Operating Instructions and Parts Manual
10” x 16” Horizontal Band Saw
Models J-7020, J-7040
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 1-800-274-6846, 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.
- JET products carry a limited warranty which varies in duration based upon the product. (See chart below)
- Accessories carry a limited warranty of one year from the date of receipt.
- Consumable items are defined as expendable parts or accessories expected to become inoperable within a reasonable amount of use and are covered by a 90 day limited warranty against manufacturer’s defects.

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. JET woodworking machinery is designed to be used with Wood. Use of these machines in the processing of metal, plastics, or other materials outside recommended guidelines may void the warranty. The exceptions are acrylics and other natural items that are made specifically for wood turning.

Warranty Limitations
Woodworking products with a Five Year Warranty that are used for commercial or industrial purposes default to a Two Year Warranty. Please contact Technical Service at 1-800-274-6846 for further clarification.

How to Get Technical Support
Please contact Technical Service by calling 1-800-274-6846.
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 1-800-274-6846 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.

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.

Product Listing with Warranty Period

<table>
<thead>
<tr>
<th>Warranty Period</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 Days – Parts; Consumable items</td>
<td></td>
</tr>
<tr>
<td>1 Year – Motors; Machine Accessories</td>
<td></td>
</tr>
<tr>
<td>2 Year – Metalworking Machinery; Electric Hoists, Electric Hoist Accessories; Woodworking Machinery used for industrial or commercial purposes</td>
<td></td>
</tr>
<tr>
<td>5 Year – Woodworking Machinery</td>
<td></td>
</tr>
<tr>
<td>Limited Lifetime – JET Parallel clamps; VOLT Series Electric Hoists; Manual Hoists; Manual Hoist Accessories; Shop Tools; Warehouse &amp; Dock products; Hand Tools; Air Tools</td>
<td></td>
</tr>
</tbody>
</table>

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.
# 2.0 Table of contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 Warranty and Service</td>
<td>2</td>
</tr>
<tr>
<td>2.0 Table of contents</td>
<td>3</td>
</tr>
<tr>
<td>3.0 Safety Warnings</td>
<td>4</td>
</tr>
<tr>
<td>4.0 About this machine and manual</td>
<td>6</td>
</tr>
<tr>
<td>5.0 Specifications</td>
<td>6</td>
</tr>
<tr>
<td>6.0 Machine setup</td>
<td>8</td>
</tr>
<tr>
<td>6.1 Uncrating and spotting</td>
<td>8</td>
</tr>
<tr>
<td>7.0 Electrical connections</td>
<td>8</td>
</tr>
<tr>
<td>8.0 Operating instructions</td>
<td>8</td>
</tr>
<tr>
<td>8.1 Controls</td>
<td>9</td>
</tr>
<tr>
<td>8.2 Setting blade speed</td>
<td>9</td>
</tr>
<tr>
<td>8.3 Raising/lowering saw head</td>
<td>9</td>
</tr>
<tr>
<td>8.4 Controlling the cut: Hydraulic feed control</td>
<td>9</td>
</tr>
<tr>
<td>8.5 Evaluating cutting efficiency</td>
<td>9</td>
</tr>
<tr>
<td>8.6 Blade selection</td>
<td>10</td>
</tr>
<tr>
<td>8.7 Blade break-in procedures</td>
<td>10</td>
</tr>
<tr>
<td>9.0 Work setup</td>
<td>10</td>
</tr>
<tr>
<td>9.1 Securing workpiece for square cuts</td>
<td>10</td>
</tr>
<tr>
<td>9.2 Adjusting vise for angle cuts</td>
<td>10</td>
</tr>
<tr>
<td>9.3 Installation and adjustment of work stop</td>
<td>11</td>
</tr>
<tr>
<td>10.0 Starting the Saw</td>
<td>11</td>
</tr>
<tr>
<td>10.1 Coolant flow</td>
<td>12</td>
</tr>
<tr>
<td>10.2 Coolant mixture and quantity</td>
<td>12</td>
</tr>
<tr>
<td>11.0 Adjustments</td>
<td>12</td>
</tr>
<tr>
<td>11.1 Blade tracking adjustment</td>
<td>12</td>
</tr>
<tr>
<td>11.2 Factory or field procedure</td>
<td>12</td>
</tr>
<tr>
<td>11.3 Blade guide bearing adjustment</td>
<td>13</td>
</tr>
<tr>
<td>11.4 Test cutting to verify adjustment accuracy</td>
<td>14</td>
</tr>
<tr>
<td>11.5 Limit switch adjustment</td>
<td>14</td>
</tr>
<tr>
<td>12.0 Maintenance</td>
<td>14</td>
</tr>
<tr>
<td>12.1 Cleaning</td>
<td>14</td>
</tr>
<tr>
<td>12.2 Lubrication</td>
<td>15</td>
</tr>
<tr>
<td>12.3 Changing blades</td>
<td>15</td>
</tr>
<tr>
<td>12.4 Changing drive belt</td>
<td>15</td>
</tr>
<tr>
<td>12.5 Replacing drive motor</td>
<td>16</td>
</tr>
<tr>
<td>12.6 Adjusting counterbalance spring</td>
<td>16</td>
</tr>
<tr>
<td>12.7 Replacing drive wheel</td>
<td>16</td>
</tr>
<tr>
<td>12.8 Replacing idler wheel or idler bearing</td>
<td>16</td>
</tr>
<tr>
<td>12.9 Adjusting blade guides</td>
<td>16</td>
</tr>
<tr>
<td>12.10 Replacing carbide blade guide</td>
<td>17</td>
</tr>
<tr>
<td>12.11 Replacing guide bearings</td>
<td>17</td>
</tr>
<tr>
<td>12.12 Replacing blade edge bearings</td>
<td>17</td>
</tr>
<tr>
<td>12.13 Replacing wire brush</td>
<td>17</td>
</tr>
<tr>
<td>13.0 Troubleshooting the J-7020/7040 Band Saws</td>
<td>18</td>
</tr>
<tr>
<td>14.0 Replacement Parts</td>
<td>19</td>
</tr>
<tr>
<td>14.1.1 Base (J-7020/7040) – Exploded View</td>
<td>20</td>
</tr>
<tr>
<td>14.1.2 Base (J-7020/7040) – Parts List</td>
<td>21</td>
</tr>
<tr>
<td>14.2.1 Head (J-7020/7040) – Exploded View</td>
<td>24</td>
</tr>
<tr>
<td>14.2.2 Head (J-7020/7040) – Parts List</td>
<td>25</td>
</tr>
<tr>
<td>15.0 Electrical Connections</td>
<td>28</td>
</tr>
<tr>
<td>15.1 Electrical Connections – single phase only (model J-7020)</td>
<td>28</td>
</tr>
<tr>
<td>15.2 Electrical Connections – three phase only (model J-7040)</td>
<td>29</td>
</tr>
</tbody>
</table>
3.0 Safety Warnings

General Cautions
- Misuse of this machine can cause serious injury.
- For safety, the machine must be set up, used and serviced properly.
- Read, understand and follow the instructions in the operator’s and parts manual which was shipped with your machine.

