Tube-Line Baleliner 7800

Operator's Manual





29665 (09/01/13)

Operator's Manual

Thank you for choosing the Tube-line TL7800 Baleliner. Our hope is that it will give you many years of productive service. This machine is designed to single-handedly transport and 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. <u>The company's liability shall be</u> <u>limited exclusively to replacing or repairing without charge, at</u> <u>its factory or elsewhere, at its discretion.</u> 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.



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.
- 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.

Operating the Tubeline Bale Baleliner

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

Bales

Well-shaped firm bales are necessary for successful wrapping, using a hard-core baler. Bales are best wrapped as soon as possible after baling. If bales are left unwrapped they will sag and loose 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, the 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 fewer odors
- 3. Less freezing in the winter
- 4. Higher dry matter intake

Wrapping Site

Select a site that will allow room to make an adequate bale row length. The Tubeline wrapper is very fast, but requires time to set up and move to a new line. There should be space for at least 50 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 wrapper. Avoid soft ground, as the wrapper will not move forward smoothly if it is sinking into the ground. Wrap on level ground or a slight uphill 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 TL 7800WX2 will wrap bales up to 5' x 5 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 TL 7800WX2 is NOT a square bale machine.



DANGER : Do NOT exceed 13 GPM !

This hydraulic system is designed for no more than 13 gallons per minute. By exceeding the flow rate the oil will overheat. To ease overheating problems, try connecting the return oil line directly into the tractors sump.

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.

Intentionally Blank

Before Operation

Familiarize Yourself With Machine

Learning to use your new machinery correctly is vital to your health and well being. Please take the time to read and understand the operating procedures described in this manual, or learn from a dealer or another Baleliner owner/operator.

Loading/Unloading Wrapper from Trailer

Unloading

Use the following instructions for unloading the wrapper from the trailer.

- 1. Unlock wrapper, axle, and arm (see A,B, and C on pg.14).
- 2. From tractor seat lower the trailer bed until it is touching the ground. Next engage the ram, this fastens the ram to the trailer chain. After this, reverse the conveyor using the control panel, you should see the wrapper moving back.
- 3. Drive SLOWLY forward after the wrapper is on the ground. This will limit the chances of the wrapper digging into the ground and interfering with the rollers.
- 4. When wrapper is fully off the trailer put the tractor in park with the parking brake on.
- 5. On the left side, towards the back of the trailer is a light bracket with a forward reverse button as well as an E-stop on it. Use either/ both the FWD and REV controls to loosen the ram pole enough to remove it. (see E on pg.14)
- 6. Store the ram pole in its designated hooks on the left side of the wrapper (see F on pg.14).
- 7. Set the loading ramps on the wrapper to the down position with the latch before using the wrapper.

Loading

When you are ready to load the wrapper and take it to another location follow these instructions.

- 1. Set the loading ramps on the wrapper to the up position before backing the trailer up to it. *This will allow the wrapper to slide up onto the rails and keep it in line with the trailer.*
- 2. From the tractor seat lower the trailer bed and back up slowly into the wrapper's ramps. Remember to set the parking brake when you get off the tractor.

- 3. Set the ram pole into the sockets of the ram and the wrapper. You may need to use the rear controls to move the ram back and forth to allow the ram pole to slide easily into the sockets.
- 4. Press the FWD button on the light bracket to pull the wrapper onto the trailer. Using these controls over the controls on the tractor will give you a better view of the wrapper loading and give you quick access to snapping the transport lock pins into place. (**B on pg.14**)
- 5. When ram is fully retracted the wrapper is nearly straight above the trailer wheels. From the tractor seat raise the trailer bed fully before locking the cam axles (**C on pg.14**).

Note : The Bale Arm can be locked before or after loading the wrapper on to the trailer.

