 225 Slide 1 279 Handwheel 5mm 226 Blade (Local Purchase) 1 280 Set Screw M8x10 227 Blade Bracket-Left 1 281 Thrust Bearing 51104 228 Clamp 2 282 Tension Indicator 229 Adjusting Valve 2 283 Flat Steel Washer 230 Clamp 2 284 Disc Spring 231 Lock Washer M6 4 289 Pulley Cover 232 Hex. Cap Bolt M6x12 4 290 Lock Knob 1/4" 233 Hose 1 291 Gear Box Pulley 234 Guide Bracket-Left 1 292 Belt A-39 | 221 | Adjustable Bracket-Left | | 1 | 275 | Set Screw | M6x8 | 1 |
| 224 Set Screw M8x10 4 278 Key 5mm 225 Slide 1 279 Handwheel 280 Set Screw M8x10 226 Blade (Local Purchase) 1 280 Set Screw M8x10 227 Blade Bracket-Left 1 281 Thrust Bearing 51104 228 Clamp 2 282 Tension Indicator 229 Adjusting Valve 2 283 Flat Steel Washer 230 Clamp 2 284 Disc Spring 231 Lock Washer M6 4 289 Pulley Cover 232 Hex. Cap Bolt M6x12 4 290 Lock Knob 1/4" 233 Hose 1 291 Gear Box Pulley 2 234 Guide Bracket-Left 1 292 Belt A-39 235 Set Screw M8x16 6 293 Motor Pulley 236 Washer M8 4 | | | | 1 | 276 | Tension Shaft | | 1 |
| 224 Set Screw M8x10 4 278 Key 5mm 225 Slide 1 279 Handwheel 226 Blade (Local Purchase) 1 280 Set Screw M8x10 228 Set Screw M8x10 328 Set Screw M8x10 329 M8x10 | 223 | Hex. Socket Cap Screw | M10x25 | 2 | 277 | Extension Bar | | 1 |
| 225 Slide 1 279 Handwheel 226 Blade (Local Purchase) 1 280 Set Screw M8x10 227 Blade Bracket-Left 1 281 Thrust Bearing 51104 228 Clamp 2 282 Tension Indicator 229 Adjusting Valve 2 283 Flat Steel Washer 230 Clamp 2 284 Disc Spring 231 Lock Washer M6 4 289 Pulley Cover 232 Hex. Cap Bolt M6x12 4 290 Lock Knob 1/4" 233 Hose 1 291 Gear Box Pulley 234 Guide Bracket-Left 1 292 Belt A-39 235 Set Screw M8x16 6 293 Motor Pulley 236 Washer M8 4 294 Set Screw M8x16 237 Ball Bearing 8 295 Washer M8 238-1 <td></td> <td></td> <td>M8x10</td> <td>4</td> <td>278</td> <td>Key</td> <td>5mm</td> <td>1</td> | | | M8x10 | 4 | 278 | Key | 5mm | 1 |
| 227 Blade Bracket-Left 1 281 Thrust Bearing 51104 228 Clamp 2 282 Tension Indicator 229 Adjusting Valve 2 283 Flat Steel Washer 230 Clamp 2 284 Disc Spring 231 Lock Washer M6 4 289 Pulley Cover 232 Hex. Cap Bolt M6x12 4 290 Lock Knob 1/4" 233 Hose 1 291 Gear Box Pulley 9 234 Guide Bracket-Left 1 292 Belt A-39 235 Set Screw M8x16 6 293 Motor Pulley 9 236 Washer M8 4 294 Set Screw M8x16 237 Ball Bearing 8 295 Washer M8 238 Eccentric Sleeve 2 296 Lock Washer M8 238-1 Centric Sleeve 2 297 Hex. Cap Bolt | 225 | Slide | | 1 | 279 | Handwheel | | 1 |
| 227 Blade Bracket-Left 1 281 Thrust Bearing 51104 228 Clamp 2 282 Tension Indicator 229 Adjusting Valve 2 283 Flat Steel Washer 230 Clamp 2 284 Disc Spring 231 Lock Washer M6 4 289 Pulley Cover 232 Hex. Cap Bolt M6x12 4 290 Lock Knob 1/4" 233 Hose 1 291 Gear Box Pulley 1 234 Guide Bracket-Left 1 292 Belt A-39 235 Set Screw M8x16 6 293 Motor Pulley 2 236 Washer M8 4 294 Set Screw M8x16 237 Ball Bearing 8 295 Washer M8 238 Eccentric Sleeve 2 296 Lock Washer M8 238-1 Centric Sleeve 2 297 Hex. Cap Bolt | 226 | Blade (Local Purchase) | | 1 | 280 | Set Screw | M8x10 | 1 |
| 229 Adjusting Valve 2 283 Flat Steel Washer 230 Clamp 2 284 Disc Spring 231 Lock Washer M6 4 289 Pulley Cover 232 Hex. Cap Bolt M6x12 4 290 Lock Knob 1/4" 233 Hose 1 291 Gear Box Pulley 234 Guide Bracket-Left 1 292 Belt A-39 235 Set Screw M8x16 6 293 Motor Pulley 236 Washer M8 4 294 Set Screw M8x16 237 Ball Bearing 8 295 Washer M8 238 Eccentric Sleeve 2 296 Lock Washer M8 238-1 Centric Sleeve 2 297 Hex. Cap Bolt M8x16 | | , | | 1 | 281 | Thrust Bearing | 51104 | 1 |
