



# **Tube - Line 5500**

Owner's Manual

2002

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Manufactured By:

**TubeLine Manufacturing Inc.**

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# Tube - Line 5500

Operation

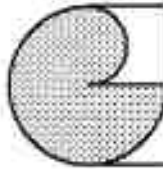




### *Warranty and Limitation Of Liability*

All Equipment is sold subject to mutual agreement that it is Warranted by the company to be free from defects of material and workmanship. But the company shall not be liable for special, indirect or consequential, damages of any kind under this contract or otherwise. The company's liability shall be limited exclusively to replacing or repairing without charge, at it's factory or elsewhere, at it's discretion. Any material, or workmanship defects which become apparent within one year from the date on which the equipment was purchased, and the company shall have no liability for damages of any kind. The buyer by the acceptance of the equipment will assume all liability for any damages which may result from the use or misuse by his employees or others.

Warranty coverage is null and void unless Warranty Registration form has been completely filled in and is on file at Tube-Line Manufacturing Inc.

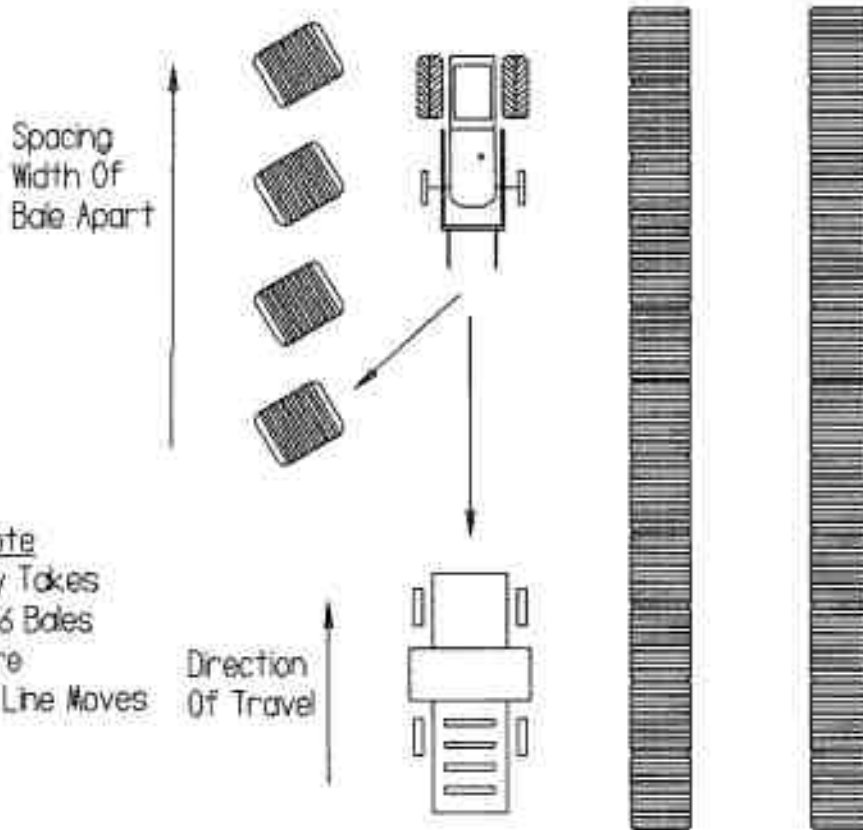


## Troubleshooting Tubeline 5500 Balewrapper

Symptom	Problem	Solution
Ram cylinder extends on auto, retracts about 3" extends, and starts to reciprocate	Table Trigger Switch stays on	Check for broken or unhooked return spring, make sure hinge is free
With Man/Auto switch on man turning Forward switch, ram starts to move and wrap starts at the same time	Battery cables reversed	Reverse Battery cables Pos. live    Neg. ground
On "man" with "for" switch turned, ram cylinder extends but "rotate switch will not start wrap motor	No hydraulic fluid going to wrap motor	Shift flowcontrol lever closer to the middle
On "man" Rotate works but "for" does not work	No hydraulic fluid going to ram cylinder	Shift flowcontrol lever closer to the middle

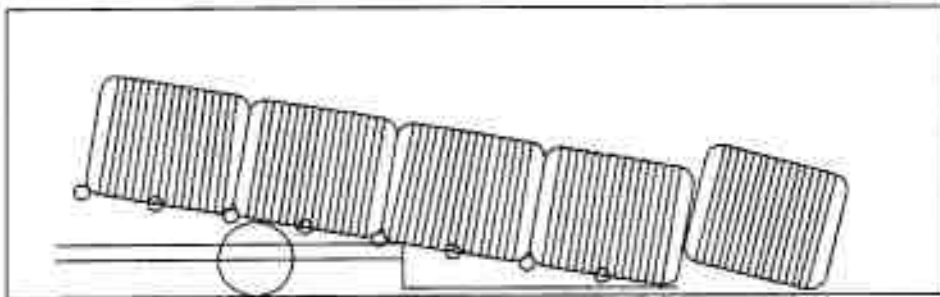
**Turn on/off switch off before boosting or charging battery**

