Section 9

Restacker
&
Return Conveyor

RESTACKER FUNCTION AND OPERATION

In the installation of a case printing system, the restacker is the key part due to the fixed location of the rail on which the restacker rolls. (see sketch in Section I, Installation) The printer as well as the return roller conveyor is positioned based on the position of the restacker when parked in the operating indentation. The "0" position of the measuring tape on the restacker must correspond to the "0" position of the printer (the center of the print cylinder as well as the "0" mark on the tape measure). The center of the rollers on the return conveyor must be at this position as well.

Because the side guides of the printer magazine are adjusted to specific numbers on the printer's tape measure when operating, it is very important that the operator be able to rely on the exact positioning of the press and restacker so that the side plates of the restacker can be set at those same numbers plus 1/4" to 1/2" additional on each side. This extra space is to ensure that the cases touch nothing on their way into the restacker. If they make contact with the side plates of the restacker, the case will twist under the print cylinder. This will wrinkle the print film and can even cause the pad to shift sideways.

Set-Up Procedure

1. Set air pressure on filter-regulator-lubricator to 60 PSI, located on driven side.
2. Turn circuit breaker switch to "ON".
3. Turn selector switch to "ON".
4. Set stacking indicator to "5" (25 cases in stack)
5. Crank adjustment wheels to set side plates to same settings as printer + 1/2".
6. Set stop plate to same length as case, + 1/2".

Start printer and run sample case. Observe whether case enters restacker without interference. If necessary, adjust side plates. Run cases. As the cases enter the restacker, an electric eye senses them and accumulates 5 on the flipper arms. This group of 5 is then dropped onto the eject conveyor below. After 5 groups are dropped (25 cases), the eject conveyor will start up and drive the stack out onto the roller conveyor for return to the operator.

At the end of the roller conveyor is a stop plate to prevent stacks from rolling off the end. If stacks are not removed but are allowed to accumulate on the conveyor back to the end of the 180 degree curve, they will eventually walk off to the outside of the conveyor.

Shut-Down Procedure

1. Push "CLEAR". Any cases on the flipper arms will be dropped, and the stack ejected onto the conveyor.
2. Turn the selector switch to "OFF".

RESTACKER SPECIFICATIONS

General Specifications

Restacker Dimensions:	Width:	48" (1220 mm)
	Length:	42.5" (1080 mm)
	Height:	50" (1270 mm)
	Weight:	600 lbs. (275 kg) (est.)

Stacking Capacities

Maximum Case Size:	36" (915 mm) wide by 36" (915 mm) long
Minimum Case Size:	10" (250 mm) wide by 10" (250 mm) long
Maximum Stacking Height:	12.5" (317 mm)
Stacking Rate:	Up to 60 cases per minute
Exit Height of Restacker:	17" (430 mm)

Controls

Stacking Indicator:	Displays number of groups of 5 cases to be accumulated into a stack before ejection
Control Panel Buttons:	"On-Off" and "Clear"

Operating Requirements

Electrical:	230 Volt AC, 50-60 Hz., Single Phase. 20 amp protection through printer
Air Supply:	Minimum 80 PSI clean shop air

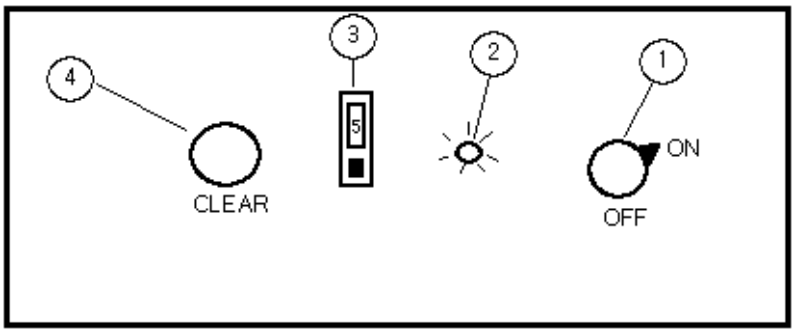
RESTACKER CONTROL PANEL

Power On-Off Control

Power for the restacker is supplied through the printer. On the driven side of the printer is a junction box with a plug-in for the power connection to the restacker and conveyor. There is also a screw connection for the signal from the restacker to stop the line. Also, the quick air connection is located in the same junction box.

