72GP EDGEBANDER

Owner's Manual



Model 72GP

Safety Speed Manufacturing

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Table of Contents

Warranty	3
Safety Information	4-5
Uncrating and Setup.	6-7
Operation and Adjustment	8-16
Starting Tape Into Advance Rollers	8
Adjusting Tape Guide	8
Upper Router Height Adjustment	
Power Feeder Height Adjustment	9
Control Panel	10
Operating Temperature	11
Glue Application Adjustment	11
Glue Level	
Top and Bottom Edge Trim Fine Adjustment	12
Front Tape Length Adjustment	
Rear Tape Length Adjustment	
Banding Laminate Strips	13
Adjusting Glue Pot/Glue Auger	14
Opening End Access Doors	15
Power Feeder Leveling	15
Starting Your Machine and Feeding in a Board	.16
Maintenance	17
ATAMIANUAL MILES	11
Electrical Diagram and Photo for Permanent Wiring	18

A MESSAGE FROM ALL OF US AT SAFETY SPEED:

Thank you for purchasing a Safety Speed Edgebander. We take pride in building these fine products in the U.S.A. Each Safety Speed product is designed to give years of dependable service. Our machines are built from the finest components we can specify, and every machine is individually assembled by our employees — some of whom have been building our products for more than 25 years. We appreciate your choosing our products for your application.

The employees of Safety Speed Mfg. Ham Lake, Minnesota

WARRANTY

Safety Speed warrants the parts and workmanship of this tool, except for the electric motors, for one year from the date of manufacture. Safety Speed will repair or replace, at our cost, any component that is determined to be defective. Such repair or replacement is limited to providing satisfactory replacement parts from the factory. Safety Speed assumes no responsibility for making repairs on site. Any parts returned to the factory must be returned freight prepaid.

All edgebander motors are warranted directly by the manufacturer. See local repair and maintenance centers for warranty claims for motors.

Safety Speed assumes no responsibility for any damage or accidents resulting from the misuse of this tool, its misapplication, or failure to follow precautionary safety measures. Safety Speed assumes no responsibility for any consequential damage or loss of production. Safety Speed will not be responsible for claims made for machines that are not used or maintained in the normal course of business, used for applications not intended, or modified in any way.

The information in this model covers the following machine:

72GP Edgebander

SAFETY

WARNING: When using electric tools, always follow basic safety precautions to reduce the risk of fire, electric shock, and personal injury.

READ AND SAVE ALL INSTRUCTIONS FOR FUTURE USE. Before use, be sure everyone using this tool reads and understands this manual as well as any labels packaged with or attached to the tool.

- 1. **KNOW YOUR POWER TOOL**. Read this manual carefully to learn your power tool's applications and limitations as well as potential hazards associated with this type of tool.
- 2. DO NOT ALLOW UNQUALIFIED PEOPLE TO OPERATE THE TOOL.
- 3. **AVOID DANGEROUS ENVIRONMENTS.** Do not use your power tool in rain, damp or wet locations, or in the presence of explosive atmospheres (gaseous fumes, dust, or flammable materials). Remove materials or debris that may be ignited by sparks.
- 4. **KEEP WORK AREA CLEAN AND WELL LIT**. Cluttered, dark work areas invite accidents. Provide at least 200 watts of lighting at the front work area of the tool. Eliminate all shadows that could interfere with clear viewing of the work area.
- 5. **DRESS PROPERLY**. Do not wear loose-fitting clothing or jewelry. Wear a protective hair covering to contain long hair, as it may be caught in moving parts. When working outdoors, wear rubber gloves and insulated, nonskid footwear. Keep hands and gloves away from moving parts.
- 6. **USE SAFETY EQUIPMENT**. Everyone in the work area should wear safety goggles or glasses with side shields that comply with current safety standards. Wear hearing protection during extended use and a dust mask for dusty operations. Hard hats, face shields, safety shoes, etc. should be used when specified or necessary. Keep a fire extinguisher nearby.
- 7. **KEEP BYSTANDERS AWAY**. Keep children and bystanders at a safe distance from the work area to avoid distracting the operator and contacting the tool.
- 8. MAKE THE WORKSHOP CHILD PROOF with padlocks, master switches, etc.
- 9. **NEVER LEAVE THE TOOL RUNNING UNATTENDED**. Turn the power off. Do not leave the tool until it comes to a complete stop.
- 10. **PROTECT OTHERS IN THE WORK AREA** from debris such as chips and sparks. Provide barriers or shields as needed.
- 11. **USE THE RIGHT TOOL**. Do not use a tool or attachment to do a job for which it is not recommended. For example, do not use the routers supplied with the machine for other manual applications. Do not alter the tool or remove guards.
- 12. **CHECK FOR DAMAGED PARTS**. Inspect guards and other parts before use. Check for misalignment, binding of moving parts, improper mounting, broken parts, and any other conditions that may affect operation. If abnormal noise or vibration occurs, turn the tool off immediately and have the problem corrected before further use. Do not use a damaged tool. Tag damaged tools "DO NOT USE" until repaired. Repair or replace a damaged guard or other part. For all repairs, insist on identical replacement parts.
- 13. **REMOVE ALL ADJUSTING WRENCHES AND TOOLS** from the tool before turning it on. Make this a habit.
- 14. **GROUND YOUR TOOL**. When in doubt as to the grounding of your machine, consult a qualified electrician before using your machine.

