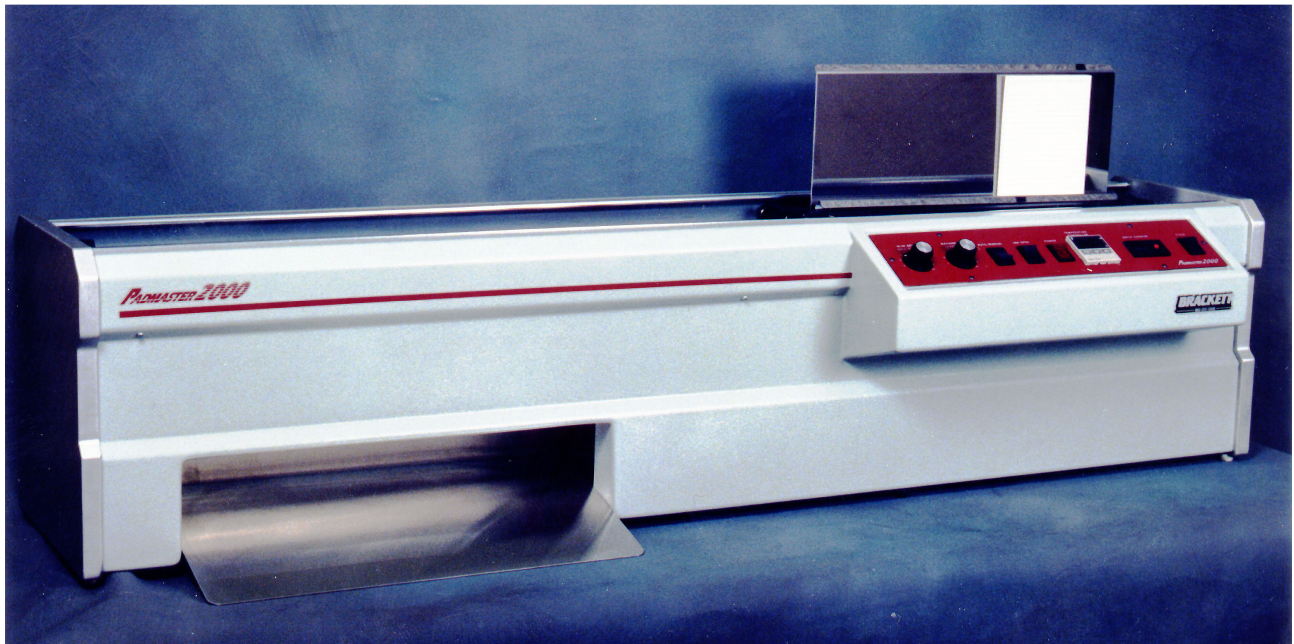


BRACKETT

Owner's Manual
for
PADMASTER 2000



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Introduction

This manual has been prepared as a reference tool for the maintenance and production personnel in order to familiarize them with the setup, mechanical maintenance, and basic repair procedure needed to preserve the reliable performance of the **PADMASTER 2000**

It is impossible to cover all of the possible problems that may occur during the operation of the machine. We will only attempt to cover the general areas of the constructions and functions of the major machine elements. This can be a comprehensive guide for the mechanics and repair personnel.

As a manufacturer, we sincerely desire that the thorough understanding of this manual and parts list will be able to aid the user of our product. The manual should enable the user to troubleshoot and repair almost any combination of troubles in order to restore the machine to its original function in a timely and cost effective way.

Should any question on the maintenance and repair procedures arise that would require clarification, do not hesitate to contact our service department.

When calling for service or repair information, please include the Model name, model number, and the Serial number.

Model Name	PadMaster 2000
Model Number	SPM-4C
Serial Number	2210677

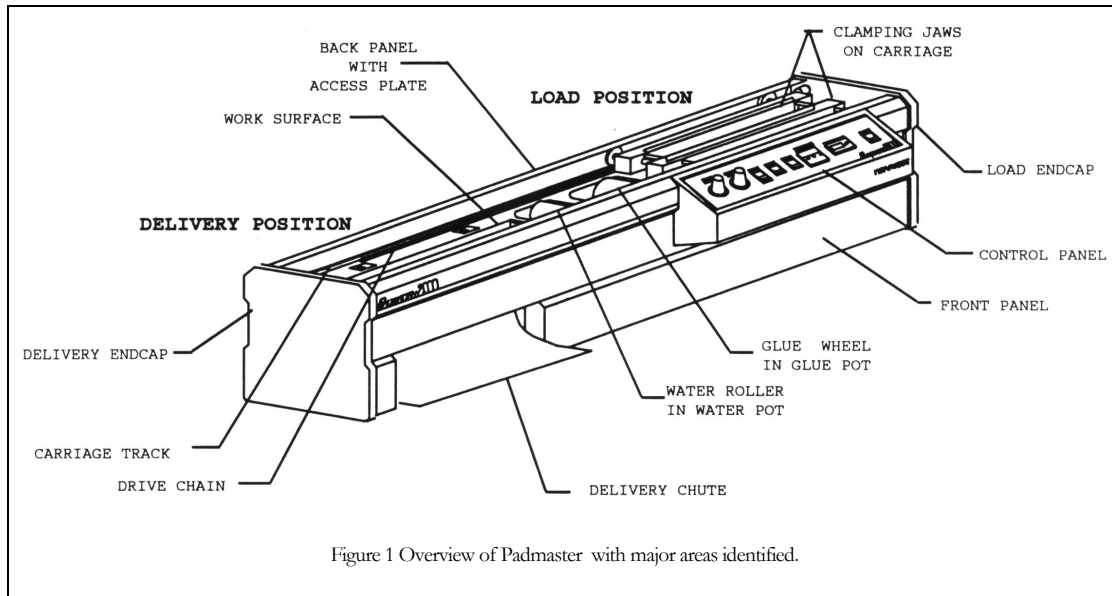
TABLE OF CONTENTS	
INTRODUCTION	2
TABLE OF CONTENTS	3
TABLE OF FIGURES	5
INTRODUCTION	6
INTRODUCTION	6
SCOPE OF MANUAL	6
CONTENTS OF MANUAL	7
PADMASTER 2000 AUTOMATIC PADDING CYCLE	8
STANDARD ACCESSORIES	9
OPTIONAL ACCESSORIES	9
INITIAL SETUP	10
ITEMS NEEDED:	10
BENCH HEIGHT	10
SUPPLIES	11
ELECTRICAL CONTROLS	11
ELECTRICAL CONTROLS	12
POWER	12
AUTO/MANUAL	12
JAW OPEN	12
CYCLE	12
PAD RELEASE TIMER	13
MACHINE SPEED	13
TEMPERATURE CONTROLLER	13
BATCH COUNTER	13
GLUE POT	14
LOADING AND HEATING THE GLUE	14
ADDING MORE GLUE	14
INSTALLING THE WORK SUPPORTS	15
FILLING THE WATER POT	16
SETTING THE GLUE TEMPERATURE	17
ASSIGNING THE GLUING TEMPERATURE	17
REDUCING THE GLUE TEMPERATURE DURING IDLE TIME	17
AUTOMATIC PAD MAKING	18
PRELIMINARY STEPS	18
LOADING THE PRODUCT	18
MAKING THE PAD	18
JAW OPENING ADJUSTMENT	18
IMPROVING PAD QUALITY	19
ROUTINE CARE AND CLEANING	21
DRAINING AND CLEANING THE GLUE POT	22
CLEANING THE GLUE POT	22
GLUE POT ADJUSTMENTS	23
<i>GLUE WHEEL HEIGHT</i>	23
<i>GLUE WIPER ROD</i>	24

GLUE DOCTOR BLADE..... 26
CLEANING THE WATER POT..... 27
REPLACING THE WATER ROLLER SLEEVE 28
 Disassemble the water roller..... 28
REPLACING THE WATER WIPER..... 29
 Disassemble the water wipers 29
 Reassemble the water wipers 29
ADJUSTING THE WATER WIPER HEIGHT..... 30
ADJUSTING THE DRIVE CHAIN 31
TROUBLE SHOOTING 32
 ELECTRICAL AND GLUE POT 32
 CARRIAGE..... 34
 JAWS & BATCH COUNTER..... 35
 TEMPERATURE CONTROLLER..... 36
PARTS LIST..... 38
 RECOMMENDED SPARE PARTS 38
MAJOR SUBASSEMBLIES 39
MACHINE SPECIFICATIONS..... 40
MACHINE SPECIFICATIONS..... 41
ELECTRICAL SCHEMATICSERROR! BOOKMARK NOT DEFINED.
TEMPERATURE CONTROL SETTINGSERROR! BOOKMARK NOT DEFINED.

TABLE OF FIGURES

Figure 1 Overview of Padmaster with major areas identified..... 6
Figure 2 Accessories that are supplied with the PadMaster 2000..... 9
Figure 3 Optional accessories..... 9
Figure 4 PadMaster location considerations..... 10
Figure 5 Delivery Chute assembly..... 10
Figure 6 attaching the power cord..... 11
Figure 7 Operator controls..... 12
Figure 8 Attaching the tall work supports to the jaws..... 15
Figure 9 Water pot set-up..... 16
Figure 10 Temperature Control setting..... 17
Figure 11 Automatic Pad Making Set-up..... 18
Figure 12 Cleaning areas of the Padmaster..... 21
Figure 13 Glue Pot Adjustments..... 23
Figure 14 Glue Pot Wiper Rod adjustment..... 25
Figure 15 Glue Pot Doctor Blade adjustment..... 26
Figure 16 Water Pot cleaning..... 27
Figure 17 Water Pot Sleeve replacement..... 28
Figure 18 Water Pot Wiper adjustment..... 29
Figure 19 Wiper height Set-up..... 30
Figure 20 Drive Chain adjustment screws..... 31
Figure 21 Main Trouble Shooting areas..... 32

INTRODUCTION



WELCOME to the ease of PadMaster 2000 automated pad making! Your PadMaster 2000 reliably and quickly produces tightly glued pads of forms, notepads, tablets, reports, computer printouts, etc.

This easily operated tabletop padder allows you to quickly become a proficient pad maker. The only Operator required function is to load the loose sheets into the clamping jaws and to depress the cycle switch.

Then PadMaster 2000 does the rest of the work. It clamps the sheets, carries them across the hot melt glue roller and a water-cooled roller to the delivery chute where the clamp jaw automatically opens and releases the finished pad onto the delivery chute.

SCOPE OF MANUAL

Review this Owner's Manual before operating your new PadMaster 2000. The manual offers much more than just operating instructions. Primarily use this manual as a reference source for training, problem solving and maintenance procedures.

CONTENTS OF MANUAL

The manual is organized chronologically so the first time user can follow a step-by-step sequence from identifying parts and controls, to the simple set-up and routine operation. At this point, you will also find an illustrated chart to help identify problem pads and improve their quality.

Another illustrated chart suggesting the routine care and cleaning of PadMaster 2000 is followed by systematic instructions for these procedures.

The manual ends with an illustrated troubleshooting chart organized by PadMaster 2000 parts, a spare parts list with ordering information and a performance/specification sheet.

Line drawings illustrate this PadMaster 2000 manual, and callouts, actually positioned on the drawings, identify parts and dimensions.

In addition, some drawings exaggerate particular features to emphasize points, and some parts are enlarged and moved away from their normal location to illustrate specific items.

PADMASTER 2000 AUTOMATIC PADDING CYCLE

1. LOAD FUNCTION

CARRIAGE LATCHED IN LOAD POSITION
WITH JAWS OPEN
OPERATOR LOADS PRODUCT
AND PRESSES "CYCLE"
JAWS CLAMP ON PRODUCT
AND SNAP LATCH RELEASES CARRIAGE

2. GLUE FUNCTION

CARRIAGE MOVES PRODUCT
OVER GLUE WHEEL AND GLUE WIPER ROD

3. COOLING FUNCTION

CARRIAGE MOVES PRODUCT
OVER WATER ROLLER,
WATER WICK AND WIPERS
CARRIAGE AND PADDED PRODUCT
ARRIVE AT DELIVERY CHUTE
CARRIAGE HOLDS PRODUCT
FOR A TIMED DELAY OF 0-10 SECONDS

4. DELIVERY FUNCTION

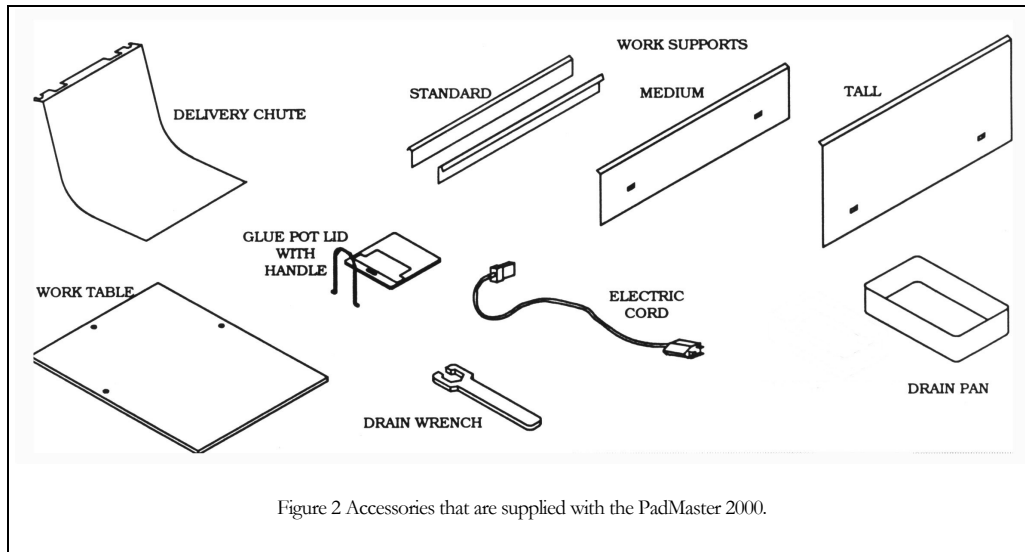
JAWS OPEN
FINISHED PAD DROPS
DOWN THE DELIVERY CHUTE

5. RETURN FUNCTION

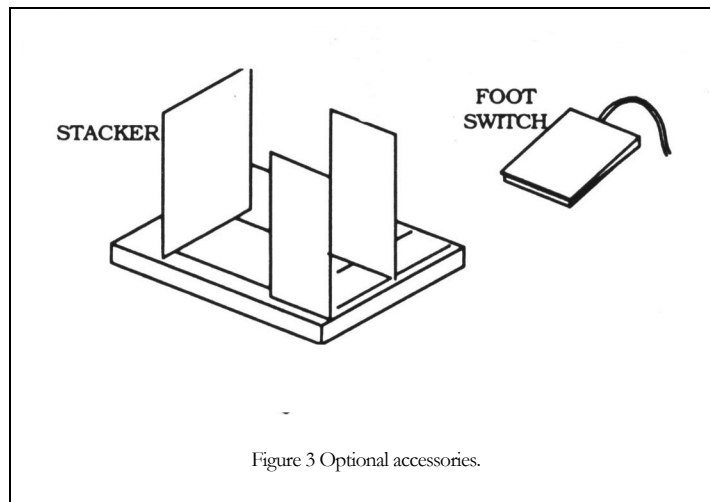
DELIVERY LATCH RELEASES CARRIAGE
THE EMPTY CARRIAGE RETURNS
TO LOAD POSITION AND PARKS
READY FOR THE NEXT CYCLE

Standard Accessories

Several accessories are shipped with your PadMaster 2000 to aid operation and performance.

**Optional Accessories**

A variety of options is available to increase the efficiency and product handling of the PadMaster.

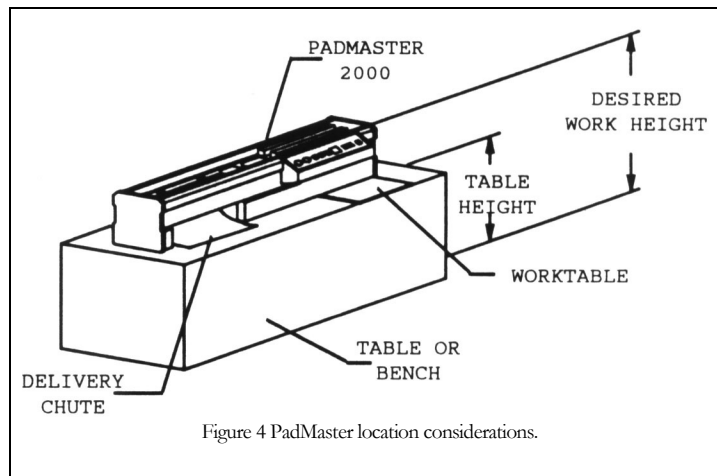


INITIAL SETUP

- Initial setup of your PadMaster 2000 consists of four simple steps.

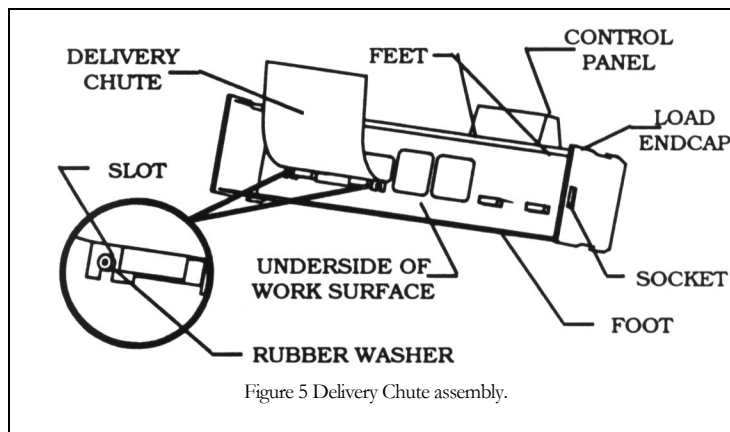
ITEMS NEEDED:

- ⇒ Sturdy table or bench
- ⇒ Level



BENCH HEIGHT

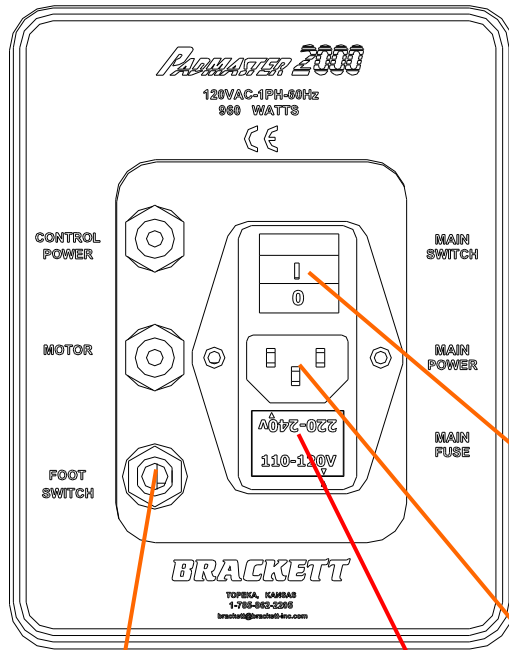
- First, determine the best table or bench height by subtracting 13 inches from your most comfort-able working height.
For example if your work height is 38", the table or bench height would be $38" - 13" = 25"$.
Now place your PadMaster 2000 on the appropriate surface.



