# TEMPERATURE CONTROL SYSTEM

The 931 Triton uses a ¼ Din Micro-Processor Based Temperature Control Module to monitor and control all temperature related functions. This unit allows you to set the temperature digitally and to monitor the current temperature of the heater block digitally.

#### ADJUST SET-POINT TEMPERATURE

Simply press either the (up) or (down) control buttons on the Temperature Control Unit. The temperature indicated on the bottom is your "SET-POINT" temperature. The temperature indicated on the top is the "ACTUAL" temperature.



The temperature control unit has a "THERMAL RUN-AWAY" alarm circuit. This feature will disengage the heater contact and will activate the front panel temperature alarm buzzer. If the Alarm is activated, remove power from the machine and contact the factory. The factory setting for this alarm is set for 500 deg.F.Refer to your control manual for more information on the alarm features of this unit.



# TIMER CONTROL SYSTEM

The 931 Triton uses a ¼ Din Clock Motor Timer Control Module for it's timing functions. This dependable unit allows you to set the pressing time of the machine and during the pressing cycle, the operator has visual feed-back of the time remaining. This timer module normally has a high time limit of (60)secs. In the event you need longer dwell times, contact the factory for other timer modules.



#### ACTIVATE THE TIMER SYSTEM

TIMER ACTIVATED PILOT LIGHT

The timer is activated when the lower load vehicle has indexed fully into the machine. With the load vehicle fully indexed, a lower roller micro-switch is activated that then activates a internal timer circuit. This timer circuit is factory set for 1-3 secs. After this time has elapsed, the timer then activates the timer. The following must take place for the timer activate:

- OPERTAOR FOOT-PEDAL IS DEPRESSED
- LOWER LOAD VEHICLE IS INDEXED FULLY
- LOWER ROLLER MICRO-SWITCH IS ENGAUGED
- PHOTO-EYE BEAM IS CLEAR
- INTERNAL PRE-SET TIMER



Before activating the machine, make sure that the indexing and pressing area of the machine is completely clear of obstructions and individuals.



RAIL ATTACHMENT PLATES CABLE CYLINDER AND LOAD VEHICLE ATTACHMNET POINT REAR PHOTO-EYE

## ATTACHING RAILS AND POSITIONING

The Triton was shipped with one of the load vehicles positioned under the heater block assembly. If you have purchased a twin station machine, the 2<sup>nd</sup> load vehicle is packaged in a separate crate. Indexing rail assemblies were shipped with the machine. The front and or rear extension rails (if you ordered a twin) are packaged with your machine. The extension rails attach easily to the center rails via attachment plates. Make sure the proper rail is attached to the center rail by taking note of the number stamped on the outer side of the rail at the end of the attachment plates.

With the rails attached, put a level on the rail to insure the rails are level. The extension rails can be adjusted by simply adjusting the level feet located at the end of each rail. With the front and or rear rails attached and level, you know can position the  $2^{nd}$  load vehicle on to the rail assembly if you have purchased a twin machine.



The Triton should be positioned on a lever solid surface. The machine should be anchor or lag bolted to the floor. The extension rail adjustment feet also needs to be anchor or lag bolted to the floor.



## MAIN PRESS AIR BAG PRESSURE SYSTEM

The 931 is equipped with a series of large diameter air bags. The air bags generate the large amounts of pressure to apply images properly. The air bags inflate when the timer activates. Once the airbags inflate, they lift the solid steel lift plate up into the load vehicle. At the end of the dwell time, the airbags then deflate causing the lift plate to then lower.

To increase or decrease the applied pressure, simply turn the pressure regulator mounted on the left side of the front panel.



The Triton requires at least 15-20 P.S.I. on the press pressure regulator in order to properly lift. The normal pressure setting for the machine for normal applications is between 40-80P.S.I.You should always set the pressure to the lowest amount for a given effect. This will increase the service life of the machine.



#### DO NOT EXCEED 100 PSI PRESSURE SETTING

# TABLE INDEXING SYSTEM

The 931 Triton is equipped with a Automatic Indexing System. The Indexing System moves the lower load vehicles in and out of the Triton press. Cable cylinders mounted on the left and right side of the lower load vehicles move the load vehicles in and out of the press upon command. To move the load vehicle into the press, the operator needs to depress the activate indexing foot-pedal switch. The front panel index alarm will activate by sounding a buzzer for 2-3 secs.. With the foot-pedal still depressed, the lower load vehicle will then index into the press until the load vehicle hits the rear table stop shock absorbers. The table will only move if the foot-pedal is depressed.



## ADJUSTING TABLE INDEXING SPEED

To adjust the speed of the lower tables, simply adjust the air input to the cable cylinders. The standard setting for the input air pressure is 20-40 psi. Simply increase the air pressure by 5 P.S.I. to increase the speed.



## FRONT PANEL ALARMS

The 931 Triton press is equipped with a series of buzzer and lights to help the operator in monitoring the operations of the press.

- E-STOP: This alarm activates when E-STOP or emergency stop/release circuit has been activated. The machine can release at any time by simply depressing on of the top channel E-STOP red palm buttons or by simply depressing one of the lower foot-pedal switches. In both cases, the alarm will indicate that the machine is in the E-STOP mode and will only reset if the switch that was activated has been reset. The E-STOP alarm on the front panel is the alarm with the (E) triangle.
- IN-INDEXING: This alarm activates when the lower "front" index foot pedal has been depressed. It will only sound for 2-3 seconds. It is to alarm operators working in the area that the lower load vehicle is about to index. This alarm has word (IN) on a triangle. The back of the press has a pilot light to indicate this operation as well.
- OUT-INDEXING: This alarm activates when the lower "rear" index foot pedal has been depressed. It will only sound for 2-3 seconds. It is to alarm operators working in the area that the lower load vehicle is about to index.
- EYE: The eye alarm activates when the photo-eye on the front and rear edges of the heater block has a obstruction that has broken the beam. This is to warn the operator that there is a object in the pressing area. This alarm will only sound while the operator has depressed the foot-pedal and there is a object blocking the eye-beam.
- TEMPERATURE ALARM: This alarm activates when the temperature of the heater block exceeds the alarm temperature set on the control unit or the heater 3-pole contactor has been de-energized. This alarm will continue to sound until the condition has cleared itself.





#### TABLE INDEXING SPEED ADJUSTMENT:

You can adjust the speed of the indexing table by doing one of the following settings. Simply increase the AIR PRESSURE on the AIR PRESSURE REGULATOR on the right front panel of your press. By increasing the pressure by 10-15 PSI the table will index faster , however it may bang when it hits the end stop. The second option is to adjust the needle valve on the quick exhaust valve located under each cable cylinder assembly. Simply turn the screw in or out by (1/2) turns. Make sure you adjust both cable cylinders the same amount to insure that the cable cylinders will move evenly. Remember, only a slight adjustment will greatly effect the speed of the cable cylinder. Make sure you carefully tighten the lock nut.



# LOWER AIRBAG DEFLATING SPEED

You can adjust the lower lift plate speed of deflation by simply adjust the lower air bag Quick-exhaust needle valves. Under each air-bag is a quick exhaust valve with a needle adjustment. Simply adjust the needle by turning it in or out of the assembly. Turn the needle (1) full rotation at a time. Make sure you adjust air of the air bags the same amount. If the plate lowers unevenly, simply adjust the needle valves.