SAFETY RULES

READ BEFORE OPERATING OR MAINTAINING MACHINE

1. Make sure the area is hazard free of contaminated air, chips, debris, grease, oil, anything slippery, obstructions, etc.

2. Do not operate until properly instructed in the safe use of the machine.

3. Do not operate without all guards, shields, covers, etc. securely in place.

4. Make sure the machine is electrically grounded.

5. Remove or confine all loose clothing, hair, jewelry, bracelets, necklaces, etc.

6. Use all applicable safety equipment, goggles, face masks, gloves, etc.

7. Check the machine to be used for improper functioning, worn parts, wrong parts, wrong rotation, secure and correct tooling installed, damaged, etc.

8. Do not alter the machine, operate outside of design limits or use, etc.

9. During use do not put hands, or anything else, under guards, shields, covers, etc.

10. When not using the machine, leaving the area or cleaning the area, turn the machine off.

11. Do not clean, adjust, maintain or service the machine unless it is turned off and all power sources disconnected.

12. Keep the machine in good, safe repair and cleanliness.
WARRANTY

Seller guarantees all machines and parts of its own manufacture against defects in material and workmanship for a period of six months from date of shipment under normal use and service by buyer. No other warranties are to be implied with respect thereto. The liability of Seller under its warranty is limited to adjustment, in accordance with the Warranty Adjustment Terms set forth below, for products which are found to be defective by Seller in the form in which they were originally shipped. In no event will Seller be liable for collateral, consequential or other damages of any kind or nature.

WARRANTY ADJUSTMENT TERMS

(a) Adjustments will be limited to claims which are presented promptly after the product is found to be defective, and within the aforesaid warranty period.

(b) All products claimed to be defective will be subject to inspection and test by Seller. Normally, Seller will request return of products for inspection and test, however, Seller reserves the right to make inspection and test on Buyer's premises. Returns are to be made only as and if authorized in writing by Seller.

(c) Buyer will pay all packing, inspection, labor, and transportation costs involved. Credit for the transportation costs only will be issued by Seller provided adjustment subsequently is allowed.

(d) No adjustment will be allowed for products which have been subjected to abuse, improper installation or application, alteration, accident or negligence in use, storage, transportation or handling; nor for products on which original identification markings have been removed, defaced or altered.

(e) Final determination as to whether any adjustment is allowable, and as to the extent thereof, rests with the Seller. Full adjustment if allowed, normally will be replacement in kind on an exchange basis. Pro rata adjustment if allowed normally will be made by the issuance of credit. In all cases, however, Seller reserves the right to make adjustment by repair, replacement or credit.

(f) Replacements for products found subject to adjustment, whether new or repaired, will be shipped FOB city of destination with transportation charges prepaid by Seller.

INSTALLATION

Buyer shall install machinery purchased from Seller at Buyer's cost and expense, unless otherwise expressly stipulated, in writing. At the request of Buyer, Seller will recommend competent engineers to supervise the installation, and to instruct the Buyer in the proper operation of the machinery and equipment. During such period of supervision and instruction, such personnel shall be deemed to be employees of the Buyer who shall pay the wages, remuneration, board and traveling expenses of such personnel shall not make Seller liable, directly or indirectly, in any manner whatsoever, for any damages resulting from any act of commission or omission or any misfeasance or malfeasance, on the part of any said personnel.

CANCELLATIONS OR RETURNS

Buyer shall not cancel any order nor return any equipment without first procuring the written consent of Seller. In any event, in case of refusal or inability of Buyer to accept a delivery, the Buyer shall nevertheless be liable for freight, express, storage, handling, restocking and any other expense resulting. In no event are orders for machines or parts built to customer specifications subject to cancellation and Buyer shall be liable for work done and materials used.
INSTRUCTIONS FOR MANUAL VEE NAILERS
MODEL VN-M

ON RECEIPT OF MACHINE

Check box or crate for any damage. Check that all parts ordered are included. Report any irregularities to the delivering carrier, or so note on their copy of the Bill of Lading. The carrier is solely responsible for any transit damage or losses.
Clean machine of residue or preservatives.

