Tube-Line Bale Wrapper TLR 5000X2







Operator's Manual

32640 (04/22/14)

Serial # Decal

Serial Number

The implement serial number is located on the front of the frame. This number helps us to track changes and improvements and must be mentioned when ordering parts or requesting service. For your convenience, a space has been provided inside the front cover of this manual to record the serial number, model number, purchase date, and dealer name.

Model # :	
Serial # :	
Date Purchased :	
Dealer Name :	

Operator's Manual

Thank you for choosing the Tubeline TLR5000X2-ECV Bale Wrapper. Our hope is that it will give you many years of productive service. This machine is designed to wrap a continuous line of round bales in a film of plastic.

Please read and understand this manual and the machine before 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 materials 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 its factory or elsewhere, at its 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 Ltd.

Safety

Take note! This safety alert symbol is found throughout this manual to call your attention to instructions involving yourself and others working around the machine.

Failure to follow these instructions can result in injury or death!



This symbol means

- Attention! Become Alert! Your Safety is involved!

Signal Words are used in this book.

Caution: Indicates a potentially hazardous situation that may result in injury. **Warning:** Indicates a potentially hazardous situation that could result is serious injury or death.

Danger: Indicates a hazardous situation that needs to be avoided. It is you the operator that needs to be aware of these dangers.

If you have any questions not answered in this manual, please contact your dealer or Tubeline Manufacturing Ltd.

6455 Reid Woods Drive, R. R. #4 Elmira Ontario, Canada N3B 2Z3 Email : sales@tubeline.ca Fax : (519)-669-5808 Tel : (519)-669-9488

Safety Guidelines

Safety of the operator is one of our main concerns, however we do hear of some accidents that could have been avoided if some precautions had been taken. To avoid personal injury study the following precautions and insist those working with you or for you, follow them.

In most cases the pictures will have the shielding in place, in some they may be removed, only to show a view behind the shield.

Keep all the shields, safety doors in place. If they become faulty and fail to work replace them. They are for your safety, do not operate the equipment with them removed.

Replace any decals that may be missing or that are not readable. Location of the decals is indicated in this manual.

Do not operate this machine while under the influence of drugs or alcohol.

Review the safety instructions with all users annually.

This equipment should not be operated by children, or with those unfamiliar with the operation of the machine. Do not allow persons to operate this machine until they have read this manual and/or were instructed by a qualified person.

Do not paint over, remove or deface any safety signs or warning decals on your equipment. Observe all safety signs and practice the instructions on them.

If the bale seems to be larger then the hoop do not try to force the material through as the film spools may touch the bale and break the plastic. If is stalls halfway through you can't back up, you will have to pull the bale apart by hand.

Lighting and Marking

This machine is equipped with lights and reflectors as required by the most stringent government and ASAE specifications. They should work with the tractor 7-pin connector.

Safety Decal Location



Safety Decal Location





Safety Decal

ITEM – A PART # - DE23846



ITEM – G PART # - DE23971

ITEM – F PART # - DE23845



For Wrapping and Storage

Be sure <u>Vent Cap</u> on tank is <u>Loose</u>

#DE23971

ITEM – H PART # - DE23847



ITEM – E PART # - DE23942



Do not exceed this implement's maximum transport speed of 32km/h (20mph)

Exceeding this speed may result in loss of control during transport or braking and serious injury or death.

WARNING

Transport only with a property ballasted tractor and a property attached safety tow chain. Do not transport with a motor vehicle. Reduce speed and use additional caution when on inclines, towing under adverse surface conditions, and turning.

Safety Decal

ITEM - I (Both Sides of the Machine) PART # - DERED



ITEM – J (Both Sides of the Machine) PART # - DEAMBER



ITEM – K PART # - DECANADA



ITEM – L PART # - DE23941

CANADA PATENT 1285862 **USA PATENT** 4793124



- Keep safety signs clean and legible at all times
- Replace safety signs that are missing or illegible Decals are available through your dealer
- •

Safety Decal





Your best assurance against accidents or damage to the machine is to know how it operates. If you do not understand a portion of the manual or a function of the wrapper, please contact your dealer or an experienced operator.