Loading Trailer With Bales

To load bales on the Baleliner trailer follow these simple directions :

Manual Mode

- 1. From the tractor, switch the control panel to Load if it is not already.
- 2. Run the ram to its starting position at the front of the wrapper using the Conveyor switch.
- 3. Disengage the ram with the Bale Ram switch on the control panel.
- 4. Drive the trailer to your bales, picking them up using the bale arm, which is operated using the Up and Down lever on the joystick.
- 5. Move the bale(s) towards the back of the trailer using the Conveyor FWD/REV switch.

Note : The trailer's bale-in trigger is strictly used in Automatic Mode.

Auto Mode

- 1. Switch the Mode knob to Load.
- 2. Push the Auto button, this will bring the ram to its starting position and disengage the ram.
- 3. Load the bales using the joystick. As the bales drop onto the bale-in trigger the trailers' chain will automatically move the bale towards the back of the trailer, allowing room for the next bale to collected.
 - Note : You may notice the chain moving forward slightly before it reverses and pushes the bale down the trailer, this ensures that your bales are pressed together without any air pockets. This distance can be adjusted from your control panel (**see pg.14**).

Wrapping Operation

Starting a Row

- 1. To start a row, unload the wrapper at the spot where you want to begin your row.
- 2. Load 2 or 3 bales onto the trailer, these will be run through the wrapper with no wrap and act as a stop for the row. Once the row is long enough to absorb the next bales you can pick these bales up and wrap them into your row.
- 3. Swing out the spear on the bale arm and reverse into the next bale, this bale will be the first bale in your row.
- 4. Lift the speared ball several inches off the ground and slide the cap over it.
- 5. Set the bale back down and this time pick it up with the forks so that the enclosed end is TOWARDS the wrapper.
- 6. Pick up full 8 bale load and return to wrapper.

DANGER ! : Always lock the bale spear back into its original place after using !

Connecting Wrapper and Trailer

- 1. Before coupling the trailer to the wrapper, make sure that the loading ramps on the wrapper are down, as if they are up the trailer's rails will hit them.
- 2. Next, from the tractor lower the trailer until it is lightly against the ground
- 3. Lower the 3 point hitch until the trailer is level with the ground, this gives you a clear view of the wrapper in action and allows quick access to stopping the wrapper.
- 4. Reverse the tractor towards the wrapper, lining up the bales on the trailer with the bale row, or the wrapper's hoop if starting a row.
- 5. Once you feel the trailer against the wagon do not let it move forward and raise the trailer under the wrappers hooks, when the Ready to Wrap screen shows up on the control panel you have successfully connected the two machines and are ready to wrap bales.



Wrapping Bales

The following instructions will guide you through the process of wrapping your bales.

Danger : Under no circumstances should the trailer's rear controls be used without the tractor's parking brake on.

Manual Mode

Note : Only use Manual Mode rear controls for starting rows or 2-man operation.

After connecting the trailer to the wrapper for the first time you may want to use Manual Mode to run the first 2 or 3 bales through the wrapper without any plastic wrap.

- 1. Put the tractor in Park and set the hand brake, make sure the control panel is in Wrap Mode.
- 2. Engage Ram with control panel.
- 3. Use the rear controls to reverse the conveyor until the first couple "anchor" bales are though the wrapping chamber.
- 4. As the bales travel over the bale trigger the drive shaft couplers will join and the lock hooks will snap out, keeping the trailer from moving away from the wrapper.
- 5. Once the capped bale is beginning to go through the hoop push the Rotate Hoop button as well as the REV Conveyor. Also put the tractor in Neutral after the anchoring bales are on the ground to allow the wrapped bales weight to push the tractor ahead.
- 6. Counting the amount of layers placed on the first bale is a good idea as you can then go to the front of the trailer and adjust the Layers Adjustment as you see fit. 6-10 layers per bale is considered normal.
- 7. After the wrapped bales are off the rollers, it is necessary to control the machine from the tractor cab. This prevents the bales from sliding on the ground.

Auto Mode

Note : If doors are opened or the E-stop is used, the machine will kick out of Auto and require you to press the Auto button on the control panel.