- Second lift the load endcap and slide the holes in the worktable under the three feet on the PadMaster 2000's front and back panels.
(IT IS NOT NECESSARY TO TURN THE MACHINE OVER.)

- Next, slip the slots on the delivery chute between the underside of the PadMaster work surface and the two studs' rubber-washers.

Make sure the chute drops down onto the washers and locks into place.



- Finally, plug the female end of the three-prong cord into the PadMaster endcap. Plug the male end of the Power Cord into a 110/115 volt AC, grounded outlet.

An optional Transformer for 220VAC applications is available.

SUPPLIES

Brackett also ships a jar of specially formulated hot melt glue and a bottle of Chill-Set with every PadMaster 2000. That way you can begin padding immediately.

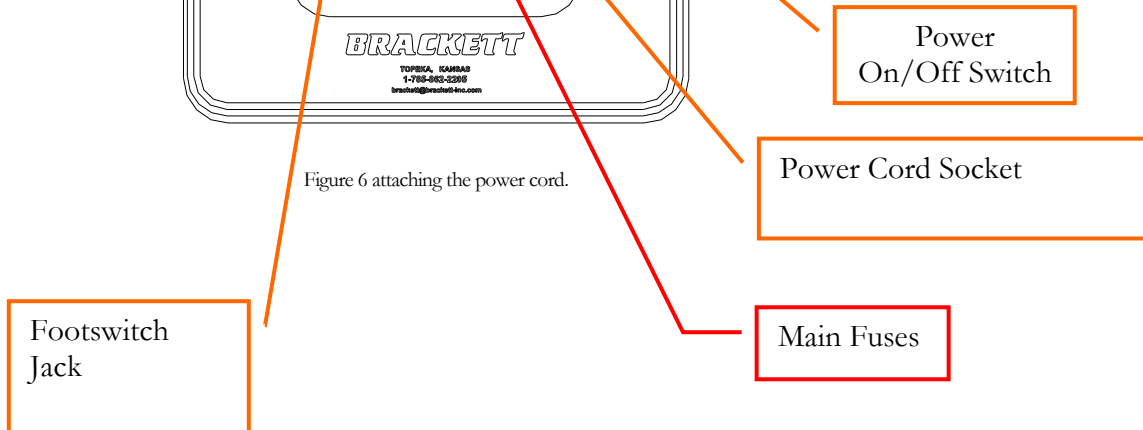


Figure 6 attaching the power cord.

ELECTRICAL CONTROLS

USE MANUAL MODE WHEN ADDING GLUE OR WATER, WHEN HEATING GLUE, WHEN MAKING ADJUSTMENTS, OR WHEN CLEANING AND SERVICING.

ACCIDENTALLY PUSHING THE CYCLE SWITCH WHILE THE PADMASTER 2000 IS IN AUTO MODE COULD CAUSE THE CARRIAGE TO CYCLE UNEXPECTEDLY AND COULD INJURE THE OPERATOR OR DAMAGE THE MACHINE.

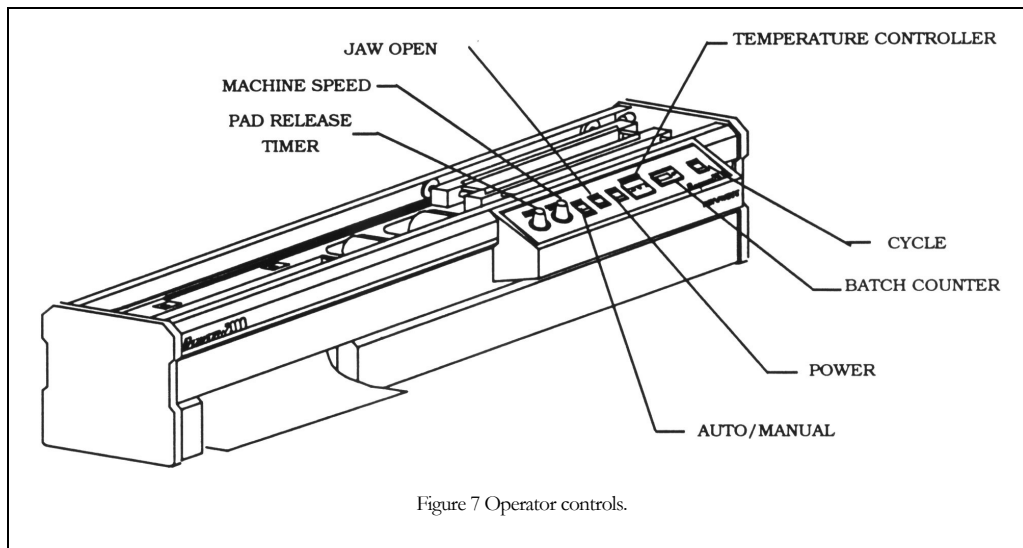


Figure 7 Operator controls.

POWER

Indicates power is on when light is on.

Pilot light indicates power is ON, and the Temperature Control Display will illuminate.

AUTO/MANUAL

AUTO --Allows PadMaster 2000 to operate automatically each time the CYCLE switch is pressed.

MANUAL --Allows the operator to control the carriage and/or jaw movement.

By holding down the CYCLE switch, the jaws will close and carriage move toward the Delivery end of the machine.

Depressing the JAW OPEN switch moves the carriage toward the Load Position and opens the jaws.

JAW OPEN

Opens clamping jaws when carriage is in LOAD position.

OR

The carriage returns to the LOAD position and opens clamping jaws.

Press and hold until jaws reach desired position.

Load Position is when the Carriage is parked at the end of the machine beside the Operator Control Panel

CYCLE

AUTO —The clamping jaws close and the carriage makes one complete pad-ding cycle or the carriage returns to LOAD. Press the switch and release.

MANUAL — The jaws close or the carriage moves only while the switch is depressed. Press the switch and hold to park the carriage at the Delivery end of the machine..

PAD RELEASE TIMER

Adjusts the time the jaws hold the pad at the delivery chute. Turn knob clockwise to increase time from 0 to 10 seconds.

Normal operating setting is "0".

A higher setting allows more time for heavier and thicker pads

MACHINE SPEED

This knob adjusts the speed of the carriage across the glue pot and water pot.

Under normal operating conditions, this is a higher number.

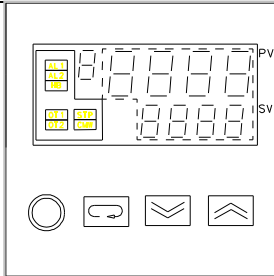
Slower carriage speeds allow thicker glue strips for thicker pads (OVER 2")

TEMPERATURE CONTROLLER

The Temperature Controller sets and displays the glue temperature.

They are preset at these recommended temperatures for Brackett glue.

Optimal Gluing Temp. ¹	325 ^o F 160 ^o C
Maximum Allowed Temp. ²	400 ^o F 205 ^o C
Suggested Idle Time-Reduced Temp.	260 ^o F 126 ^o C



**BEGIN
PADDING
WHEN THE PV
DISPLAY IS
THE SAME AS
THE SV
DISPLAY.**

**FOLLOW THE
GLUE
MANUFACTURER'S
RECOMMENDED
SETTINGS
FOR EACH
ADHESIVE TO
PREVENT
A FIRE OR OTHER
SERIOUS DAMAGE.**

BATCH COUNTER

Displays number of padding cycles since last reset.

Push red button to reset count to 0.



¹ This setting is made by the operator.

² This parameter is preset when the Temperature Controller is installed.

Glue Pot

LOADING AND HEATING THE GLUE

Allow 35 to 45 minutes for the glue to reach operating temperature. During this heat-up time, you can finish the other simple padding preparations on the next page.

ITEMS NEEDED:

- ⇒ Glue Pot Lid Handle
- ⇒ 25 oz. of Padding Glue
- ⇒ Pair of Gloves

1. Switch "AUTO/MANUAL" to MANUAL, and push the "POWER" switch ON.
2. Press and hold the "CYCLE" switch until the carriage moves to the DELIVERY end of your PadMaster 2000.
3. Place the handle into the slot in the glue pot lid, and lift the lid off the glue pot.
4. Add glue chips on top of the fins until about 25 ounces have been melted. The melted glue should be level with the top of the heating fins inside the glue pot.
5. Replace the lid when all the glue is melted. Remove the handle.
6. Switch "AUTO/MANUAL" to AUTO. The carriage will return to LOAD position.

ADDING MORE GLUE

ITEMS NEEDED:

- ⇒ Glue Pot Lid Handle
- ⇒ Padding Glue

Primarily use the above method to add more glue when your PadMaster 2000 is idle such as breaks, lunch or quitting time. This allows time for the glue to completely melt without interrupting your pad making.

About a half dozen chips at a time may be added DURING PADDING, if the chips are added on top of the front fins and are allowed to melt before adding any more.

!CAUTION!
TURN "POWER"
OFF WHEN THE
GLUE POT
REMAINS
EMPTY. FAILURE
TO DO SO MAY
DAMAGE THE
GLUE POT
HEATERS OR MAY
CAUSE A FIRE.

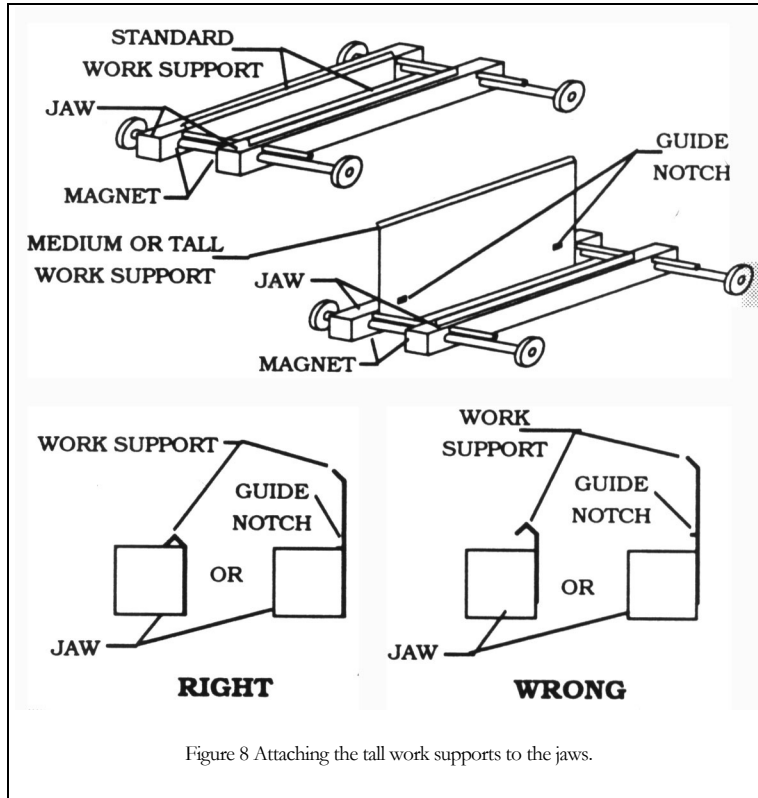
DO NOT CYCLE
WHEN THE
GLUE POT
HOLDS
SOLIDIFIED
GLUE. FORCING
THE GLUE WHEEL
TO TURN MAY
DAMAGE THE
DRIVE SYSTEM.

**NEVER FILL
THE GLUE POT
ABOVE THE
TOP OF THE
HEATING
FINS.
GLUE WILL
DAMAGE THE
BEARINGS
AND SEALS IN
THE GLUE
WHEEL
SHAFT.**

INSTALLING THE WORK SUPPORTS

ITEMS NEEDED:

⇒ Work Supports



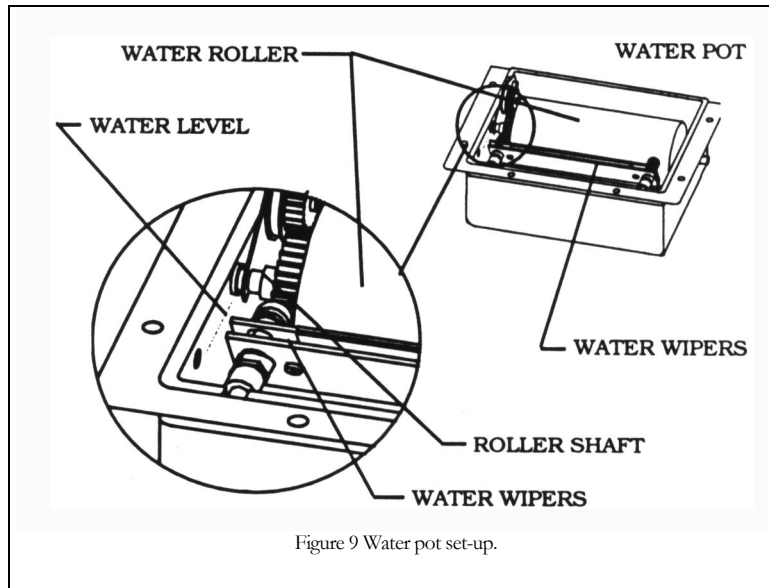
1. Select the proper work support pair to hold the product upright in the carriage jaws.

STANDARD	2 - 6 in. TALL
MEDIUM	6 - 9 in. TALL
TALL	9 - 18 in. TALL

2. Place each support against the magnetic surface on the inside of the jaws.
3. Press each support or guide notch down against the top of the jaw.

FILLING THE WATER POT**ITEMS NEEDED:**

- ⇒ About 3-1/2 cups of Water
- ⇒ Chill Set Solution



1. Add about 3-1/2 cups of water to the water pot. The water level is about 1 inch below the top of the pot or just below the roller shaft.
2. Add a capful of Chill Set solution to the water. (A large squirt of 40 to 50 drops)

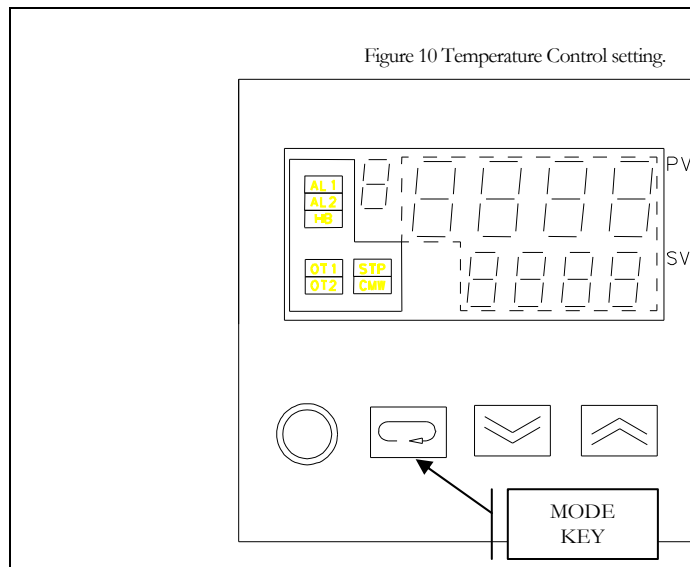
SETTING THE GLUE TEMPERATURE

ASSIGNING THE GLUING TEMPERATURE

The optimal gluing temperature may vary for different glues. The temperature set at the factory is the optimal gluing point (325° F.) for the Brackett glue shipped with your PadMaster 2000.

**ALWAYS FOLLOW THE MANUFACTURER'S
RECOMMENDED SETTINGS FOR ADHESIVES.**

FOR MORE
INFORMATION ON
SETTING THE
TEMPERATURE
CONTROLLER, SEE
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Press the control panel "POWER" switch ON.

The Present Temperature Value will show in the top numerical display, and the PreSet Temperature Value in the lower numerical display.

The display mode changes as the "MODE" key is pressed:

The only adjustment that can be made in the Normal Operating Mode is the adjustment of the glue temperature.(SV)

Press the "UP" or "DOWN" keys until your new value is displayed. Wait for the temperature to reach the new value.

REDUCING THE GLUE TEMPERATURE DURING IDLE TIME

Using a lower optimal gluing point keeps the glue warm between intermittent padding cycles. This practice keeps your PadMaster 2000 ready to pad again in 3 or 4 minutes, while keeping the glue at a safe temperature. In addition it preserves the quality and extends the life of the glue. This is the "SP" setting. Follow the instructions to assign an optimal gluing temperature, but use a lower glue temperature.(260° F. is suggested for Brackett glue.)

NOTE:
The temperature at which the glue becomes liquid enough for the Glue Roller to turn is 305° F. for Brackett glue, The Optimal Gluing Temperature is 325°. The "ALARM 1 HYSTERISIS" is set at 20 allowing the machine to cycle only after the glue is liquefied.

AUTOMATIC PAD MAKING

PadMaster 2000 can begin operating when the glue temperature has reached 325° F. and the glue wheel is free to turn.

PRELIMINARY STEPS

!ATTENTION!
Do not cycle the machine while your fingers are between the jaws or your fingers **WILL BE PINCHED** by the clamping action of the jaws.

- 1) Switch the "AUTOMATIC/MANUAL" control to AUTO.
- 2) Press and release the "CYCLE".
- 3) This cycles the empty, and evenly distributes the glue over the glue wheel and moistens the water wick.
- 4) Repeat step 2 several times.
- 5) Park the carriage in LOAD position.
- 6) Push the red "BATCH COUNTER" button to reset the count at 0.

LOADING THE PRODUCT

- 1) Push the "OPEN JAW" switch until the opening amply provides enough space for the elements of one pad.
- 2) Insert these elements **TOP DOWN** between the jaws.
- 3) For multiple pads, place the separator on the clamping guides, and then load another set of loose padding elements.
- 4) Lightly fan and tap the elements on the work surface until all edges are uniform and even.

MAKING THE PAD

- 1) Press and release the "CYCLE" switch, and at the same time release the product.
- 2) Now PadMaster 2000 automatically clamps, glues, cools and delivers your finished pad.

JAW OPENING ADJUSTMENT

For a wider jaw opening,

- 1) Remove the nut on the bottom of the screw, and remove the screw.
- 2) Relocate the guide stud to the upper hole for an additional .25" of pad clearance when the jaw opens to drop the pad.
- 3) Reinstall the screw and bottom nut.