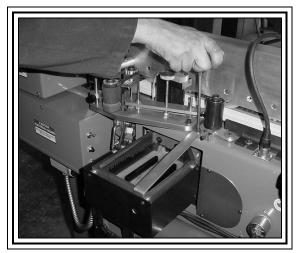
SAFETY

- 15. **AVOID ACCIDENTAL STARTING**. Do not use the tool if the power switch does not turn it on and off. Disconnect power when performing maintenance on the tool.
- 16. **DO NOT FORCE THE TOOL**. Your tool will perform best at the rate for which it was designed. Excessive force only causes operator fatigue, increased wear, increased risk of binding or sudden breakage, and reduced control.
- 17. KEEP HANDS AWAY FROM ALL CUTTING EDGES, HOT COMPONENTS, AND MOVING PARTS.
- 18. **DO NOT ABUSE THE CORDS**. Keep the cords away from heat, oil, sharp objects, cutting edges, and moving parts.
- 19. **DO NOT OVERREACH. MAINTAIN CONTROL**. Keep proper footing and balance at all times. Maintain a firm grip.
- 20. **STAY ALERT**. Watch what you are doing, and use common sense. Do not use a tool when you are tired, distracted, or under the influence of drugs, alcohol, or any medication causing decreased control.
- 21. **MAINTAIN TOOLS CAREFULLY**. Keep handles dry, clean, and free from oil and grease. Keep cutting components sharp and clean. Follow instructions for lubricating and changing accessories. Periodically inspect tool cords for damage. Have damaged parts repaired or replaced.
- 22. **MAINTAIN LABELS AND NAMEPLATES**. These carry important information. If unreadable or missing, contact Safety Speed for a free replacement.
- 23. DO NOT REMOVE THE GUARDS OR OPERATE THE TOOL WITHOUT THE GUARDS IN PLACE.

READ AND SAVE ALL INSTRUCTIONS FOR FUTURE REFERENCE.

A. UNCRATING AND SETUP

- 1. Remove wood crating. Machine base is bolted to pallet with 3/8" bolts from beneath 2" x 4" rails. Install 4 levelling pads and adjust so that machine sits firmly on all four (4) pads without rocking. (Theses are in the box packaged with the machine.)
- 2. Remove Glue Pot shipping support strap by unscrewing 3/16 allen head bolts from positions shown in (**FIGURES 1 & 2**). Be sure to replace bolts after strap has been removed.



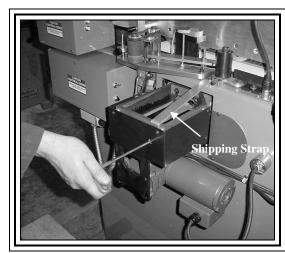


FIGURE 1

FIGURE 2

- 3. Remove protective packing from inside Glue Pot and apply Glue Pot Lid found inside the box packaged with the machine.
- 4. Install tape support disc to the rear of the machine top, directly behind the control panel (FIGURES 3 & 4). The holes in the tape disc support arm are large enough to allow adjustment. Level the disc parallel to the machine top before tightening the two ½" x ¾" fastening screws. NOTE: You may remove protective covering from table disc surfaces.