- 1. Now that the first end capped bale is wrapped go to the cab of your tractor. *Auto mode can only be used from cab controls.*
- 2. Simply push the Auto button on the control panel to start the wrapping cycle, the machine will automatically wrap the remaining bales on the trailer. Put the tractor in neutral for this operation to allow the Baleliner to be pushed instead of the bale row.
- 3. Check the ram force gauge on the front of the trailer (see **pg.26**) regularly while wrapping, do NOT let it rise over 1500 PSI (into the red zone).

- 1. Load 7 bales onto the trailer.
- 2. Spear the last bale and cap it the same way as the starting bale.
- 3. Lower the bale to the ground and lock spear parallel to bale arm.
- 4. Maneuver the trailer so that the enclosed end of the bale is facing the tractor. *This will* ensure your row is capped at the end of each row.
- 5. Wrap all bales on the trailer except the last one, this one will be on the wrapper but will not be fed through the wrapper, this is where the ram pole and push-off plate are used.

Note : Use Manual Mode from tractor cab for wrapping the last bale.

- 6. Reverse the ram about six feet back onto the trailer before disengaging the trailer from the wrapper.
- 7. Unhook the wrapper from the trailer and drive ahead enough so that the ram pole can be placed into the ram's pocket (**see H on pg.14**). Next, place the push plate on the wrapper end of the ram pole.
- 8. The ram's pocket will keep the ram pole stable as you reverse the trailer back and connect to the wrapper. Move the ram until the push plate is fully on the trailer before coupling to avoid interference.
- 9. After connecting the trailer and wrapper put tractor in park and set hand brake. On the wrapper there is a coupler lock, push this lever down. This will manually lower the wrapper's bale trigger down into the deck, coupling the hoop motor to the hoop drive.
- 10. From the tractor reverse the conveyor, pushing the push plate against the bale and rotate the hoop as the end capped bale moves through the wrapping chamber.
- 11. Be sure to run the ram all the way back until it stops moving, this will disengage the coupler lock making it safe to disconnect the trailer from the wrapper.
- 12. Make sure the coupler lock is in the up position before unhooking the trailer from the wrapper and pulling away from the wrapper.
- 13. Park the tractor and stow the push plate and ram pole in their designated spot(s) on the wrapper (see F & I on pg. 14), or hook the ram pole into the lower notch of the ram if you are ready to load the wrapper (see D on pg.14).





Baleliner Control Panel Screens

On the next few pages you will see illustrations of the possible screens that may show up on the screen of your control panel. These screen snapshots will help you understand what is going on in areas that may be hard to see from the tractor seat. They are also very useful in troubleshooting scenarios.

Manual Screens

MANUAL DISENG ENGAGE FWD REV HOOP

With the control panel in manual load mode this is the first screen you will see.

MANUAL					
ARM	UP	BED	UP		
ARM	DN	BED	DN		

You will notice when using manual loading or wrapping that when you use either a control panel or switch or the loading arm joystick the appropriate option will be highlighted. (i.e., if you are looking at this screen and you lower the bale arm the **ARM DN** will have a black box around it, stop the joystick, and the highlight disappears).

MANUAL

DOOR OPN

Manual Ready to Wrap Door ok In manual wrap mode the default screen is either **Door Open**, if the trailer is not correctly linked to the wrapper or **Ready To Wrap**, if everything is ready to wrap bales.

Using the left and right arrow buttons in both **Load** and **Wrap** mode will take you to the other default screens (Any of the previous 4 screens, depending on connection to wrapper).

OIL FLOW AT RAM MOTOR 0.0 GPM (RUN CHAIN 10 S)

This is an information screen showing the gallons per minute of oil flow to the Baleliner. Use this screen to accurately measure gallons per minute by running the the bed chain (either direction) for 10(+) seconds to allow the unit to calculate the flow.