When setting up the machine:
- Always avoid using the machine in damp or poorly lighted work areas.
- Always be sure the machine is securely anchored to the floor or the work bench.
- Always keep the machine guards in place.
- Always put the start switch in the “OFF” position before plugging in the machine.

When using the machine:
- Never operate the machine with safety guards missing.
- Always wear safety glasses with side shields (See ANSI Z87.1)
- Never wear loose clothing or jewelry.
- Never overreach; you may slip and fall into the machine.
- Never leave the machine running while unattended.
- Always shut the machine off when not in use.

When servicing the machine:
- Always unplug the machine from the electrical power before servicing.
- Always follow the instructions in the operators and parts manual when changing accessory tools or parts.
- Never modify the machine without consulting JET.

You — the stationary power tool user — hold the key to safety.

Read and follow these simple rules for best results and full benefits from your machine. Used properly, JET machinery is among the best in design and safety. However, any machine used improperly can be rendered inefficient and unsafe. It is mandatory that those who use our products be properly trained in how to use them correctly. They should read and understand the Operator’s and Parts Manual as well as all labels affixed to the machine. Failure in following all of these warnings can cause serious injuries.

General Machinery Warnings
1. Always wear protective eye wear when operating machinery. Eye wear shall be impact resistant, protective safety glasses with side shields which comply with ANSI Z87.1 specifications. Use of eye wear which does not comply with ANSI Z87.1 specifications could result in severe injury from the breakage of the eye protection.

2. Wear proper apparel. No loose clothing or jewelry which can get caught in moving parts. Rubber soled, nonslip, footwear is recommended for best footing.

3. Do not overreach. Failure to maintain a proper working position can cause you to fall into the machine or cause your clothing to get caught — pulling you into the machine.

4. Keep guards in place and in proper working order. Do not operate the machine with the guards removed.

5. Avoid dangerous working environments. Do not use stationary machine tools in wet or damp locations. Keep work areas clean and well lit.

6. Special electrical precautions should be taken when working on flammable materials.

7. Avoid accidental starts by being sure that the start switch is in the “OFF” position before plugging in the machine.

8. Never leave the machine running while unattended. The machine shall be shut off whenever it is not being used.

9. Disconnect the electrical power before servicing, whenever changing accessories or when general maintenance is done on the machine.

10. Maintain all machine tools with care. Follow all maintenance instructions for lubricating and the changing of accessories. No attempt shall be made to modify or have makeshift repairs done to the machine. This not only voids the warranty but also renders the machine unsafe.

11. If there is any risk of tipping or sliding, the machinery must be anchored to the floor.

12. Secure your work. Use clamps or a vise to hold your work, when practical. It is safer than using your hands and it frees both hands to operate the machine.

13. Never brush chips away while the machine is in operation.


15. Remove adjusting keys and wrenches before turning the machine on.

16. Use the right tool. Don’t force a tool or attachment to do a job for which it was not designed.

17. Use only recommended accessories and follow manufacturer’s instructions pertaining to them.
18. Keep hands in sight and clear of all moving parts and cutting surfaces.

19. All visitors should be kept at a safe distance from the work area. Make your workshop completely safe by using padlocks, master switches, or by removing starter keys.

20. Know the tool you are using; its application, limitations, and potential hazards.

**General Electrical Cautions**

This machine should be grounded in accordance with the National Electrical Code and local codes and ordinances. The work should be done by a qualified electrician. The machine should be grounded to protect the user from electrical shock.

**Wire Sizes**

**CAUTION:** For circuits that are a great distance from the electrical service box, the wire size must be increased in order to deliver ample voltage to the motor. To minimize power losses and to prevent motor overheating and burnout, the use of wire sizes for branch circuits or electrical extension cords according to the following table is recommended:

<table>
<thead>
<tr>
<th>Conductor length</th>
<th>240 volt lines</th>
<th>120 volt lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-50 feet</td>
<td>No. 14</td>
<td>No. 14</td>
</tr>
<tr>
<td>50-100 feet</td>
<td>No. 14</td>
<td>No. 12</td>
</tr>
<tr>
<td>Over 100 feet</td>
<td>No. 12</td>
<td>No. 8</td>
</tr>
</tbody>
</table>

**Safety Instructions on Sawing Systems**

1. Always wear leather gloves when handling saw blade. The operator shall not wear gloves when operating the machine.

2. All doors shall be closed, all panels replaced, and other safety guards in place prior to the machine being started or operated.

3. 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 achieve full speed before bringing the saw blade into contact with the workpiece.

4. Keep hands away from the blade area.

5. Remove any cut off piece carefully while keeping your hands free of the blade area.

6. Saw must be stopped and electrical supply must be cut off before any blade replacement or adjustment of blade support mechanism is done, or before any attempt is made to change the drive belts or before any periodic service or maintenance is performed on the saw.

7. Remove all loose items and unnecessary workpieces from the area before starting machine.

8. Bring adjustable saw guides and guards as close as possible to the workpiece.

9. Always wear protective eye wear when operating, servicing, or adjusting machinery. Eyewear shall be impact resistant, protective safety glasses with side shields complying with ANSI Z87.1 specifications. Use of eye wear which does not comply with ANSI Z87.1 specifications could result in severe injury from breakage of eye protection.

10. Nonslip footwear and safety shoes are recommended.

11. Wear ear protectors (plugs or muffs) during extended periods of operation.

12. The workpiece, or part being sawed, must be securely clamped before the saw blade enters the workpiece.

13. Remove cut off pieces carefully, keeping hands away from saw blade.

14. Saw must be stopped and electrical supply disconnected before reaching into cutting area.

15. Avoid contact with coolant, especially guarding your eyes.

**WARNING:** This product can expose you to chemicals including titanium dioxide which is known to the State of California to cause cancer, and lead which is 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 injury or possibly even death.