INSTALLATION

Pick a location that is suitable for the work flow and that is safe for the operator with ample unobstructed freedom of movement. Machine should stand solidly and be reasonably level.
If desired, the machine can be secured to the floor by the four holes at the base flange.
Familiarize yourself with the machine by locating and understanding all the adjustments.

ADJUSTMENTS

The clamp pad is attached to a 5/8" rod, held into the clamp arm by a 1/4" "fastpin". For different height settings, simply pull the fastpin and adjust the shaft to a desired setting. There are two holes in the clamp rod for this adjustment. The main objective is:

1 - Have the pad as close to the work piece as possible.
2 - A good view of the miter.
3 - Minimal downward stroke of the clamp pad arm and foot pedal.

A good rule of thumb is to use the lower setting on material that is 3/4" or lower.

The fence is movable, forward and backward, through the tunnel guide on the right side of the table. The outside (back) nail stop is pre-set at the factory. It can be adjusted by opening the allen head screw (5/32 wrench supplied) on the eccentric stop, which is secured to the rear of the fence guide arm. Locate the eccentric at the desired nail position and re-tighten the allen head screw. When adjusting for the second nail, the inside (front) nail stop can be adjusted by sliding the slotted stop to a desired position and locking the thumb screw. The fence has a slide distance of approximately three inches. The tape scale on the top of the fence slide arm is used as a reference point for driving nails between the front and rear stops. The locking handle on the tunnel is used for locking the fence at any particular nail driving stop. On woods with a softer density where one nail, in depth, is used, it
may not be necessary to lock the fence. Otherwise, tighten lightly. The locking handle can be positioned to lock where desired. Simply lift up handle, turn to desired position and push handle down into sprocket.

To accommodate a change in nail size, the nail track of the nailing fixture must be adjusted. (See enclosed illustration). The procedure is as follows:

1. Using the extended pin, pull the nail pusher back and allow it to seat itself at the beveled end of the nail track.
2. Loosen the two allen head screws holding the nail side guide. (5/32" wrench provided).
3. Remove the tension spring from the roller.
4. Slide the magazine feed track up or down to accommodate the size of nail desired.
5. Lay a stick of nails in the track with knife side up, tape side down and female vee leading in.
6. Adjust the track until there is approximately 1/32" to 1/16" clearance between the underneath side of the table and the top (knife edge) of the nails.
7. Re-tighten the two allen head screws and replace spring on roller.

Make sure the allen head screws are tight, as they also set the side guide that forms the nail tunnel. Nails must be free feeding on the nail track all the way in. Push nail stick firmly into the nail tunnel to make sure that the first nail is in position over the nail driver. Slide the nail pusher up to the nail stick firmly. The depth of the nail should be flush or slightly below the surface of the wood. The 3/8" stop screw behind the driver pusher bar, on the driver activating arm, can be adjusted to suit this condition.

**OPERATION**

Make sure the nail magazine is loaded with the proper size nails. Set the fence for the location of the first nail relative to the outside of the frame. Put the first nail at the highest part of the profile.

Since the work may vary greatly from flat to sharp profiles and from soft to hard woods, the pad material on the self leveling mount should suit these conditions. Too soft a pad on a hard wood profile could allow work movement as the nail is driven in. Optional pads are available. Our general recommendations are to use the thinnest and hardest pad that will not mark the work. The self leveling mount can be used without any pad.
Set the clamp pad at the desired height for the moulding to be clamped.
Bank and butt two mitered frame parts against the fence and each other.
Press the foot pedal slowly but firmly until it will not go any further, then release the pedal. Avoid overpressing after the nail is fully driven. This unnecessary pressure can cause unnecessary marking. The first nail should now be inserted. The other corners are now processed. If two or more nails are to be placed in each corner, use the slide stop and scale for positioning the fence.
Do not step on the foot pedal unless there is wood under the clamp or a nail will be driven into the clamp pad.
Two nails can be inserted, one right after and behind each other in soft wood, with the fence clamped.
Do not stand on the pedal or use excessive force. The machine has been designed to insert the nail with a minimum of pressure.
Keep the nail delivery opening clean of build up of glue or tape.
Use a spray solvent regularly that will not affect the nail tape. Any carburetor and choke cleaning solvent is recommended.

