

Tube - Line 5500 X2

Owner's Manual

2007



Manufactured By:
TubeLine Manufacturing Inc.

RR#3 Listowel,
Ontario , Canada
N4W 3G8

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TubeLine 5500 X2
New for 2007

1. Reinforced the front Ram Cross Tube at the bolt-on point.
2. Slide tubes instead of Flip-out Arms for the final push-off
3. Channel Track at the bottom of the Safety Door
4. New Safety Door handle
5. Changed battery location
6. Better Engine Access
7. Improved engine shielding and Fenders
8. Decal for bale size on Bale Saddle
9. Removable Tapered Bale Spears
10. New Hillside Roller
11. Riser Table side angles turned down (more clearance for plastic
12. Longer Riser Table Handle
13. Twin wrap added a plastic roller to guide film over edge of wrap carrier

Introducing Tubeline T5500 X2

Tubeline Owner

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

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 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 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 Inc.

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 in 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 Inc

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Safety -- It's in your interest.



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.

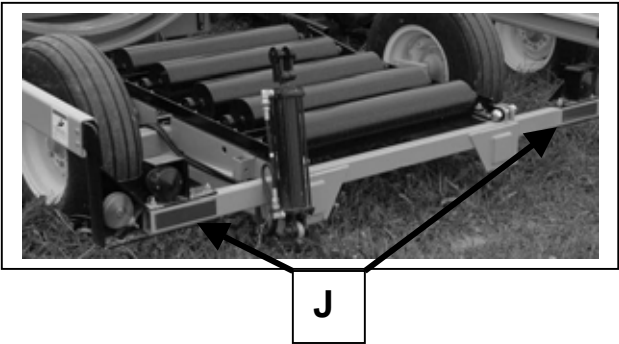
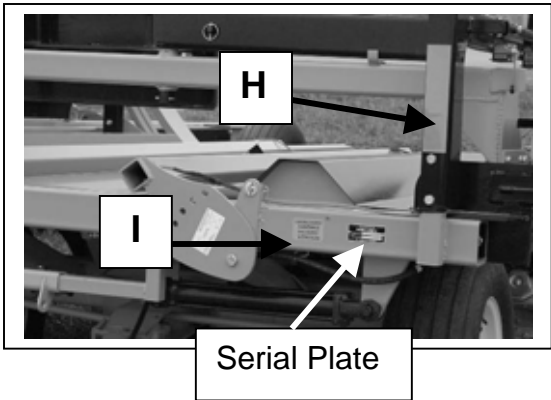
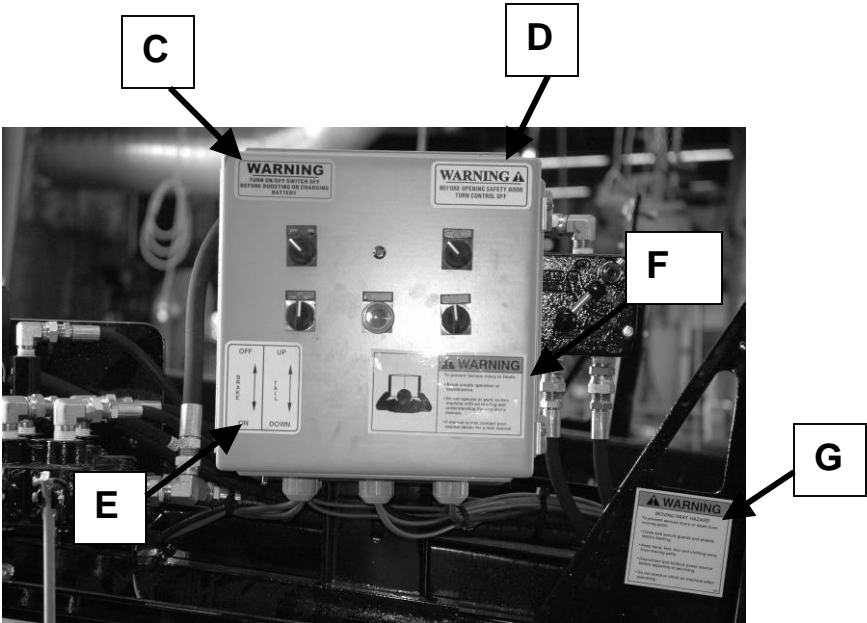
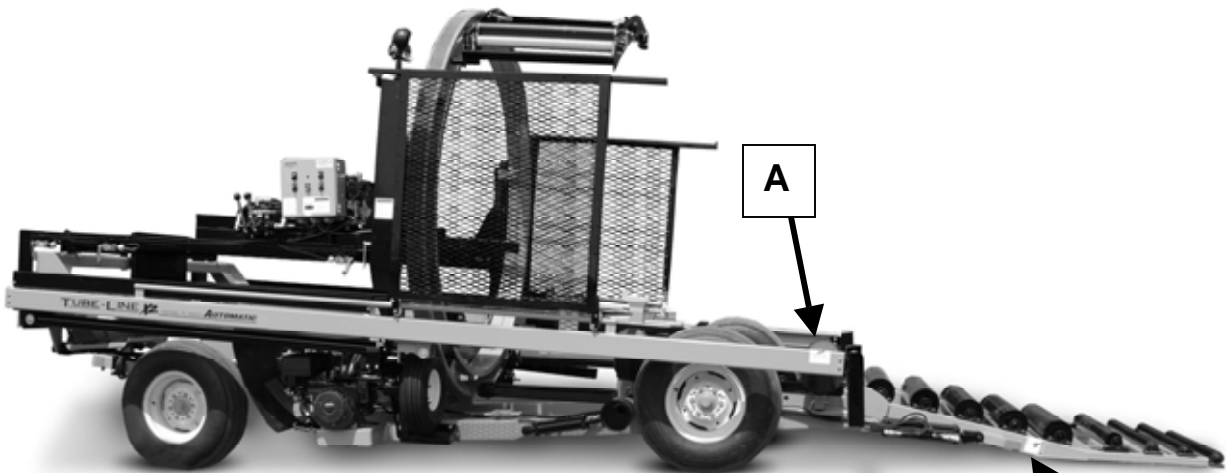
If the bale seems to be larger then the hoop do not try to force the material through as the film spools my touch the bale and break the plastic. If it stalls halfway through you can't back up, you will have to pull the bale apart by hand.



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 plug. You may have to make an adaptor when towing behind a truck.

Safety Decal Location



A Both Sides



B Both Sides



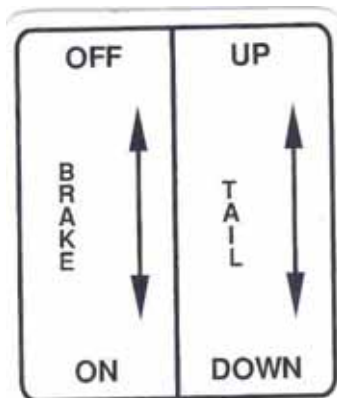
C



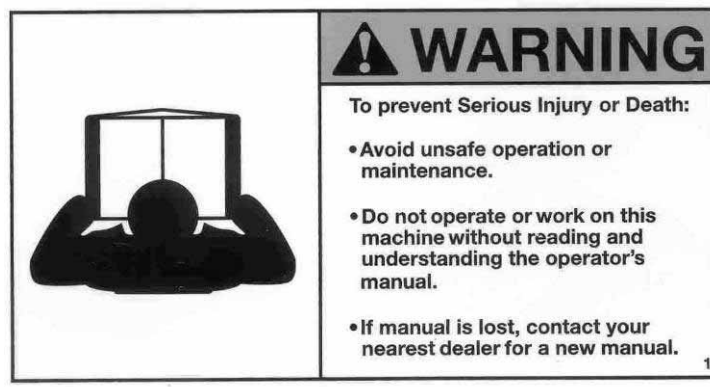
D



E



F



G Both Sides



H

Amber Reflector Strip

I



J

Red Reflector Strip



- Keep safety signs clean and legible at all times
- Replace safety signs that are missing or illegible
- Decals are available through your Dealer, Distributor or Factory.



Maintain proper tire pressure 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 as the original as the brakes may or may not release. (We have found $\frac{3}{4}$ " diameter difference between brands)



Remember

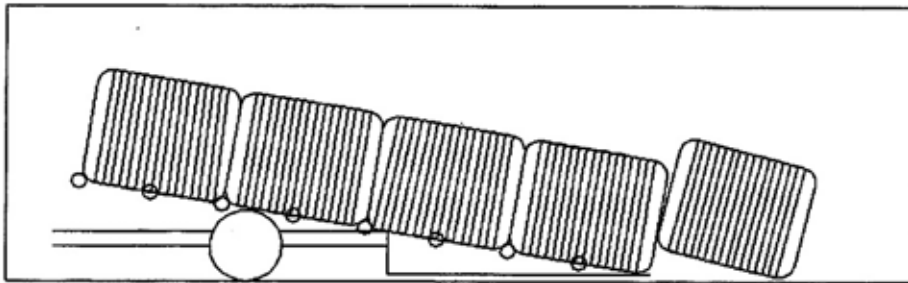
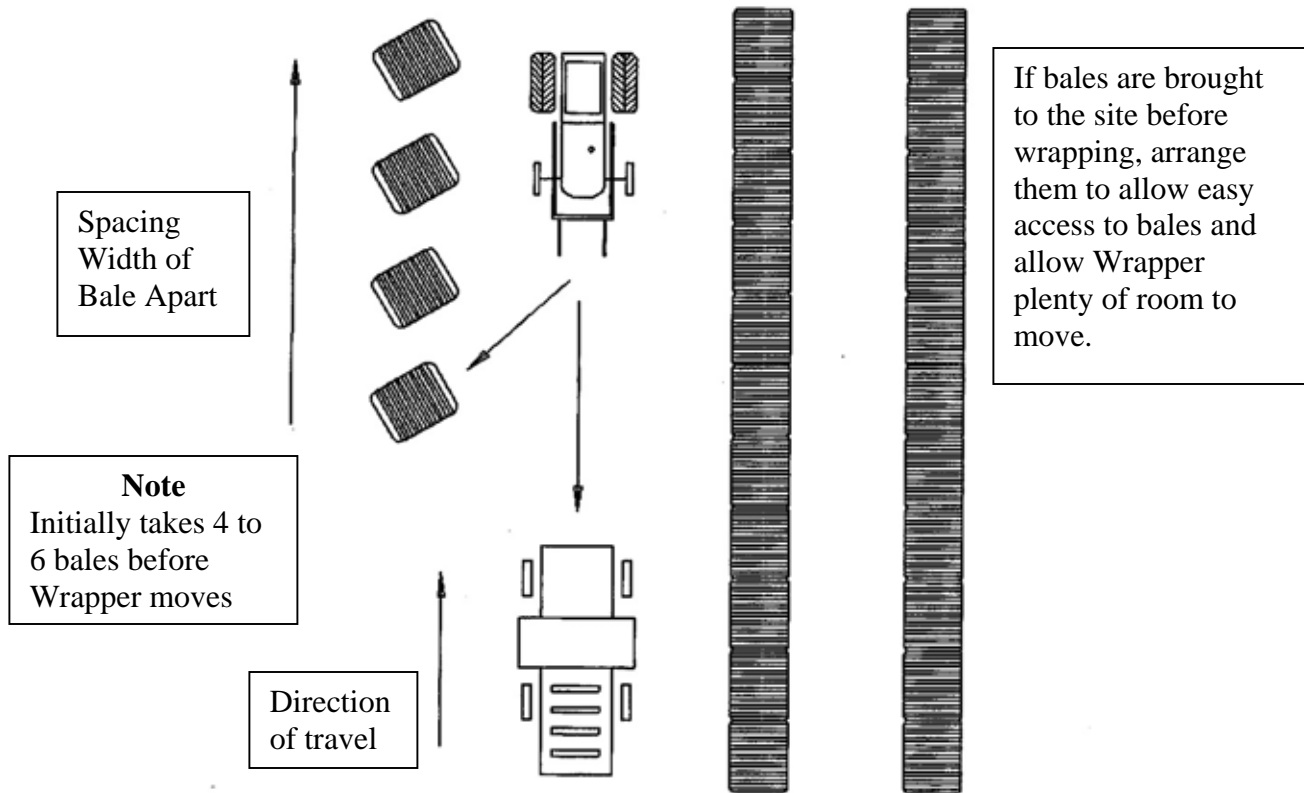
Your best assurance against accidents or damage to the machine is to know how it operates. If you do not understand a portion of the manual or a function of the wrapper please contact your dealer or an experienced operator.



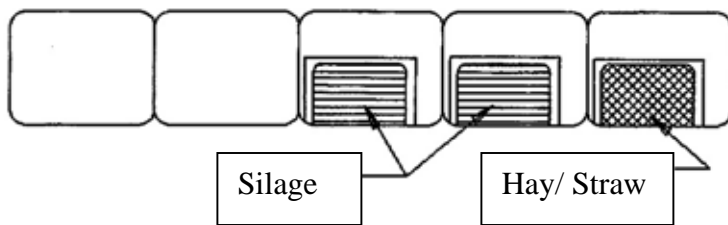
Before Operation

- 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 stick and push the table switch down to start the cycle. Do not reach in and push the switch paddle down by hand.

Tube Line Set up



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



Operating the Model TL5500 X2

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 to wilt silage than to make dry hay. This also extends the working day, as the correct moisture to bale 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 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, 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 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 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 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 Model TL5500 X2 will wrap bales up to 5 ½' 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 diameter to 4-4 ½', even though the wrapper will handle larger size.

Square Bales

The Model TL5500 X2 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 bale square bales of silage.

Bales, which are approximately 4' wide and 2' high can be stacked two high for wrapping, **one drawback**, the ends of the bales tend to be rounded somewhat and will form an air tunnel the full length of the row.

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



Recommended Operating Procedure

We suggest the following method for operating the TL5500 X2 Tube-Line Wrapper.

- Park the wrapper where you want the end of the row to be, facing in the appropriate direction.
- Fold in the first section of the tongue and fasten the bracket into the hydraulic steering slider with the pin that held the tongue.
- Undo the tail Tiebar hairpin and lay the bar over the rear axle and put the hairpin back into place to prevent loss.



Danger: To prevent injury!

Prior to lowering the tail section, be sure to check that all bystanders are standing clear!!

- Lower the tail section using the manual operating valve.



Caution!! 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**
- Turn control panel to “man” or stop the engine when changing plastic rolls. Never leave it in “auto” as your helper may set a new bale on the table or press the start button on the remote.



Installation of Plastic



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.

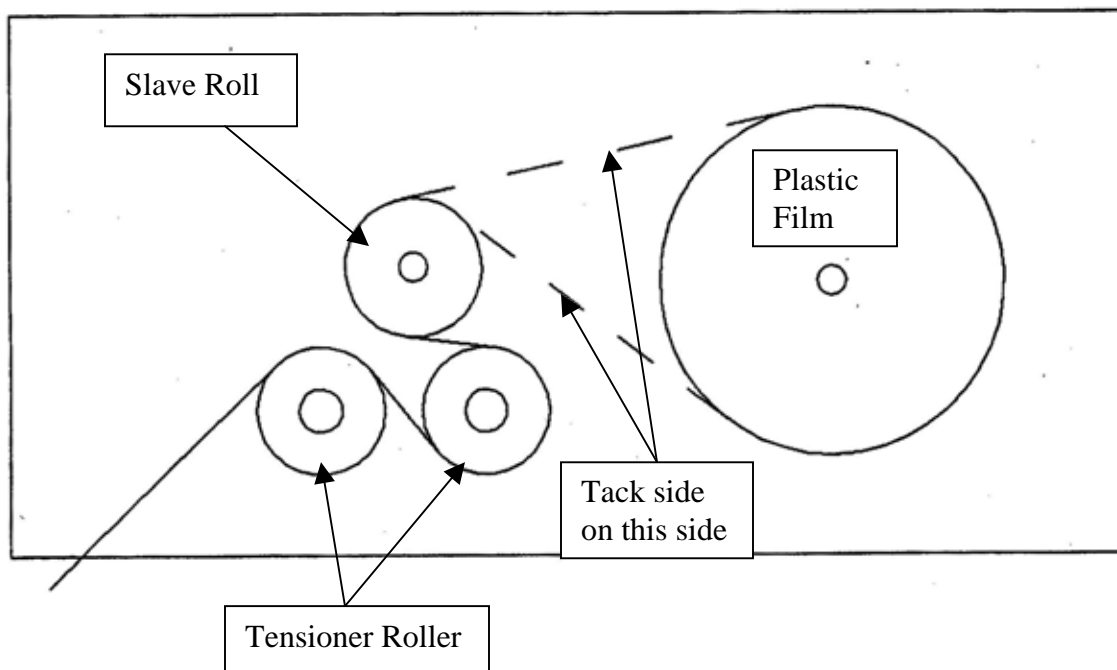
The roll of plastic should be installed with the *tack* on the inside of the plastic film next to the bale of silage. The plastic then passes over the slave roller and is threaded through the two metal rollers on the Tensioner as shown in the diagram.

The two metal stretcher 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:

1. 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 retighten the bearings and loosen the locking collar on the roller shaft this will allow the shaft to slide in the bearing; retighten the bearing collar. The gears can also be meshed too tight; this can be fixed by slightly loosening one set of bearing bolts and 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 built 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.

Roll of plastic may catch on the bottom of the bale. If the 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 "Man"



Danger!! When the machine is in manual mode the safety door switches and the film sensor (if so equipped) Do Not Function.

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

Bale Guide Bars/ Riser

The bale guide bars are designed to align the round bales as the bales are set on the wrapper. These bars should be adjusted to the narrow setting to wrap round bales up to 5ft diameter. For bale larger than this use the wide setting.

Caution! It is important that the bale sit firmly on the bars, 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.

When wrapping square bales use the narrow setting and change the switch plate to the top.

To Wrap Bales with Model TL5500 X2 A (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 of bales. These bales can be picked up and placed on the wrapper later after the line has formed.

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 4ft of plastic through each stretcher and tie it under the twine on the bale. Or tie it to the bracket at the control panel at decal G page 4.
- With the control panel switch “auto/man” set to “man” turn “forward switch 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 in the “Rotate” button.
- When the ram hits the switch at the end of the stroke the forward motion on the cylinder will stop. (This switch can be moved on the slider arm to accommodate your needs). More about this later.
- With the switch set to “man” the switch buttons will have to be turned and/or pushed and held, when you let them go the function will stop.
- Turning the reverse switch 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 on the bale table. As the bale depresses the table trigger the ram will start automatically. Adjust the second slider switch to start the wrap cycle at the same time that the bale makes contact with the bales on the machine.



Warning!!

To stop the cycle: after the cycle has started in the automatic mode, turn “auto/man” switch to “man” (or if you have the optional remote kit, push the “stop” button on the hand unit to stop the cycle. After the problem is rectified, finish the rest of the cycle in the “man” mode and then return to “auto” mode. (If you press start button on the hand unit it will also start the ram forward again except if the ram had passed the hoop start switch the hoop will not start with the ram).



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 “man” these switches are bypassed.



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 turns as this prevents the bales from being tightly packed together. The steering speed can be adjusted with the needle valve at the manifold block.

- 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 table trigger switch should be unplugged. When the control panel “auto/man” switch is on “auto” the bale can be placed on the table without the cycle starting. After the bale has been placed on the table 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 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. The Honda engine does not have an electric ignition therefore the key can be left “on” without the battery draining. The 20hp engine has an electric fuel valve and the **key** needs to be “off” when the engine is not running, as the valve will drain the battery.



Slider Switch

Adjust the second 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 the wrap motor, and reverse the ram cylinders. –**TIP**- Adjust the rear switch so that the junctions of the 2 bales are in the middle of the wrap chamber. It is possible to adjust the second switch so that the wrap will start just before the bales start moving through the wrap chamber, thereby putting extra plastic on the joint of the bale. The front slider switch is set to stop the ram retract stroke after the engine has throttled down and before the cylinder bottoms out.



Brake

The brake is operated, by using the brake hydraulic valve. Moving the hydraulic lever apply oil pressure to the 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 the wheels. Open the ball valve and **RELEASE BRAKES** when the row is finished and prior to transporting the wrapper.



To Wrap Bales with Model TL5500 X2 (with manual hydraulics)

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 of bales. These bales can be picked up and placed on the wrapper later after the line has formed.

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 4ft of plastic through each stretcher and tie it under the twine on the bale. Or tie it to the Hoop Post Brace at the triangular hole beside the Control Panel.
- Set the selector valve to “bale only”. This will allow the bale to be moved without the plastic stretcher applying plastic.
- Place this bale on the table. Push it to the hoop.
- As the bale is pushed through the hoop, start the hoop rotating by operating the “wrap” valve
- The bale should be advanced 4” for each rotation of the plastic dispenser. This will apply 4 to 5 layers of plastic.
- When you are familiar with the machine, set the selector valve to “both” and adjust the flowcontrol valve so that the correct amount of plastic is applied.
- If there is a space between the bale just loaded and the previous bale.
 - Set the selector valve to “Cylinder Only”
 - Advance the bale until it contacts the previous bale
 - Move the selector valve to “Both”
- If the bales do not line up then put on extra wrap at the junction of the bales to ensure a good seal.

This also pertains to automatic wrapping

- Careful application of an adequate amount of plastic is critical to give a good quality product.
- Careless application of plastic will result in losses.
- Continually watch the row for dark “windows” indicating that not enough plastic has been applied.

Steering

Similar to the automatic but uses manual valve. (see previous page)

Brakes

Same as automatic: (see previous page)



Pushing off Bales from the Wrapper

- ❖ The automatic wrapper will have to be switched to “man” position for pushing the bale off.



Danger!!

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

- To push off the bales
 - Open the bale pusher
 - Remove the lynch pin from the front push plate arms
 - Unfold the arms to extend the push plate
 - Remove the lynch pin from the top of the arms and swing the X bars onto the pins, replace the lynch pin to secure the X bar
- 1. Push the bale through the wrapper by using the forward button and the wrap button with the automatic machine or with the manual machine with the lever in “both” mode until you have enough plastic on the bale. Continue pushing the bale through the wrap chamber until you have reached the end of the stroke.
- 2. Retract the bale pusher
- 3. Refold the push plate arms and secure with lynch pins at the front arms
- 4. 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
- 5. Close the pusher a second time to push the bales further off the wrapper
- 6. Extend rear extension tubes at the rear of the ram tubes
- 7. Open the pusher and move the 2 x 3 tube to the socket at the rear end of the arms. (Insert the pegs on the arms into the holes in the tube. This will keep the tube from sliding on the arms). Close the pusher to finish pushing off the bales from the tail
- 8. Open the bale pusher, store the 2 x 3 tube in bracket secure with lock pin
- 9. Retract the extensions at the rear of the ram tubes back into the original position and secure with pin.
- 10. Fold up the tail end of the roller table using the “tail” valve and secure with the tie bar
- 11. Undo steering, unfold tongue and insert lock pin



- 12. Make sure the brakes are released before driving away



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.