### 4.0 About this machine and manual

The JET Models J-7020 and J-7040 Horizontal Cut-Off Band Saws are ruggedly built, precision-oriented machines designed for either wet or dry applications. The 2-horsepower motor along with the worm gear reduction drive train in an oil bath, transmits smooth and positive power to the blade. This drive system coupled with the recirculating coolant system keeps the blade running cool and true, which results in longer blade life. The blade guide system has adjustable six-point contact using a combination of bearing and carbide blocks. The vise is a rapid acting, three jaw design.

This manual is provided by JET covering the safe operation and maintenance procedures for the J-7020 and J-7040 Horizontal Band Saws. 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 as 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.

**WARNING** Read and understand the entire contents of this manual before attempting assembly or operation! Failure to comply may cause serious injury!

### 5.0 Specifications

<table>
<thead>
<tr>
<th>Model number</th>
<th>J-7020</th>
<th>J-7040</th>
<th>J-7040-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock number</td>
<td>414472</td>
<td>414478</td>
<td>414499</td>
</tr>
</tbody>
</table>

**Motor and electricals:**

| Main motor type               | totally enclosed fan cooled, induction |
| Horsepower                    | 1-1/2 HP (1.1kW) 2HP (1.5kW) 2HP (1.5kW) |
| Phase                         | single 3 3 |
| Voltage (prewired 230V)       | 115/230V 230/460V 230/460V |
| Cycle                         | 60Hz 60Hz 60Hz |
| Listed FLA (full load amps)   | 22A/11A 6A 3A |
| Start capacitor               | 300MFD 250VAC -- 3A |
| Run capacitor                 | .4μF 250VAC -- -- |
| Starting amps (no load)       | 80A / 40A 26A 13A |
| Running amps (no load)        | 15A / 7.6A 8A 4A |
| Power cord length             | 6 ft. 6 ft. 6 ft. |
| Power plug installed          | no no no |
| Power transfer                | belt and stepless pulleys belt and stepless pulleys belt and stepless pulleys |
| Motor speed                   | 1720 RPM 1720 RPM 1720 RPM |
| Recommended circuit size³     | 30A/15A 15A 10A |
| Sound emission                | .80 dB .80 dB .80 dB |

³For 230V models only.
Coolant pump:
Horsepower .......................................... 1/8HP (0.1kW) ................... 1/8HP (0.1kW) ................... 1/8HP (0.1kW)
Phase ...................................................... single ....................... single ....................... single
Listed FLA (full load amps) .................. 0.5/0.25A .................. 0.2/0.1A .................. 0.2/0.1A
Speed ..................................................... 2850/3400 RPM .......... 2850/3400 RPM .......... 2850/3400 RPM
Cycle ..................................................... 60Hz ......................... 60Hz ......................... 60Hz
Flow rate .................................................. 1 gal. p/min ................. 1 gal. p/min ................. 1 gal. p/min

1 subject to local/national electrical codes

Speeds and capacities:
Blade speed ........................................ variable 100-350 fpm ........ variable 100-350 fpm ........ variable 100-350 fpm
Round capacity at 90-degrees ............. 10" (255mm) .................. 10" (255mm) .................. 10" (255mm)
Round capacity at 45-degrees ............. 10" (255mm) .................. 10" (255mm) .................. 10" (255mm)
Rectangular capacity at 90-degrees ....... 7"x16'/10"x10' .................. 7"x16'/10"x10' .................. 7"x16'/10"x10'
Rectangular capacity at 45-degrees ....... 6-1/2"x11' ..................... 6-1/2"x11' ..................... 6-1/2"x11'
Coolant reservoir capacity .................. 8 gal. ......................... 8 gal. ......................... 8 gal.

Dimensions:
Blade size ............................................ 1x0.04x135° 4/6TPI .......... 1x0.04x135° 4/6TPI .......... 1x0.04x135° 4/6TPI
Blade wheel diameter ....................... 14" (360mm) .................. 14" (360mm) .................. 14" (360mm)
Bed height from floor ............. 23-1/2" (597mm) .................. 23-1/2" (597mm) .................. 23-1/2" (597mm)
Floor space required ...................... 75-1/2"x33"x41" ................ 75-1/2"x33"x41" ................ 75-1/2"x33"x41"
(1918x838x1042mm) .................. (1918x838x1042mm) ........ (1918x838x1042mm)
Bed working surface .................... 17-1/2"Wx24"L ............... 17-1/2"Wx24"L ............... 17-1/2"Wx24"L
(445x610mm) .................. (445x610mm) .................. (445x610mm)
Overall size ......................................... 79"Lx31"Wx41"H .......... 79"Lx31"Wx41"H .......... 79"Lx31"Wx41"H
(2007x788x1042mm) ................ (2007x788x1042mm) .......... (2007x788x1042mm)
Shipping crate ...................... 76"Lx30"Wx46"H .......... 76"Lx30"Wx46"H .......... 76"Lx30"Wx46"H
(1931x762x1170mm) ................ (1931x762x1170mm) .......... (1931x762x1170mm)

Materials:
Bed and motor support .................... cast iron ....................... cast iron ....................... cast iron
Blade wheels ........................................ cast iron ....................... cast iron ....................... cast iron
Bow frame ........................................... steel ....................... steel ....................... steel
Stand ..................................................... steel ....................... steel ....................... steel
Blade guides ................................. carbide blocks/ball bearing .... carbide blocks/ball bearing .... carbide blocks/ball bearing

Weights:
Net weight .......................................... 927 lb (420.5kg) ............. 927 lb (420.5kg) ............. 927 lb (420.5kg)
Shipping weight .............................. 973 lb (441kg) ............... 973 lb (441kg) ............... 973 lb (441kg)

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 Machine setup

The saw delivered to you has been adjusted at the factory. A number of test pieces have been cut using the saw to verify the accuracy of cutting. Therefore, the only setup operations required before releasing the saw for service are spotting the saw and establishing the electrical connections to the motor.

6.1 Uncrating and spotting

Spot the saw where it makes the most sense for the operations you will probably be doing. If you are going to be doing cut-off work on very long pieces of stock, allow plenty of room for the stock, and the infeed and outfeed supports. Remove the saw from the shipping skid and discard any hold-down devices that were used to secure the saw to the skid.

7.0 Electrical connections

WARNING JET recommends that any wiring involving hard wiring of the saw to a branch, or any change of voltage supplied to the motor be performed by a licensed electrician.

Observe the following when connecting to the power source (wiring diagrams are shown in section 15.0):

1. Make sure the saw is disconnected from the power source, or that the fuses have been removed or breakers tripped in the circuit in which the saw will be connected. Place a warning placard on the fuse or circuit breaker to prevent accidental electrical shock.
2. If you are installing the motor power cord into a receptacle, make sure to use the appropriate plug.
3. If you are using hard-wired connections to a junction box, connect the wires in the box, and close the box.
4. Install the fuses or reset the breaker.
5. The saw is now ready for service.