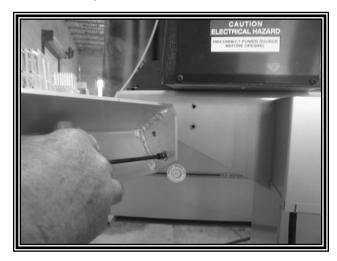
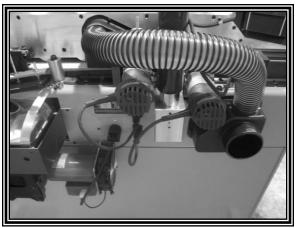




FIGURE 3 FIGURE 4

- 5. Connect power supply into main power box according to the diagram inside the power box cover. NOTE: All electrical connections should be made by a qualified electrician to prevent damage to machine or possible electrical shock.
- 6. Connect dust collector hose to 4" connection at rear of machine (FIGURES 5 & 6).

 NOTE: A dust collector of sufficient capacity minimum 600 CFM must be used to keep cutter bearings from accumulating with cutting debris.



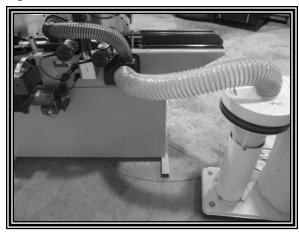


FIGURE 5

FIGURE 6

- 7. Confirm levelling pads are securely in the base of the machine. Level the machine front to back and side to side. *NOTE: Machine must sit level to ensure that the glue pot moves freely.*
- 8. Install crank handle (In Box) with 3/16" allen bolt provided (FIGURE 8).
- 9. Raise Power Feeder and remove Power Feeder Support Board by rotating locking levers, shown in (**FIGURES 7 & 8**), counter-clockwise and turning the crank handle counter-clockwise.

Note: Failure to loosen both locking levers may adversely affect machine operation. You may need to level the power feeder to the table (see power feeder levelling).

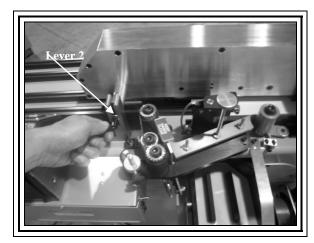


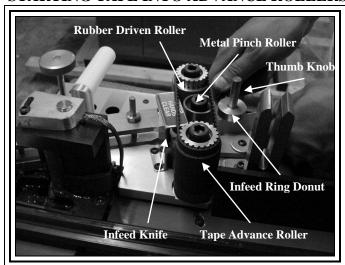
FIGURE 7



FIGURE 8

B. OPERATION AND ADJUSTMENT

STARTING TAPE INTO ADVANCE ROLLERS



ADJUSTING TAPE GUIDE

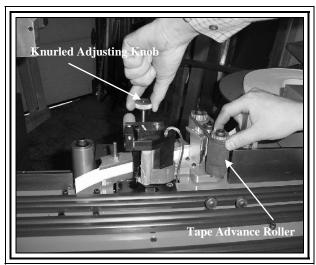


FIGURE 9 FIGURE 10

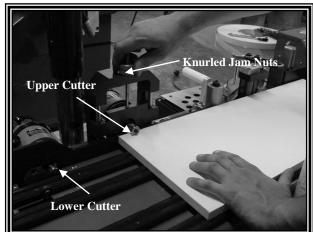
1. Starting Tape Into Advance Rollers (FIGURE 9)

- A) Place the roll of edge tape to be used onto tape table so that when the tape end is pulled toward rollers; the side facing the inside of the roll is facing the operator. NOTE: Tape being used must be a minimum of 1/8" wider than the thickness of the panel. E.g.: 3/4" panel 7/8" tape not 13/16".
- **B**) Place the tape end under the tape infeed ring donut, then while keeping the tape flush to the bottom of the groove.
- C) Place the tape end between the rubber driven roller and the metal pinch roller.
- **D**) Turn the rubber tape advance roller till the tape end just passes the infeed knife set.
- **E**) Adjust tape in feed ring donut height with approximately 1/16" clearance using the plastic thumb knob to lock into place.

2. Adjusting Tape Guide (FIGURE 10)

- **A)**With power switch turned off, advance tape until it passes all the way through the tape guide. *Note:* If tape is too wide to enter tape guide, turn the knurled adjusting knob clockwise till tape can pass all the way through guide.
- **B**) Turn the Tape Advance Roller back and forth by hand so that the tape is continuously moving. Lower the upper guide by rotating the knurled knob counter clockwise until a slight drag is felt against the tape.
- C) Now turn the knurled knob clockwise (about ½ to ¾ of a turn) until the drag disappears.
- **D**) Pull tape back so that the leading edge of the tape is just past the infeed guillotine. This is where the tape will always be positioned when starting a new roll or after changing tapes.