TROUBLE SHOOTING

No nails coming ............ 1 - Nail stick binding in feed track.
2 - First nail on stock not against driver guide

Nails protruding from wood... 1 - Driver set too low.
2 - Nails not sharp.
3 - Driver pushing edge not sharp, regrind or replace driver.

Nail driver jamming......... 1 - Nails in stick slanted and driver wedges.
2 - Nail pusher tension too weak.
3 - Nail tunnel obstructed.
4 - Faulty nail sticks.
5 - Delivery opening obstructed with glue, tape, etc.

Clearing a jammed driver..... 1 - Pull down from underneath on the driver arm. Pull the 1/4" pin on the clamp pad rod, drop rod and remove. Tap driver down with a brass or other soft rod.

MAINTENANCE

Lubricate the chain sprocket once a week with a few drops of heavy oil.
Lubricate the driver arm and foot pedal pivot points once a week with a few drops of heavy oil.
Inspect and check nail track tunnel and nail delivery opening, as necessary, for any build up.
Check the driving surface of the nail driver monthly for sharp edges. If rounded, regrind or install a new driver. Clean nail driver track and driver daily.

SAFETY

Keep hands away from underneath the clamp and above the nail delivery opening in the table while working the machine. When the machine is not in use, lay a piece of wood directly over the nail delivery opening.

ACCESSORIES INCLUDED

1 - Instruction booklet.
2 - Green pad - For use on contoured moulding (illustration enclosed).
3 - Plastic triangle - For use on soft or delicate mouldings. Triangle is placed between work piece and normal clamp pad.
4 - Felt pad - also for use on soft or delicate mouldings. Pad is placed between work piece and normal clamp pad.
5 - Plastic tube with magnet - for cleaning nail track if machine should jam.
6 - Allen keys - 5/32" for various nail height and stop adjustments. 5/16" for tightening.
AIR OPERATED VN-M

INSTALLATION

The air operated VN-M is equipped with a filter, oiler, regulator mounted on the right leg of the machine. The regulator is factory set at approximately 60 PSI. This is the medium setting. Depending upon moulding hardness, the regulator can be adjusted from between 40 to 90 PSI.

It is necessary to fill the oiler with either hydraulic or a lightweight #10 oil. To fill, remove the knurled brass knob located on top of oiler reservoir and fill cup with oil.

Install a minimum of a 1/4" air line from the compressor to the "in port" fitting on the filter side of the filter, oiler, regulator unit. Regulate oiler to emit one drop of oil for approximately every twenty cycles of machine. To control flow adjust flat head screw located on top of oiler.

For operation, the pneumatic foot pedal can be placed at any of the four sides of the machine.
# PARTS LIST

