# INSTRUCTIONS FOR MAR-BEL ASSOCIATES' MODELS PR-6 CLOSED END AND PRO-7 OPEN ENDED PINCH ROLLERS

### **GENERAL**

THANK YOU FOR YOUR PURCHASE OF A MAR-BEL PINCH ROLLER. WE EXPECT YOU WILL BE AS PLEASED WITH ITS PERFORMANCE AS THOUSANDS OF YOUR PREDECESSORS HAVE BEEN.

# PLEASE READ THE FOLLOWING INSTRUCTIONS THROUGH COMPLETELY BEFORE PLUGGING IN THE MACHINE

THE INSTRUCTIONS ARE GROUPED INTO FIVE SUBJECT AREAS:

- A SHIPPING, UNCRATING, INSTALLATION
- **B** SAFETY AND TESTING
- C OPERATION
- **D** MAINTENANCE
- E HELPFUL HINTS
- F MOTOR, BRAKE, CONTROL PANEL WIRING DIAGRAMS AND ILLUSTRATIONS OF KEY ELECTRICAL PARTS

# SHIPPING, UNCRATING, AND INSTALLATION SHIPPING AND UNCRATING

UPON RECEIPT, IMMEDIATELY AND CAREFULLY INSPECT THE MACHINE AND ITS CRATE FOR SHIPPING DAMAGE. THERE ARE TWO TYPES OF FREIGHT DAMAGE: CONCEALED AND UNCONCEALED. UNCONCEALED IS ALL DAMAGE THAT SHOULD BE OBVIOUS TO THE RECIPIENT: OUR UNITS ARE COVERED WITH 4 MIL VISQUEEN AND STURDY LUMBER:

IF ANY OF THE LUMBER IS BROKEN OR THERE ARE ANY TEARS OR PUNCTURES IN THE VISQUEEN, YOU SHOULD MAKE A NOTE OF IT ON THE FREIGHT BILL OR IT WILL HAVE BEEN DEEMED DELIVERED IN UNDAMAGED CONDITION.

CONCEALED DAMAGE IS DAMAGE NOT EVIDENCED BY EXTERIOR SIGNS AND CAN RESULT FROM IMPROPER STACKING OR SEVERE DROPPING FOR EXAMPLE. THIS DAMAGE IS DISCOVERED WHILE YOU ARE IN THE PROCESS OF REMOVING THE LUMBER AND VISQUEEN.

<u>IF SUCH DAMAGE BECOMES EVIDENT, IMMEDIATELY STOP UNCRATING, SAVE ANY CRATING MATERIALS PREVIOUSLY REMOVED AND IMMEDIATELY CALL THE CARRIER.</u>

IF YOUR FREIGHT WAS ARRANGED BY US, YOU MAY ALSO CALL MR. TIM MCMULLEN AT FREIGHTQUOTE 888-595-5664 EXT 1876, BUT IN ANY CASE CALL THE LOCAL OFFICE OF THE FREIGHT COMPANY AND ALERT THEM AS TO THE CONCEALED DAMAGE IN THE EVENT THEY WISH TO CONDUCT AN INSPECTION.

It is your responsibility to file the freight claim:
Mar-Bel will assist with parts / cost estimates to
repair the damage: IF YOU FAIL TO NOTE
DAMAGE ON FREIGHT BILL WHEN RECEIVED
YOU MAY LOSE YOUR RIGHT TO FILE A FREIGHT
DAMAGE CLAIM.

### **INSTALLATION**

## DO NOT PLUG IN THE MACHINE UNTIL TOLD TO DO SO IN THE INSTRUCTIONS!!

LOCATE THE MACHINE IN A LEVEL LOCATION NO MORE THAN THE UNIT'S CORD LENGTH FROM A 110 v 60 HZ OUTLET. THE MOTOR BRAKE ON THE UNIT IS SENSITIVE TO EXCESS WIRING RESISTANCE-AN EXTENSION CORD OF TOO SMALL A GUAGE OR EXCESSIVE LENGTH IS LIKELY TO TRIGGER THE MOTOR BRAKE.

### **SAFETY**

AS AN EMPLOYER, YOUR ATTENTION IS DIRECTED TO R408.12411 "EMPLOYER RESPONSIBILITY" AND ANY AND ALL OTHER PROMULGATED LAWS, RULINGS AND INDUSTRY STANDARDS WHICH MAY RELATE TO THE OPERATION OF THIS MACHINE. R408.12411 READS AS FOLLOWS:

#### **RULE 2411.**

- (1) THE EMPLOYER SHALL TRAIN AND INSTRUCT THE OPERATOR IN THE SAFE METHOD OF WORK BEFORE STARTING WORK ON ANY OPERATION COVERED BY THIS PART. THE EMPLOYER SHALL INSURE, BY ADEQUATE SUPERVISION, THAT CORRECT OPERATING PROCEDURES ARE BEING FOLLOWED AND THAT ALL REQUIRED SAFEGUARDS ARE INSTALLED, ARE FUNCTIONAL, AND ARE BEING USED.
- (2) THE EMPLOYER SHALL INSURE THE ORIGINAL AND CONTINUING COMPETENCE OF MAINTENANCE PERSONNEL CARING FOR, INSPECTING AND MAINTAINING PRESSES (AND BY INFERENCE, ANY OTHER MACHINERY HAVING CUTTING AND PINCH POINTS- MAR-BEL LANGUAGE ADDITION).