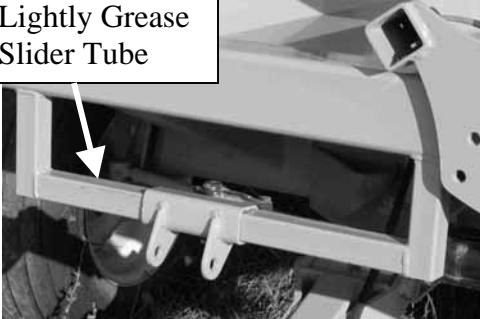
Do Not Tow the Bale Wrapper at Speeds Over 35 KPH



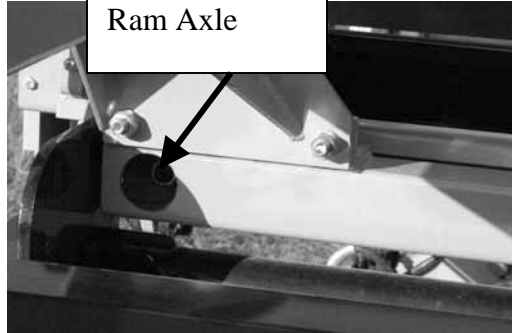
Daily Maintenance

Lubricate all grease points

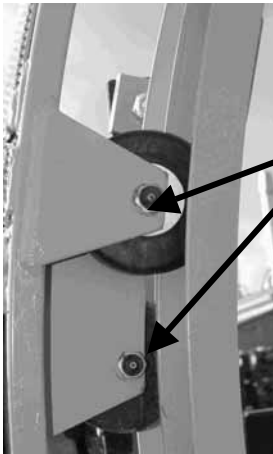
Lightly Grease
Slider Tube



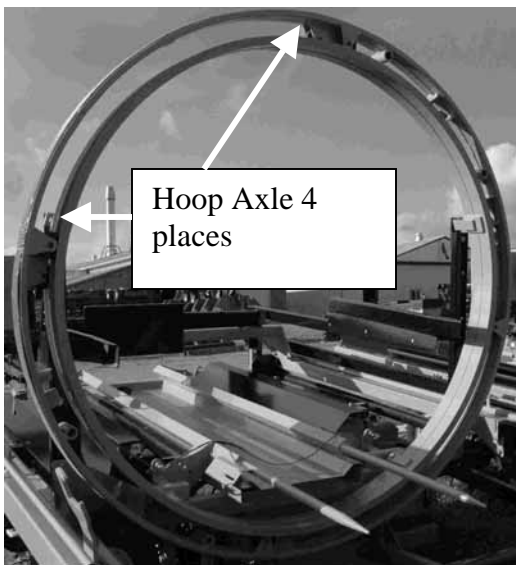
Grease Fitting
Ram Axle



Hoop Axle
2 shots daily

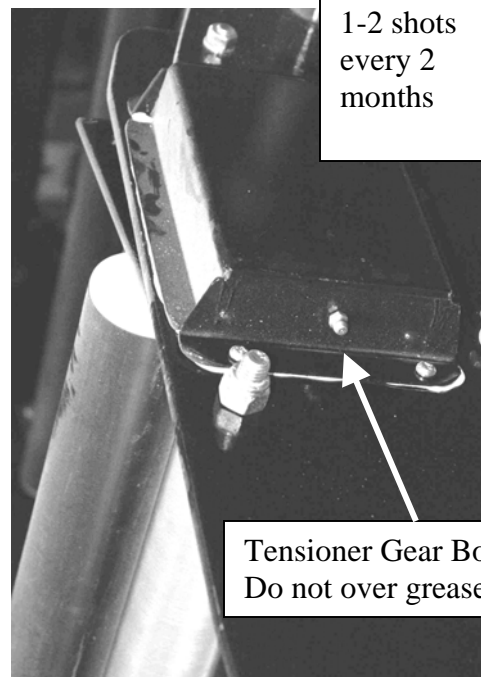


Hoop Axle 4
places



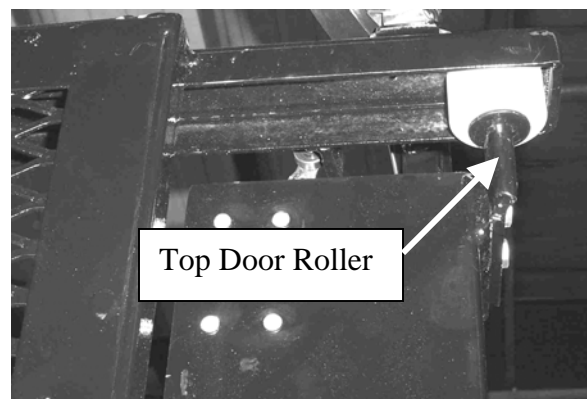
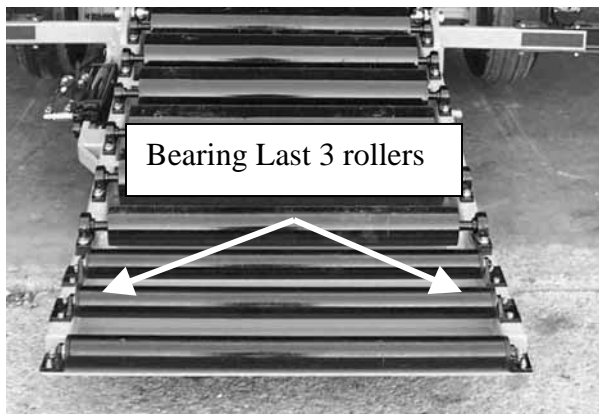
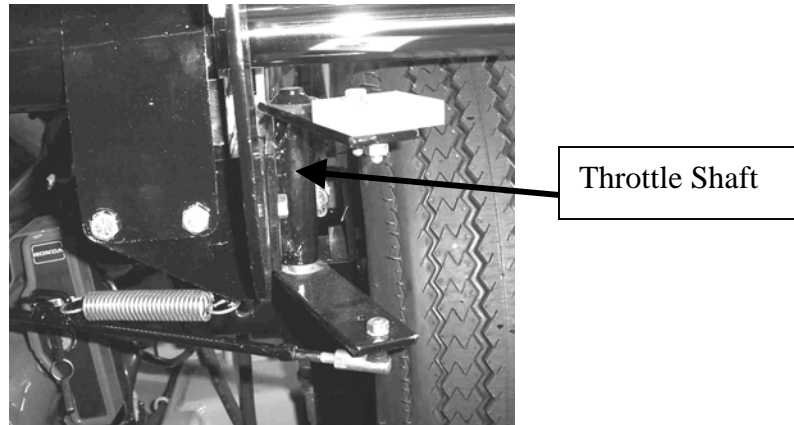
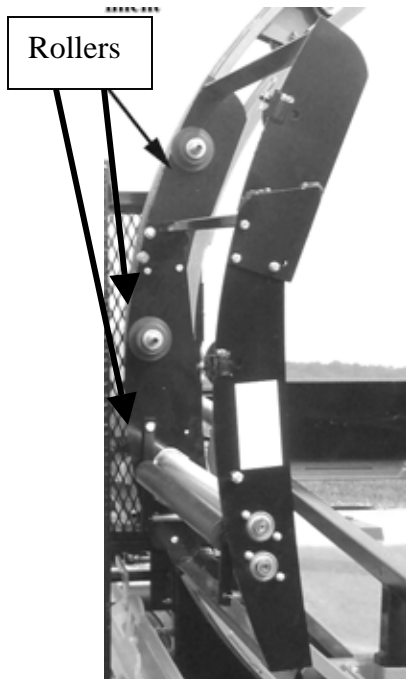
1-2 shots
every 2
months

Tensioner Gear Box
Do not over grease



Points to be oiled

Oil these points occasionally to keep the parts moving freely





Check Hydraulic Level Daily
With Ram Retracted and Tail
Up Oil Level at Full Mark

Fill with SAE #10
Hydraulic Oil

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 TL5500 X2 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 or livestock.

Feeding out

With the TL5500 X2, a loader can pick 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.

Tube-Line 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 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 inert in a landfill and will not pollute the ground water. Manufacturers are making serious efforts to economically recycle silage plastic. Use a recycling service when available. Please do not burn the plastic!

Collect and dispose all plastic in an Environmentally Friendly manner.

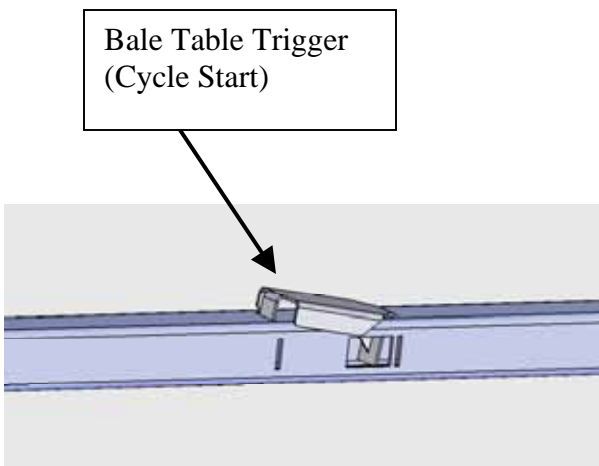
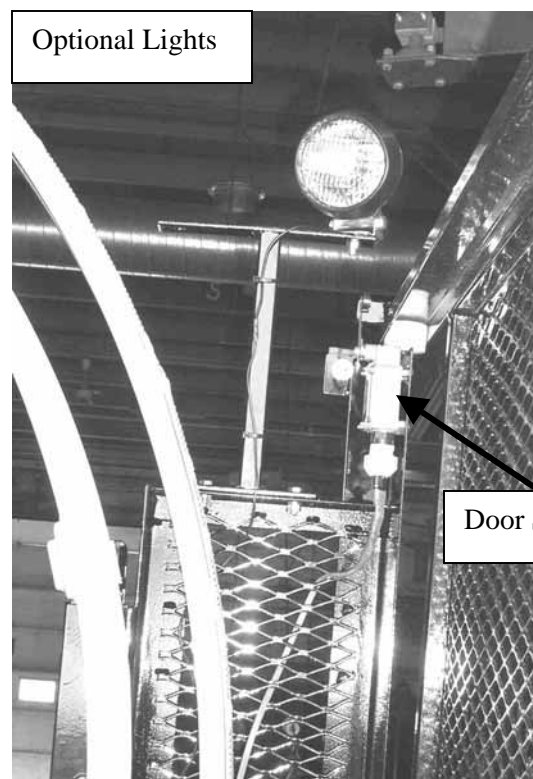
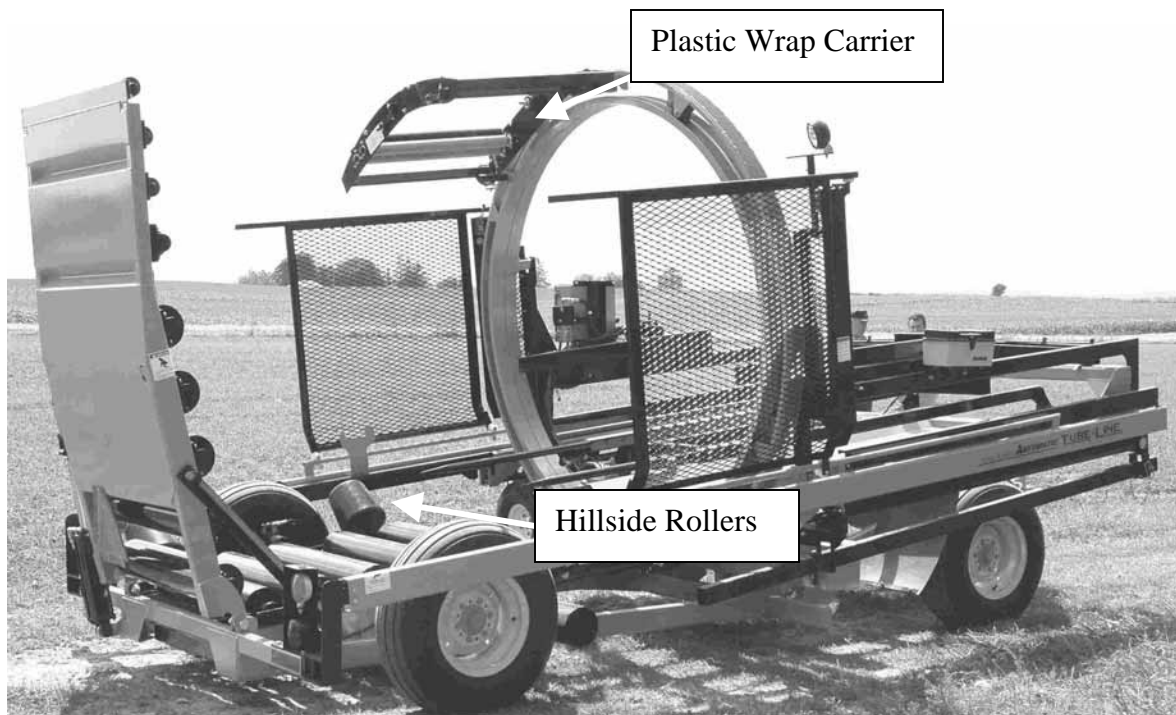
Remember the air and the ground that you contaminate is your visible footprint for many generations!

Unsightly used silage film will encourage complaints.

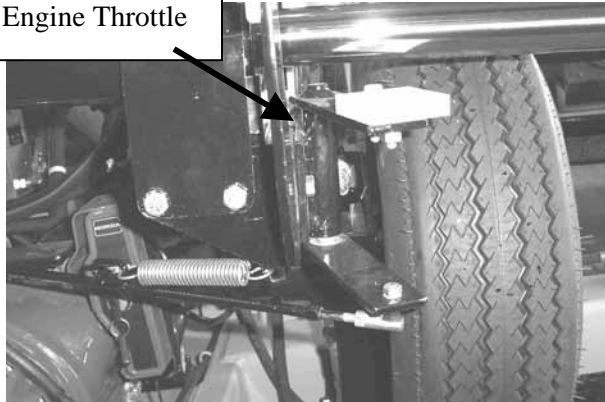
The design of the Tube-Line Bale Wrappers is protected under Canadian Patent 1285862 and USA Patent 4793124

Edited 02/13/2007 for model year 2007

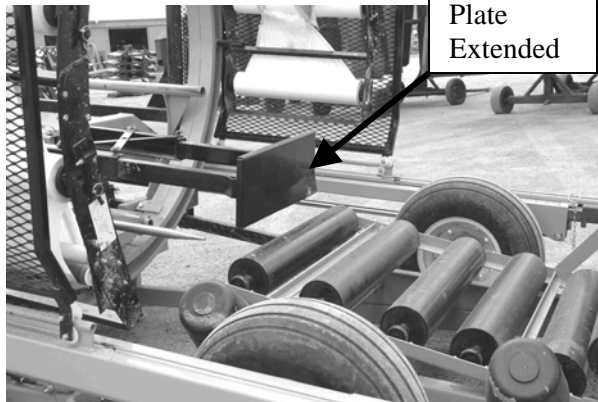




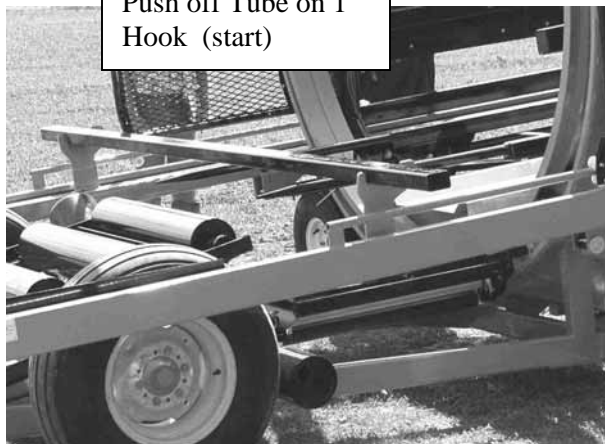
Engine Throttle



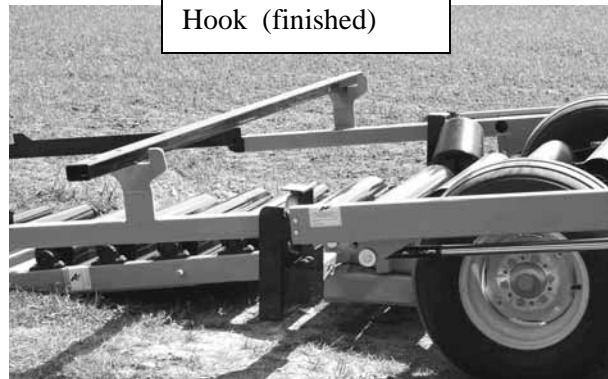
Push off
Plate
Extended



Push off Tube on 1st
Hook (start)



Push off Tube on 1st
Hook (finished)



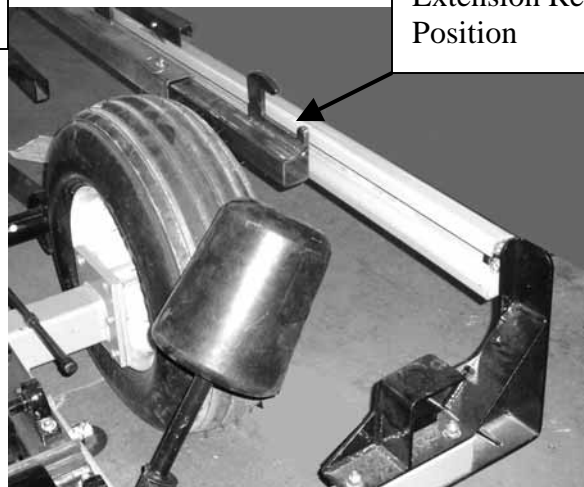
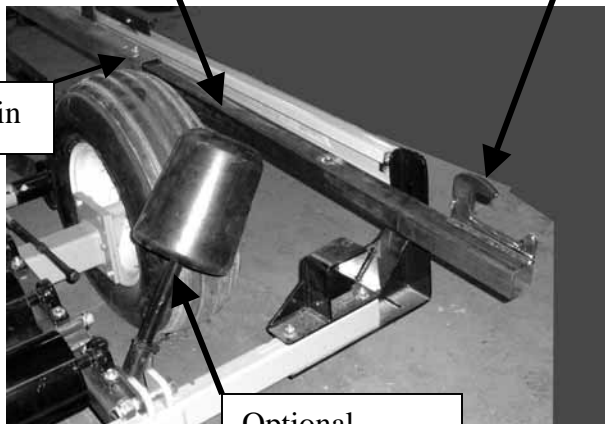
Rear push off
Extension Extended
Position

Push off Tube -
Extension start of
Finish position

Rear push-off
Extension Retracted
Position

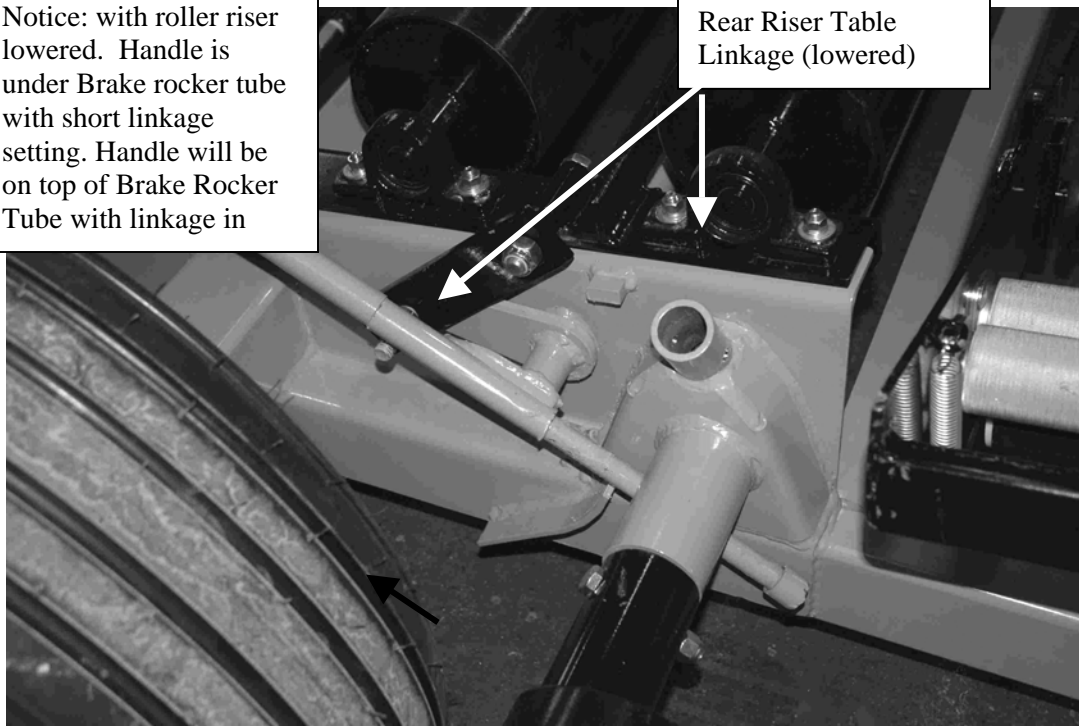
Pin

Optional
Hillside Roller

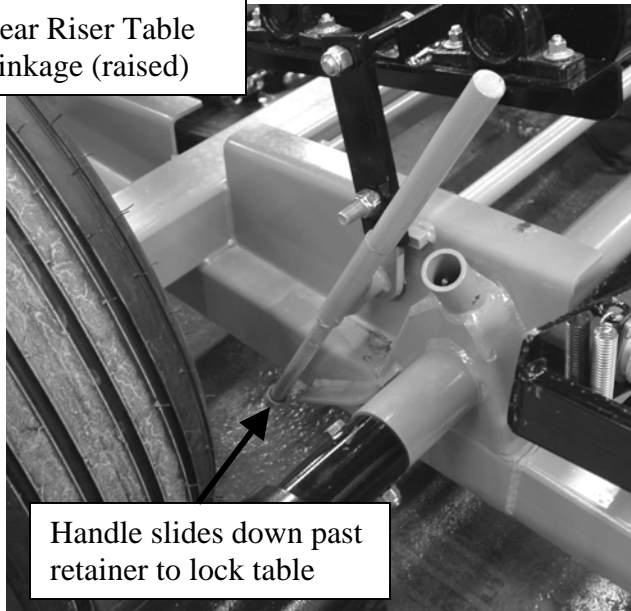


Notice: with roller riser lowered. Handle is under Brake rocker tube with short linkage setting. Handle will be on top of Brake Rocker Tube with linkage in

Rear Riser Table Linkage (lowered)

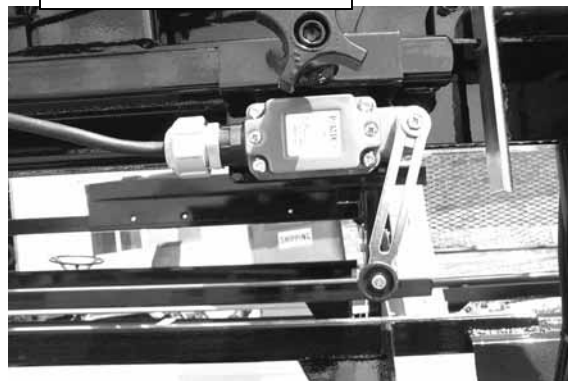


Rear Riser Table Linkage (raised)



Handle slides down past retainer to lock table

Limit Switch at stroke end



Notes

Electric Solenoid valves can be manually operated by pushing a small punch into the end of spool and holding it in. **Do Not Use a Hammer!!**



Caution Stay Away From Hoop When Engine Is Running

Inside of Control Panel , control relays are numbered CR1 to CR5 from left to right.

Relay CR1 is wired to table trigger. CR1 will activate solenoid valve to extend ram cylinder. CR2 is wired to switch at the front slider, when ram is extended to this switch CR2 will close, energizing the wrap motor valve. Ram cylinder will extend and wrap motor will turn until ram comes in contact with slider switch at rear, then CR1 and CR2 will turn off and CR3 will turn on. Wrap motor will stop and ram cylinder will retract until ram cylinder trips limit switch at front end of table. All controls will then turn off. Testing can be done by pushing trigger plate and wait until machine goes through cycle, or you can push small square button on the front of relay 1 and let machine go through cycle.

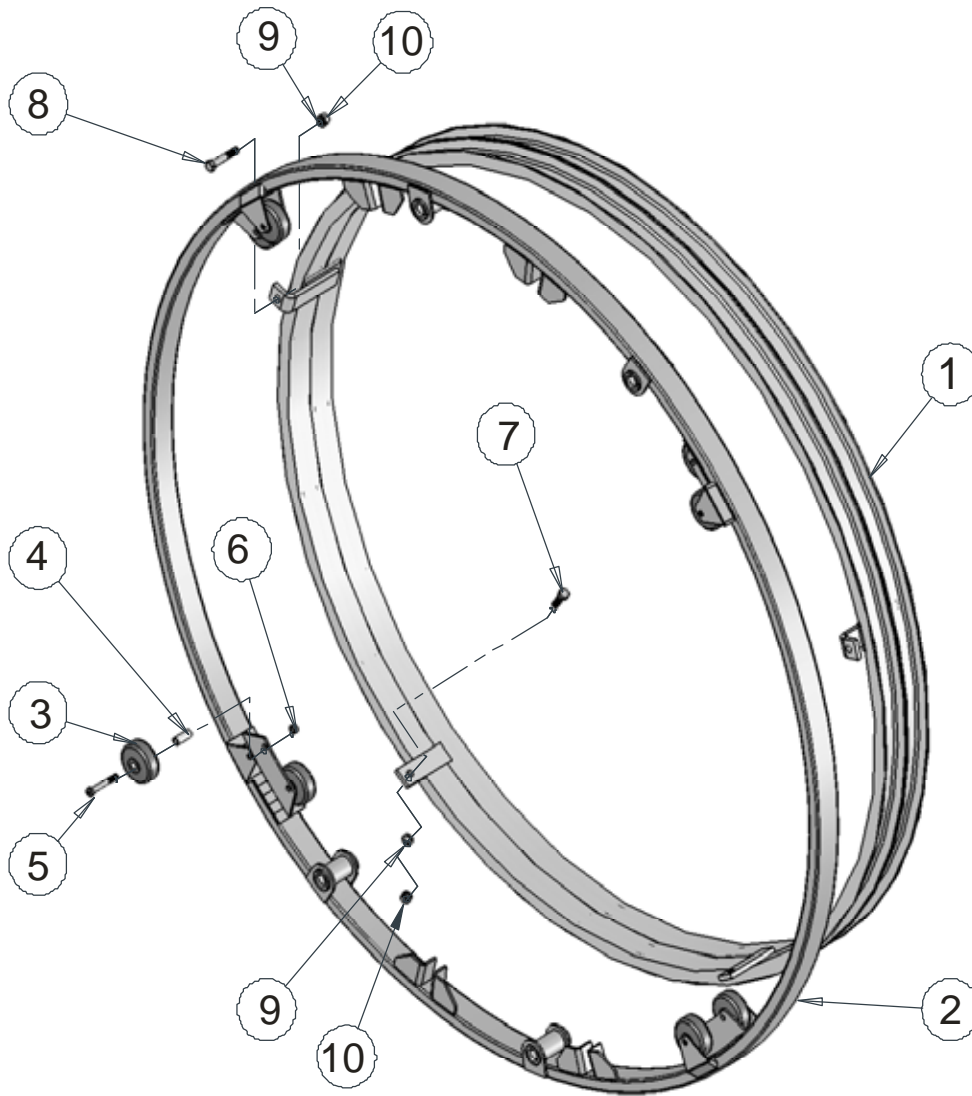
When control relays are activated a small light goes on inside the relay.

When running machine through the cycle and wrapper motor or the cylinders do not work, check flowcontrol valve to see if flow is going to both motor and cylinder.

Engine is stopped by grounding ignition, in case of ignition failure make sure that stop switch wire is not grounded to frame and engine switch is not in stop position.