The power is fed to a lockable circuit breaker on the stacker control cabinet. The power is on when the switch is turned clockwise.

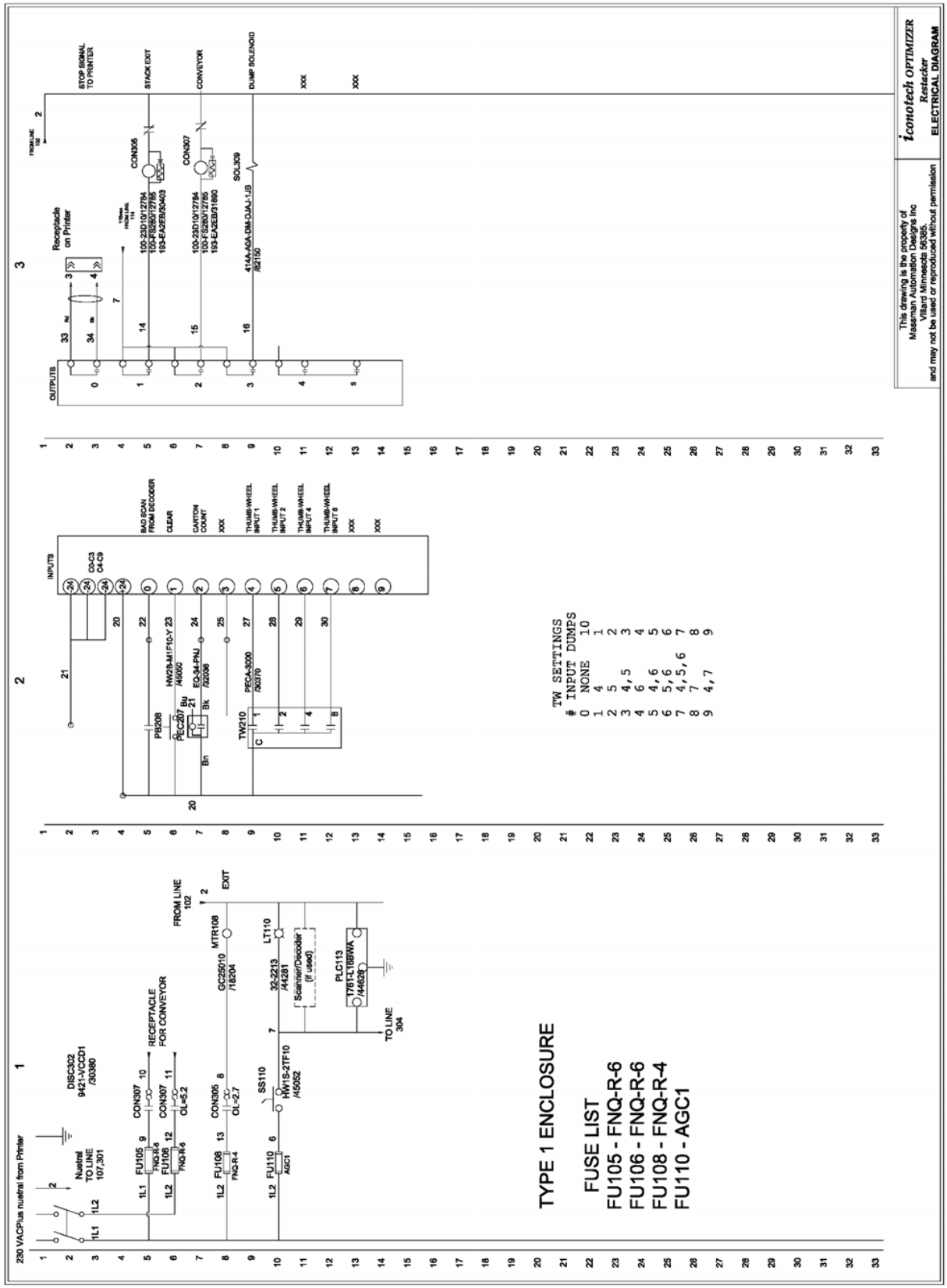
Control Panel Layout

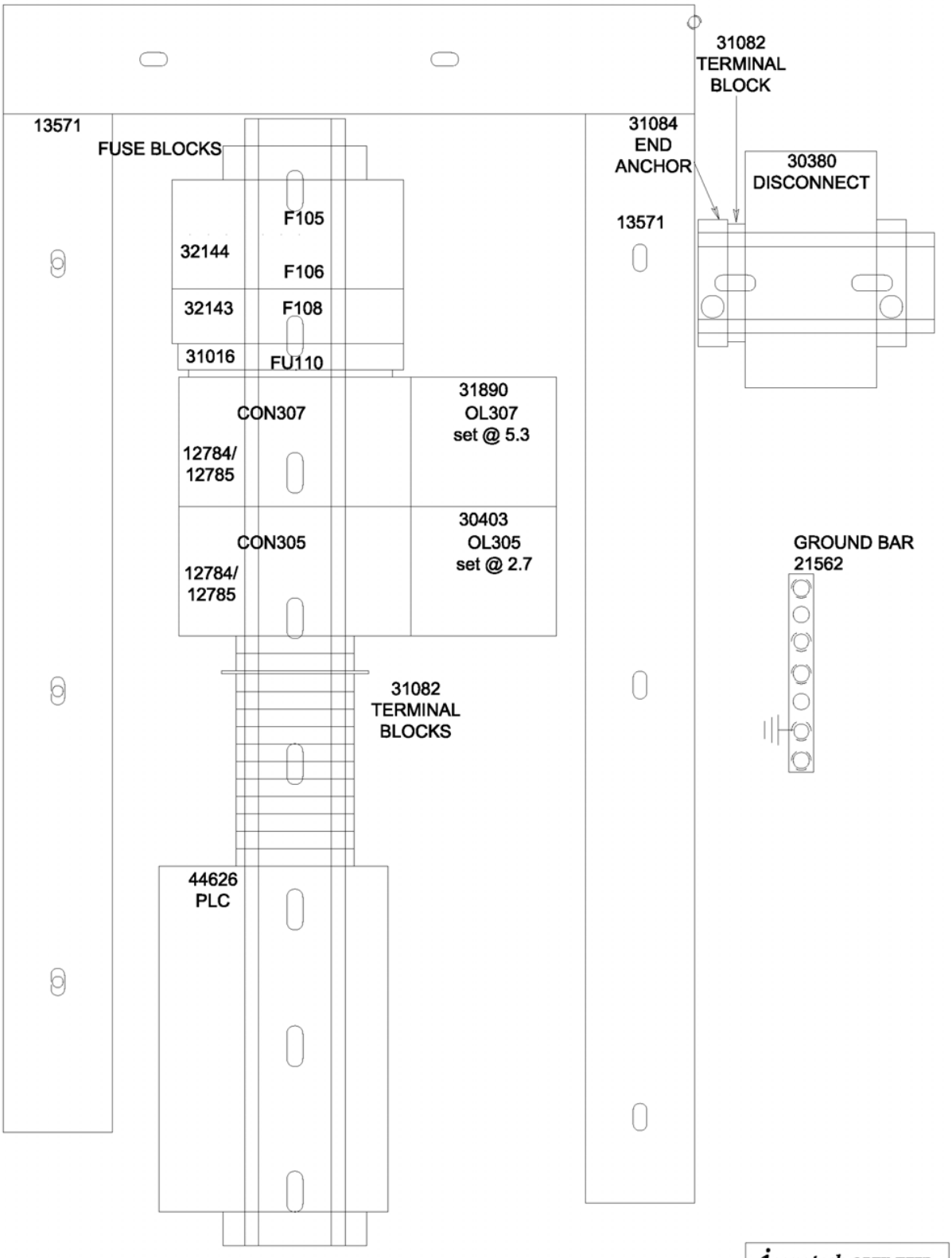


Operator Control Panel

Key	*Name*	*Description*
1	ON-OFF	Powers up the restacker and starts the roller conveyor
2	Indicator Light	Shows power on or off
3	Stacking Indicator	Sets the number of groups of 5 cases to be dropped into the stack before ejecting. Maximum 9 groups, restricted by stop bar height. Minimum number must allow cases to proceed far enough on return conveyor to allow next bundle to completely exit the Restacker
4	Clear	Dump any cases remaining in upper chamber and ejects the stack onto the conveyor

Note: Circuit Breaker is on Front of Control Cabinet (not shown)


