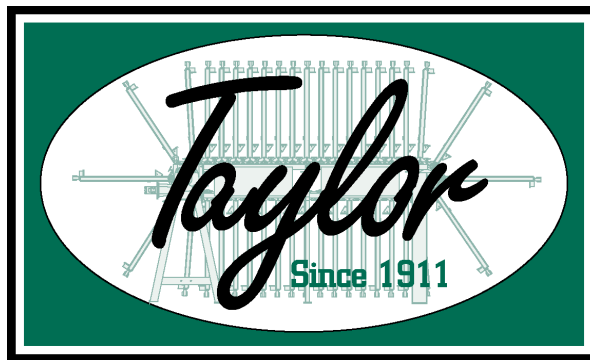

The Taylor Clamp Carrier



Model - #CC-M2, #80N, 817B
SN - _____

108 Parker Ave.
Poughkeepsie, NY 12601
Tel: (845)-452-3780
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INTRODUCTION

INTRODUCTION

We at James L. Taylor Mfg. Co. would like to thank you and your company for selecting the Taylor Clamp Carrier. With proper care, your Clamp Carrier will provide you with many years of the highest quality, most trouble-free edge gluing available.

This manual contains important information about the installation, operation and maintenance of your Clamp Carrier. We urge you to read it carefully, become familiar with the components and features it describes, and follow its recommendations, to help make your edge gluing trouble-free and productive.



Limited Warranty

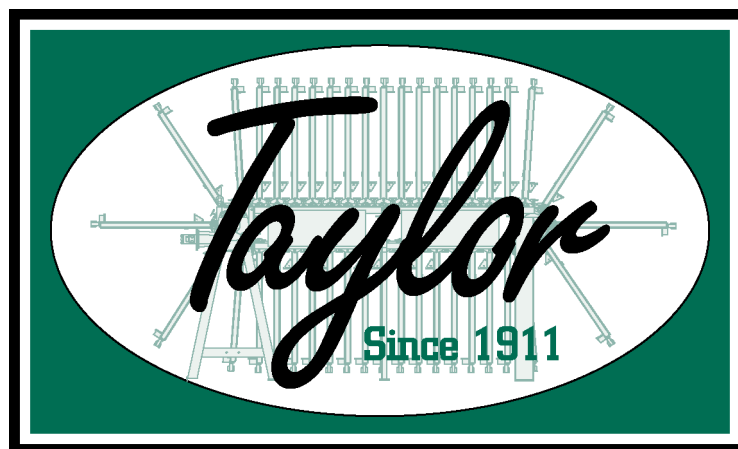
(This supersedes all previous warranties)

James L. Taylor Manufacturing guarantees all products of its manufacture to be free of defects in workmanship or material when properly installed, serviced and maintained under normal conditions. **James L. Taylor Manufacturing's** obligation under this warranty is limited to repairing or replacing any part or parts thereof which shall within one (1) year after shipment to the original user, be returned to its factory, transportation charges prepaid, and which **James L. Taylor Manufacturing's** examination shall disclose to be defective.

James L. Taylor Manufacturing assumes no liability for labor charges incidental to the adjustment, service, repairing, or removal or replacement of parts or other losses, or for expense of repairs made outside of its factory, except when made pursuant to **James L. Taylor Manufacturing's** PRIOR written consent.

James L. Taylor Manufacturing does not guarantee equipment furnished by us, but manufactured by others, such as belts, electric motors, starters, controls or other electrical equipment or accessories, as they are guaranteed separately by their respective manufacturers. **James L. Taylor Manufacturing** assumes no liability whatever for any of these parts claimed to be defective or for damages or delays caused by defects beyond making such repair or furnishing duplicate parts within the manufacturer's warranty, nor shall we be liable for any defective material repaired or replaced without our consent.

The foregoing shall constitute the fulfillment of all of our obligations under this warranty and there are no other warranties or guarantees, expressed or implied except as stated herein.



RULES FOR SAFE OPERATION

RULES FOR SAFE OPERATION

Types of Warnings

This is the safety alert symbol. It is used to alert you to potential injury hazards.



Obey all safety messages that follow this symbol to avoid possible injury.

DANGER in white letters on a safety red background with a safety red exclamation point.



This indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.

WARNING in black letters on a safety orange background with a safety orange exclamation point.



This indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.

CAUTION in black letters on a safety yellow background with a safety yellow exclamation point.

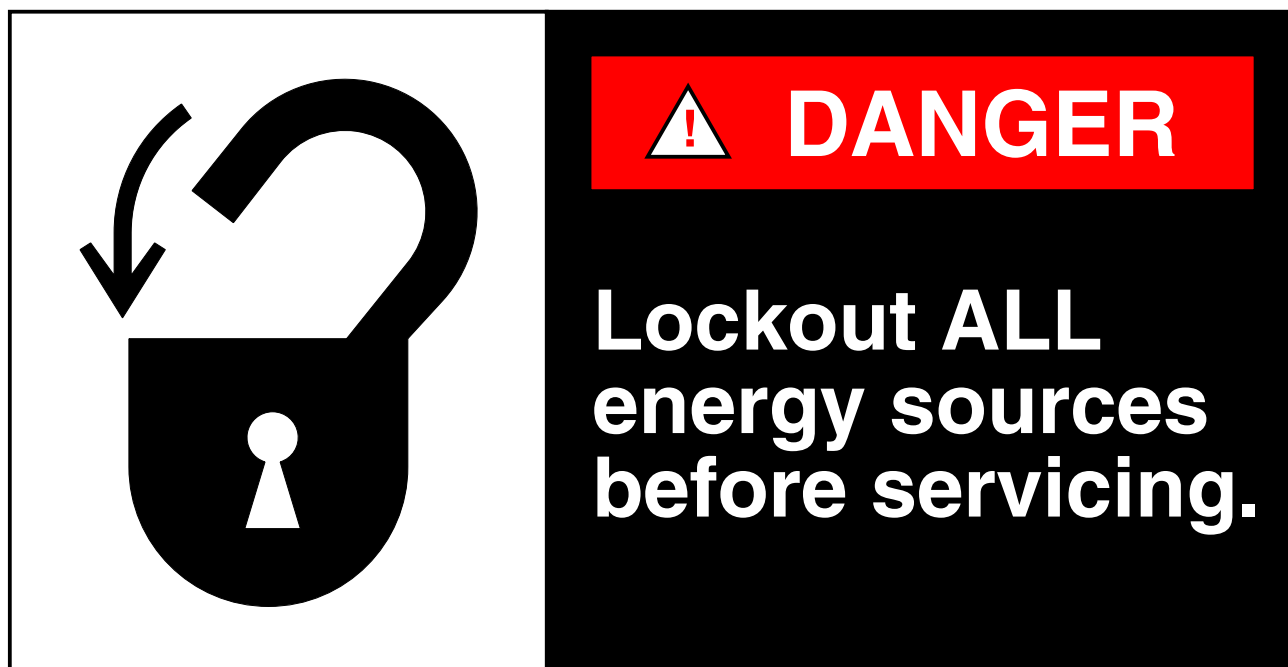


This indicates a potentially hazardous situation which, if not avoided, COULD result in minor or moderate injury.

RULES FOR SAFE OPERATION

General Safety Rules

- Follow lockout procedure before servicing.
- Read and understand manual before operating machine.
- Wear eye protection.
- See the plant supervisor to determine what protective equipment each job requires.
- Follow electrical and fire codes.
- Do not wear loose clothing, jewelry or long hair around operating equipment.
- Keep guards in protective position when machine is operating.
- Keep clear of belts chains and moving parts.



INSTALLATION

INSTALLATION

Clamp Carrier Specifications

Machine	Production	Electrical Requirements	Air Requirements
8 1/2' -6 Section Clamp Carrier	126 Panels per day	None	None
8 1/2' 12 Section Clamp Carrier w/ Swing Style CT/PF, SDAMD	315 panels per day	None	14cfm @90 psi
8 1/2' 20 Section Clamp Carrier w/ Semi Auto. CT, PF, HDAMD	360 panels per day	None	14cfm @90 psi (1" Air Line)
8 1/2' 20 Section Clamp Carrier w/ Semi Auto. Hyd. CT, PF, HMD	360 panels per day	240/480v Three phase	4 cfm @90 psi(3/8" Air Line)
8 1/2' 40 Section Automated Clamp Carrier	840 Panels per day	120v Single Phase	20 cfm @90 psi(1" Air Line)
8 1/2' 40 Section Hydraulic Automated Clamp Carrier	980 Panels per day	240/480v Three Phase	None
8 1/2' 60 Section Dual Hydraulic Auto. Clamp Carrier	1930 panels per day	240/480v Three Phase	None
#128 Polyvinyl Glue Pump	6 gal. per hour	120v Single Phase	None
Plate Spreader	For up to 20 sec. CC	None	None
16' Conveyorized	For 20 sec. & up CC	240/480v 3-Phase	None
Opti-Sizer 6'	For 20 sec. & up CC	240/480v 3-phase	1cfm @ 60 psi.

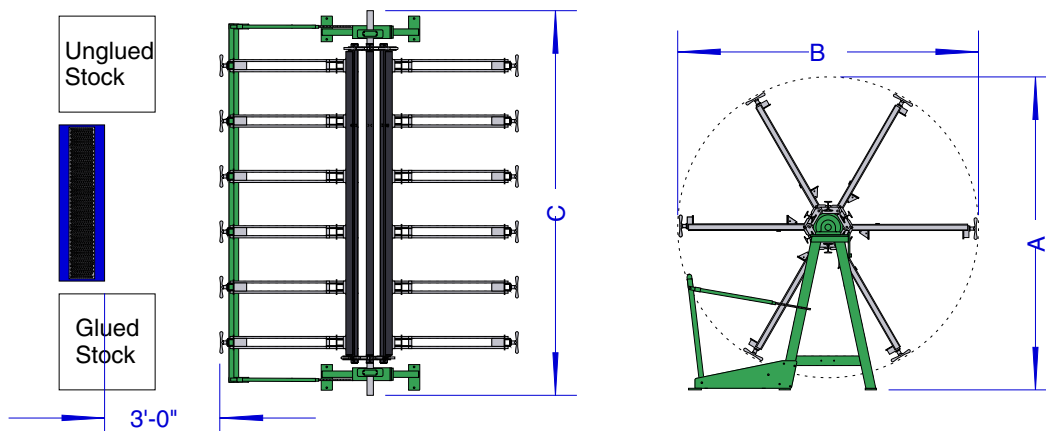
Manual Clamp Carrier

A. Height: 8'4" + 2" for every inch of clamp opening over 32"

B. Length:	Number of sections: 6	12	20	30	40
	Overall length: 7'9"	9'4"	11'6"	13'11"	16'4"

Notes: Add 2" to the dimension above for every inch of clamp opening over 32". The distance from the rear shaft to the rear wall should be at least 50" + 1" for every inch of clamp opening over 32".

C. Width:	Machine size:	8 1/2'	10 1/2'	12 1/2'	16 1/2'
	Overall Width:	10'1/4"	12'1/4"	14'1/4"	18'1/4"



INSTALLATION

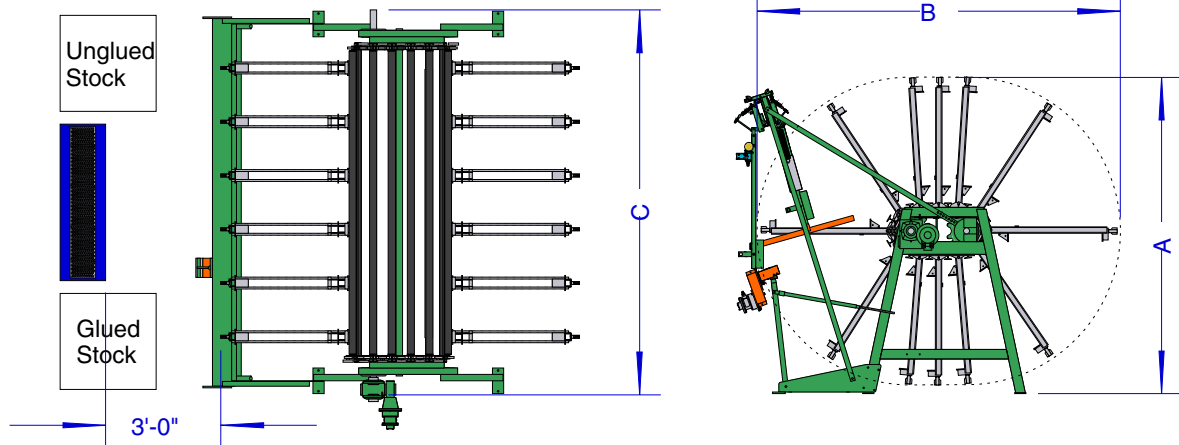
Swing Style Clamp Carrier

A. Height: $8'4" + 2"$ for every inch of clamp opening over 32"

B. Length: Number of sections: 6 12 20
Overall length: 7'9" 9'4" 11'6"

Notes: Add 2" to the dimension above for every inch of clamp opening over 32". The distance from the rear leg to the rear wall should be at least $50" + 1"$ for every inch of clamp opening over 32".

C. Width: Machine size: 8 1/2' 10 1/2'
Overall Width: 10'1/4" 12'1/4"



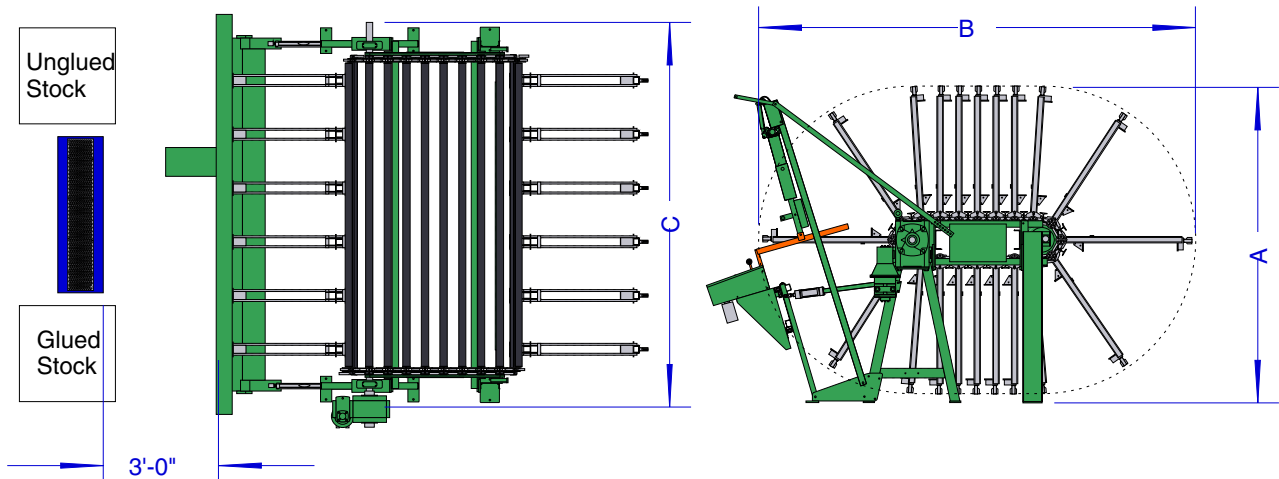
Semi-Automatic Clamp Carrier

A. Height: $8'4" + 2"$ for every inch of clamp opening over 32"

B. Length: Number of sections: 6 12 20 30 40 60
Overall length: 7'9" 9'4" 11'6" 13'11" 16'4" 21'2"

Notes: Add 2" to the dimension above for every inch of clamp opening over 32". The distance from the rear leg to the rear wall should be at least $50" + 1"$ for every inch of clamp opening over 32".

C. Width: Machine size: 8 1/2' 10 1/2' 12 1/2' 16 1/2'
Overall Width: 10'1/4" 12'1/4" 14'1/4" 18'1/4"



INSTALLATION

Automated Clamp Carrier

A. Height: 8'4" + 2" for every inch of clamp opening over 32"

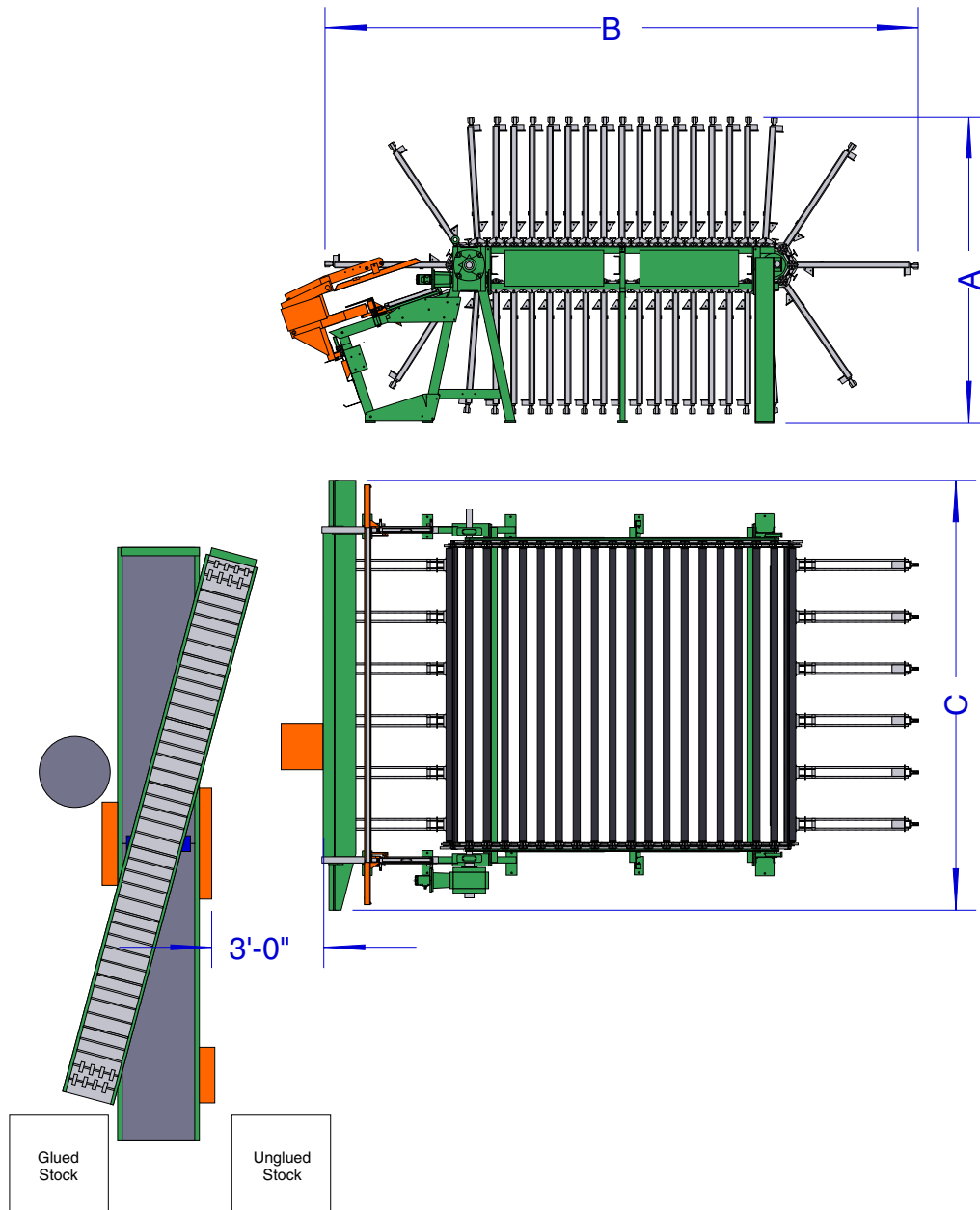
B. Length:

Number of sections:	20	30	40	60	80
Overall length:	11'6"	13'11"	16'4"	21'2"	26'

Notes: Add 2" to the dimension above for every inch of clamp opening over 32". The distance from the rear shaft to the rear wall should be at least 50" + 1" for every inch of clamp opening over 32".