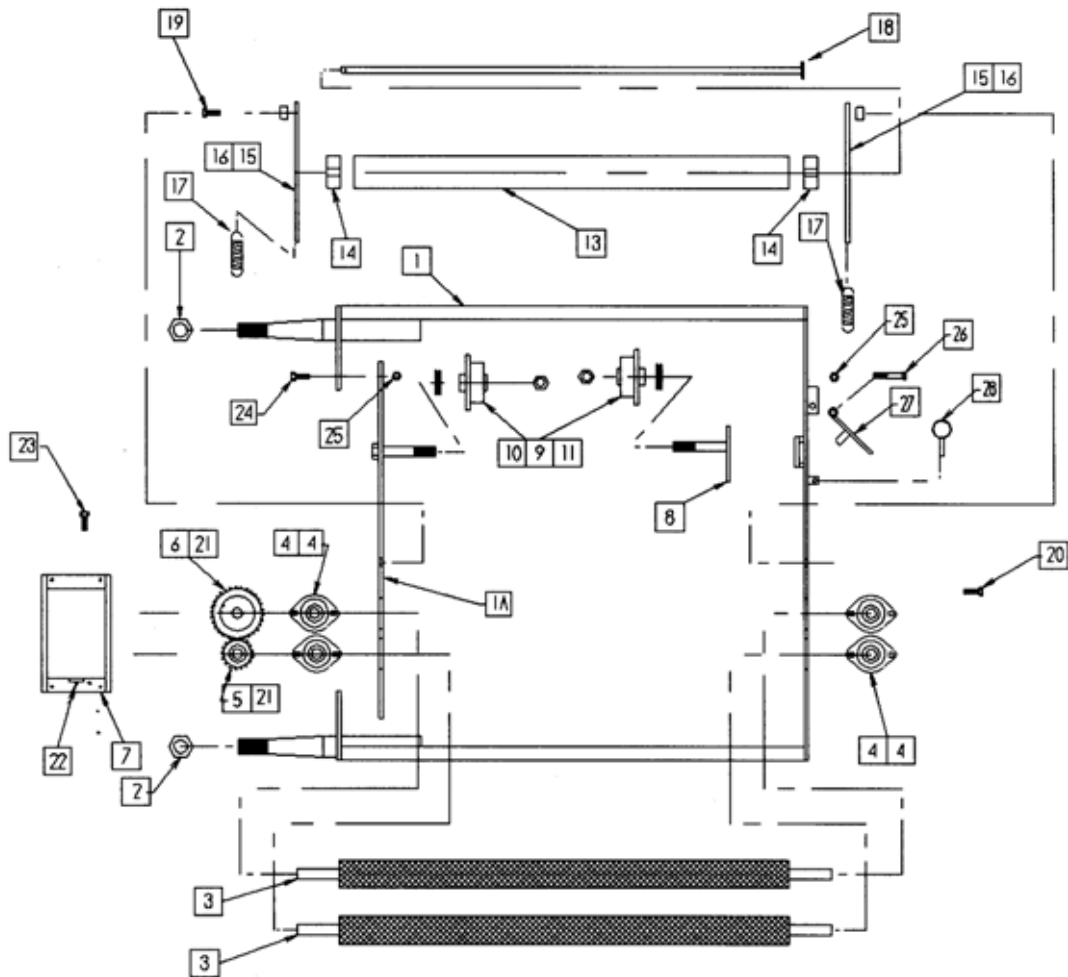
Steering is controlled by switch right/left on control panel through CR4 and CR5 activating coil A or B on steering solenoid valve.

Tube Line 5500 Hoop



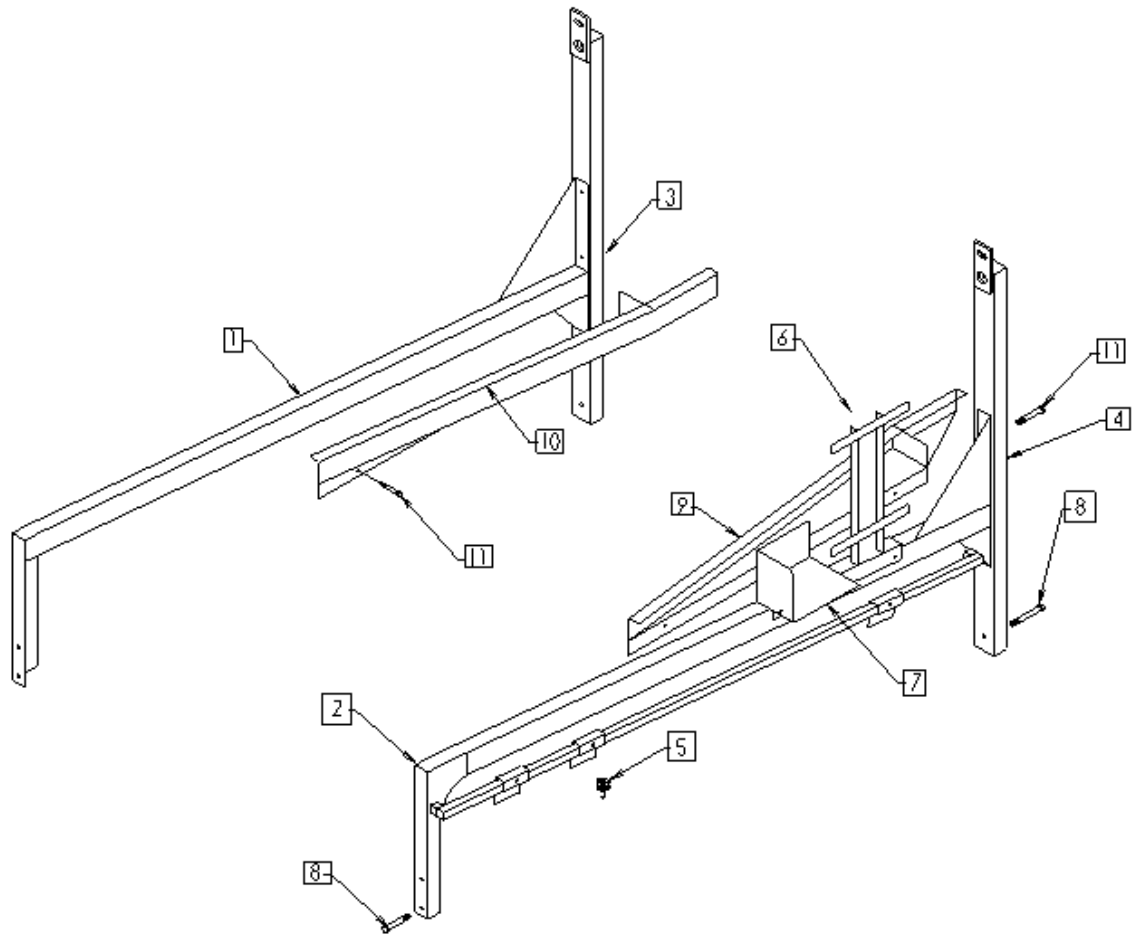
Item No	Description	Part No	Item No	Description	Part No
1	Inner Ring	550-100-002	6	Axle Locknut	1/2 -20
2	Outer Ring	550-301-001	7	5/8 x 2 bolt	
3	Hoop Wheel	500-200-014	8	5/8 x 3 1/2 bolt	
4	Spanner	550-200-016	9	5/8 Lockwasher	
5	Axle Bolt	500-100-016	10	5/8 nut	

Tube Line 5500 Plastic Wrap Carrier



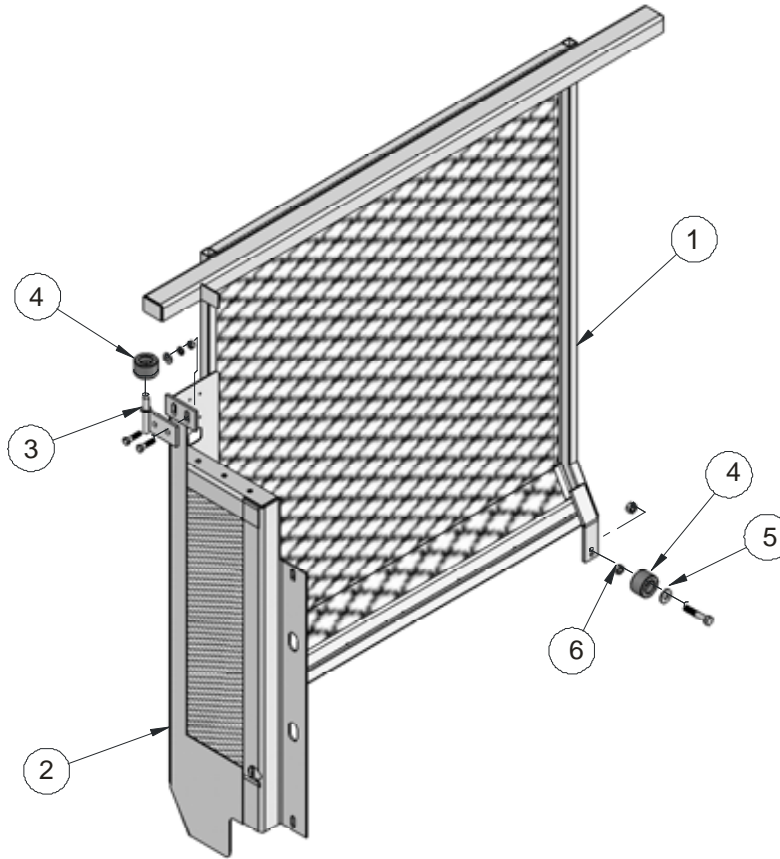
Item #	Description	Part No	Item #	Description	Part No
1	Main Wrap Bracket	550-100-089	15	ABS Bracket	550-100-016
1A	Main Wrap Side Insert	550-200-090	16	Spacer	550-100-017
2	1-14 UNF Casselnut	550-100-005	17	Spring	500-100-135
3	Tensioner Roller	550-100-006	18	Axle Shaft	550-100-018
4	¾ inch Bearing	550-100-007	19	½ x 2 Bolt	550-100-003
5	Small Gear	550-100-008	20	5/16 Carriage Bolt	550-100-019
6	Large Gear	550-100-009	21	3/16 Keystock	550-100-020
7	Gear Cover	550-100-010	22	Grease Fitting	550-100-021
8	Spool Holder	550-200-115	23	10-24 x ¾ Bolt	599-100-006
9	Plastic Wrap Spool	550-200-012	24	3/8 x 1 #5 Bolt	550-200-100
10	5/8 Flat Washer	550-100-013	25	3/8 Locknut	550-200-101
11	5/8 Nylocknut	550-100-014	26	3/8 x 2 ½ Bolt	550-200-102
13	ABS Pipe	550-100-022	27	Latch	550-200-103
14	HMWPVC Bearing	500-100-021	28	3/16 Linch Pin	550-100-104

Tube-Line 5500 X2
Hoop Brace Assembly



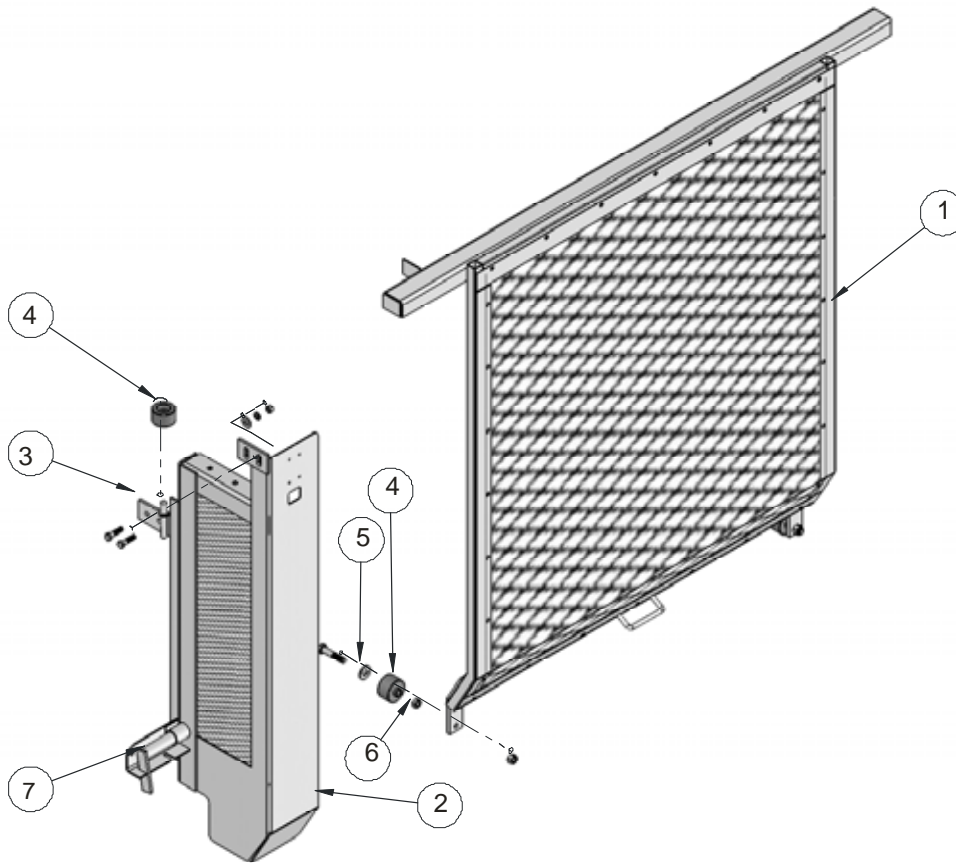
Item #	Description	Part No	Item #	Description	Part No
1	Right Brace	5X2-100-100	7	Manual Control Mount	5X2-100-106
2	Left Brace	5X2-100-101	8	1/2 x 3 bolt	599-100-110
3	Right Hoop Post	5X2-100-102	9	Left Bale Deflector	5X2-100-110
4	Left Hoop Post	5X2-100-103	10	Right Bale Deflector	5X2-100-111
5	Switch Adjuster Screw	5X2-100-104	11	3/8x 3 Bolt	5---100-111
6	Automatic Control Panel Mount	5X2-100-105			

Tube – Line 5500 X 2
Right Safety Guard



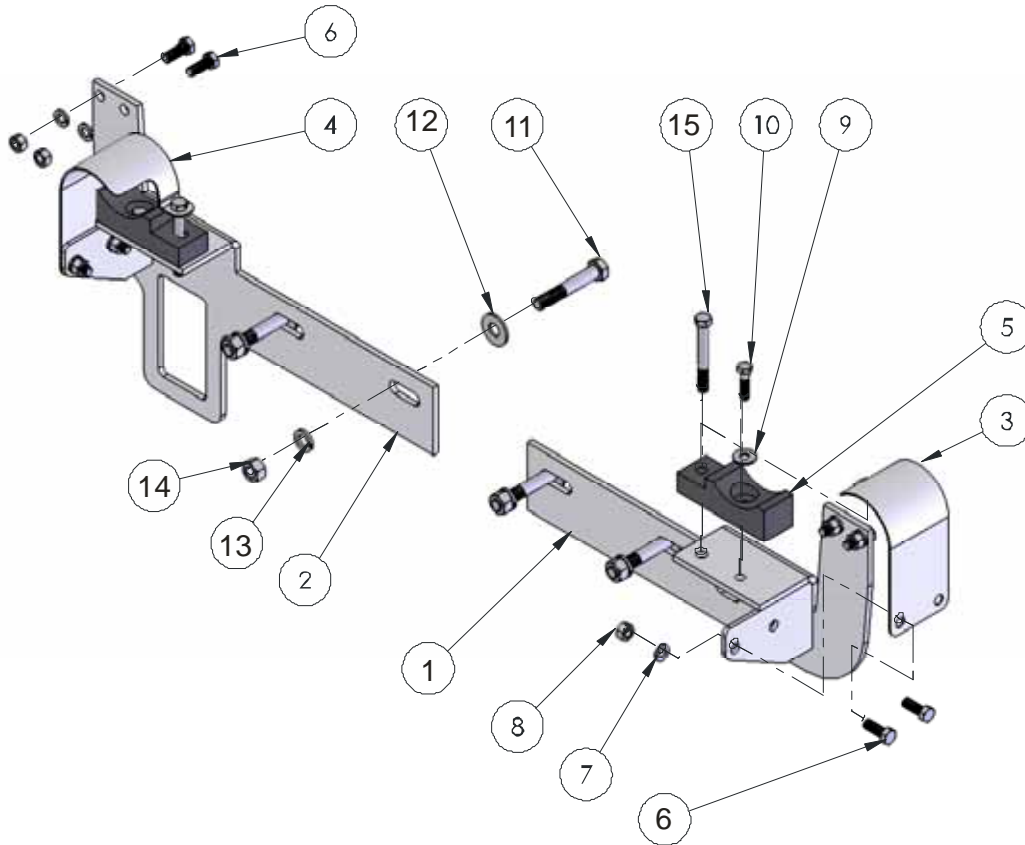
Item #	Description	Part No
1	Safety Door	5X2-301-022 R
2	Safety Guard Bracket	5X2-100-024 R
3	Upper Right Hand Door Bracket	5X2-301-103
4	Door Roller	5X2-301-121
5	½ SAE Washer	550-301-100
6	½ -13 Jam Nut	550-301-101

Tube – Line 5500 X 2
Left Safety Guard



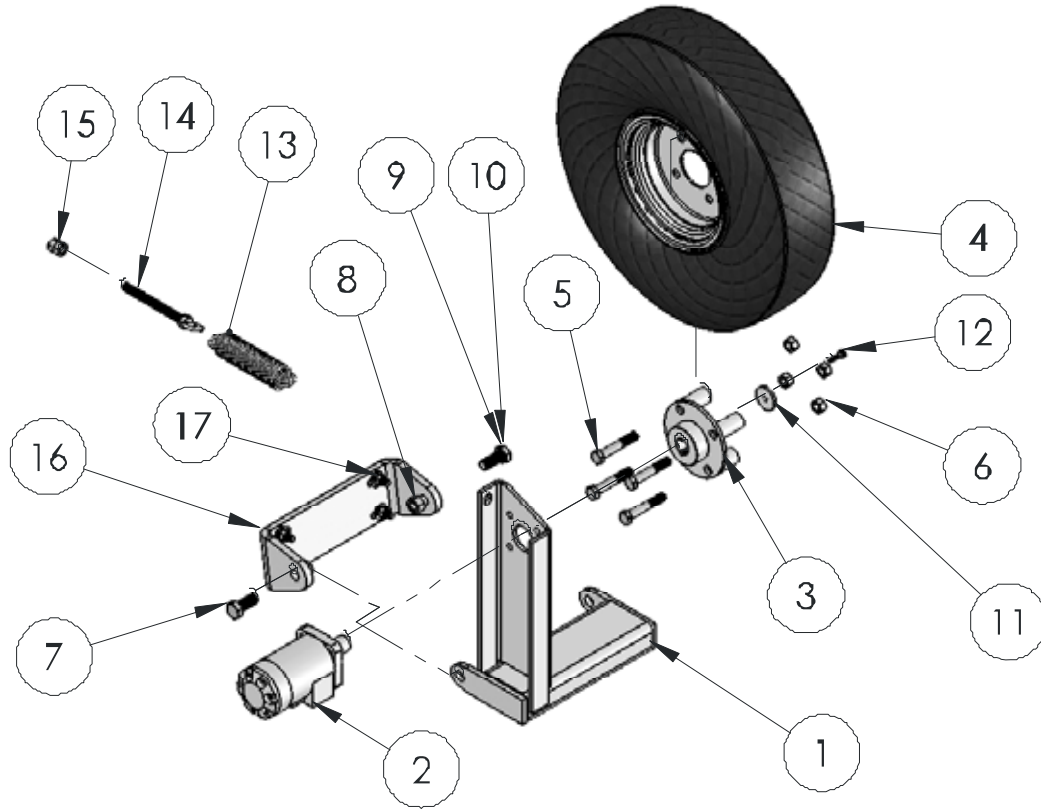
Item #	Description	Part No
1	Safety Door	5X2-301-023L
2	Safety Guard Bracket	5X2-100-025L
3	Top Roller Bracket	5X2-301-120
4	Door Roller	5X2-301-121
5	½ SAE Washer	550-301-100
6	½ - 13 Jam Nut	550-301-101
7	Hoop Lock Pin	550-200-050

Tube – Line 5500 X 2
Ram Cylinder Support



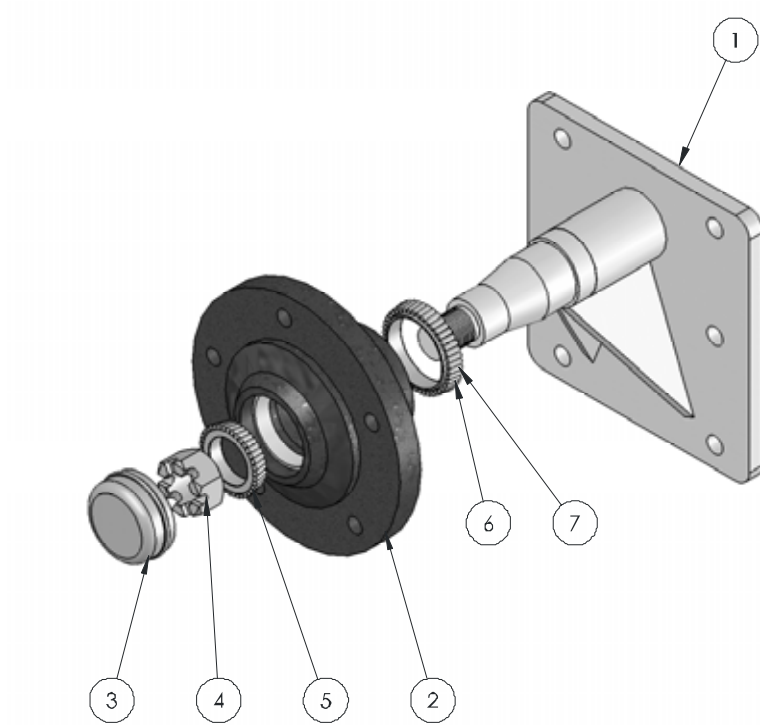
Item #	Description	Part No
1	Right Support Bracket	5X2-301-130
2	Left Support Bracket	5X2-301-131
3	Right Cylinder Clamp	5X2-100-132
4	Left Cylinder Clamp	5X2-100-133
5	Cylinder Support	550-200-109
6	3/8 x 1	
7	3/8 Lockwasher	
8	3/8 Nut	
9	5/16 Flatwasher	
10	5/16 x 1 ¼	
11	½ x 3	
12	½ Flatwasher	
13	½ Lockwasher	
14	½ Nut	
15	3/8 x 3	

Tube – Line 5500 X 2
Hoop Drive



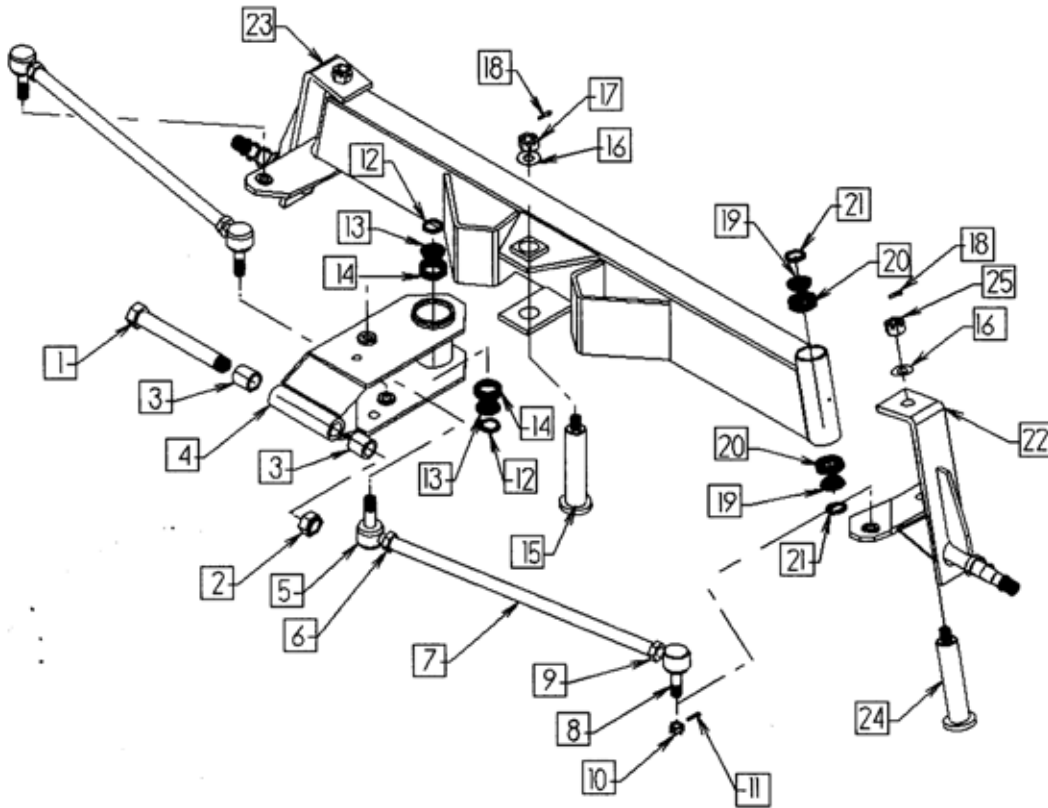
Item #	Description	Part No	Item #	Description	Part No
1	Drive Base	5X2-100-049	11	Check Valve (manual only)	500-100-059
2	Hydraulic Motor	5X2-100-050	12	Wheel Washer	500-100-060
3	Wheel Hub	500-100-051	13	1/4 x 1 Bolt c/w Lockwasher	
4	Drive Wheel	500-100-052	14	Relief Valve (manual only)	500-101-222
5	1/2 x 3 UNF Bolt	500-100-053	15	Wheel Tensioner Spring	500-101-231
6	1/2 Wheel Nut	500-100-054	16	Spring Tensioner Bolt	500-101-232
7	5/8 x 1 1/2 Bolt	500-100-055	17	1/2 Nuts	
8	5/8 Locknut	500-100-056	18	Drive Base Mount	5X2-100-090
9	3/8 x 3/4 Bolt		19	3/8 x 1 1/2 Bolt	
10	3/8 Lockwasher				

