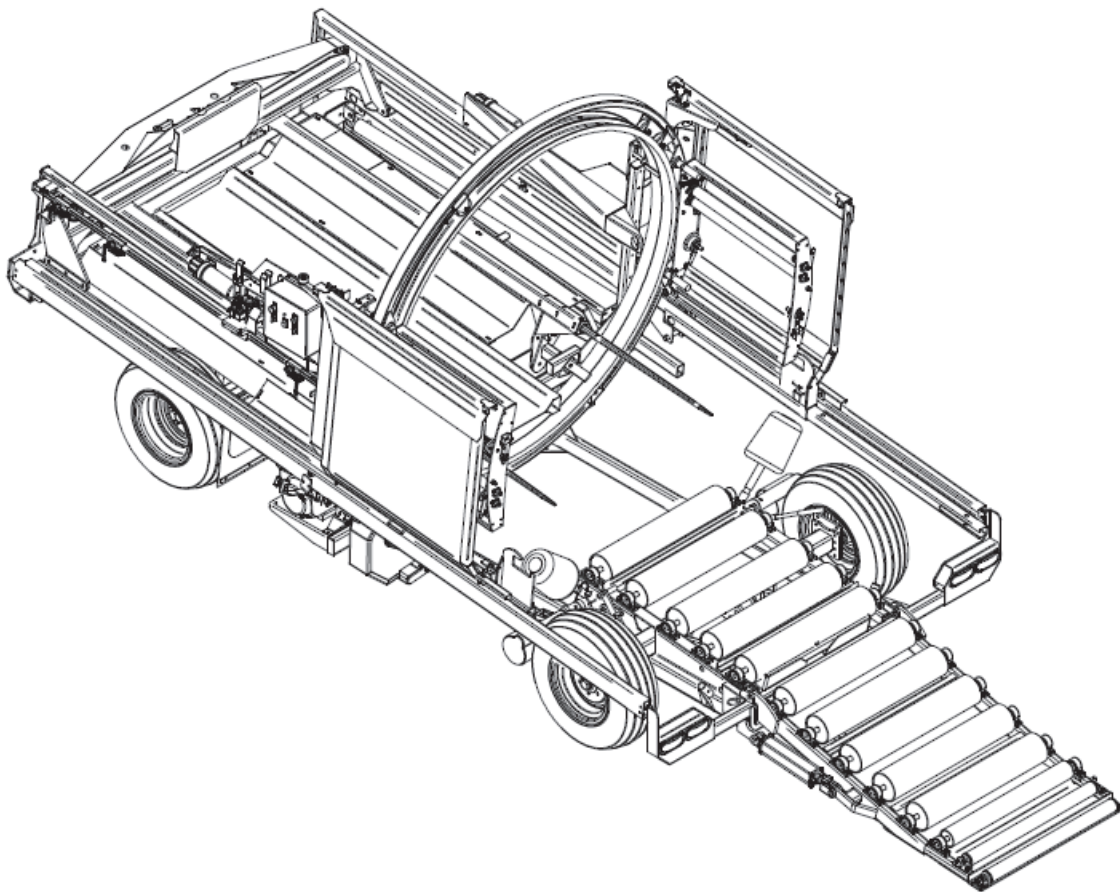


Tube-Line Balewrapper

TL5500AX2



Operator's Manual

Thank you for choosing the Tubeline TL5500AX2 Balewrapper.
Our hope is that it will give you many years of productive service.
This machine is designed to wrap bales in a continual line with plastic film.
Please read and understand this manual and the machine before operation.

Warranty and Limitation of Liability

All equipment is sold subject to mutual agreement that it is warranted by the company to be free from defects of materials and workmanship. But the company shall not be liable for special, indirect or consequential, damages of any kind under this contract or otherwise.

The company's liability shall be limited exclusively to replacing or repairing without charge, at its factory or elsewhere, at its discretion.

Any material, or workmanship defects which become apparent within one year from the date on which the equipment was purchased, and the company shall have no liability for damages of any kind. The buyer by the acceptance of the equipment will assume all liability for any damages, which may result from the use or misuse by his employees or others.

Warranty coverage is null and void unless Warranty Registration form has been completely filled in and is on file at Tubeline Manufacturing Ltd.

Serial Number

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

Model No : _____

Serial No : _____

Date Purchased : _____

Dealer Name : _____



Serial Number Plate Location

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Section 1 - 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!**

Safety Signal Words / Safety Messages

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 Ltd.

You can also check for a newer manual version at www.tubeline.ca/support

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Safety Guidelines

Safety of the operator is a main design concern, 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.



Lighting & Marking

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

Safety Decal Location



Rear Side Rail

J

R

C



Safety Guard

B



Front

U

H

W

X



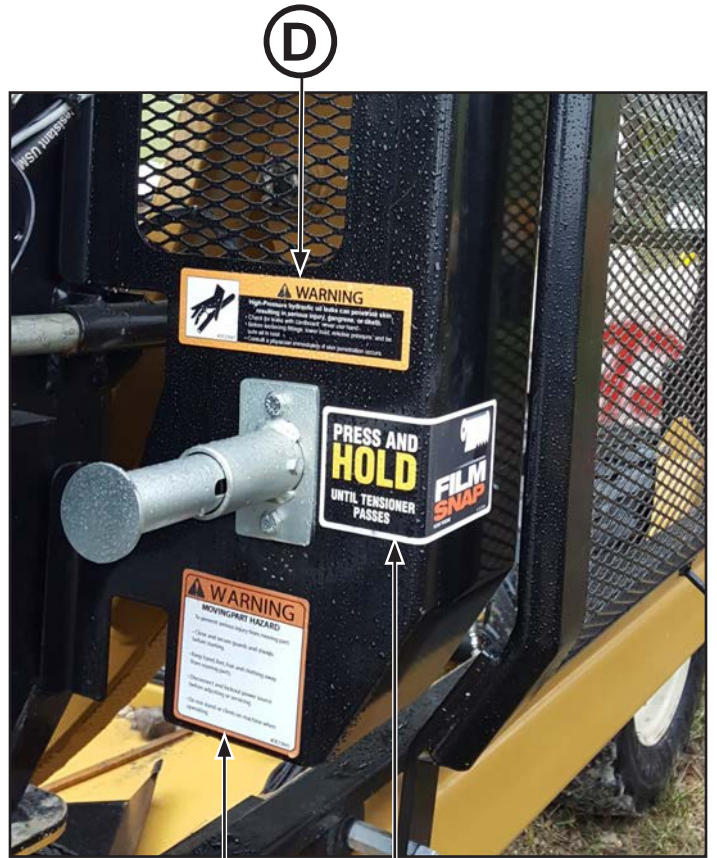
Rear

S

Safety Decal Location



Control Panel



Door Mount



Left Side Deck



Right Side Deck



Front Right Corner



Safety Decal Illustrations

Item - A

Part # : DE23839

 **CAUTION**

To avoid serious injury:

- Read Operator's Manual before operating, servicing or repairing equipment. Follow all safety rules and instructions. (Manuals are available from your selling dealer.)
- Never allow riders. • Keep bystanders away from equipment during operation.
- Operate from tractor seat only. • Keep all shields in place and good condition.
- Lower equipment to ground, stop engine, remove key and set brake before dismounting tractor.
- Never allow children or untrained persons to operate equipment.

#DE23839

Item - B

Part # : DE23845

 **WARNING**



MOVING PART HAZARD

To prevent serious injury or death from moving parts:

- Close and secure guards and shields before starting.
- Keep hands, feet, hair, and clothing away from moving parts.
- Disconnect and lockout power source before adjusting or servicing.
- Do not stand or climb on machine when operating.

#DE23845

Item - C

Part # : DE23846

 **WARNING**



MOVING PART HAZARD


To prevent serious injury from moving part:


- Do not stand or climb on machine when operating.
- Keep others away.

#DE23846

Item - D

Part # : DE23847

 **WARNING**



#DE23847

High-Pressure hydraulic oil leaks can penetrate skin resulting in serious injury, gangrene, or death.

- Check for leaks with cardboard; never use hand.
- Before loosening fittings: lower load, release pressure, and be sure oil is cool.
- Consult a physician immediately if skin penetration occurs.

Safety Decal Illustrations

Item - E

Part # : DE23939



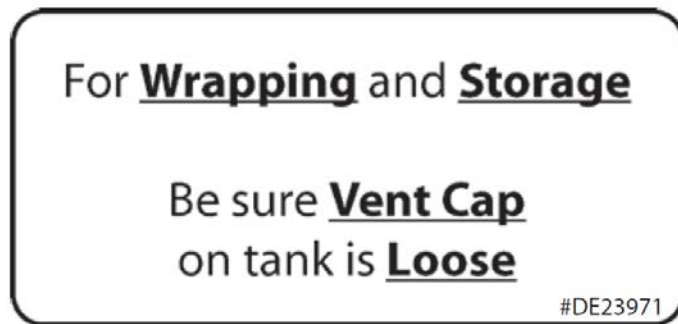
Item - F

Part # : DE23941



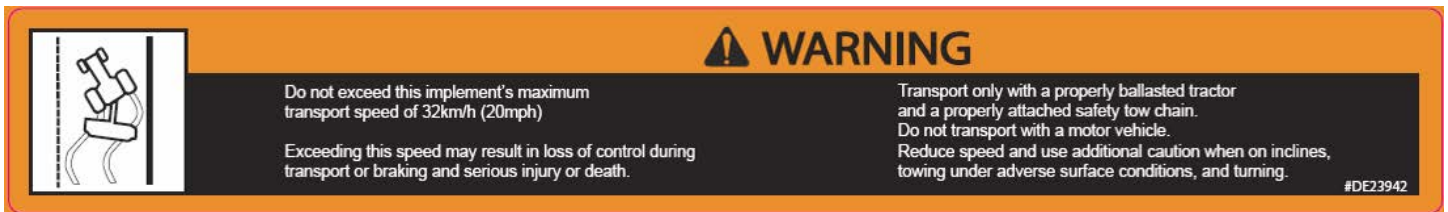
Item - G

Part # : DE23971



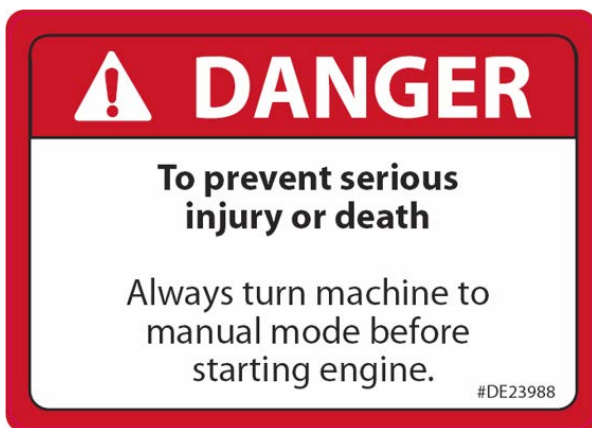
Item - H

Part # : DE23942



Item - I

Part # : DE23988



Item - J

Part # : DE23978



Safety Decal Illustrations

Item - K

Part # : DE30879



Item - L

Part # : DE30880



Item - M

Part # : DE30881



Item - N

Part # : DE37509



Item - O

Part # : DECANADA



Item - P

Part # : DE23954



Item - Q

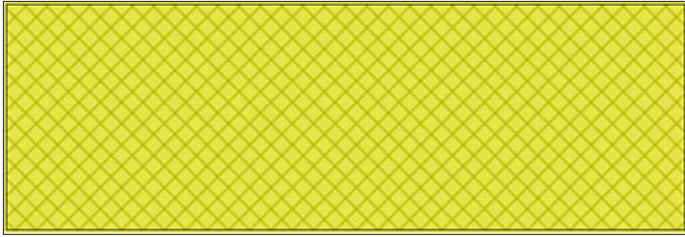
Part # : DE23955



Safety Decal Illustrations

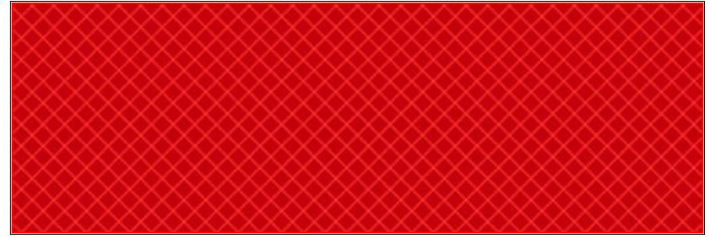
Item - R

Part # : DEAMBER



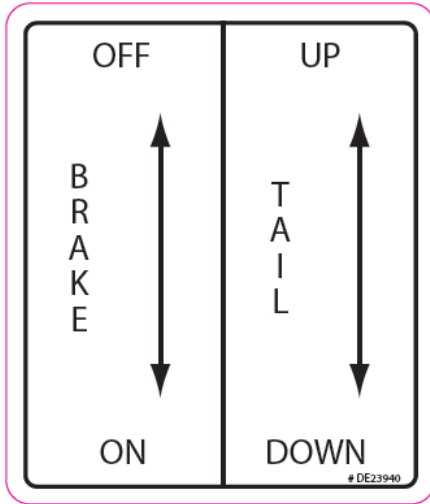
Item - S

Part # : DEREED



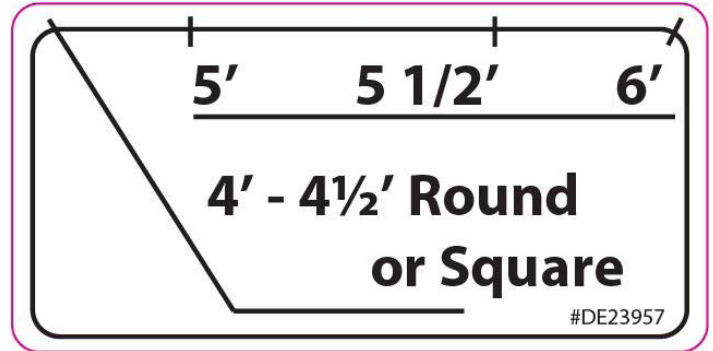
Item - T

Part # : DE23940



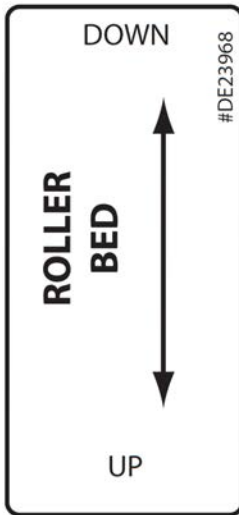
Item - U

Part # : DE23957



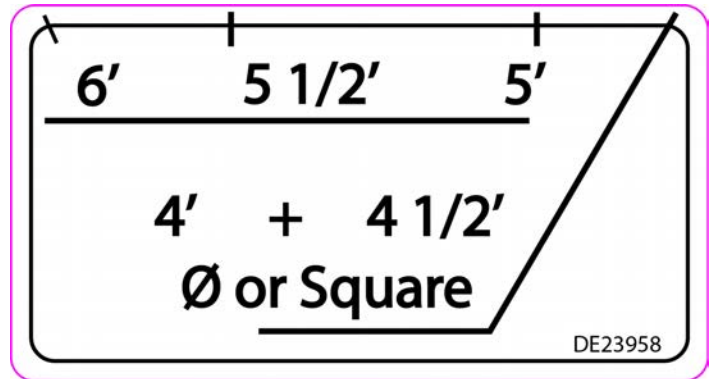
Item - V

Part # : DE23968



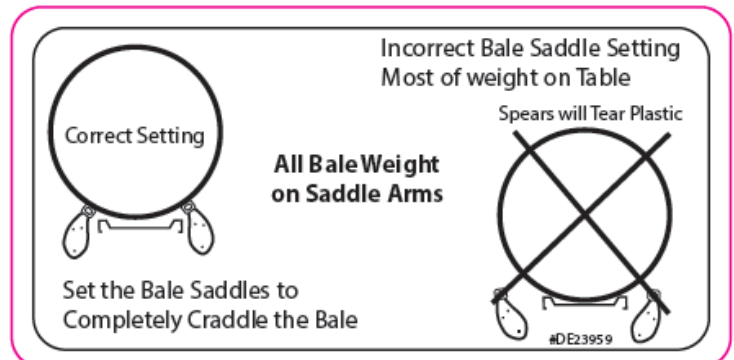
Item - W

Part # : DE23958



Item - X

Part # : DE23959



Section 2: Operation

Pre-operation

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.

- 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.
- Check 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 to push the bale trigger switch down to start the cycle.

Recommended In-field Setup

We suggest the following method of setting up the TL5500AX2 Tubeline Wrapper:

- Park the wrapper where you want the end of the row to be, facing in the appropriate direction with the rear axle in its raised position.
- Apply parking brake and fold in the first section of the tongue and fasten the bracket into the hydraulic steering slider with the pin that held the tongue.
- Fully lower tail.



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.

WARNING: Do not push down the bale trigger switch by hand.

Tire Pressure

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.

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.

Tubeline wrappers make 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 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:

- Lighter bales to handle.
- More desirable fermentation with fewer odors.
- Less freezing in the winter.
- Higher dry matter intake.

Wrapping Site

Select a site that will allow room to make an adequate bale row length.

Tubeline wrappers are fast, with easy setup and mobility. 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 is less likely to attract rodents that can damage the plastic.

Adjusting Bale Saddles

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 5' diameter. For larger bales use the wide setting.

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

Round Bale Size

The TL5500AX2 will wrap round bales up to 5 1/2' in diameter. It will wrap all sizes smaller than this dimension as well.

Remember when making big bale silage the bales will be heavier than dry hay.

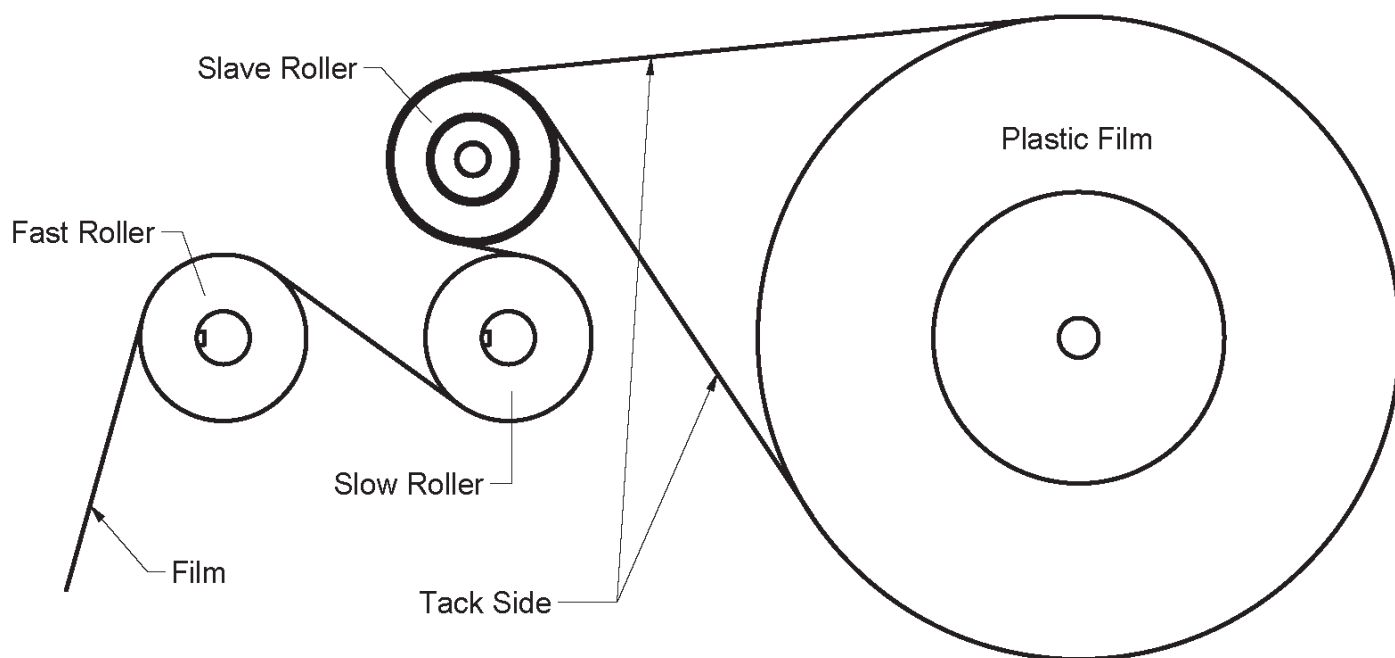
This puts extra strain on loading and transporting equipment. Also, bales will be heavier when feeding out and may have to be moved on wet ground or snow. As a result most operators reduce silage bale diameter to 4–5', even though the wrapper will handle larger size.

Square Bales

Square Bales - The TL 5500AX2 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 is also the maximum length advisable to handle big square bales of silage.

Bales, which are approximately 4' wide and 2' high can be stacked two high for wrapping, however there is 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' x 3', do not stack well. These may be wrapped in single tier of bales.



Installation of Plastic

Danger! Stop Engine before attempting to install plastic.

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.

Procedures for maintenance, repairs or plastic rolls replacement:

1. Push the Emergency Button.
2. Remove the key from the motor (has to be kept by the end user to avoid accident).

3. Complete the required work.

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

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

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

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

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

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.

Switch the control panel to **MAN**.



Danger! When the machine is in manual mode the safety switches and the film sensor 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 bales are heavy and silage bales are even heavier. Use only bale-handling equipment. Keep bales low when turning loader.

To Wrap Bales with Model TL5500AX2

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

- Pull about 4 ft of plastic through each stretcher and tie it under the twine on the bale, or tie it in the slots on the hoop brace (both sides).
- 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.
- Wrap the 1st few bales in **MAN** until the first bale overhangs at rear of machine by 6 inches. Lower machine to the ground and disengage parking brake, if equipped with a power drive, disengage the hydraulic lever.

NOTE- You may want to leave some weight on the wheels until the wrapper starts moving to avoid bales from sliding on the ground.

- After you have wrapped a few bales in this way, switch **AUTO/MAN** switch to **AUTO** and place bale on the bale table. As the bale depresses the table trigger ram will start automatically. Adjust the second slider switch to start the wrap cycle at the same time that the bale makes contact with bales on the machine.



Warning!

Stopping 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 turn 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 bales 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.

NOTE- The **ON-OFF** switch on the control panel will turn off all the electric current to the Control Panel **INCLUDING** the 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 junction 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 before the cylinder bottoms out.

Brake

The brake is operated by using the brake hydraulic valve. Moving the hydraulic lever applies oil pressure to the brakes on the rear wheel. Increase pressure to the point where the bales are firmly packed together. Close the brake 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.

NOTE- Make sure **BRAKE IS DISENGAGED** before transporting the wrapper.

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 end bale row:

1. Open the bale pusher by pivoting the handle under the ram to the opposite side of that machine.
2. Start pushing last bale through the wrapper by using the reverse button and wrap button on the control panel. Continue pushing the bale through the wrap chamber until you have reached the end of the stroke.
3. Retract the bale pusher.
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. Open the pusher and move the 2 x 3 tube to the socket at the rear end of the arms. Close the pusher to finish pushing off the bales from the tail.

NOTE- The last pushoff brackets are lower than the hill rollers. **BE SURE** the tube is behind the rollers before pushing and remove the tube before opening pusher all the way).

7. Open the bale pusher, store the 2 x 3 tube in bracket secure with lock pin.
8. Undo steering, unfold tongue and insert lock pin.
9. Make sure the brakes are released before driving away.

NOTE- The last pushoff brackets are lower than the guide rollers. **BE SURE** the tube is behind the rollers before pushing and remove the tube before opening pusher all the way).

10. Open the bale pusher, store the 2 x 3 tube in bracket secure with lock pin.
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.

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 TL5500AX2 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 TL5500AX2, 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 warm weather and for at least a week in cooler weather.



Disposal of Plastic

Users of bale wrappers are encouraged to collect all plastic to prevent it from becoming an environmental problem. Plastic, although bulky, is inserted in a landfill and will not pollute the ground water. Manufactures are making serious efforts to economically recycle silage plastic.

Use recycling services when available. Please do not burn the plastic!

Collect and dispose all plastic in an Environmentally Friendly manner.

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

Unightly used silage film will encourage complaints.

Section 3: Diagnostics

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 the limit switch at the front end of table. All control 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 flow control 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 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.

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.

Wrap cycle fluid flows from power beyond port on 2 spool valve to flow control, 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 flow control 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 vice-versa.

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. Wrap cycle fluid flows from power beyond port on 2 spool valve to flow control, 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 flow control 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.
3. 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 on 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 run. **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.
4. 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, 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.
5. 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.

Section 4: Maintenance

Lubrication

Tensioner Gear Cover



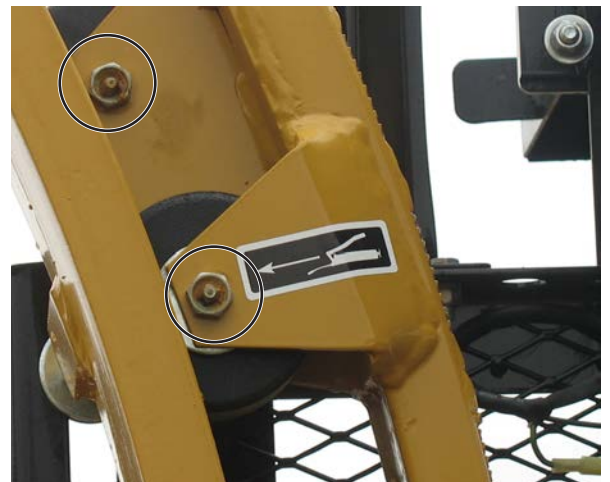
Hoop Axle Bolts



Ram Axle Bolt



Hoop Axle Bolts



Slider Tube



Specifications

Slider Tube: Lightly Grease Once a Week

Hoop Axle Bolts: Twice a Day, All 8 Bolts

Ram Axle Bolts : Once a Week

Gear Box: 1 or 2 Times Every 2 Months

DO NOT OVER GREASE

Oil Points

Oil these points occasionally to keep the parts moving freely.

Top Door Rollers



Bottom Door Rollers



Tensioner Rollers



Last 2 Tail Rollers



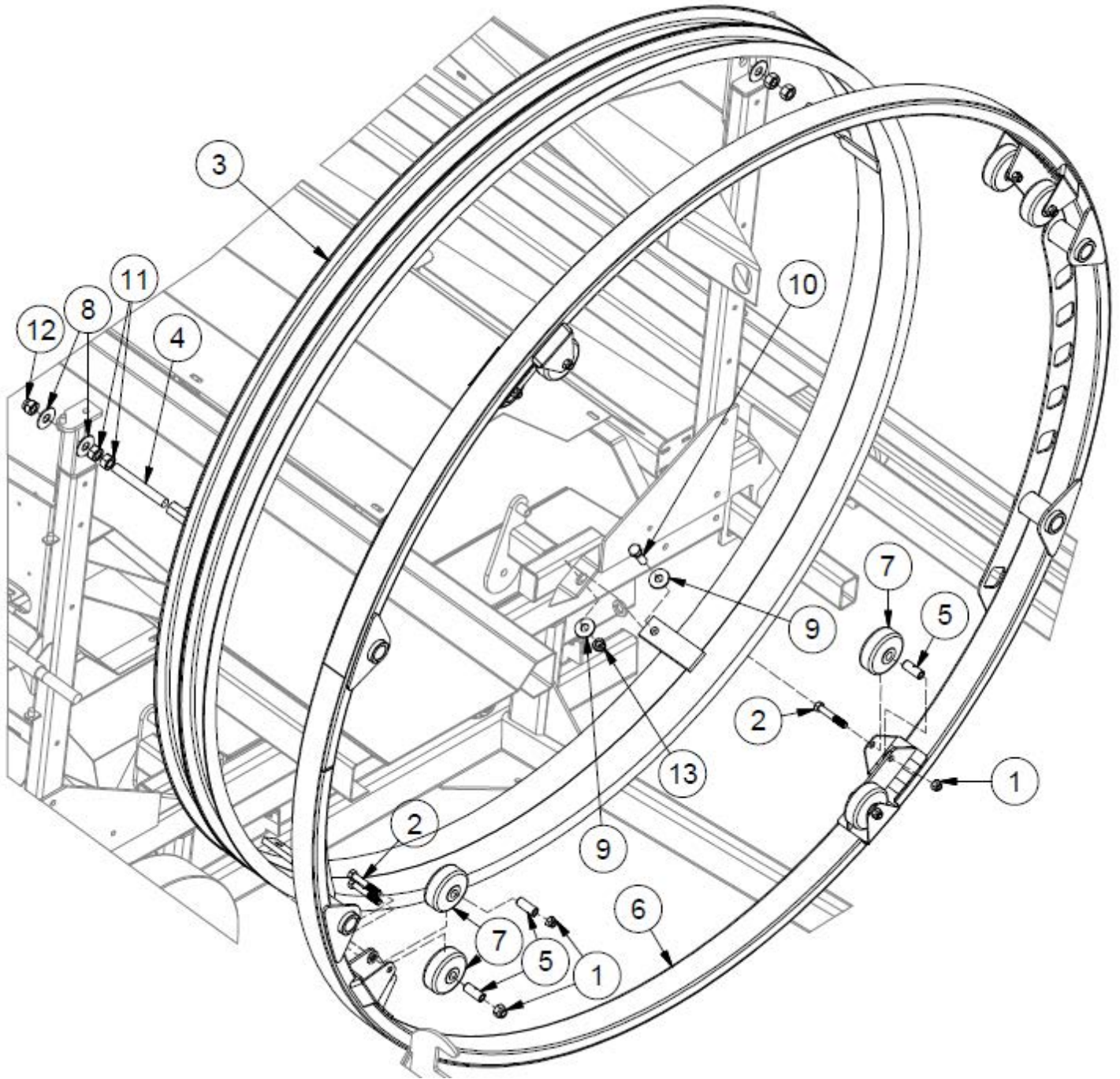
Hoop Wheel Shaft



Section 5: Parts Lists

Actual parts may vary slightly from illustrations shown.

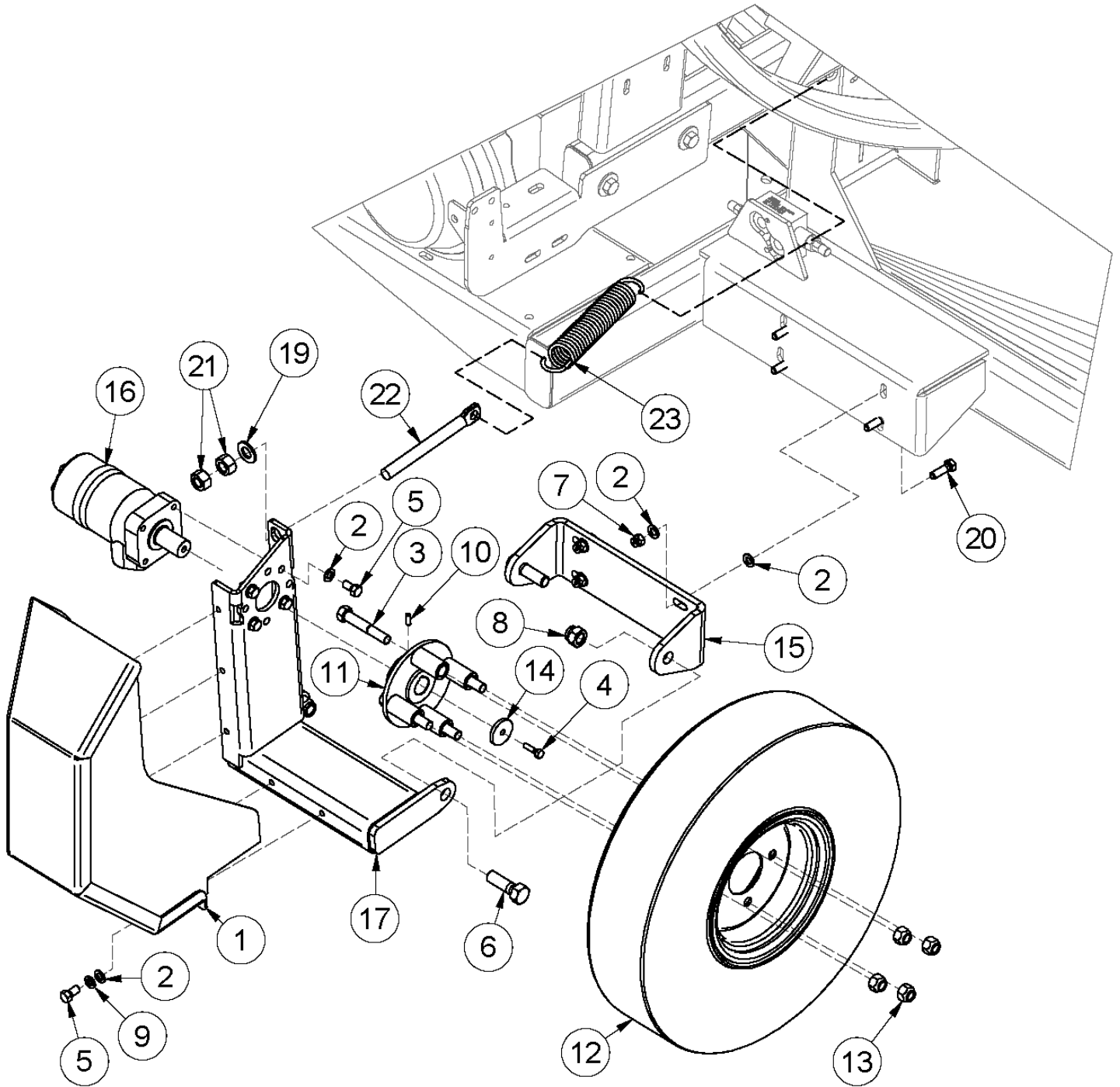
Hoop



Hoop

ITEM	QTY	PART NUMBER	DESCRIPTION
		TL5X2-500-101	Outer Hoop Assembly (Items 1,2,5,6,7)
		TL5X2-500-102	Hoop Wheel Assembly, 4"
1	8	LN 1/2 N	Locknuts - 1/2-13 Zinc Plated Nylon Insert Lock Nut
2	8	TL500-100-015	Axle Bolt & Locknut
3	1	TL550-100-002	Channel Hoop / Inner Hoop
4	2	TL550705	Top Hoop Mount
5	8	TL550-200-016	Spanner
6	1	TL550-301-001	Hoop Outer Ring
7	8	TLWHEEL01	Hoop Wheel
8	4	FW 3/4	Flatwasher Plated - 3/4" Zinc Plated USS (400)
9	4	FW 5/8	Flatwasher - 5/8" Zinc Plated USS
10	2	HB 5/8-11X2.0 Z5	Hex Bolt 5/8-11 x 2 Grade 5 Zinc Plated Hex Cap Screw NC
11	4	HN 3/4	Hex Nut - 3/4"-10 Grade 5 Zinc Plated Finished N.C.
12	2	LN 3/4 N	Locknuts - 3/4-10 Zinc Plated Nylon Insert
13	2	LN 5/8 N	Locknut - 5/8-11 Zinc Plated Nylon Insert Lock Nut

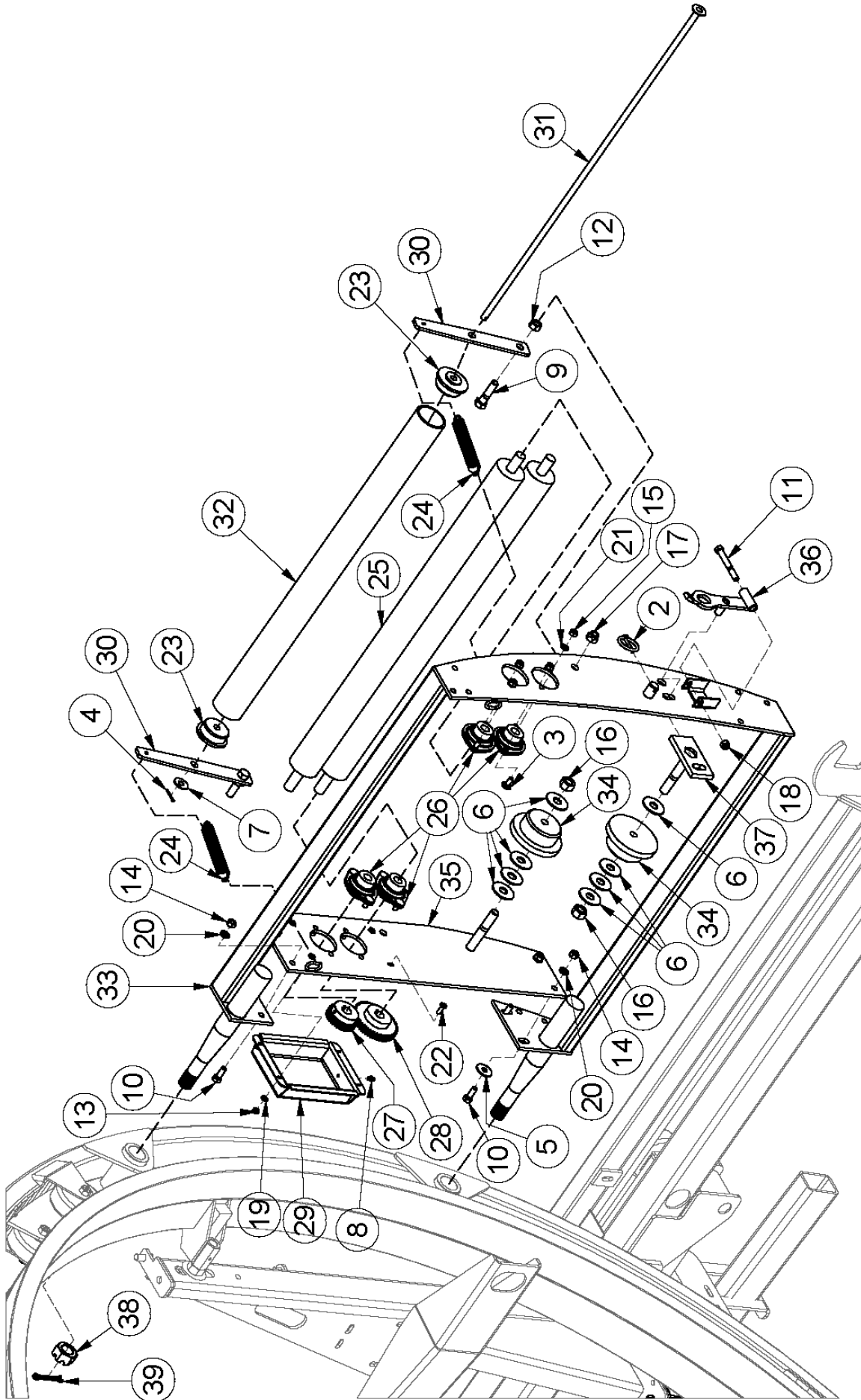
Hoop Drive



Hoop Drive

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	25073	Hoop Wheel Guard
2	18	FW 3/8	Flatwasher Plated, 3/8" Zinc Plated USS (2984)
3	4	HB 1/2-20X3.0 Z5	Hex Bolt 1/2"-20 x 3" Grade 5 Zinc Plated Hex Cap Screw N.F.
4	1	HB 1/4-20X1.0 Z5	Hex Bolt 1/4-20 x 1" Grade 5 Zinc Plated Hex Cap Screw N.C.
5	9	HB 3/8-16X 3/4 Z5	Hex Bolt - 3/8-16 x 3/4" Grade 5 Zinc Plated Hex Cap Screw N.C.
6	2	HB 5/8-11X2.0 Z5	Hex Bolt 5/8-11 x 2 Grade 5 Zinc Plated Hex Cap Screw N.C.
7	4	LN 3/8 N	Locknuts - 3/8-16 Zinc Plated Nylon Insert Lock Nut
8	2	LN 5/8 N	Locknut - 5/8-11 Zinc Plated Nylon Insert Lock Nut
9	5	LW 3/8	Lockwasher - 3/8" Zinc Plated Medium Split (5500)
10	2	SS 14X34	Allan Head Set Screw, Cup Point Set Screw 1/4 x 3/4
11	1	TL500-100-051	Hoop Drive Wheel Hub
12	1	TL500-100-052	Drive Wheel
13	4	TL500-100-054	Wheel Nut, 1/2"
14	1	TL552404	Hoop Motor Plate
15	1	TL5X2-100-090	Hoop Wheel Base
16	1	TL5X2-200-050	Hydraulic Motor (M + S 2009 Models)
17	1	TL5X2-100-049	Hoop Motor Mount
19	1	FW 5/8	Flatwasher - 5/8" Zinc Plated USS (516)
20	4	HB 3/8-16X1.1/4 Z5	Hex Bolt 3/8-16 x 1 1/4" Grade 5 Zinc Plated Hex Cap Screw N.C.
21	2	HN 5/8	Hex Nut - 5/8"-11 Grade 5 Zinc Plated Finished N.C.
22	1	PP00051	Flat Eye Bolt 5/8 x 7.0
23	1	TL500-101-231	Wheel Tensioner Spring