## Set Up For Tube Line

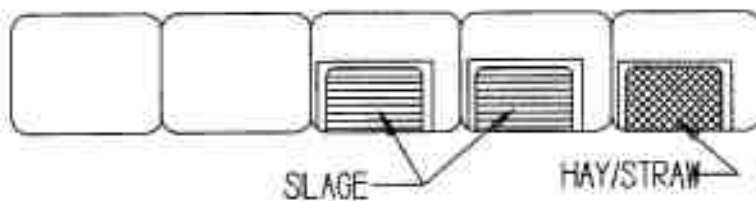


Note  
Initially Takes  
4 to 6 Bales  
Before  
Tube Line Moves

If bales are brought  
to the site before  
wrapping, arrange  
them to allow easy  
access to bales and  
allow tubeline plenty  
of room to move.



The first bale tips as  
the line forms and  
may be picked up  
when the row is well  
started



A bale of hay or straw  
is added to protect  
the end of the line

## **Operating the Model TL5500 Tube-Line Bale Wrapper**

### Big Bale Silage

The objective of big bale silage is to provide high quality forage using a minimum of equipment. To do this, crop must be cut at the correct stage of maturity, wilted, baled tightly and wrapped air tight using a good quality stretch wrap.

The Tube-Line wrapper makes timely harvest possible by reducing the dependence on the weather. It is much easier to get weather to wilt silage than to make dry hay. This also extends the working day, as forage is at the correct moisture to bale earlier and later in the day.

### Bales

Well-shaped firm bales are necessary for successful wrapping. Bales are best wrapped as soon as possible after baling. If bales are left unwrapped, they will sag and lose shape. Heating will start soon after baling and protein quality will be lost. It is desirable to wrap within four hours. In an emergency such as rain, bales can be left 12 to 16 hours.

### Moisture

Successful silage can be made over a wide moisture range. In general, 40 to 50% moisture is satisfactory for dairy cows. Some beef farmers prefer 60 to 70% moisture as it limits intake. A good rule of thumb is to dry "Half-way to hay". Drier silage gives you:

1. lighter bales to handle
2. more desirable fermentation with less odour
3. less freezing in the winter
4. higher dry matter intake

### Wrapping Site

Select a site which will allow room to make an adequate bale row length. The Tube-Line is a very fast wrapper, but requires time to set up and move to a new line. There should be space for at least 50 or more bales in a row.

Select a site that is accessible in winter conditions and does not flood in the spring.

A firm surface is necessary for the successful operation of the Tube-Line. Avoid soft ground, as the wrapper will not move forward smoothly if it is sinking into the ground. Wrap on the level or up a slight grade.

A site that is free from grass and debris will be less likely to attract rodents that can damage the plastic.

### Bale Size

**ROUND BALES** The Model TL5500 will wrap bales of up to 5½' wide and up to 5' high. It will wrap all sizes smaller than these dimensions as well.

Remember when making big bale silage, the bales will be heavier than dry hay. This puts extra strain on loading and transporting equipment. Also, bales will be heavier when feeding out and may have to be moved on wet ground or snow. As a result, most operators reduce silage bale diameters to 4-4½', even though the wrapper and baler will handle larger bales.

## Square Bales

The Model TL5500 will wrap most sizes of square bales. The length should be reduced to 5'. This is to allow the bales to be placed on the bale receiver. This may also be the maximum length advisable to handle big square bales of silage.

Bales which are approximately 4' wide and 2' high can be stacked two high for wrapping.

Bales which are approximately 3' wide and 3' high do not stack well. These may be wrapped in a single tier of bales.

Big square bales must be wrapped manually, or with the remote control kit. When stacking two high, the first bale would activate the automatic device prior to loading the second bale.

Extra care must be taken to ensure that extra film is applied at the bale joints if the bales are uneven.

## Recommended Operating Procedure

We suggest the following method of operating the TL5500 Tube-Line Wrapper.

- Park the wrapper where you want the end of the row to be, facing in the appropriate direction.
- Fold front section of tongue and insert bracket in hydraulic steering pin.
- Start the engine
- Undo tail tiebar hairpin and lay bar over rear axle and put hairpin back into place to prevent loss.

**Caution:** To Prevent Injury—Prior to lowering wrapper tail section, be sure to check that all bystanders are standing clear.

- Lower the tail section using the manual operating valve

## Installation Of Plastic

Plastic from factory has a natural *tack* on inside. In event of plastic being stored for an extended period of time, the tack may migrate to opposite side. To test for *tacky* side, fold plastic inside to inside and pull apart. Fold opposite (top to top) to determine tackier side.