It is recommended that the single phase band saw (model J-7020), when operated on 115 volt power, be connected to a dedicated 30 amp circuit with a 30 amp circuit breaker or time-delay fuse marked “D”. When operated on 230 volt power, use a dedicated 15 amp circuit with a 15 amp circuit breaker or time-delay fuse marked "D".

It is recommended that the three phase band saw (model J-7040) on 230 volt power be connected to a dedicated 15 amp circuit with a 20 amp circuit breaker or time-delay fuse marked “D”; and for 460 volt power, a dedicated 10 amp circuit with a 20 amp circuit breaker or time-delay fuse marked “D”.

NOTE: Local codes take precedence over recommendations.

8.0 Operating instructions

8.1 Controls

The operating controls for the saw are provided in a control panel on the left side of the machine. The control panel is mounted on a pivoting tube. The pivoting tube allows the operator to position the control panel in a convenient location.

Figure 1: Control panel

1. A power-on light is provided on the left side of the control panel. The power-on light indicates when power is connected to the machine.
2. An emergency stop button is provided on the control panel. The emergency stop button provides a means to rapidly cut off electrical power.
3. The saw motor pushbutton switch starts the saw motor and the E-stop button stops the saw motor.
4. A green pushbutton switch is provided to the right of the emergency stop pushbutton. The pushbutton opens an electro-magnetic valve in the hydraulic cylinder circuit. Opening the valves allows the saw head to move downward and put the saw blade in contact with the workpiece.
5. A red release button on the electro-magnetic valve provides a means to lower the saw head when power to the machine has been disconnected (see Figure 4).
6. The rate at which the saw head moves downward is controlled by a hydraulic feed rate control located on the top, rear of the saw head (see Figure 3).
7. A coolant pump switch is provided on the electrical equipment box on the back of the machine (see figure 2).


8.2 Setting blade speed

1. The blade speed is controlled by an adjustment mechanism on the right end of the saw. Speed increases when the adjustment knob is turned counterclockwise. Speed decreases when the knob is turned clockwise.

2. A placard on the drive belt guard provides recommended speeds for various materials.

3. A speed indicator is provided on the barrel of the adjustment mechanism. The indicator provides speed indications in feet per minute and meters per minute. (The meters per minute values are shown in parenthesis on the indicator.)

4. The feed rates on the placard are expressed in meters per minute. The feed rate graduations available on the indicator may not match the recommended feed rate. An approximate speed may therefore be required. For example, to set a speed rate of 25 meters per minute, the indicator would be set about midway between 21 meters-per-minute and the 30 meters-per-minute graduations.

**CAUTION** To change speed, the saw motor must be operating.

5. Turn the speed adjustment knob to the desired rate setting as determined by the material being cut.

8.3 Raising/lowering saw head

1. Lift the saw head using the handle on the far left side of the saw head.

2. To lower the saw head, press the green pushbutton on the right side of the control panel.

3. To adjust the feed rate, adjust the feed rate control valve knob on the top of the saw head (see Figure 3).

4. To lower the saw head with power off, pull and turn the red knob (manual override) on the electro-magnetic valve (see Figure 4).

8.4 Controlling the cut: Hydraulic feed control

The weight of the saw arm provides all the force needed to move the saw blade through the workpiece. In fact, if the full weight of the arm is allowed to make the cut, rapid blade wear and poor cutting accuracy will result. A hydraulic feed control is provided that gives the operator a means to control the speed and efficiency of cutting.

The hydraulic cylinder is attached between the saw base and the saw head. The hydraulic cylinder resists movement of the saw head in the downward direction. However, the hydraulic cylinder offers no resistance when the saw head is raised upward.

The amount of downward force can be controlled by using the feed rate control valve. When the valve is opened slightly, the saw head will move downward. The further the valve is opened, the faster the saw head will move downward.

The feed control is adjusted by the operator until the saw is operating efficiently. This is usually determined by observing the chip formation. (See section 8.5, Evaluating cutting efficiency, for more information.)

8.5 Evaluating cutting efficiency

Is the blade cutting efficiently? The best way to determine this is to observe the chips formed by the cutting blade.
If the chip formation is powdery, then the feed rate is much too light, or the blade is dull.

If the chips formed are curled, but colored — that is, either blue or straw-colored from heat generated during the cut — then the feed rate is too high.

If the chips are slightly curled and are not colored by heat — the blade is sufficiently sharp and is cutting at its most efficient rate.

8.6 Blade selection

The cut-off saw is provided with a saw blade that is adequate for a variety of cut-off jobs on a variety of common materials. A 4/6 vari tooth bi-metal blade (5674011) and a 6/10 vari tooth bi-metal blade (5674021) are available from JET.

See sect. 8.2, Setting blade speed, for the recommended speeds for various materials. These selections, while appropriate for many shop cutting needs, do not encompass the wide variety of blades of special configuration (tooth pitch and set) and special alloys for cutting unusual or exotic materials.

A coarse blade could be used for a solid steel bar but a finer tooth blade would be used on a thin-wall tube. In general, the blade choice is determined by the thickness of the material; the thinner the material, the finer the tooth pitch.

A minimum of three teeth should be on the work piece at all times for proper cutting. The blade and workpiece can be damaged if the teeth are so far apart that they straddle the workpiece.

For very high production on cutting of special materials, or to cut hard-to-cut materials such as stainless steel, tool steel, or titanium, you can ask your industrial distributor for more specific blade recommendations. Also, the supplier who provides the workpiece material should be prepared to provide you with very specific instructions regarding the best blade (and coolant or cutting fluid, if needed) for the material and shape supplied.

8.7 Blade break-in procedures

New blades are very sharp and, therefore, have a tooth geometry which is easily damaged if a careful break-in procedure is not followed. Consult the blade manufacturer’s literature for break-in of specific blades on specific materials. However, the following procedure will be adequate for break-in of JET-supplied blades on lower alloy ferrous materials.

1. Clamp a round section workpiece in the vise. The workpiece should be 2 inches or larger in diameter.

2. Set the saw on low speed. Start the cut with a very light feed rate.

3. When the saw has completed 1/3 of the cut, increase the feed rate slightly and allow the saw to complete the cut.

4. Keep the same hydraulic cylinder setting and begin a second cut on the same or similar workpiece.

5. When the blade has completed about 1/3 of the cut, increase the feed rate. Watch the chip formation until cutting is at its most efficient rate and allow the saw to complete the cut (see sect. 8.5, Evaluating blade efficiency). The blade is now considered ready for regular service.