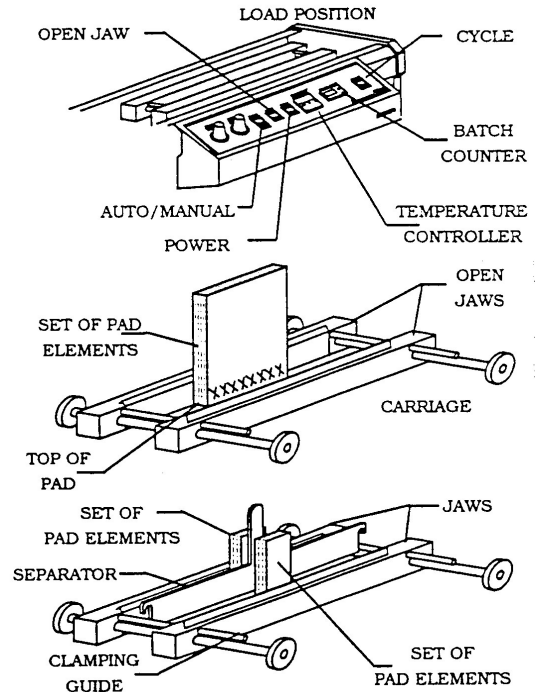
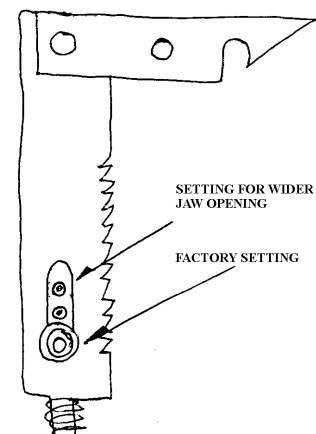


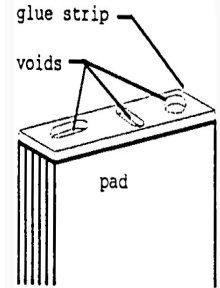
Figure 11 Automatic Pad Making Set-up.



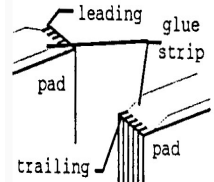
IMPROVING PAD QUALITY

PROBLEM	POSSIBLE CAUSE	SOLUTION
GLUE VOIDS	LARGE BUBBLES ON GLUE WHEEL	MOVE DOCTOR BLADE CLOSER OR FARTHER FROM GLUE WHEEL(PG 26)
	TOO LITTLE GLUE IN GLUE POT	ADD GLUE
	PARTICLES IN GLUE	CHANGE THE GLUE (PG 22)
	GLUE BUILDUP ON WATER ROLLER	PEEL GLUE OFF ROLLER SLEEVE OR REPLACE
	GLUE WIPER ROD TOO HIGH	LOWER GLUE WIPER ROD(PG 24)
	WATER WIPER TOO HIGH	LOWER WATER WIPER(PG 30)
GLUE MISSING EITHER ON TRAILING END OR ON LEADING END	GLUE WIPER ROD TOO LOW	IF PROBLEM CONTINUES CALL YOUR BRACKETT DEALER
	SAME AS GLUE VOIDS PROBLEM	RAISE GLUE WIPER ROD(PG 24)
EXCESSIVE GLUE ON PAD (THICK W/ LENGTH WISE STREAKS)	INSUFFICIENT CHILL SET SOLUTION IN WATER POT	ADD A FEW DROPS OF CHILL SET TO WATER IN WATER POT
ROUGH GLUE FINISH	GLUE BUILDUP ON WATER ROLLER	PEEL GLUE OFF ROLLER SLEEVE OR REPLACE
	WATER WIPER DRY	MOISTEN WATER WIPER
	WATER WIPER TOO HIGH	LOWER WATER WIPER(PG 30)
	GLUE WIPER ROD NOT LEVEL	LEVEL GLUE WIPER ROD
	GLUE APPLIED TOO THICK	RAISE GLUE WIPER ROD(PG 24) INCREASE "MACHINE SPEED" ON CONTROL PANEL
	SEDIMENT IN GLUE	CHANGE GLUE

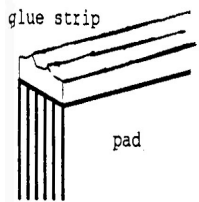
GLUE VOIDS



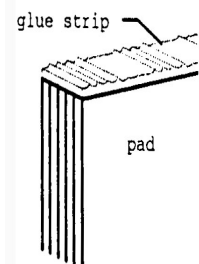
GLUE MISSING EITHER ON TRAILING END OR ON LEADING END

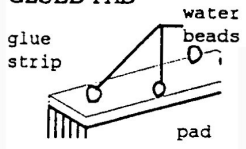
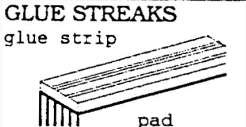

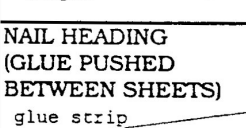
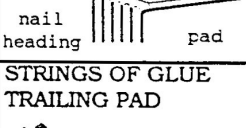

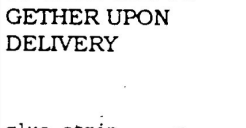
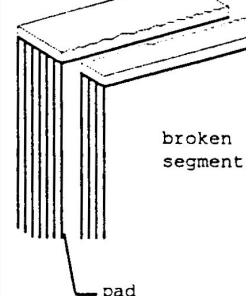


EXCESSIVE GLUE ON PAD (THICK W/ LENGTHWISE STREAKS)



ROUGH GLUE FINISH



	PROBLEM	POSSIBLE CAUSE	SOLUTION
<p>WATER BEADS ON GLUED PAD</p> 	WATER BEADS ON GLUED PAD	WATER WIPER TOO LOW	RAISE WATER WIPER (PG 30)
<p>GLUE STREAKS</p> 	GLUE STREAKS	WATER WIPER TOO HIGH	LOWER WATER WIPER (PG 30)
<p>RIDGES OF GLUE</p> 	RIDGES OF GLUE	PAD DIPS INTO GLUE TOO FAR	LOWER GLUE WHEEL (PG23) MOVE DOCTOR BLADE
<p>NAIL HEADING (GLUE PUSHED BETWEEN SHEETS)</p> 	NAIL HEADING (GLUE PUSHED BETWEEN SHEETS)	GLUE WHEEL OR WIPER ROD GRAZES SHEETS IN PAD	LOWER GLUE WHEEL (PG23) OR WIPER ROD
<p>RIDGES OF GLUE</p> 	STRINGS OF GLUE TRAILING PAD	GLUE TEMPERATURE TOO LOW	RAISE OPTIMAL GLUING TEMPERATURE ON CONTROLLER (USE GLUE MANUFACTURER'S SUGGESTED TEMPERATURE SETTING) PG 13
<p>NAIL HEADING (GLUE PUSHED BETWEEN SHEETS)</p> 	GLUE FAILS TO HOLD PAD TOGETHER UPON DELIVERY	GLUE TEMPERATURE TOO HIGH	LOWER OPTIMAL GLUING TEMPERATURE ON CONTROLLER
<p>STRINGS OF GLUE TRAILING PAD</p> 		INSUFFICIENT CHILL SET SOLUTION IN WATER POT	ADD A FEW DROPS OF CHILL SET TO WATER IN WATER POT
<p>GLUE FAILS TO HOLD PAD TOGETHER UPON DELIVERY</p> 	GLUE FAILS TO HOLD PAD TOGETHER UPON DELIVERY	CARRIAGE SPEED TOO FAST	DECREASE "MACHINE SPEED" ON CONTROL PANEL
		PAD TOO HEAVY AND BREAKS WHEN IT HITS DELIVERY CHUTE	MANUALLY REMOVE PAD AT END OF CYCLE
		PAD GRAZES WATER ROLLER AND/OR WIPER	LOWER WATER WIPER
		DRYING TIME FOR GLUE TOO SHORT	INCREASE "PAD RELEASE TIMER" ON CONTROL PANEL
		PRODUCT INCOMPATIBLE WITH GLUE -- ENAMEL STOCK, CURLY STOCK OR OTHER	CONSULT YOUR BRACKETT DEALER

ROUTINE CARE AND CLEANING

Regular inspections, care and cleaning protect the reliability of your PadMaster 2000. The following chart recommends the type and interval of care and cleaning for individual parts of the PadMaster 2000. The AREA column relates the PadMaster 2000 parts in the illustration to the maintenance recommended for each part in the chart below.

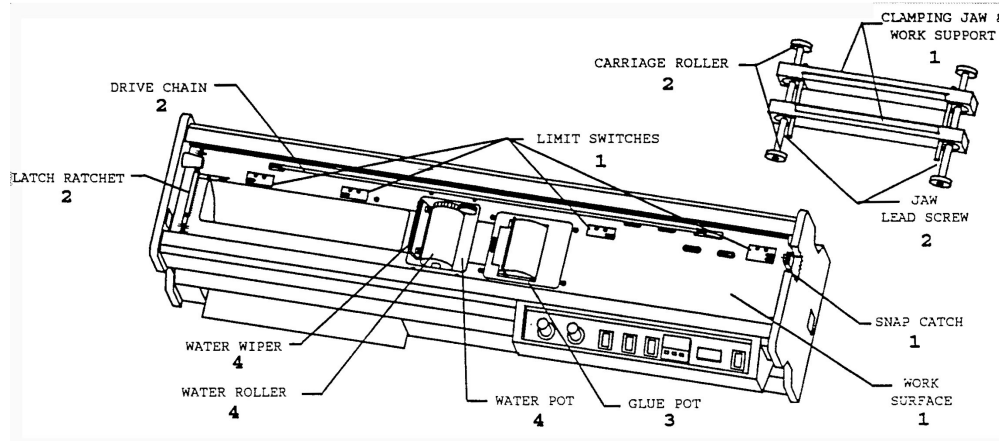


Figure 12 Cleaning areas of the Padmaster

AREA	CLEANING ACTION	FREQUENCY
1) ALL EXPOSED SURFACES	Wipe clean Peel off glue Spray with silicone spray or equivalent	AS NEEDED AS NEEDED
2) MOVING PARTS (drive chain, latch ratchet, jaw lead screw, carriage rollers)	Drain and clean	AS NEEDED AFTER 40 HOURS OF OPERATION
3) GLUE POT	Drain and clean	IF GLUE LOOKS BURNT AFTER 40 HOURS OF OPERATION AS NEEDED
4) WATER POT	Change water Drain to remove small bits of paper and/or sediment) Peel cool glue off water roller sleeve and wipers	AS NEEDED

CAUTION!
ALWAYS REMOVE THE DRAIN PLUG FROM THE GLUE POT WHILE THE GLUE IS COOL AND SOLID TO PREVENT SEVERE BURNS FROM HOT GLUE DRAINING OVER YOUR HANDS.

DRAINING AND CLEANING THE GLUE POT

SWITCH "POWER" OFF AND UNPLUG YOUR PADMASTER 2000 FROM ITS ELECTRICAL SOURCE.

Items Needed

- ⇒ Glue Pot Lid Handle
- ⇒ Small Drain Pan
- ⇒ Drain Wrench
- ⇒ Pair of Gloves

HOT GLUE MELTS MANY PLASTIC CONTAINERS. USE ONLY ALUMINUM OR CARDBOARD CONTAINERS FOR THE MELTED GLUE. AN ALUMINUM CONTAINER IS SUPPLIED

PLAN TO DRAIN AND CLEAN YOUR GLUE POT BEFORE HEATING THE GLUE TO MAKE PADS. THIS ELIMINATES WAITING FOR THE GLUE TO COOL.

- 1) Allow the glue to cool until solid.
- 2) Pull the access plate away from the back panel.
- 3) Place the small aluminum pan under the Glue Pot drain plug.
- 4) Use the wrench to unscrew the COOLED drain plug.
- 5) Plug in PadMaster 2000's electrical cord and switch "POWER" ON.
- 6) Place the ends of the handle into the slot in the glue pot lid, and pull the lid off the glue pot.
- 7) Scrape any glue off the lid.

FOR EASIER REMOVAL, SCRAPE THE GLUE WHEN IT BEGINS TO SOFTEN, BUT BEFORE IT MELTS.

PERIODICALLY CHECK THE GLUE POT WHILE THE MELTING GLUE DRAINS. TO AVOID DAMAGING THE GLUE POT HEATERS AND TO PREVENT A FIRE, NEVER ALLOW AN EMPTY GLUE POT TO HEAT WHILE UNATTENDED.

CLEANING THE GLUE POT

Items Needed:

CHARRED GLUE INSULATES THE GLUE POT AND HAMPERS ITS HEATING EFFICIENCY.

- ⇒ Pair of Gloves
- ⇒ Drain Wrench
- ⇒ Small Drain Pan
- ⇒ Scraper (small putty knife, etc.)
- ⇒ Cleaning solution (suggested by glue mfg. such as Fuller P-6013; or vegetable oil)
- ⇒ Padding Adhesive.

- 1) Slowly pour cleaning solution over the glue wheel and into the DRAINED glue pot. Scrape off any remaining glue residue.
(Leave the drain pan under the open drain and leave "POWER" ON)
- 2) Scatter new glue chips on and between the front and back fins of the glue pot.
(The drain remains open.)
- 3) Allow this glue to melt and drain into the drain pan. This purges the cleaning solution out of the glue pot.
- 4) **SWITCH "POWER" OFF AND UNPLUG YOUR PADMASTER 2000 FROM ITS ELECTRICAL SOURCE. LET THE GLUE POT COOL.**
- 5) Screw the plug back into the COOLED drain and dispose of the used glue and cleaning solution in the drain pan.
- 6) Replace the access plate on the back panel.

GLUE POT ADJUSTMENTS

Brackett presets all glue pot adjustments at the factory, and normally these adjustments do not need to be reset.

GLUE WHEEL HEIGHT

This setting controls the relationship of the sheets to be padded to the glue wheel. The sheets must not be above the glue. At the same time the sheets must touch the glue; not the wheel.

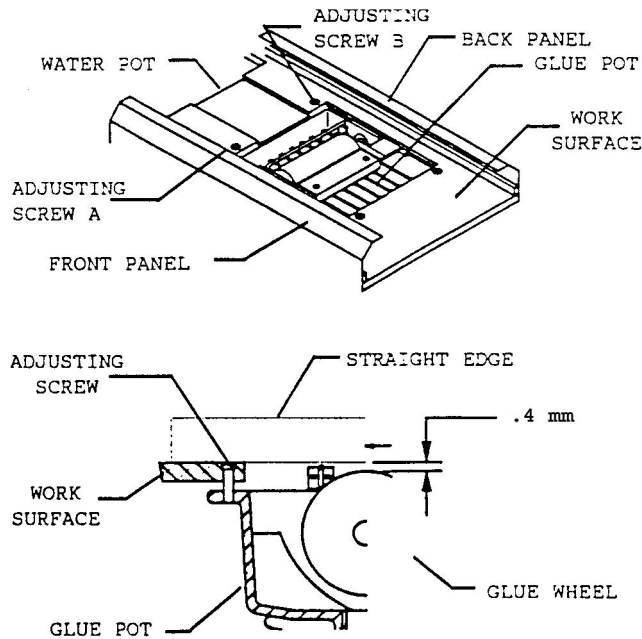


Figure 13 Glue Pot Adjustments.

CAUTION!

DO NOT REMOVE THE DRAIN PLUG FROM A GLUE POT CONTAINING HOT GLUE AND CLEANING SOLUTION.

THE HOT GLUE AND CLEANING SOLUTION GUSHES AND SPLASHES FROM THE DRAIN AS THE PLUG IS REMOVED AND MAY CAUSE SEVERE BURNS.

!CAUTION!

THESE GLUE POT ADJUSTMENTS ARE MADE WHEN THE GLUE IS HOT.

DO NOT TOUCH THE MELTED GLUE, THE GLUE LID, OR ANY PART OF THE GLUE POT. THE GLUE REACHES 325° F. AND CAN CAUSE SEVERE BURNS.

Items Needed:

- ⇒ Slotted screwdriver
- ⇒ Phillips screwdriver
- ⇒ Scraper (small putty knife, etc.)
- ⇒ .016 feeler gauge

- 1) Switch to "MANUAL" mode.
- 2) **SWITCH "POWER" OFF AND UNPLUG YOUR PADMASTER 2000 FROM ITS ELECTRICAL SOURCE.**
- 3) Scrape the glue off the glue wheel.
- 4) Stand the straight edge on the work surface over the end of the glue wheel on the operator's side.
- 5) Slip the 0.016 feeler gauge between the wheel and the straight edge.
- 6) Turn the "A" height adjusting screw in small increments until the feeler gauge fits snugly in the gap.
- 7) Move the straight edge over to the opposite end of the glue wheel.
- 8) Slip the 0.016 feeler gauge between the wheel and the straight edge.
- 9) Turn the "B" height adjusting screw in small increments until the feeler gauge fits snugly in the gap.

SYMPTOM	PROBLEM	SOLUTION
VOIDS ON THE GLUE STRIP	Glue Wheel too low	Turn Screws A & B CW (clockwise)
PRODUCT HITS GLUE WHEEL	Glue Wheel too high	Turn Screws A & B CCW (counter clockwise)

GLUE WIPER ROD

This setting controls the amount of glue that is applied to the pads.

Items needed:

- ⇒ Scraper
- ⇒ Phillips Screwdriver
- ⇒ .010 Feeler Gauge

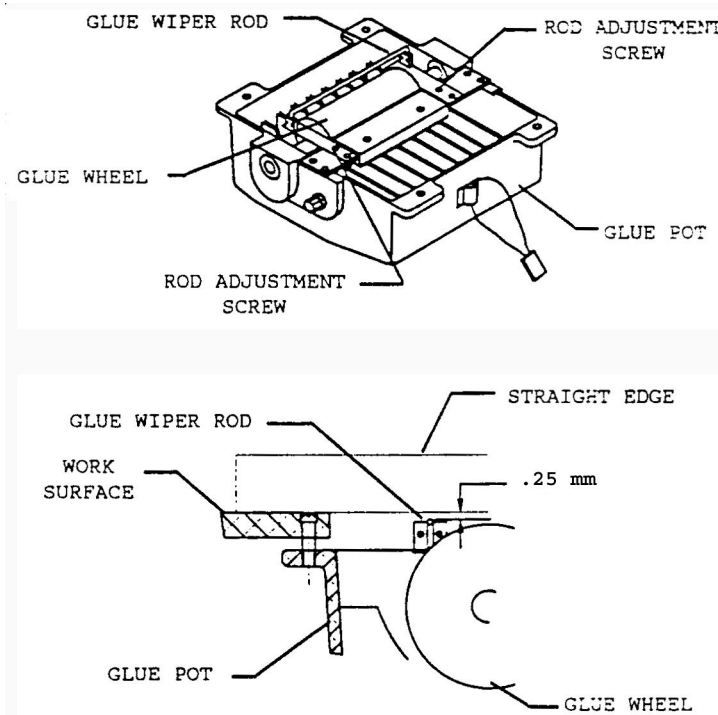


Figure 14 Glue Pot Wiper Rod adjustment.

CAUTION
THESE GLUE POT ADJUSTMENTS ARE MADE WHEN THE GLUE IS HOT.

DO NOT TOUCH THE MELTED GLUE, THE GLUE LID, OR ANY PART OF THE GLUE POT.

THE GLUE REACHES 325° F. AND CAN CAUSE SEVERE BURNS.

- 1) Switch to "MANUAL" mode.
- 2) **SWITCH "POWER" OFF AND UNPLUG YOUR PADMASTER 2000 FROM ITS ELECTRICAL SOURCE.**
- 3) Scrape the glue off the glue wiper rod.
- 4) Stand the straight edge on the work surface and over the center of the glue wiper rod.
- 5) Slip the 0.010 feeler gauge between the glue wiper and the straight edge.
- 6) Alternately turn both Wiper Rod Adjustment Screws in small increments until the feeler gauge fits snugly into the gap.
- 7) Check that the 0.010 feeler gauge fits into the gap on both ends of the glue wiper rod to be sure that the wiper rod remains level.