| 229 Adjusting Valve 2 283 Flat Steel Washer 230 Clamp 2 284 Disc Spring 231 Lock Washer M6 4 289 Pulley Cover 232 Hex. Cap Bolt M6x12 4 290 Lock Knob 1/4" 233 Hose 1 291 Gear Box Pulley 234 Guide Bracket-Left 1 292 Belt A-39 235 Set Screw M8x16 6 293 Motor Pulley 236 Washer M8 4 294 Set Screw M8x16 237 Ball Bearing 8 295 Washer M8 238 Eccentric Sleeve 2 296 Lock Washer M8 238-1 Centric Sleeve 2 297 Hex. Cap Bolt M8x16 | 228 | Clamp | | 2 | 282 | Ÿ | | 1 |
| 230 Clamp 2 284 Disc Spring 231 Lock Washer M6 4 289 Pulley Cover 232 Hex. Cap Bolt M6x12 4 290 Lock Knob 1/4" 233 Hose 1 291 Gear Box Pulley 234 Guide Bracket-Left 1 292 Belt A-39 235 Set Screw M8x16 6 293 Motor Pulley 236 Washer M8 4 294 Set Screw M8x16 237 Ball Bearing 8 295 Washer M8 238 Eccentric Sleeve 2 296 Lock Washer M8 238-1 Centric Sleeve 2 297 Hex. Cap Bolt M8x16 | | • | | | 283 | | | 1 |
| 231 Lock Washer M6 4 289 Pulley Cover 232 Hex. Cap Bolt M6x12 4 290 Lock Knob 1/4" 233 Hose 1 291 Gear Box Pulley 234 Guide Bracket-Left 1 292 Belt A-39 235 Set Screw M8x16 6 293 Motor Pulley 236 Washer M8 4 294 Set Screw M8x16 237 Ball Bearing 8 295 Washer M8 238 Eccentric Sleeve 2 296 Lock Washer M8 238-1 Centric Sleeve 2 297 Hex. Cap Bolt M8x16 | | , , | | | | | | 13 |
| 232 Hex. Cap Bolt M6x12 4 290 Lock Knob 1/4" 233 Hose 1 291 Gear Box Pulley 234 Guide Bracket-Left 1 292 Belt A-39 235 Set Screw M8x16 6 293 Motor Pulley 236 Washer M8 4 294 Set Screw M8x16 237 Ball Bearing 8 295 Washer M8 238 Eccentric Sleeve 2 296 Lock Washer M8 238-1 Centric Sleeve 2 297 Hex. Cap Bolt M8x16 | | • | M6 | 1 | 289 | · - | | 1 |
| 233 Hose 1 291 Gear Box Pulley 234 Guide Bracket-Left 1 292 Belt A-39 235 Set Screw M8x16 6 293 Motor Pulley 236 Washer M8 4 294 Set Screw M8x10 237 Ball Bearing 8 295 Washer M8 238 Eccentric Sleeve 2 296 Lock Washer M8 238-1 Centric Sleeve 2 297 Hex. Cap Bolt M8x10 | | | M6x12 | | 290 | | 1/4" | 1 |
| 234 Guide Bracket-Left 1 292 Belt A-39 235 Set Screw M8x16 6 293 Motor Pulley 236 Washer M8 4 294 Set Screw M8x10 237 Ball Bearing 8 295 Washer M8 238 Eccentric Sleeve 2 296 Lock Washer M8 238-1 Centric Sleeve 2 297 Hex. Cap Bolt M8x16 | | | | 1 | 291 | Gear Box Pulley | | 1 |
| 235 Set Screw M8x16 6 293 Motor Pulley 236 Washer M8 4 294 Set Screw M8x10 237 Ball Bearing 8 295 Washer M8 238 Eccentric Sleeve 2 296 Lock Washer M8 238-1 Centric Sleeve 2 297 Hex. Cap Bolt M8x10 | | | | - | | • | A-39 | 1 |
| 236 Washer M8 4 294 Set Screw M8x10 237 Ball Bearing 8 295 Washer M8 238 Eccentric Sleeve 2 296 Lock Washer M8 238-1 Centric Sleeve 2 297 Hex. Cap Bolt M8x10 | | | M8x16 | | | | | 1 |
| 237 Ball Bearing 8 295 Washer M8 238 Eccentric Sleeve 2 296 Lock Washer M8 238-1 Centric Sleeve 2 297 Hex. Cap Bolt M8x16 | | | | | | , | M8x10 | 1 |
| 238 Eccentric Sleeve 2 296 Lock Washer M8 238-1 Centric Sleeve 2 297 Hex. Cap Bolt M8x16 | | | | | | | | 2 |
| 238-1 Centric Sleeve 2 297 Hex. Cap Bolt M8x16 | | <u>-</u> | 1 | | | | | 2 |
| | | | 1 | - | | | M8x16 | 2 |
| | | | M8 | | | • | | 1 |
| 240 Hex. Socket Cap Screw M8x45 4 | | | | | | -1 | | <u> </u> |
| 241 Hex. Socket Cap Screw M6x30 4 | | - | | | | | | |
| 242 Washer M6 8 | | · | | | | | | |
| 243 Blade Guide 4 | | | | | | | | <u> </u> |
| 244 Ball Bearing 608ZZ 2 | | | 60877 | | | | | <u> </u> |
| 245 Hex. Socket Cap Screw M8x20 1 | | | | | | | | <u> </u> |
| 246 Adjustable Bracket-Right 1 | | | MONEO | | | | | |