C. Width:

Machine Size:	8 1/2'	10 1/2'	12 1/2'	14 1/2'	16 1/2'	20 1/2'
Overall Width:	11'7"	13'7"	15'7"	17'7"	19'7"	23'7"



INSTALLATION

INSTALLATION

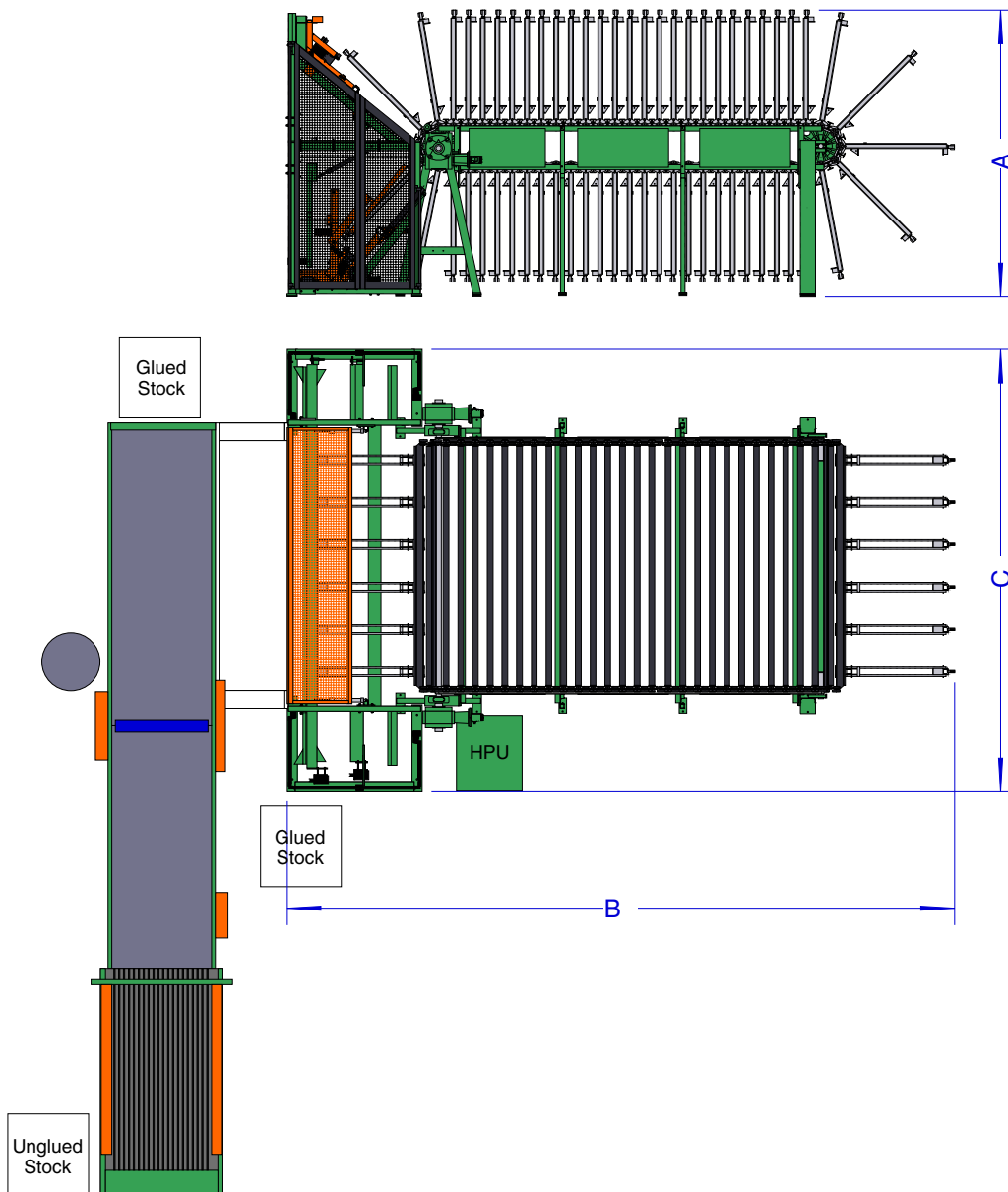
Dual-Automated Clamp Carrier

A. Height: 8'9" + 2" for every inch of clamp opening over 32"

B. Length: Number of sections: 60 80
Overall length: 22'1" 26'11"

Notes: Add 2" to the dimension above for every inch of clamp opening over 32". The distance from the rear shaft to the rear wall should be at least 50" + 1" for every inch of clamp opening over 32".

C. Width: Machine Size: 8 1/2' 10 1/2'
Overall width: 14'7" 16'7"



INSTALLATION

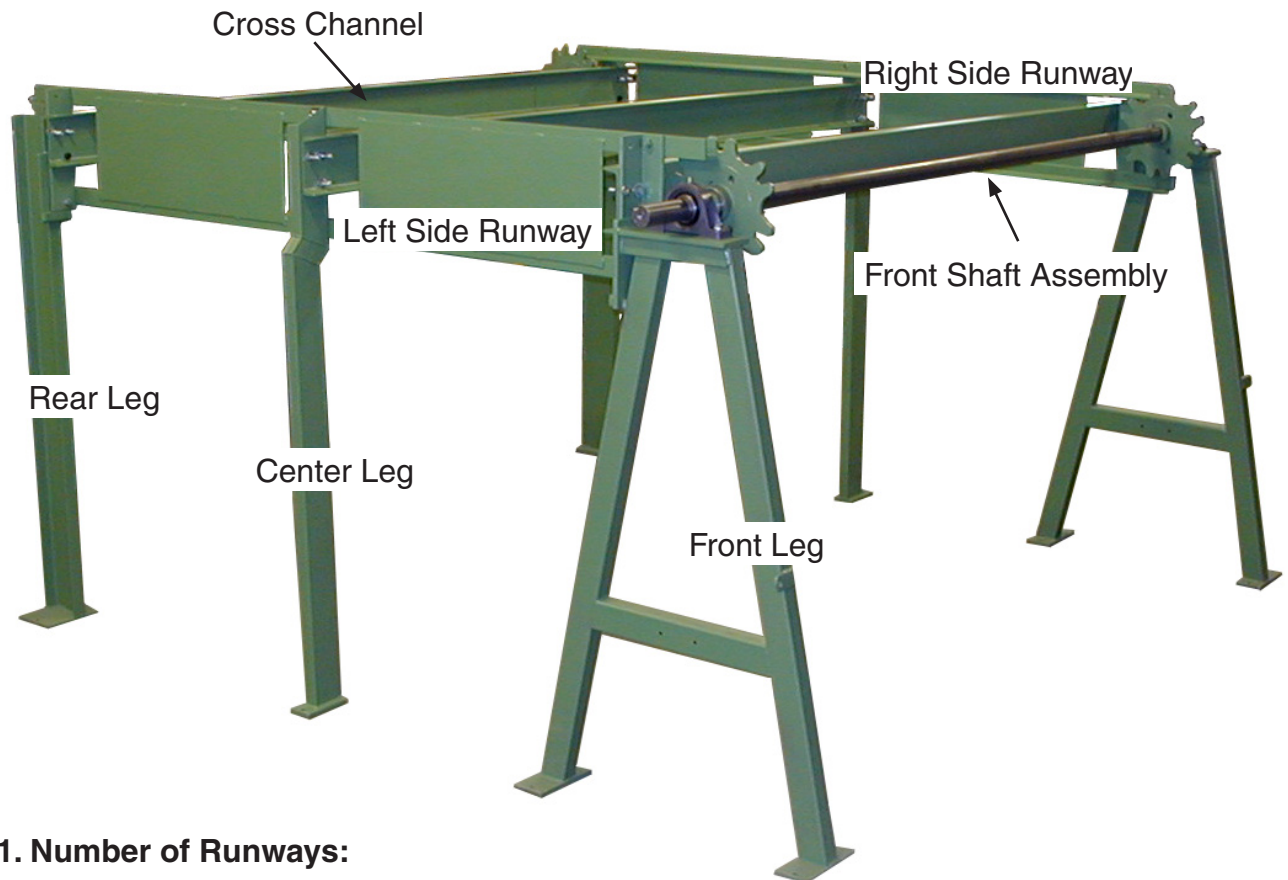
Overview of Machine Installation

1st	Install Clamp Frame
2nd	Install Carrier Drive
3rd	Install Front End (Tightener/Flattener)
4th	Install Clamps

INSTALLATION

Clamp Carrier Section Installation

When unpacking your machine, make sure that you have all the necessary frame pieces:



INSTALLATION

1. Number of Runways:

Width of Machine	# of Runways
8 1/2'	2 side
10 1/2'	2 side, 1 center
12 1/2'	2 side, 2 center
14 1/2'	2 side, 2 center
16 1/2'	2 side, 2 center
20 1/2'	2 side, 3 center

2. Number of Legs:

Number of Sections	# of Legs	# of Cross Channels
20	2 front & 2 rear	2
30 & 40	2 front, 2 rear & 2 center	3
60	2 front, 2 rear & 4 center	4
80	2 front, 2 rear & 6 center	5

3. Number of Cross Channels:

Note: On larger width machines, the frame may be partially assembled.

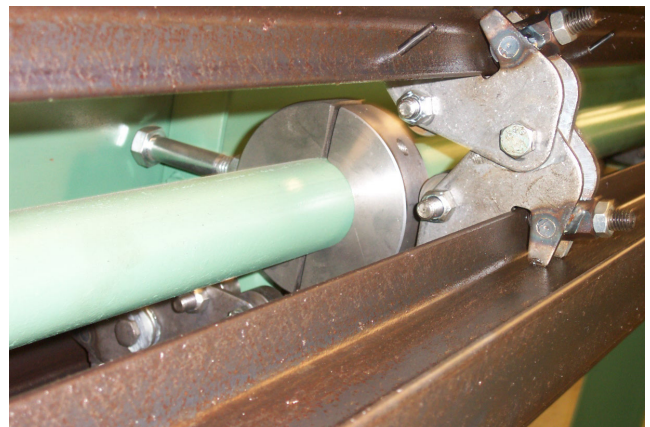
Other Frame Configurations

Due to the width of the frame and its number of sections, many frames may appear different:



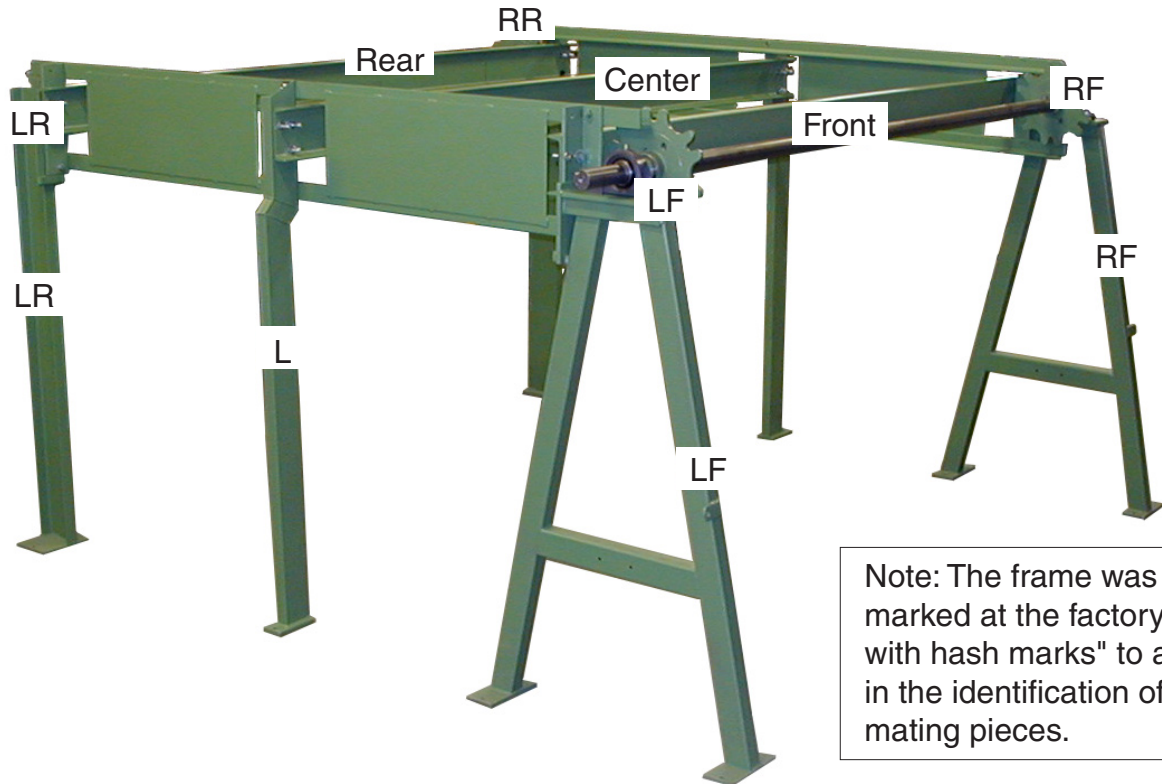
INSTALLATION

Rear Shaft Rings **MUST** be assembled as shown and tensioned. If they are not kept tight, damage to your machine will result.



Assembling the Frame

The frame pieces are marked "RF" (Right Front), "LR" (Left Rear), etc. to aid in their identification:



1. Attach the "RF" end of the right side runway to the right front leg (also marked "RF") with (1) 1/2" x 1-1/4" hex cap screws and (1) socket head cap screw. Place (2) 1/2 X 2" Hex cap screws into the top two holes on the rear of the side runway. These bolts will be used for the cross channels. Leave them loose for now. Attach the "RR" end of the right side runway to the right rear leg ("RR") with (1) 1/2" x 1-1/4" hex cap screws and (1) socket head cap screw. The socket head cap screws go in the top holes in the legs.
2. Attach the "LF" end of the left side runway to the left front leg ("LF") with (1) 1/2" x 1-1/4" hex cap screws and (1) socket head cap screw. Again, place (2) 1/2 X 2" Hex cap screws into the top two holes on the rear of the side runway. These bolts will be used for the cross channels. Leave them loose for now. Attach the "LR" end of the left side runway to the left rear leg ("LR") with (1) 1/2" x 1-1/4" hex cap screws and (1) socket head cap screw. The socket head cap screws go in the top holes in the legs.
3. Slide the "Front" and "Rear" cross channels through the left, and right runways. After removing the 1/2" x 1-1/4" socket head cap screws that were installed in steps 1 and 2, fasten each end of each cross channel to the side runways with (2) 1/2" x 2" and (1) 1/2" x 1-1/4" socket head cap screws.

INSTALLATION

4. Bolt the right ("R") and left ("L") center legs (if provided) to the left and right side runways with (2) 1/2" x 1-1/4" flat head screws per leg.
5. Slide the "Center" cross channel(s) (if provided) through the left and right runways, and bolt it (them) to the side runways with (3) 1/2" x 2" hex cap screws per leg.

Installing the Front Shaft

1. Set the assembled shaft on the front legs. (Note: The ends of the front shaft assembly are marked "R" and "L" respectively on the keyways and bearings.)
2. Insert one roll pin into each end bearing and front leg. Pull the end bearings down and bolt them onto the front legs.

Installing the Rear Shaft

1. Slide a collar, a rear sprocket (has grease fitting, no keyway) with grease fitting facing out, and a second collar onto each end of the rear shaft. Leave the collars loose for now.
2. Lift the shaft and insert the ends of the shaft into the yokes in the rear legs.
3. Rotate the rear shaft such that the tapped holes in the ends of the shaft are horizontal, with the over-bored ends of the holes toward the rear of the machine. Insert two 1/2" x 6" full thread bolts through the yokes. Thread on lock nut between the yoke and the shaft and then insert bolts into the tapped holes in the ends of the shaft. Tighten the bolts only a few turns. (Note: The rear shaft remains stationary when the Carrier rotates.)

Placing the Machine

1. Place the frame in the exact position it is to occupy. Use the dimensions from the "Clamp Carrier Specification Sheet" in this manual.
Note: Be sure to either place the rear of the Clamp Carrier against a wall or otherwise guard the rear of the Carrier to prevent injury to passersby that may inadvertently walk into the exposed clamps.

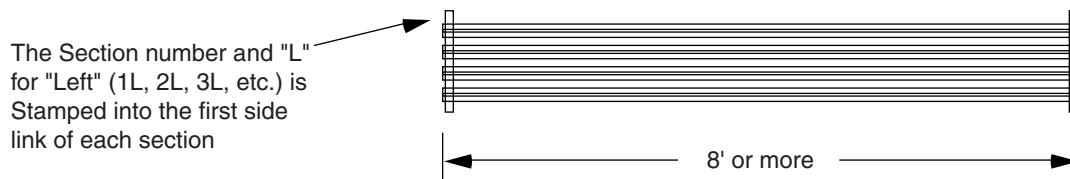
Squaring the Frame

1. Square the machine by measuring the diagonals from the vertical angle irons attached to the front and rear legs.
2. Level the runways from front to rear and the cross channel(s) from right to left, shimming the legs as necessary.
3. Shim the center legs, if the Carrier is equipped with them, as necessary, to avoid pulling the side runways downward at their centers.
4. Lag the legs to the floor.

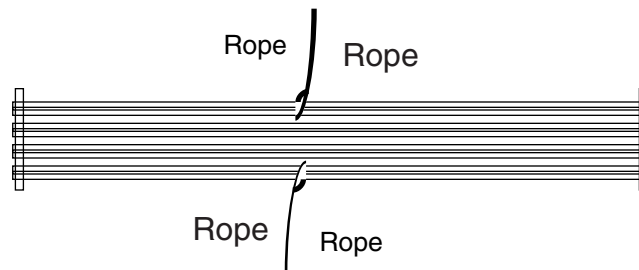
INSTALLATION

Installing the " I " Beams

The I beam sections are shipped partially assembled. They look something like this:



1. Find I beam section number 1. Lift it onto the front of the Carrier frame, onto the upper tracks of the side and center runways. Be sure that the "1L" mark is on the left side of the machine, with the mark toward the rear of the machine.
2. Attach two ropes to I beam section number one. You will pull on these ropes to advance the sections around the frame and to keep the sections from falling off the front or rear of the machine:

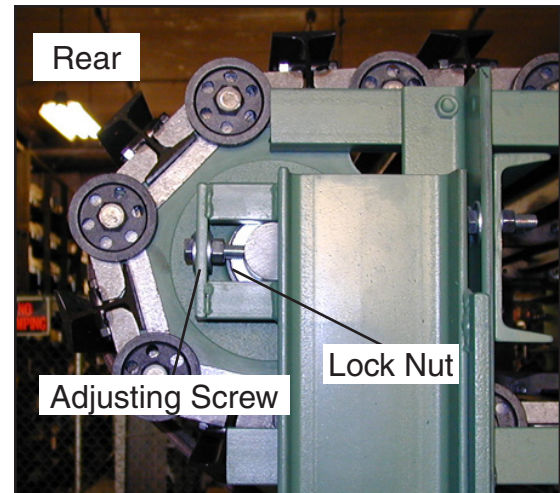
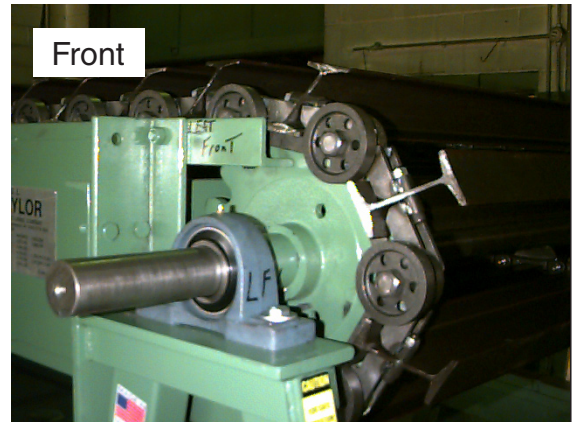


3. Find I beam section number 2. Lift it onto the front of the Carrier frame, in front of section number 1. Be sure that the "2L" mark is on the left side of the machine.
4. Using the spare 5/8" hex cap screws, and wheels, join the side links of the two sections together. Tighten the 5/8" hex cap screw, allowing just enough clearance for the wheel to turn freely. Lock the screw in place with a 5/8" hex nut. Leave the center links unconnected for now.
5. Install the remaining I beam sections in the same manner.

Notes: At each interval, be sure to secure the ropes to prevent the I beam sections from running off the back end of the machine. Also, in rolling the I beams around the rear shaft, the assembly must be kept taut by pulling on both ropes simultaneously. The side link joints will fit into the large tooth spaces of the sprockets.

INSTALLATION

6. The closing of the assembly is done on the front sprockets. The two open ends of the side links must enter a tooth space of the sprocket simultaneously in order for them to fit together properly.
7. Join the center links between each I beam section with hex cap screws.
8. Position the rear sprockets on the rear shaft such that all of the clearance between the side rollers and the side runways is on the left side of the machine; there should be no clearance between the side rollers and the side runways on the the right side of the machine.. Position the collars against the sprockets and tighten the set screws to lock them in place.
9. Tighten the I beam/chain assembly with the adjusting screws in the rear shaft. Remove all slack from the chain. Tighten the lock nuts to keep the adjusting screws in place.
10. Check that the I beam/chain assembly rotates freely on the frame. If not, make adjustments as necessary.
11. Grease the side runways (particularly the right side runway) and side roller bolt heads to minimize friction between the side roller bolt heads and the vertical faces of the side runways.