SYMPTOM	PROBLEM	SOLUTION
VOIDS ON GLUE STRIP	Glue wiper rod too high	Turn Screws CW (clockwise)
GLUE STRIP IS TOO THICK	Glue wiper rod too low	Turn Screws CCW (counter clockwise)

GLUE DOCTOR BLADE

This setting controls the uniformity of glue on the wheel.

Items needed:

- ⇒ Scraper
- ⇒ Allen Wrench
- ⇒ 0.045 Feeler Gauge

CAUTION
THESE GLUE
POT
ADJUSTMENTS
ARE MADE
WHEN THE
GLUE IS HOT.

DO NOT TOUCH
THE MELTED
GLUE, THE
GLUE LID,
OR ANY PART
OF THE GLUE
POT.

THE GLUE
REACHES 325°
F. AND CAN
CAUSE SEVERE
BURNS.

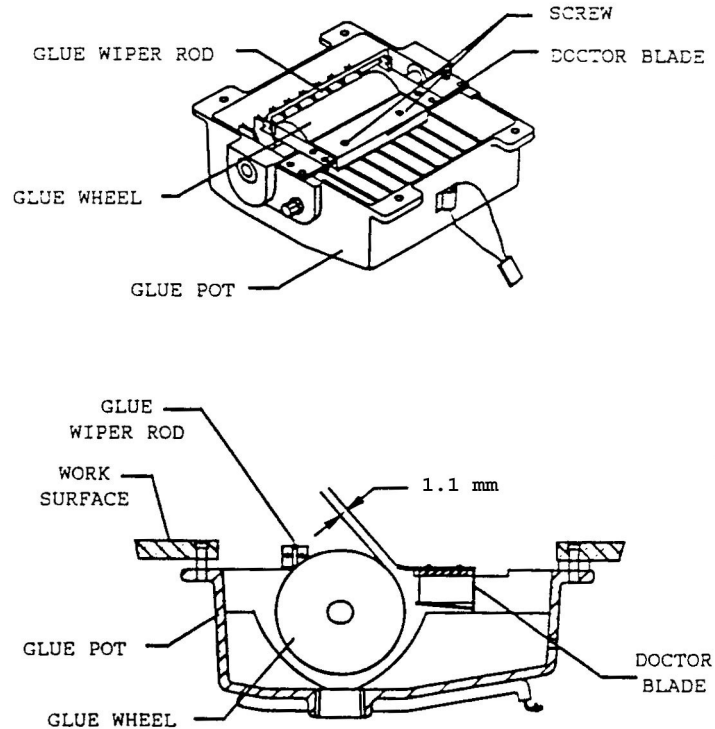


Figure 15 Glue Pot Doctor Blade adjustment.

- 1) Switch to "MANUAL" mode.
- 2) Loosen the screws on top of the doctor blade.
- 3) Slide the 0.045 feeler gauge between the doctor blade and the glue wheel for the initial setting.
- 4) Cycle the carriage, and check the glue surface on the wheel after two complete revolutions.
- 5) The glue surface should be consistent and smooth.
- 6) The glue layer should not be too thin.
- 7) Lightly tap the doctor blade either toward or away from the glue wheel.
- 8) Repeat Steps 4 and 5 until the glue surface is consistently smooth and the glue layer is not too thin.
- 9) Tighten the screws.

CLEANING THE WATER POT

Items Needed:

- ⇒ Drain Pan
- ⇒ Drain Wrench
- ⇒ 3-1/2 cups of Water

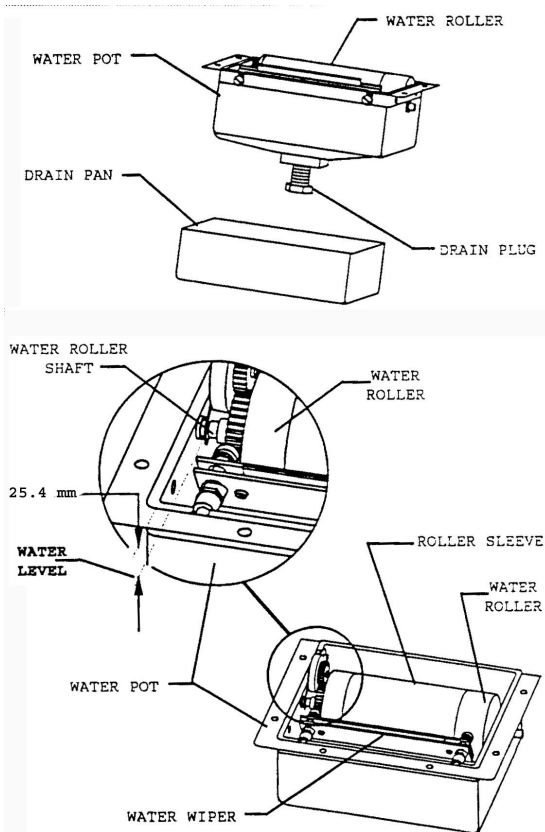


Figure 16 Water Pot cleaning.

- 1) Switch to "MANUAL" mode.
- 2) **SWITCH "POWER" OFF AND UNPLUG YOUR PADMASTER 2000 FROM ITS ELECTRICAL SOURCE.**
- 3) Pull the access plate away from the back plastic panel.
- 4) Place the large drain pan under the water pot drain.
- 5) Using the drain wrench unscrew and remove the drain plug.
- 6) Peel any glue off the water roller and the water wipers.
- 7) Rinse the water pot and roller with clean water.
- 8) Screw the plug back into the drain.
- 9) Refill the water pot with about 3-1/2 cups of clean tap water.
- 10) Add a large squirt (about 40 to 50 drops) of the Chill-Set solution to the water.

NOTE:

The maximum water level should remain about 1" below the top of the water pot or just below the water roller shaft.

REPLACING THE WATER ROLLER SLEEVE

Items Needed:

- ⇒ 1/4" Screwdriver
- ⇒ Allen Wrench
- ⇒ Water Roller Sleeve

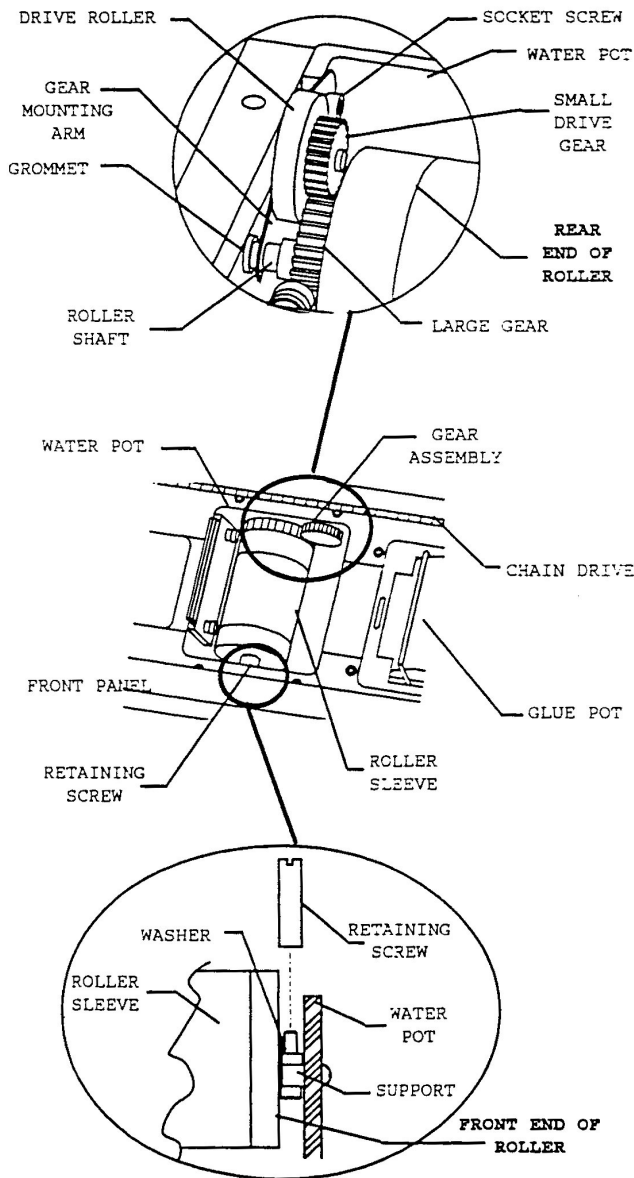


Figure 17 Water Pot Sleeve replacement.

Disassemble the water roller

- 1) Switch to "MANUAL" mode.
- 2) **SWITCH "POWER" OFF AND UNPLUG YOUR PADMASTER 2000 FROM ITS ELECTRICAL SOURCE.**
- 3) Remove the socket head screw from the gear-mounting arm.
- 4) Lift the mounting arm, the drive roller and the small gear out of the water pot.
- 5) Use the standard screwdriver to remove the retaining screw from the roller shaft.
- 6) Lift the front end of the roller then slide the shaft toward the front panel until the back end of the shaft is free from the grommet in the pot.
- 7) Lift the roller straight up.
DO NOT LOSE THE WASHERS ON BOTH ENDS OF THE SHAFT.
- 8) Remove the old roller sleeve, and replace it with a new one.
- 9) Lower the roller straight down with the washers on both ends of the shaft.
- 10) Slide the shaft into the grommet in the water pot and through the water pot wall.
- 11) Lower the front end of the shaft onto the support.
- 12) Replace the retaining screw and tighten.
- 13) Slide the mounting arm, the drive roller and the small gear into place on the roller shaft.
- 14) Replace the gear mounting (socket head) screw and tighten.

REPLACING THE WATER WIPER**Items Needed:**

- ⇒ Standard Screwdriver
- ⇒ 2 Water Wipers (if needed)
- ⇒ 1 Water Wick

Disassemble the water wipers

- 1) Switch to "MANUAL" mode.
- 2) **SWITCH "POWER" OFF AND UNPLUG YOUR PADMASTER 2000 FROM ITS ELECTRICAL SOURCE.**
- 3) Unscrew and remove the two brass thumbnuts.
- 4) Remove the spacer and the wiper assembly.
- 5) Unscrew and remove the two screws on the wiper assembly.
- 6) Remove the top plate, the two wipers and the water wick. Throw away the water wick.

Reassemble the water wipers

- 1) Rotate the wipers to expose the unused edge or replace.
- 2) Place the wipers against the ridge on the bottom plate for straight placement.
- 3) Place the new water wick about 1/8" to 3/16" below the top of the wipers.
- 4) Place the top plate on the wipers, and tighten with the two screws.
- 5) Replace the wiper assembly and the spacer in the water pot.
- 6) Replace the two brass thumbnuts.

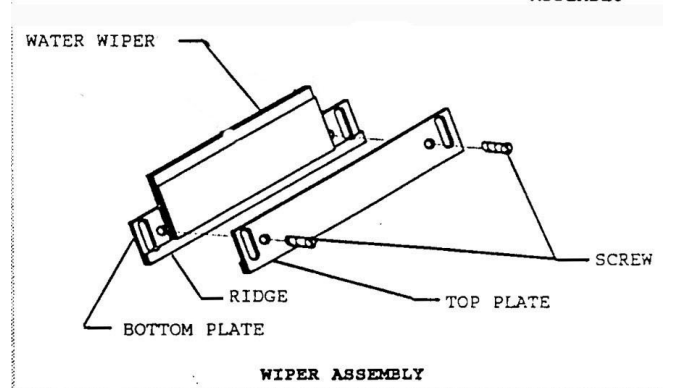
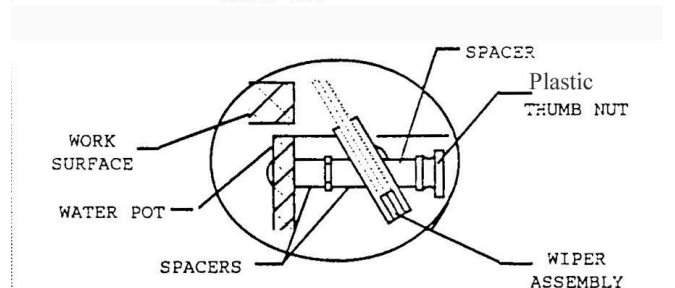
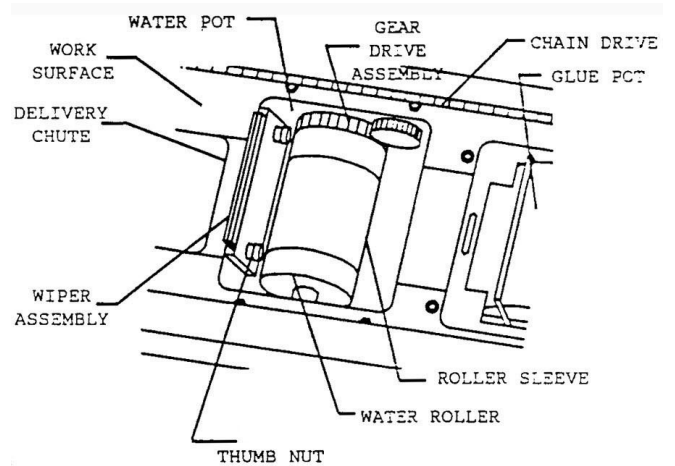


Figure 18 Water Pot Wiper adjustment.

ADJUSTING THE WATER WIPER HEIGHT

Items Needed:

- ⇒ Straight Edge
- ⇒ .020 Feeler Gauge

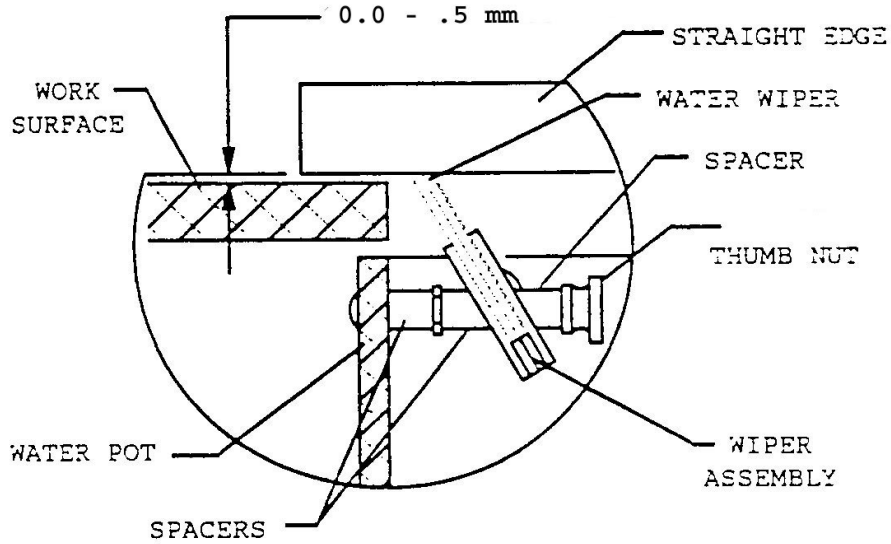


Figure 19 Wiper height Set-up.

NOTE:
If the wiper assembly must be raised above the work surface, slip a 0.020 feeler gauge between the work surface and the straight edge. Then continue with Steps 3 - 7.

- 1) Switch to "MANUAL" mode.
- 2) **SWITCH "POWER" OFF AND UNPLUG YOUR PADMASTER 2000 FROM ITS ELECTRICAL SOURCE.**
- 3) Stand the straight edge on top of the work surface and across the wipers. The wipers should be flush or slightly above the bottom of the straight edge.
- 4) Loosen the brass thumbnuts.
- 5) Move the wiper assembly either up or down until the wipers barely touch the bottom of the straight edge.
- 6) Repeat Steps 3 & 5 on the other end of the wiper assembly.
- 7) Tighten the thumbnuts.

SYMPTOM	PROBLEM	SOLUTION
WATER BEADS ON GLUE STRIP OF PAD	Wiper too low	Raise Wiper Assembly ³
DEFORMED GLUE STRIP ON PAD	Wiper too high	Lower Wiper Assembly

³ The Wiper Assembly may need to be above the Work Surface in rare cases. See the related Note above.

ADJUSTING THE DRIVE CHAIN

The drive chain may rest on the work surface because some slack exists with normal chain tension.

Items Needed:-

Phillips Screwdriver

- 1) Switch to "MANUAL" mode.
- 2) **SWITCH "POWER" OFF AND UNPLUG YOUR PADMASTER 2000 FROM ITS ELECTRICAL SOURCE.**
- 3) Loosen the two chain adjust screws on the work surface.
- 4) Push the screws either toward or away from the load endcap to adjust the chain. (See the chart on this page.)
- 5) Retighten the screws.

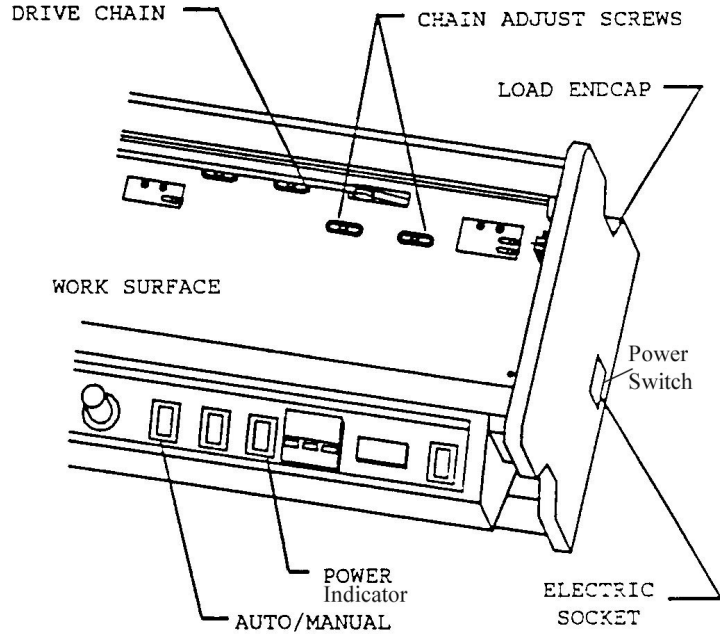


Figure 20 Drive Chain adjustment screws.

