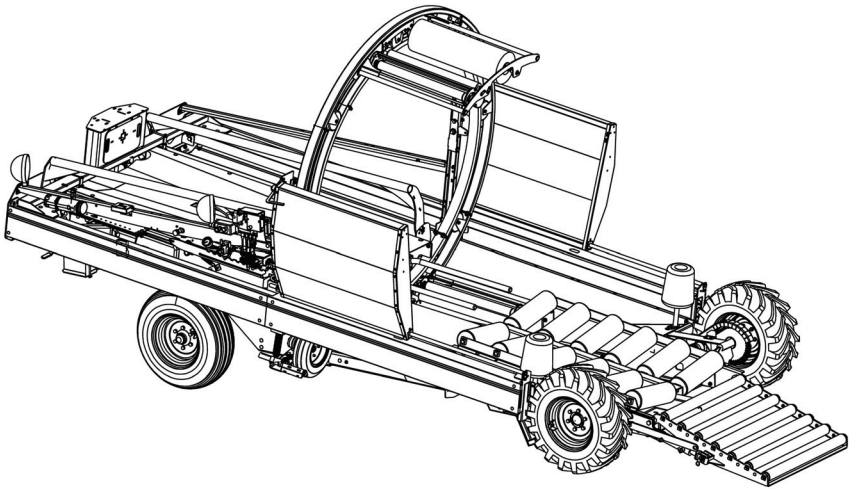
#404605-3

ANDERSON

The NutriWrap™ System

Round Bale Wrapper
NWS660(660E)



CE

Operator's Manual
2011

How to Reach Us

When you contact us, always provide us with the following information:

- Your name, address, and telephone number;
- Product model and serial number;
- Purchase date and invoice number;
- Dealer name, address, and telephone number and salesperson name;
- Precise and detailed description of your problem.

Address:	**ANDERSON GROUP** 5125 de la Plaisance Chesterville (Québec) CANADA G0P 1J0
Email Service:	service@grpanderson.com
Fax Service:	1-819-382-2218
Website:	www.grpanderson.com

For safe and proper functioning please:

- Read the manual.
- Follow the safety instructions.
- Follow the start-up steps given on the last page of your manual.
- In case of sale or transfer, give this manual to the new owner.

Table of Contents

ANDERSON LIMITED WARRANTY FORM

Warranty form must be completed and returned.

Please fill in this form with information about your new machine. **Please return this form to us in the 15 days following the date of delivery** to validate your warranty. Details of the warranty provided can be found in the operator's manual.

Warranty Validation
(to be mailed or faxed within 15 days)

Type of Machine:	
Model:	
Options:	
Serial Number:	
Date of Sale to Customer:	
Customer Name:	
Customer Address:	
Customer Telephone Number:	
Dealer Name:	
Salesperson Name:	
Dealer Address:	
Salesperson signature:	
Customer signature:	

FAX: 1-819-382-2218

For your personal records, we recommend that you fill in this form with information about your machine.

Type of Machine:	
Model:	
Options:	
Serial Number:	
Date of Sale to Customer:	
Customer Name:	
Customer Address:	
Customer Telephone Number:	
Dealer Name:	
Salesperson Name:	
Dealer Address:	
Salesperson Signature:	
Client Signature:	

1 ANDERSON Limited Warranty

One-Year Limited Warranty

In the year following the purchase of a new machine, if your ANDERSON equipment fails to operate properly due to defective materials, manufacturing, or assembly, our company will furnish replacement parts and repair your machine free of charge.

Documents

Keep your original invoice or a photocopy. Please refer to your invoice or to the information on the preceding page whenever you order parts, for any questions about the operating procedures of your machine or for any questions you might have concerning your warranty.

Problem Resolution

Your satisfaction is a priority for your dealer and for us. Normally, all problems concerning our products are taken care of by the dealer's service department. Please follow the following steps if you are not satisfied after consulting your dealer:

- First, let it be understood that our warranty is void if your equipment has been modified without our express authorization. Let it also be understood that we alone will determine the cause of the problem or how the machine was broken. Please note that all repairs must be authorized before any work is performed to ensure that your machine remains covered by the warranty.
- If your problem has already been dealt with by your dealer's service department but you are not completely satisfied, please contact one of the managers of the dealership that sold you the Anderson machine. In most cases, your problem can be solved at this level.
- If your problem still has not been resolved to your satisfaction after this step, please contact us directly.

When you contact us, always provide us with the following information:

  - Your name, address, and telephone number;
  - Product model and serial number;
  - Purchase date and invoice number;
  - Dealer name, address, and telephone number and salesperson name;
  - Precise and detailed description of your problem.

- 1.3.4 After reviewing all aspects of the problem, we will rapidly communicate our decision to you and, if applicable, the steps taken to resolve the situation. It is nonetheless likely that your problem will be solved by your dealer using his team and specialized equipment. We therefore strongly suggest that if you need any kind of help, your first contact should be made directly with your dealer.

Modifications

Given that our desire is to always improve our products, our company reserves the right to modify its machines, their characteristics, and their parts at any time without advance notice or obligation.

Thank you for placing your confidence in us

Dany Poisson, President
Anderson Equipment

ANDERSON EQUIPMENT

LIMITED WARRANTY

The **one-year warranty** period will begin on the date the new equipment is sold to the customer. However, if your equipment is used for **commercial or rental purposes**, this warranty will only be valid for a period of **90 days or a maximum of 3500 bales for in-line bale wrappers and 2500 bales for individual bale wrappers beginning on the date of purchase.**

1. During the year following the purchase of a new machine, if your ANDERSON equipment fails to function properly due to defective design, materials, manufacturing, or assembly, our company will repair your equipment free of charge.
2. Replacement or repair of equipment parts will be performed by the dealer or by our technician. This includes parts and labor **only if preauthorized by our customer service department.**
3. However, the customer will be responsible for transporting the equipment to/from the authorized dealer's head office.
4. The dealer will describe the terms of this warranty to the customer before the retail sale and will record the date of purchase, the serial number, and the equipment description. The dealer will fax the duly completed warranty form in the 15 days following the transaction to the following number: 1-819-382-2218 to validate the warranty.
5. To have equipment repaired under the warranty, the customer must advise his dealer **as soon as possible** of the problem and request that the repairs be made according to the terms of the applicable warranty.
6. For all repair requests made to an **Anderson** dealer, you must furnish **the date of sale, the serial number, the type of equipment and options, and the owner's contact information.**
7. **Anderson equipment reserves the rights to modify the warranty policy at any time without advance notice.**
8. Notwithstanding the foregoing.

Warranty Exemptions

1. **Certain parts**, such as the tires, the battery, and the Honda engine, **are covered under warranties from their respective manufacturers. Please contact the appropriate manufacturer.**
2. If the equipment has been subjected to bad treatment or negligence, has been used inappropriately, has not received necessary maintenance, has not been appropriately protected during storage, has been damaged by vandalism, bad weather, natural elements, collision, or accident.
3. Let it be understood that our warranty is void if your equipment has been modified without our express authorization.
4. This warranty **does not cover** normal maintenance services (such as adjustments, oil changes, normal wear and tear, etc.)
5. The customer will be responsible for service calls and/or transporting the equipment to/from the authorized dealer's head office. **The warranty does not cover towing expenses.**
6. If parts or accessories other than those **manufactured or sold by Anderson Equipment** have been used with the authorization of the customer service department, and if we decide that their use negatively impacts the performance, stability, or reliability of the equipment.

Exclusive Remedy

To the extent permitted by law, the purchaser's exclusive remedy in connection with the breach or performance of any warranty on the equipment are those set forth in this warranty.

In no event will Anderson Equipment be liable for any incidental or consequential damages or injuries, including but not limited to loss of profits, rental of substitute equipment, or other commercial or personal loss or damages arising as a result of a fundamental breach or breach of a fundamental term.

No Dealer Warranty

Except for conditions or warranties which may not be excluded by law, the selling dealer makes no warranty of its own on any item warranted by **Anderson Equipment** unless it delivers to the purchaser a separate written warranty document specifically warranting the item. **The selling dealer has no authority to make any representation or promise on behalf of Anderson Equipment or to modify the terms or limitations of this warranty in any way.**

Right of Modification

Given that our desire is to always improve our products, our company reserves the right to modify its machines, their characteristics, and their parts at any time **without advance notice or obligation.**

ANDERSON EQUIPMENT
5125 de la Plaisance
Chesterville (Québec)
CANADA G0P 1J0
Email Service: service@anderson-equipment.com
Fax Service: (819) 382-2218

2 Safety

Your ANDERSON bale wrapper was designed to reduce to a minimum the risks to the operator. However, it must be used only for the work it was designed for. Additionally, since it includes a powerful hydraulic system, moving metal parts, and a gasoline engine and all these elements can cause serious injury to humans or animals, it is strongly recommended to read and to closely adhere to the following guidelines.

Safe Operators

Be familiar with operating procedures before using your ANDERSON bale wrapper. Also insist that these directions be followed by all who use your bale wrapper. Make sure that your operators know the emergency telephone numbers and the location of your first aid kit. Only allow the bale wrapper to be used by responsible people who have been fully trained in its safe operation.

Danger Zone

Do not allow yourself to be disturbed during the installation or the operation of the machine. As an operator, you must be the only person to move about the machine within a security zone of 5 meters (16 feet) diameter and mainly at the back of the machine. Keep all other people, especially children, away from the site, as well as domestic animals.

Secure Attachment to the Tractor

The machine must be properly attached to the fixed drawbar of the tractor so that the bale wrapper is positioned as high as possible. To increase the stability of the bale wrapper, choose a flat and level ground and use the stabilizers, if you have that option.

Dangerous Situations

Pay attention to the stickers and the warning labels that appear on your machine. Know how to make an hydraulic stop. Before starting the engine, make sure that all controls are in neutral position. It is always dangerous to stand on the machine. Keep fingers, hands, and feet away from moving parts: chains, gears, etc.

Prevention

The clothes that you wear as an operator must be safe. Avoid wide sleeves and pants, scarves, and shirt or coat sleeves that could become stuck in the moving parts of the machine. Additionally, wear adequate hearing protection to reduce the danger of hearing loss due to continued exposure to the noise of the bale wrapper. Also use an approved mask in dusty conditions. If you work in the evening or at night, make sure that you have sufficient lighting to work safely. Have a working fire extinguisher within arm's reach. Keep the protective shields and other security devices in place and never use your bale wrapper if they have been removed or damaged.

Safe Maintenance and Repair

On a regular basis, or at least every 500 bales, remove hay, straw, and any other flammable material from around the engine. Stop the engine to perform adjustments, repairs, and maintenance and to transport the bale wrapper. Do not work underneath the machine without having first blocked the wheels with chocks. Replace any defective or worn out parts.

Fuel

Gasoline is a very flammable substance which must be handled with care in an approved container when you fill the engine tank of your hydraulic unit. Put back in place and firmly tighten the tank cap and wipe away any spilled fuel. Never add gasoline when the engine is hot or operating. Have a working fire extinguisher within arm's reach near the baling site.

Hydraulic Oil

Any leak of pressurized oil can cause serious injuries. Do not use your hands to locate a leak, but rather an object such as a piece of cardboard. Stop the engine and release the pressure before disconnecting or reconnecting the lines. Firmly tighten all connections before restarting the engine or reapplying hydraulic pressure.

WARNING

Any hydraulic fluid that makes contact on or underneath the skin must be removed within hours by a doctor familiar with this type of injury. Without intervention, serious problems, including gangrene, may result.

Traveling Safely on Public Roads

If you travel on public roads, you are responsible for respecting the identification and lighting regulations of your region. We recommend that you always attach a security chain to the hitch point between the machine and your tractor and that you lock the coupling link with a pin.

End of Operation

At the end of each day's work and especially if you will not use the bale wrapper again for a long period of time, do not forget to close the engine fuel valve (1), located beneath the choke on the right side of the engine (Figure 2.1).

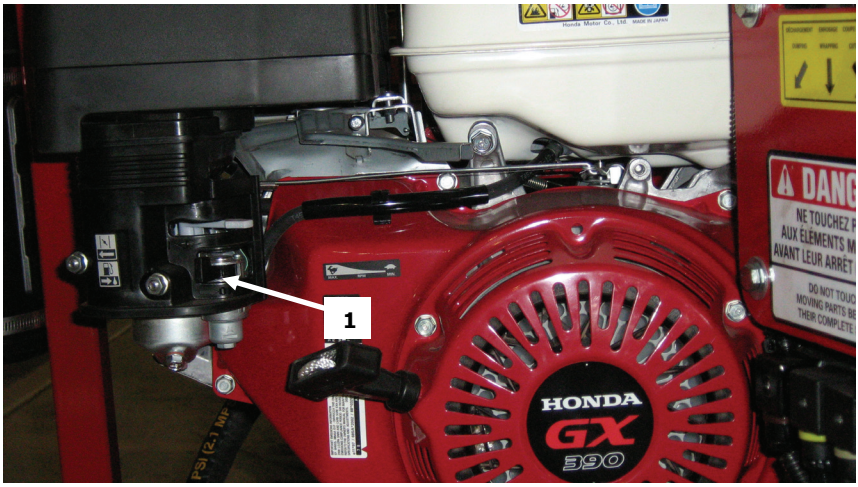


Figure 2.1 Closing the fuel valve

!!! IMPORTANT NOTICE !!!

Before to perform any maintenance and repair operation on your machine, you should turn off the engine and remove the ignition key. The ignition key must be stored inside the plastic box located on the side of the wrapper. A lock must secure the plastic box.

3 General Characteristics and Specifications

Congratulations! You are now the owner of an ANDERSON bale wrapper, a high-quality machine designed for inline continuous wrapping of large round bales. This agricultural machine is carefully manufactured by our company to give you many years of reliable performance.

Design

The majority of our parts have been designed with the aid of digital software and have been cut by our Laser cutters according to the highest industry standards. With a 13 hp gasoline engine, our machines have a wrapping capacity of approximately 120 bales an hour. All our machines are equipped with 2 high-performance geared plastic film stretchers and 2 aluminum rollers. These can stretch a 30-inch-wide (76 cm) plastic film up to 55%.

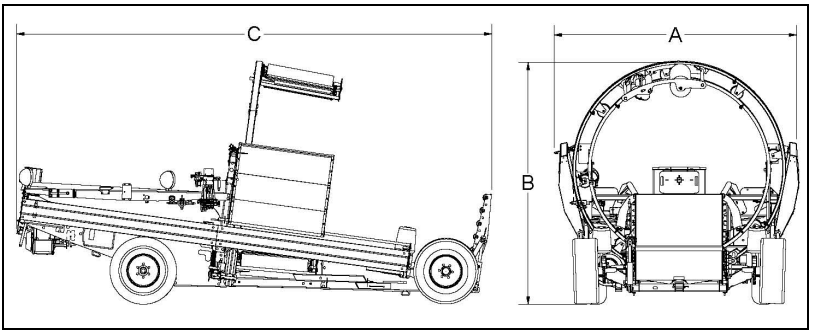


Figure 3.1 Dimensions and Weight

Dimensions and Weight

Width (A)	111 in. (2.81 m)	
Transportation width	94 po (2,388 m)	
Height (B)	108 in. (2.74 m)	
Tires	11L15	29-12.5-15
Length (C) (Gate Raised)	208 in. (5.28 m)	
Length (Gate down)	242 po (6,147m)	
Total Weight	4806 lbs (2180 kg)	
Attachment Weight	930 lbs (422 kg)	

Read Me

Before starting your ANDERSON machine we strongly recommend that you look through this guide. This technical manual is a very practical guide to the safe use and maintenance of your machine. In case of sale or transfer, give this manual to the new owner.

Modifications

The illustrations in this manual are presented for your reference according to the latest information available when it was printed. ANDERSON EQUIPMENT reserves the right to modify its machines without advance notice.

4 Moving the Bale Wrapper

Short Distances

Your bale wrapper can be moved very short distances using its own traction. Start the engine and use the hydraulic control levers (Figure 4.1). According to the options available on your bale wrapper, there are 4 ways to start the HONDA engine: manual ignition, electronic ignition with key, electronic ignition with remote control, and electronic ignition using the same remote control as for remote steering.

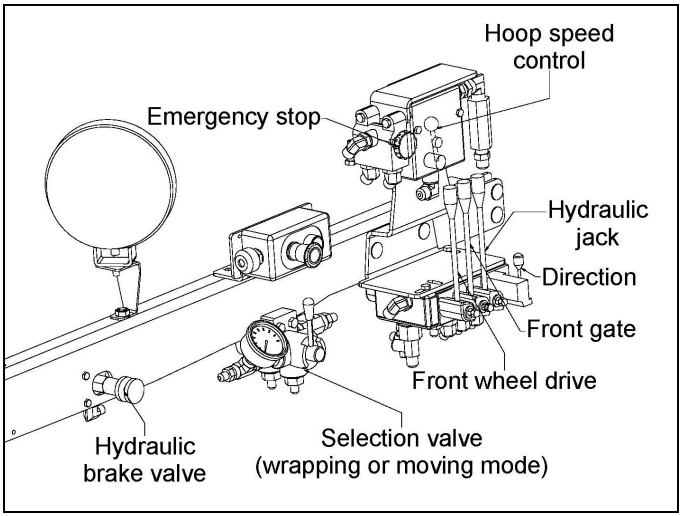


Figure 4.1 Controls

When the pusher is in the rear position, it holds the engine throttle lever in "slow" position. To switch to moving mode, move the lever of the selection valve to "moving" (Figure 4.1). Place the throttle lever in "high speed" position by removing the ring pin from the throttle lever (Figure 4.2). Use the "front wheel drive" lever to control the movement of the bale wrapper and the "direction" lever to control its direction (Figure 4.1). Finally, once you are done moving your bale wrapper, do not forget to put the ring pin back in the throttle lever (Figure 4.2).

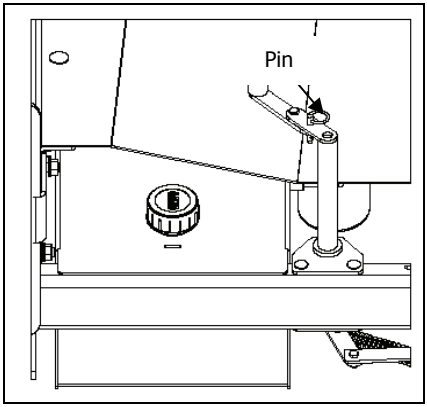


Figure 4.2 Engine throttle lever

Medium Distances

Your machine can be moved short and medium distances behind a tractor or truck. Use the hydraulic jack to raise the front of the bale wrapper and install the draw bar (Figure 4.3). Attach the machine and attach a security chain to the ring provided for this purpose on the draw bar. The front wheels of the machine should not touch the ground during transportation. You can invert the draw bar if the wheels are too close to the ground. Closely align the rear wheels using the indicator decal and the needle gauge (Figure 4.4). On public roads, follow the traffic regulations of your region for agricultural machines.

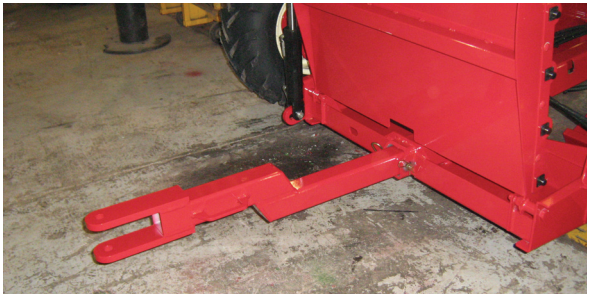


Figure 4.3 Draw bar

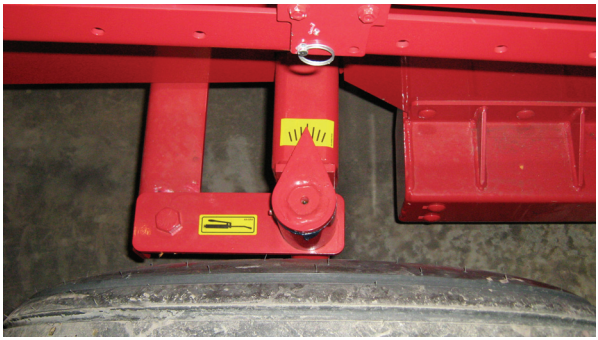


Figure 4.4 Indicator decal

Safety Measures

Regardless of how you transport your bale wrapper, do not let anyone stand on the machine. Whenever you move the machine (except by its own traction), it is essential to close the fuel valve because the gasoline could leak into the engine cylinder and base and flood it.

5 Advice for Producing High-Quality Wrapped Fodder

Why Make Fodder Silage?

Briefly, the purpose of producing fodder silage is to conserve the fodder in an optimal nutritive and appetizing state. This is achieved through airless fermentation (anaerobic) of some of the sugars (carbohydrates), which are gradually transformed into organic acids through bacterial activity. Making good fodder silage requires two starting conditions. First, the plants must have attained a good sugar level while growing. Second, once the plants have been cut, the humidity must have decreased to an adequate level. Once these two conditions have been achieved, all you have to do to obtain high-quality fodder silage is to wrap them in airtight plastic.

Why Make Fodder Silage with Round Bales?

The main advantage of baling large round or square bales is to allow for easy, flexible, and economical management of your harvest based upon the different types of livestock you have to feed. Pairing the steps of baling and silaging in large bales creates a number of clear advantages for harvesting feed crops:

- ♣ Maximal nutritional value,
- ♣ Highly flavorful fodder,
- ♣ Food is preserved in good condition for a long period of time,
- ♣ Fewer losses in the field, minimal rejection and loss of food,
- ♣ Less dependence upon variable weather conditions during the harvest,
- ♣ Easy handling with machines,
- ♣ No investment in buildings and minimal investment in machinery,
- ♣ Easy to use in conjunction with computerized feeding programs, etc.

Why Make Continuous Round Bale Fodder Silage?

Several cost studies have demonstrated that after a certain number of bales, plastic films costs when performing continuous bale wrapping are up to 40% less than for individual bale wrapping or bagging, all while creating the same airtight conditions necessary for high-quality silage. The savings that the ANDERSON bale wrapper will produce is an important addition to all the advantages mentioned above.

When Is the Best Time to Harvest?

Naturally, you should harvest the plants that have the best nutritive value to begin with! It is important to know that, though productivity increases with plant maturity, quality decreases.
We know that feed crops must be cut when they contain their highest levels of sugar so as to ferment properly and when they contain an optimal amount of protein in order to maximize their nutritional value. This corresponds to the vegetative stage, or the beginning of ear emergence just before maturity, for grasses (timothy grass, millet, brome grass, orchard grass, etc.) and 10% flowering for legumes (alfalfa, red or white clover, lotus, etc.)…
Excessively mature fodder has a higher fiber content, but when it is placed in silage, it tends to become moldy after several months. On the other hand, in addition to producing highly flavorful food, early harvest allows for a quick return to the growth stage and decreases the time until the 2nd and 3rd harvests.
Good methods for harvesting and, if necessary, for curing and turning hay, are also important in order to obtain a high-quality product. Large, regular field crops produce bales that are more solid and uniform. It is also important to avoid contaminating the fodder with soil, manure, or residues from previous harvests.

When Is the Best Time for Baling?

After the drying period, the decision of when to bale your fodder depends above all on the time when the amount of humidity in the cut hay has decreased just enough. If you want your fodder to stay good for at least a year, the ideal level of humidity is around 50% for both grasses and legumes, with a possible range of 40% to 55%. Two easy and effective ways to determine the level of humidity in the hay are an easy, well-know test using a microwave or using a humidity tester. If there is too much water in your baled hay, the formation of butyric acid could prevent some of the fermentation necessary for conserving your silage from taking place. Such hay must be used within 3 months.

During baling, the tractor driver has a large impact on the quality of the future silage. We recommend proceeding slowly and keeping the tractor's power take-off at high rpm to obtain high-density bales. You should also ensure that your bales are firm and regular. They will then be easier to wrap and will produce continuous bale rows that are more airtight and silage that is more effective.

When Is the Best Time to Produce Continuous Bale Rows?

It is advisable to wrap bales as soon as possible after baling because fermentation inside the bale begins as soon as it is produced. We recommend a waiting period of 12 hours maximum, and a much shorter time period if the outside temperature is relatively high. Studies on potential heating of hay and changes in ph show significant differences between the quality of hay wrapped the same day as baling and hay that is wrapped the following day.

6 Beginning Continuous Bale Wrapping

Before Beginning

Check the level of oil in the hydraulic tank, as well as the level of fuel in the tank of the Honda engine. Also check the Honda engine's oil level using the gauge at the base behind the engine (Figure 6.1).

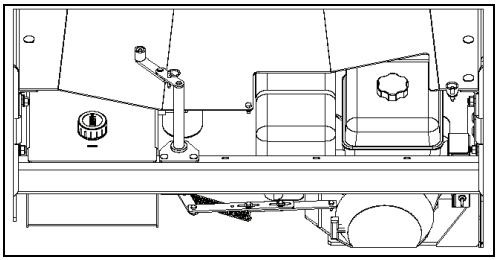


Figure 6.1 Engine unit

If necessary, lubricate the machine well (see **maintenance** section).

Where to Wrap and Store Bales

First of all, choose a place where the continuous bale rows will be easily accessible in all seasons. Be aware of possible snowfall during the winter. The ground for storage should be flat, clean, and well-drained. If necessary, mow the land or treat it with an herbicide such as Roundup to prevent rodent infestation in winter and the serious damage they can cause to the plastic film. If your land is on a slight slope, it is best to begin your continuous bale row at the bottom and to climb the slope by backing up the bale wrapper. Your continuous bale row will be more compressed and will therefore contain less air.

Adjusting the Bale Guides

Adjust the bale guides according to the size of your bales. Remove the rear and front pins. Move the guides and put the pins back in place (Figure 6.2).

Figure 6.2 Adjusting the bale guides

Installing the 1st Plastic Film Roll (Engine Stopped)

First, open the protective screen on the right side of the hoop. Pull on the latch at the top left corner of the screen and slide it forward.
If one of the two film dispensers is not at a good height for your, manually turn the large hoop upwards to bring the dispenser within reach.

To prevent the hoop from turning during installation, engage the hoop brake pedal, located to the left of the drive wheel (Figure 6.3).

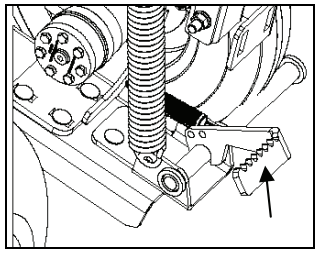


Figure 6.3 Brake pedal

Remove the pin from the front roll support (Figure 6.4), slide the support forward, and, if applicable, remove the empty spool. Install the new roll so that the plastic film unwinds as indicated (Figure 6.5), push the support back in place, and put back the pin (Figure 6.4).

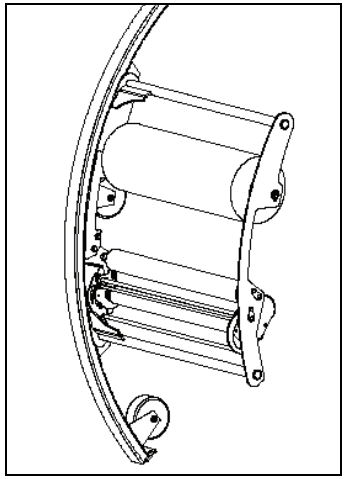


Figure 6.4 Roll support and stretcher

Next, follow the diagram (the same diagram as is on the machine) (Figure 6.5) to thread the film, first behind the black rubber free roller, then through the 2 aluminum rollers of the plastic film stretcher. Let approximately 30 cm (12 in.) of plastic stick out past the stretcher.