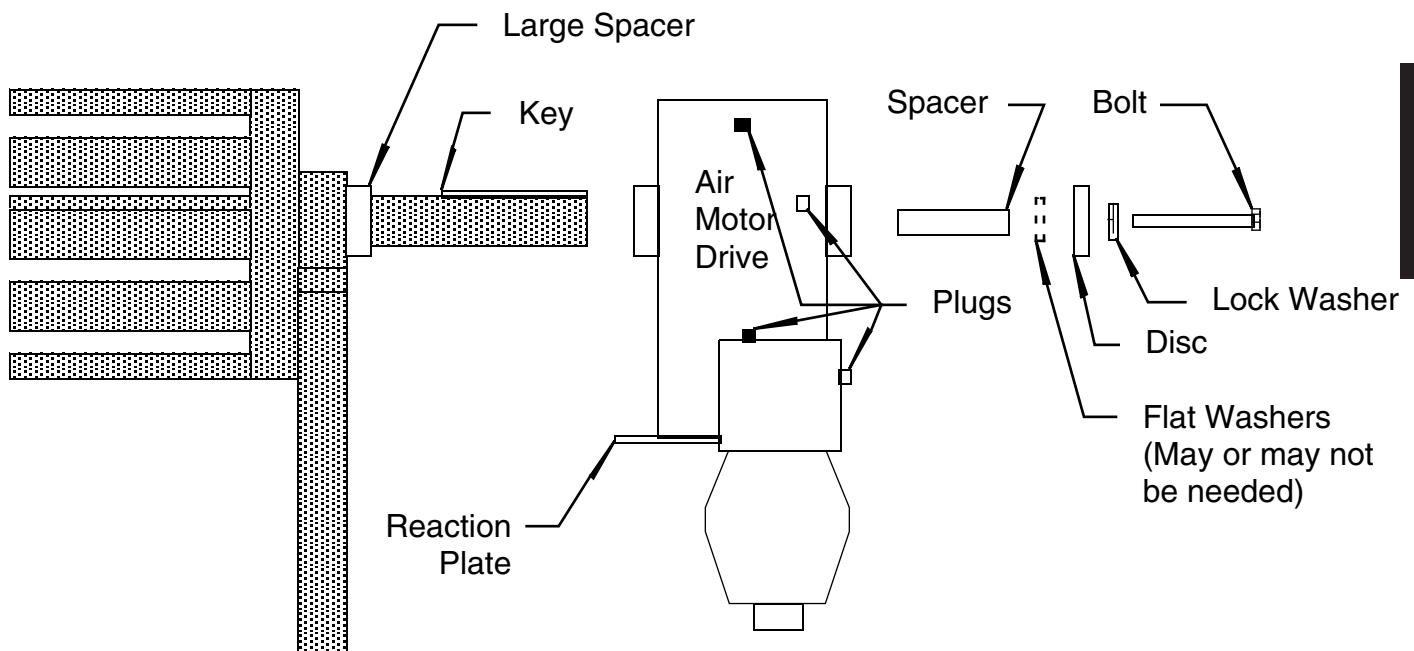


INSTALLATION

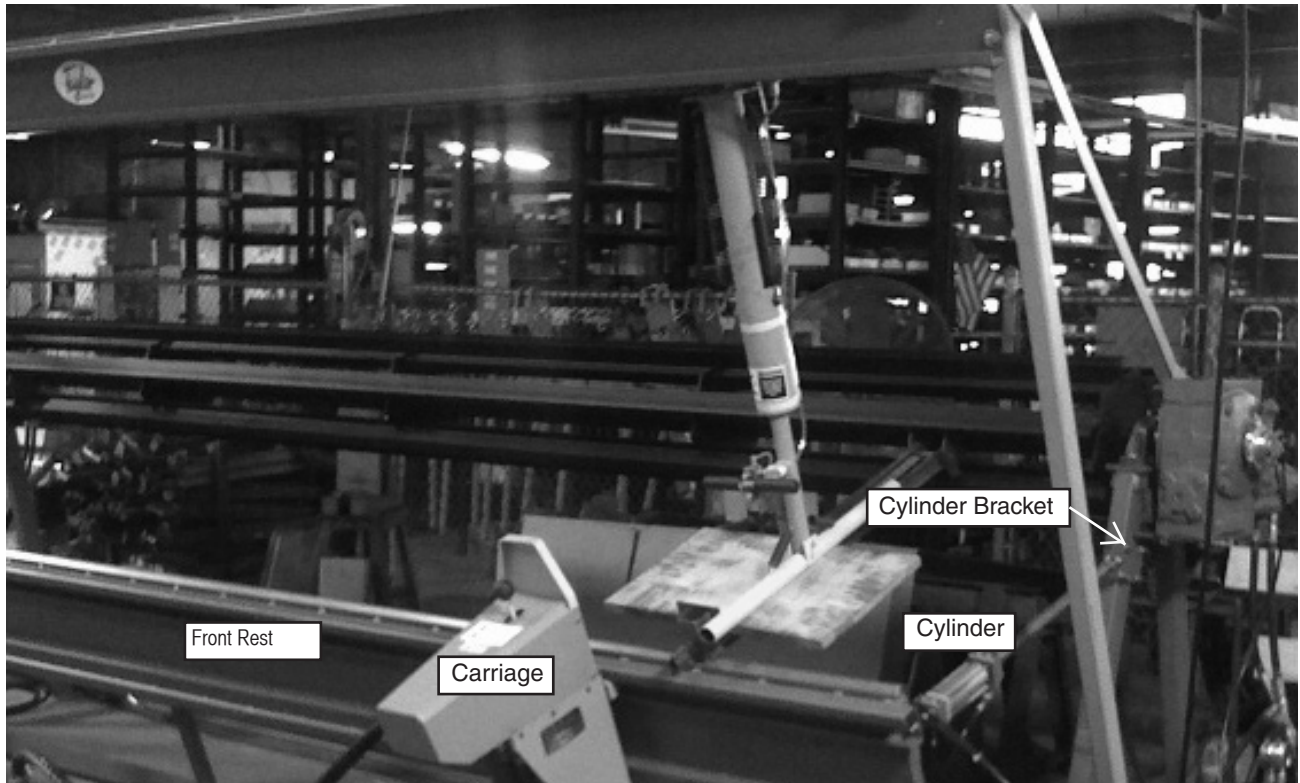
Mounting the Air Motor Drive on the Front Shaft

The package of mounting parts for the Air Motor Drive is attached to the Air Motor Drive.

1. Slide the large (painted) spacer onto the right end of the front shaft.
2. Slide the Air Motor Drive onto the right end of the front shaft until the Drive contacts the large spacer. The plate at the bottom of the Air Motor Drive should enter between the two uprights of the front leg.

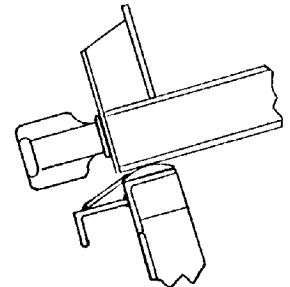


3. Rotate the front shaft to align the keyway in the shaft with the keyway in the Air Motor Drive.
4. Insert the longest key possible.
5. Several 1/2" spacers have been supplied, each of different length. You will use only one of them. Select the spacer that will project slightly beyond the right end of Air Motor Drive's hollow shaft as the other end of the spacer contacts the front shaft. Use flat washers if necessary.
6. Secure the Air Motor Drive with the disc, 1/2" lockwasher, and 1/2" hex head bolt.
7. There are four plugs shown on the diagram above, two black and two white. Remove the two black plugs from the Air Motor Drive and replace them with plastic vented plugs (supplied). This will minimize pressure buildup in the Air Motor Drive.



Installing the Front Rest

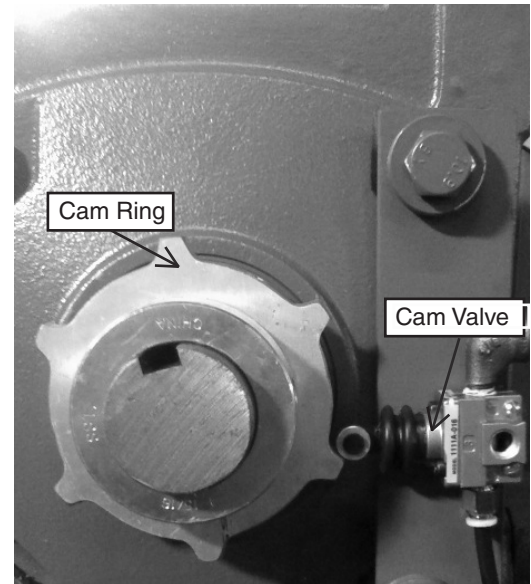
1. Attach the cylinder brackets to the front legs of the Clamp Carrier, approximately 12" from the tops of the legs.
2. Secure the two positioning plates to the front legs of the Carrier frame with the U-bolts supplied.
3. Attach the base of the front rest to the two positioning plates. Secure with 1/8 x 1-1/2 cotter pins.
4. Swing the front rest up and attach the cylinders to the front rest.
5. Lag the positioning plates to the floor.
6. Adjust the cylinder brackets for proper placement on the front legs. The ends of the clamps should just overlap the top rail of the front rest when the front rest is in its upright position.



INSTALLATION

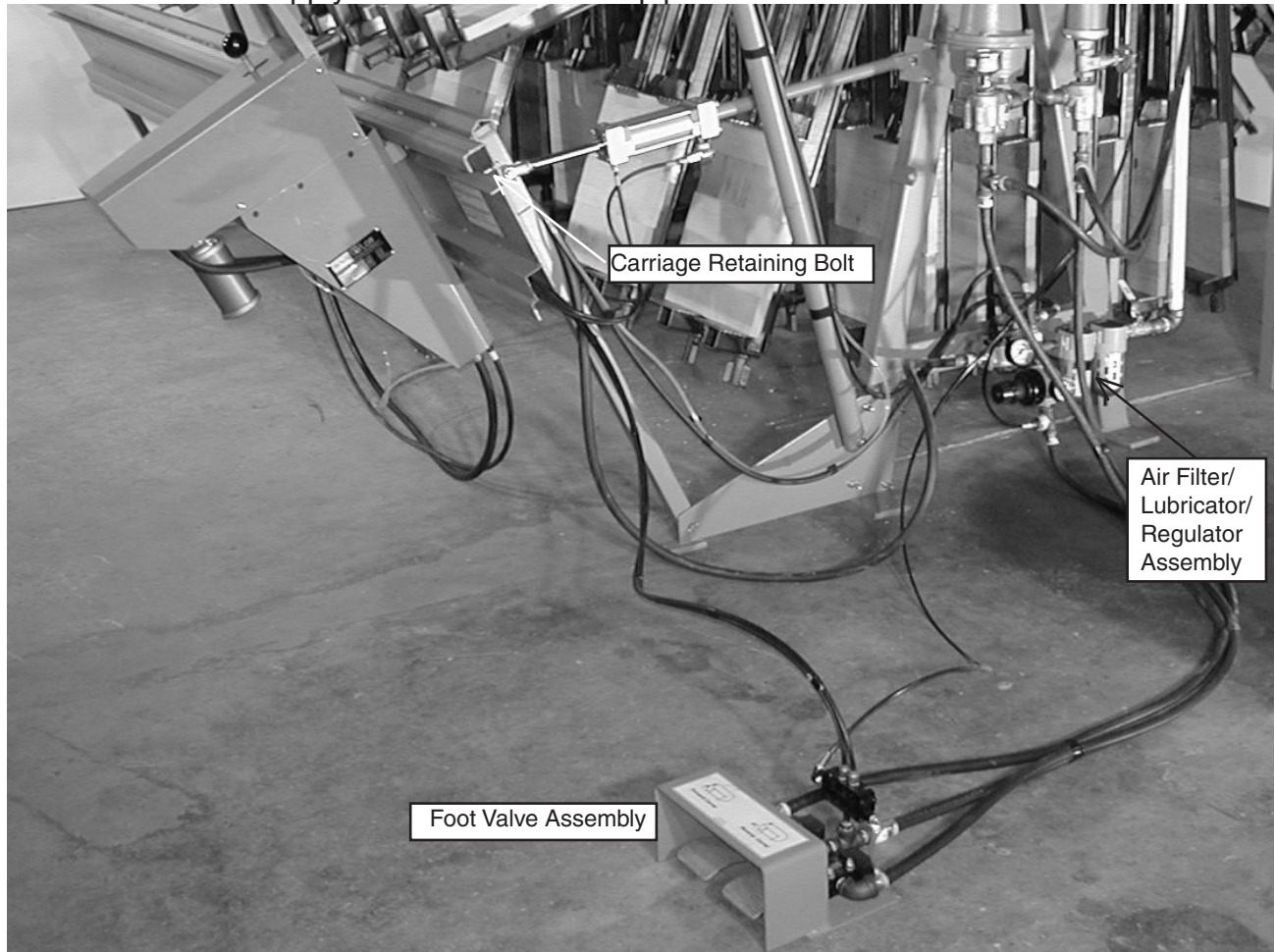
Installing the Clamp Tightener

1. Remove the carriage retaining bolt from one end of the front rest carriage track. Slide the Clamp Tightener carriage onto the front rest. Replace and tighten the retaining bolt.
2. Mount the cam ring on the Air Motor Drive. Tighten the set screw lightly. The cam ring will be adjusted later.
3. Mount the cam valve on the Air Motor Drive as shown.



Hooking Up the Air Motor Drive Hoses

1. Mount the air filter/lubricator/regulator assembly on the right front leg of the Clamp Carrier.
2. Connect the air supply line. It must be 3/4" pipe



INSTALLATION

or larger.

3. Position the foot valve assembly to the right side of the front rest in a comfortable position.

Note: Place the foot valve assembly 48" from the right front of the clamp carrier.

Fasten it to the floor.

4. Attach the 1/2" hose from the bottom of the filter/lubricator/regulator assembly to the center fitting on the foot valve assembly.

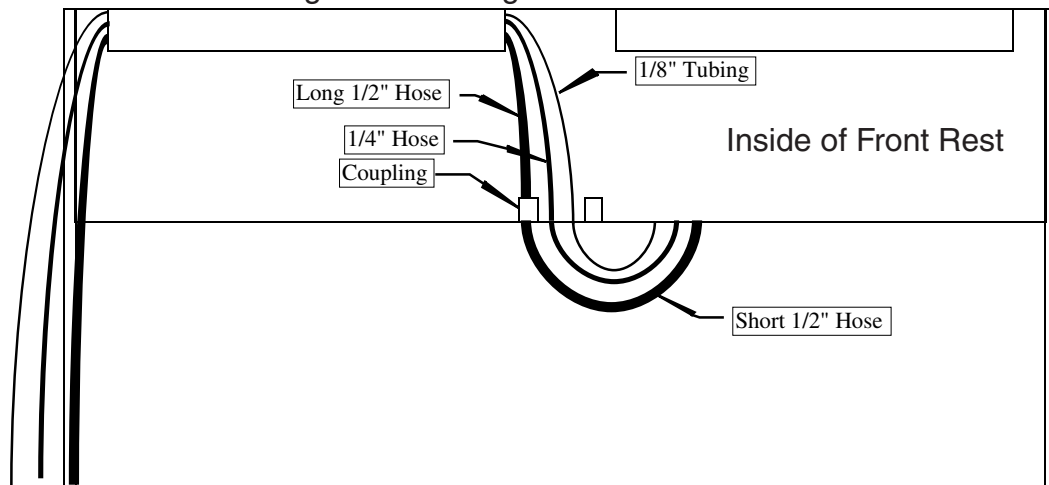
Note: The ends of the hoses are color coded for easy identification.

5. Attach the 1/2" hose with the large muffler to the rear fitting of the air motor.

6. Attach the 1/2" hose with the small muffler to the front fitting of the air motor.

Hooking Up the Clamp Tightener Hoses

1. There is a long 1/2" hose included in your hose kit. Remove the 2" long coupling from this hose and discard the coupling. You now have two hoses.
2. Connect the short 1/2" hose, to the bottom of one of the two couplings that are welded to the inside bottom of the front rest (see diagram below). Connect the other end of the hose to the bottom of the tightener carriage.



3. Connect one end of the long 1/2" hose to the top of the same coupling on the front rest. Feed the free end of the hose through the tunnel on the inside of the front rest.
4. Snake the 1/4" hose and 1/8" tubing along side the 1/2" hose. Connect one end of each hose to the bottom of the tightener carriage. The free end of the clear 1/8" hose will be connected during the installation of the panel flattener.

Note: If you did not order a panel flattener with your machine, you will need to discard the 1/8" hose for the safety circuit. Also, you will need to plug the port for the safety circuit on the carriage with the 1/8" pipe plug that is included.

5. Connect the free end of the long 1/2" hose to the end of the air filter/lubricator/regulator assembly.

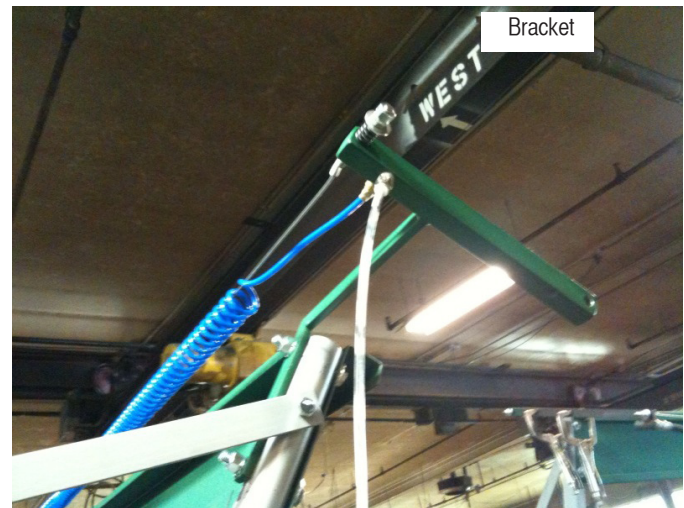
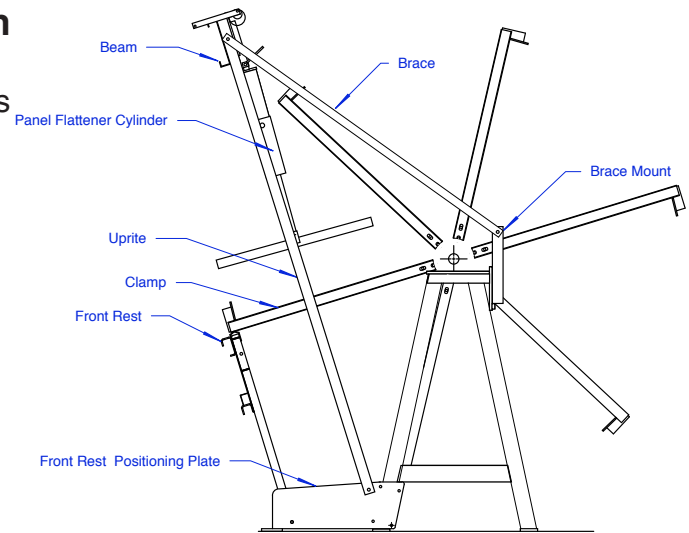
INSTALLATION

6. Connect the 1/4" hose from the tightener to the tee on the filter/lubricator/regulator assembly.
7. Connect the short 1/4" tube from the cam valve to the tee on the bottom of the air filter/lubricator/regulator assembly.
8. Connect the long 1/4" tube from the cam valve to the left end of the pilot operated valve on the foot pedal assembly.
9. Feed the long 1/4" tubes from the center of the valve on the foot pedal assembly through the tunnel at the bottom of the front rest. Connect the free ends of these tubes to the front rest cylinders, according to their color coding.

INSTALLATION

Installing the Panel Flattener Beam

1. The Overhead Track is actually two tracks back to back, with one side slightly longer than the other so that the upright can be bolted to the track. Lay the track on the floor, in front of the Clamp Carrier, so that shorter side of the track is facing the clamp carrier and the longer side is facing away. Make sure that the metal flanges or "Friction Stops" are up.
2. Secure the two positioning plates to the outside of the front legs of the Carrier frame with the U-bolts supplied.
3. If not already done, separate the carriage (the roller assembly that will sit inside of the short track) from the Panel Flattener by removing the clevis pin and hoses. Slide the carriage of the Panel Flattener Carriage on the short side of the track.
4. Attach the end of the uprights with a single hole to the outsides of the positioning plates using 1/2" X 3" hex head cap screws and lay the free end on the floor. Attach the end of the braces with a single hole to the outside of the uprights using 1/2" X 3" hex head cap screws.
5. Lay the track long side down to attach the uprights to the track. Be sure to place the cable brackets on the side of the uprights opposite the track. Use 1/2" X 4" hex head cap screws, 1/2" lock washers, and two 1/2" flat washers per screw to sandwich the uprights between the track and the cable brackets.
6. Attach the brace mounts (angles) to the side runways (or front legs for a 6-section Carrier) with 1/2" X 1" hex head cap screws. Tubular 12 and 20 section machines come with brace mount blocks welded to the sides.



7. Swing the Overhead Track upward and attach the free ends of the braces to the brace mounts with 1/2" X 1-1/4 hex head cap screws.