SYMPTOM	PROBLEM	SOLUTION
Carriage fails to return properly	Chain too loose	Push screws toward the LOAD endcap
Carriage moves before the jaws fully clamp	Chain too tight	Push screws toward the DELIVERY endcap

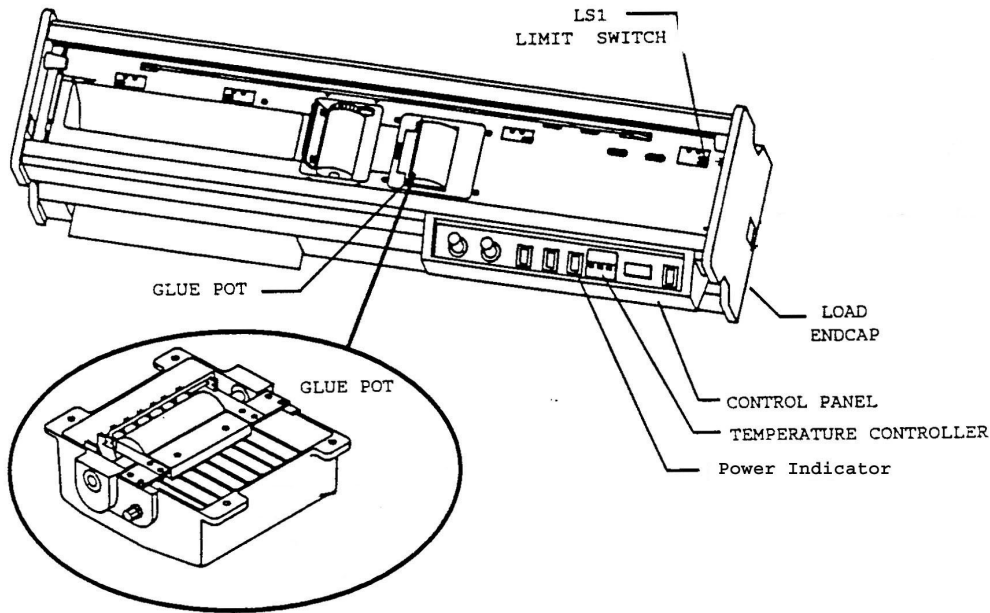


Figure 21 Main Trouble Shooting areas.

TROUBLE SHOOTING

ELECTRICAL AND GLUE POT

TROUBLE	PROBABLE CAUSE	CORRECTIVE ACTION
No power to the PM2000 with the "POWER SWITCH" on.	PM2000 is unplugged.	Plug in the PM2000.
	A fuse is blown	Check main fuse and replace with an 8A. Fuse
Check thermal fuse on glue pot	"POWER SWITCH" is defective.	Check and replace as needed.
Motor fails to operate when the "CYCLE" or "OPEN JAW" switch is depressed.	No electrical power is applied.	Switch the "POWER ON" switch to the "ON" position. The switch should illuminate. See previous section.

TROUBLE	PROBABLE CAUSE	CORRECTIVE ACTION
Motor fails to operate when the "CYCLE" or "OPEN JAW" switch is depressed.	Glue temperature is below the set point.	Wait for the Displayed Temperatures to become the same.
	Motor Fuse blown.	Check and replace the 3/4A. MDL fuse.
	Motor Control Board disconnected or defective.	Consult your BRACKETT dealer.
	Motor is defective.	Consult your BRACKETT dealer.
Glue in the Glue Pot Smokes.	If new glue has been added.	It will stop smoking after 8 hours.
	Glue may be too hot.	Lower the OPTIMAL GLUING TEMPERATURE set point on the TEMPERATURE CONTROLLER.
	Foreign matter may be present in the glue. (cleaning agent, oil, etc.)	Drain the Glue Pot, clean it, and load new glue.
The glue foams or boils in the Glue Pot.	Water or similar material is vaporizing.	Allow water to vaporize before padding.
		Drain the Glue Pot, clean it, and load new glue.

CARRIAGE

**!CAUTION!
SWITCH
"POWER" OFF
AND UNPLUG
YOUR
PADMASTER
2000 FROM ITS
ELECTRICAL
SOURCE
WHILE
PERFORMING
THESE
ADJUSTMENTS**

TROUBLE	PROBABLE CAUSE	CORRECTIVE ACTION
CARRIAGE RETURNS TO LOAD POSITION IN SLOW SPEED	1. LS2 SWITCH STUCK OR SWITCH ARM BENT	1. Adjust or replace.
	2. LS2 SWITCH DEFECTIVE	2. Check for shorts or replace.
	3. LS5 SWITCH STUCK OR SWITCH ARM BENT	3. Adjust or replace.
	4. LS5 SWITCH DEFECTIVE	4. Check for shorts or replace.
CARRIAGE RUNS IN SLOW SPEED	1. "MACHINE SPEED" SET FOR SLOW SPEED	1. Turn control to a higher speed. (Turn knob cw.)
	2. LS3 SWITCH STUCK OR SWITCH ARM BENT	2. Adjust or replace.
	3. LS5 SWITCH STUCK OR SWITCH ARM BENT	3. Adjust or replace.
	4. LS4 SWITCH DEFECTIVE	4. Check for shorts or replace.
	5. LS5 SWITCH DEFECTIVE	5. Check for shorts or replace.
	6. "MACHINE SPEED" SWITCH DEFECTIVE	6. Check for shorts or replace.
	7. LS5 LEADS SHORTED TOGETHER	7. Fix or replace.
	8. CIRCUIT BOARD DEFECTIVE	8. Consult your BRACKETT dealer.
CARRIAGE WILL NOT CYCLE IN "MANUAL" MODE	1. LS1 SWITCH STUCK OR SWITCH ARM BENT	1. Adjust or replace.
	2. LS1 SWITCH DEFECTIVE	2. Check for shorts or replace.
	3. "AUTO/MANUAL" SWITCH DEFECTIVE	3. Check or replace.

PROBLEM	PROBABLE CAUSE	CORRECTIVE ACTION
CARRIAGE REMAINS AT DELIVERY POSITION IN "AUTO" MODE	1. LS4 SWITCH STUCK OR SWITCH ARM BENT	1. Adjust or replace.
	2. LS4 SWITCH DEFECTIVE	2. Check for short or replace.
	3. LEADS DISCONNECTED TO LS4 SWITCH	3. Correct or replace.
	4. DELIVERY LATCH FAILS TO RELEASE CARRIAGE	4. Inspect latch mechanism and correct.

JAWS & BATCH COUNTER

PROBLEM	PROBABLE CAUSE	CORRECTIVE ACTION
JAWS FAIL TO CLAMP BEFORE LEAVING LOAD POSITION	SNAP CATCH OUT OF POSITION.	Readjust.
	SNAP CATCH WORN	Turn catch over to unworn side or replace.
	CHAIN TOO TIGHT	Loosen chain.
	JAW CLAMPING SCREWS BENT	Correct or replace.
PAD RETURNS TO LOAD POSITION. (JAWS FAIL TO OPEN IN DELIVERY POSITION.)	CARRIAGE LATCH PLATE FAILS TO LATCH.	Correct or replace.
	BUMPER LOOSE OR COCKED	Straighten and tighten
	DISCONNECTED OR BROKEN DELIVERY CATCH SPRING OR LATCH SPRING.	Reconnect or replace.
	LS4 SWITCH OUT OF POSITION	Adjust towards unload endcap.
BATCH COUNTER FAILS TO COUNT (DISPLAY BLANK)	BATTERIES DEFECTIVE	Replace with 2 Alkaline "N" batteries behind the batch counter. NOTE PROPER POLARITY.
JAWS FAIL TO OPEN WIDE ENOUGH IN DELIVERY POSITION.	DELIVERY END LATCH NEEDS ADJUSTING.	MOVE THE CARRIAGE LATCH PLATE MOUNTING GUIDE TOWARD THE REAR OF THE MACHINE.(page 18)

TEMPERATURE CONTROLLER

**!CAUTION!
SWITCH
"POWER" OFF
AND UNPLUG
YOUR
PADMASTER
2000 FROM ITS
ELECTRICAL
SOURCE
BEFORE
REPLACING
ANY
ELECTRICAL
COMPONENTS.**

TEMPERATURE CONTROLLER DISPLAY	PROBABLE CAUSE	CORRECTIVE ACTION
"FFF"	1. THERMOCOUPLE SHORT CIRCUITED	1. Check or replace thermocouple. Check or replace glue pot (thermal) fuse.
	2. DEFECTIVE TEMPERATURE CONTROLLER	2. Consult your BRACKETT dealer.
"..."	1. THERMOCOUPLE HAS BROKEN	1. Check or replace thermocouple. Check or replace glue pot (thermal) fuse.
	2. DEFECTIVE TEMPERATURE CONTROLLER	2. Consult your BRACKETT dealer.
BLINKS "FFF" (CONTROLLER KEYS ARE DISABLED)	1. BREAK IN THERMOCOUPLE CIRCUIT	1. Check thermocouple or replace. Check or replace glue pot (thermal) fuse.
		Check thermocouple wiring or replace.
	2. DEFECTIVE TEMPERATURE CONTROLLER	2. Consult your BRACKETT dealer.
BLINKS "..." (CONTROLLER KEYS ARE DISABLED)	1. THERMOCOUPLE POLARITIES (POSITIVE-WHITE/NEGATIVE-RED) REVERSED.	1. Check or correct.
	2. DEFECTIVE TEMPERATURE CONTROLLER	2. Consult your BRACKETT dealer.
ROOM TEMPERATURE	1. THERMOCOUPLE SHORT-CIRCUITED.	1. Check thermocouple or replace. Check or replace glue pot (thermal) fuse.
		2. Consult your BRACKETT dealer.

TEMPERATURE CONTROLLER DISPLAY	PROBABLE CAUSE	CORRECTIVE ACTION
"E11" (CONTROLLER KEYS ARE DISABLED)	1. MEMORY FAILURE	1. Switch "POWER" OFF once and then ON again.
		2. Consult your BRACKETT dealer.
"E33" (CONTROLLER KEYS ARE DISABLED)	1. ANALOG-TO-DIGITAL CONVERTER FAILURE	1. Switch "POWER" OFF once and then ON again.
		2. Consult your BRACKETT dealer.

PARTS LIST

RECOMMENDED SPARE PARTS

NUMBER REQUIRED	PART NUMBER	DESCRIPTION
1	177476	Motor Control Board
2	100150-2	Limit Switch w/ Cam Lever
1	100668	Thermocouple (Athena Sensor)
1	107356	Compression Spring
1	108189	Rubber Grommet
4	180051	Water Wiper
1	180313	Delivery Return-Spring/Ratchet-Latch
1	180323	Chill-Set Solution
2	180353-1	Double Roller Catch
1	103595	Glue Wiper Rod
4	976150	Nylon Apron Clip
2	180413	Water Roller Sleeve - Red
1	108525 ⁴	50 pounds of hot melt glue
OR	551692	9 pounds of hot melt glue
1	101276	Fuse, 8A

Brackett recommends a clear hot melt adhesive that was specially formulated for pad making. In fact, "general purpose" hot melt adhesives or hot melts formulated for intents such as perfect binding are discouraged.

The recommended glue for use in your PadMaster 2000 is available from your BRACKETT dealer in large or small quantities to fit your specific needs.

WHEN ORDERING PARTS or requesting service please be sure to include the quantity, part number and description along with the model number and serial number of your machine. The model number and serial number of your PM2000 is located inside the back guard behind the delivery chute. Record these numbers on the next page for your convenience.

YOUR AUTHORIZED DEALER supplies genuine **BRACKETT** replacement parts and factory trained service personnel. Otherwise, contact Customer Service,

BRACKETT INC.

P.O. Box 19306,
Bldg 451, "J" Street
6700 S. Topeka Blvd.
Topeka, Kansas 66619
800-255-3506 / 785-862-2205
FAX 785-862-1127

Order On-Line
www.brackett-inc.com

⁴ This is the glue normally shipped with the Padmaster 2000. For specialty glues that meet particular applications, contact your Brackett Dealer.

MAJOR SUBASSEMBLIES

ASSEMBLY #	DESCRIPTION
501792-3	PM2000 MECHANICAL ASS'Y
501793	PM2000 CARRIAGE ASS'Y
501794A	PM2000 GLUE POT ASS'Y
501795-1	PM2000 WATER POT ASS'Y
501796C	PM2000 ELECTRICAL (120V) ASS'Y
108404D	PM2000 ELECTRICAL (PANELS)
501797A	PM2000 ACCESSORIES
899606-2A	PM2000 WIRING SCHEMATIC

501797A

PM2000 ACCESSORIES (SPM-4C)

101352	1.000 EA	CORD SET,3 COND.EUROPEAN STYLE
102230	1.000 EA	DECAL "CAUTION HOT" 1.5"x3"
102255	1.000 EA	ALUM. PAN
103590	1.000 EA	PAD SUPPORT PLATE
107029-4	1.000 EA	8" ADJUSTABLE CRESCENT WRENCH
107029-6	1.000 EA	HEX KEY SET,BALL END,INCH SET
180008	1.000 EA	TALL WORK GUIDE
180011	1.000 EA	MED. HEIGHT WORK GUIDE
180046	2.000 EA	SHORT WORK GUIDES
551692	1.000 EA	9 lb. HOTMELT PADDING ADHESIVE
180305	1.000 EA	DELIVERY CHUTE
180323	1.000 EA	CHILL SET SOLUTION 4 OZ. BOTTLES
180371	1.000 EA	Glue Pot Lid

MACHINE SPECIFICATIONS

MACHINE PERFORMANCE

MAXIMUM PAD DIMENSIONS

LENGTH	17 IN.
HEIGHT	18 IN.
THICKNESS (2 SHEETS MIN.)	3 IN.

* MANUAL PAD REMOVAL
RECOMMENDED
FOR:
PADS OVER 14 IN. HIGH
PADS OVER 2 IN. THICK

PADDING CYCLES

FULLY AUTOMATIC PADDING
STD. SPEED 650 PER HOUR

SLOW SPEED 600 PER HOUR

AUTOMATIC MODE
SINGLE PUSH BUTTON CYCLE

OR
PLUG-IN FOOT SWITCH
(OPTIONAL)

MANUAL MODE
CARRIAGE JOGS FORWARD
OR REVERSE

ADHESIVE
TEMPERATURE
ADJUSTABLE

WARM-UP TIME
FROM COLD START 18 MIN.

YOUR MODEL NO.

SPM-4C

YOUR SERIAL NO.

MACHINE SPECIFICATIONS

OVERALL DIMENSIONS

LENGTH	56	IN.
HEIGHT	13	IN.
DEPTH	15-1/4	IN.
WEIGHT	103	LBS.

GLUING SYSTEM

GLUE POT CAPACITY 25 OZ.

TEMPERATURE CONTROLLER
LED SEQUENTIALLY SELECTED TO
DISPLAY

CURRENT TEMPERATURE OF
GLUE
OPTIMAL GLUING TEMPERATURE
ADHESIVE LIQUEFIED
TEMPERATURE
THERMOCOUPLE CALIBRATION

RED INDICATOR LIGHTS SIGNIFY
HEATERS ARE ON
ADHESIVE IS LIQUEFIED

GREEN INDICATOR LIGHTS SIGNIFY
TEMPERATURE AT OPTIMAL
GLUING
TEMPERATURE ABOVE OPTIMAL
GLUING
TEMPERATURE BELOW OPTIMAL
GLUING
RAPID COOLING OF GLUE STRIP
WATER ROLLER/WATER WIPER

ELECTRICAL SYSTEM
ACCESSIBLE FUSES FOR ALL MAJOR
COMPONENTS.
PLUG-IN TYPE RELAY BOARD FOR
CONTROLS
POWER CONSUMPTION
MODEL SPM-4
8 AMPS @ 115VAC/ 60 HZ.

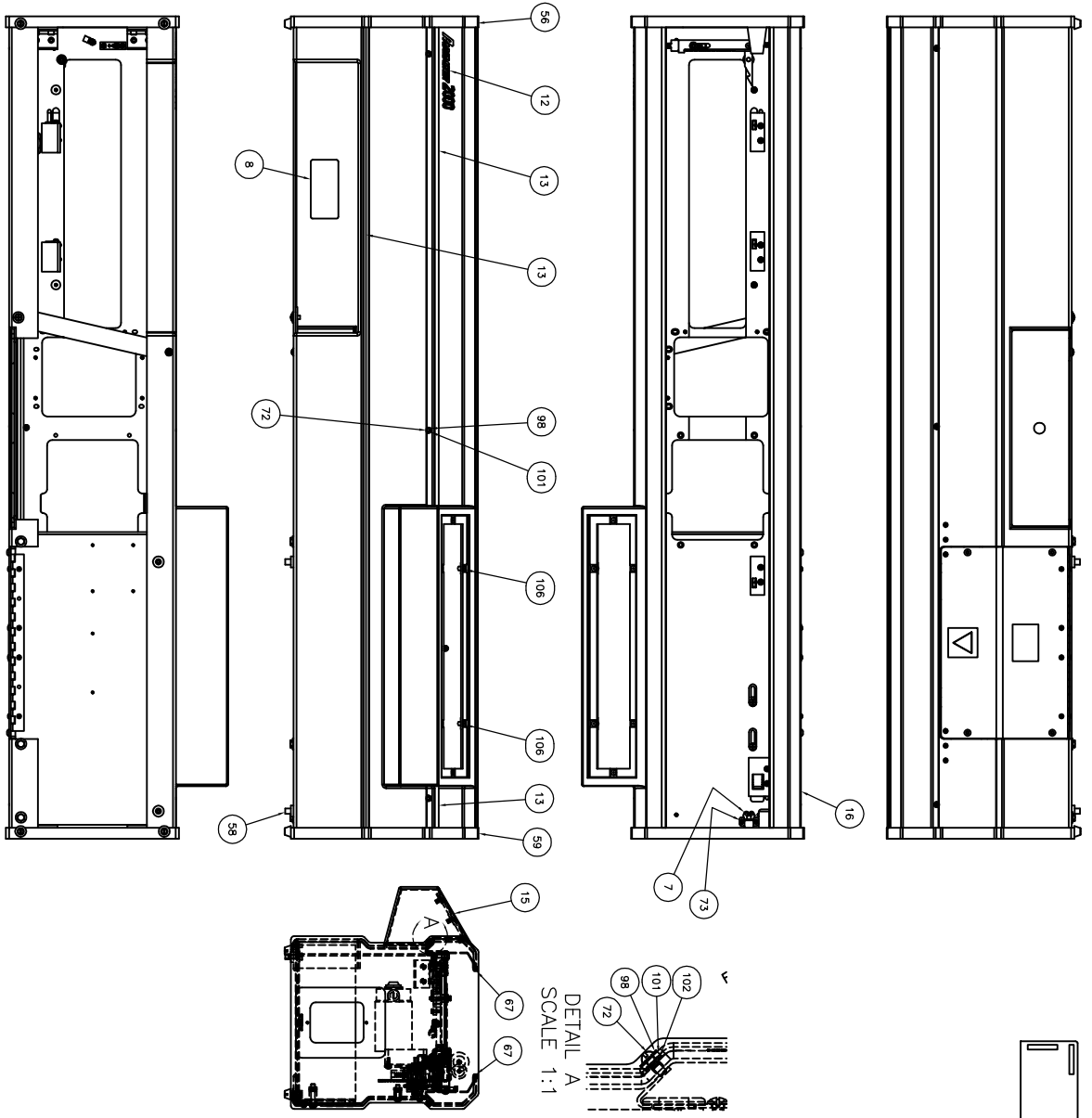
SPM-4C PADMASTER 2000

SEQUENCE OF OPERATION

Sequence of Operation

- 1) Foot or cycle switch activated power applied to wire 10.
 - a CR-2 energizes and latches through S-4 (closed), wire 11, CR-2 pins 12-8, wire 12, LS-4 n/c, to wire 10.
 - b MC-1 energizes applying forward power to motor through wire 21, CR-1 pins 12-4, wire 26, motor, wire 27, CR-1 pins 3-11, wire 22.
 - c Slow clamping speed is obtained through LS-5 (closed) shorting P1 & P2
 - 2) When clamp is closed mechanical release of carriage causes LS-1 and LS-5 to return to normal state.
 - a LS-1 provides current path around CR-2 pins 12-8.
 - b LS-5 returns the portion of R-4 to P1 & P2 for forward speed control through wire 23, CR-3 pins 11-3, R4, CR-3 pins 2-10, wire 24.
 - c P2-P3 resistance is obtained through wire 24, CR-3 pins 10-2, R4, wire 25.
When this resistance is decreased motor speed increases.
 - 3) LS-2 returns to normal state, which has no affect on circuit.
 - 4) LS-3 changes state. This provides slow down of the carriage.
 - a P1 and P2 are shorted through wire 23, CR-2 pins, 9-5 (closed), wire 29, LS-3 n/o (closed), wire 24.
 - 5) When carriage reaches the delivery end LS-4 changes state.
 - a LS-4 removes power from wire 10 and applies it to wire 13.
 - b CR-2 drops out removing the short on P1-P2
 - c CR-6 is energized starting the time delay.
 - 6) At end of CR-6 time delay, CR-1 and CR-3 are energized.
 - a CR-1 pins 10-2 open and drop out CR-2.
 - b CR-1 pins 11-7 & 12-8 close while pins 11-3 & 12-4 open reversing A+ and A- leads to motor.
 - c CR-1 pins 5-6 provide latching for CR-1.
 - d CR-1 pins 6-10 provide power to MC-1.
 - e CR-3 energizes momentarily after CR-1.
 - f CR-3 pins 10-6 and 11-7 close and 10-2 and 11-3 open providing the fixed resistance of R-2 across P1-P2 and short circuit across P2-P3 for a fixed carriage return speed.
 - 7) Clamp opens, releasing pad, unlocks carriage latch and carriage moves from delivery position.
 - a LS-4 returns to normal state applying power to wire 10 and dropping out CR-6.
 - b CR-1 & CR-3 are latched in through CR-1 pins 10-6.
 - c MC-1 power is maintained.
 - 8) LS-3 returns to normal state, which has no affect on circuit.
 - 9) LS-2 changes state. This provides slow down of the carriage.
 - a P1 and P2 are shorted through wire 23, LS-2 (closed), wire 28, CR-3 pins 8-12 (closed), wire 24.
 - b P2 and P3 are still shorted through CR-3 pins 10-6.
 - 10) Carriage reaches home. LS-1 and LS-5 change state.
 - a LS-1 opens dropping out CR-1, CR-3 and MC-1. This stops the motor, returns A+ & A- to forward direction, sets R-4 for proper forward speed and advances batch counter by 1.
 - b LS-5 applies the short between P1 and P2 for the next cycle clamping speed.
-