TYPE 1 ENCLOSURE
FUSE LIST
FU105 - FNQ-R-6
FU106 - FNQ-R-6
FU108 - FNQ-R-4
FU110 - AGC1
TW SETTINGS
INPUT DUMPS
0 NONE 10
1 4 1
2 5 2
3 4,5 3
4 6 4
5 4,6 5
6 5,6 6
7 4,5,6 7
8 7 8
9 4,7 9
iconotech OPTIMIZER
Restacker
ELECTRICAL DIAGRAM
STOP SIGNAL TO PRINTER
STACK EXIT
CONVEYOR
DUMP SOLENOID
XXX
XXX
XXX
CLEAR
CARTON COUNT
THUMB-WHEEL INPUT 1
THUMB-WHEEL INPUT 2
THUMB-WHEEL INPUT 4
THUMB-WHEEL INPUT 8
RECEPTACLE FOR CONVEYOR
Receptacle on Printer
Scanner/Decoder (if used)
TO LINE 304
FROM LINE 102

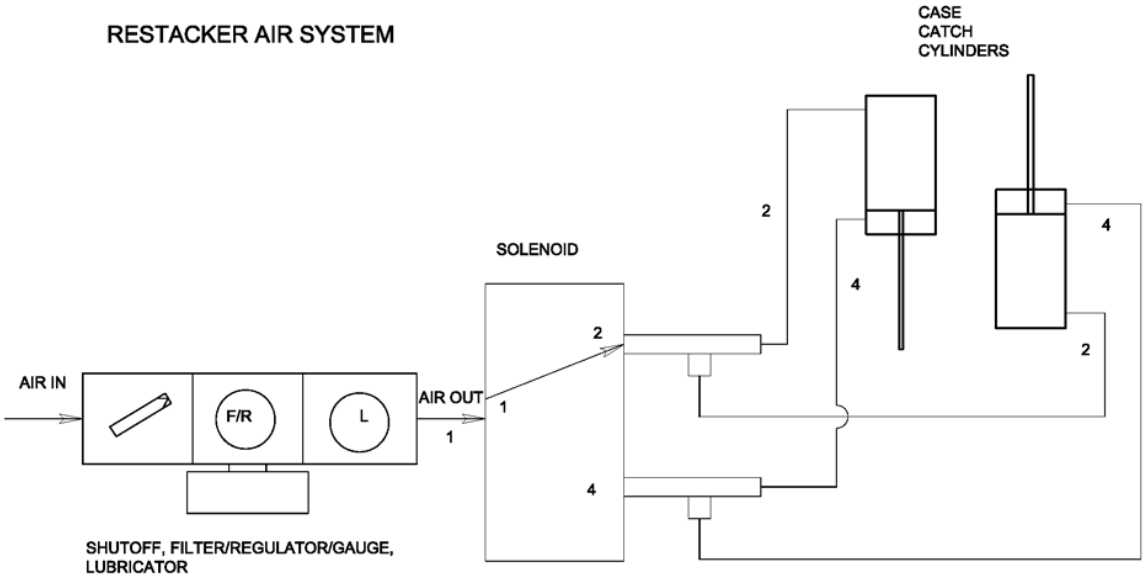


iconotech OPTIMIZER
Restacker
CONTROL PANEL LAYOUT

RESTACKER AIR CONTROL SYSTEM

The flipper arms in the restacker are operated by the air cylinders. They are controlled by a single, solenoid-operated air valve.

The air is controlled by a filter-regulator-lubricator on the driven side of the stacker. Air connection is made through a flexible tube and connected via a quick-disconnect coupling at the junction box on the driven side of the printer. (This is true when the restacker is installed with the printer. If the restacker is installed at a later date, air must be connected directly to its air filter-regulator-lubricator.)



RETURN ROLLER CONVEYOR

The unit has 24" wide rollers and an overall width of 28". It consists of 18" of straight section at the eject end of the restacker, a 180 degree curve, and a 10 foot straight section.

It has a line shaft drive with individual O-ring belts driving each roller. The drive motor gearbox is mounted at the end of the 10-foot section right after the 180 degree turn.

The conveyor elevation is 17" at the restacker end and increases to 34" at the opposite end.

The conveyor should be anchored to the floor.

All electrical controls are contained in the restacker electrical control enclosure. Connection from restacker to conveyor is on the driven side of the restacker with conventional twist plug for the 230 Volt, Single Phase, AC connection.

See instructions in the beginning of the manual under Installation.