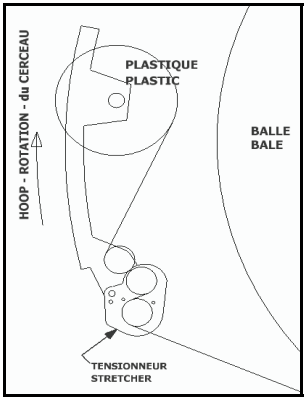


Figure 6.5 Installing the plastic film roll

Installing the 2nd Plastic Film Roll

Release the brake of the hoop wheel, turn the hoop 180 degrees, and reengage the brake. Repeat the preceding installation instructions. Put the screen back in place. Leaving the plastic rolls in the sun for an extended period of time before installation can cause the film to become soft. The film can then be stretched too easily during wrapping and will be more like to tear or break.

Start Bale Wrapping

There are several ways to begin a continuous bale row. Here is the method that we recommend:

Level Position

Start the Honda engine and use the hydraulic lever to raise the front of the bale wrapper to the horizontal position so that the first bales that you place on the machine do not slide forward. Unlock and lower the front gate.

Compression Bales

Place the wrapping speed control lever at zero (Figure 4.1) so that the hoop does not turn. Place an unwrapped bale on the bale wrapper platform without wrapping it, let the pusher return to the rear position and place a second bale on the platform (let the pusher complete a cycle). These first bales will compress the future continuous bale row and you will be able to wrap them later. Be sure to place these bales horizontally and in line with the pusher. Each time you place a bale on the pusher trigger (Figure 6.6) it will activate the pusher and move the bale forward.

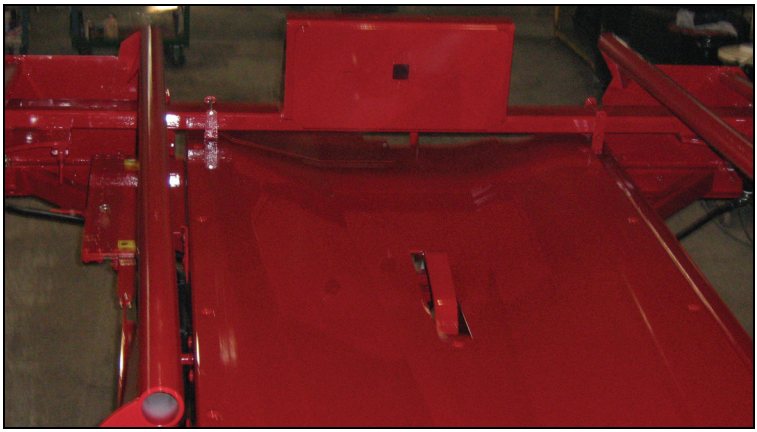


Figure 6.6 Pusher trigger

For bales more than 122 cm (4 feet) long, you should adjust the path of the pusher by moving the stopper forward or backward so that the edge of the bale stops more or less in the center of the stretchers.

Ground Level

Once these unwrapped bales have been pushed through, use the hydraulic lever to slowly lower the front of the machine to the ground. You should now place the red lever in wrapping position (Figure 4.1). (See moving or wrapping label.)

The First Wrapped Bale

After wrapping it in a plastic bag, you are ready to load the first bale of the continuous bale row. Be careful not to tear the plastic bag while transporting the bale and placing it on the bale wrapper. The trigger will make the pusher advance. When the pusher has pushed this bale to the end of its path and the pusher has returned to stopped position, it is time to begin wrapping the bale in plastic.

1- Open the gate on the right side of the bale wrapper. At this point, the hoop wheel brake is still activated (see p.20 Install) and the stretcher is at your level.
2- Pull the plastic film and pass it inside to attach it to the bracket (Figure 4.1).
3- Release the hoop wheel brake.
4- Manually engage the hoop release valve (Figure 4.1).
5- Manually and gradually engage the hoop speed control valve to make the hoop perform 2.5 slow turns. Next, close the hoop speed control valve and remove the plastic film from the bracket.
6- The second stretcher should now be at your level. Repeat steps 2-5 for the second stretcher.
7- Place the wrapping speed control at position #6, which should give you about 6 layers of plastic.
8- Close the gate. The machine is ready for wrapping.

*Note: Optimal Adjustment at Hoop Release:

It is necessary to adjust the pointer relative to the rack so that the hoop starts at the right time. By moving the pointer backward, the hoop will be released more rapidly, and vice-versa. The hoop should be released when there is a distance of about 5 cm (2 in.) between the bale that has just been loaded and the bale already on the bale wrapper during a pusher cycle.

Hydraulic Brake

At this moment, you should also gradually adjust the front wheel drive's hydraulic brake (Figure 4.1). This more or less blocks the front wheels so as to compress the continuous bale row and decrease as much as possible the air space between the bales. At the start of a continuous bale row, only moderate pressure should be applied to the brake so as not to make the continuous bale row slide on the ground and potentially damage the plastic film. As the continuous bale row becomes heavier, greater pressure must be applied to the hydraulic brake by tightening the brake lever. Depending on the weight of the bales and whether you are moving uphill or downhill, the pressure should increase to between 500 psi and 1000 psi on the pressure gauge.

Direction of the Continuously Wrapped Bale

You can activate the bale wrapper's direction lever so as to make the continuous bale row as straight as possible (Figure 4.1).

7 Wrapping Settings

Adjusting automatic system

You already know that it is possible to increase the number of plastic film layers by moving the wrapping speed control lever to a higher number. Remember that each full revolution of the hoop represents two layers of plastic film due to the two plastic film stretchers.
On the other hand, you may simply want to add one or two additional layers where the separate bales meet in order to have a more airtight and more solid continuous bale row without adding extra plastic film everywhere. In this case, you must move the pointer towards the rear (Figure 7.1). This pointer is controlled by the pusher lever and releases the hoop. This causes the hoop to begin wrapping a bit earlier. You can also move the pointer forwards to achieve the opposite effect.

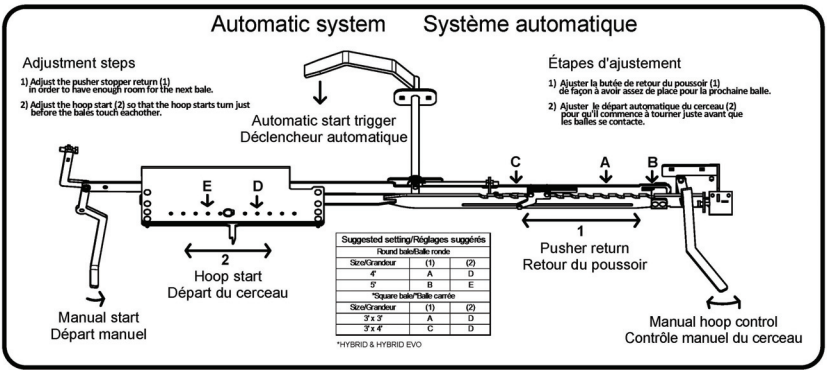


Figure 7.1 Automatic system

Adjusting the Distance the Pusher Travels

1) Adjust the pusher stopper return (1)(Figure 7.1) in order to have enough room for the next bale.
2) Adjust the hoop start (2)(Figure 7.1) so that the hoop starts turn just before the bales touch eachother.

Suggested setting/Réglages suggérés		
Round bale/Balle ronde		
Size/Grandeur	(1)	(2)
4'	A	D
5'	B	E
*Square bale/*Balle carrée		
Size/Grandeur	(1)	(2)
3' x 3'	A	D
3' x 4'	C	D

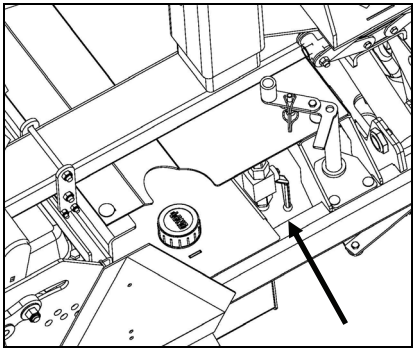
*For the Hybrid and Hybrid EVO models

Deactivation of the pusher system

It is possible to deactivate the pusher trigger.

Deactivating the trigger will allow you to activate only the hoop to replace the plastic even if there is a bale placed on the pusher mechanism.

To deactivate the trigger, it is necessary to have the valve that is situated behind the wrapper near the hydraulic oil tank.



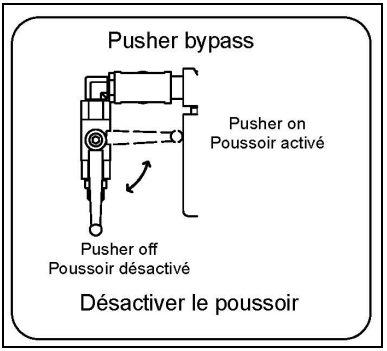


Figure 7.2 Deactivate the pusher

Adjusting the Hoop's Drive Wheel

If the hoop slips or stops, you can increase the tension of the spring that holds the wheel in place. All you have to do is tighten the nut on the threaded rod, located above the spring to the left of the wheel (Figure 7.3).

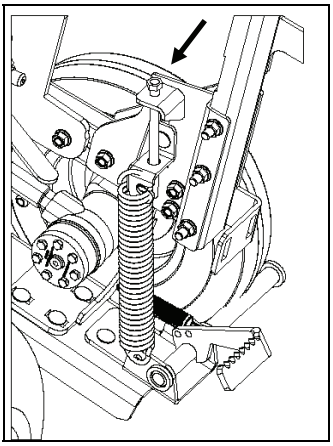


Figure 7.3 Hoop wheel

Adjusting the Plastic Film Stretchers

The 2 stretchers hold 30-inch-long (76 cm) rolls and are adjusted during assembly to stretch the plastic film up to 55%-60%. Generally, they require no other adjustment.
Note: If the plastic film breaks often during hot weather, detach the stretcher spring (Figure 7.4).

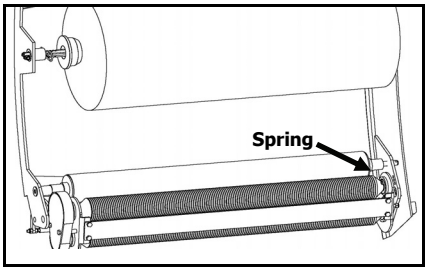


Figure 7.4 Stretcher spring

Testing the Stretchers

To check the effectiveness of the stretchers, draw two vertical lines 10 inches (25 cm) apart on the circumference of a plastic film roll with a felt-tip marker. Make the hoop turn at normal speed for two revolutions, then measure the distance between the two lines of the bale. If you obtain a distance of 15 inches (38 cm), the stretcher is adequately stretching the plastic film. Repeat the test for the other stretcher.

8 Adjustment Procedures

Factory-Made Automatic System: In Case of Problem Check Adjustments

Follow steps (8.1)-(8.2)-(8.3)-(8.4)-(8.5). Refer to the numbers in the illustrations.

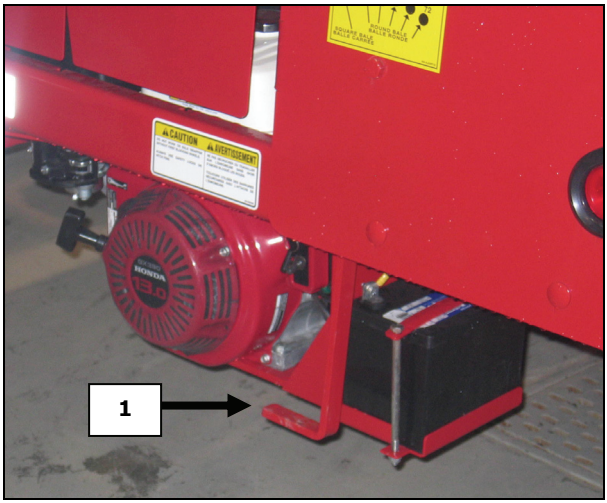


Figure 8.1 Start pedal

8.1 ➔ Press down on the start pedal located at the back of the bale wrapper, right next to the Honda gasoline engine (Figure 8.1 #1). (Do not start the Honda engine.)

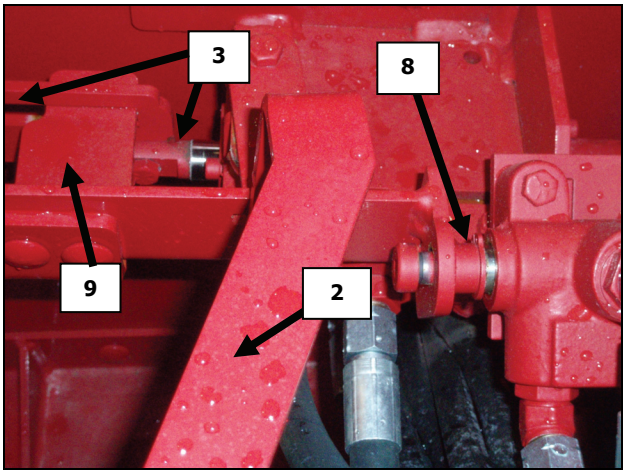


Figure 8.2 Hoop lever

8.2 ➔ Push the lever (Figure 8.2 #2) toward the rear of the bale wrapper to make the slide come out of the valve (Figure 8.2 #8), then push the lever toward the front of the bale wrapper until the plate (Figure 8.2 #9) very lightly touches the end of the slot in the part (Figure 8.2 #3) without moving it.

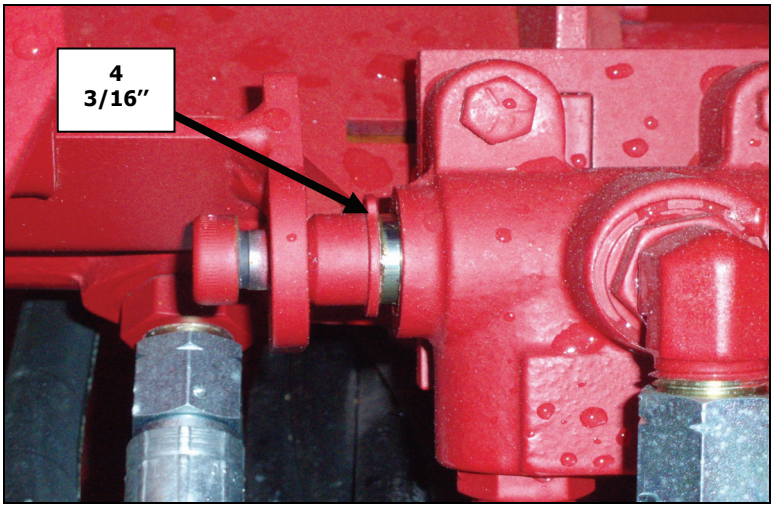


Figure 8.3 Gap

8.3 ➔ If the automatic system is correctly adjusted, you should obtain a distance of 3/16” (Figure 8.3 #4) between the snap ring and the body of the valve. If you do not obtain a distance of 3/16”, refer to the adjustment procedure that follows.

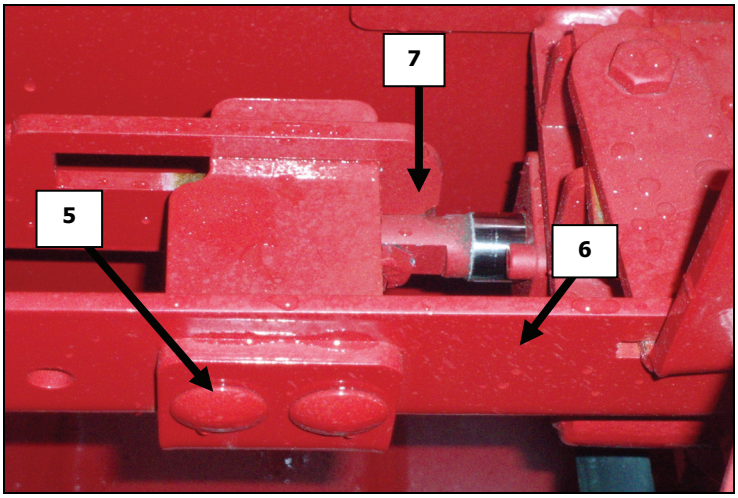


Figure 8.4 Transfer bar

8.4 ➔ To adjust the gap (Figure 8.3 #4) in the preceding illustration, you must unscrew the 2 carriage bolts (Figure 8.4 #5) and move the part (Figure 8.4 #6) so as to obtain the necessary gap (Figure 8.3 #4), all while keeping the part (Figure 8.4 #7) at the end of the gap. Screw the 2 carriage bolts (Figure 8.4 #5) in place.

Very Important
8.5 ➔ To check that the adjustment has been completed correctly and that the necessary gap (Figure 8.3 #4) is present, return to step 8.1.

Adjusting the Hoop Release

8.6 ➔ Place the part (Figure 8.5 #10) at the 7th slot from the rear of the machine (Figure 8.5#11).

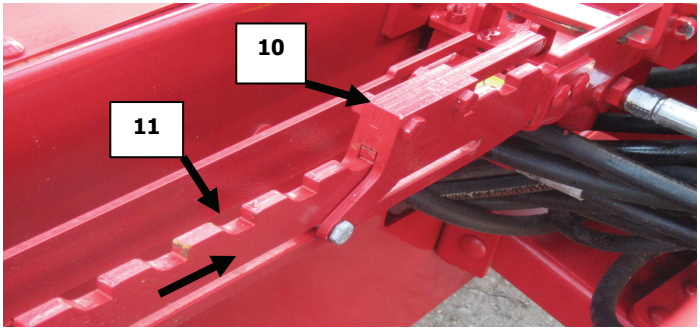


Figure 8.5 Stopper

8.7 ➔ Place the hoop speed control lever at position 0 (Figure 8.6 #12). Press the hydraulic stop button (Figure 8.6 #13).

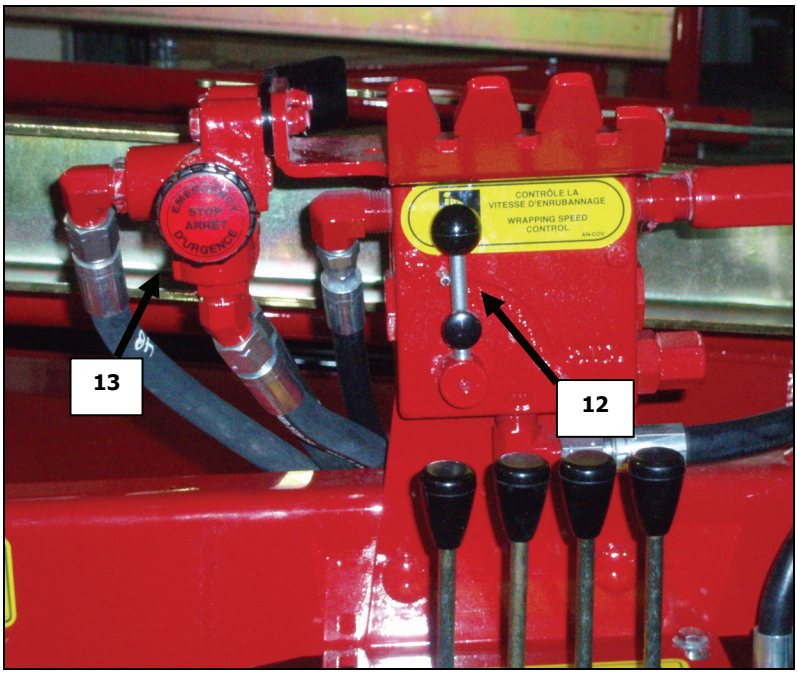


Figure 8.6 Valve

8.8➔ Manually push the pointer toward the front of the machine (Figure 8.7 #14). Start the engine. Push down the pusher start pedal (Figure 8.1 #1). Stand beside the machine so that you can see the pointer and the actuator lever (Figure 8.7). Pull the hydraulic stop button (Figure 8.6 #13). Be prepared for the pusher to move toward the front of the machine and be ready to push the hydraulic stop button when the actuator lever (Figure 8.7 #15) is in front of

the end of the pointer (Figure 8.7 #14). Stop the engine and adjust the actuator lever (Figure 8.7 #15) so that it skims the end of the pointer (Figure 8.7 #14). The automatic system is now adjusted. Restart the engine and pull the hydraulic stop button (Figure 8.6 #13) to make the pusher return to its starting position.

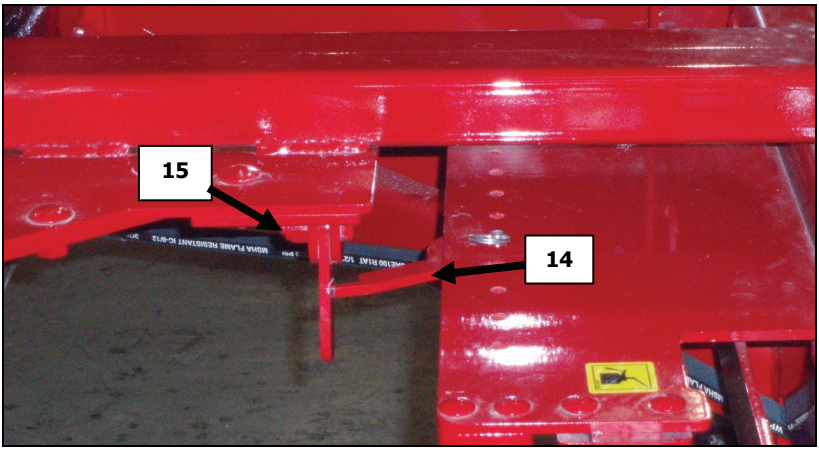


Figure 8.7 Hoop actuator lever

Adjusting the Pusher Trigger

8.9 ➔ Place the speed control lever at position 0 (Figure 8.6#12). Push the hydraulic stop button (Figure 8.6#13). Start the engine. Push down the pusher start pedal (Figure 8.1#1). Stand so that you can see the trigger (Figure 8.9 #17) and the pusher cross bar (Figure 8.9#18). Pull the hydraulic stop button (Figure 8.6#13). Let the pusher perform a cycle toward the front. Be prepared when the pusher returns and push the hydraulic stop button (Figure 8.6#13) when the pusher cross bar (Figure 8.9#18) is above the trigger (Figure 8.9#17). Stop the engine.

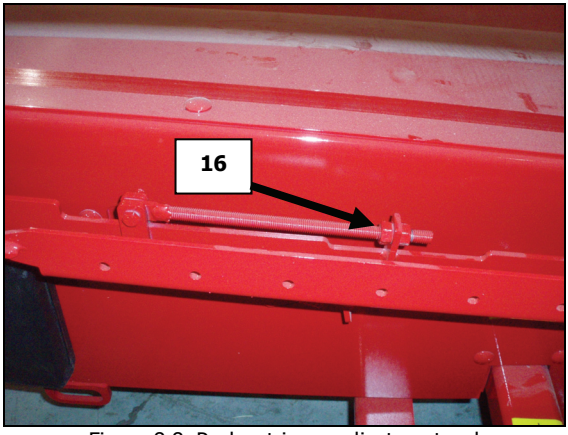


Figure 8.8 Pusher trigger adjustment rod

To adjust the gap (Figure 8.9 #19), you must screw or unscrew the 2 bolts (Figure 8.8 #16) to move the automatic trigger (Figure 8.9 #17) so that it lightly touches the pusher cross bar (Figure 8.9 #18). The automatic system is now adjusted. Restart the engine and pull the hydraulic stop button (Figure 8.6#13) to make the pusher return to its starting position.

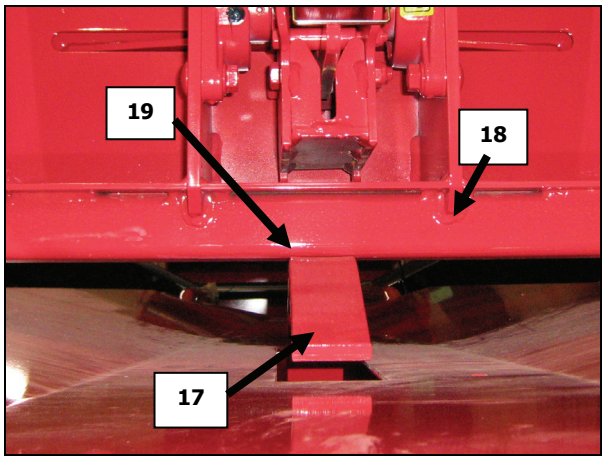


Figure 8.9 Pusher trigger

Adjusting the Limit Stop

8.10 ➔ The trigger (Figure 8.10#20) must be adjusted to about 3/4" from the pusher.

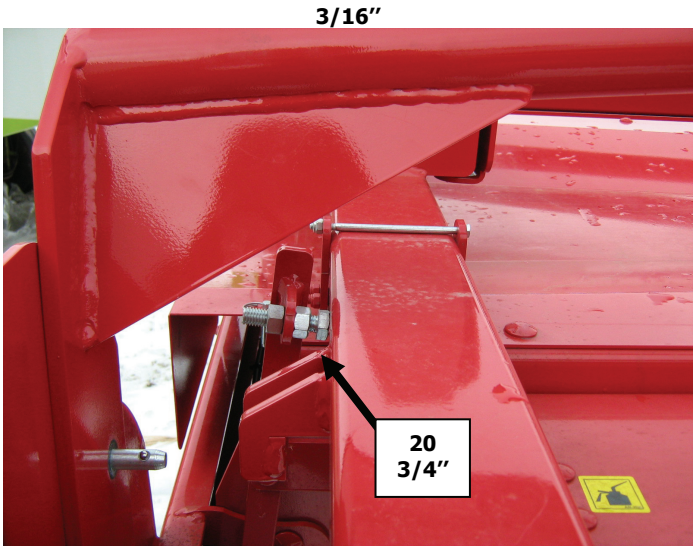


Figure 8.10 Trigger limit stop

8.11 ➔ The spring attachment must be at an angle of about 45 degrees relative to the table (Figure 8.11 #21).

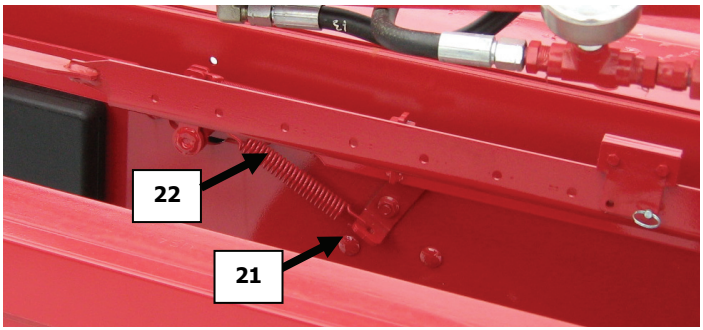


Figure 8.11 Automatic system spring

9 How to finish a continuous bale row

1- Wrap the last bale of the continuous bale row in a plastic bag and load it onto the bale wrapper. The wrapping cycle will take place. Do not forget to release the hydraulic brake (Figure 6.3).

2- Stop the engine (Do not stay or walk on the machine when the engine is running).

3- Move part #10 (Figure 8.5) as far toward the front as possible.

4- Remove the ring pin from the pusher plate (Figure 9.1).

5- Take out the 2 unloading posts, located on the left side of the rear chassis. Take the unloading post with a round rod at the end and place it in the square axle of the pusher plate with the square holes facing downward. Put the ring pin back in the pusher plate. Push on the unloading post to manually move the pusher plate forward (about 1m) and add the second pole and, then move the pusher plate until it touches the bale (at the center) (Figure 9.2).