- (3) THE EMPLOYER SHALL PROVIDE CLEARANCE BETWEEN MACHINES SO THAT MOVEMENT OF ONE OPERATOR DOES NOT INTERFERE WITH THE WORK OF ANOTHER. AMPLE ROOM FOR CLEANING MACHINES AND HANDLING MATERIAL, WORK PIECES AND SCRAP SHALL ALSO BE PROVIDED. ALL SURROUNDING FLOORS SHALL BE KEPT IN GOOD CONDITION AND FREE FROM OBSTRUCTIONS, GREASE, OIL AND WATER
- (4) THE EMPLOYER SHALL OPERATE HIS PRESSES WITHIN THE TONNAGE AND ATTACHMENT WEIGHT RATINGS SPECIFIED BY THE MANUFACTURER.
- (5) THE EMPLOYER SHALL OBTAIN FROM ANY OUTSIDE FIRM MODIFYING A PRESS INSTRUCTIONS NEEDED TO ESTABLISH NEW OR CHANGED GUIDELINES FOR THE CARE AND USE OF THE PRESS SO MODIFIED.

BEFORE PLUGGING IN THE MACHINE, CHECK THAT THERE IS NO VISUAL DAMAGE TO THE SAFETY GATE, SWITCH, MOTOR, ELECTRICAL CONNECTIONS OR THE LIMIT SWITCHES MOUNTED AT THE GATE.

THIS INSPECTION SHOULD BE REPEATED DAILY PRIOR TO FIRST USING THE MACHINE

NEXT, SEE THAT THE DIRECTION SWITCH IS SET IN THE FORWARD POSITION, PLUG IN THE MACHINE AND FOLLOW THE STEPS BELOW IN ORDER:

- 1 ENSURE ALL PERSONNEL ARE CLEAR OF THE MACHINE, PARTICULARLY THE ROLL SURFACES.
- 2 DO NOT WEAR GLOVES OR LOOSE CLOTHING THAT MAY BECOME CAUGHT IN THE MACHINE
- 3 DEPRESS THE START SWITCH ONCE AND OBSERVE THE MOTION OF THE LOWER ROLL. NOTE IF THE UNIT WILL ONLY RUN WITH THE START SWITCH DEPRESSED, THEN YOUR EMERGENCY STOP BUTTON IS IN ITS LOCK DOWN POSITION: TURN THE SWITCH COUNTERCLOCKWISE TO FREE IT FROM ITS DETENT POSITION.
- 4 PUSH THE SAFETY GATE INWARD TOWARD THE ROLLS: AFTER THE GATE BOTTOM TRAVELS NO MORE THAN ONE INCH, YOU SHOULD NOTE THE MOTOR STOPPING AND THE ROLL CEASING TO TURN AS THE MOTOR BREAK ENGAGES. IF THIS DOES NOT HAPPEN, UNPLUG THE MACHINE AND CALL THE MAR-BEL ASSOCIATES PHONE NUMBER FOR ASSISTANCE.

### UNDER NO CIRCUMSTANCES SHOULD YOU CONTINUE TO OPERATE THE MACHINE!

5 IF THE MACHINE DOES STOP WHEN THE SAFETY GATE IS PUSHED AS DESCRIBED ABOVE, TURN THE FWD/REV SWITCH TO REV AND REPEAT STEP 4. IF THE UNIT DOES NOT CEASE TO OPERATE, UNPLUG THE UNIT IMMEDIATELY AND CONTACT MAR-BEL.

AT A MINIMUM, THE TESTING OF THE SAFETY GATE AS
OUTLINED ABOVE SHOULD BE DONE AT THE BEGINNING OF
EACH DAY: IT TAKES BUT A MOMENT TO DO.