Tube Line 5500 X 2
Axle / Spindle / Hub



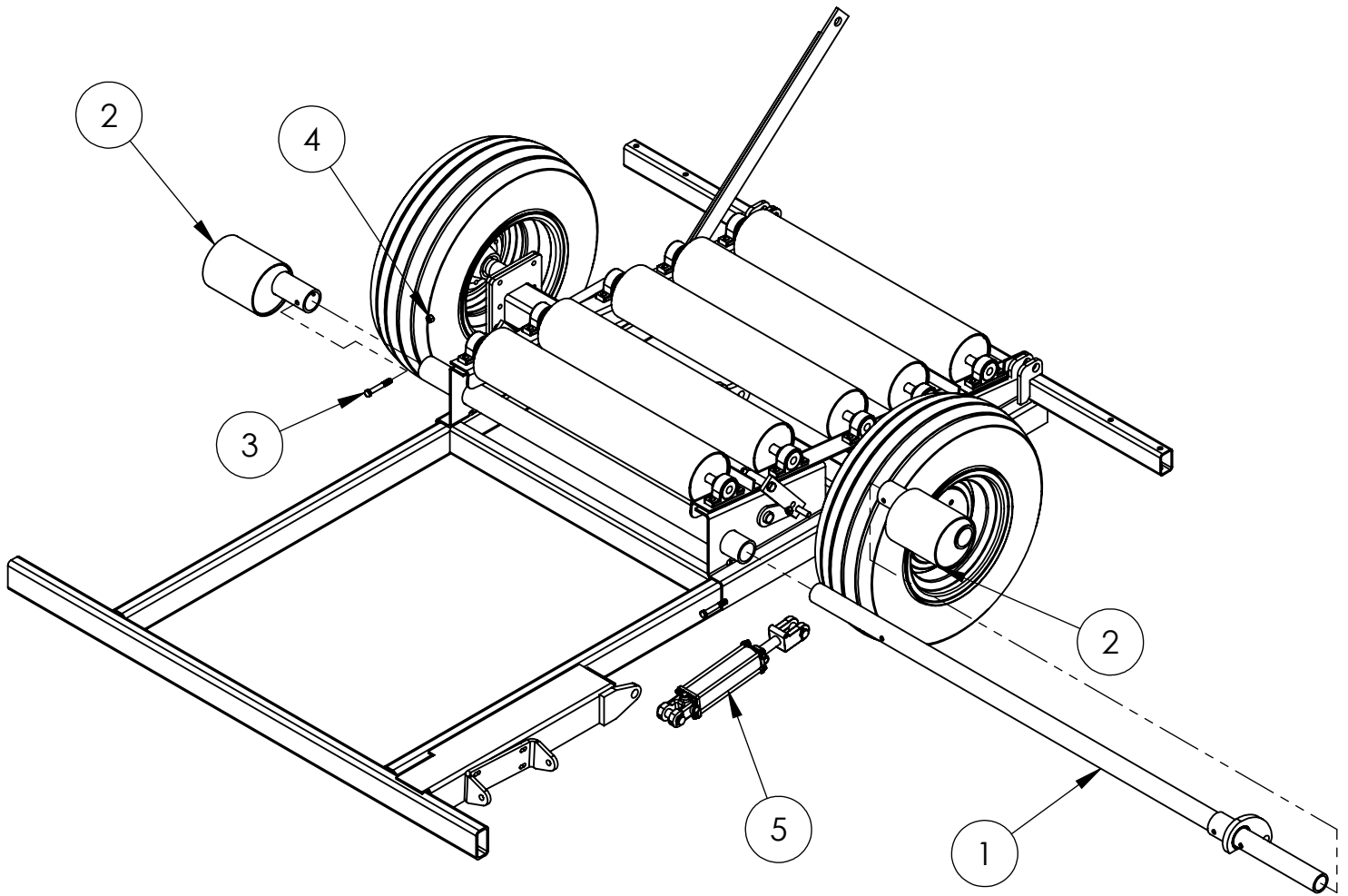
Item #	Description	Part No
1	Spindle	550-200-001
2	Hub	500-100-066
3	Dust Cap	500-100-073
4	Castellated Nut	500-100-070
5	Outer Bearing	500-100-068
6	Inner Bearing	500-100-064
7	Inner Seal	500-100-063

Tube Line 5500 X 2 Front Steering



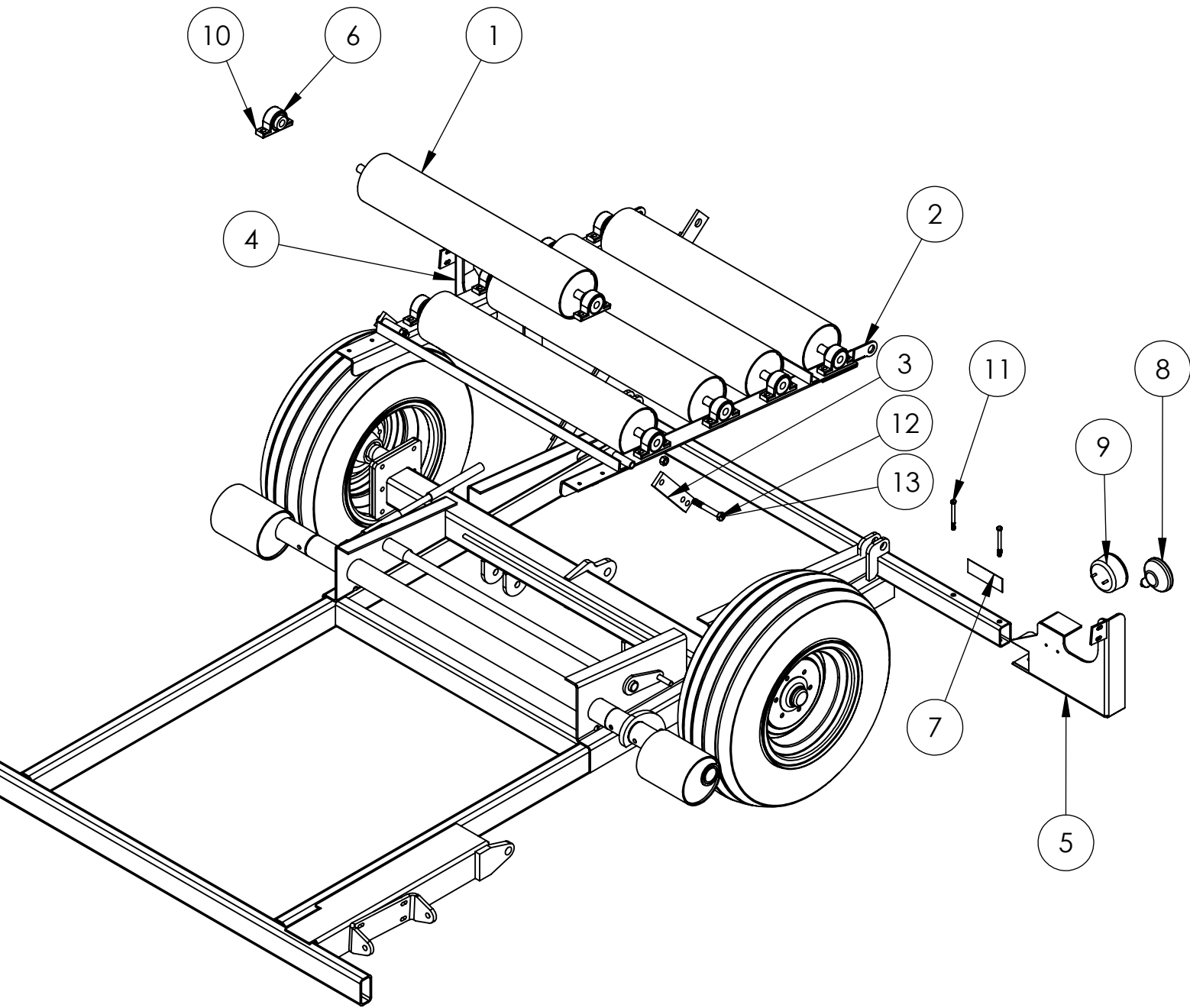
Item #	Description	Part #	Item #	Description	Part #
1	7/8 x 8 Bolt	500-100-152	13	Tongue Bracket Timkin Bearing	550-111-010
2	7/8 Locknut	500-100-153	14	Tongue Bracket Timkin Cup	550-111-009
3	Tongue Bracket Bushing	550-111-012	15	Tongue Bracket Pin	550-221-013
4	Tongue Bracket Assy	550-221-008	16	13/16 Flatwasher	550-111-014
5	Tie Rod End Right Thread	550-111-006	17	Tongue Bracket Nut	550-111-015
6	3/4 Jam Nut (NF RH)	550-111-003	18	3/16 x 2 Cotter Pin	550-111-016
7	Tie Rod	550-221-001	19	Spindle Bearing Timkin Cone	550-200-080
8	Tie Rod End Left Thread	550-111-007	20	Spindle Bearing Timkin Cup	550-200-081
9	3/4 Jam Nut (NF LH)	550-111-002	21	Spindle Bearing Seal	550-200-082
10	9/16 NF Slotted Hex Nut	550-111-004	22	Left Side Spindle Assy	550-100-083
11	1/8 Cotter Pin	550-111-005	23	Right Side Spindle Assy	550-100-084
12	Tongue Bracket Seal	550-111-011	24	Spindle Pin	550-100-085

Brake



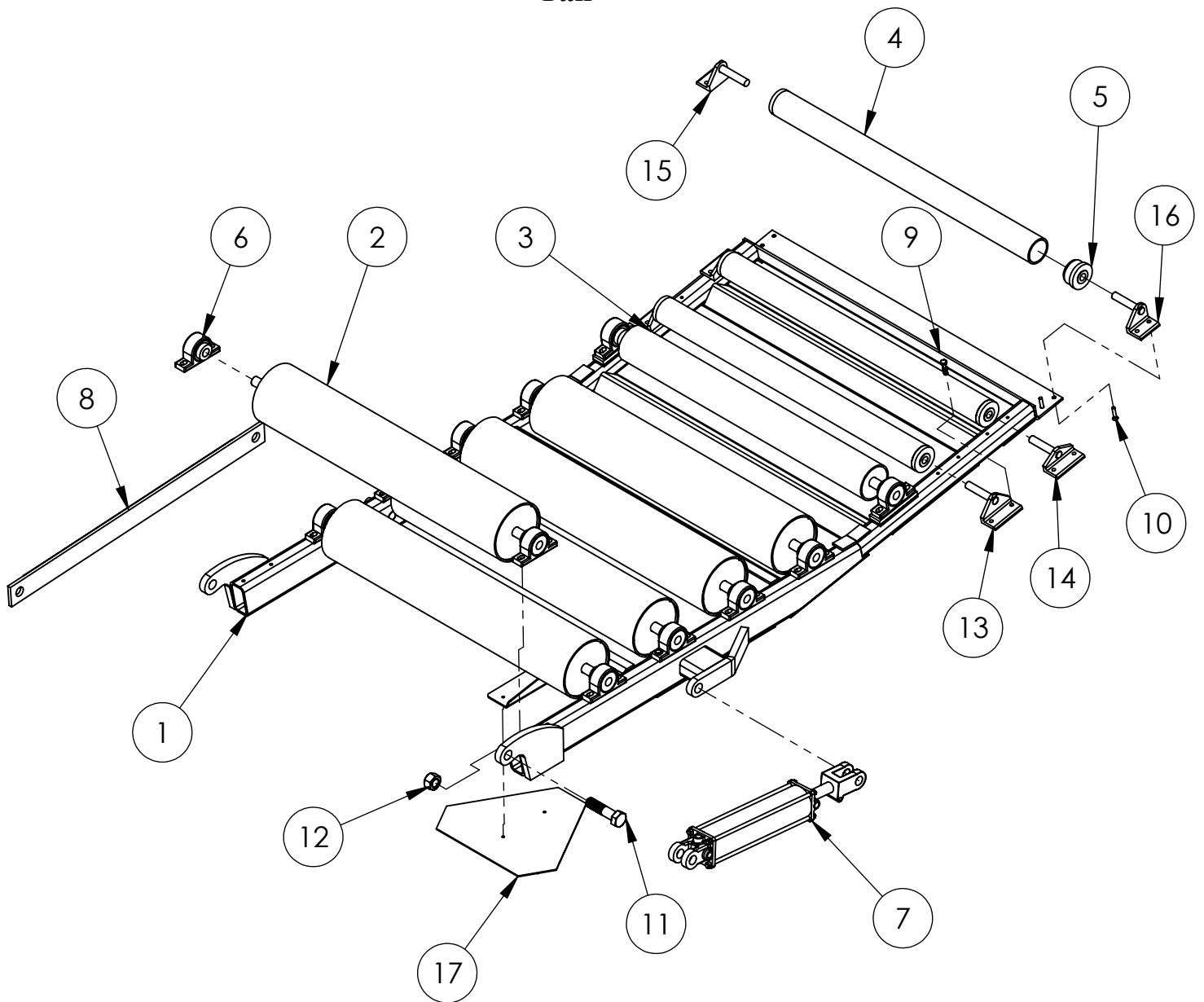
Item No	Description	Part No
1	Rocker Tube	5X2 -100-028
2	Brake Eccentric	550-100-029
3	1/2 x 3 1/2	
4	1/2 Locknut	
5	Hydraulic Cyl	500-100-082

Rear Roller



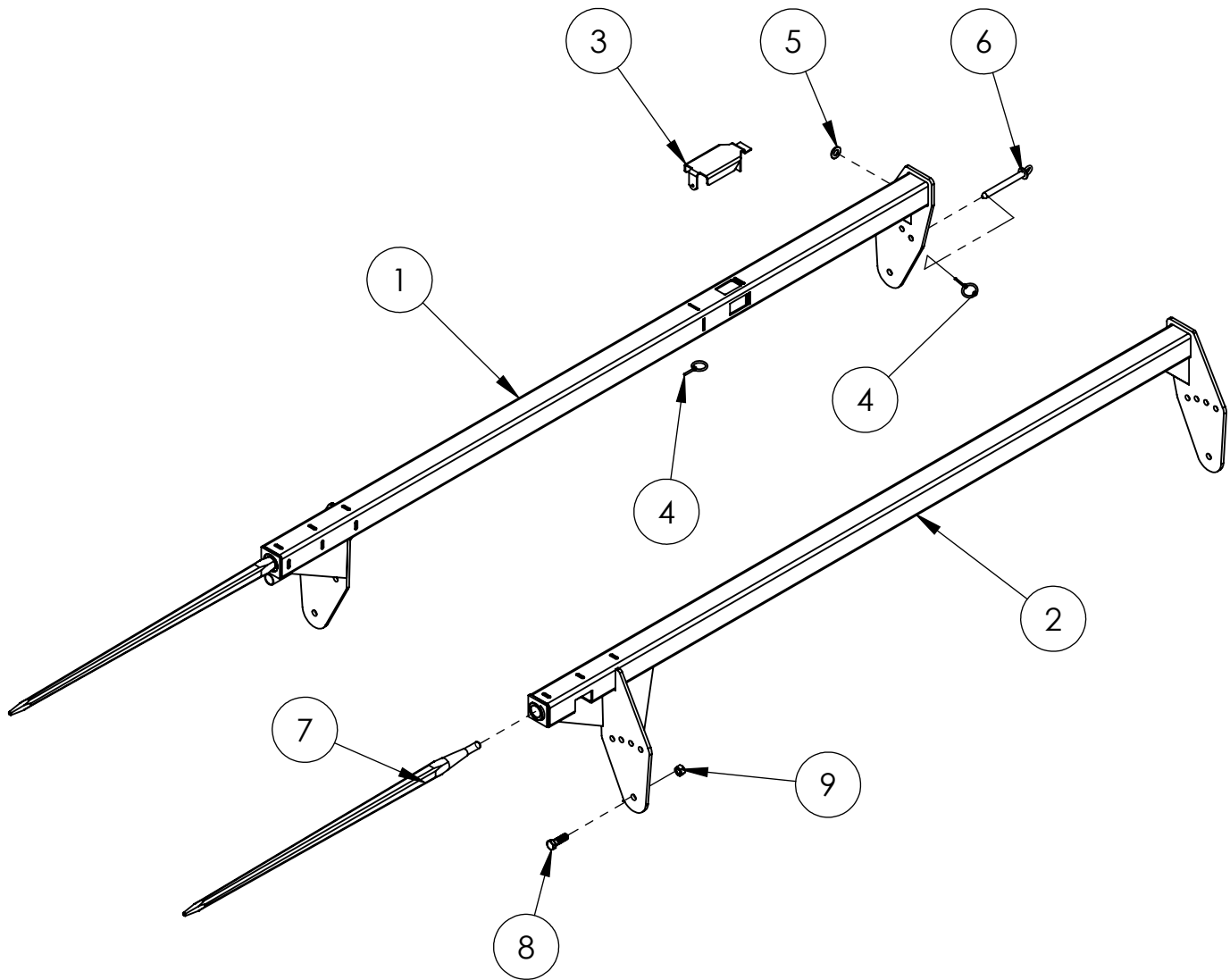
Item No	Description	Part No	Item No	Description	Part No
1	Large Roller	500-100-086	7	Red Reflector	5X2-100-033
2	Riser Frame	5X2-301-007	8	Amber Light	5X2-100-034
3	Riser Link	5X2-301-030	9	Red Light	5x2-100-035
4	Right Rear Light Bkt	5X2-100-031	10	3/8 x 1 1/2	
5	Left Rear Light Bkt	5X2-100-032	11	3/8 x 4	
6	1" Bearing	500-100-030	12	5/8 x 4	
			13	5/8 Locknut	

Tail



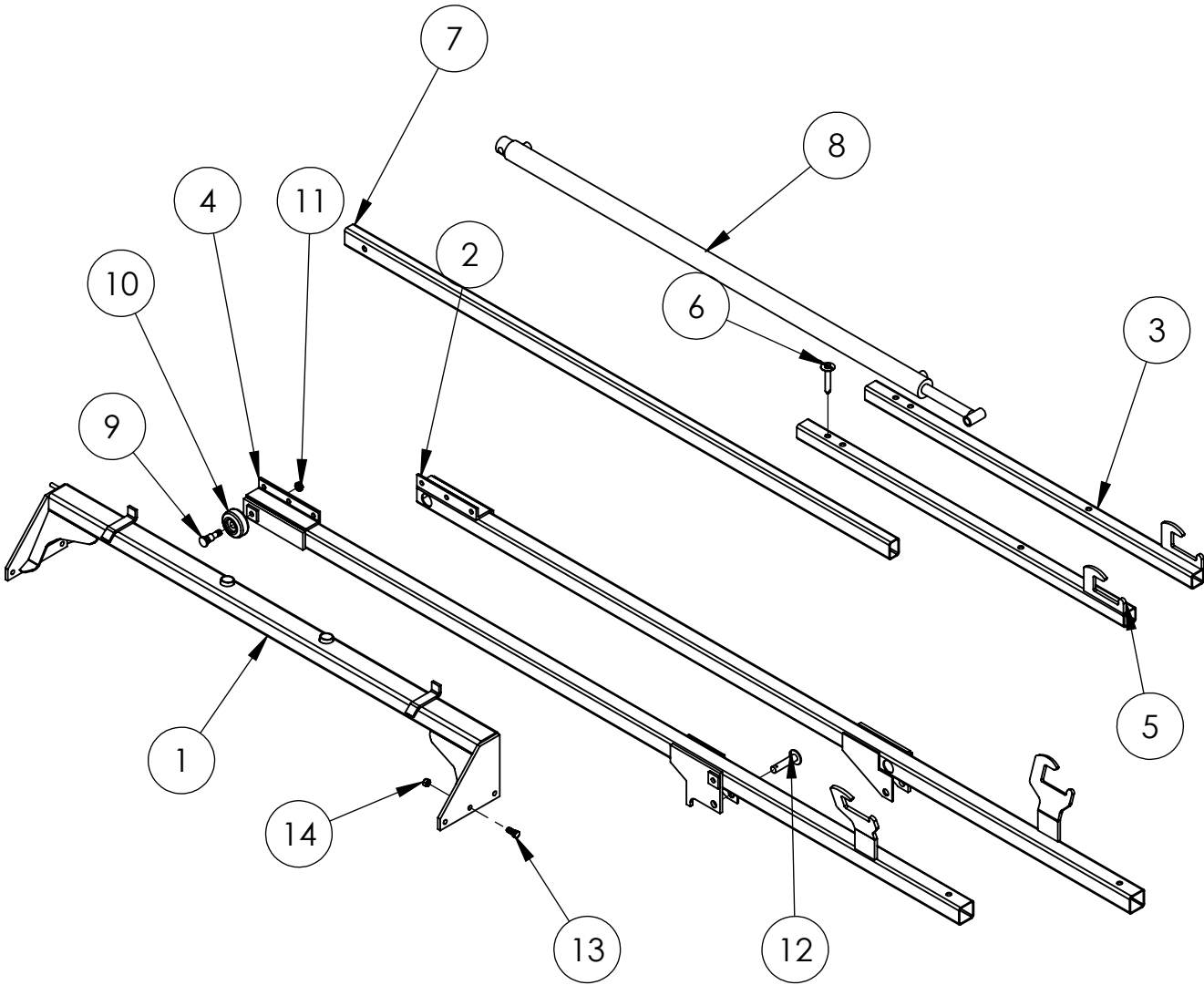
Item No	Description	Part No	Item No	Description	Part No	
1	Tail Base	550-100-033	10	5/16 x 1 1/2 Flathead		
2	Large Roller	500-100-086	11	1x4		
3	4" Roller	500-100-099	12	1" Locknut		
4	2 7/8 Roller	550-200-106	13	#1 Small Roller Bkt	550-200-002	
5	3/4" Nylon Bearing	550-100-092	14	#2 Small Roller Bkt	550-200-003	
6	1" Bearing	550-100-030	15	#3 RH Small Roller Bkt	550-200-004	
7	3x12 Hydraulic Cyl	550-100-107	16	#3 LH Small Roller Bkt	550-200-005	
8	Tail tie Bar	599-100-035	17	SMV Sign		
9	3/8x 1 1/2					

Bale Saddle



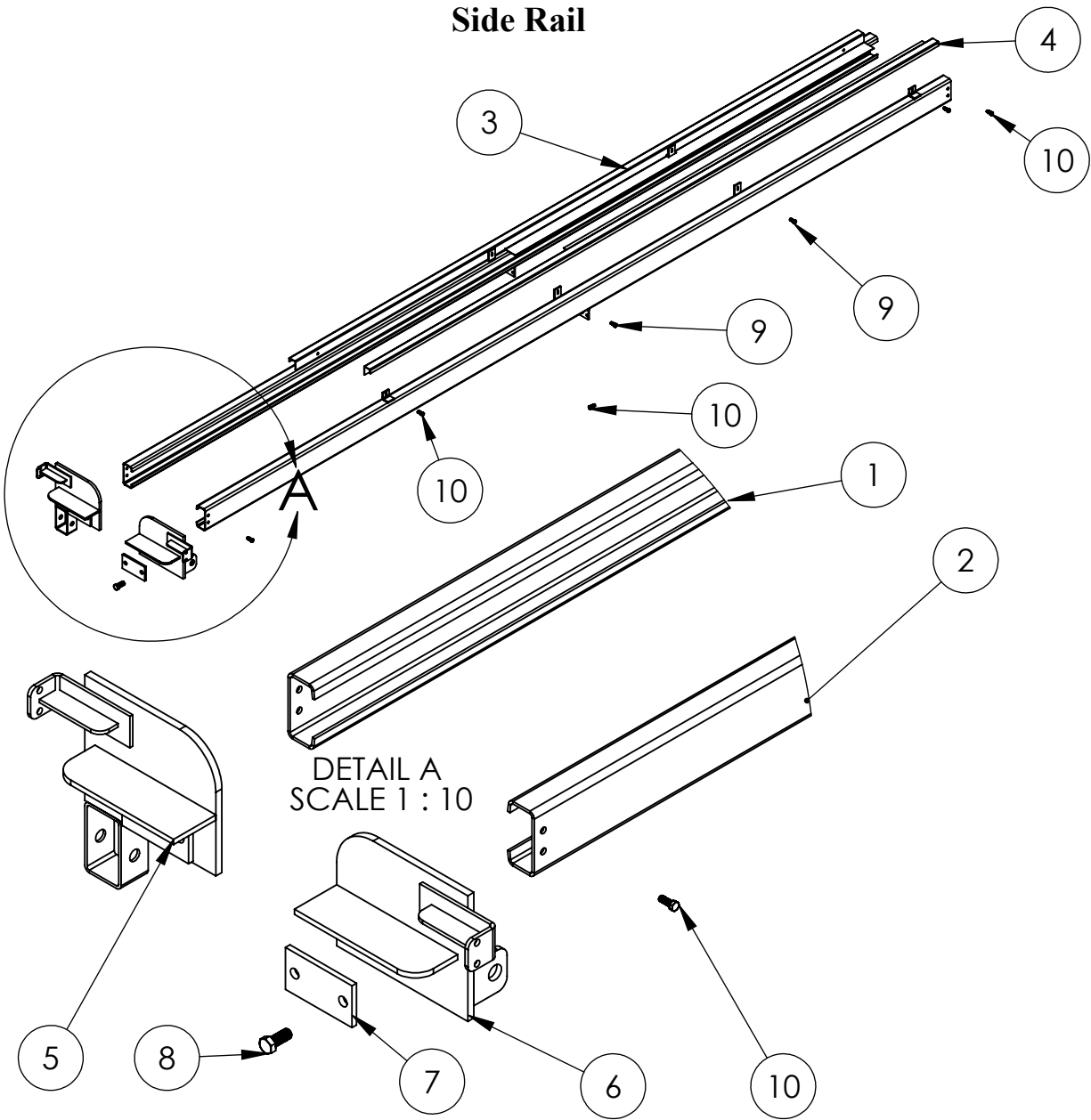
Item No	Description	Part No	
1	Left bale Guide	5X2-301-140	
2	Right Bale Guide	5X2-301-141	
3	Trigger Plate	5X2-301-142	
4	3/16 Lynch Pin	550-200-108	
5	Grommet	5X2-100-143	
6	1/2" Pin	550-200-104	
7	Bale Spear	5X2-301-144	
8	5/8x2		
9	5/8 Locknut		