UPPER ROUTER HEIGHT ADJUST



POWER FEEDER HEIGHT ADJUST

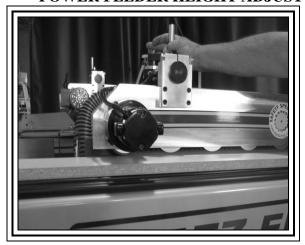


FIGURE 11 FIGURE 12

3. Upper Router Height Adjust (FIGURE 11) (Accutrim system)

A) With the machine in the "OFF" position use a sample piece of panel, slide the panel forward till it passes under the Upper Cutter Contact bearing. The router should lift up approximately 1/16". If not, loosen the two knurled jamb nuts and adjust till the correct height is achieved, then lock the jamb nuts to secure setting. NOTE: At first, this adjustment can be performed with the feeder lifted to full height and swung away (see section on power feeder height adjustment). Once the operator is more familiar with the machine, the adjustment is easily done with the feeder lifted slightly, so the panel can be slid through without contacting the belt feeder.

4. Power Feeder Height Adjust (FIGURE 12)

A) Take a sample of panel to be banded and lay it on the tabletop slides parallel to the front of the power feeder. B) Lower the feeder until the top of the panel is approximately 2MM (3/32") higher than the bottom of the rubber feed belt or a 3/32" from the bottom of the feeder roller.

NOTE: Be sure to tighten both feeder-locking screws before operating and loosen both before adjusting height or the level of the feeder may be disturbed and re-levelling will be necessary. (Reference Fig. 7 & 8)

To swing the power feeder away for cleaning or making adjustments, loosen the rear locking lever then completely remove the front locking lever 2 (**Reference Fig. 7 & 8**). Raise the feeder using the crank handle to its full height and swing towards the outfeed end of the machine. **NOTE:** The dust collection hose must be removed first as well as unplugging the power feeder supply cable. FAILURE TO UNPLUG THE FEEDER CABLE MAY RESULT IN DAMAGE TO THE CABLE AND OTHER ELECTRICAL COMPONENTS.

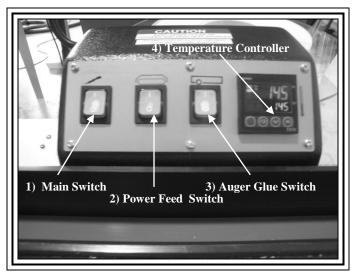


FIGURE 13

5. Control Panel (Figure 13)

The Control Panel functions **Figure 13** from left to right.

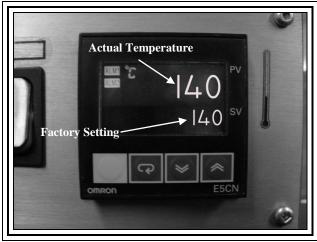
- 1. Main Power On/Off Switch
- 2. Feeder Power On/Off Switch
- 3. Glue Auger On/Off Switch
- 4. Temperature Controller

Note: In regular operating mode these three switches should be all turned to the on position, even in heat up mode.

When the **Main Power Switch** is turned on the glue will begin to heat. All other functions will be operational. Eg. Trim Motors, End Cut Guillotines, etc. **NOTE:** No adjustments should be made while main power switch is on. Severe injury may occur to hands if cutters are triggered inadvertently.

The **Feeder Power Switch** turns the power feeder on and off as well as setting the standby temperature mode. When the feeder is switched on, the normal operating temperature will be shown in the lower SV (Set Value) display. If the machine is to be left standing unused for a short time (1/2 – 1 hour) and the operator does not wish the glue to cool completely, turning the feeder switch off will engage the standby temperature. The lower SV value will change to indicate the lower temperature. Turning the feeder switch on will reinstate the normal operating temperature and heat up time is substantially reduced. *NOTE: The 72GP has a* "Time Out" Function that will turn off the power feeder and engage the standby temperature feature if left running but unused after 15 minutes. To restart in normal operating mode, turn main power switch off for two (2) seconds, then on again.

