



Picture Process Maps Salvage

Auto Tie Baler Operation-Training

Salvage– Auto Tie Baler Operation

BEFORE YOU START:

1. Do not operate baler without being trained and signed off
2. **Do not operate baler without completing the Daily Checklist**
 - a. Daily Checklist is located on a clipboard on the threader
 - b. The checklist is turned into a Salvage Manager at the end of every shift. The Salvage Manager scans the document and its saved in an electronic file

Required Tools and Materials	
<input type="checkbox"/>	Gaylords (2)
<input type="checkbox"/>	Daily Checklist (see last page)

Auto Tie Baler Operation – Information Screen

INFORMATION SCREEN

Whenever the baler is on, this screen is on.

System Pressure

When the baler is compressing a bale, the pressure used is being indicated here.

Tie Length

The length of the bale currently being processed

Bale Size

The standard setting for the size of bale we use is 68

Message Screen

Important operating messages



Auto Tie Baler Components- Stack Light

The Stack Light is above the Control Console. Each color stands for a different mode of operation.

WHITE- Indicates the baler has been started.

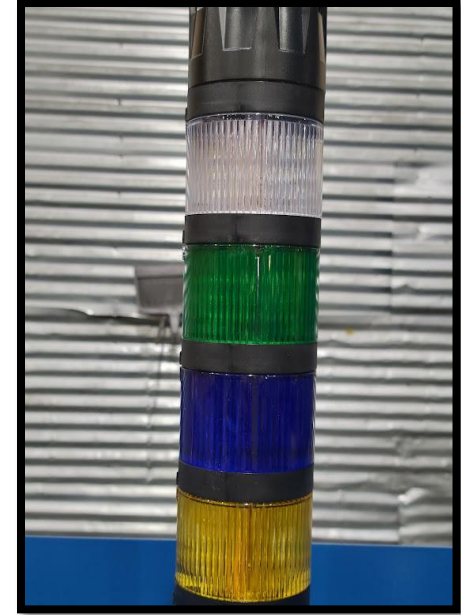
GREEN - Indicates the baler is running in automatic

BLUE - Indicates the baler is in the tie cycle

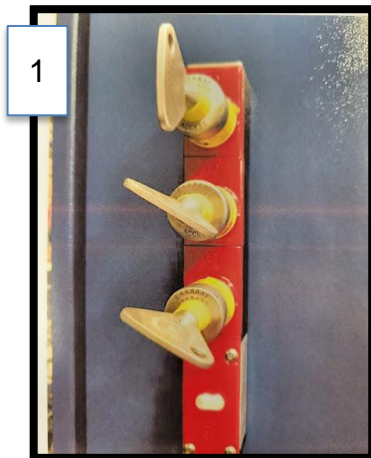
AMBER -Indicates the baler is in start-up mode OR has a fault and has stopped, The light will pulse.

If solid, it means the baler is trying to be started, and the HAND-AUTO switch is not in the HAND position.

HORN-Horn will blow whenever the amber light is on.



Control Console Key Exchange

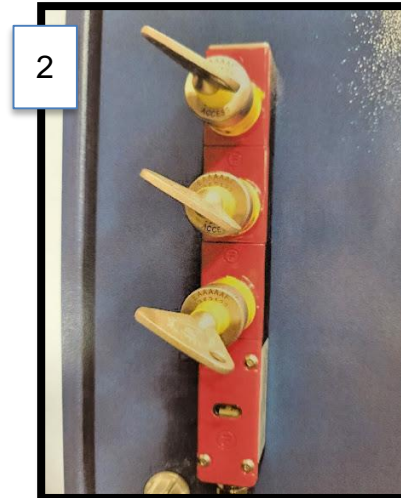


1. Baler On Position:

- Correct positions for keys
- Red light is off

2. Baler Off Position:

- Correct positions for keys
- Red light will go on
- Baler will stop



Auto Tie Baler Components- Control Console-Top

BALER ON/OFF

Used to lock the baler controls, when set to "off", the baler cannot be started. Stops unintended ops, but not a proper lockout/tag out.

MODE HAND/AUTO

When starting the baler, must be turned to HAND. Once the motors have started, you can switch to AUTO.

START Button

When pressed it will illuminate and the baler will go through its start-up sequence.

Stop Button

When pressed the baler will stop and the motor will turn off.

RESET Button

Used to reset the emergency stop relay and clear any faults that may have occurred. The HAND-AUTO switch must be in the HAND position to reset.

