



Individual bale wrapper Automatic wrapping sequence explanation 2014-2019 model

Step 1 – Wrapping table is on stand-by waiting for operator to launch the wrapping sequence

- The wrapper is in stand-by after the alignment process and waiting for the operator to launch the automatic wrapping cycle.
- During that step, if the wrapping table get out of its stand-by position, it will used the registered voltage during alignment to go back to where it should.

Step 2 – Launching the automatic wrapping cycle

- In order to launch the wrapping sequence, the operator has to:
 - Press once on the blue button of the controller mounted on the wrapper
 - OR
 - Press on the “wrapping” button on the remote control.
- The controller will send maximum voltage to the proportional valve in order to get it closed

Step 3 – Wrapping table start to rotate

- The controller will engage the solenoid of the wrapping table rotation valve counter-clockwise
- Then the controller will slowly reduce the voltage, which going to open progressively the proportional valve until the wrapping table has reach the speed set in the remote control.
 - The RPM speed is provided by the Encoder within the hydraulic motor, and the rotation sensor attach to that hydraulic motor
- During the wrapping process, the controller will continuously monitor the speed of the wrapping table and adjust the voltage to the proportional valve to adjust the speed in order to stay as close as possible from the rotation table speed set by the user within the remote setting.

Step 4 – The cut and hold mechanism will release the film during wrapping process

- Within the Step 3, after the wrapping table has done 1 ½ to 1 ¾ revolution, the controller will send voltage to the cut & hold mechanism solenoid during 5 seconds in order to open it, and release the film.

Step 5 – Wrapping table slow down in order to position for dumping

- When there is one last turn remaining to the wrapping cycle, once the laser cut hole located in the main gear of the wrapping table pass above the zeroing sensor, it will reset the pulse counting to -980 pulses. One complete revolution of the wrapping table represent 980 pulses.
- If you have set your braking point at 400 pulses for example, the controller will start to increase the voltage to the proportional valve from the time the wrapping table position



will reach position -400 pulses before the (Zeroing sensor + User pulse setting of the remote) till the wrapping table stabilize to its final position before dumping.

- If the wrapping table stop before or pass beyond the (Zeroing sensor + User pulse setting of the remote), the controller will use voltage registered in the Step 4 of the alignment process to correct the wrapping table position. If the voltage value registered is not sufficient to rotate the wrapping table to its dumping position, the controller will decrease the voltage on the proportional valve in order to increase the hydraulic flow.
- Once the table is positioned ready to dump, it will reinitiate the wrapping table rotation counter back to 0

Step 6 – Ejecting the bale off the wrapping table

- The controller will then send voltage to the solenoid, which control the wrapping table dumping cylinder in order to extend the cylinder and incline the table so the bales roll off.
 - There is a sensor fixed to the dumping mechanism. The sensor is OFF when the dumping table is sitting on the chassis.
 - During the inclination of the dumping platform, the sensor will be ON
 - At the end of the cylinder stroke, when the wrapping table is in fully dump position, that sensor will be OFF again and then it go to Step 7.

Step 7 – Cut and hold the film after dumping

- The controller will send voltage to the solenoid of the cylinder, which control the closing of the cut & hold mechanism for 1 second.

Step 8 – Lowering down the wrapping table on the chassis

- The controller will then send voltage to the solenoid, which control the wrapping table dumping cylinder, in order to retract the cylinder and lower the wrapping table.
 - There is a sensor fixed to the dumping mechanism. The sensor is OFF when the dumping table is in dumped position.
 - When the wrapping table is lowering down, the sensor will be ON
 - At the end of the cylinder stroke, when the wrapping table is sitting back on the chassis, that sensor will be OFF again.
- The solenoid of the dump cylinder shall be activated for a minimum of 2.5 second (for 600/RB680/780SB wrapper model) and the proximity sensor should be OFF before going to step 9.

Step 9 – Repositioning the wrapping table position for next bale

- If the ¼ turn IS NOT selected, then it will go to step 1.
- If the ¼ turn IS selected, then the controller will engage the wrapping table rotation valve in order to position the wrapping table in ¼ turn + 20deg.
 - During that time, the controller will adjust the voltage to the proportional valve in order to progressively rotation the table and when it will come close to its final position, the controller will increase the voltage to close the proportional valve in order to stop the wrapping table rotation.



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- Then the controller will engage the solenoid of the wrapping table rotation valve clockwise to its final position. During that time, the controller will send the voltage (found in the alignment process) to the proportional valve in order to slowly position the table to the $\frac{1}{4}$ turn position.
- Step 1 is starting over again