Before Operation

- Carefully study and understand the manual or be trained by an experienced operator.
- Do not wear loose clothing that may get caught in moving parts.
- Visually inspect the machine to make sure no parts are loose or missing.
- Be sure that no tools are left on the machine.
- Make sure no hay is lying on the engine and that the cooling fins are not clogged with dust and hay (this could cause a fire)
- Do not hurry the learning process. Be familiar with one part before trying the next part.
- Practice by running the machine through its paces, first in Manual Mode with no bales in the machine until you are comfortable and familiar with the operation. After you become familiar with the operation, switch the machine to Auto Mode. Use a pole to push the table switch down to start the cycle.
- Do not reach in and push the switch paddle down by hand.

Bale Size

Round Bales - The TLR5000X2-ECV will wrap bales up to 5' x 5 $\frac{1}{2}$ ' It will wrap all sizes smaller than this 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 diameter to $4-4 \frac{1}{2}$, even though the wrapper will handle larger size.

Square Bales - Model TLR5000X2-ECV is NOT a square bale machine.



We suggest the following method of operating the TLR5000X2-ECV Tubeline Wrapper

Park the wrapper where you want the end of the row to be, facing in the appropriate direction with wrapper in up position.

Apply parking brake and fold in the first section of the tongue and fasten the bracket into the hydraulic steering slider with the pin that held the tongue.

To Wrap Bales with Model TLR5000X2-ECV

Before the first bale that will stay on the line is placed on the wrapper, place an end cap on the bale. (Check with your plastic supplier for suggestions.)

- Pull about 4 ft of plastic through each stretcher and tie it under the twine on the bale, or tie it in the slots on the hoop brace (both sides)
- Start the machine by starting the engine under the table on the left hand side. You may need to choke it on the first use.
- You will see a control panel mounted above the engine, turn the ON/OFF switch to ON, you should see the control panel and the ON/OFF switch light up.
- With the control panel set to Manual Mode press the Ram REV button to advance the bale without the plastic stretcher applying plastic.
- As the bale is pushed through the hoop, start the hoop rotating to apply plastic by pushing the "Rotate" button (with the Ram REV button)
- When the ram hits the switch at the end of the stroke the forward motion on the cylinder will stop. More about this later.
- With the wrapper set to Manual Mode the panel buttons will have to be pushed and held, if you let them go the function will stop.
- Pressing the Ram FWD will retract the ram and open the bale pusher to accommodate the next bale.
- Wrap the 1st few bales in Manual Mode until the first bale overhangs the rear of the machine by 6 inches. Lower machine to the ground and **disengage parking brake**, if equipped with a power **drive**, **disengage the hydraulic lever**.
- **Note!** You may want to leave some weight on the wheels until the wrapper starts moving to avoid bales from sliding on the ground.
- After you have wrapped a few bales in this way, press the Auto/Manual button to set Auto Mode and place bale on the bale table. As the bale depresses the table trigger ram will start automatically.

Danger - The use of automatic setting when pushing off bales can cause severe injury or death.



To stop the cycle: after the cycle has started in Automatic Mode, press the Auto/Manual button for Manual Mode (or if you have the optional remote kit, push the Stop button on the hand unit to stop the cycle.

For safety reasons, safety switches are installed in the doors. In Auto Mode the safety doors must be closed for the machine to work. In Manual Mode these switches reduce hoop and ram switches.

Steering

This wrapper is equipped with hydraulic steering. The purpose of this is to keep the wrapper operating in a straight line or to direct the wrapper around obstacles. If the ground is uneven or the wrapper is operated on the side of a 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. When steering around obstacles in the wrapping path do not make sharp turn as this prevents the bales from being tightly packed together.

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

Optional- Remote Control

With the remote control the machine can be controlled with a hand held 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 fourth button is the remote cycle stop. Notice- the "on/off" switch on the control panel will turn off all the electric current to the Control Panel and also Engine Stop. When stopping the machine, switching the engine to OFF is advised. This will avoid draining the battery.

Pushing the Last Bale Off the Wrapper

The wrapper must be in Manual Mode to push the last bale off.