Plastic Wrap Carrier

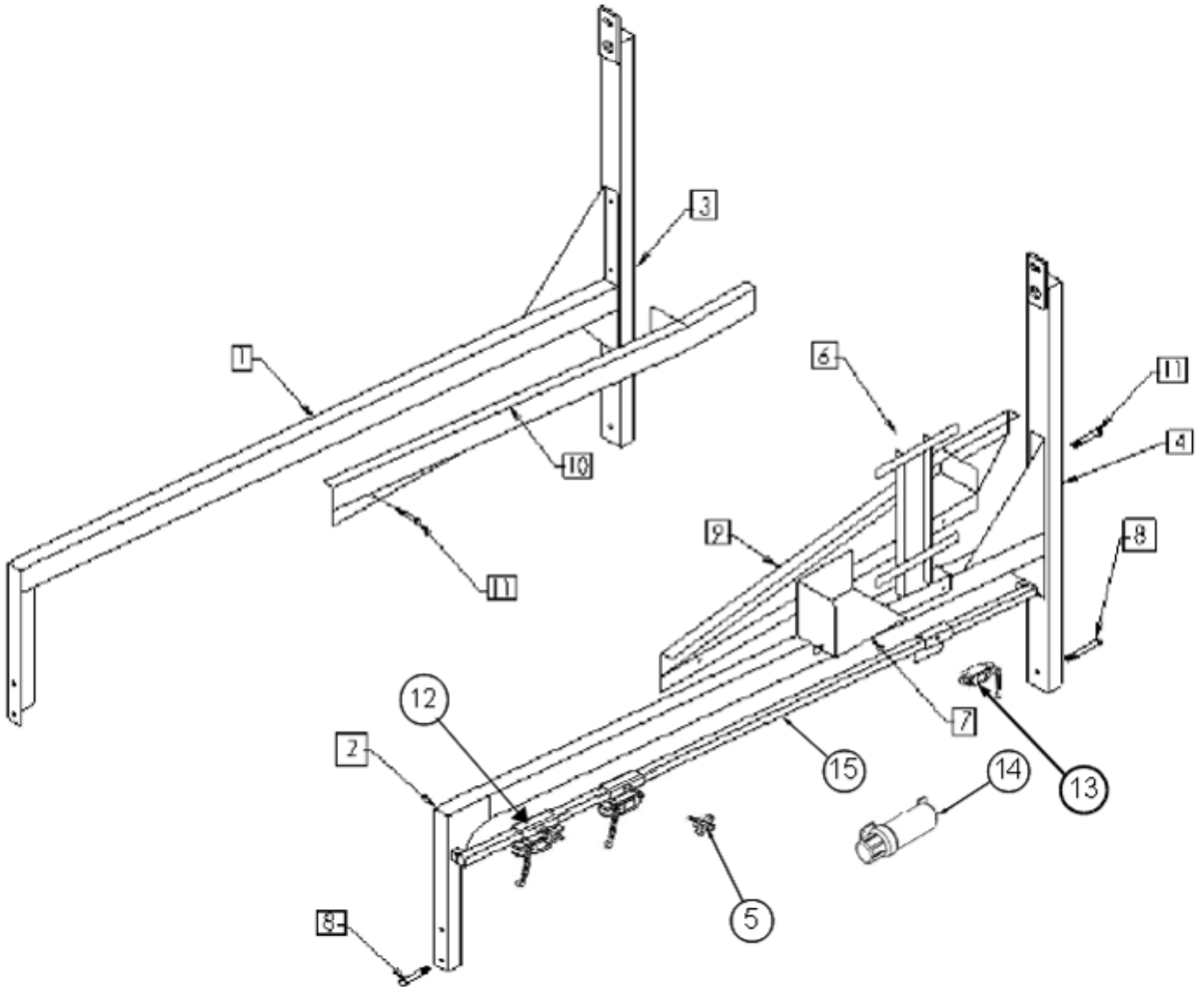


Plastic Wrap Carrier

ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	TL550-100-072	Complete Plastic Wrap Carrier Assembly
2	1	25680	Lynch Pin 3/16 x 1.5
3	8	CB 5/16-18X 3/4 Z5	Carriage Bolt - 5/16-18 x 3/4" Zinc Plated Grade 5
4	1	CP 18X1	Pin, Cotter 1/8 x 1.0
5	2	FW 3/8	Flatwasher Plated, 3/8" Zinc Plated USS (2984)
6	8	FW 5/8	Flatwasher - 5/8" Zinc Plated USS (516)
7	1	FW 7/16	Flatwasher - 7/16" Zinc Plated USS (1620)
8	1	GR 1/4 X 28	Grease Fitting 1/4-28 Strght-Standrd Zerk
9	2	HB 1/2-13X2.0 Z5	Hex Bolt 1/2-13 x 2" Grade 5 Zinc Plated Hex Cap Screw N.C
10	4	HB 3/8-16X1.0 Z5	Hex Bolt 3/8-16 x 1" Grade 5 Zinc Plated Hex Cap Screw N.C.
11	1	HB 3/8-16X3.0 Z5	Hex Bolt 3/8-16 x 3" Grade 5 Zinc Plated Hex Cap Screw N.C
12	2	HN 1/2	Hex Nut 1/2"-13 Grade 5 Zinc Plated Finished N.C.
13	4	HN 1/4	Hex Nut 1/4"-20 Grade 5 Zinc Plated Finished N.C.
14	4	HN 3/8	Hex Nut 3/8"-16 Grade 5 Zinc Plated Finished N.C.
15	8	HN 5/16	Hex Nut 5/16"-18 Grade 5 Zinc Plated Finished Hex Nut N.C.
16	2	HN 5/8	Hex Nut - 5/8"-11 Grade 5 Zinc Plated Finished N.C.
17	2	LN 1/2 N	Locknuts - 1/2-13 Zinc Plated Nylon Insert Lock Nut
18	1	LN 3/8 N	Locknuts - 3/8-16 Zinc Plated Nylon Insert Lock Nut
19	4	LW 1/4	Lockwasher - 1/4" Zinc Plated Medium Split (15000)
20	4	LW 3/8	Lockwasher - 3/8" Zinc Plated Medium Split (5500)
21	8	LW 5/16	Lockwasher - 5/16" Zinc Plated Medium Split (9000)
22	4	MS 1/4X1.1/2 SDS	Machine Screw - 1/4"-14 x 1-1/2" Unslotted Hex Washer Head Self Drilling Screw Z
23	2	TL500-100-021	HMWPVC Bearing - Plastic End Cap
24	2	TL500-100-135	Spring - Tensioner
25	2	TL550-100-006	Tensioner Roller
26	4	TL550-100-007	Flange Bearing, 3/4" (2 Flanges & Bearing)
27	1	TL550-100-008	Small Gear - 3/4 Bore, KW, SS, 14 1/2 deg, 2.25 P.D.
28	1	TL550-100-009	Large Gear - 3/4 Bore, KW, SS, 14 1/2 deg, 3.50 P.D.
29	1	TL550-100-010	Gear Cover
30	2	TL550-100-016	Slave Roller Mount Bracket
31	1	TL550-100-018	Axle Shaft
32	1	TL550-100-022	Pipe, ABS (Plastic Idler)
33	1	TL550-100-089	Main Wrap Bracket
34	2	TL550-200-012	Plastic Wrap Spool
35	1	TL550-200-090	Main Wrap side Insert
36	1	TL550-200-103	Wrap Carrier (Spool) Latch
37	1	TL550-200-115	Spool Holder
38	2	HN 1.0-14NFCastle	Hex Nut 1"-14 Slotted Plain Finis(NF Castle Nut Bare)
39	2	CP 1/4 x 2.0	Pin, Cotter - 1/4" x 2" Zinc Plated

Hoop Brace - Original

Prior to serial # 12025



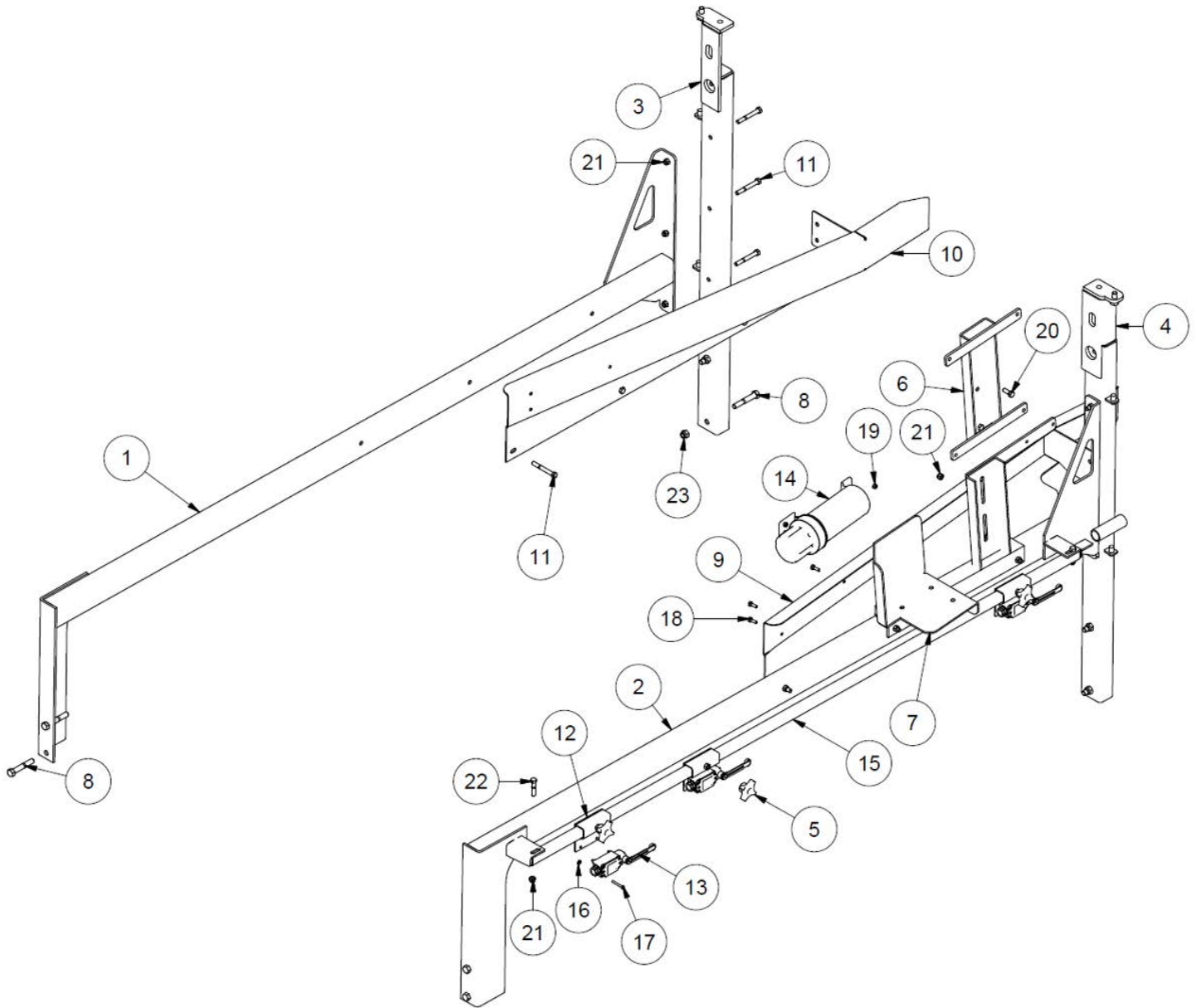
Hoop Brace - Original

Prior to serial # 12025

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	TL5X2-100-100	Right Brace
2	1	TL5X2-100-101	Left Brace
3	1	TL5X2-100-102	Right Hoop Post
4	1	TL5X2-100-103	Left Hoop Post
5	3	TL5X2-100-104	Switch Adjuster Screw
6	1	TL5X2-100-105	Control Panel Mount
7	1	TL5X2-100-106	Mount
8	6	HB 1/2-13X3.0 Z5	Hex Bolt 1/2-13 x 3" Grade 5 Zinc Plated Hex Cap Screw NC
9	1	TL5X2-100-110	Left Bale Deflector
10	1	TL5X2-100-111	Right Bale Deflector
11	6	HB 3/8-16X3.0 Z5	Hex Bolt 3/8-16 x 3" Grade 5 Zinc Plated Hex Cap Screw NC
12A		TL5X2-500-109	Switch Slider c/w Switch (Ref # 5,12,& 13)
12	3	TL5X2-100-242	Switch Slider
13	3	TL550-100-060	Limit Switch
14	1	TL5X2-201-111	Manual Holder
15	1	TL5X2-500-110	Switch Slider Tube

Hoop Brace - First Change

Serial # 12026 to 12070



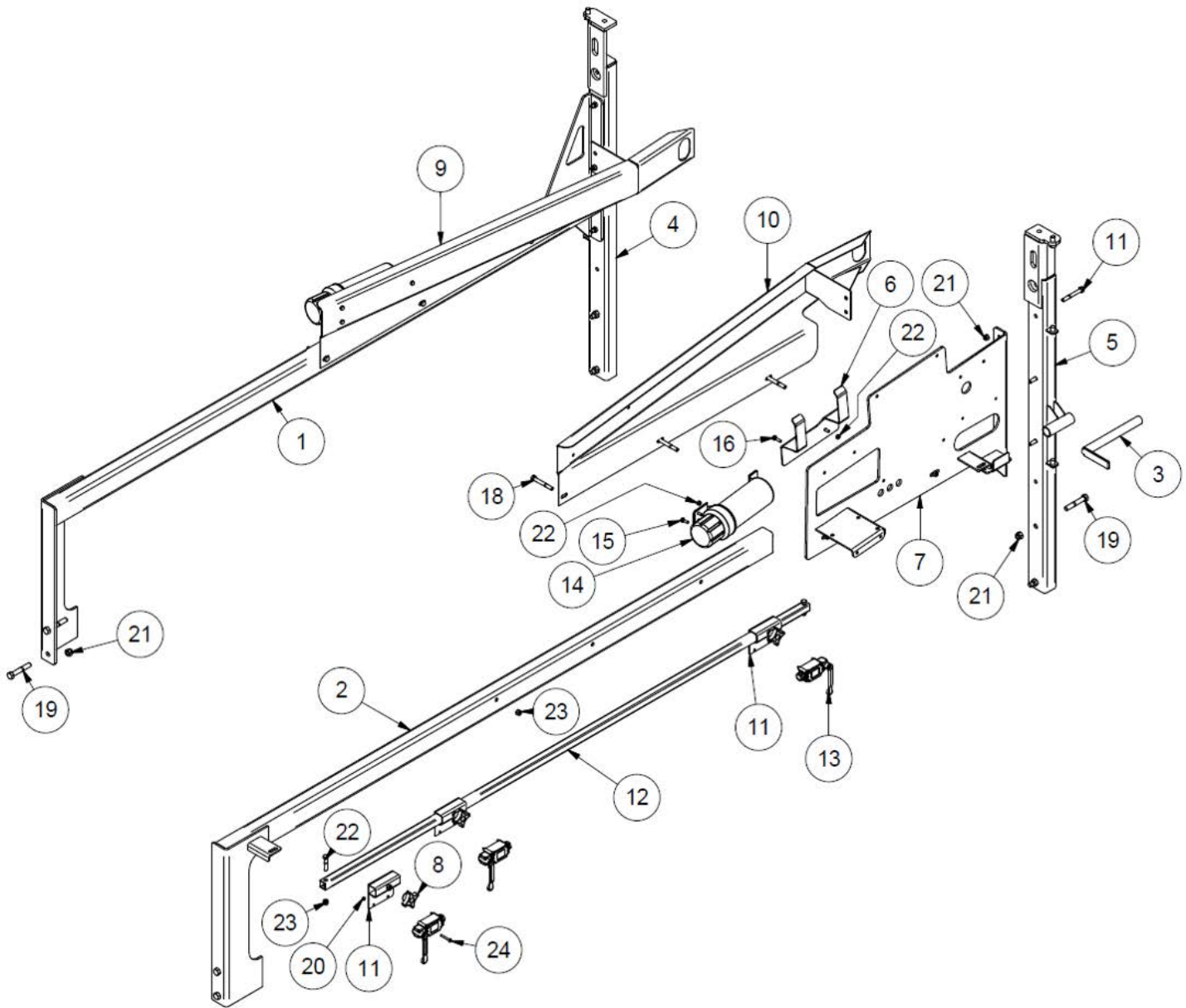
Hoop Brace - First Change

Serial # 12026 to 12070

ITEM	QTY	PART #	DESCRIPTION
1	1	TL5X2-100-100	Right Brace
2	1	TL5X2-100-101	Left Brace
3	1	TL5X2-100-102	Right Hoop Post
4	1	TL5X2-100-103	Left Hoop Post
5	3	TL5X2-100-104	Switch Adjuster Screw
6	1	TL5X2-100-105	Control Panel Mount
7	1	TL5X2-100-106	Mount
8	8	HB 1/2-13X3.0 Z5	Hex Bolt 1/2-13 x 3" Grade 5 Zinc Plated Hex Cap Screw NC
9	1	TL5X2-100-110	Left Bale Deflector
10	1	TL5X2-100-111	Right Bale Deflector
11	10	HB 3/8-16X3.0 Z5	Hex Bolt 3/8-16 x 3" Grade 5 Zinc Plated Hex Cap Screw NC
12A		TL5X2-500-109	Switch Slider c/w Switch (Ref # 5,12 & 13)
12	3	TL5X2-100-242	Switch Slider
13	3	TL550-100-060	Limit Switch
14	1	TL5X2-201-111	Manual Holder
15	1	TL5X2-500-110	Switch Slider Tube
16	12	HN 10-24	Nut - 10-24 Low Carbon Zinc Plated Machine Screw Nut
17	12	MS 10X1 3/4	Machine Screw 10-24x1-3/4
18	3	HB 1/4-20X 3/4 Z5	Hex Bolt - 1/4"-20 x 3/4" Grade 5 Zinc Plated Hex Cap Screw NC
19	3	HN 1/4	Hex Nut 1/4"-20 Grade 5 Zinc Plated Finished NC
20	2	HB 3/8-16X1.0 Z5	Hex Bolt 3/8-16 x 1" Grade 5 Zinc Plated Hex Cap Screw NC
21	14	HN 3/8	Hex Nut 3/8"-16 Grade 5 Zinc Plated Finished NC
22	2	HB 3/8-16X1.3/4 Z5	Hex Bolt - 3/8-16 x 1 3/4" Socket Head Cap Screw
23	8	HN 1/2	Hex Nut 1/2"-13 Grade 5 Zinc Plated Finished NC

Hoop Brace - Current

Serial # 1355001 to current



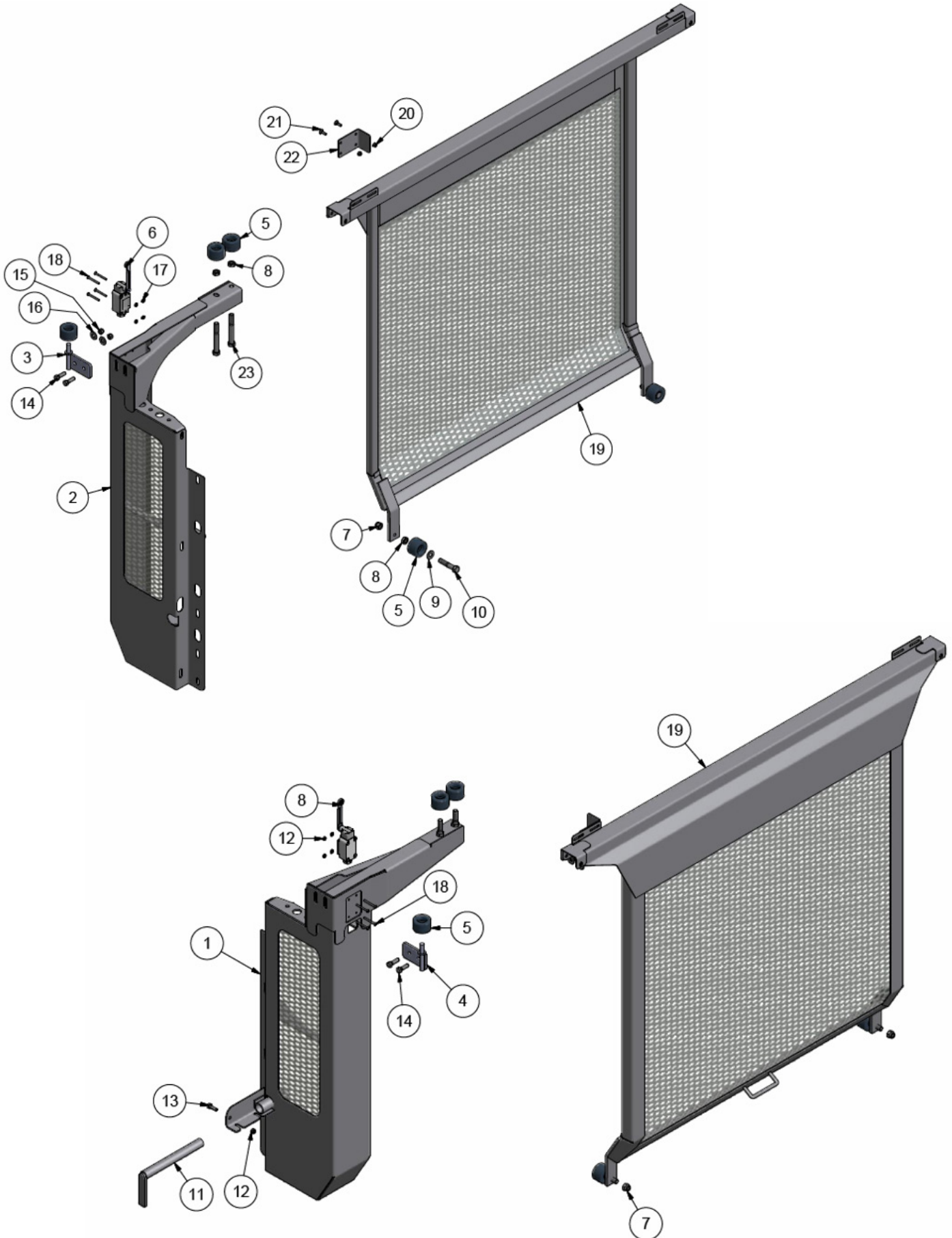
Hoop Brace - Current

Serial # 1355001 to current

ITEM	QTY	PART #	DESCRIPTION
1	1	TL5X2-100-100	Right Brace
2	1	TL5X2-100-101	Left Brace
3	1	25667	Hoop Lock Pin
4	1	28792	Right Hoop Post
5	1	28793	Left Hoop Post
6	1	31173	Tape Holder
7	1	31174	Control Panel Mount
8	3	TL5X2-100-104	Switch Adjuster Screw
9	1	TL5X2-100-110	Left Bale Deflector
10	1	TL5X2-100-111	Right Bale Deflector
11	3	TL5X2-100-242	Switch Slider
12A	2	TL5X2-500-109	Switch Slider c/w Switch (Ref # 8,11, 13, 20 & 24)
12	1	TL5X2-500-110	Switch Slider Tube
13	3	TL550-100-060	Limit Switch
14	1	TL5X2-201-111	Manual Holder
15	3	HB 1/4-20X 3/4 Z5	Hex Bolt - 1/4"-20 x 3/4" Grade 5 Zinc Plated Hex Cap Screw NC
16	2	HB 1/4-20X1.0 Z5	Hex Bolt 1/4-20 x 1" Grade 5 Zinc Plated Hex Cap Screw NC
17	2	HB 3/8-16X1.3/4 Z5	Hex Bolt - 3/8-16 x 1 3/4" Socket Head Cap Screw
18	10	HB 3/8-16X3.0 Z5	Hex Bolt 3/8-16 x 3" Grade 5 Zinc Plated Hex Cap Screw NC
19	8	HB 1/2-13X3.0 Z5	Hex Bolt 1/2-13 x 3" Grade 5 Zinc Plated Hex Cap Screw NC
20	12	HN 10-24	Nut - 10-24 Low Carbon Zinc Plated Machine Screw Nut
21	8	LN 1/2 N	Locknuts - 1/2-13 Zinc Plated Nylon Insert Lock Nut
22	3	LN 1/4 N	Locknuts - 1/4-20 Zinc Plated Nylon Insert
23	14	LN 3/8 N	Locknuts - 3/8-16 Zinc Plated Nylon Insert Lock Nut
24	12	MS 10X1 3/4	Machine Screw 10-24x1-3/4

Safety Guard - Original

Prior to serial # 12025



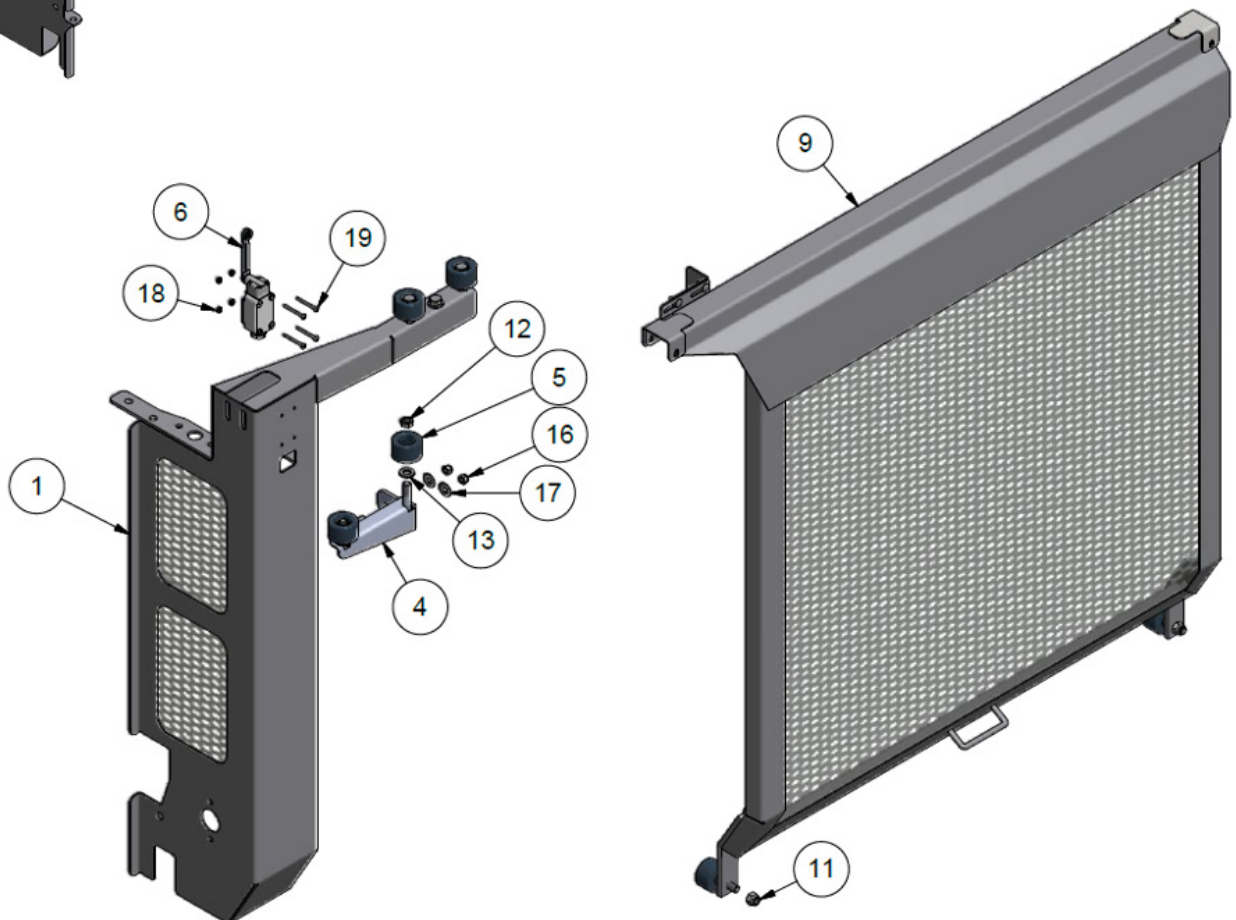
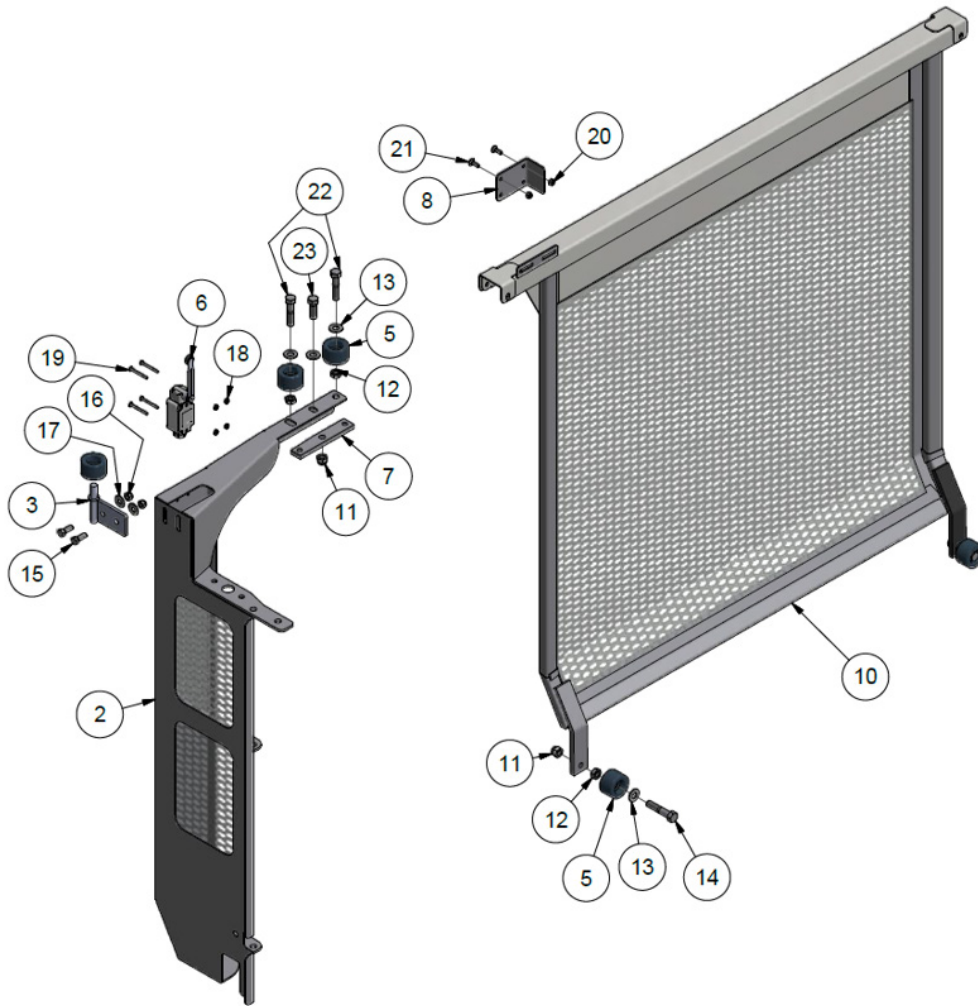
Safety Guard - Original

Prior to serial # 12025

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	TL5X2-100-025	Left Safety Guard
2	1	TL5X2-100-024	Right Safety Guard
3	1	TL5X2-301-103	Right Top Door Roller Bracket
4	1	TL5X2-301-120	Left Top Door Roller Bracket
5	6	TL5X2-301-121	Door Roller
6	2	TL550-100-060	Limit Switch
7	6	LN 1/2 N	Locknuts - 1/2-13 Zinc Plated Nylon Insert Lock Nut
8	8	HN 1/2 JAM	Hex Nut - 1/2-13 Zinc Plated Hex Jam Nut
9	4	FWSAE 1/2	Flatwasher, 1/2" Zinc Plated SAE
10	4	HB 1/2-13X2.1/2 YZ8	Hex Bolt 1/2-13 x 1" Grade 5 Zinc Plated Hex Cap Screw
11	1	TL550-200-050	Hoop Lock Pin
12	1	LN 5/16 N	Locknut - 5/16-18 Type NE Zinc Plated Nylon Insert
13	1	HB 5/16-18X1.0 Z5	Hex Bolt 5/16-18 x 1" Grade 5 Zinc Plated Hex Cap Screw
14	4	HB 3/8-16X1.1/4 Z5	Hex Bolt 3/8-16 x 1 1/4" Grade 5 Zinc Plated Hex Cap Screw
15	4	LN 3/8 N	Locknuts - 3/8-16 Zinc Plated Nylon Insert Lock Nut
16	4	FW 3/8	Flatwasher Plated, 3/8" Zinc Plated USS (2984)
17	8	HN 10-24	Nut - 10-24 Low Carbon Zinc Plated Machine Screw Nut
18	8	HB 10-24X1.3/4 Z5	Hex Bolt - #10-24 x 1 3/4 Zinc Finish Flat Socket Cap Screw
19	2	24111	Door Weldment
20	4	LN 1/4 N	Locknuts - 1/4-20 Zinc Plated Nylon Insert
21	4	CB 1/4-20X 3/4 Z	Carriage Bolt 1/4-20 x 3/4" Zinc Plated
22	2	25062	Door Switch Tab
23	4	HB 1/2-13X4.0 Z5	Hex Bolt 1/2-13 x 4 Grade 5 Zinc Hex Cap Screw

Safety Guard - Current

Serial # from 12026 to current

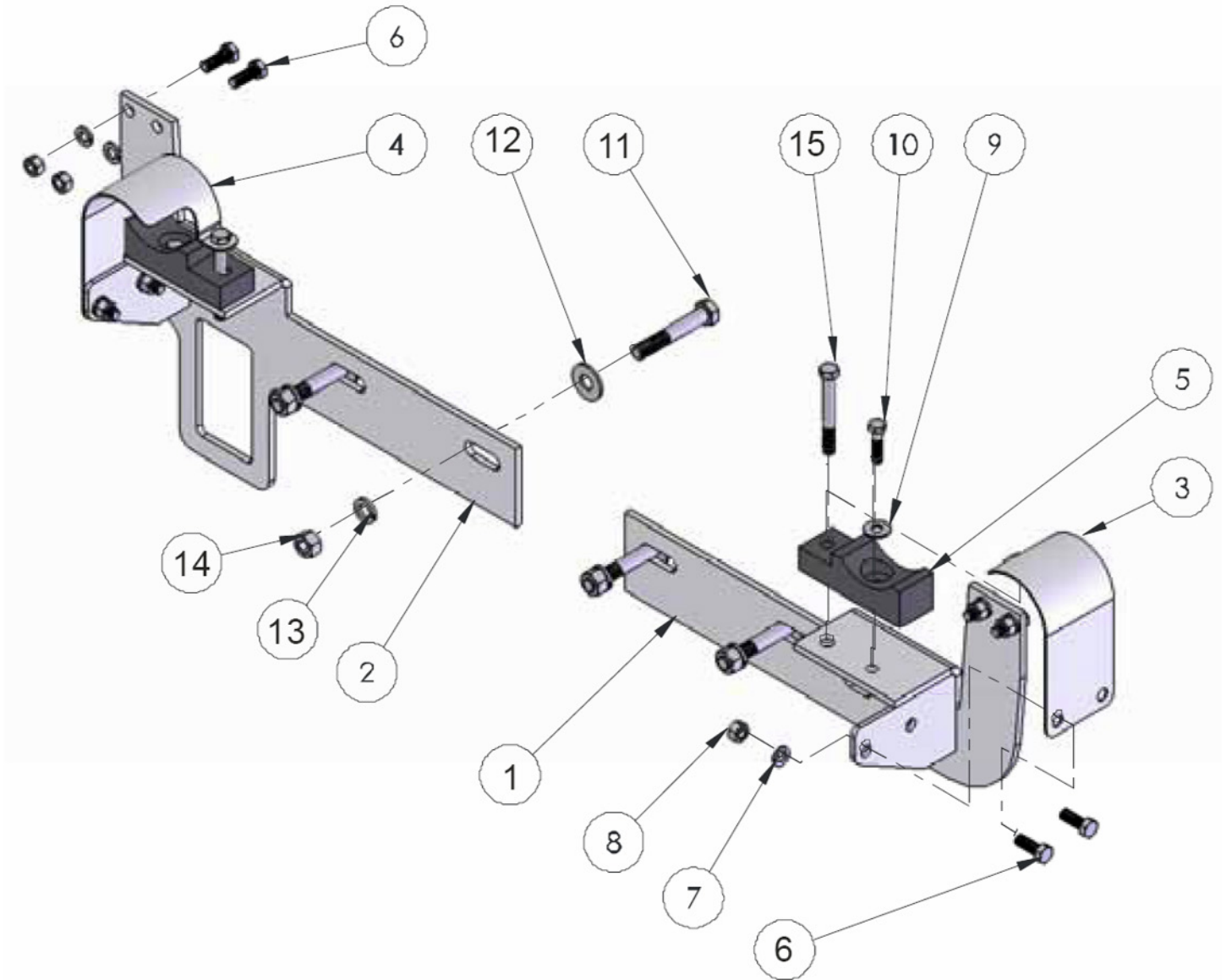


Safety Guard - Current

Serial # from 12026 to current

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	TL109-100-363	Left Safety Guard
2	1	TL109-100-364	Right Safety Guard
3	1	TL5X2-301-103	Right Top Door Roller Bracket
4	1	TL5X2-301-120	Left Top Door Roller Bracket
5	10	TL5X2-301-121	Door Roller
6	2	TL550-100-060	Limit Switch
7	2	28741	Rear Roller Mount
8	2	25062	Door Switch Tab
9	1	31562	Left Door
10	1	33222	Right Door
11	6	LN 1/2 N	Locknuts - 1/2-13 Zinc Plated Nylon Insert Lock Nut
12	8	HN 1/2 JAM	Hex Nut - 1/2-13 Zinc Plated Hex Jam Nut
13	10	FWSAE 1/2	Flatwasher, 1/2" Zinc Plated SAE
14	4	HB 1/2-13X2.1/2 Z5	Hex Bolt 1/2-13 x 2 1/2" Grade 5 Zinc Plated Hex Cap Screw
15	4	HB 3/8-16X1.1/4 Z5	Hex Bolt 3/8-16 x 1 1/4" Grade 5 Zinc Plated Hex Cap Screw
16	4	LN 3/8 N	Locknuts - 3/8-16 Zinc Plated Nylon Insert Lock Nut
17	4	FW 3/8	Flatwasher Plated, 3/8" Zinc Plated USS (2984)
18	8	HN 10-24	Nut - 10-24 Low Carbon Zinc Plated Machine Screw Nut
19	8	HB 10-24X1.3/4 Z5	Hex Bolt - #10-24 x 1 3/4 Zinc Finish Flat Socket Cap Screw
20	4	LN 1/4 N	Locknuts - 1/4-20 Zinc Plated Nylon Insert
21	4	CB 1/4-20X 3/4 Z	Carriage Bolt 1/4-20 x 3/4" Zinc Plated
22	4	HB 1/2-13X2.1/4 Z5	Hex Bolt - 1/2"-13 x 2 1/4"
23	2	HB 1/2-13X1.1/2 Z5	Hex Bolt 1/2-13 x 1 1/2" Grade 5 Zinc Plated Hex Cap Screw