The Glue Auger Switch turns the glue auger motor on. The auger should be on while at operating temperature to prevent glue from burning in the upper housing and to help maintain consistent temperature. NOTE: The safety feature will not allow the auger motor to turn on until a preset temperature is reached, even though the auger switch is turned on. This is to protect the motor and other components from damage while the glue is still solid or too thick. The machines are all programmed for low temp glue. Contact the factory if you are considering using a high temp glue.



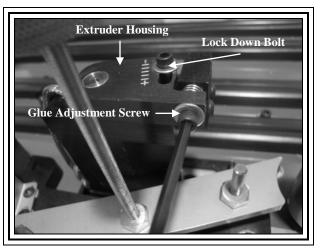


FIGURE 14

FIGURE 15

6. Operating Temperature (Figure 14)

The 72GP has a factory operational setting of 140° C, but is adjustable from $100 - 210^{\circ}$ C please call factory if there is a need to change setting. The operating temperature will depend on the glue being used. Refer to glue manufacturer's specification sheet for correct operating range. We recommend using Jowatt low temp glue, applies best at 140° C (Cat #282.20).

To change temperature setting, use the up or down arrow until the lower green SV display reads the desired temperature. The temperature will begin to change, but allow sufficient time for the new setting to be reached.

7. Glue Application Adjustment (Figure 15)

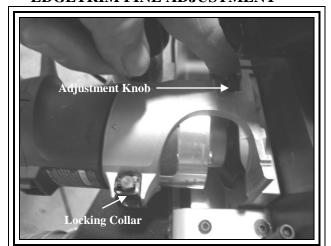
From time to time the operator may want to adjust the amount of glue being applied due to varying conditions. Including: Panel core density (porosity), type of tape being applied, viscosity of glue, etc.

To adjust the amount of glue being applied, slightly loosen the lock down bolt using the 1/8" allen key wrench. Then use the 1/8" allen, as shown in **Figure 15**, to adjust your Glue adjustment screw. Turning the glue adjustment screw clockwise will increase the amount of glue and turning it counter clockwise will reduce it. This adjustment is done while at operating temperature and while auger is turning. *CAUTION: These parts are extremely hot and can produce severe burns*.

8. Glue Level

The glue reservoir must be filled to a minimum level that covers the thermocouple (small metal probe at front left of reservoir). When adding glue pellets to existing hot glue, add to the rear of the reservoir so new pellets have time to melt before being drawn into the glue auger. It is very important that the Glue Pot not be filled too full. For most small shops edgebanding two (2) hours per day or less, keeping the glue level '4" below the top of the middle heating fins ensure that new glue will be added frequently. This will keep the glue fresh, ensuring maximum adhesion at all times and reducing cleaning and maintenance to the glue applicator assembly, as well as shortening heat up times. *CAUTION: Glue reservoir and all related parts, including the lid, are extremely HOT. Care must be taken while working around hot parts to avoid severe burn*

EDGETRIM FINE ADJUSTMENT



REAR CUT ADJUSTMENT

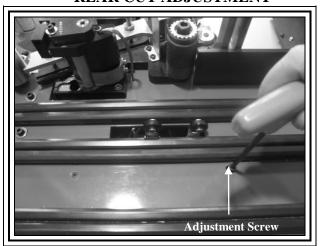


FIGURE 16 FIGURE 17

9. Top and Bottom Edge Trim Fine Adjustment (Figure 16)

The 72GP utilizes high rpm routers with a 10⁰ bevel bit to achieve a smooth accurate trim. To adjust the closeness of the trim, loosen the router locking collar and rotate the adjustment knob till the trim is satisfactory. Rotating the knob clockwise, leaves more tape, counter clockwise brings the trim closer to the panel edge. Remember to tighten the locking collar after each adjustment. TIP: It's a good idea to keep a slight amount of pressure on the back of the router while making adjustments to take out any free play.

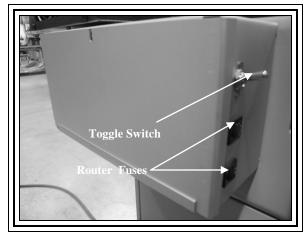
10. Front Tape Length Adjustment

No adjustment is necessary as the knife cuts while being tight against the panel.

TIP: To get the best results, be sure knife components are free of debris.