Mounting the Panel Flattener

1. Line up the Panel Flattener with the corresponding hole in the carriage. Insert the clevis and hitch pin, reconnect the hoses, and attach the spring.

Hooking up the Panel Flattener Hoses:

1. Attach one side of the cable to the hole on the Carrier side of the bracket. Do this by double nutting the 3/8" hex nuts. Be sure to leave it loose so that it will easily attach to the other side.
2. Install the 1/4" coiled hose and a 1/8" coiled hose. Tighten the cables so that they are taught.
3. Attach one end of the 1/4" coiled hose to the Flattener carriage and the other end to the right cable bracket. Attach one end of the 1/8" coiled hose to the carriage and the other end to the left cable bracket.
4. Attach one end of the 1/4" Air hose to the top regulator and the other end to the right cable bracket. Attach one end of the long 1/2" Air hose to the left regulator and the other end to the right cable bracket.

Testing the Panel Flattener & Tightener:

1. Fill the lubricator bowl on the air filter/lubricator/regulator assembly (on the Clamp Carrier leg) with SAE #10 non-detergent oil.
2. Turn on the air. Adjust the air regulator (Panel Flattener) to 10 psi and the Clamp Tightener regulator to 60 psi.
3. Activate the Clamp Tightener.



INSTALLATION

4. Depress the bottom button on the Panel Flattener. The Panel Flattener cylinder should extend downward. Release the button. The Flattener should stay down until the top button is depressed.
5. Make sure that the Panel Flattener cylinder will not extend unless the Tightener has been activated.
6. Check the maximum stroke of the Panel Flattener cylinder. You should be able to flatten 1/2" thick stock.

Adjusting the Panel Flattener & Tightener:

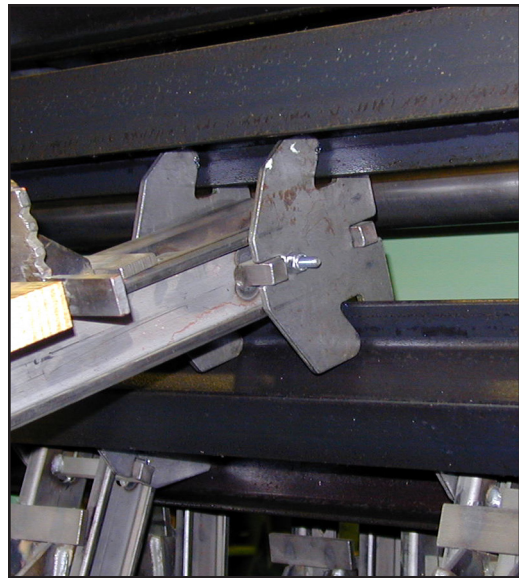
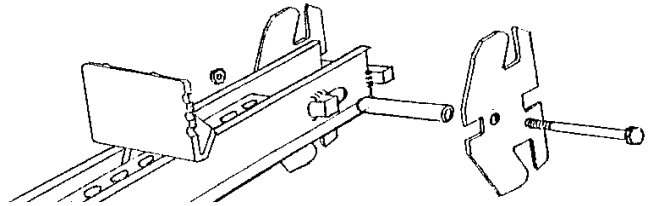
1. Set the Panel Flattener air pressure as desired, from 10 psi to 90 psi.
2. The Panel Flattener is spring loaded. Adjusting the spring will change the angle on the Panel Flattener. This spring can be adjusted, if desired, with raising or lowering the position of the eye bolt.

INSTALLATION

Installing the Clamps

1. Mount a clamp to the I-Beam sections using two stampings, a $\frac{1}{4}$ " x $3\text{-}13/16$ " spacer, a $\frac{1}{4}$ " x 5" hex cap screw, and a $\frac{1}{4}$ " elastic stop nut as shown below:
2. Tighten the screw and nut firmly. The clamp will still move in and out $3/16$ " when pushed or pulled; this is an intentional "floating" feature of the Taylor clamp.
3. Repeat steps 1 and 2 above for each clamp, installing the desired number of clamps on each section.
4. To maintain clamp carrier balance, place clamps on the front and back of the clamp carrier simultaneously.

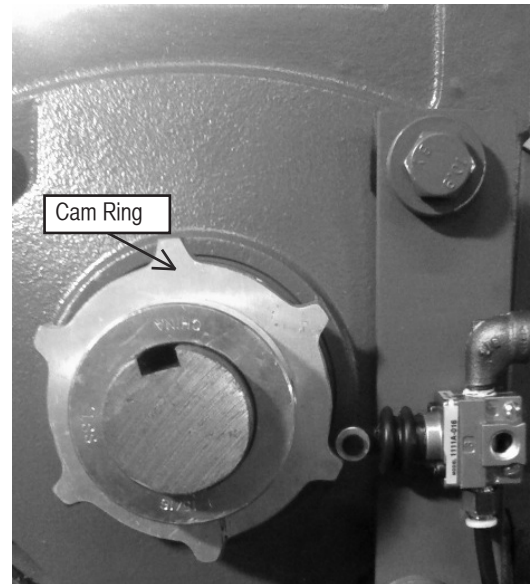
Beveled corners "up"



INSTALLATION

Testing and Adjusting the Clamp Tightener & Air Motor Drive

1. Fill the lubricator bowl with SAE #10 non-detergent oil.
2. Turn the air on. Adjust the air regulator nearest the supply pipe to 90 psi.
3. Engage the Carrier rotation valve in the "Reverse" direction. This should cause the front rest to swing outward and the Carrier to rotate in reverse (clamps at the front of the machine moving upward). Engage the Carrier rotation valve in the "Forward" Direction. This should cause the Carrier to rotate forward. At the proper time during rotation, the front rest should swing back in automatically. If the front rest swings in too soon or



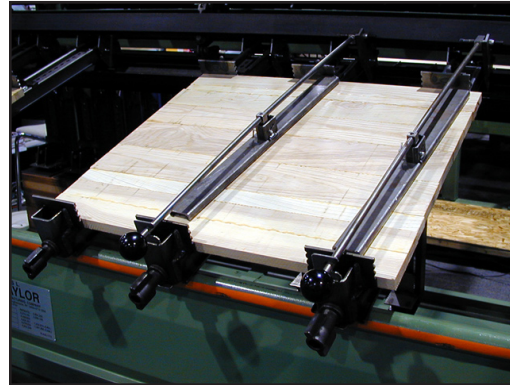
too late, adjust (turn) the cam ring on the Air Motor Drive hollow shaft. Once the proper action is obtained, tighten the set screw in the cam ring securely.

Note: If clamps are installed only on every other section, contact Taylor, you will need a special Cam Ring (80-1148). This will prevent the front rest from swinging in on vacant sections.

4. Adjust the forward speed of the Air Motor drive with the gate valve on the Air Motor Drive. Closing the valve will slow the forward rotation of the Clamp Carrier, making it easier to control.
5. Check that the Clamp Tightener smoothly engages the clamps as they lie on the front rest. The Clamp Tightener's in-and-out adjustment is made by sliding the two front rest cylinder brackets up and down the front legs of the Carrier. Be sure to lock these plates securely in place after making the final adjustment. The Clamp Tightener height adjustment is made by removing the tightener cover and adjusting the two nuts on the 5/16" threaded rod that supports the wrench mount.
6. Adjust the lubricator such that one drops of oil drip (in the sight bubble at the top of the lubricator) for each clamp either tightened or loosened. The Clamp Carrier should use at least 1/3 of a bowl of oil per week.

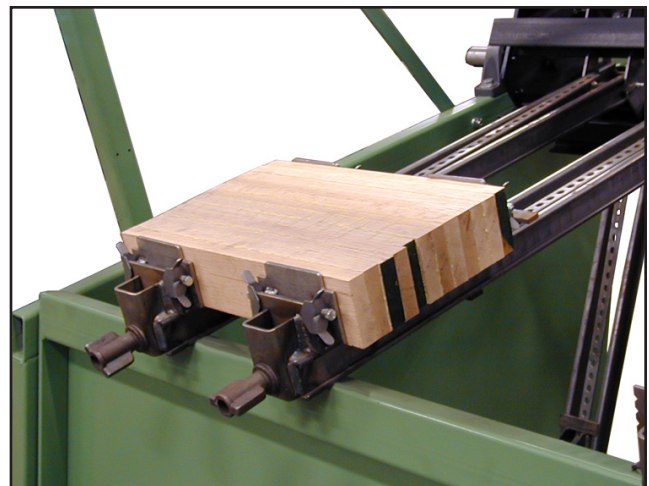
Installing Optional Clamp Equipment

When gluing thin panels (less than 3/4"), or laminating (2" to 6" thick), special additions are needed. Holddown bars are designed for edge gluing thin panels (less than 3/4"). They prevent the boards from springing out of the clamps during tightening and curing. They are easily removed when not needed. Rocker plates are used for laminating (2" to 6" thick) and are needed for two reasons. First, they extend the height of the jaws to cover the full thickness of the material. Secondly, since our clamps have "toe-in", rocker plates are necessary to evenly distribute the clamping force from top to bottom. They can be installed or removed in seconds.



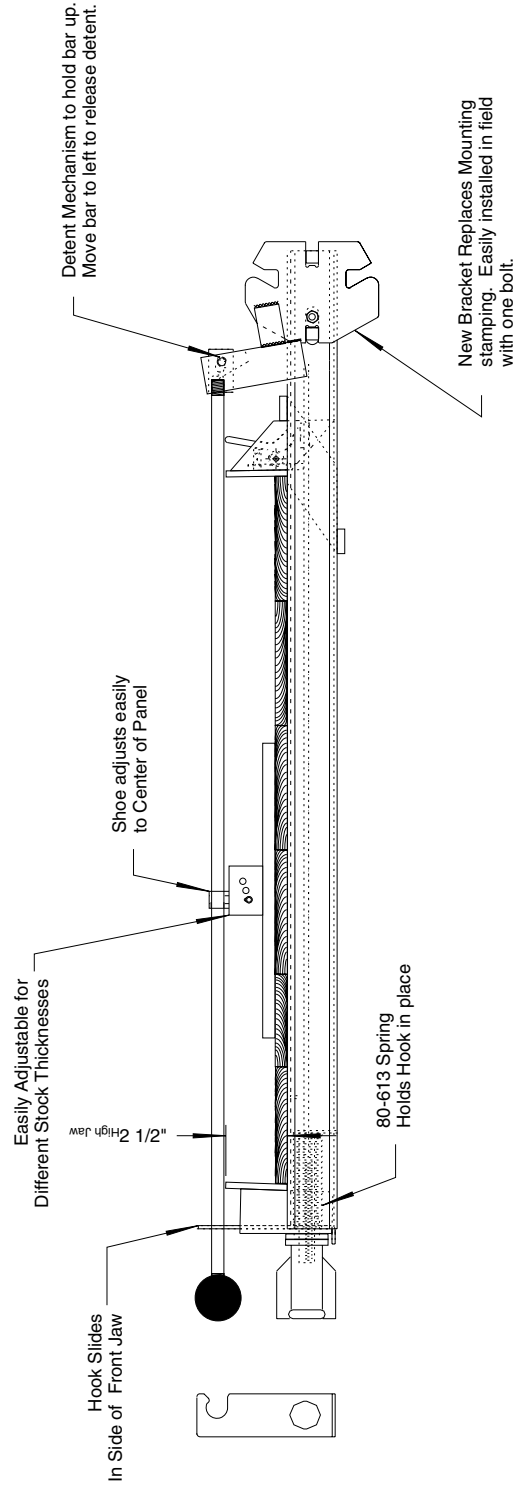
Installing Rocker Plates

1. While pulling outward on the spring-loaded clips on the sides of the Rocker Plates, slide one Rocker Plate onto each jaw of the clamp.
2. Adjust the Rocker Plates such that the pivot points of the Rocker Plates are centered on the stock to be glued.



Installing Holddown Bars

S80-2000



This Holddown assembly is designed to work in conjunction with the Automated, Semi Automated, and Conventional Clamp Tighteners. When gluing thin panels it helps reduce the problem of boards popping out of the clamps. The holddown bar is hooked in first and then the panel is tightened and flattened

#202 Clamp w/ Detented Holddown

Scale: 1/6	James L. Taylor Mfg. Co.	
Material:	Poughkeepsie, N.Y., U.S.A.	
	11/23/98 V.J.L	S80-2000

DISMANTLING:

To dismantle the machine, reverse the Installation (Assembly) instructions.

OPERATION

Safety & Training

According to many OSHA, ANSI, STATE, and LOCAL CODES it is the EMPLOYER'S RESPONSIBILITY to:

- Permit only trained and authorized employees to operate equipment.
- Inspect and maintain guards, safety devices, and start/stop controls.
- Instruct, train, and supervise the safe method of work



Be sure personnel are properly trained and safety rules are clearly understood before operating or performing maintenance!

The intended use of this Semi-Auto Clamp Tightener is to apply clamping pressure to wood during a gluing operation.

Coating the Clamps

A 16-oz. spray bottle is supplied with your machine for coating the clamps with Bates Boothcoating. Pour the Boothcoating directly from the 1-quart can into the spray bottle and adjust the nozzle. Spray a light mist of Boothcoating over all areas that will come in contact with the glue. You may also want to spray some on the horizontal tee bars to make sliding the clamps from side to side easier.

Additional quantities of Boothcoating can be purchased from:

U.C. Chemical Corp.
P.O. Box 1066
2250 Fillmore Avenue
Buffalo, NY 14215 Phone: 716-833-9366

See the brochure at the back of this manual for further details.

Setting up the clamps

1. Clamps should be spaced no more than 18" apart.
2. For laminating or face gluing, be sure to use Rocker Plates to insure even pressure across the face of the stock.

Loading the Clamp Carrier

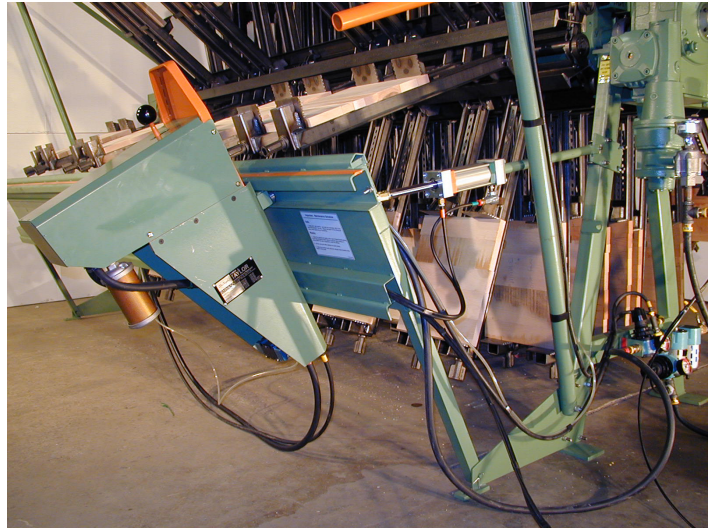
The Clamp Carrier should be kept relatively balanced at all times . When first loading an empty machine with heavy stock it may be necessary to first load one section of clamps, then rotate the machine one-half turn (180 degrees) and load the second section. Continue rotating the Carrier by one-half turns while loading the remaining sections. The same method may also be used in unloading.

Operating the Clamp Tightener, Panel Flattener & Air Motor Drive

1. Load stock into the clamps on one section (row of clamps) of the Clamp Carrier.
2. Start at the left side of the Clamp Carrier. Using the tee handle, slide the Panel Flattener along the beam until it is located between the first two clamps to be tightened. At the same time, with the other hand, slide the Clamp Tightener along the front rest until it is in front of the first clamp to be tightened. Push and pull the tee handle on the Panel Flattener to center the Flattener shoe on the panel. Twist the handle left and right to dodge the jaws of the clamps if necessary.
3. Engage the Clamp Tightener on the first (left) clamp.
4. While holding the joystick control forward of the tightener, press down the tee handle on the Panel Flattener. The Flattener cylinder should extend downward. You may release

the lever and tee handle. The Flattener should stay down until the tee handle is pulled upward.

5. Tighten the clamp that is to the left of the Panel Flattener (or both clamps if there are only two clamps on the panel).
6. Release the Panel Flattener by pulling upward on the tee handle.
7. Position the Panel Flattener between the next pair of clamps to be tightened. Engage the Flattener.
8. Tighten the clamp that is to the left of the Flattener. If the Flattener is between the two last clamps on the panel, tighten both clamps.
9. Repeat the above steps for the remaining clamps on this section.
10. Slide the Panel Flattener to one side so it will clear the clamps when the Clamp Carrier is rotated.
11. Briefly depress the right foot pedal on the foot valve assembly. The Clamp Carrier will rotate backwards and the front rest will swing outward. Depress the left foot pedal to rotate the Carrier forward. The front rest will swing back to its upright position automatically. At the appropriate time, release the foot pedal. This may take a little practice, as you'll want the machine to rotate far enough that all of the clamps make good contact with the front rest, but not so far that the clamps are pinned too tightly against the front rest to be slid easily from side to side.
12. Loosen the clamps and remove the glued panels.



Panel Flattener Safety

1. You should have no more than one Clamp Carrier operator per Panel Flattener. The Panel Flattener produces up to 750 pounds of force; this is more than enough to injure a man's hand.
2. Once each day, depress the Panel Flattener tee handle without touching the Clamp Tightener. The Panel Flattener cylinder should not extend. If it does, check the safety air circuit. Do not use the Panel Flattener until proper repairs have been made.

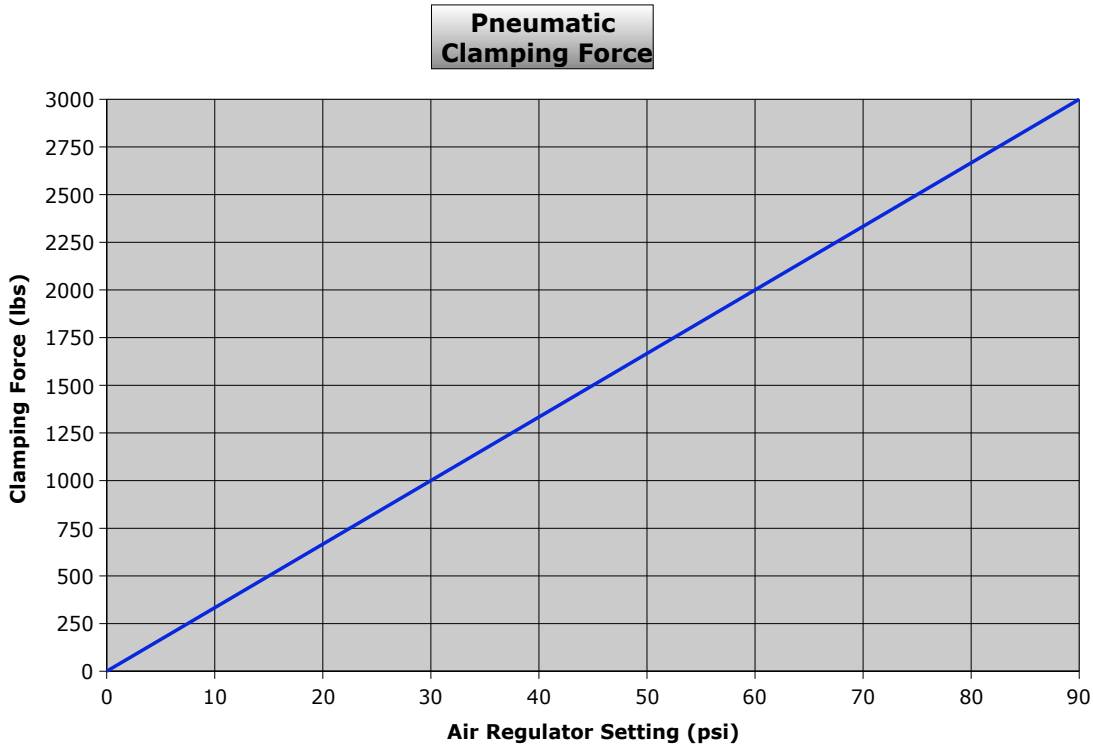
Shutting Down at Night

1. Before shutting down at the end of the day, depress the right foot pedal briefly to rotate the Clamp Carrier in the reverse direction. The front rest will swing outward. The air supply to the machine may then be turned off safely. If this procedure is not followed,

the front rest will swing outward by itself when the air is turned off. Then, when the air is turned on again in the morning, the ends of the clamps will be hanging down low enough that they will be caught by the front rest when it returns to its upright position.

Clamping Force vs. Clamp Tightener Air Pressure

The graph below shows the clamping force, per clamp, for Clamp Tightener air pressures between 0 and 90 psi:



Caution: The Clamp Tightener must not be operated at more than 90 psi, or damage to the clamps will result.

Glue Line Clamping Pressure

1. What is your desired glue line pressure (psi)?
2. What is the glue line area (sq.in.)?
 $\text{Glue line area} = \text{Length of Panel (in.)} \times \text{Thickness of panel (in.)}$
3. $\text{Glue line pressure (psi)} \times \text{glue line area (sq. in.)} = \text{total clamping force (lbs)}$.
4. Divide total clamping force by the number of clamps used on the panel.
5. Read the chart above to get the regulator setting (psi.).