Cylinder Supports

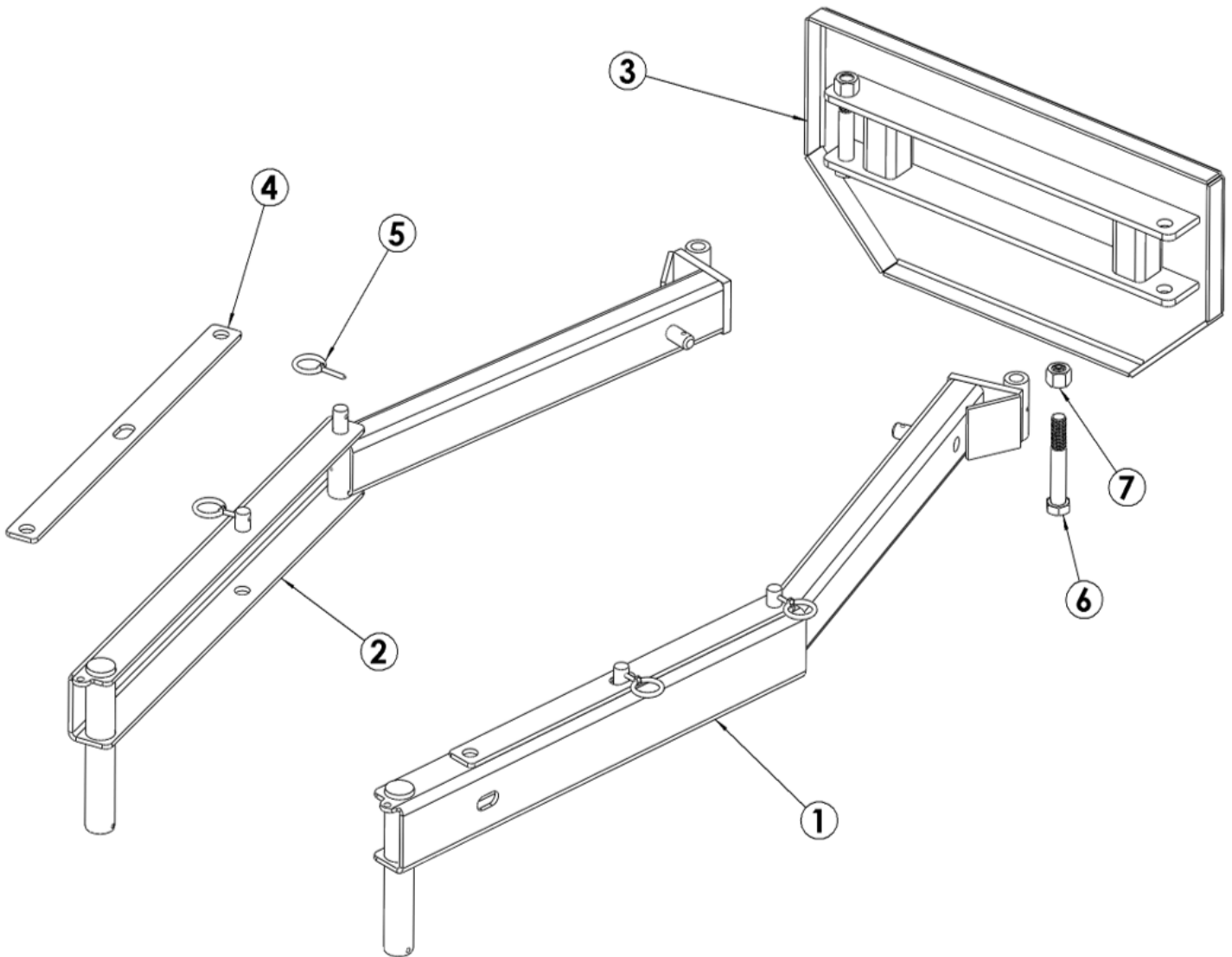


Cylinder Supports

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	TL5X2-301-130	Right Support Bracket
2	1	TL5X2-301-131	Left Support Bracket
3	1	TL5X2-100-132	Right Cylinder Clamp
4	1	TL5X2-100-133	Left Cylinder Clamp
5	2	TL550-200-109	Cylinder Support
6	8	HB 3/8-16X1.0 Z5	Hex Bolt 3/8-16 x 1" Grade 5 Zinc Plated Hex Cap Screw NC
7	8	FW 3/8	Flatwasher Plated, 3/8" Zinc Plated USS
8	8	HN 3/8	Hex Nut 3/8"-16 Grade 5 Zinc Plated Finished NC
9	2	FW 5/16	Flatwasher - 5/16" Zinc Plated USS
10	2	HB 5/16-18X1.1/4 Z5	Hex Bolt - 5/16"-18 x 1 1/4" Grade 5 Zinc Plated Hex Cap Screw
11	4	HB 1/2-13X3.0 Z5	Hex Bolt 1/2-13 x 3" Grade 5 Zinc Plated Hex Cap Screw NC
12	4	FW 1/2	Flatwasher - 1/2" Zinc Plated USS
13	4	LW 1/2	Lockwasher - 1/2" Zinc Plated Medium Split
14	4	LN 1/2 N	Locknuts - 1/2-13 Zinc Plated Nylon Insert Lock Nut
15	2	HB 3/8-16X3.0 Z5	Hex Bolt 3/8-16 x 3" Grade 5 Zinc Plated Hex Cap Screw N.C

Front Pushoff - Original

For wrappers with a serial # **up to** 12070



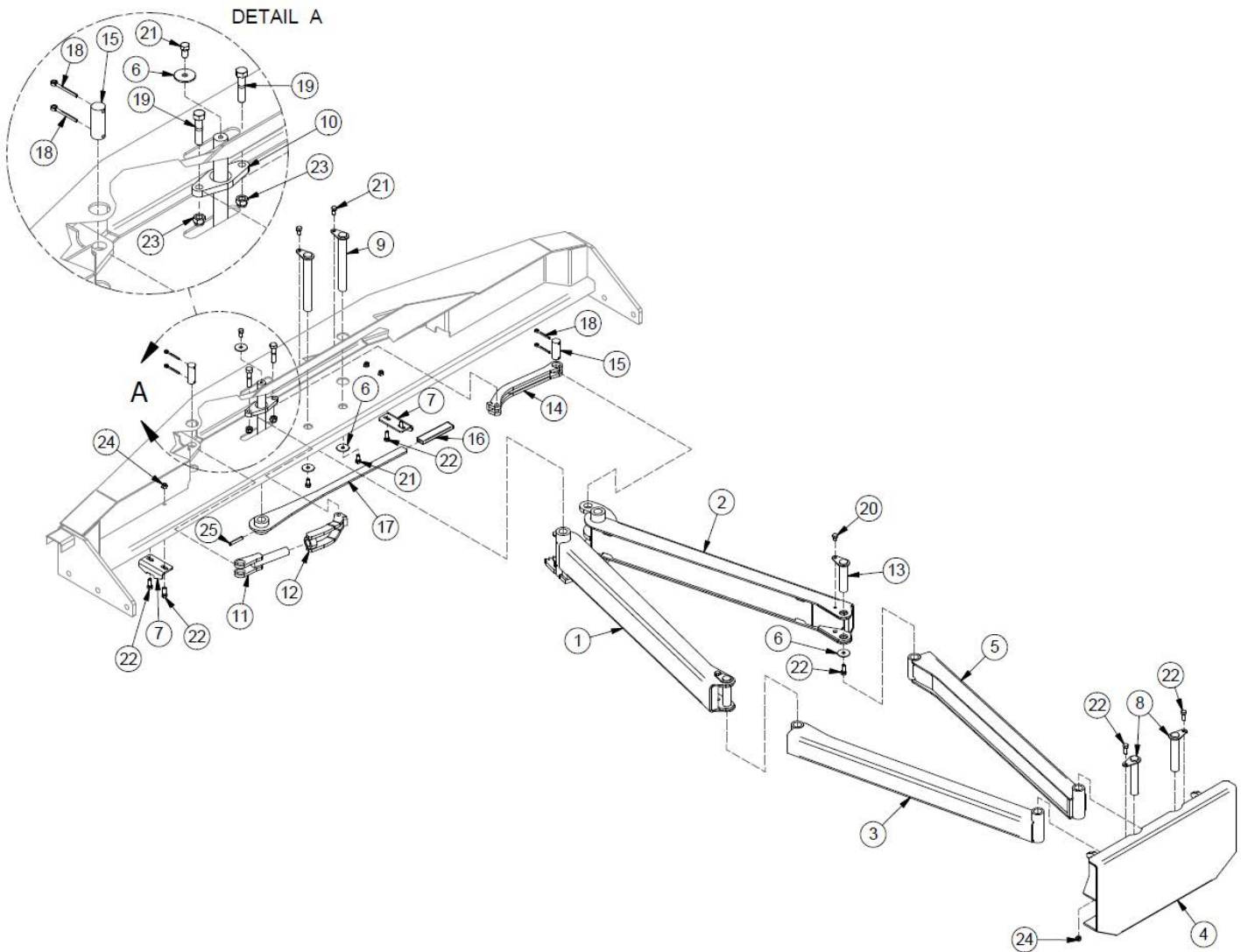
Front Pushoff - Original

For wrappers with a serial # **up to** 12070

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	TL5X2-500-143	Left Front Pushoff Arm
2	1	TL5X2-500-144	Right Front Pushoff Arm
3	1	TL5X2-301-016	Push Plate
4	2	TL599-100-017	X Brace
5	4	TL385501	Lynch Pin 3/16 x 1.5
6	2	HB 3/4-10X5.1/2 Z5	Hex Bolt 3/4"-10 x 5-1/2" Grade 5 Zinc Plated Hex Cap Screw N.C.
7	2	LN 3/4 N	Locknuts - 3/4-10 Zinc Plated Nylon Insert

Front Pushoff - Current

For wrappers with a serial # from 1355001 to current.



Note: To order complete ram assembly (includes 30899, see [page 5-26](#)), use part # : 31935 (40961 after serial number: 16R234).

Note: Wrappers **prior** to serial number 1455001 require both item 12 & 13 when replacing.

Front Pushoff - Current

For wrappers with a serial # **from** 1355001 **to** current.

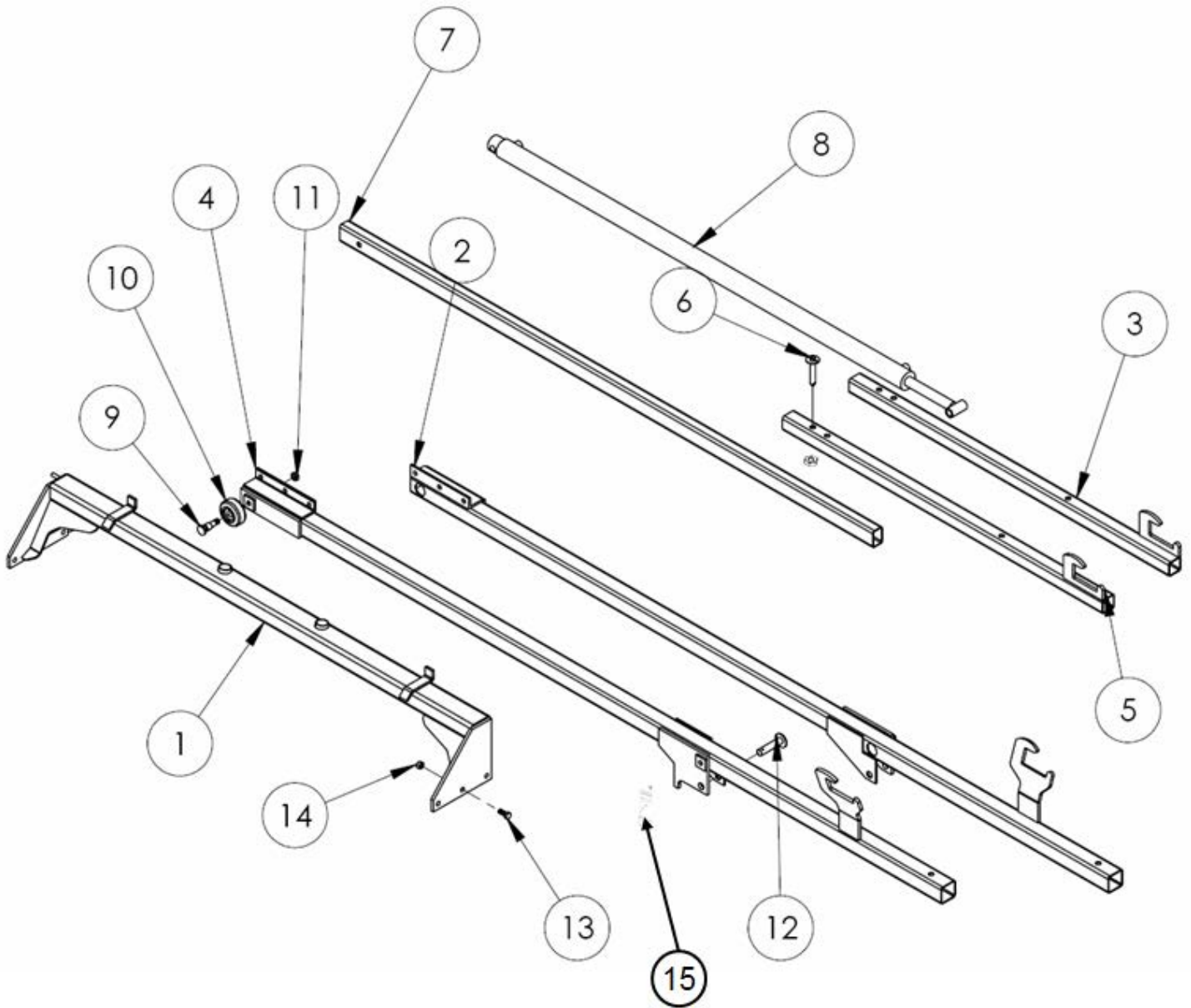
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	30455	Left Large Arm
2	1	30456	Right Large Arm
3	1	30457	Left Small Arm
4	1	30459	Push Plate
5	1	30462	Right Small Arm
6	5	30924	Pin Washer
7	2	30958	Handle Holder
8	2	30980	Last Pushoff Plate Pin
9	2	30982	Pushoff Middle Pin
10	1	30983	Linkage Pivot
11	1	30985	Linkage Adjuster
12	1	30986	Pivot Adjuster
13	2	30988	Arm Joint Pin
14	1	30989	Solid Pivot Arm
15	2	30993	Ram Linkage Mount Pin
16	1	22707	Rubber Handle for 3/8 x 1 Flat Bar
17	1	30981	Last Pushoff Handle (c/w 22707)
18	4	CP 3/16 X 1.0	Pin, Cotter 3/16 x 1
19	2	HB 1/2-13X2.1/4 Z5	Hex Bolt - 1/2"-13 x 2 1/4"
20	2	HB 3/8-16X 1/2 Z5	Hex Bolt Plated Gr. 5 NC
21	5	HB 3/8-16X 3/4 Z5	Hex Bolt - 3/8-16 x 3/4" Grade 5 Zinc Plated Hex Cap Screw NC
22	8	HB 3/8-16X1.0 Z5	Hex Bolt 3/8-16 x 1" Grade 5 Zinc Plated Hex Cap Screw NC
23	2	LN 1/2 N	Locknuts - 1/2-13 Zinc Plated Nylon Insert Lock Nut
24	6	LN 3/8 N	Locknuts - 3/8-16 Zinc Plated Nylon Insert Lock Nut
25	1	RP 38X212	Pin - Roll Pin 3/8 x 2 1/2

Note: To order complete ram assembly (includes 30899, see [page 5-26](#)), use part # : 31935 (40961 after serial number: 16R234).

Note: Wrappers *prior* to serial number 1455001 require both item 12 & 13 when replacing.

Ram - Original

For wrappers with a serial # up to 12070



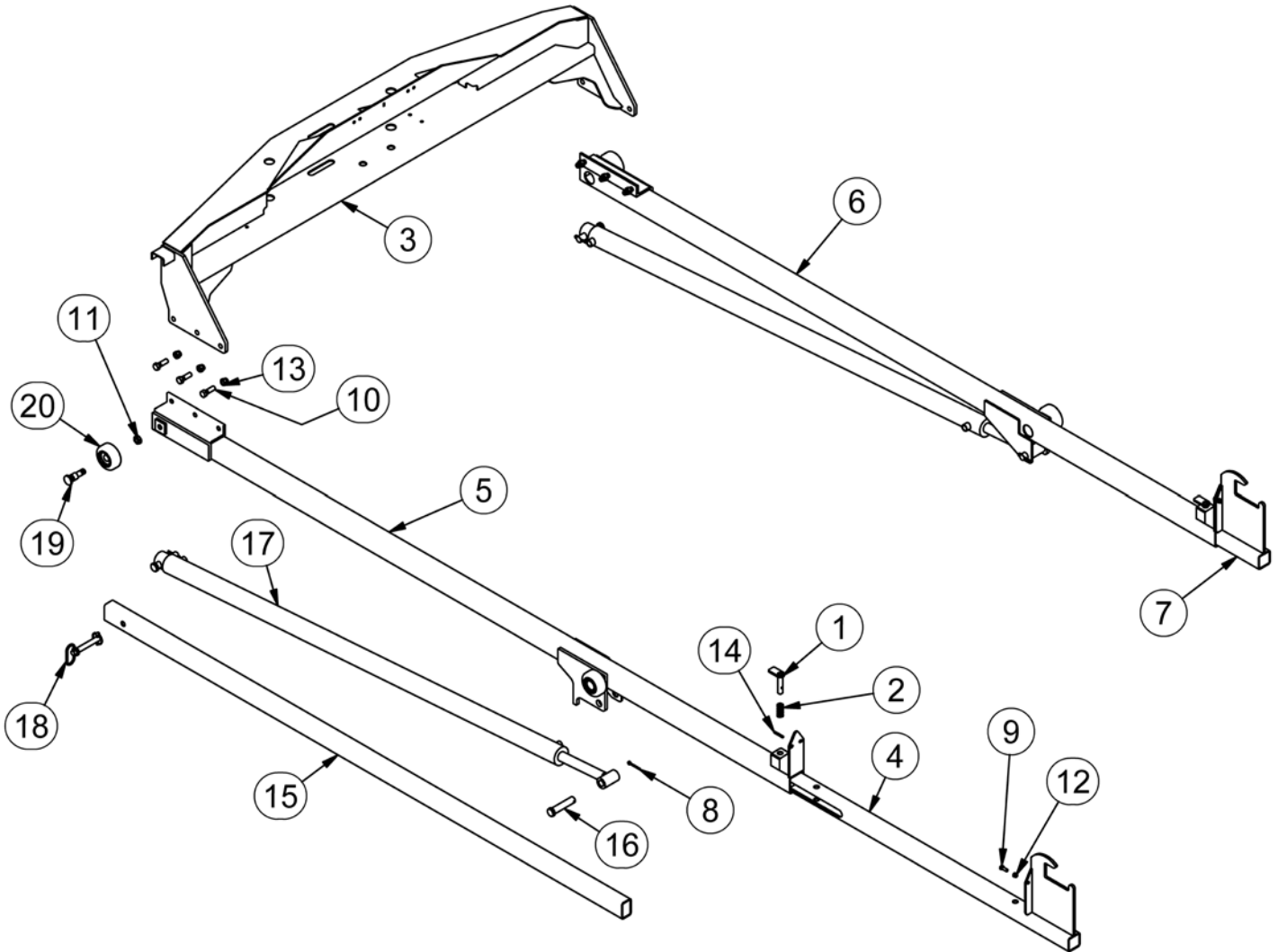
Ram - Original

For wrappers with a serial # **up to** 12070

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	TL5X2-301-150	Front Ram member
2	1	TL5X2-301-151	Right Ram Tube
3	1	TL5X2-301-152	Right Rear Extension
4	1	TL5X2-301-153	Left Ram Tube
5	1	TL5X2-301-154	Left Rear Extension
6	2	TL5X2-500-139	¾ Drawbar Pin (comes with hairpin)
7	1	TL500-301-048	Pushoff Tube
8	2	TL550-100-043	Ram Cylinder
9	4	TL5X2-301-156	Ram Wheel Axle
10	4	TL5X2-301-157	Ram Wheel
11	4	HN 3/4 JAM	Hex Jam Nut 3/4"-16 Zinc Plated N.F.
12	4	TL550-100-042	Ram Cylinder Pin
13	6	HB 5/8-18X2.0 Z5	Hex Bolt 5/8-18 x 2 Grade 5 Zinc Plated Hex Cap Screw NF
14	6	HN 5/8-18	Hex Nut - 5/8"-18 Grade 5 Zinc Plated Finished NF
15	4	CP 3/16 X 2.0	Pin, Cotter - 3/16 x 2.0
	2	TLSK25	Ram Cylinder Seal Kit

Ram - Current

For wrappers with a serial # from 1355001 to current

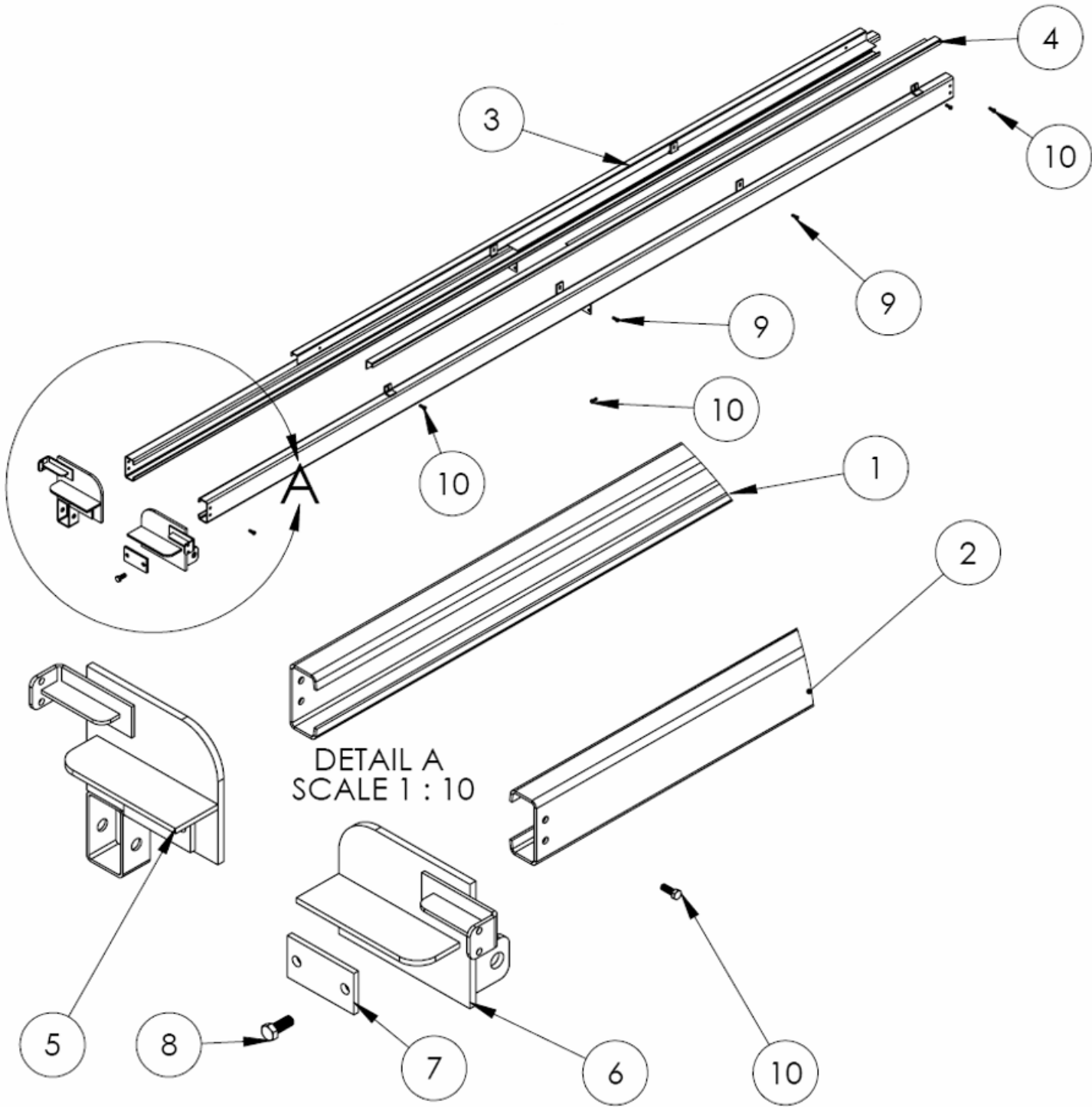


Ram - Current

For wrappers with a serial # **from** 1355001 **to** current

ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	27230	Pushoff Latch Pin
2	2	27566	Last Pushoff Spring Pin
3	1	30899	Ram
4	1	31397	Left Rear Extension
5	1	31398	Left Side Ram Tube
6	1	31399	Right Side Ram Tube
7	1	31987	Right Rear Extension
8	4	CP.188 X 2	3-16 x 2.25 Cotter Pin, Brass
9	4	HB 3/8-16X1 Z5	Hex Bolt 3/8-16x1 Grade 5 Zinc Plated Hex Cap Screw
10	6	HB 5/8-11X2 Z5	Hex Bolt 5/8-11x2 Grade 5 Zinc Plated Hex Cap Screw
11	4	HN 3/4 JAM	Hex Nut - 3/4-16 Zinc Plated Hex Jam Nut
12	4	LN 3/8 N	LN 3/8-16 Zinc Plated Nylon Insert Lock Nut
13	6	LN 5/8 N	LN 5/8-11 Zinc Plated Nylon Insert Lock Nut
14	2	RP 1/4 x 1 7/8	Pin - Roll Pin 1/4 x 1 7/8
15	1	TL500-301-048	Pushoff Tube
16	4	TL550-100-042	Ram Cylinder Pin
17	2	TL550-100-043	Ram Cylinder
18	1	TL550-100-050	Push Off Pin
19	4	TL5X2-301-156	Ram Wheel Axle
20	4	TLWHEEL0205	Ram Rail Wheel
	2	TLSK25	Ram Cylinder Seal Kit

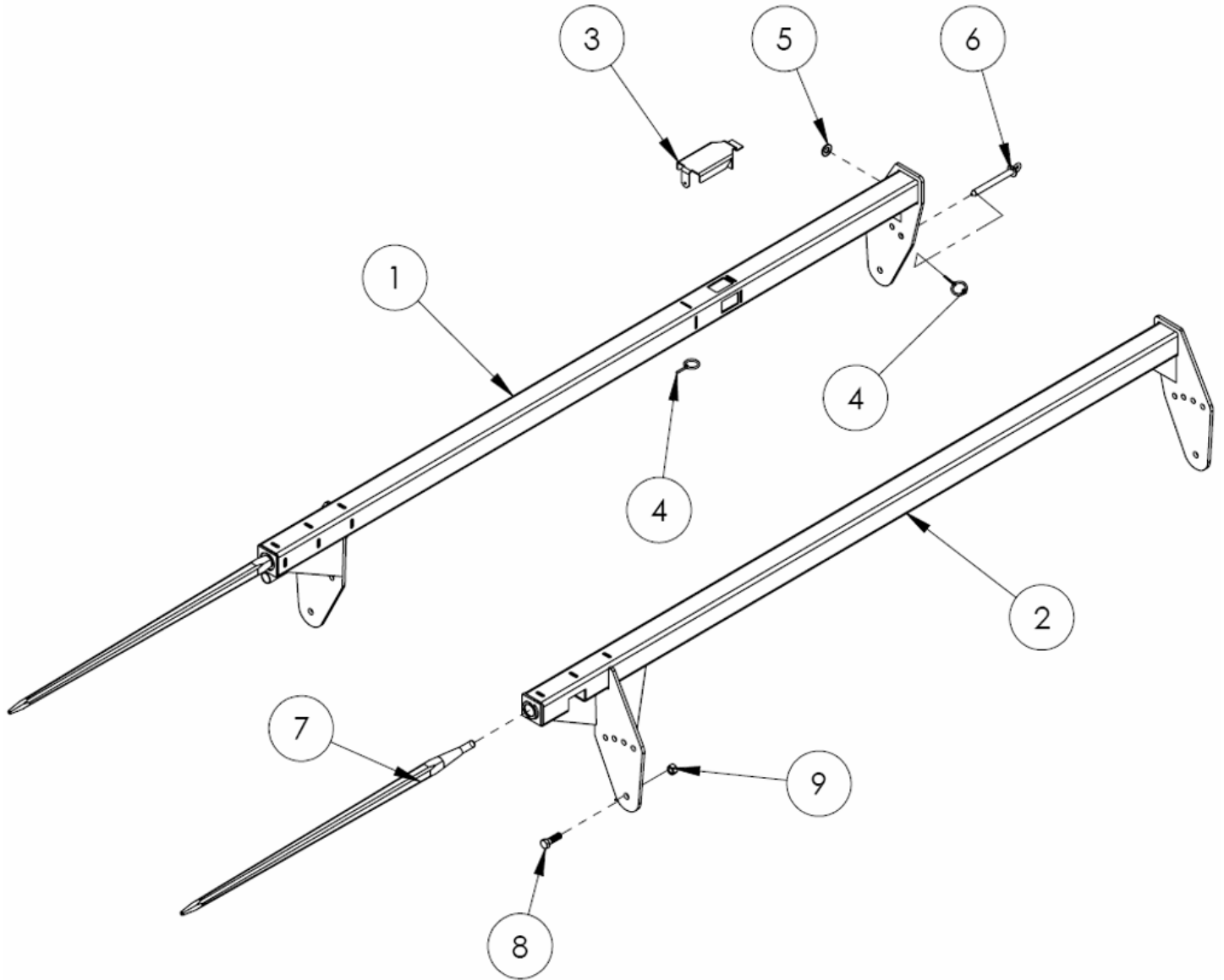
Front Corners & Side Rails



Front Corners & Side Rails

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	TL5X2-301-170	Right Side Rail
2	1	TL5X2-301-171	Left Side Rail
3	1	TL5X2-301-172	Right Guard/ Track
4	1	TL5X2-301-176	Left Guard/ Track
5	1	TL5X2-100-173	Right Front Cylinder Mount
6	1	TL5X2-100-174	Left Front Cylinder Mount
7	1	TL5X2-100-175	Reinforcing Plate
8	1	HB 5/8-18X1.1/2 Z5	Hex Bolt Plated Gr. 5 NF
9	3	HB 5/16-18X1.0 FHSCS	Hex Bolt - 5/16-18 x 1" Zinc Plated Flat Head Socket Cap Screw
10	14	HB 3/8-16X1.0 Z5	Hex Bolt 3/8-16 x 1" Grade 5 Zinc Plated Hex Cap Screw NC

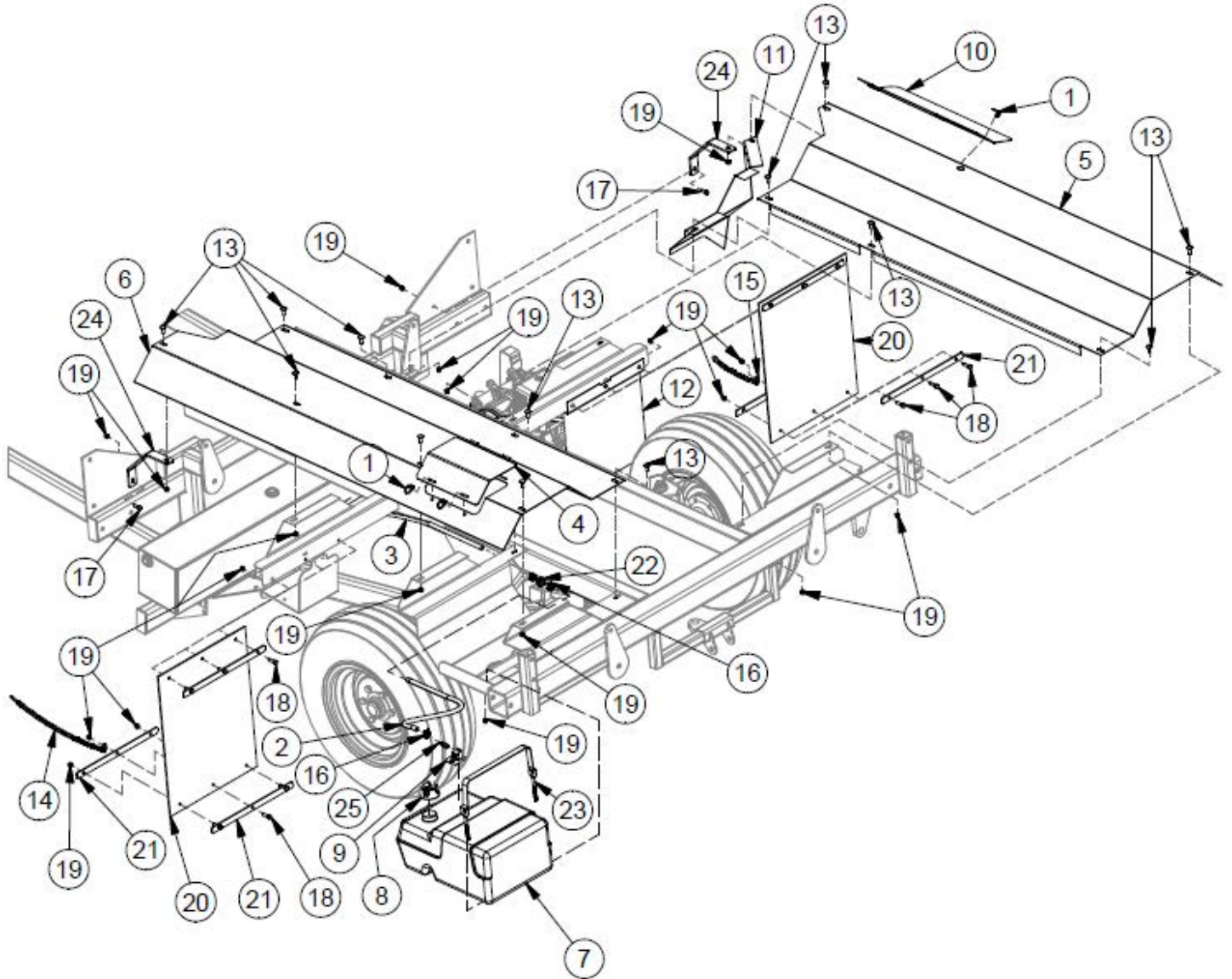
Bale Saddle



Bale Saddle

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	TL5X2-301-140	Left Bale Guide
2	1	TL5X2-301-141	Right Bale Guide
3	1	TL5X2-301-142	Trigger Plate
4	5	TL550-200-108	3/16 Lynch Pin
5	1	TL5X2-100-143	Grommet
6	4	TL550-200-104	½ Pin
7	2	TL5X2-301-144	Bale Spear
8	2	HB 5/8-11X2.1/2 Z5	Hex Bolt 5/8-11 x 2 1/2" Grade 5 Zinc Plated Hex Cap Screw NC
9	2	LN 5/8 N	Locknut - 5/8-11 Zinc Plated Nylon Insert Lock Nut

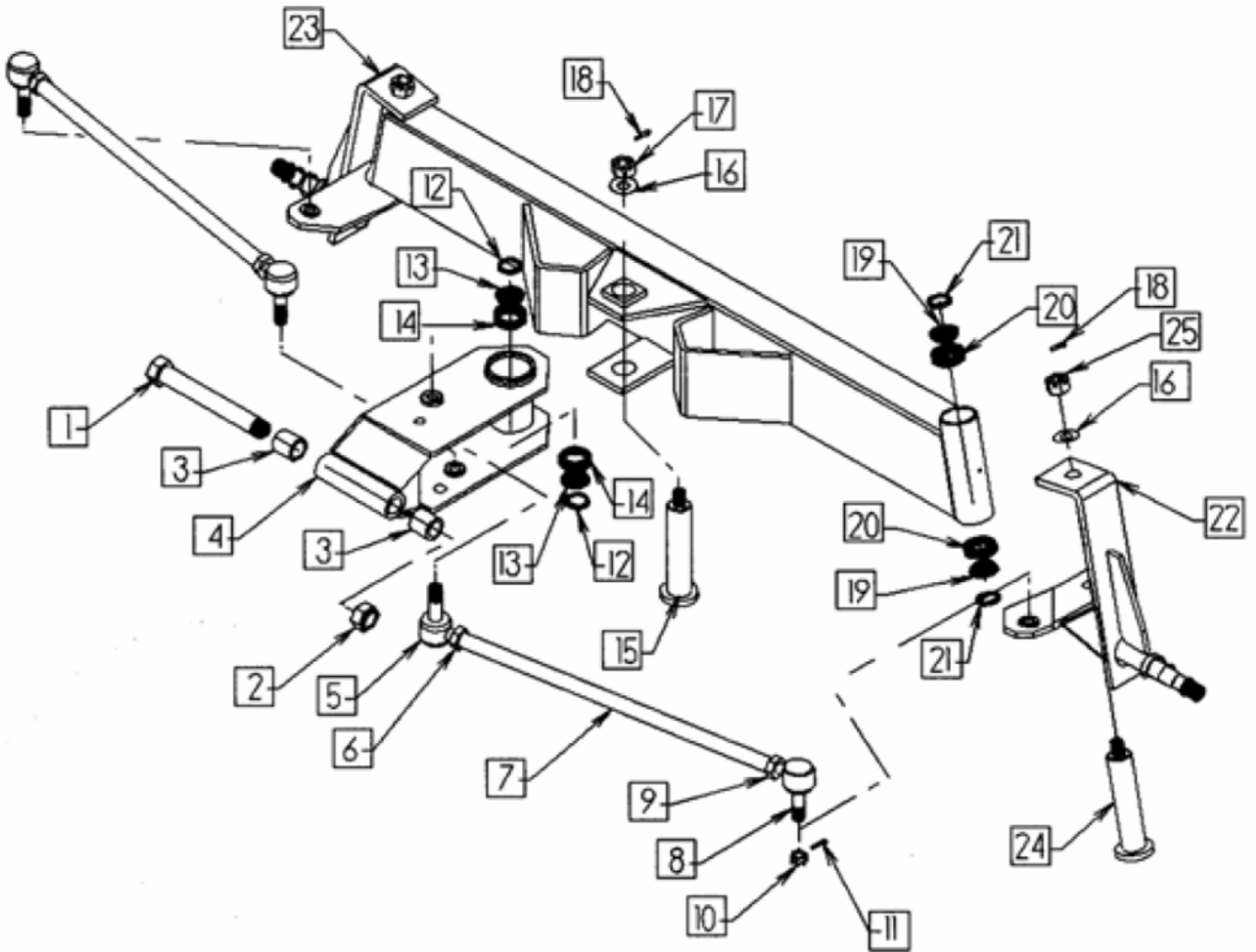
Fenders - Gas Tank



Fenders - Gas Tank

ITEM	QTY	PART NUMBER	DESCRIPTION
1	3	36268	Cam Lock
2	1	40956	Short Fuel Line
3	1	40957	Long Fuel Line
4	1	36619	Gas Tank Shield
5	1	36621	Left Shield
6	1	36662	Right Shield
7	1	TL550-204-100	Fuel Tank
8	1	TL550-204-101	Vented Cap for Fuel Tank
9	1	TL550-204-103	Fuel Gauge - Bale Wrapper
10	1	TL5X2-301-145	Rear Engine Shield
11	1	TL5X2-301-146	Engine Side Shield
12	1	TL5X2-500-149	Heat Shield
13	14	CB 3/8-16X1.0 Z5	Carriage Bolt - 3/8-16 x 1" Grade 5 Zinc
14	1	CHAIN 3/16 X 19	Chain 3/16 Link - 19" pce
15	1	CHAIN 3/16 X 9	Chain 3/16 Link - 9" pce Zinc
16	3	GC 4	Gear Clamp #4 .25 to .625"
17	2	HB 3/8-16X1.0 Z5	Hex Bolt 3/8-16 x 1" Grade 5 Zinc Plated Hex Cap Screw NC
18	12	HB 3/8-16X1.1/4 Z5	Hex Bolt 3/8-16 x 1 1/4" Grade 5 Zinc Plated Hex Cap Screw NC
19	30	LN 3/8 N	Locknuts - 3/8-16 Zinc Plated Nylon Insert Lock Nut
20	2	TL500-100-163	Mud Flap
21	6	TL500-100-164	Metal Strip Mud Flap
22	1	TL550-200-111	Fuel Filter
23	1	TL550-204-110	Tie Down Strap (Fuel Tank)
24	2	TL559917	Rear Fender Mount
25	1	TL5X2-201-108	1/4 Barb x 1/4 NPT Fitting

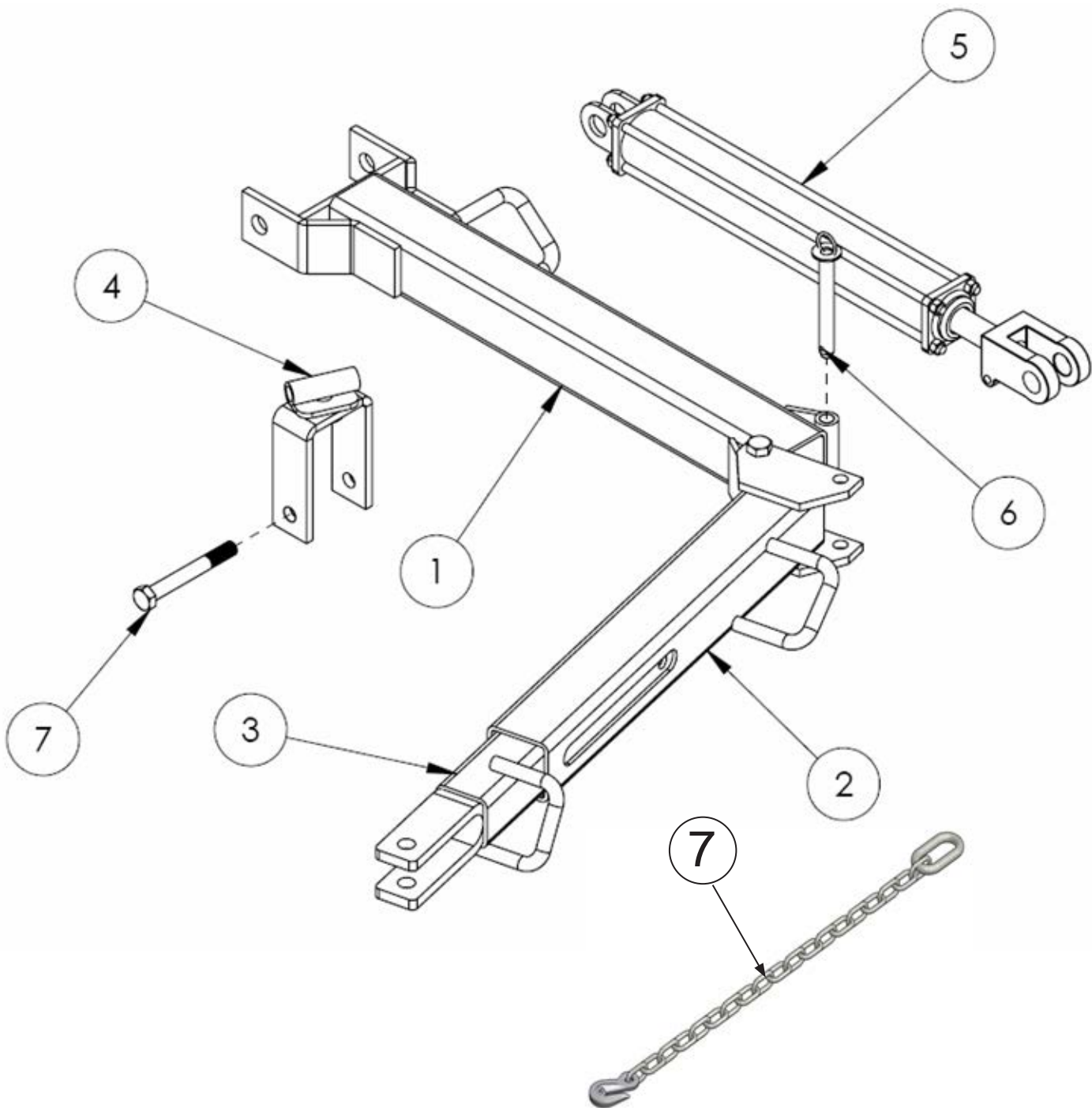
Front Steering



Front Steering

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	TL500-100-152	7/8 x 8 Bolt
2	1	TL500-100-153	7/8 Locknut
3	2	TL550-111-012	Tongue Bracket Bushing
4	1	TL550-221-008	Tongue Bracket Asm
5	2	TL550-111-006	Tie Rod End Right Thread
6	2	TL550-111-003	¾ Jam Nut (NF RH)
7	2	TL550-220-001	Tie Rod
8	2	TL550-111-007	Tie Rod End Left Thread
9	2	TL550-111-002	¾ Jam nut (NF LH)
10	4	TL550-111-004	9/16 NF Slotted Hex Nut
11	4	TL550-111-005	1/8 Cotter Pin
12	2	TL550-111-011	Tongue Bracket Seal
13	2	TL550-111-010	Tongue Bracket Timkin Bearing
14	2	TL550-111-009	Tongue Bracket Timkin Cup
15	1	TL550-221-013	Tongue Bracket Pin
16	3	TL550-111-014	13/16 Flatwasher
17	1	TL550-111-015	Tongue Bracket Nut
18	3	TL550-111-016	3/16 x 2 Cotter Pin
19	4	TL550-200-080	Spindle Bearing Timkin Cone
20	4	TL550-200-081	Spindle Bearing Timkin Cup
21	4	TL550-200-082	Spindle Bearing Seal
22	1	TL550-100-083	Left Side Spindle Assy
23	1	TL550-100-084	Right Side Spindle Assy
24	2	TL550-100-085	Spindle Pin
25	2	TL500-100-070	1" Fine Thread Castle Nut