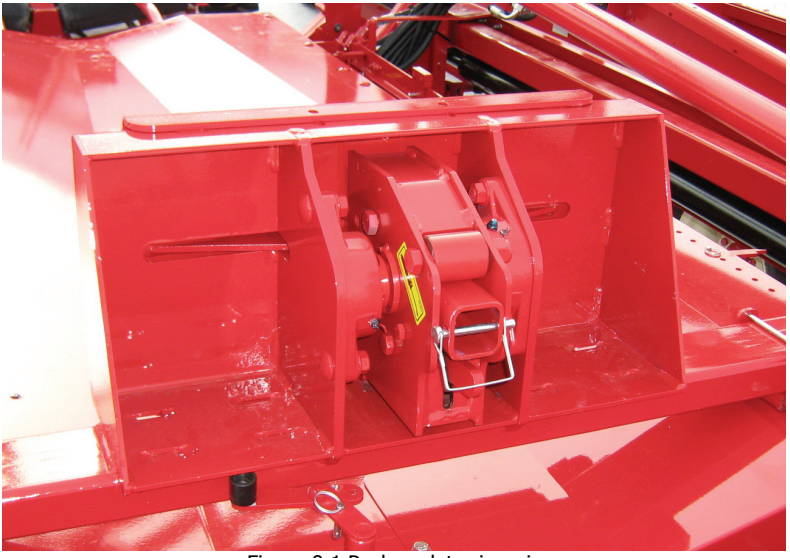


Figure 9.1 Pusher plate ring pin

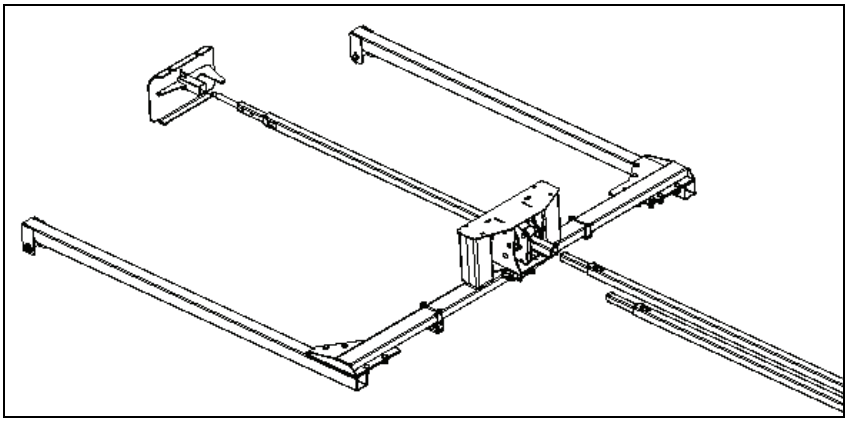


Figure 9.2 Unloading post

6- Once the pusher plate is located in the bale, start the engine.
7- By pushing on the start pedal located at the rear of the bale wrapper (Figure 9.3), you will start a pushing cycle. You must manually remove the unloading post (push forward) while the pusher is moving backward.

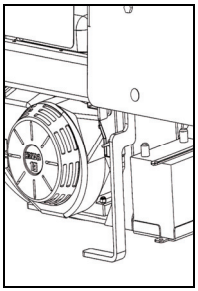


Figure 9.3 Pusher start pedal

8- As soon as the last bale has passed through the hoop and is fully wrapped, stop the engine and cut the 2 sheets of plastic film and place the speed control lever at 0. Attach the 2 free ends of the plastic film to the plastic holder (Figure 9.4).

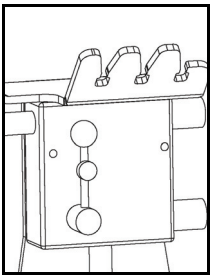


Figure 9.4 Speed control lever

9- Restart the engine and press down the pusher start pedal again to make the pusher complete 2-3 more pushing cycles. Keep the unloading posts in place until the second post has traveled almost as far as it can go and the last bale has been pushed to the end of the front gate.
10- Once the bale row has been completed, remove the 2 unloading posts and the plate. Place the unloading posts back in their storage area. Put the ring pin back in place at the rear of the pusher plate.

Variation for Finishing a Continuous Bale Row: Before inserting the unloading posts, certain users use one or several bales that will not be wrapped to push their continuous bale row so as to be certain to completely free their machine at the end of the bale row without risking damage to the bale row.
Once the bale row is finished, check that the entire length of the bale row is fully sealed in plastic. If necessary, seal the air holes with airtight tape so that fermentation can quickly begin. Do not use masking tape or duct tape.
Identify your continuous bale rows by field and date them. You can also make a map or a written description of your storage site to make management easier.
Regularly examine your bale rows and repair any holes or cracks that you see.

10 Maintenance and Storage

Safety

During maintenance, it is important to respect all safety rules.

Grease Gun Lubrication

Your ANDERSON bale wrapper must be lubricated with a grease gun every 200 bales in the places indicated by a yellow sticker.

- Both front axels.
- Both rear axels.
- Gears of the stretcher.

Figure 10.1 Front axels.

Figure 10.2 Rear axels.

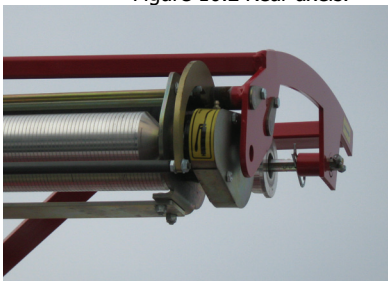


Figure 10.3 Stretcher gears

We recommend that you use Synthetic Grease.

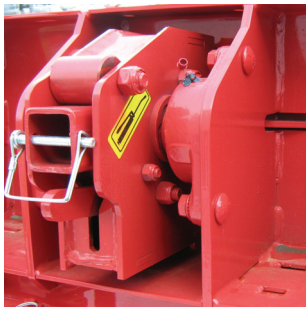


Figure 10.4 Swevel

Your wrapper needs to be oiled after every 200 bales in the places indicated by the yellow stickers.

- Traction chain.
- Engine idle control.
- Automatic system.
- Hoop activation.
- Pusher guide rail.

Figure 10.5 Traction chain.

Figure 10.6 Engine idle control.

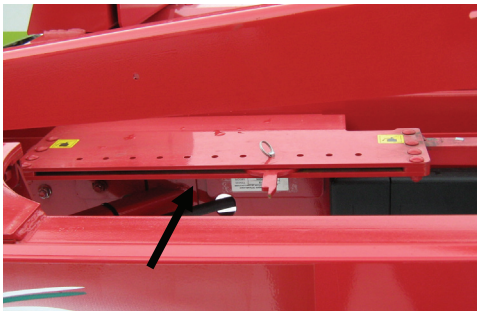


Figure 10.7 Automatic system.

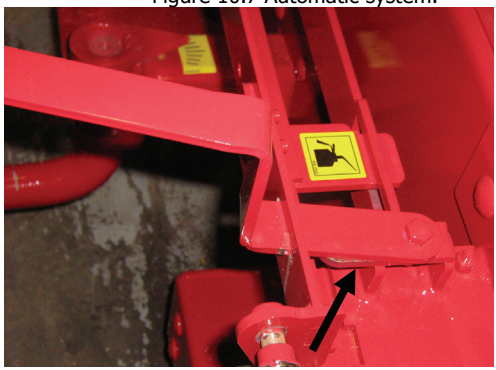


Figure 10.8 Hoop activator.

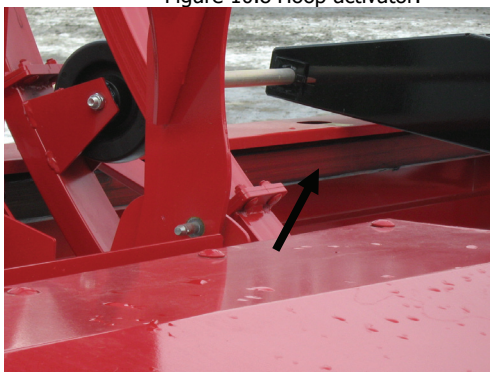


Figure 10.9 Pusher guide rail.

Important !

Pusher rail: Both square tubes that serve as guide rails were greased in the factory. The use of additional grease could accumulate dust and cause the pusher to slide badly. We recommend that you use some new oil to the places indicated with the yellow stickers, as well as on the rear part of the tubes when the pusher is moved toward the front of the machine.

Cleaning

Always keep the rollers of the plastic film stretcher and the rubber free roller clean and free of all hay or other residue to prevent these parts or the gears from jamming, breaking, or tearing the plastic film.
Also remove regularly the hay that can get stuck in the axles and gears of the machine so as not to place needless strain on the hydraulic engines.
Additionally, we remind you that it is a good idea to remove all flammable materials from the area around the gasoline engine. Also, you should regularly remove the dust from the exterior air filter at the front of the engine.

Preventative Maintenance

Frequently check that the bolts of the 4 wheel rims of your machine are properly tightened and that the tires have enough air pressure.

Storage

Given its weight, we have already recommended that you check that the 4 wheels of your bale wrapper are firmly touching the ground and that you block the wheels of the machine with chocks during storage. Additionally, raise the front gate to prevent others from trying to climb on the machine. Do not forget to close the engine fuel valve to prevent the fuel from seeping into the engine oil.
Finally, when storing your machine for a long period of time, such as in winter, it is very important to generously oil the 2 arms on which the pusher frame slides, underneath the fenders. This will prevent the pusher frame from becoming stuck when the bale wrapper is used in the future. General maintenance is also highly recommended at this moment.

11 Troubleshooting

Breakdown?!?

You machine is functioning poorly or not at all?!? Before calling a technician, examine your machine and consult the table below to find a solution. If you are still not able to solve the problem yourself, ask for help from the customer service department of your agricultural dealer.

Troubleshooting Table

Problems	Possible Causes	Solutions
1. The engine does not start.	The fuel valve is closed.	Open the fuel valve and start again.
	The gas tank is empty.	Put fuel in the tank and start again.
	The low engine oil sensor of the Honda engine is activated.	Add oil to the engine and start again.
	The spark plug is clogged or defective	Clean the spark plug or change it.
	The engine is flooded because the fuel valve was not closed during transportation.	Remove the spark plug, dry it out, dry out the cylinder by activating the starter crank. Put back the spark plug and start again.
		Change the oil.
	Too much oil in the oil pan.	Adjust oil level.
2. The pusher does not move forward.	The bale is not correctly placed on the trigger or is not exerting enough pressure on it.	Pick up the bale with the tractor and rotate it a quarter turn around its axis. Re-load bale.
		If necessary, sufficiently widen the bale guides.
	The hydraulic oil level or pressure is too low.	Check oil level. Also check for leaks or holes. Repair if necessary. Add hydraulic oil #32 (or TDH or hydraulic transmission fluid) to the tank.
	The trigger is not properly adjusted.	Adjust the trigger. See adjustment procedures.
3. The pusher goes back to its starting position without finishing its trajectory.	The stopper is not in the right position because it is not suited to the bale format or it is not fully pushed in.	Move the stopper to the right place or check it.
	The pusher does not reach the stopper because the automatic system spring is too tight.	The spring attachment must be vertical or slightly inclined (up to 30°) clockwise. Adjust it.
	Lack of oil pressure.	Check oil level. Check for leaks. Adjust as needed.

4. The hoop does not turn.	The hoop speed control is at 0.	Move the control forward between 2 and 10.
	The drive wheel slides on the hoop.	Tighten the wheel spring.
		Check tire air pressure and adjust if necessary.
		Change the tire if it is worn out.
	The drive wheel does not turn.	Check oil level. Check for leaks.
		Check the condition of the wheel motor and change it if necessary.
	The actuator lever does not move the pointer.	See section 8-adjustment procedures.
5. The hoop and the pusher lose speed.	Lack of hydraulic oil or oil pressure.	Check oil level. Check for leaks. Adjust as needed.
6. The pusher moves forward at normal speed but the hoop turns slowly.	The wrapping speed control is at too low a setting	Increase wrapping speed.
	The actuator lever does not move the pointer.	See section 8-adjustment procedures
7. The speed control lever is blocked.	Water infiltration may have caused the interior to rust.	Take apart the speed control and lubricate it.
8. The plastic film breaks at normal temperatures.	The film is not tight enough.	Check that the plastic film roll is installed as indicated in the diagram.
		Check that stretcher and spring parts are in good condition.
	Debris have become wrapped around the rolls or in the stretchers.	Remove the debris and check the general condition of the stretchers.
	The aluminum rollers are dirty.	Clean them with penetrating oil.
	The rubber roller is damaged.	Replace the rubber roller.
	The spikes have become rough.	Gently sand the spikes.
9. The plastic film often breaks in hot weather.	The stretcher springs are putting pressure on the hoop.	Unhook the stretcher springs.
10. The remote starter does not work or has stopped working.	The engine key is in OFF position.	Turn the key to ON position.
	The remote control battery has lost its charge or has a bad contact.	Check the contact or change the battery. Reprogram the remote starter (see instructions).
	The Honda engine fuse has burned out.	Change the fuse.

11. The remote control for remote operation does not work or has stopped working.	The 12 V battery of the remote control has lost its charge or is disconnected.	Change the battery or check the connection. Next, press in alternation on the right/left direction buttons to reprogram remote operation.
	The remote control is too far away.	Move closer to the module.
12. The emergency stop activates itself.	Greasy residues have formed on the piston and the vibrations of the plastic detector have activated it.	Take apart the emergency stop valve and clean the piston with a solvent. Reinstall the emergency stop valve.
13. The engine starts with the key but does not stop and the engine kill switch does not work.	The engine kill switch is defective.	Disconnect the orange and black wires. Reconnect the black wire in place of the orange wire. Restart the engine and stop it with the key.

12 OPTIONAL EQUIPMENT

12.1 Work Lights

Two halogen lights installed on the cross bar on the right side of the machine to facilitate machine operation in the evening or at night. Connected to the machine's electrical system (Figure 12.1)(Figure 12.2).

Be aware that the Honda engine must be equipped with a minimum 10 amp alternator for this option to be successfully installed. If not, your battery will lose its charge and this situation is not covered by the warranty.

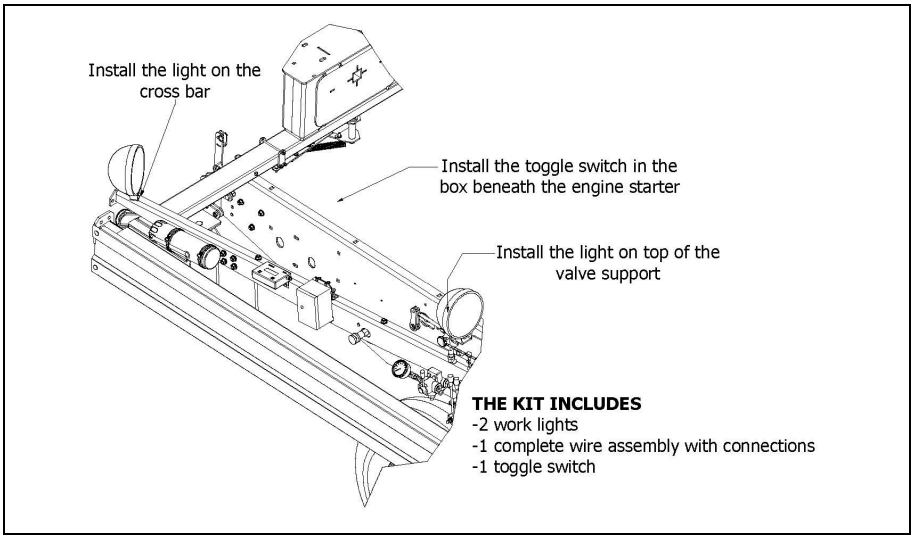


Figure 12.1 Work light

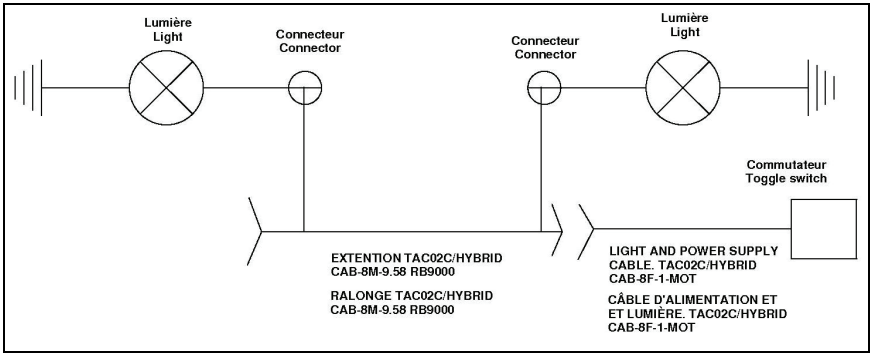


Figure 12.2 Electrical diagram

NOTE:
YOU MUST OPEN THE STARTER BOX TO INSTALL THE SWITCH.
YOU MUST CONNECT THE WIRE TO THE SCREW OF THE STARTER.
SEE THE PARTS BOOKLET.

12.2 Remote Starter

Characteristics

This electric starter system, also called an engine kill, can only start or stop the Honda gas engine. It includes a module that is installed on the interior of the rear chassis on the right side and connected to the engine. It also includes a small remote control (Figure 12.3). The remote control has 2 buttons. The small green button (upper left corner) starts the engine. The red button (in the center) stops the engine. A red blinker briefly turns on when it is activated.

Remote Control

We remind you that the small green button (upper right corner) starts the engine. The red button (in the center) stops the engine. A red blinker turns on briefly when the remote control is used to indicate that the internal battery is in good condition. In case of failure, the remote control will itself try 2 more times to start the engine. Finally, be aware that your small remote control is not waterproof.

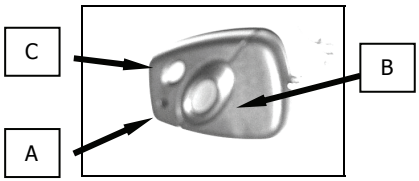


Figure 12.3 Functions of remote start

Caution!

The remote control is not waterproof.

Start Up

Do not forget to turn the engine key to ON before using your remote control. If you do not do this, the remote control will not work. You can leave the engine switch in ON position for several weeks without starting the engine.

Caution !

If the engine does not start after the first try, the receiver will try two more times automatically.

Programming

If your remote starter was installed in the factory, your remote control has probably already been configured. If not, or if this is a new remote control, here are the configuration instructions:
1 – Move the engine switch to OFF.
2 – Hold down the red button while simultaneously moving the switch rapidly to ON, OFF, and ON.
3 – Release the red button and press the green button. Your engine will start.

Malfunction

Reprogram your remote control or check the battery

12.3 Anderson Plastic Detector

This equipment can be added to the Anderson NWX660 bale wrapper. It stops the machine when the plastic film tears or runs out.

To activate or deactivate the plastic watch, move the pin into the desired hole of the rod just above the control panel of the wrapper.

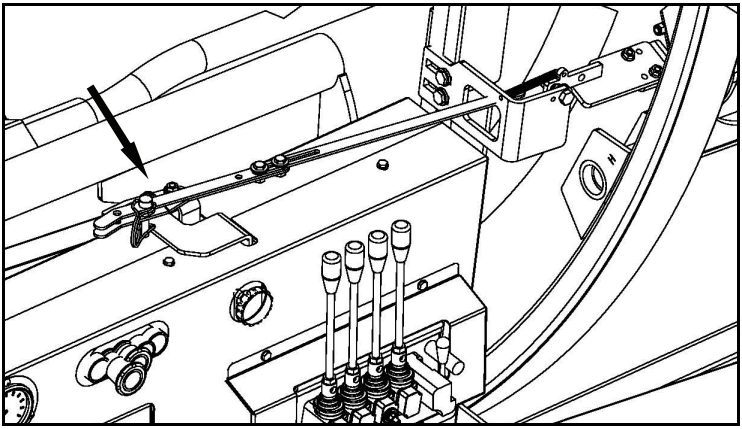


Figure 12.4 Plastic detector system

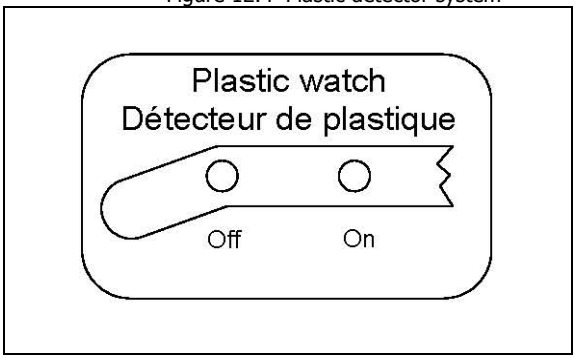


Figure 12.5 Plastic detector system

12.4 Remote steering

General characteristics

The remote steering option allows the operator to control the wrapper from his tractor. The functions of the remote permit the operator to move the wrapper and also start and stop the Honda engine.

The direction can be controlled with the remote control or with the control levers on the main valve.

This option includes a remote control, a receiver and an electric section on the main valve.

Receiver

The receiver is located inside on the back frame of the machine towards the engine where it is protected from impacts of the machine and bad weather. (Figure 12.6)

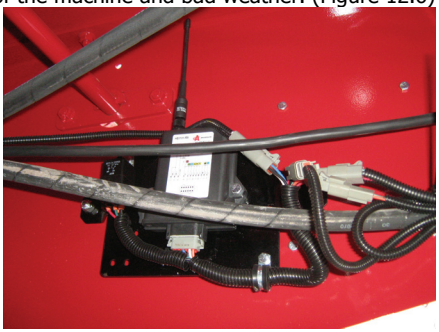


Figure 12.6 Receiver

To engage the receiver, push the blue button situated on the control box. (Figure 12.7) The button lights up when the remote steering function is activated.

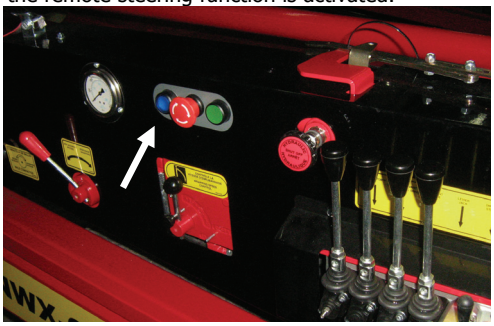


Figure 12.7 Control box

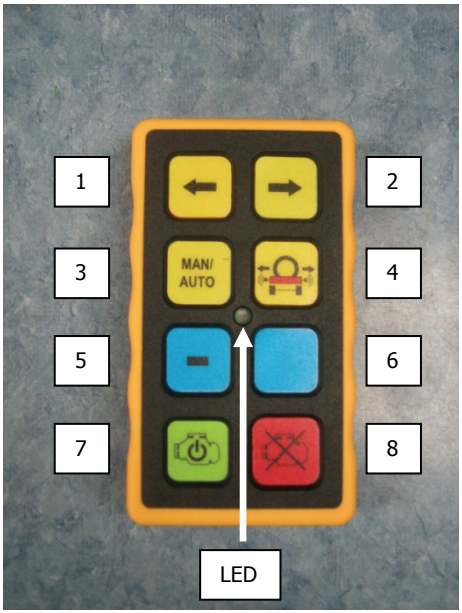
Important !

When the remote steering is activated the Honda engine will only start with the remote control.
The engine will cut out automatically when the remote steering button is engaged.

Remote Control

Each remote control is equipped with three alkaline batteries (AA). They are located in the compartment under the remote control.

The below diagram shows the functions of the remote control.



#	FONCTION
1	Turn to the left
2	Turn to the right
3	Select manual or automatic(*)
4	Selection for automatic pilot (*)
5	Pusher activation (**)
6	---
7	Start engine
8	Stop engine
LED	Signal light

Figure 12.8 Functions of the remote control.

*Button used for automatic pilot.
*Button used for Hybrid Evolution.

start your engine with the remote control

- Turn the Honda engine key to the on position.
- Make sure that the emergency stop is disengaged.
- Make sure that the safety gate for the hoop is tightly closed.
- Push the green button on the remote control.-

Important !

To start the engine with the remote control, after the engine has been stopped by another function (i.e. emergency stop) you must press the stop engine button on the remote before you are able to press the start engine button to start the engine.

Remote control / Control box association

In the case of a lost or broken remote control, you will have to replace it. The new remote control must be associated with the receiver (Control box). The following procedure allows you to make the association.

- Remove the Honda engine key.
- Turn on the receiver by pushing the blue button on the.
- Press and hold the start engine button on the remote control.
- Press the button Adress Learn (Figure 12.9) on the receiver.

The signal light (LED) Adress Learn will blink green to indicate that the signal from the remote has been received and the remote control and the receiver are now associated.

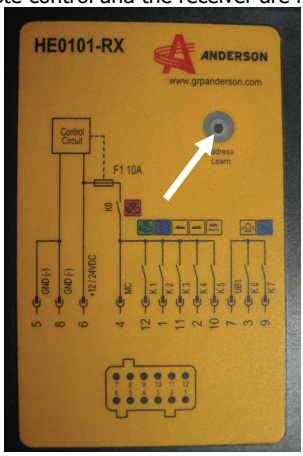


Figure 12.9 Adress Learn button

Descriptions of the LED lights

Signal light functions (LED) from the remote control and the receiver are below:

Remote Control	Red LED	Green LED
Battery low	On	Blinking
Normal transmission	Off	Blinking
Not transmitting properly	On	On
Engine stopped	Blinking	Off

Receiver	Red LED	Green LED	Yellow LED
Error on the main contact (Output diagram)	On	Off	Off
Reception is ready	Off	Off	Blinking
Receiving a signal	Off	Blinking	Off

Turn off the receiver when you are finished using it to avoid draining the battery of the wrapper.

Trouble shooting

Problem	Possible Cause	Solution
1. The system does not work after start up.	The battery is completely uncharged.	Verify the charge of the batteries and replace if necessary.
	The receiver is not turned on.	Verify the Adress Learn LED to insure that it is on. Verify connections.
2. The remote control is on but the machine does not respond.	Remote control is out of range.	Position yourself closer to the wrapper
	The receiver is not ON	Turn ON the receiver.
	Problem with Remote control (Stop button) or the connection.	Verify the stop button and the electric connections. Repair or replace.
3. Some functions work intermittently.	Electric wires of the function are loose or badly connected.	Verify the wires from the receiver to the function that is not working.
4. The Honda engine does not start with the remote control.	The security stop is engaged on the remote control.	Push the stop button on the remote and then retry.

12.5 Diesel engine

The NWX660 is also available with a diesel engine manufactured by KUBOTA. This option allows you to use a pump with a larger flow (debit) which will increase the performance of the machine.

Caution

The operator's manual specific to the diesel engine is supplied with the wrapper. Please familiarize yourself with the security measures and maintenance procedures in this manual.

13 Hoop

13.1 Reassembling the Hoop

Outer Hoop

Place the 4 sections flat on the ground.
Place a 3/8" wide metal spacer on the ground in the center of each section so that the sections are parallel to the ground.
Each end piece is numbered from 1 to 4. Each end piece must be placed with its corresponding number.
Next bolt the sections with 3/8x1 carriage bolts.
Only tighten the bolts when they are all in place.

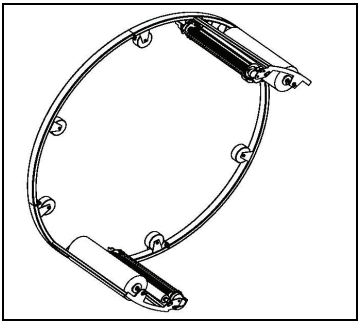


Figure 13.1 Outer hoop

Inner Hoop

Be careful not to tighten the bolts before the final step.
Bolt part (A) of the hoop onto the bale wrapper.
Bolt the lower two quarters of the hoop with the fastenings (B).
Bolt the fastenings to the machine (C).
Bolt the upper quarter of the hoop (D) onto part (B).
Tighten the bolts.

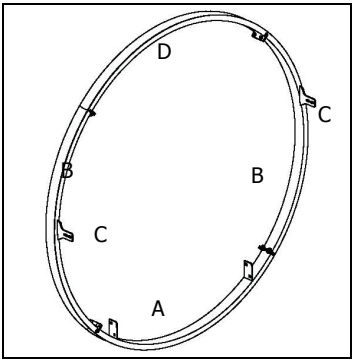


Figure 13.2 Inner hoop

Remove 5 of the rollers that are attached to the outer hoop. Keep the next 3 rollers in place.
Place the outer hoop around the inner hoop.
Reinstall the 5 rollers.

13.2 Reassembly Instructions for Revolving Hoop

You have received your machine assembled in the factory according to the illustration below and you want to reinstall the hoop in normal position. Here are the steps to follow:
1 – Go inside the frame of the machine underneath the hoop and take apart the 2 spikes by unscrewing the hex screws on the inside of the 2 spike supports. You will need a ¾" hex key.
2 – Remaining in the same place, use a ¾" hex key to unscrew and remove the 2 bolts on the 2 sides of the chassis.
3 – Also remove the ½" bolts, which are located just above the hoop pivots on each side of the machine.
4 – Raise the hoop to vertical position and place it correctly on the small tire of the drive wheel, pushing the drive wheel downward if necessary.
5 – Go back inside the frame to reinstall the 2 bolts on each side of the chassis. Reinstall the spikes. Screw back in the retaining hex screws. Also put the 2 ½" screws back in the holes above the hoop pivots. Tighten securely.
6 – Raise the hoop's 2 security screens, which are lying on the front of the machine. The left security screen must be permanently bolted to the left post of the hoop. The right screen has a handle that allows it to be opened as necessary to install the plastic film rolls. Fix the handle in place.

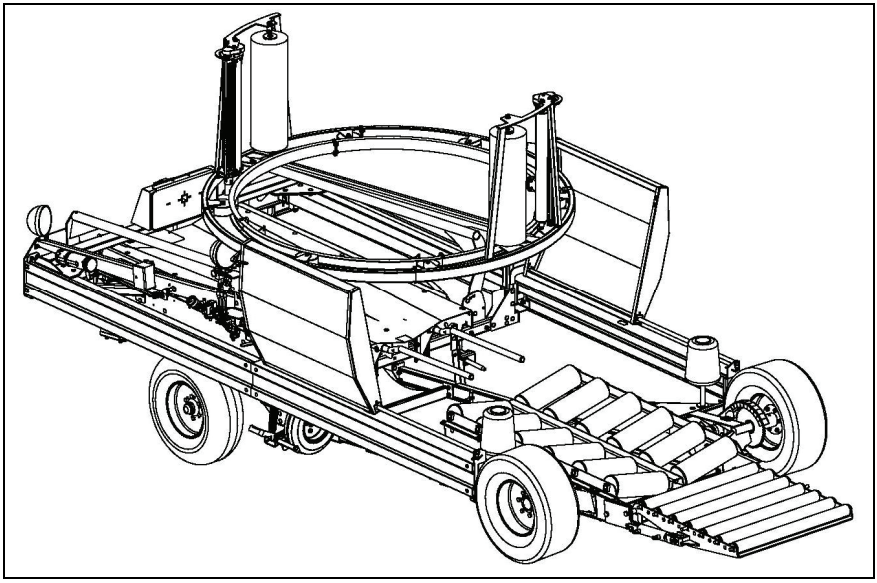


Figure 13.3 Revolving hoop

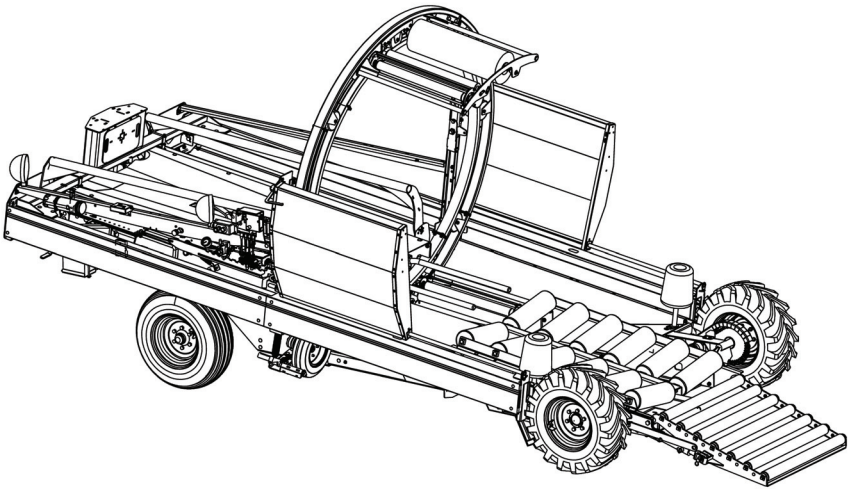
ANDERSON

The NutriWrap™ System

Parts manual

ROUND BALE WRAPPER

NWS660 (660E)



ALWAYS KEEP THIS MANUAL WITH THE WRAPPER

CE

Content

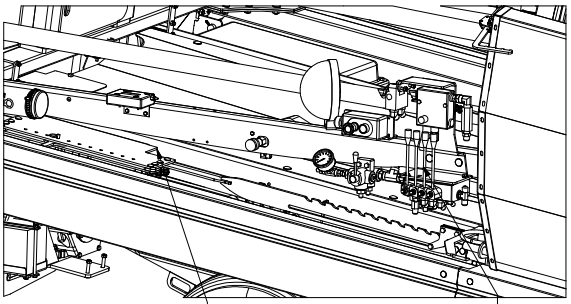
Content

For any parts order, please use the parts manual to find the item(s) you need and contact your dealer to order it or contact us directly at :

ANDERSON EQUIPMENT
5125 de la Plaisance
Chesterville (Québec)
CANADA G0P 1J0

Fax : (819) 382-2218
Email : service@grpanderson.com

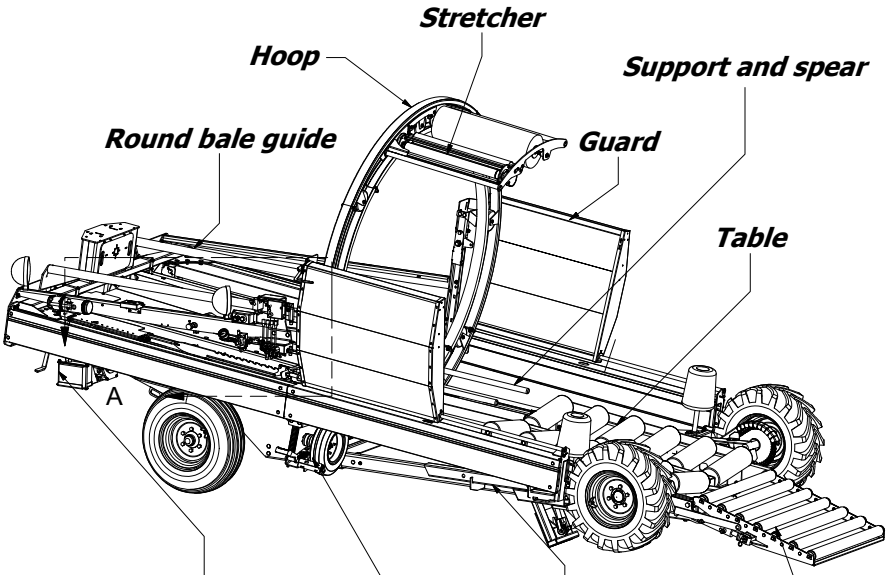
Visit our website ➔ ***www.grpanderson.com***



DETAIL A

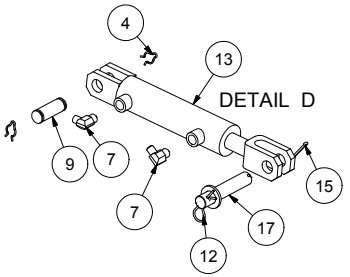
Hydraulic unit

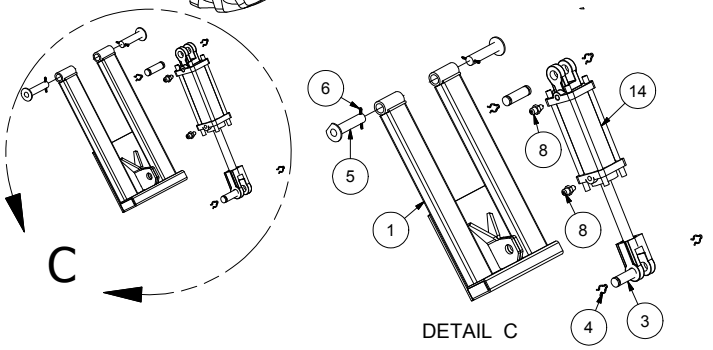
Pusher automatic system



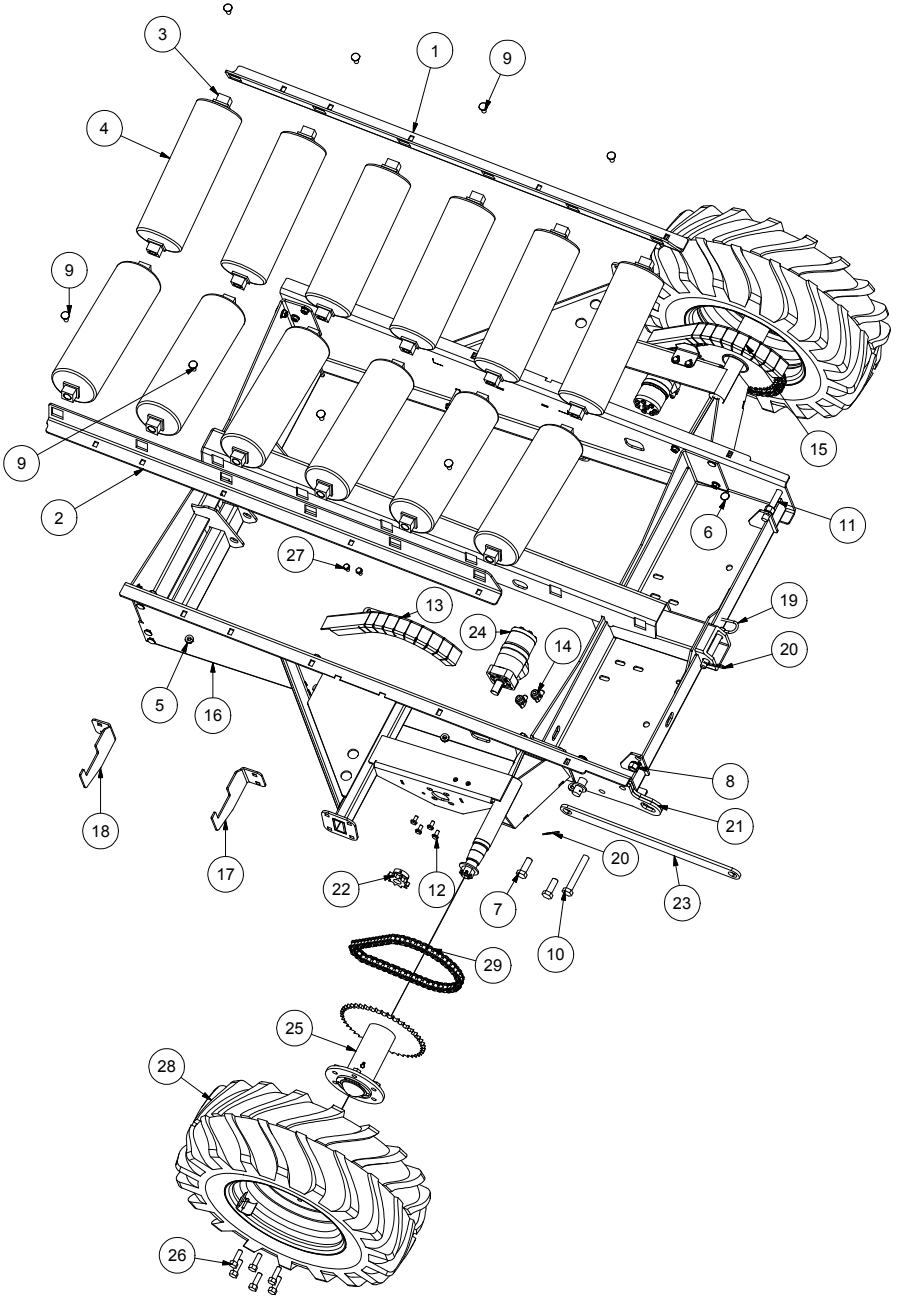
2 - COMPLETE FRONT SECTION

PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	2	210141	HYDRAULIC JACK
2	1	210000-2	FRONT GATE
3	2	467502	CYLINDER PIN
4	6	467501	HAIR PIN
5	2	210001	JACK LOCKING PIN
6	2	320002	COTTER PIN
7	2	450711	HYDRAULIC FITTING
8	2	450543	HYDRAULIC FITTING
9	1	467500	CYLINDER PIN
10	1	210503	TOW BAR
11	1	210143-2	COMPLETE FRONT FRAME
12	3	320039	HITCH PIN
13	1	467099	HYDRAULIC CYLINDER
14	1	467228	HYDRAULIC CYLINDER
15	1	320043	COTTER PIN
16	2	210832	ROLLER ASSEMBLY
17	1	210142-2	GATE LOCKING PIN





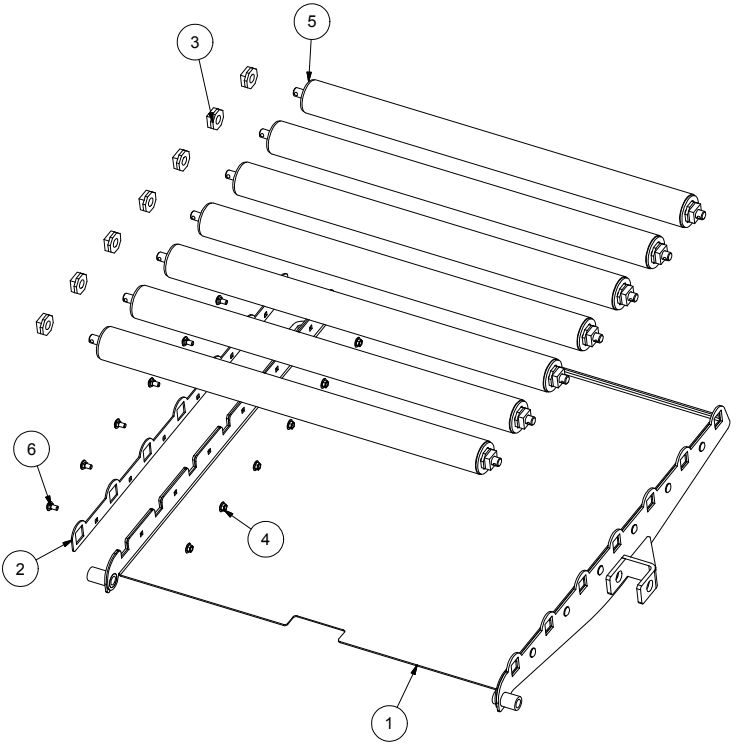
3 - FRAME FRONT SECTION



PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	210005-1	LEFT SIDE V ROLL
2	1	210010-1	RIGHT V ROLL
3	24	279001	PLASTIC BUSHING
4	12	224091	TABLE ROLLER
5	34	501024	FLANGE NUT
6	14	500500	CARRIAGE BOLT
7	2	500285	BOLT
8	4	501036	NYLON NUT
9	12	500501	CARRIAGE BOLT
10	1	500297	BOLT
11	1	500295	BOLT
12	8	500602	FLANGE BOLT
13	1	210016	RIGHT SIDE CHAIN GUARD
14	4	461262	HYDRAULIC FITTING
15	1	210512	LEFT SIDE CHAIN GUARD
16	1	210145-2	FRONT FRAME
17	1	210513	TOW BAR SUPPORT
18	1	210514	TOW BAR SUPPORT
19	1	320082	TOW BAR LOCKING PIN
20	2	320039	HITCH PIN
21	2	210144-2	CYLINDER PLATE
22	2	301010	SPROCKET
23	1	210011-3	FRONT BRIDGE LOCK
24	2	469159	HYDRAULIC MOTOR
25	2	210015	HUB WITH SPROCKET
26	12	507016	WHEEL BOLT
27	2	500602	FLANGE BOLT
28	1	481503	TIRE AND RIM
29	2	210014	TRACTION CHAIN

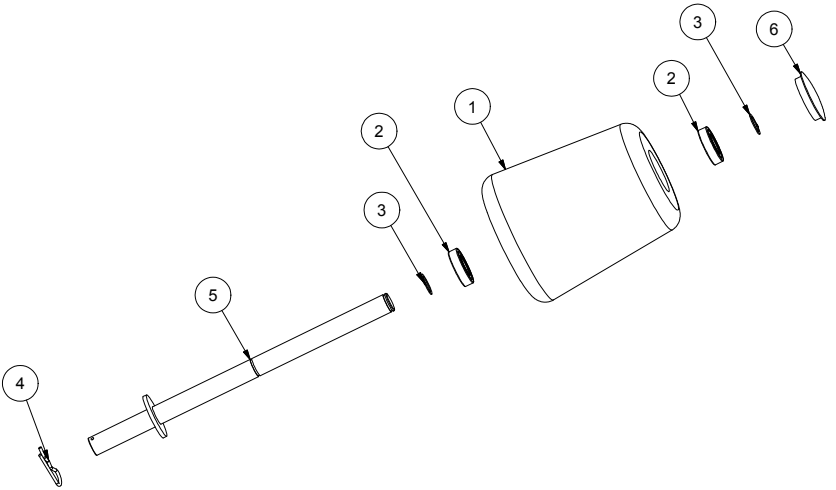
4 - FRONT GATE

PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	210012-1	FRONT GATE FRAME
2	1	210013	FRONT GATE ROLL LOCKING
3	14	279002	PLASTIC BUSHING
4	12	501022	FLANGE NUT
5	7	210802	GATE FRONT ROLL
6	12	500440	CARRIAGE BOLT



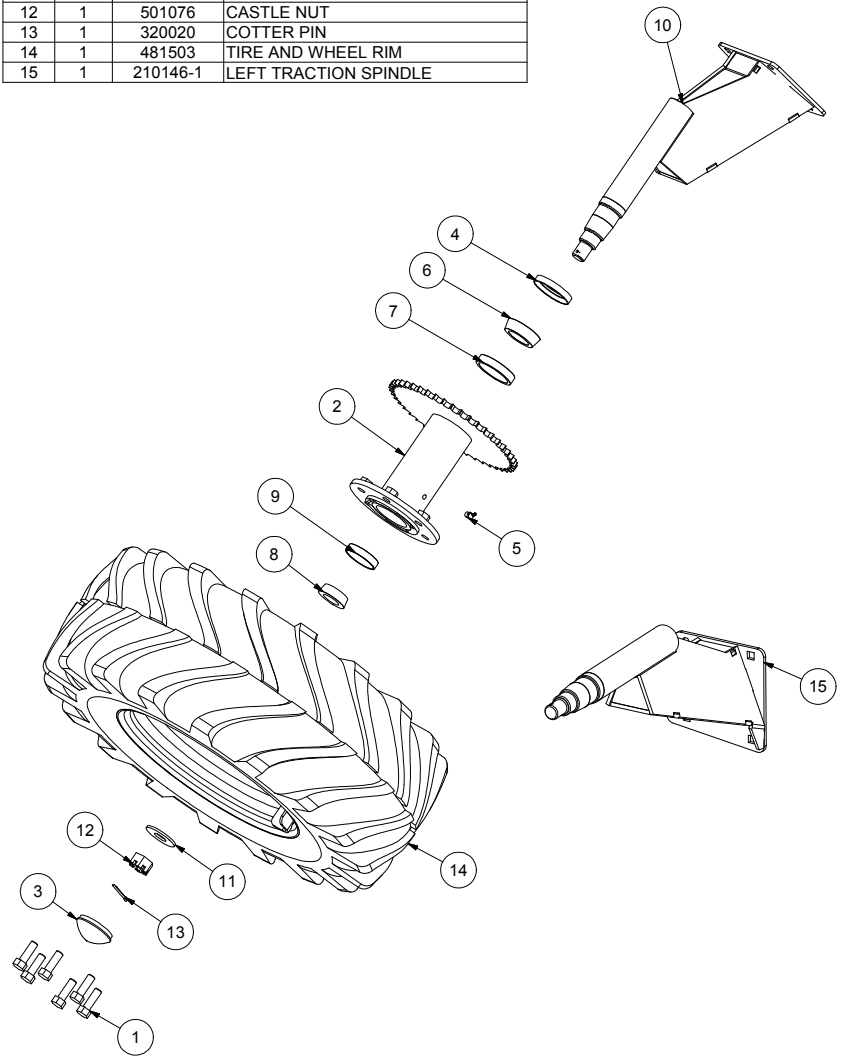
5 - SUPPORT ROLLER

PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	325112	SUPPORT ROLLER
2	2	303045	BEARING
3	2	320006	RETAINING RING
4	1	320010	HITCH PIN
5	1	210526	SUPPORT ROLLER SHAFT
6	1	325107	CAP



6 - FRONT SPINDLE

PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	6	507016	WHEEL BOLT
2	1	210015	HUB WITH SPROCKET
3	1	481005	DUST CAP
4	1	303500	SEAL
5	1	322294	GREASE FITTING
6	1	303501	BEARING
7	1	303099	BEARING CUP
8	1	303034	BEARING
9	1	303037	BEARING CUP
10	1	210147-1	RIGHT TRACTION SPINDLE
11	1	502011	FLAT WASHER
12	1	501076	CASTLE NUT
13	1	320020	COTTER PIN
14	1	481503	TIRE AND WHEEL RIM
15	1	210146-1	LEFT TRACTION SPINDLE



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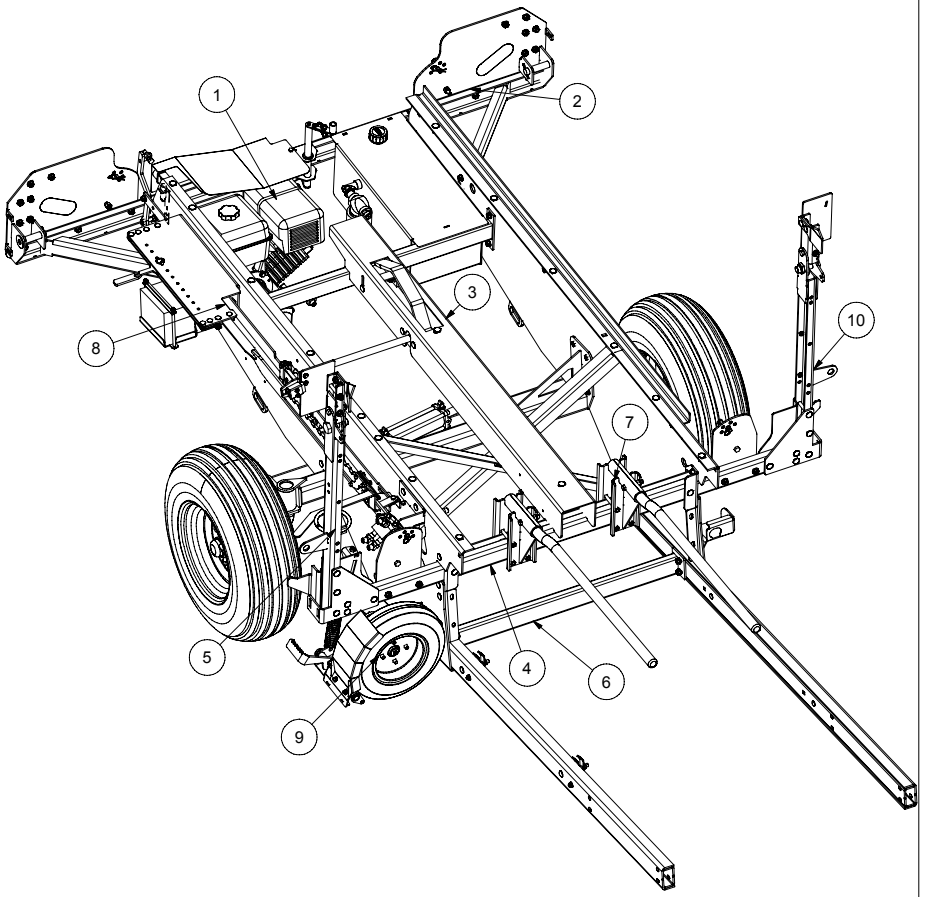
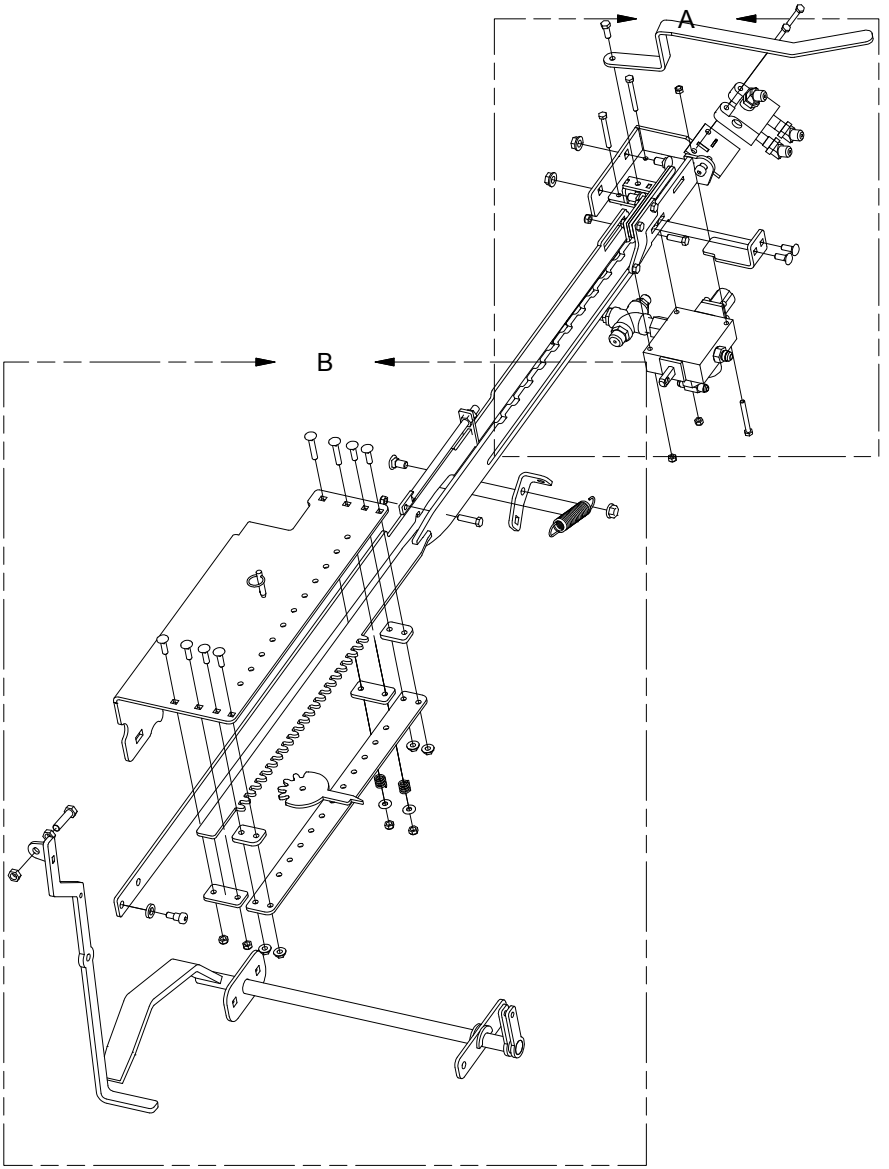
ITEM	QTY	PART	DESCRIPTION
1	1		COMPLETE ENGINE UNIT
2	1		REAR BUMPER
3	1		CENTRAL BEAM
4	1		HOOP AND SPEAR SUPPORT
5	1		RIGHT HOOP SUPPORT
6	1		REINFORCEMENT
7	2		REMOVABLE SPEAR AND SUPPORT
8	1		COMPLETE AUTOMATIC SYSTEM
9	1		COMPLETE DRIVE WHEEL
10	1		LEFT HOOP SUPPORT

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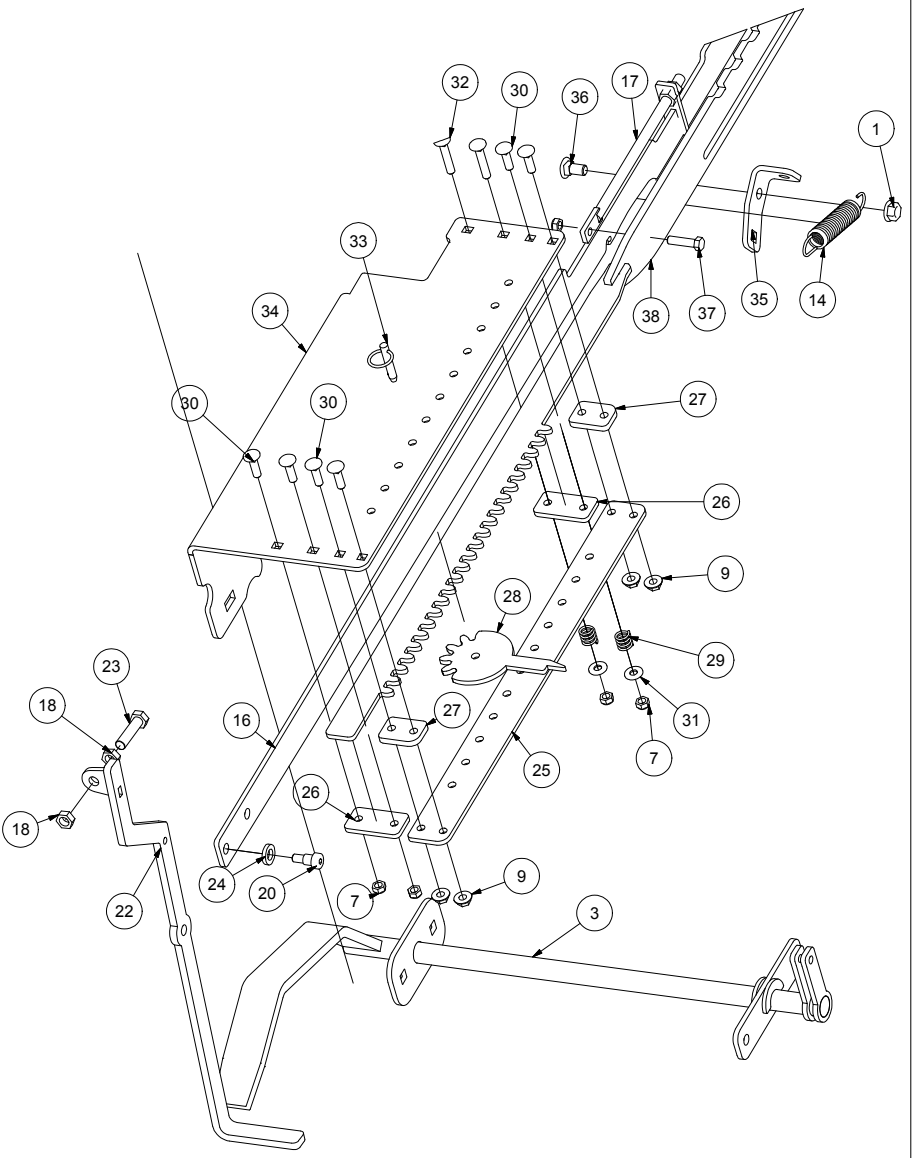
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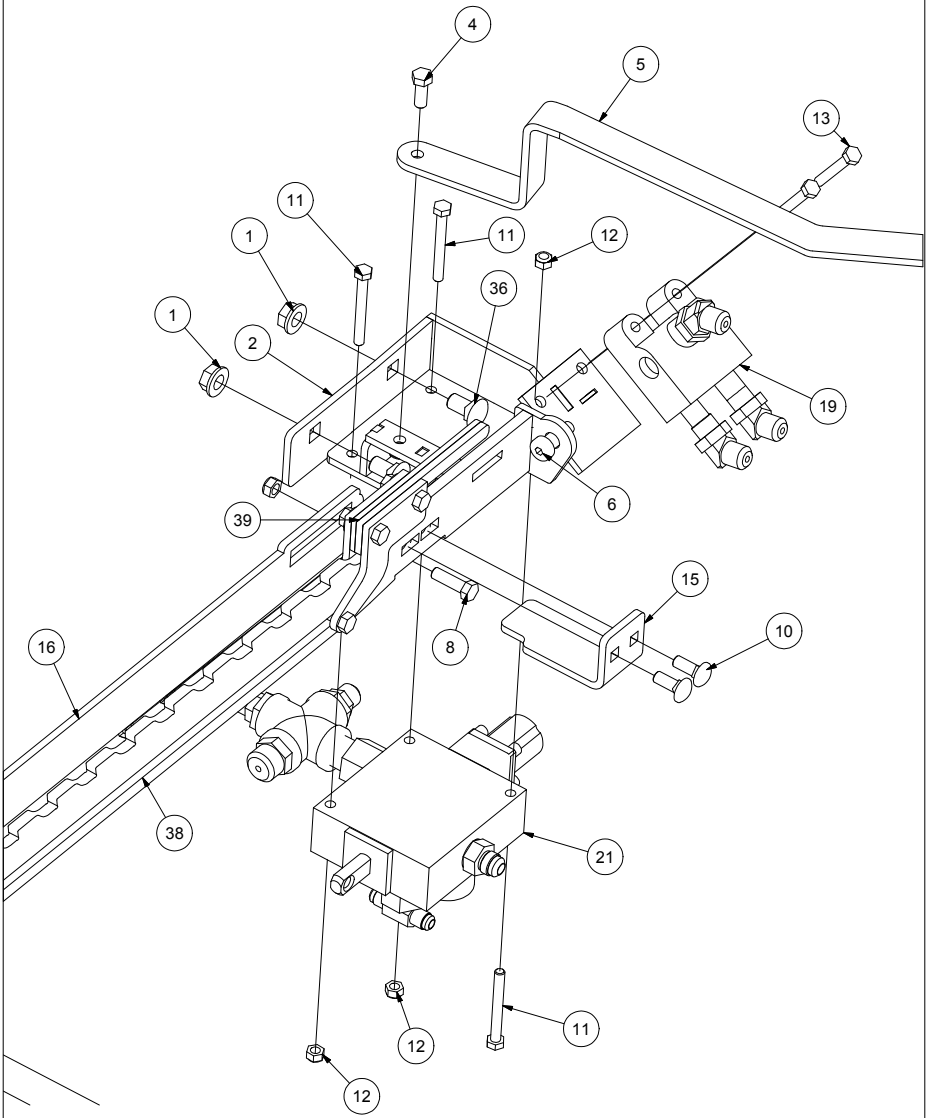
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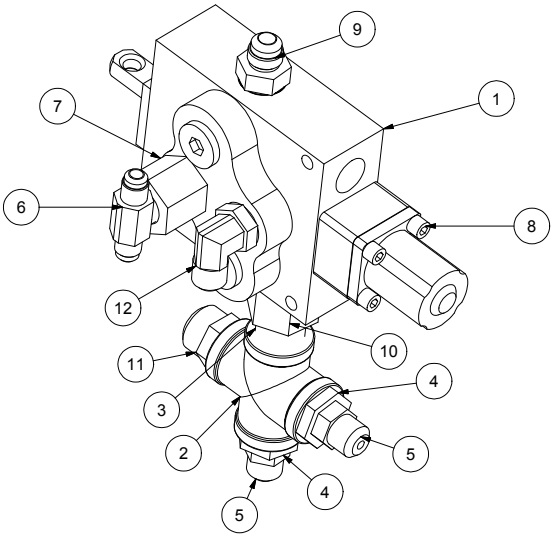
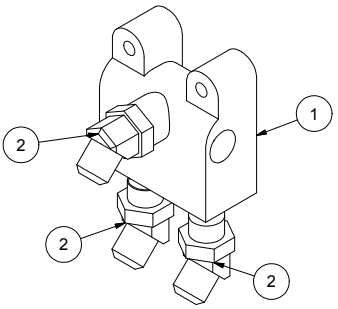
PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	3	501024	FLANGE NUT
2	1	210657-1	AUTOMATIC SYSTEM FRONT PLATE
3	1	210658-1	TRIGGER FOR AUTOMATIC SYSTEM
4	1	500084	BOLT
5	1	210659-2	PUSHER MANUAL TRIGGER
6	1	500578	SHOULDER SCREW
7	8	501032	NYLON NUT
8	4	500086	BOLT
9	8	501022	FLANGE NUT
10	2	500442	CARRIAGE BOLT
11	3	500057	BOLT
12	5	501031	NYLON NUT
13	2	500052	BOLT
14	1	304001	SPRING
15	1	210663-1	STOPPER
16	1	210662-1	TRANSFER PLATE
17	1	210784	ADJUSTMENT ROD FOR AUTOMATIC SYSTEM
18	4	501004	NUT
19	1	465880	HYDRAULIC VALVE
20	1	500570	SHOULDER SCREW
21	1	465002	VALVE
22	1	210149-1	TRANSFERT BAR
23	1	500180	BOLT
24	1	210148	WASHER
25	1	210781	POINT PLATE SUPPORT
26	2	210656-1	RACK IN PINION SUPPORT PLATE
27	2	210814	POINT PLATE SUPPORT
28	1	210655-1	POINT PLATE
29	2	310014	SPRING
30	6	500443	CARRIAGE BOLT
31	2	502004	FLAT WASHER
32	2	500446	CARRIAGE BOLT
33	1	320025-2	QR PIN
34	1	210150	RACK IN PINION SUPPORT
35	1	210640	SPRING ATTACHMENT
36	3	500500	CARRIAGE BOLT
37	1	500088	BOLT
38	1	210272	RACJ IN PINION
39	1	210273	STOPPER SYSTEM

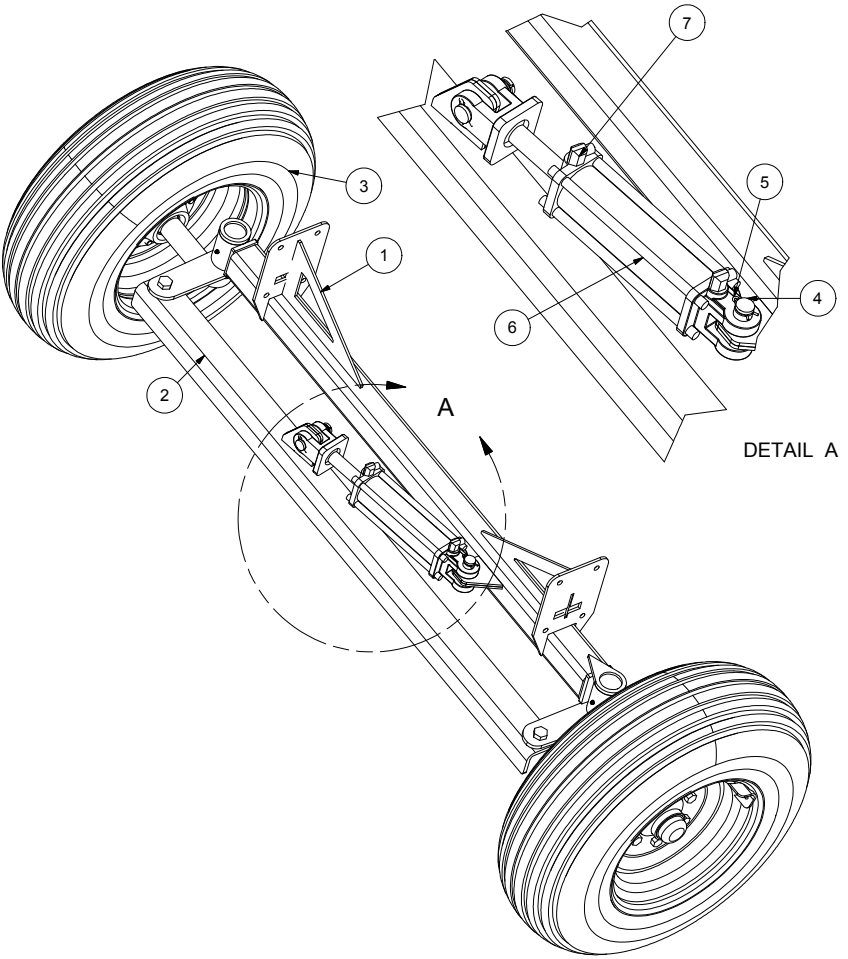
PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	465002	VALVE
2	1	451799	CROSS
3	1	451985	NIPPLE
4	2	451998	GALVANIZE PIPE
5	2	450548	HYDRAULIC FITTING
6	1	450827	HYDRAULIC FITTING
7	1	451120	HYDRAULIC FITTING
8	1	465003	DETENT KIT
9	1	451179	HYDRAULIC FITTING
10	1	451124	HYDRAULIC FITTING
11	1	450558	HYDRAULIC FITTING
12	1	451265	HYDRAULIC FITTING



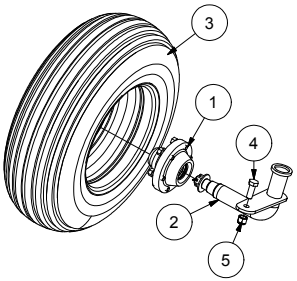
PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	465001	HYDRAULIC VALVE
2	3	451229	HYDRAULIC FITTING

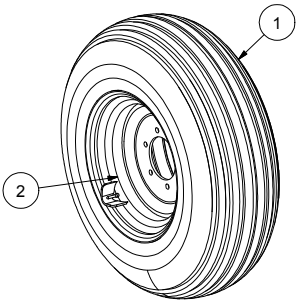


PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	210048	STEERING AXLE BEAM
2	1	210049	DIRECTION ANGLE ARM
3	2	481507	TIRE AND RIM
4	2	467503	CYLINDER AXLE
5	4	467501	HAIR PIN
6	1	467215	HYDRAULIC CYLINDER
7	2	450711	HYDRAULIC FITTING

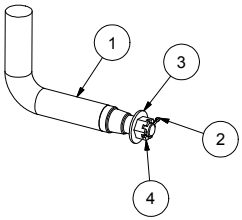


PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	481453	COMPLET HUB
2	1	210151	SPINDLE
3	1	481507	TIRE AND RIM
4	1	500213	BOLT
5	1	501036	NYLON NUT



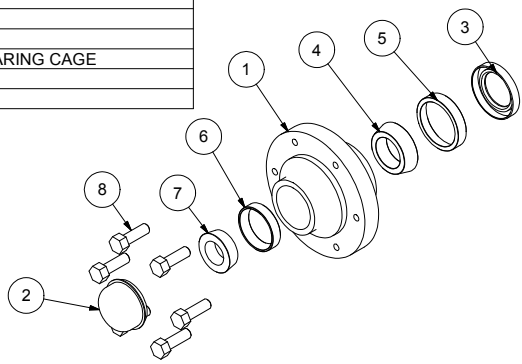


PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	481602	TIRE
2	1	481702	RIM



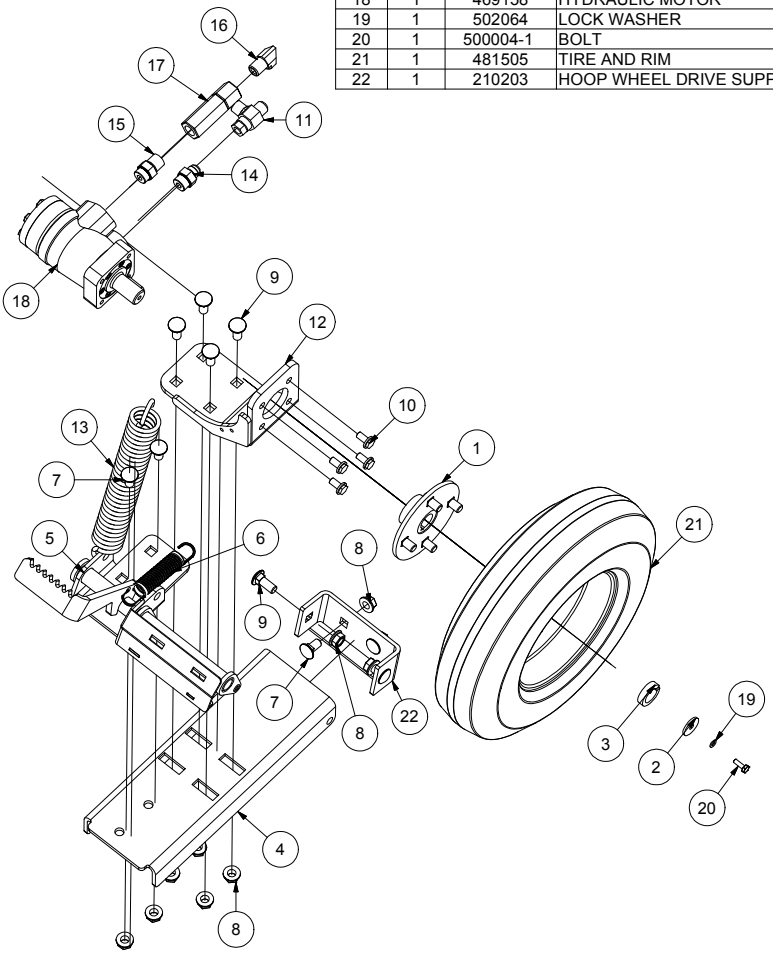
PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	481107	AXLE
2	1	320020	COTTER PIN
3	1	502011	FLAT WASHER
4	1	501076	CASTLE NUT

PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	481450	HUB
2	1	481002	HUB CAP
3	1	303500	DUST CAP
4	1	303501	BEARING
5	1	303099	BEARING
6	1	303037	ROLLING BEARING CAGE
7	1	303034	BEARING
8	6	507016	WHEEL BOLT

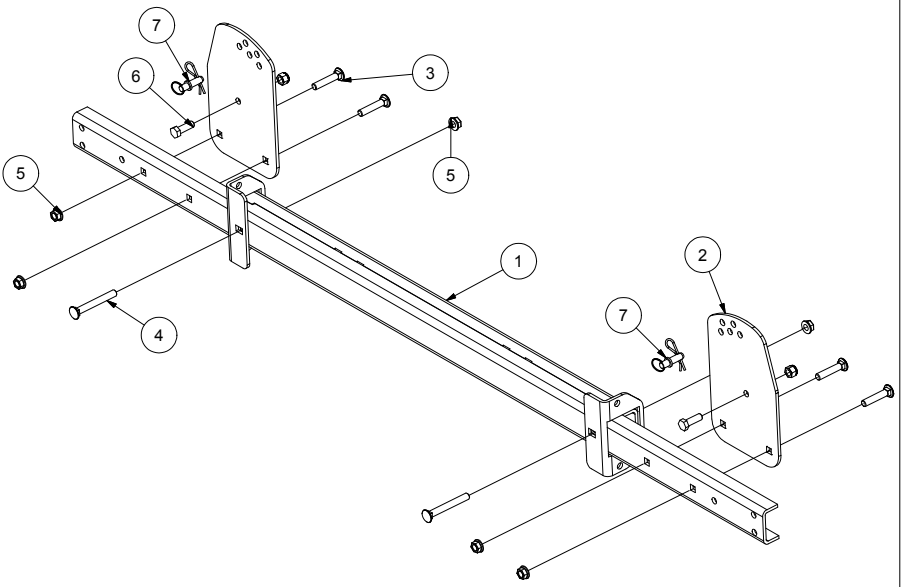


11 - HOOP WHEEL DRIVE

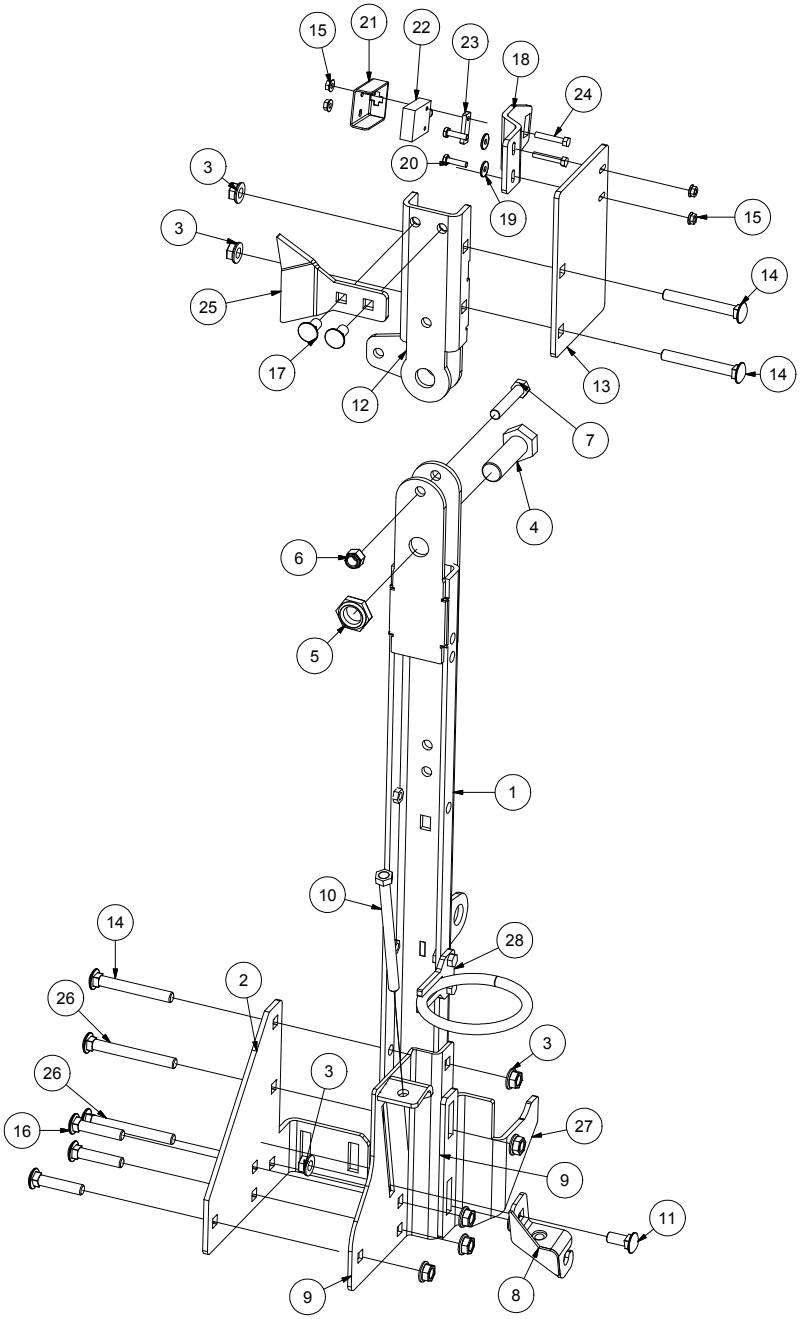
PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	210628	HUB
2	1	210629	WASHER
3	1	210630	WASHER
4	1	210631-1	BRAKE SUPPORT
5	1	210634-1	DRIVE WHEEL BRAKE
6	1	304001	SPRING
7	8	500500	CARRIAGE BOLT
8	10	501024	FLANGE NUT
9	6	500501	CARRIAGE BOLT
10	4	500602	FLANGE BOLT
11	1	450973	HYDRAULIC FITTING
12	1	210719-1	MOTOR SUPPORT
13	1	304013	SPRING
14	1	451179	HYDRAULIC FITTING
15	1	451097	HYDRAULIC FITTING
16	1	450712	HYDRAULIC FITTING
17	1	465878	CHECK VALVE
18	1	469158	HYDRAULIC MOTOR
19	1	502064	LOCK WASHER
20	1	500004-1	BOLT
21	1	481505	TIRE AND RIM
22	1	210203	HOOP WHEEL DRIVE SUPPORT



PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	210604	CENTRAL BEAM SUPPORT
2	2	210058-1	FRONT BALE GUIDE SUPPORT
3	4	500506	CARRIAGE BOLT
4	2	500510	CARRIAGE BOLT
5	6	501024	FLANGE NUT
6	2	500177	BOLT
7	2	308011	GOUPILLE

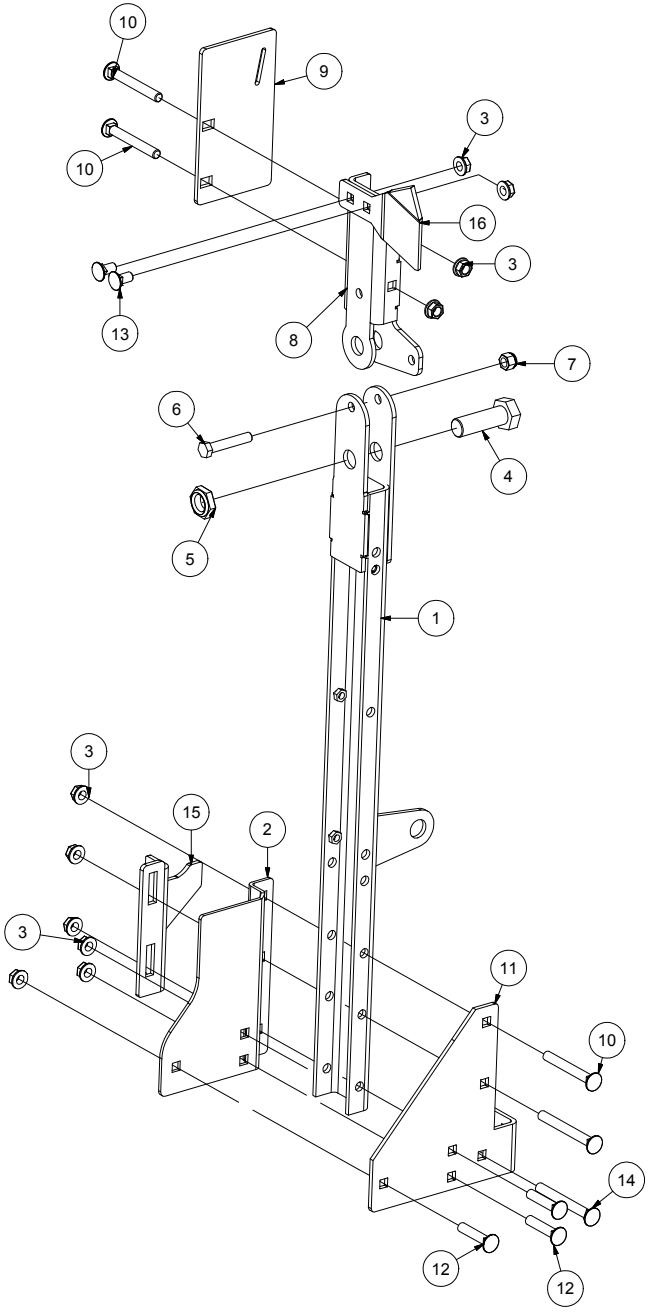


13 - RIGHT SUPPORT HOOP



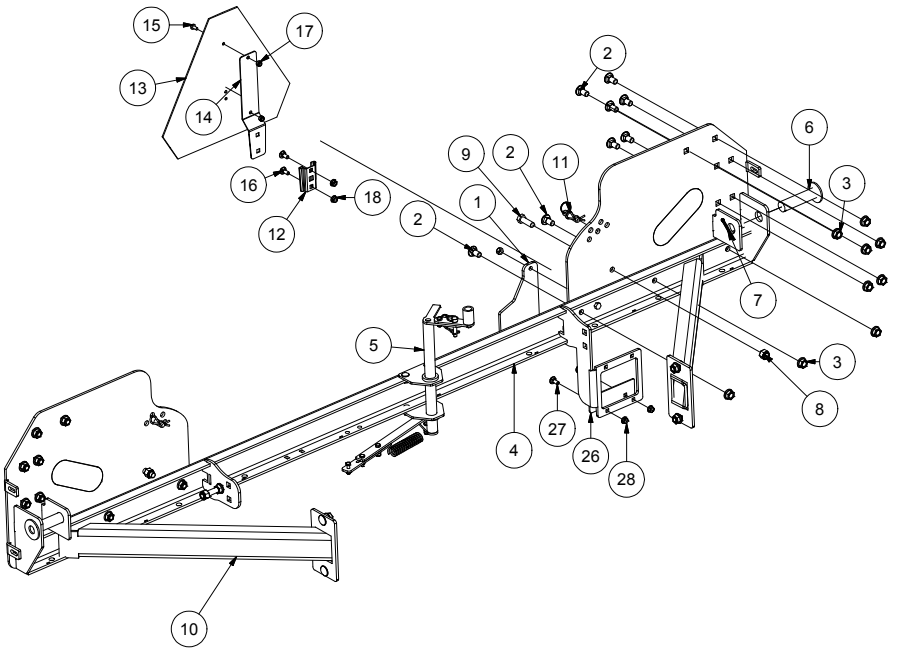
PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	210152-1	RIGHT HOOP SUPPORT
2	1	210153	RIGHT FRONT ATTACHMENT
3	11	501024	FLANGE NUT
4	1	500326	BOLT
5	1	501057	HALF NYLON NUT
6	1	501034	NYLON NUT
7	1	500184	BOLT
8	1	210756	SPRING ADJUSTMENT
9	1	210757	ADJUSTMENT SUPPORT
10	1	210817	ADJUSTMENT
11	1	500500	CARRIAGE BOLT
12	1	210768	HOOP PIVOT
13	1	210769-1	PIVOT PLATE
14	3	500510-1	CARRIAGE BOLT
15	4	501020	FLANGE NUT
16	3	500506	CARRIAGE BOLT
17	2	500500	CARRIAGE BOLT
18	1	210770-1	RIGHT SHIELD ATTACHMENT
19	2	502002	FLAT WASHER
20	2	500006	BOLT
21	1	210839	COVER
22	1	210138-1	EMERGENCY STOPPER
23	1	210840	SPACER PLATE
24	2	500010	BOLT
25	1	210154-1	RIGHT HOOP SUPPORT
26	2	500511	CARRIAGE BOLT
27	1	210207	RIGHT PUSHER CYLINDER SUPPORT
28	1	210892	HOSE ATTACHMENT

13 - LEFT SUPPORT HOOP



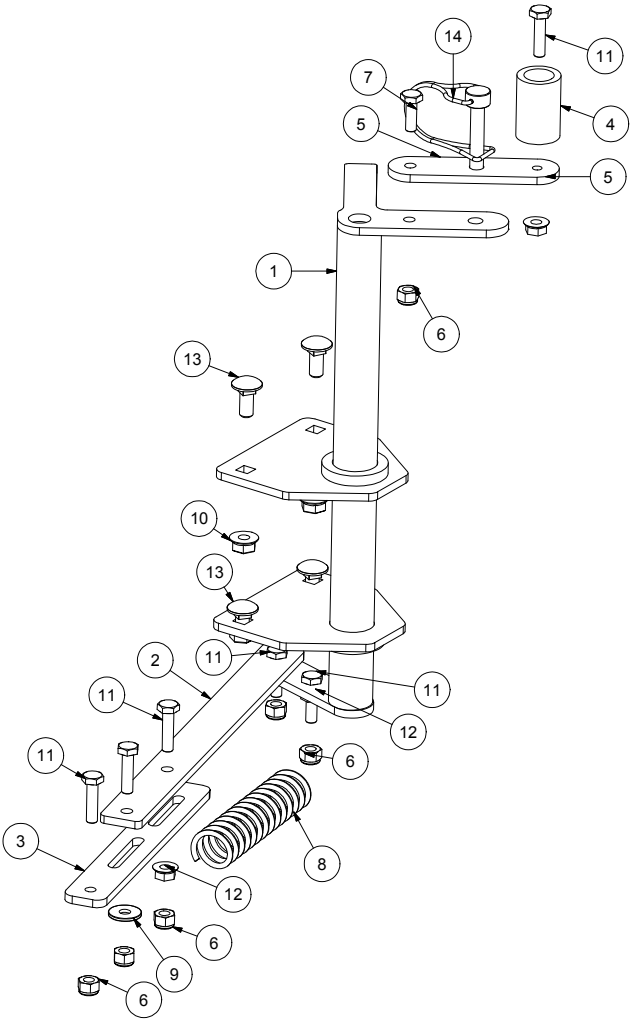
PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	210155-1	LEFT HOOP SUPPORT
2	1	210608-1	LEFT REAR ATTACHMENT PLATE
3	10	501024	FLANGE NUT
4	1	500326	BOLT
5	1	501057	HALF NYLON NUT
6	1	500184	BOLT
7	1	501034	NYLON NUT
8	1	210772	LEFT PIVOT HOOP
9	1	210841	PIVOT PLATE
10	3	500510	CARRIAGE BOLT
11	1	210156	LEFT FRONT ATTACHMENT PLATE
12	3	500506	CARRIAGE BOLT
13	2	500500	CARRIAGE BOLT
14	2	500511	CARRIAGE BOLT
15	1	210208	LEFT PUSHER CYLINDER SUPPORT
16	1	210154-2	LEFT HOOP ATTACHMENT

PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	210157	POST LOCK
2	22	500500	CARRIAGE BOLT
3	23	501024	FLANGE NUT
4	1	210158-2	REAR BUMPER
5	1	210159-1	COMPLETE THROTTLE
6	2	210209	REAR CYLINDER AXLE
7	2	320002	COTTER PIN
8	3	501034	NYLON NUT
9	2	500177	BOLT
10	2	210168	BUMPER REINFORCMENT
11	2	320032-1	HITCH PIN
12	1	210758	TRIANGLE SUPPORT
13	1	325145	SLOW VEHICULE TRIANGLE
14	1	222055	TRIANGLE SUPPORT
15	2	500001	BOLT
16	2	500360	CARRIAGE BOLT
17	2	501030	NYLON NUT
18	2	501021	FLANGE NUT
26	1	210365	PUSH OFF POLE SUPPORT
27	2	500360	CARRIAGE BOLT
28	2	501021	FLANGE NUT



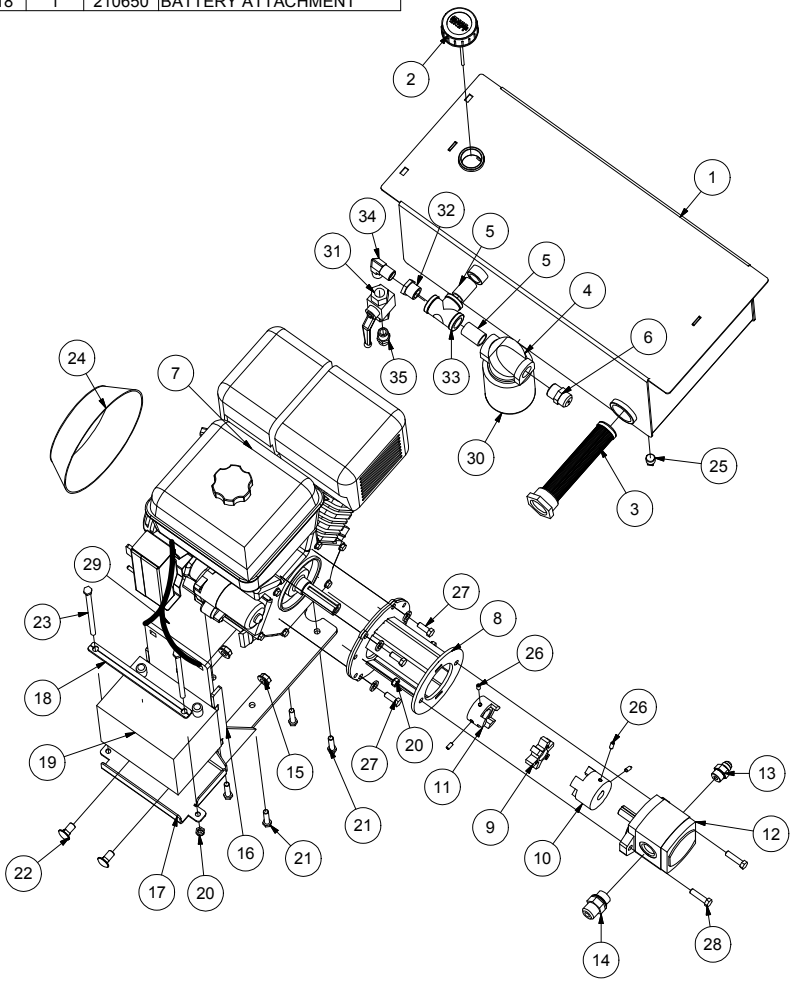
14 - THROTTLE CONTROL

PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	210726-2	THROTTLE HANDLE
2	1	210775-1	ADJUSTABLE PLATE
3	1	210622-2	ADJUSTABLE PLATE
4	1	306031	PLASTIC ROLLER
5	1	210624-2	ACTIVATION PLATE
6	6	501030	NYLON NUT
7	1	500004	BOLT
8	1	310015	SPRING
9	1	502002	FLAT WASHER
10	4	501021	FLANGE NUT
11	6	500006	BOLT
12	3	501020	FLANGE NUT
13	4	500360	CARRIAGE BOLT
14	1	320031	LOCK PIN

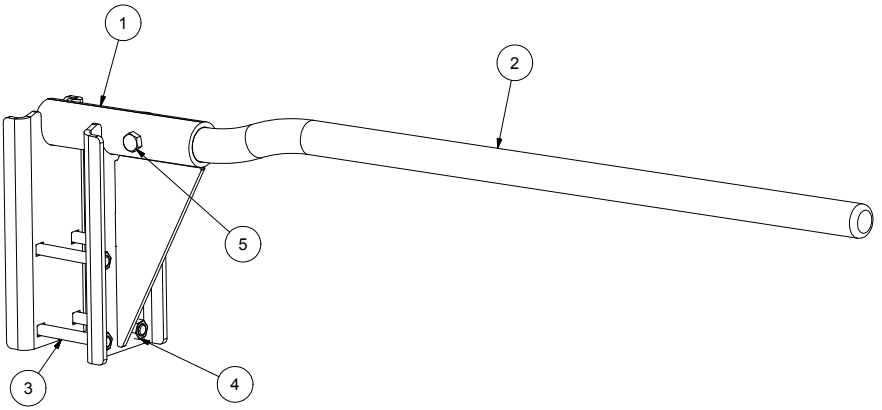


PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	210648-1	OIL TANK
2	1	470112	PLUG
3	1	470990	STRAINER
4	1	470014	FILTER HEAD
5	2	451985	HYDRAULIC FITTING
6	1	410558	HYDRAULIC FITTING
7	1	610006	ENGINE
8	1	322008	PUMP ADAPTOR
9	1	322020	RUBBER INSERT
10	1	322042	COUPLING
11	1	322050	COUPLING
12	1	468500	HYDRAULIC PUMP
13	1	451179	HYDRAULIC FITTING
14	1	451190	HYDRAULIC FITTING
15	3	501024	FLANGE NUT
16	1	210651-1	ENGINE SUPPORT
17	1	210652	BATTERY SUPPORT
18	1	210650	BATTERY ATTACHMENT

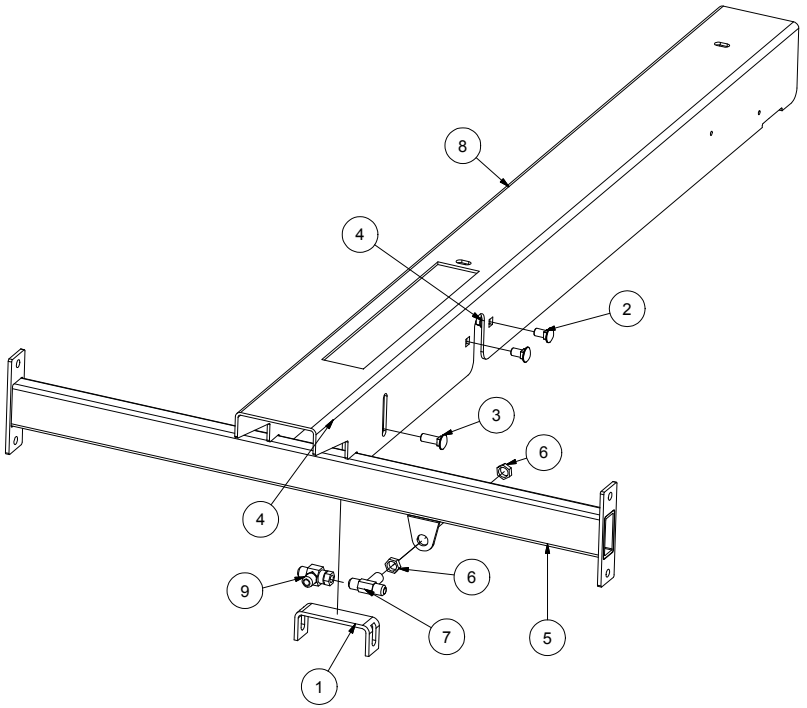
PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
19	1	470113	BATTERY
20	12	501032	NYLON NUT
21	4	500090	BOLT
22	6	500173	CARRIAGE BOLT
23	2	500114	BOLT
24	1	210649	AIR FILTER
25	1	470117	PLUG
26	4	507003	ALLEN SET SCREW
27	7	500084	BOLT
28	3	500088	BOLT
29	1	315044	BATTERY-ENGINE WIRE
30	1	470015	OIL FILTER
31	1	466999	HYDRAULIC VALVE
32	1	451998	
33	1	451992	
34	1	450196	HYDRAULIC FITTING
35	1	450548	HYDRAULIC FITTING



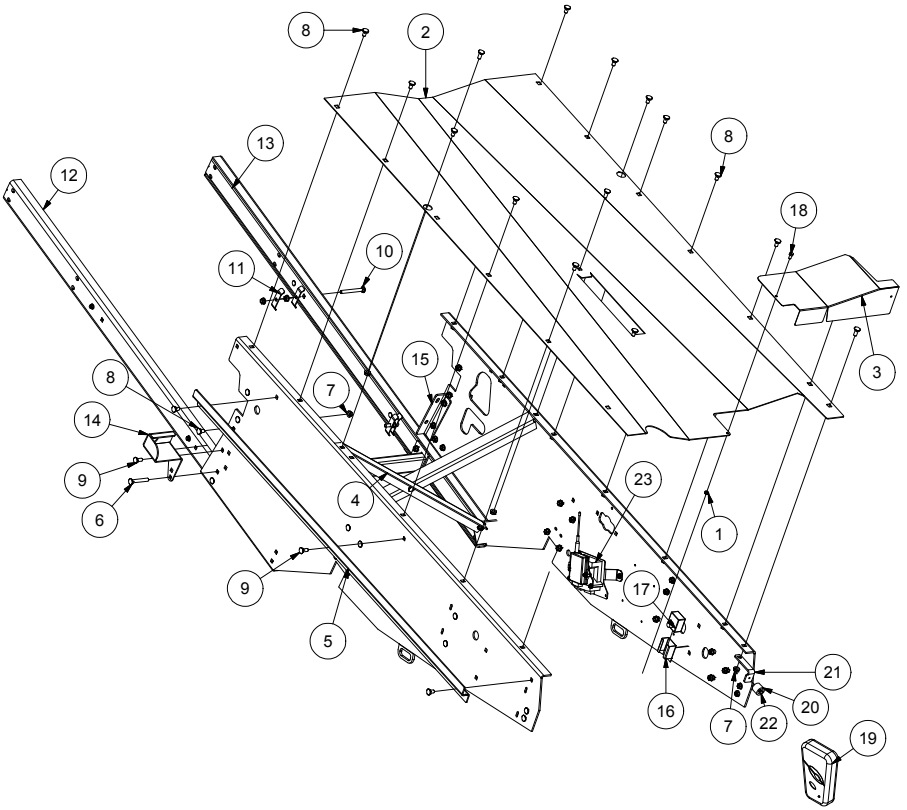
PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	210619-1	SPEAR SUPPORT
2	1	210620-2	SPEAR
3	4	500510	CARRIAGE BOLT
4	4	501024	FLANGE NUT
5	1	500185	BOLT



PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	210725-1	STOPPER
2	2	500500	CARRIAGE BOLT
3	2	500502	CARRIAGE BOLT
4	4	501024	FLANGE NUT
5	1	210197	REAR BEAM SUPPORT
6	2	450899	HYDRAULIC FITTING
7	1	450863	HYDRAULIC FITTING
8	1	210198	CENTRAL BEAM
9	1	450973	HYDRAULIC FITTING

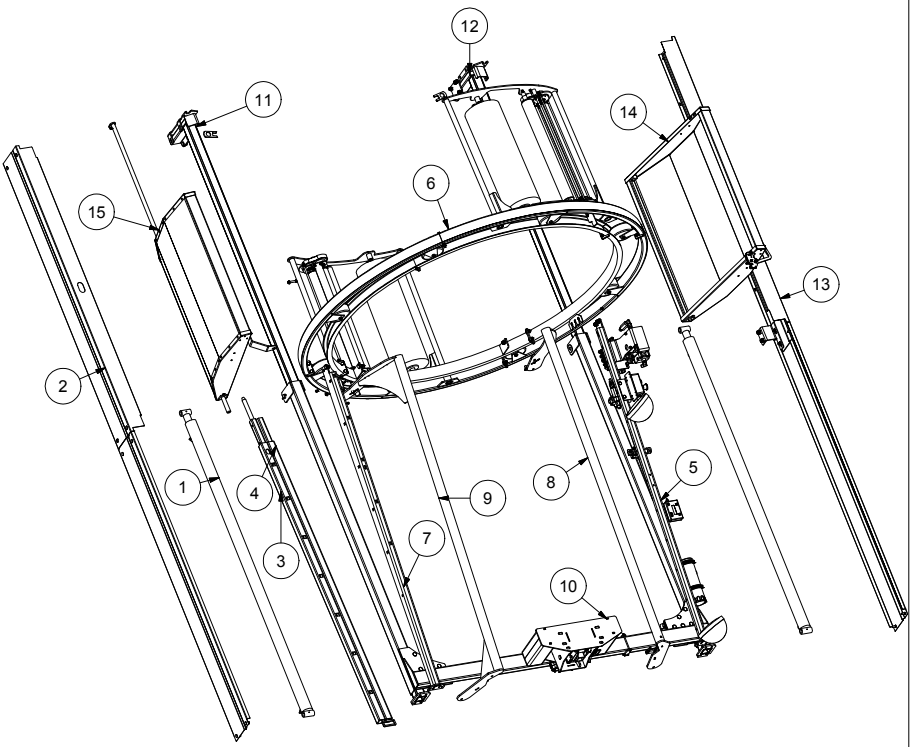


PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	28	501032	NYLON NUT
2	1	210081-1	BALE RECEPTION TABLE
3	1	210163-1	ENGINE COVER
4	2	210084	REAR REINFORCMENT FRAME
5	1	210087	GUIDE
6	4	500509	CARRIAGE BOLT
7	139	501024	FLANGE NUT
8	80	500500	CARRIAGE BOLT
9	19	500501	CARRIAGE BOLT
10	6	500511-1	CARRIAGE BOLT
11	4	210160	HOSE ATTACHMENT
12	2	210161	LEFT BOTOM FRAME
13	2	210162	RIGHT BOTTOM FRAME
14	1	210167	PUSHER POLE SUPPORT
15	2	210085-1	SIDE REAR REINFORCMENT
16	1	210823	REMOTE STARTER SUPPORT
17	1	315052	REMOTE STARTER RECIEVER
18	7	500082	BOLT
19	1	315053	HAND HELD REMOTE
20	1	325115	RUBBER DOOR HOLDER
21	1	210844	RUBBER SUPPORT
22	5	500001	BOLT
23	1	T1-CE	REMOTE STEERING
23	1	T1-PA	AUTOMATIC PILOT



PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	2	467289	HYDRAULIC CYLINDER
2	1	***	COMPLETE LEFT FENDER
3	1	210091-1	PUSH OFF POLE WITH SHAFT, NWS660
4	1	210101	PUSH OF POLE
5	1	***	COMPLETE RIGHT SUPPORT OF ROLL
6	1	***	HOOP
7	1	210171	COMPLETE LEFT SUPPORT OF ROLL
8	1	210172	RIGHT BALE GUIDE
9	1	210173	LEFT BALE GUIDE
10	1	210092-2	COMPLETE PUSHER FRAME
11	2	210200-2	LEFT PUSHER FRAME
12	1	210201-2	RIGHT PUSHER FRAME
13	1	***	COMPLETE RIGHT FENDER
14	1	***	COMPLETE RIGHT SHIELD
15	1	***	COMPLETE LEFT SHIELD

*** NEXT PAGES

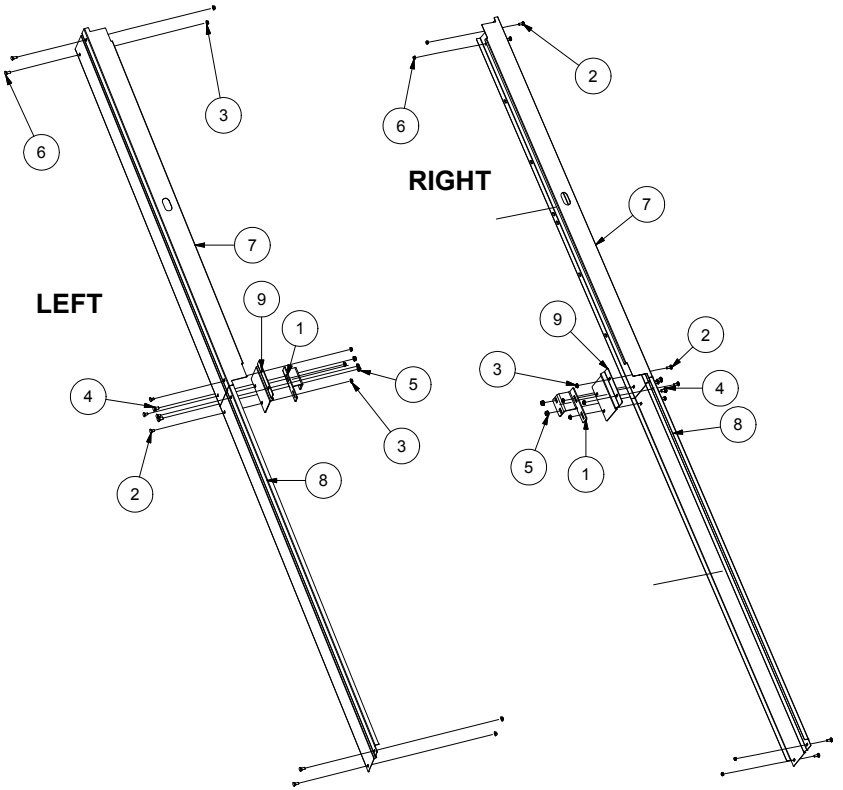


LEFT

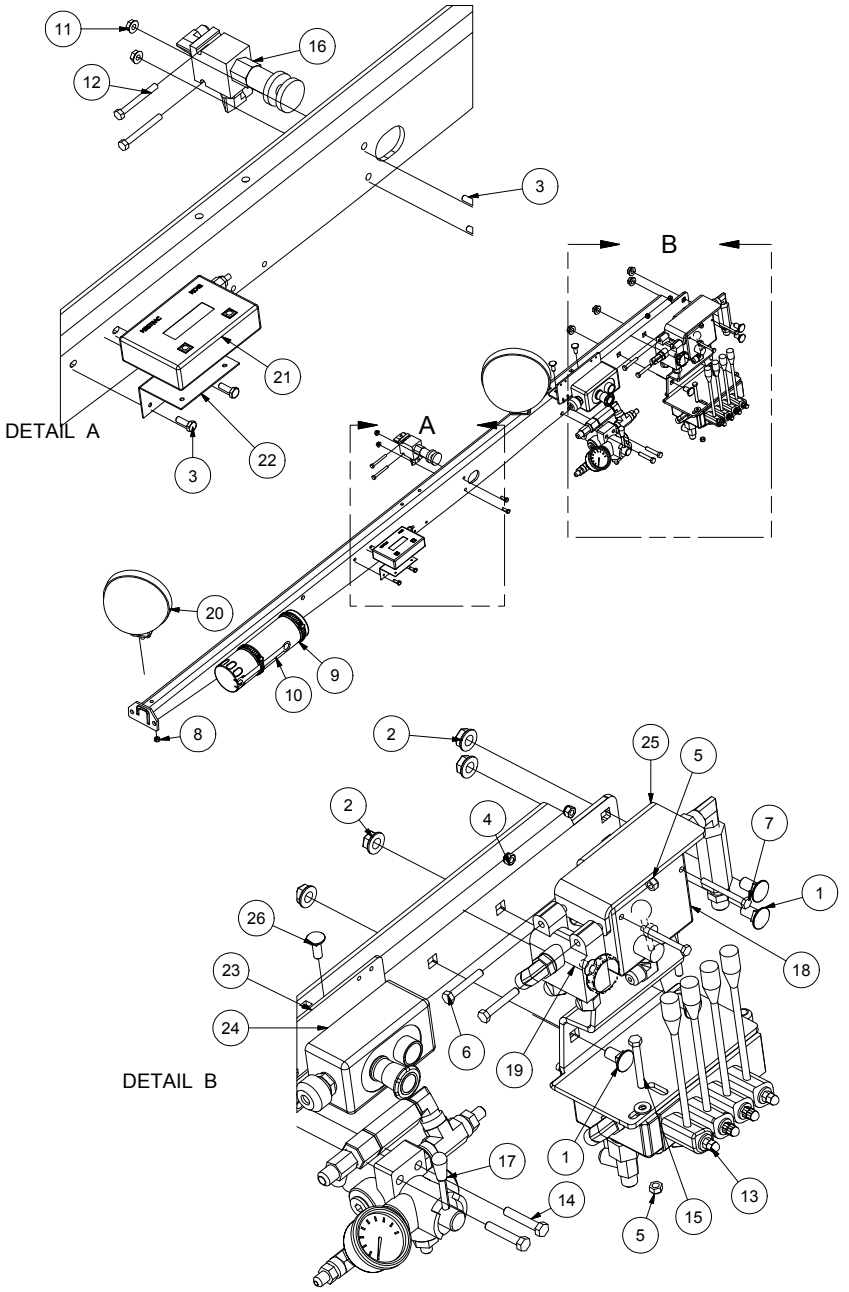
PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	210539	LEFT FENDER JOINT
2	4	500440	CARRIAGE BOLT
3	8	501022	FLANGE NUT
4	2	500500	CARRIAGE BOLT
5	2	501024	FLANGE NUT
6	4	500442	CARRIAGE BOLT
7	1	210541	FRONT LEFT FENDER
8	1	210540	REAR LEFT FENDER
9	1	210538-1	JOINT

RIGHT

PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	210544	RIGHT FENDER JOINT
2	8	500442	CARRIAGE BOLT
3	4	501022	FLANGE NUT
4	2	500500	CARRIAGE BOLT
5	2	501024	FLANGE NUT
6	4	501032	NYLON NUT
7	1	210541	FRONT RIGHT FENDER
8	1	210543	REAR RIGHT FENDER
9	1	210538-1	JOINT

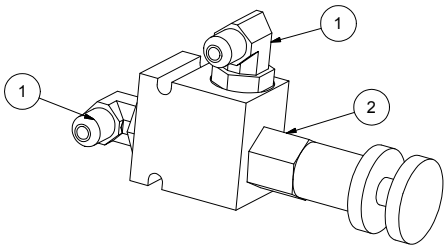


21 - SUPPORT OF ROLL AND VALVE

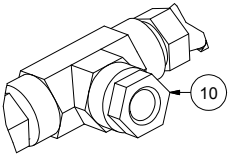


PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	4	500500	CARRIAGE BOLT
2	4	501024	FLANGE NUT
3	4	500004	BOLT
4	6	501030	NYLON NUT
5	5	501031	NYLON NUT
6	2	500052	BOLT
7	2	500017	BOLT
8	3	501032	NYLON NUT
9	1	325120	MANUAL CASE
10	2	210735	WRENCH KEY
11	2	501020	FLANGE NUT
12	2	500016	BOLT
13	1		VALVE (NEXT PAGE)
14	2	500092	BOLT
15	2	500055	BOLT
16	1		VALVE (NEXT PAGE)
17	1		VALVE (NEXT PAGE)
18	1		VALVE (NEXT PAGE)
19	1		VALVE (NEXT PAGE)
20	2	319880	WORK LIGHT
21	1	315080	BALE COUNTER
22	1	315080	WHIT BALLE CONTER
23	1	210891	EMERGENCY STOP SUPPORT
24	1	210138-2	EMERGENCY STOP
25	1	210549-2	VALVE SUPPORT
26	2	500442	CARRIAGE BOLT

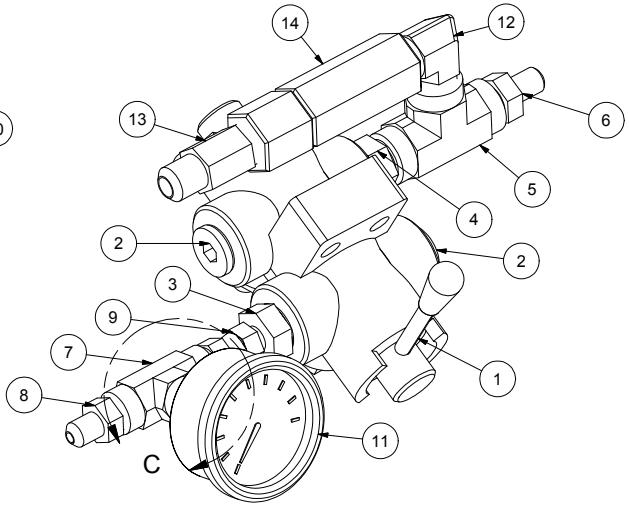
PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	2	451261	HYDRAULIC FITTING
2	1	468877	HYDRAULIC VALVE



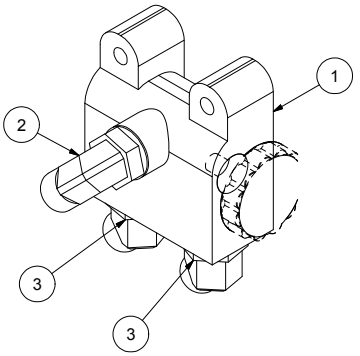
PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	465065	HYDRAULIC VALVE
2	2	451356	HYDRAULIC FITTING
3	3	451173	HYDRAULIC FITTING
4	1	451097	HYDRAULIC FITTING
5	1	450243	HYDRAULIC FITTING
6	1	450543	HYDRAULIC FITTING
7	1	450242	HYDRAULIC FITTING
8	1	450542	HYDRAULIC FITTING
9	1	450994	HYDRAULIC FITTING
10	1	450022	HYDRAULIC FITTING
11	1	470010	PRESSURE GAUGE
12	1	450196	HYDRAULIC FITTING
13	1	450877	HYDRAULIC FITTING
14	1	465878	CHECK VALVE



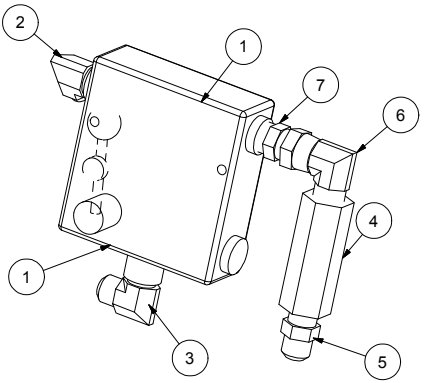
DETAIL C



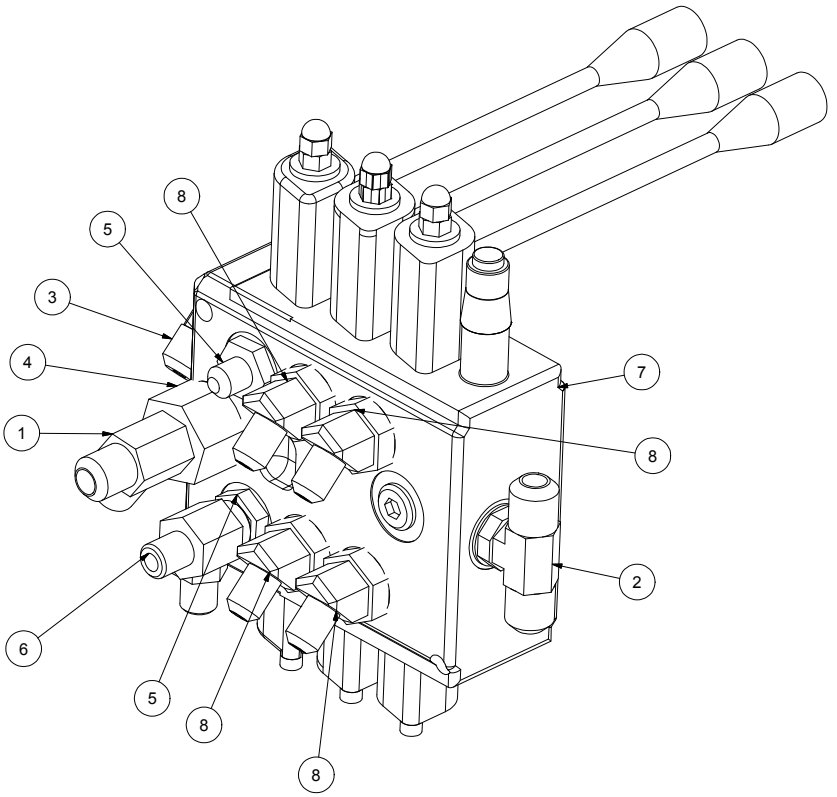
PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	465880	VALVE
2	1	451265	HYDRAULIC FITTING
3	2	451229	HYDRAULIC FITTING



PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	465983	SPEED CONTROL VALVE
2	1	450712	HYDRAULIC FITTING
3	1	450716	HYDRAULIC FITTING
4	1	465879	CHECK VALVE
5	1	450548	HYDRAULIC FITTING
6	1	450381	HYDRAULIC FITTING
7	1	450008	HYDRAULIC FITTING

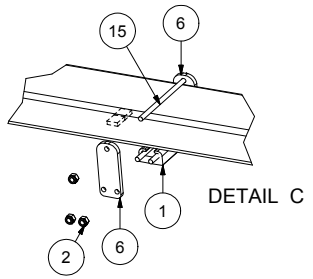


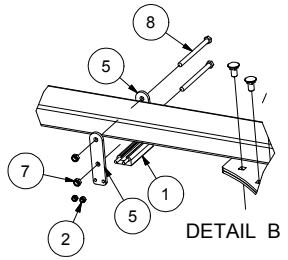
PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	450877	HYDRAULIC FITTING
2	1	451313	HYDRAULIC FITTING
3	1	451265	HYDRAULIC FITTING
4	1	451123	HYDRAULIC FITTING
5	2	451172	HYDRAULIC FITTING
6	1	450972	HYDRAULIC FITTING
7	1	465975	HYDRAULIC VALVE (3 SECTION)MAN.
7	1	465984-0	HYDRAULIC VALVE (4 SECTION)ELEC.
7	1	465985-0	HYDRAULIC VALVE (4 SECTION)MAN.
8	4	451227	HYDRAULIC FITTING

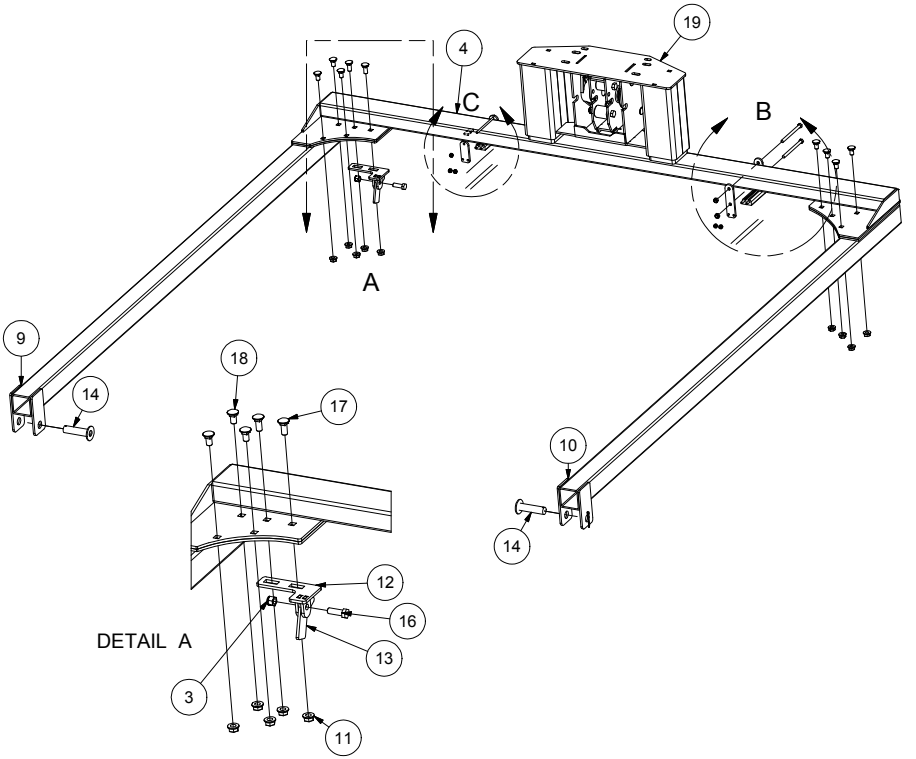


22 - COMPLETE PUSHER

PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	2	210671	TEFLON SKATE
2	13	501030	NYLON NUT
3	2	501034	NYLON NUT
4	1	210178-1	PUSHER SUPPORT
5	2	210562	LEFT SKATE SUPPORT
6	2	210563	RIGHT SKATE SUPPORT
7	3	501032	NYLON NUT
8	2	500108	BOLT
9	1	210179-2	RIGHT CYLINDER SUPPORT
10	1	210180-2	LEFT CYLINDER SUPPORT
11	13	501024	FLANGE NUT
12	1	210181-1	WEDGE SUPPORT
13	1	210182	WEDGE
14	2	210183	CYLINDER LOCK SUPPORT
15	5	500026	BOLT
16	1	500177	BOLT
17	6	500501	CARRIAGE BOLT
18	7	500500	CARRIAGE BOLT
19	1	210566-2	COMPLET PUSHER

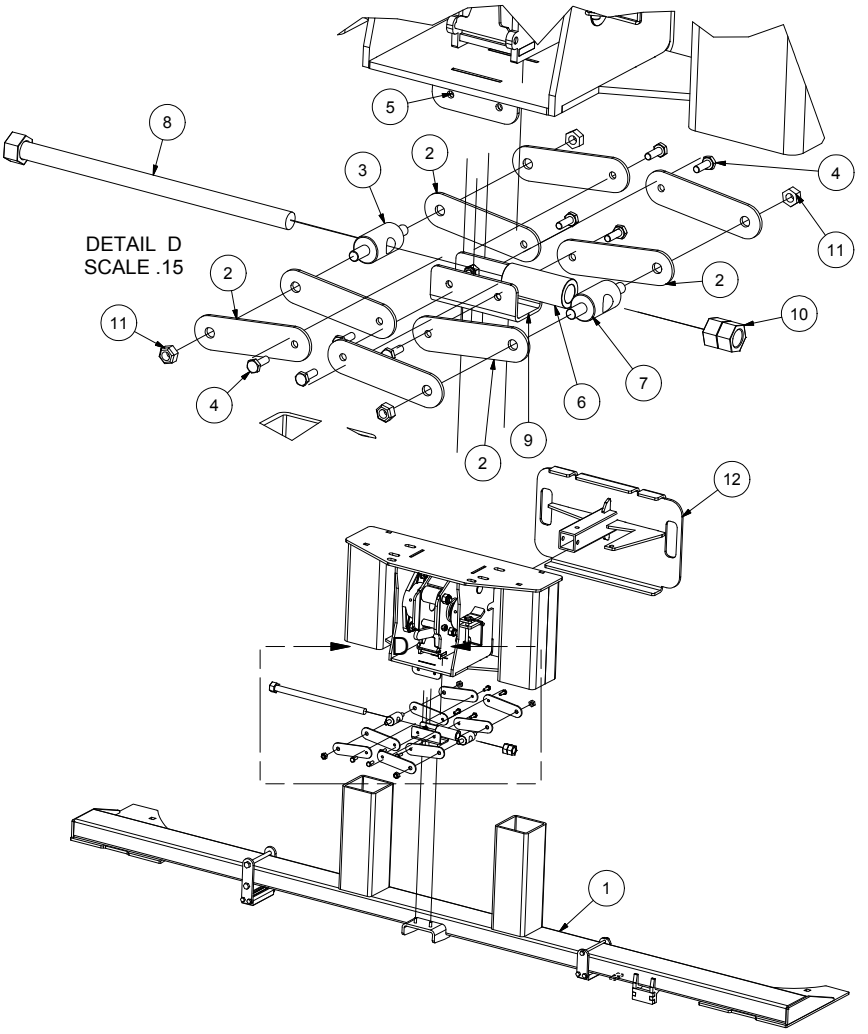






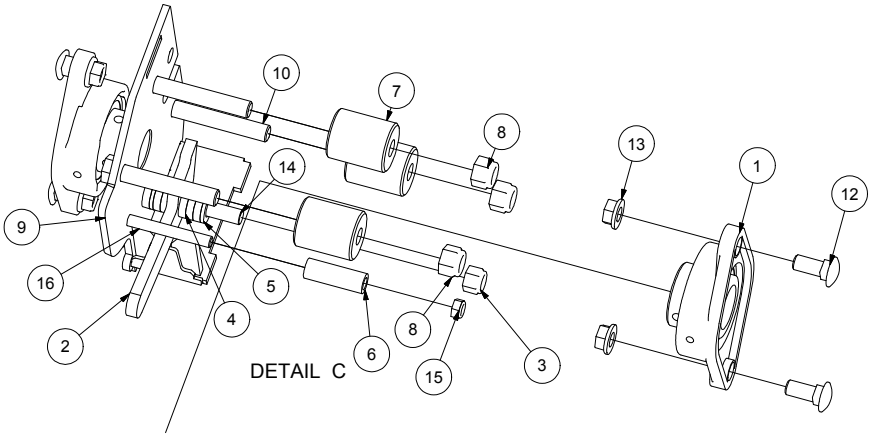
22 - COMPLETE PUSHER

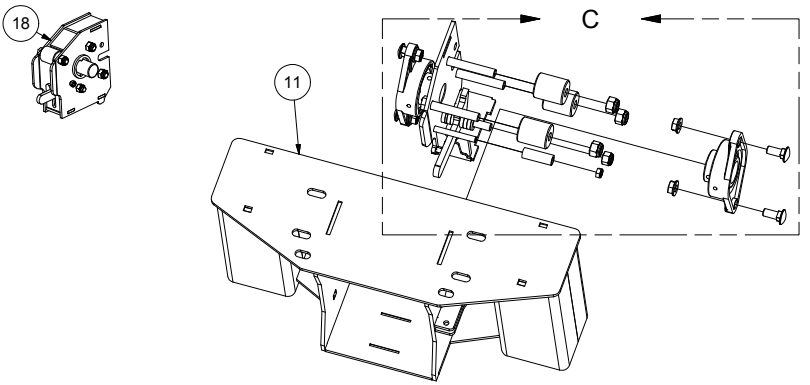
PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	210178-1	PUSHHER SUPPORT
2	8	210790	PUSHER PLATE
3	1	306020	JACK AXLE
4	10	500004	BOLT
5	8	501030	NYLON NUT
6	1	210816	STOPPER
7	1	306022	JACK AXLE
8	1	210792	ADJUSTMENT ROD
9	1	210791	JACK SUPPORT
10	2	501005	NUT
11	4	501042	NYLON NUT
12	1	210567-2	PUSHER PLATE



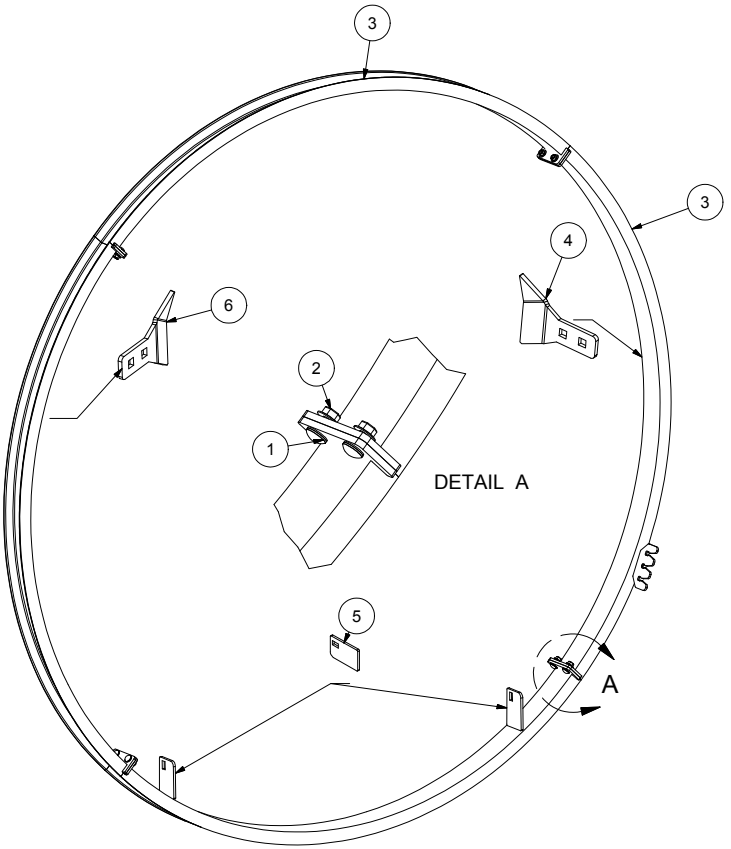
23 - PUSHER

PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	2	303024	BEARING
2	1	210568	WEDGE
3	1	501034	NYLON NUT
4	6	210722	SPACER
5	2	210740	SPACER
6	1	210833	SPACER TUBE
7	3	210672	NYLATRON BUSHING
8	3	500009	NYLON NUT
9	1	210723-2	SIDE FRAME SWIVEL HEART
10	3	500230	BOLT
11	1	210572-2	PUSHER FRAME
12	4	500501	CARRIAGE BOLT
13	4	501024	FLANGE NUT
14	1	500187	BOLT
15	1	501032	NYLON NUT
16	1	500100	BOLT
17	1	320023	LOCK PIN
18	1	210724-2	COMPLETE SWIVEL HEART

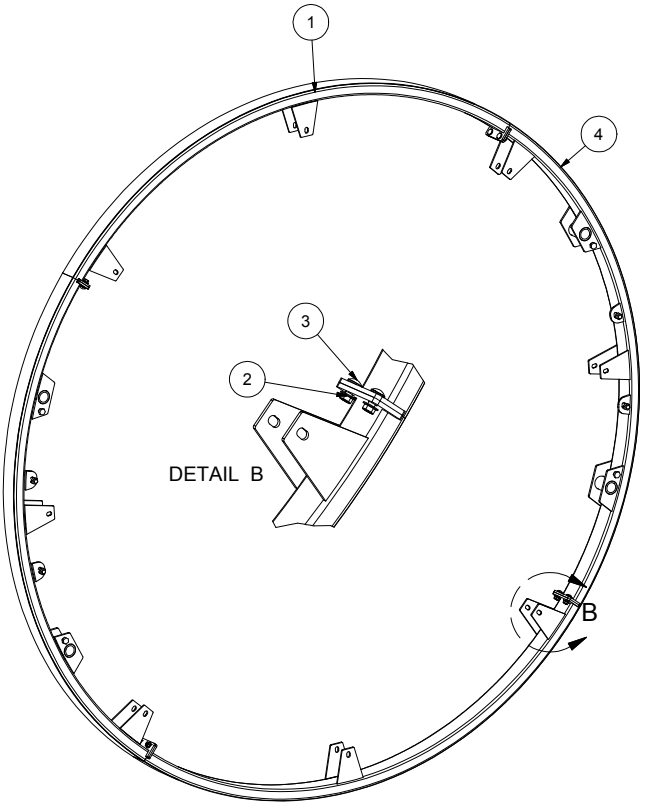




PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	8	500442	CARRIAGE BOLT
2	8	501022	FLANGE NUT
3	4	210185	INSIDE HOOP SECTION
4	2	210154-1	RIGHT HOOP SECTION ATTACHMENT
5	2	210187	HOOP SECTION ATTACHMENT
6	1	210154-2	LEFT HOOP SECTION ATTACHMENT

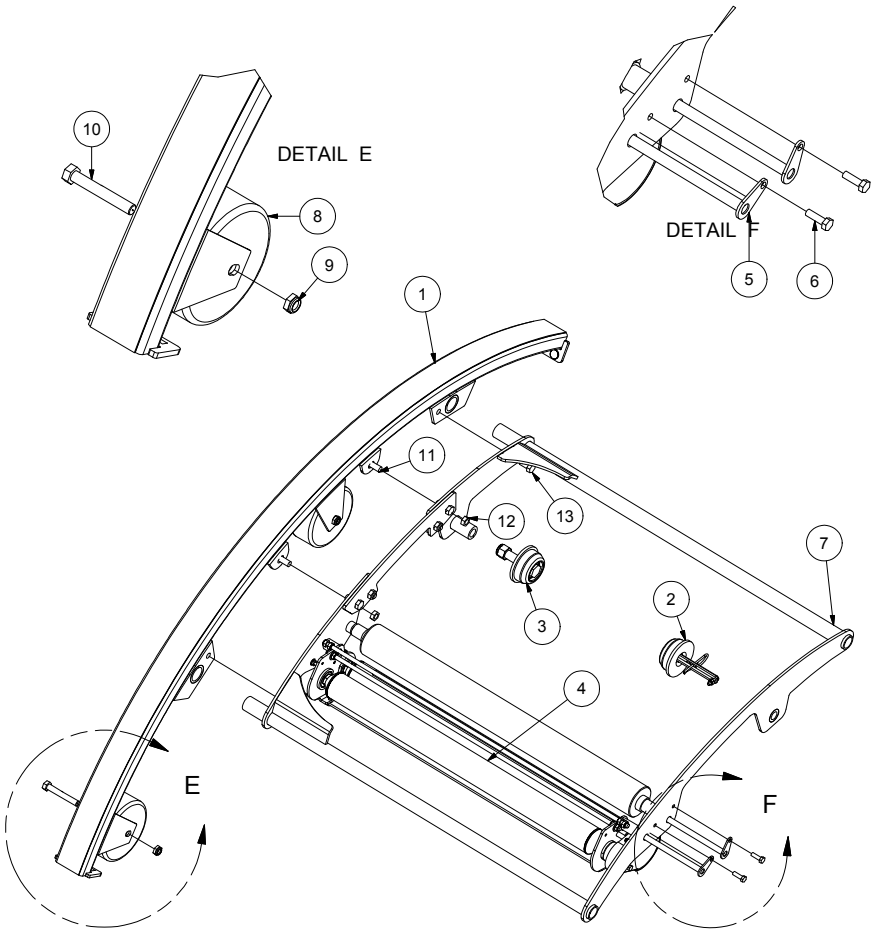


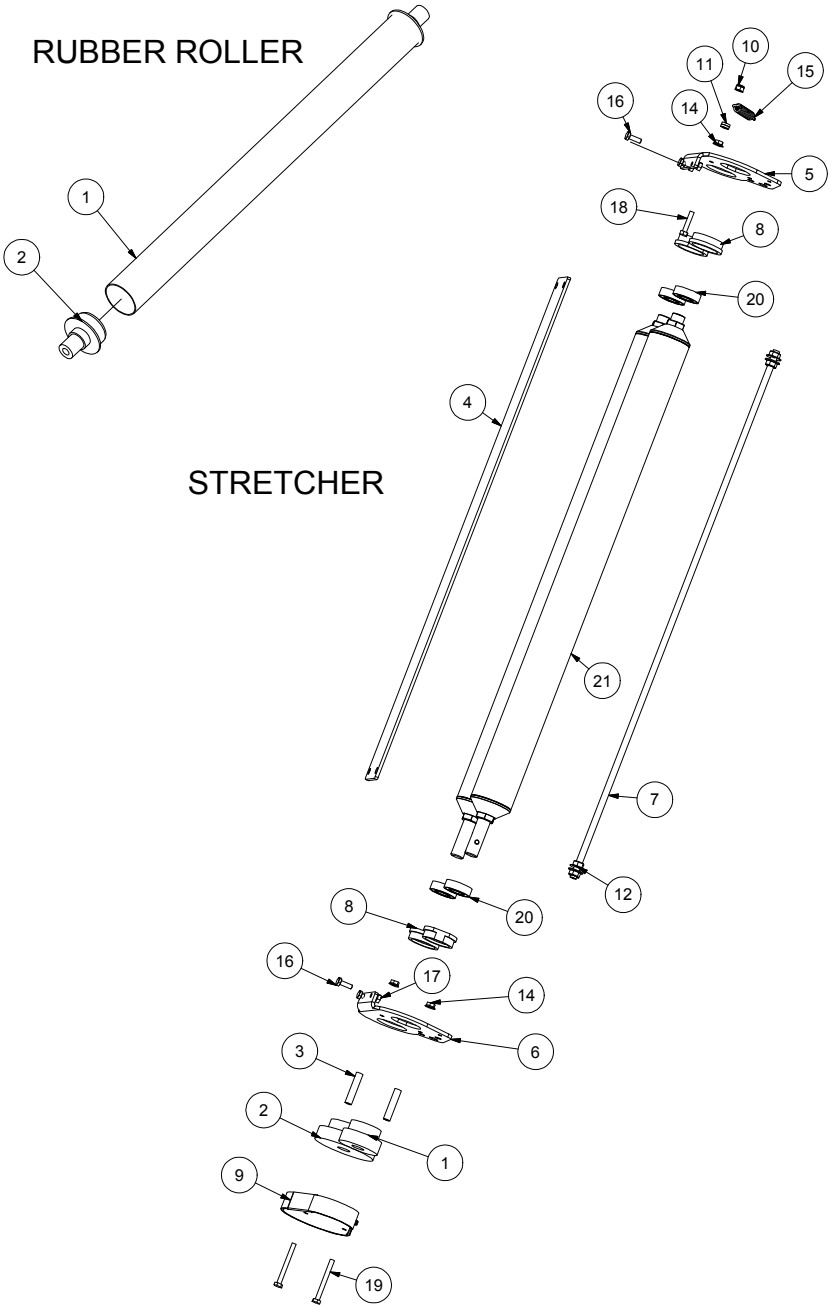
PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	2	210189-1	HOOP SECTION
2	4	501022	FLANGE NUT
3	4	500442	CARRIAGE BOLT
4	2	210205	HOOP SECTION FOR STRTCHER



24 - STRETCHER ROLL SECTION

PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	210205	HOOP SECTION FOR STRTCHER
2	1	210584	PLASTIC ROLLER FIXEDHOLDER
3	1	210583	PLASTIC ROLLER ADJUSTABLE HOLDER
4	1	279004	STRETCHER
5	2	210585	RETAINING ROD
6	2	500044	BOLT
7	1	210206	STRETCHER FRAME
8	2	322100	HOOP WHEEL AND BOLT
9	2	COME WHIT WHEEL	HALF NYLON NUT
10	2	COME WHIT WHEEL	BOLT
11	2	500175	BOLT
12	4	501004	NUT
13	2	500173	BOLT




RUBBER ROLLER
STRETCHER
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RUBBER ROLLER

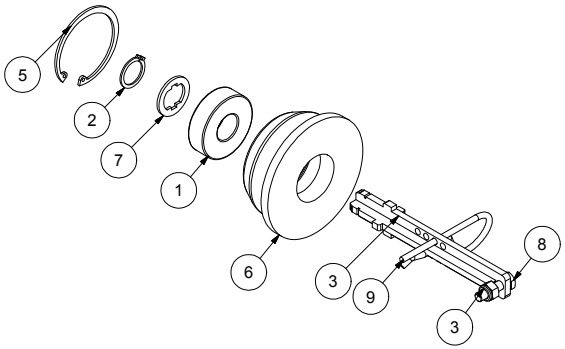
PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	210676	TUBING
2	2	306018	RUBBER ROLLER CAP

STRETCHER

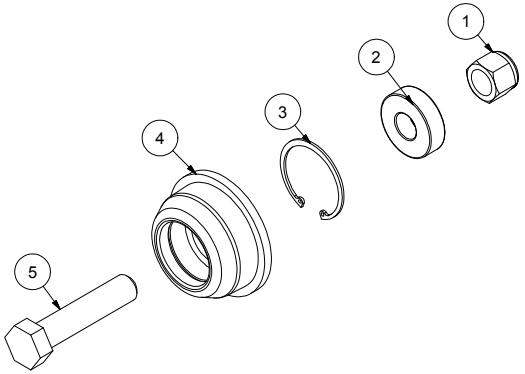
PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	279102	SMALL GEAR
2	1	279100	LARGE GEAR
3	2	210591	SPACER TUBE
4	1	210586	RETAINING PLATE
5	1	210587	STRETCHER REAR PLATE
6	1	210588	STRETCHER FRONT PLATE
7	1	210720	RETAINING ROD
8	4	279006	BEARING CUP
9	1	210589	COVER
10	1	501030	NYLON NUT
11	2	210590	WASHER
12	4	501022	FLANGE NUT
14	3	501020	FLANGE NUT
15	1	304005	SPRING
16	4	500004	BOLT
17	4	501000	NUT
18	1	500008	BOLT
19	2	500017	BOLT
20	4	303018	BEARING
21	2	224069	ROLL

26 - ROLL SUPPORT

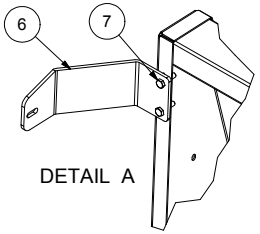
PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	303012	BEARING
2	1	320028	RETAINING RING
3	1	210721	ADJUSTABLE PIN
4	1	501030	NYLON NUT
5	1	320027	RETAINING RING
6	1	279007	PLASTIC ROLL HOLDER
7	1	210592	WASHER
8	1	500006	BOLT
9	1	320039	HITCH PIN



PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	501036	NYLON NUT
2	1	303012	BEARING
3	1	320027	RETAINING RING
4	1	279007	PLASTIC ROLL HOLDER
5	1	500297	BOLT

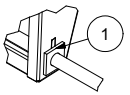


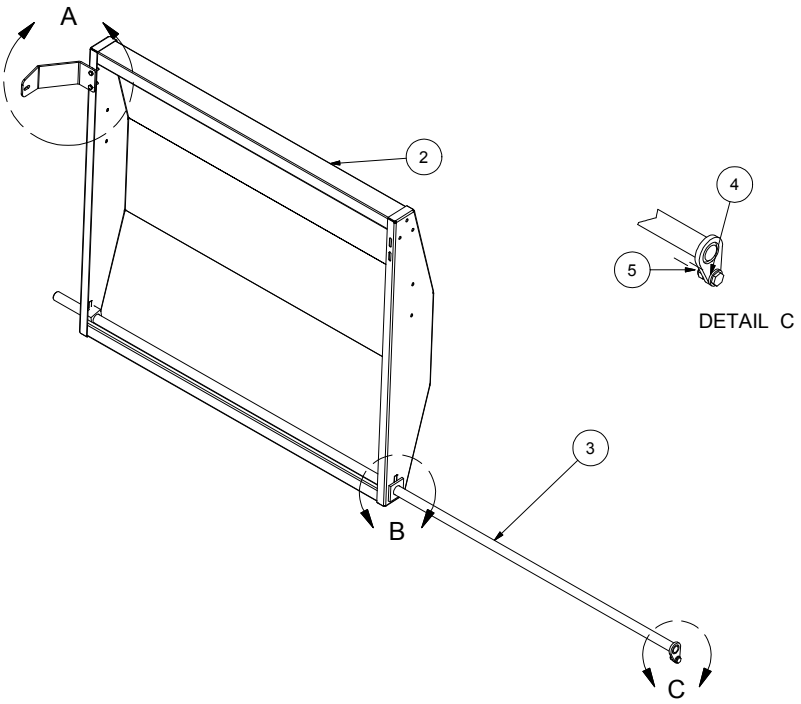
PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	2	279001	PLASTIC BUSHING
2	2	210681-1	SHIELD
3	1	210683-1	SHIELD SUPPORT
4	1	500602	FLANGE BOLT
5	1	501032	NYLON NUT
6	1	210682	FIXED SHIELD ATTACHMENT
7	2	500006	BOLT



DETAIL A

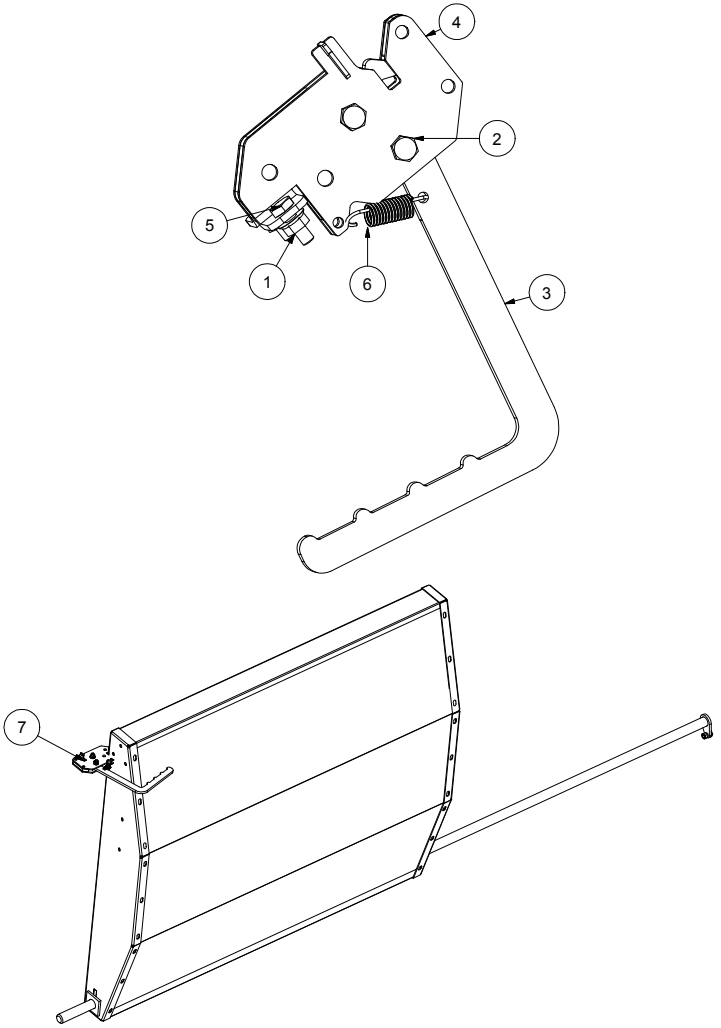
DETAIL B



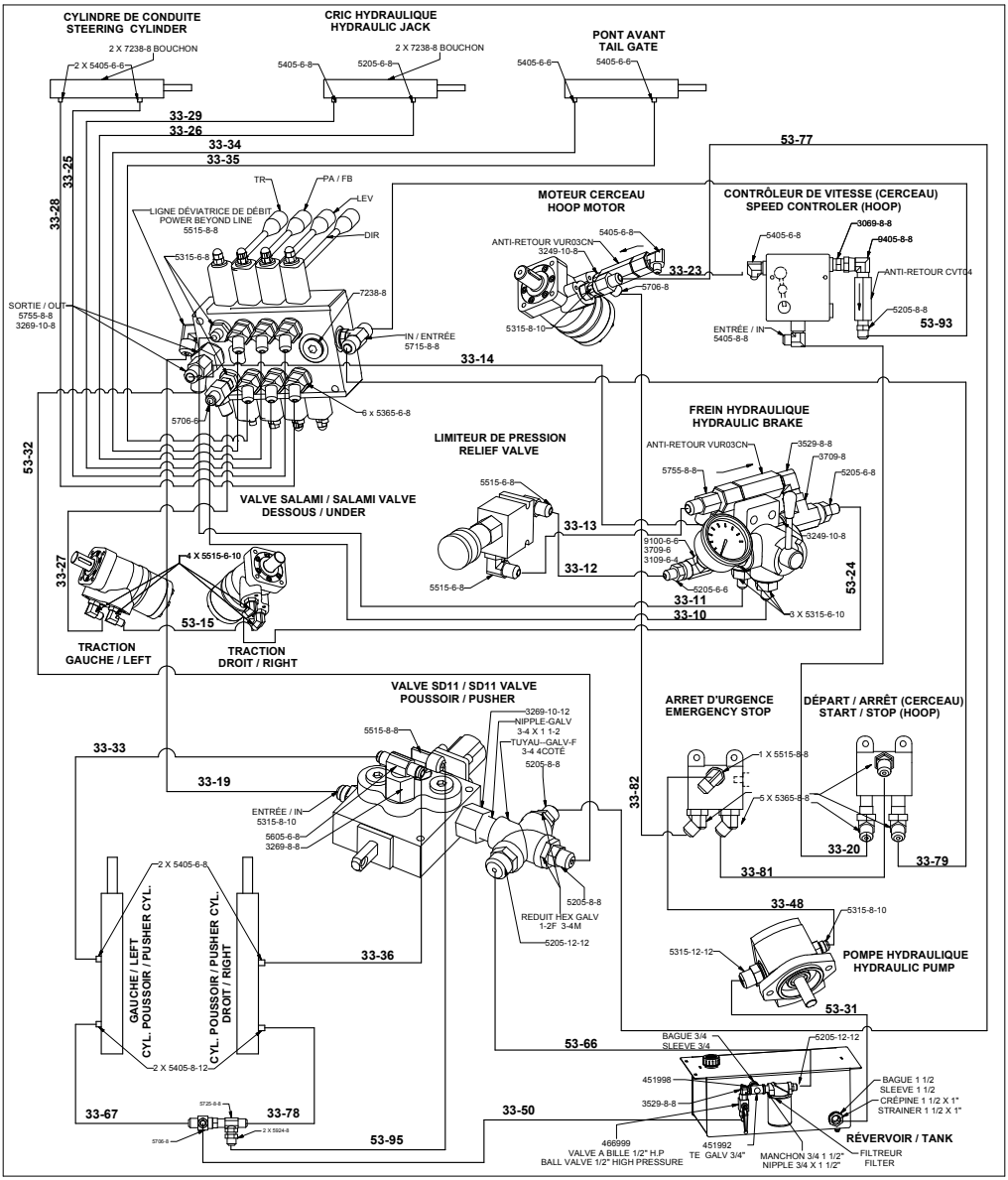


DETAIL C

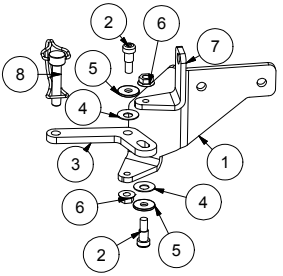
PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	3	501020	FLANGE NUT
2	2	500006	BOLT
3	1	210755	SHIELD HANDLE
4	1	210809	SHIELD LOCK
5	2	500004	BOLT
6	1	304021	SPRING
7	1	210831	LOCK



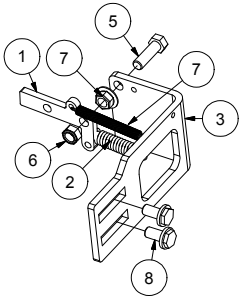
28-DIAGRAMME HYDRAULIQUE NWS-660E / NWS-660E HYDRAULIC DIAGRAM



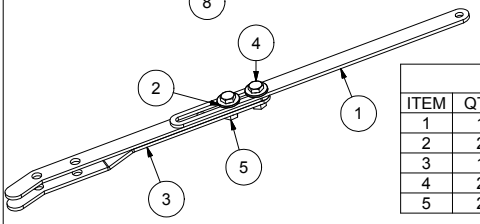
LISTE DE PIÈCES				
ITEM	QTÉ-QT	PIÈCE/PAR	DESCRIPTION FRANÇAISE	ENGLISH DESCRIPTION
1	1	210749	BOYAU 33-10	HOSE 33-10
2	1	210748	BOYAU 33-11	HOSE 33-11
3	1	210753	BOYAU 33-12	HOSE 33-12
4	1	210752-1	BOYAU 33-13	HOSE 33-13
5	1	210751-1	BOYAU 33-14	HOSE 33-14
6	1	210686-2	BOYAU 33-19	HOSE 33-19
7	1	210687-1	BOYAU 33-14	HOSE 33-20
8	1	210688-1	BOYAU 33-23	HOSE 33-23
9	1	210690-2	BOYAU 33-25	HOSE 33-25
10	1	210691	BOYAU 33-26	HOSE 33-26
11	1	210692-1	BOYAU 33-27	HOSE 33-27
12	1	210693-2	BOYAU 33-28	HOSE 33-28
13	1	210694-1	BOYAU 33-29	HOSE 33-29
14	1	210697-2	BOYAU 33-33	HOSE 33-33
15	1	210698-1	BOYAU 33-34	HOSE 33-34
16	1	210699-1	BOYAU 33-35	HOSE 33-35
17	1	210700-2	BOYAU 33-36	HOSE 33-36
18	1	210701-1	BOYAU 33-48	HOSE 33-48
19	1	210703-1	BOYAU 33-67	HOSE 33-67
20	1	210705-1	BOYAU 33-78	HOSE 33-78
21	1	210706-2	BOYAU 33-79	HOSE 33-79
22	1	210707-2	BOYAU 33-81	HOSE 33-81
23	1	210708-1	BOYAU 33-82	HOSE 33-82
24	1	210685-1	BOYAU 53-15	HOSE 53-15
25	1	210689-2	BOYAU 53-24	HOSE 33-24
26	1	210695-2	BOYAU 53-31	HOSE 33-31
27	1	210696-2	BOYAU 53-32	HOSE 53-32
28	1	210702-1	BOYAU 53-66	HOSE 53-66
29	1	210704-2	BOYAU 53-77	HOSE 53-77
30	1	210709-3	BOYAU 53-93	HOSE 33-93
31	1	210747-1	BOYAU 53-95	HOSE 33-95
32	1	210894	BOYAU 33-50	HOSE 33-50



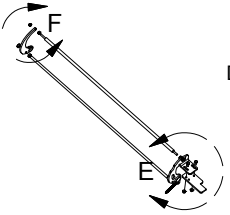
PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	210799-3	PIVOT SUPPORT
2	2	500572	SHOULDER SCREW
3	1	210807	PIVOT
4	2	502035	DISC SPRING
5	2	502002	FLAT WASHER
6	2	501020	FLANGE NUT
7	1	210801-3	ACTIVATION HOOK
8	1	320031	LOCK PIN



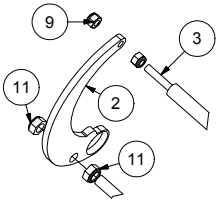
PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	210199	TRIGGER
2	1	304005	SPRING
3	1	210796	TRIGGER SUPPORT
4	1	304022	SPRING
5	1	500086	BOLT
6	1	501032	NYLON NUT
7	1	501022	FLANGE NUT
8	2	500602	FLANGE BOLT



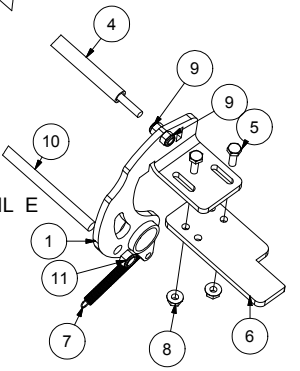
PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	210358-1	TANSFER ROD 1
2	2	502002	FLAT WASHER
3	1	210359	TANSFER ROD 2
4	2	500004	BOLT
5	2	501020	FLANGE NUT



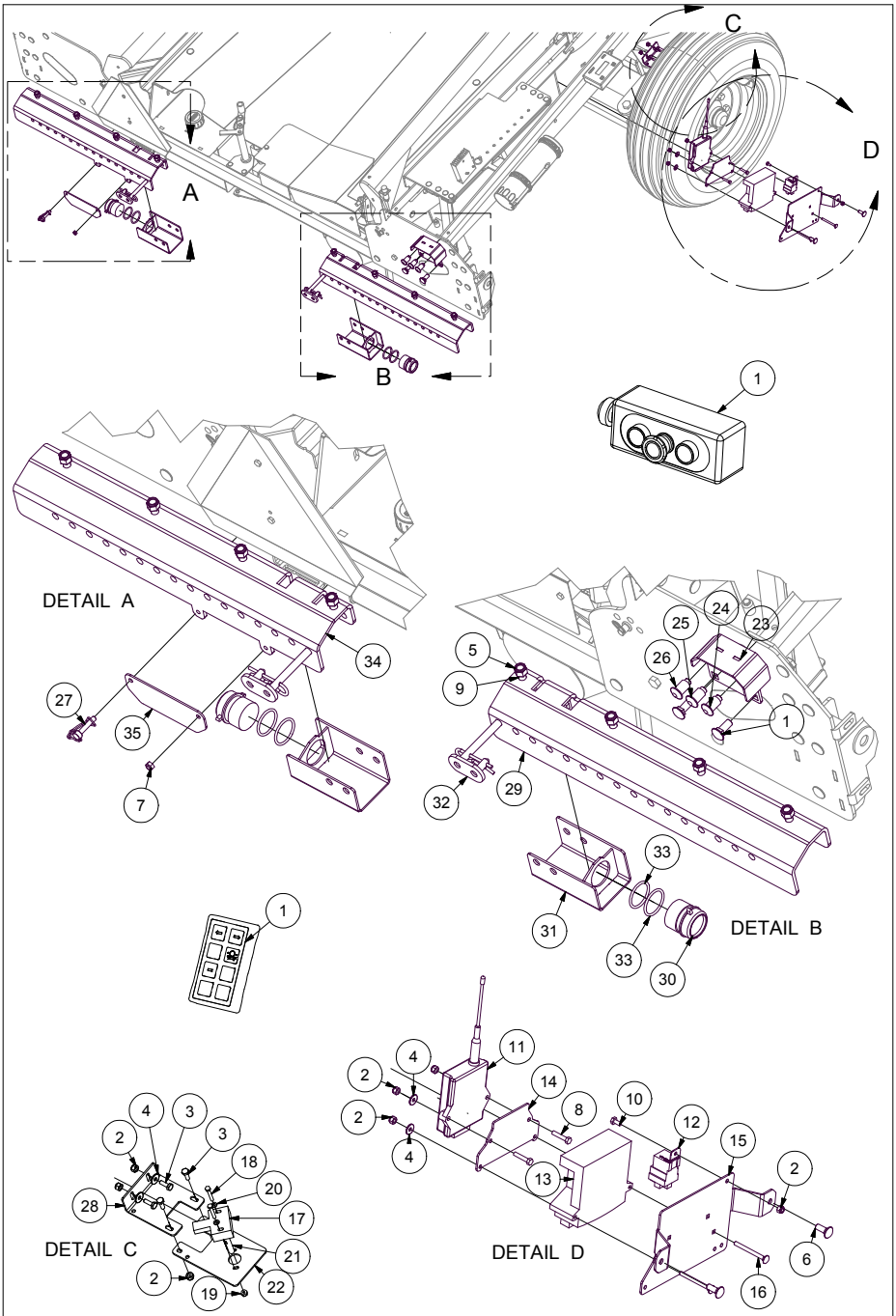
DETAIL F



DETAIL E



PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	210806	INSIDE HALF MOON SUPPORT
2	1	210794	OUTSIDE HALF MOON SUPPORT
3	1	210795	THREADED ROD
4	1	210805	PLASTIC TUBE
5	2	500004	BOLT
6	1	210797	TRIPPING PLATE
7	1	304022	SPRING
8	2	501020	FLANGE NUT
9	4	501030	NYLON NUT
10	1	306034	ROD
11	4	501032	NYLON NUT


A
B
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DETAIL A
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DETAIL C
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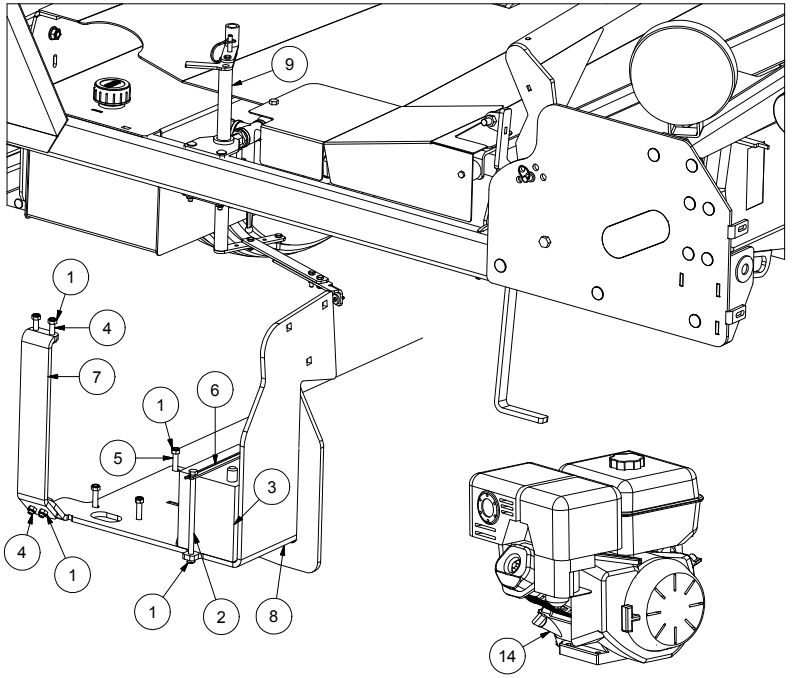
DETAIL D

PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	4	500501	CARRIAGE BOLT
2	4	501030	NYLON NUT
3	4	500004	BOLT
4	2	502002	FLAT WASHER
5	8	501034	NYLON NUT
6	2	500442	CARRIAGE BOLT
7	1	501031	NYLON NUT
8	2	500008	BOLT
9	8	500175	BOLT
10	5	500001	BOLT
11	1	315133	RECCEIVER HETRINIC
12	1	900603	RELEY
13	1	315081	COMPUTER
14	1	210360	RECEIVER SUPPORT
15	1	210361	CONTROLLER SUPPORT
16	2	500368	CARRIAGE BOLT
17	1	315103	SENSOR
18	2	500348	BOLT
19	2	501049	NYLON NUT
20	2	502015	WASHER
21	1	223399	ACTIVATOR FOR SENSOR
22	1	210333	SENSOR SUPPORT
23	1	210339	LIGHT GUARD
24	1	900564	YELLOW LIGHT KIT
25	1	900565	GREEN LIGHT KIT
26	1	900566	RED LIGHT KIT
27	2	320031	LOCK PIN
28	1	210898	FRAME SENSOR SUPPORT
29	1	210334	RIGHT GUARD
30	2	315101	SENSOR
31	1	210337	RIGHT SENSOR BOX
32	2	210336	PIN
33	4	467755	ORING
34	1	210335	LEFT GUARD
35	1	210400	LOCK
36	1	315155	3 FONCTION REMOTE
37	1	315132	REMOTE CONTROL

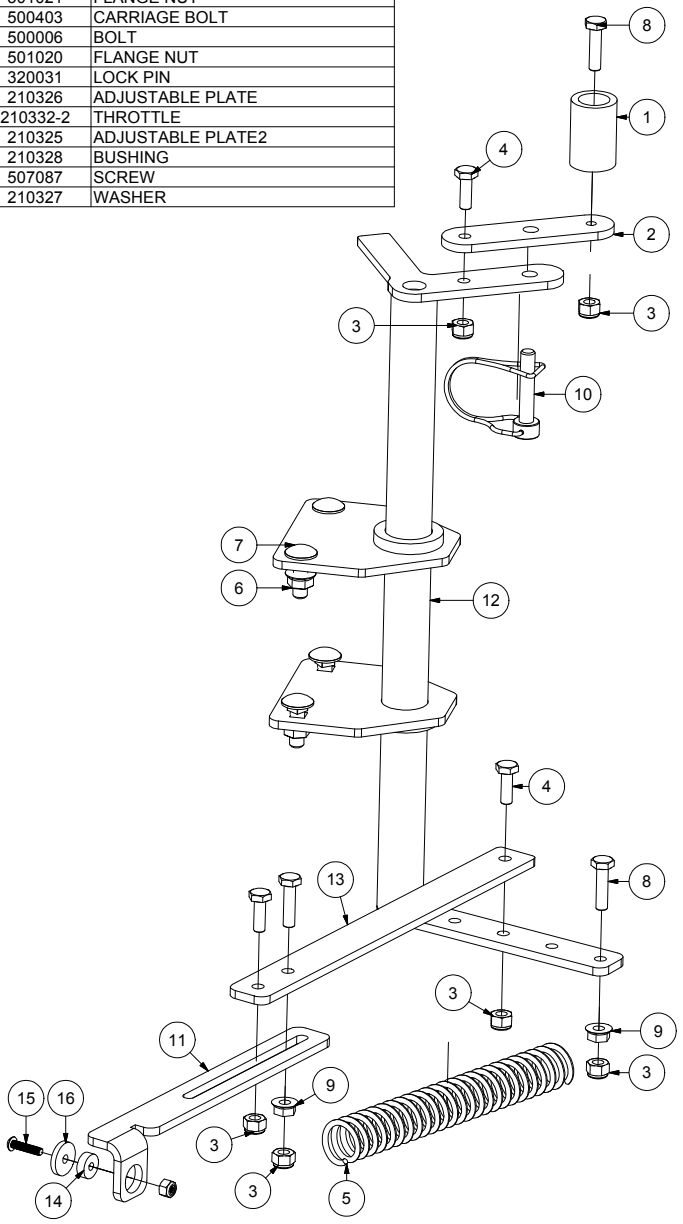


PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	10	501032	NYLON NUT
2	4	500114	BOLT
3	2	470113	BATTERY
4	10	500086	BOLT
5	4	500090	BOLT
6	1	210650	BATTERY ATTACHMENT
7	1	210896-2	SUPPORT REINFORCMENT
8	1	210895-2	ENGINE SUPPORT
9	1	***	THROTLLE
10	1	T1-DIES	ENGINE

*** See other page

31 - THROTTLE CONTROL

PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	1	306031	PLASTIC ROLLER
2	1	210624-2	ACTIVATION PLATE
3	6	501030	NYLON NUT
4	3	500004	BOLT
5	1	310015	SPRING
6	4	501021	FLANGE NUT
7	4	500403	CARRIAGE BOLT
8	3	500006	BOLT
9	2	501020	FLANGE NUT
10	1	320031	LOCK PIN
11	1	210326	ADJUSTABLE PLATE
12	1	210332-2	THROTTLE
13	1	210325	ADJUSTABLE PLATE2
14	1	210328	BUSHING
15	1	507087	SCREW
16	1	210327	WASHER



PARTS LIST			
ITEM	QTY	PART	DESCRIPTION
1	4	500084	BOLT
2	2	501021	FLANGE NUT
3	2	500360	CARRIAGE BOLT
4	4	500082	BOLT
5	8	501022	FLANGE NUT
6	1	470032	GAS TANK
7	1	210364	GAS TANK LEFT SUPPORT
8	1	210363	GAS TANK RIGHT SUPPORT
9	1	210362	GAS VALVE SUPPORT
10	1	470027	GAS VALVE
11	1	470026	GAZ FILTER