

pikrite

HP 25LL

Hydra-Pull
SPREADERS

Litter-Lime
SPREADERS

OPERATION AND PARTS MANUAL



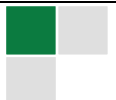
PROUDLY MADE IN THE USA



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

JANUARY 2025
SN 77025001 - 77025001

Phone 800-326-9763
Fax 570-523-8175
www.pikrite.com





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

OPERATION MANUAL	6
INTRODUCTION	6
SAFETY	7
PREPARING THE TRACTOR	13
PREPARING THE SPREADER	15
CONTROLS	16
ATTACHING THE SPREADER	17
DETACHING THE SPREADER	18
TRANSPORT	19
OPERATING THE SPEADER	21
LUBRICATION AND MAINTENANCE	24
SPECIFICATIONS	29

PARTS MANUAL 30

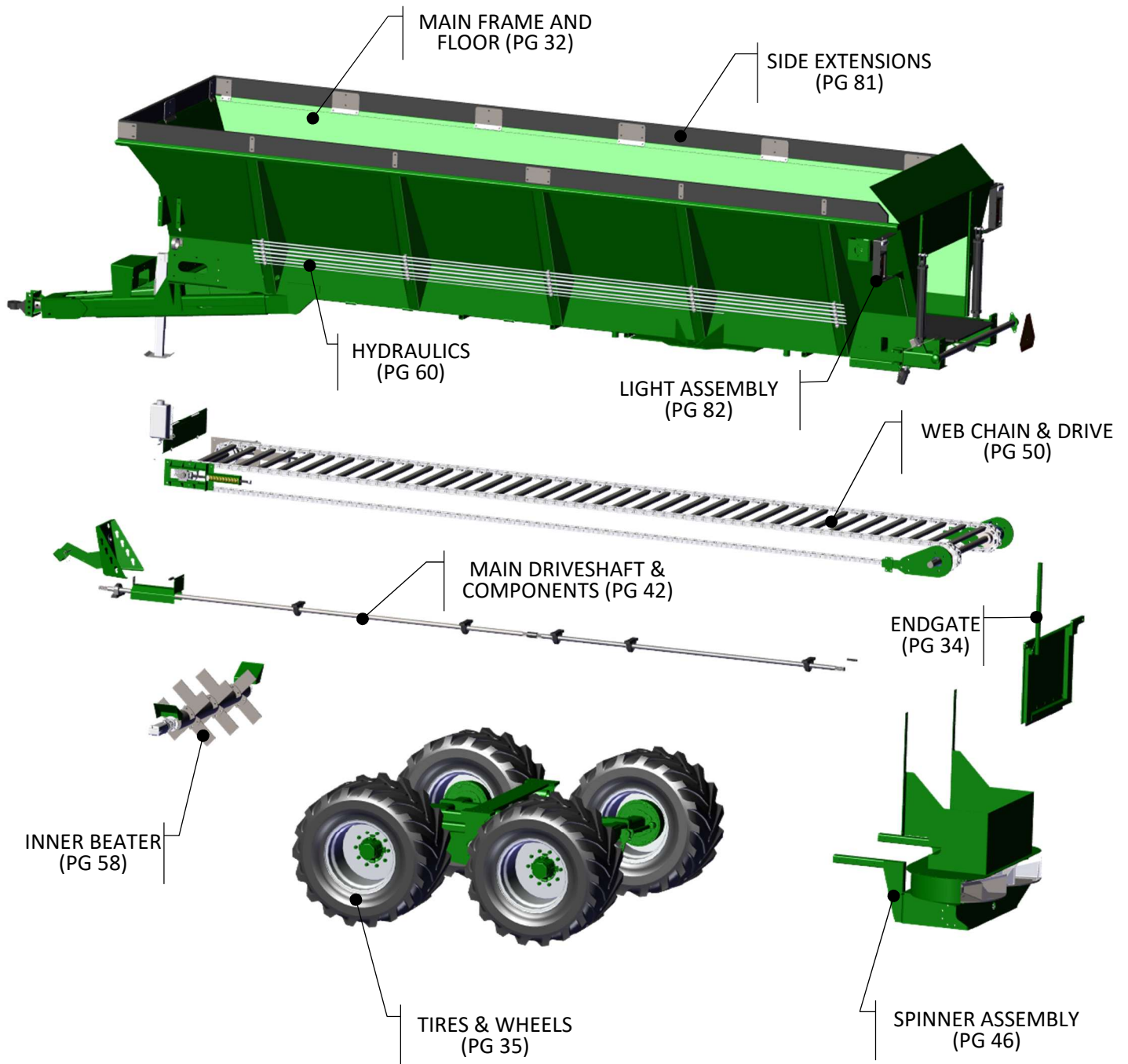
77023-1-01	MAIN FRAME	32
77021-1-03	GUILLETINE ENDGATE	34
77021-1-04	TIRES AND WHEELS, 710/50-26.5	35
77021-1-04A	OPT. TIRES AND WHEELS, 750/60-30.5	35
77021-1-06	WALKING BEAM	36
77021-1-07	ADR SQUARE AXLE COMPONENTS	37
77021-2-01	FRONT DRIVELINE, 1000RPM, 1-3/4"	38
77023-2-02	MAIN DRIVE SHAFT	40
77024-2-02A	REAR DRIVE SHAFT	42
77024-2-03	SPINNER ASSEMBLY W/ REAR BEATER	44
77023-2-03A	GEARBOX ASSEMBLY, SPINNERS	46
77023-2-04	WEB CHAIN & DRIVE	48
77024-2-05	WEB CHAIN GEARBOX AND MOTOR, 25MM INPUT	48

NOTES:

TABLE OF CONTENTS

77024-2-05A	GEARBOX PART BREAKDOWN, 25MM INPUT, CHAIN DRIVE	54
77023-2-06	OPT. INNER BEATER ASSEMBLY	56
77024-2-07	REAR BEATER ASSEMBLY	58
77023-3-01	HYDRAULICS, WEB DRIVE	60
77023-3-02	HYDRAULICS, ENDGATE	62
77023-3-02A	ENDGATE CYLINDER	63
77023-3-03	OPT. HYDRAULICS, INNER BEATER	64
77024-3-03A	HYDRAULICS, REAR BEATER	65
77023-3-04	HYDRAULICS, DRUM BRAKES, REMOTE	66
77023-3-04A	HYDRAULICS, DRUM BRAKES, EURO FF	67
77023-3-05	OPT. HYDRAULICS, MANUAL FLOW CONTROL, WEB DRIVE	68
77023-3-06	OPT. HYDRAULICS, REMOTE, ELECTRONIC FLOW CONTROL, WEB DRIVE	70
77023-3-07	OPT. AIR BRAKES, ADR AXLES	72
77021-4-01	SAFETY CHAIN	74
77023-4-02	ACCESSORIES	75
77021-4-03	DECALS ON FRONT OF SPREADER	76
77021-4-04	DECALS ON SIDES & REAR OF SPREADER	77
77023-4-05	SIDE EXTENSIONS	78
77023-5-01	ELECTRICAL AND LIGHTING	79
77023-5-02	WEIGH SCALE SYSTEM, DG400	81
77023-5-02C	OPTIONAL SCALE SYSTEM, ATHENE, VARRATE CONTROLLER, ISOBUS READY TRACTOR W/UT & GPS	82
77023-5-02D	OPTIONAL SCALE SYSTEM, ATHENE, VARRATE CONTROLLER, X25 & GPS, NON-ISOBUS TRACTOR	86
77023-5-02E	OPTIONAL: SCALE SYSTEM, ATHENE, VARRATE CONTROLLER, X25 UT & GPS, ISOBUS READYTRACTOR	90

NOTES:



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 Hydra-Pull series features heavy duty components throughout the entire spreader. With a pintle chain breaking strength of 60,000 lbs, a rugged steal box design, and poly board flooring for maximum strength and durability, this machine is designed to efficiently and uniformly spread manure.

Spring Tension Rollers – The spring loaded front idler rollers keep the chain secure and provides better chain tracking.

Two Piece Drive Sprocket – The pintle chain sprocket allows for service removal without completely disassembling the drive system.

Precision Application – Optional load cells in the spreader body allow the hydraulic drive to adjust speed for consistent output.



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

pikrite

Hydra-Pull
1000

CAUTION
Operate only with
1000 rpm PTO

TRACTOR DRAWBAR
ADJUSTMENTS

CAUTION
REMOVE PTO SHAFT
WHEN TOWING
MACHINE
PTO SHAFT MAY FALL CAUSING
DAMAGE OR SERIOUS INJURY

Made in U.S.A.

CAUTION
1. Keep all shields in place
2. Overrange and shut off all
engine and/or reactor power
before servicing or setting
up machine.
3. Keep hands, feet and clothing
away from power-
driven parts.

DANGER
KEEP HANDS AND FEET AWAY

CAUTION
Interruption in rotating
equipment may cause serious
injury or death.
Keep all shields in place.
Keep control with
rotating parts.

pikrite
Lansing, MI, U.S.A.
800-324-4763



⚠ 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.

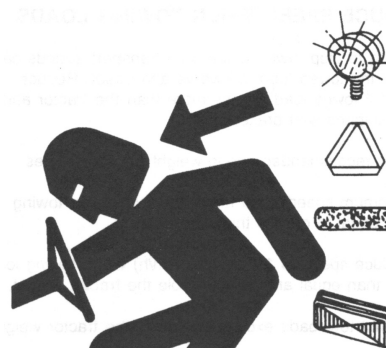
Operating equipment safely requires the full attention of the operator. Do not wear radio or music headphones while operating machine.

**⚠ 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.



SAFETY



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.

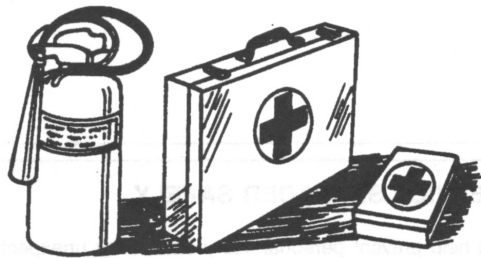
NOTICE

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.



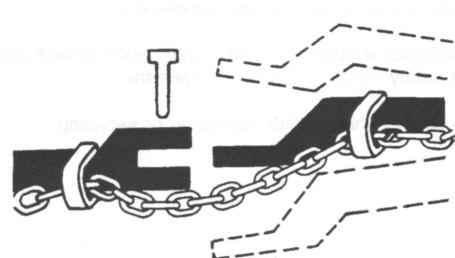
SAFETY INSTRUCTIONS

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.



⚠ 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.

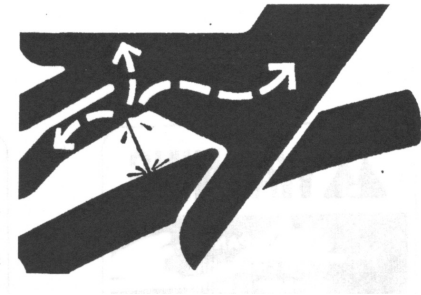
Do not clean out or service spreader while beater is rotating.

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.



SAFETY



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.

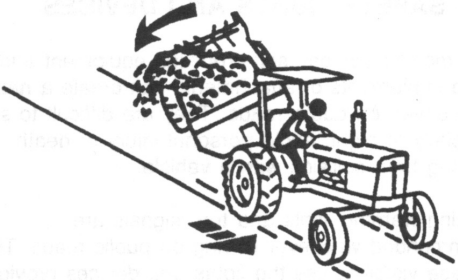
If spreader is connected to tractor, disengage PTO, engage parking brake and/or place transmission in "PARK," shut off engine and remove key.

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

NOTICE APPROVED TRACTORS, MODEL HP25LL

Row Crop Tractors with 200 HP PTO rating or larger are approved for operation with the HP25LL Spreader.

Utility Tractors are **NOT APPROVED** 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 3.7 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 1500 psi minimum.

Two selective control valves are required to operate the spreader.

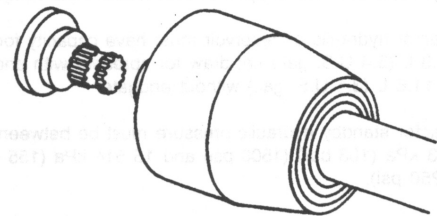
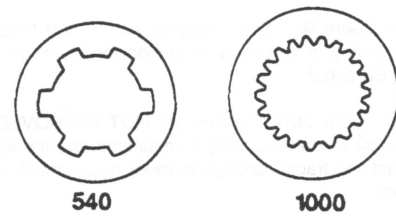
NOTICE CHOOSING CORRECT PTO SPEED

MODEL – HP25LL – 1000 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.

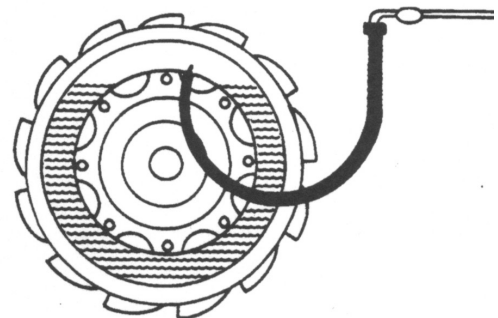


NOTICE BALLASTING THE TRACTOR

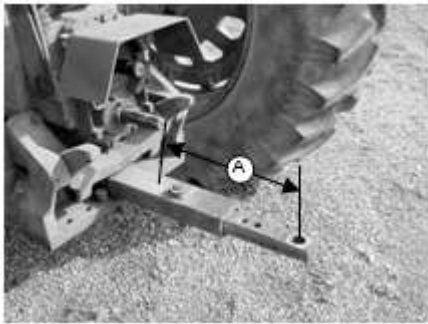
Do not tow loads that weigh more than twice the tractor weight.

(See Recommended Maximum Towing Speed in Transport section.)

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



PREPARING THE TRACTOR



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	Dimension (A)
1000 rpm x 1-3/4	508 mm (20in.)

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 CHAIN 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 15 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).

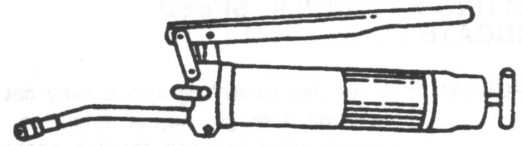
SAFETY INSTRUCTIONS CHECKING TRANSMISSION/HYDRAULIC OIL LEVEL

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.)



NOTICE BRAKE ADJUSTMENT (HYDRAULIC)

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



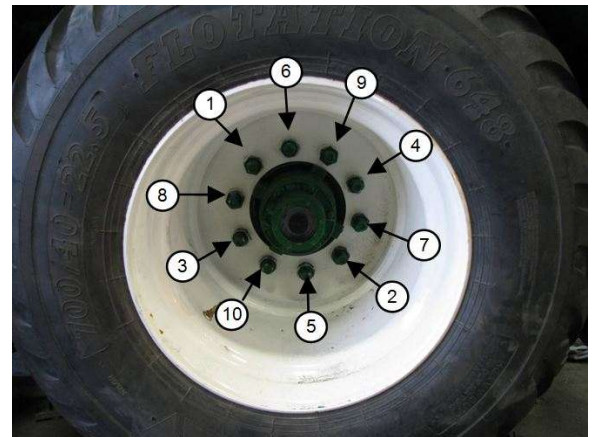
SAFETY INSTRUCTIONS TIGHTENING WHEEL HARDWARE

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 375 lb-ft of dry torque
in the sequence shown.

<u>Tire Size</u>	<u>Wheel Size</u>	<u>Tire Pressure</u>
710/50-26.5	26.5 x 28	60 psi
750/60-30.5	30.5 x 29.5	40 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.



CONTROLS

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.

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

SAFETY INSTRUCTIONS

OPERATING THE ENDGATE

Contact of apron chain running with endgate closed will cause damage. To avoid contact with apron chain, endgate must be raised when running.

Operate the endgate with the second auxiliary control valve lever.



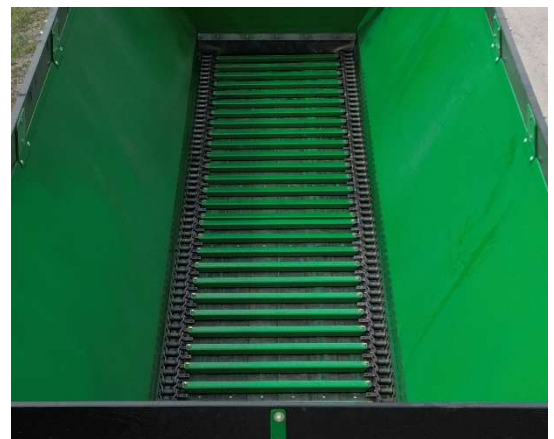
SAFETY INSTRUCTIONS

OPERATING APRON CHAIN

To run apron chain lock hydraulic control lever in operating position on tractor.

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 apron chain motor is 15 gpm. Trying to force through more oil than this may cause serious damage to motor (relief factory set at 1250 psi)



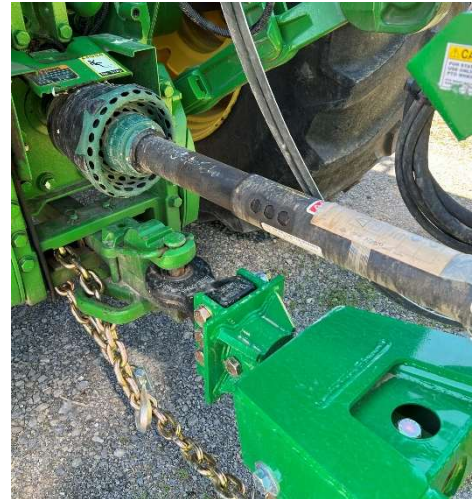
⚠ CAUTION ATTACHING THE SPREADER

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 1-1/2 in. pin and secure.

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

2. Lock safety hook onto chain.



SAFETY INSTRUCTIONS CONNECTING AIR HOSES (AIR ASSIST BRAKES)

1. Connect red line to supply port.
2. Connect blue line to service/control port.



SAFETY INSTRUCTIONS CONNECTING HOSES (HYDRAULIC BRAKES)

1. Connect pressure hoses to pressure ports of hydraulic remote coupler.
2. Connect return hoses to return ports of hydraulic remote coupler.

(Relief factory set 1000 psi)

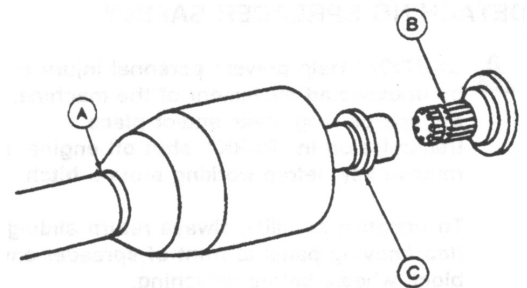


SAFETY INSTRUCTIONS ATTACHING DRIVELINE

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.



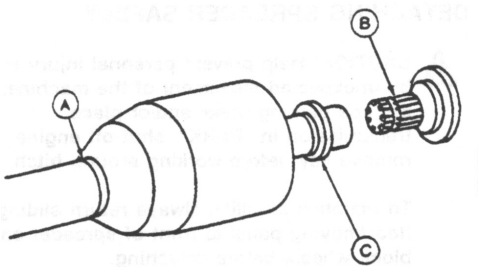
DETACHING THE SPREADER



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

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)

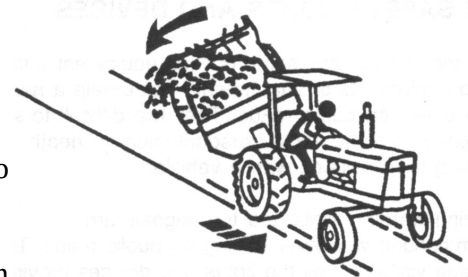
SAFETY
INSTRUCTIONS

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.



NOTICE RECOMMENDED MAXIMUM TOWING SPEED

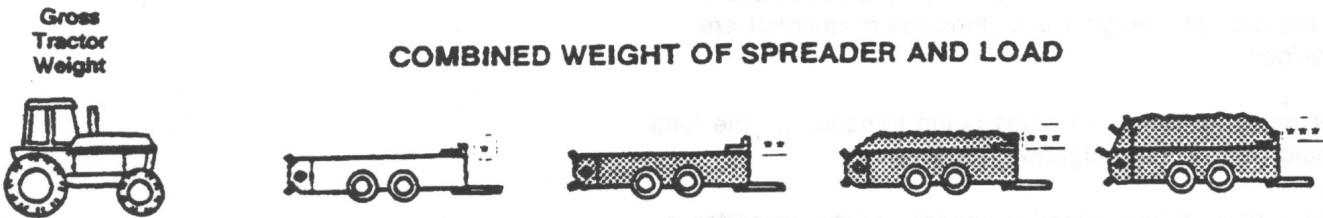
Tractor Weight	*	**	***	****
(0-2997 lb)	Do Not Tow	Do Not Tow	Do Not Tow	Do Not Tow
(2998-5950 lb)	Do Not Tow	Do Not Tow	Do Not Tow	Do Not Tow
(5951-11021 lb)	Do Not Tow	Do Not Tow	Do Not Tow	Do Not Tow
(11022-12123 lb)	Do Not Tow	Do Not Tow	Do Not Tow	Do Not Tow
(12124-14769 lb)	Do Not Tow	Do Not Tow	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



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.



OPERATING 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 along edges of apron chain

Remove material buildup from endgate panel. Keep endgate arms clean to prevent freezing to side rails.



NOTICE CLEAN WALKING BEAM

When tire valve stems are mounted towards the inside, clean top of walking beams to prevent valve stem damage.

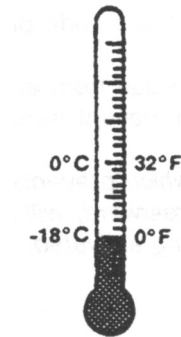


NOTICE WARMING HYDRAULIC OIL TEMPERATURES BELOW 0°F (-18°C)

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.



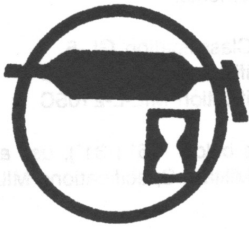
NOTICE BYPASSING SPREADER CONTROL VALVE

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.

LUBRICATION AND MAINTENANCE



⚠ 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.

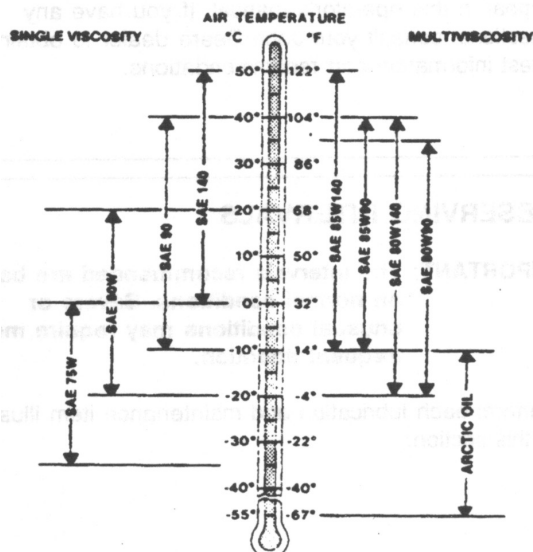
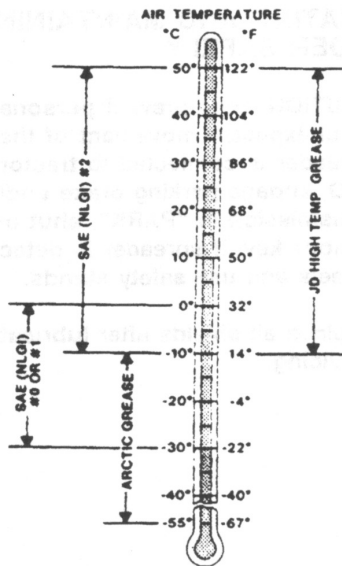
Moly-type grease is recommended, however, if not available, multipurpose grease is acceptable.

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.



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

- Adjust apron chain
- Tighten wheel hardware
- Lubricate walking beam pivots

EVERY 250 HOURS

- Lubricate endgate pivots

SERVICE AS REQUIRED

- Adjust apron chain tension
- Slip the clutch

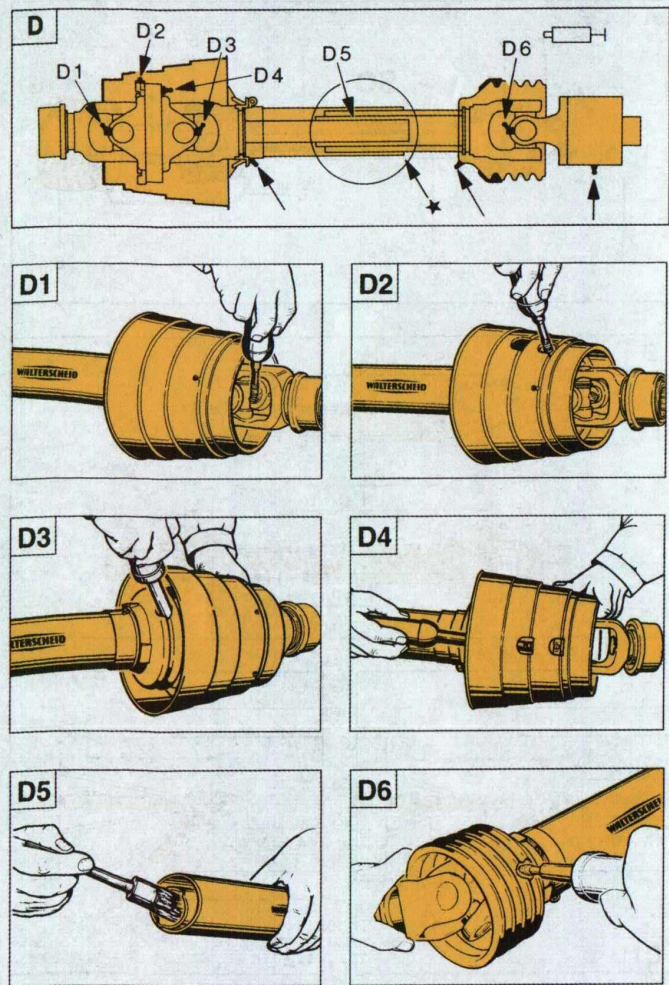
In addition to the above referenced information, you are working with a central lube CV design on the primary that contains a special lubrication provision that needs to be well defined for the user so that extended life on the CV can be achieved.

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.

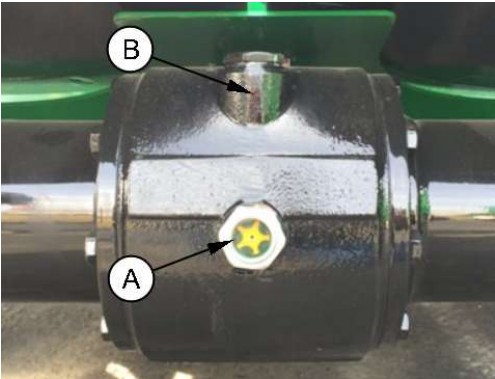
Primary Driveline (to Tractor) Lubricate fittings D1 through D6 every eight hours of operation.

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

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

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



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>
710/50-26.5	26.5 x 28	60 psi
750/60-30.5	30.5 x 29.5	40 psi

SAFETY INSTRUCTIONS

LUBRICATE WALKING BEAM PIVOTS

1. Place a jack under the spreader main frame.
2. Raise spreader enough to relieve weight from walking beam.
3. Lubricate grease bank (A) with Moly High Temperature/Extreme Pressure Grease.



NOTICE

TIGHTENING THE CHAIN

1. Loosen the jam nut at the bearing enough to adjust.
2. Tighten the nut at the end of the threaded rod so the spring length is 10" (between the plates).
3. Retighten the jam nut.



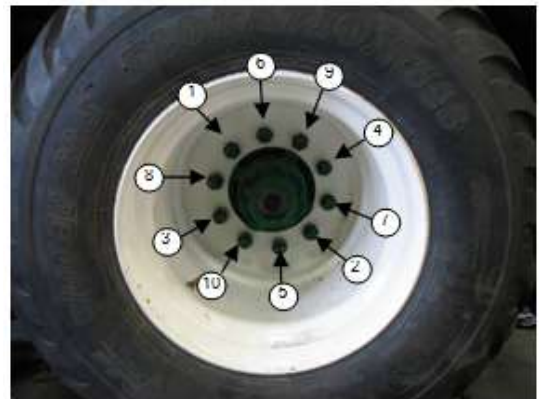
NOTICE

TIGHTENING WHEEL HARDWARE

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 375 lb.-ft. in the sequence shown.



NOTICE

LUBRICATE CHAIN DRIVE

Before long periods of storage, always oil the chain. Run the chain with both ball valves fully open for 5 minutes. Approximately usage will be a quart of oil every lubrication cycle

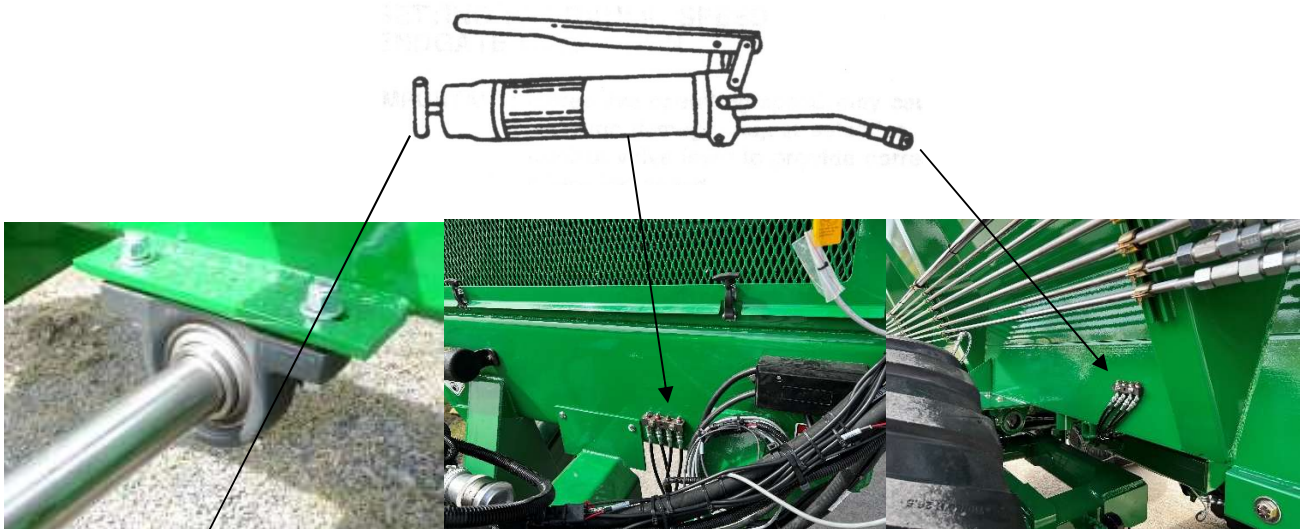


LUBRICATION AND MAINTENANCE

LUBRICATE THE SIX PILLOW BLOCKS

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

Lubricate grease fitting with Moly High Temperature/Extreme Pressure Grease



LUBRICATE WALKING BEAMS

Using grease banks attached to side rails (two on each side).



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

TRACTOR SIZE

Minimum recommended 200 hp PTO

WEIGHT

Spreader, Complete with Implement tires
And all Attachments 19,700 lb.

LOAD CAPACITY 48,400 lb.

VOLUME CAPACITY

Struck Level 707 cu. ft.
Heaped Load 1058 cu. ft.

SPINNER SPEED 520 rpm

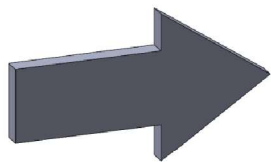
UNLOADING SPEED

Infinitely Variable 0-16 ft/min

DRIVELINE

Shielded 1000 rpm

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.

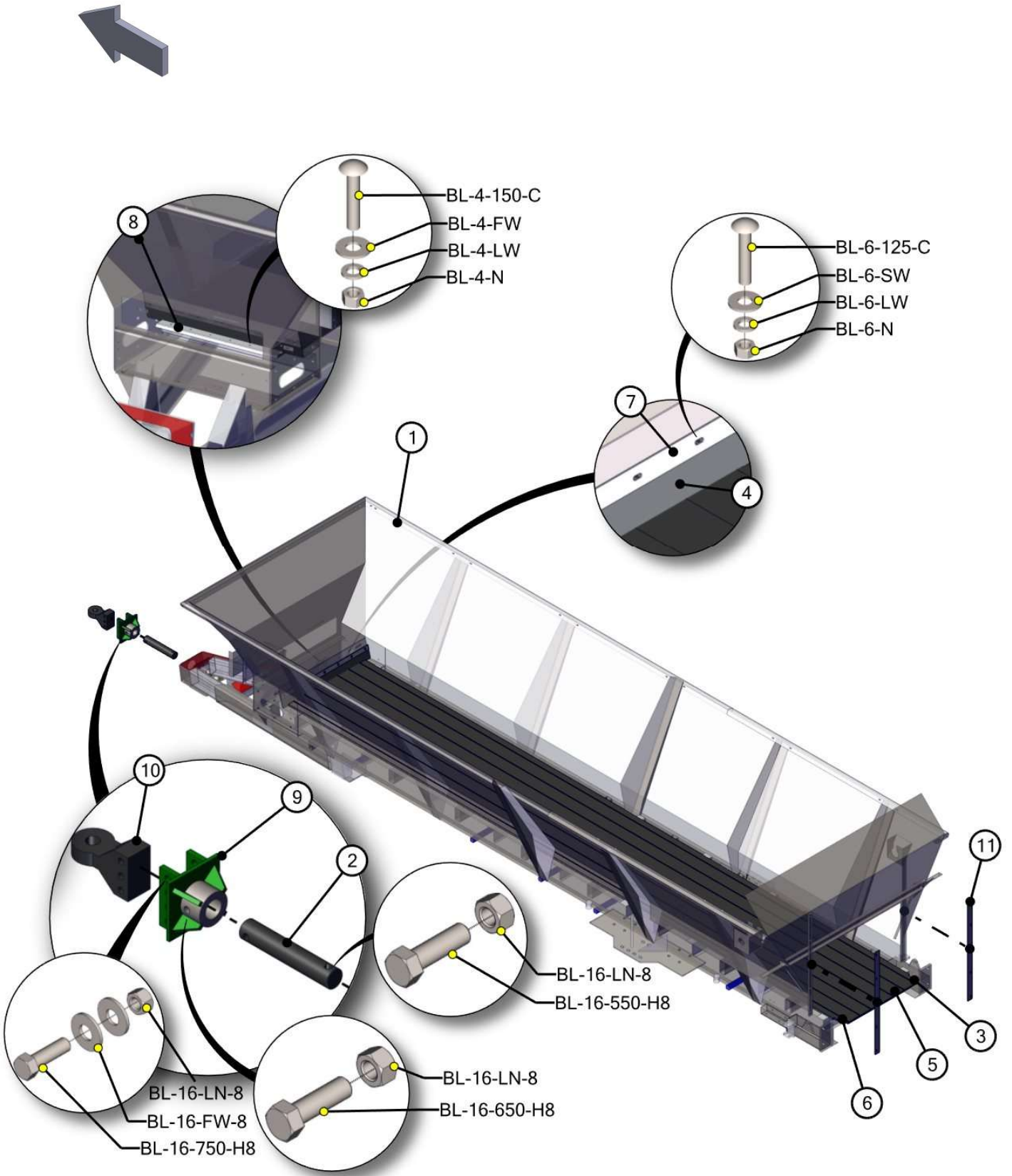
REFERENCE NUMBER IDENTIFICATION

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)

PAGE LEFT BLANK
INTENTIONALLY

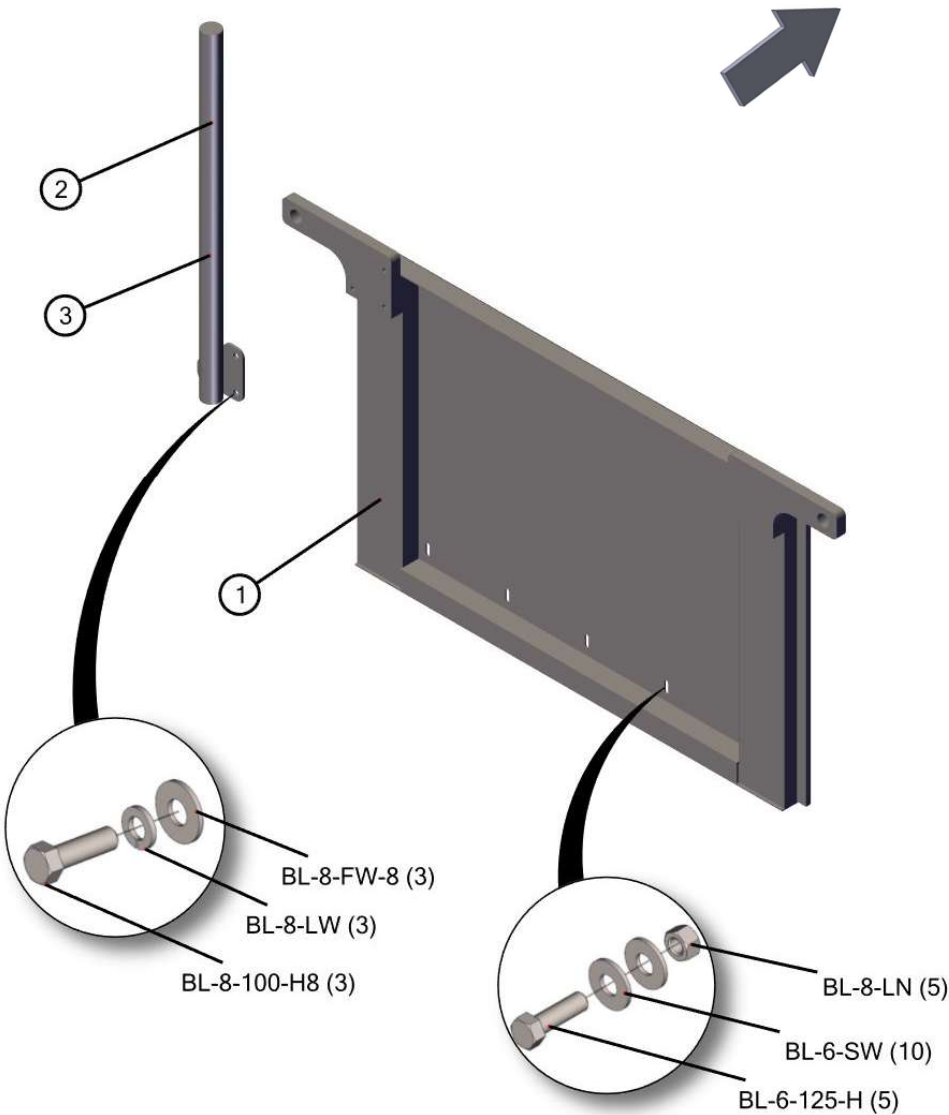
77023-1-01 MAIN FRAME

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	PR72030	Main Frame, HP25LL	1		
2	PR63101	Hitch Shaft, Hardened, Long	1		
3	PR72100	Poly Board, RH, Custom Cut	1		
4	PR72102	Front Belting, Belting	1		
5	PR72101	Poly Board, Cut to 305.5	6		
6	PR72104	Poly Board, LH, Custom Cut	1		
7	PR72103	Front Belting Bar	1		
8	PR72105	Front Floor Trim Plate	1		
9	PR80007	Load Cell Mount, Hitch Area, 1880 VB	1		
10	TH-0002	Bull-Pull Articulating Hitch, 3-Bolt	1		
11	PR72016	Endgate backing bar	2		
100	BL-4-150-C	1/4-20 X 1-1/2 CARRIAGE BOLT G5 ZC	78		
101	BL-4-FW	1/4 USS FW ZC	78		
102	BL-4-LW	1/4 SPLIT LW ZC	78		
103	BL-4-N	1/4-20 HEX FIN NUT ZC	78		
104	BL-16-750-H8	1-8 X 7-1/2 HH C/S G8 ZC	3		
105	BL-16-650-H8	1-8 X 6-1/2 HH C/S G8 ZC	1		
106	BL-16-550-H8	1-8 X 5-1/2 BOLT HH C/S G8 ZC	1		
107	BL-16-SW-8	1' SAE FW G8 ZC	6		
108	BL-16-LN-8	1 H LN ZC G8	5		
109	BL-6-125-C	3/8-16 X 1-1/4 CARRIAGE BOLT G5 ZC	7		
110	BL-6-SW	3/8 SAE FW ZC	7		
111	BL-6-LW	3/8 SPLIT LW ZC	7		
112	BL-6-N	3/8-16 HEX NUT ZC	7		



77021-1-03 GUILLETINE ENDGATE

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	PR72004	Guillettine Endgate, Lime/Litter	1		
2	PR72011	Endgate Marker	1		
3	DC-0123	Ruler Decal, HP500, Tailgate Opening	1		
100	BL-8-100-H8	1/2 X 1 HH G8	3		
101	BL-8-LW	1/2 SPLIT LW ZC	3		
102	BL-8-FW-8	1/2 FW G8 ZC	3		
103	BL-6-125-H	3/8-16 X 1-1/4 HHCS G5 ZC	5		
104	BL-6-SW	3/8 SAE FW ZC	10		
105	BL-6-LW	3/8 SPLIT LW ZC	5		



77021-1-04 TIRES AND WHEELS, 710/50-26.5

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	WHM-7120	710/50R-26.5 Tire & Wheel Assy, 335mm BCD, Mounted, ADR	4		
801	WHT-7101	Tire, 560/60R22.5 , Vredestein Flotation Trac, 161D TL	1		
802	WHL-7104	Wheel, 16 x 22.5 - 7/15, 3/8" (+) Offset, HD, Painted	1		



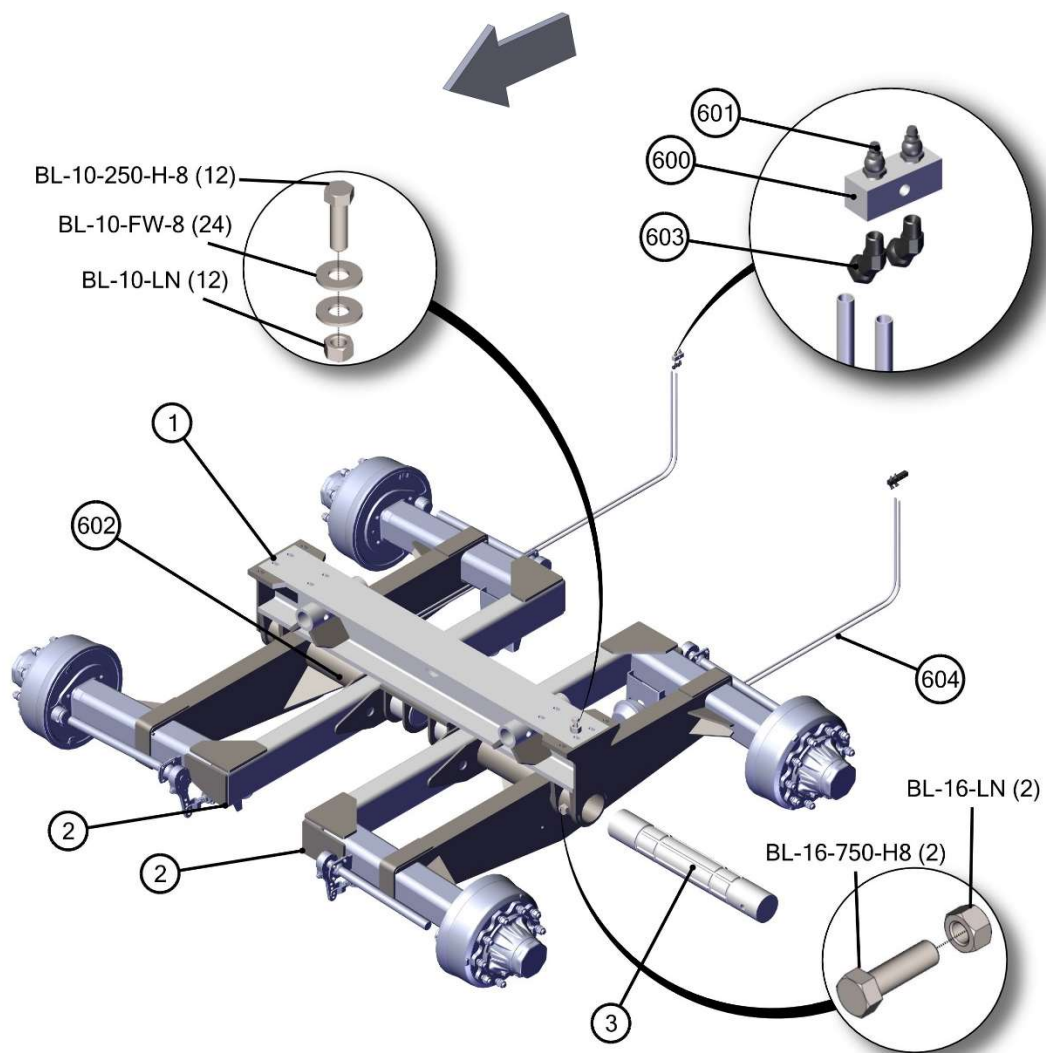
77021-1-04A OPTIONAL TIRES AND WHEELS, 750/60-30.5

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	WHM-7121	750/60-30.5 Tire & Wheel Assy, 335mm BCD, Mounted, ADR	4		



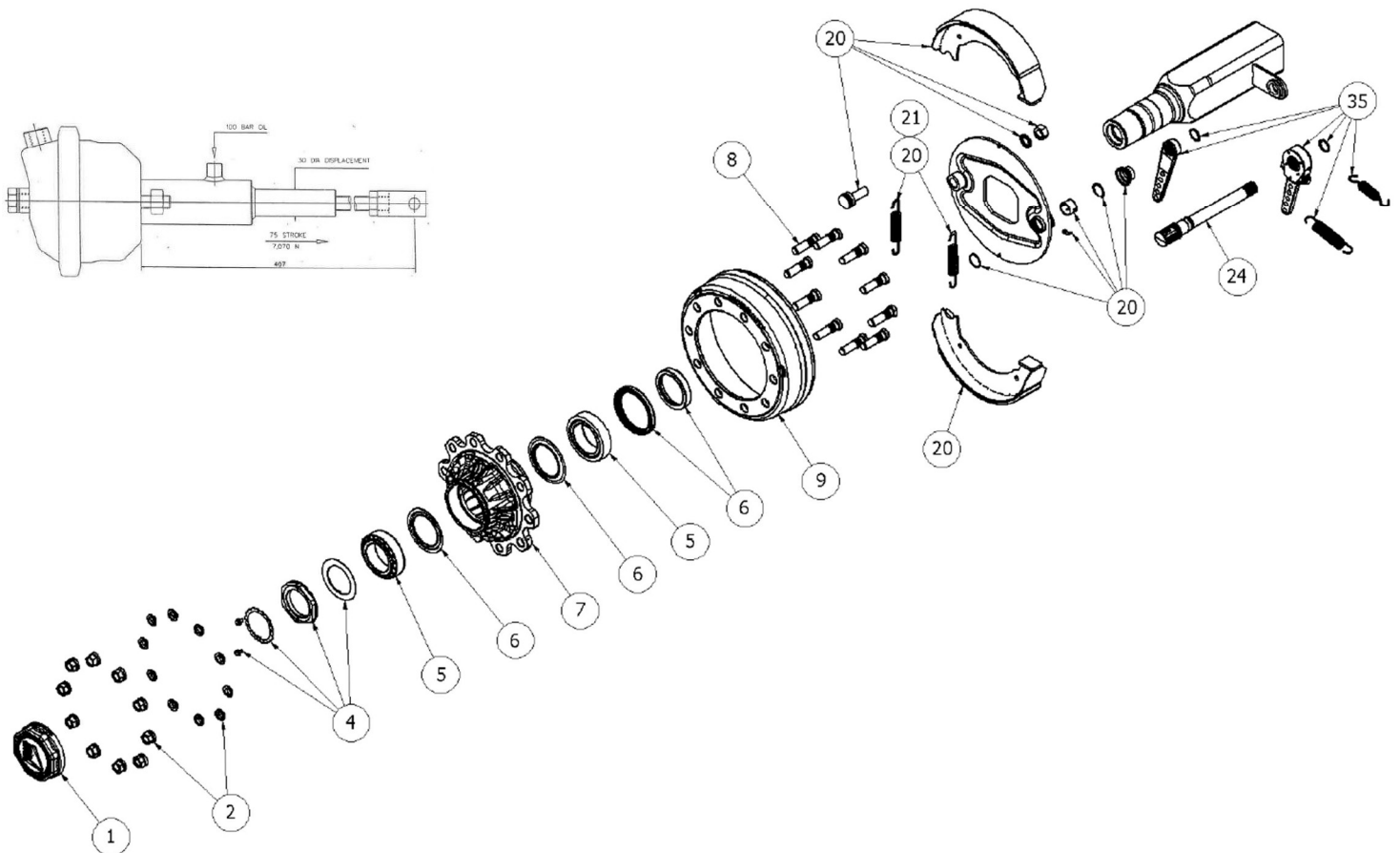
77021-1-06 WALKING BEAM

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	PR72800	Axle I Beam, Lime/Litter	1		
2	PR72801	Rocker, Walking Beam, Lime/Litter	2		
3	PR72803	Shaft, Walking Beam Pivot, Lime/Litter	2		
101	BL-16-750-H8	1-8 X 7-1/2 HH C/S G8 ZC	2		
102	BL-16-LN-8	1 H LN ZC G8	2		
103	BL-10-LN	5/8-11 HEX LN NE ZC	12		
104	BL-10-FW-8	5/8 FW G8	24		
105	BL-10-250-H-8	5/8-11 X 2-1/2 HH G8 ZC	12		
600	GF-2-2	2' Grease Manifold	1		
601	GF-1827	Grease Fitting 1/8 NPT Straight	4		
602	A-1501-2-2	1/8' MP x 1/8' FPX90-	4		
603	A-1503-2-2	1/8' MP x 1/8' FPX 45-	4		
604	H2-102-2MP-2MP	1/8' Hose 1/8MP x 1/8MP x 102' L	4		