## MACHINE

**Manual Vee Nailer**

**MODEL NO.**

**VN-M**

**TYPE PARTS**

**DATE:** 11/82

<table>
<thead>
<tr>
<th>REF</th>
<th>NUMBER</th>
<th>DESCRIPTION</th>
<th>NO ON MACHINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>S-6403-3</td>
<td>Fence ruler</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>S-6403-1</td>
<td>Fence guide</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>28302</td>
<td>Fence handle</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>S-6403-2</td>
<td>Fence pointer</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>A-6402</td>
<td>Fence</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>A-6441</td>
<td>Octagon fence</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>S-6397</td>
<td>Table</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>S-6405-1</td>
<td>Nailing head mount</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>32503</td>
<td>Leveling clamp 2-1/4</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>43506</td>
<td>Leveling clamp 7/8 (optional)</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>P-6405-3</td>
<td>Urethane pad 2-1/4 x 1/8</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>P-6405-4</td>
<td>Urethane pad 7/8 x 1/8 (optional)</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>Lixie green</td>
<td>Rubber clamp pad 1&quot;</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>S-6211-2</td>
<td>Nail stripper</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>S-6376-1</td>
<td>Driver guide</td>
<td>1</td>
</tr>
<tr>
<td>16</td>
<td>S-6126-3</td>
<td>Nail side guide</td>
<td>1</td>
</tr>
<tr>
<td>17</td>
<td>S-6366-1</td>
<td>Driver</td>
<td>1</td>
</tr>
<tr>
<td>18</td>
<td>S-6114-4</td>
<td>Spring roller</td>
<td>1</td>
</tr>
<tr>
<td>19</td>
<td>S-6399-6</td>
<td>Driver pin</td>
<td>1</td>
</tr>
<tr>
<td>20</td>
<td>S-6399-2</td>
<td>Nail driver link</td>
<td>1</td>
</tr>
<tr>
<td>21</td>
<td>S-6126-4</td>
<td>Nail track side plate</td>
<td>1</td>
</tr>
<tr>
<td>22</td>
<td>S-6111-4</td>
<td>Nail pusher</td>
<td>1</td>
</tr>
<tr>
<td>23</td>
<td>S-6111-1</td>
<td>Nail track</td>
<td>1</td>
</tr>
<tr>
<td>24</td>
<td>S-6382-1</td>
<td>Base plate</td>
<td>1</td>
</tr>
<tr>
<td>25</td>
<td>S-6112-4</td>
<td>Nail pusher arm</td>
<td>1</td>
</tr>
<tr>
<td>26</td>
<td>S-1E</td>
<td>Magazine nail spring</td>
<td>1</td>
</tr>
<tr>
<td>27</td>
<td>S-6406-4</td>
<td>Clamp spring</td>
<td>2</td>
</tr>
<tr>
<td>28</td>
<td>S-6406-2</td>
<td>Chain</td>
<td>1</td>
</tr>
<tr>
<td>29</td>
<td>S-6399-4</td>
<td>Spring pins</td>
<td>2</td>
</tr>
<tr>
<td>30</td>
<td>S-6399-1</td>
<td>Nail driver arm</td>
<td>1</td>
</tr>
<tr>
<td>31</td>
<td>5/8 x 3/4 x 1</td>
<td>Nail driver arm bushing</td>
<td>1</td>
</tr>
<tr>
<td>32</td>
<td>S-6398-3</td>
<td>Clamp pad holder</td>
<td>1</td>
</tr>
<tr>
<td>33</td>
<td>1/4&quot;</td>
<td>Collar</td>
<td>2</td>
</tr>
<tr>
<td>34</td>
<td>S-6405-2</td>
<td>Clamp holder pin</td>
<td>1</td>
</tr>
<tr>
<td>35</td>
<td>35B19F</td>
<td>Chain sprocket</td>
<td>1</td>
</tr>
<tr>
<td>36</td>
<td>S-03</td>
<td>Sprocket shaft</td>
<td>1</td>
</tr>
<tr>
<td>37</td>
<td>SLX 3/4</td>
<td>Bearing</td>
<td>2</td>
</tr>
<tr>
<td>38</td>
<td>S-6398-1</td>
<td>Clamp arm</td>
<td>1</td>
</tr>
<tr>
<td>39</td>
<td>S-6398-2</td>
<td>Clamp bearing spacer</td>
<td>2</td>
</tr>
<tr>
<td>40</td>
<td>5/8 x 4</td>
<td>Nail driver arm pivot bolt</td>
<td>1</td>
</tr>
</tbody>
</table>
Clamp Spring S-6394-4

Chain Sprocket 35 B19F

1" (25mm) thick steel clamp head opens for easy operator viewing of miter joint before joining.
S-6398-1

Adjustable, non-marking swiveling polyurethane clamp pad.
32503

P-6405-3 Poly Pad Only

Easy access to nail magazine and nail driving components.

Heavy duty 14 gage steel cabinet stand.

Simple side load nail magazine, holds 250 vee nails.

One piece flat ground sliding fence with vee corner for quick alignment of frame parts. Optional octagon and hexagon fences available. (see p. 5)

Precision ground nickel plated work surfaces protect against rust and glue accumulation. Wide table (12") for maximum support.

Pedal Spring E 068

Nail feeds up from bottom for blind joining. No puttying or filling necessary.

Full span tread. Machine can be operated from the front or either side and with either foot pedal or by foot movement.

Foot pedal 10" off floor S-6400-1

Chain S-6406-2

Quick set nail position & jaws S-6403-2

Fence locking handle 26302

Fence guide S-6403-1

Heavy duty roller chain linkage to foot lever.

Fence S-03 Sprocket Shaft

Octagon Fence (Not Shown)

S-6397 Table

S-6402-1 Fence Ruler