THE INFORMATION CONTAINED ON THIS DRAWING IS PROPRIETARY AND SHALL NOT BE DISCLOSED, USED, OR REPRODUCED FOR ANY PURPOSES WITHOUT WRITTEN CONSENT FROM BRACKETT.



DETAIL A
SCALE 1:1

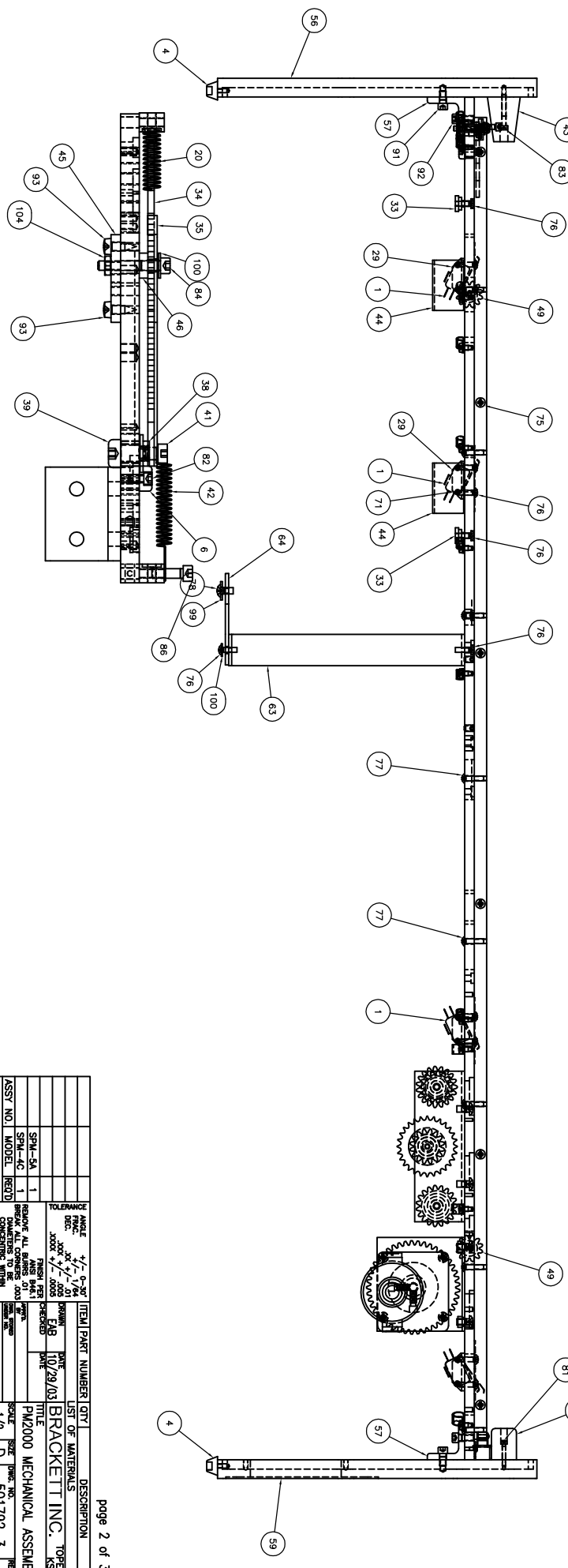
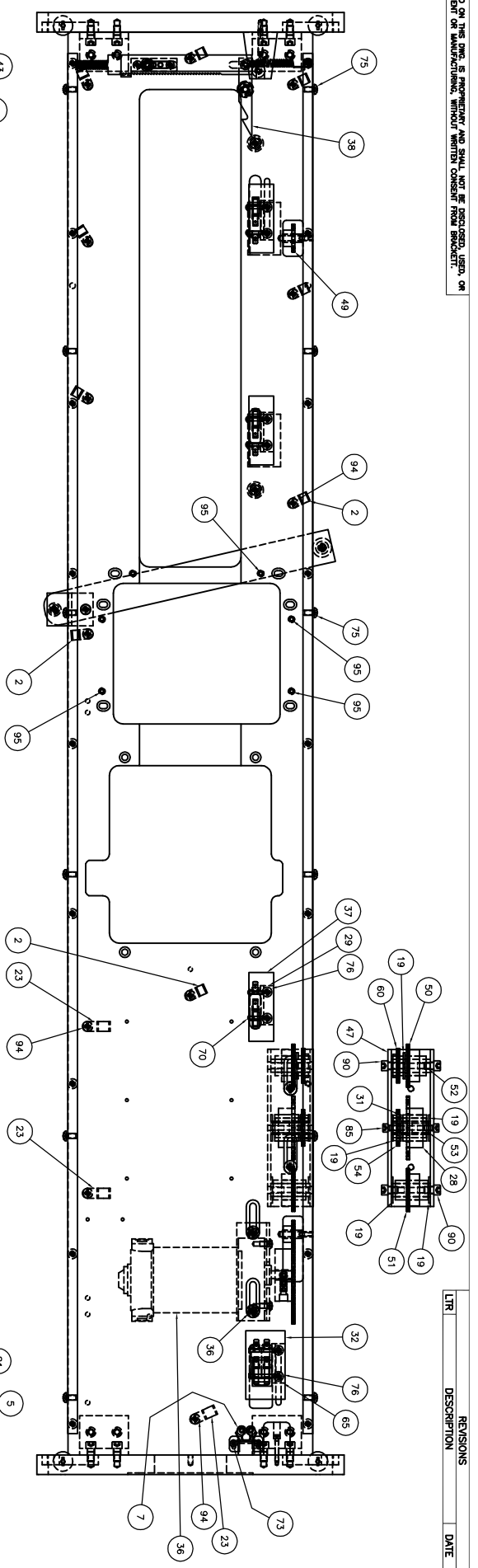
Item	Part No.	Qty	Description	Part List	Item	Part No.	Qty	Description
55	180372-1	2	GUARD MOUNT		106	872482-2	8	INSERT, 6-32 THREADED
54	180366	1	CLUTCH SPROCKET		107	882986-1	6	#10 RUBBER WASHER
53	180365	1	PIER SHAFT		108	882988-1	6	#10 BRASS WASHER
52	180364	2	PIER SHAFT		109	882989	2	#10 BRASS WASHER
51	180361	1	PIER SPROCKET		110	882990	2	#10 BRASS WASHER
50	180360	1	PIER SPROCKET		111	882991	2	#10 BRASS WASHER
49	180357	1	PIER SPROCKET		112	882992	2	#10 BRASS WASHER
48	180356	2	WORK SURFACE SPROCKET		113	882993	2	#10 BRASS WASHER
47	180355	1	WORK SURFACE SPROCKET		114	882994	2	#10 BRASS WASHER
46	180354	1	WORK SURFACE SPROCKET		115	882995	2	#10 BRASS WASHER
45	180353	1	WORK SURFACE SPROCKET		116	882996	2	#10 BRASS WASHER
44	180352	1	WORK SURFACE SPROCKET		117	882997	2	#10 BRASS WASHER
43	180351	1	WORK SURFACE SPROCKET		118	882998	2	#10 BRASS WASHER
42	180350	1	WORK SURFACE SPROCKET		119	882999	2	#10 BRASS WASHER
41	180349	1	WORK SURFACE SPROCKET		120	883000	2	#10 BRASS WASHER
40	180348	1	WORK SURFACE SPROCKET		121	883001	2	#10 BRASS WASHER
39	180347	1	WORK SURFACE SPROCKET		122	883002	2	#10 BRASS WASHER
38	180346	1	WORK SURFACE SPROCKET		123	883003	2	#10 BRASS WASHER
37	180345	1	WORK SURFACE SPROCKET		124	883004	2	#10 BRASS WASHER
36	180344	1	WORK SURFACE SPROCKET		125	883005	2	#10 BRASS WASHER
35	180343	1	WORK SURFACE SPROCKET		126	883006	2	#10 BRASS WASHER
34	180342	1	WORK SURFACE SPROCKET		127	883007	2	#10 BRASS WASHER
33	180341	1	WORK SURFACE SPROCKET		128	883008	2	#10 BRASS WASHER
32	180340	1	WORK SURFACE SPROCKET		129	883009	2	#10 BRASS WASHER
31	180339	1	WORK SURFACE SPROCKET		130	883010	2	#10 BRASS WASHER
30	180338	1	WORK SURFACE SPROCKET		131	883011	2	#10 BRASS WASHER
29	180337	1	WORK SURFACE SPROCKET		132	883012	2	#10 BRASS WASHER
28	180336	1	WORK SURFACE SPROCKET		133	883013	2	#10 BRASS WASHER
27	180335	1	WORK SURFACE SPROCKET		134	883014	2	#10 BRASS WASHER
26	180334	1	WORK SURFACE SPROCKET		135	883015	2	#10 BRASS WASHER
25	180333	1	WORK SURFACE SPROCKET		136	883016	2	#10 BRASS WASHER
24	180332	1	WORK SURFACE SPROCKET		137	883017	2	#10 BRASS WASHER
23	180331	1	WORK SURFACE SPROCKET		138	883018	2	#10 BRASS WASHER
22	180330	1	WORK SURFACE SPROCKET		139	883019	2	#10 BRASS WASHER
21	180329	1	WORK SURFACE SPROCKET		140	883020	2	#10 BRASS WASHER
20	180328	1	WORK SURFACE SPROCKET		141	883021	2	#10 BRASS WASHER
19	180327	1	WORK SURFACE SPROCKET		142	883022	2	#10 BRASS WASHER
18	180326	1	WORK SURFACE SPROCKET		143	883023	2	#10 BRASS WASHER
17	180325	1	WORK SURFACE SPROCKET		144	883024	2	#10 BRASS WASHER
16	180324	1	WORK SURFACE SPROCKET		145	883025	2	#10 BRASS WASHER
15	180323	1	WORK SURFACE SPROCKET		146	883026	2	#10 BRASS WASHER
14	180322	1	WORK SURFACE SPROCKET		147	883027	2	#10 BRASS WASHER
13	180321	1	WORK SURFACE SPROCKET		148	883028	2	#10 BRASS WASHER
12	180320	1	WORK SURFACE SPROCKET		149	883029	2	#10 BRASS WASHER
11	180319	1	WORK SURFACE SPROCKET		150	883030	2	#10 BRASS WASHER
10	180318	1	WORK SURFACE SPROCKET		151	883031	2	#10 BRASS WASHER
9	180317	1	WORK SURFACE SPROCKET		152	883032	2	#10 BRASS WASHER
8	180316	1	WORK SURFACE SPROCKET		153	883033	2	#10 BRASS WASHER
7	180315	1	WORK SURFACE SPROCKET		154	883034	2	#10 BRASS WASHER
6	180314	1	WORK SURFACE SPROCKET		155	883035	2	#10 BRASS WASHER
5	180313	1	WORK SURFACE SPROCKET		156	883036	2	#10 BRASS WASHER
4	180312	1	WORK SURFACE SPROCKET		157	883037	2	#10 BRASS WASHER
3	180311	1	WORK SURFACE SPROCKET		158	883038	2	#10 BRASS WASHER
2	180310	1	WORK SURFACE SPROCKET		159	883039	2	#10 BRASS WASHER
1	180309	1	WORK SURFACE SPROCKET		160	883040	2	#10 BRASS WASHER

ASST NO.	MODEL	RECD	DATE	BY
	SFM-5A	1		
	SFM-4C	1		

BRACKETT INC. TORONTO, ONT. CANADA
PAGE 1 OF 3
MECHANICAL ASSEMBLY
SCALE 1/4 D
501792-3

THE INFORMATION DISCLOSED ON THIS DRAWING IS PROPRIETARY AND SHALL NOT BE DISCLOSED, USED, OR REPRODUCED FOR ANY PURPOSES WITHOUT WRITTEN CONSENT FROM BRACKETT.

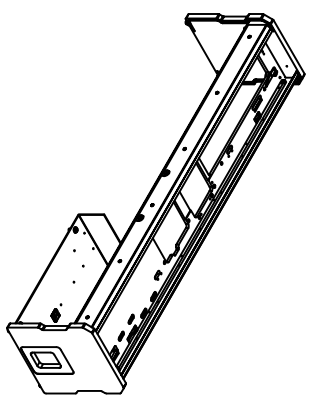
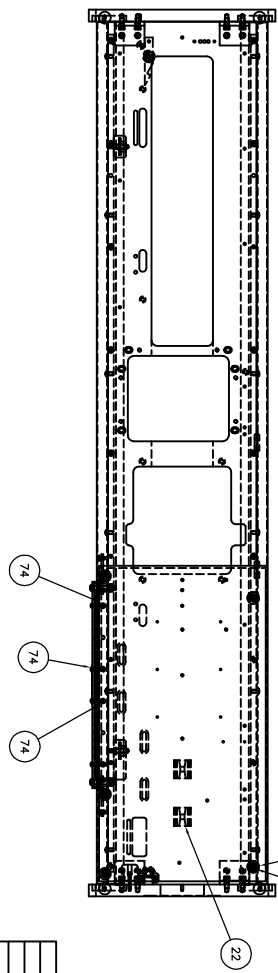
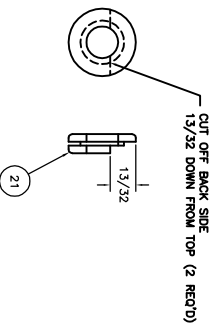
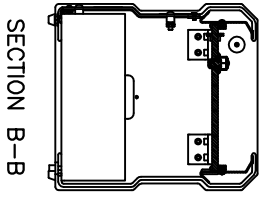
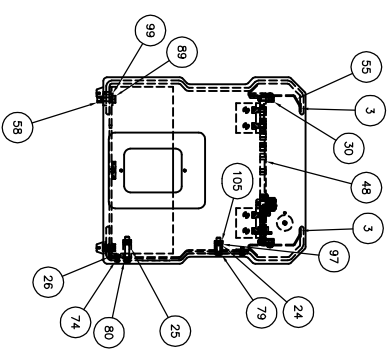
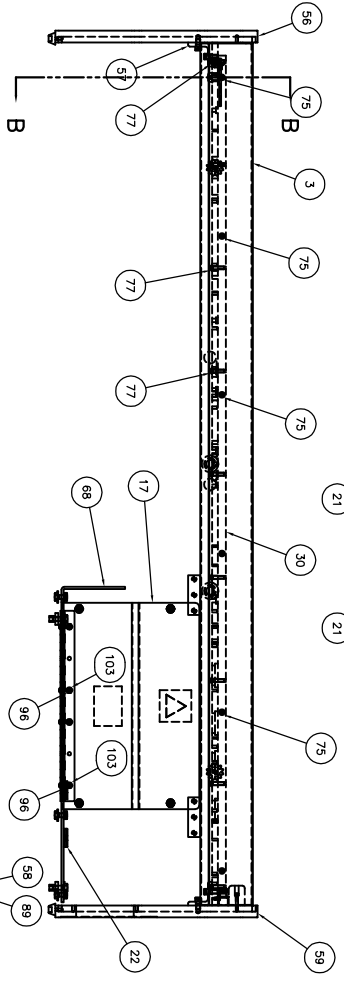
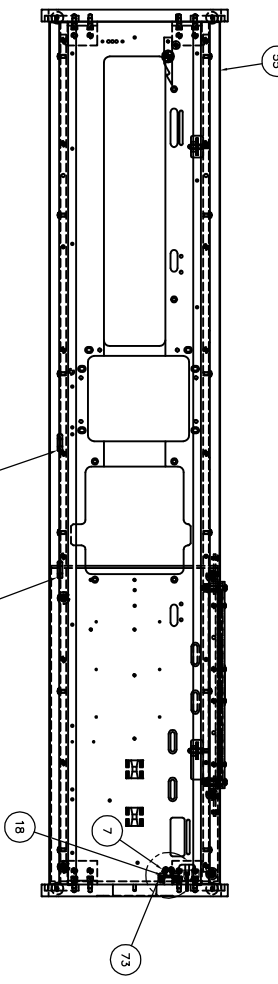
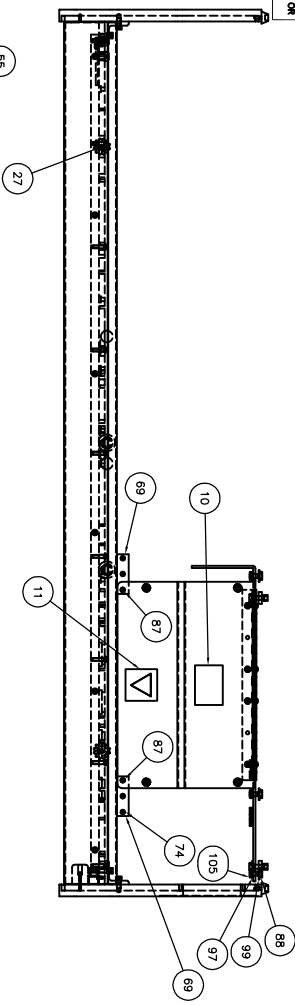
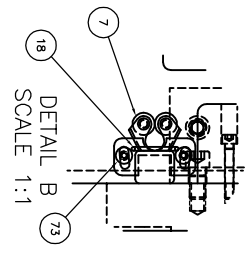
REVISIONS
DATE BY