9.0 Work setup

9.1 Securing workpiece for square cuts

1. Raise the saw head (refer to Figure 5).

2. Slide the left vise jaw far enough to the left to allow the workpiece to be placed in the vise.

3. Place the workpiece on the work table. If the workpiece is long, provide support at the other end. It may also be necessary to provide additional downward clamping to hold the workpiece securely on the work table.

4. Turn clamping hand wheel clockwise to clamp the workpiece in position against the fixed (right) vise jaw.

5. After completing the cut, turn the clamping hand wheel counterclockwise and slide the left jaw away from the workpiece.

9.2 Adjusting vise for angle cuts

1. Referring to Figure 6, loosen the angle locking screw and the pivot screw on the left vise jaw.

2. Turn the locking handle on the round, angle-setting block counterclockwise to unlock the block. Slide the block until the pointer on the block is aligned with desired angle (see Figure 7). Tighten the locking handle to set the angle.
3. Set the workpiece in the vise. Put the front end of the workpiece against the corner of the right vise jaw. Put the rear end of the workpiece against the angle-setting block.

4. Turn clamping hand wheel clockwise until the left vise jaw is parallel with the workpiece. Tighten the pivot screw and angle locking screw on the left vise jaw. Clamp the workpiece in position.

5. After completing the cut, turn the clamping hand wheel counterclockwise and slide the left jaw away from the workpiece.

4. Install the locking knob in the hole in the side of the stop L-bracket.

5. Slide the assembled stop L-bracket onto the stop rod. Position the stop post against the work piece and tighten the knob in the stop L-bracket. The stop post can be moved left or right as required to place it against the work piece.

10.0 Starting the Saw

**WARNING** Never operate saw without blade covers in place and secured.

**CAUTION** Make sure blade is not in contact with workpiece when motor is started. Do not drop the saw head on workpiece or force saw blade through the workpiece.

1. Raise the saw head. With the saw motor off, pull the red release button on the electromagnetic valve and check the rate at which the saw head lowers.


3. Clamp the workpiece in the vise. (See Figure 9 for examples of workpieces in the vise.)

4. Be sure the blade is not in contact with the workpiece when the motor is started.

5. Start the motor and allow the saw to come up to speed.

6. Slowly set the saw down onto the workpiece. Adjust cutting speed with feed rate control valve.
7. DO NOT DROP THE SAW HEAD OR FORCE THE CUT. Let the weight of the saw head provide the cutting force.

8. The saw will automatically shut off at the end of the cut.

10.1 Coolant flow

**CAUTION** The coolant pump must be submerged before operating to prevent damage to the pump.

1. The blade guides are fitted with coolant fittings. Coolant is provided to the fittings through interconnecting tubing. The coolant is dispensed directly onto the saw blade.

2. Adjust the coolant flow valves on the top, rear of the saw head as required to provide the desired flow. The flow should be no more than the blade can draw into the workpiece by blade movement.

3. The coolant flow can be stopped in two ways:
   1) By using the coolant pump switch on the electrical equipment box, or
   2) By closing the coolant flow valves on the top, rear of the saw head.

10.2 Coolant mixture and quantity

The general purpose coolant is a mixture of water soluble oil and water. Mix one part of soluble oil (TRIM SOL) to ten parts of water (one quart oil, ten quarts of water). Eleven quarts of coolant are required for the coolant pump to operate properly.

There are numerous coolants on the market that are formulated for special applications. Consult your local distributor for details in the event you have a long range production task, or are required to cut some of the more exotic materials.

11.0 Adjustments

The efficient operation of the cut-off saw is dependent upon the condition of the saw blade. If the performance of the saw begins to deteriorate, the first item that you should check is the blade.

If a new blade does not restore the machine’s cutting accuracy and quality, refer to sect. 13.0, Troubleshooting (or the blade manufacturer’s guide) for conditions to consider and adjustments that can be made to increase the life of the blade.

To change the blade, refer to sect. 12.3, Changing blades. To adjust blade tracking, refer to the following procedures.

11.1 Blade tracking adjustment

Blade tracking has been tested at the factory. Adjustment is rarely required when the blade is used properly or if the blade is correctly welded. (See Figure 10 for location of blade tracking adjustment screws.)

**Figure 10: Blade tracking and tensioning**

11.2 Factory or field procedure

1. Raise the saw head enough to allow the saw motor to operate.

2. Loosen four knobs securing the blade cover. Lift the cover and swing it backward.

3. Remove the blade guard mounted on the left blade guide support.

4. Remove both blade guide bearing brackets.

   **NOTE:** Maintain proper tension at all times using the blade tensioning mechanism.

5. Loosen the center locking screws in all three hex adjustment screws on the blade tensioning mechanism (see Figure 10).

   **CAUTION** While performing the following, keep the blade from rubbing excessively on the shoulder of the wheel. Excessive rubbing will damage the wheel and/or the blade.

6. Start the saw. Slowly turn the single hex adjustment screw at the rear of the tracking mechanism to tilt the idler wheel. Do not turn either of the other two adjustment screws. Turn the adjustment screw until the blade is touching the shoulder of the idler wheel.

   **NOTE:** Turning the screw inward causes the blade to move toward the shoulder of the wheel. Turning the screw outward causes the blade to move away from the shoulder.

7. Turn the single hex adjustment screw so the blade starts to move away from the shoulder of the wheel – then turn the single hex adjustment screw in the other direction so the blade stops, then moves slowly toward the shoulder.

   **WARNING** Keep fingers clear of blade and wheel to avoid injury.

8. Turn the single hex adjustment screw to stop the motion of the blade on the wheel as it gets closer to the wheel shoulder.
9. Put a 6-inch length of paper between the blade and the wheel as shown in Figure 11. The paper should not be cut as it passes between the wheel shoulder and the blade.

10. Turn the single hex adjustment screw a small amount. Repeat the insertion of the paper between the wheel shoulder and the blade until the paper is cut in two pieces.

![](image1)

Figure 11: Checking blade-to-wheel clearance using paper strips

**NOTE:** You may have to repeat the check with the paper several times before the blade and the shoulder cuts the paper into two pieces. Do not hurry the adjustment. Patience and accuracy here will pay off with better, more accurate, quieter cutting and much longer machine and blade life.

11. When the paper is cut, turn the hex adjustment screw slightly in the counterclockwise direction. This assures that the blade is not touching the shoulder of the wheel.

12. Shut off the saw.

13. Hold the hex adjustment screws with a wrench and tighten the center locking screws. Make sure the hex adjustment screws do not move while tightening the center screws.