11. Rear Tape Length Adjustment (Figure 17)

Periodic adjustment may have to be made due to many factors. Panel squareness, feed speed, panel warpage and tape composition (wood/polyester/PVC) can all affect the rear trim length. To adjust, run a sample panel with the tape to be used. Note the rear trim length. To lengthen trim, turn the adjustment screw with the 3/16 allen wrench clockwise. To shorten, turn counter clockwise until you achieve the desired trim. Note: Many types of panel composition (i.e. melamine) are prone to having some curvature when cut to size from a full sheet. This can affect rear trim. It is suggested that trim be adjusted slightly long (1/16) and then touched up with a file or knife in cases where rear trim varies from panel to panel. This will avoid having a short trim situation where the tape must be removed and new tape reapplied.



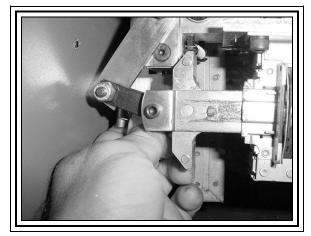


FIGURE 18 FIGURE 19

12. Banding Laminate Strips

Banding laminate strips is done by placing a strip into the slot, similar to the tape placement. The strip should be approximately 1" longer than the panel being banded. Because the guillotines cannot end trim the laminate they must be disabled and the trimming of the ends done manually.

To disable the rear guillotine, turn off the toggle switch located on the side of the main power box (**FIGURE 18**).

To disable the front guillotine with the power turned off, open the outfeed end access door and remove the return spring from the ½" attachment rod and push the knife closed manually (**FIGURE 19**). *NOTE: Be sure power is off while doing this.* The guillotine will stay closed and out of the way of the laminate strip passing by. **Note:** A buzzing noise may be heard as the panel passes through but this is normal and when returning back to normal edgebanding operation. Reconnect the spring for banding tape.

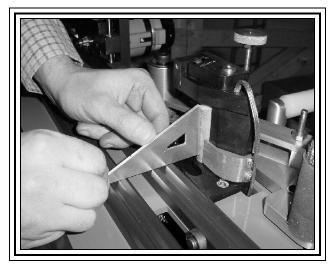
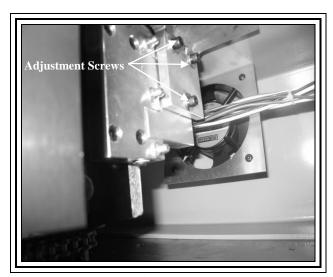




FIGURE 20 FIGURE 21

13. Adjusting Glue Pot / Glue Auger

If the glue auger is not perpendicular to the panel face it may be easily adjusted by removing the cover from the glue hinge access opening (FIGURE 21) and using a 3/16" Hex Wrench to loosen the adjusting screws (FIGURE 22). Using the aluminium square provided (Figure 20), tilt glue pot until glue auger is perpendicular to the machine top and retighten screws. NOTE: The auger is factory aligned and tested however due to shipping it may have moved slightly and need minor alignment, following these procedures. POWER MUST BE DISCONNECTED AND GLUE POT ALLOWED TO COOL BEFORE PERFORMING THIS ADJUSTMENT.



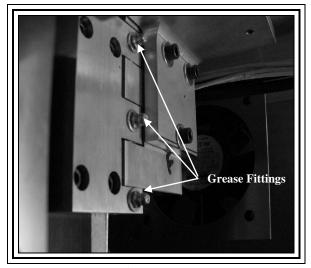


FIGURE 22 FIGURE 23

NOTE: Hinge Access opening (FIGURE 21) also allows access to hinge pin grease fittings. The hinge pin should be lubricated after every 40 hours of use with a high quality high temperature grease (FIGURE 23).



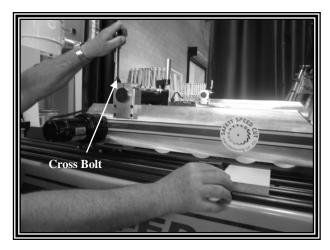


FIGURE 24 FIGURE 25

14. Opening End Access Doors

To open end access doors (**FIGURE 24**), use a 1/8 allen wrench to remove the 10-24 flat head screws located in table top at either end of machine. When closing the doors be sure that the retention screw is aligned correctly and won't become cross-threaded.

NOTE: End access doors must remain closed at all times during operation and should only be opened after power has been disconnected to avoid possible electrical shock.