Bale Ram



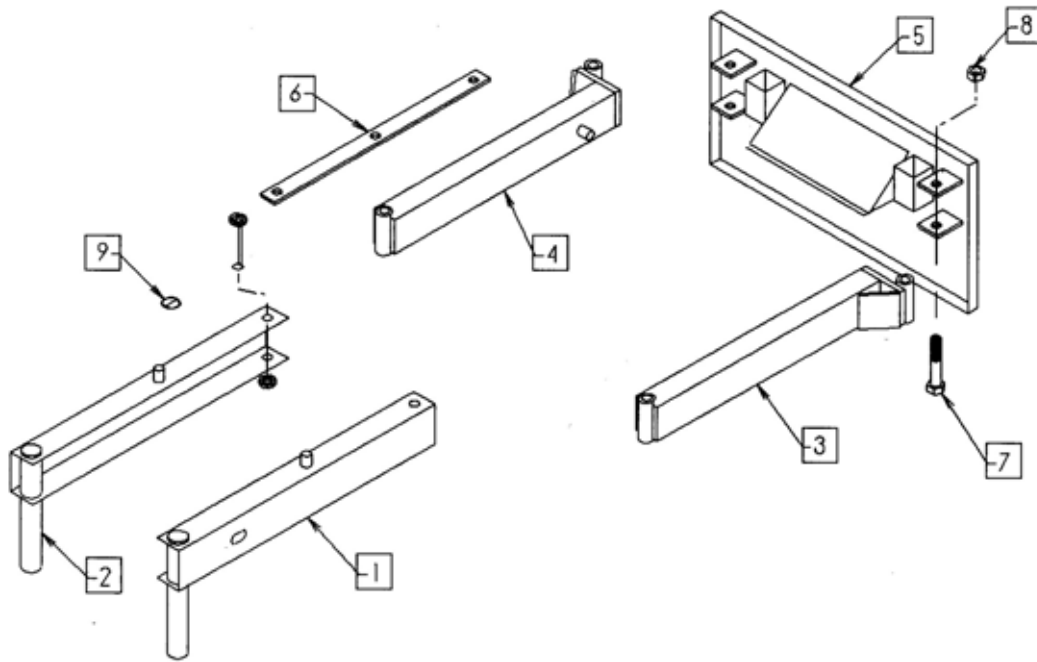
Item No	Description	Part No	Item No	Description	Part No
1	Front Ram Member	5X2-301-150	8	Ram Cylinder	550-100-043
2	Right Ram Tube	5X2-301-151	9	Ram Wheel Axle	5X2-301-156
3	Right Rear Extension	5X2-301-152	10	Ram Wheel	5X2-301-157
4	Left Ram Tube	5X2-301-153	11	3/4" UNF Jam Nut	
5	Left Rear Extension	5X2-301-154	12	Cylinder Pin	550-100-043
6	3/4 Drawbar Pin		13	5/8 x 1 1/2 UNF # 5	
7	Pushoff Tube	500-301-048	14	5/8 UNF Nut	

Side Rail



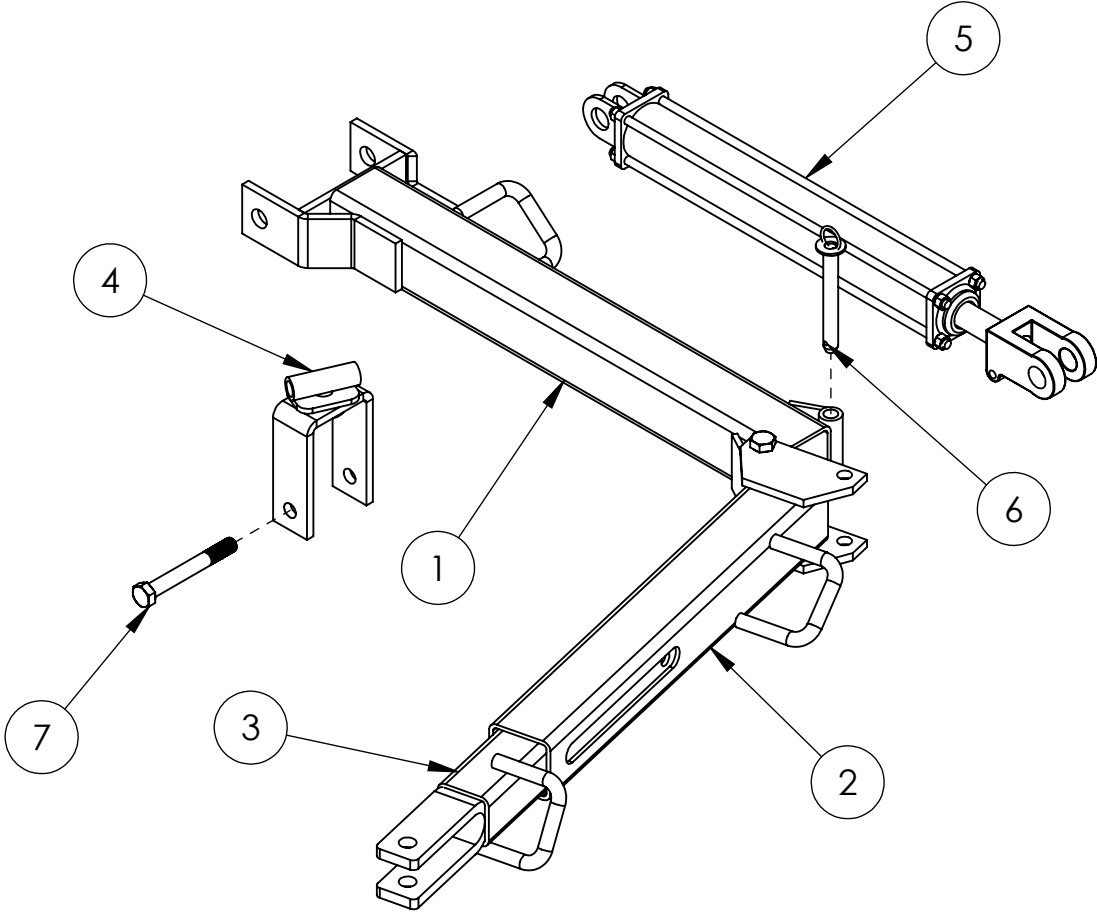
Item No	Description	Part No
1	Right Side Rail	5X2-301-170
2	Left Side Rail	5X2-301-171
3	Right Guard/Track	5X2-301-172
4	Left Guard/Track	5X2-301-176
5	Right Front Cylinder Mount	5X2-100-173
6	Left Front Cylinder Mount	5X2-100-174
7	Reinforcing Plate	5X2-100-175
8	5/8x1 1/2 UNF #5 Bolt	
9	5/16x 1 Flathead bolt	
10	3/8 x 1 Bolt	

Tube Line 5500 X 2 Push Off



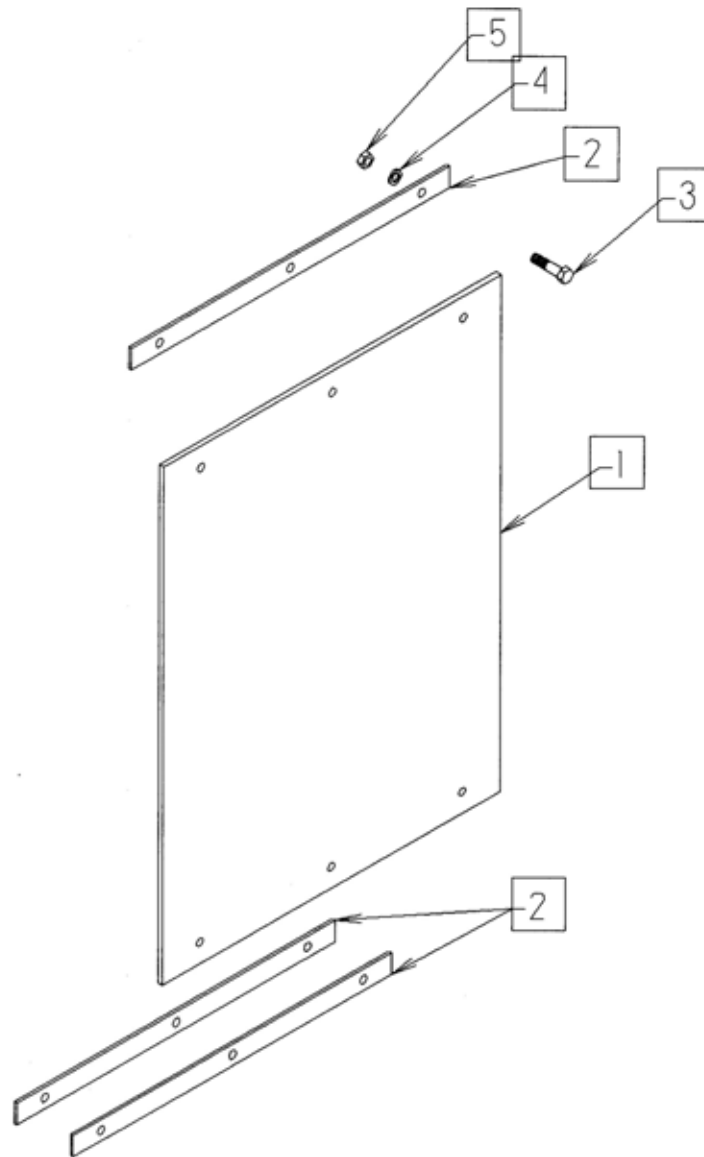
Item #	Description	Part No
1	Left Front Arm	5X2-100-180
2	Right Front Arm	5X2-100-181
3	Left Rear Arm	5X2-100-182
4	Right Rear Arm	5X2-100-183
5	Push Plate	5X2-301-016
6	X Bar	599-100-017
7	3/4 x 5 Bolt	
8	3/4 Locknut	
9	3/16 Linch Pin	550-200-104

Tongue



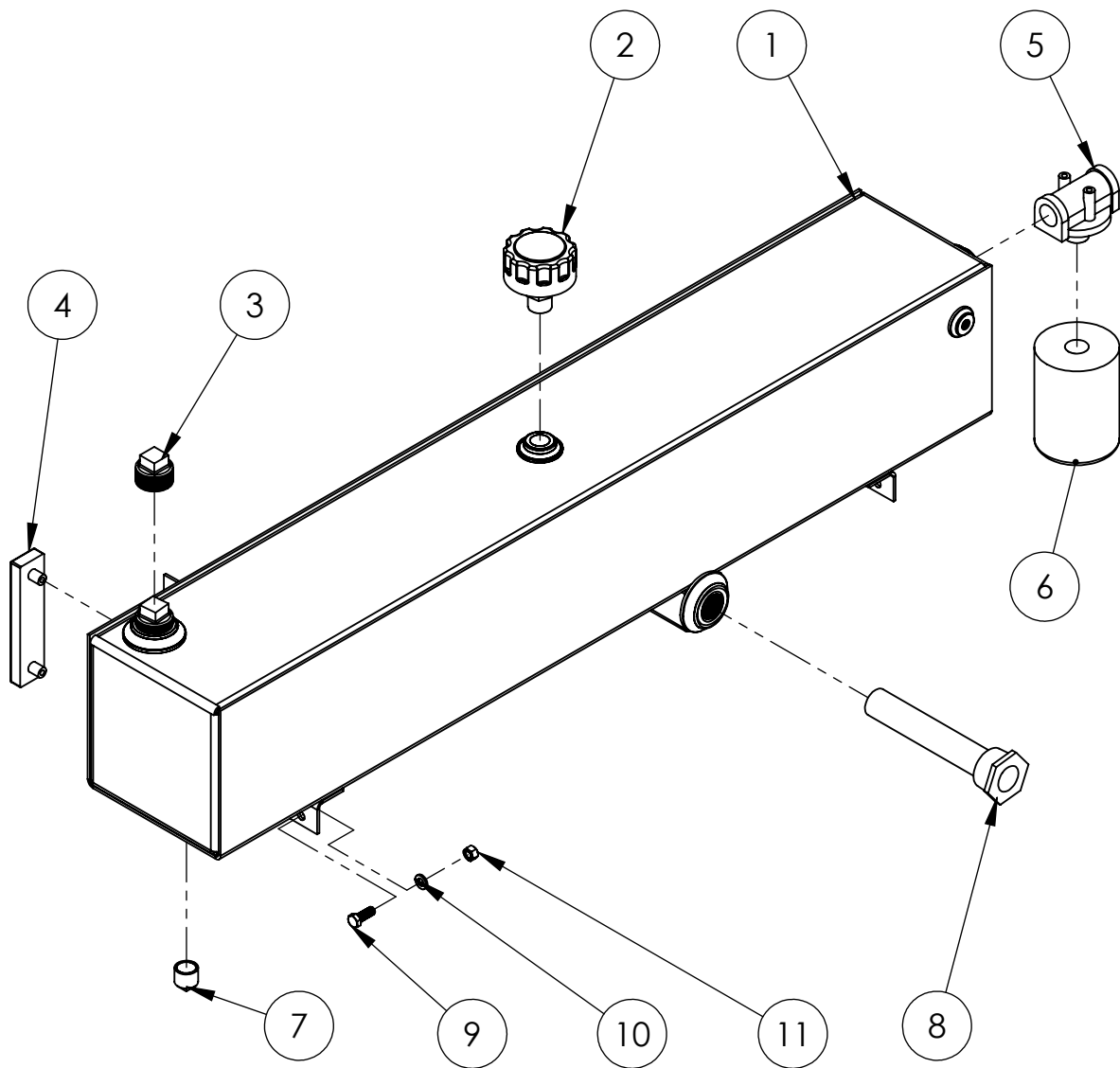
Item No	Description	Part No
1	Main Tongue	550-100-051
2	Swinging Tongue	550-100-052
3	Slideing Tongue	550-100-053
4	Tongue Holder	500-301-160
5	2x16 Cylinder	500-100-103
6	Tongue Pin	500-100-154

Tube Line 5500 X 2 **Mud Flap**



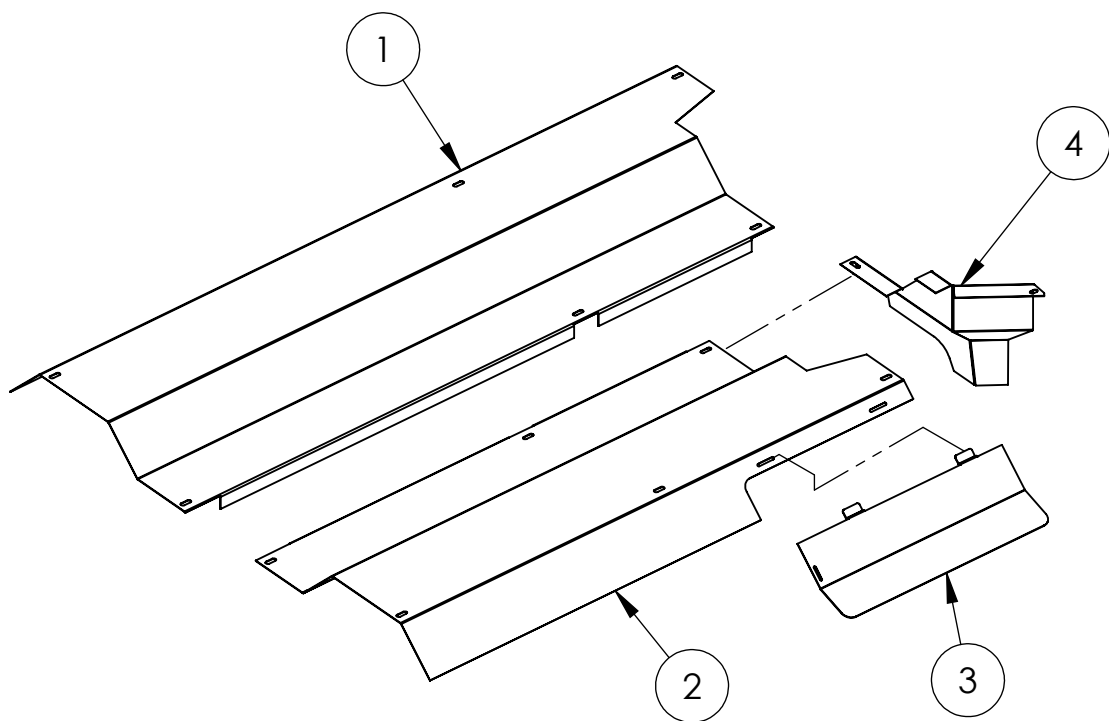
Item #	Description	Part No
1	Mud Flap	550-100-054
2	Metal Strip	500-100-164
3	5/16 x 1 Bolt	
4	5/16 Lockwasher	
5	5/16 Nut	

Hydraulic Tank



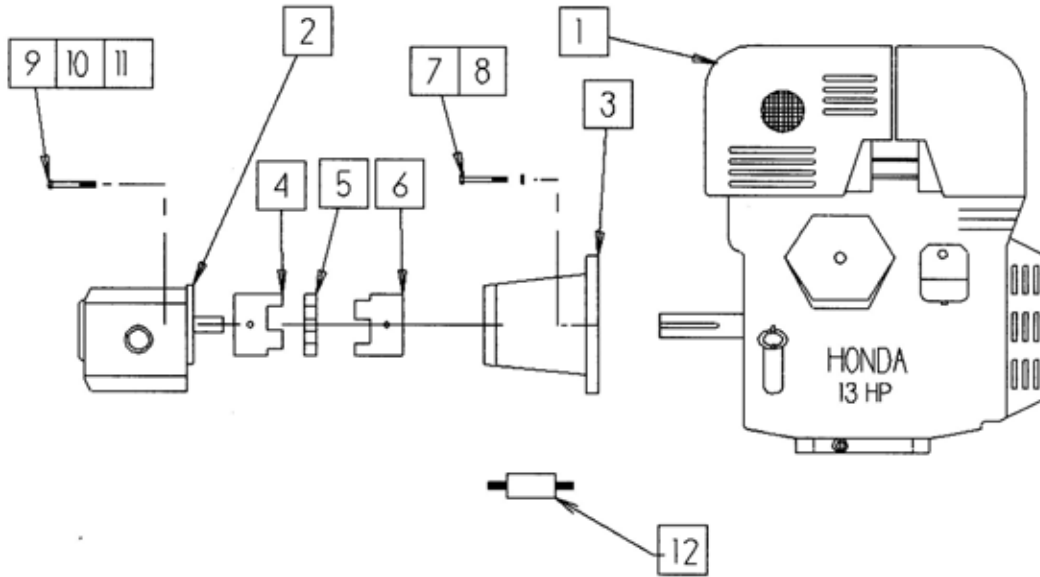
Item No	Description	Part No	Item No	Description	Part No
1	Hydraulic Tank	5X2-100-190	9	3/8 x 1 bolt	
2	Breather Cap	500-100-169	10	3/8 Lockwasher	
3	Filler Plug 1 1/4 pipe	500-100-170	11	3/8 Nut	
4	Sight Gauge	500-100-171	Filter Cross Reference		
5	Filter Base	500-100-172	Filter	Reference	
6	10 Micron filter	500-100-173	Stauf	SF6520	
7	3/4" Magnetic Plug	500-100-174	Gresen	F22001	
8	Suction Strainer	500-100-175	Fram	P1653-A	
			Fleetguard	HF6510	
			Cross	1A9021	

Fender/Engine Guard



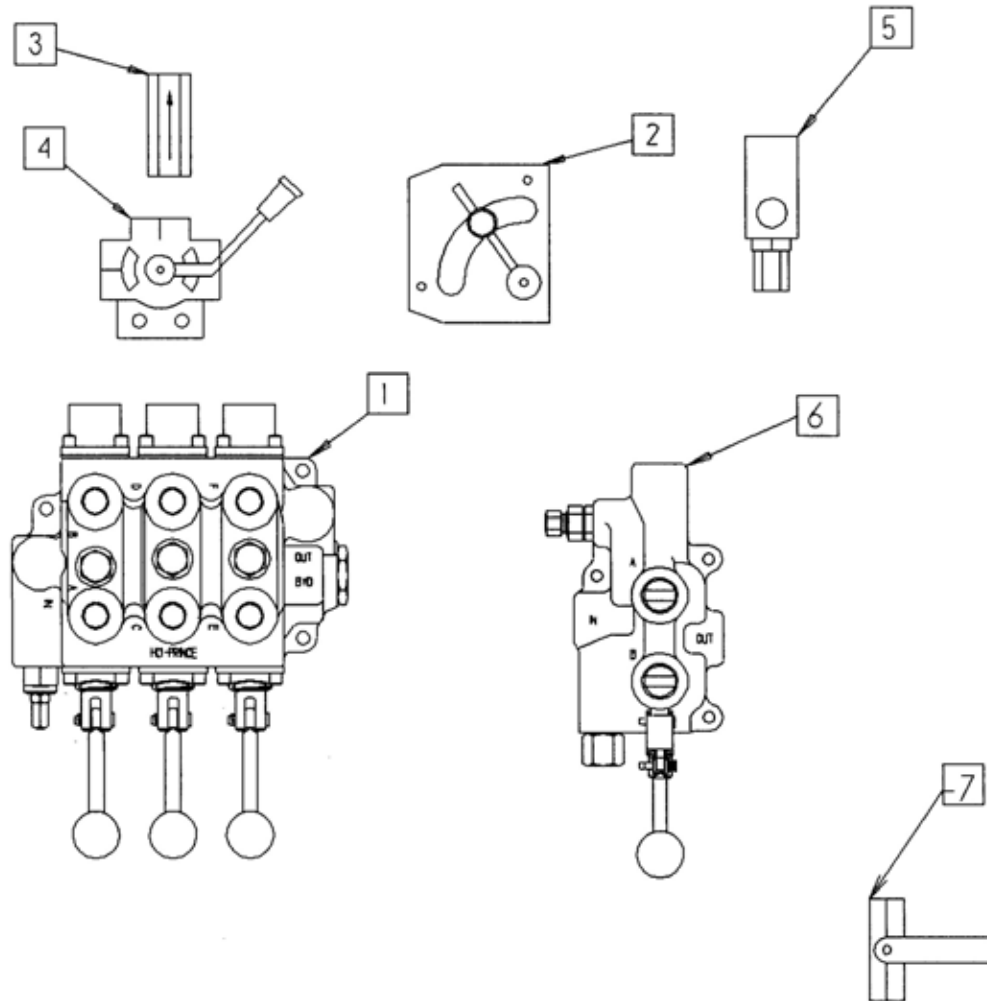
Item No	Description	Part No
1	Right Fender	5X2-301-101
2	Left Fender	5X2-301-100
3	Rear Engine Shield	5X2-301-145
4	Engine Side Shield	5X2-301-146

Tube Line 5500 X2 Pump / Motor



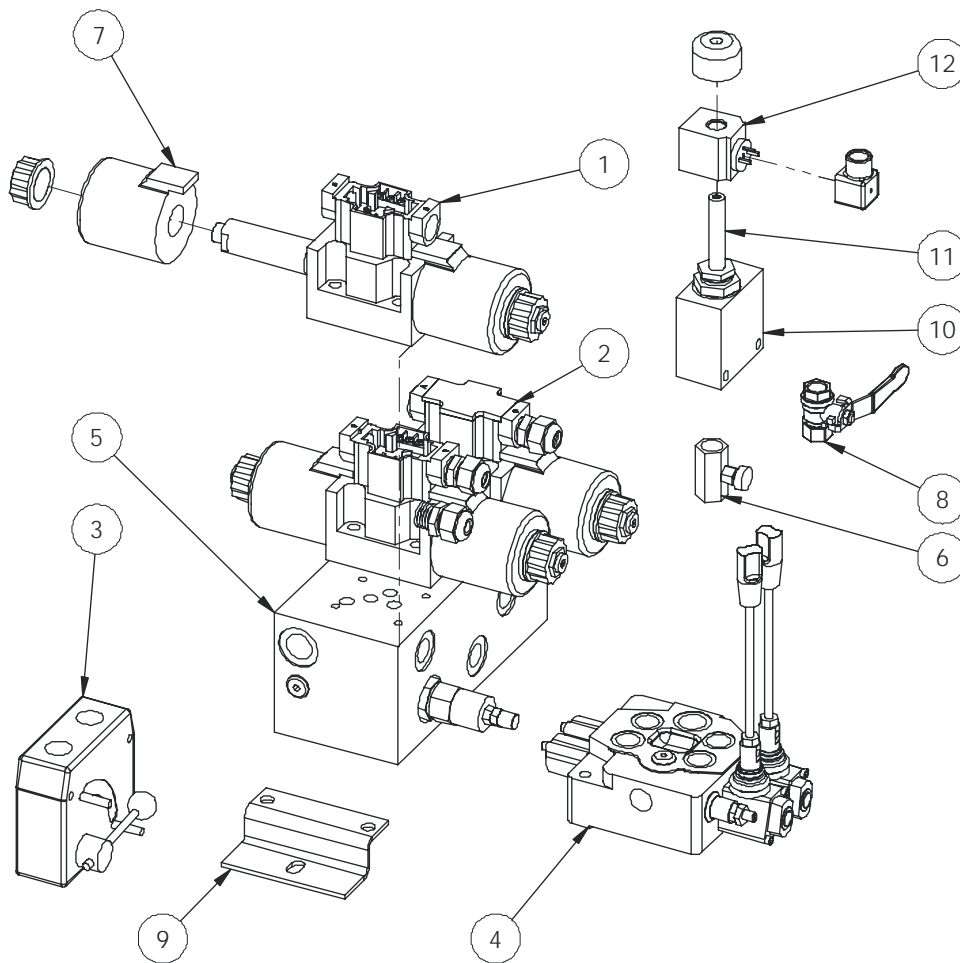
Item #	Description	Part No	Item #	Description	Part No
1	13 HP Honda Engine electric start	500-200-179	7	3/8 x 1 Bolt	
2	Hydraulic Pump	500-100-181	8	3/8 Lockwasher	
3	Engine – Pump Adaptor	500-100-182	9	3/8 x 1 1/4 Bolt	
4	Love Joy Coupling (pump)	500-100-183	10	3/8 Lockwasher	
5	Coupling Spacer	500-100-184	11	3/8 Flatwasher	
6	Love Joy Coupling (engine)	500-100-185	12	Fuel Filter	500-301-150