General Operation

Coating the Clamps

A 16-oz. spray bottle is supplied with your machine for coating the clamps with Bates Boothcoating. Pour the Boothcoating directly from the 1-quart can into the spray bottle and adjust the nozzle. Spray a light mist of Boothcoating over all areas that will come in contact with the glue. You may also want to spray some on the horizontal I-Beams to make sliding the clamps from side to side easier.

Additional quantities of Boothcoating can be purchased from:

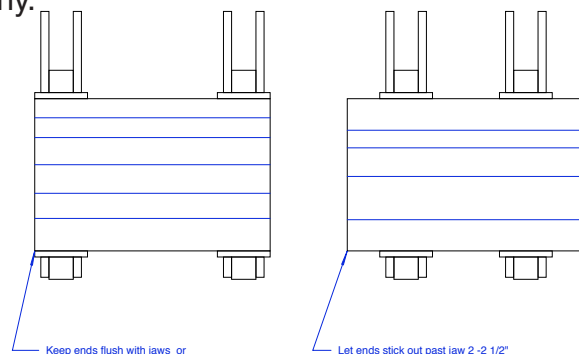
U.C. Chemical Corp.
P.O. Box 1066
2250 Fillmore Avenue
Buffalo, NY 14215

Setting up the clamps

1. For evenness of joint pressure, clamps on each panel should be spaced no more than 18" apart.
2. For laminating or face gluing, be sure to use Rocker Plates to insure even pressure across the face of the stock.
3. To avoid interference with the panel flattener(s), the clamps must have a minimum spacing of 7" center to center.
4. The edge of each panel must either be flush with the clamp jaw plates or extend 2" beyond the jaw plates. If the panel is between 0" and 2" beyond the jaw plates, the panel flattener(s) may not flatten the panel properly.

Loading the Clamp Carrier

The Clamp Carrier should be kept relatively balanced at all times. When first loading an empty machine with heavy stock it may be necessary to first load one section of clamps, then rotate the machine one-half turn (180 degrees) and load the second section. Continue rotating the Carrier by one-half turns while loading the remaining sections. The same method may also be used in unloading.



Instruction-placement of wood

Scale:	James L. Taylor Mfg. Co.
Material:	Poughkeepsie, N.Y., U.S.A.
	8/23/06
	JLM

Tightening Sequence of the clamps

When tightening long members in a clamp carrier, the following sequence should be used to ensure that the finished product remains straight:

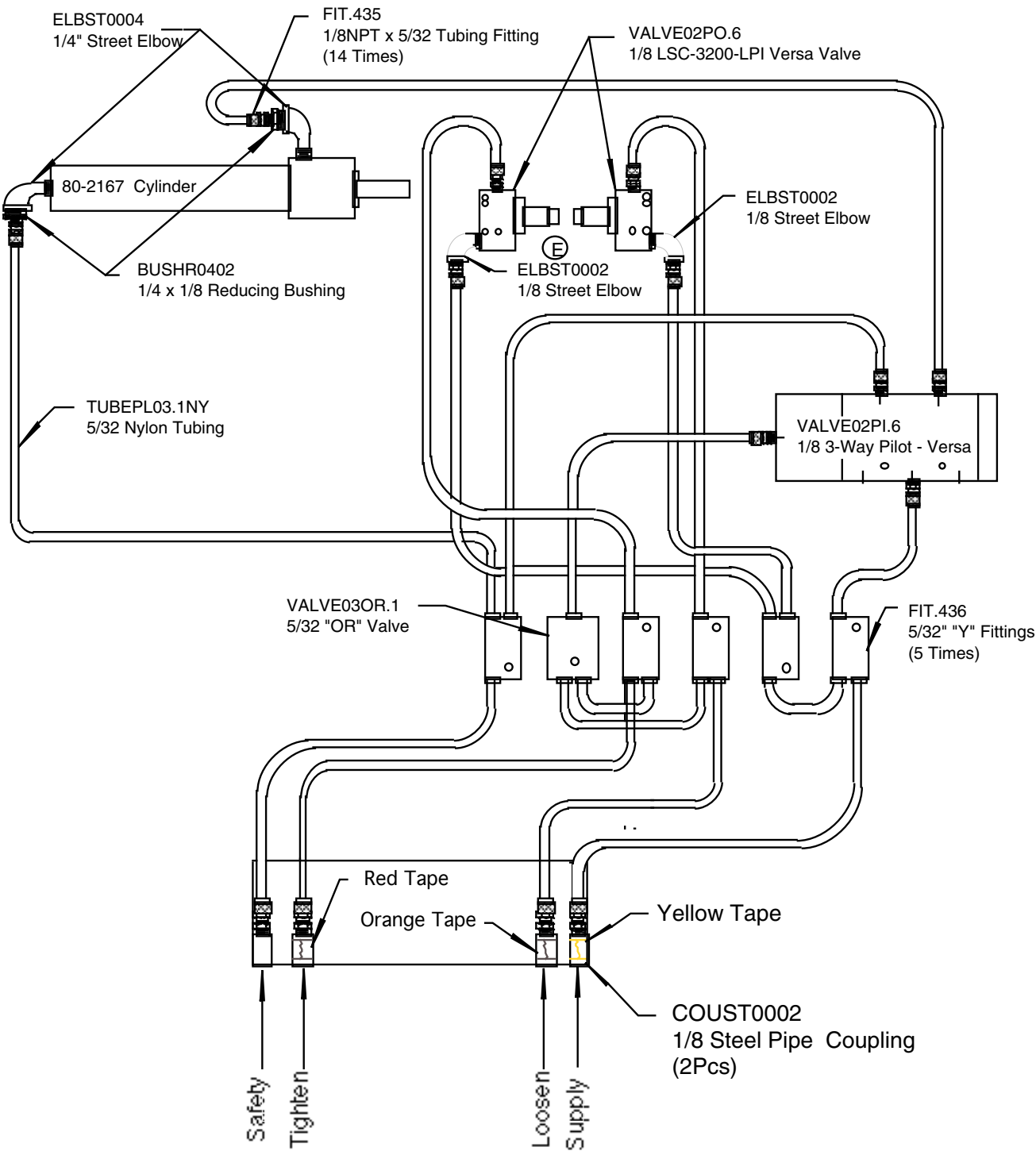
1. The center clamp should be tightened.
2. The clamps that are one quarter of the way in from each end of the product should be tightened.
3. The remaining clamps can be tightened from left to right.

TROUBLESHOOTING

Clamp Tightener Motor Runs with Difficulty

1. Check the air supply. You must have at least a 3/4" pipe air supply, at 90 psi.
2. The Clamp Carrier lubricator should be using approximately 1/3 of a bowl of oil per week. If not, adjust the lubricator such that five drops of oil drip (in the sight bubble at the top of the lubricator) for each clamp tightened or loosened.
3. If the air motor has been run for awhile without oil, the motor may be siezing. If this is the case, you will probably need to rebuild your air motor. See the Maintenance section of this manual for air motor disassembly and assembly instructions. Air motor parts are available from Taylor. Alternatively, you may send your air motor to Taylor for rebuilding.

Tightener Pneumatic Schematic



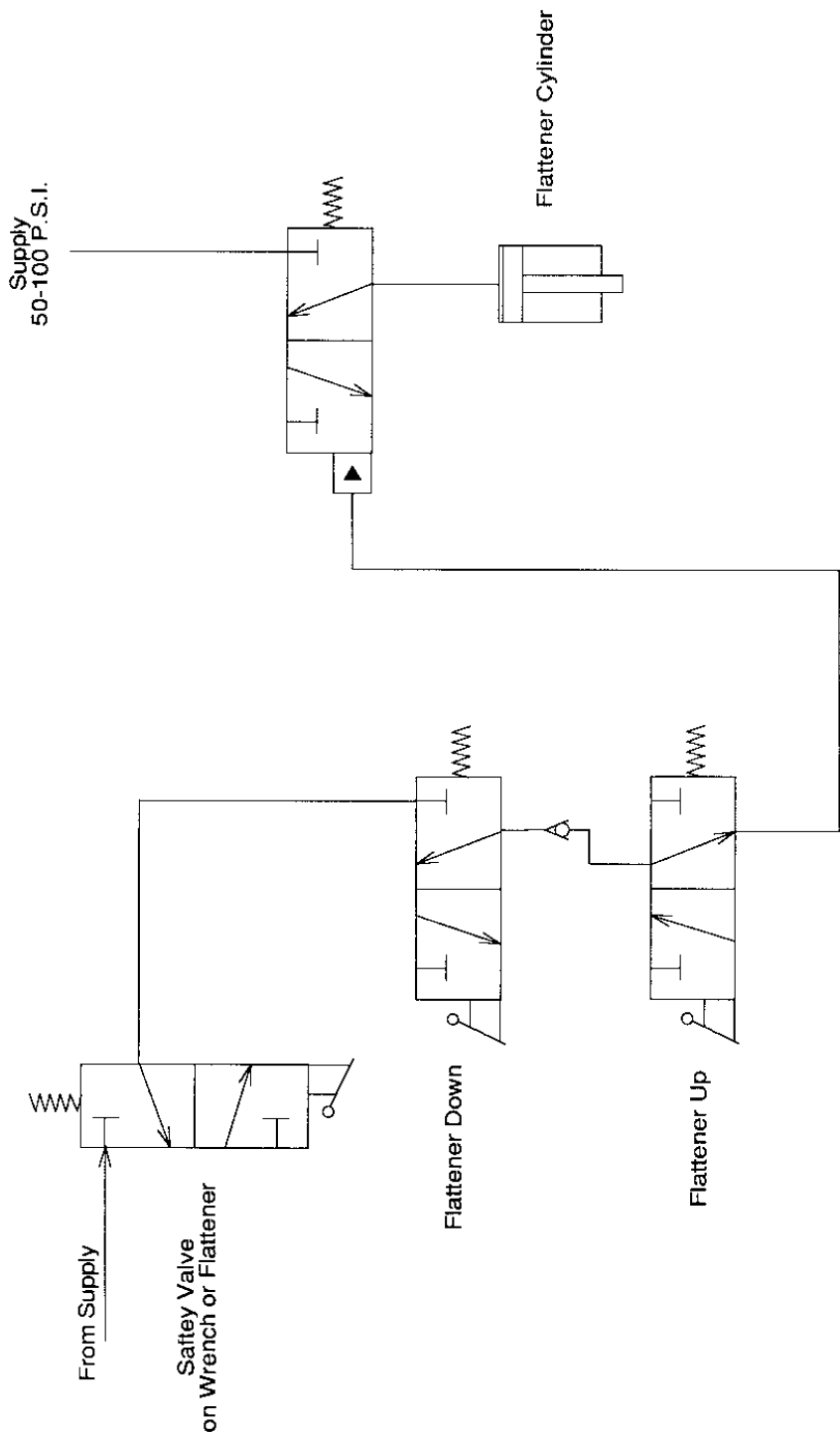
TROUBLESHOOTING

Panel Flattener Will Not Extend

1. Check the air supply. You must have at least a 3/8" pipe air supply, at 90 psi.
2. Check that the Panel Flattener's safety interlock with the Clamp Tightener (the pilot air circuit) is operating properly. If not, make repairs as needed.
3. The Clamp Carrier lubricator should be using approximately 1 bowl of oil per week. If not, adjust the lubricator such that five drops of oil drip (in the sight bubble at the top of the lubricator) for each clamp either tightened or loosened with the Clamp Tightener.
4. If the Panel Flattener has been operated for awhile without oil, the leather cup in the Flattener's air cylinder may be dried out and leaking. New leather cups are available from Taylor.

Panel Flattener Pneumatic Schematic

80A-18



Panel Flattener Air Schematic

Scale: None	James L. Taylor Mfg. Co. Poughkeepsie, N.Y., U.S.A.		
Material:	10-11-89 G.D.F.	80A-18	

MAINTENANCE

MAINTENANCE

Maintenance Checklist

(Photocopy for use)

Weekly Maintenance Checklist	Comments	Date	By
<ul style="list-style-type: none"> • Clean the clamps with a plastic scraper • Apply Bates Boothcoating to the clamps • Oil the screw and thrust washer on each clamp • Check for foreign material underneath the Clamp Carrier • Discharge the accumulated water from the air filter bowl • Fill the air lubricator with SAE #10 motor oil and adjust if necessary • Make sure the Panel Flattener will not extend unless the Clamp Tightener is engaged 			
Monthly Maintenance Checklist	Comments	Date	By
<ul style="list-style-type: none"> • Inspect the gear box oil level and add 90 weight extreme pressure lubricant if the level is below midway of the sight glass 			

MAINTENANCE

Replacing the Vanes in the Clamp Tightener Air Motor

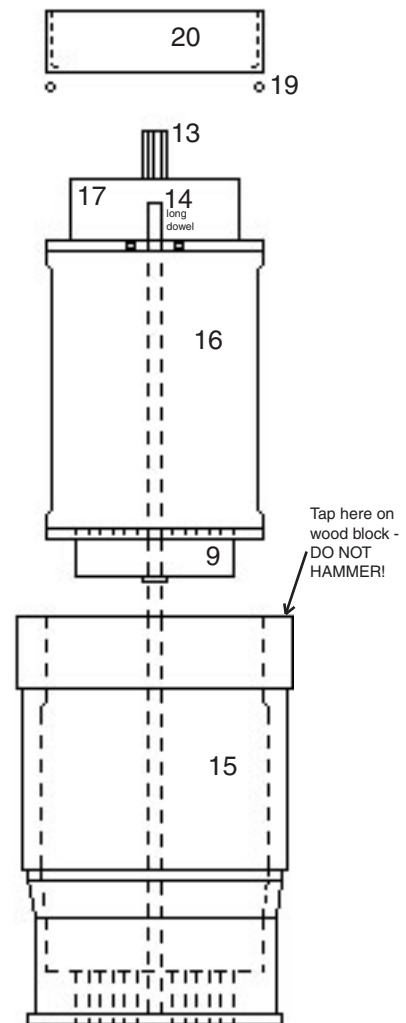
Note: The numbers in parentheses on this page coincide with the numbers on the Ingersoll-Rand parts sheet in the "Parts List" section of this manual.

Air Motor Disassembly

1. Remove the black gear case by removing three (3) socket cap screws.
2. From the aluminum motor housing, lift off the gear head planet assembly.
3. Remove the Motor Retainer (#20). Note the position of the flange.
4. Remove the motor retainer ring (#19) - "O" ring.
5. By tapping the motor housing (#15) on a wood block, (see drawing) remove motor assembly (#9, 13, 16, 17)
6. Remove cylinder dowel (#14).
7. Tap the rotor shaft (#13) on a wood block to remove the bronze front end plate (#17).
8. Slide the cylinder (#16) off to expose the vanes. When replacing the vanes, the bronze rear end and front end plate (#9 and #17) should be checked for wear and tear. If needed, replace or resurface (grind 1/64" maximum).

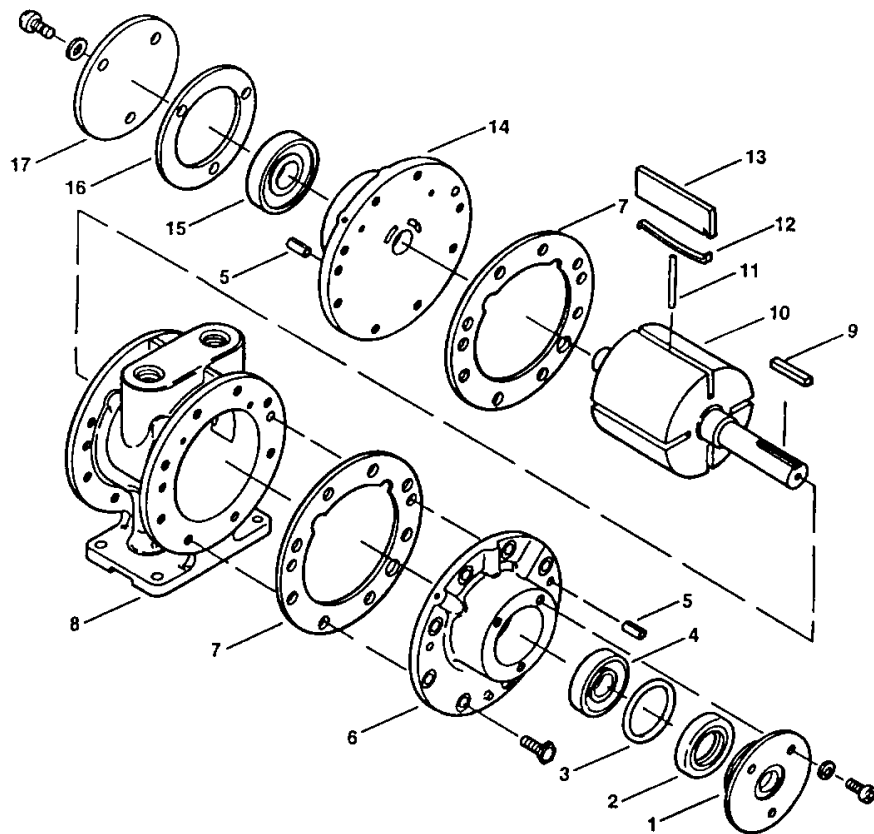
Air Motor Reassembly

1. Insert the long dowel (supplied with vanes) into the center hole of the front end plate (#17), cylinder (#16) and rear end plate (#9). Then loosely insert the end of the dowel into the center hole of the motor housing.
2. Make sure assembly is seated completely. If needed, tap lightly on a socket or other spacer to transfer shock to the inner race of the upper bearing. **DO NOT** hammer on endplates, (#17) or (#9), or on rotor shaft (#13), as they are soft material and expensive.
3. Slide this assembly down the dowel and seat it in the motor housing.
4. Once seated, remove the long dowel and insert the cylinder dowel (#14) in its place making sure that the various components do not shift.
5. Replace the motor retaining ring (#19) - "O" ring.
6. Replace the motor retainer (#20). Note position of the flange. Wide side should be against the "O" ring.
7. Replace the gear head planet (#25) (not in drawing).
8. Replace the black gear case.



PARTS & SERVICE

PARTS & SERVICE



Ref. No.	Description	Part Qty	8AM-NRV-28A
1	End Cap, Drive End	1	AC988
•2	Shaft Seal	1	AB936
•3	O-Ring	1	AC989
•4	Bearing, Drive End	1	AB927
5	Dowel Pin	4	AB162
6	End Plate, Drive	2	AC965
•7	Body Gasket	2	AC888
8	Body	1	AC878C
9	Key	1	AB136D
10	Rotor Assembly	1	AC986
•11	Push Pin	2	AC879
•12	Vane, Spring	4	AC817
•13	Vane	4	AC816
14	End Plate, Dead	1	AC964
•15	Bearing, Dead End	1	AC894B
•16	End Cap, Gasket	1	AC837
17	End Cap, Dead End	1	AC836
	Muffler Assembly	1	AC990
	Felt	1	AC993
	Service Kit	1	K211

• Denotes Parts included in the service kit.

Parts listed are for stock model units. For specific OEM models consult the factory. When ordering parts please provide full model and serial number.

OPERATING and MAINTENANCE INSTRUCTIONS

CONSTRUCTION

Your air motor is a precision built rotary type motor. The top clearance (between rotor and bore) is .0015". The total end clearance (between the sides of the rotor and the end plates) is .004". The vanes take up their own wear and will last 5,000-15,000 hours depending upon speed, method of oiling, operating pressure, and the precautions taken in maintaining the motor. The type of shaft seal used does not lend itself to operating pressures above 100 P.S.I. (6.89 Bar-Metric).

INSTALLATION

Install a moisture trap and filter in the air line ahead of motor. For efficiency of output and control of speed use air lines the same size or the next pipe size larger than the intake port of the motor. A single rotation motor will operate properly in only one direction. A reversible motor will work equally well in both directions. A 4-way valve which can be connected by piping to both air ports of the motor will make reversing possible. When coupling or connecting the motor to a driven member avoid any end or side thrust on the shaft and especially do not hammer on shaft itself or on the coupling or pulley you might attach.

LUBRICATION – USE A DETERGENT SAE #10 AUTOMOTIVE ENGINE OIL (Gast AD220)

For proper operation and maximum service life an automatic air line lubricator must be installed in the air line just ahead of the air motor. The lubricator should be adjusted to feed one drop of oil for every 50-75 CFM of air going through the motor. Air consumption figures for various models at various speeds and air line pressures can be obtained from your local Gast Representative or the factory. Use a detergent SAE#10 automotive engine oil. Lubrication is necessary for all internal moving parts and rust prevention. Excessive moisture in the air line can cause rust formation in motor and might also cause ice to form in the muffler due to expansion of air thru the motor. The moisture problem can be corrected by installing a moisture separator in the line and also by installing an aftercooler between the compressor and air receiver.