### **OPERATING INSTRUCTIONS**

- NORMAL ROLL SPACING SHOULD BE BETWEEN 3/32" AND 1/16" LESS THAN THE NOMINAL THICKNESS OF THE LAMINATE AND SUBSTRATE. DO NOT OVERPRESSURE! IF YOUR DRIVE CHAIN IS JUMPING OFF THE SPROCKETS, YOU EITHER HAVE THE OPENING TOO SMALL OR ARE ATTEMPTING TO APPLY PRESSURE IN EXCESS OF THE MACHINES' DESIGNED ENVELOPE. THE MACHINE NOISE WHEN FEEDING YOUR MATERIAL THROUGH THE ROLLS SHOULD NOT BE NOTICEABLY MORE THAN THE MACHINE NOT RUNNING UNDER LOAD. IF YOU EXPERIENCE A BUMPING NOISE, YOU LIKELY HAVE SET THE OPENING TOO SMALL FOR THE WORK BEING FED.
- ENSURE THE LAMINATE AND SUBSTRATE ARE ALIGNED PRIOR TO FEEDING INTO THE MACHINE, BUT IF YOU HAVE A FALSE START, HIT THE STOP BUTTON, THEN RELEASE (TURN) THE STOP BUTTON, PUT THE FWD/REV SWITCH IN REV POSITION AND START THE MACHINE. THE ROLLS WILL OPERATE IN REVERSE AND RETURN YOUR WORK TO YOU FOR RE-ALIGNMENT.
- 3 FEED THE MATERIAL FROM THE FRONT OF THE MACHINE-THE REVERSE IS INTENDED TO BE USED FOR MISALIGNMENTS.
- 4 MAKE SURE THE OUTFEED SIDE OF THE MACHINE IS CLEAR OF OBSTRUCTIONS THAT THE WORKPIECE UNDER LOAD COULD COLLIDE WITH.
- THE TOP ROLL FACE IS 1.5" LONGER ON THE RIGHT (NON MOTOR) SIDE THAN THE LOWER ROLL FACE: THIS ALLOWS YOU TO PASS RAISED EDGES REQUIRING UP TO 2.25" CLEARANCES. IF YOU REQUIRE ADDITIONAL CLEARANCES EITHER AT AN END OR ELSEWHERE ON THE WORKPIECE, REUSABLE BLANKS ARE SUGGESTED.
- 6 SINCE YOU PRESET THE ROLLER OPENING, THE OPENING IS NOT FORCED BY THE FED WORKPIECE: THIS ALLOWS THE MACHINE TO BE MORE FORGIVING IF YOUR LAMINATE HANGS SLIGHTLY OVER THE FEED AND

OUTFEED SIDES OF THE SUBSTRATE-YOU DON'T HAVE TO CONCERN YOURSELF WITH FRACTURING THE LAMINATE.

### **MAINTENANCE**

WITH THE EXCEPTION OF THE SAFETY CHECKS AND REQUIREMENTS OUTLINED ABOVE, THE OVERALL MAINTENANCE OF YOUR MAR-BEL PINCH ROLLER ARE MINIMAL

#### **CLEANING**

Unless you have ordered a custom machine, the rolls are constructed of 60 durometer black neoprene on gusseted steel tubing. Adhesive buildup will degrade the uniformity of the pressure your rolls will provide.

CONSULT YOUR ADHESIVES OR CHEMICAL SUPPLIER TO DETERMINE AN APPROPRIATE SOLVENT FOR YOUR ADHESIVE THAT WILL NOT ALSO HARM THE NEOPRENE ROLLERS

THE MOTOR AND BRAKE SHOULD BE KEPT FREE OF DIRT, DUST AND OTHER CONTAMINANTS AS THESE WILL HARM THE AIR COOLED CAPABILITY OF THE MOTOR AND THUS ITS LIFE SPAN.

### **LUBRICATION**

NEITHER THE TOTALLY ENCLOSED, FAN COOLED GEARMOTOR OR THE ROLL SHAFT BEARINGS WILL REQUIRE LUBRICATION OVER THE LIFE OF THE MACHINE. ONCE A MONTH THE ASA41 RIVETED ROLLER DRIVE CHAIN SHOULD BE CHECKED FOR DEFLECTION. IF MORE THAN A HALF INCH OF DEFLECTION AT THE POINT MIDWAY BETWEEN THE TWO SPROCKETS IS OBSERVED, LOOSEN THE TWO MOTOR MOUNT BOLTS AND ROTATE THE MOUNT AND MOTOR UNTIL THE DESIRED MAXIMUM DEFLECTION IS ONCE AGAIN ACHIEVED. IF THE ROTATION DOES NOT ACCOMPLISH THIS, REMOVE ONE OR MORE LINKS FROM THE CHAIN. RE-TIGHTEN THE BOLTS. IF THE CHAIN APPEARS DRY, APPLY A LIGHT COATING OF LUBRICANT OF A TYPE DISCOURAGING DUST/DIRT COLLECTION.

### **HELPFUL HINTS**

BUILD INFEED AND OUTFEED TABLES OF SUITABLE HEIGHT TO FEED AND RECEIVE THE WORKPIECES

YOU MAY WISH TO MOUNT THE MACHINE ON LOCKING CASTERS SO IT CAN BE PUT ASIDE WHEN NOT BEING USED

ONCE YOU ARE COMFORTABLE WITH THE MACHINE'S INTERFACE WITH YOUR ADHESIVES, YOU MAY HAVE ONE OR MORE PREFERRED ROLL OPENINGS WHICH YOU CAN THEN SCRIBE ON THE OPENING SCALE AS PRESET OPENINGS.

### **CUSTOMER NOTES**