Settings Menu

By pushing the ESC button while in manual mode you will be taken to the settings menu. **Warning !** These settings are adjustable. You may use the left and right arrows to move between screens, and the up and down arrows to adjust the numbers. These numbers are called pulses, 1 pulse = approx. 2.5". Note : *All pulses are shown as 0 on the illustrations.*

BALE FWD INDEX 0	With this screen you may control how far the conveyor moves forward after the bale trigger is activated by a bale. This will push the bale(s) on the trailer against the newly placed bale on the trailer. <i>This screen is defaulted at 13 pulses.</i>
BALE REV INDEX O	After the Bale FWD Index the bale(s) must be moved down the trailer to allow room for the next bale, this is what the Bale REV Index controls. You may want to adjust this depending on your bale size. Note that if your FWD Index is set at 13 and your REV index is set at 34, the bale(s) will only move back 21 pulses. By default, this screen is set at 34 pulses.
FULL LOAD INDEX 0	When both the trailer's bale trigger and the full load switch are triggered, bales move forward this amount, then goes back to manual and are ready for the wrapping operation. Moving the bales forward squeezes them together, eliminating air pockets. If you still notice gaps between wrapped bales consider raising the Full Load Index. <i>This screen is set to 12 pulses by default.</i>
RAM FWD INDEX 0	At the end of an auto wrap cycle, when the ram is fully extended it automatically moves forward this distance, this setting cannot be less than 12 pulses as this will not allow the ram to clear the wrapping chamber. <i>This screen is by default set to 12 pulses.</i>

LIFETIME COUNTER

A

This screen shows how many bales have been wrapped over the life of this particular machine.

SWITCH INPUTS A BALE IN FUL LOAD RAM HOM

This screen shows you three things : If BALE IN is lit, there is a bale sitting on the trailer bale trigger. With FULL LOAD highlighted the trailer is at maximum capacity, and if RAM HOM is lit the ram is in its storage position at the front of the trailer.

SWITCH INPUTS B R DOOR PROXY A E-STOP R LIMIT

This screen shows four things : a lit R DOOR tells you the wrapper doors are open. PROXY A will flash when the conveyor chain is running. The E-Stop has been pushed if it is **not** highlighted, and R LIMIT indicates when the ram is fully extended. *If the E-Stop is activated all power is disconnected.*

REV LS FILTER 000.000

The REV LS FILTER is an option for changing the amount of time taken to stop the ram upon hitting the limit switch. By default this is set to 1/2 second, you may want to change it depending on the size of tractor you are using.

.5 default

PROGRAM VERSION

1.0

Displays what program version was installed when the machine was manufactured. This screen is used only for diagnostic reasons.

OIL FLOW CALC ON RAM HYD MOTOR O X 1/1000 GALLONS PER PULS

This screen is set by default to .110

Auto Screens

Auto mode for either Wrap or Load is in use if there is a red light on your control panel.

auto Wrap Rev Hoop	With the Mode switch in Wrap and the Auto buttor lit the default screen is this one. The REV and HOOP will highlight when they are in use.				
AUTO LOAD LOAD COUNT 0 BALE COUNT 0	Switching the Mode to Load will bring up this screen. The Load Count displays how many bales are currently on the trailer and the Bale Count displays how many bales have been wrapped.				
RESET COUNT? press OK or ESC	Pressing the DEL button on the control panel will reset this screen to zero. The button in the middle of the arrows (OK) to continue and ESC will cancel the reset.				

Diagnostic Screens

E-STOP!

This screen will show up on the control panel if the rear control Estop button has been pushed. Go to the tractor and press the Auto button to clear this screen.



If at any time you notice this screen it means that there is an electrical connection problem between the tractor and trailer.

BALELINER HYDRAULIC VALVE CONFIGURATIONS

The Baleliner may be configured to operate with either a closed or open center tractor hydraulic system with the proper valve cartridge. All units shipped from the factory will be configured as closed center. Please refer to the following instructions and illustrations for the correct setup for the system desired.