OPERATION

The starting torque is less than the running torque and could vary depending on the position at which the vanes stop in relation to the air intake port. The speed and torque can be regulated by using a pressure regulator or a simple shut-off valve to obtain desired power and conserve air. **It is very IMPORTANT that the air motor not be allowed to "run free" at high speeds with no load and improper lubrication. Running under these conditions can cause excessive internal heat build up, loss of internal clearances and rapid motor damage.**

SERVICING

If the motor is sluggish or inefficient try flushing with solvent* in well ventilated areas. To flush a unit, disconnect air line and muffler and add several teaspoonsful of solvent*. Rotate the shaft by hand in both directions for a few minutes, reconnect the air line and slowly apply pressure until there is no trace of solvent in exhaust air (keep face away from exhaust air). Relubricate the motor with a squirt of oil in the chamber. If the vanes need replacing or foreign materials are present in motor chamber, an experienced mechanic may remove the end plate opposite the drive shaft end. Do not pry with a screwdriver. It will dent the surface of the plate and body causing leaks. A puller tool should be used which will remove the end plate while maintaining the position of the shaft. New vanes should have the edge with the corners cut on angle or the notched edge (if reversible) towards the bottom of the vane slot.

*Recommended commercial solvents for air motors and lubricated pumps are Loctite Safety Solvent, Inhibisol Safety Solvent, Dow Chemical Chlorothane, or any non toxic, non flammable industrial cleaning solvent.

DANGER: To prevent explosive hazard DO NOT drive this air motor with combustible gases.

It is usually quickest and least expensive to send the motor in for repair.

Authorized service facilities are located at:

Brenner-Fiedler and Associates
16210 Gundry Ave.
Paramount, CA 90723
213/636-3206

Wainbee, Ltd.
121 City View Drive
Toronto, Ontario
Canada
416/248-5621

Gast Manufacturing Corporation
515 Washington Ave.
Carlstadt, NJ 07072
201/933-8484

Wainbee, Ltd.
215 Brunswick Blvd.
Pointe Claire, Montreal, Quebec
Canada
514/697-8810

Gast Manufacturing Corporation
2550 Meadowbrook Rd.
Benton Harbor, MI 49022
616/926-6171

Recommended Lubricants for the Air Motor Drive Gear Box:

Atlantic Richfield Co.	Pennant E.P. S-3150
Chevron Oil Co.	Cheveron Gear Compound 160
Cities Service Oil Co.	Citgo E.P. Compound 150 or 160
Continental Oil Co.	Conoco Milgear L-160
Gulf Oil Corp.	Gulf Transgear Lubricant E.P. 140
Humble Oil & Refining Co.	Pen-O-Led EP6
Kendall Refining Co.	Kendall NS-MP-90-140 Hypoid
Keystone Div.-Penwalt Corp.	WG-B
Mobil Oil Corp.	Mobil Compound GG
Phillips Petroleum Co.	Philube ILB Gear Oil SAE 140
Shell Oil Co.	Macoma 81
Standard Oil Co. of Br. Columbia, Ltd.	Chevron Gear Compound 160
Standard Oil Co. of Calif., W. Oper., Inc.	Cheveron Gear Compound 160
Standard Oil Co. (Kentucky)	Chevron Gear Compound 160
Standard Oil Co. (Ohio)	Factolube 6
Sun Oil Co.	Sunep 1150
Texaco, Inc.	Meropa 6
Union 76 Div. Union Oil Co. of CA	Union PB Lube 160
Warren Refining Div., Parr, Inc.	882 Gear Lube

MODEL 3840P52/VSM-4883 MULTI-VANE® AIR MOTOR



⚠ WARNING

**IMPORTANT SAFETY INFORMATION ENCLOSED.
READ THIS MANUAL BEFORE OPERATING TOOL.**

FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.

- Always operate, inspect and maintain this motor in accordance with American National Standards Institute Safety Code for Portable Air Tools (ANSI B186.1).
- For safety, top performance and maximum durability of parts, operate this motor at 90 psig (6.2 bar/620 kPa) air pressure at the inlet with 1/2" (13 mm) air supply hose.
- Always turn off the air supply and disconnect the air supply hose before installing, removing or adjusting any accessory on this motor or before performing any maintenance on this motor.
- Keep hands, loose clothing and long hair away from rotating end of motor.
- Check for excessive speed and vibration before operating.
- Motor shaft may continue to rotate briefly after motor shuts off.
- Do not lubricate motors with flammable or volatile liquids such as kerosene, diesel or jet fuel.
- Do not remove any labels. Replace any damaged label.
- This motor is not designed for working in explosive atmospheres.
- This motor is not insulated against electric shock.

NOTICE

The use of other than genuine Ingersoll-Rand replacement parts may result in safety hazards, decreased tool performance and increased maintenance, and may invalidate all warranties.

Ingersoll-Rand is not responsible for customer modification of tools for applications on which Ingersoll-Rand was not consulted.

Repairs should be made only by authorized, trained personnel. Consult your nearest Ingersoll-Rand Authorized Servicenter.

It is the responsibility of the employer to place the information in this manual into the hands of the operator.

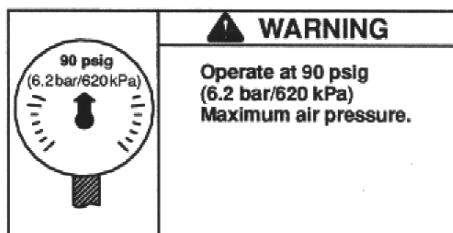
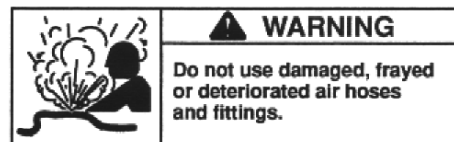
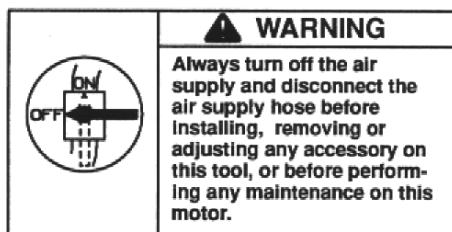
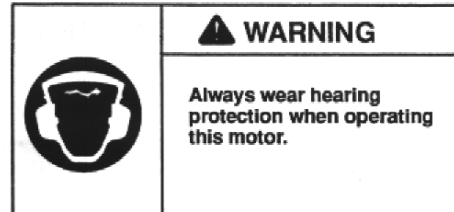
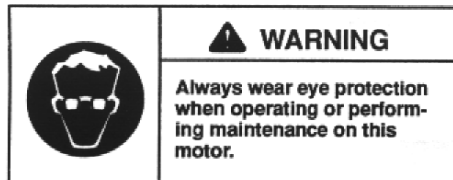
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INGERSOLL-RAND®
PROFESSIONAL TOOLS

WARNING LABEL IDENTIFICATION

⚠ WARNING

FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.



PLACING TOOL IN SERVICE

LUBRICATION



Ingersoll-Rand No. 50 Ingersoll-Rand No. 28

Always use an air line lubricator with this motor. We recommend the following Filter-Lubricator-Regulator Unit:

For USA – C22-04-G00

For International – C26-C4-A29

After each forty hours of operation, or as experience indicate, inject Ingersoll-Rand No. 28 Grease into the Grease Fitting (30). Do not grease excessively. Too much grease in the Gear Case (29) will cause heating. Grease leakage from the spindle end is also an indication that an

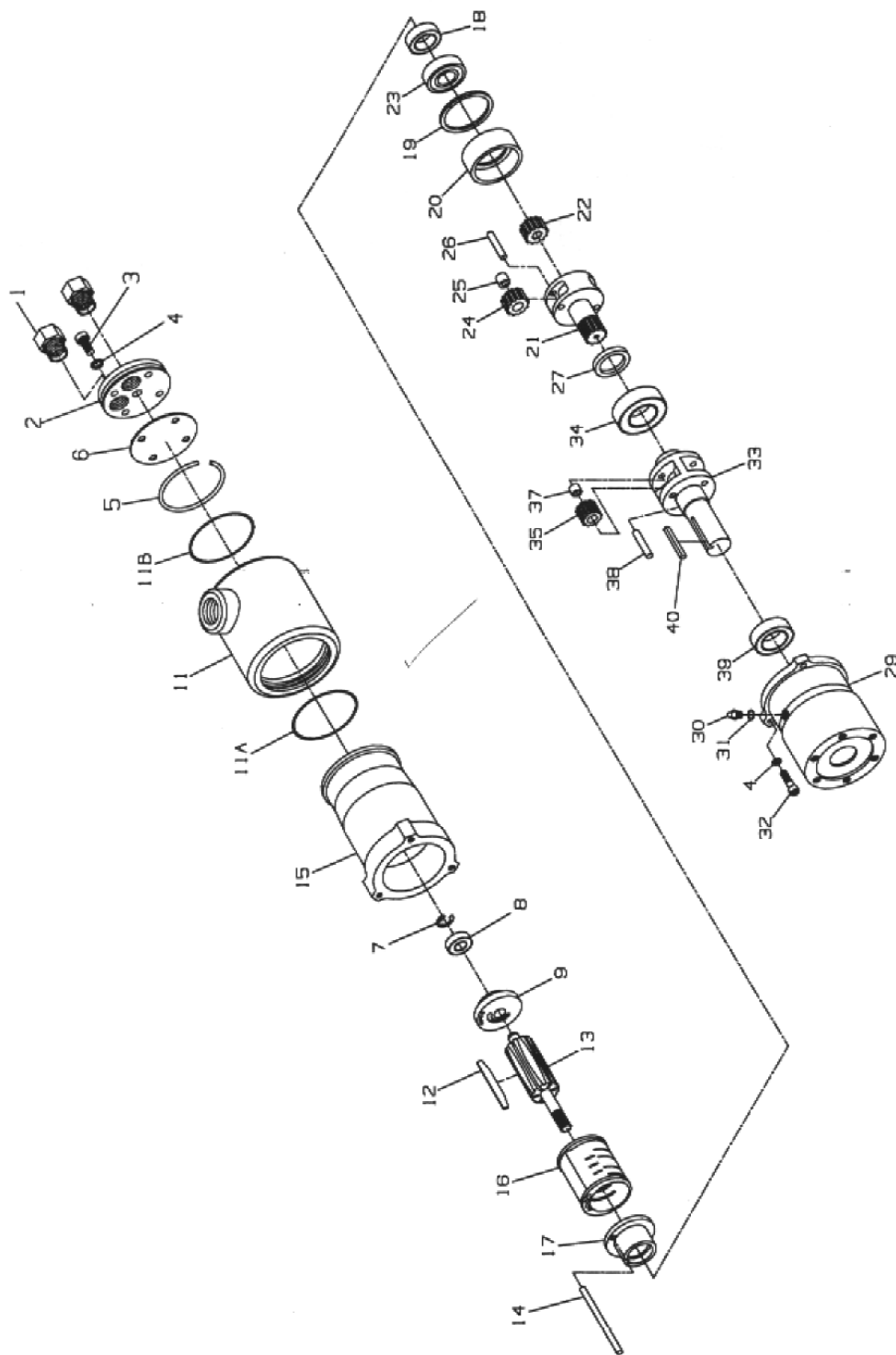
excessive amount of grease has accumulated within the Gear Case.

INSTALLATION

Air Supply and Connections

Always use clean, dry air at 90 psig maximum air pressure. Dust, corrosive fumes and/or excessive moisture can ruin the motor of an air tool. An air line filter can greatly increase the life of an air tool. The filter removes dust and moisture. Make sure all hoses and fittings are the correct size and are tightly secured.

MAINTENANCE SECTION



(Dwg. TPA1477)

MAINTENANCE SECTION

PART NUMBER FOR ORDERING

PART NUMBER FOR ORDERING

1	Air Strainer (2)	R38-565A	23	Gear Head Bearing	4E-510
2	Backhead	R3840-102	24	Gear Head Planet Gear (22 teeth)(2)	R38P-10
3	Backhead Cap Screw (4)	510-638	25	Gear Head Planet Gear Bearing (one for each Gear)	8U-654
4	1/4" Lock Washer (7)	8U-58	26	Gear Head Planet Gear Shaft (2)	8U-191
5	Exhaust Deflector Retaining Ring	R4-323	27	Gear Head Spacer	VSM-5347
6	Backhead Gasket	R3840-283	29	Gear Case	ET3802P-A37
7	Rotor Bearing Retainer	404-118	30	Grease Fitting	R1-188
8	Rear Rotor Bearing	R1-24	31	Grease Fitting Washer (2)	R3-92A
9	Rear End Plate	R3800-12	32	Gear Case Cap Screw (3)	R0H-354
11	Exhaust Deflector (with 3/4" Pipe Tap exhaust)	R3800-A123	33	Spindle Assembly (3/4" round shaft)	R3800P-A108
11A	Deflector Front Seal	R3800-210	34	Spindle	R3800P-108
11B	Deflector Rear Seal	10BMP-604	35	Spindle Rear Bearing	R38P-97
12	Vane Packet (set of 5 Vanes)	R38-42-5	36	Spindle Planet Gear (12 teeth)(3)	R38P-9
13	Rotor (7 teeth)	R3800M-53	37	Spindle Planet Gear Bushing (one for each Gear)	R38P-500
14	Cylinder Dowel	R38KT-198	38	Spindle Planet Gear Shaft (3)	R38P-190
15	Motor Housing	R3800-40	39	Spindle Front Bearing	4UA9-593
16	Cylinder	R3840-3	40	Spindle Key	P25-150
17	Front End Plate	R3800-11	*	Grease Gun	R000A2-228
18	Front Rotor Bearing	R1-24A			
19	Motor Retaining Ring	34U-216			
20	Motor Retainer	R3800-118			
21	Gear Head Assembly	R38P-A216			
22	Gear Head	R38P-216			
	Rotor Pinion (19 teeth)	R38P-17			

* Not illustrated.

To keep downtime to a minimum, it is desirable to have on hand certain repair parts. We recommend that you stock one (pair or set) of each part indicated by a bullet (•) for every four tools in service.

MAINTENANCE SECTION

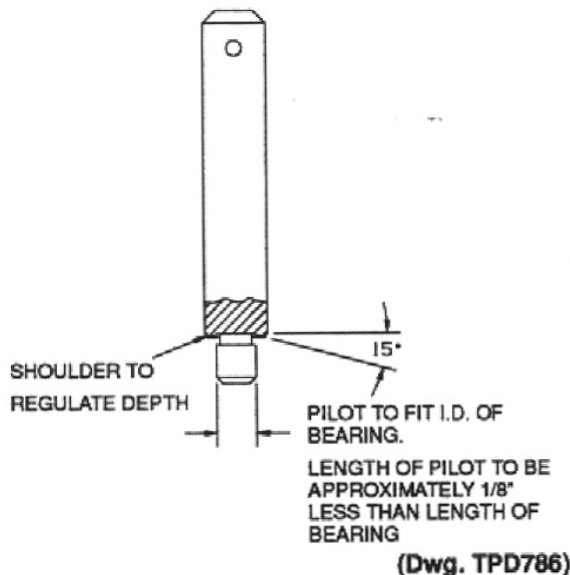
Maintenance Instructions

When removing a Planet Gear Shaft (26 or 38) from a Spindle (33) or Gear Head (21), always press it out so that it is ejected at the short hub end of these parts. Likewise, when installing a Shaft, start it into the narrow flange at the short hub end. This is important, as the shaft holes are slightly tapered, so the shaft fits much tighter in the front, or wide, flange of the Spindle or Gear Head.

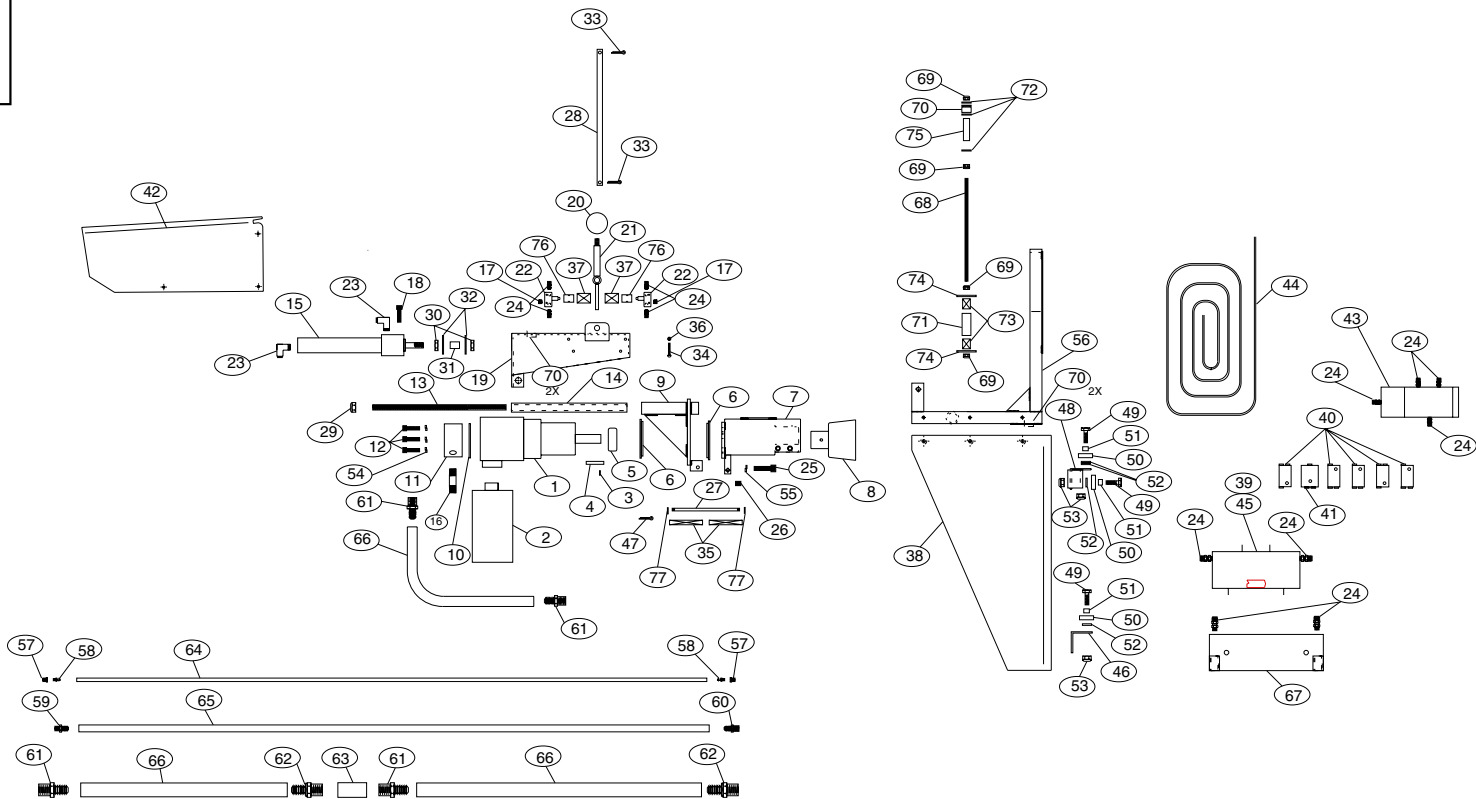
Planet Gear Bearings (25) must be installed with care to avoid distorting or fracturing the thin shell surrounding the needles. The bearing manufacturer recommends a needle bearing inserting tool for pressing the bearing into position. (Refer to drawing TPD786). Press only on the stamped end of the bearing. One bearing should be pressed from each end of the bore when two bearings are used in one gear. Never use one bearing as an arbor for installing the other.

Be sure to enter the Rotor Pinion (22) in the Gear Head (21) after one Gear Head Planet Gear (24) has been installed. The Pinion cannot be installed or removed when both Planet Gears are mounted in the frame. The Cap Screws (3 and 32) that retain the Backhead (2) and Gear Case (29) on the Motor Housing (15) should be checked periodically for tightness.