TENSION AUTO/DUMP

AUTO = Tension cylinder is controlled by the baler program based on HMI and pressure transducer.
DUMP = Used for a manual dump.

HIGH LEVEL OFF/ON

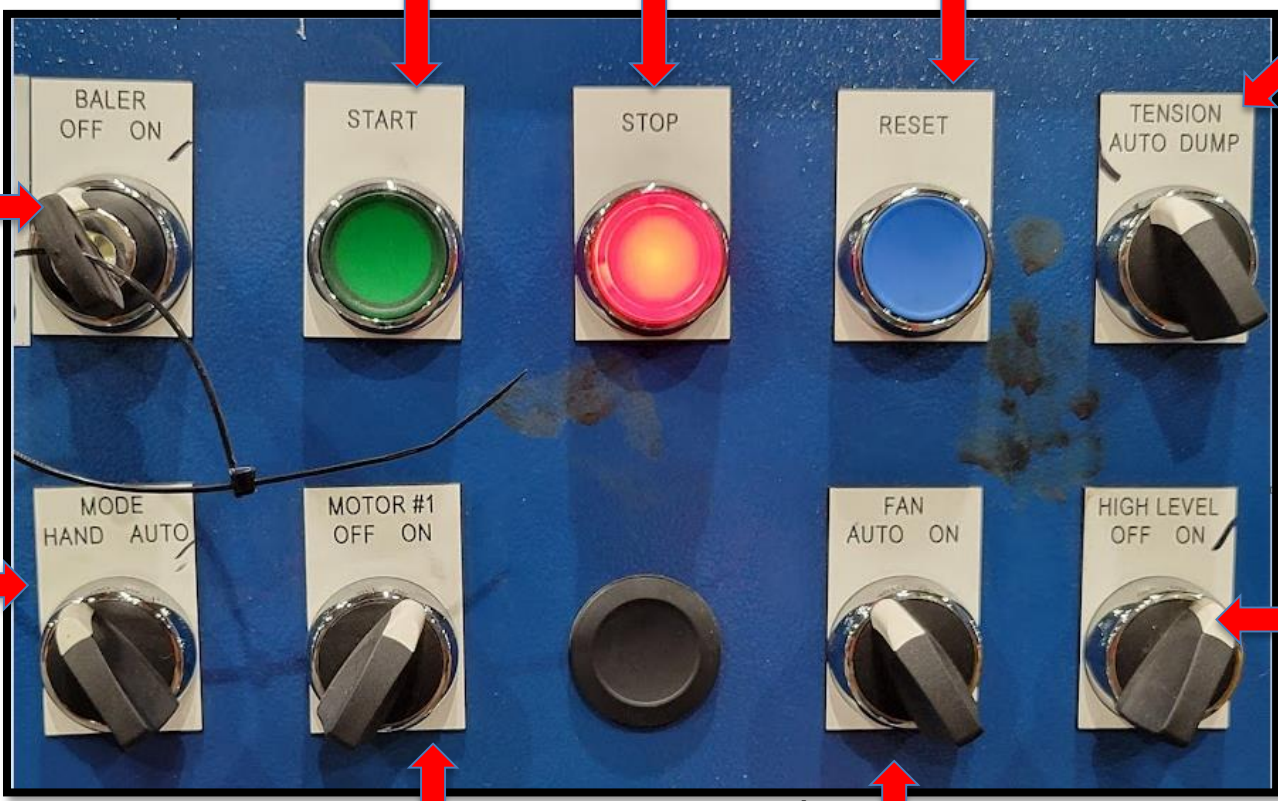
Used to enable ON, or disable OFF the high level function. See HMI

MOTOR #1 ON/OFF

Manual Start/Stop to the motor. The motor can be stopped in automatic mode, BUT the Mode switch must be in the HAND position. This button is typically left in the ON position.

FAN AUTO/ON

AUTO = heat exchanger is controlled by the oil temp. switch
ON = Fan will continually run while baler in operation.



Auto Tie Baler- Control Console Bottom

TIE CYCLE RESET:

In MANUAL hold along with PLUNGER ADV/CYC-the ram will advance to LS4 and pressurize the tier

In AUTO triggering cycle will cause the baler to tie the current bale

In BOTH, you can cancel the tie cycle by pressing RESET button

TWIST: Forward/Release

Used in MANUAL cycle to advance or retract the *tie* twister.

NEEDLE: Advance (ADV) / Retract (RET)

Used in MANUAL cycle to advance or retract the *tier* needles.