ITEM	PART NUMBER	QTY	DESCRIPTION
LIST OF MATERIALS			
BRACKETT INC. TORONTO, ONT.			
DATE: 10/29/03			
TITLE: P12000 MECHANICAL ASSEMBLY			
SCALE: 1/2 D			
DO NOT SCALE			
DATE: 501792-3			

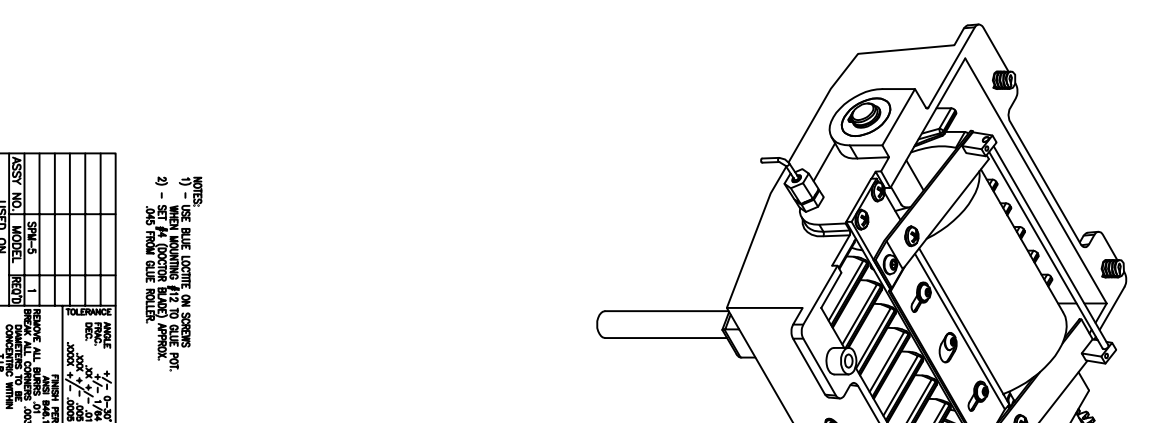
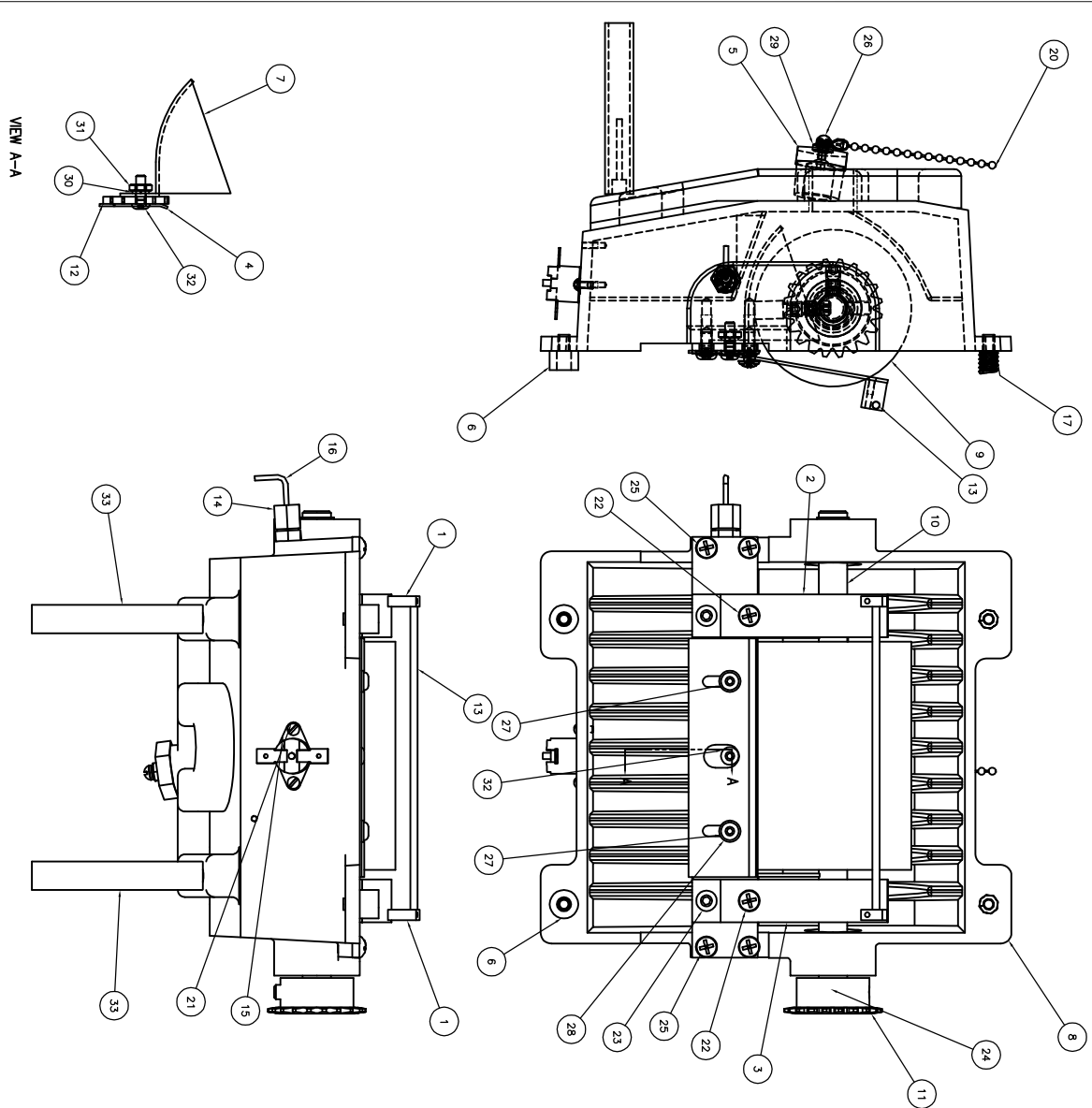
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REVISIONS
DATE BY



ITEM	PART NUMBER	QTY	DESCRIPTION
			LIST OF MATERIALS
			BRACKETT INC. TORONTO, ONT.
			PL2000 MECHANICAL ASSEMBLY
			SCALE: 1/4" = 1"
			DO NOT SCALE
			501792-3

THE INFORMATION PROVIDED ON THIS DRAWING IS PROPRIETARY AND SHALL NOT BE REPRODUCED, USED, OR DISCLOSED FOR ANY PURPOSE WITHOUT THE WRITTEN CONSENT OF BENTON BROS. CO.



NOTES:
 1) - USE BLUE LOCTITE ON SCREWS
 2) - SET TORQUE RANGES
 3) - SET TORQUE RANGE
 4) - SET TORQUE RANGE

ITEM	PART NUMBER	QTY	DESCRIPTION
33	1800411	2	SILICONE TUBE
32	901123	1	8-32 x 1/2 B.H.C.S.
31	962004	1	8-32 HEX NUT
30	960020	1	#8 SPLIT LOCKWASHER
29	962002	1	6-32 HEX NUT
28	960170	2	WASHER, BRASS .172x3/8x.032
27	901121	2	8-32 x 1/4 B.H.C.S.
26	900483	4	10-32 x 3/8 PAN HEAD PHILLIPS
25	901762	6	1/4-20 x 1/4 SSS QJP POINT
24	968402	2	10-32 x 3/8 B.H.C.S.
23	901822	2	10-32 x 1/2 P.H.M.S.
22	901783	2	4-40 x 1/4 P.H.M.S.
21	900241	1	GLUE POT CHAIN
20	1800410	1	GLUE POT INSULATION
19	1800409	1	GLUE POT INSULATION
18	1800408	1	GLUE POT INSULATION
17	107775-1	2	ZINC SILICONE SPRING
16	100468	1	SENSOR ARMATURE
15	100750-2	1	THERMAL CUT-OFF
14	177195	1	THERMOCOUPLE FITTING
13	103595	1	1.25 MUSIC WIRE
12	180390	1	GLUE WIPER MOUNT
11	180362	1	GLUE POT SPRING
10	1800504	1	GLUE ROLLER SHIRT
9	180059	1	GLUE ROLLER
8	180381A	1	110V GLUE POT
7	180409	1	GLUE BATTERY
6	180408	2	GLUE POT SPACER WASHER
5	180397	1	GLUE POT PLUG
4	180396	1	GLUE DOCTOR BLADE
3	180394	1	GLUE POT ROD SPRING - RIGHT
2	180393	1	GLUE POT ROD SPRING - LEFT
1	180382	2	GLUE POT WINDING ROD MOUNT

ITEM	PART NUMBER	QTY	DESCRIPTION
33	1800411	2	SILICONE TUBE
32	901123	1	8-32 x 1/2 B.H.C.S.
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3	180394	1	GLUE POT ROD SPRING - RIGHT
2	180393	1	GLUE POT ROD SPRING - LEFT
1	180382	2	GLUE POT WINDING ROD MOUNT

ASSY NO.	MODEL	REV	DATE	BY
SPG-5	1			

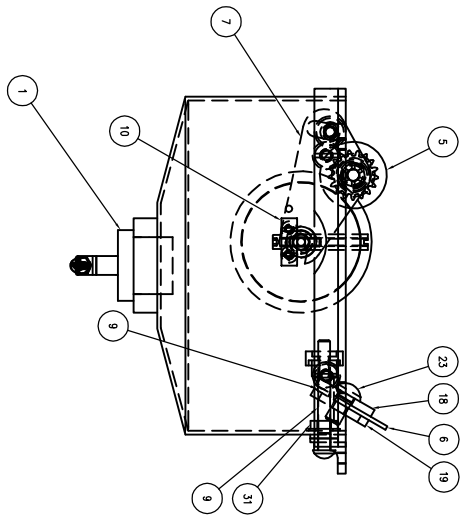
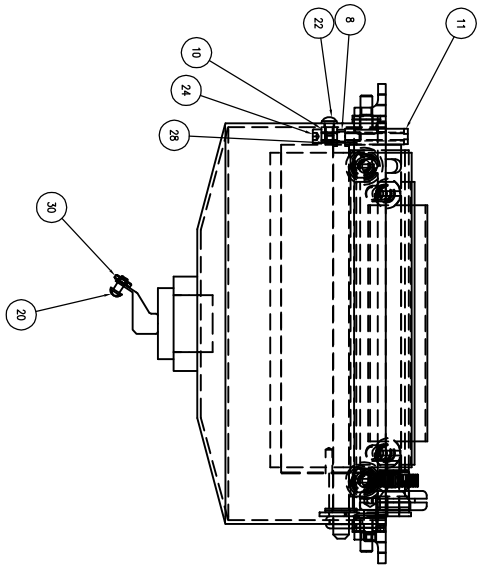
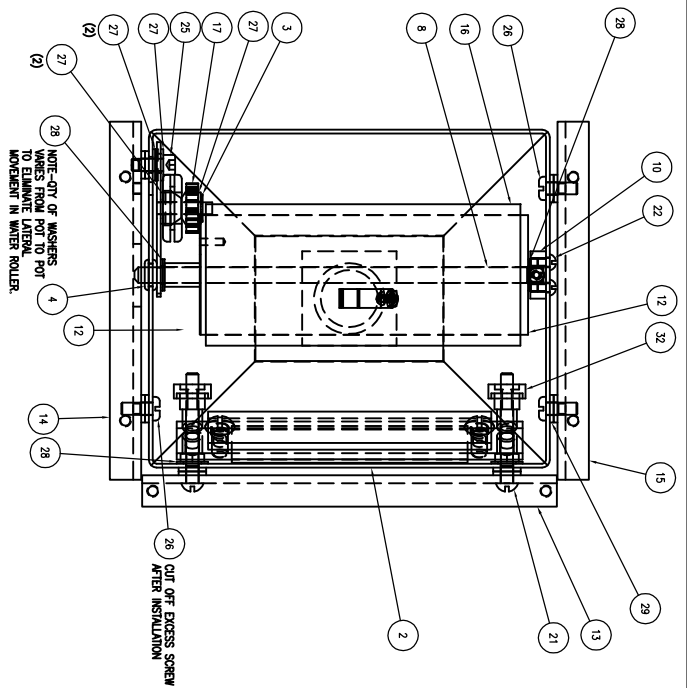
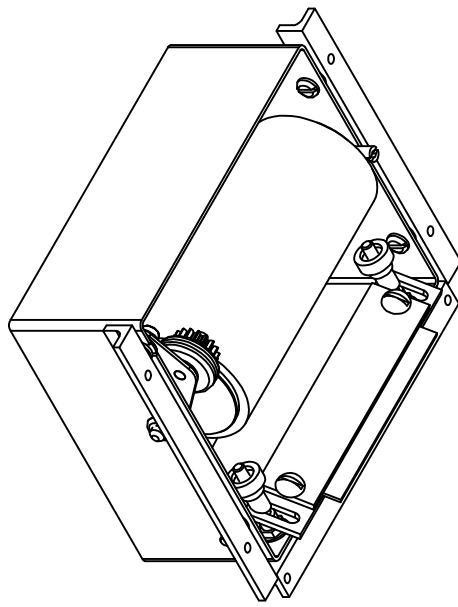
DATE	BY	DESCRIPTION
5/1/01		BRACKET ASSEMBLY

DATE	BY	DESCRIPTION
5/1/01		BRACKET ASSEMBLY

VIEW A-A

REVISIONS
 DATE BY
 DESCRIPTION

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 THE DRAWING FOR CONSTRUCTION OR MANUFACTURING WITHOUT WRITTEN PERMISSION FROM BRACKETT.



REV	DATE	BY	DESCRIPTION
A	10-30-00	TAS	REVISIONS

ITEM	QTY	DESCRIPTION	UNIT
32	2	NUT, PLASTIC, NUMBERED PHANG	
31	2	10-24 HEX NUT, STAINLESS STEEL	
30	1	4-40 HEX NUT	
29	12	WASHER, FLAT, FERROUS, 203 D	
28	6	WASHER, FLAT, INCON 9/128, 1/2 x .031	
27	6	WASHER, BRNS, 203, 1/2 x .040	
26	3	10-32 x 1/2 PLATE, INCON	
25	1	10-32 x 1/2 SLICK, STAINLESS ST	
24	1	4-32 x 3/8 SLICK, STAINLESS ST	
23	2	1/4-20 x 1/2 PLATE, INCON	
22	2	4-32 x 1/2 PLATE, STAINLESS	
21	2	10-24 x 1/2 PLATE, STAINLESS	
20	1	4-40 x 1/2 PLATE	
19	1	QUICK WASH HOLDER	
18	1	INSIDE WASH HOLDER	
17	1	WATER POT DRIVE SPRING	
16	1	WATER ROLLER COVER	
15	1	WATER POT KNUFF	
14	1	WATER POT KNUFF	
13	1	WATER POT KNUFF	
12	1	WATER ROLLER	
11	1	STANDARD SCREW	
10	1	WATER ROLLER KING BLOCK	
9	4	WHEEL STANDOFF	
8	1	COILING ROLLER SHFT	
7	1	SPRING PIN w/PROT PIN	
6	1	WHEEL	
5	1	GEOMET. ROLLER 1/2 D X 1-1/8 OD	
4	1	1/4" RIBS, COILING	
3	1	RING CORE, PLASTIC	
2	1	PLASTIC WHEEL POT	
1	1	PLATE, EXPANSION TIRE	
103031	1	WHEEL	

NAME	DATE	DESCRIPTION
BRACKETT INC.	9-11-00	TITLE WATER POT ASSEMBLY

ITEM PART NUMBER	QTY	DESCRIPTION	UNIT
32	2	NUT, PLASTIC, NUMBERED PHANG	
31	2	10-24 HEX NUT, STAINLESS STEEL	
30	1	4-40 HEX NUT	
29	12	WASHER, FLAT, FERROUS, 203 D	
28	6	WASHER, FLAT, INCON 9/128, 1/2 x .031	
27	6	WASHER, BRNS, 203, 1/2 x .040	
26	3	10-32 x 1/2 PLATE, INCON	
25	1	10-32 x 1/2 SLICK, STAINLESS ST	
24	1	4-32 x 3/8 SLICK, STAINLESS ST	
23	2	1/4-20 x 1/2 PLATE, INCON	
22	2	4-32 x 1/2 PLATE, STAINLESS	
21	2	10-24 x 1/2 PLATE, STAINLESS	
20	1	4-40 x 1/2 PLATE	
19	1	QUICK WASH HOLDER	
18	1	INSIDE WASH HOLDER	
17	1	WATER POT DRIVE SPRING	
16	1	WATER ROLLER COVER	
15	1	WATER POT KNUFF	
14	1	WATER POT KNUFF	
13	1	WATER POT KNUFF	
12	1	WATER ROLLER	
11	1	STANDARD SCREW	
10	1	WATER ROLLER KING BLOCK	
9	4	WHEEL STANDOFF	
8	1	COILING ROLLER SHFT	
7	1	SPRING PIN w/PROT PIN	
6	1	WHEEL	
5	1	GEOMET. ROLLER 1/2 D X 1-1/8 OD	
4	1	1/4" RIBS, COILING	
3	1	RING CORE, PLASTIC	
2	1	PLASTIC WHEEL POT	
1	1	PLATE, EXPANSION TIRE	
103031	1	WHEEL	

REVISIONS

DATE

BY

DESCRIPTION

10-30-00

TAS

TITLE WATER POT ASSEMBLY

BRACKETT INC.