Needle Bearing Inserting Tool



800219



Semi-Auto Carriage Assembly

Scale: None	James L. Taylor Mfg. Co. Poughkeepsie, N.Y., U.S.A.	
Material:		
	5/28/04 JTH	Model 800219

PARTS & SERVICE

Key #	Part Name	Description	Quantity
1.	WR3840P52	R3840P52 Ingersol Rand Air Wrench	1
2.	MUF12	3/4 07 FWC/Disc Muffler	1
3.	PINRO.033206	3/32 x 3/8 Roll Pin	1
4.	WR25.150	P25-150 Key	1
5.	BERTR13	E-6 Thrust Bearing	1
6.	80-228	Collar	2
7.	80-1884	Assembly - Yoke	1
8.	80-1069	Driver	1
9.	80-2096	Wrench Mount - Welded	1
10.	WR3840.283	3840-283 Backhead Gasket	1
11.	80-2251	Backhead - 64 Degree	1
12.	SCRSH0420	1/4 x 1-1/4 Socket Head Cap Screws	Specify Qty.
13.	80-2100	Rod Threaded Tie - Semi-Automated	2
14.	80-2101	Tube - Delrin - Semi Automated	2
15.	80-2167	Cylinder	1
16.	NIP0432	1/4 x 2 NIPPLE	2
17.	PLUGFL02	1/8" Flush Pipe Plug	2
18.	SCRSH0524	5/16 x 1-1/2 Socket Head Cap Screws	2
19.	80-2095	Wrench Bracket - Welded	1
20.	BALLPL30	1-7/8 Plastic Ball Knob	1
21.	80-2076	Handle - Assembly	1
22.	VALVE02PO.9	1/8 MV45 Mead	2
23.	FIT.447	1/4 NPT x 5/32 Tubing Elbow	2
24.	FIT.435	1/8 NPT x 5/32 Tubing Straight	Specify Qty.
25.	SCRSH0520	5/16 x 1-1/4 Socket Head Cap Screw	6
26.	SCRSS0510	5/16 x 5/8 Socket Set Screw	1
27.	80-247	Rod	1
28.	80-2098	Pivot Rod - Semi Automated	1
29.	NUTES07.14	7/16-14 Elastic Stop Nut	4
30.	NUTHX07.20J	7/16-20 Fine Jam Nut	2
31.	BUSH0706	7/16 x .375FK 62486 Bushing	1
32.	WASHFL07	7/16 Flat Washers	2
33.	PINCO0116	3/32 x 1 Cotter Pin	2
34.	SCRRH.063216	6-32 x 1 Round Head Screws	4
35.	SPGC06.062.3	3/8 x .062 x 2" Compression Spring	2
36.	NUTHX.0632	6-32 Hex Nut	4
37.	SPGC12.062.7	3/4 x .062 x 1-1/4 Spring	2
38.	80-2068	Carriage - Body	1
39.	VALVE.41	Wabco Size II Base 1/2"	1
40.	FIT.436	5/32 "Y" Fitting	5
41.	VALVE03OR.1	5/32 "OR" Valve	1
42.	80-2078	Wrench Cover	1
43.	VALVE02PI.6	1/8 3-Way Pilot Valve	1
44.	TUBEPL03.1PL	5/32 Poleurethane Tubing	Specify Length
45.	VALVE.51	WABCO #2 3 Position # Pilot Valve	1
46.	80-2077	Lower Wheel Mount	1
47.	PINCO0108	3/32 x 1/2 Cotter Pin	2
48.	80-2165	Upper Wheel Mount - Assembly	1
49.	SCRHH0824	1/2 x 1-1/2 HHC Screw	5

PARTS & SERVICE

Key #	Part Name	Description	Quantity
50.	WHE.10	Wheel (Bearing) 6203ZZ	5
51.	BUSH082107	1/2 x 21/32 x 7/16 Bushing	5
52.	SHIM0812.125	1/2 x 3/4 x .125 Shim	Specify Qty.
53.	NUTES08.13	1/2-13 Elastic Stop Nut	5
54.	WASHLO04HI	1/4" Hicollar Lock Washer	4
55.	WASHLO05	5/16" Lock Washer	5
56.	80-2094	Assembly - Frame	1
57.	FIT.065	MPA 1810 10-32 x 1/8 Reducing Bushing	2
58.	FIT.050	MH-1008-1 1/8PTU x 10-32 MPT	2
59.	INSHO0402	1/4 x 1/8 Hose Insert	1
60.	INSHO0404	1/4 x 1/4 Hose Insert	1
61.	INSHO0808	1/2 x 1/2 Hose Insert	2
62.	FIT.275	10710 1/2 Swivel Barb	2
63.	COUST0008	1/2 Steel Pipe Coupling	1
64.	TUBEPL02.1PU	1/8" MUT-1008 Poly U Tube	Specify Length
65.	HOSAI04	1/4" Air Hose	Specify Length
66.	HOSAI08	1/2" Air Hose	Specify Length
67.	80-2177	Bracket	1
68.	80-2090	Threaded Rod	1
69.	NUTES05.18	5/16-18 Elastic Stop Nut	4
70.	GROM.20	5/16 x 1/2 x 11 GA. Grommet	1
71.	80-2091	Spacer	1
72.	WASHFL05	5/16 Flat Washers	3
73.	SPGC16.125.1	1 x .125 x 1 Compression Spring	2
74.	WASHFN05	5/16 Fender Washer	2
75.	80-2178	Spacer	1
76.	80-3078	Spacer - Spring	2
77.	WASHFL03	3/16" Flat Washer	2

PARTS & SERVICE

PARTS & SERVICE

Key #	Part Name	Description	Quantity
1.	WR3840U	R3840U Ingersol Rand Air Wrench	1
2.	MUF12	3/4 07 FWC/Disc Muffler	1
3.	PINRO.033206	3/32 x 3/8 Roll Pin	1
4.	WR25.150	P25-150 Key	1
5.	BERTR13	E-6 Thrust Bearing	1
6.	80-228	Collar	2
7.	80-1888	Assembly - Yoke	1
8.	80-1882	Driver	1
9.	80-2096	Wrench Mount - Welded	1
10.	WR3840.283	3840-283 Backhead Gasket	1
11.	80-2251	Backhead - 64 Degree	1
12.	SCRSH0420	1/4 x 1-1/4 Socket Head Cap Screws	Specify Qty.
13.	80-2100	Rod Threaded Tie - Semi-Automated	2
14.	80-2101	Tube - Delrin - Semi Automated	2
15.	80-2167	Cylinder	1
16.	NIP0432	1/4 x 2 NIPPLE	2
17.	Not Used		
18.	SCRSH0524	5/16 x 1-1/2 Socket Head Cap Screws	2
19.	80-2095	Wrench Bracket - Welded	1
20.	BALLPL30	1-7/8 Plastic Ball Knob	1
21.	80-2076	Handle - Assembly	1
22.	VALVE02PO.6	1/8 LSC-3200-LP1 Versa	2
23.	FIT.447	1/4 NPT x 5/32 Tubing Elbow	2
24.	FIT.446	1/8 NPT x 5/32 Tubing Elbow	Specify Qty.
25.	SCRSH0520	5/16 x 1-1/4 Socket Head Cap Screw	6
26.	SCRSS0510	5/16 x 5/8 Socket Set Screw	1
27.	80-247	Rod	1
28.	80-2098	Pivot Rod - Semi Automated	1
29.	NUTES07.14	7/16-14 Elastic Stop Nut	4
30.	NUTHX07.20J	7/16-20 Fine Jam Nut	2
31.	BUSH0706	7/16 x .375FK 62486 Bushing	1
32.	WASHFL07	7/16 Flat Washers	2
33.	PINCO0116	3/32 x 1 Cotter Pin	2
34.	SCRRH.063216	6-32 x 1 Round Head Screws	4
35.	SPGC06.062.3	3/8 x .062 x 2" Compression Spring	2
36.	NUTHX.0632	6-32 Hex Nut	4
37.	SPGC12.094.5	3/4 x .094 x 1-1/4 Spring	2
38.	80-2068	Carriage - Body	1
39.	VALVE.41	Wabco Size II Base 1/2"	1
40.	FIT.436	5/32 "Y" Fitting	5
41.	VALVE03OR.1	5/32 "OR" Valve	1

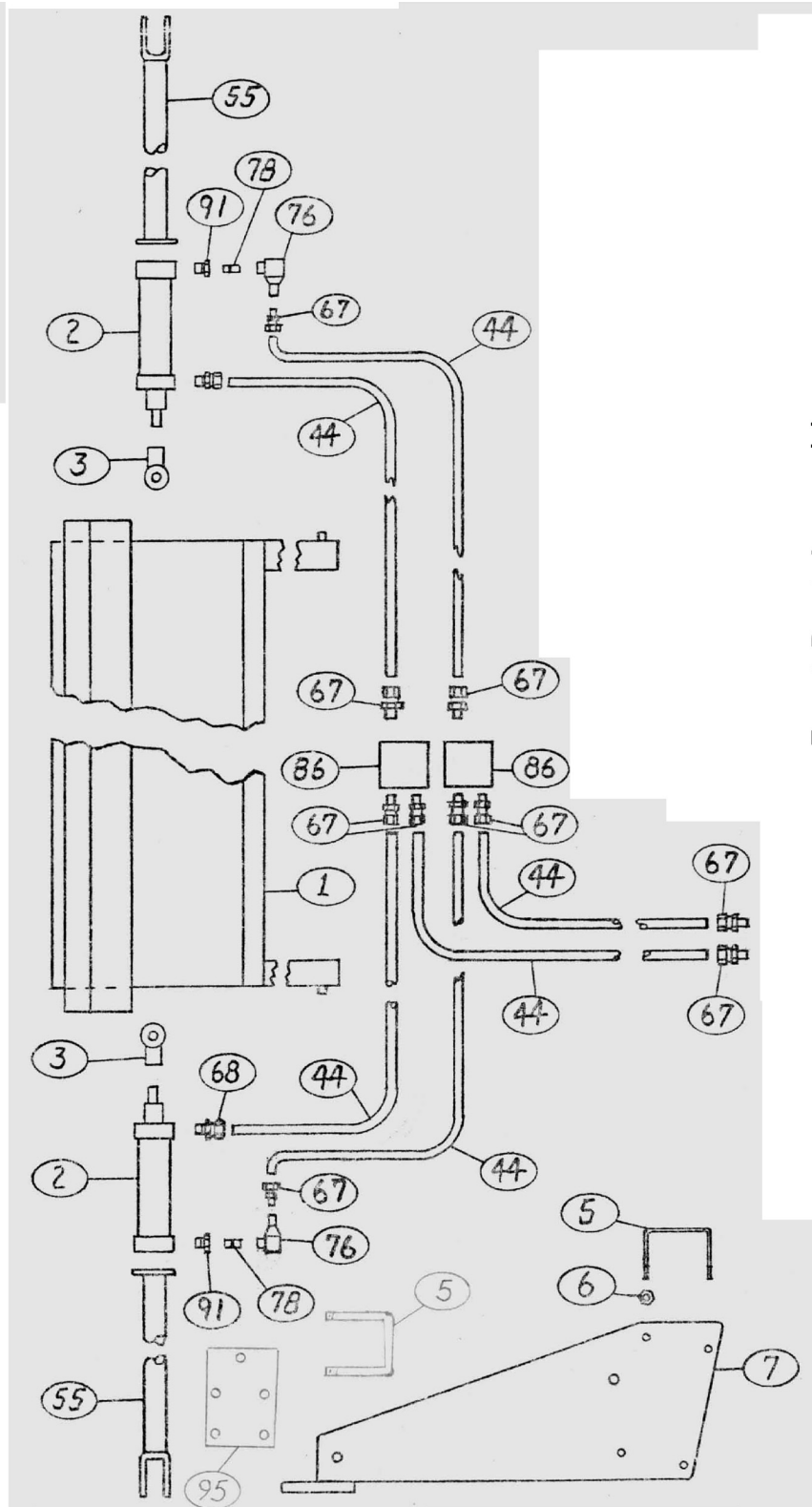
PARTS & SERVICE

Key #	Part Name	Description	Quantity
42.	80-2078	Wrench Cover	1
43.	VALVE02PI.6	1/8 3-Way Pilot Valve	1
44.	TUBEPL03.1NY	5/32 Nylon Tubing	Specify Length
45.	VALVE.51	WABCO #2 3 Position # Pilot Valve	1
46.	80-2077	Lower Wheel Mount	1
47.	PINCO0108	3/32 x 1/2 Cotter Pin	2
48.	80-2165	Upper Wheel Mount - Assembly	1
49.	SCRHH0824	1/2 x 1-1/2 HHC Screw	5
50.	WHE.10	Wheel (Bearing) 6203ZZ	5
51.	BUSH082107	1/2 x 21/32 x 7/16 Bushing	5
52.	SHIM0812.125	1/2 x 3/4 x .125 Shim	Specify Qty.
53.	NUTES08.13	1/2-13 Elastic Stop Nut	5
54.	WASHLO04HI	1/4" Hicollar Lock Washer	4
55.	WASHLO05	5/16" Lock Washer	5
56.	80-2094	Assembly - Frame	1
57.	FIT.065	MPA 1810 10-32 x 1/8 Reducing Bushing	2
58.	FIT.050	MH-1008-1 1/8PTU x 10-32 MPT	2
59.	INSHO0402	1/4 x 1/8 Hose Insert	1
60.	INSHO0404	1/4 x 1/4 Hose Insert	1
61.	INSHO0808	1/2 x 1/2 Hose Insert	2
62.	FIT.275	10710 1/2 Swivel Barb	2
63.	COUST0008	1/2 Steel Pipe Coupling	1
64.	TUBEPL02.1PU	1/8" MUT-1008 Poly U Tube	Specify Length
65.	HOSAI04	1/4" Air Hose	Specify Length
66.	HOSAI08	1/2" Air Hose	Specify Length
67.	80-2177	Bracket	1
68.	80-2090	Threaded Rod	1
69.	NUTES05.18	5/16-18 Elastic Stop Nut	4
70.	GROM.20	5/16 x 1/2 x 11 GA. Grommet	1
71.	80-2091	Spacer	1
72.	WASHFL05	5/16 Flat Washers	3
73.	SPGC16.125.1	1 x .125 x 1 Compression Spring	2
74.	WASHFN05	5/16 Fender Washer	2
75.	80-2178	Spacer	1
76.	80-2193	PVC Spacer	2
77.	WASHFL03	3/16" Flat Washer	2

PARTS & SERVICE

#815A-M1-1 Front Rest

Key #	Part Name	Description	Quantity
1.	80-1325	Front Rest - State Overall Length	1
2.	CYL.SP.10	Cylinder 200 x 5 Springville	2
3.	CLEVI.10	Clevis 1945 Cylinder	2
4.	80-879	Bracket-Cylinder-Steel Legs Only	
5.	80-880	Bolt - "U" 80-880	8
6.	NUTHX06.16	Nut - 3/8" Hex	8
7.	80-1015	Mounting 32-38", 80-1047 Mounting 40-50" Clamps	
44.	TUBEPL05.2PF	5/16 #55P Poly Flo Tubing	Specify Length
55.	80-636	Extension-Alkon - State Overall Length	
67.	FIT.160	268P 5/16PTU x 1/8 MPT Straight	6
68.	FIT.165	268P 5/16PTU xx 1/4MPT Straight	4
76.	VALVE02QE.1	1/8 SQE-1 Quick Exhaust	
78.	NIP0002	1/8 Close Nipple	
86.	80-933	Connector	2
91.	BUSHR0402	1/4 x 1/8 Reduce Bushing	2
95.	80-897	Bracket	2



Front Rest Assembly

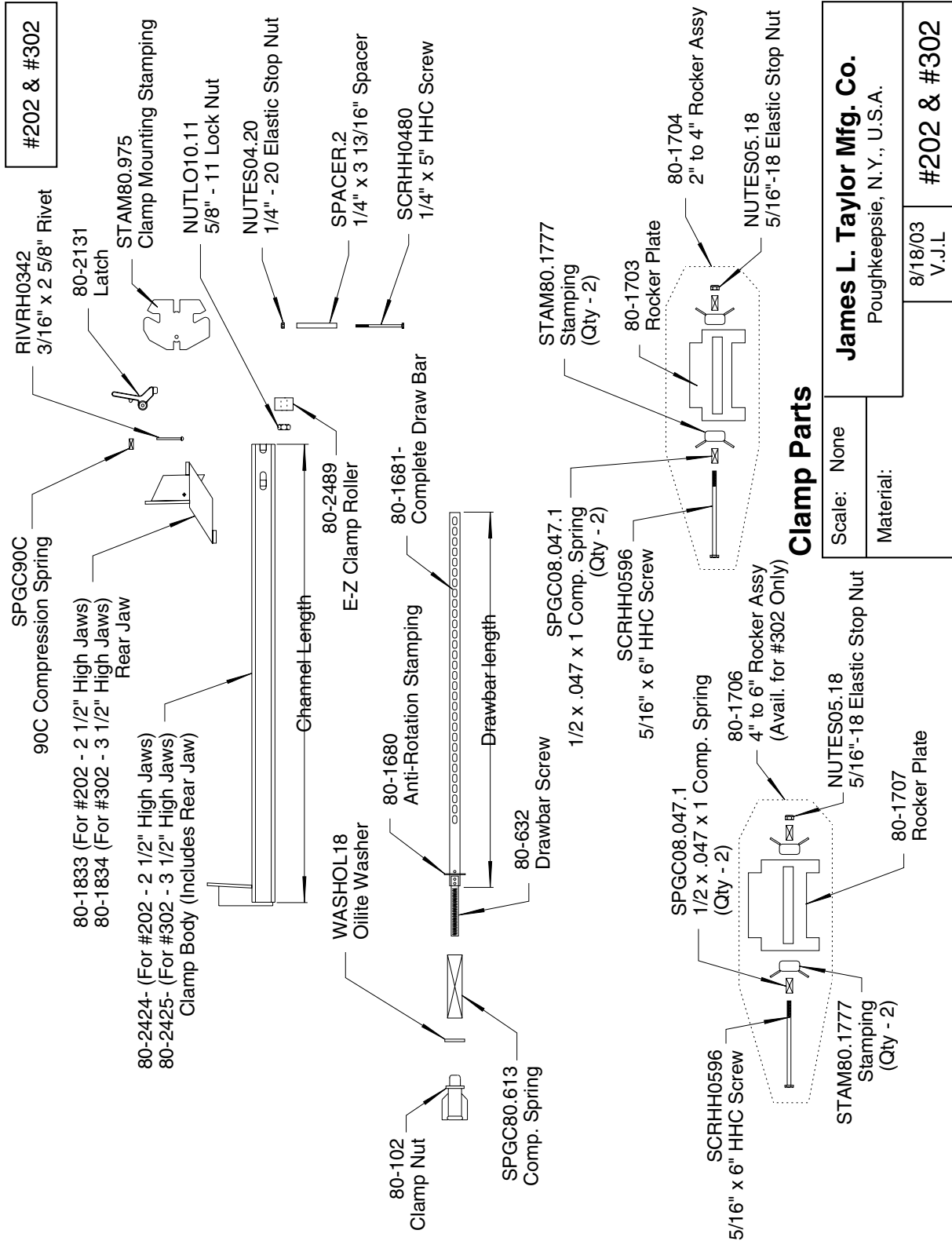
SCALE None	JAS. L. TAYLOR MFG. CO.	#815A-M1-1
MAT.	POUGHKEEPSIE, N.Y. U.S.A.	4-14-82
	Model	(M)

2nd DEPT. 1000 1000 1000 1000

D#CM-16-R2

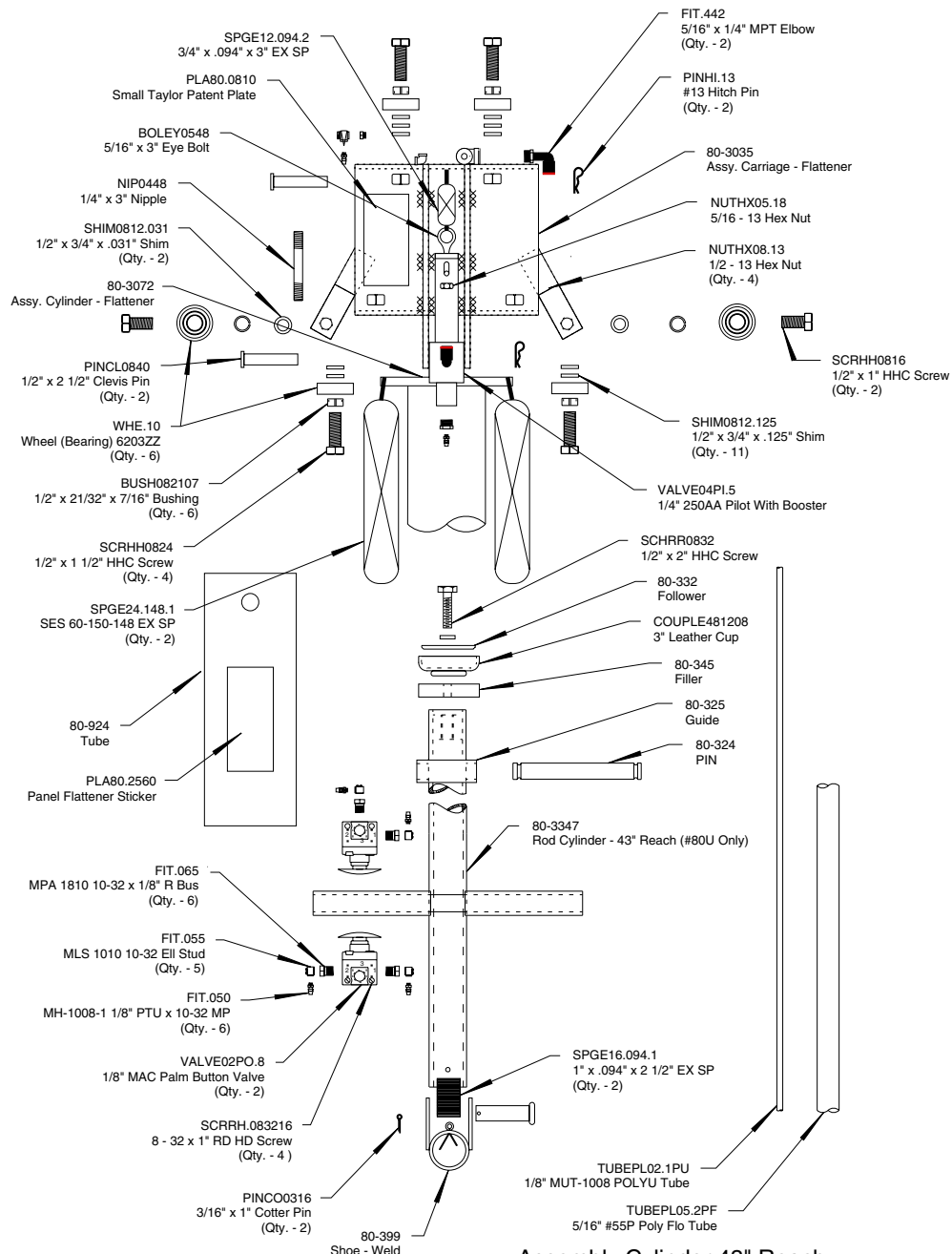


Scale: None	James L. Taylor Mfg. Co. Poughkeepsie, N.Y., U.S.A.	
Material:	10/306 JLM	#CC-M2



PARTS & SERVICE

800216



Assembly Cylinder 43" Reach
9" Stroke 1 Hand

Scale:	James L. Taylor Mfg. Co.		
Material:	Poughkeepsie, N.Y., U.S.A.		
	5/4/04 JTH	800216	

Bates Boothcoating - Glue Release



U-C COATINGS CORPORATION

The premier manufacturer of water based coatings for the forest products industry, worldwide

BATES®

Boothcoating/Glue Release

A Silicone-Free Coating For Gluing Equipment And Paint Spray Booths

BATES is the #1 Glue Release coating in the world. A high quality, protective coating for gluing equipment and paint spray booths, **BATES** is ready-to-use, environmentally friendly and very cost effective.