14. Install the two blade guide bearing brackets. Position the guides so the bearings just touch the blade.

15. Install the left blade guard.

16. Close the saw head cover. Tighten all four knobs.

**11.3 Blade guide bearing adjustment**

Proper adjustment of the blade guide bearings is critical to efficient operation of the cut-off saw. The blade guide bearings are adjusted at the factory. They should rarely require adjustment. When adjustment is required, adjust immediately. Failure to maintain proper blade adjustment may cause serious blade damage or inaccurate cuts.

It is always better to try a new blade when cutting performance is poor. If performance remains poor after changing the blade, make the necessary adjustments.

If a new blade does not correct the problem, check the blade guides for proper spacing. For most efficient operation and maximum accuracy, provide 0.001 inch clearance between the blade and the guide bearings. The bearings will still turn freely with this clearance. If the clearance is incorrect, the blade may track off the drive wheel.

**CAUTION** Check the blade to make sure the welded section is the same thickness as the rest of the blade. If the blade is thicker at the weld, the guide bearings may be damaged.

If required, adjust the guide bearings as follows:

1. The inner guide bearing is mounted on a concentric bushing and cannot be adjusted.

2. The outer guide bearing (closest to the operator) is mounted on an eccentric bushing and can be adjusted.

3. Hold the bushing with a 3/4-inch wrench and loosen the center locking screw with an Allen wrench (see Figure 12).

![](image2)

Figure 12: Adjustment of guide bearings

4. Position the bearing by turning the bushing. Set the clearance at approximately 0.001 inch.

![](image3)

Figure 13: Blade-to-bearing orientation
1. Clam in vise and mark top of barstock here
2. Cut off a slice of the bar stock
3. Rotate stock in vise so mark is at bottom
4. Cut off a new slice from the stock
5. Measure here...
6. ...measure here
7. Differences between measurements at edges of disk should be less than .003 inches per inch per side of stock diameter

11.4 Test cutting to verify adjustment accuracy

Test cuts can be used to determine whether or not you have adjusted the blade accurately. Use 2-inch round bar stock to perform these test cuts, as follows:

1. With the bar stock securely clamped in the vise, make a cut through the bar stock. (See Figure 14.)
2. Mark the top of the bar stock.
3. Move the bar stock about 1/4-inch past the blade so you can begin a second cut.
4. Rotate the bar stock 180 degrees so the mark you made is now at the bottom of the cut.
5. Make a cut through the bar stock.
6. Use a micrometer to measure the thickness variation of the disk you have cut from the bar stock. Measure at the top and bottom of the disk.
7. The saw blade can be considered correctly adjusted when the variation measure is no more than 0.012 inch across the face of the disk.
8. If you do not have a piece of 2-inch bar stock available for a test cut, use a larger diameter test piece rather than a smaller one. The maximum thickness variation on any test piece should be no more than 0.003 inch, per side, per inch of stock diameter.

11.5 Limit switch adjustment

1. The limit switch is provided to shut off the saw motor when the workpiece is cut through.
2. To set the limit switch, loosen the jam nut on the limit switch stop (Figure 15).
3. Adjust the stop as required and retighten jam nut.

12.0 Maintenance

12.1 Cleaning

1. Clean off any preservative on machine surfaces.
2. After cleaning, coat the machined surfaces of the cut-off saw with a medium consistency machine oil. Repeat the oil coating process at least every six months.
3. Clean up accumulated saw cuttings after use. Make sure the lead screw is kept free of saw cuttings and other material that would cause damage.
4. Clean the chip sludge from the coolant tank. The frequency should be determined by how often the saw is used.
12.2 Lubrication
Lubricate the following components at the specified frequencies and using the lubricants as defined:

1. Ball bearings: The bearings are lubricated and sealed—periodic lubrication is not required.
2. Blade guide bearing: The bearings are lubricated and sealed—lubrication is not required. Inspect periodically.
3. Idler wheel bushing: The bearings are lubricated and sealed—lubrication is not required. Inspect periodically.
4. Lead screw bearing housing: Lubricate with light oil monthly (see exploded figure, section 14.1.1).
5. Lead screw: Lubricate with light oil monthly (see exploded figure, section 14.1.1).
6. Hydraulic cylinder pivot: Lubricate with light oil every 6 months (see exploded figure, section 14.1.1).
7. Blade tension screw: Lubricate with grease every 6 months (see exploded figure, section 14.2.1).
8. Blade brush bearing: Lubricate with light oil monthly (see exploded figure, section 14.2.1).
9. Gear box: Check oil once a year.
10. Change coolant on a frequency appropriate to the type of coolant being used. Oil based coolants can sour. Refer to the coolant supplier’s instructions for change frequency.
11. Coolant tank: Clean every 6 months or as required.

12.3 Changing blades

**WARNING** Shut off all electrical power to machine.

1. Loosen four knobs securing the blade cover. Lift the cover and swing it backward.
2. Remove the blade guard mounted to the left blade guide support.

**WARNING** Always wear leather gloves when handling saw blade to avoid injury from saw teeth.

3. Turn the blade tensioning hand wheel clockwise to relieve tension on the blade. Loosen the blade enough to remove the blade from the idler and drive wheels. Remove the blade from between the blade guides.
4. Install the new blade between the blade guide bearings and the carbide blade guides. Install the blade over the drive and idler wheels.
5. Turn the blade tensioning hand wheel counterclockwise to tighten the blade. Tighten the blade until the blade tension indicator reads 2000 pounds.
6. Operate the saw at low speed and observe the tracking of the blade. If tracking needs to be adjusted, refer to sect. 11.1, Blade tracking adjustment.
7. Adjust the bearings on the upper edge of the blade until they just contact the blade (see Figure 18).
8. Check the guide bearings and the carbide guides to make sure they are just contacting the sides of the blade.
9. Install the left blade guard making sure there is ample clearance with the blade.
10. Make a test cut to make sure the blade tracks properly during operation. Adjust tracking as required (see sect. 11.1, Blade tracking adjustment).