To push off the last bale :

- Open the bale pusher by pivoting the handle under the ram to the opposite side of that machine.
- Start pushing the bale through the wrapper by using the reverse button and wrap button on the control panel. Continue pushing the bale through the wrap chamber until you have reached the end of the stroke.
- Retract the bale pusher
- Open the safety doors, remove 2 x 3 tube from the Hydraulic tank side of the wrapper and lay it across the top of the pushoff brackets (lower pushoff to other side if machine is equipped with optional folding pushoff).
- Open the bale pusher, store the 2 x 3 tube in bracket, secure with lock pin
- Undo steering, unfold tongue and insert lock pin.
- Make sure the brakes are released before driving away.

Post Operation

Remember to turn off the control panel when turning off the machine, if the green ON/OFF switch is lit on your control panel, it indicates the control panel is still powered. Leaving the control panel on for long periods of time will drain your battery. Also if you have the engine start turned to electric only remember to turn the engine off and remove the key.

After wrapping, inspect the rows of silage regularly to ensure there is no damage occurring from birds, rodents or livestock.

Feeding Livestock

When its time to take a bale off a row all that is needed is a loader tractor. You can pick up bales without cutting the plastic, as the plastic will break away between bales and can be removed from the side of the bales before dropping the bales in the feeder.

Wrapped bales do not spoil as the line is fed. Unlike long bags of bales, the stretch wrap prevents air from moving past the bales and causing the bales at the far end to heat and spoil. As the next bale is undisturbed it will not spoil for one to two days in warm weather and for at least a week in cooler weather.

Disposal of Plastic

Users of bale wrappers are encouraged to collect all plastic to prevent it from becoming an environmental problem. Plastic, although bulky, is inserted in a landfill and will not pollute the ground water. Manufactures are making serious efforts to economically recycle silage plastic. Use recycling services when available. Please do not burn the plastic! Collect and dispose all plastic in an Environmentally Friendly manner.

Remember the air and the ground that you contaminate is your visible footprint for many generations!

Unsightly used silage film will encourage complaints.

Control Screen Operation

After the machine is started and the control panel screen is on you should see either a manual or automatic screen. The following screens show the different functions of the TLR5000X2-ECV.

Please note that functionality will vary with different installed features.

Auto Home Screen

Image: Sector of the sector of th

Manual Home Screen





Error Message : If, while operating, you see one of these errors where the Tubeline decal is, stop the machine and check that the doors are fully closed and that the film has not ripped or is empty.





Setup Screen

<u>SETUP</u>				<		
TWIN WRAP	YES	36	AUTO WRAP BALE WIDTH [IN]			
TARGET WRAP LAYERS	10	42	AUTO WRAP BALE OPENING [IN]	<		
FILM SENSOR	DISABLED	6	AUTO HOOP START DELAY [IN]	<	\bigcirc	
POWER DRIVE TIMER [s]	10	6	BALE COUNT ADJUST	<	ESC	

Information Screen

> /		INFORMATION			<	: /	
	TOTAL BALES MACHINE LIFETIME	100000	LEFT DOOR	CLOSED -		_ (
	ECU VERSION	REV X. 00000	RIGHT DOOR	CLOSED			
>	DISPLAY VERSION	REV X. 00000	BALE IN SWITCH	BALE NOT DETECTED	<		
	REMOTE STEER	INACTIVE	FILM SENSOR	FILM NCT DETE			-
>	REMOTE STEER RIGHT	INACTIVE	RAM HOME SWITCH	RAM NOT HOME	<	0	
	REMOTE CONTROL	INACTIVE	HOOP PRESSURE	2500		\sim	
	REMOTE CONTROL	ACTIVE	JOYSTICK X [mV]	4500			
>	RAM POSITION (INCHES)	0.24	JOYSTICK Y [mV]	500	<	ESC	3

In the setup screen you may change settings to customize the wrapping operation.

- Switch Twin Wrap box to "YES" if you have installed this option (4 rolls instead of normal 2) Target Wrap Layers : Change amount from 2-20 layers per bale •
- •
- Disable the film sensor as needed •
- Add more time before power drive auto disengages Change to different preset bale widths (36",48",60") •
- •
- Change to different complete ram travel length (default is 42")
- Change to different length the ram will travel before the hoop starts rotating (default is 6") •
- Set Bale Count Adjust to zero at start of new job •

Trouble Shooting / Maintenance



Be Safe, never ride on the machine while being used or transported. Never climb on the table or inside the wrap chamber with the Engine running.