Tube Line 5500 X 2 Manual Valve Bank



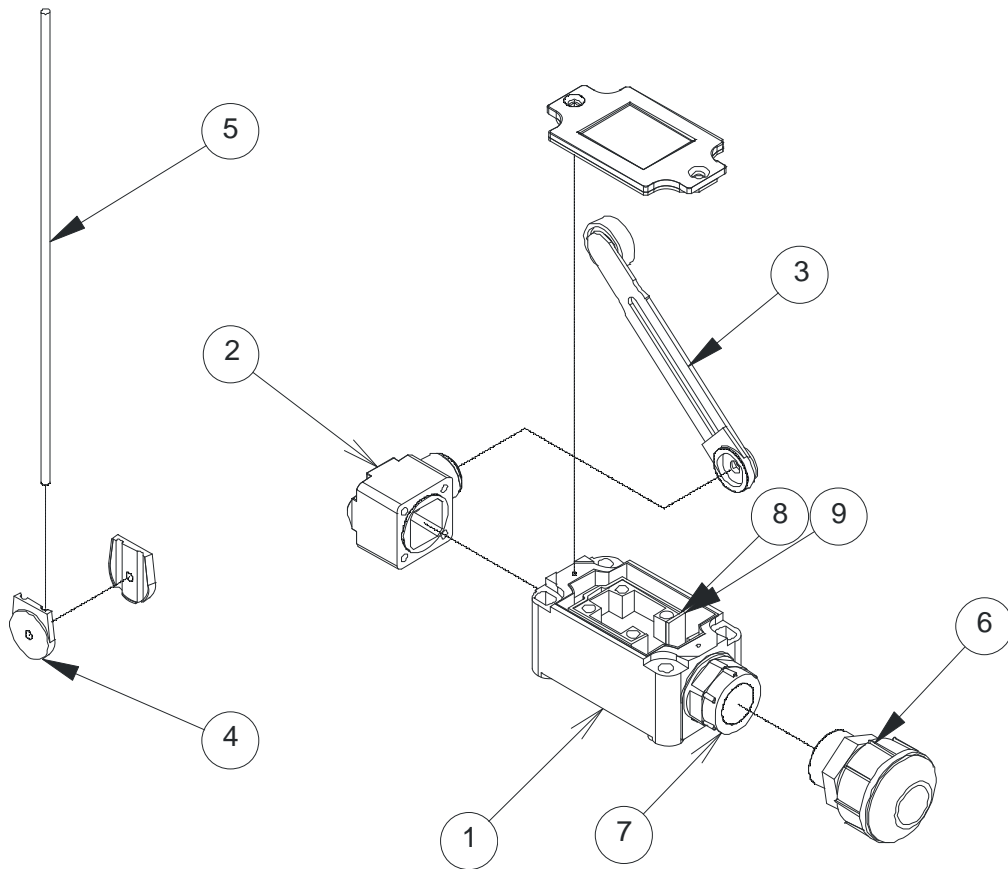
Item #	Description	Part No
1	RD5300 Valve	500-200-192
2	RD- 150 –08 Flow Control	500-100-193
3	1/2 “ Check Valve	500-100-194
4	Selector Valve	500-100-195
5	Relief Valve	500-101-222
6	LS3010-1 Valve	500-200-193
7	Ball Valve	550-200-112

TubeLine Hydraulic Valve



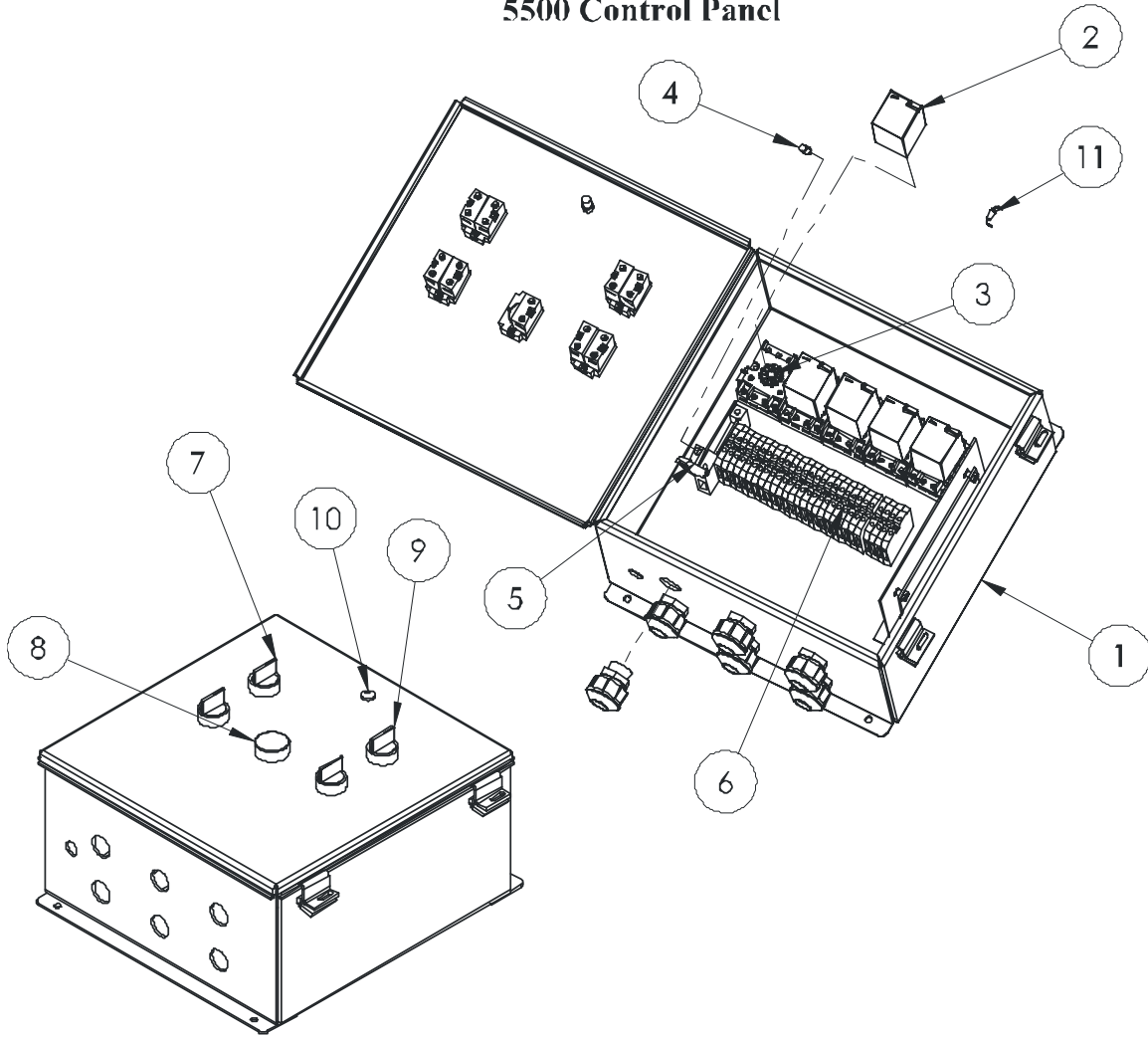
Item No.	Description	Part No.
1	Tandem Center 12 volt DC Valve	5X2-201-200
2	Single 12 volt DC Valve	5X2-201-201
3	Flow Control	500-100-193
4	2 Spool Mono-Block Valve	5X2-201-055
5	3 Station Custom Manifold	550-100-056
6	Steering Speed Control	550-200-006
7	Valve Coil	5X2-201-007
8	Ball Valve	550-200-112
9	Manifold Mount	550-200-113
10	Dump Valve Body (20HP)	850-301-109
11	Valve Cartridge (20HP)	850-301-110
12	12 V Coil (20HP)	850-301-111

Limit Switch



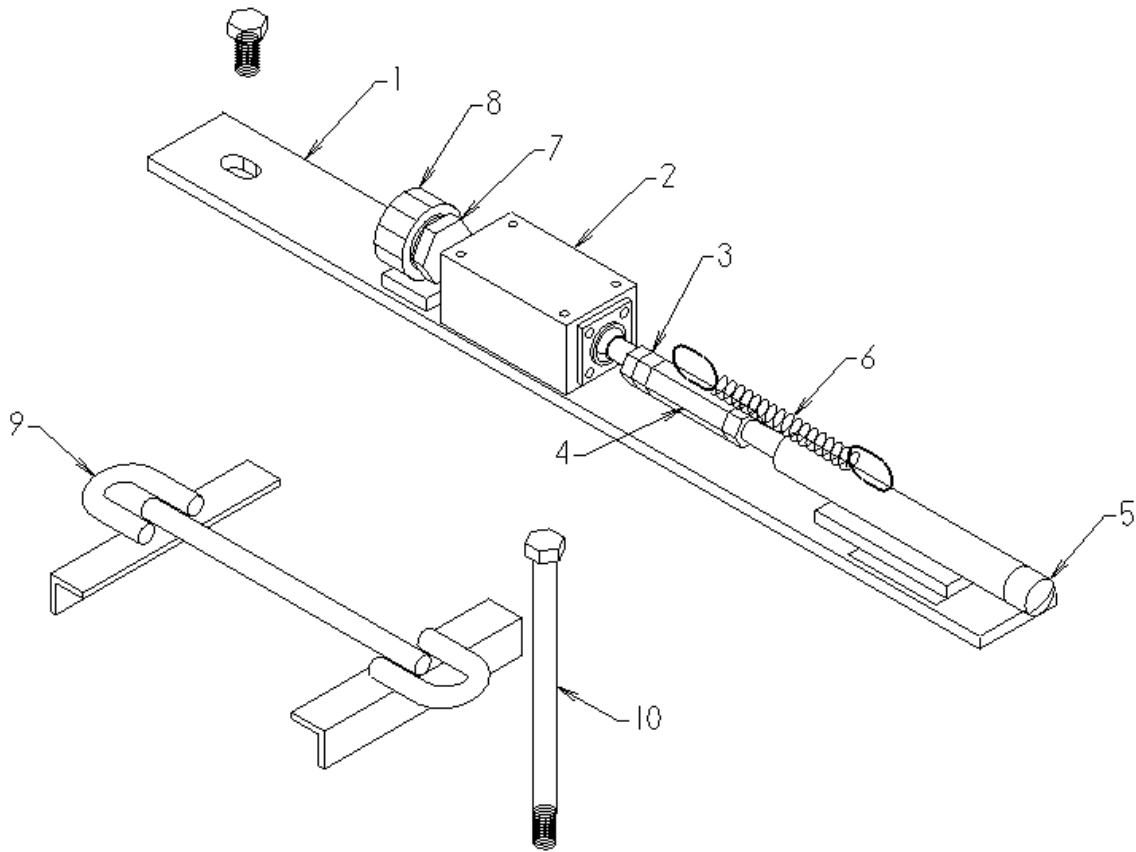
Item No	Description	Part No
	Limit Switch Assembly	550-100-060
1	Switch Body	550-100-057
2	Actuator	550-100-058
3	Arm	550-100-059
4	Wire Clamp	550-100-082
5	Wire Arm	550-100-049
6	PVC Box Connector	550-100-086
7	Metric to Pipe Adaptor	550-200-086
8	NO - NC Contact	550-200-087
9	NC - NC Contact	850-200-087

5500 Control Panel



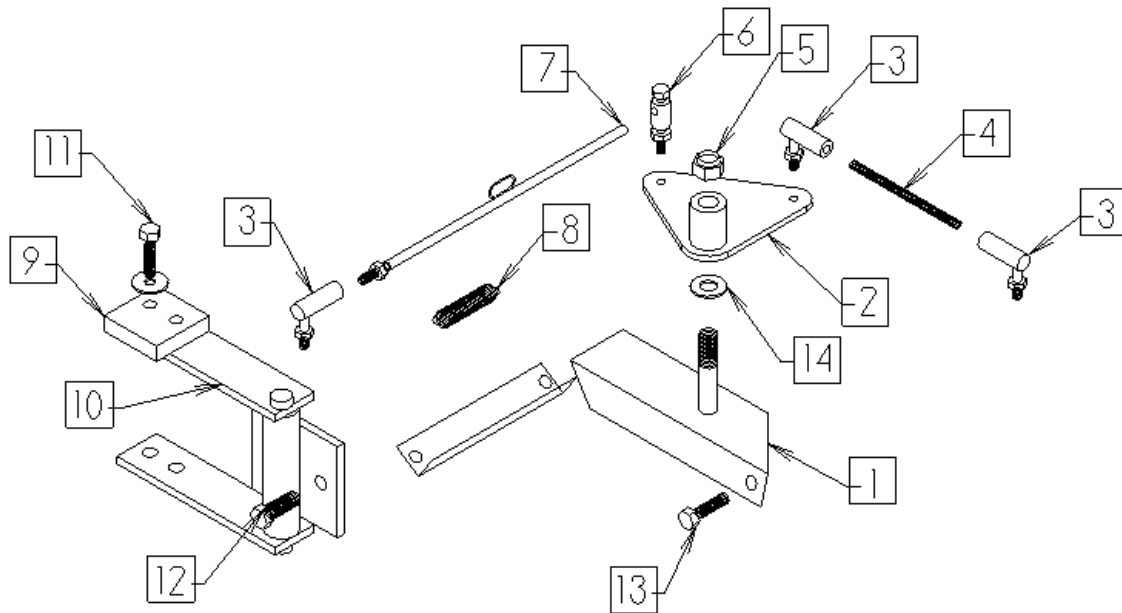
Item	Description	Part No
1	Control Panel Assy	550-200-061
2	Control Relay	500-100-221
3	11 Pin Relay Base	500-100-223
4	15 Amp Fuse	550-100-079
5	DIN Rail Fuse Holder	550-100-083
6	DIN Rail Terminal Block	550-100-084
7	On/Off Switch-Hand /Auto	550-100-076
8	Rotate (push button)	550-100-075
9	Ram/Steering	550-100-177
10	Power Indicator LED	550-100-078
11	Diode	550-150-085

Tube – Line 5500 X 2
Bale Switch



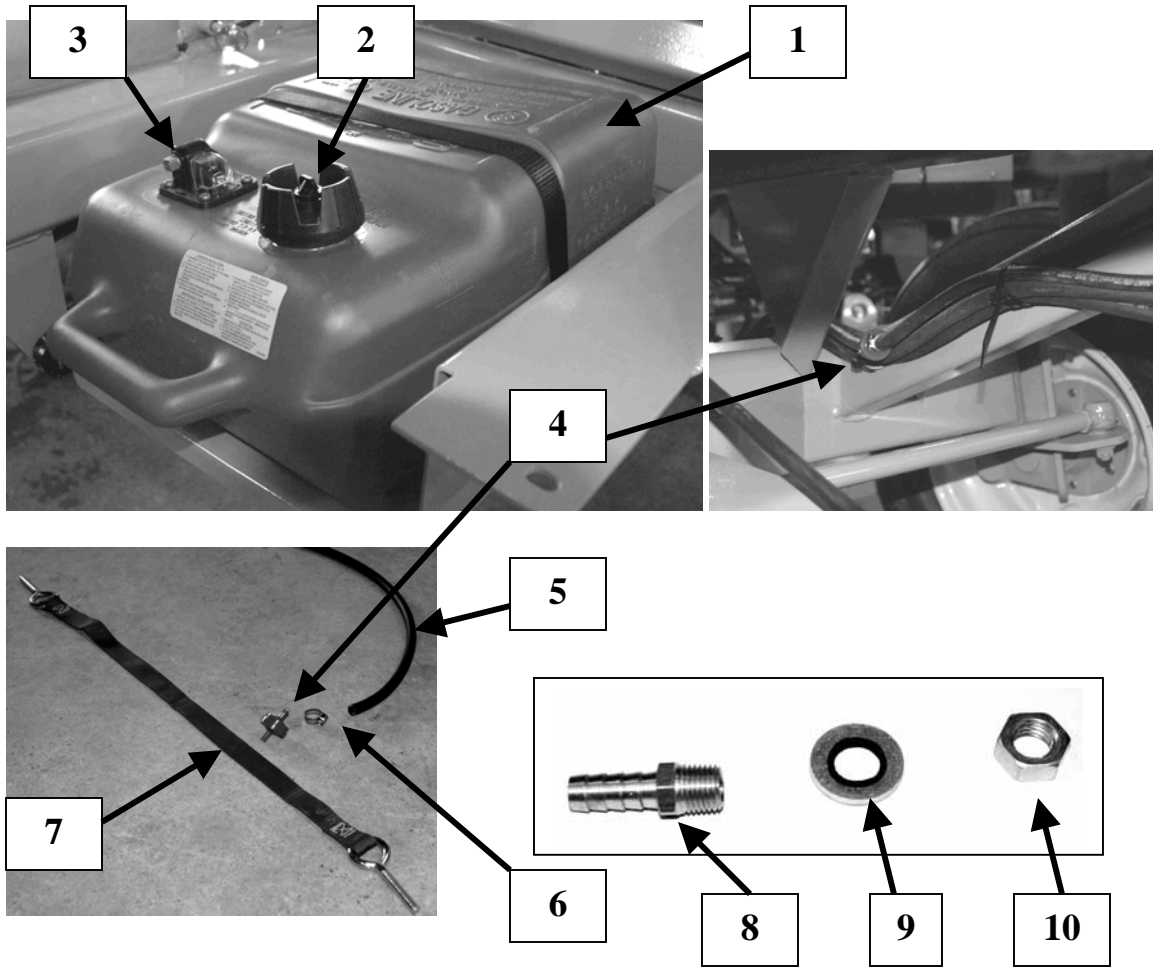
Item #	Description	Part No
1	Switch Base	5X2-100-220
2	Switch	5X2-100-221
3	3/8 x 1 Bolt	500-100-046
4	3/8 Coupling Nut	5X2-100-222
5	Push Rod	5X2-100-223
6	Spring	500-100-062
7	Adaptor metric to inch	550-200-086
8	Wire Clamp	550-100-082
9	Battery Hold – Down	500-301-221
10	Battery Bolts	500-100-212

Throttle



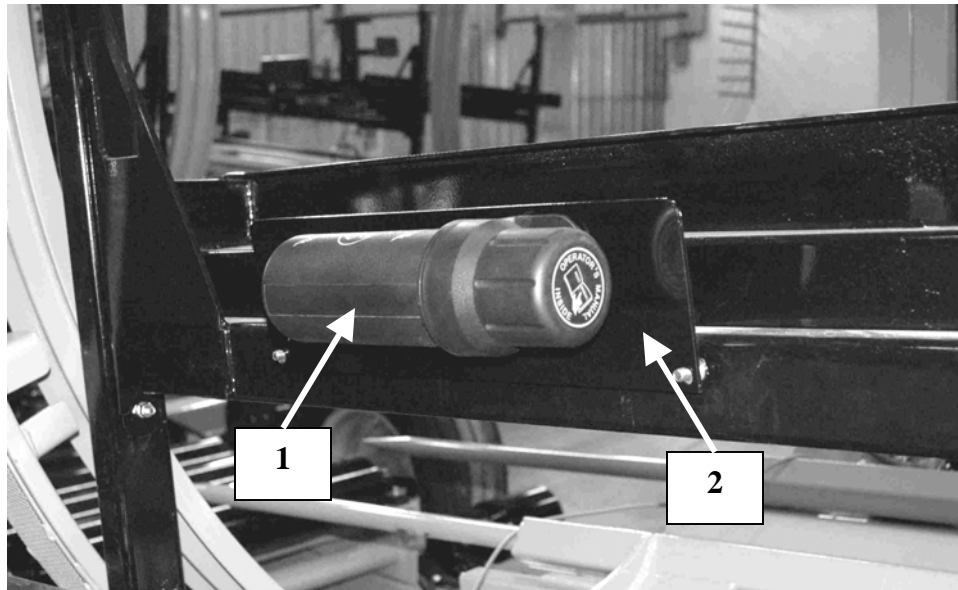
Item #	Description	Part No	Item #	Description	Part No
1	Engine Bracket	599-100-067	8	Spring	550-100-069
2	Swing Link	5X2-100-230	9	Striker Block	5X2-100-232
3	Ball Joint	550-100-065	10	Main Link	5X2-100-233
4	1/4 UNF Rod	599-100-069	11	5/16 x 1 1/2 Bolt	
5	1/2 Locknut	500-100-114	12	3/8 x 1 1/2 Bolt	
6	Linkage Pivot	550-100-067	13	5/16 x 1 Bolt	
7	Control Rod	5X2-100-231	14	1/2 SAE Washer	5X2-100-234

Fuel Tank



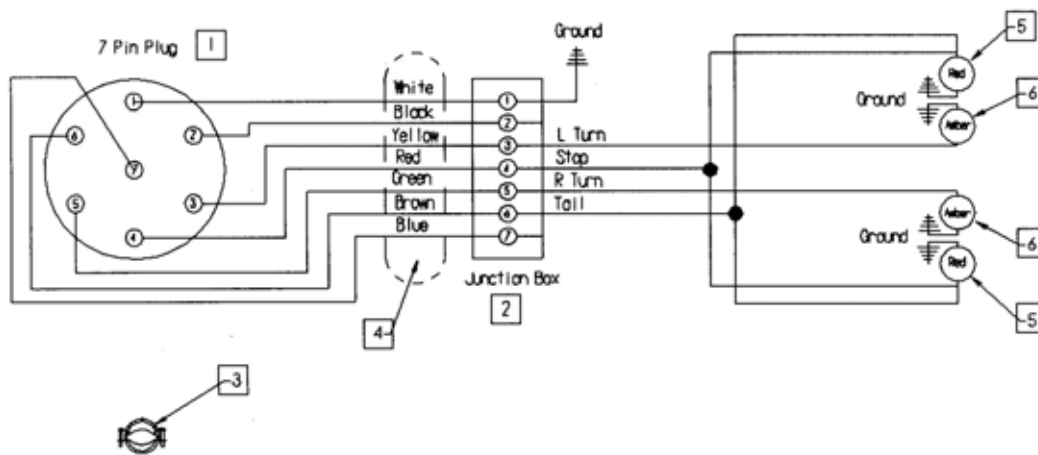
Item #	Description	Part No
1	Fuel Tank	550-204-100
2	Vented Cap	550-204-101
3	Fuel Gauge Assy	550-204-103
4	Fuel Filter	550-200-111
5	Fuel Line	5X2-201-107
6	Hose Clamp	550-204-109
7	Tie Down Strap	550-204-110
8	Hose Adaptor	5X2-201-108
9	Sealing Washer	5X2-201-109
10	Adaptor Nut	5X2-100-234

Operator's Manual Holder



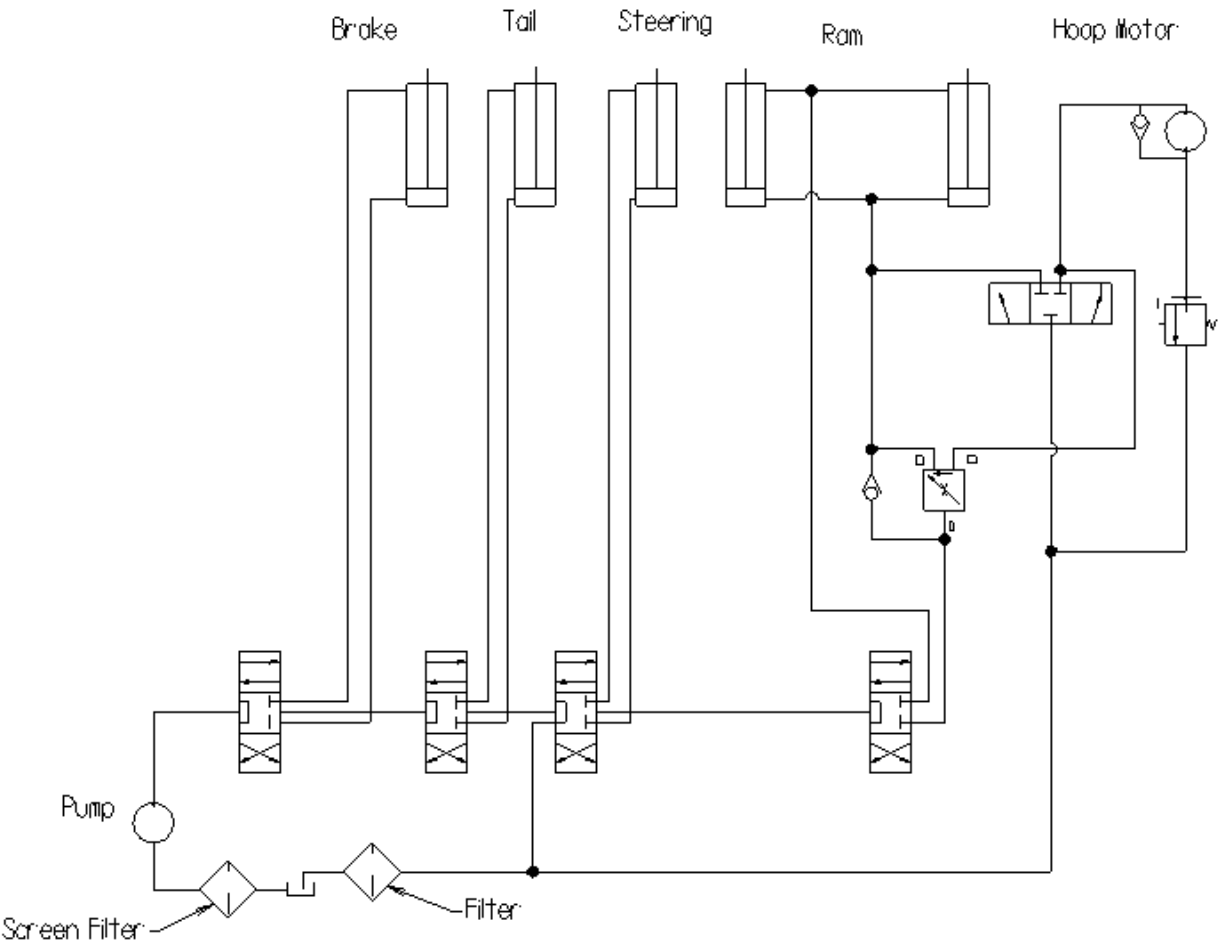
Item #	Description	Part No
1	Manual Holder	5X2-201-111
2	Mounting Bracket	5X2-201-112