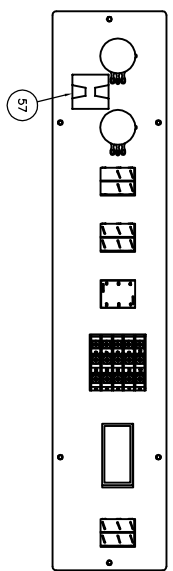
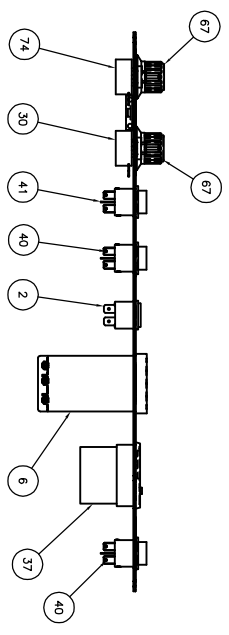
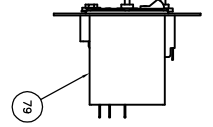
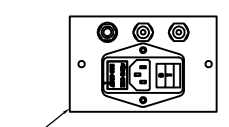
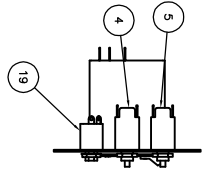
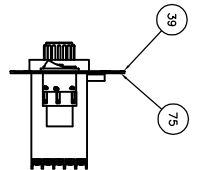
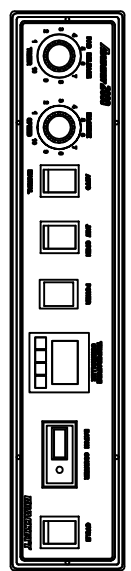
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DATE

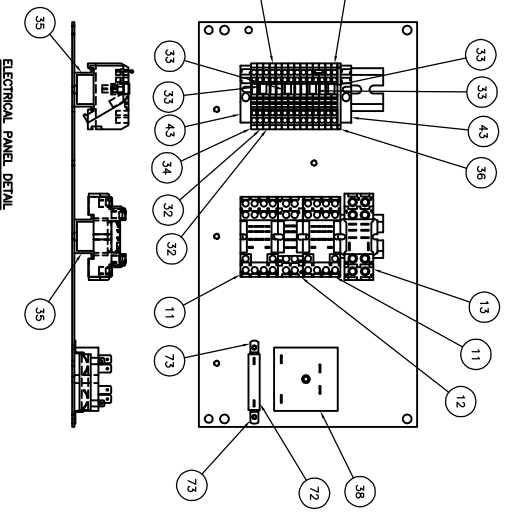
BY

DESCRIPTION

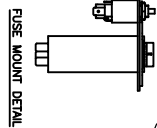
THE INFORMATION DISCLOSED ON THIS DRAWING IS PRELIMINARY AND SHALL NOT BE DISCLOSED, USED, OR REPRODUCED FOR ANY PURPOSES WITHOUT WRITTEN CONSENT FROM BRACKETT.



CONTROL PANEL DETAIL



ELECTRICAL PANEL DETAIL



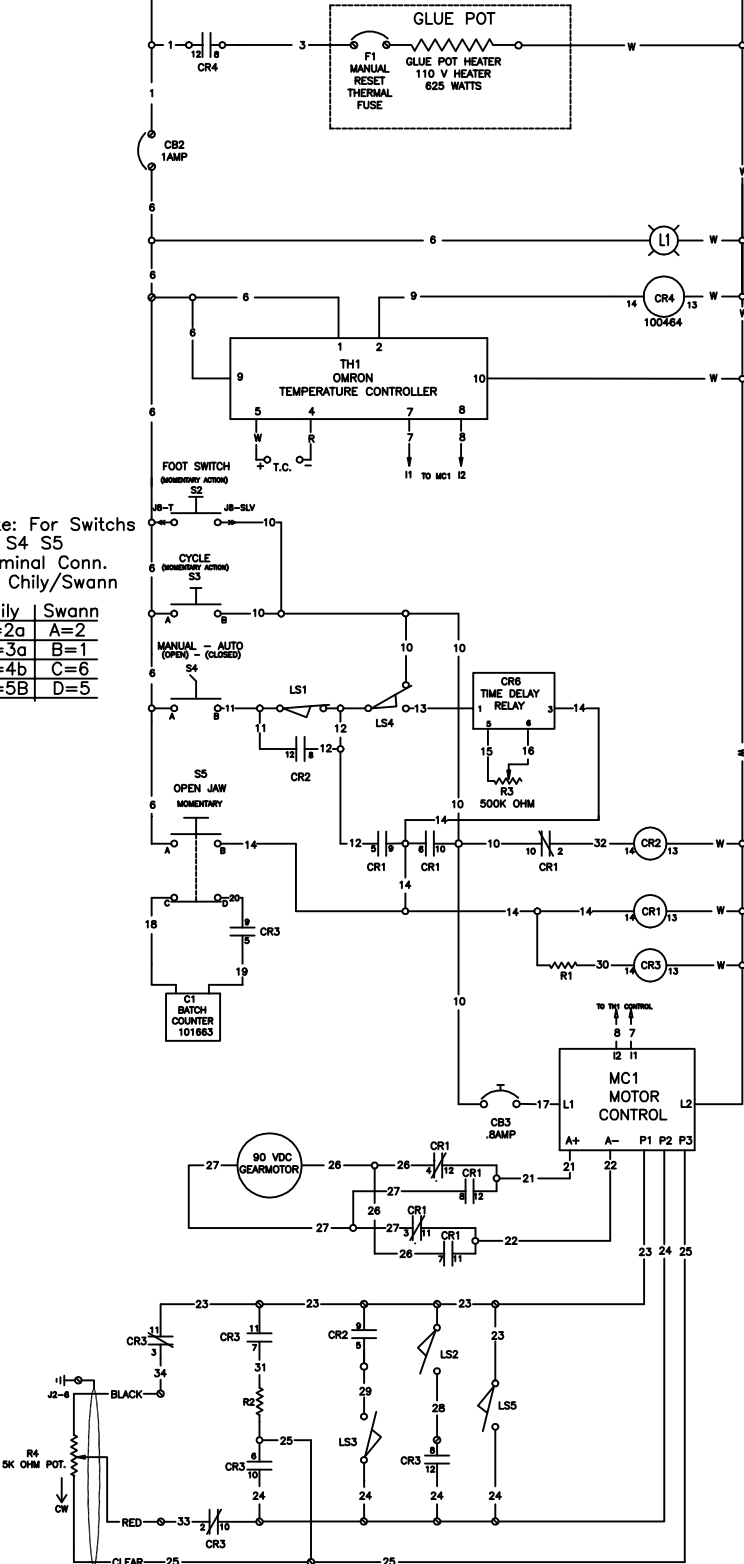
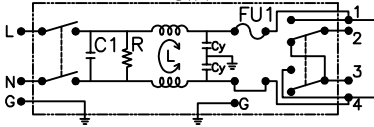
Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
78	1803198	1	INSULATED ELECT. 864-10/011	38	1803209	1	TIME DELAY RELAY
79	180372-3	1	FUSE MOUNT	37	1803643	1	CONTROL BLOCK END PLATE
77	180420	1	FERRULE ELECTRICAL	36	1801571-1	1	TERMINAL BLOCK END PLATE
76	180370	1	PHASOR CONTROL PANEL	35	1801589	1	DIN TRACK W/ WIRE SLOTS
74	108849	1	500 K OHM POT	34	1801588-1	1	TERMINAL BLOCK GRN/YEL 5mm
73	108822-1	2	500 K OHM RESISTOR	33	1801586-4	4	TERMINAL BLOCK GRN/YEL 5mm
72	108822	4	E-7 K OHM RESISTOR	32	1801585-1	1	TERMINAL BLOCK GRN/YEL 5mm
71	108444	4	DISCONNECT FEMALE NON-INSUL	31	1801584-1	1	TERMINAL BLOCK GRN/YEL 5mm
70	108442	14	DISCONNECT FEMALE FULLY INSUL	30	1801583	1	POTENTIOMETER, 5K OHM 2 WATT
69	108457	28	FEMALE FEMALE SPINDLE 22-18 GA	29	1801582	1	WIRE MARKER #9
68	108458	2	FEMALE DISCONNECT INSULATED	28	1801581	1	WIRE MARKER #8
67	108450	24	FEMALE DISC. 22-18 GA	27	1801580	1	WIRE MARKER #7
66	108418	2	FEMALE DISC. 22-18 GA	26	1801579	1	WIRE MARKER #6
65	108418	2	FEMALE DISC. 22-18 GA	25	1801578	1	WIRE MARKER #5
64	108412	125	WIRE 20 GA WHITE	24	1801577	1	WIRE MARKER #4
63	108411	3	WIRE 20 GA RED	23	1801576	1	WIRE MARKER #3
62	1083811-6	3	INSULATED WIRE FERRULE 22GA	22	1801287	10	WIRE MARKER #2
61	1083811-2	6	INSULATED WIRE FERRULE 18GA	21	1801286	10	WIRE MARKER #1
60	1083811	55	INSULATED WIRE FERRULE 18GA	20	1801284	3	PHONE JACK
59	1083508	3	BUTT SPLICE 22-18 GA	19	1801281	1	MARKER, TERMINAL 31 / 32
58	1083508	1	TUBING, SILICON RBR RED	18	1801170-5	1	MARKER, TERMINAL 25 / 26
57	108225	1	THE BASE STOCK-ON	17	1801170-4	1	MARKER, TERMINAL 9 / 10
56	108224-5	6	WIRE, 290 DEG. 18 GA RED	16	1801170-3	1	MARKER, TERMINAL 5 / 6
55	108224-1	1	WIRE, 290 DEG. 18 GA WHITE	15	1801170-2	1	MARKER, TERMINAL 3 / 4
54	108218	1	RESISTOR 10K OHM 1/4 WATT	14	1801170-1	1	MARKER, TERMINAL 25 / 26
53	108218	5	WIRE 18 GA. BLACK	13	1801170-2	1	MARKER, TERMINAL 5 / 6
52	108110	2	WIRE 18 GA. WHITE	12	1801170-1	1	MARKER, TERMINAL 5 / 6
51	108109	2	WIRE 18 GA. GREEN W/YELLOW	11	1801170-6	1	BLADE TYPE RELAY SOCKET 10 AMP
50	108108	9	WIRE 18 GA. RED	10	1801170-5	1	BLADE TYPE RELAY SOCKET 7AMP
49	108107	2	WIRE 18 GA. WHITE	9	1801170-4	1	WIRING DUCT COVER
48	1080335	2	NUT, WIRE, GRAY	8	1801170-3	1	1" X 1" WIRING DUCT
47	108032	5	HDWR, FORK NYLON INSULATED	7	1801170-2	1	SHIELDED CABLE
46	108028	2	DISCONNECT FEMALE	6	1801170-1	1	CONTROLLED TEMP
45	108026	7	RING TERMINAL	5	1801170-2	1	CIRCUIT BREAKER, 1 AMP PUSH BUTTON
44	108019	4	END STOP	4	1801170-20	1	CIRCUIT BREAKER, 3 AMP PUSH BUTTON
43	102653-1	2	WIRE TERMINAL	3	1801170-21	1	INDICATOR LIGHT, RED SWAP IN
42	102650	4	WIRE TERMINAL	2	1801170-22	2	BATTERY, 1.5 V
41	102630	1	DAK SW. SPST ON/OFF	1	1801170-23	1	BATTERY, 1.5 V
40	102630	2	DAK SW. SPST MOUNT. ON				
39	102311-2	1	PH2000 ELECTRICAL PANEL DECAL				

REV.	DATE	DESCRIPTION
1	10-28-03	BRACKETT INC. TORERA, KS
2	10-28-03	BRACKETT INC. TORERA, KS
3	10-28-03	BRACKETT INC. TORERA, KS
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79	10-28-03	BRACKETT INC. TORERA, KS

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LTR	REVISIONS	DATE	BY
	DESCRIPTION		

115VAC-50/60HZ-1 PHASE SW1



Note: For Switches S3 S4 S5 Terminal Conn. for Chily/Swann

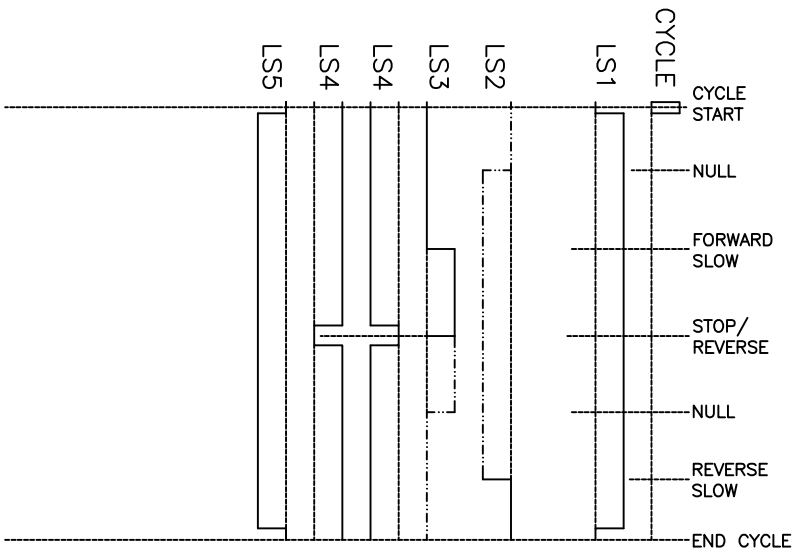
Chily	Swann
A=2a	A=2
B=3a	B=1
C=4b	C=6
D=5B	D=5

SPM-4C	MODEL	REQ'D	USED ON
ASSY NO.	MODEL	REQ'D	
REMOVE ALL BURRS .01 BREAK ALL CORNERS .003 DIAMETERS TO BE CONCENTRIC WITHIN T.I.R.			
TOLERANCE		ANGLE	
FRAC.		+/-	0-30'
DEC.		XX +	1/64
.XXX +		-	.01
.XXXX +		-	.005
.0005		-	.0005
FINISH PER ANSI B46.1			
DRAWN		DATE	
PLF		10-28-03	
CHECKED		DATE	
APPROD. BY			
DWG. STORED UNDER NO.			
DO NOT SCALE			
SCALE		SIZE	DWG. NO.
B		B	899606-2A
REV.			
ITEM PART NUMBER		QTY	DESCRIPTION
LIST OF MATERIALS			
BRACKETT INC. TOPEKA, KS			
TITLE			
PM2000 ELECT. SCHEMATIC			
115VAC 60 Hz (page 1 of 2)			

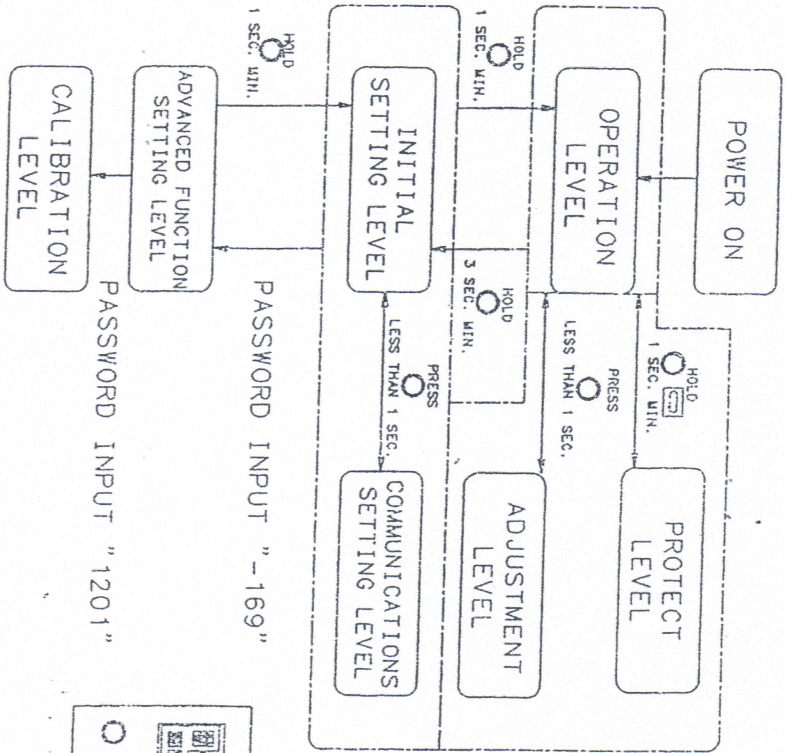
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REVISIONS		DATE	BY
LTR	DESCRIPTION		

S1	100198	1	SWITCH, 2POLE FUSED/FILTERED
CB3	100570-20	1	CIRCUITBREAKER .8AMP
CB2	100570-21	1	1 AMP CIRCUITBREAKER
GLUE POT	180381A	1	PM2000 110 GLUE POT
R3	108584	1	500 K OHM POT.
FU1	101276	1	FUSE, 8 AMP. MDA, 250V.
TC	100668	1	TEMP. SENSOR TERMOCOUPLE
R2	108218	1	10 K OHM 1/4 WATT RESISTOR
R1	108582	1	2.7 K OHM 10 W RESISTOR
MC1	177476	1	KB ELECT. #KBLC-120 CONTROL
C1	101663	1	COUNTER 6 DIGIT ELECTRO MECH
LS2-LS4	100150-2	3	LIMIT SWITCH CAM LEVER SPDT
LS1,LS5	180405A	1	Limit Switch,Double
TH1	100672-1	1	OMRON TEMP CONTROL E5CS-X
CR2	101513	1	RELAY DPDT 3 AMP 120V
CR4	100464-1	1	RELAY DPDT 120V 8 PIN
CR1,CR3	100744	2	RELAY 120V 4PDT
CR6	102309	1	TIME DELAY RELAY SSAC #TSD1420
S4	102631	1	SPST 2 POS SWITCH BLACK
S3,SS	102630	2	SPST MOMENTARY ON/OFF BLK SWITCH
S2	180206	1	SPST FOOT SWITCH
L1	100293-2	1	RED INDICATOR LIGHT
F1	100750-2	1	THERMAL FUSE MANUAL RESET
GEAR MTR	180156A	1	90 V DC GEAR MOTOR

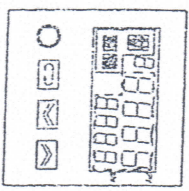


ITEM	PART NUMBER	QTY	DESCRIPTION
LIST OF MATERIALS			
BRACKETT INC. TOPEKA, KS			
DRAWN	DATE	TITLE	SCALE
PLF	10-28-03	PM2000 ELECT. SCHEMATIC	115VAC 60 Hz (page 2 of 2)
CHECKED	DATE	APPROV'D. BY	DWG. NO.
			899606-2A
FINISH PER ANSI B46.1		DO NOT SCALE	
REMOVE ALL BURRS .01		SCALE	
BREAK ALL CORNERS .003		SIZE	
DIAMETERS TO BE CONCENTRIC WITHIN T.I.R.		B	
TOLERANCE		REV.	
ANGLE +/- 0-30'			
FRAC. +/- 1/64			
DEC. .XX +/- .01			
.XXX +/- .005			
.XXXX +/- .0005			
SPM-4C		1	
ASSY NO. MODEL		REQ'D	
USED ON			



Sequence for Initial Setup of the Controller.

POWER UP	TUSH ON POWER
OPERATION LEVEL	DEFAULT DISPLAY
PROTECT LEVEL	TUSH PROTECT KEY
OPERATION LEVEL	ID "
INITIAL SETTING LEVEL	SET DEFAULTS
ADVANCED FUNCTION SETTING LEVEL	SET DEFAULTS
OPERATION LEVEL	SET DEFAULTS
ADJUSTMENT LEVEL	SET DEFAULTS
OPERATION LEVEL	TUSH PROTECT KEY
PROTECT LEVEL	ID "
OPERATION LEVEL	



DRAWN	DATE	BRACKETT INC	TOPP
LPK	5/13/99		KS.
CHECKED	DATE	TITLE	
ZAPPE D.		OMRON TEMP. CTRL'R STGS	
REV.		SCALE	SIZE
NO. STORED		FULL	C
SHEET NO.		DRG. NO.	100672-1
DO NOT SCALE		REV.	