15. Powerfeeder Leveling

If powerfeeder level has been altered by accidentally raising or lowering feeder without loosening infeed locking handle, it can be re-levelled by the following procedure.

- A. Loosen feeder mount cross bolt just slightly with a 9/16 wrench (**FIGURE 25**), just enough so that feeder will rotate on support post with a moderate amount of pressure on the infeed end.
- B. Using a small piece of melamine (approximately 2" x 3") as a gauge, slide melamine piece under #2 and #6 wheels and adjust tilt of feeder until it is perfectly level (within 1/64") from front to back.
- C. Tighten cross bolt when finished and re-check level to be sure the feeder hasn't moved while retightening.

NOTE: It is imperative that the feeder be parallel with tabletop. If your panel does not stay tight to the guide fences while operating check the feeder level and adjust if necessary.

16. Starting Your Machine and Feeding in a Board

A. Switch the main power switch to on position and turn on the power feeder and auger switch. Operator should see temperature reading on display reach operating temperature (140° C factory setting) in approximately 10-15 minutes depending on available supply voltage and level of glue in reservoir. *NOTE: Temperature reading may rise past the set point for a short time before settling back to set point. This is normal*

<u>CAUTION</u>: A low temperature glue must be used $(140-160^{\circ}\text{ C operating range})$ to prevent serious damage from occurring to the auger drive motor. JOWAT 282-20 Glue is recommended. If it is necessary to use high temperature glue, other changes must be made to the safety settings programmed into the temperature controller to avoid damaging components. Contact Safety Speed for technical information necessary to make these changes.

B. Once the machine is at operating temperature *(see section on Operating Temperature), it is ready to start edgebanding. Slide the board along the infeed fence keeping pressure against tape advance roller and the infeed fence, until leading edge of board meets the advanced tape at the pressure roller (FIGURE 26). At this point the power feeder will maintain adequate pressure of the panel against the pressure roller. After the board has stopped at the outfeed side of the feeder it must be pulled directly off the end of the machine, rather than lifting it up, so that the trim motors will automatically turn off. NOTE: It is the movement of the panel against the first rubber roller, which rotates the roller and advances the tape. Failure to keep the panel against the infeed fence and first roller will cause the tape to be short at the front of the panel.

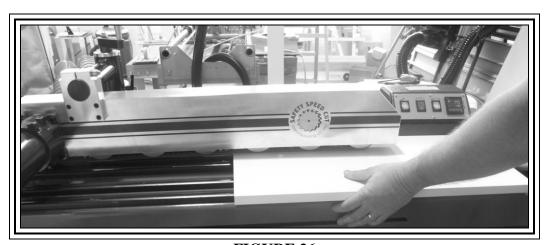


FIGURE 26

C. MAINTENANCE

The glue reservoir must be cleaned regularly of burnt glue build-up. Care must be taken not to bend or damage the thermocouple during the cleaning process. The cleaning frequency will vary depending on amount of usage, temperature range of glue being used and type of glue being used.

Every eight (8) hours of operation

- Lubricate the glue spindle drive chain with a high quality chain lubricant.
- Open the end access covers using the 1/8" hex wrench provided, and using compressed air, blow through the area below the machine to remove cuttings, which may have escaped the dust collection system.
- Spray the end trim guillotines with WD-40 or equivalent to reduce glue and particle build-up.
- Raise power feeder and while it is operating, hold a damp cloth to the bottom of the belt, to remove build-up that may affect belt traction and feed consistency. <u>WARNING:</u> Use caution when doing this and keep hands away from trim bits and end cutters that may be inadvertently turned on. A safe way to avoid accidentally turning routers on while cleaning belt, is to switch the manual switches situated on the routers, to the "OFF" position.
- Periodically, the four (4) blue slide strips mounted on the tabletop should be cleaned and lubricated with WD-40 or an antifriction spray such as "Top Cote".
- Inspect and clean the tracer bearings to make sure they are clean and free of debris. These bearing are located in front of the upper and lower router bits. The bearings ride on the material as the trimming takes place.

Once a month

• With the locating shoulder screw removed, lift the power feeder to its highest position and apply a **light** coat of high quality grease to the feeder support post.

D. Electrical Supply Diagram-4 Wire

- #1 Hot (Black)
- **#3 Neutral (White)**
- **#5 Hot (Red)**

Green Ground