It is important to note that the main valve bank on the Baleliner has a maximum flow capacity of 13 GPM whether operating as a closed or open center system. Operating at higher flows will cause the hydraulic oil to heat up. A good practice is to have the tractor hydraulic valve in neutral during transport to minimize this heating possibility. The latest controller software update (V1.2) has a new screen that can show the flow. Follow the instructions for the screen to determine the rate of flow and adjust the tractor flow control to not exceed 13 GPM if tractor is so equipped. If the tractor does not have a flow control you can regulate flow by engine RPM.



On the left is an open center layout with an open center valve cartridge marked SV12-29. *Note the routing of the steel hydraulic lines.*



This is the configuration for a closed center hydraulic system with a closed center valve cartridge marked SV12-28. As per "A" two caps have been installed to close the lines as indicated. An elbow has been installed "B" and is connected to the line "C" originally connected to the return line now capped.



Position of open or closed cartridge in valve body.

To change cartridges simply remove the nut securing the cartridge to the valve body and unscrew the cartridge. Be sure to clean the area first and keep all dirt out.



The open center kit to the left illustrates the parts required to revert to the open center system. It consists of a short line (removed when converted to closed center) and an SV12-29 cartridge. To revert to open center from closed center install the SV12-29 cartridge, remove the two plugs and elbow, reinstall the short line in this kit and reconnect lines as per diagram on previous page.



The closed center kit to the left illustrates the parts required to convert from open centre to closed center. The kit consists of:

- 2 304C-10 cap
- 1 6500-10-10 elbow
- 1 SV12-28 cartridge

To convert to closed center from open center install the SV12-28 cartridge, remove the short line, cap lines, install elbow and reconnect lines. See *illustration on previous page.*

Optional Accessories

Rear Retrieving Roller

If you have purchased a rear retrieving roller for your Baleliner follow these instructions on installing it as well as operating the roller properly.





- 1. Unplug electrical cord connected to the floater pan.
- 2. Remove the snap rings from the pins and remove plates from side of the trailer.
- 3. Pull out pins of the floater pan to fully remove the floater pan.
- 4. With the retriever roller fully compacted slide it onto one side of the trailer, mounting it onto the square wheel, this is what will turn the roller.
- 5. Use the loose nuts on the inside of the roller to extend it to the other side until it is solidly connected in between the trailer's sides, as shown in the right picture above.

When the roller is pushed out as far as it can go, the nuts will act as locks to keep it fully extended until you are ready to remove the roller again.

Operation

- 1. With an empty trailer, reverse trailer towards bale row.
- 2. Lower trailer to ground and reverse into bottom of bale.
- 3. Start running the conveyor FWD while slowly backing into the bale.
- 4. Keep reversing the tractor and running the trailer's conveyor chain until a full load has been achieved.

Miscellaneous Instructions

Installing Plastic

Before wrapping can be done plastic rolls must be installed in the tensioners. Read the instructions and diagram below for a complete guide on installing these rolls.

Danger!! E-stop 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.

- 1. The roll of plastic should be installed with the tack on the inside of the plastic film next to the bale silage.
- 2. The plastic then passes over the slave roller and is threaded through the two metal rollers on the Tensioner as shown in the diagram.
- 3. 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:
- 4. Tie the loose end of plastic on to the hoop brace inside the hoop, one per side per tensioner,
- 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.



Trouble Shooting 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.

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.

Poor quality plastic: Use a brand with good tear resistance.

Tack build up on the rollers: Particularly in hot weather. 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 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.

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.

Build-up on Stretchers

When wrapping in hot weather there can be a build-up of adhesive on the stretcher rollers. This can cause the plastic to break. Remove the adhesive with soap and water.

Wrapping Straw

The 7800WX2 wrapper can be used to weather- protect straw.

Only two layers of plastic are necessary.

If the straw is dry, it may be wrapped continually without spaces. Straw that has some moisture is best wrapped with spaces in the plastic.