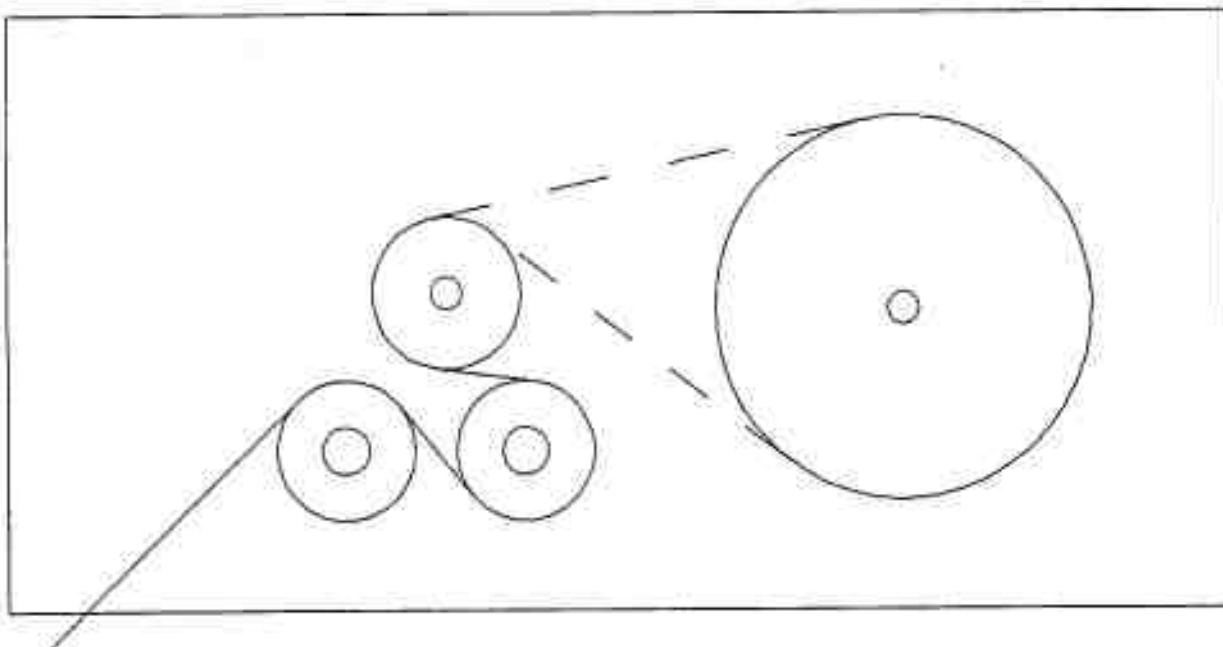
The roll of plastic should be installed with *tack* on inside of the plastic film next to the bale of silage. The plastic then passes over the slave roller and is threaded through the two metal rollers on the tensioner as shown in the diagram.

The two metal stretcher rollers rotate at different speeds. This causes the plastic to be stretched. It is very important that the plastic goes over the slow roller first and the faster roller second.

If there is any question on which is the faster roller:

1. Place a pen mark on each roller and rotate one roller one turn.
2. Check the location of the mark on the other roller.  
If it has advanced further, then it is the fast roller.  
If it has advanced less, then it is the slow roller.

When the plastic is installed correctly, it should stretch tight on the bale to form a smooth tube.



## Trouble Shooting Plastic Installation

1. Wrinkles in the plastic with seams between layers easily visible.  
Check to determine if plastic is properly routed through the metal tensioner rollers.
2. Plastic tears between tensioner and bale.

Reel holders not turning freely. Lubricate and turn manually until free.

Slave roller not turning freely. Lubricate and turn manually until free.

Poor quality plastic. Use a brand with a good tear resistance. Tack build-up on rollers. Particularly in hot weather, the tack, which sticks the layers of plastic together, can build up on the rollers. Clean the tensioner with warm soapy water.

Plastic roll is too hot. In very hot weather the plastic can become soft if left in the sun for long periods of time. In these conditions, the spare rolls should be kept in the shade. After installation on the machine the roll can be parked under the row of wrapped bale if not used for an extended period of time. In extreme heat, the top position roll on twin tensioner machines can be covered to provide shade when not in use.

Roll of plastic catching on the bottom of the bale. If bales are misshapen, the roll of plastic may drag on the bottom of the bale, causing the plastic to break.

If wrapper is equipped with electric automation:

Switch the control to manual.

**Caution:** Prior to rotating hoop, check to be sure guards are in place and all persons are clear of hoop.

-Test the hydraulics by rotating the hoop and moving the bale ram back and forth.

-Install the roll of plastic according to Plastic Installation diagram.