Running Lights

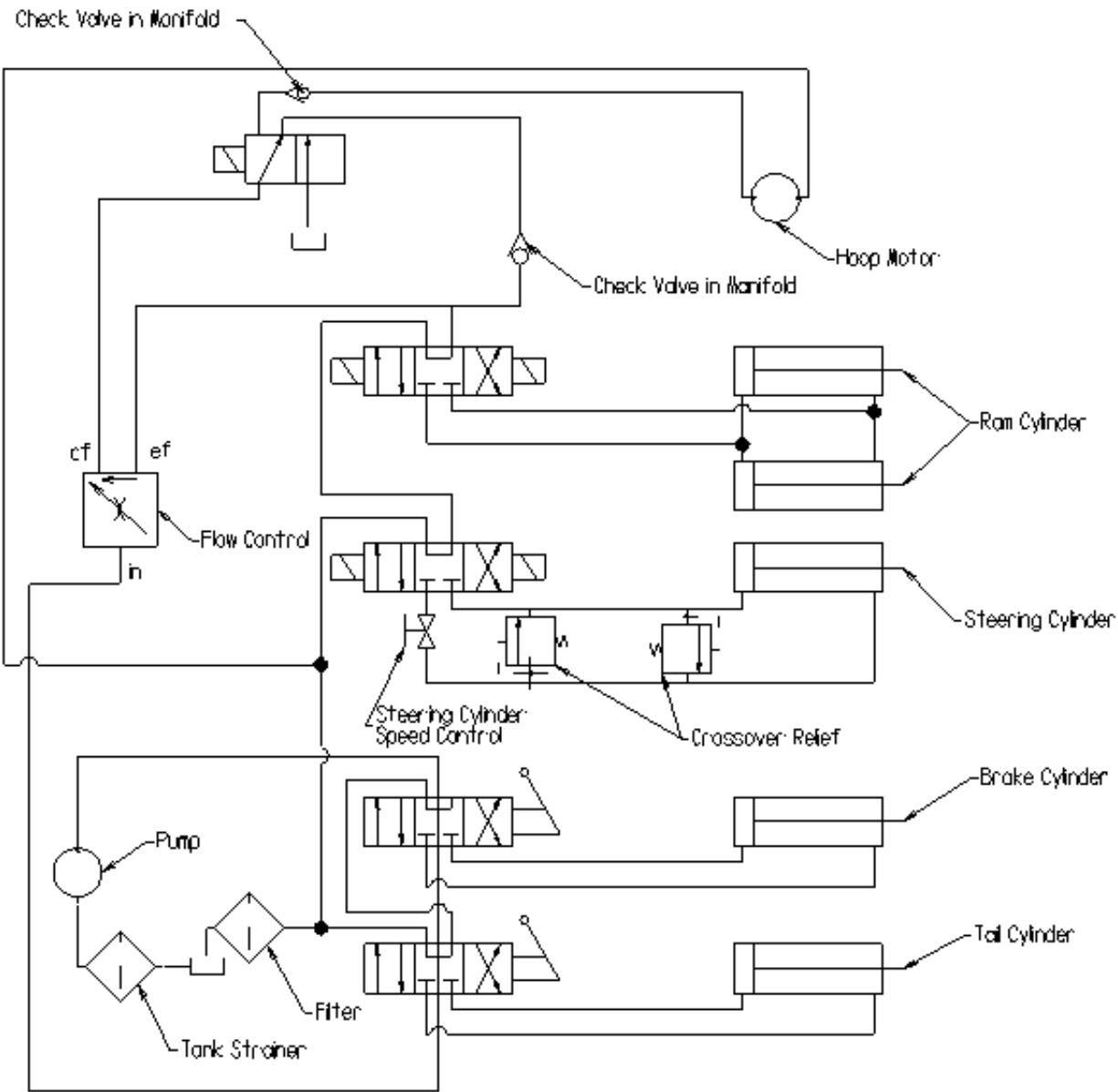


Item #	Description	Part No
1	7 Pin Plug	550-200-117
2	Junction Box	550-200-118
3	Strain Relief	550-200-119
4	7 Wire Conductor	550-200-120
5	Red Lamp	550-200-121
6	Amber Lamp	550-200-122

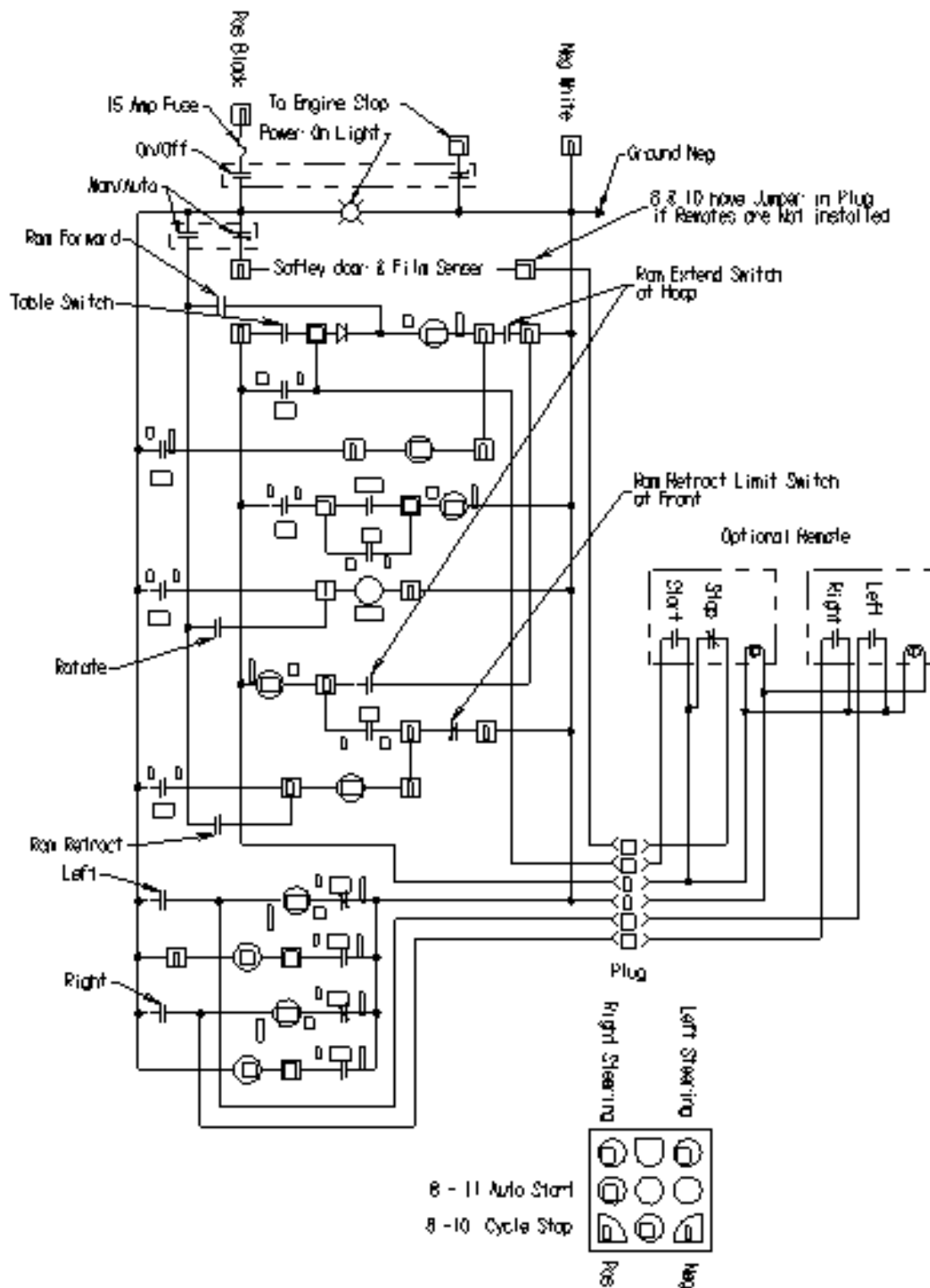
Manual Hydraulic Schematic



Electric Hydraulic Schematic



Electric Control Panel Schematic

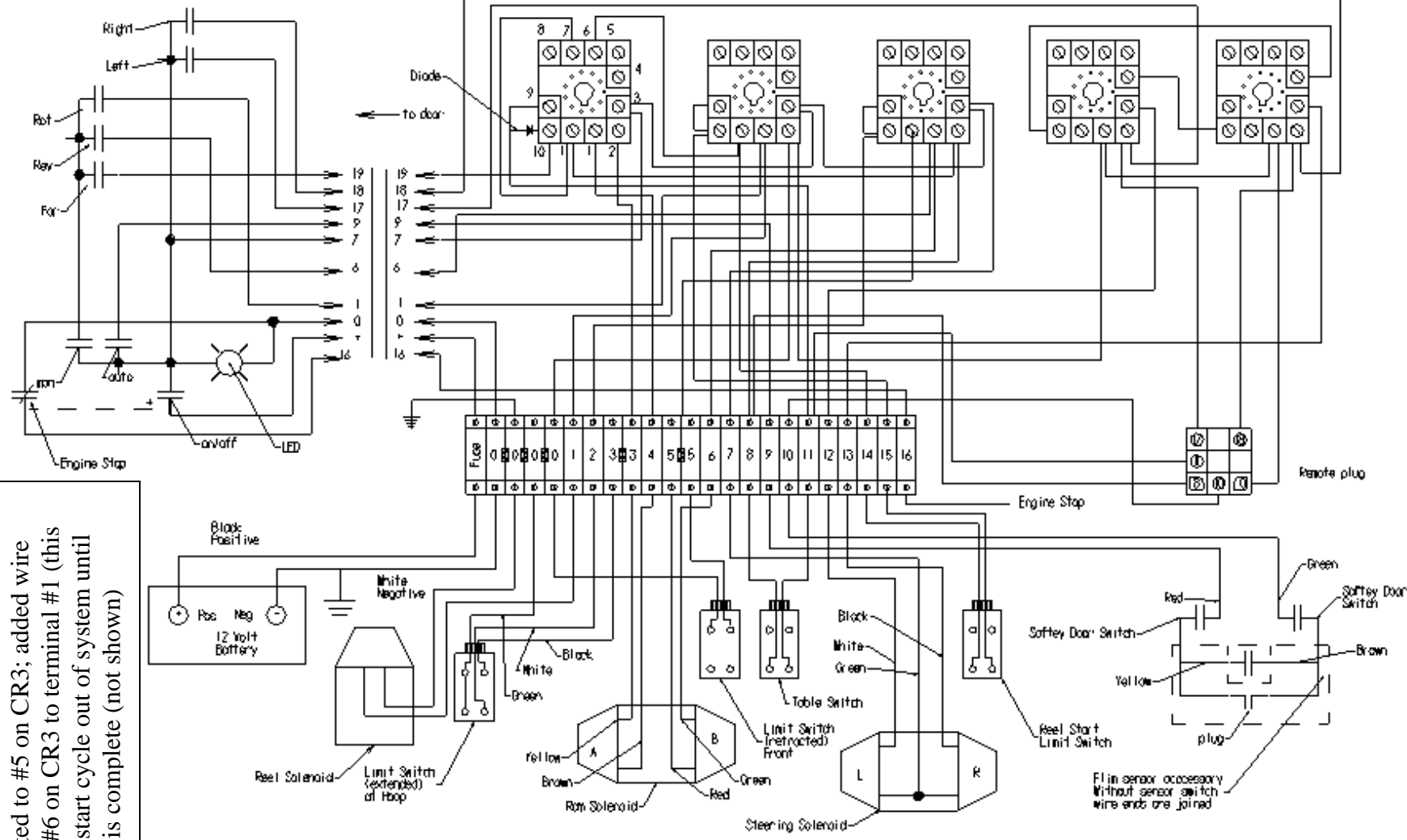


Tubeline 55 X2

Wiring

Control Panel Update

Wire from CR1 to Terminal #1 rerouted to #5 on CR3; added wire from #6 on CR3 to terminal #1 (this takes start cycle out of system until cycle is complete (not shown))



Tube-Line 5500

Manual Hydraulic Sequence of Operation

- 1 With valves in neutral position, engine running hydraulic fluid is pumped through valve bank and returned to reservoir.
- 2 Brakes, tail and steering are standard hydraulic cylinder operation.
- 3 Wrap cycle – push wrap valve in, detent will hold valve in position, fluid flows from valve through flowcontrol and is split into 2 circuits, one circuit will go to ram cylinders and the other will go to hydraulic motor. These circuits are proportioned with the lever on flowcontrol valve. With the selector valve handle in “Both” position flow will go to cylinder and motor. By changing flowcontrol handle, the cylinders will speed up or slow down accordingly. At the same time motor will change speed inversely to cylinder ie. when cylinder slows down motor will speed up.
- 4 Selector valve is used to bleed either cylinder or motor flow back to tank, or block both circuits causing both cylinder and motor to operate. ie. With handle in wrap only position the fluid that would normally go to the cylinder will flow back to tank. With handle in ram only position motor fluid will go to tank.
- 5 Wrap cycle – pull wrap valve out, detent will hold valve in position, fluid will flow from valve port causing cylinder to retract. Fluid from other end of cylinder will return through check valve, at flowcontrol back through valve stack and to tank.
- 6 Check valve at motor lets motor freewheel in one direction without cavitating. Relief valve at motor return acts as a restrictor valve to keep motor from turning when ram cylinder is retracting.

Tube-Line 5500

Electric Hydraulic Sequence of operation

- 1 With valves in neutral position, control panel on/off switch in off position, engine running fluid is pumped through valve stack and returned to reservoir.
- 2 Brakes and tail are standard hydraulic cylinder operation.
- 3 Wrap cycle fluid flows from power beyond port on 2 spool valve to flowcontrol, and is split into 2 circuits one circuit goes to double solenoid valve for ram cylinder, the other circuit goes to single solenoid valve for hydraulic motor. By moving flowcontrol handle more or less fluid will flow to cylinder or motor ie. as more fluid flows to cylinder less fluid will flow to motor and vise-versa.
- 4 Electric control panel- "Man-Auto" switch turned to "Man". Turn "On/Off" switch to On, then red LED will light up indicating 12V power is at control circuits, with engine running. Turn "Forward" switch in to energize solenoid A on double solenoid valve. Ram cylinder will extend. Turn "Reverse" switch to energize solenoid B on same valve. Ram cylinder will retract. Push Rotate button in and hydraulic motor will turn. "For/Rev and Push" buttons have to be held to operate, by releasing them action will stop. Engine throttle has linkage to slow engine down when ram is all the way to the front. Spring on linkage will speed engine up as soon as Ram cylinder starts to extend.
- 5 When "Man/Auto" switch is turned to Auto, "For/Rev and Rotate" switches no longer function. Depress trigger switch located on bale table, Ram hydraulic valve is energized. The ram cylinder will extend and engine will speed up. When ram extends to front slider switch, this switch will energize the single solenoid valve and turning the wrap motor. When ram is extended to the limit switch at the end of stroke, single solenoid valve and double solenoid valve "A" will turn off. Solenoid B will energize causing ram cylinder to retract until it trips limit switch at the front end of bale table, solenoid "B" will turn off, the ram cylinder will stop and engine will idle down.
- 6 Steering is done by steering switch, right/left activating steering double solenoid valve A or B. This valve will work in either manual or automatic mode.

Film Sensor



Adjusting Bolt

Wire should stick through and touch the top of bracket to keep the other end from dropping down too far and interfering with the film rolls. End of the wire may be bent to allow switch to open

Installation

This machine is pre-wired for a film switch. To install, locate 2-wire plug on the end of a wire that is located close to the rear left pivot on the Bale Saddle.

Remove the plug and plug film switch onto it.

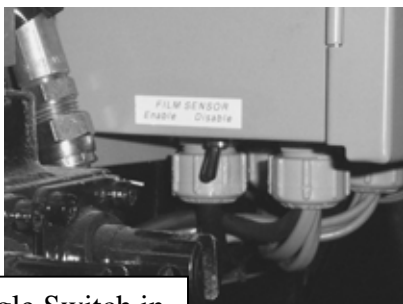
Install toggle switch into the bottom of the control panel as shown. Remove JUMPER wire and wire toggle switch in where the jumper was. The wires are not polarity sensitive. With this switch the sensor can be disabled in the “auto” position.



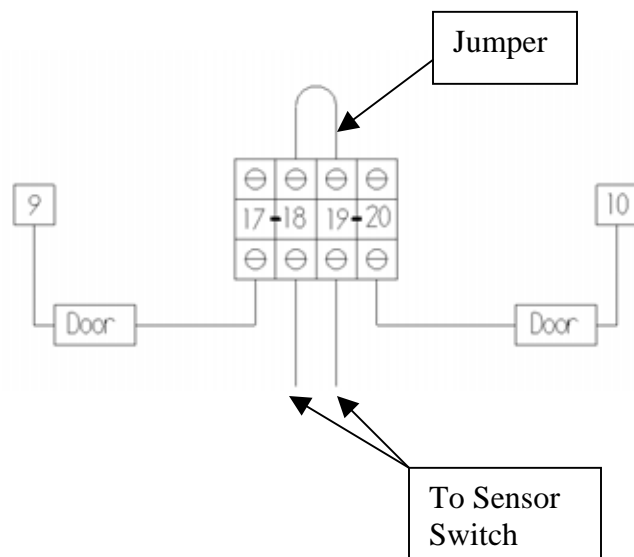
Notice: in “man” the sensor and the safety doors **Do not** work.

Adjust the wire arm with no plastic in the machine. Make sure the wire does not interfere with the plastic roll assy. When plastic is in the machine it will hold the wire up, causing the switch to close. Make the switch closes with the wire parallel with the bale spears.

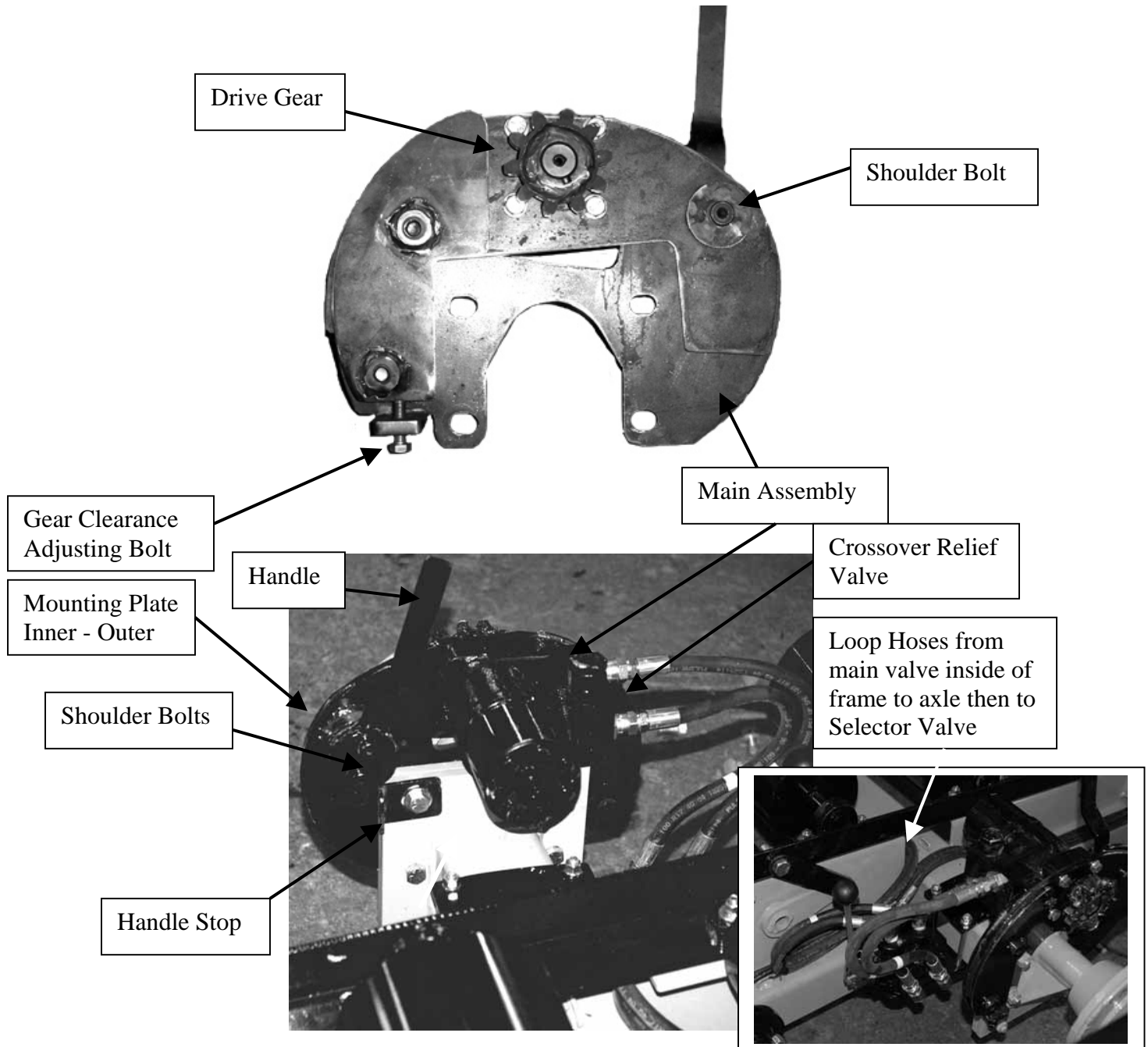
Wire can be shortened to suit your needs. The switch bracket can be adjusted back and forth so only one layer of plastic holds the wire up, if more then one layer contacts the wire then the unbroken roll of plastic will hold the switch up and defeating the sensor.



Toggle Switch in Control Panel

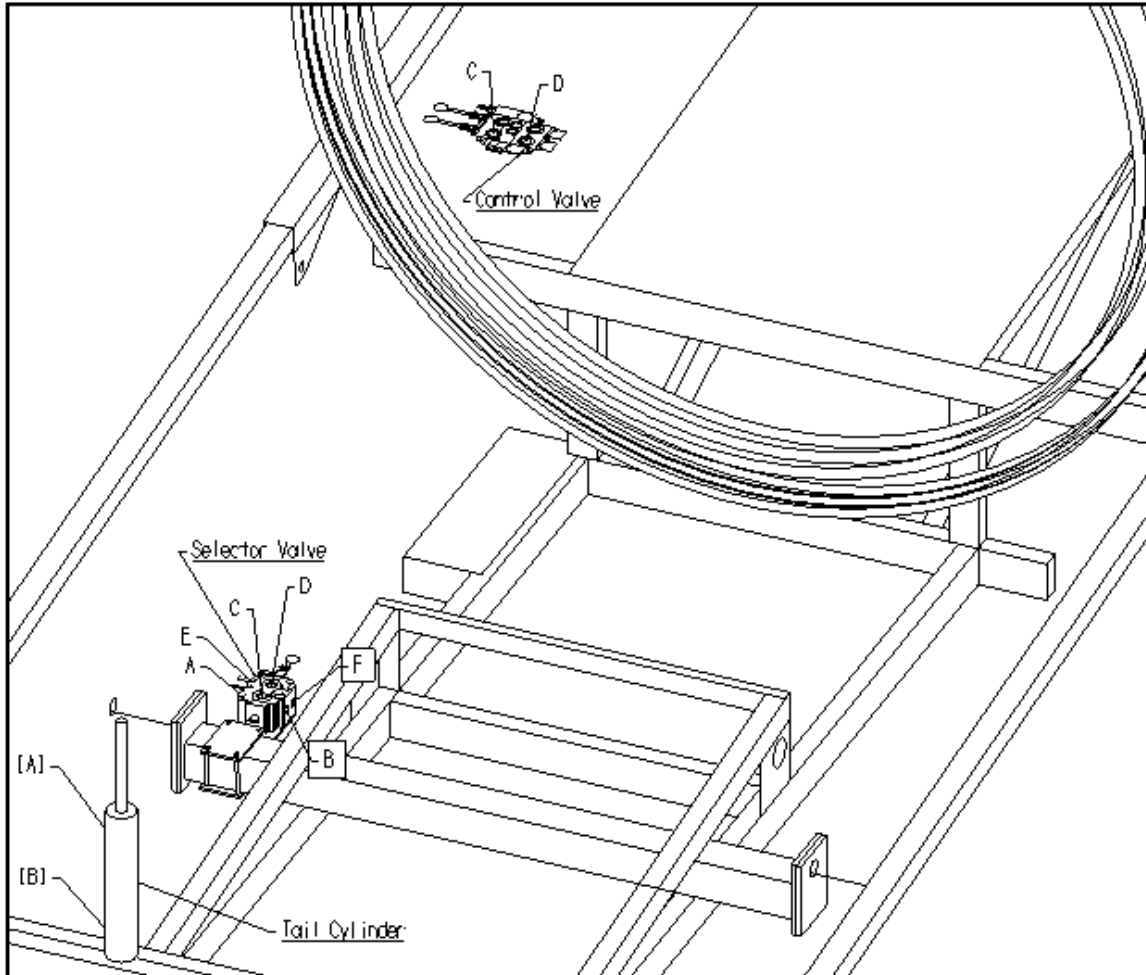


TubeLine 5500 X 2 Wheel Drive



Handle Update kit	Item #	Description	Part #
#550-203-242	1	Rim with Gear (not shown)	550-200-134
Consists of	2	Main Assembly	550-200-135
2 pc c/w SAE Washer	3	Shoulder Bolt	550-200-136
	4	Gear	550-203-237
	5	Motor	550-200-138
1 pc	6	Handle	550-203-240
1 pc	7	Inner Plate	550-203-238
1 pc	8	Outer Plate	550-203-239
1 pc	9	Handle Stop	500-203-241

Wheel Drive Hydraulic Valve Locations



Item #	Description	Part No
2	Selector Valve	550-200-121
3	Selector Valve Mount	550-200-122
4	Mount Clamp	550-200-123

Wheel Motor Hydraulics

Remove wheel from Rear left hub, and unbolt the spindle assy.