After Wrapping

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

Feeding Out

With the 7800WX2, a loader can pick up bales without cutting the plastic. The plastic breaks 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 the warm weather and for at least a week in the 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 of recycling service 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.

Decals

Part # : DE30245







Part # : DE30247



Part # : DE30248

VALVE LAYOUT						
V1	V2	V3	V4	V5		
2301 RAM	2310	2307	2304	2306		
ENGAGE / DISENGAGE	LOADING ARM UP/DN	ROTATE HOOP	CONVEYOR FWD/REV	AXLE UP/DN		
2302	2309		2303	2305		

Part # : DE30249





Part # : DECANADA



Part # : DE23845







#DF23851

Part # : DE23784



Part # : DE31325



Part # : DE23977



Part # : DE31350









MAIN CONDUIT		BRANCH CONDUIT	WIRE LABEL	DESC	COLOUR		GUAGE	WIRE LENGTH
B1 (7/8" X 23')		R1 (1/2" X 5')	GND	GND	WHT		14	30 FT
			MRK	CLR	BLK		14	30 FT
			RT	RIGHT	GRN		14	30 FT
			STP	STOP	RED		14	30 FT
			TAIL		BRN LICHT BLU		14	30 FT
			WINL	WORKLIGHT	LIGHT DLU		12	JUFI
		L1 (1/2" X 5')	GND	GND	WHT		14	30 FT
			MRK	CLR	BLK		14	30 FT
			STD	STOP	RED		14	30 FT
				TAIL	BRN		14	30 FT
			WKL	WORKLIGHT	LIGHT BLU		12	30 FT
			2109	FWD	ORN		16	30 FT
			2110	REV	GRN		16	30 FT
			2111	HOOP	GRN/YEL		14	30 FT
			2112	ESTOP	RED/WHT	Ш	16	30 FT
			24V+	24\/+	BLU		16	30 FT
		RI 1 (1/2" X 2')	0	GND	WHT		16	30 FT
			2106	REVLS	RED		18	30 FT
			2104	FULL LD LS	BLK		18	30 FT
			2108	GATE LS	ORN		16	30 FT
			24\/+	24\/+	YEL		16	30 FT
			24V+	24V+	BLU		14	30 FT
			24\/+	24\+	BLU		18	30 FT
V0 (7/8" X 26")		V1 (1/2" X 23")	2306	AXLE UP	RED		14	6 FT
			0	GND	WHT		14	6 FT
			2305	AXLE DN	BLK		14	6 FT
			U	GND	WITT		14	011
		V2 (1/2" X 20")	2304	RAM FWD	RED		14	6 FT
			0	GND	WHT	_	14	6 FT
			0	GND	WHT		14	6 FT
			_					
		V3 (1/2" X 14")	2307	HOOP	BLK		14	6 FT
			0	GND	WHT		14	6 FT
		V4 (1/2" X 11")	2310	ARMUP	RED		14	6 FT
			0	GND	WHT		14	6 FT
			2309	ARM DN	BLK		14	6 FT
			U	GND	WHI	L	14	611
		V5 (1/2" X 8")	2302	RAM ENG	RED		14	6 FT
			0	GND	WHT		14	6 FT
			2301	RAM DISENG	BLK		14	6 FT
	TEE		U	GND	WILL		14	OFI
F1 (1/2" X 10')		PS1 (1/2" X 20")	24\+	24\/+	BRN		PSW	15 FT
			0	GND	BLU		PSW	15 FT
		(A) (1/2" X 15")	2101	CONV PULSE	BLK		PSW	15 F1
	TEE	V6 (1/2" X 5")	2312	BYPASS	BLK		14	15 FT
			0	GND	WHT		14	15 FT
		FLH (B) (1/2" X 12")	24\/+	24\/+	BLU		14	15 FT
		(-) (2105	HOME LS	RED		14	15 FT
FLB (1/2" X 6' 6")			24\/+	24V+	BLU		14	10 FT
			2103	BALE LS	RED		14	10 FT