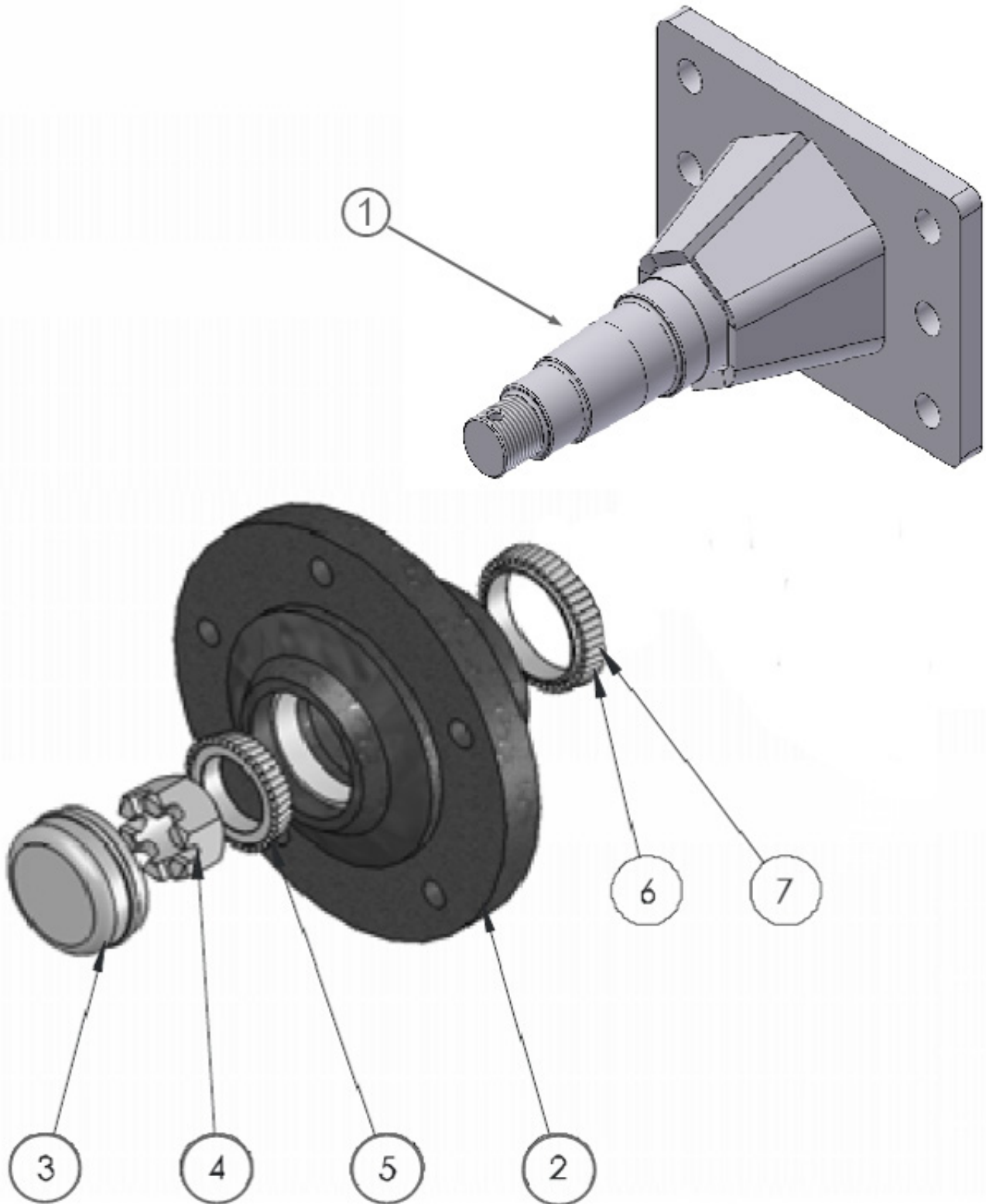
Tongue



Tongue

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	TL550-100-051	Main Tongue
2	1	TL550-100-052	Swinging Tongue
3	1	TL550-100-053	Sliding Tongue
4	1	TL500-301-160	Tongue Holder
5	1	TL500-100-103	2 x 16 Cylinder
6	1	TL500-100-154	Tongue Pin
7	1	25262	10,000 lbs Safety Chain
	1	TL109-100-354	Steering Cylinder Seal Kit

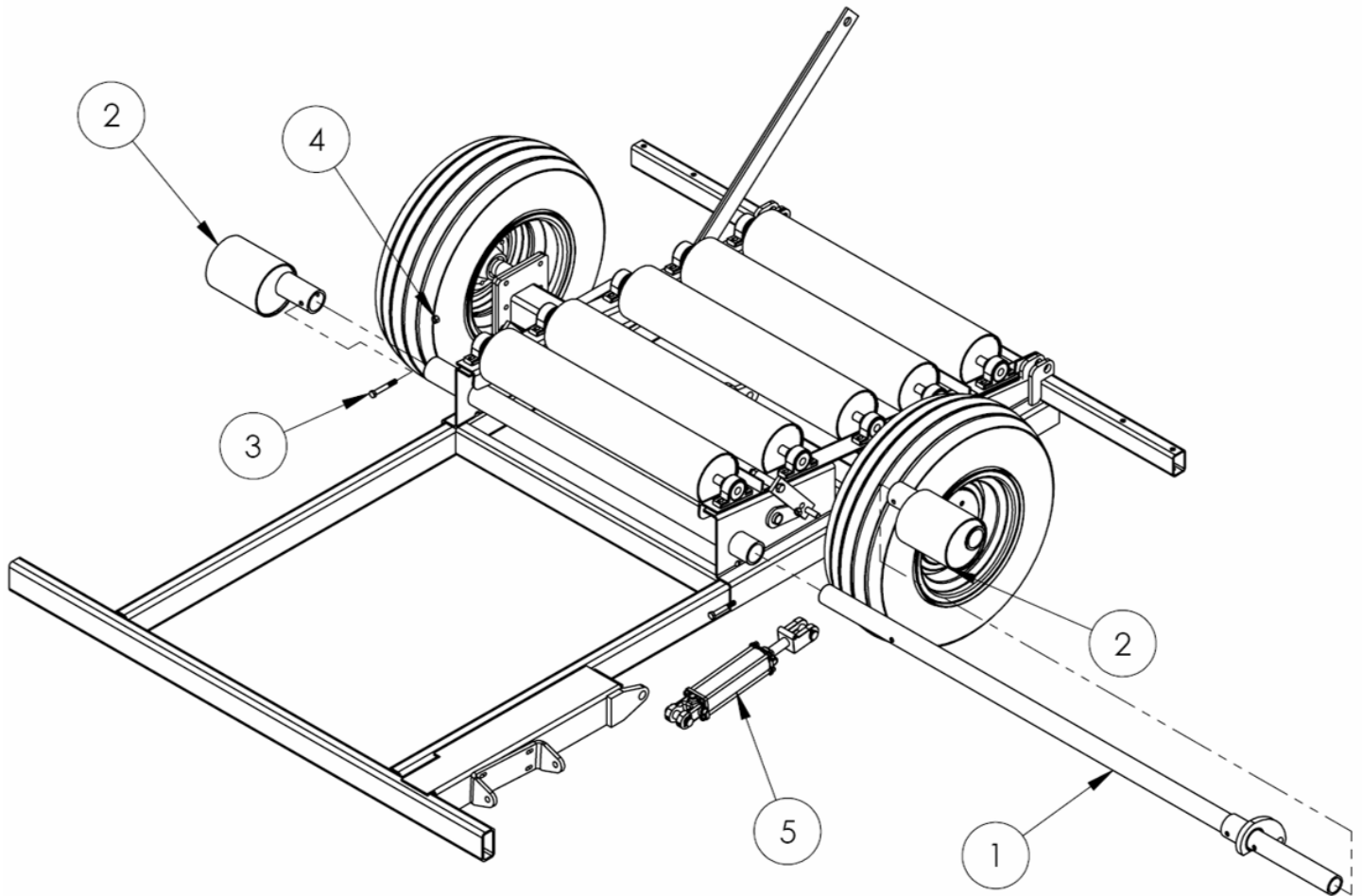
Axle - Spindle - Hub



Axle - Spindle - Hub

ITEM	QTY	PART NUMBER	DESCRIPTION	SERIAL BREAK
1	1	TL550-200-001	Spindle	Up to 11R012
1	1	TL109-100-356	Spindle	11R012 to Current
2	1	TL500-100-066	Hub	
3	1	TL500-100-073	Dust Cap	
4	1	TL500-100-070	Castellated Nut	
5	1	TL500-100-068	Outer Bearing	
6	1	TL500-100-064	Inner Bearing	
7	1	TL500-100-063	Inner Seal	

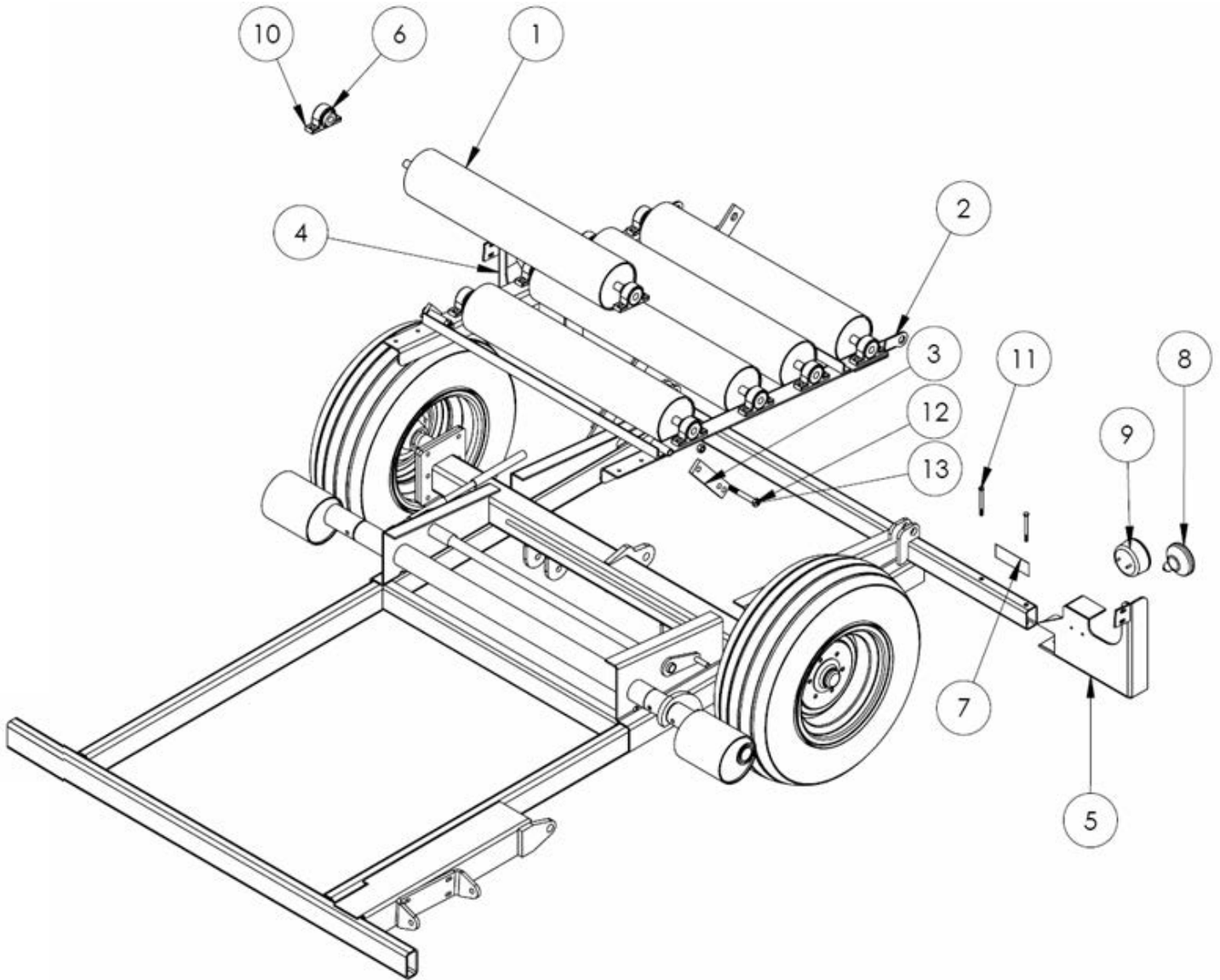
Brake



Brake

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	TL5X2-100-028	Rocker Tube
2	1	TL550-100-029	Brake Eccentric
3	1	HB 1/2-13X3.1/2 Z5	Hex Bolt 1/2-13 x 3 1/2" Grade 5 Zinc Plated Hex Cap Screw NC
4	1	LN 1/2 N	Locknuts - 1/2-13 Zinc Plated Nylon Insert Lock Nut
5	1	TL500-100-082	Hydraulic Cylinder

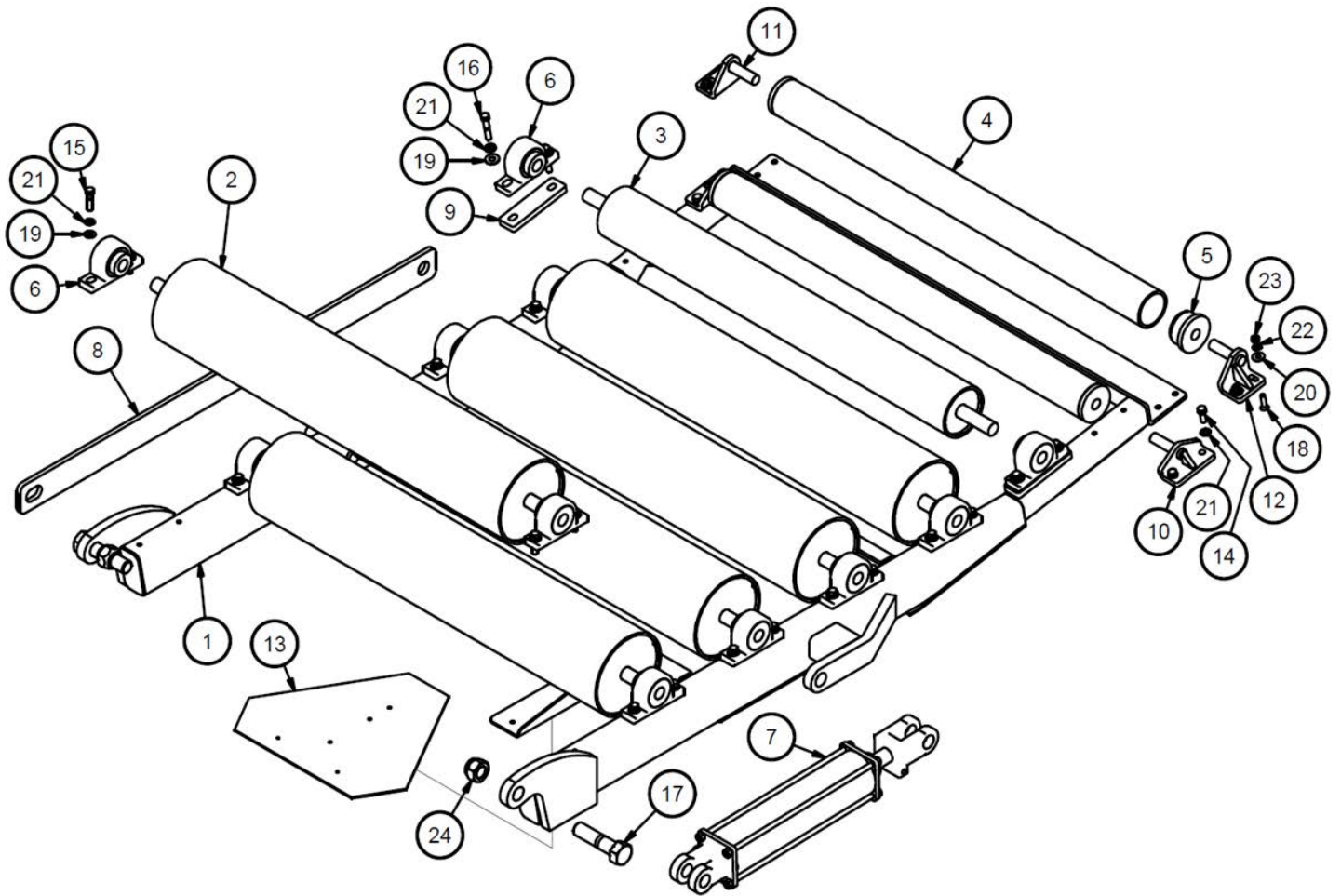
Rear Axle & Roller Bed



Rear Axle & Roller Bed

Item	Qty	Part Number	Description
1	5	TL500-100-086	Large Roller
2	1	TL5X2-301-007	Riser Frame
3	1	TL5X2-301-030	Riser Link
4	1	TL5X2-100-031	Right Rear Light Bkt
5	1	TL5X2-100-032	Left Rear Light Bkt
6	10	TL5X2-100-030	1" Bearing
7	2	TL5X2-100-033	Red Reflector
8	2	TL5X2-100-034	Amber Light
9	2	TL5X2-100-035	Red Light
10	20	HB 3/8-16X1.1/2 Z5	Hex Bolt - 3/8-16 x 1 1/2" Grade 5 Zinc Plated Hex Cap Screw NC
11	4	HB 3/8-16X4.0 Z5	Hex Bolt - 3/8"-16 x 4" Zinc Finish SAE J429 Grade 5 Hex Cap Screw NC
12	1	HB 5/8-11X4.0 Z5	Hex Bolt 5/8-11 x 4" Grade 5 Zinc Hex Cap Screw NC
13	2	LN 5/8 N	Locknut - 5/8-11 Zinc Plated Nylon Insert Lock Nut
14	2	WHE T111-15-8	Galaxy Tire 11L-15
15	12	TL500-100-072	Wheel Bolt 9/16 x 1 3/4

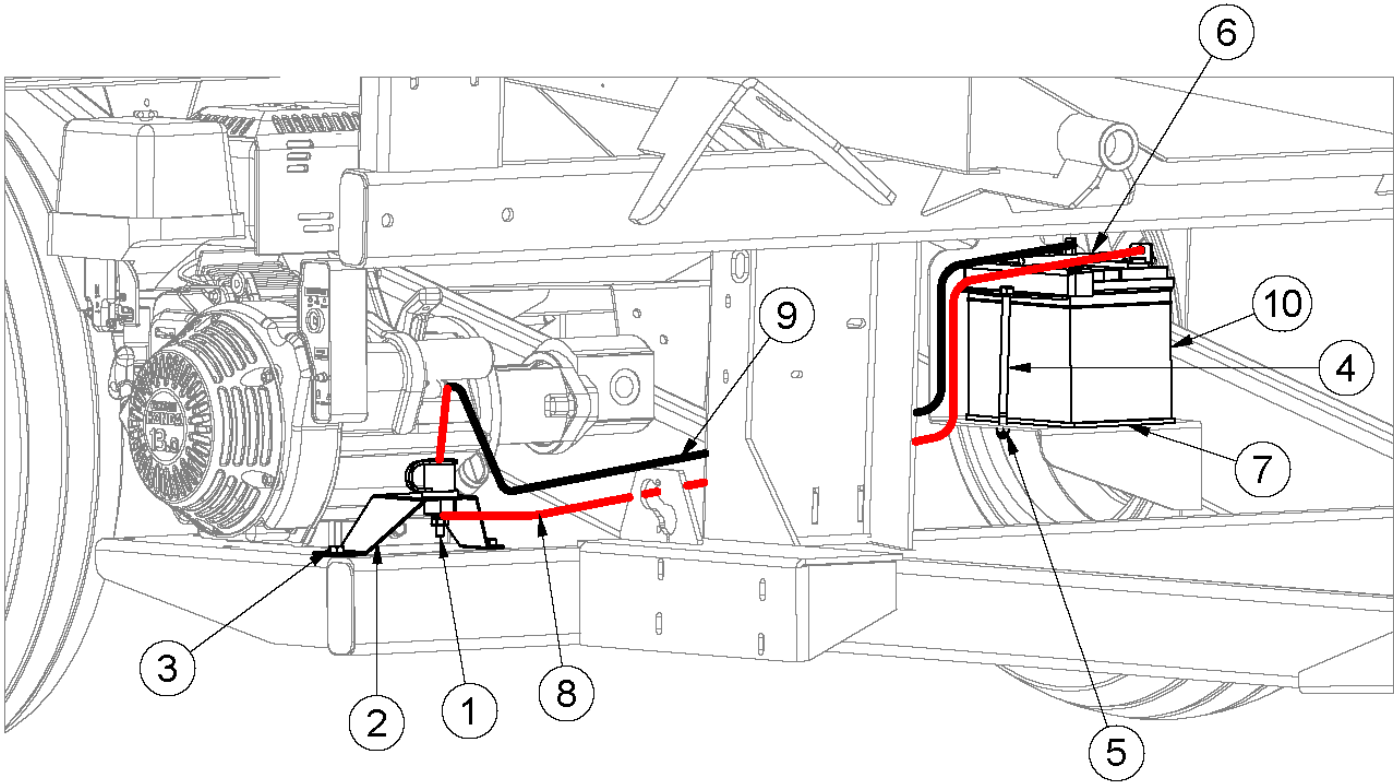
Tail



Tail

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	TL550-100-033	Tail Base
2	5	TL500-100-086	Large Roller
3	1	TL500-100-099	4" Roller
4	2	31384	2 7/8 Roller
5	4	TL550-100-092	3/4" Nylon Bearing
6	12	TL550-100-030	1" Bearing
7	1	TL550-100-107	3 x 12 Cylinder
8	1	TL599-100-035	Tail Tie Bar
9	2	TL5X2-500-125	1/2 Spacer
10	2	TL550-200-003	#2 Small Roller Bkt
11	1	TL550-200-004	#3 RH Small Roller Bkt
12	1	TL550-200-005	#3 LH Small Roller Bkt
13	1	DESMV	SMV Sign
14	20	HB 3/8-16X1.1/4 Z5	Hex Bolt 3/8-16 x 1 1/4" Grade 5 Zinc Plated Hex Cap Screw NC
15	4	HB 3/8-16X1.1/2 Z5	Hex Bolt - 3/8-16 x 1 1/2" Grade 5 Zinc Plated Hex Cap Screw NC
16	4	HB 3/8-16X2.0 Z5	Hex Bolt 3/8-16 x 2" Grade 5 Zinc Plated Hex Cap Screw NC
17	2	HB 1-8X4.0 Z5	Hex Bolt - 1"-8 x 4" Grade 5 Zinc Plated Hex Cap Screw NC
18	4	HB 5/16-18X1.1/2 FHSCS	Hex Bolt - 5/16-18 x 1 1/2" Zinc Plated Flat Head Socket Cap Screw
19	28	FW 3/8	Flatwasher Plated, 3/8" Zinc Plated USS
20	4	FW 5/16	Flatwasher - 5/16" Zinc Plated USS
21	28	LW 3/8	Lockwasher - 3/8" Zinc Plated Medium Split
22	4	LW 5/16	Lockwasher - 5/16" Zinc Plated Medium Split
23	4	LN 5/16 N	Locknut - 5/16-18 Type NE Zinc Plated Nylon Insert
24	2	LN 1.0 N	Locknuts - 1-8 Zinc Plated Nylon Insert

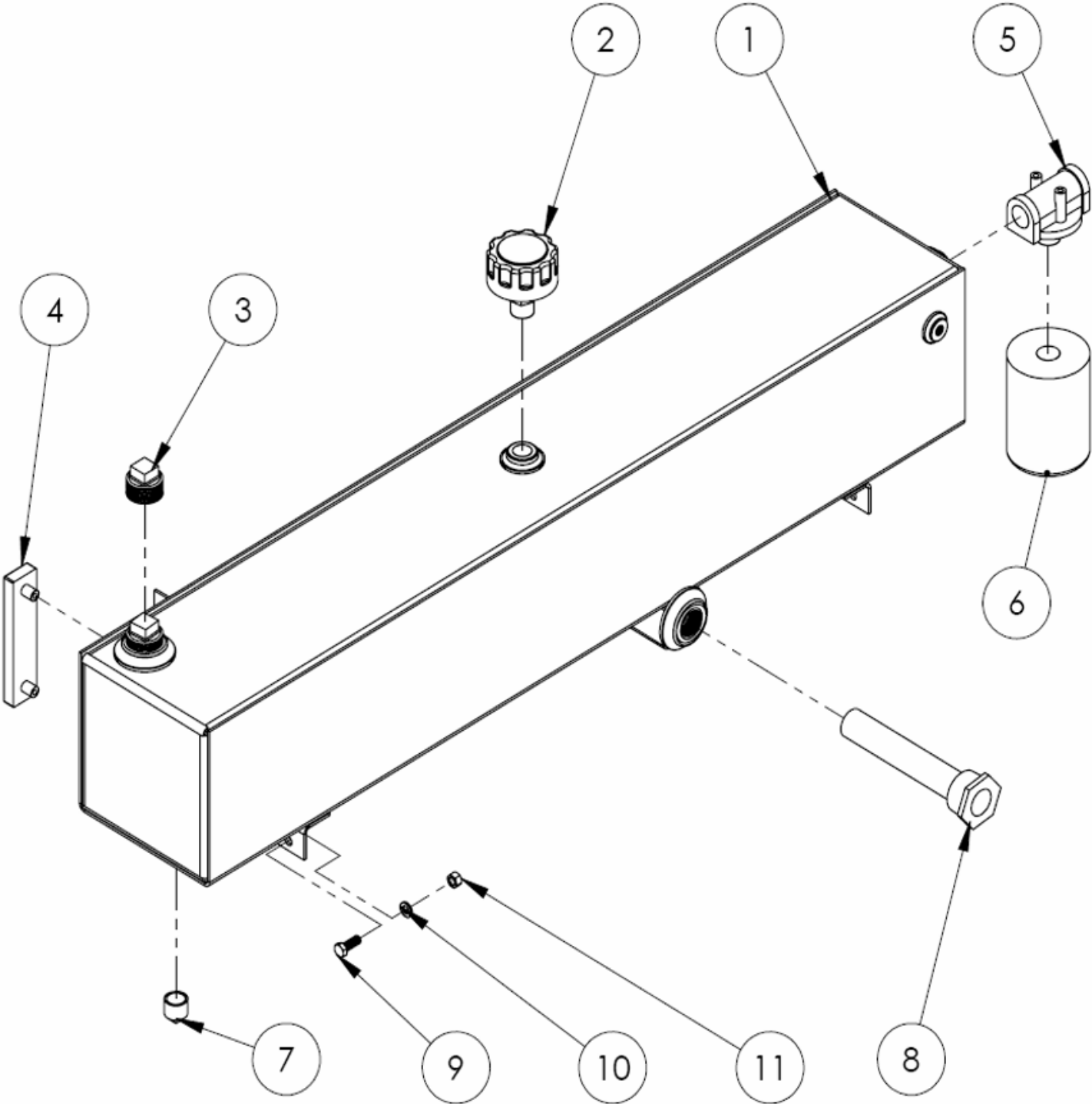
Battery



Battery

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	30873	Battery Post
2	1	31383	Insulated Jumper Mount
3	16	HB 3/8-16X1.0 Z5	Hex Bolt 3/8-16 x 1" Grade 5 Zinc Plated Hex Cap Screw N.C.
4	2	HB 5/16-18X6.0 Z5	Hex Bolt - 5/16-18 x 6 Grade 5 Zinc Hex Cap Screw
5	2	LN 5/16 N	Locknut - 5/16-18 Type NE Zinc Plated Nylon Insert
6	1	TL500-301-221	Battery Hold-Down
7	1	TL5X2-007-101	Battery Rubber, 3/16 x 5 x 8 Mud Flap
8	1	TL5X2-500-159	Red Battery Cable
9	1	TL5X2-500-160	Black Battery Cable
10	1	TLBATSP35	SP-35 Interstate Battery

Hydraulic Oil Tank



Hydraulic Oil Tank

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	TL5X2-100-190	Hydraulic Tank
2	1	TL500-100-169	Breather Cap
3	1	TL500-100-170	Filter Plug 1 ¼ Pipe
4	1	TL500-100-171	Sight Gauge
5	1	TL500-100-172	Filter Base
6	1	TL500-100-173	10 Micron Filter
7	1	TL500-100-174	3/4" Magnetic Plug
8	1	TL500-100-175	Suction Strainer
9	1	HB 3/8-16X1.0 Z5	Hex Bolt 3/8-16 x 1" Grade 5 Zinc Plated Hex Cap Screw NC
10	1	LW 3/8	Lockwasher - 3/8" Zinc Plated Medium Split
11	1	LN 3/8 N	Locknuts - 3/8-16 Zinc Plated Nylon Insert Lock Nut

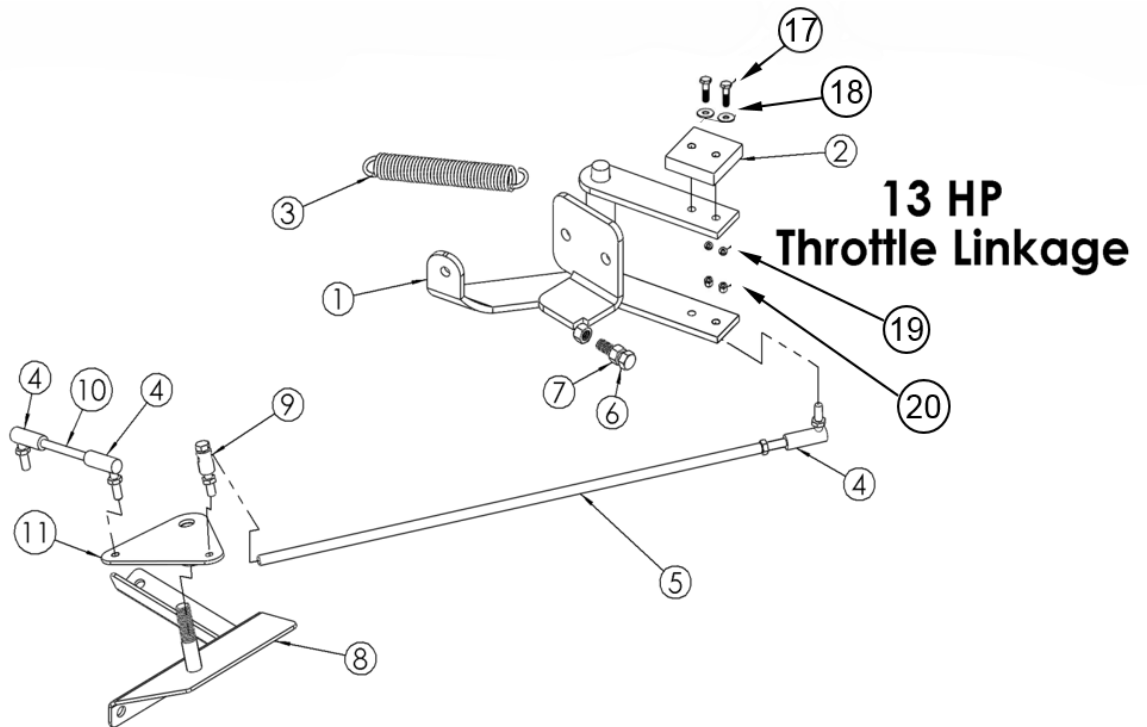
Oil in Unit: AW32 Hydraulic Oil

Oil capacity : approx 60L (16 Gal)

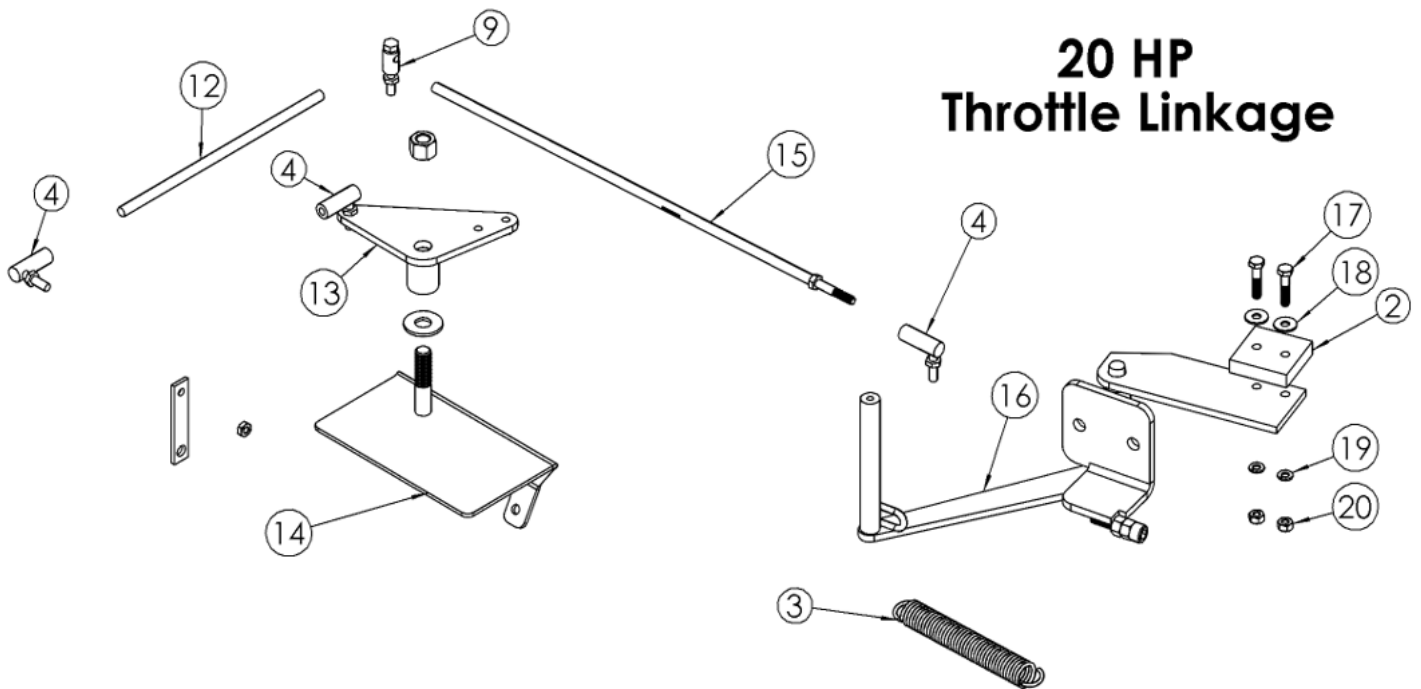
FILTER CROSS REFERENCE	
FILTER	REFERENCE
Stauf	SF6520
Gresen	F22001
Fram	P1653-A
Fleetguard	HF6510
Cross	1A9021

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Throttle Linkages - Original