PLUNGER: Advance (ADV) /Cycle Retract (CYC RES)

Used to MANUALLY run the baler:

ADV: Runs baler forward

RET: Runs baler backwards

Used in AUTO:

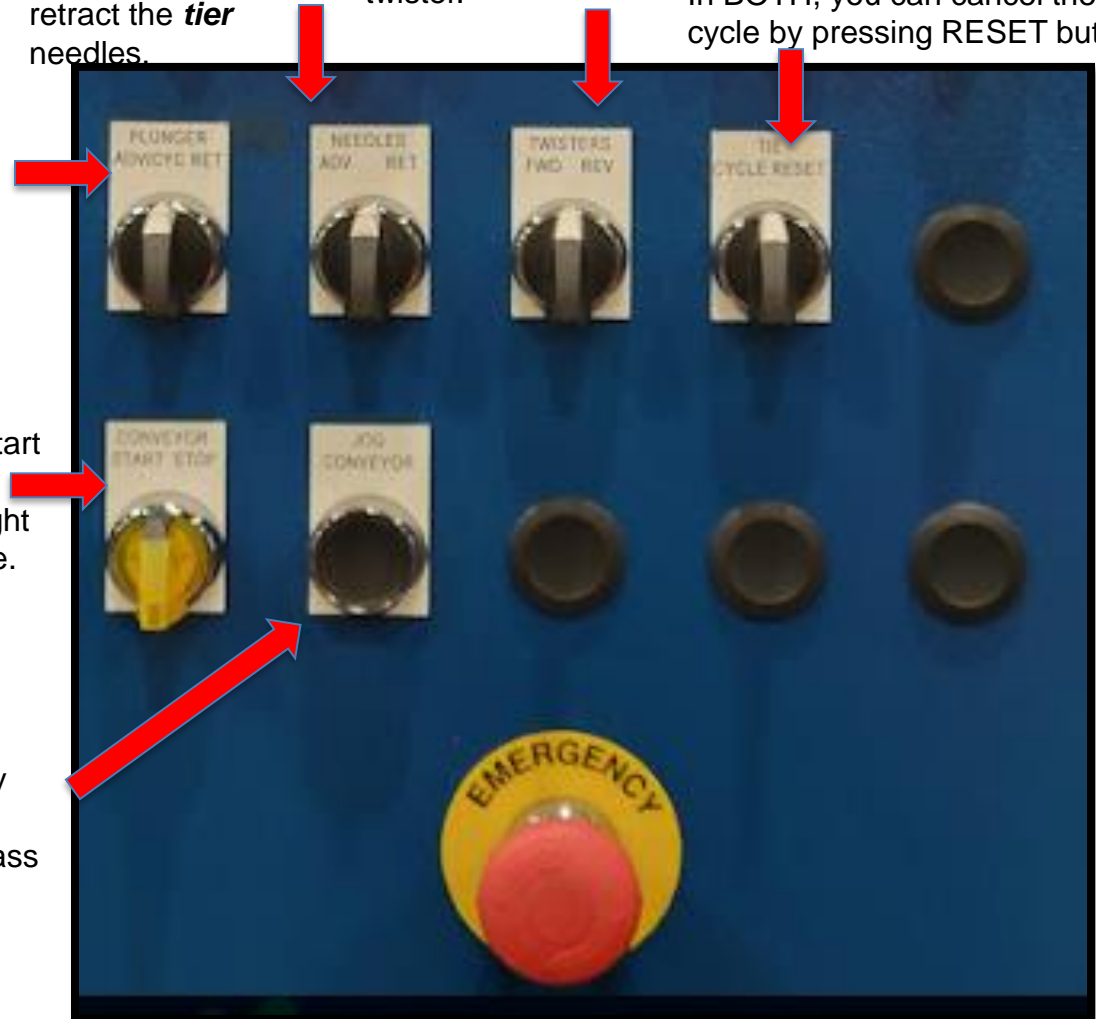
ADV/CYC will advance the baler one stroke

CONVEYOR Start-Stop:

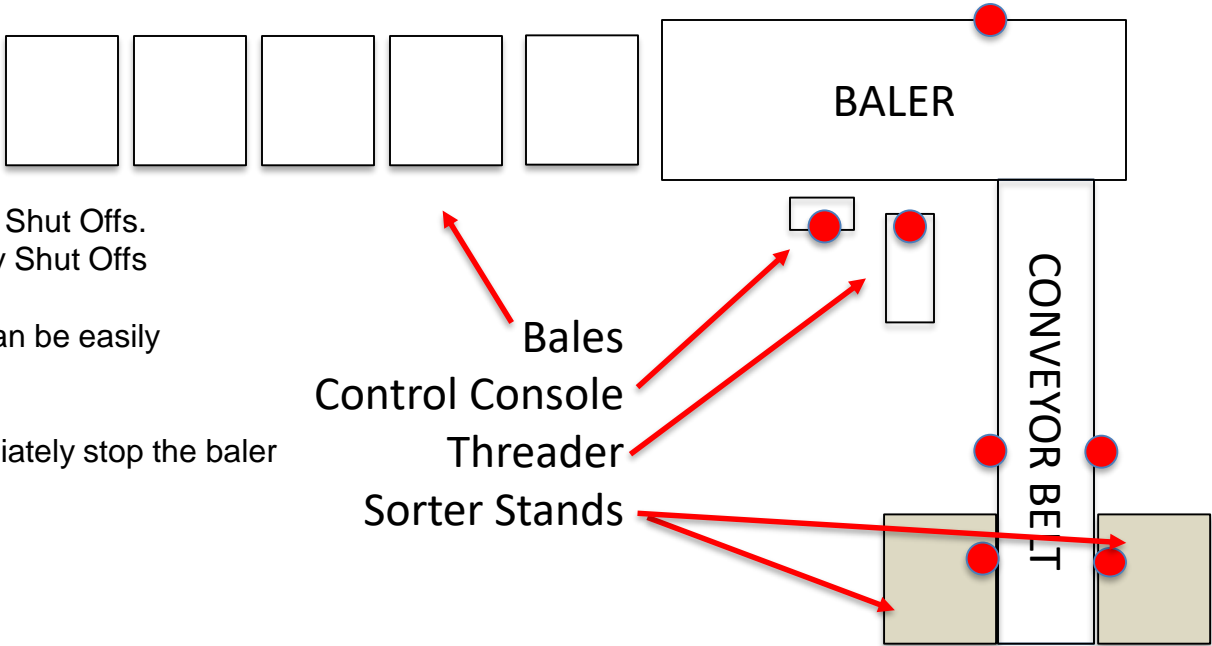
1. The baler must be running with no faults to start the conveyor
2. When the baler has started, the switch will light up, indicating it is OK to start/stop at any time.

JOG CONVEYOR:

1. Used to manually run conveyor momentarily when the baler is on OR off
2. Can be used to add material to hopper/bypass



Auto Tie Baler- Emergency Shut Off Locations



There are a total of **SEVEN** Emergency Shut Offs.
● Indicates locations of Emergency Shut Offs

Some have a protective cover (if they can be easily bumped), others do not.

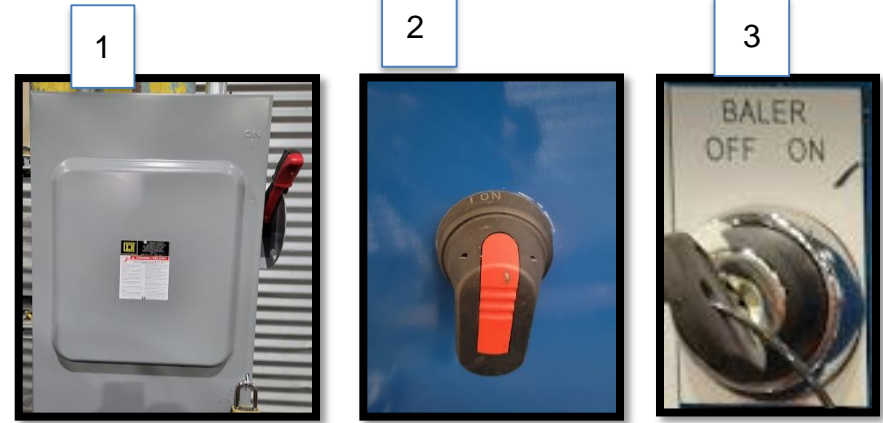
Pressing an emergency stop will immediately stop the baler and the motor.