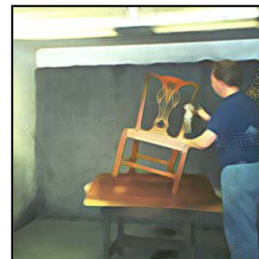
DESCRIPTION — A water-based, wax and oil coating that makes surfaces slippery to repel glues. BATES is very effective when reapplied on a regular basis. *It is a temporary, protective film – not a cleaner.*



USES — Apply to any non-porous surface that accumulates dried glue, paint over-spray, wood resin, or other unwanted material. Use on gluing equipment, spray booths, slide ways, saw tables, etc. *Do not use on walkways; it is very slippery.*

PROVEN RESULTS — BATES Glue Release is recommended by most manufacturers of adhesives, glue clamping equipment and high-frequency electronic gluers.

BENEFITS — BATES *saves clean-up time!* Regular application prevents the harsh, difficult cleaning that abuses and deteriorates equipment. *Reduced clean-up time increases production output.*



Tel: 716-833-9366
website: www.uccoatings.com

US/CN Toll Free: 1-888-END-COAT
P. O. Box 1066 • Buffalo, NY 14215 • U.S.A.

Fax: 716-833-0120
email: info@uccoatings.com

BATES® Boothcoating/Glue Release

EASY TO APPLY — A liquid coating, BATES can be easily sprayed on, brushed on, or wiped on.

As a glue release – a light, thin coating is best

As a spray booth coating – a heavy coating is best

Apply BATES using:

A Trigger Bottle & Sponge



or a Roller



or a Spray Gun



PROPERTIES — BATES is a stable wax & oil emulsion. It contains *no silicones*.

Appearance:	Viscous, white or creamy liquid that sets-up to a transparent film
Viscosity:	1900 cps. (similar to heavy weight oil)
Shipping Weight:	470 lbs./55 gallon drum; 45 lbs./5 gallon pail (215 kg./205 liter drum; 21 kg./19 liter pail)
Specific Gravity:	0.95
Clean-up:	Use hot soapy water
Coverage:	100 – 1000 sq. ft. per gallon, depending on application

STORAGE — Do not expose to freezing temperatures. Storage temperature between 50° – 90°F is suggested.

CONTAINER SIZES — 55 gallon drums / 30 gallon drums / 5 gallon pails
Smaller sizes are available upon request.

TRY IT BEFORE YOU BUY IT — All of U-C Coatings' products are available on a sample basis to allow you to test their effectiveness in your operation. Contact us for information and a sample of BATES to *start saving production time and money!*

OTHER PRODUCTS — We also produce other related coatings and sealers.

BATES HPR – high temperature glue release coating

BATES DPS – waxless sealer for dried wood parts

ANCHORSEAL – wax sealer for green lumber and logs

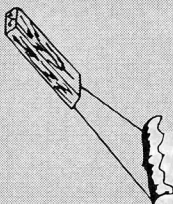
GEMPAINT – paint for dried lumber bundles and logs

U-C COATINGS CORPORATION

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website: www.uccoatings.com

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Fax: 716-833-0120
email: info@uccoatings.com



BATES Boothcoating* / Glue Release

General Instructions

1. BATES Coating is non-flammable, non-corrosive, and gives off no toxic or irritating fumes -- very safe to use. In case of contact with skin, wash with warm water and soap. In case of contact with eyes, wash with warm water until clear. If swallowed in any appreciable quantity, obtain medical attention. Do not induce vomiting. BATES Coating contains water, petroleum oils and waxes, soap, and ethylene glycol.
2. BATES Coating will freeze after prolonged exposure to temperatures below freezing. This will cause the emulsion to break down, making it unusable. **STORE IN A HEATED AREA.**
3. Our "Freeze Stable" BATES Coating will be shipped during winter weather. If it arrives frozen, store in a warm area until thawed. It can then be used in a normal manner.
4. Cover and/or reseal containers between uses to prevent evaporation and deterioration of BATES Coating. It has an indefinite self life if kept sealed. Moderate stirring may be necessary after long periods of storage.
5. BATES Coating **DOES NOT DRY** -- it forms a waxy gel, so **DO NOT** use it on floors or other walkways. It is **VERY** slippery.
6. In addition to its primary use as a glue release coating and paint spraybooth coating, BATES Coating may also be used as a concrete mold or form release coating, and as temporary protection against fumes and spattering of most acids and alkalies. To remove the contamination and the coating, wash with a forceful stream of hot water.

Instructions for use as a Glue Release Coating

BATES Glue Release is the most widely used coating for the protection of equipment from glues of all types in the woodworking and furniture industries. It is used with excellent results on cold gluing equipment of all types: high frequency machines, clamps and clamp carriers, panel-mints, slat conveyers, set-up tables, etc. (For equipment operating above 80°C/175°F, use BATES HPR - Hot Press Release.) Except where noted in the instructions below, a thin coating of BATES Glue Release is all that is required. A thin coat will not contaminate the work. BATES Glue Release contains no silicone.

1. Surfaces of any equipment to be protected from glue accumulation must first be cleaned by conventional methods.
2. Any surface of glue equipment or equipment exposed to glue drippings can be protected by applying a thin coat of BATES Glue Release with a cloth, brush, sponge, or fine spray.
 - a. A small amount of BATES Glue Release should be applied to the cloth, brush or sponge, or sprayed onto the surface to be protected. The cloth or sponge should then be used to spread the BATES Glue Release to a thin, uniform coating in the same way that floor polish is applied in your home.
 - b. BATES Glue Release is also recommended to simplify clean-up of cold water-base glue pots, glue pans, applicator wheels and rolls, spreaders, etc. In these cases, the equipment should be cleaned at the end of every shift and a very thin new coating should be applied.

The BATES Glue Release should "set" for at least an hour before operation start up -- overnight is best.

3. BATES Glue Release is effective in protecting most surfaces of equipment used with hot or solvent-base glue, but it should not be used on applicator surfaces or in the glue source.
4. BATES Glue Release and accumulated glue can be removed easily with a scraper, putty knife, squeegee, cloth or sponge, depending on the application and the cleaning cycle. An efficient way to use BATES Glue Release is to make glue removal and re-application of a thin coating of BATES Glue Release a part of the operating cycle. So long as the old glue is removed, there is no need to remove remaining traces of BATES Glue Release, and no cleaning solvents are needed.
5. Use a very thin film of BATES Glue Release to protect saw table, planer tables, sander tables, etc., from rosin build-up and to keep work sliding smoothly. Dilute BATES Glue Release with a little water and spray it onto the surface with a spray bottle. Wipe off any excess with a damp cloth or sponge. Renew as needed. Scrape with a putty knife to clean.
6. Use a thick coat of BATES Glue Release for lubricating slideways and turnarounds where no one ever walks. A thick coat may also be sprayed onto non-work surfaces of clamp carriers, drive chains, and other equipment exposed to glue drippings, where the cleaning cycle is longer.

Instructions for use as a Paint Spraybooth Coating

1. Areas to be protected from paint or lacquer should be reasonably clean and smooth. The surface need not be completely clean and dry.
2. BATES Boothcoating may be applied with a brush, roller, or by spraying. Complete coverage with one heavy coat is all that is required. Application equipment can be cleaned with hot water and soap -- no solvents.
3. BATES Boothcoating **DOES NOT DRY**. It stays "wet and waxy". It should be applied and allowed to "set" for at least 4 hours before using the spraybooth. During this period, it will lose its yellowish color and become a soft, waxy gel which can be easily wiped or scraped off the wall.
4. BATES Boothcoating is most economical for spraybooths, water walls, exhaust stacks, exhaust fan blades, etc., which must be stripped and

recoated on a frequent basis. IT **DOES NOT DRY** and tends to slowly evaporate.

5. A wide blade, reasonably sharp putty knife or scraper is the best tool for removal of BATES Boothcoating and the paint residue covering it. All paint or lacquer residue should be removed, but it is not necessary to remove all of the old BATES Boothcoating.
6. Where there are facilities for drainage and collection of residue, BATES Boothcoating and the paint or lacquer overspray covering it can be washed off walls, exhaust stacks, and other surfaces and equipment by hosing with a forceful stream of hot water. Surfaces do not need to be completely dry before recoating.

*BATES Boothcoating is a registered trademark of U•C Coatings Corporation.



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SUGGESTIONS HOW TO USE *BATES Boothcoating/Glue Release* On Your Gluing Equipment

POSSIBLE USAGE AREAS	SUGGESTED PROCEDURES *
<p>A. Cleaning Up Old Glue Mess</p> <p>Don't let equipment go unprotected after this! <i>BATES Glue Release</i> is a protective coating, not normally a cleaner.</p>	<p>Hammer & chisel, power sander, or . . .</p> <p>To penetrate and soften dried glue build-up (water-based adhesives only), this sometimes works:</p> <p>(a) Paint on a heavy coating of <i>BATES Glue Release</i> at the end of the day Friday. Let sit over the weekend. On Monday, pry up with a scraper or blade. (Glue build-up may become pliable, like plastic.) Or,</p> <p>(b) Cover the glue build-up with wet cloths on Friday. Scrape on Monday. Or,</p> <p>(c) Do (a) and (b) together.</p>
<p>B. Applying <i>BATES Glue Release</i></p> <p>To: Clamps and Clamp Carriers High Frequency or Panel-Mint gluing machines. Set-up Tables. Any area or machinery on which glue drips or spatters.</p>	<p>Surface must be clean and free of glue</p> <p>Use a rag, sponge, roller, or dishwashing string mop lightly soaked with <i>BATES Glue Release</i> — not dripping wet — or in a spray bottle diluted 1:1 with water.</p> <p>Apply a thin coating to surfaces on which glue will drip. (Thin — like oiling machine parts for storage; thick coatings make a mess, and could be "squeegeed" into glue joints.)</p>
<p>To: Glue Pot Interior Glue Spreader Wheel Glue Pan Glue Spreader Conveyor</p>	<p>For best results, wipe on a thin coating after clean-up at the end of the work day. This allows <i>BATES Glue Release</i> to "set up" overnight. Otherwise, one hour drying time is usually sufficient.</p> <p>CAUTION: <i>BATES Glue Release</i> should be used to line glue pots, etc., only with cold, water-based glues. Use with hot or solvent based glue can result in contamination of the glue.</p>
<p>To: Saw Table Tops Any surface needing light, silicone-free lubrication.</p>	<p>Wipe on a very light film with a rag or sponge. Rub it in until it can't be seen at all — like polishing furniture.</p>
<p>NOTE: <i>BATES Glue Release</i> will remain soft and wet in appearance. It is not necessary to wait for it to "dry". However, many customers report best results when glue is scraped off at the end of a shift and <i>BATES Glue Release</i> is allowed to set up overnight.</p>	
<p>C. Periodic Clean-up</p> <ol style="list-style-type: none"> 1. A wide-blade scraper is most frequently used in areas where large amounts of hardened glue have accumulated. New <i>BATES Glue Release</i> can be applied at the same time. (See above). 2. A rag, sponge, or string mop, lightly soaked with <i>BATES Glue Release</i> is used by some to keep their work areas free of glue throughout the day, by wiping away recently accumulated glue and simultaneously applying fresh <i>BATES Glue Release</i>, for example, on a set-up table or HF bed during daily operations. <p>NOTE: As long as the glue is removed, traces of old <i>BATES Glue Release</i> do not need to be cleaned off before applying a new coating.</p>	

To clean application equipment — brushes, sprayers, sponges, or rags — simply use a solution of hot water and detergent. No cleaning solvents are needed or recommended.

*Through continued usage, each individual operation will find its own most convenient application and clean-up methods.

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: BATES Boothcoating/Glue Release

DATE PREPARED: May 1, 2002

1. IDENTIFICATION

Identity (as used on label and listings): BATES Boothcoating/Glue Release

Chemical Family/Specific Type: Water-based emulsions / aqueous emulsion of wax and oil

<u>Manufacturer:</u>	U-C Coatings Corporation	<u>Telephone Number:</u>	716-833-9366
	P. O. Box 1066	<u>Fax Number:</u>	716-833-0120
	Buffalo, NY 14215 U.S.A.	<u>Emergency Telephone No.:</u>	716-833-9366

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Ingredient</u>	<u>Approximate %</u>	<u>CAS No.</u>
Petroleum Oil	27%	64742 - 52 - 5
Petroleum Wax	17%	64742 - 61 - 6

No reportable quantities of any hazardous ingredients are present. No toxic chemical(s) subject to reporting requirements of Section 313 of Title III and of 40 CFR 372 are present.

3. HAZARDS RATINGS (HMIS) OF THE PRODUCT

HEALTH: 1

FLAMMABILITY: 1

REACTIVITY: 0

PROTECTIVE EQUIPMENT: C

Explanation of Hazards Ratings:

0 = Minimal Hazard 1 = Slight Hazard 2 = Moderate Hazard 3 = Serious Hazard 4 = Severe Hazard

Protective Equipment: C = safety glasses + gloves + apron

General: BATES is generally harmless to handle provided that certain precautions normally taken when handling cleaning products and chemicals are observed.

Inhalation: Vapor pressure is very low, so inhalation is not normally a problem. Avoid heating the product --- heating may cause vapors causing irritation of the nose, throat and respiratory system.

Eye Contact: Causes irritation to the eyes.

Skin Contact: Repeated or prolonged skin contact may cause dermatitis or defatting.

Ingestion: Not expected to be acutely toxic. May cause irritation of digestive tract.

4. FIRST AID MEASURES

Inhalation: Remove to fresh air. Seek medical attention if symptoms continue.

Eye Contact: Flush eyes immediately with large amounts of water, using soap if possible. If irritation continues, seek medical attention.

Skin Contact: Wash skin with soap and water. Remove contaminated clothing. If irritation persists, seek medical attention.

Ingestion: Do not induce vomiting (aspiration hazard). Seek medical help immediately for ingestion of petroleum distillates.

5. FIRE FIGHTING MEASURES

Flash Point: No flash - boils at 190° - 212°F / 88° - 100°C

Extinguishing Media: Water spray, dry chemical, carbon dioxide (CO₂), foam. Do not direct solid stream of water or foam into burning pools.

Fire Fighting Instructions: Avoid breathing smoke and vapor.

Fire Fighting Equipment: Self-contained breathing apparatus and protective clothing.

Other Fire or Explosion Hazards: Incomplete combustion can produce carbon monoxide.

6. ACCIDENTAL RELEASE MEASURES

Spills or Leaks: Large spills: contain with dikes, collect, and filter for reuse. Small spills: collect or absorb with oil absorbent pads. Clean contaminated areas with soap and water. All spill response and disposal should be carried out in accordance with national and local requirements.

PRODUCT NAME: BATES Boothcoating/Glue Release

7. HANDLING AND STORAGE

Handling: Do not swallow; use normal precautions to avoid exposure to eyes and skin; use in areas with normal ventilation.

Storage: Store at temperatures above 32°F / 0°C. Avoid high heat or open flames.

General: Keep containers closed to minimize evaporation and skin formation. Store above 32°F / 0°C to prevent freezing and destruction of product.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits: None established for this product.

Ventilation: Good ventilation in work area, atmospheric pressure.

Personal Protection: Eyes: safety glasses or splash goggles
Hands: rubber gloves
Other: synthetic apron for cleanliness

9. PHYSICAL & CHEMICAL CHARACTERISTICS

Appearance and Odor: Creamy colored liquid of paint-like consistency

Boiling Point: 212°F / 100°C

Specific Gravity: .94

Vapor Pressure: same as water

Melting Point: 32°F / 0°C

Vapor Density (air = 1): same as water

Evaporation Rate (butyl acetate = 1): < 1

Solubility In Water: infinitely diluteable

Flash Point: No flash - boils at 190° - 212°F / 88° - 100°C

Volatile Organic Compounds: none

Volatile Hazardous Air Pollutants: none

10. STABILITY AND REACTIVITY

Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: None known.

Materials to Avoid: Strong oxidizing agents.

Hazardous Polymerization: Will not occur.

Hazardous Decomposition: Burning may produce carbon monoxide and/or carbon dioxide.

11. TOXICOLOGICAL INFORMATION

Product is practically non-toxic and non-irritating.

12. ECOLOGICAL INFORMATION

No data available.

13. DISPOSAL CONSIDERATIONS

Not a hazardous waste. Where recovery and reuse is not possible, dry water out of product and dispose of as industrial waste or by incineration where permitted under national and local regulations.

14. TRANSPORTATION INFORMATION

ADR/RID: Not regulated

IMDG: Not regulated

ICAO/IATA: Not regulated

15. REGULATORY INFORMATION

The ingredients in this product are in the TSCA, MITI, AICS, DSL inventories.

16. OTHER INFORMATION

Please consult product and application information for the proper use of this product.

PARTS & SERVICE

Parts Order Form

1. Sold to:

Company _____
Address _____
Address _____
City _____
State _____ Zip _____
Your Name _____
Phone # _____
Fax # _____
Purchase Order # _____

2. Ship to:

Company _____
Address _____
Address _____
City _____
State _____ Zip _____
Attention: _____
Phone # _____
Fax # _____
Purchase Order # _____

3. Parts Needed:

Quantity	Part Name (see parts list)	Description	Price (each)

4. Preferred Shipping Method:

(check one)

- ☐ UPS Regular
☐ UPS Next Day Air

- ☐ Truck
Carrier: _____
☐ Air Freight

- ☐ Customer Pickup
☐ Other: _____

5. Fax, Mail, or Phone your Order to:

James L. Taylor Mfg. Co.
108 Parker Avenue
Poughkeepsie, NY 12601
Phone: (845) 452-3780
Fax: (845) 452-0764

Declaration of Conformity

We, James L. Taylor Mfg. Co.
108 Parker Avenue
Poughkeepsie, NY 12601
(914)-452-3780
(914)-452-0764 Fax

declare under our sole responsibility that the product

#80N/817B-M1/#80K Clamp Carrier - Edge gluing machine
Model 800130, 800161, 800216, #CC-M2
Serial Number:

to which this declaration relates is in conformity with the following standards and other normative documents

EN 292 Safety of Machinery, Basic Concepts, General Principles for Design
pr EN 1050 Principles for Risk Assessment
EN 294 Safety distances to prevent danger zones being reached by upper
limbs
EN 349 Safety distances to avoid crushing of human body

following the provisions of the following directives.

89/392/EEC
91/368/EEC
93/44/EEC

The Technical Construction File is maintained at the above address.

Place of Issue: Poughkeepsie NY

Date of Issue:

Authorized Signature: