

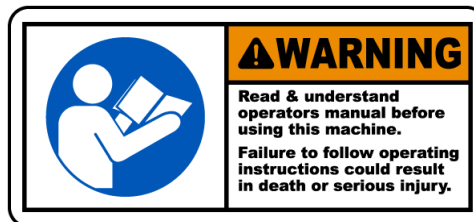
pikrite HR 250

Hydra-Ram  
SPREADERS

# OPERATION AND PARTS MANUAL



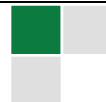
PROUDLY MADE IN THE USA



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DECEMBER 2020

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Some illustrations may not represent the spreader model you have; however, the principles of operation and maintenance are the same. If you have questions specific to your spreader please contact your dealer.

**SPECIFICATIONS AND DESIGN SUBJECT TO CHANGE WITHOUT NOTICE**

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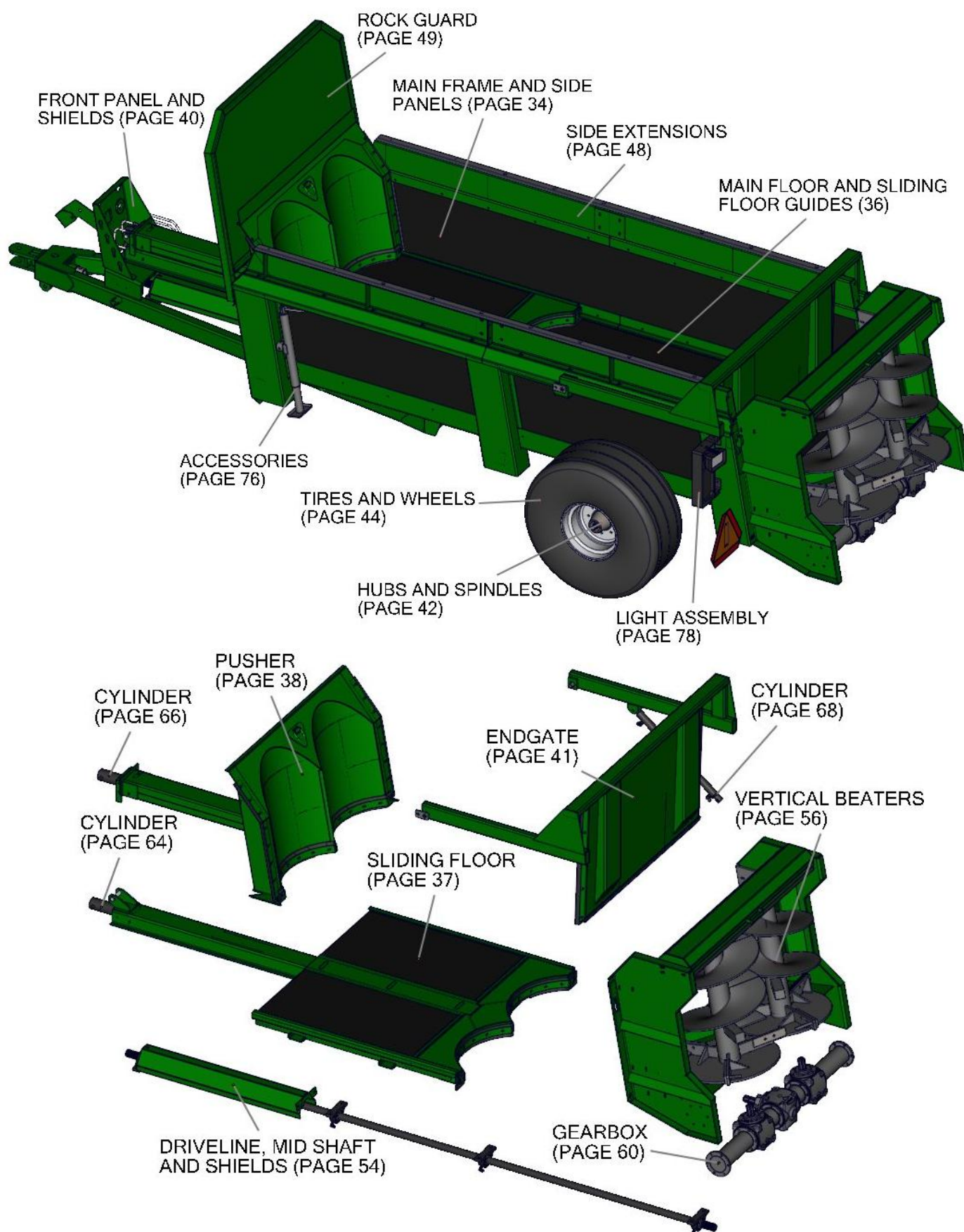
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## TO THE NEW OPERATOR OR OWNER

Since 1986 Pik Rite equipment has been developed by people who work as hard as you do in the fields, on the farm and on site. Our goal is to deliver products that get the job done with the most efficient results. If you want tough, dependable people and products you can count on, we've got your back.

This manual is provided to all our customers of newly manufactured manure spreaders to create an awareness of all maintenance expectations and dangers that may be encountered when owning this equipment. This manual should be kept for all future references. Please review these operating instructions carefully, then sign and date the last page of this document and return it to Pik Rite Inc. for processing. This will activate your warranty and verify that you have read and understand the following operating instructions and warnings. In the event you have questions or encounter other applications not discussed in this manual, please call before proceeding.

***Congratulations and Thank You*** for choosing a quality manure spreader manufactured by Pik Rite Inc. We believe you'll be very satisfied with the purchase, and we appreciate your patronage.

## PRINCIPLES OF OPERATION

The legacy of the 2-stage hydraulic push began with the John Deere Hydra-Push spreaders. Pik Rite continues the tradition with the Hydra-Ram series, which are designed to efficiently and uniformly spread manure. Equipped with a double hydraulic cylinder these spreaders also have a sliding floor. Each Hydra-Ram spreader is built to withstand the demands of farm life. All side and floor panels are constructed with a laminated poly covered finish for maximum strength and durability.

***Less Compaction*** – This line of tough machines uses both a sliding floor and a moving front panel to deliver the material to the beaters. The sliding floor is pushed back first, using an engineered hydraulic cylinder. When fully extended, the front panel moves back to unload the box completely.

***Less Maintenance*** – The Hydra-Ram is engineered to get the job done with fewer moving parts. This design efficiency extends the life of the spreader while requiring less maintenance and down-time than other manufacturer's equipment. Auger systems tend to compact the material into clumps, causing uneven distribution and increased wear on the beater system. The 2-stage hydraulic push technology greatly reduces compaction and provides optimal clean-out.

***Less Time, Spread Faster*** – The Hydra-Ram 2-stage push system delivers the material to the beaters at an even and controlled speed. Manual and/or electric over hydraulic flow controls allow you to unload the material faster than auger or side sling machines.





## RECOGNIZE SAFETY INFORMATION

This is the safety-alert symbol. When you see this symbol on your machine or in this manual be alert to the potential of physical injury.

**Obey all safety messages that follow this symbol to avoid possibly injury or death.**

## UNDERSTAND SIGNAL WORDS

A signal word – DANGER, WARNING, or CAUTION – is used with the safety-alert symbol. DANGER identifies the most serious hazards.

**DANGER** indicates a hazardous situation which, if not avoided, **will** result in death or serious injury.

**WARNING** indicates a hazardous situation which, if not avoided, **could** result in death or serious injury.

**CAUTION** indicates a hazardous situation which, if not avoided, **could** result in minor or moderate injury.

**NOTICE** is used to address practices not related to physical injury.

**SAFETY INSTRUCTIONS** are used to indicate specific safety-related instructions or procedures.

## FOLLOW SAFETY INSTRUCTIONS

Carefully read all safety messages in this manual and on your machine safety labels.

Learn how to operate the machine and how to use controls properly. Do not let anyone operate without instruction.

Keep your machine in proper working condition. Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.

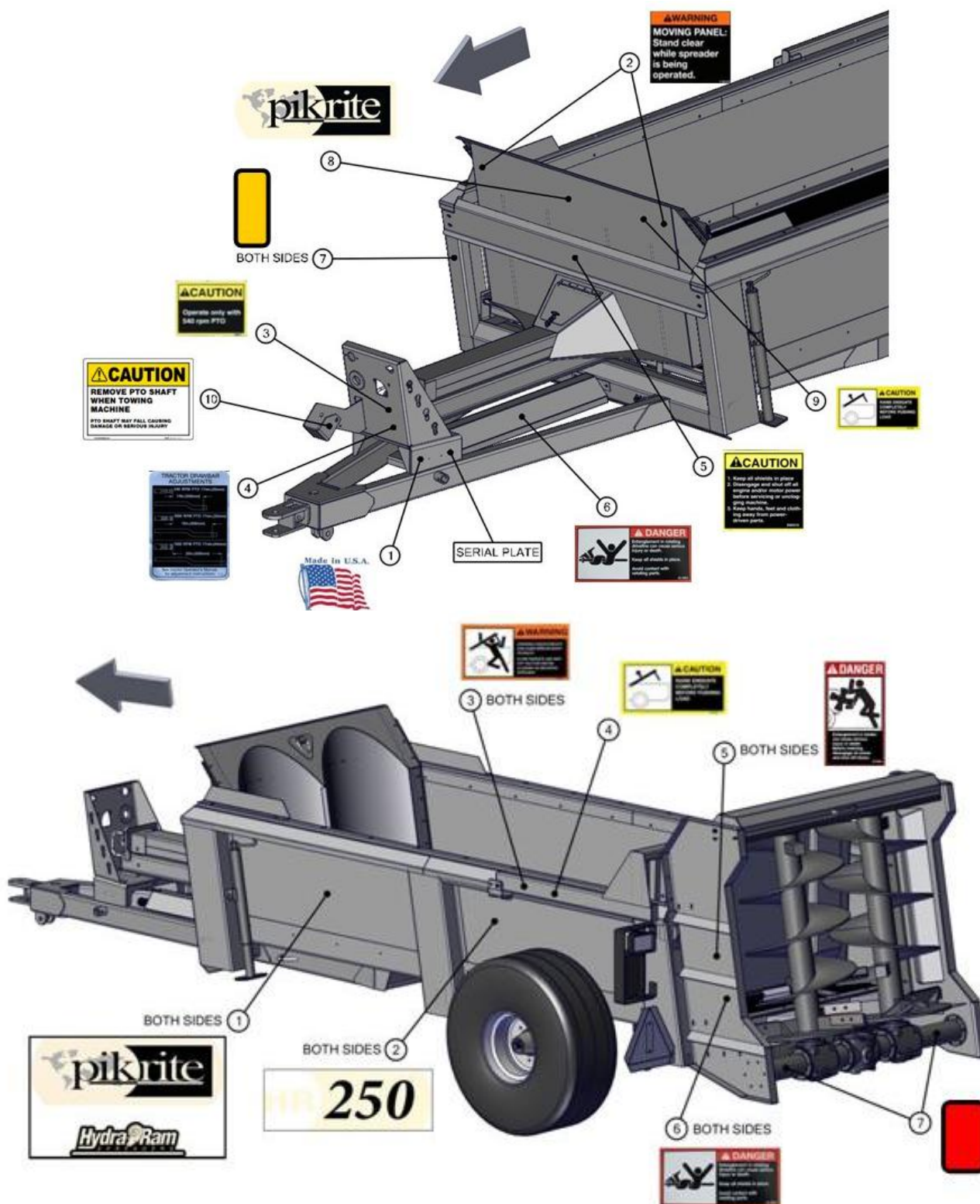
If you do not understand any part of this manual and need assistance, contact your Pik Rite dealer.





## REPLACE SAFETY LABELS

Keep safety labels in good condition. Replace missing or damaged safety labels. Be sure new equipment components and repair parts include the current safety labels. Replacement safety labels are available from your Pik Rite dealer (See "Front Decals" and "Side Decals" in the Parts Manual for part numbers.)



## SAFETY

### **⚠ DANGER** KEEP SHIELDS IN PLACE

Do not operate spreader without safety shields in place.

Rotating parts can crush or dismember causing death or personal injury.

Disconnect PTO driveline and hydraulic lines from tractor before removing shields for adjustment or service.



### **⚠ WARNING** PROTECT BYSTANDERS

Never operate the spreader near people.

Do not place rocks, timbers or other solid objects in the spreader. Objects can be thrown great distances causing injury to people.



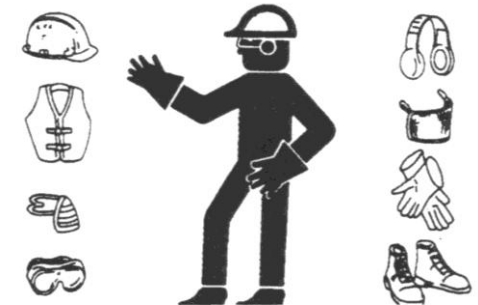
### **⚠ CAUTION** WEAR PROTECTIVE CLOTHING

Wear close fitting clothing and safety equipment appropriate to the job.

Prolonged exposure to loud noise can cause impairment or loss of hearing.

Wear a suitable hearing protective device such as earmuffs or earplugs to protect against objectionable or uncomfortable loud noises.

Operating equipment safely requires the full attention of the operator. Do not wear radio or music headphones while operating machine.



### **⚠ WARNING** USE SAFETY LIGHTS AND DEVICES

Slow moving tractors, self-propelled equipment and towed implements or attachments can create a hazard when driven on public roads. They are difficult to see, especially at night. Avoid personal injury or death resulting from collision with a vehicle.

Flashing warning lights and turn signals are recommended whenever driving on public roads. To increase visibility, use the devices provided with your machine. For some equipment, install extra flashing warning lights.

Keep safety items in good condition. Replace missing or damaged items.





## **⚠️ WARNING KEEP RIDERS OFF MACHINE**

Riders are subject to injury such as being struck by foreign objects and being thrown off the machine. Riders also obstruct the operator's view resulting in the machine being operated in an unsafe manner



## **SAFETY INSTRUCTIONS PARK SPREADER SAFELY**

Park spreader on a level surface and block wheels.

Close endgate.

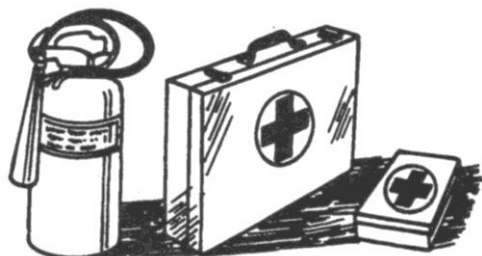
Secure jackstand with pin.

## **NOTICE PREPARE FOR EMERGENCIES**

Be prepared if a fire starts.

Keep a first aid kit and fire extinguisher handy.

Keep emergency numbers for doctors, ambulance service, hospital, and fire department near your telephone.



## **SAFETY INSTRUCTIONS USE A SAFETY CHAIN**

A safety chain will help control drawn equipment should it accidentally separate from the drawbar.

Using the appropriate adapter parts, attach the chain to the tractor drawbar support or other specified anchor location. Provide only enough slack in the chain to permit turning.

See your Pik Rite dealer for a chain with a strength rating equal to or greater than the gross weight of the towed machine. Do not use safety chain for towing.



## SAFETY

### **⚠ DANGER OPERATE SPREADER SAFELY**

Rotating parts can entangle or strike people, resulting in death or personal injury.

Never enter a spreader while in operation.

Operate the spreader from the tractor seat only.

Do not exceed load capacity of the spreader. (See Transport section)

Reduce speed when turning or traveling on rough terrain. Avoid traveling over loose fill, rocks, ditches or holes.

When working on inclines or slopes, travel uphill or downhill. Keep tractor in gear when traveling downhill.



### **⚠ WARNING STAY CLEAR OF RAISED ENDGATE**

Contact with a lowering endgate can cause death or personal injury.

Lower endgate and disconnect hydraulic lines before servicing or adjusting.



### **⚠ WARNING STAY CLEAR OF ROTATING DRIVELINES**

Entanglement in rotating driveline can cause serious injury or death.

Keep tractor master shield and driveline shields in place at all times. Make sure rotating shields turn freely.

Wear close fitting clothing. Stop the engine and be sure PTO driveline is stopped before making adjustments, connections, or cleaning out PTO driven equipment.



### **⚠ DANGER STAY CLEAR OF ROTATING BEATER**

Rotating beater can entangle or strike causing death or personal injury.

Do not clean out or service spreader while beater is rotating.

Disconnect PTO driveline and make sure all parts have stopped rotating before cleaning or servicing.

**Do not cut or weld on vertical beater attachment. Serious injury or death could occur when operating.**







## **WARNING AVOID HIGH-PRESSURE FLUIDS**



Escaping fluid under pressure can penetrate the skin causing serious injury.

Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure.

Search for leaks with a piece of cardboard. Protect hands and body from high pressure fluids.

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar with this type of injury should reference a knowledgeable medical source.

### **SAFETY INSTRUCTIONS**

## **SERVICE SPREADER SAFELY**



To help prevent personal injury caused by unexpected movement, be sure to service spreader on level surface.

If spreader is connected to tractor, disengage PTO, engage parking brake and/or place transmission in "PARK," shut off engine and remove key.

If spreader is detached from tractor, block wheels and use safety stands to prevent movement.

Replace all shields after lubricating or servicing.

### **SAFETY INSTRUCTIONS**

## **REDUCE SPEED WHEN TOWING LOADS**



Braking to stop towed loads from transport speeds can cause the towed load to swerve and upset. Reduce speed if towed load weighs more than the tractor and is not equipped with brakes.

Follow recommended speed-weight ratio guidelines:

- Maximum speed is 20 mph (32 km/h) when towing loads equal to or less than the tractor.
- Reduce speed to 10 mph (16 km/h) when towing loads more than equal and up to double the tractor weight.
- Do not tow loads exceeding double the tractor weight.
- Use additional caution when towing loads under adverse surface conditions, when turning, and on inclines

## PREPARING THE TRACTOR

### **NOTICE** APPROVED TRACTORS, MODEL HR250

Row Crop Tractors with 60 HP PTO rating or larger are approved for operation with the HR250 Spreader.

Utility Tractors are **NOT RECOMMENDED** because of drawbar weight limitations and the inability to ballast the tractor enough to meet requirements for towing.

A drawbar support is required on any tractor with a drawbar size of no less than 1-1/2 x 3 in.

Tractor hydraulic oil reservoir must have capacity for 3.4 U.S. gal. net draw for a spreader with an endgate or 3.1 U.S. gal. without an endgate.

Tractor standby hydraulic pressure must be between 1500 psi and 2250 psi.

One selective control valve is required to operate the spreader.

A second selective control valve is required to operate the endgate.

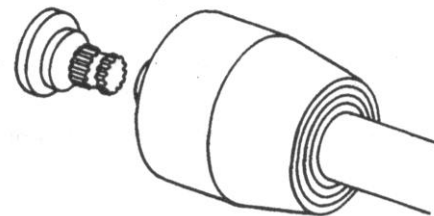
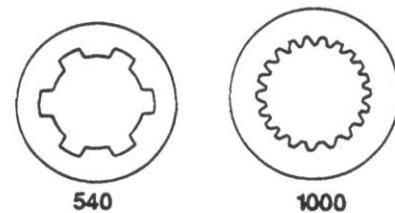
### **NOTICE** CHOOSING CORRECT PTO SPEED

MODEL – HR250 – 540 RPM ONLY

**Drive components can be damaged.**

Under no circumstances should a machine equipped for 540 rpm PTO be operated by a tractor equipped with 1000 rpm PTO.

Nor should a 1000 rpm PTO machine be operated with a tractor equipped with 540 rpm PTO.

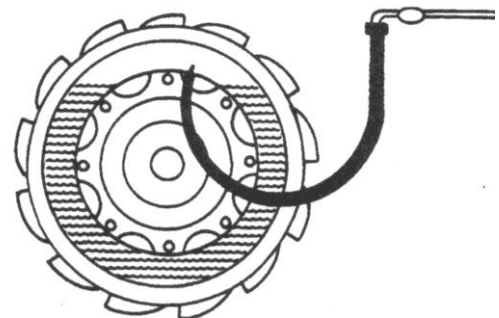


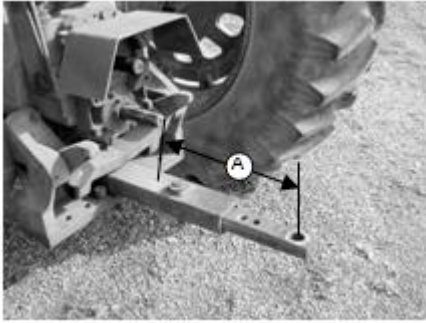
### **NOTICE** BALLASTING THE TRACTOR

**Do not tow loads that weigh more than twice the tractor weight.**

(See Recommended Maximum Towing Speed in Transport section.)

To ensure proper stability, adjust ballast and wheel spacing according to tractor operator's manual.





### SAFETY INSTRUCTIONS

## POSITIONING DRAWBAR

**Tractor PTO and machine driveline can be damaged. Be sure drawbar length is properly set. If equipped with clevis, remove it. Lock drawbar along tractor centerline with offset down.**

Remove clevis if equipped.

### PTO Speed

540 rpm

### Dimension (A)

356 mm (14in.)

Adjust drawbar length (A) to help prevent driveline damage.

A tractor drawbar support is required on tractors with a drawbar size of 1-1/2 x 3 in. minimum

### SAFETY INSTRUCTIONS

## USING SELECTIVE CONTROL LEVERS TO CONTROL FLOOR SPEED

Floor and moving panel speed can be controlled by using tractor selective control lever to extend and retract cylinders.

Adjust selective control valve lever to provide the slowest operating speed. (See your tractor operator's manual). Maximum hydraulic oil flow through the spreader control valve is 6.8 gpm. Trying to force through more oil than this, may create a pressure drop.

### SAFETY INSTRUCTIONS

## SETTING HYDRAULIC SPEED ENDGATE OPERATION

**Excessive operating speed may cause machine damage. Adjust selective control valve lever to provide correct operating speed.**

Adjust selective control valve lever, it should take two to three seconds to fully extend or retract the cylinder. (See your tractor operator's manual).

### SAFETY INSTRUCTIONS

## CHECKING TRANSMISSION/HYDRAULIC OIL LEVEL

Cycle all hydraulic cylinders fully two or three times.

Fully retract all cylinders.

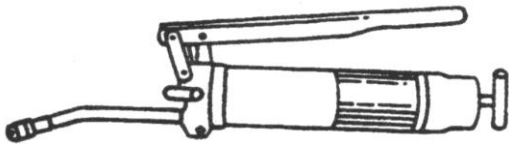
Check transmission/hydraulic oil level. (See your tractor's Operator's Manual)



PREPARING THE SPREADER

NOTICE LUBRICATING THE MACHINE

Be sure the machine has been adequately lubricated.  
(See Lubrication and Maintenance page.)



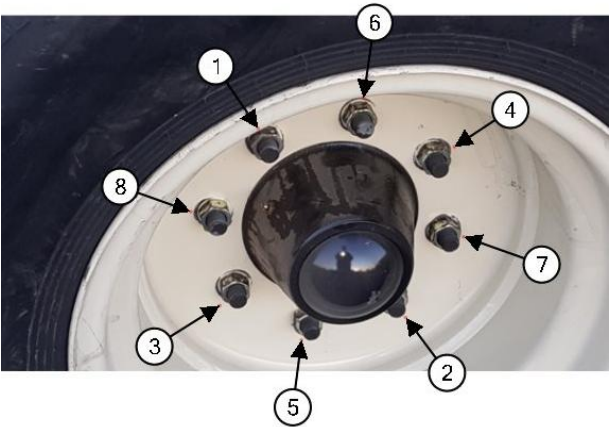
SAFETY INSTRUCTIONS TIGHTENING WHEEL HARDWARE

Operating the spreader with loose wheel hardware will damage the hub or wheel. Tighten hardware after initial transport, after one hour of operation and every fifty hours thereafter.

Tighten to 240 lb-ft of dry torque (180 lb-ft wet) in the sequence shown.

Tire Size	Wheel Size	Tire Pressure
16.5 x 16.1 Implement	14.00 x 16.1	48 psi
11 R 22.5	22.5 x 8.25	75 psi
385/65 R 22.5	22.5 x 11.75	115 psi
425/65R22.5 Truck Tires	22.5 x 13	115 psi

(Additional options may be available, please contact your dealer for more information)



SAFETY INSTRUCTIONS CHECKING TIRES

- 1. Check tires daily for damage or noticeably low pressure.
- 2. Repair any cuts or breaks as soon as possible.
- 3. Protect tires from exposure to sunlight and petroleum products or chemicals.



SAFETY  
INSTRUCTIONS**OPERATING THE BEATER**

To start beater, engage PTO lever slowly, at low engine rpm.

To stop beater, disengage PTO. (See your tractor's Operator's Manual)

For best spreading results, operate the tractor engine at "PTO RATED" speed.

SAFETY  
INSTRUCTIONS**OPERATING THE ENDGATE**

**Contact of sliding floor/moving panel with endgate closed will cause damage. To avoid contact with moving panel, endgate must be raised fully.**

Operate the endgate with the second auxiliary control valve lever.

**Endgate is not a metering device.**

**Doing so may cause damage to the spreader.**

SAFETY  
INSTRUCTIONS**OPERATING SLIDING FLOOR  
MOVING PANEL USING METERING CONTROL VALVE**

To extend the sliding floor and moving panel lock control lever in operating position.

To retract the sliding floor/moving panel, move control lever in opposite direction.

See your tractor's operating manual for information on how to control flow rates of your hydraulic system.

Maximum hydraulic oil flow through the spreader control valve is 6.8 gpm. Trying to force through more oil than this, may create a pressure drop.

## ATTACHING THE SPREADER

### **⚠ CAUTION** ATTACHING THE SPREADER

Help prevent personal injury caused by unexpected movement of the machine. Engage parking brake and/or place transmission in "PARK", shut off engine, and remove key before working around hitch.

1. Attach with a 1-1/8 pin and secure.

Shorten safety chain to allow only enough slack required for turning.

2. Lock safety hook onto chain.



### **SAFETY INSTRUCTIONS**

## STORING JACKSTAND

1. After the spreader is attached to the tractor and secure, remove jackstand from lift position.
2. Store jackstand as shown and secure with pin.

### **⚠ CAUTION** CONNECT HYDRAULIC HOSES

To avoid injury from escaping hydraulic oil under pressure, relieve the pressure in the system by shutting off the tractor and moving remote cylinder operating levers in both directions before attaching hoses to or detaching hoses from the breakaway couplers.



### **SAFETY INSTRUCTIONS**

## CONNECT ENDGATE HYDRAULIC HOSES

1. Connect pressure hose to pressure port of hydraulic remote coupler.
2. Connect return hose to return port of hydraulic remote coupler.



## SAFETY INSTRUCTIONS

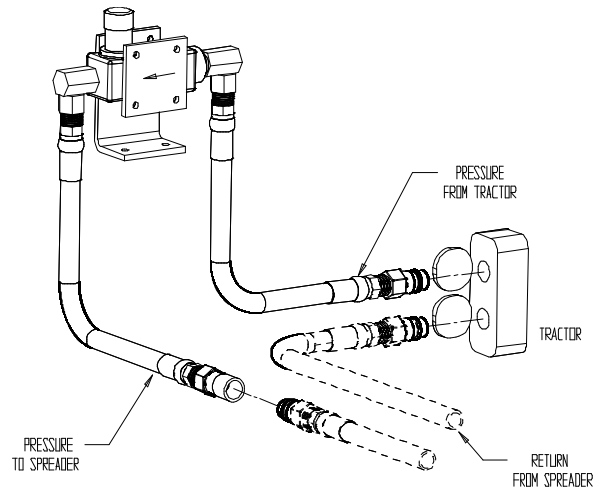
### CONNECTING HYDRAULIC HOSES

#### TRACTOR WITH CLOSED CENTER HYDRAULIC SYSTEM

Attach control valve to tractor where it can be reached by the operator.

Attach hoses accordingly.

(Diagram shows unloading configuration, flow reverses to retract.)



## SAFETY INSTRUCTIONS

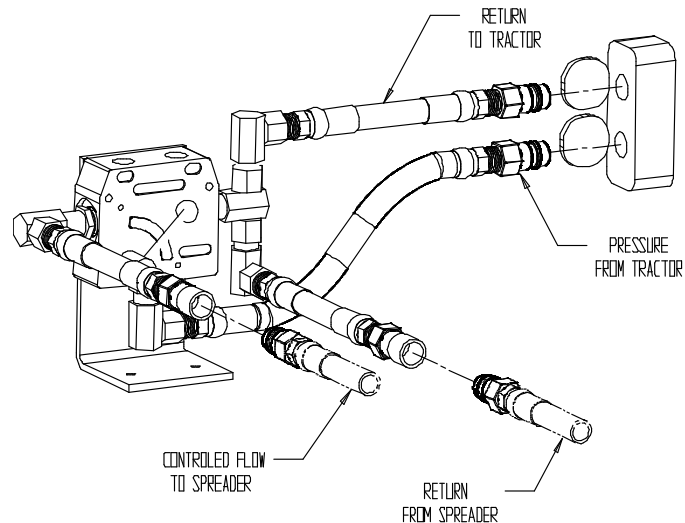
### CONNECTING HYDRAULIC HOSES

#### TRACTOR WITH OPEN CENTER HYDRAULIC SYSTEM

Attach control valve to tractor where it can be reached by the operator.

Attach hoses accordingly.

(Diagram shows unloading configuration, flow reverses to retract.)



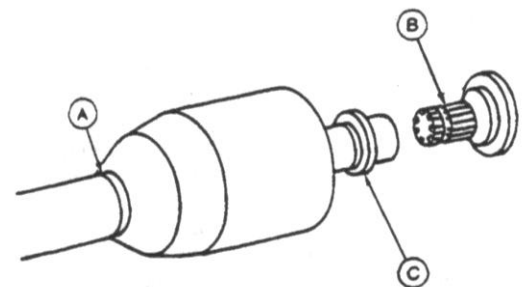
## SAFETY INSTRUCTIONS

### ATTACHING DRIVELINE

Avoid causing damage to shielding,

**DO NOT** use bell on driveline to lift driveline into position.

1. Support driveline, cradling it in your hand.
2. Rotate driveline (C) or tractor PTO (B) to align splines.
3. Pull collar (C) rearward and push forward on bell (A) to engage driveline yoke with tractor PTO (B).
4. Pull back on PTO driveline shielding to be sure driveline is locked. **DO NOT** pull on collar, this will release latch.



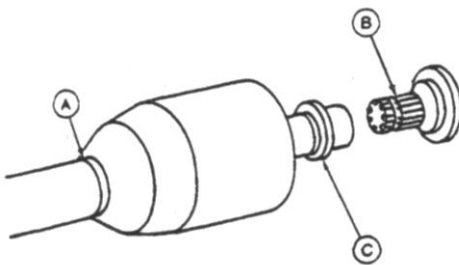
## DETACHING THE SPREADER



### SAFETY INSTRUCTIONS

## DETACHING SPREADER

1. Secure jack stand in lift position
2. Detach safety chain
3. Remove hitch pin
4. Disconnect hoses. Store on spreader



### SAFETY INSTRUCTIONS

## DETACHING DRIVELINE

1. Support driveline (A) and pull rearward on collar (C) to release driveline from tractor PTO (B).
2. When possible store driveline in driveline cradle provided with machine.
3. Replace tractor PTO shields.

SAFETY  
INSTRUCTIONS

## TOWING LOADS

**Braking to stop towed loads from transport speeds can cause the towed load to swerve and upset. Reduce speed if towed load is not equipped with brakes and weighs more than the tractor.**

*Follow recommended speed-weight ratio guidelines:*

- Maximum speed is 20 mph (32 km/h) when towing loads equal to or less than the weight of the tractor.
- Reduce speed to 10 mph (16 km/h) when towing loads more than or up to double the tractor weight.
- **DO NOT** tow loads that exceed double the tractor weight.
- Use additional caution when towing loads under adverse road surface conditions (i.e. slippery or rough), when turning and/or on inclines.
- For proper tractor size and towing speed see the following “Recommended Maximum Towing Speed” chart.
- If necessary, add ballast as described in your tractor’s Operator’s Manual.



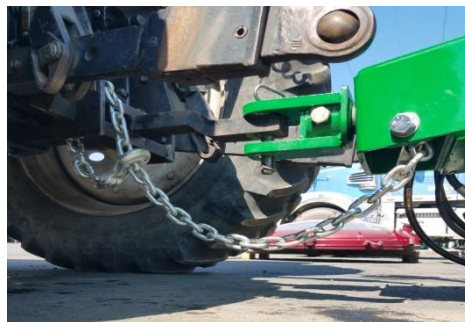


## TRANSPORT

### SAFETY INSTRUCTIONS

#### USING A SAFETY CHAIN

A safety chain will help control drawn equipment should it accidentally separate from the drawbar while transporting. Using the appropriate adapter parts, attach the chain to the tractor drawbar support or other specified anchor location. Provide only enough slack in the chain to permit turning. See your Pik Rite dealer for a chain with a strength rating equal to or greater than the gross weight of the towed machine.



### NOTICE

#### LIGHTING

When transporting the machine on a road or highway at night or during the day, use accessory lights and devices for adequate warning to operators of other vehicles. Check local governmental regulations. Keep safety items in good condition. Replace missing or damaged items.

(Contact your Hydra-Pull Dealer for available lighting kit)





**NOTICE****RECOMMENDED MAXIMUM TOWING SPEED**

Tractor Weight	*	**	***	****
(0-2997 lb)	Do Not Tow	Do Not Tow	Do Not Tow	Do Not Tow
(2998-5950 lb)	Do Not Tow	Do Not Tow	Do Not Tow	Do Not Tow
(5951-11021 lb)	Do Not Tow	Do Not Tow	Do Not Tow	Do Not Tow
(11022-12123 lb)	Do Not Tow	Do Not Tow	Do Not Tow	Do Not Tow
(12124-14769 lb)	Do Not Tow	Do Not Tow	Do Not Tow	Do Not Tow
(14770-22044 lb)	Do Not Tow	Do Not Tow	Do Not Tow	Do Not Tow
(22045-24910 lb)	(20 mph)	(10 mph)	(10 mph)	(10 mph)
(24911-29540 lb)	(20 mph)	(10 mph)	(10 mph)	(10 mph)
(29541 lb-Up)	(20 mph)	(10 mph)	(10 mph)	(10 mph)

*\*Base Spreader Empty Load*

*\*\*Load struck level consisting of manure with high liquid content.*

*Calculated at 70 lb/cu ft*

*\*\*\*Load piled 381 mm (15 in.) above beater consisting of semi-solid type manure*

*Calculated at 55 lb/cu ft*

*\*\*\*\*Load piled at 15 in. above optional upper beater consisting of semi-solid type manure.*

*Calculated at 55 lb/cu ft*

**COMBINED WEIGHT OF SPREADER AND LOAD**

## OPERATING THE SPREADER

### SAFETY INSTRUCTIONS

### PREOPERATING CHECKS

1. Be sure spreader does not contain any foreign objects
2. Check for correct hydraulic hookup. Raise endgate fully. Engage beaters, engage apron chain
3. Disengage apron chain, disengage beaters
4. Close endgate

### CAUTION LOADING THE SPREADER

**Do not place rocks, timbers, or other solid objects in the spreader. Objects of this nature can damage the spreader and could also be thrown great distances causing possible injury to anyone standing in the vicinity.**

Load front of spreader first, distributing load evenly.

When operating without an endgate, avoid loading manure against the beater.



### CAUTION PREPARE TO UNLOAD THE SPREADER

**Help prevent personal injury. Be sure no one is near spreader and tractor before operating.**

Start beater by engaging PTO slowly at low engine rpm. Increase to "PTO RATED" speed.

**For best spreading results, operate tractor at "PTO RATED" speed.**

**Do not operate apron chain without running the beaters as this may damage the spreader.**



### **NOTICE** RAISE ENDGATE

**Contact of apron chain with endgate will cause damage. To avoid contact with apron chain, endgate must be raised fully.**

The endgate closes off the back end of the spreader to contain manure with high liquid content.

The endgate also prevents solid material from being piled tight against the beater.



### **SAFETY INSTRUCTIONS**

### **UNLOADING SPREADER USING METERING VALVE**

1. Set flow control on tractor hydraulics obtain desired rate of unload speed.

**Rate of spread is affected by both ground speed and unload speed. Experience will help you determine both gear selection and control knob setting.**

2. When spreader is empty, disengage apron chain, disengage PTO, and lower endgate.

### **SAFETY INSTRUCTIONS**

### **PRODUCING GOOD SPREADING RESULTS**

1. Operate tractor engine at “PTO RATED” speed.
2. Do not overload beater. A clumpy spread pattern will result from too fast of an unload rate.
3. When operating without an endgate, avoid loading material against the beater. Otherwise, large clumps of material will be thrown out during the first few turns of the beater.

### **NOTICE** CLEANING SPREADER IN COLD WEATHER

When operating the spreader during extended periods of subfreezing temperatures, frozen material may build up on steel surfaces. This can prevent the beater from moving.

After completing spreading for the day, use the following cleaning procedure.

**Cleaning is only necessary during extended periods of subfreezing temperatures.**

Remove material buildup from endgate panel. Keep endgate arms clean to prevent freezing to side rails. Remove debris from sliding floor, pusher tracks, and beater pan. Periodically check inside the pusher door and remove debris as necessary.

## OPERATING THE SPREADER

### **NOTICE** WARMING HYDRAULIC OIL TEMPERATURES BELOW 0°F (-18°C)

It is necessary to warm the hydraulic oil for proper spreader operation.

Follow the procedures in your tractor's Operator's Manual for warming hydraulic oil.

The following procedures apply only to tractors with a closed center hydraulic system.



### **NOTICE** BYPASSING SPREADER CONTROL VALVE

There will be a large hydraulic oil pressure drop across the auxiliary flow control valve when the oil is cold. Oil pressure available to hydraulic cylinders may be too low.

Try cycling the cylinders several times slowly so the cold oil in the cylinders is mixed with the warm oil in the tractor. In the event of extreme cold; you may need to bypass the control valve to do this. Be sure you begin by moving the cylinders very slowly.

Reconnect hoses to flow control valve.



## **CAUTION** LUBRICATING AND MAINTAINING SPREADER

Help prevent personal injury caused by unexpected movement of the machine. If spreader is connected to tractor, disengage PTO, engage parking brake and/or place transmission in "PARK", shut off engine, and remove key. If spreader is detached, block wheels and use safety stands.

Replace all shields after lubricating or servicing.

## **NOTICE** OBSERVING INTERVALS

The intervals recommended are based on normal conditions. Severe or unusual conditions may require more frequent attention.

## **NOTICE** SELECTING GREASE

Depending upon the expected air temperature range during the service interval, use grease as shown on the adjusting temperature chart.

SAE-Multipurpose High Temperature Grease with Extreme Pressure [EP] Performance with 3 to 5% molybdenum disulfide.

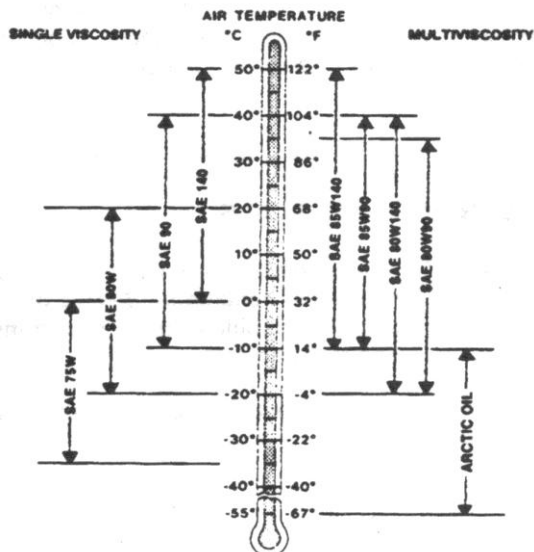
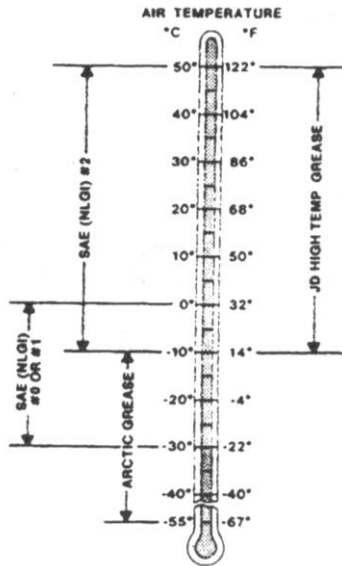
Moly-type grease is recommended, however, if not available, multipurpose grease is acceptable.

## **NOTICE** SELECTING GEAR CASE OIL

Depending upon the expected air temperature range during the drain interval, use oil viscosity shown on the adjoining temperature chart.

- API Service Classification GL-5
- Military Specification MIL-L-2105B
- Military Specification MIL-L-2105C

At temperatures below -35° [-31°], use arctic oils such as those meeting Military Specifications MIL-G-10324A.





## LUBRICATION AND MAINTENANCE

### NOTICE SERVICE INTERVALS

- Change gearbox lubricant every 6,000 loads

#### EVERY 8 HOURS

- Lubricate driveline
- Check gear case oil level
- Check tires
- Check axle hub oil

#### EVERY 40 HOURS

- Lubricate top beater bearings
- Grease apron chain drive bearings & sprockets

#### EVERY 50 HOURS

- Tighten wheel hardware
- Lubricate walking beam pivots

#### EVERY 250 HOURS

- Lubricate endgate pivots

#### SERVICE AS REQUIRED

- Adjust apron chain tension
- Slip the clutch

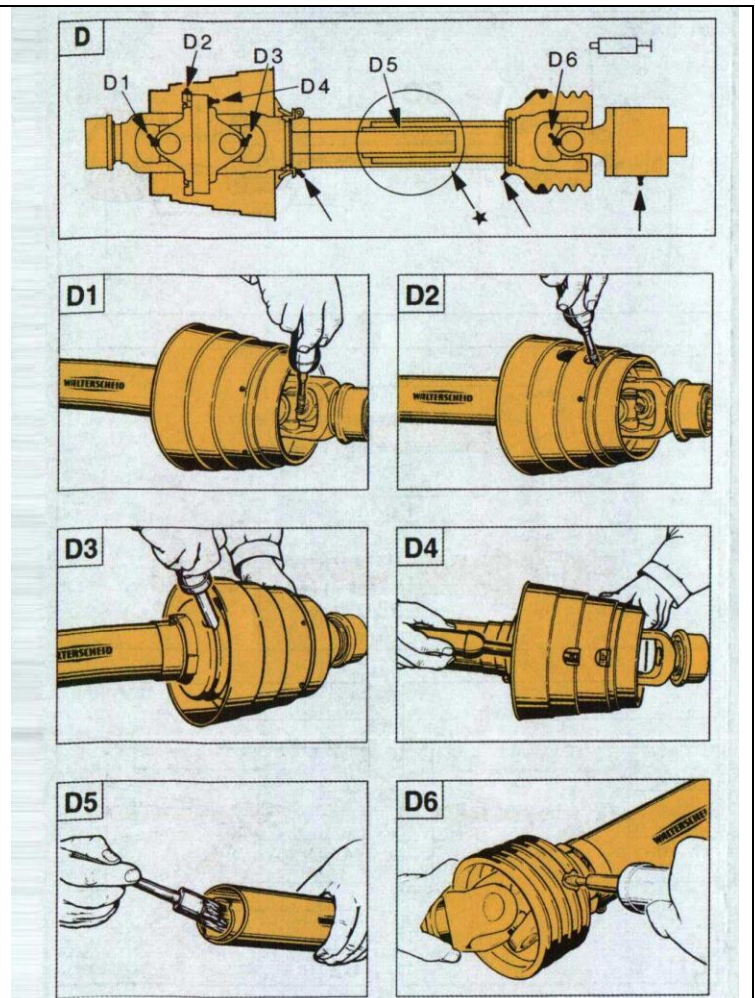
In addition to the above referenced information, you are working with a central lube CV design on the primary that contains a special lubrication provision that needs to be well defined for the user so that extended life on the CV can be achieved.

The key point is that each CV has one zerk in a bearing cap and it is this zerk that is most important since it feeds the inboard cross kit as well as the the ball and socket of the CV. The user needs to understand that the zerk in the cap should receive **15-20 pumps** of grease each day while the other zerks in the joint

CV housing and telescoping members can operate with 5-6 pumps or until the seals purge. The plastic zerks feeding the shielding should also receive 3-4 pumps daily if shields are being restrained.

Primary Driveline (to Tractor) Lubricate fittings D1 through D6 every eight hours of operation.

Secondary Driveline (under spreader) Lubricate as above including overrunning clutch.



**NOTE:** Lubrication step D5 is only necessary when driveline does not have grease fitting. Separate front and rear halves of driveline and brush with grease.

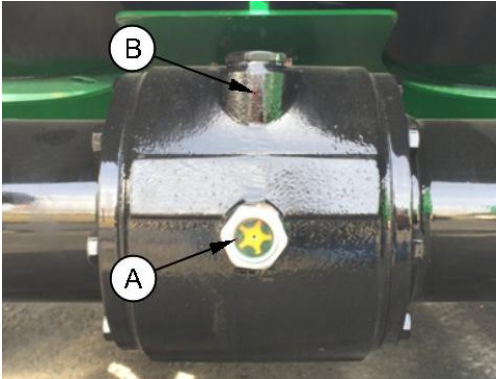
## LUBRICATION AND MAINTENANCE

### NOTICE

#### CHECK GEAR CASE OIL LEVEL

With spreader on level ground, check oil level at the sight glass on the center gearcase "A"

Add recommended oil as needed. (See Selecting Gear Case Oil)  
To add oil, remove fill cap at the top of the gearcase "B"



### NOTICE

#### GREASE TOP BEATER BEARINGS

Grease the two bearings at the top of the vertical beaters every 8 hours of operation. Rear grease bank on beater side panel



### SAFETY INSTRUCTIONS

#### CHECKING TIRES

1. Check tires daily for damage or noticeably low pressure.
2. Repair any cuts or breaks as soon as possible.
3. Protect tires from exposure to sunlight and petroleum products or chemicals.



<u>Tire Size</u>	<u>Wheel Size</u>	<u>Tire Pressure</u>
16.5 x 16.1 Implement	14.00 x 16.1	48 psi
11 R 22.5	22.5 x 8.25	75 psi
385/65 R 22.5	22.5 x 11.75	115 psi
425/65R22.5 Truck Tires	22.5 x 13	115 psi

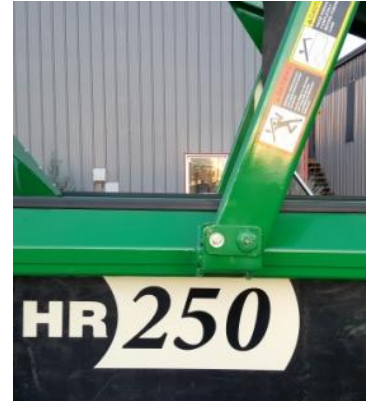


## LUBRICATION AND MAINTENANCE

### SAFETY INSTRUCTIONS

### LUBRICATE ENDGATE PIVOTS

Lubricate grease bank on the endgate arm mount.



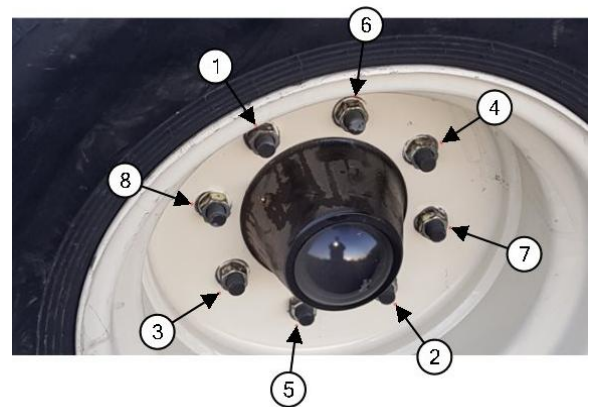
### NOTICE

### TIGHTENING WHEEL

#### HARDWARE

Operating the spreader with loose wheel hardware will damage the hub or wheel. Tighten hardware after initial transport, after one hour of operation, and every fifty hours thereafter.

Tighten to 240 lb.-ft. in the sequence shown.

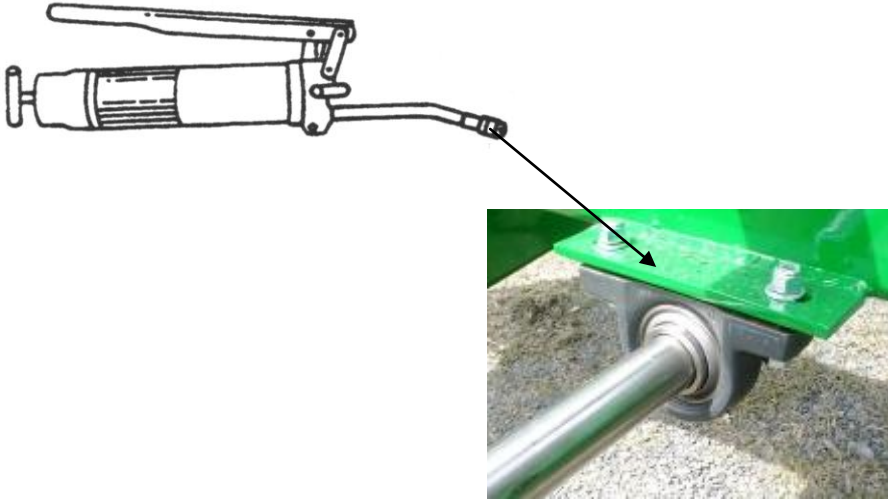


### NOTICE

### LUBRICATE THE THREE PILLOW BLOCKS

Located under the spreader, they carry the main power shaft, using central grease location

Lubricate grease fitting with Moly High Temperature/Extreme Pressure Grease



### NOTICE

### MAINTAINING SLIP CLUTCH, WALTERSCHEID

The clutch is preset and is not field adjustable

If you determine that your slip clutch needs maintenance or adjustment, contact your dealer



### NOTICE

### ADJUST SLIDING FLOOR/MOVING PANEL SEALS

The rubber seals on the moving panel and sliding floor are adjustable.

Properly adjusted seals will minimize leakage and ensure a clean wiping action on the sides and floor.

Inspect adjust, or replace seals as necessary.

**SPECIFICATIONS**

**TRACTOR SIZE**

Minimum recommended 60 hp PTO

**WEIGHT**

Spreader, Complete with Implement tires  
And all Attachments 5,540 lb

**LOAD CAPACITY** 13,000 lb

**VOLUME CAPACITY**

Struck Level 147 cu. ft.  
Heaped Load 249 cu. ft.

**BEATER SPEED** 350 rpm

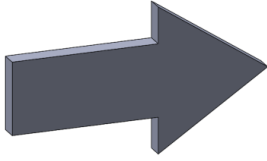
**UNLOADING SPEED**  
Infinitely Variable 0-16 ft/min

**DRIVELINE**  
Shielded 540 rpm

**ATTACHMENTS**  
Control For Fender or ROPS  
Open Center Valve With Control Endgate

**SPECIFICATIONS AND DESIGN SUBJECT TO CHANGE WITHOUT NOTICE**

## DIRECTION ARROWS



ARROWS ARE USED WITH ILLUSTRATIONS TO INDICATE THE FRONT OF THE UNIT. "RIGHT-HAND" AND "LEFT-HAND" SIDES ARE DETERMINED BY FACING THE DIRECTION OF MACHINE FORWARD TRAVEL.

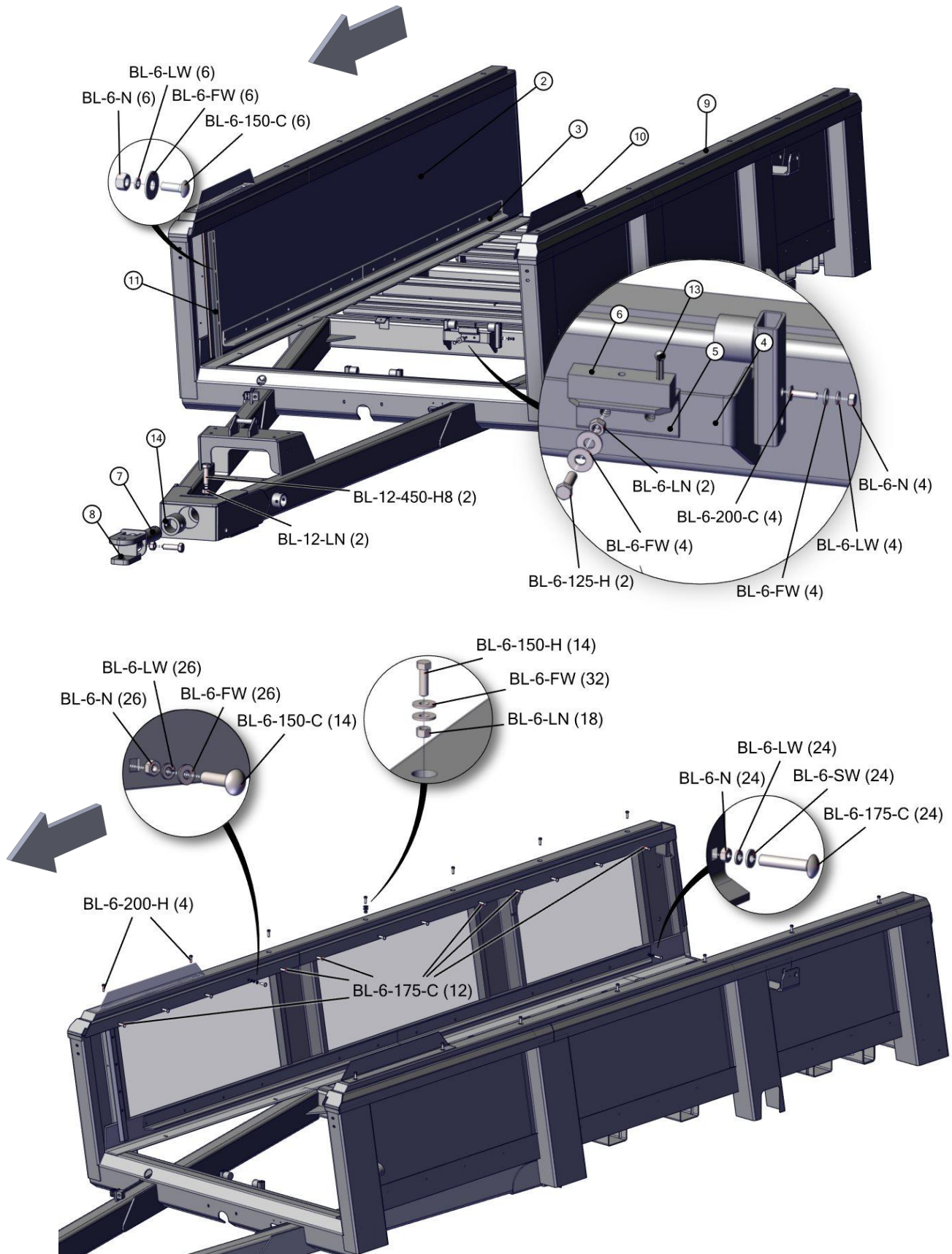
## REFERENCE NUMBER IDENTIFICATION

REF NO.	DESCRIPTION
000-099	PARTS USED FOR ASSEMBLY
100-199	BOLTS AND FASTENERS
200-299	ELECTRICAL COMPONENTS
800-899	REPLACEMENT PARTS (USED TO REPAIR ASSEMBLIES)

## 7215-1-01 MAIN FRAME AND SIDE PANELS

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	PR70140	Main Frame	1		
2	PR70153	Panelam, Side	2		
3	PR70144	ANGLE, SLIDING FLOOR	2		
4	PR70147	Support, Floor Cyl.	1		
5	PR70092	Floor Cyl Support, Angle	1		
6	PR32639	Support, Cylinder, UHMW	1		
7	PR75046	Hitch Shaft	1		
8	PR75007	Load Cell Mount, Hitch	1		
9	PR44526	Bumper Rail, Top Rail Protector, 490, 250	2		
10	PR39181	Splash Guard, 490	2		
11	PR70162	Edge Protector, RH Panelam	1		
12	PR70163	Edge Protector, LH Panelam	1		
13	PIN-C4-32	Cotter Pin .25 x 2'	2		
14	PR75047	Collar, Hitch Shaft	1		
100	BL-6-125-H	3/8-16 X 1-1/4 HHCS G5 ZC	2		
101	BL-6-150-C	3/8-16 X 1-1/2 CARRIAGE BOLT G5 ZC	20		
102	BL-6-150-H	3/8-16 X 1-1/2 HEX CAP G5 ZC	14		
103	BL-6-175-C	3/8-16 X 1-3/4 CARRIAGE BOLT G5 ZC	36		
104	BL-6-200-C	3/8-16 X 2 CARRIAGE BOLT G5 ZC	4		
105	BL-6-200-H	3/8-16 X 2 HEX CAP G5 ZC	4		
106	BL-6-FW	3/8 USS FW ZC	76		
107	BL-6-LW	3/8 SPLIT LW ZC	60		
108	BL-6-SW	3/8 SAE FW ZC	24		
109	BL-6-LN	3/8-16 FIN H LN NE A563 GA ZC	20		
110	BL-6-N	3/8-16 HEX NUT ZC	60		
111	BL-12-450-8	3/4' x 4-1/2', HH C/S G8 ZC	2		
112	BL-12-LN	3/4-10 LN w/ NYLON INSERTS	2		

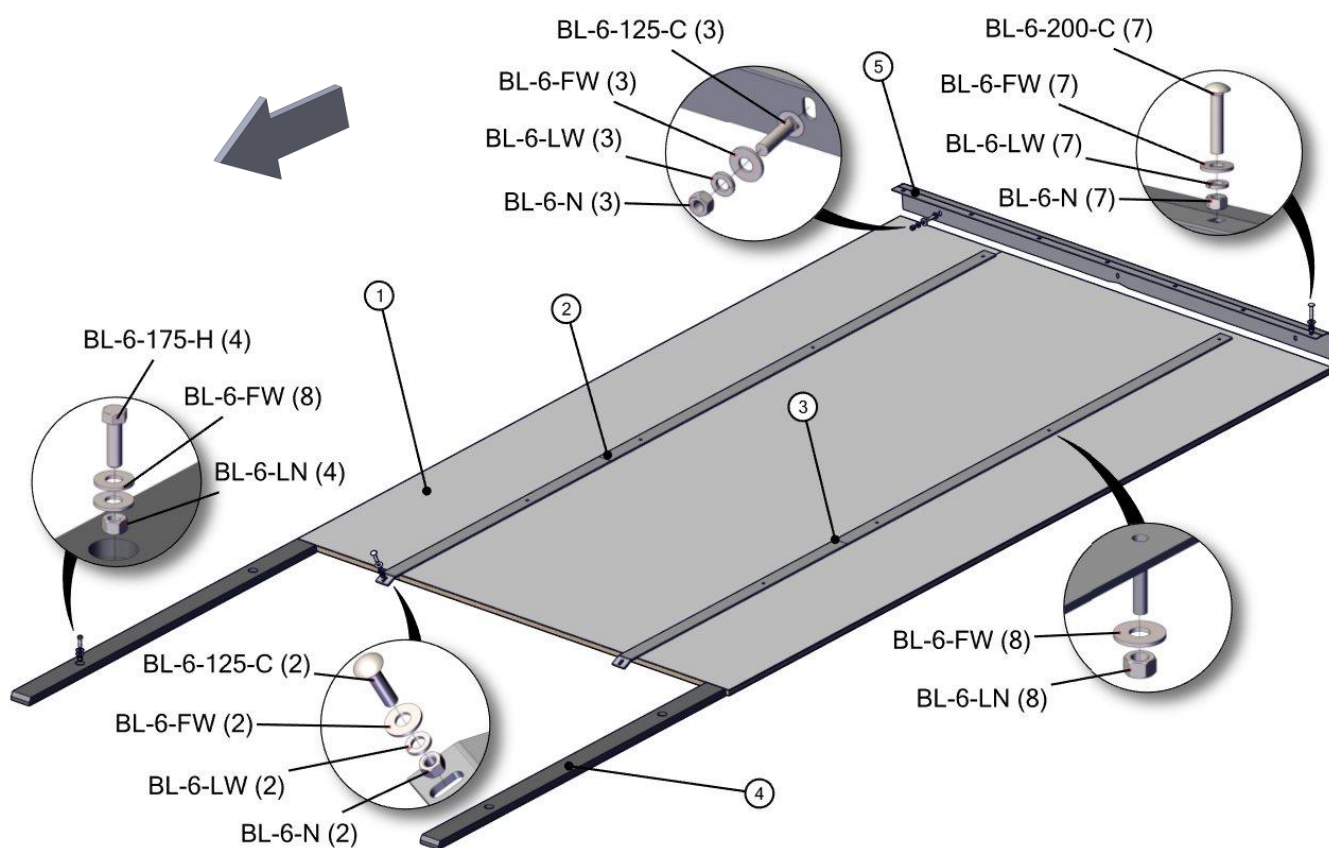
## 7215-1-01 MAIN FRAME AND SIDE PANELS





## 7215-1-02 MAIN FLOOR AND SLIDING FLOOR GUIDES

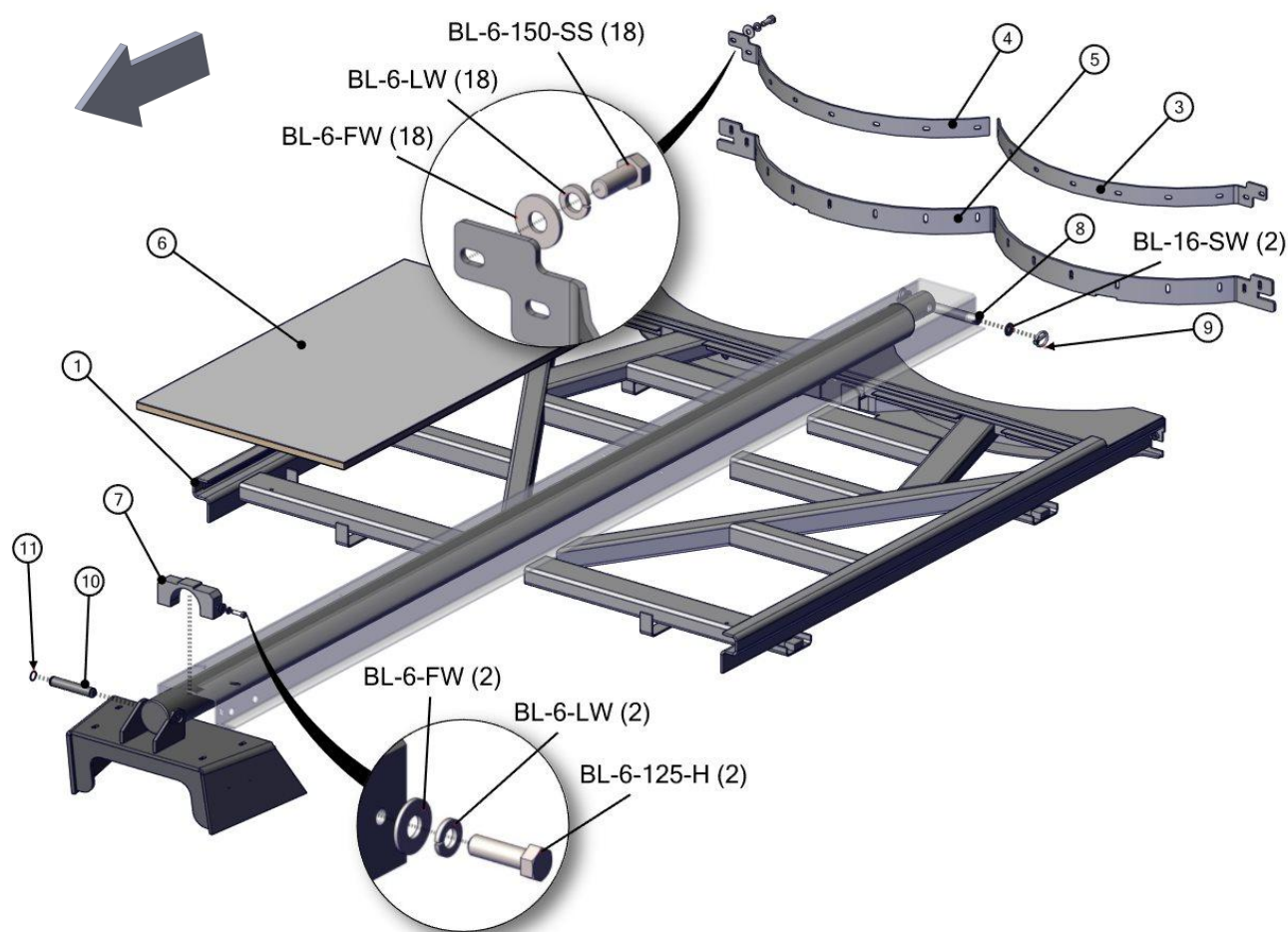
REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	PR44530	Panel, Main Floor, High Density, 490 & HR250 Spreader	1		
2	PR21065	Wear Strip, 490 Spreader	1		
3	PR21066	Wear Strip, Spreader Floor, 490 Spreader	1		
4	PR30998	Slide, Wood, 490 Spreader	2		
5	PR70146	Rear Panelam Cover	1		
100	BL-6-125-C	3/8-16 X 1-1/4 CARRIAGE BOLT G5 ZC	5		
101	BL-6-175-H	3/8-16 X 1-3/4 HHCS G5 ZC	4		
102	BL-6-200-C	3/8-16 X 2 CARRIAGE BOLT G5 ZC	7		
103	BL-6-FW	3/8 USS FW ZC	28		
104	BL-6-LW	3/8 SPLIT LW ZC	12		
105	BL-6-LN	3/8-16 FIN H LN NE A563 GA ZC	12		
106	BL-6-N	3/8-16 HEX NUT ZC	12		





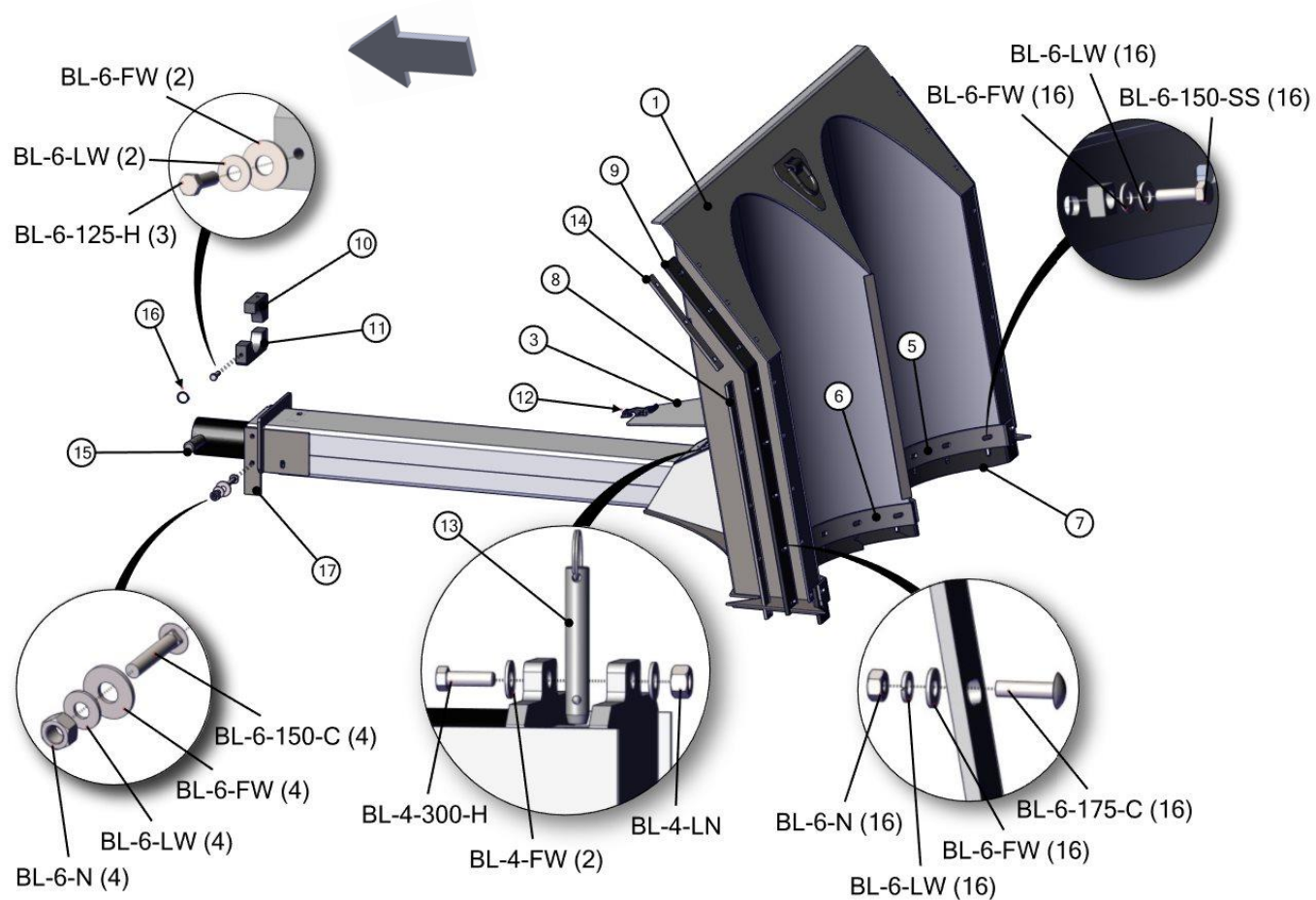
## 7215-1-03 SLIDING FLOOR

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	PR70142	Sliding Floor Frame	1		
3	PR70166	Scallop Belting Bar, LH	1		
4	PR70165	Scallop Belting Bar, RH	1		
5	PR70164	Scallop Belting, Sliding Floor	1		
6	PR44562	Sliding Floor Panel, 490 Spreader	2		
7	PR70143	Plastic Cylinder Guide, Sliding Floor	1		
8	PR70182	5/8" SS Pin, 6.5' Usuable	1		
9	PIN-250L	1/4" Lynch Pin	2		
10	PIN-16-72	Clevis Pin, Zinc-Plated, 1" Dia., 4 1/2" OA, 4 3/16" Usuable	1		
100	BL-6-125-H	3/8-16 X 1-1/4 HHCS G5 ZC	2		
101	BL-6-150-SS	3/8-16 X 1-1/2 HEX CAP SS	18		
102	BL-6-FW	3/8 USS FW ZC	20		
103	BL-6-LW	3/8 SPLIT LW ZC	20		
104	BL-16-SW	1 SAE FW	2		



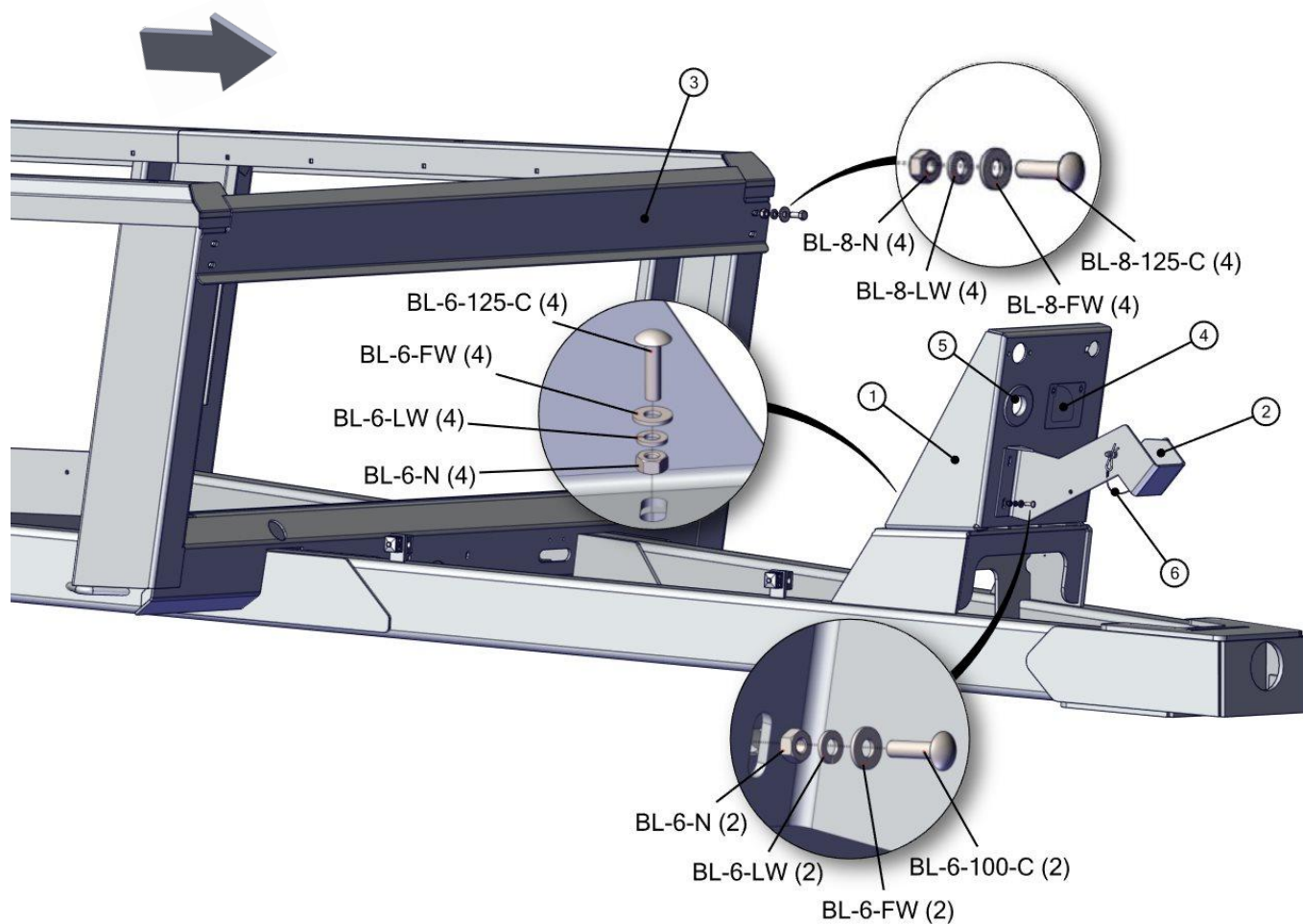
## 7215-1-04 PUSHER

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	PR70148	Pusher Weldment	1		
3	PR75037	Access Panel, Pusher	1		
5	PR70157	Scallop Belting Bar, LH, Pusher	1		
6	PR70158	Scallop Belting Bar, RH, Pusher	1		
7	PR70156	Scallop Belting, Pusher	1		
8	PR70160	Belting Bar, Side, Pusher	2		
9	PR70159	5/16 Belting, Side, Pusher	2		
10	PR70154	Pusher Cyl Guide, Top	1		
11	PR70155	Pusher Cyl Guide, Bott	1		
12	LA-1530	Medium Rubber T Latch Assembly	1		
13	PIN-10-300	5/8" Pin SS, Quick Release, 3.00' usable	1		
14	PR70117	Pusher Bar, Top	2		
15	PR30289	Cylinder Pin	1		
16	PR58806	Retaining Ring, 63/64" (.984) Shaft Size, External	2		
17	PR70199	Pusher Guide	1		
100	BL-6-125-H	3/8-16 X 1-1/4 HHCS G5 ZC	3		
101	BL-6-150-C	3/8-16 X 1-1/2 CARRIAGE BOLT G5 ZC	4		
102	BL-6-150-SS	3/8-16 X 1-1/2 HEX CAP SS	16		
103	BL-6-175-C	3/8-16 X 1-3/4 CARRIAGE BOLT G5 ZC	16		
104	BL-4-300-H	1/4-20 X 3 HEX CAP G5 ZC	1		
105	BL-6-FW	3/8 USS FW ZC	38		
106	BL-6-LW	3/8 SPLIT LW ZC	38		
107	BL-4-LN	1/4-20 HEX LN NE ZC	1		
108	BL-6-N	3/8-16 HEX NUT ZC	20		
109	BL-4-FW	1/4 USS FW ZC	2		



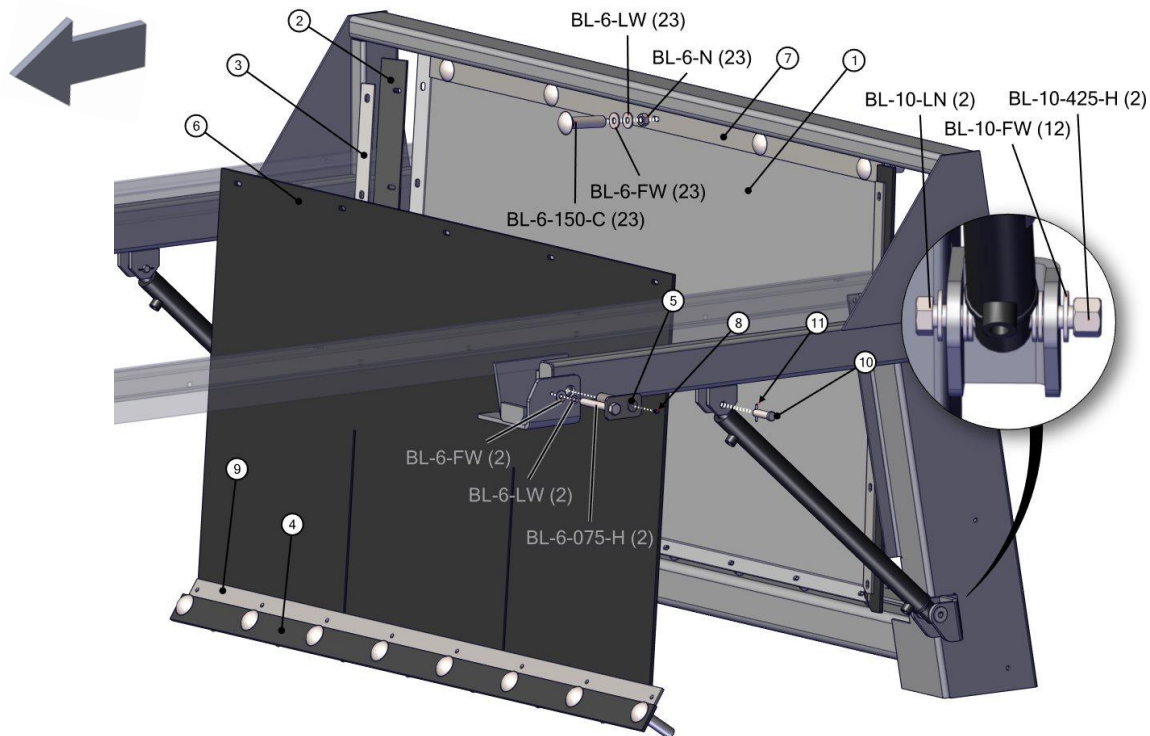
## 7215-1-05 FRONT PANELS AND SHIELDS

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	PR70086	Hose Mount, Spreader	1		
2	PR70087	PTO Holder	1		
3	PR70173	Front Panel	1		
4	PR70131	Cover, Flow Control Cutout	1		
5	EL-0041	2' ID Grommet, 3.5' x 3/16' cutout	1		
6	PIN-500-575	Pin 1/2 x 5-3/4 w/Lanyard & hairpin Clip	1		
100	BL-6-100-C	3/8-16 X 1 CARRIAGE BOLT G5 ZC	2		
101	BL-6-125-C	3/8-16 X 1-1/4 CARRIAGE BOLT G5 ZC	4		
102	BL-6-FW	3/8 USS FW ZC	6		
103	BL-6-LW	3/8 SPLIT LW ZC	6		
104	BL-6-N	3/8-16 HEX NUT ZC	6		
105	BL-8-125-H	1/2-13 X 1-1/4 HHCS G5 ZC	4		
106	BL-8-FW	1/2 USS FW ZC	8		
107	BL-8-LN	1/2-13 LN NYLON INSERT ZC	4		



## 7215-1-06 ENDGATE

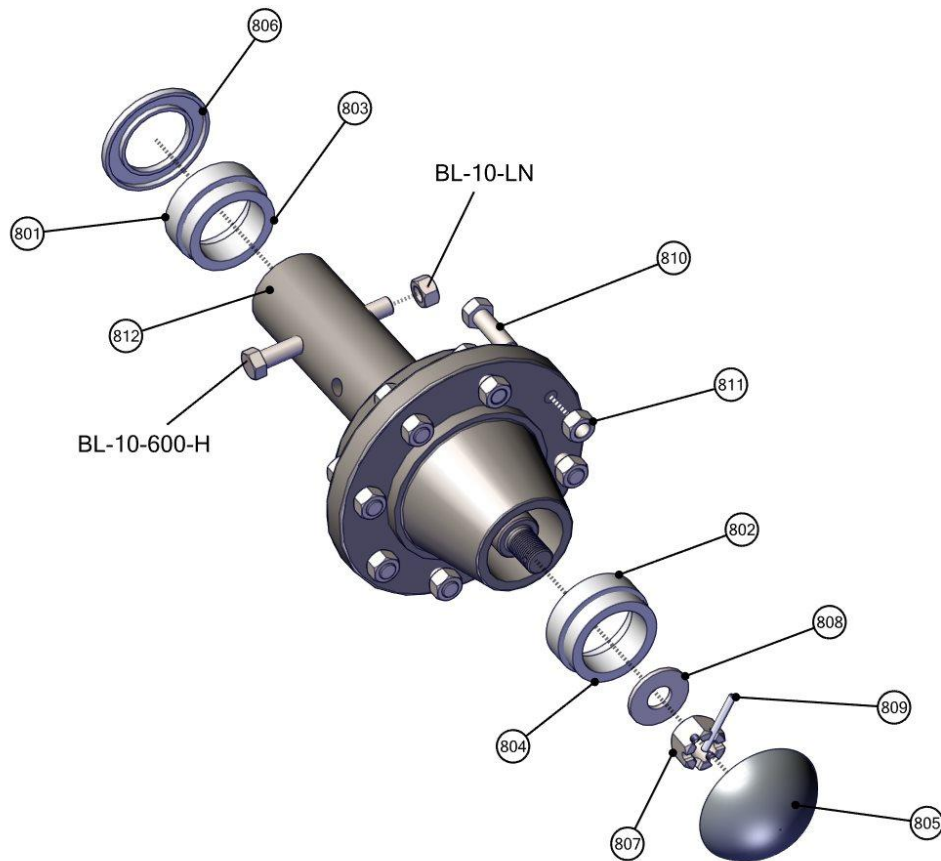
REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	PR70167	Endgate	1		
2	PR70174	Endgate Belting, Side	2		
3	PR70175	Endgate Belting Bar	2		
4	PR70176	Endgate Belting, Bottom	1		
5	PR70118	End Gate Hinge Pin	2		
6	PR70178	Endgate Belting	1		
7	PR70179	Belting Bar	1		
8	GF-1428	Grease Fitting 1/4" x 28 straight	2		
9	PR70177	Backing Bar	1		
10	PIN-10-40	Clevis Pin, Zinc-Plated, 5/8" Dia., 2-1/4" Long, 2' Usable	2		
11	PIN-0014	Spring Roll Pin, 5/32 x 1-1/2" Long	2		
100	BL-6-075-H	3/8-16 X 3/4 HHCS G5 ZC	2		
101	BL-6-150-C	3/8-16 X 1-1/2 CARRIAGE BOLT G5 ZC	23		
102	BL-6-FW	3/8 USS FW ZC	25		
103	BL-6-LW	3/8 SPLIT LW ZC	25		
104	BL-6-N	3/8-16 HEX NUT ZC	23		
105	BL-10-425-H	5/8-11 X 4-1/4 HH CAP G5 ZC	2		
106	BL-10-FW	5/8 USS FW ZC	12		
107	BL-10-LN	5/8-11 HEX LN NE ZC	2		





## 7215-1-07 HUBS AND SPINDLES

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
0	WHL-7107	22.5 x 8.25 Wheel - 8-8-6 - 3/8" Positive Offset	2		
0	WHT-1021	1000-20 Tube	2	WHT-1020 OR WHT-7107	
0	WHT-7107	11-22.5 Recapped Implement Tire	2		
1	WHL-3000	Hub Assembly Complete (includes spindle), Painted Black	2		Harvesters use WHL-3000-2
100	BL-10-600-H	5/8-11 X 6 HEX CAP G5 ZC	2		
101	BL-10-LN	5/8-11 HEX LN NE ZC	2		
800	WBR-3000K	Wheel Bearing Kit for WHL-3000 Hub & Spindle Assy.	2	WHL-3000	
801	WHL-3000A	Inner Cup	2	WHL-3000	
802	WHL-3000B	Outer Cup	2	WHL-3000	
803	WHL-3000C	Inner Cone	2	WHL-3000	
804	WHL-3000D	Outer Cone	2	WHL-3000	
805	WHL-3000H	Hub Cap	2	WHL-3000	3 1/8 od
806	WHL-3000G	Seal	2	WHL-3000	
807	WHL-3000J	Spindle Nut	2	WHL-3000	
808	WHL-3000K	Spindle Washer	2	WHL-3000	
809	PIN-C3-16-32	Cotter Pin 3/16 x 2'	2		
810	WHL-3000E	Stud Bolt	16	WHL-3000	
811	WHL-3000F	Lug Nut	16	WHL-3000	
812	WHL-3001	Spindle 3' x 16'	2	WHL-3000	



## 7215-1-08 TIRES AND WHEELS, 16.5-16.1 IMPLEMENT TIRES

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	WHM-1514	16.5-16.1 Tire & Wheel Assembly (Spreader, Tubeless)	2	790	



## 7215-1-08A OPT. TIRES AND WHEELS, 11R-22.5 TRUCK TIRES

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	WHM-7107	11.00-22.5 Tire & Wheel Assy.	2		



## 7215-1-08B OPT. TIRES AND WHEELS, 385/65R22.5

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	WHM-7106	385/65R22.5 Tire & Wheel Assy (Spreaders)	2	790	



## 7215-1-08C OPT. TIRES AND WHEELS, 425/65R22.5

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	WHM-7109	425/65R22.5 Tire & Wheel Assy, 8 Lug	2		

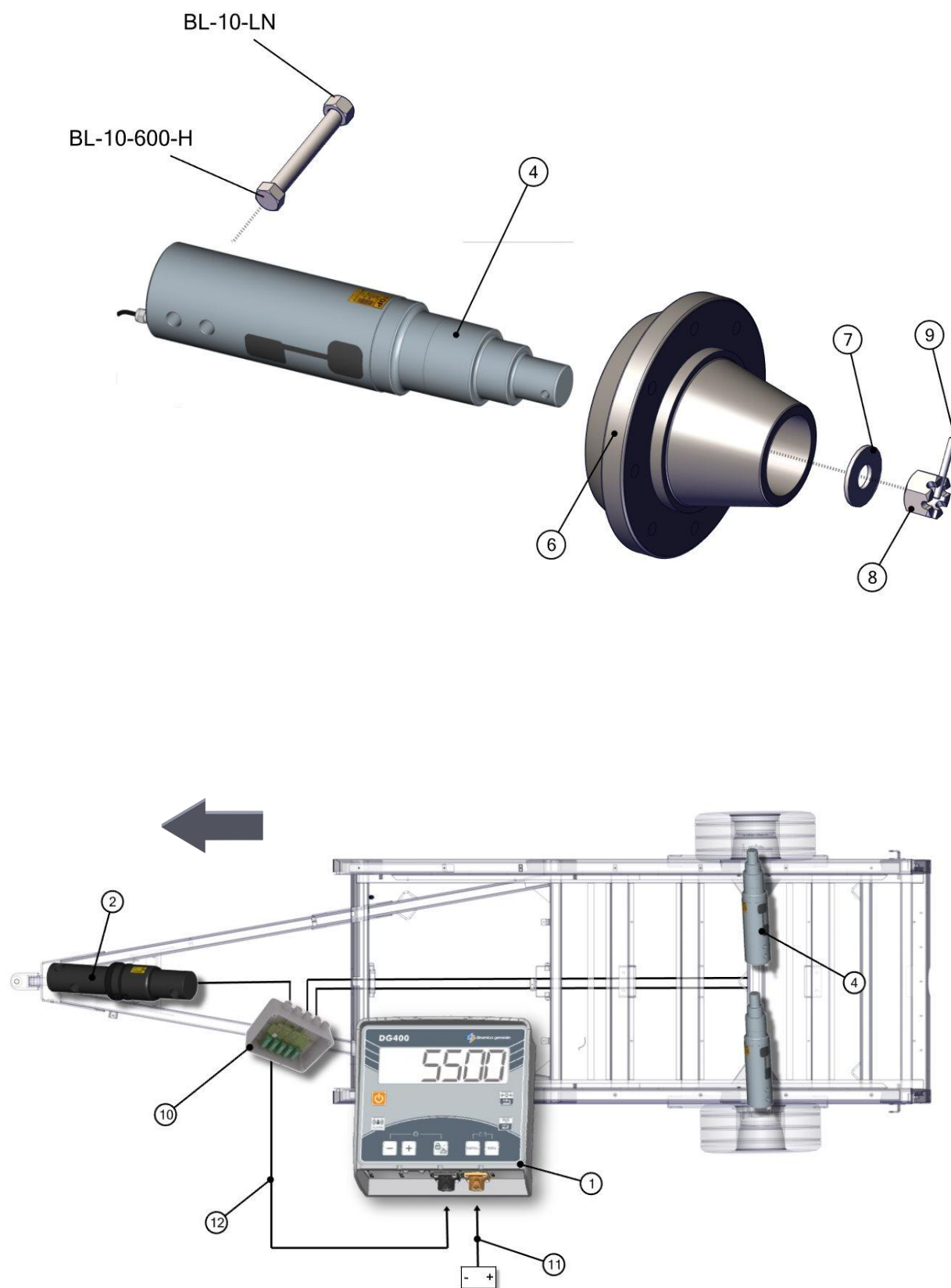


## 7219-1-09 OPT. WEIGHT SCALE SYSTEM, 3 POINT DG400

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	SWS-1001	DG400 Slim Box w/ Isobus, Weigh Scale Display Module	1		
2	SWS-1007	Load Cell, 2-7/8' Dia	1		
4	SWS-1008	Spindle Load Cell, 3' Dia.	2		
6	WHL-3000-HC	Complete Hub For WHL-3000, Without the Spindle	2		
7	WHL-3000K	Spindle Washer	2	WHL-3000	
8	WHL-3000J	Spindle Nut	2	WHL-3000	
9	PIN-C3-16-32	Cotter Pin 3/16 x 2'	2		
10	SWS-1004	J-Box, 6-9 Load Cells Plug Style	1		
11	SWS-1005	Power Cable, 16 ft w/ Ring Terminals	1		
12	SWS-1006	Sensor Cable, 22 ft w/ Connectors, J-Box to Scale Head	1		
100	BL-10-600-H	5/8-11 X 6 HEX CAP G5 ZC	1		
101	BL-10-LN	5/8-11 HEX LN NE ZC	1		

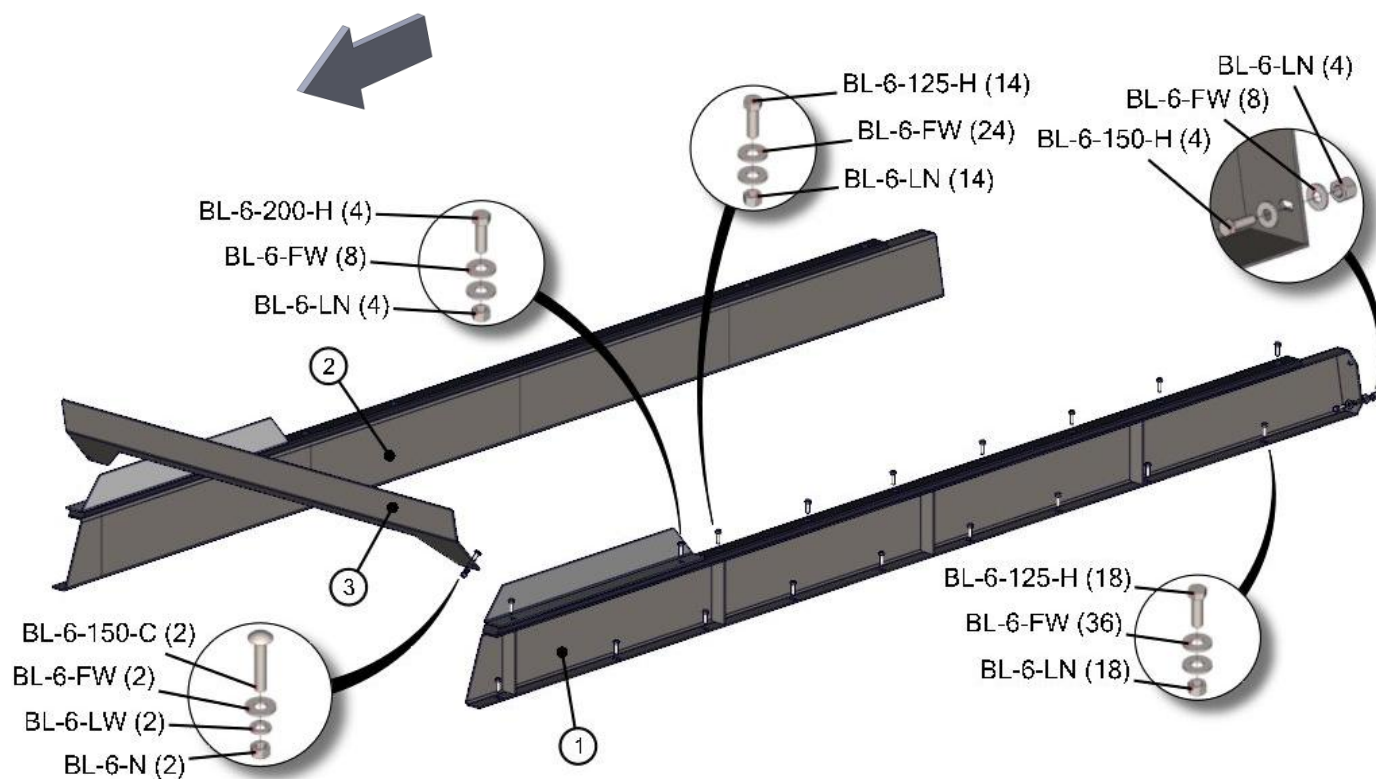


## 7219-1-09 OPT. WEIGHT SCALE SYSTEM, 3 POINT DG400



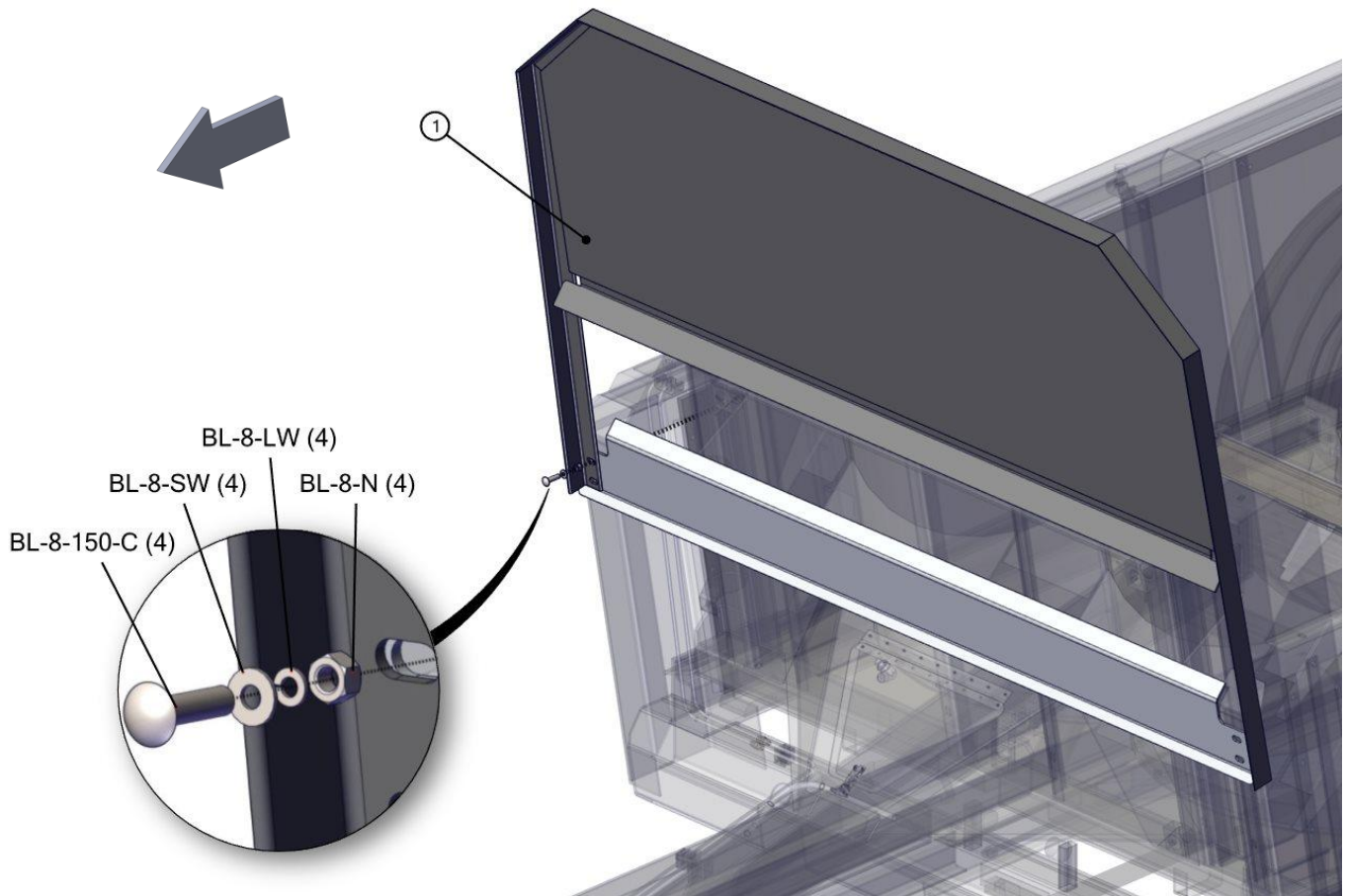
## 7220-1-11 OPT. SIDE EXTENSIONS

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	PR70495	Side Extension, HR250, LH	1		
2	PR70496	Side Extension, HR250, RH	1		
3	PR70203	Pusher Extension, HR250	1		
100	BL-6-125-H	3/8-16 X 1-1/4 HHCS G5 ZC	32		
101	BL-6-150-H	3/8-16 X 1-1/2 HEX CAP G5 ZC	4		
102	BL-6-150-C	3/8-16 X 1-1/2 CARRIAGE BOLT G5 ZC	2		
103	BL-6-200-H	3/8-16 X 2 HEX CAP G5 ZC	4		
104	BL-6-FW	3/8 USS FW ZC	82		
105	BL-6-LW	3/8 SPLIT LW ZC	2		
106	BL-6-N	3/8-16 HEX NUT ZC	2		
107	BL-6-LN	3/8-16 FIN H LN NE A563 GA ZC	40		



## 7215-1-12 OPT. ROCK GUARD

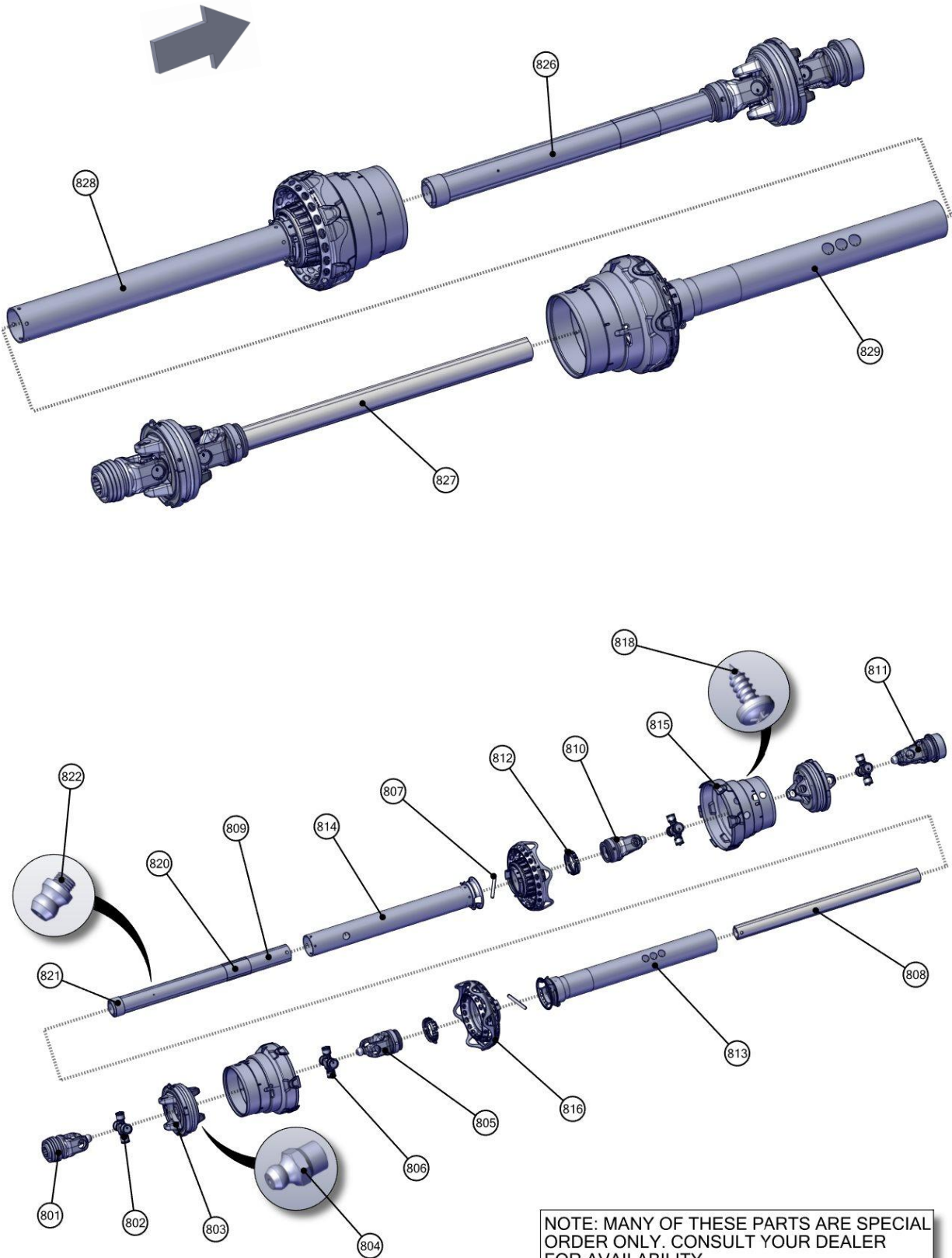
REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	PR70200	Rock Guard, HR250	1		
100	BL-8-150-C	1/2-13 X 1-1/2 CARRIAGE BOLT G5 ZC	4		
101	BL-8-SW	1/2 SAE FW ZC	4		
102	BL-8-LW	1/2 SPLIT LW ZC	4		
103	BL-8-N	1/2-13 HEX FIN NUTS ZC	4		



## 7215-2-01 DRIVELINE, FRONT 1-3/8" CV

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
801	PTS-1008J	Yoke, 1 3/4'-20 Spline	1		Special Order Only
802	PTS-1008E	Cross & Bearing Kit	2		Special Order Only
803	PTS-1008B	Double Yoke	2		Special Order Only
804	PTS-1017C	Zerk-in Item 2	2		
805	PTS-1008D	Inboard Yoke, 1b	1		Special Order Only
806	PTS-1008P	Cross Bearing & Kit	2		Special Order Only
807	PTS-1010C	Spring Pin	2		Special Order Only
808	PTS-1008F	Inner Profile, 1bGA	1		Special Order Only
810	PTS-1008H	Inboard Yoke, 2a	1		Special Order Only
811	PTS-1012A	Yoke ASGE	1		
812	PTS-1002J	PTO Shield Bearing Ring	2		Special Order Only
813	PTS-1008L	Guard Cone, 3 Rib	2		Special Order Only
815	PTS-1008K	CV Guard and Bearing Assy	2		Special Order Only
817	PTS-1002K	PTO Shield Safety Chain	1		Special Order Only
818	PTS-1010K	Screw	14		Special Order Only
819	PTS-1010L	Decal, Outer	1		Special Order Only
820	PTS-1010M	Decal, Inner	1		Special Order Only
821	PTS-1010N	Support Bearing	1		Special Order Only
822	PTB-1014L	Zerk	1		Special Order Only
823	PTS-1021P	Lubrication Decal	1	Replaces PTS-1008Q	Special Order Only
826	PTS-1012	540 rpm CV Driveline, Front, Vert.	1		
828	PTS-1012-FH	Front, Half Shaft	1		
829	PTS-1008-RH	Rear, Half Shaft	1		Special Order Only

## 7215-2-01 DRIVELINE, FRONT 1-3/8" CV

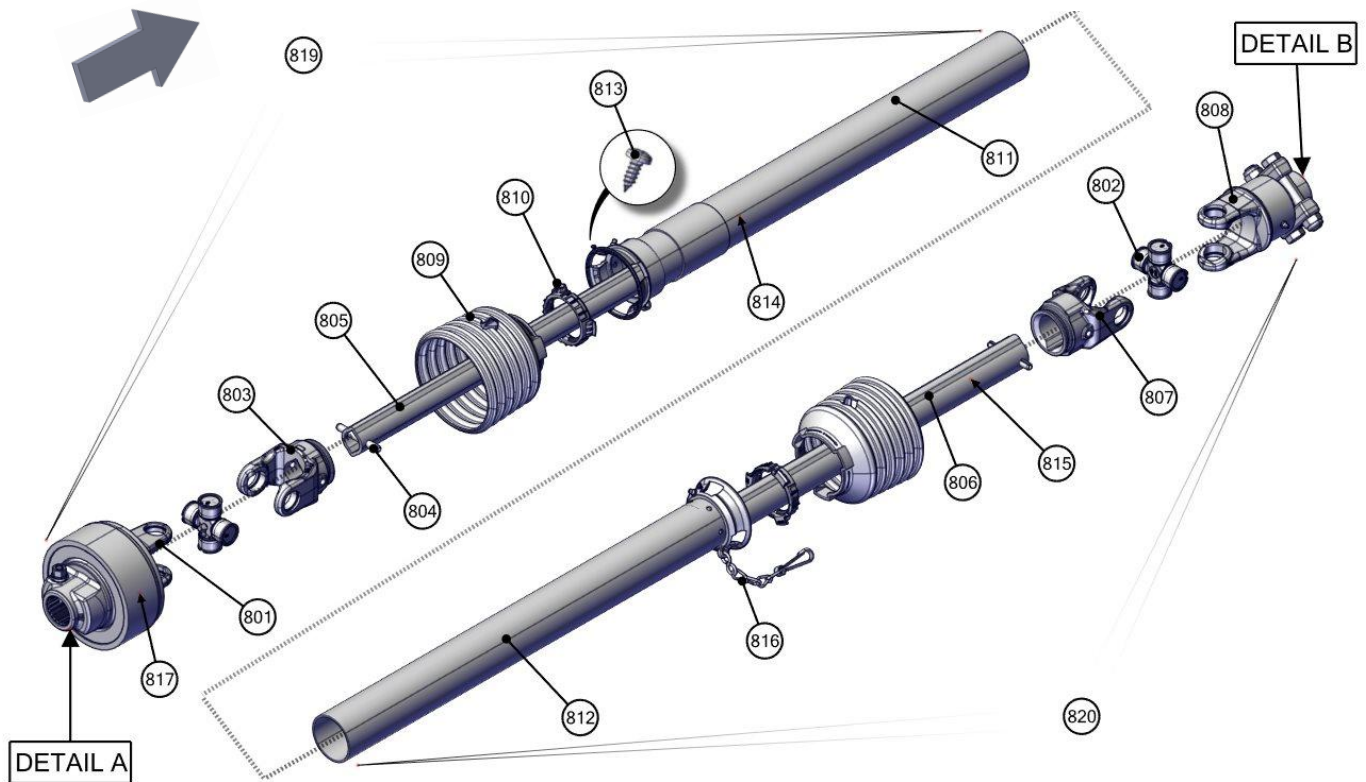


## 7215-2-02 DRIVELINE, REAR WITH CLUTCH

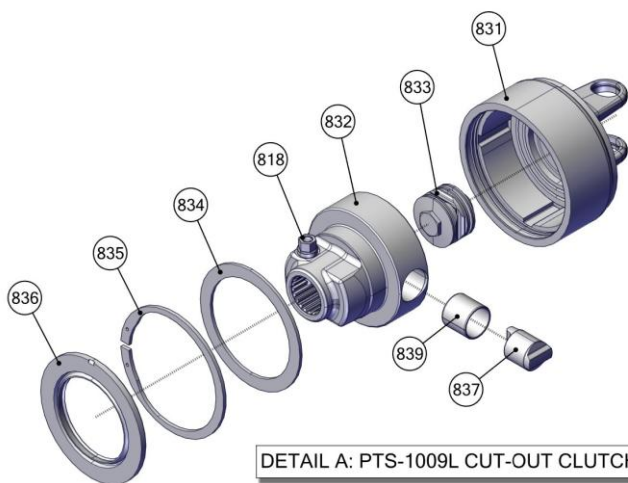
REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	PTS-1009	Driveline for Verticals, Rear	1		
801	PTS-1009L	Cut-Out Clutch	1		Special Order Only
802	PTS-1010B	Cross & Bearing Kit	2		Special Order Only
803	PTS-1009B	Inboard Yoke, 1b	1		Special Order Only
804	PTS-1010C	Spring Pin	2		Special Order Only
805	PTB-1014E	Inner Profile	1		Special Order Only
806	PTS-1009M	Outer Profile	1		Special Order Only
807	PTS-1010D	Inboard Yoke	1		Special Order Only
808	PTS-1009N	Overrunning Clutch	1		Special Order Only
809	PTB-1014I	Shield Cone 6 Rib	2		Special Order Only
810	PTS-1002J	PTO Shield Bearing Ring	2		Special Order Only
811	PTS-1009P	Guard Tube Outer	1		Special Order Only
812	PTS-1009Q	Guard Tube Inner	1		Special Order Only
813	PTS-1010K	Screw	2		Special Order Only
814	PTS-1010L	Decal, Outer	1		Special Order Only
815	PTS-1010M	Decal, Inner	1		Special Order Only
816	PTS-1002K	PTO Shield Safety Chain	1		Special Order Only
817	PTS-1009J	Decal	1		Special Order Only
818	PTS-1009K	CC Lock Assembly	1		Special Order Only
819	PTS-1009-FH	Front, Half Shaft	1		Special Order Only
820	PTS-1009-RH	Rear, Half Shaft	1		Special Order Only
831	PTS-1009E-B	Housing	1		Special Order Only
832	PTS-1009E-C	Hub 1-3/4'-20 Spl CC	1		Special Order Only
833	PTS-1009E-D	Spring Pack	1		Special Order Only
834	PTS-1009E-E	Washer	1		Special Order Only
835	PTS-1009E-F	Retaining Ring	1		Special Order Only
836	PTS-1009E-G	Sealing Ring	1		Special Order Only
837	PTS-1009E-A	Cam	2		Special Order Only
839	PTS-1009E-J	Bushing - In Part PTS-1009E-C	2		Special Order Only
841	PTS-1020A-A	Clutch Housing	1		Special Order Only
842	PTS-1009N-A	Hub	1		Special Order Only
843	PTS-1010F-A	Key	2		Special Order Only
844	PTS-1010F-B	Leaf Spring	2		Special Order Only
845	PTS-1009N-B	Supporting Ring	1		Special Order Only
846	PTS-1010F-G	Retaining Ring	1		Special Order Only
847	PTS-1009N-C	Clamp Bridge	2		Special Order Only
848	PTS-1009N-D	Hex Bolt - M16 x 110L	2		Special Order Only
849	PTS-1009N-E	Locknut - M16	2		Special Order Only
850	PTS-1008C	Zerk, Double Yoke	1		Special Order Only



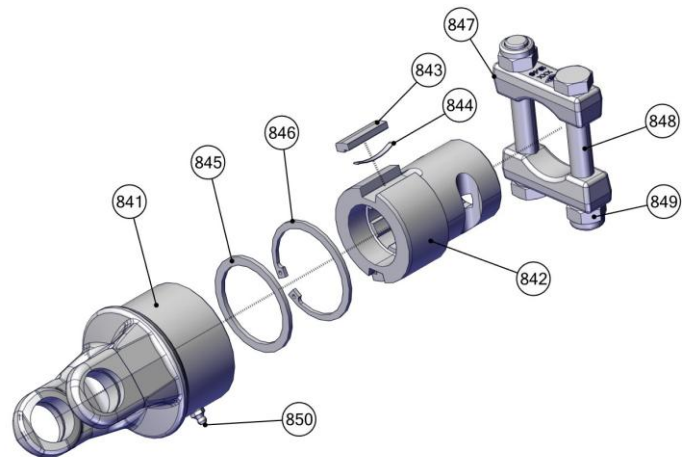
## 7215-2-02 DRIVELINE, REAR WITH CLUTCH



NOTE: MANY OF THESE PARTS ARE SPECIAL ORDER ONLY. CONSULT YOUR DEALER FOR AVAILABILITY.



DETAIL A: PTS-1009L CUT-OUT CLUTCH

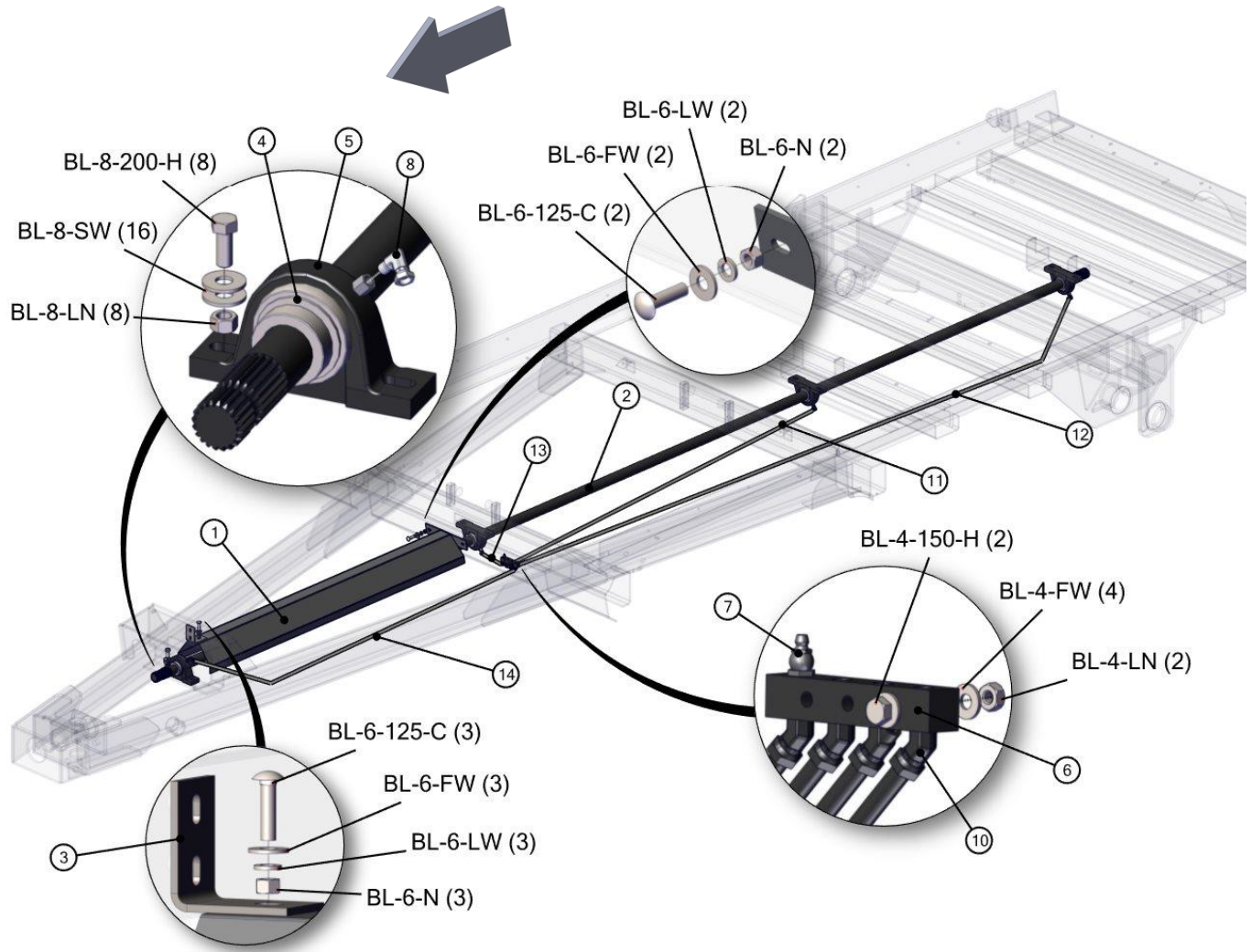


DETAIL B: PTS-1009N OVER RUNNING CLUTCH

## 7215-2-03 DRIVELINE, MID SHAFT AND SHIELDS

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
0	HA-1031	Hydraulic Hose Holder 3/8	5		
0	PR70181	Hanger, Drive Shaft Shield	1		
0	WT-11	Wire Tie 11'	12		
1	PR70180	Shield, Main Drive Shaft	1		
2	PR38261	Shaft,Main,490 Vertical Beater Spreader	1		
3	PR70141	Bearing Mount, Driveline	2		
4	BR-175-085-I	Bearing, 1 3/4" ID, TS	4		
5	BR-085-RAK	Bearing Housing 85 mm	4		
6	GF-4-4	4' Grease Manifold	1		
7	GF-1827	Grease Fitting 1/8 NPT Straight	4		
8	A-1501-2-2	1/8" MP x 1/8" FPX90°	4		
10	A-1503-2-2	1/8" MP x 1/8" FPX 45°	4		
11	H2-74-2MP-2MP	1/8in Hose x 1/8MP x 1/8MP x 74in Long	1		
12	H2-122-2MP-2MP	1/8in Hose x 1/8MP x 1/8MP x 122in Long	1		
13	H2-14-2MP-2MP	1/8in Hose x 1/8MP x 1/8MP x 14in Long	1		
14	H2-54-2MP-2MP	1/8in Hose x 1/8MP x 1/8MP x 54in	1		
100	BL-4-150-H	1/4-20 X 1-1/2 HEX CAP G5 ZC	2		
101	BL-4-FW	1/4 USS FW ZC	4		
102	BL-4-LN	1/4-20 HEX LN NE ZC	2		
103	BL-6-125-C	3/8-16 X 1-1/4 CARRIAGE BOLT G5 ZC	5		
104	BL-6-FW	3/8 USS FW ZC	5		
105	BL-6-LW	3/8 SPLIT LW ZC	5		
106	BL-6-N	3/8-16 HEX NUT ZC	5		
107	BL-8-200-H	1/2-13 X 2 HEX CAP G5 ZC	8		
108	BL-8-FW	1/2 USS FW ZC	16		
109	BL-8-LN	1/2-13 LN NYLON INSERT ZC	8		

## 7215-2-03 DRIVELINE, MID SHAFT AND SHIELDS

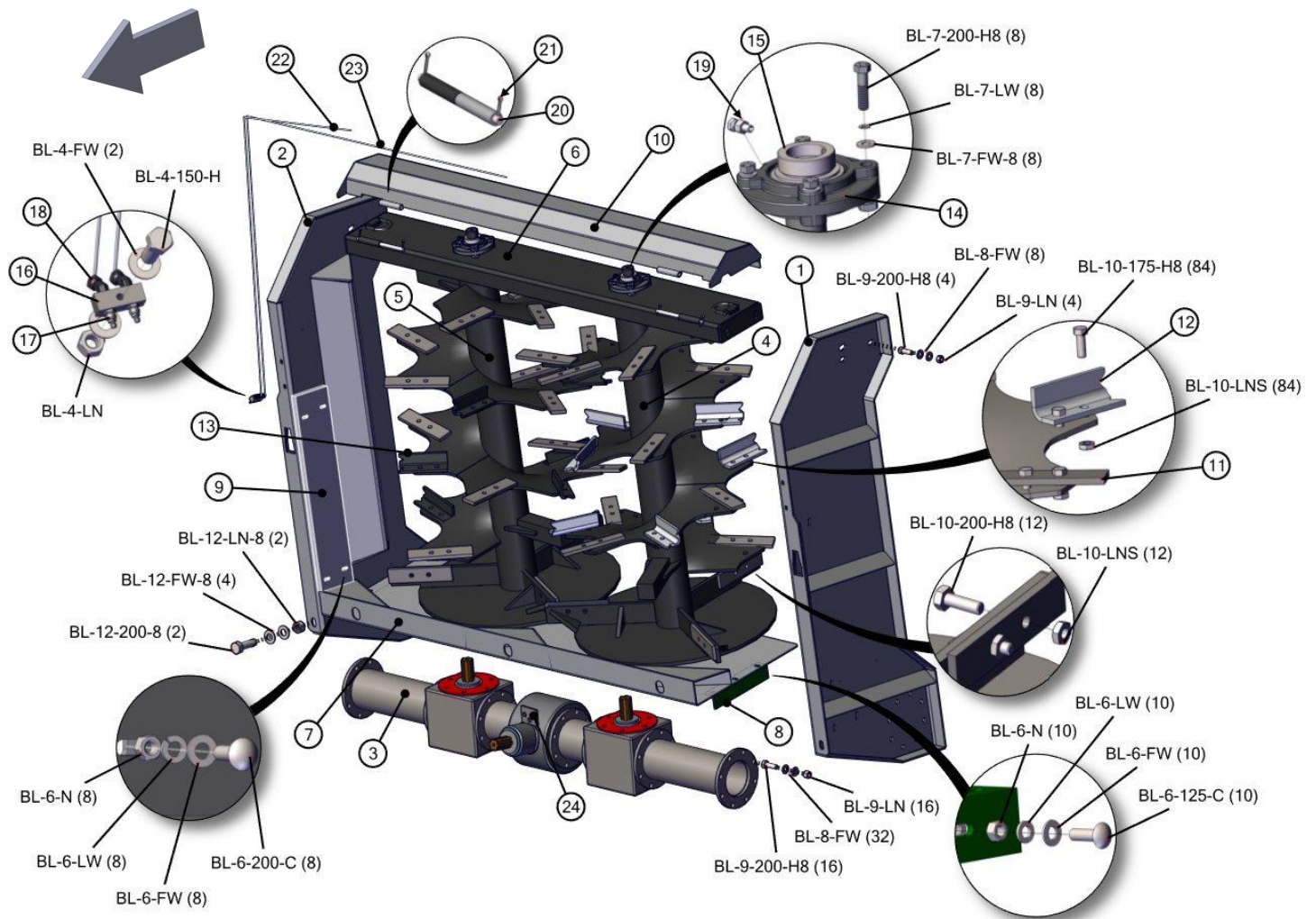


## 7215-2-04 VERTICAL BEATERS WITH GEARBOX

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	PR70151	Beater Panel, LH	1		
2	PR70152	Beater Panel, RH	1		
3	VTB-1879-A1	Gearbox Assembly, 540 rpm	1		
4	VTB-0003	Beater W, LH	1		
5	VTB-0004	Beater W, RH	1		
6	PR70168	Bearing Plate, Beaters	1		
7	PR70150	Beater Pan	1		
8	PR70085	Beater Pan Mount	2		
9	PR70090	Beater Panel Plastic	2		
10	PR70169	Bearing Cover	1		
11	VTB-1899-F3	Knife, Weight Specific	30	1190VB: 71113001- 1180VB: 74015011-	
12	VTB-1899-B3	Claw/Blade, Left Beater From Rear	6		
13	VTB-1899-C3	Claw/Blade, Right Beater From Rear	6		
14	BR-085-4PF	85mm Four Bolt Piloted Flange Housing	2		
15	BR-175-085-I	Bearing, 1 3/4" ID, TS	2		
16	GF-2-2	2" Grease Manifold	1		
17	GF-1827	Grease Fitting 1/8 NPT Straight	2		
18	A-1503-2-2	1/8" MP x 1/8" FPX 45°	2		
19	A-1404-2-2	1/8 MP x 1/8 FPX	2		
20	PR70133	Hinge Pin, 1/2" x 9"	2		
21	PIN-C2-16	Cotter Pin, 1/8" x 1"	4		
22	H2-38-2MP-2MP	1/8 in grease hose 1/8MP x 1/8MP x 38 in long	1		
23	H2-67-2MP-2MP	1/8in Hose x 1/8MP x 1/8MP x 67in Long	1		
24	PR50502	Shim, Bottom Panel under Gearbox	1		
25	HP-1038	Gear Lube, 80W90 @ Quart	11	Hydra Ram Spreader	
100	BL-4-150-H	1/4-20 X 1-1/2 HEX CAP G5 ZC	1		
101	BL-4-FW	1/4 USS FW ZC	2		
102	BL-4-LN	1/4-20 HEX LN NE ZC	1		
103	BL-6-125-C	3/8-16 X 1-1/4 CARRIAGE BOLT G5 ZC	10		
104	BL-6-200-C	3/8-16 X 2 CARRIAGE BOLT G5 ZC	8		
105	BL-6-FW	3/8 USS FW ZC	18		
106	BL-6-LW	3/8 SPLIT LW ZC	18		
107	BL-6-N	3/8-16 HEX NUT ZC	18		
108	BL-7-200-H8	7/16-14 X 2 HH G8	8		
109	BL-7-FW-8	7/16 FW G8	8		
110	BL-7-LW	7/16 SPLIT LW ZC	8		
111	BL-8-FW	1/2 USS FW ZC	40		
112	BL-9-200-H8	9/16-12 X 2 HH G8	20		

## 7215-2-04 VERTICAL BEATERS WITH GEARBOX

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
113	BL-9-LN	9/16-12 LN w/ NYLON INSERT	20		
114	BL-10-175-H8	5/8-11 X 1-3/4 HH G8 ZC	84		
115	BL-10-200-H8	5/8-11 X 2 HEX CAP G8 ZC	12		
116	BL-10-LNS	5/8-11 STOVER LN	96		
117	BL-12-200-8	3/4-10 X 2 HH C/S G8 ZC	2		
118	BL-12-FW-8	3/4 FW G8	4		
119	BL-12-LN-8	3/4-10 LN w/ NYLON INSERTS G8	2		





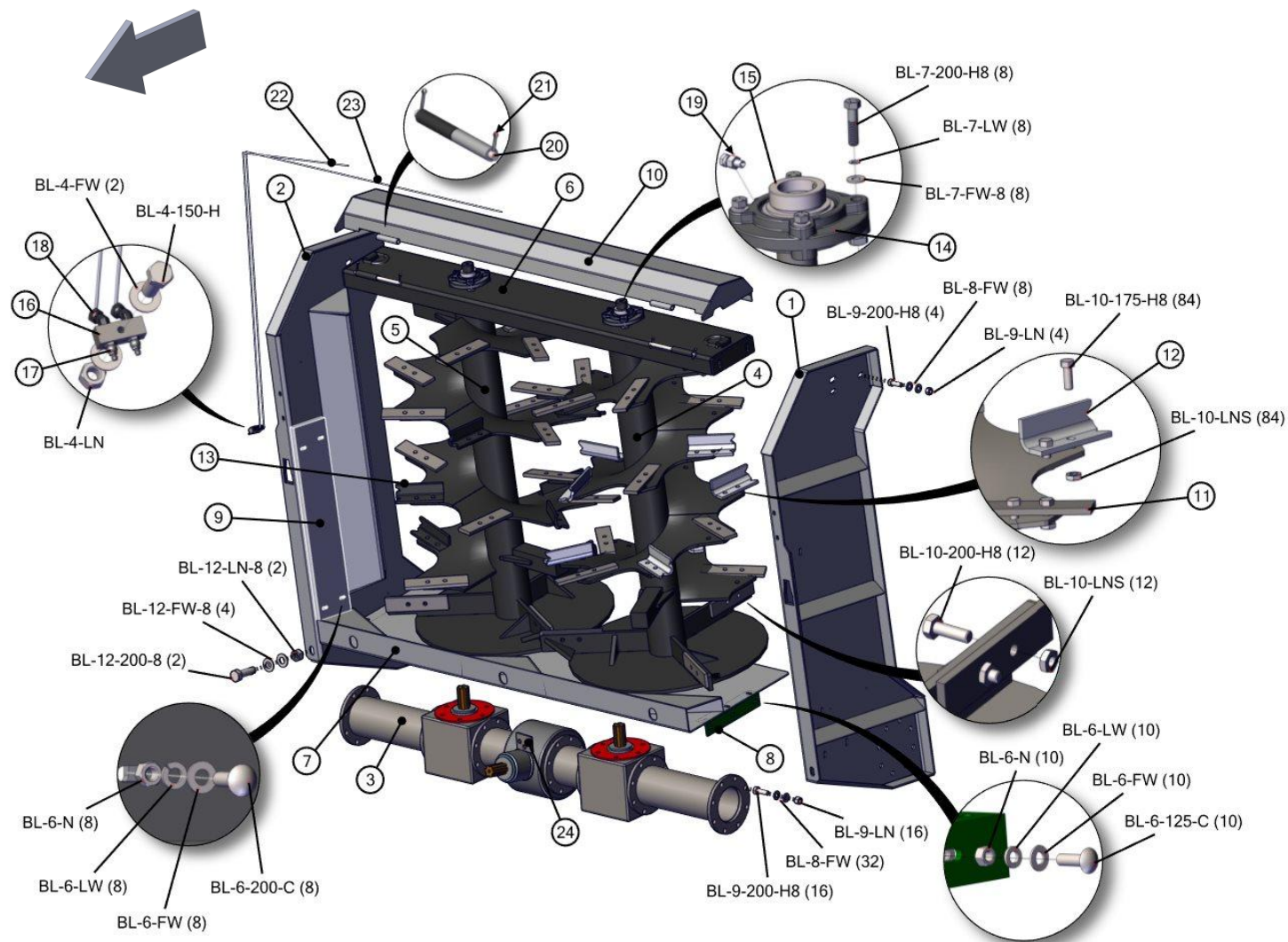
## 7215-2-04LP VERTICAL BEATERS, LOW PRO

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	PR70190	Beater Panel, LH, Low Pro	1		
2	PR70191	Beater Panel, RH, Low Pro	1		
3	VTB-1879-A1	Gearbox Assembly, 540 rpm	1		
4	VTB-0005	Vertical Beater, LH, Low Pro	1		
5	VTB-0006	Vertical Beater, RH, Low Pro	1		
6	PR70168	Bearing Plate, Beaters	1		
7	PR70150	Beater Pan	1		
8	PR70085	Beater Pan Mount	2		
9	PR70192	Plastic Spacer, Beater Panel	2		
10	PR70169	Bearing Cover	1		
11	VTB-1899-A3	Knife	24	1880: - 74015014	
12	VTB-1899-B3	Claw/Blade, Left Beater From Rear	5		
13	VTB-1899-C3	Claw/Blade, Right Beater From Rear	5		
14	BR-085-4PF	85mm Four Bolt Piloted Flange Housing	2		
15	BR-175-085-I	Bearing, 1 3/4" ID, TS	2		
16	GF-2-2	2' Grease Manifold	1		
17	GF-1827	Grease Fitting 1/8 NPT Straight	2		
18	A-1503-2-2	1/8" MP x 1/8" FPX 45°	2		
19	A-1404-2-2	1/8 MP x 1/8 FPX	2		
20	PR70133	Hinge Pin, 1/2" x 9"	2		
21	PIN-C2-16	Cotter Pin, 1/8" x 1"	4		
22	H2-23-2MP-2MP	1/8 in grease hose 1/8MP x 1/8MP x 23 in long	1		
23	H2-56-2MP-2MP	1/8in Hose x 1/8MP x 1/8MP x 56in	1		
24	PR50502	Shim, Bottom Panel under Gearbox	1		
100	BL-4-150-H	1/4-20 X 1-1/2 HEX CAP G5 ZC	1		
101	BL-4-FW	1/4 USS FW ZC	2		
102	BL-4-LN	1/4-20 HEX LN NE ZC	1		
103	BL-6-125-C	3/8-16 X 1-1/4 CARRIAGE BOLT G5 ZC	10		
104	BL-6-200-C	3/8-16 X 2 CARRIAGE BOLT G5 ZC	8		
105	BL-6-FW	3/8 USS FW ZC	18		
106	BL-6-LW	3/8 SPLIT LW ZC	18		
107	BL-6-N	3/8-16 HEX NUT ZC	18		
108	BL-7-200-H8	7/16-14 X 2 HH G8	8		
109	BL-7-FW-8	7/16 FW G8	8		
110	BL-7-LW	7/16 SPLIT LW ZC	8		
111	BL-8-FW	1/2 USS FW ZC	40		
112	BL-9-200-H8	9/16-12 X 2 HH G8	20		
113	BL-9-LN	9/16-12 LN w/ NYLON INSERT	20		
114	BL-10-175-H8	5/8-11 X 1-3/4 HH G8 ZC	84		
115	BL-10-200-H8	5/8-11 X 2 HEX CAP G8 ZC	12		



## 7215-2-04LP VERTICAL BEATERS, LOW PRO

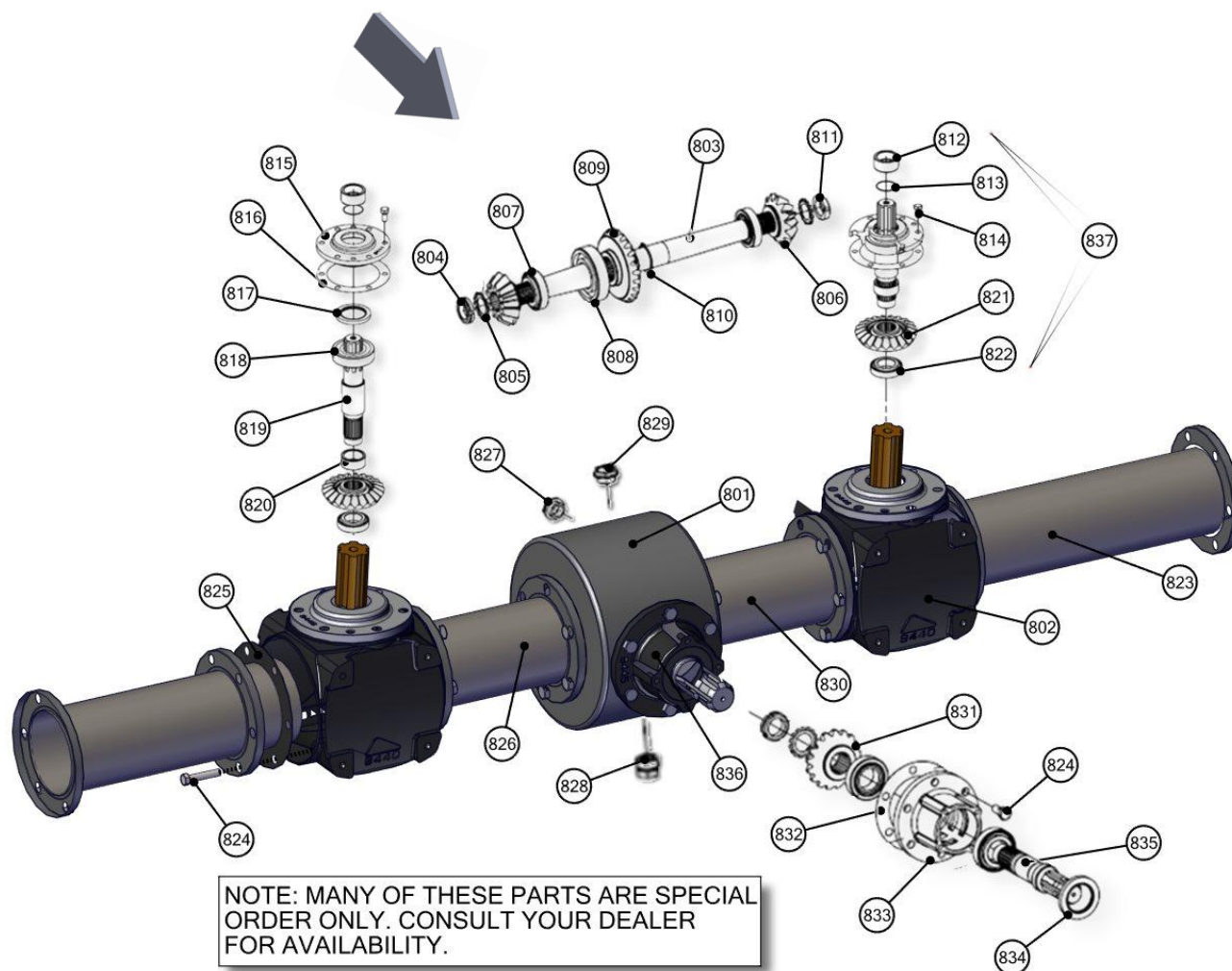
REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
116	BL-10-LNS	5/8-11 STOVER LN	96		
117	BL-12-200-8	3/4-10 X 2 HH C/S G8 ZC	2		
118	BL-12-FW-8	3/4 FW G8	4		
119	BL-12-LN-8	3/4-10 LN w/ NYLON INSERTS G8	2		



## 7215-2-05 GEARBOX, VERTICAL BEATERS

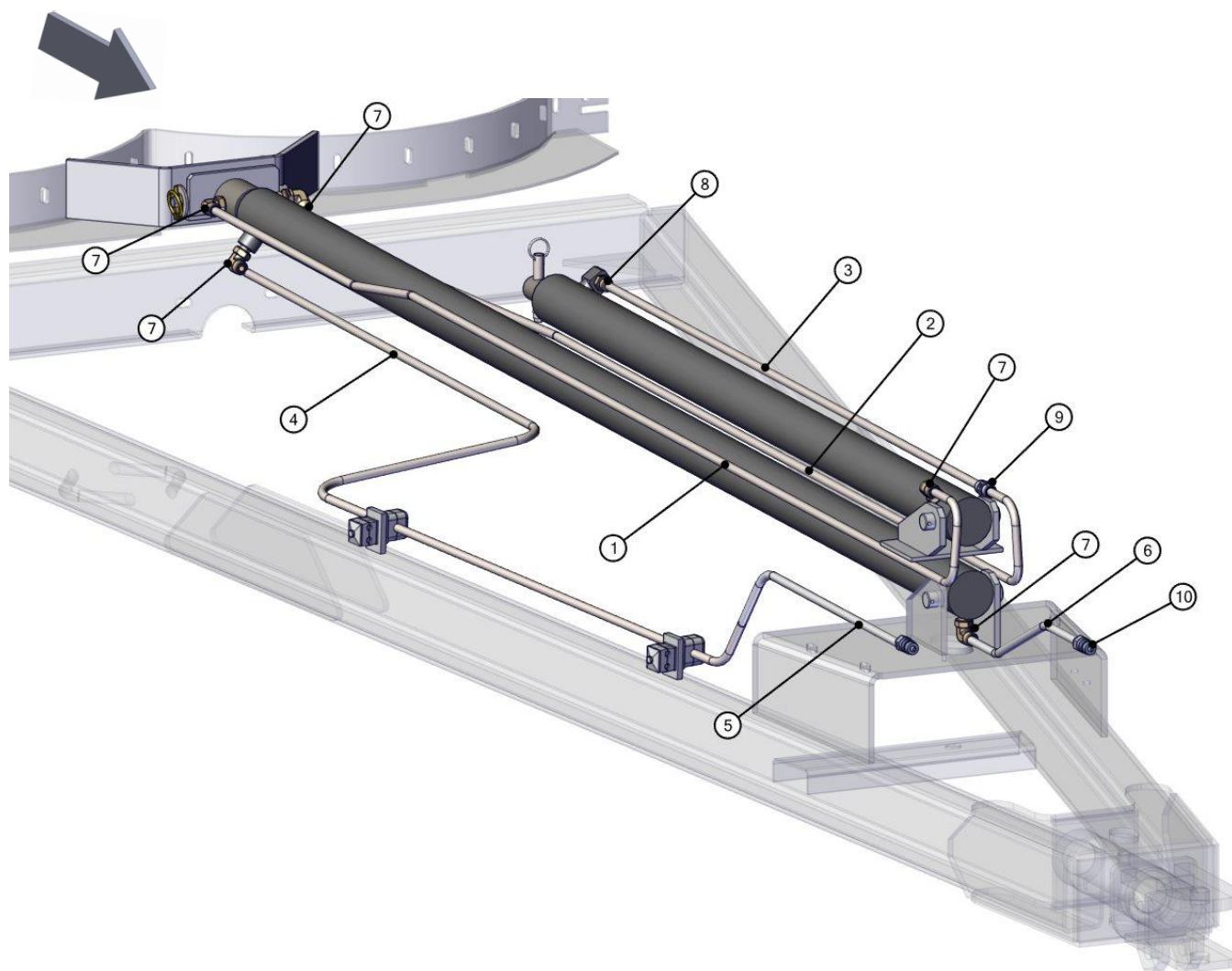
REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
801	VTB-1899-A1	Housing	1		Special Order Only
802	VTB-1899-B1	Housing	2		Special Order Only
803	VTB-1899-C1	Shaft	1		Special Order Only
804	VTB-1899-D1	Threaded Ring, LH Thread	2		Special Order Only
805	VTB-1899-E1	Washer	3		Special Order Only
806	VTB-1899-F1	Bevel Pinion Z=13	2		Special Order Only
807	VTB-1899-G1	Bearing 32209	4		Special Order Only
808	VTB-1899-H1	Bearing 6311	1		Special Order Only
809	VTB-1899-J1	Gear Z=24	1		
810	VTB-1899-K1	Circlip E 55	1		Special Order Only
811	VTB-1899-L1	Threaded Ring, RH Thread	1		Special Order Only
812	VTB-1899-M1	Spacer	2		Special Order Only
813	VTB-1899-N1	O-ring 2212	2		Special Order Only
814	VTB-1899-P1	Screw, hex-hd M14X30	12		Reference Only, Special Order
815	VTB-1899-Q1	Calotte	2		Special Order Only
816	VTB-1899-R1	Gasket	2		Special Order Only
817	VTB-1899-S1	Oil Seal	2		Special Order Only
818	VTB-1899-T1	Bearing 6311-2RS	2		Special Order Only
819	VTB-1899-U1	Shaft	2		Special Order Only
820	VTB-1899-V1	Spacer	2		Special Order Only
821	VTB-1899-W1	Gear Z=22	2		
822	VTB-1899-X1	Bearing 32210	2		Special Order Only
823	VTB-1899-Y1	Spacer L=428	2		Special Order Only
824	VTB-1899-Z1	Screw, hex-hd M14X35	54		Reference Only, Special Order
825	VTB-1899-A2	Gasket	6		Special Order Only
826	VTB-1899-B2	Right Spacer L=178	1		Special Order Only
827	VTB-1899-C2	Oil Lev. Indicator	1		Same as GBXA-5-ST10B
828	VTB-1899-D2	Oil Plug, 1/2" Gas	1		Special Order Only
829	VTB-1899-E2	Oil Plug, 1" Gas.	1		Special Order Only
830	VTB-1899-F2	Left Spacer, L=178	1		Special Order Only
831	VTB-1899-G2	Bevel Pinion Z=17	1		
832	VTB-1899-H2	Gasket	1		Special Order Only
833	VTB-1899-J2	Hub	1		Special Order Only
834	VTB-1899-K2	Oil Seal	1		
835	VTB-1899-L2	Shaft	1		Special Order Only
836	VTB-1899-M2	Hub Complete, Gearbox	1		Special Order Only
837	VTB-1899-N2	Calotte Complete, Gearbox	2		Special Order Only

## 7215-2-05 GEARBOX, VERTICAL BEATERS



## 7219-3-01 HYDRAULICS, PUSH CYLINDERS

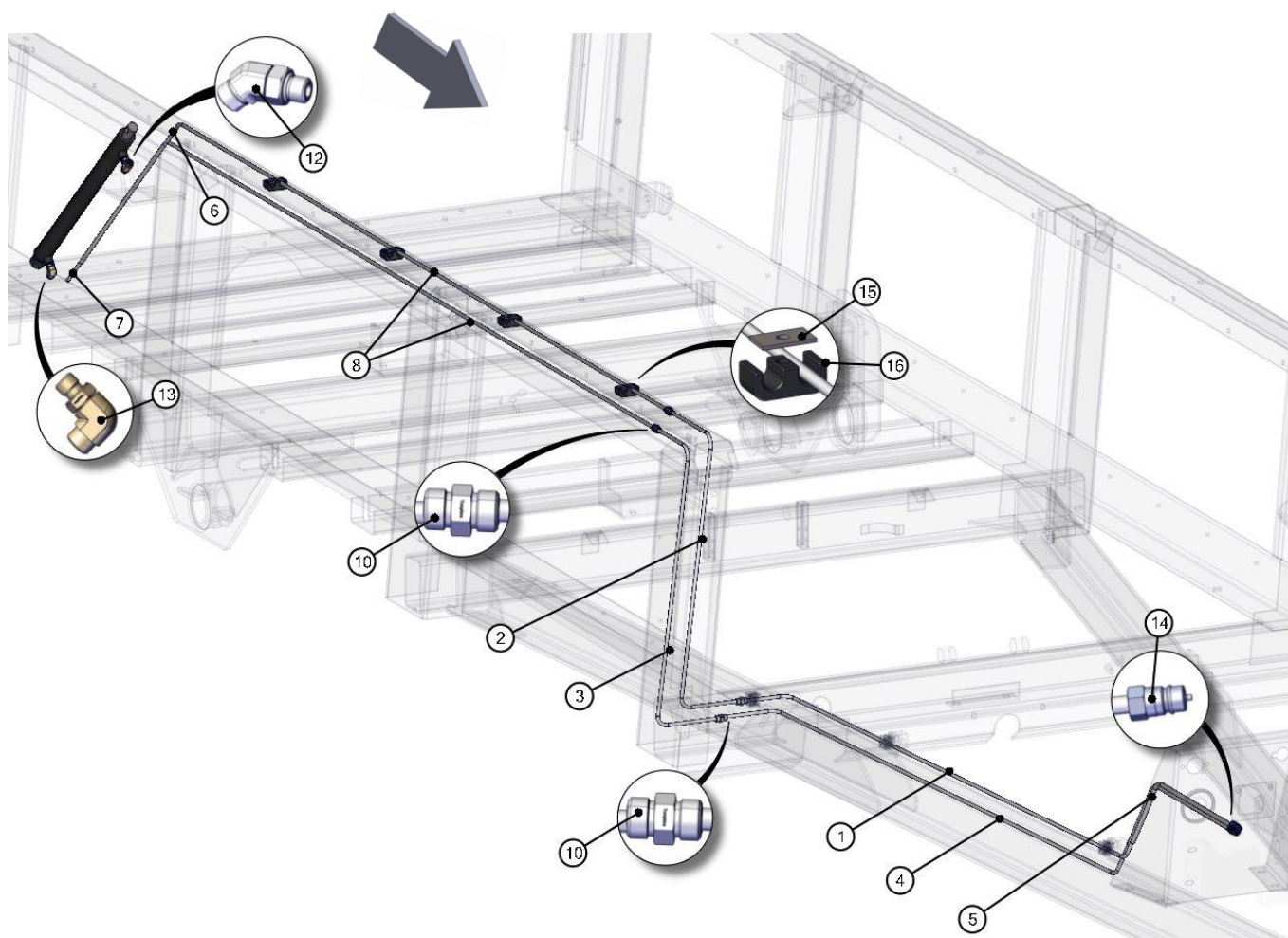
REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
0	HY-TRAN	Hytran @ gal	5		
1	H-T7050F	1/2' SS Tube, Pusher Extend, ORFS	1		
2	H-T7051F	1/2' SS Tube, Pusher Retract, ORFS	1		
3	H-T7052F	1/2' SS Tube, Pusher Retract, ORFS	1		
4	H-T7055F	1/2' SS Tube, Sliding Floor, ORFS	1		
5	H8-100-8MOR-8MFF	1/2' Hose, 1/2' Male SAE x 1/2' Male ORFS	1		
6	H8-94-8MOR-8FFFX	1/2' Hose, 1/2' Male SAE x 1/8 Female ORFS	1		
7	A-FF6801-08-08	Elbow, 1/2' Male ORFS x 1/2' SAE	5		
8	A-FF6400-08-08	Union, 1/2' Male ORFS x 1/2' SAE	1		
9	A-FF2403-08-08	Union, 1/2' Male ORFS x 1/2' Male ORFS	1		
10	A-QDS71X15	Ag Quick Coupler, 1/2' ISO5675 x 8SAE	2		





## 7219-3-02 HYDRAULICS, ENDGATE CYLINDERS

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	H-T7053F	3/8" SS Tube, Endgate, ORFS	1		
2	H-T7056F	3/8" SS Tube, Endgate, ORFS	1		
3	H-T7057F	3/8" SS Tube, Endgate, ORFS	1		
4	H-T7054F	3/8" SS Tube, Endgate, ORFS	1		
5	H6-100-6MFF-8MOR	3/8" Hose, 3/8' Male ORFS x 1/2' SAE	2		
6	H4-59-6MFF-6FFFX	1/4" Hose, 3/8' Male ORFS x 3/8' Female ORFS	1		
7	H4-33-6MFF-6FFFX	1/4" Hose, 3/8' Male ORFS x 3/8' Female ORFS	1		
8	H-T7018F	3/8" SS Tube, Endgate, ORFS	2		
10	A-FF2403-06-06	Union, 6MFF X 6MFF	4		
12	A-FF6802-06-06	45 ELBOW, 6MFF X 6SAE	1		
13	A-FF6801-06-06	ELBOW, 6MFF X 6SAE	1		
14	A-QDS71X15	Ag Quick Coupler, 1/2" ISO5675 x 8SAE	2		
15	PR34894	Support, Clamp, 1/4" Double Hose Clamp	4		
16	PR34896	Hose Clamp, 1/4" Hydraulic, 1/2" O.D. Hose	4		

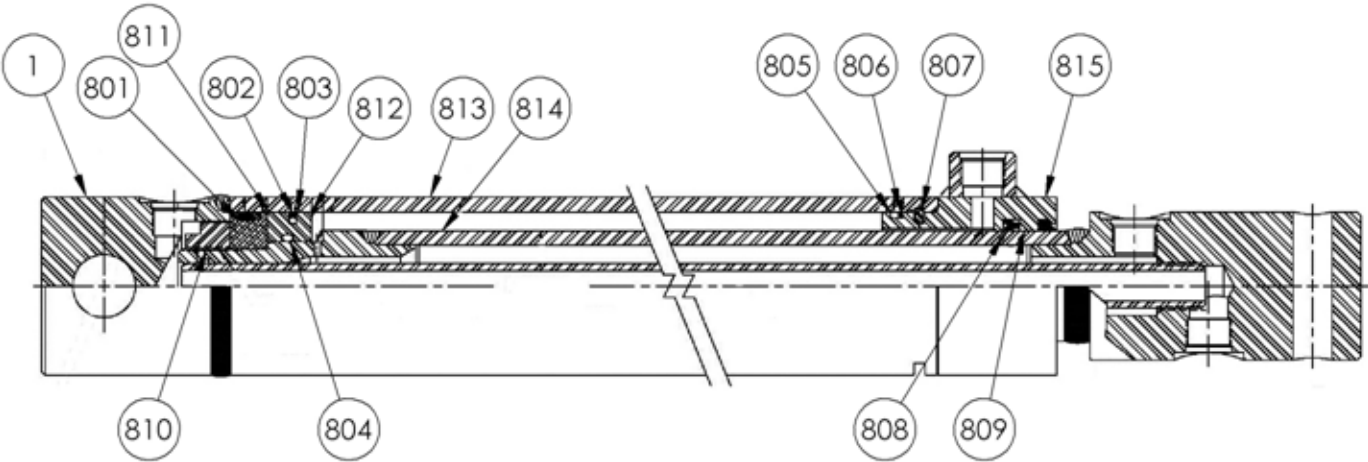
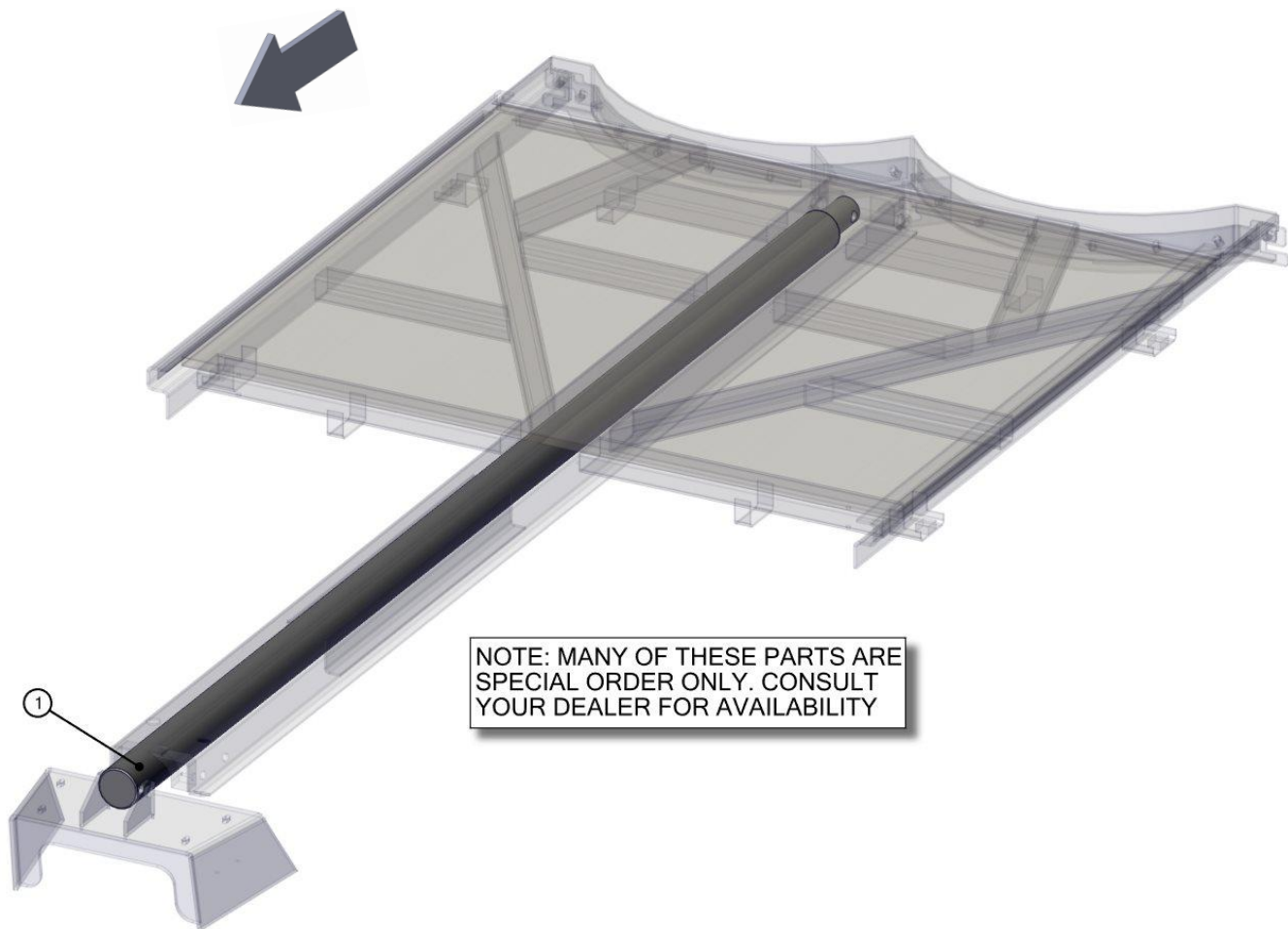


## 7215-3-03 CYLINDER, SLIDING FLOOR

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	PR24703	Main Cylinder, Dual Pin	1		
801	PR24701-B	Wear Ring	1		Part of Seal Kit, Not Sold Separately
802	PR24701-C	Poly Hone	1		Part of Seal Kit, Not Sold Separately
803	PR24701-D	O'Ring	1		Part of Seal Kit, Not Sold Separately
804	PR24701-E	O' Ring	1		Part of Seal Kit, Not Sold Separately
805	PR24701-F	O' Ring	1		Part of Seal Kit, Not Sold Separately
806	PR24701-G	Back-up Ring	1		Part of Seal Kit, Not Sold Separately
807	PR24701-H	Wire Retaining Ring	1		Part of Seal Kit, Not Sold Separately
808	PR24701-I	Loaded U-Cup	1		Part of Seal Kit, Not Sold Separately
809	PR24701-J	Rod Wiper	1		Part of Seal Kit, Not Sold Separately
810	PR24701-K	Thin Locknut	1		Reference Only, Special Order
811	PR24701-L	Piston	1		Reference Only, Special Order
812	PR24701-M	Piston	1		Reference Only, Special Order
813	PR24701-N	Barrel Assembly	1		Reference Only, Special Order
814	PR24701-O	Rod Assembly	1		Reference Only, Special Order
815	PR24701-P	Head Assembly	1		Reference Only, Special Order
816	PR24701-SK	Seal Kit, 490 Main Cylinder	1		

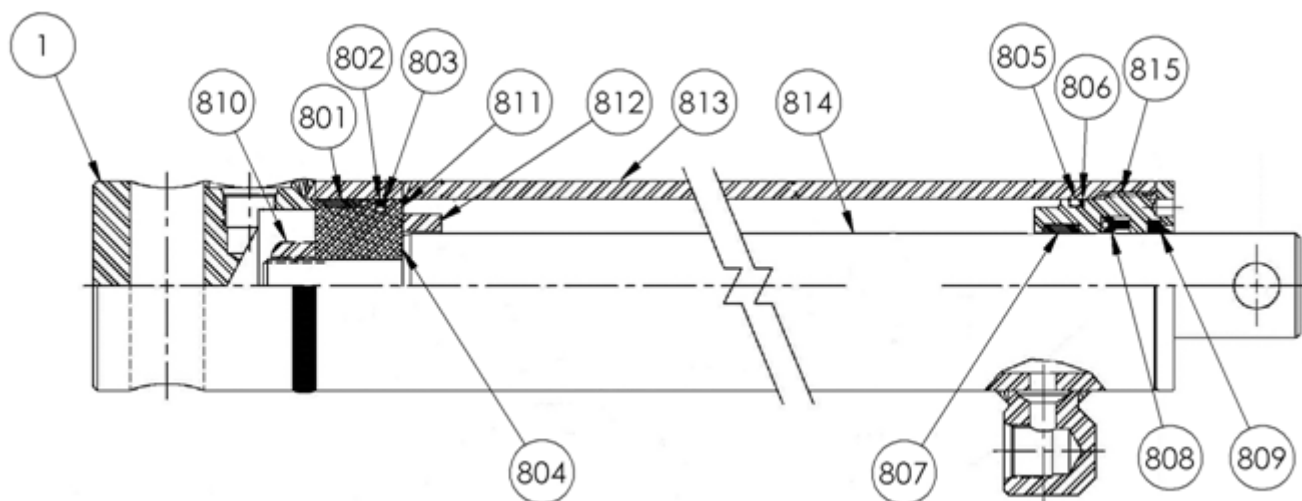
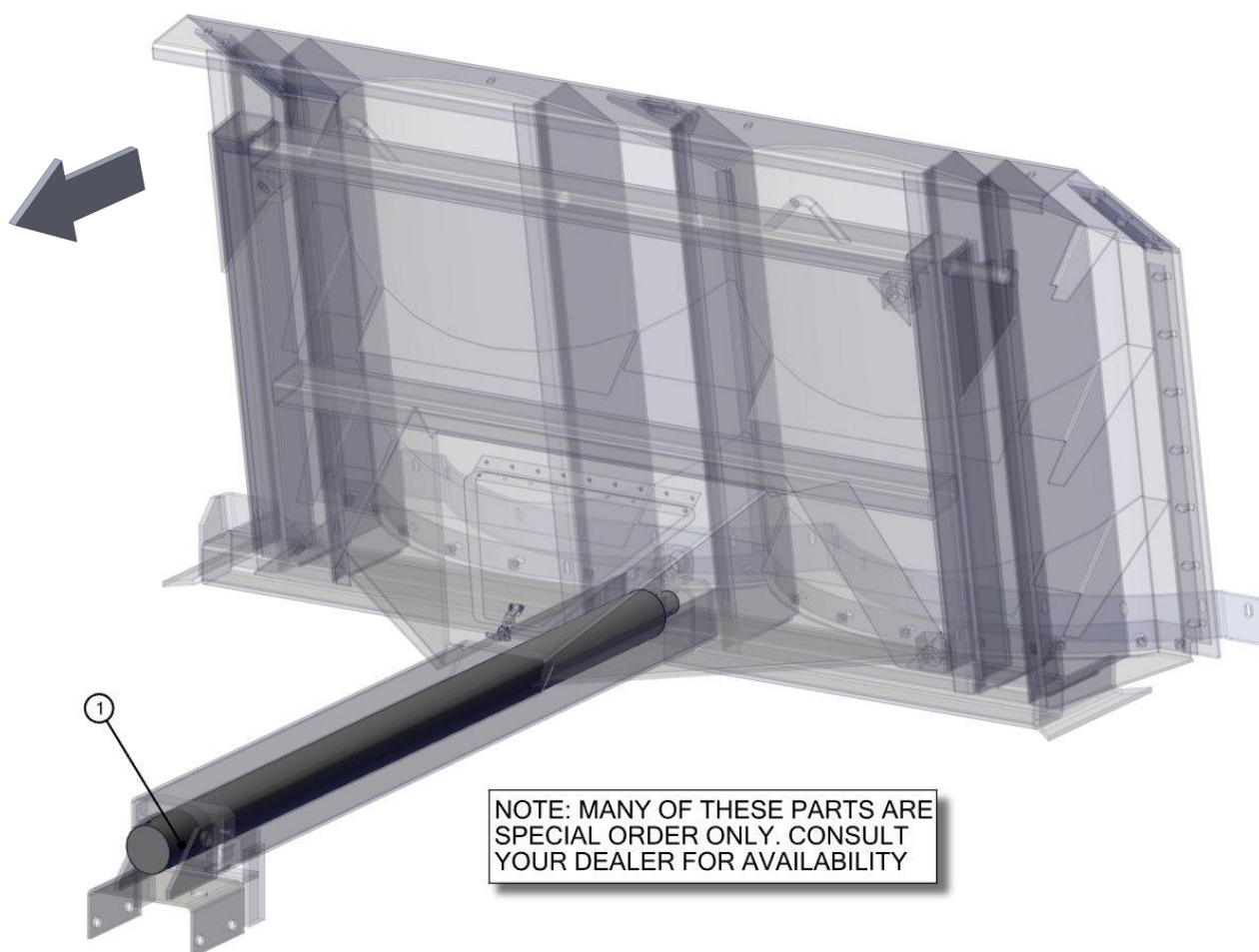


7215-3-03 CYLINDER, SLIDING FLOOR



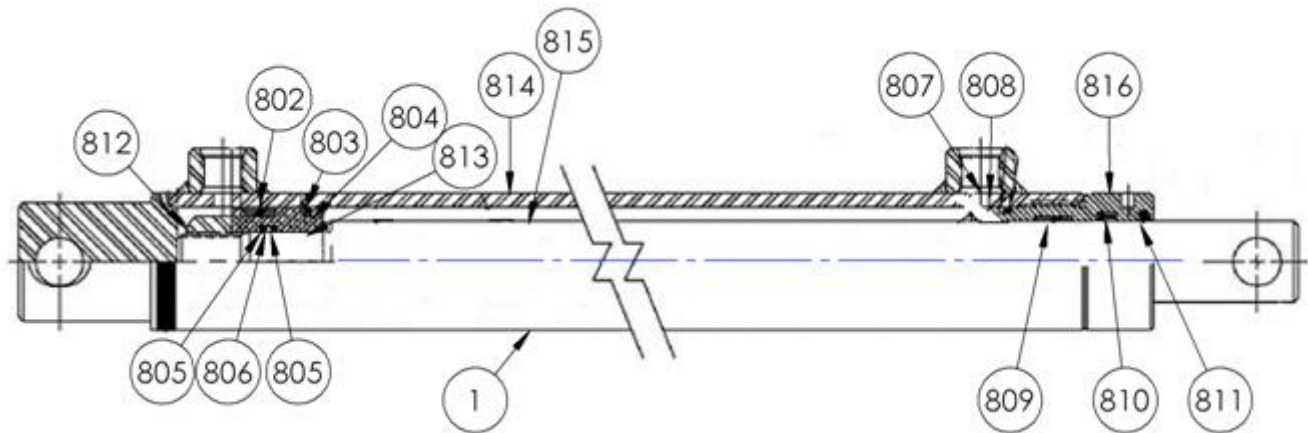
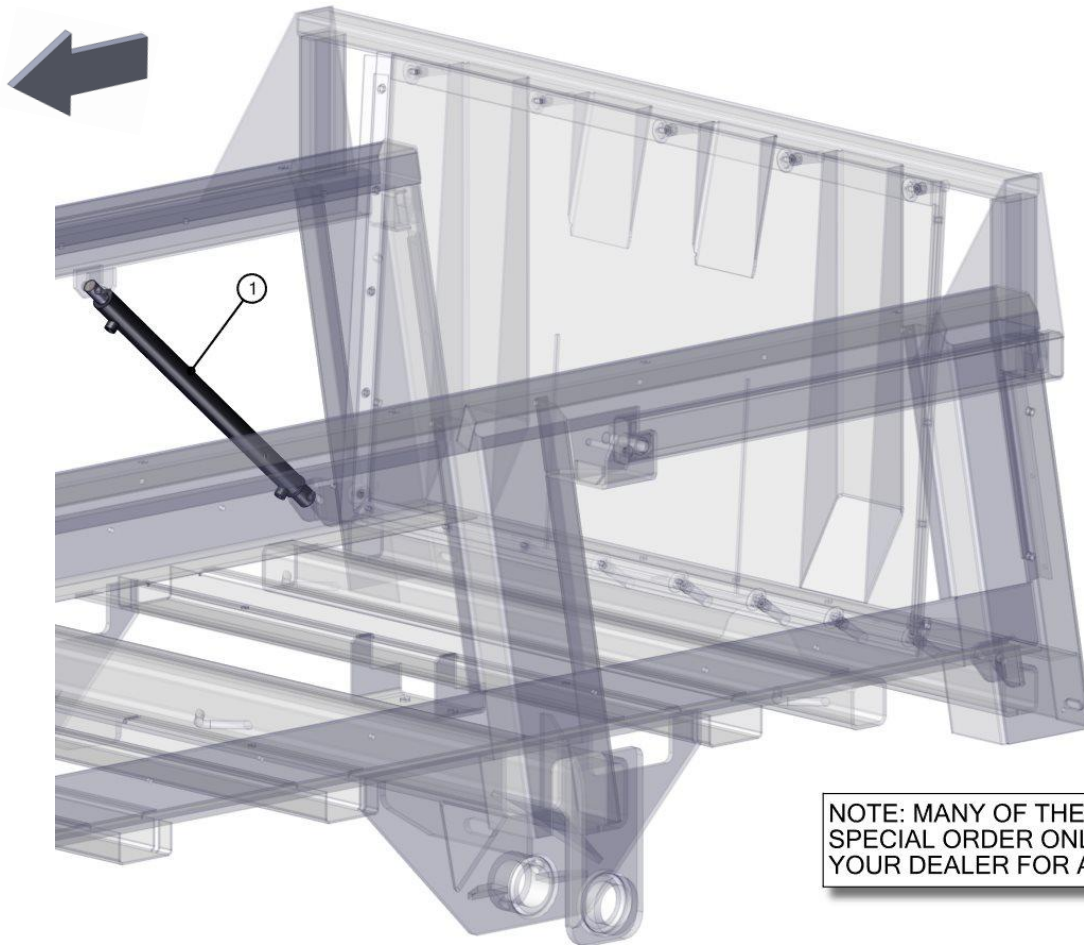
## 7215-3-04 CYLINDER, PUSHER

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	PR24704	Secondary Cylinder,Dual Pin	1		
801	PR24702-A	Wear Ring	1		Part of Seal Kit, Not Sold Separately
802	PR24701-C	Poly Hone	1		Part of Seal Kit, Not Sold Separately
803	PR24701-D	O'Ring	1		Part of Seal Kit, Not Sold Separately
804	PR24702-B	O' Ring	1		Part of Seal Kit, Not Sold Separately
805	PR24702-C	O' Ring	1		Part of Seal Kit, Not Sold Separately
806	PR24701-G	Back-up Ring	1		Part of Seal Kit, Not Sold Separately
807	PR24702-D	Wear Ring	1		Part of Seal Kit, Not Sold Separately
808	PR24702-E	Loaded U-Cup	1		Part of Seal Kit, Not Sold Separately
809	PR24702-F	Rod Wiper	1		Part of Seal Kit, Not Sold Separately
810	PR24702-G	Locknut	1		Reference Only, Special Order
811	PR24702-H	Piston	1		Reference Only, Special Order
812	PR24704-A	Spacer	1		Reference Only, Special Order
813	PR24704-B	Barrel Assembly	1		Reference Only, Special Order
814	PR24704-C	Rod	1		Reference Only, Special Order
815	PR24702-L	Internal Head	1		Reference Only, Special Order
816	PR24704-SK	Seal Kit	1		



## 7215-3-05 CYLINDER, ENDGATE

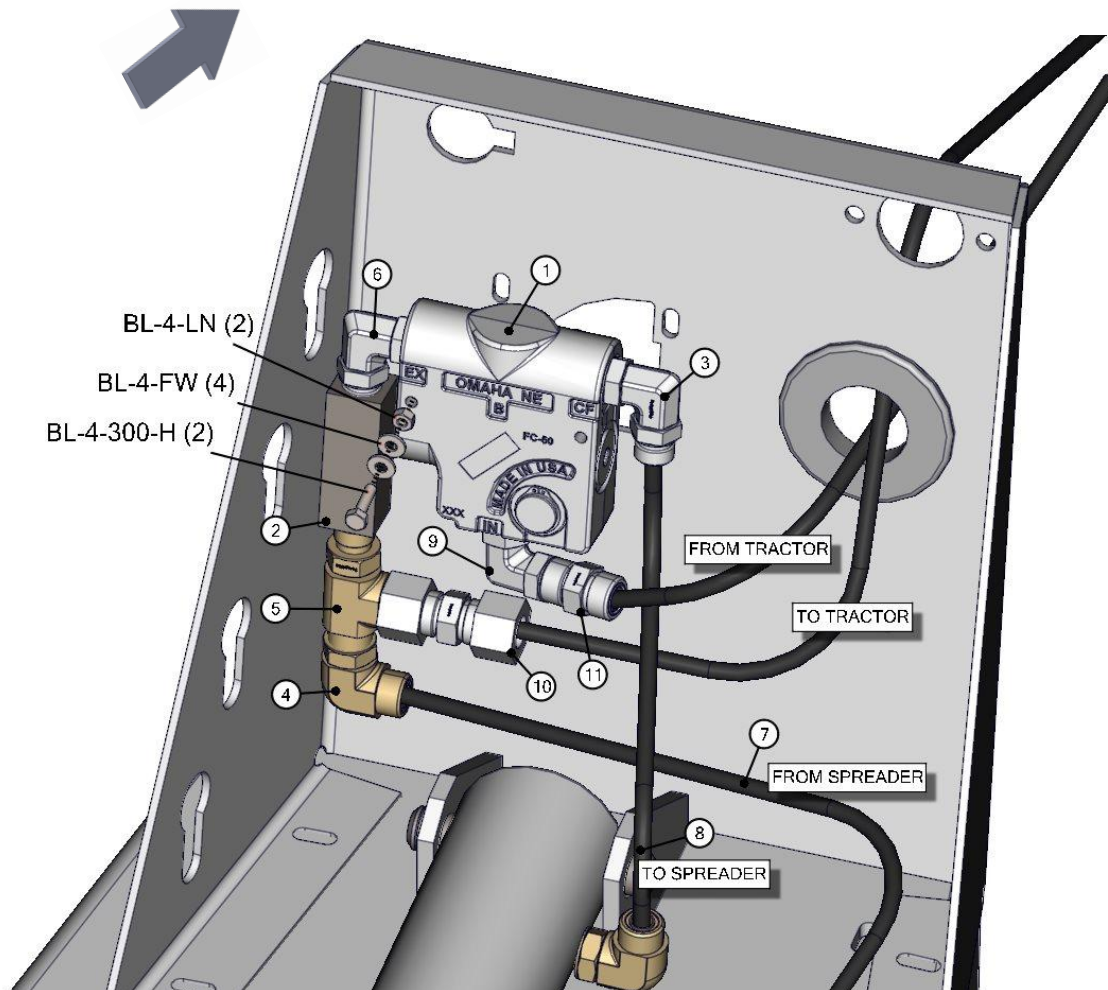
REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	PR39068	Cylinder, Endgate, 1.5 bore	1		
802	PR39068-A	Wear Ring	1		Part of Seal Kit, Not Sold Separately
803	PR39068-B	TFE Seal	1		Part of Seal Kit, Not Sold Separately
804	PR39068-C	O Ring	1		Part of Seal Kit, Not Sold Separately
805	PR39068-D	Back-Up Ring	2		Part of Seal Kit, Not Sold Separately
806	PR39068-E	O Ring	1		Part of Seal Kit, Not Sold Separately
807	PR39068-F	O Ring	1		Part of Seal Kit, Not Sold Separately
808	PR39068-G	Back-Up Ring	1		Part of Seal Kit, Not Sold Separately
809	PR39068-H	Wear Ring	1		Part of Seal Kit, Not Sold Separately
810	PR39068-I	Loaded U-Cup	1		Part of Seal Kit, Not Sold Separately
811	PR39068-J	Rod Wiper	1		Part of Seal Kit, Not Sold Separately
812	PR39068-K	Locknut	1		Reference Only, Special Order
813	PR39068-L	Piston	1		Reference Only, Special Order
814	PR39068-M	Barrel Assembly	1		Reference Only, Special Order
815	PR39068-N	Rod	1		Reference Only, Special Order
816	PR39068-OB	Internal Cylinder Head 1 1/2' (Fine)	1	Verify Stamp Location	
817	PR39068-SK	Seal Kit, Endgate Cylinder, Per Each	1		



## 7219-3-06 OPT. FLOW CONTROL

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	HV-FC5510	Flow Control, #10 SAE, 0-16 GPM, Free Reverse Flow	1		
2	HV-CKV-C1020S	#10 Parker Check Valve, 5 psi Crack, 15 gpm	1		
3	A-FF6801-10-10	Elbow, 5/8" MFF x 5/8" SAE	1		
4	A-FF6500-08-08	Elbow, 8MFF x 8FFFX	1		
5	A-FF6804-08-10-08	Run Tee, 8MFF x 10SAE x 8MFF	1		
6	A-6807-10-10	Elbow, 10SAE x 10SAE	1		
7	H8-26-8FFFX-8MFF	1/2" Hose, 1/2" Female ORFS x 1/2" Male ORFS	1		
8	H8-26-10FFFX-8FFFX	1/2" Hose, 5/8" Female ORFS x 1/2" Female ORFS	1		
9	A-FF6809-10-10	Elbow, 10SAE x 10FFFX	1		
10	A-FF6510-08-08	Union Swivel, 8FFFX x 8FFFX	1		
11	A-FF2403-10-08	Straight Reducer, 10MFF x 8MFF	1		
12	PR70131	Cover, Flow Control Cutout	-1		
102	BL-4-LN	1/4-20 HEX LN NE ZC	2		
103	BL-4-FW	1/4 USS FW ZC	4		
104	BL-4-300-H	1/4-20 X 3 HEX CAP G5 ZC	2		

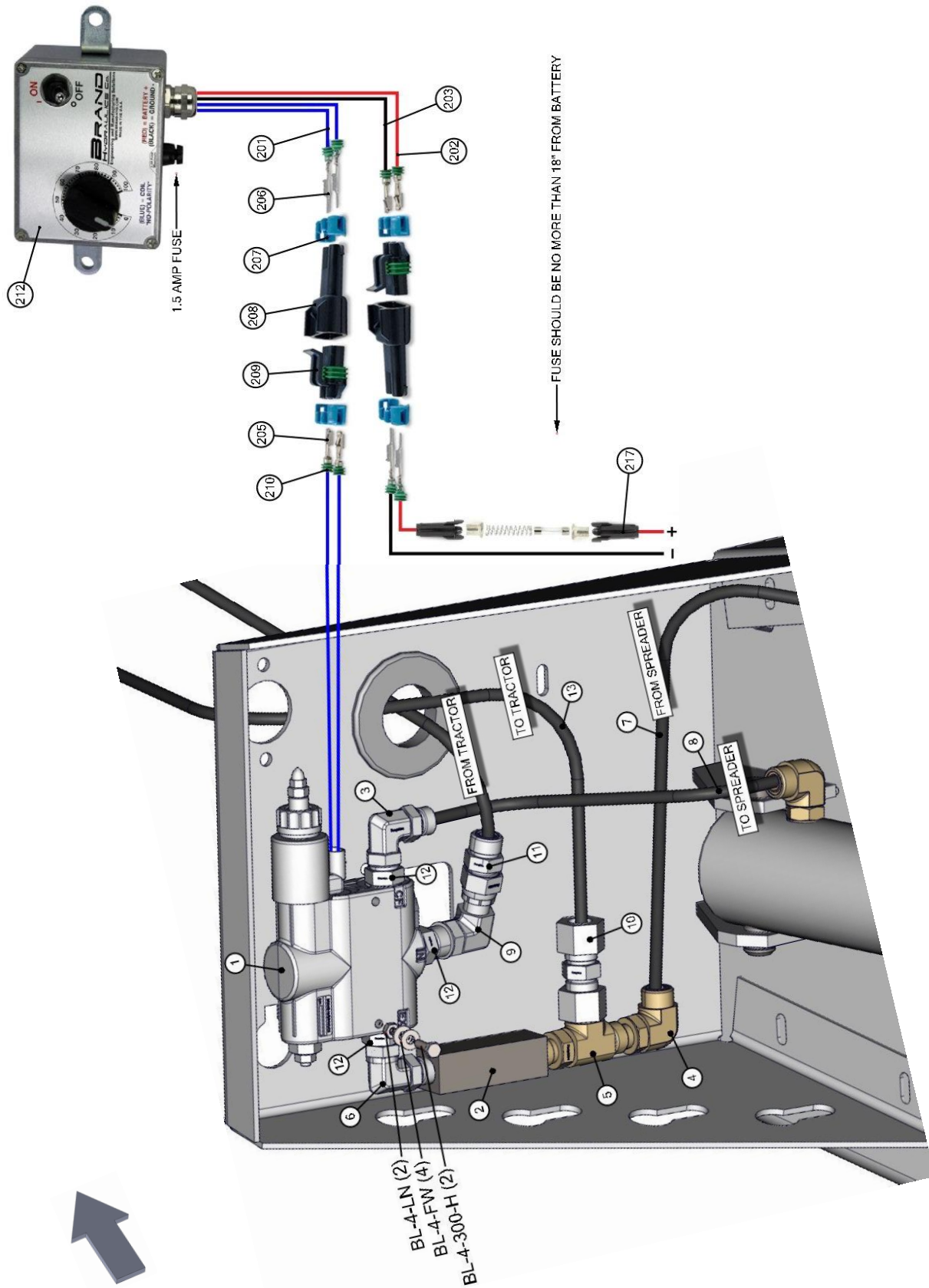




## 7219-3-07 OPT. REMOTE FLOW CONTROL

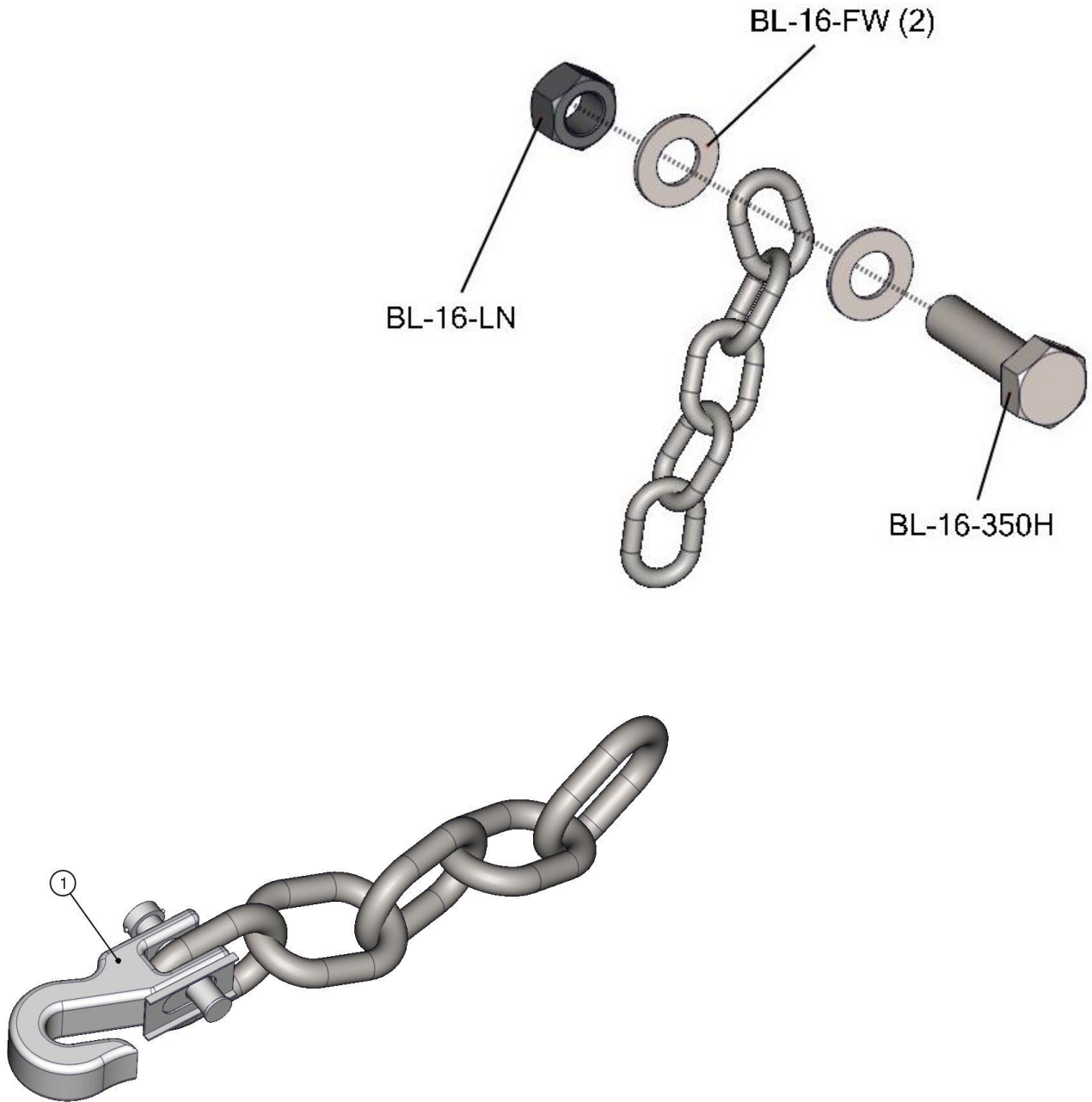
REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	HVE-C122012	Electronic Flow Control w/free flow reverse	1		
2	HV-CKV-C1020S	#10 Parker Check Valve, 5 psi Crack, 15 gpm	1		
3	A-FF6801-10-10	Elbow, 5/8" MFF x 5/8" SAE	1		
4	A-FF6500-08-08	Elbow, 8MFF x 8FFFX	1		
5	A-FF6804-08-10-08	Run Tee, 8MFF x 10SAE x 8MFF	1		
6	A-6807-10-10	Elbow, 10SAE x 10SAE	1		
7	H8-26-8FFFX-8MFF	1/2" Hose, 1/2" Female ORFS x 1/2" Male ORFS	1		
8	H8-26-10FFFX-8FFFX	1/2" Hose, 5/8" Female ORFS x 1/2" Female ORFS	1		
9	A-FF6809-10-10	Elbow, 10SAE x 10FFFX	1		
10	A-FF6510-08-08	Union Swivel, 8FFFX x 8FFFX	1		
11	A-FF2403-10-08	Straight Reducer, 10MFF x 8MFF	1		
12	A-6410-12-10	#12 SAE O-Ring Port Reducer to #10 SAE	3		
13	H8-94-8MOR-10FFFX	1/2" Hose, 1/2" Male SAE x 5/8" Female ORFS	1		
102	BL-4-LN	1/4-20 HEX LN NE ZC	2		
103	BL-4-FW	1/4 USS FW ZC	4		
104	BL-4-300-H	1/4-20 X 3 HEX CAP G5 ZC	2		
201	ELC-14-BL	14 Gauge Wire (Blue)	40		
202	ELC-14-R	14 Gauge Wire, Red	20		
203	ELC-14-BLK	14 Gauge Wire, Black	20		
204	ELL-25-0	1/4' Wire Loom @ft	20		
205	EL-30036	Male Terminal	4		
206	EL-30037	Female Terminal	4		
207	EL-38035	Two Contact Clip for Contact Connector	4		
208	EL-38062	Male Connector Body	2		
209	EL-38063	Female Connector Body	2		
210	EL-39000	Cable Seal	8		
211	ELT-31703	Terminal Ring, 16-14 Ga.#10 Blue Insulated Nylon	2		
212	HV-1201	Brand Flow Valve Electronic Box	1		
216	EL-70150	1.5 Amp Fuse, Type GMA	1		
217	EL-46000	Inline Fuse Holder	1		

## 7219-3-07 OPT. REMOTE FLOW CONTROL



## 7215-4-01 OPT. SAFETY CHAIN

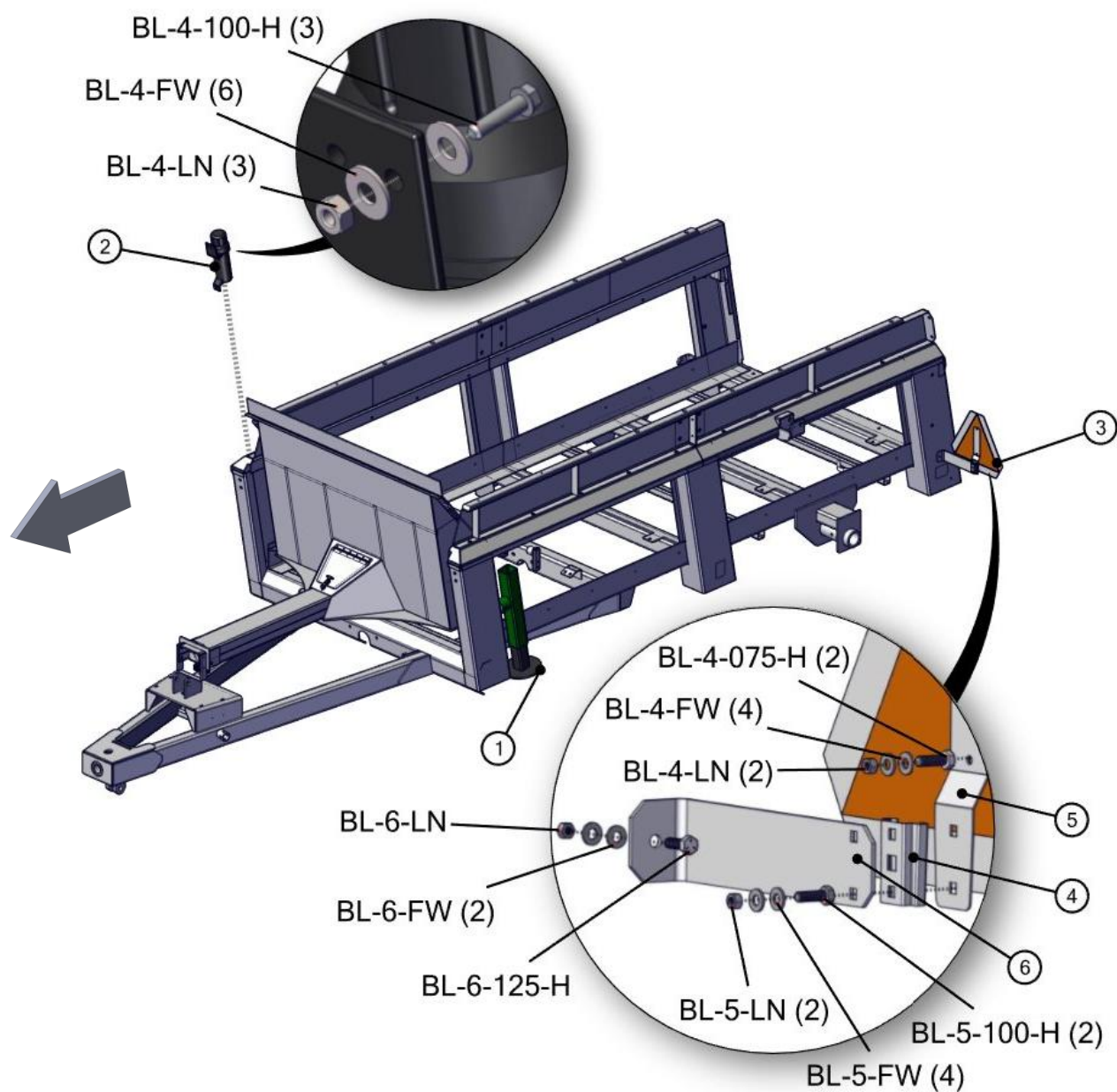
REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	FRM-3164	Safety Chain, Agricultural, 20,200 lb. Capacity	1		
100	BL-16-350H	1-8 X 3-1/2 HH BOLT ZC G5	1		
101	BL-16-FW	1 FW ZC	2		
102	BL-16-LN	1 LN w/ NYLON INSERTS	1		



## 7215-4-02 ACCESSORIES

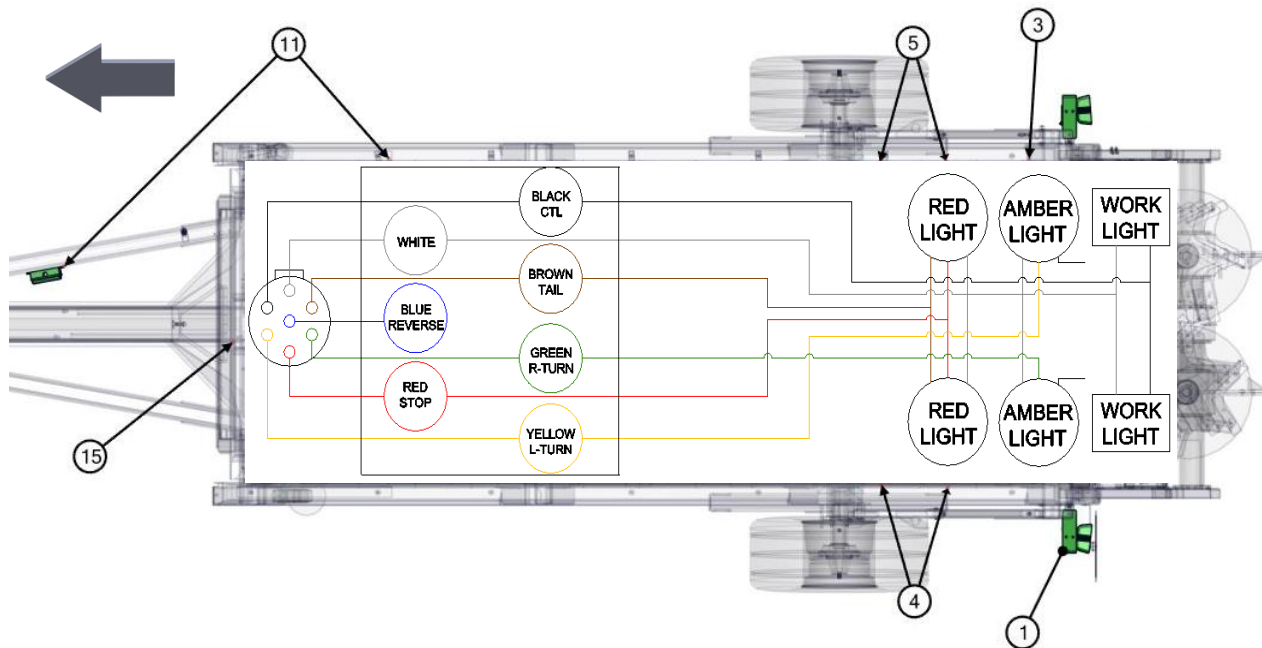
REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	WH-16122	Bulldog Sidewind Swivel Jack, 5,000 lb.	1	-71009001 -70209005	Old Style-Topwind, Part No. 18-450-3
2	MAN-67670	Manual Holder/Canister	1		
3	SMV-PL	SMV Sign, Metal	1		
4	SMV-S	Socket for Spade Mount	1		
5	SMV-SM	Spade Mount	1		
6	PR39117	Bracket, SMV Sign, Spreader	1		
7	MAN-0061	Manual, Parts & Operation, HR250 Spreader	1		
100	BL-4-075-H	1/4-20 X 3/4 HH C/S BOLT G5 ZC	2		
101	BL-4-100-H	1/4-20 X 1 HH C/S G5 ZC	3		
102	BL-4-FW	1/4 USS FW ZC	10		
103	BL-4-LN	1/4-20 HEX LN NE ZC	5		
104	BL-5-100-H	5/16 UNC X 1 HH C/S BOLT GR5 ZINC	2		
105	BL-5-FW	5/16 USS FW ZC	4		
106	BL-5-LN	5/16-18 HEX LN NE ZC	2		
107	BL-6-125-H	3/8-16 X 1-1/4 HHCS G5 ZC	1		
108	BL-6-FW	3/8 USS FW ZC	2		
109	BL-6-LN	3/8-16 FIN H LN NE A563 GA ZC	1		
801	WH-16122-D	Crank Assy for Bulldog Topwind Swivel Jack	1	-71009001	
802	WH-16122-E	Pin & Chain Assy for Bulldog Topwind Swivel Jack	1	-71009001	



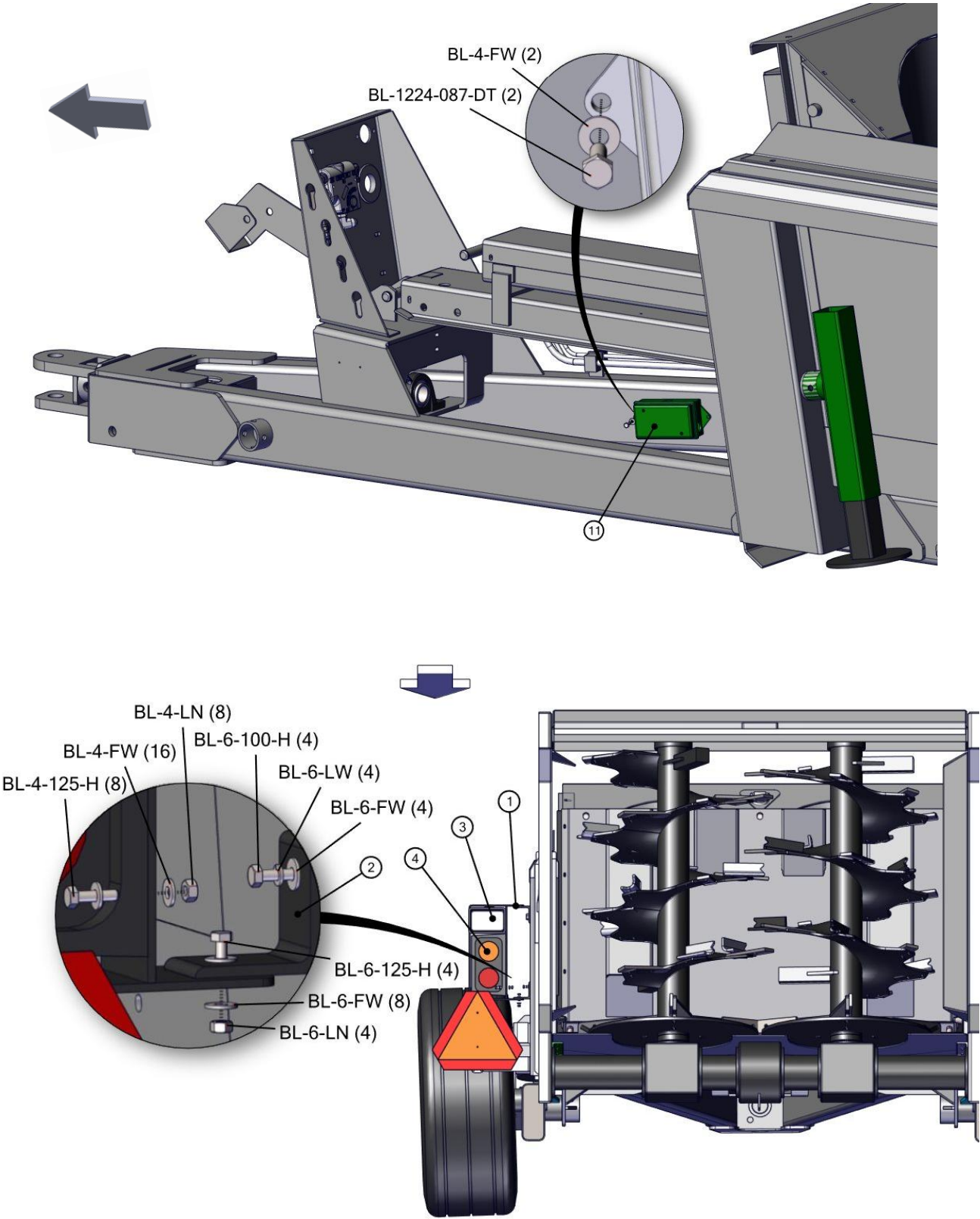


## 7215-4-03 OPT. LIGHT ASSEMBLY, LED

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	PR63004	Light Bracket	2		
2	PR70130	Light Bracket Mount	4		
3	EL-1233	Light, Auxiliary Work Light, Clear, Trapezoid Beam, TL#80394	2		Replaces EL-1201
4	EL-1501	LED Ag Light, LH, w/ brake light	1		
5	EL-1502	LED Ag Light, RH, w/ brake light	1		
8	EL-40602-342	Harness, Right Side Spreader Light	1		
9	EL-40603-426	Harness, Left Side Spreader Lights	1		
10	EL-40604-13	Harness, Work Lights, Spreader	2		
11	EL-1361	Junction Box, (7) Studs, (5) Entry, High Impact PE, 2.5x3.5x8.0	1	19426	
12	EL-50781-55	7 Conductor x 55' Long, Harness	1		
13	EL-0038	Grommet, 3/4" id, 1-1/16" Groove Dia, 1/4" Groove Width	2		
14	ELC-127-144	12 Gauge 7 Conductor Spiral Cord, 12' Long	1		
100	BL-4-125-H	1/4-20 X 1-1/4 HEX CAP G5 ZC	8		
101	BL-4-FW	1/4 USS FW ZC	18		
102	BL-4-LN	1/4-20 HEX LN NE ZC	8		
103	BL-6-100-H	3/8-16 X 1 HH C/S BOLT G5 ZC	4		
104	BL-6-125-H	3/8-16 X 1-1/4 HHCS G5 ZC	4		
105	BL-6-FW	3/8 USS FW ZC	12		
106	BL-6-LW	3/8 SPLIT LW ZC	4		
107	BL-6-LN	3/8-16 FIN H LN NE A563 GA ZC	4		
108	BL-1224-087-DT	12-24 X 7/8, DRILL AND TAP SCREW	2		

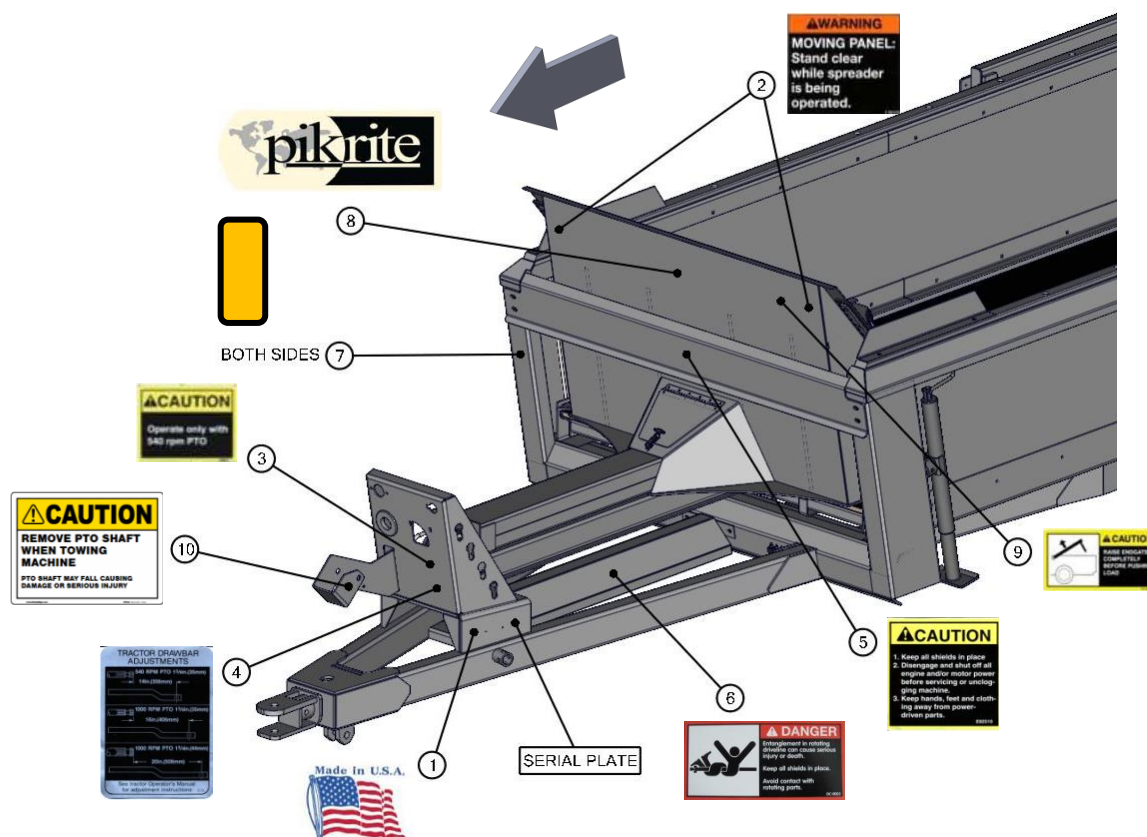


7215-4-03 OPT. LIGHT ASSEMBLY, LED



## 7215-4-04 FRONT DECALS

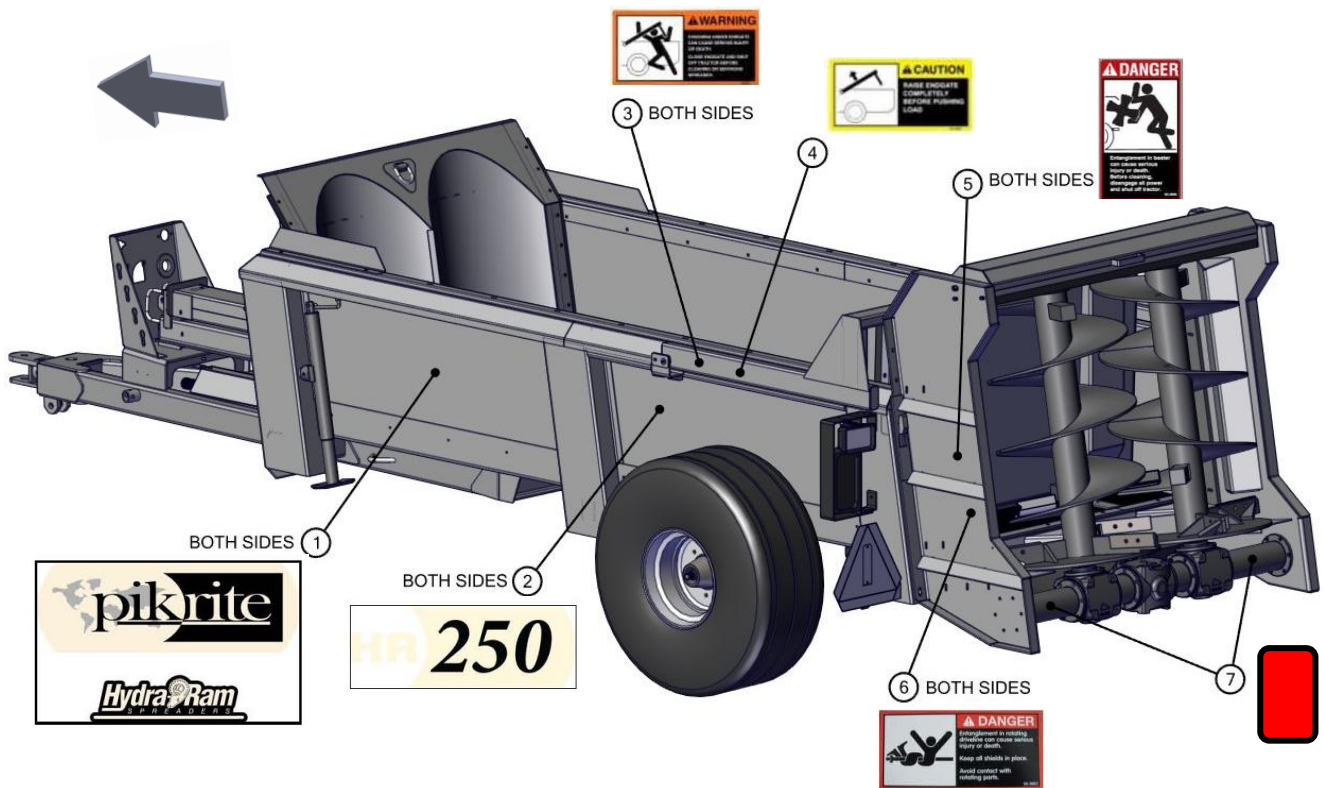
REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
0	MAN-0061	Manual, Parts & Operation, HR250 Spreader	0		
1	DC-0011	Decal, All, 'Made in USA', White Back w/ Red & Blue Letters	1		
2	DC-0020	Decal, Warning, Moving Panel	2		
3	DC-0024	Decal, Caution, 540 rpm PTO	1		
4	DC-0022	Decal, Tractor Drawbar Adjustments	1		
5	DC-0023	Decal, Caution, Keep All Shields In Place	1		
6	DC-0025	Decal, Danger, Entanglement In Rotating Drive	1		
7	EL-1226	Decal Reflector, Rectangle, Yellow, 2x3.5, Adhesive	2		
8	DC-0097	Pik Rite Logo, Large, 8 x 22.8	1		
9	DC-0038	Decal, Caution, Raise Endgate Completely	1		
10	DC-0221	Decal, Caution, Stationary Use	1		





## 7215-4-05 SIDE DECALS

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	DC-0107	Pikrite/Hydra-Ram Spreaders 14.23' x 22.8'	2		
2	DC-0100	Model Number, HR250, 8 x 22.5	2		
3	DC-0026	Decal, Warning, Crushing Under Endgate	2		
4	DC-0038	Decal, Caution, Raise Endgate Completely	1		
5	DC-0030	Decal, Danger, Entanglement In Beater	2		
6	DC-0025	Decal, Danger, Entanglement In Rotating Drive	2		
7	EL-1227	Decal Reflector, Rectangle, Red, 2x3.5, Adhesive	2		







Pik Rite, Inc. provides a limited warranty assuring any new Hydra-Pull Spreader to be free from defects in material and workmanship for a period of two (2) years from the original date of purchase. Pik Rite will repair or replace, at its option and without charge, any defective or malfunctioning part (excluding items of normal wear or misuse) of the spreader for this allotted time.

**PIK RITE MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE.**

## CUSTOMER'S RESPONSIBILITY

It is the customer and/or operator's responsibility to read the Operator's Manual, to operate, lubricate, maintain and store the equipment in accordance with all instructions and safety procedures. Failure of the operator to read the operators manual is a misuse of this equipment.

It is the customer and/or operators responsibility to inspect the product and to have any part(s) repaired or replaced when continued operation would cause damage or excessive wear to other parts or cause a safety hazard. It is the customer's responsibility to deliver the product to the authorized dealer, from whom the spreader was purchased, for service or replacement of defective parts, which are covered by warranty.

It is the customer's responsibility for any cost incurred by the dealer for hauling the product for the purpose of performing a warranty obligation or inspection.

## WARRANTY INFORMATION

Make certain the warranty registration card has been forwarded to:

Pik Rite, Inc.  
60 Pik Rite Lane  
Lewisburg, PA 17837

Always give your dealer the serial number of your Pik Rite, Inc. product when ordering parts or requesting service or other information.

In the space provided record the model number, the serial number and the date of purchase to assist in providing you with prompt and efficient service.

MODEL NUMBER: HR250

DEALER: \_\_\_\_\_

SERIAL NUMBER: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PURCHASE DATE: \_\_\_\_\_

\_\_\_\_\_

PHONE: \_\_\_\_\_

SALESMAN: \_\_\_\_\_

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