12.4 Changing drive belt

1. Disconnect the electrical power source from the cut-off saw to prevent any possibility of accidental motor start-up.
2. Set the arm at the full horizontal position.
3. Remove the knob on the drive belt cover. Remove the drive belt cover to expose the V-belt and pulleys.
4. Remove two screws, nuts, and washers from back of saw head support. Push on the motor support bracket to pivot the motor upward to loosen the tension on the belt.
5. Remove the worn belt.
6. Put the replacement belt in the pulleys. Allow the motor to pivot downward.
7. Install the two screws, nuts, and washers in back of saw head support and through the motor support bracket.
8. Install the drive belt cover. Install and tighten the knob on the drive belt cover.
12.5 Replacing drive motor
1. Disconnect the motor from all electrical power. Unplug the motor if it is plugged into a socket. Shut off the power to the branch and remove the connection to the junction box if the motor is hard wired to the branch.
2. Remove the drive belt from the drive motor pulley (see sect. 12.4, Changing drive belt).
3. Remove motor pulley.
4. Open the motor junction box and disconnect the power cord wires from their terminals.
5. Remove the nuts, washers and bolts that secure the motor to the mounting plate.
6. Installation of a new motor is a reversal of the above steps.

12.6 Adjusting counterbalance spring
1. The counterbalance spring is located at the right, rear of the saw head. The counterbalance spring is used to adjust the amount of down force the saw head puts on the workpiece when the feed rate control valve is fully open.
2. Raise the saw arm to its full upright position and lock it in position.
3. To adjust the tension on the spring, loosen the two nuts on the threaded rod of the spring pivot post. Adjust the tension as required.
4. Tighten the two nuts against the pivot post.
5. The saw can now be returned to service.

12.7 Replacing drive wheel
1. Remove the blade (see sect. 12.3, Changing blades).
2. Remove the screw, spring washer, and washer from the speed reducer shaft.
3. Pull the wheel from the speed reducer shaft. Remove the drive key from the speed reducer shaft.
4. Inspection: Examine drive edge and shoulder of the wheel for damage. Replace the wheel if damaged.
5. Install the key in the keyway in the speed reducer shaft. Align the keyway in the wheel with the key in the speed reducer shaft. Reinstall the wheel on the speed reducer shaft.
6. Install the screw, spring washer and washer in the end of the speed reducer shaft.
7. Install the blade (see sect. 12.3, Changing blades).

12.8 Replacing idler wheel or idler bearing
1. Remove the saw blade (see sect. 12.3, Changing blades).
2. Remove the screw, spring washer, and washer from the idler shaft.
3. Remove the idler wheel. Remove the bearing from the idler wheel.
4. Inspection: Examine the drive edge and shoulder of the idler wheel for damage. Replace the wheel if damaged.
5. Inspect bearings for damage and smooth operation. Replace if faulty.
6. Install the bearing in the idler wheel. Install the idler wheel on the idler shaft.
7. Install the screw, spring washer and washer in the idler shaft.
8. Install the blade (sect. 12.3, Changing blades).

12.9 Adjusting blade guides
The cut-off saw has adjustable blade guide supports (see Figure 16). The blade guide supports allow you to set the blade guides for varying widths of workpieces.

To make accurate cuts and prolong blade life, the blade guide supports should be set to just clear the workpiece to be cut.

Figure 16: Blade guide supports

1. Loosen the knob on the blade guide support and slide the guide left or right as required. Repeat for the other blade guide.
2. Set the blade guide supports as required to accommodate the width/diameter of the workpiece. The blade guides should be positioned so the guides do not contact the workpiece as the saw head moves downward through the workpiece.
12.10 Replacing carbide blade guide

Refer to Figure 17.

1. Remove the cap screw and remove the carbide guide. Discard the carbide guide.
2. Install the replacement carbide guide on the guide bearing support. Install the cap screw. Set the guide so it just contacts the side of the saw blade.
3. Using a machinist's square, check squareness of the blade to the table.

![Figure 17: Carbide blade guides and guide bearings](image)

12.11 Replacing guide bearings

Referring to Figure 17, remove the cap screw from the bearing being replaced. Separate the bushing and cap screw from the bearing. Discard the bearing.

**NOTE:** There is a light press fit between the bearing and the bushing.

1. Install bushing in replacement bearing. Install cap screw through bushing and into guide support.
2. If the bearing being replaced is on an eccentric bushing, install the bearing on the operator side of the blade.
3. Turn the eccentric bushing in the guide support until the bearing contacts the blade.

12.12 Replacing blade edge bearings

1. Remove the capscrew from the blade edge bearing being replaced and discard the bearing. Be careful not to lose the spring washer that separates the bearing from the floating block (see Figure 18).
2. Insert the capscrew into the new bearing. Replace the spring washer onto the capscrew and re-install into the floating block.
3. If re-adjustment is necessary, loosen the pivot capscrew and move the floating block so that the blade edge is close to the guide support, but cannot touch the bottom surface of it when the saw blade is cutting a workpiece.

![Figure 18: Blade edge bearing replacement](image)

12.13 Replacing wire brush

1. Loosen four knobs securing the blade cover. Lift the cover and swing it backward.
2. Remove the attaching screw, spring washer and washer. Remove and discard the brush (see Figure 19).
3. Install replacement brush and secure with screw, spring washer and washer.
4. Close the blade cover and secure with four knobs.