Auto Tie Baler- Start up/Shut Down

Start up

0. Ensure Key Exchange keys are in the correct position (no picture)
 1. Ensure electrical power is on (handle is up) (Pic #1)
 2. Ensure the Baler power toggle switch is turned on (Pic #2)
 3. Baler on/off switch, turn key to ON (Pic #3)
 4. Mode switch Hand/Auto: Ensure in "Hand" position (Pic #4)
 5. Reset Button: Press for a few seconds, release, press for a few more seconds (Pic #5)
 6. a. Press the start button until the stop button illuminates red (Pic #6 a/b)
- WAIT FOR MOTOR TO TURN ON**
7. Turn the Mode Switch to AUTO (Pic #4)



Shut down

1. Baler on/off switch, turn key to OFF (Pic #3)
2. Ensure the Baler power toggle switch is turned off (Pic #2)
3. Ensure electrical power is off (handle is down) (Pic #1)

Auto Tie Baler- Sorting

SAFETY ALERT: DO NOT add any type of step, box, or other item on top of either sorter stands to stand on.

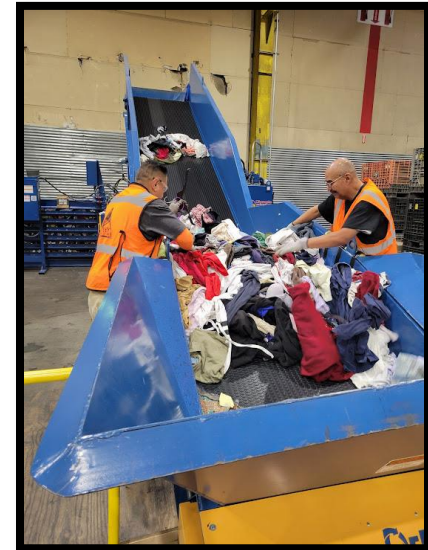
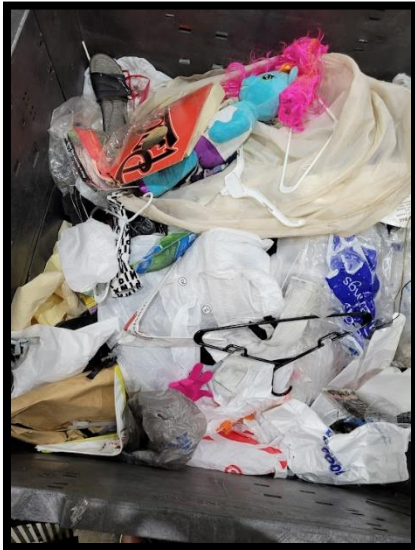
While the gaylord is being emptied onto the conveyor belt, the following items need to be removed and placed in the appropriate gaylord:

- Stuffed Animals
- Shoes
- Hangers
- Plastic/Plastic Bags
- Other non-cloth items

One gaylord shall be located on each side of the Sorting platforms.



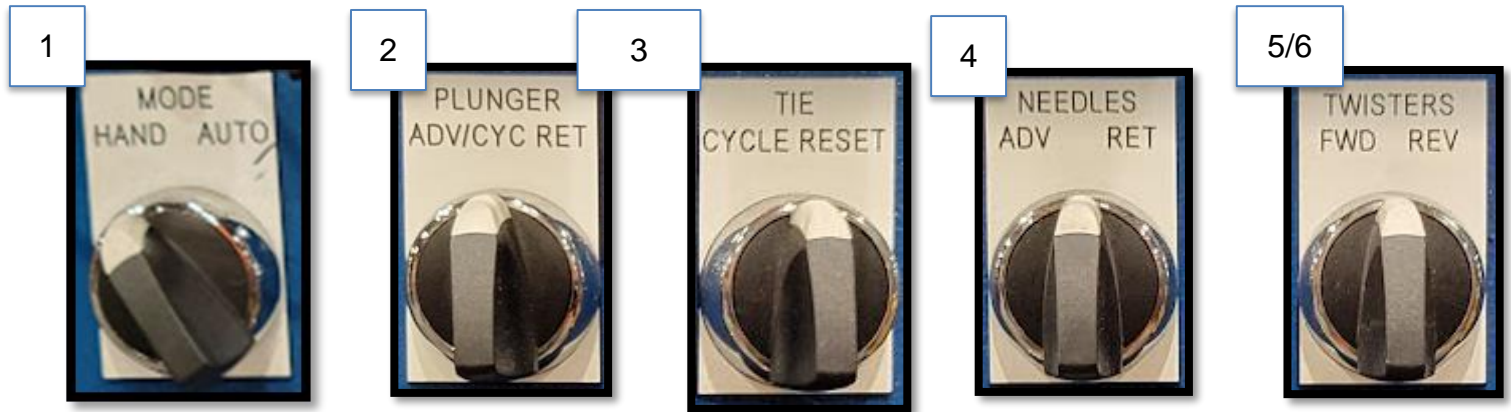
Example of removed items:



Auto Tie Baler- Manual Tie

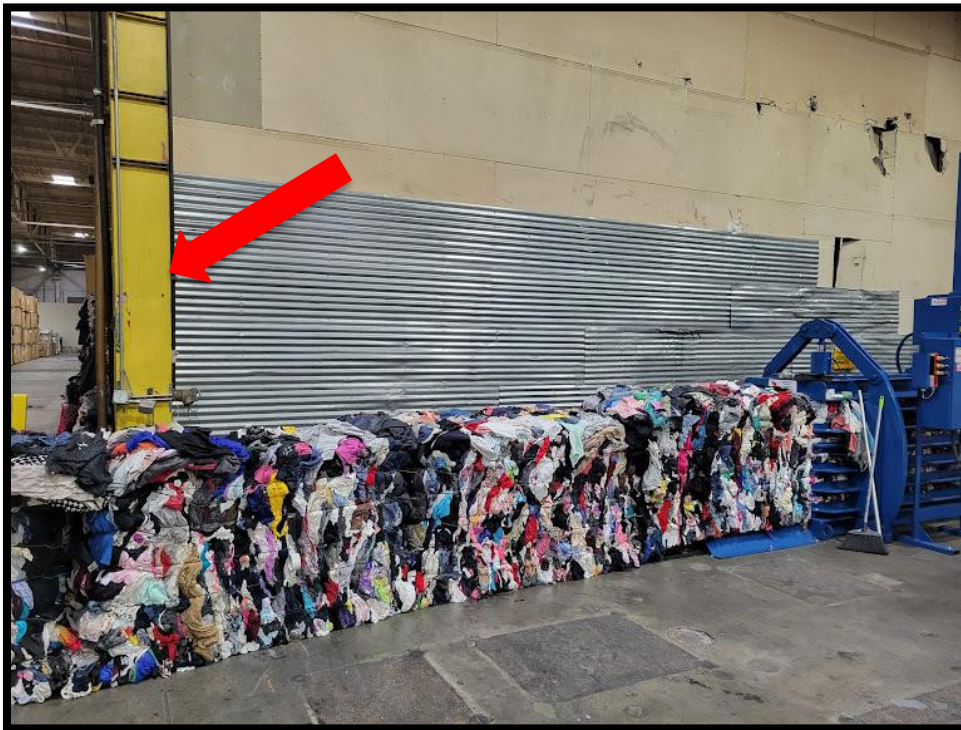
If the baler stops DURING THE TIE CYCLE (Blue light is on). if you need to stop the machine. always check to see if the blue light is on. If it is, do not stop the Baler until it has finished the Tie Cycle.

1. **Mode switch** is in “Hand” position (Pic #1)
2. Hold the **Plunger** on Advance for 5 seconds (Pic #2)
3. Hold the **Plunger AND Tie Cycle** at the same time for 5 seconds OR until the baler stops making noise (Pic #2/3)
4. Hold the **Needle** on Advance until it stops (Pic #4)
5. Hold the **Twist** on Forward until it stops (Pic #5/6)
6. Hold the **Twist** on reverse until it stops (Pic #5/6)



Auto Tie Baler- Removing Bales

1. Bales should not be removed until they reach the yellow pillar (see red arrow) Generally, 6 bales.
2. The baling machine uses the weight of finished bales to compact the new bale against.



Auto Tie Baler- Daily Checklist

Auto Tie Baler Daily Check-Off List

Phoenix RO ONLY

Date:

Maintenance Task	Clean Daily	Insp. Daily	Initials
Check infrared sensors (5) are lit	x		
Clean tier (Threader)	x		
Clean heat exchanger (top of the ATB)	x		
Clean loose material on floor, from behind the plunger, and on top of all machine surfaces	x		
Check hydraulic oil temp. If oil Temp exceeds 140 degrees, the machine will shut down		x	
Walk Around:			
Check oil level. If oil level is low, the machine will shut down		x	
Check for hydraulic oil leaks		x	
Check that all electrical covers are functional and secure		x	
Check that all bale wire feeds are smooth and unrestricted		x	
Check Twister Hooks for wear and alignment		x	
Check oil filter indicator		x	
Check that all safety sensors (including tier position switch) and guards are functional and secure		x	
NOTES:			

Infrared Sensors (5)	
(2)Hopper windows	
(3) Tier (threader) inside, 1 south, 2 north	
Heat Exchange (Fans)	
On top of >>>>>>>>	
Twister Hooks	
North/South side of compression chamber	
Oil Gauge&Check Oil Filter Indicator	