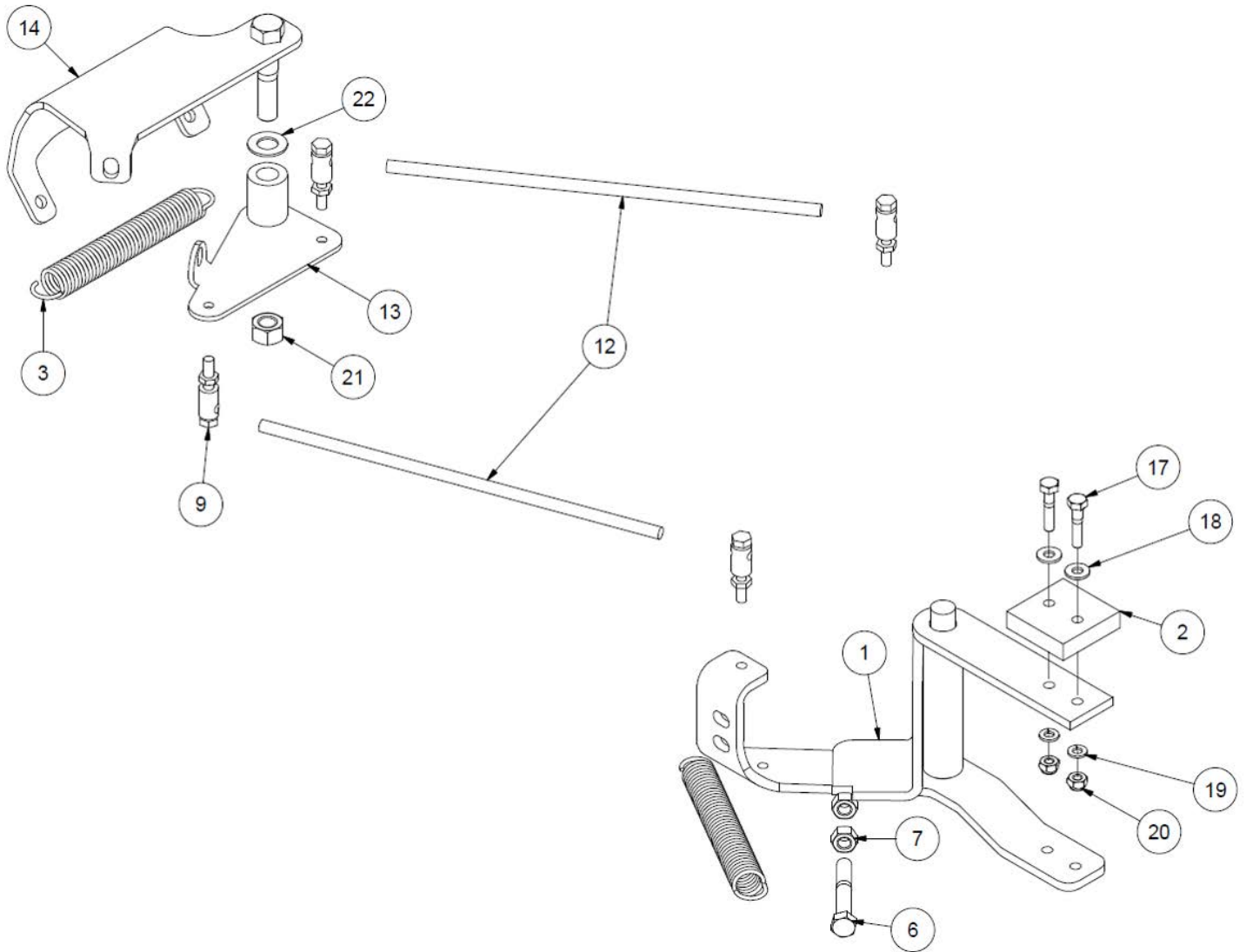


Prior to Serial # 10044



Throttle Linkages - Current

Serial # 10044 to current

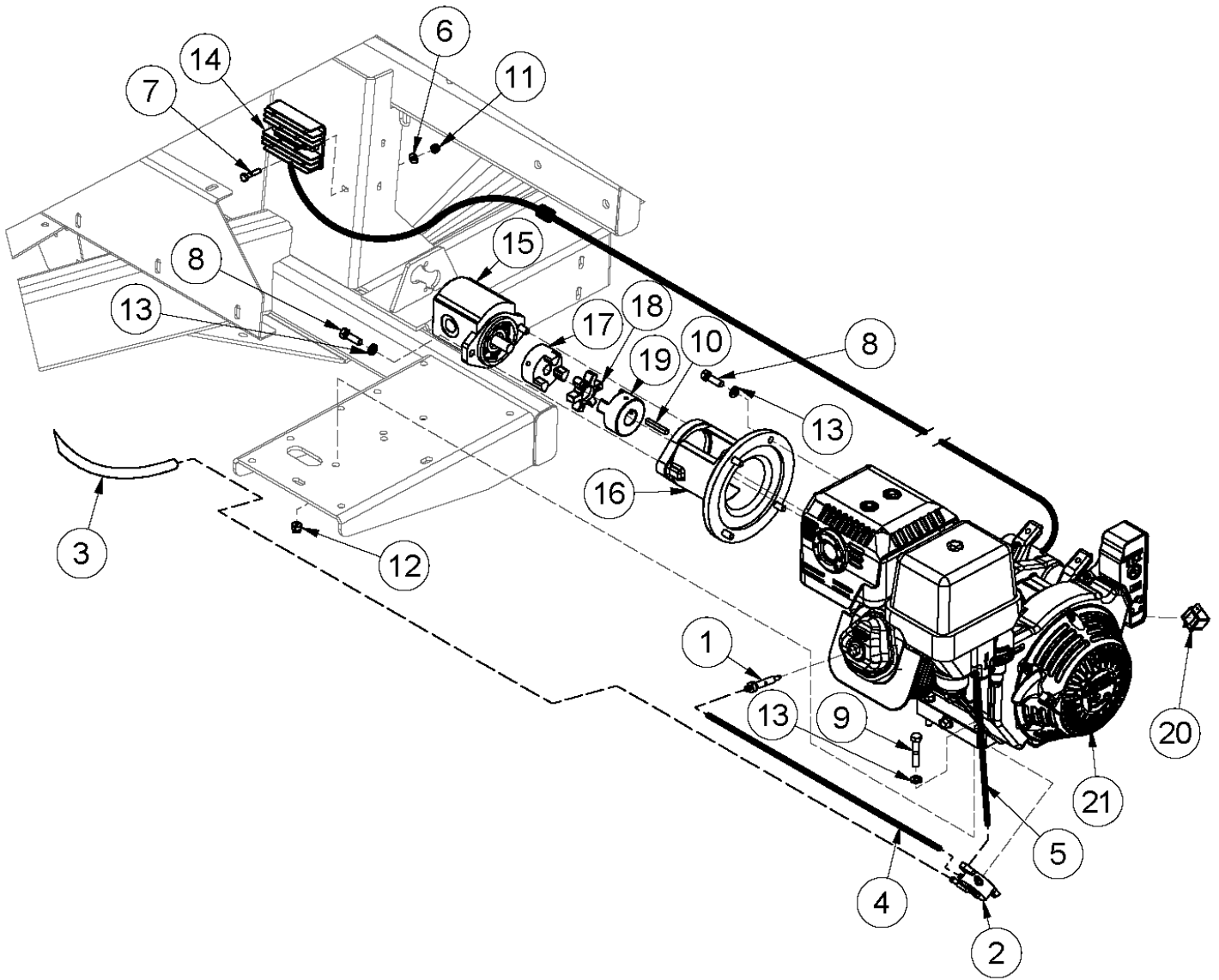


Throttle Linkages

ITEM	QTY	PART NUMBER	DESCRIPTION	SERIAL BREAK
1	1	TL5X2-500-154	Main Link	(20HP) 11R001 - Current
2	1	TL5X2-100-232	Striker Block	
	1	TL550-100-069	Throttle Spring	
4		TL550-100-065	Ball Joint	
5	1	TL5X2-100-231	Control Rod	
6	2	HB 3/8-16X2.1/2 Z5	Hex Bolt 3/8"-16 x 2-1/2" Grade 5 Zinc Plated Hex Cap Screw NC	
7	2	HN 3/8	Hex Nut 3/8"-16 Grade 5 Zinc Plated Finished NC	
8	1	TL599-100-067	13 HP Engine Throttle Base	
9		TL550-100-067	Linkage Pivot	
10	1	TL599-100-069	1/4-28 UNF Rod x 4	
11	1	TL5X2-100-230	13 HP Swing Link	
12	2	TL5X2-500-155	1/4-28 UNF Rod x 9 1/2	
13	1	TL5X2-500-156	20 HP Swing Link	
14	1	TL6X2-120-001	20 HP Engine Throttle Base	
15	1	TL6X2-120-004	20 HP Control Rod	
16	1	TL5X2-500-157	20 HP Main Link	
17	2	HB 1/4-20X1.1/4 Z5	Hex Bolt - 1/4"-20 x 1-1/4" Grade 5 Zinc Plated Hex Cap Screw	
18	2	FW 1/4	Flatwasher - 1/4" Zinc Plated USS	
19	2	LW 1/4	Lockwasher - 1/4" Zinc Plated Medium Split	
20	2	HN 1/4	Hex Nut 1/4"-20 Grade 5 Zinc Plated Finished NC	
21	1	LN 1/4 N	Locknuts - 1/4-20 Zinc Plated Nylon Insert	
22	1	FWSAE 1/2	Flatwasher, 1/2" Zinc Plated SAE	

- 17,18,19,and 20 each have 2 items regardless of the linkage used

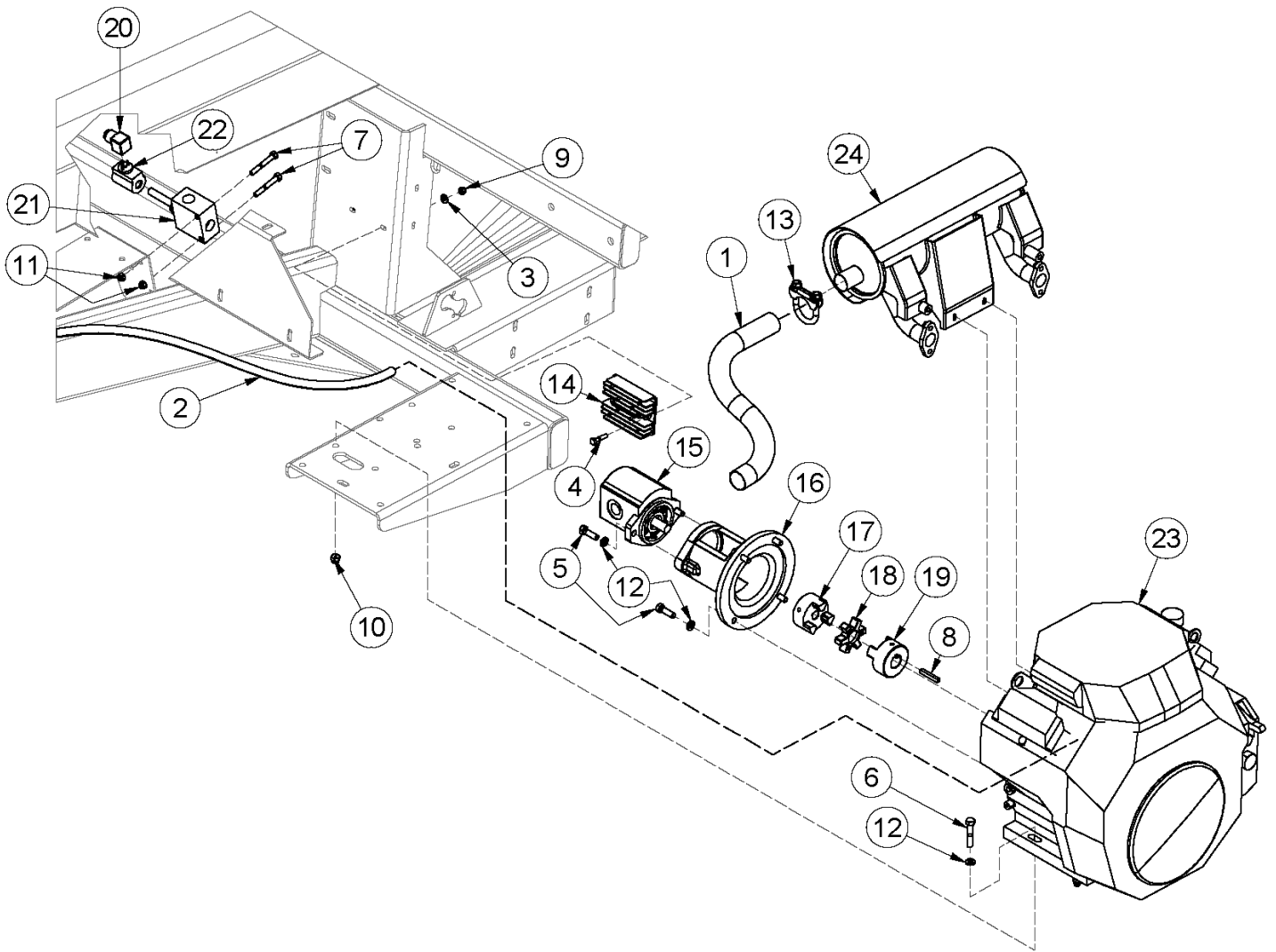
13 HP Engine (TL13HP)



13 HP Engine (TL13HP)

ITEM	QTY	PART NUMBER	DESCRIPTION	SERIAL BREAK
1	1	25591	13HP Valve Cover Bolt for Fuel Pump	
2	1	25649	Fuel Pump (Honda #16700Z0J013)	
3	1	40957	Long Fuel Line	
4	1	40962	Piston Discharge Line	
5	1	40963	Engine Fuel Line	
6	2	FW 1/4	Flatwasher - 1/4" Zinc Plated USS	
7	2	HB 1/4-20X1.1/4 Z5	Hex Bolt - 1/4"-20 x 1-1/4" Grade 5 Zinc Plated Hex Cap Screw	
8	6	HB 3/8-16X1.1/4 Z5	Hex Bolt 3/8-16 x 1 1/4" Grade 5 Zinc Plated Hex Cap Screw N.C.	
9	4	HB 3/8-16X2.0 Z5	Hex Bolt 3/8-16 x 2" Grade 5 Zinc Plated Hex Cap Screw N.C.	
10	1	KS40960	Key .25 x 1.75	
11	2	LN 1/4 N	Locknuts - 1/4-20 Zinc Plated Nylon Insert	
12	4	LN 3/8 N	Locknuts - 3/8-16 Zinc Plated Nylon Insert Lock Nut	
13	10	LW 3/8	Lockwasher - 3/8" Zinc Plated Medium Split	
14	1	TL31620-ZG5-033	Honda 20 Amp Rectifier for 13.5 & 20 HP (GX620 Engine Only)	
15	1	TL500-100-181	Hydraulic Pump (13 HP Engine)	
16	1	TL500-100-182	Adapter, Engine to Pump	
17	1	TL500-100-183	Lovejoy Coupling Pump Side	
18	1	TL500-100-184	Coupling Spacer	
19	1	TL500-100-185	Love Joy Coupling Engine Side	
20	1	TL500-100-220	35 AMP Relay	Used up to 12R147
21	1	TL5X2-100-200	13 HP Honda 18 Amp Engine	

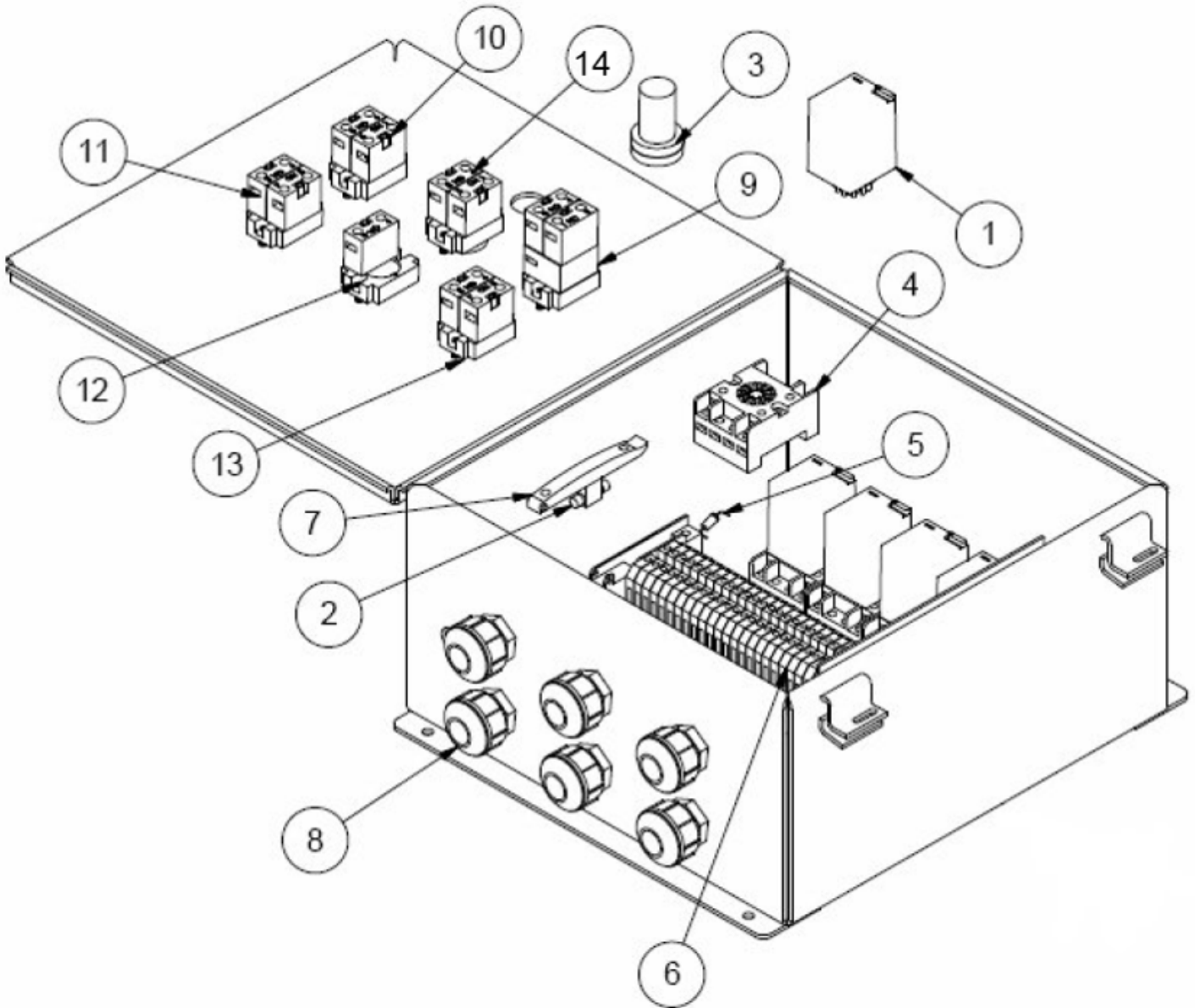
20 HP Engine (TL20HP)



20 HP Engine (TL20HP)

ITEM	QTY	PART NUMBER	DESCRIPTION	SERIAL BREAK
1	1	36945	20 HP Muffler Pipe	
2	1	40957	Long Fuel Line	
3	2	FW 1/4	Flatwasher - 1/4" Zinc Plated USS (6480)	
4	2	HB 1/4-20X1.1/4 Z5	Hex Bolt - 1/4"-20 x 1-1/4" Grade 5 Zinc Plated Hex Cap Screw	
5	6	HB 3/8-16X1.1/4 Z5	Hex Bolt 3/8-16 x 1 1/4" Grade 5 Zinc Plated Hex Cap Screw N.C.	
6	4	HB 3/8-16X2.0 Z5	Hex Bolt 3/8-16 x 2" Grade 5 Zinc Plated Hex Cap Screw N.C.	
7	2	HB 5/16-18X2.1/4 Z5	Hex Bolt - 5/16-18 x 2-1/4 Grade 5 Zinc Hex Cap Screw	
8	1	KS40960	Key .25 x 1.75	
9	2	LN 1/4 N	Locknuts - 1/4-20 Zinc Plated Nylon Insert	
10	4	LN 3/8 N	Locknuts - 3/8-16 Zinc Plated Nylon Insert Lock Nut	
11	2	LN 5/16 N	Locknut - 5/16-18 Type NE Zinc Plated Nylon Insert	
12	10	LW 3/8	Lockwasher - 3/8" Zinc Plated Medium Split (5500)	
13	1	MC 1 1/2	Muffler Clamp 1 1/2" Pipe (MC7112)	
14	1	TL31750-Z2E-803	Honda 20AMP Rectifier for GX630 Engine	
15	1	TL5X2-101-181	Hydraulic Pump (20 HP Engine)	
16	1	TL500-100-182	Adapter, Engine to Pump	
17	1	TL500-100-183	Lovejoy Coupling Pump Side	
18	1	TL500-100-184	Coupling Spacer	
19	1	TL500-100-185	Love Joy Coupling Engine Side	
20	1	31305	Wiring Harness for Dump Valve	
21	1	TL6X2-102-202	Dump Valve (Includes Base and Relief)	Up to 13R004
21A	1	31545	Dump Valve Body and Cartridge (20 HP)	13R005 - Current
22	1	TL6X2-102-204	Dump Valve Solenoid (Coil) Round Coil	Up to 13R004
22A	1	31546	Dump Valve Solenoid (Coil) Square Coil	13R005 - Current
23	1	TL6X2-100-200	20 HP Honda Engine	
24	1	TLVHRM6	Muffler	

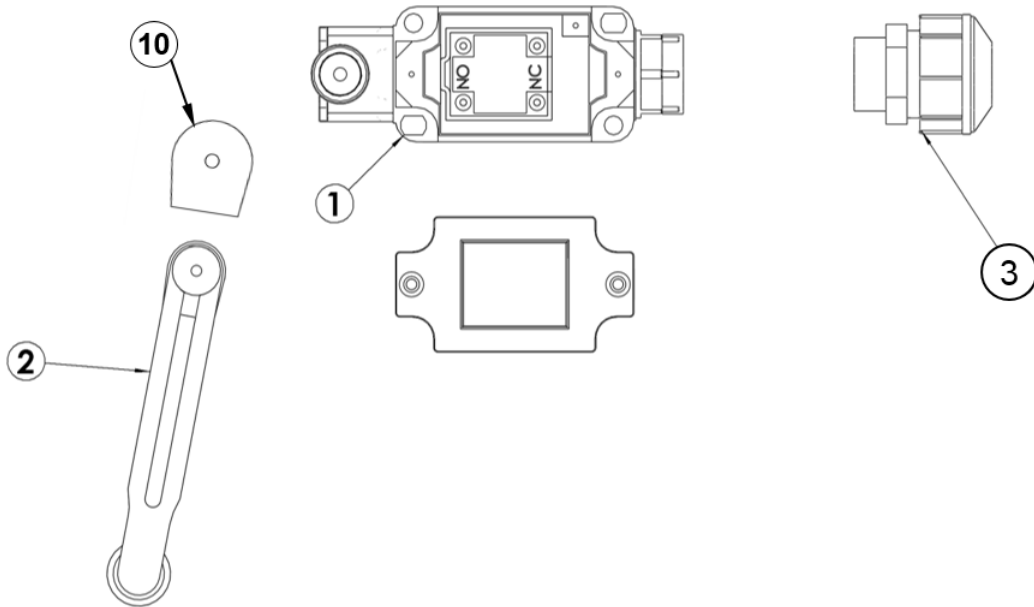
Control Panel



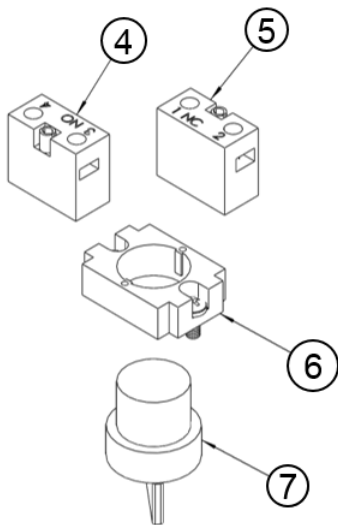
Control Panel

ITEM	QTY	PART NUMBER	DESCRIPTION
	1	TL550-200-061	Complete Control Panel
1	5	TL500-100-221	Control Relay
2	1	TL550-100-079	15 AMP Fuse
3	1	TL25764	LED Light
4	5	TL5X2-500-158	11 Pin Relay Base
5	1	TL550-150-085	Diode 1N5406 3amp 600V
6	26	TL550-150-084	DIN Rail Terminal Block
7	1	TL550-150-083	DIN Rail Fuse Holder
8	6	TL550-100-086	PVC Wire Holder
9	1	TL25762	On/Off Switch
10	1	TL550-100-076	Man/Auto Switch
11	1	TL550-100-077	Steering Switch
12	1	TL550-100-075	Rotate Switch
13	1	TL550-100-077	Forward/ Reverse Switch
14	1	TL25763	Emergency Stop Button

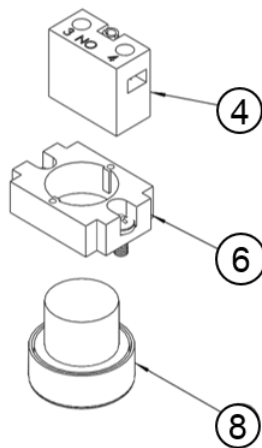
Limit Switch



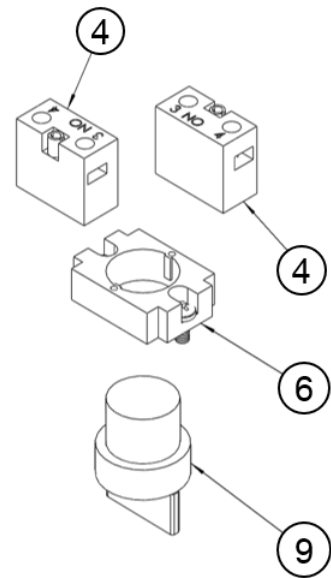
On/Off - Man/Auto Switch



Rotate Switch



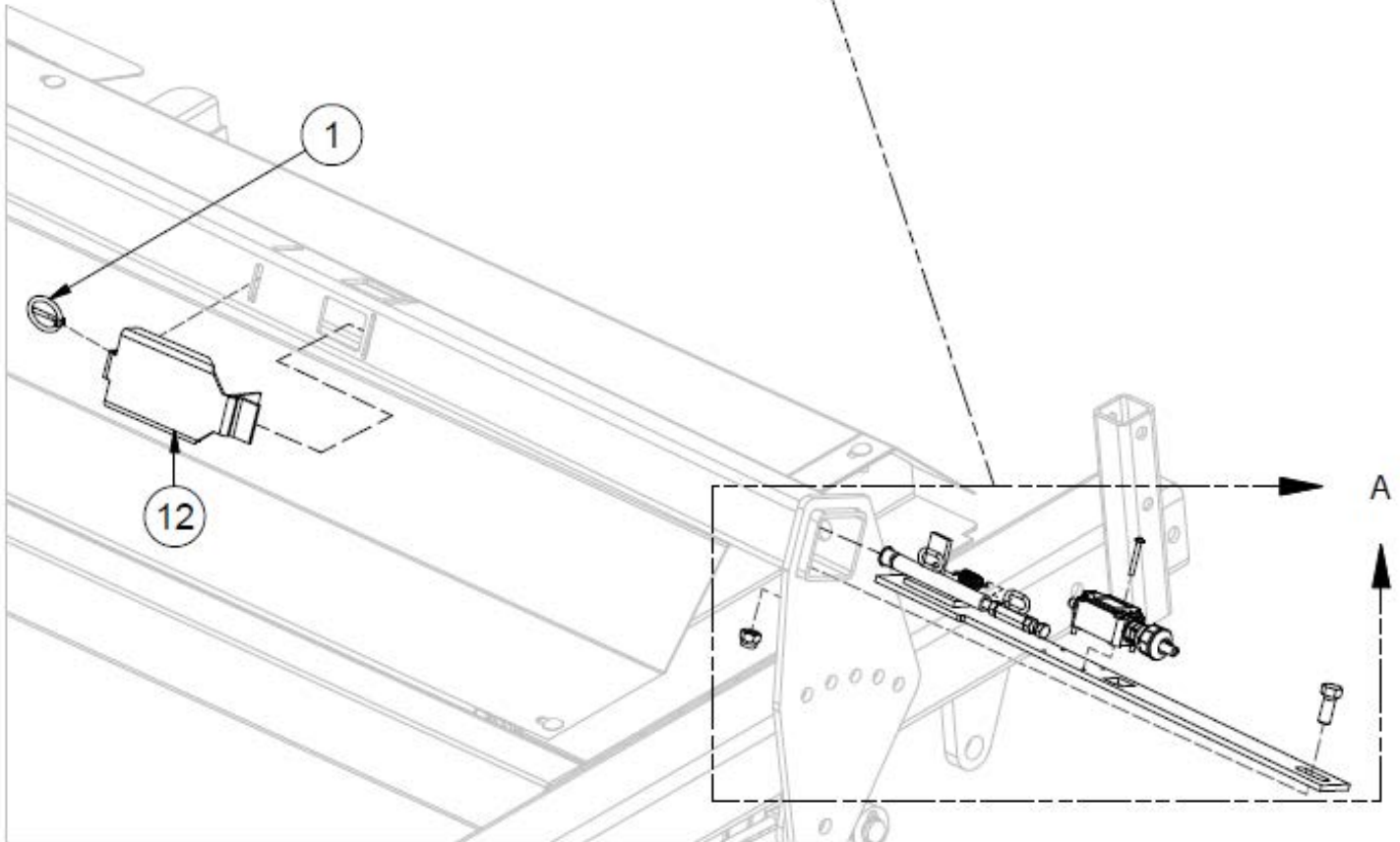
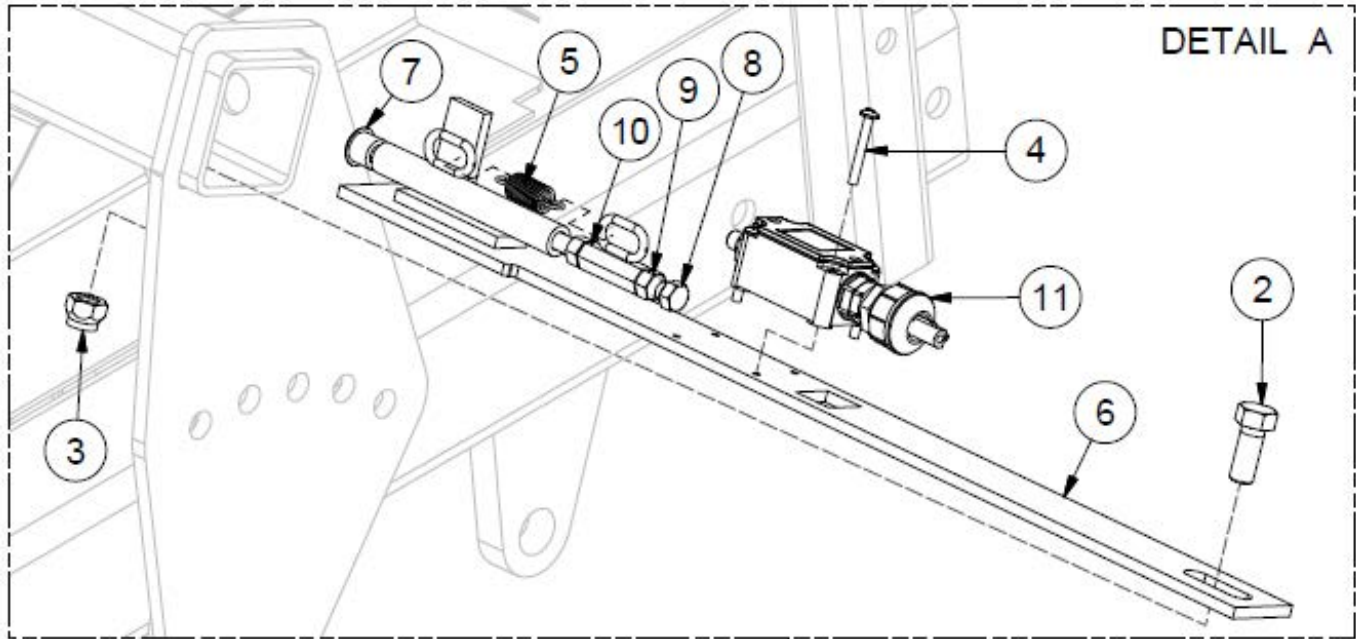
Ram - Steering Switch



Limit Switch

ITEM	QTY	PART NUMBER	DESCRIPTION
1	5	TL550-100-060	Complete Limit Switch (Ref # 1, 2, & 4)
2	5	TL550-100-059	Limit Switch Arm
3	1	TL550-100-086	PVC Box Connector
4	7	TLRB2BE101	Contact Block Normally Open (NO)
5	2	TLRB2BE102	Contact Block Normally Closed (NC)
6	5	TLRB2B	Switch Mount Collar
7	1	TLRB2BD2	Selector Switch – 2 Position
8	1	TLRB2BA2	Push Button
9	1	TLRB2BDR3	Selector Switch – 3 Position Spring Return
	2	TL550-100-076	On/Off – Man/Auto Switch (Complete)
	1	TL550-100-075	Rotate Switch (Complete)
	2	TL550-100-077	Ram/Steering Switch (Complete)
10	1	TL550-100-082	Wire Clamp

Bale Trigger

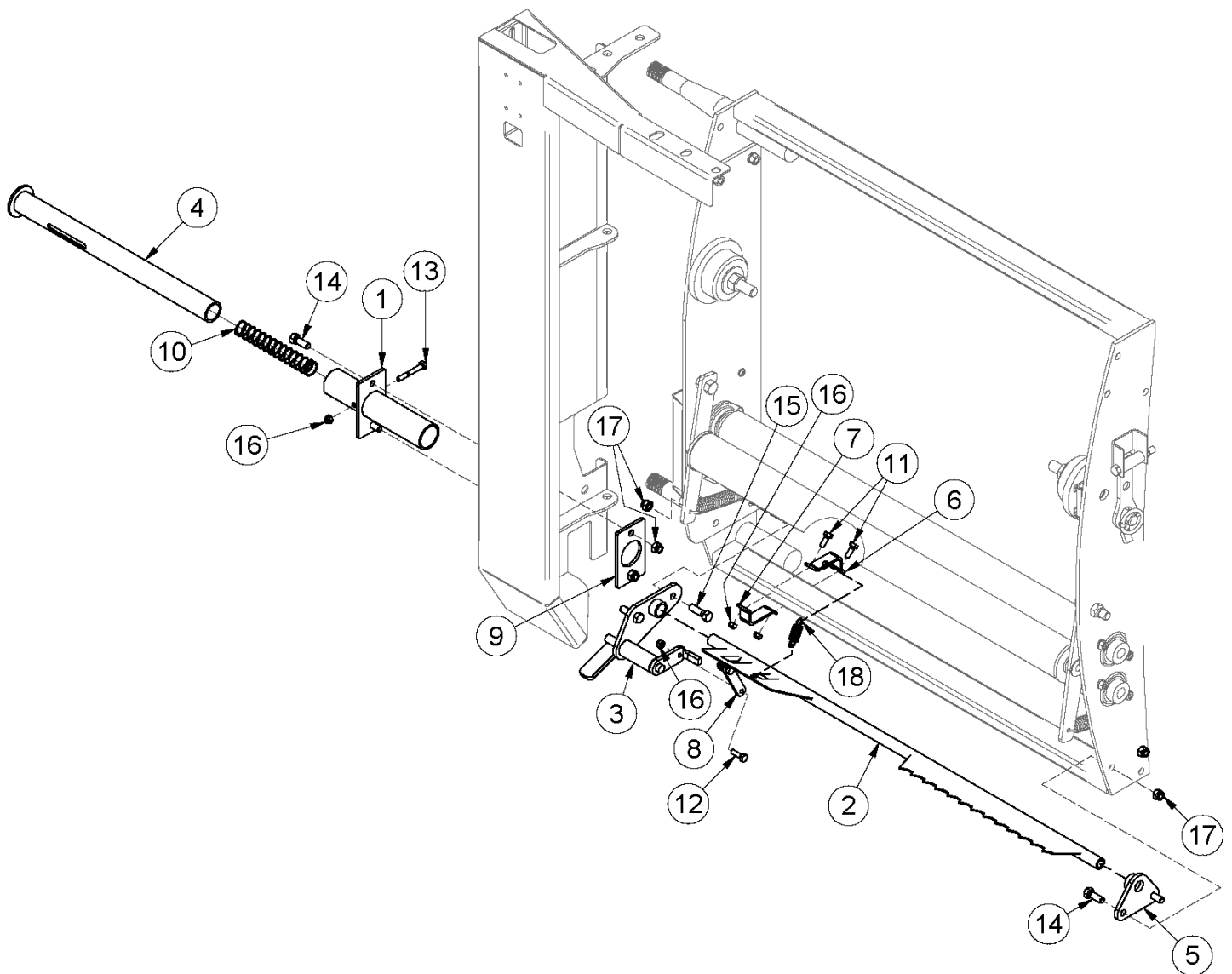


Bale Trigger

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	25680	Lynch Pin 3/16 x 1.5
2	1	HB 1/2-13X1.1/4 Z5	Hex Bolt 1/2-13 x 1 1/4" Grade 5 Zinc Plated Hex Cap Screw NC
3	1	LN 1/2 N	Locknuts - 1/2-13 Zinc Plated Nylon Insert Lock Nut
4	4	MS 10X1 1/2	Machine Screw 10-24x1-1/2
5	1	TL500-100-062	Extension Spring (Trigger)
6	1	TL553900	TL5500 Trigger Switch Weldment
7	1	CB 3/8-16X7.0 B	Carriage Bolt - 3/8 x 7 Low Carbon Plain
8	1	HB 3/8-16X1.1/4 Z5	Hex Bolt 3/8-16 x 1 1/4" Grade 5 Zinc Plated Hex Cap Screw NC
9	2	HN 3/8	Hex Nut 3/8"-16 Grade 5 Zinc Plated Finished NC
10	1	TL5X2-100-222	Coupling Nut, 3/8
11	1	TL5X2-100-221	Switch
12	1	TL5X2-301-142	Trigger Plate

Film Snap

Serial Number 15R003 to current



Note: Available for retrofit on older machines. Please contact dealer or manufacturer for details.

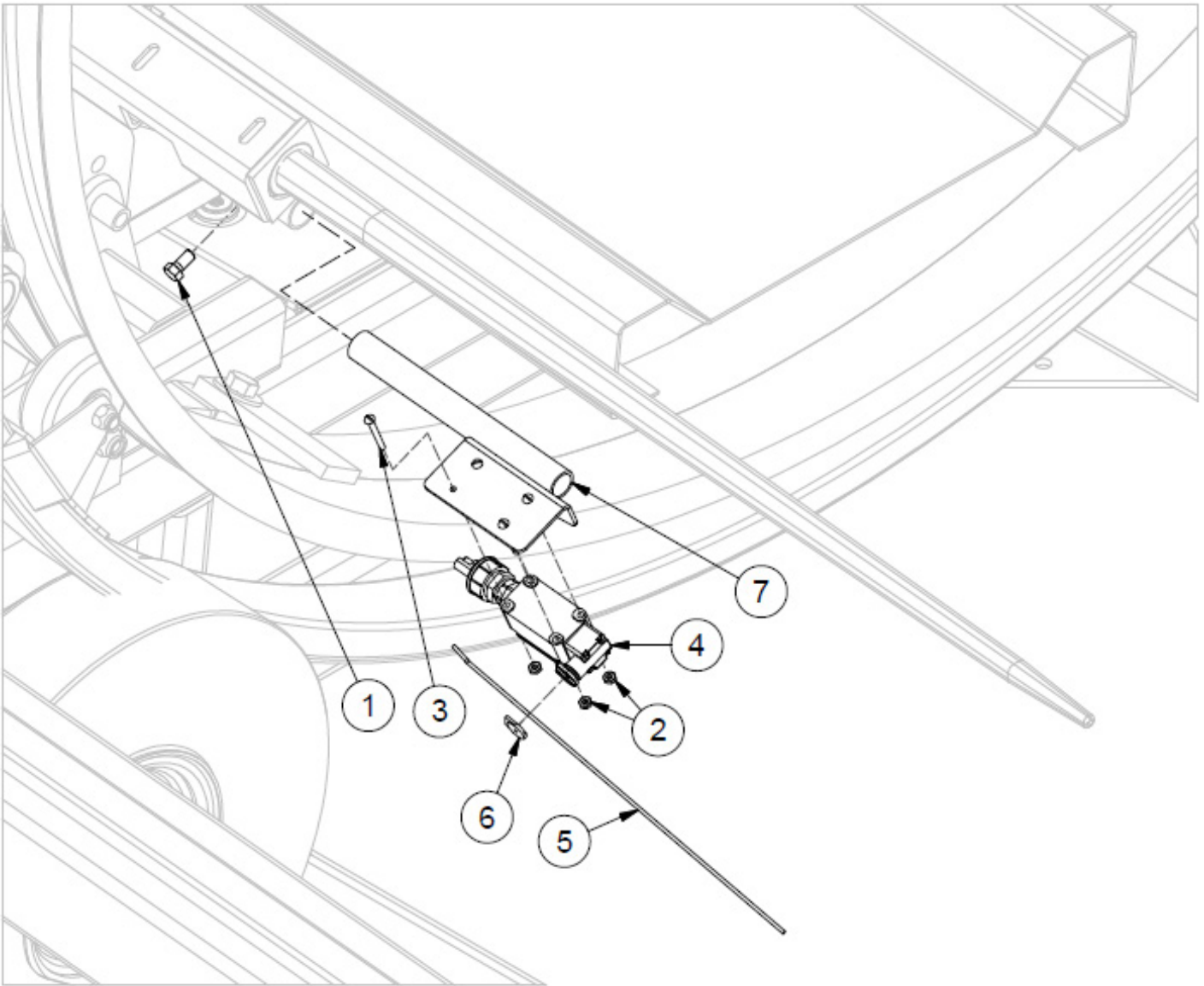
Film Snap

Serial Number 15R003 to current

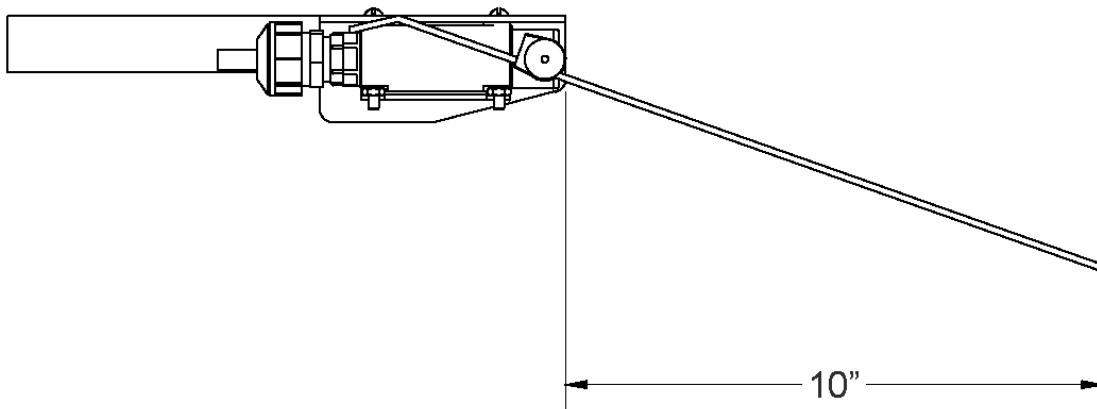
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	33352	Wrap Cut Tube Support
2	1	33353	Wrap Cut
3	1	33354	Wrap Cut Swivel
4	1	33355	Cut Push Tube
5	1	33356	Pivot Support Bracket
6	1	36021	Spring Mount
7	1	36026	Bracket For Film Snap
8	1	36068	Swivel Plate
9	1	36629	Pipe Support
10	1	36900	Film Snap Compression Spring
11	2	HB 1/4-20X 3/4 Z5	Hex Bolt - 1/4"-20 x 3/4" Grade 5 Zinc Plated Hex Cap Screw NC
12	2	HB 1/4-20X1.0 Z5	Hex Bolt 1/4-20 x 1" Grade 5 Zinc Plated Hex Cap Screw NC
13	1	HB 1/4-20X2.0 Z5	Hex Bolt Plated Gr. 5 NC
14	4	HB 3/8-16X1.0 Z5	Hex Bolt 3/8-16 x 1" Grade 5 Zinc Plated Hex Cap Screw NC
15	2	HB 3/8-16X1.1/4 Z5	Hex Bolt 3/8-16 x 1 1/4" Grade 5 Zinc Plated Hex Cap Screw NC
16	5	LN 1/4 N	Locknuts - 1/4-20 Zinc Plated Nylon Insert
17	6	LN 3/8 N	Locknuts - 3/8-16 Zinc Plated Nylon Insert
18	1	TL500-100-062	Extension Spring

Note: Available for retrofit on older machines. Please contact dealer or manufacturer for details.

Film Sensor



Sensor wire must be adjusted so that only one layer of plastic is covering the end of the wire while wrapping. Adjustment can be made on the bracket and on the sensor wire. The end of the sensor wire behind the switch can be bent to allow the wire in front of the switch to drop down far enough to trip the switch when no plastic is present.