![Figure 19: Wire brush](image)
# Troubleshooting the J-7020/7040 Band Saws

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Possible Cause</th>
<th>Correction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excessive blade breakage</td>
<td>Material loose in vise.</td>
<td>Clamp work securely.</td>
</tr>
<tr>
<td></td>
<td>Incorrect speed or feed.</td>
<td>Check machinist’s handbook for speed/feed appropriate for the material being cut.</td>
</tr>
<tr>
<td></td>
<td>Teeth too coarse for material.</td>
<td>Check machinist’s handbook for recommended blade type.</td>
</tr>
<tr>
<td></td>
<td>Incorrect blade tension.</td>
<td>Adjust blade tension to the point where the blade just does not slip on the wheel.</td>
</tr>
<tr>
<td></td>
<td>Saw blade is in contact with workpiece before the saw is started.</td>
<td>Start the motor before placing the saw on the workpiece.</td>
</tr>
<tr>
<td></td>
<td>Blade rubs on the wheel flange.</td>
<td>Adjust blade tracking.</td>
</tr>
<tr>
<td></td>
<td>Misaligned guides.</td>
<td>Adjust guides.</td>
</tr>
<tr>
<td></td>
<td>Cracking at weld.</td>
<td>Longer annealing cycle.</td>
</tr>
<tr>
<td>Premature blade dulling</td>
<td>Blade teeth too coarse.</td>
<td>Use a finer tooth blade.</td>
</tr>
<tr>
<td></td>
<td>Blade speed too high.</td>
<td>Try a lower blade speed.</td>
</tr>
<tr>
<td></td>
<td>Inadequate feed pressure.</td>
<td>Decrease spring tension.</td>
</tr>
<tr>
<td></td>
<td>Hard spots in workpiece or scale on/in workpiece.</td>
<td>Increase feed pressure (hard spots). Reduce speed, increase feed pressure (scale).</td>
</tr>
<tr>
<td></td>
<td>Work hardening of material (especially stainless steel).</td>
<td>Increase feed pressure by reducing spring tension.</td>
</tr>
<tr>
<td></td>
<td>Insufficient blade tension.</td>
<td>Increase tension to proper level.</td>
</tr>
<tr>
<td></td>
<td>Operating saw without pressure on workpiece.</td>
<td>Do not run blade at idle in/on material.</td>
</tr>
<tr>
<td>Bad cuts (out-of-square)</td>
<td>Workpiece not square with blade.</td>
<td>Adjust vise so it is square with the blade. (Always clamp work tightly in vise.)</td>
</tr>
<tr>
<td></td>
<td>Feed pressure too fast.</td>
<td>Decrease pressure.</td>
</tr>
<tr>
<td></td>
<td>Guide bearings not adjusted properly.</td>
<td>Adjust guide bearing clearance to 0.001 inch (0.002 inch maximum).</td>
</tr>
<tr>
<td></td>
<td>Inadequate blade tension.</td>
<td>Gradually increase blade tension.</td>
</tr>
<tr>
<td></td>
<td>Span between the two blade guides too wide.</td>
<td>Move blade guide bar closer to work.</td>
</tr>
<tr>
<td></td>
<td>Dull blade.</td>
<td>Replace blade.</td>
</tr>
<tr>
<td></td>
<td>Incorrect blade speed.</td>
<td>Check blade speed.</td>
</tr>
<tr>
<td></td>
<td>Blade guide assembly is loose.</td>
<td>Tighten blade guide assembly.</td>
</tr>
<tr>
<td></td>
<td>Blade guide bearing assembly loose.</td>
<td>Tighten blade guide bearing assembly.</td>
</tr>
<tr>
<td></td>
<td>Blade tracks too far away from wheel flanges.</td>
<td>Adjust blade tracking.</td>
</tr>
<tr>
<td></td>
<td>Guide bearing worn.</td>
<td>Replace worn bearing.</td>
</tr>
<tr>
<td>Bad cuts (rough)</td>
<td>Blade speed too high for feed pressure.</td>
<td>Reduce blade speed and feed pressure.</td>
</tr>
<tr>
<td></td>
<td>Blade is too coarse.</td>
<td>Replace with finer blade.</td>
</tr>
<tr>
<td>Blade is twisting</td>
<td>Blade is binding in the cut.</td>
<td>Decrease feed pressure.</td>
</tr>
<tr>
<td></td>
<td>Blade tension too high.</td>
<td>Decrease tension on blade.</td>
</tr>
<tr>
<td>Symptom</td>
<td>Possible Cause</td>
<td>Correction</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>----------------------------------------------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>Unusual wear on side/back of blade</td>
<td>Blade guides worn</td>
<td>Replace blade guides.</td>
</tr>
<tr>
<td></td>
<td>Blade guide bearings not adjusted.</td>
<td>Adjust blade guide bearings.</td>
</tr>
<tr>
<td></td>
<td>Blade guide bearing bracket is loose.</td>
<td>Tighten blade guide bearing bracket.</td>
</tr>
<tr>
<td>Teeth missing/ripped from blade</td>
<td>Blade tooth pitch too coarse for workpiece.</td>
<td>Use blade with finer tooth pitch.</td>
</tr>
<tr>
<td></td>
<td>Feed too slow; feed too fast.</td>
<td>Increase feed pressure and/or blade speed.</td>
</tr>
<tr>
<td></td>
<td>Workpiece vibrating.</td>
<td>Clamp workpiece securely.</td>
</tr>
<tr>
<td></td>
<td>Gullets loading up with chips.</td>
<td>Use blade with a coarse tooth pitch — reduce feed pressure.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Brush blade to remove chips.</td>
</tr>
<tr>
<td>Motor running too hot</td>
<td>Blade tension too high.</td>
<td>Reduce tension on blade.</td>
</tr>
<tr>
<td></td>
<td>Drive belt tension too high.</td>
<td>Reduce tension on drive belt.</td>
</tr>
<tr>
<td></td>
<td>Blade too coarse for workpiece (especially with tubular stock).</td>
<td>Use blade with fine tooth pitch.</td>
</tr>
<tr>
<td></td>
<td>Blade too fine for workpiece (especially with heavier, soft material).</td>
<td>Use blade with coarse tooth pitch.</td>
</tr>
<tr>
<td></td>
<td>Speed reducer gears require lubrication.</td>
<td>Check speed reducer.</td>
</tr>
<tr>
<td>No coolant flow</td>
<td>Pump motor is burned out.</td>
<td>Replace pump.</td>
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<tr>
<td></td>
<td>Screen/filter on pump is clogged.</td>
<td>Clean screen/filter.</td>
</tr>
<tr>
<td></td>
<td>Impeller is loose.</td>
<td>Tighten impeller.</td>
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<tr>
<td></td>
<td>Coolant level too low.</td>
<td>Add coolant to reservoir.</td>
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<tr>
<td>Excessive speed reducer noise/vibration</td>
<td>V-belt is too tight.</td>
<td>Reset V-belt tension.</td>
</tr>
<tr>
<td></td>
<td>Countering spring not tensioned properly.</td>
<td>Increase spring tension.</td>
</tr>
</tbody>
</table>

### 14.0 Replacement Parts

Replacement parts are listed on the following pages. To order parts or reach our service department, call 1-800-274-6848 Monday through Friday, 8:00 a.m. to 5:00 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.

Non-proprietary parts, such as fasteners, can be found at local hardware stores, or may be ordered from JET. Some parts are shown for reference only, and may not be available individually.
14.1.1 Base (J-7020/7040) – Exploded View
# Base (J-7020/7040) - Parts List

<table>
<thead>
<tr>
<th>Index No</th>
<th>Part No</th>
<th>Description</th>
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<th>Qty</th>
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*** Spring Changed since Dec. '96

Piston/Seal Kit 5512787
E-M valve & coil 5713371A
Not shown in exploded view.
14.2.1 Head (J-7020/7040) – Exploded View
## 14.2.2 Head (J-7020/7040) – Parts List

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15.0 Electrical Connections

15.1 Electrical Connections – single phase only (model J-7020)

Figure 20: Model J-7020 wiring diagram

Figure 21: Connection diagram for 1PH motor
15.2 Electrical Connections – three phase only (model J-7040)

Figure 22: Model J-7040 wiring diagram

Figure 23: Connection diagram for 3PH motor
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