Use Manual Mode or stop the engine when changing plastic rolls. Never leave it in Auto Mode as your helper may set a new bale on the table or press the start button on the remote.

Installation of Plastic

Procedures for maintenance, repairs or plastic rolls replacement :

- 1. Push the Emergency Button
- 2. Remove the key from the motor (has to be kept by the end user to avoid accident)
- 3. Do the required maintenance / repairs

Turn control panel off to avoid wasting battery if repairs are lengthy

Plastic Installation

- 1. Wrinkles in the plastic with seams between layers easily visible. Check to determine if the plastic is properly routed through the Tensioner rollers.
- 2. Plastic tears between the Tensioner and the bale. Film spool holders: not turning freely. Lubricate and turn by hand until free. Slave roller not turning freely. Lubricate and turn by hand until free.
- 3. Tensioner rolls not turning freely : Loosen the bolts holding the bearing and check if this makes a difference. It may be that the bearings have too much end pressure, in this case re-tighten the bearings and loosen the locking collar on the roller shaft this will allow the shaft to slide in the bearing; re-tighten the bearing collar. The gears can also be meshed too tight; this can be fixed by slightly loosening one set of bearing bolts. Using a hammer and punch, lightly tap the bearing away from the other roller.

Caution - Do not use a hammer on the aluminum stretcher rolls.

- 4. Poor quality plastic: Use a brand with good tear resistance.
- 5. Tack build up on the rollers, particularly in hot weather : Clean the Tensioner with warm soapy water.
- 6. 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 the rolls have been installed on the machine one can be parked on the bottom and a cover can be placed on the top one Rolls of plastic may catch on the bottom of the bale. If bales are misshaped the roll of plastic may drag on the bottom of the bale, causing the plastic to break.



Danger! Stop engine before attempting to install plastic.

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

The roll of plastic should be installed with the tack on the inside of the plastic film next to the bale 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 rolls 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 roll second. If there is any question, which is the faster roller:

• Turn one roller by hand and watch the speed of the other roller, this should help you determine which is the fast and slow roller. When the plastic is installed correctly, it should stretch tight on the

bale to form a smooth tube.





Danger



When the machine is in Manual Mode the safety switches and the film sensor reduce the ram and hoop speed.
Test the hydraulics by rotating the hoop and moving the ram back and forth.
Install the roll of plastic according to the Plastic Installation diagram.

Caution

Close safety doors after installing plastic to avoid injury.

Caution

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

Caution

It is important that the bale sit firmly on the deck, as the bale spears should deflect the hay somewhat. Failure to do this may cause the plastic to stick to the spears and tear the plastic inside the bale.

Transportation / Storage

Brake

The TLR5000X2-ECV is equipped with a manual parking brake in rear left wheel. If the wrapper is equipped with optional POWER DRIVE, the power drive is engaged and used as a parking brake.

Notice - Make sure BRAKE IS DISENGAGED before transporting the wrapper.

Caution

Before moving the wrapper any distance close the fuel valve at the engine! As the machine is towed it will bounce and shake, as it does this the carburetor float will let too much fuel into the system. Raw fuel can get into the engine cylinder and wash the cylinder walls down and end up in the engine oil.

OBSERVE MAXIMUM TRANSPORT SPEED

The maximum transport speed for this implement is 32 km/h (20 mph).

Some tractors are capable of operating at speeds that exceed the maximum transport speed of this implement. Regardless of the maximum speed capability of the tractor being used to tow this implement, do not exceed the implement's maximum transport speed. Exceeding the implements maximum transport speed can result in: - Loss of control of the tractor/implement combination - Reduced or no ability to stop during braking - Implement tire failure - Damage to the implement structure or its components Use additional caution and reduce speed when towing under adverse surface conditions, when turning, and when on inclines. Do not attempt transport if the fully loaded implement weighs more than 1.5 times the weight of the tractor.

Tires

Proper tire pressure is 36 psi and should be maintained at all times. On the rear axle replace tire with the same type and brand if possible. If this is not practical then replace with a tire that has the same outside diameter.