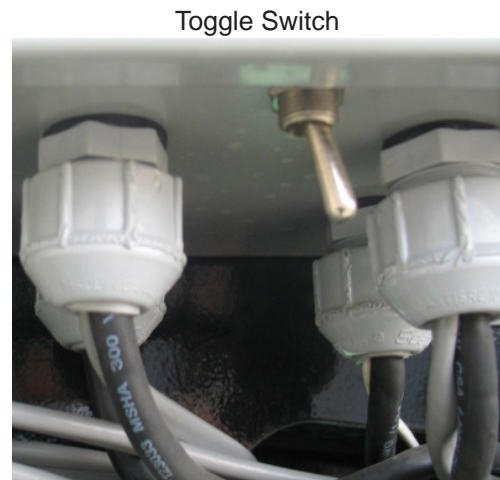
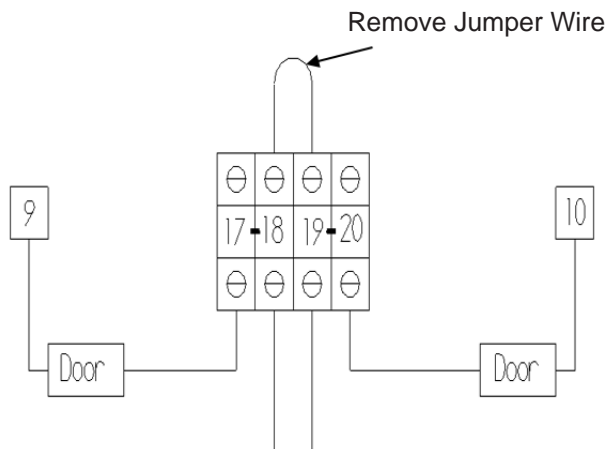


Film Sensor

ITEM	QTY	PART NUMBER	DESCRIPTION
	1	TLPSSK	Complete Film Sensor Kit
1	1	HB 3/8-16X 3/4 Z5	Hex Bolt - 3/8-16 x 3/4" Grade 5 Zinc Plated Hex Cap Screw NC
2	4	HN 10-24	Nut - 10-24 Low Carbon Zinc Plated Machine Screw Nut
3	4	MS 10X1 3/4	Machine Screw 10-24x1-3/4
4	1	TL109-100-348	Film Sensor Limit Switch
5	1	TL550-100-049	Wire Arm
6	1	TL550-100-049	Wire Clamp
7	1	TLFSB2007	Film Sensor Bracket
	1		12" Wire (Terminal 18 & 19)

Film Sensor Installation

- Install film sensor bracket
- Locate the wire labeled film sensor (pre-wired machine)
- Remove the plug and connect to film sensor switch
- Install toggle switch in the control panel
- Remove the jumper wire between terminal 18 & 19
- Connect wires from toggle switch to terminal 18 & 19



Film Sensor Wire Adjustment

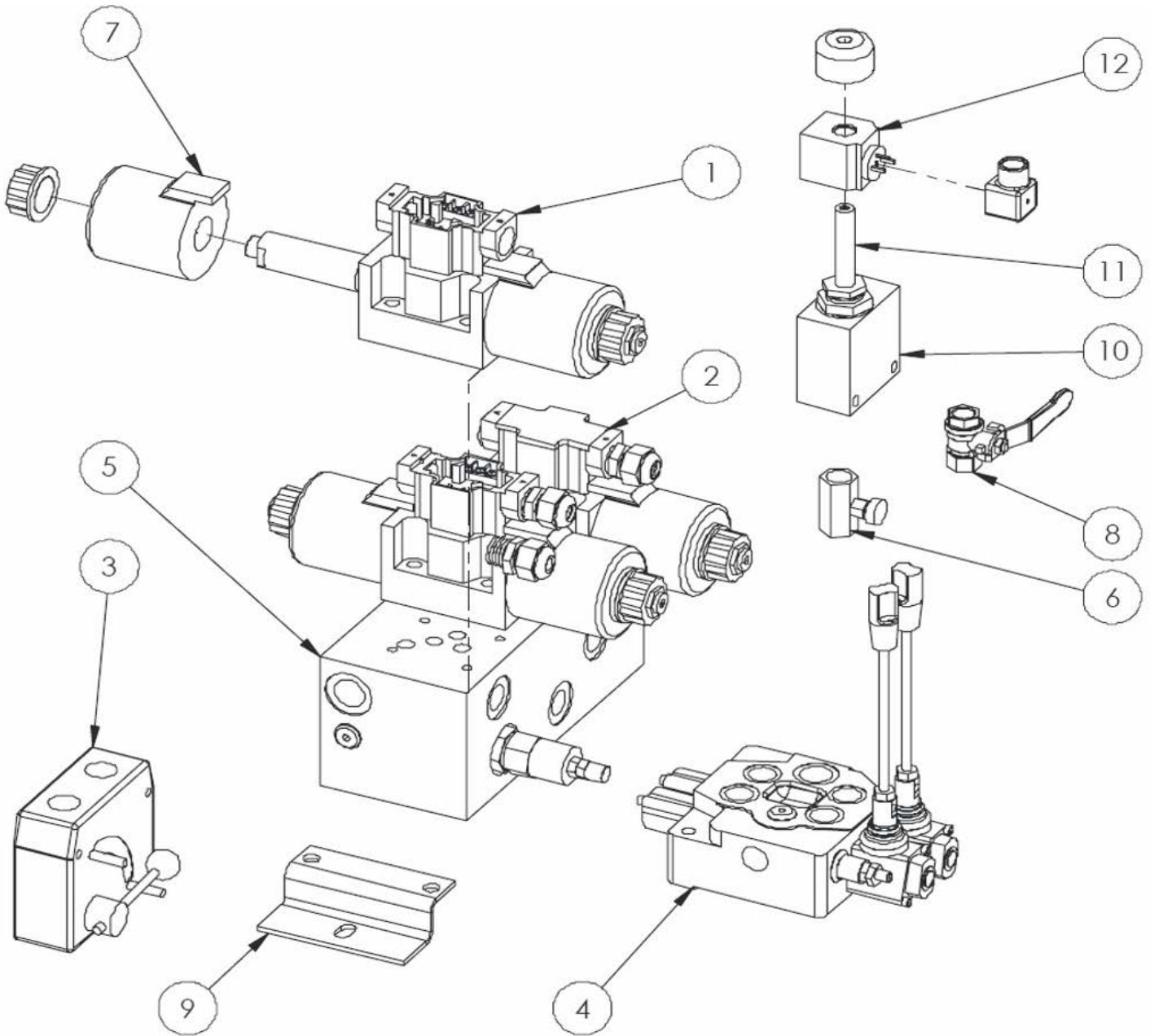
Note: Use measurements as initial guide only.

- Measure length of wire from the hoop face (see previous page)
- 9.5" wire = approx. 3" between wraps = 8-9 layers per bale
- 9.5" wire should stop hoop rotation just after an empty tensioner passes the wire
- Lengthen wire 3" for 4 layers of wrap or 1.5" for 6 layers
- Shorten wire by 1.5" for 10 layers per bale

As a guide, if the hoop stops before an empty tensioner passes the film sensor wire, the wire is too short and if the hoop does not stop with one empty tensioner the film sensor is too long.

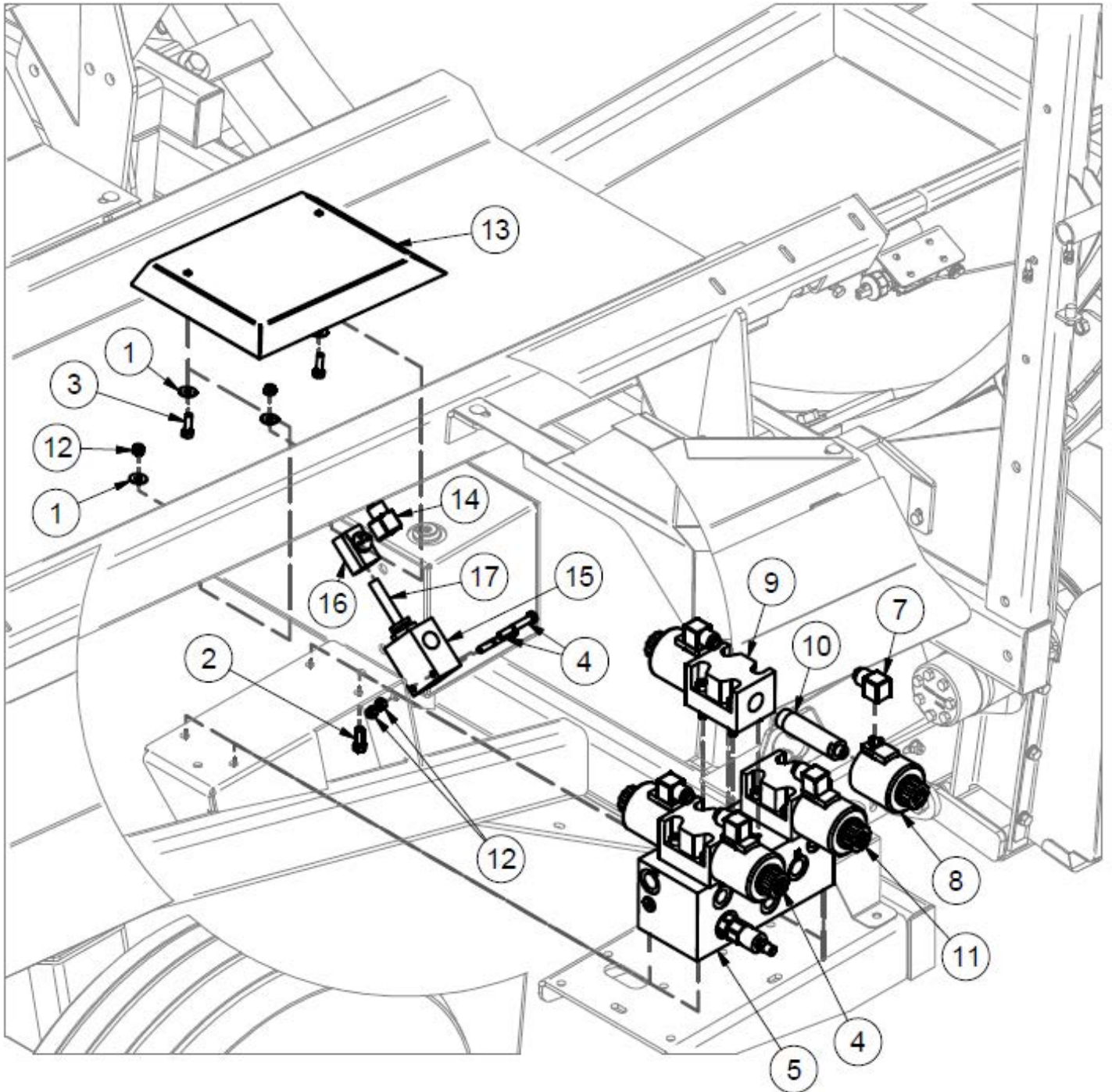
Hystar Hydraulic Valve - Original

Up to Serial Number 11022



Hystar Hydraulic Valve - Current

Serial Number 11R023 to current



Hystar Hydraulic Valve

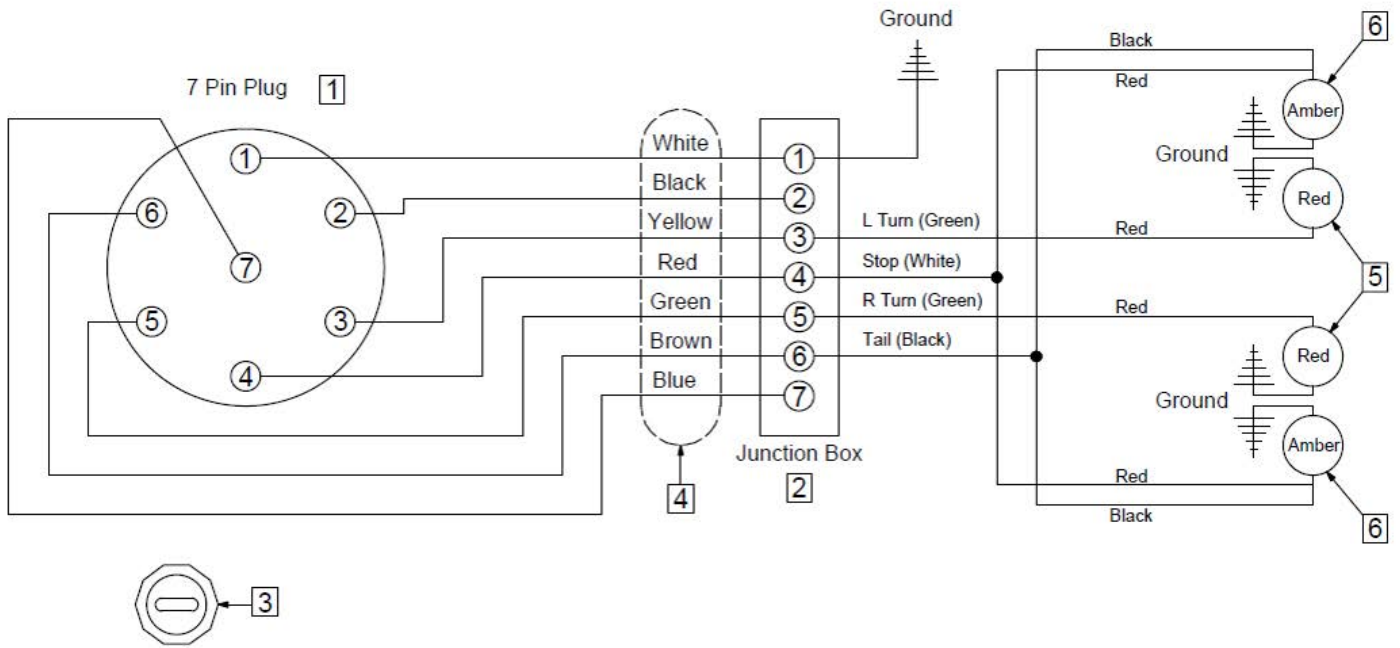
Up to Serial Number 110022

ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	TL5X2-201-200	Tandem Center 12 Volt DC Valve
2	1	TL5X2-201-201	Single 12 Volt DC Valve
3	1	TL500-100-193	Flow Control
4	1	TL5X2-201-055	2 Spool Mono-Block Valve
5	1	TL550-100-056	3 Station Custom Manifold
6	1	TL550-200-006	Steering Speed Control
7		TL5X2-201-007	Valve Coil
8	1	TL550-200-112	Ball Valve
9	1	TL550-200-113	Manifold Mount
10	1	TL850-301-109	Dump Valve Body (20 hp only)
11	1	TL850-301-110	Valve Cartridge (20 hp only)
12	1	TL850-301-111	12 Volt Coil (20 hp only)

Serial Number 110023 to current

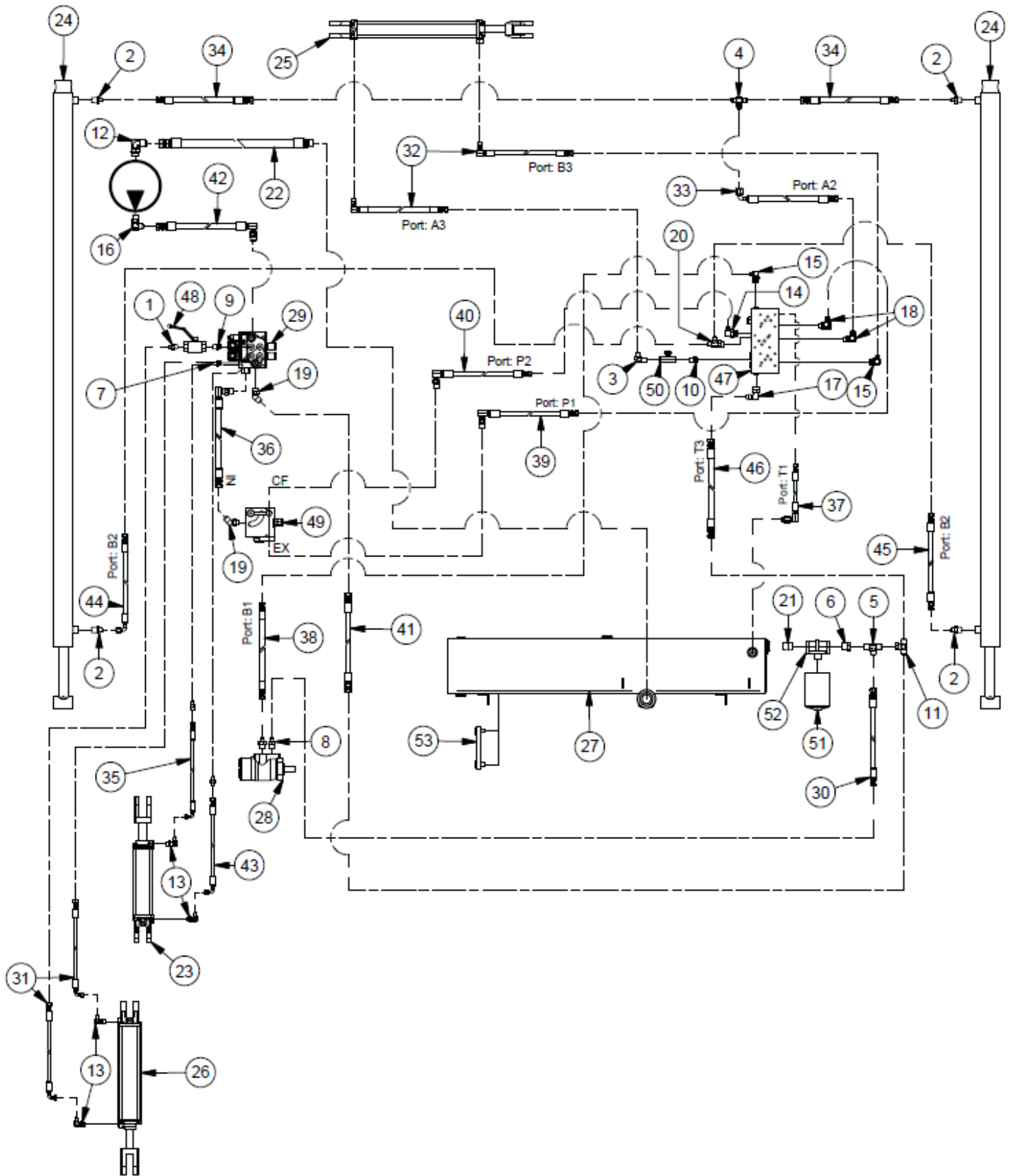
ITEM	QTY	PART NUMBER	DESCRIPTION
1	4	FW 5/16	Flatwasher - 5/16" Zinc Plated USS
2	6	HB 3/8-16X1.0 Z5	Hex Bolt 3/8-16 x 1" Grade 5 Zinc Plated Hex Cap Screw NC
3	2	HB 5/16-18X1.0 Z5	Hex Bolt 5/16-18 x 1" Grade 5 Zinc Plated Hex Cap Screw NC
4	2	HB 5/16-18X2.1/4 Z5	Hex Bolt - 5/16-18 x 2-1/4 Grade 5 Zinc Hex Cap Screw
5	1	TL550-100-056	3 Station Custom Manifold
6	2	TL5X2-201-200-1	Tandem Center 12 Volt DC Valve
7	2	28534	DIN Connector
8	2	TL5X2-201-007	Valve Coil
9	1	VAL25285	Valve Body
10	2	VAL25288	Tube Assembly
11	1	TL5X2-201-201	Single 12 Volt DC Valve
12	6	LN 5/16 N	Locknut - 5/16-18 Type NE Zinc Plated Nylon Insert
13	1	TL559925	HRP 0.070 in
14	1	28534	DIN Connector
15	1	TL850-301-109	Dump Valve Body (20hp Only)
16	1	TL850-301-111	12 Volt Coil (20hp Only)
17	1	TL850-301-110	Valve Cartridge (20hp Only)

Running Lights



ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	TL550-200-117	7 Pin Plug
2	1	TL550-200-118	Junction Box
3	1	TL550-200-119	Strain Relief
4	1	TL550-200-120	7 Wire Conductor
5	2	TL550-200-121	Red Lamp
6	2	TL550-200-122	Amber Lamp

Hydraulic Layout



Hydraulic Layout

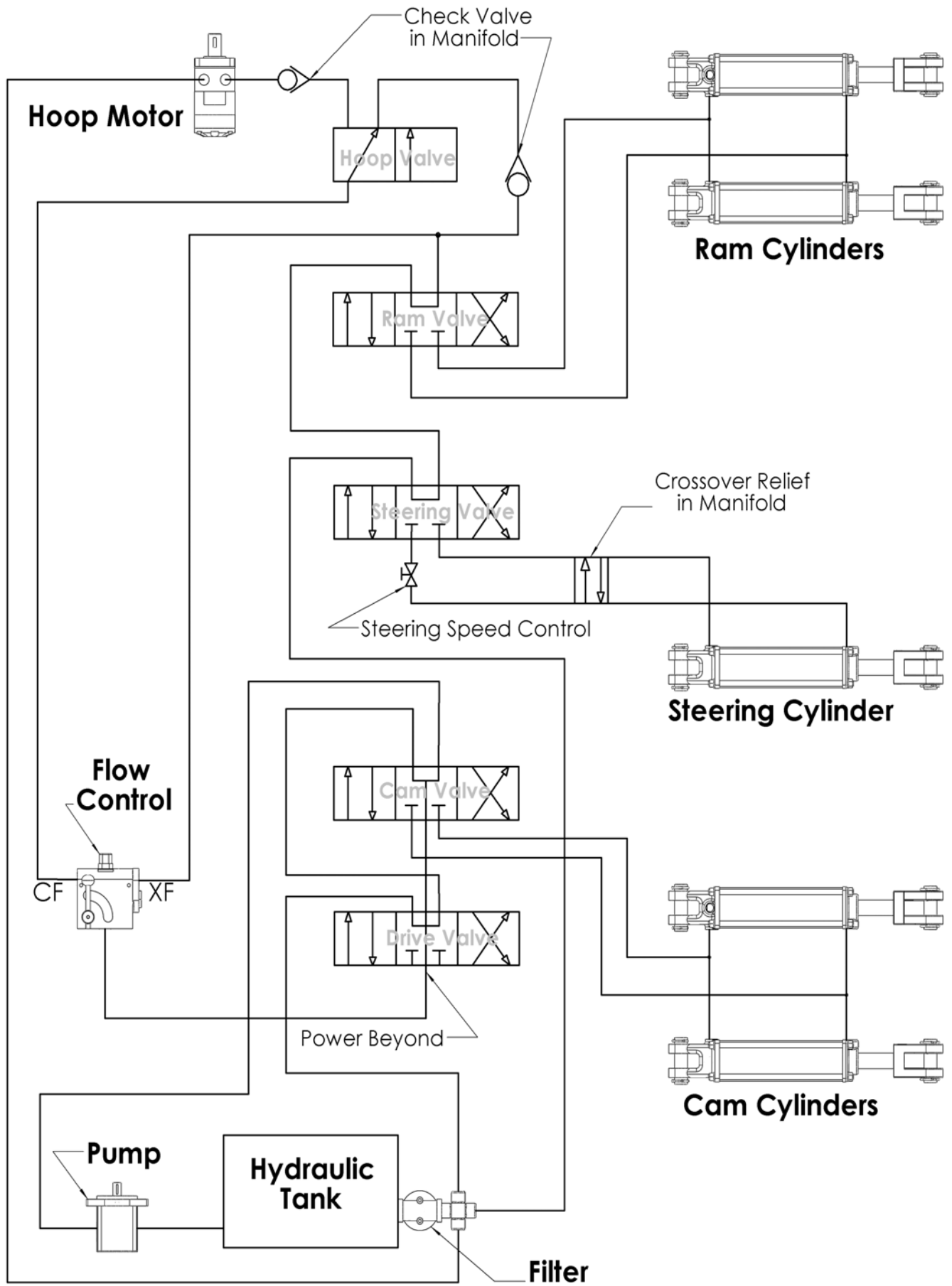
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	HF 2404-4-6	Hyd. Fitting - Male JIC - Male Pipe
2	4	HF 2404-6-8	Hyd Fitting, Male JIC - Male Pipe
3	1	HF 2501-6-6	Hyd Fitting - Male JIC - Male Pipe 90 Degree
4	1	HF 2603-8-8-8	Hyd Fitting
5	1	HF 2605-8-8	Male JIC - Male Pipe
6	1	HF 5406-12-8	Hyd. Fitting - Reducer Bushing
7	3	HF 6400-4-6	Hyd Fitting - Male JIC - Male ORB
8	2	HF 6400-6-10	Hyd Fitting -Male JIC - Male ORB
9	1	HF 6401-6-6	Hydraulic Adapter - Male OTB - Male Pipe
10	1	HF 6401-8-6	Hydraulic Adapter - Male ORB - Male Pipe
11	1	HF 6600-8-8	Hyd. Fitting - Male JIC - Female JIC Tee
12	1	HF 6801-12-12	Forged Fitting - 3/4" JIC x 3/4" SAE 90 Deg. Elbow
13	4	HF 6801-4-6	Hyd Fitting - Male JIC - Male ORB 90 Degree
14	1	HF 6801-6-10	Hyd. Fitting -Male JIC - Male ORB 90 Degree Elbow
15	2	HF 6801-6-8	Hyd Fitting - Male JIC - Male ORB 90 Degree
16	1	HF 6801-8-10	Hyd. Fitting -1/2" JIC - 5/8" 90 Degree Elbow
17	1	HF 6801-8-6-NWO	HF 6801-8-6-NWO
18	2	HF 6801-8-8	Hyd. Fitting- 1/2" JIC- 1/2" SAE 90 Deg Elbow
19	2	HF 6802-8-8	Hyd. Fitting- Male JIC- Male ORB 45 Deg
20	1	HF 6804-6-8-6	Hyd Fitting - Male JIC - Male ORB Tee
21	1	PI 3/4 CLOSE NIPPLE	Close Nipple Sch 80 3/4
22	1	TL-TLM517	HH37.5 - 12G4H(12MP,12FJXH) 37.5HCL
23	1	TL500-100-082	Brake Cylinder
24	2	TL550-100-043	Hydraulic Cylinder (Ram)
25	1	TL550-100-103	Steering Cylinder
26	1	TL599-100-107	Tail Cylinder
27	1	TL5X2-100-190	Oil Tank
28	1	TL5X2-200-050	Hydraulic Motor
29	1	TL5X2-201-055	2 Spool Monoblock Valve
30	1	TLT5E102-09	HH48 - 6ATI(8FJXH-6FJXH)48HCL
31	2	TLT5E153-A	HH205 - 4AT1(6FJXH,4FJX90S) 205 E/CL Hose Assy
32	2	TLT5E606-09	HH92.50 - 6ATI(6MBX90,6FJXH) 92.50" E/E
33	1	TLT5E609-09	HH84.25-8ATI(8FJX90S-8FJX)84.25-CL/E
34	2	TLT5E610-09	HH45.75-6ATI(8FJX-6FJX)45.75-E/E
35	1	TLT5E612-09	HH119.50-4ATI(4FJX90S-4FJX)119.50-CL/E
36	1	TLT5M111-09	HH24.75- 8ATI(8MBX90-8FJX)24.75 - E/E
37	1	TLTLE101-09	HH25-4ATI(4FJXH-6MBX90)25HCL
38	1	TLX202-09	HH54.75-6ATI-6FJX-6FJX-54.75-E/E
39	1	TLX203-09	HH86-6ATI-8MBX90-6FJX-86 CL/E
40	1	TLX204-09	HH80-6ATI-8MBX90-6FJX-80-CL/E

Continued

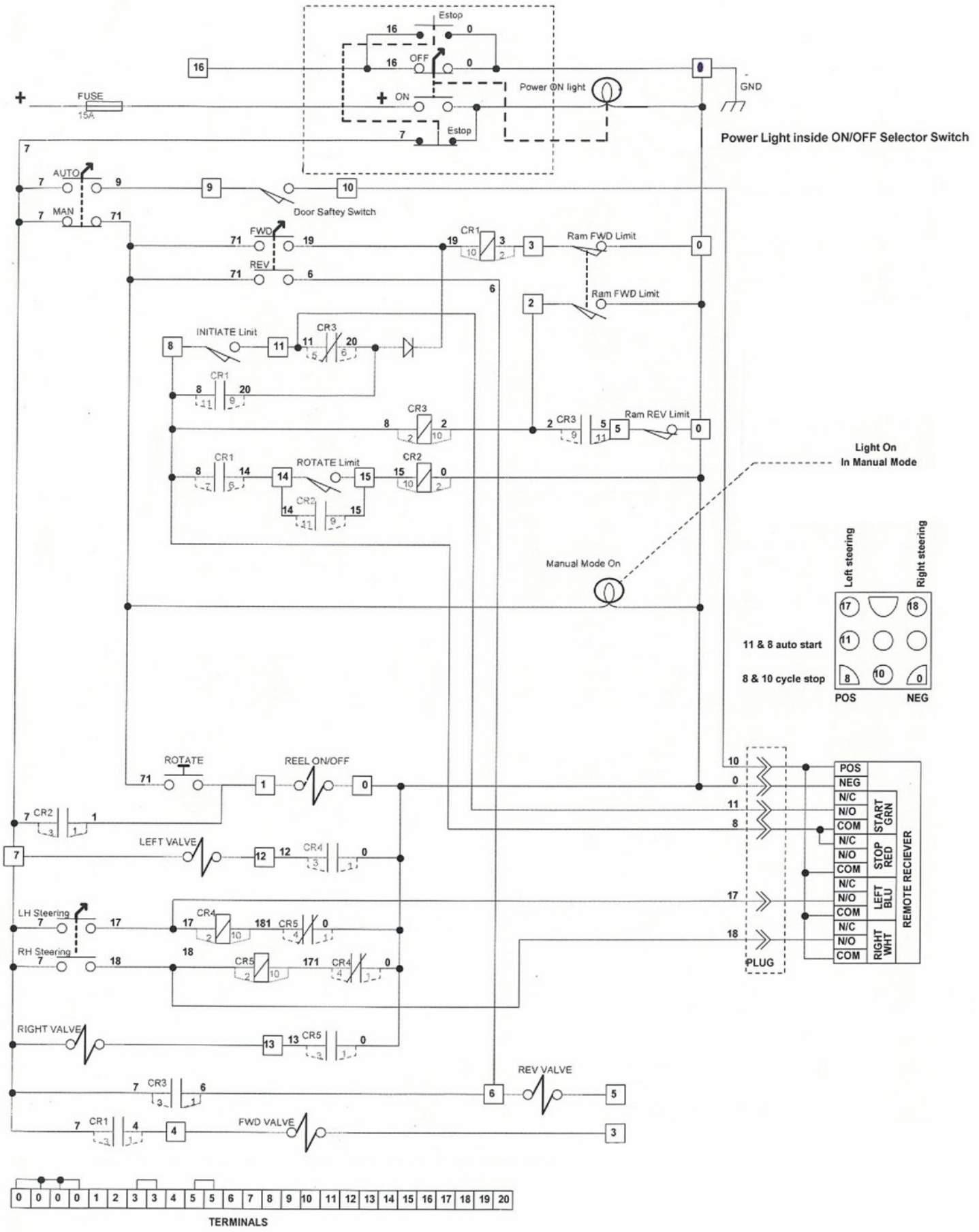
Hydraulic Layout

41	1	TLX205-09	HH74.25-6ATI-8FJX-8FJX-74.25-E/E
42	1	TLX206-09	HH93.25-8ATI-8MBX90-8FJX-93.25 CL/E
43	1	TLX207A	HH129.5 - 4ATI(4FJX,4FJX90S) 129.5" E/CL
44	1	TLX208-09	HH48.75-6ATI(6FJX90S-6FJX)48.75-CL/E
45	1	TLX209-09	HH78-6AT(6FJX-6FJX)78-E/E
46	1	TLX210-09	HH22.25 - 8ATI(8FJX-8FJX) 22.25-CL/E
47	1	VAL BLOCCO CX 59	Manifold
48	1	VAL BV73-100	Valve 1/2" Ball
49	1	VAL FCR51-3/4	Flow Control, FCR51-3/4
50	1	VAL FT-03-2090 NPT	Flow Control Valve
51	1	VAL HEK44	HEK44-20-135-AS-SP010-B Filter Element
52	1	VAL HF620	HF620.20-B17-NE-XA-NA-XB-NA Filter Base
53	1	VAL HL91	HL91-20-T1-T-B Level Gauge

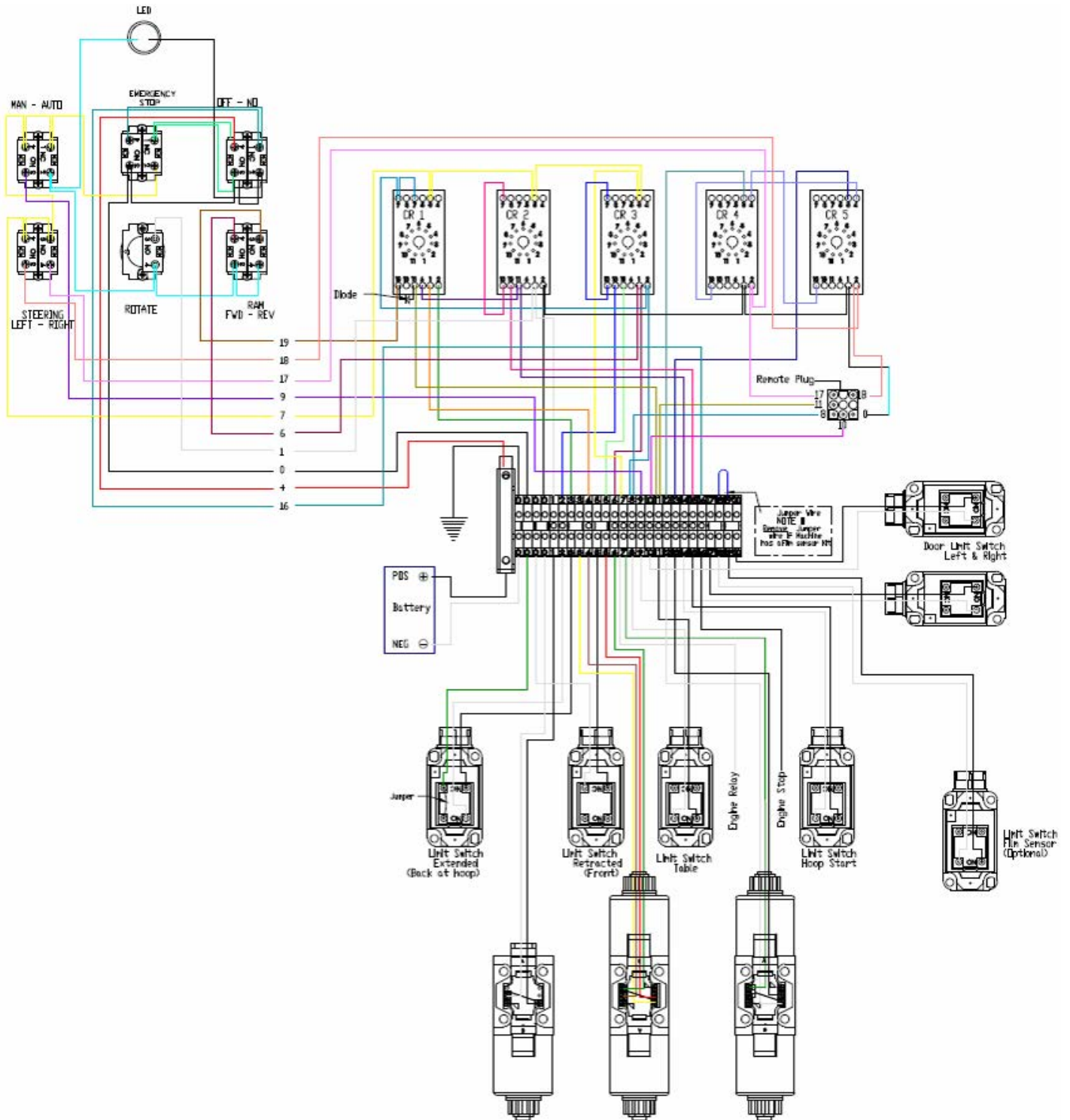
Hydraulic Schematic



Electrical Schematic



Wiring Diagram



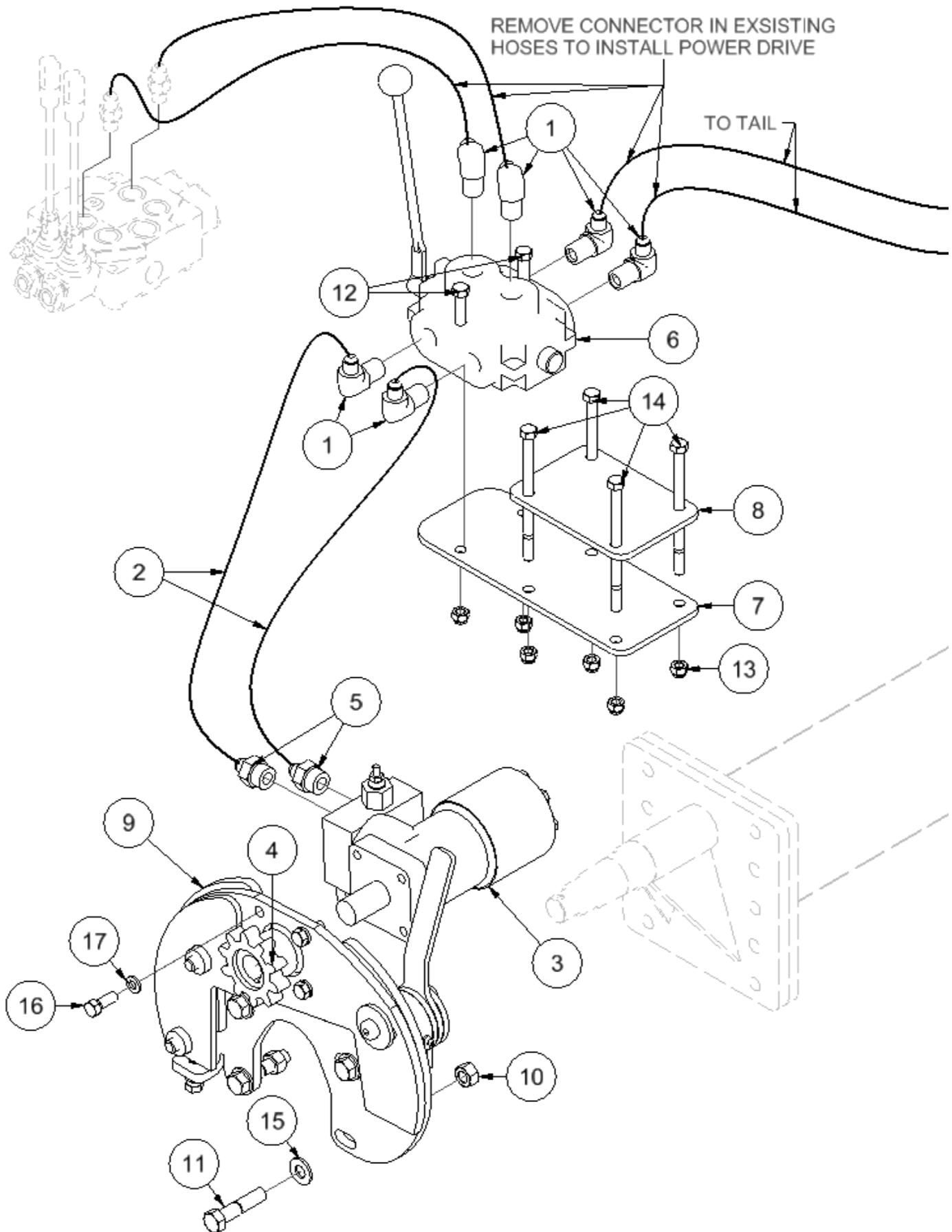
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Section 6: Options

- Single Power Drive
- Dual Power Drive
- Light Kit(s)
- Remote Control
- Guide Roller Kit
- Twin Wrap Kit
- Quick Start Power Jack