Mount the hydraulic motor assy on the outside of spindle bracket with the longer 1/2 bolts.

Install the new rim with gear welded on the inside.

After rim is installed adjust gear so that the backlash is at a minimum but allowing the gear to turn freely.

To do this engage handle to top, loosen bolts **A** and move plate up or down by adjusting height bolt and retighten bolts.

After adjustment is OK, lock height adjustor bolt with jam nut.

Mount selector valve on 1/4 x 4 1/4 plate with 2 pc 3/8 bolts.

Fasten selector valve bracket on bottom of axle beam with smaller plate on top of axle and bolt with long 3/8 bolts through plates. Clamping assy. on to axle.

Remove Hydraulic lines from port C and D on control valve.

Install 3/8 in. line x 164 from port D on control valve to port D on Selector Valve

Install 3/8 in. line x 164 from port C on control valve to port. C on selector Valve

Install 3/8 in. line x 14 from port E on selector valve to Bottom port on Motor.

Install 3/8 in. line x 14 from port A on selector valve to Top port on Motor.

Install 1/4 in. line x 64 from port F on selector valve to Bottom port on Tail Cylinder.

Install 1/4 in. line x 64 from port B on selector valve to Top port on Tail Cylinder.

To Use The Wheel

-The control valve that is used to raise and lower the tail will now also be used to drive the wheel through the selector valve. By shifting the selector valve you can select between the wheel motor and tail cylinder.

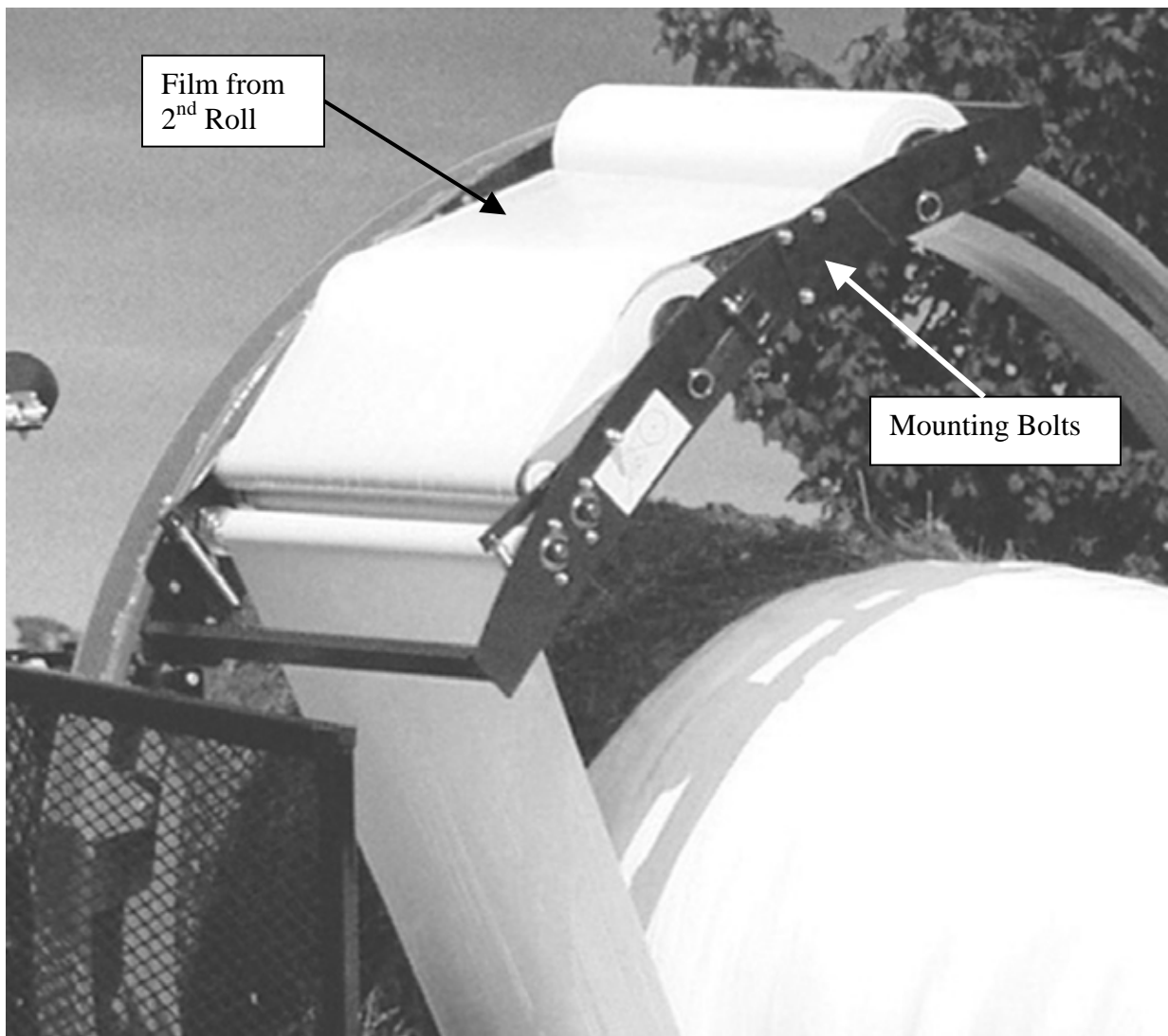
-To engage the wheel motor, swing the handle beside the motor all the way up to the top position until the handle slides down behind handle stop.

Notice: Do not force the handle. If the gears do not mesh, try to turn the small gear a little bit with the hydraulic valve and try again.

-To disengage pull handle Up then and swing handle all the way down.

Coat Motor Gear Lightly with grease before installing

Twin Wrap Kit



Note

The film from the 2nd roll goes over top of the first roll and through the tension rolls together with the first film from the first roll

Item #	Description	Part No
1	Twin Wrap Frame	550-200-139
2	Plastic Wrap Spool	550-200-140
3	3/8 x 1 Bolts, nut lockwasher	550-200-141
4	Spool Holder	550-200-115

TubeLine

Model TL5500 X2 & TL6500 X2

Re: Mounting Accessories (year 2003)

Remote Package consists of Pause – Cycle stop, Start – start wrap cycle,
Steering – Right/Left

1: Installing Remote Package

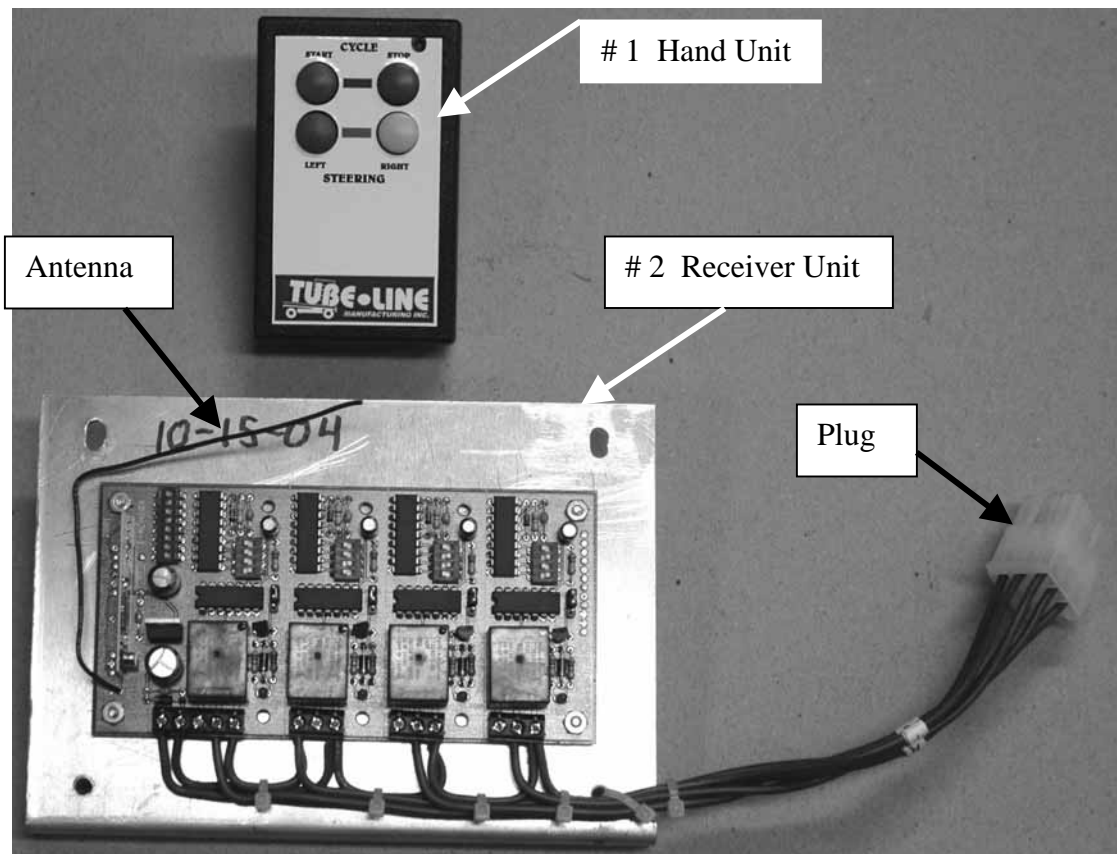
Bolt receiver assembly to inside rear right of control box with connector plug at bottom
Remove the jumper between term #8 and #10. Plug the connector together at the bottom of the panel.

Notice

Antenna wire should extend 2-3 inches through a hole on bottom of control panel.

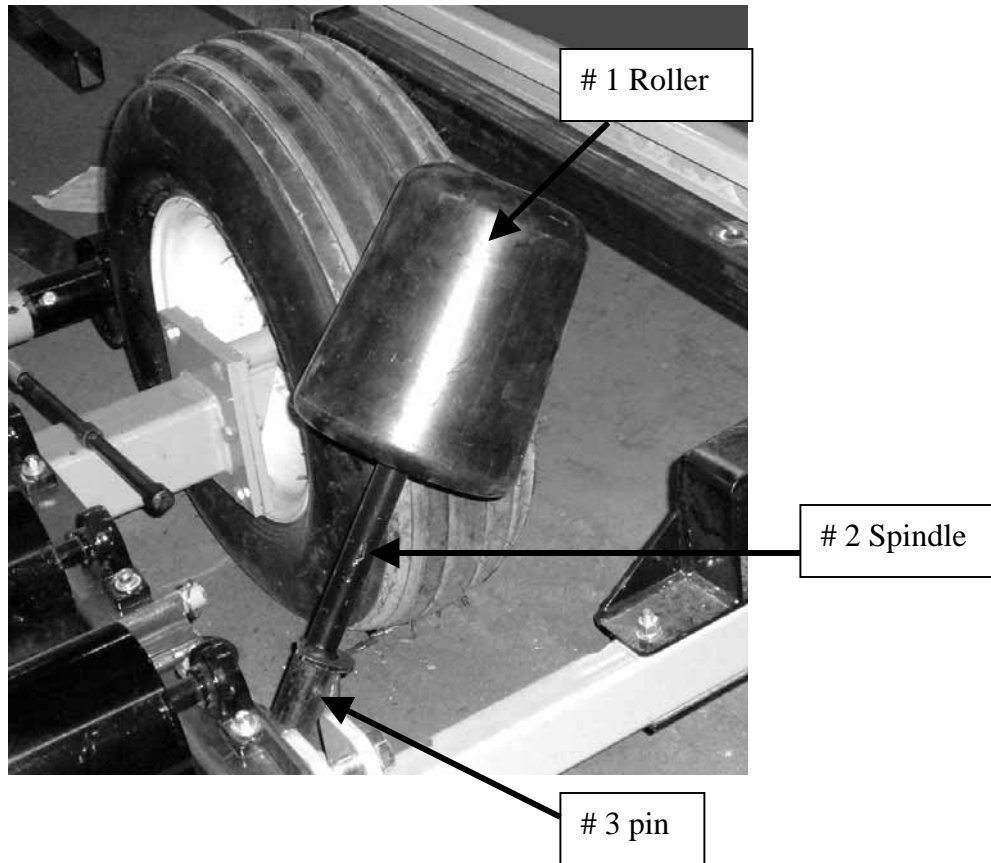
2: The frequency has been preset at the factory. If in the event that another machine would be in close proximity to this machine, there is a slight chance that the frequencies will interfere with each other. The frequencies can be changed by removing the receiver from the control panel and changing the DIP switches on the channels. The hand unit will also have to have the switches set the same as the receiver.

3: When using the remote start of ram, unplug the wire from the switch at the table trigger to disable the switch. Secure the end of wire somewhere so it does not get tangled in the steering of the wrapper, make sure the plug will not short out to the frame.



**TubeLine 6500 X 2
Guide Roller Kit**

Kit consists of two rollers that are used on the lower side to keep the bales from rolling off to one side.



Item #	Description	Part No
1	Roller	550-301-238
2	Spindle	550-301-239
3	5/16 PTO Pin	550-301-233

Lights



The light brackets can be mounted on top of side guards as shown. Light package consists of 3 lights and one on/off toggle switch. Usually the lights are mounted with 2 lights facing to the rear and 1 facing to the front. The toggle switch can be mounted by drilling a ½” hole into the side or the bottom,



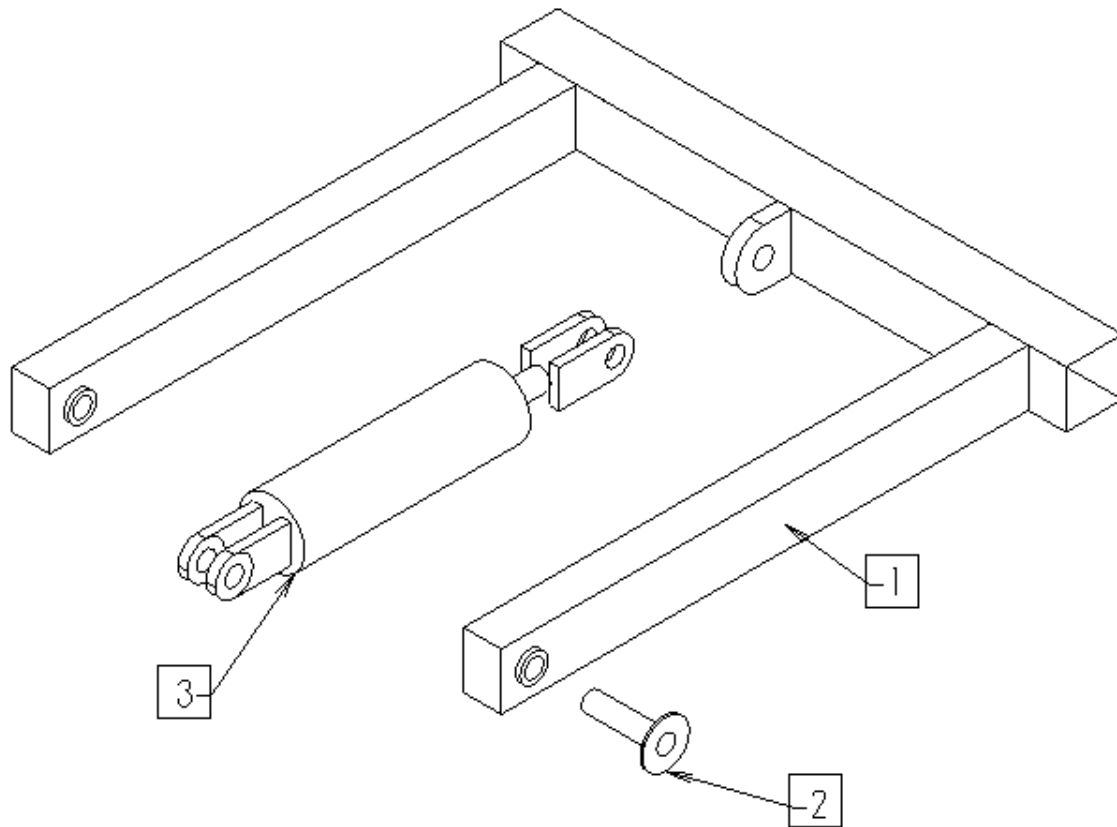
(preferred) of the control panel, be careful that you don't damage wires on the inside. Install the switch, inline fuse and wire it into the **bottom** of fuse block. This way lights are fused separate from the wrapper controls.

The engine has an 18 Amp charging system and should keep the battery charged.

Note: the engine only charges 18 amp when running at high speed; at an idle it charges very little. With the lights on and the engine not revved up, over a period of time the battery will slowly discharge.

Description	Part No
Light Bracket	5X2-100-201
Toggle Switch	550-200-235

**Tube – Line 5500 X 2
Leveler**



Item #	Description	Part No
1	Main Stand	5X2-100-205
2	Pivot Pin	5X2-100-206
3	3 ½ x 8 Cylinder	5X2-100-207

Bolt Torque

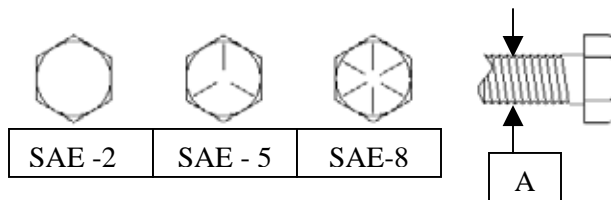
As used on this equipment

Bolt torque table shown below gives torque values for the various bolts used.
This chart is for non-lubricated threads.
Replace with the same strength bolt.

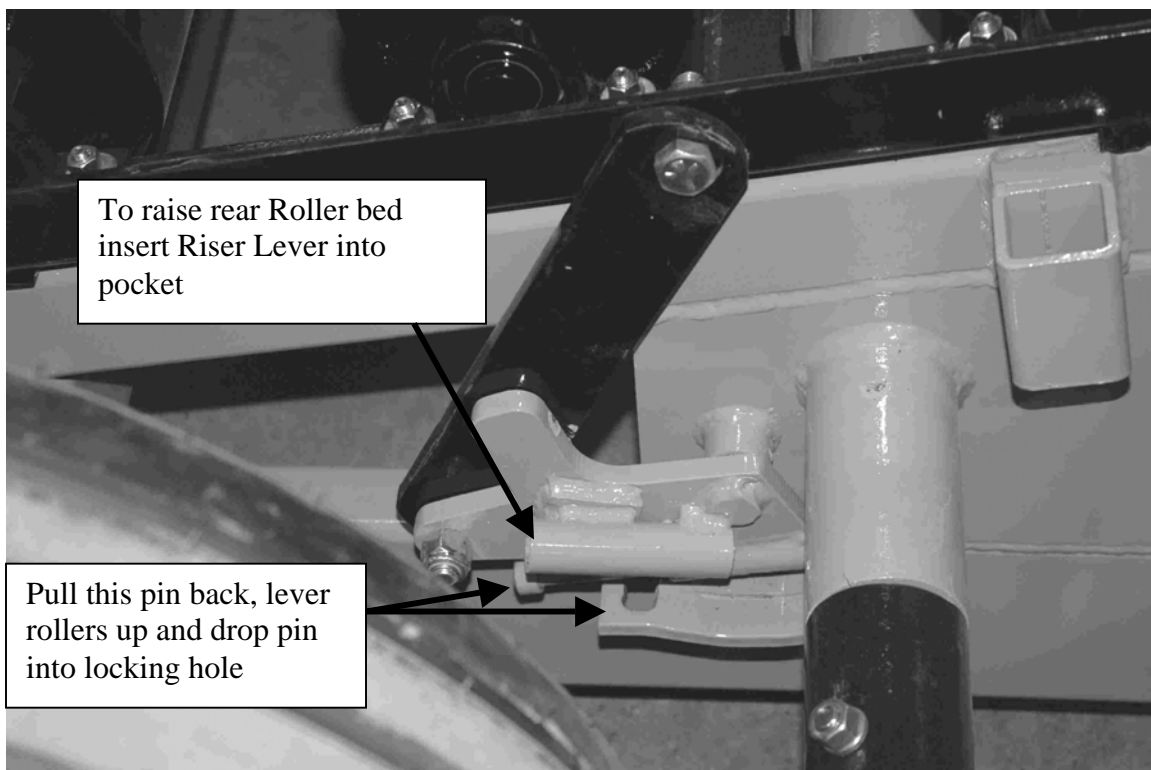
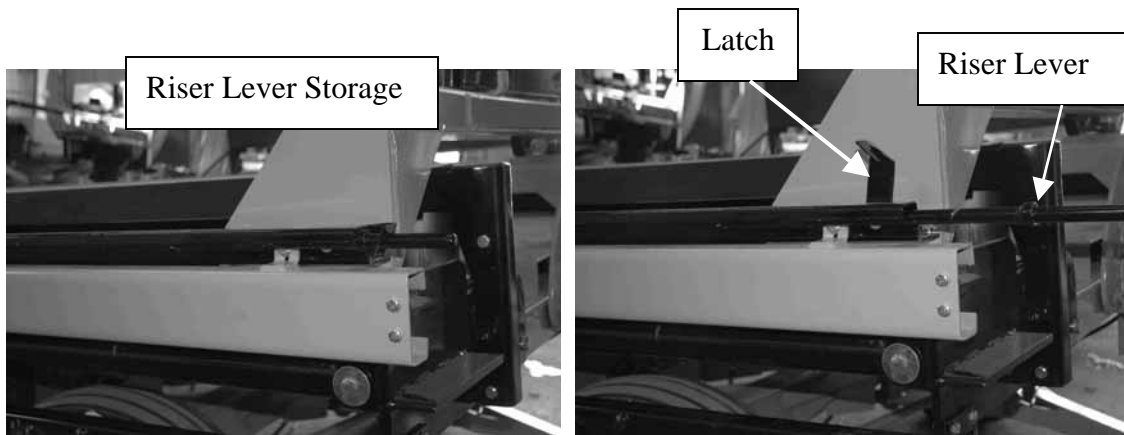
Torque Specifications. Torque values are identified by their head markings

Diameter	SAE 2		SAE 5		SAE 8	
"A"	Lb-ft	N.m	Lb-ft	N.m	Lb-ft	N.m
1/4	6	(8)	9	(12)	12	(17)
5/16	10	(13)	19	(25)	27	(36)
3/8	20	(27)	33	(45)	45	(63)
7/16	30	(41)	53	(72)	75	(100)
1/2	45	(61)	80	(110)	115	(155)
5/8	95	(128)	160	(215)	220	(305)
3/4	165	(225)	290	(390)	400	(540)
1	225	(345)	630	(850)	970	(1320)

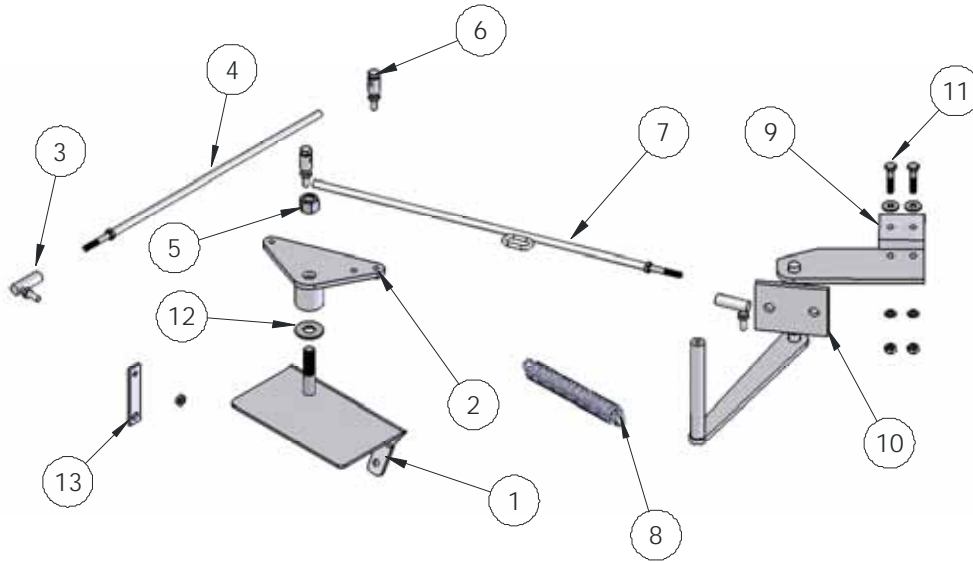
Allen head cap screws are similar to SAE 8 quality.



These torques are for a reference only. Not all these sizes and grades are necessarily used in this machine. Bolts that are used as a pivot or hinge have to be used with a locknut, therefore only tighten enough to secure the bolt and still allowing the part to rotate freely.



T5500 Throttle 20HP



Item	Description	Part No	Item	Description	Part No
1	Engine Bracket	6X2-120-001	8	Throttle Spring	550-100-069
2	Swing Link	6X2-120-002	9	Striker Block	5X2-100-232
3	Ball Joint	550-100-065	10	Main Link	5X5-120-005
4	Short Rod	6X2-120-003	11	5/16 x 1 1/2	Bolt
5	1/2 Locknut		12	1/2 SAE	Washer
6	Linkage Pivot	550-100-067	13	Modified Engine Link	6X2-120-006
7	Long Rod	6X2-120-004			