Powermatic Vertical Panel Saw

<table>
<thead>
<tr>
<th>Description</th>
<th>Vertical Panel Saw – Model 511</th>
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</thead>
<tbody>
<tr>
<td>Size / Horse power</td>
<td>5’ x 10’ Panel</td>
</tr>
<tr>
<td>Power source</td>
<td>120 volt through plugged power cord</td>
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<tr>
<td>Uses</td>
<td>Cutting large wood panels</td>
</tr>
</tbody>
</table>

**Safety Precautions**

**Hazards**
- Severe cuts, potential for amputation
- Flying debris (potential eye and face damage)
- Electrical shock
- Entanglement of hair, jewelry or clothing
- Material kickback

**Training**
- Shop Safety Fundamentals
- Site Specific Training

**Protective Equipment**
- Safety Glasses
- Hearing protection
- Tie back long hair
- Avoid loose fitting clothing

**Operation**

**Crosscutting**

**WARNING! Do not place hands on or under the carriage or in path of saw blade**

1. Position the saw motor in the crosscutting position with the blade oriented vertically
2. Loosen the carriage locking knob and move the carriage to the top of the guides
3. Move the adjustable stop (A) to the measurement on the horizontal scale (either left or right side of carriage) that matches the desired width of your cut
4. Place the workpiece on top of the rollers. **DO NOT DROP** it on the rollers
5. Slide workpiece into position against the adjustable stop, while double checking the cut size via the crosscut rulers. Make sure workpiece is adequately supported. Use one hand to guide it
6. Start motor and allow it to reach full speed
7. Pull carriage down slowly and smoothly as the blade moves through the workpiece
8. Support and remove the cut-off piece as the saw completes its cut
9. Once the cut is complete, turn off the motor and wait for the blade to come to a full stop
10. Remove the workpiece, return the carriage to the top of the guides, and lock the carriage
Ripcutting

WARNING! Ripping must be done in direction of arrow on the saw carriage to prevent risk of injury

1. Make sure there is enough space on both sides of the saw to completely load, pass, and offload the workpiece
2. Pull the indexing pin on the turntable and rotate turntable counterclockwise. The indexing pin will lock into place
3. Select the height of the saw blade above the rollers. Move the carriage until the index tab is aligned with the corresponding dimension on the vertical ruler. Lock the carriage securely to the guides with the locking knob
4. Start motor and allow it to reach full speed
5. Place workpiece on the side of machine according to direction of cut shown by the arrow on the carriage
6. Move the workpiece slowly and smoothly through the saw. Do not force the workpiece
7. As the workpiece passes through the saw, move to the other side and complete the cut by pulling the workpiece past the blade. Support the upper piece to prevent it from pinching the blade
8. Once the cut is complete, turn off the motor and wait for the blade to come to a full stop
9. Rotate turntable back to the vertical position and return it to the top of the guides. Lock the carriage

Changing the Blade – Performed by Authorized Personnel Only

1. Disconnect saw from power source and observe appropriate lockout procedures
2. Tighten carriage lock and remove the blade guard by unscrewing and removing the knob
3. Engage spindle lock on the motor to keep spindle from turning, loosen and remove arbor bolt (NOTE: turn clockwise to loosen)
4. Remove outer flange, blade, and inner flange
5. Clean spindle, flanges, bolts and blade to remove dust and debris
6. Re-install inner flange, install new blade with arrow point as shown. Re-install outer flange and tighten arbor bolt
7. Re-install blade guard
8. Loosen carriage lock and move carriage to the top of the guides. Reconnect power

Maintenance

<table>
<thead>
<tr>
<th>Storage</th>
<th>Armory – Room 0062</th>
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<tbody>
<tr>
<td>Care</td>
<td></td>
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<tr>
<td></td>
<td>Wipe the machine down after each use</td>
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<tr>
<td></td>
<td>Keep exposed metal surfaces clean and rust free</td>
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<td></td>
<td>Make periodic inspection of the operation of the machine</td>
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<td>Replace gear oil at least once a year</td>
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