TLHPD5500 - Single Power Drive

Up to serial #: 1755001



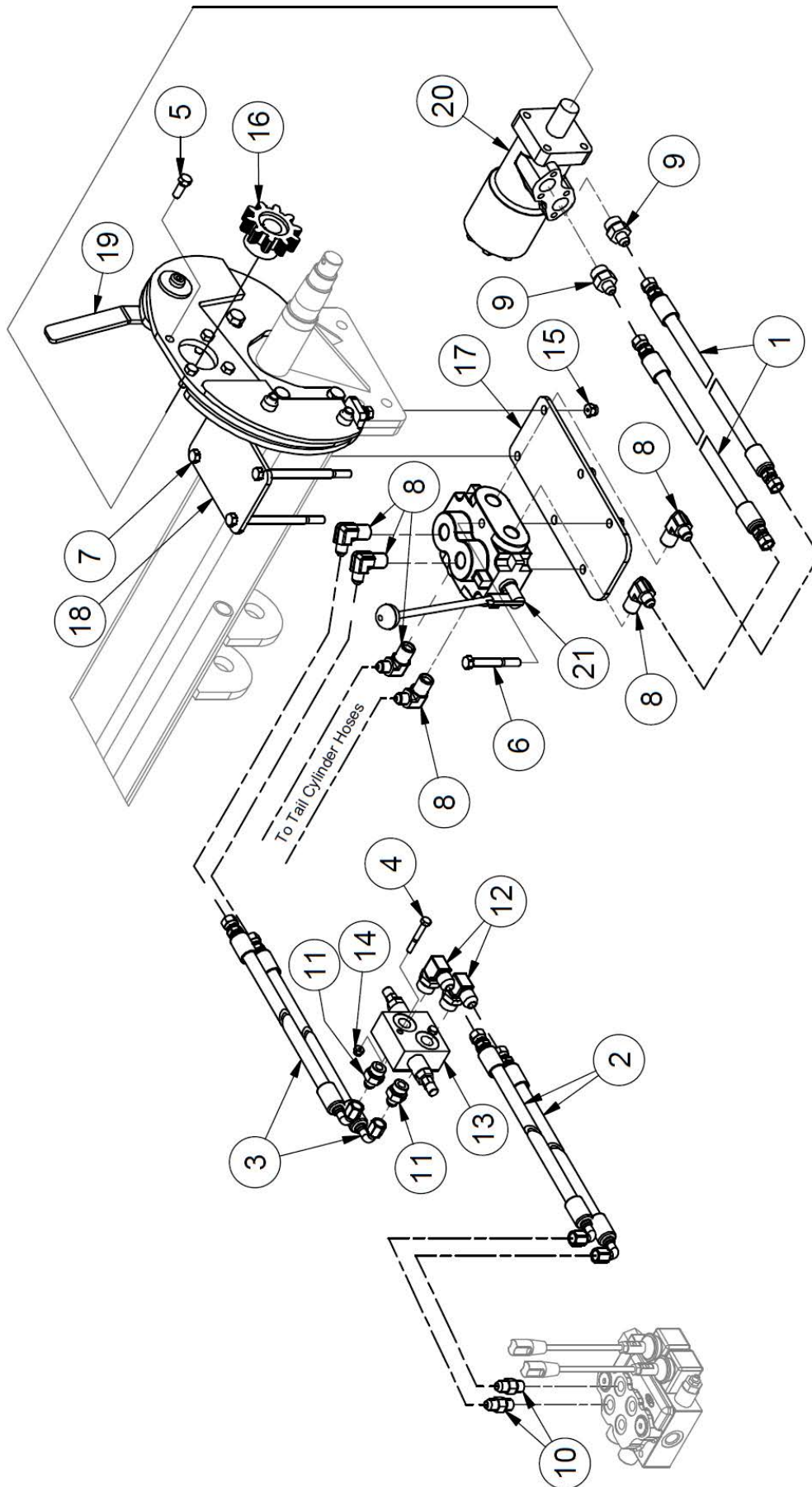
TLHPD5500 - Single Power Drive

Up to serial #: 1755001

ITEM	QTY	PART NUMBER	DESCRIPTION	SERIAL BREAK
1	6	HF2501-6-8	Hydraulic Fitting	
2	1	25113	HH14 - 6AT1(6FJX	
3	1	TL550-200-138	Hydraulic Motor	
4	1	TL550-203-237	Sprocket	Up to 12038
		28772		12039 to Current
5	2	HF6400-6-10	Hydraulic Fitting	
6	1	VAL DS1A1E	Selector Valve	
7	1	TLWHEEL13	Selector Valve Mount	
8	1	TLWHEEL13A	Selector Valve Mount	
9	1	TLWHEEL32	Power Drive Assembly	
10	4	HN 1/2-20NF	Nut 1/2-20 NF Fine Thread	
11	4	HB 1/2-20X2.1/4 Z5	Hex Bolt - 1/2"-20 x 2 1/4" Grade 5 Zinc Plated Hex Cap Screw Fine Thread Gr5	
12	2	HB 3/8-16X3.0 Z5	Hex Bolt 3/8-16 x 3" Grade 5 Zinc Plated Hex Cap Screw NC	
13	6	LN 3/8 N	Locknuts - 3/8-16 Zinc Plated Nylon Insert Lock Nut	
14	4	HB 3/8-16X5.1/4 Z5	Hex Bolt - 3/8"-16 x 5 1/4" Grade 5 Zinc Plated Hex Cap Screw NC	
15	4	FW 1/2	Flatwasher - 1/2" Zinc Plated USS	
16	4	HB 3/8-16X1.0 Z5	Hex Bolt 3/8-16 x 1" Grade 5 Zinc Plated Hex Cap Screw NC	
17	4	LW 3/8	Lockwasher - 3/8" Zinc Plated Medium Split	

TLHPD5500 - Single Power Drive - Current

After serial #: 1755001



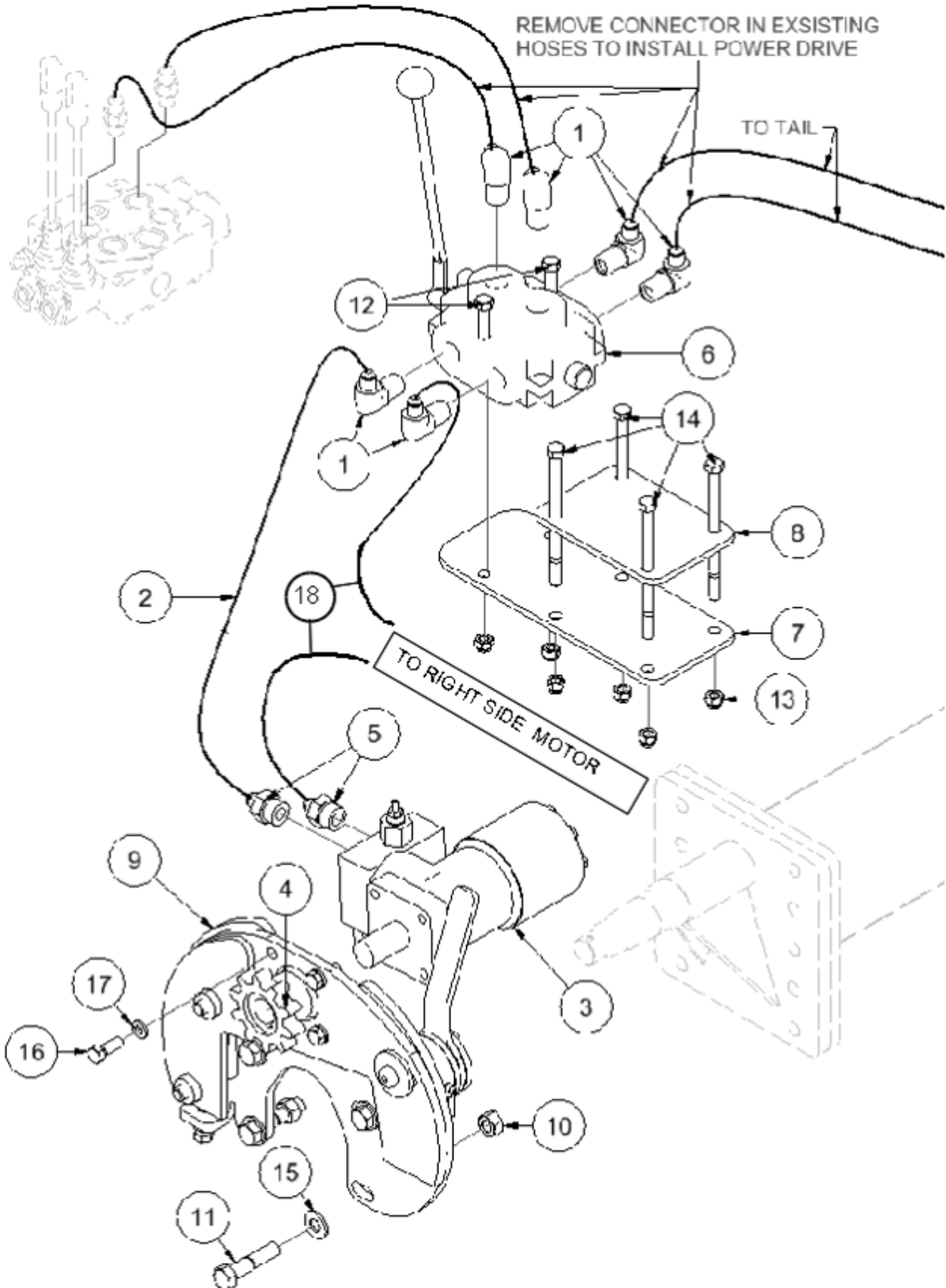
TLHPD5500 - Single Power Drive - Current

After serial #: 1755001

ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	25113	HH14 - 6AT1(6FJX,6FJ)HCL 14"
2	2	41512	HH80- 6AT1(6FJXH-6FJX90S) HCL80"
3	2	41593	HH85- 6AT1(6FJXH-6FJX90S) HCL85"
4	2	HB 1/4-20X2.0 Z5	Hex Bolt Plated Gr. 5 NC
5	4	HB 3/8-16X1.0 Z5	Hex Bolt 3/8-16 x 1" Grade 5 Zinc Plated Hex Cap Screw NC
6	2	HB 3/8-16X3.0 Z5	Hex Bolt 3/8-16 x 3" Grade 5 Zinc Plated Hex Cap Screw NC
7	4	HB 3/8-16X5.1/4 Z5	Hex Bolt - 3/8"-16 x 5 1/4" Grade 5 Zinc Plated Hex Cap Screw NC
8	6	HF 2501-6-8	90 Degree 3/8 MJIC - 1/2 MPT
9	2	HF 6400-6-10	Hyd Fitting -Male JIC - Male ORB
10	2	HF 6400-6-6	Hyd Fitting
11	2	HF 6400-6-8	Hyd Fitting -Male JIC - Male ORB
12	2	HF 6801-8-6-NWO	Adapter
13	1	LA-SB2000RV	Relief Valve
14	2	LN 1/4 N	Locknuts - 1/4-20 Zinc Plated Nylon Insert
15	6	LN 3/8 N	Locknuts - 3/8-16 Zinc Plated Nylon Insert Lock Nut
16	1	TL550-203-237	Drive Gear for Wheel Drive Motor
17	1	TLWHEEL13	Power Drive Selector Mount
18	1	TLWHEEL13A	Selector Valve Mount Clamp
19	1	TLWHEEL32L	Power Drive Linkage (Left)
20	1	VAL 1008	Motor, Hydraulic - (BS208107A)
21	1	VAL DS-1A1E	Double Selector Valve for Power Drive

TLHPDD5500 - Dual Power Drive

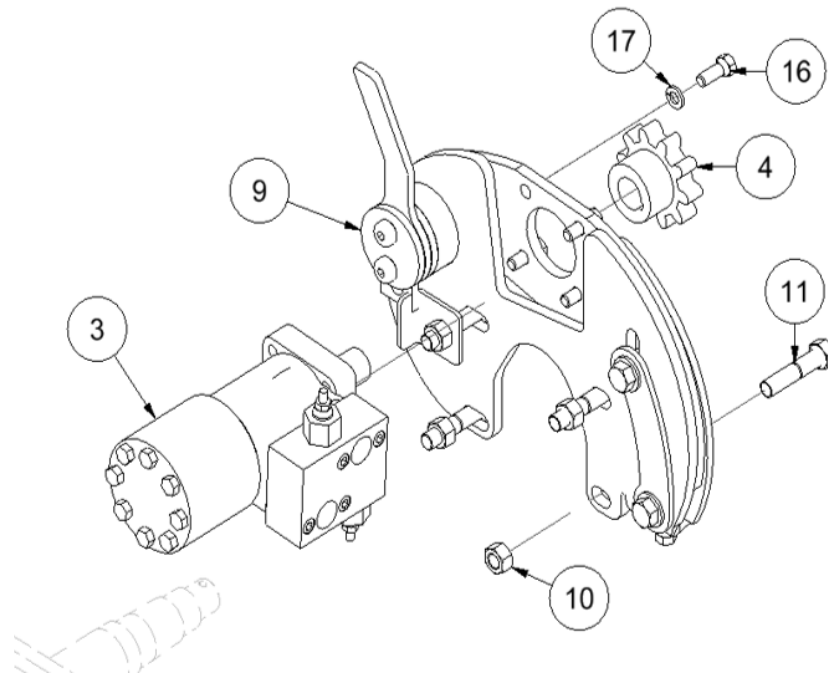
Up to serial #: 1755001



TLHPDD5500 - Dual Power Drive

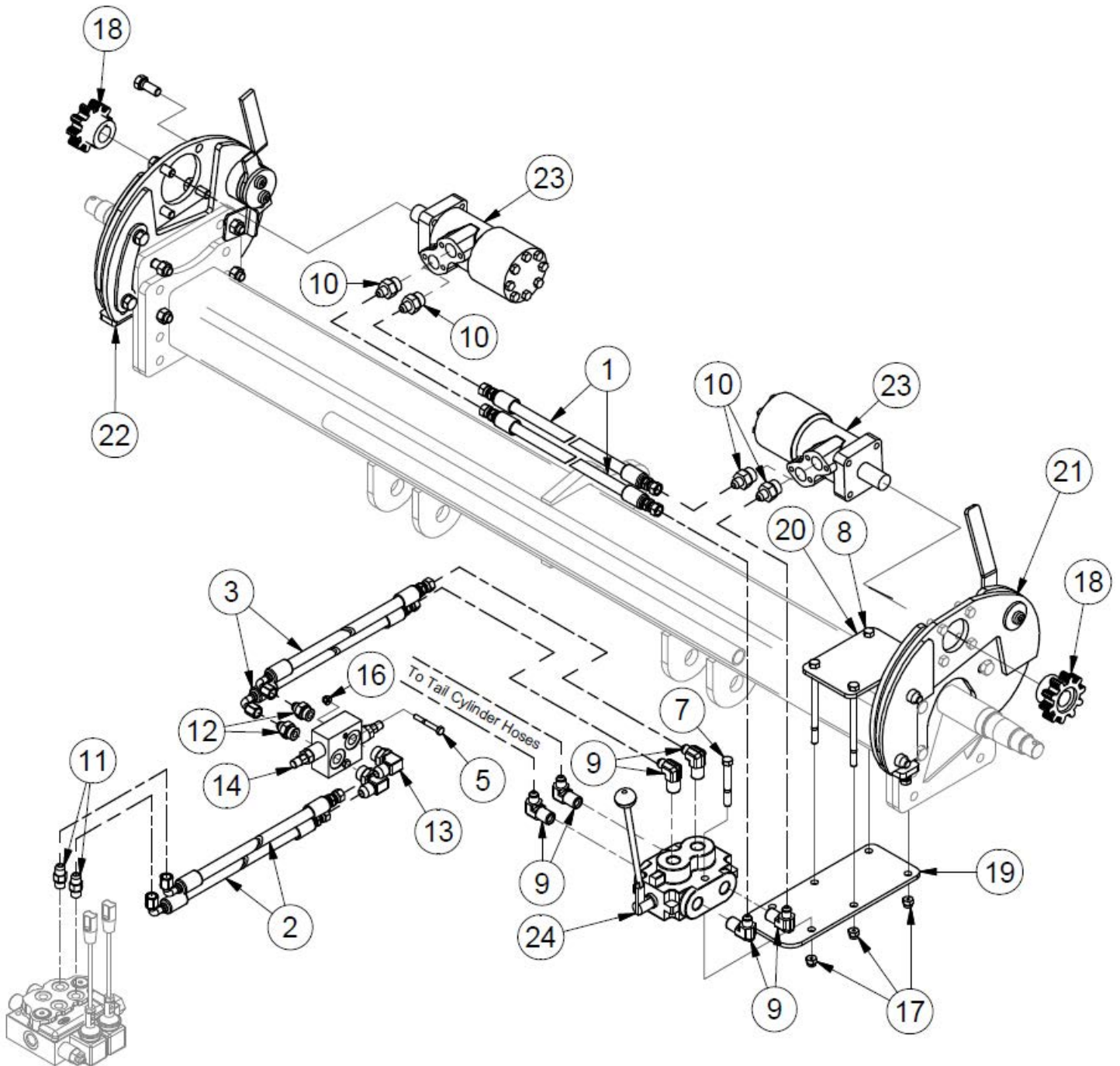
Up to serial #: 1755001

ITEM	QTY	PART NUMBER	DESCRIPTION	SERIALBREAK
1	6	HF2501-6-8	Hydraulic Fitting	
2	1	25113	HH14 - 6AT1(6FJX	
3	2	TL550200138	Hydraulic Fitting	
4	2	TL550203237	Sprocket	Up to 12038
		28772		12039 to Current
5	4	HF6400-6-10	Hydraulic Fitting	
6	1	VAL DS1A1E	Selector Valve	
7	1	TLWHEEL13	Selector Valve Mount	
8	1	TLWHEEL13A	Selector Valve Mount	
9	2	TLWHEEL32	Power Drive Assembly	
10	8	HN 1/2-20NF	Nut 1/2-20 NF Fine Thread	
11	8	HB 1/2-20X2.1/4 Z5	Hex Bolt - 1/2"-20 x 2 1/4" Grade 5 Zinc Plated Hex Cap Screw Fine Thread Gr5	
12	2	HB 3/8-16X3.0 Z5	Hex Bolt 3/8-16 x 3" Grade 5 Zinc Plated Hex Cap Screw NC	
13	6	LN 3/8 N	Locknuts - 3/8-16 Zinc Plated Nylon Insert Lock Nut	
14	4	HB 3/8-16X5.1/4 Z5	Hex Bolt - 3/8"-16 x 5 1/4" Grade 5 Zinc Plated Hex Cap Screw NC	
15	8	FW 1/2	Flatwasher - 1/2" Zinc Plated USS	
16	8	HB 3/8-16X1.0 Z5	Hex Bolt 3/8-16 x 1" Grade 5 Zinc Plated Hex Cap Screw NC	
17	8	LW 3/8	Lockwasher - 3/8" Zinc Plated Medium Split	
18	2	24114	HH64 - 6AT1(6FJ,6FJX)HCL 64	



TLHPDD5500 - Dual Power Drive

After serial #: 1755001

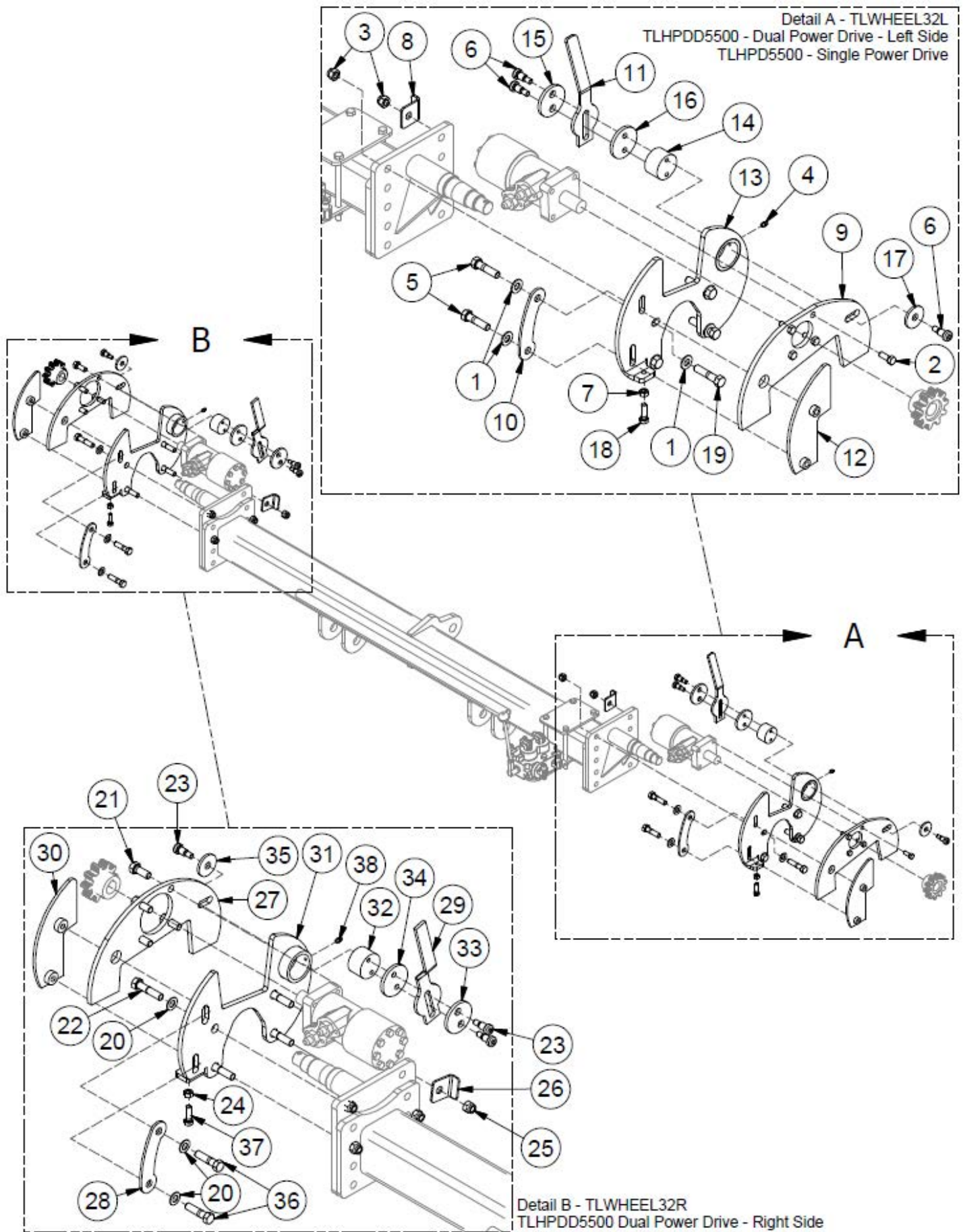


TLHPDD5500 - Dual Power Drive

After serial #: 1755001

ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	24114	HH64 - 6AT1(6FJ,6FJX) HCL 64
2	2	41512	HH80- 6AT1(6FJXH-6FJX90S) HCL80"
3	2	41593	HH85- 6AT1(6FJXH-6FJX90S) HCL85"
4	4	HB 1/2-13X2.0 Z5	Hex Bolt 1/2-13 x 2" Grade 5 Zinc Plated Hex Cap Screw NC
5	2	HB 1/4-20X2.0 Z5	Hex Bolt Plated Gr. 5 N.C
6	4	HB 3/8-16X1.0 Z5	Hex Bolt 3/8-16 x 1" Grade 5 Zinc Plated Hex Cap Screw NC
7	2	HB 3/8-16X3.0 Z5	Hex Bolt 3/8-16 x 3" Grade 5 Zinc Plated Hex Cap Screw NC
8	4	HB 3/8-16X5.1/4 Z5	Hex Bolt - 3/8"-16 x 5 1/4" Grade 5 Zinc Plated Hex Cap Screw NC
9	6	HF 2501-6-8	90 Degree 3/8 MJIC - 1/2 MPT
10	4	HF 6400-6-10	Hyd Fitting -Male JIC - Male ORB
11	2	HF 6400-6-6	Hyd Fitting
12	2	HF 6400-6-8	Hyd Fitting -Male JIC - Male ORB
13	2	HF 6801-8-6	Adapter
14	1	LA-SB2000RV	Relief Valves
15	4	LN 1/2 N	Locknuts - 1/2-13 Zinc Plated Nylon Insert Lock Nut
16	2	LN 1/4 N	Locknuts - 1/4-20 Zinc Plated Nylon Insert
17	6	LN 3/8 N	Locknuts - 3/8-16 Zinc Plated Nylon Insert Lock Nut
18	2	TL550-203-237	Drive Gear for Wheel Drive Motor
19	1	TLWHEEL13	Power Drive Selector Mount
20	1	TLWHEEL13A	Selector Valve Mount Clamp
21	1	TLWHEEL32L	Power Drive Bracket
22	1	TLWHEEL32R	Power Drive Linkage (Right)
23	2	VAL 1008	Motor, Hydraulic - (BS208107A)
24	1	VAL DS-1A1E	Double Selector Valve for Power Drive

Power Drive Brackets



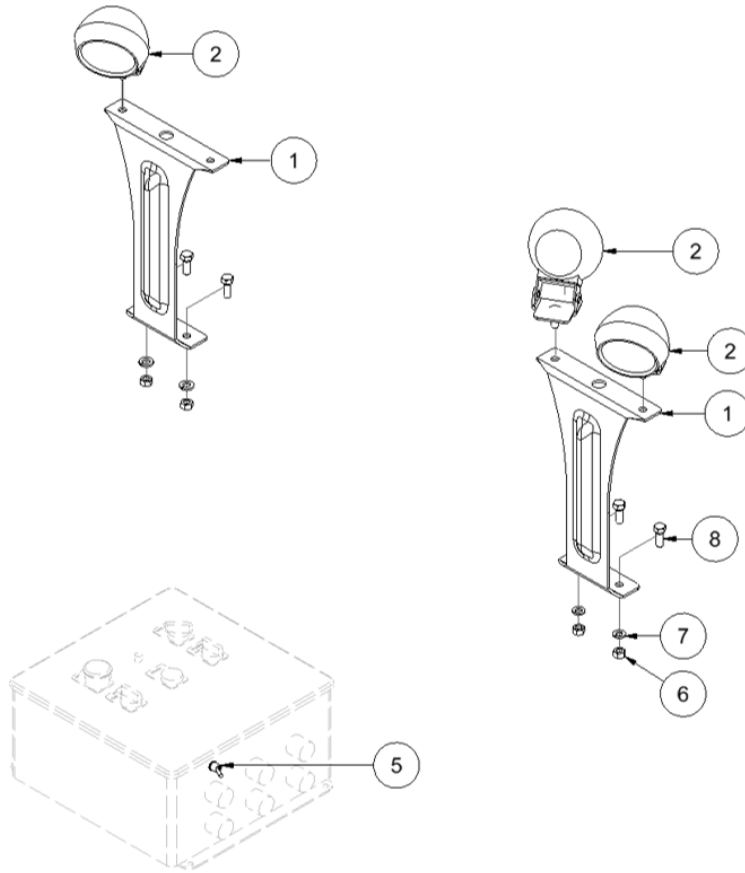
Power Drive Brackets

TLWHEEL32L - Items 1-20* **TLWHEEL32R** Items 21-38*

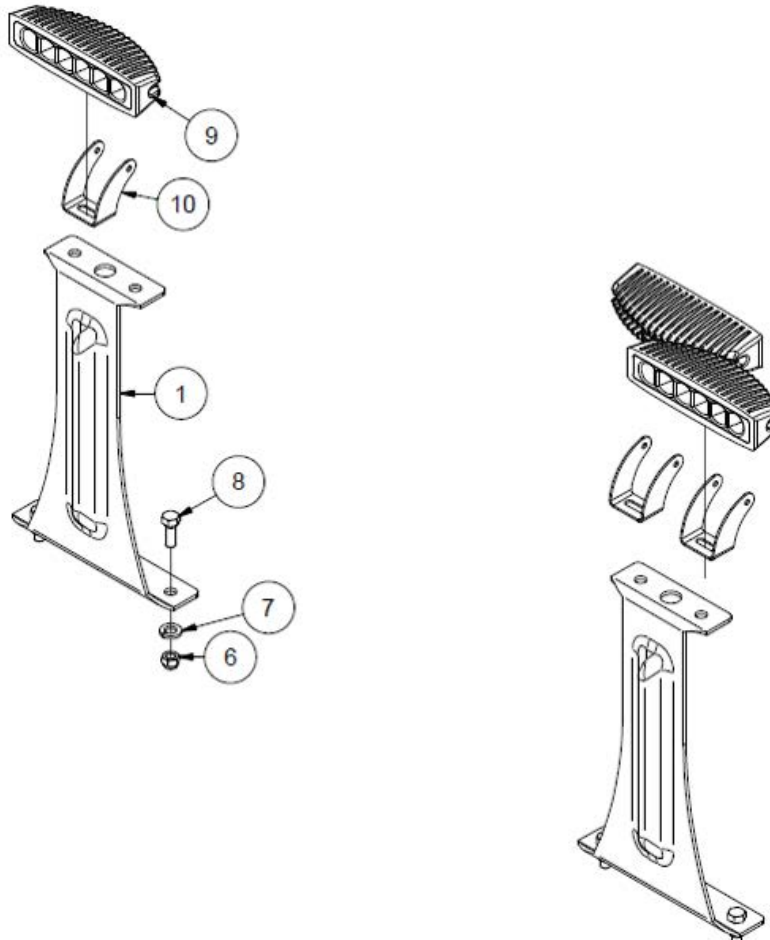
ITEM	QTY	PART NUMBER	DESCRIPTION
1	6	FWSAE 1/2	Flatwasher - 1/2" Zinc Plated USS
2	4	HB 3/8-16X1.0 Z5	Hex Bolt 3/8-16 x 1" Grade 5 Zinc Plated Hex Cap Screw NC
3	4	LN 1/2 N	Locknuts - 1/2-13 Zinc Plated Nylon Insert Lock Nut
4	1	GR 1/4 X 28	Grease Fitting 1/4-28 Strght-Standrd Zerk
5	2	HB 1/2-13X2.0 Z5	Hex Bolt 1/2-13 x 2" Grade 5 Zinc Plated Hex Cap Screw NC
6	3	HB 1/2X 5/8 SS	Shoulder Bolt - 1/2" Shldr x 5/8" x 3/8-16
7	1	HN 3/8	Hex Nut 3/8"-16 Grade 5 Zinc Plated Finished NC
8	1	TLWHEEL101	Handle Stop
9	1	TLWHEEL11	Motor Mount
10	1	TLWHEEL14	Pivot Washer
11	1	TLWHEEL18	Handle
12	1	TLWHEEL30LEFT	Left Pivot Plate
13	1	TLWHEEL31L	Wheel Drive Mounting Plate
14	1	TLWHEEL9	Power Drive Eccentric
15	1	WHEEL2012	Outside Handle Washer
16	1	WHEEL20121	Inside Handle Washer
17	1	WHEEL2013	Inside Cam Washer
18	1	HB 3/8-16X1.1/4 Z5	Hex Bolt 3/8-16 x 1 1/4" Grade 5 Zinc Plated Hex Cap Screw NC
19	4	HB 1/2-13X2.1/4 Z5	Hex Bolt - 1/2"-13 x 2 1/4"
20	6	FWSAE 1/2	Flatwasher - 1/2" Zinc Plated USS
21	4	HB 3/8-16X1.0 Z5	Hex Bolt 3/8-16 x 1" Grade 5 Zinc Plated Hex Cap Screw NC
22	4	HB 1/2-13X2.1/4 Z5	Hex Bolt - 1/2"-13 x 2 1/4"
23	3	HB 1/2X 5/8 SS	Shoulder Bolt - 1/2" Shldr x 5/8" x 3/8-16
24	1	HN 3/8	Hex Nut 3/8"-16 Grade 5 Zinc Plated Finished NC
25	4	LN 1/2 N	Locknuts - 1/2-13 Zinc Plated Nylon Insert Lock Nut
26	1	TLWHEEL101	Handle Stop
27	1	TLWHEEL11	Motor Mount
28	1	TLWHEEL14	Pivot Washer
29	1	TLWHEEL18	Handle
30	1	TLWHEEL30RIGHT	Right Pivot Plate
31	1	TLWHEEL31R	Wheel Drive Mounting Plate
32	1	TLWHEEL9	Power Drive Eccentric
33	1	WHEEL2012	Outside Handle Washer
34	1	WHEEL20121	Inside Handle Washer
35	1	WHEEL2013	Inside Cam Washer
36	2	HB 1/2-13X2.0 Z5	Hex Bolt 1/2-13 x 2" Grade 5 Zinc Plated Hex Cap Screw NC
37	1	HB 3/8-16X1.1/4 Z5	Hex Bolt 3/8-16 x 1 1/4" Grade 5 Zinc Plated Hex Cap Screw NC
38	1	GR 1/4 X 28	Grease Fitting 1/4-28 Strght-Standrd Zerk
*		22707	Rubber Handle (not shown)

Light Kit(s)

TLNWLK (Halogen)



TLNWLKLED (LED)



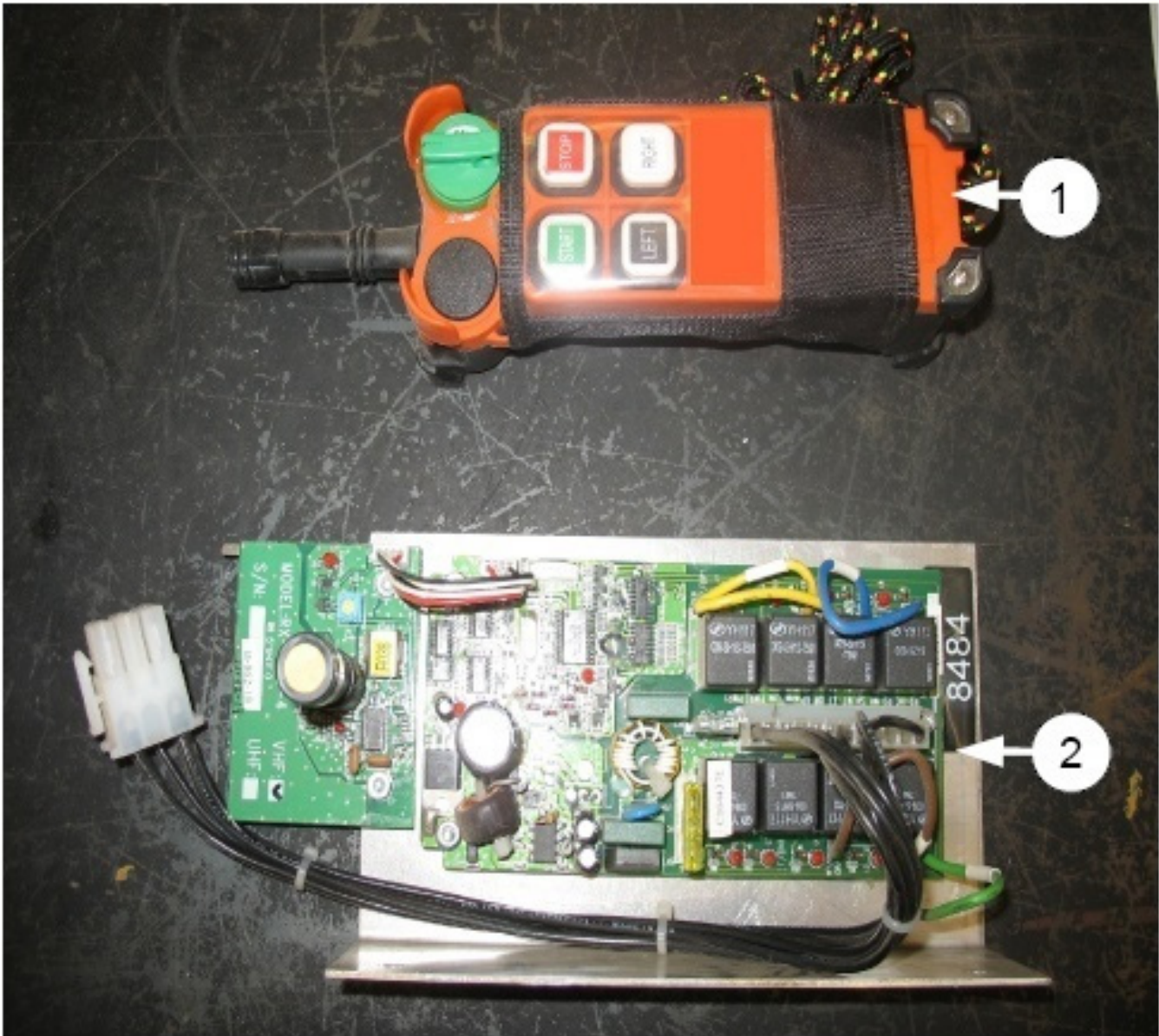
Light Kit(s)

ITEM	QTY	PART NUMBER	DESCRIPTION
		TLNWLK	Complete Halogen Kit
		TLNWKLED	Complete LED Kit
1	2	TL5X2-100-201	Light Bracket
2	3	TL64931B	Light
3	1	FUSEATC-15	15 Amp Blade Type Fuse
4	1	TL82-2164	Fuse Holder
5	1	TL550-200-235	Toggle Switch
6	4	HN 3/8	Hex Nut 3/8"-16 Grade 5 Zinc Plated Finished NC
7	2	LW 3/8	LW 3/8" (Lock Washer)
8	4	HB 3/8-16X1.0 Z5	Hex Bolt 3/8-16 x 1" Grade 5 Zinc Plated Hex Cap Screw NC
9	3	33237	LED Light
10	3	33223	LED Light Bracket

Installation

- Mounting location is at the top of the hoop guards.
- Drill a 1/2" hole in the bottom of the control panel for the toggle switch.
- Install the switch, locate the 2 wires labeled lights inside the control panel, connecting them to the one terminal on the toggle switch.
- Connect the inline fuse from the toggle switch to the bottom of the fuse block (fuse block is located at the left side of the terminal strip).

Remote Control



Remote Control

ITEM	QTY	PARTNUMBER	DESCRIPTION
		TLR SSKX2HD	Remote Control Kit
1	1	TLH HCX2HD	Hand-held Unit
2	1	TLR SSKX2HDL	Receiver Unit

Remote Control Installation

- Bolt receiver assembly to inside rear right of control box with connector plug at bottom.
- Locate the plug with 6 wires inside the control panel.
- Remove the jumper plug and connect the remote control board.

Note: All remote control units use the same frequency, no programming is required.

Remote Control Function

ON/OFF – Turns handheld unit on/off (detent has no function).

START – Starts the wrap cycle (unplug the table switch if you prefer to start each cycle with this button), this will not restart the hoop if cycle is broken after Hoop Start was triggered.

STOP – Stops the wrap cycle (if the table switch is not unplugged and it has a bale holding it down, it is nessecary to hold stop until the circuit is broken by switching to manual mode at the control panel).

LEFT - Steers left.

RIGHT - Steers right.