**Caution:** Close guards after installing plastic to avoid injury.

**Caution:** Round bales are heavy and silage bales are even heavier. Use only authorized bale-handling equipment. Keep bales low when turning loader.

### Bale Guide Bars

The bale guide bars are designed to align the bales as the bales are set on the wrapper. These bars should be adjusted to set firmly against the bale when the bale is placed on the wrapper. If bars are too far apart, the bales will not align and the plastic joints will not be tight.

If the guide bars are too close, the bales will not set down until they have entered the wrapping hoop. This will cause the row of bales to have a 'saw-toothed' appearance. Again, the seal between the bales will not be as tight.

Adjust the guide bars when a change is made in bale size.

## To Wrap Bales with **Model TL5500A** (automatic)

Open the bale pusher and place the first bale on the table. Push this bale and two other bales through the hoop. This gives a stable end for the line. These bales can be picked up and placed on the wrapper later when the line is formed and wrapped later. Alternatively a bale of straw can be used to form a tight seal in addition to the plastic sheet or bag.

-Pull about 4' of plastic through each plastic stretcher and tie it under the twine on the third bale. Or tie it to the bracket at control panel (see picture on page 14).

-Place a single bale bag or a sheet of plastic on the next bale to form the end seal.

-With control panel switch "auto/man" set to "man" turn "forward" button in to advance bale without the plastic stretcher applying plastic.

-As the bale is pushed through the hoop, start the plastic dispenser rotating to apply plastic by pushing in the "Rotate" button.

-When the ram hits the switch at the end of stroke forward motion on cylinder will stop, "this switch can be moved on the slider arm to accommodate your needs. More about this later."

-With switch set to "man", the switch buttons have to be turned and/or pushed and held, when you let them go the function will stop.

-Turning, reverse button will retract the ram and open the bale pusher to accommodate the next bale.

-After you have wrapped a few bales in this way, switch "auto/man" switch to "auto" and place bale onto bale table. As bale depresses the table trigger the cycle will start automatically. Adjust front slider switch to start the wrap cycle.

-To stop cycle after the cycle has started in the automatic mode turn on/off switch to "off". (or if you have the optional remote kit, push engine stop switch to stop the engine.) Before starting engine again, turn "on/off" switch to "off" then back to on, or turn "man/auto" to "man" to reset the control relays. After you have rectified the problem finish the rest of cycle in the "man" mode and then return to "auto" mode.

-For safety reasons safety switches are installed in doors. In "auto" the safety doors must be closed for machine to function properly.

## Steering

The wrapper is equipped with hydraulic steering. The purpose of this is to keep the wrapper operating in a straight line or direct the wrapper around obstacles. If the ground is uneven or the wrapper is operated on a side hill then it can drift out of line. The loader operator is usually able to detect if the wrapper is not moving in the desired direction. Also the steering can be used to go around obstacles in the wrapping path. Do not make sharp turns as this prevents the bales from being tightly packed together. With the automatic wrapper the steering speed can be adjusted with the needle valve at the manifold block.

-When starting the row, align the wrapper in the desired direction for the row and ensure the steering is in the center position.

### With - Optional Remote Control-

With optional remote control the machine can be controlled with the hand held unit. The table trigger switch should be unplugged. Then the control panel, "man/auto" switch on "auto", bale can be placed on table without cycle starting. After the bale has been placed, and you want the cycle to start, press the start button on the hand unit. The machine will now go through the complete wrap cycle and stop at the end of the cycle. Two of the remote buttons are used to control right and left steering. The forth button is the remote engine stop, this button will have to be held in until the engine has come to a complete stop.

**-Notice-** When the engine is not running; and the control panel "on/off" switch is turned "on", "auto/man" is on "auto", the table trigger is depressed, then the ram extend valve will be energized, draining the battery until "auto/man" switch is turned to "man", or "on/off" switch is turned to "off". The LED will also be off if the switch is turned "off". The engine does

not have a battery ignition; therefore it will not drain the battery when the ignition switch at the engine is left on and the engine is not running.

### -Slider Switches-

Adjust the front slider switch to start the rotate motor when the bales have made contact. By adjusting the slider switch at the rear of the slider bar, which will stop the ram and wrap motor, and reverse the ram cylinders. Adjust it so that the junction of the 2 bales are in the wrap chamber. It is possible to adjust the front slider switch so the wrap will start just before the bales start moving through the wrap chamber, thereby putting extra plastic on the joint of bale.

The brake is operated by using the brake hydraulic valve. Moving hydraulic lever will cause oil pressure to apply brakes on the rear wheel. Increase pressure to the point where the bales are packed firmly together. Close brake ball valve to maintain positive pressure on brakes. Open ball valve and **RELEASE BRAKES WHEN THE ROW IS FINISHED AND PRIOR TO TRANSPORTING THE WRAPPER**