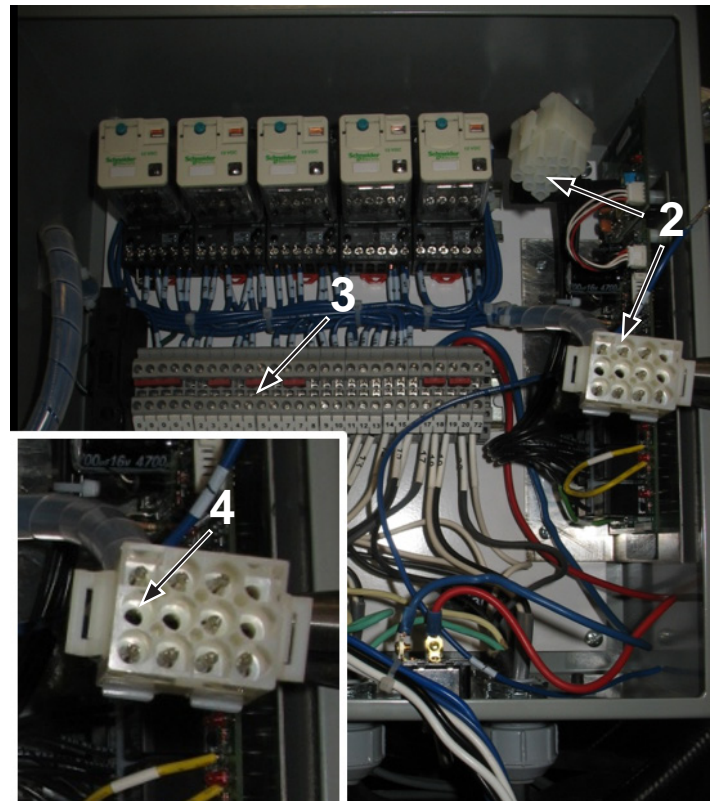
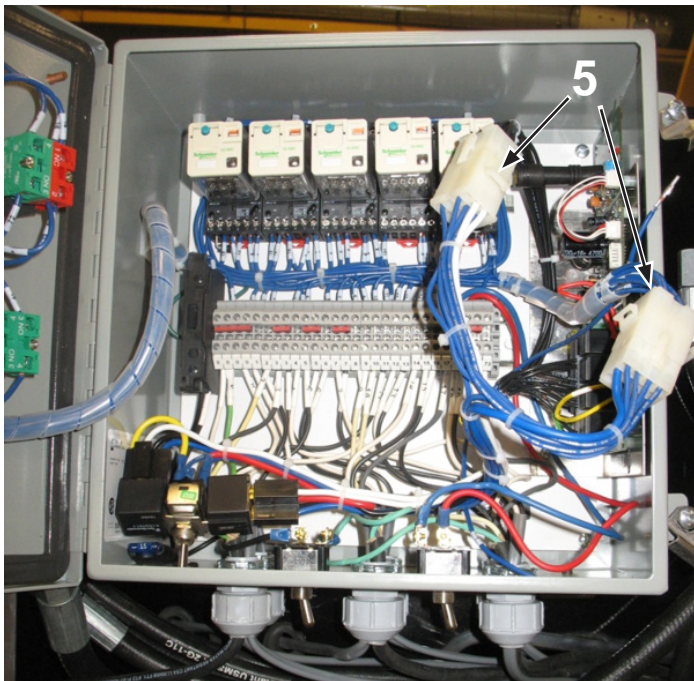
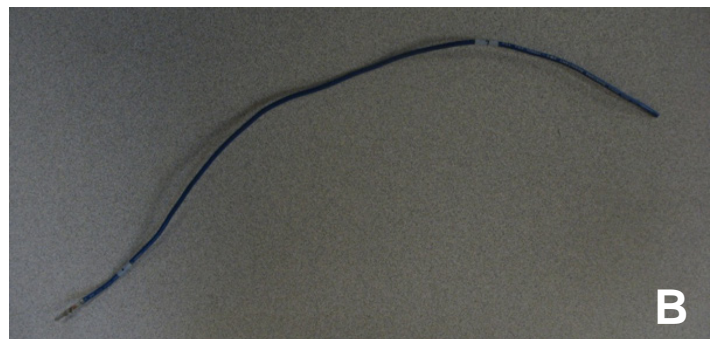
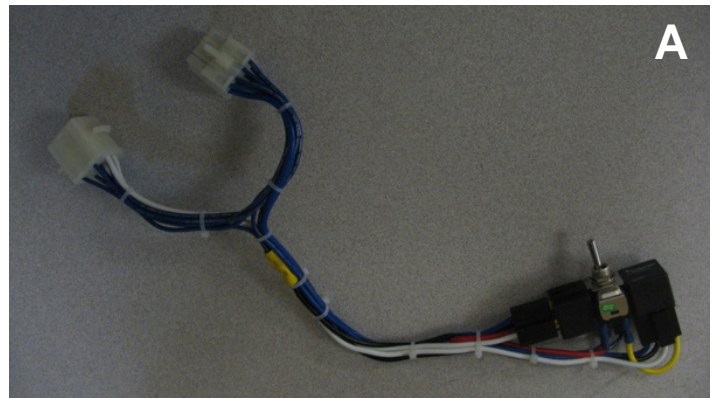
Optional Remote Start Add-on*

* To order this option you must have a remote control [see previous page(s)]

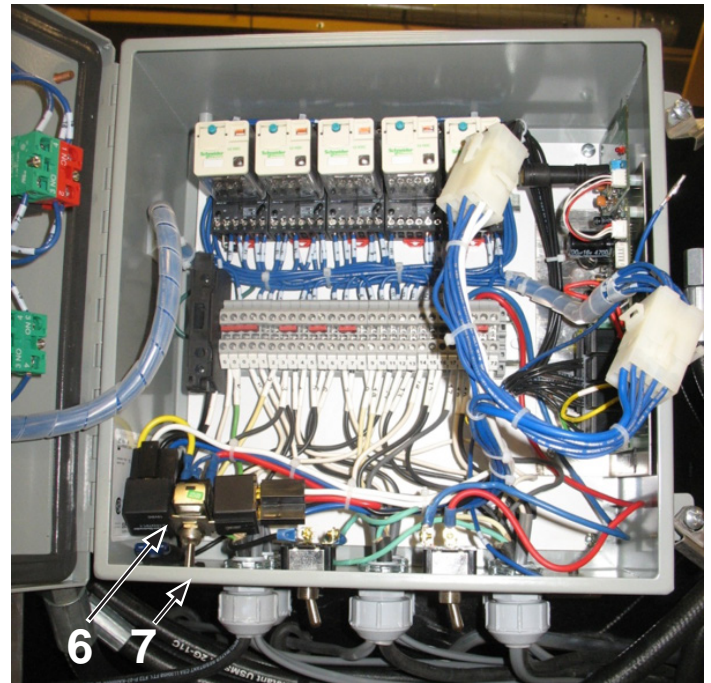
Remote Start Add-on Installation

Read the following instructions before attempting to install.

1. Make sure you have both Item A (remote switch) & B (power wire).
2. After making sure your wrapper's engine and control panel are switched off, open your control panel and unplug the 2 white pin plugs.
3. Connect the provided power wire (B) into the top #7 port on the control panel terminal strip. Older machines (Prior to serial # 13R058) will have only one top #7 on their terminal strip. Splice this new wire into the existing #7 wire to install.
4. The silver capped end on the provided wire MUST be threaded into this plug AND this port. (Fins on the cap will hold the wire in place once inserted).



5. Plug 2 white existing plugs into the 2 white plugs on the provided remote start switch (A).
6. Unscrew one of the hex jam nuts from the bottom of the switch on the remote start.
7. Drill 1/2" hole into bottom of control panel if your machine is older than serial # 13R058. If newer, remove black plug.
8. Slide the switch through the hole in the bottom of the control panel and refasten the hex jam nut you took off in step 6.
9. Close the control panel.
10. Apply provided decal to front of control panel, above installed switch.



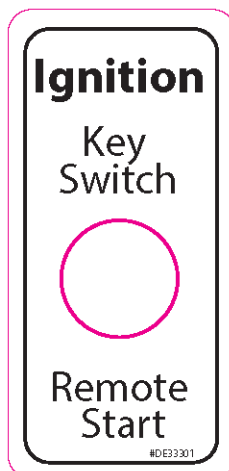
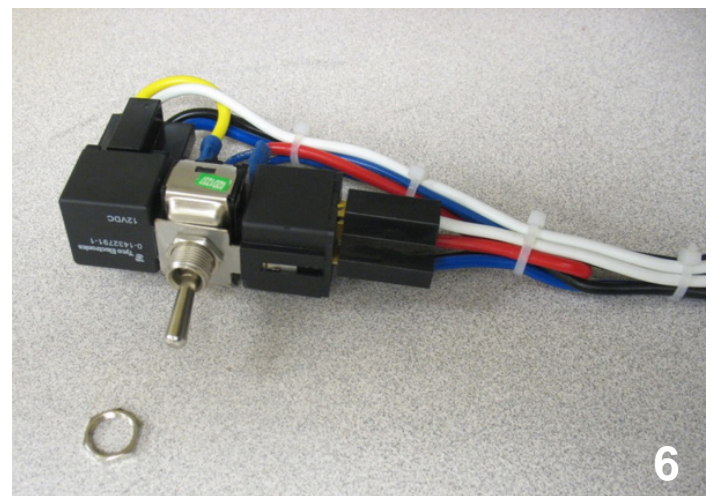
Remote Start Add-on Test Run

Your new remote start is now complete.

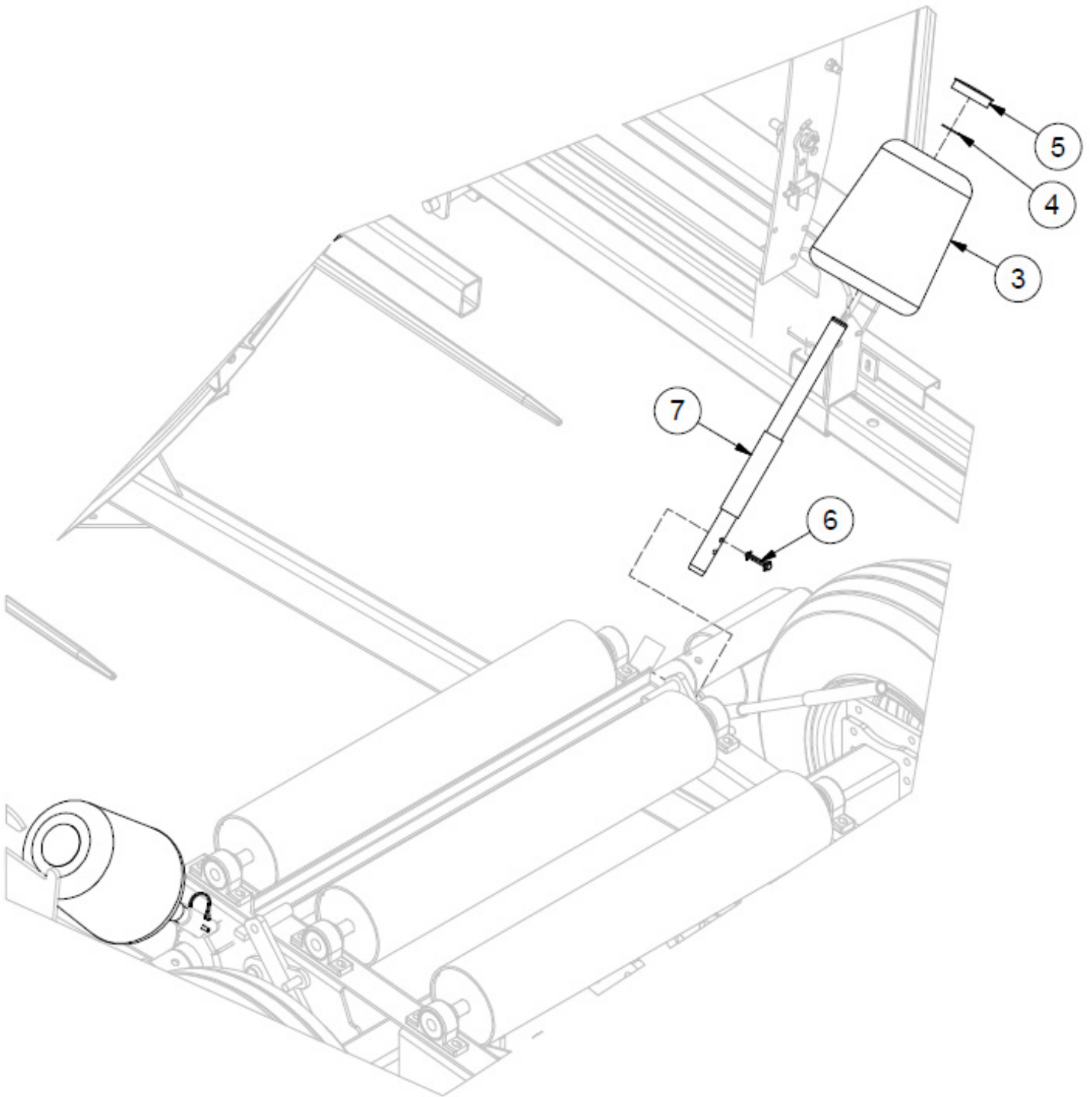
To test this feature follow these steps:

1. Flip switch on bottom of control panel to Remote Engine Start.
2. Twist the green dial on your orange remote. (you may have to hold it open for a moment, especially if cold starting).
3. If the machine doesn't start you may want to engage the throttle slightly.

For troubleshooting please contact your local dealer or contact us using the information provided on page of this manual.



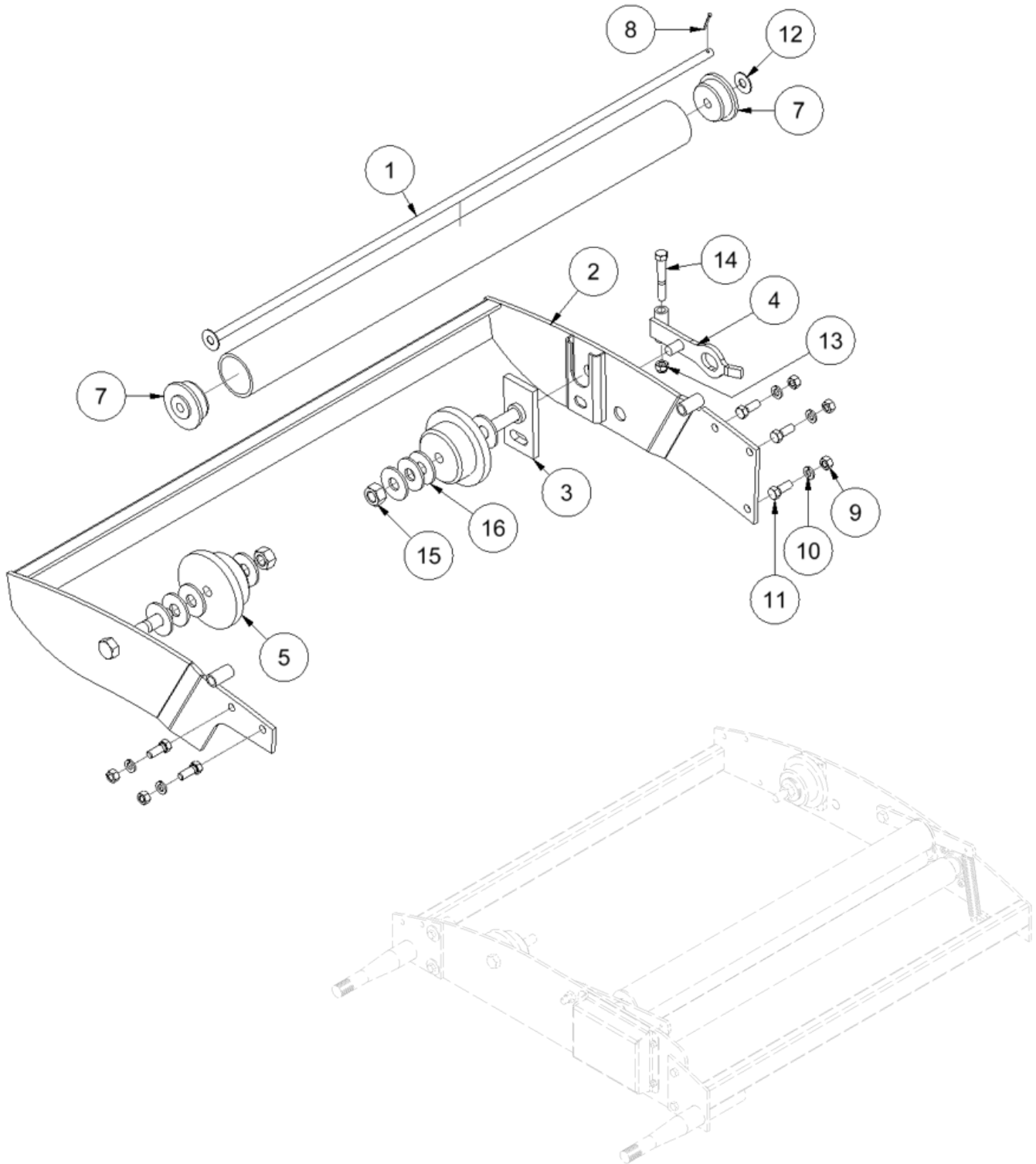
Guide Rollers



Guide Rollers

ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	TLGRA	Guide Roller Kit (Single)
2	1	TLGR	Guide Roller Kit
3	1	25587	Guide Roller
4	1	RR 1.25	Retaining Ring (Spaenaur No. R3100-125)
5	1	TL245-057	Nylon Plug 3"
6	1	TL550-301-233	Lock Pin - 5/16 PTO Pin
7	1	TL550-301-239	Guide Roller Spindle

Twin Wrap Kit

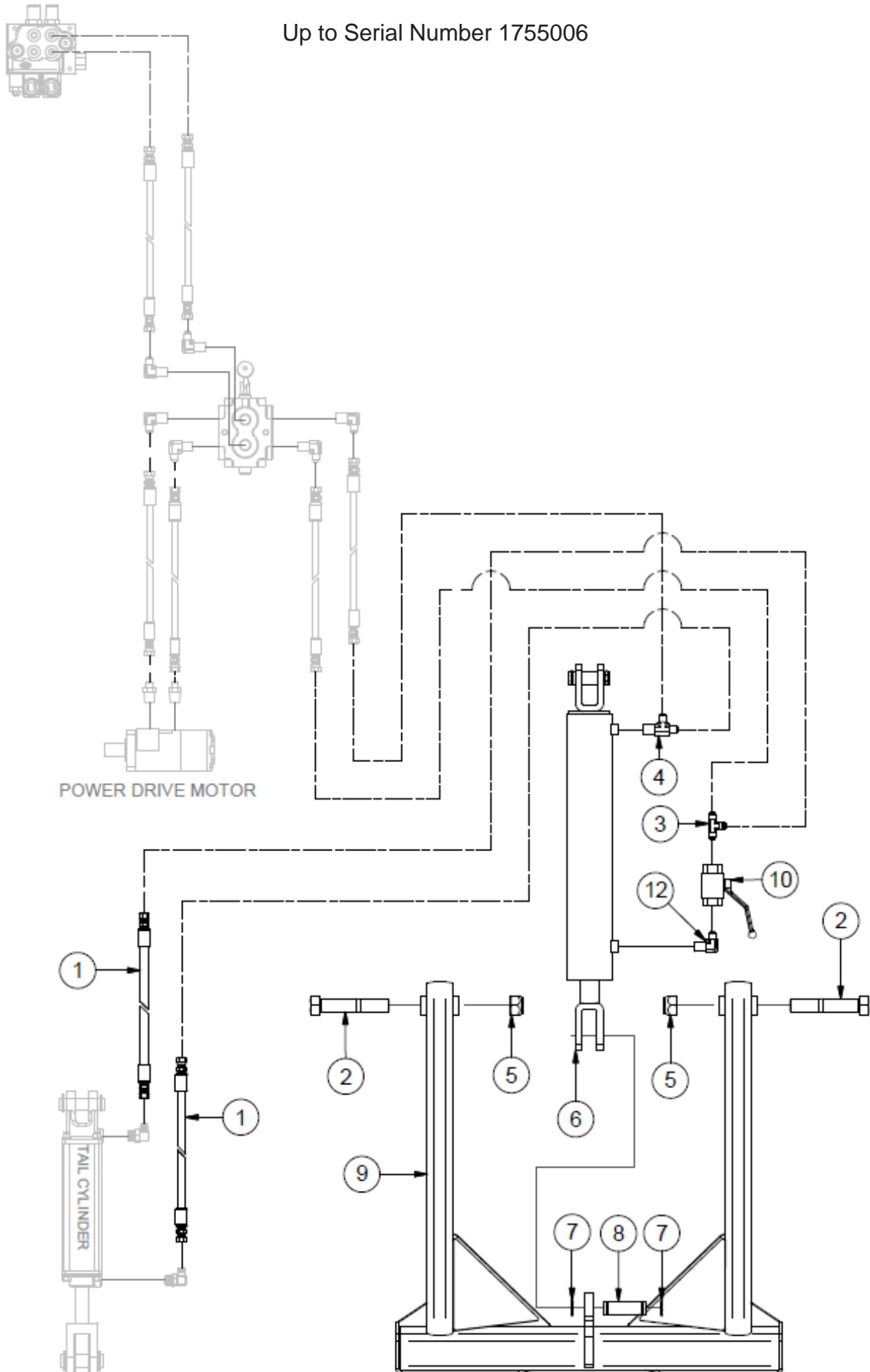


Twin Wrap Kit

ITEM	QTY	PART NUMBER	DESCRIPTION
		TL TWK	Twin Wrap Kit
1	1	TL TWROD	Idler Axle
2	1	TL550-200-139	Twin Wrap Frame
3	1	TL550-200-115	Spool Holder Bracket
4	1	TL550-200-103	Spool Holder Latch
5	2	TL550-200-012	Wrap Spool Holder
6	1	TL550-100-022	Plastic Idler
7	2	TL500-100-021	Idler End Caps
8	1	CP 18X1	Pin, Cotter 1/8 x 1.0
9	5	HN 3/8	Hex Nut 3/8"-16 Grade 5 Zinc Plated Finished NC
10	5	LW 3/8	Lockwasher - 3/8" Zinc Plated Medium Split
11	5	HB 3/8-16X1.0 Z5	Hex Bolt 3/8-16 x 1" Grade 5 Zinc Plated Hex Cap Screw NC
12	2	FW 7/16	Flatwasher - 7/16" Zinc Plated USS
13	1	LN 3/8 N	Locknuts - 3/8-16 Zinc Plated Nylon Insert Lock Nut
14	1	HB 3/8-16X2.1/2 Z5	Hex Bolt 3/8"-16 x 2-1/2" Grade 5 Zinc Plated Hex Cap Screw NC
15	2	HN 5/8	Hex Nut - 5/8"-11 Grade 5 Zinc Plated Finished NC
16	8	FW 5/8	Flatwasher - 5/8" Zinc Plated USS

Quick Start Power Jack (with Power Drive)

Up to Serial Number 1755006



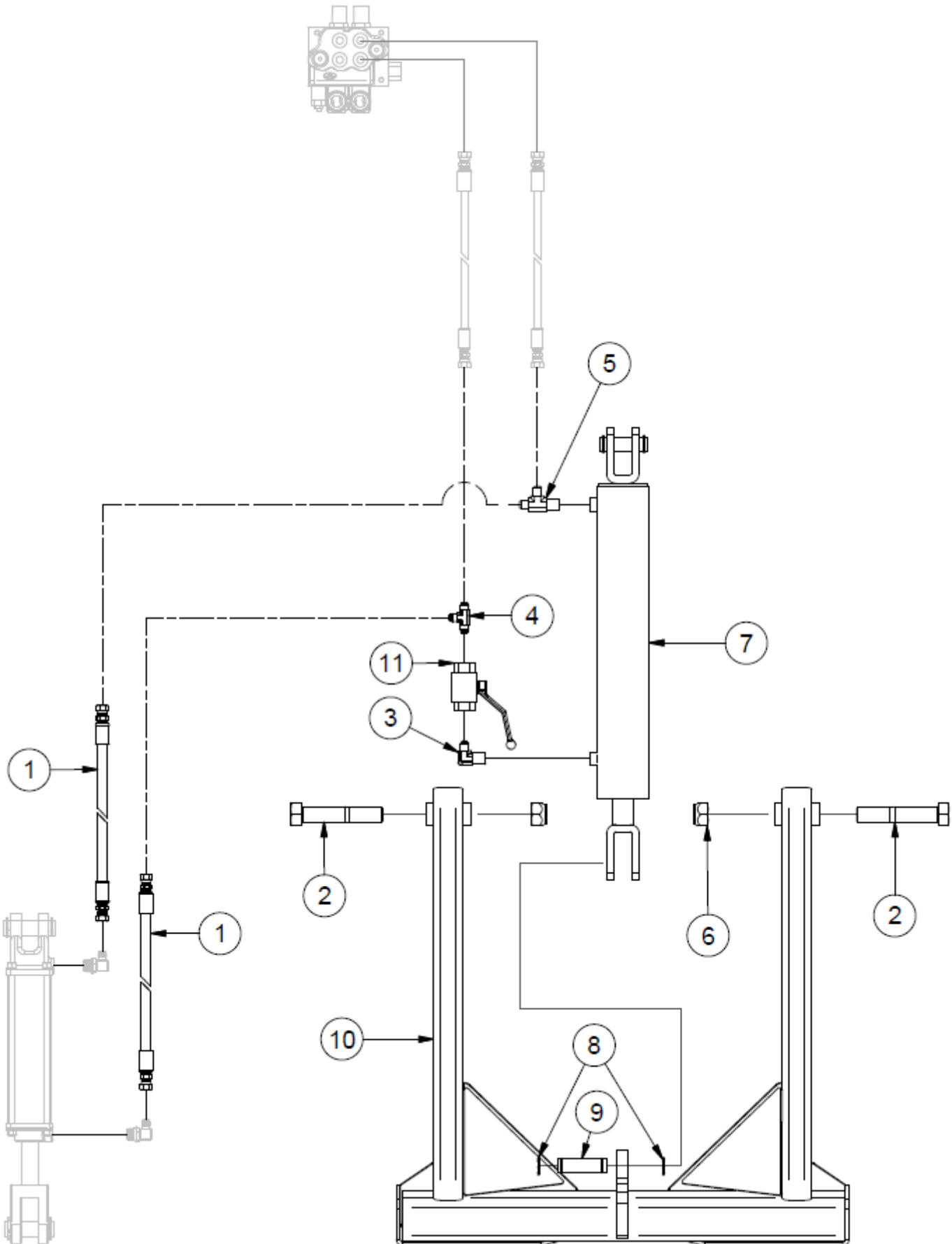
Quick Start Power Jack (with Power Drive)

Up to Serial Number 1755006

ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	41774	HH64 - 6ATI(6FJX-6FJX) HCL 64"
2	2	HB 1-8X5.1/2 Z5	Hex Bolt - 1"-8 x 5-1/2" Grade 5 Zinc Plated Hex Cap Screw
3	1	HF 2603-6-6-6	Male JIC Tee
4	1	HF 2605-6-8-6	Tee 3/8 MJIC - 1/2 MPT- 3/8 MJIC / Reducer S1010-DC
5	2	LN 1.0 N	Locknuts - 1-8 Zinc Plated Nylon Insert
6	1	TL5X2-100-207	Cylinder, 3.5 x 8
7	4	25299	Cylinder Clip
8	2	TL550-100-042	Cylinder Pin
9	1	TLJ1000	Power Jack
10	1	VAL HYSHBV3000PSI	HYSHBV3000PSI-A105-3/8 3000 PSI Ball Valve

Quick Start Power Jack (w/o Power Drive)

Up to Serial Number 1755006



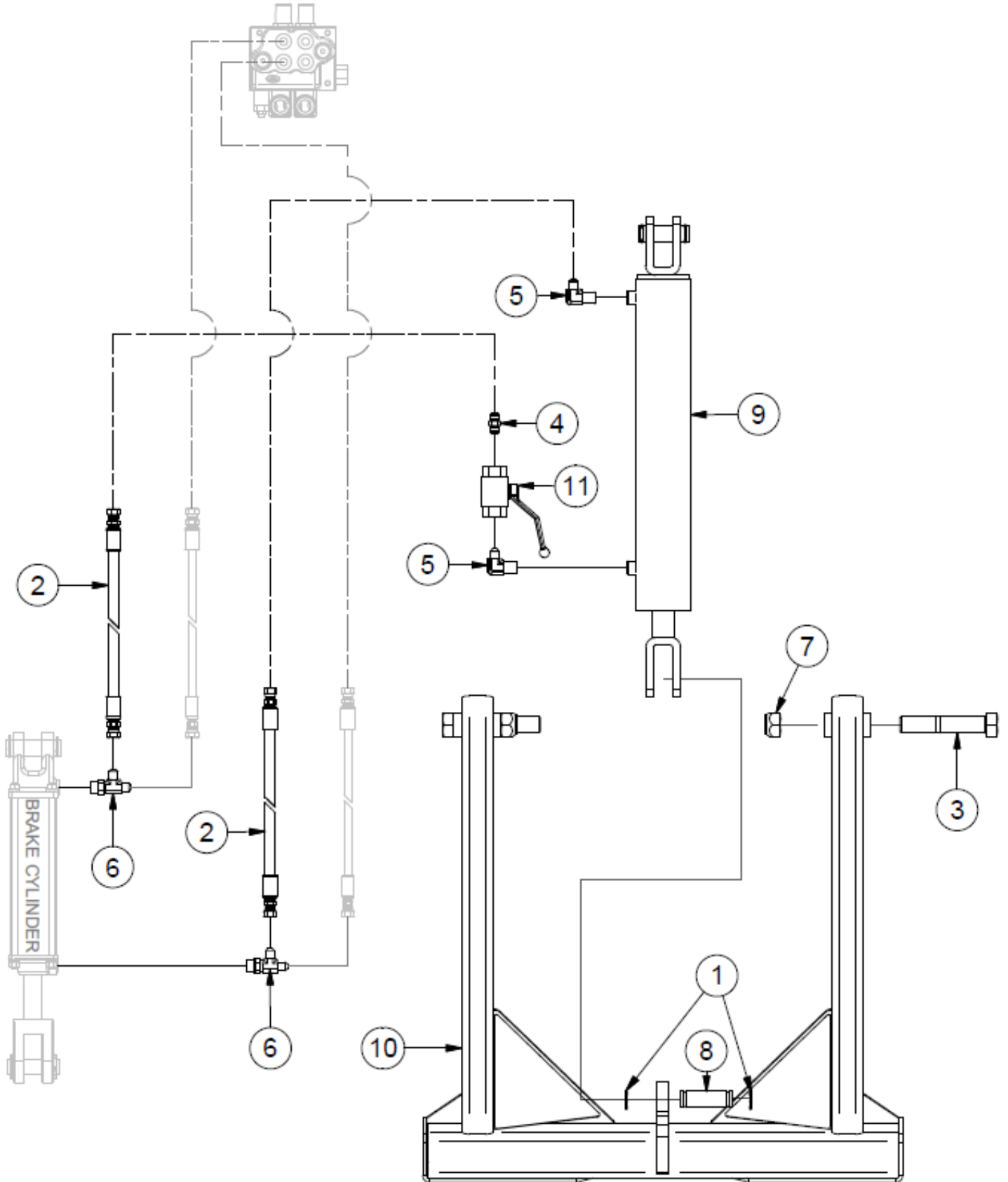
Quick Start Power Jack (w/o Power Drive)

Up to Serial Number 1755006

ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	41774	HH64 - 6ATI(6FJX-6FJX) HCL 64"
2	2	HB 1-8X5.1/2 Z5	Hex Bolt - 1"-8 x 5-1/2" Grade 5 Zinc Plated Hex Cap Screw
3	1	HF 2501-6-8	90 Degree 3/8 MJIC - 1/2 MPT
4	1	HF 2603-06-06-06	Male JIC Tee
5	1	HF 2605-6-8-6	Tee 3/8 MJIC - 1/2 MPT- 3/8 MJIC / Reducer S1010-DC
6	2	LN 1.0 N	Locknuts - 1-8 Zinc Plated Nylon Insert
7	1	TL5X2-100-207	Cylinder, 3.5 x 8
8	4	25299	Cylinder Clip
9	2	TL550-100-042	Cylinder Pin
10	1	TLJ1000	Power Jack
11	1	VAL HYSHBV3000PSI	HYSHBV3000PSI-A105-3/8 3000 PSI Ball Valve

Quick Start Power Jack - Current

Serial Number 1755007 to Current

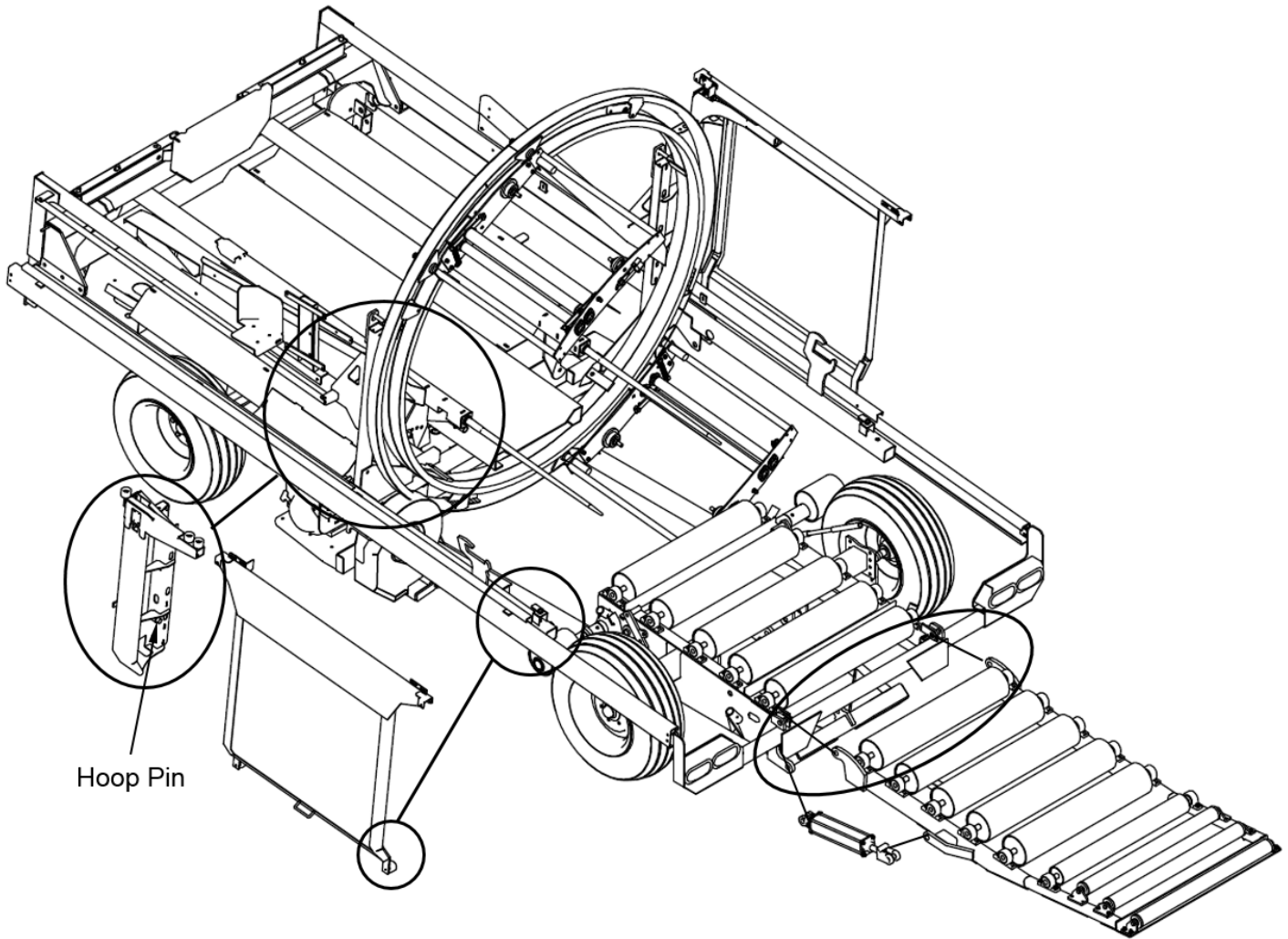


Quick Start Power Jack - Current

Serial Number 17550076 to current

ITEM	QTY	PART NUMBER	DESCRIPTION
1	4	25299	Cylinder Clip
2	2	41795	3/8 Hydraulic Hose
3	2	HB 1-8X5.1/2 Z5	Hex Bolt - 1"-8 x 5-1/2" Grade 5 Zinc Plated Hex Cap Screw
4	1	HF 2403-6-6	FJIC- MJIC Reducer
5	2	HF 2501-6-8	90 Degree 3/8 MJIC - 1/2 MPT
6	2	HF 6804-6-8-6	Hyd Fitting - Male JIC - Male ORB Tee
7	2	LN 1.0 N	Locknuts - 1-8 Zinc Plated Nylon Insert
8	2	TL550-100-042	Cylinder Pin
9	1	TL5X2-100-207	Cylinder, 3.5 x 8
10	1	TLJ1000	Power Jack
11	1	VAL HYSHBV3000PSI	HYSHBV3000PSI-A105-3/8 3000 PSI Ball Valve

Dealer Installation



Dealer Installation












1. Remove the parts strapped to the roller bed, these include the doors, tail and door mounts.
2. Remove the 5 loose bolts (3/8" x 1 1/4") on Hoop Brace, these will be used to attach the Door Mount.
3. Move the Door Mount into position so that the bolts can be put back on but not fully tightened.
4. Add the wheels attached to the Door Mount mesh to their proper position on top of the Door Mount.
5. Remove the last bolt on the Door Track (towards back).
6. Slide the Doors into the Door Track, the top channel fits over the top wheel of the Door Mount. This keeps the door in line with the wheels in the Door Track.
7. Refasten the last bolt on the Door Track, and fully tighten the Door Mount bolts.

Note: Use the slots in the Door Mounts to move it up or down. The wheels should be about a 1/4" from touching the top channel on the Doors. Be sure that the Hoop Lock pin can easily slide in and out of the Hoop Stop.

8. Remove tail from roller bed by taking the lock nuts off the bolts. Insert the tail between the tabs and refasten nuts and bolts.
9. Next release the tie straps holding the upright cylinder. Use the pin and clips to secure it to the tail.
Note : All hydraulics are ready to use on delivery.
10. Route wires for safety door switches.
11. Adjust safety switches.
12. Bolt red battery cable to battery.
13. Start the Honda.
14. To test the wrapper; switch to manual mode, jog the ram to speed up the engine. The hoop, power drive and steering can now be tested.
15. If you ordered your machine with a steering remote and shut down kit you will find it in your control panel.

Imperial Torque Value Chart

UNIFIED INCH BOLT AND CAP SCREW TORQUE VALUES

SAE Grade and Head Markings	1 or 2 ^b	5	5.1	5.2	8	8.2
	NO MARK 					
SAE Grade and Nut Markings	2	5		8		
	NO MARK 					

T81162 -19-03M4109

Size	Grade 1				Grade 2 ^b				Grade 5, 5.1, or 5.2				Grade 8 or 8.2			
	Lubricated ^a		Dry ^a		Lubricated ^a		Dry ^a		Lubricated ^a		Dry ^a		Lubricated ^a		Dry ^a	
	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft
1/4	3.7	2.8	4.7	3.5	6	4.5	7.5	5.5	9.5	7	12	9	13.5	10	17	12.5
5/16	7.7	5.5	10	7	12	9	15	11	20	15	25	18	28	21	35	26
3/8	14	10	17	13	22	16	27	20	35	26	44	33	50	36	63	46
7/16	22	16	28	20	35	26	44	32	55	41	70	52	80	58	100	75
1/2	33	25	42	31	53	39	67	50	85	63	110	80	120	90	150	115
9/16	48	36	60	45	75	56	95	70	125	90	155	115	175	130	225	160
5/8	67	50	85	62	105	78	135	100	170	125	215	160	240	175	300	225
3/4	120	87	150	110	190	140	240	175	300	225	375	280	425	310	550	400
7/8	190	140	240	175	190	140	240	175	490	360	625	450	700	500	875	650
1	290	210	360	270	290	210	360	270	725	540	925	675	1050	750	1300	975
1-1/8	400	300	510	375	400	300	510	375	900	675	1150	850	1450	1075	1850	1350
1-1/4	570	425	725	530	570	425	725	530	1300	950	1650	1200	2050	1500	2600	1950
1-3/8	750	550	950	700	750	550	950	700	1700	1250	2150	1550	2700	2000	3400	2550
1-1/2	1000	725	1250	925	990	725	1250	930	2250	1650	2850	2100	3600	2650	4550	3350

DO NOT use these values if a different torque value or tightening procedure is given for a specific application. Torque values listed are for general use only. Check tightness of fasteners periodically.

Shear bolts are designed to fail under predetermined loads. Always replace shear bolts with identical grade.

^a "Lubricated" means coated with a lubricant such as engine oil, or fasteners with phosphate and oil coatings. "Dry" means plain or zinc plated without any lubrication.

^b Grade 2 applies for hex cap screws (not hex bolts) up to 152 mm (6-in.) long. Grade 1 applies for hex cap screws over 152 mm (6-in.) long, and for all other types of bolts and screws of any length.

Fasteners should be replaced with the same or higher grade. If higher grade fasteners are used, these should only be tightened to the strength of the original.

Make sure fasteners threads are clean and that you properly start thread engagement. This will prevent them from failing when tightening.

Tighten plastic insert or crimped steel-type lock nuts to approximately 50 percent of the dry torque shown in the chart, applied to the nut, not to the bolt head. Tighten toothed or serrated-type lock nuts to the full torque value.

Metric Torque Value Chart

METRIC BOLT AND CAP SCREW TORQUE VALUES

Property Class and Head Markings	4.8		8.8		9.8		10.9		12.9	
Property Class and Nut Markings	5		10		10		10		12	

Size	Class 4.8				Class 8.8 or 9.8				Class 10.9				Class 12.9			
	Lubricated*		Dry*		Lubricated*		Dry*		Lubricated*		Dry*		Lubricated*		Dry*	
	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft	N-m	lb-ft
M6	4.8	3.5	6	4.5	9	6.5	11	8.5	13	9.5	17	12	15	11.5	19	14.5
M8	12	8.5	15	11	22	16	28	20	32	24	40	30	37	28	47	35
M10	23	17	29	21	43	32	55	40	63	47	80	60	75	55	95	70
M12	40	29	50	37	75	55	95	70	110	80	140	105	130	95	165	120
M14	63	47	80	60	120	88	150	110	175	130	225	165	205	150	260	190
M16	100	73	125	92	190	140	240	175	275	200	350	255	320	240	400	300
M18	135	100	175	125	260	195	330	250	375	275	475	350	440	325	560	410
M20	190	140	240	180	375	275	475	350	530	400	675	500	625	460	800	580
M22	260	190	330	250	510	375	650	475	725	540	925	675	850	625	1075	800
M24	330	250	425	310	650	475	825	600	925	675	1150	850	1075	800	1350	1000
M27	490	360	625	450	950	700	1200	875	1350	1000	1700	1250	1600	1150	2000	1500
M30	675	490	850	625	1300	950	1650	1200	1850	1350	2300	1700	2150	1600	2700	2000
M33	900	675	1150	850	1750	1300	2200	1650	2500	1850	3150	2350	2900	2150	3700	2750
M36	1150	850	1450	1075	2250	1650	2850	2100	3200	2350	4050	3000	3750	2750	4750	3500

DO NOT use these values if a different torque value or tightening procedure is given for a specific application. Torque values listed are for general use only. Check tightness of fasteners periodically.

Shear bolts are designed to fail under predetermined loads. Always replace shear bolts with identical property class.

Fasteners should be replaced with the same or higher property class. If higher property class fasteners are used, these should only be tightened to the strength of the original.

* "Lubricated" means coated with a lubricant such as engine oil, or fasteners with phosphate and oil coatings. "Dry" means plain or zinc plated without any lubrication.

Make sure fasteners threads are clean and that you properly start thread engagement. This will prevent them from failing when tightening.

Tighten plastic insert or crimped steel-type lock nuts to approximately 50 percent of the dry torque shown in the chart, applied to the nut, not to the bolt head. Tighten toothed or serrated-type lock nuts to the full torque value.

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