77021-1-06A ADR SQUARE AXLE

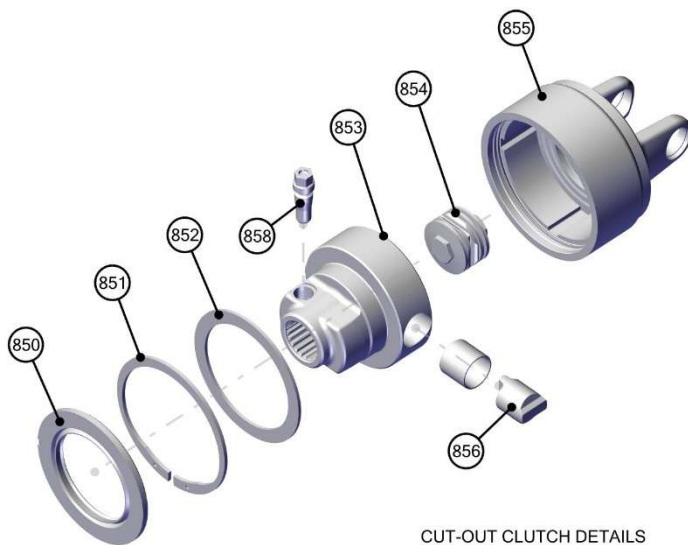
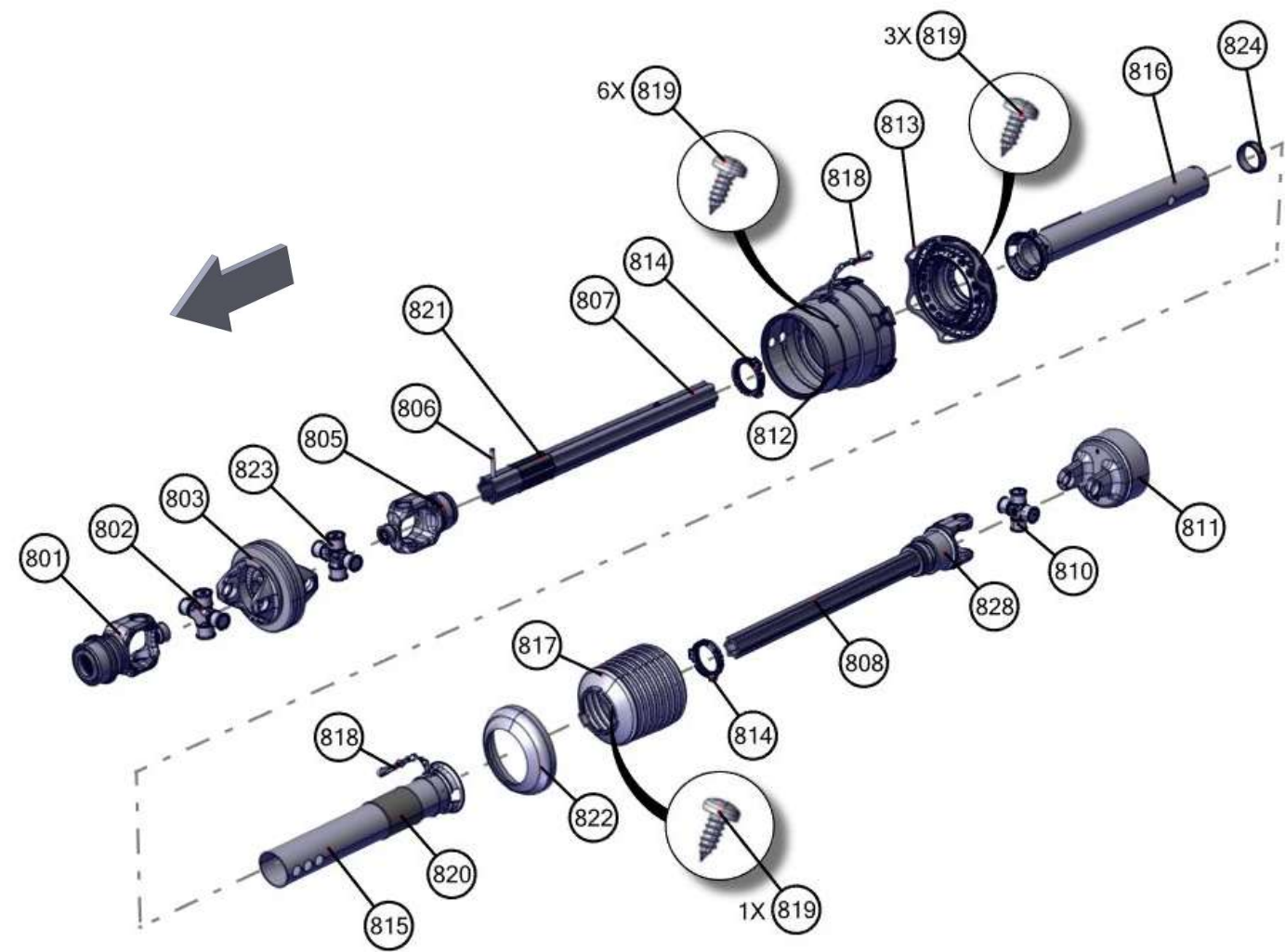
REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	PR60124-A-1	Outer Cap & O-Ring	0		
2	PR60124-A-2	Lug Nuts & Washers (10 each)	0		
4	PR60124-A-4	Ring Nut Locking Kit (5 pieces)	0		
5	PR60124-A-5	Bearings, Front & Rear	0		
6	PR60124-A-6	Seal Kit (4 pieces)	0		
7	PR60124-A-7	Hub	0		
8	PR60124-A-8	Studs (10 pieces)	0		
9	PR60124-A-9	Drum	0		
20	PR60124-A-20	Brake Assembly, Includes Springs (2)	0		
21	PR60124-A-21	Replacement Springs (2)	0		
24	PR60124-A-24	Cam Shaft, 32 Teeth Module	0		
25	PR60124-A-25	Replacement Cam Shaft	0		
35	PR60124-A-35	Lever Parts (6 pieces)	0		
36	PR60124-A-50	Actuator, Dual Control, Brake, 20/30	0		



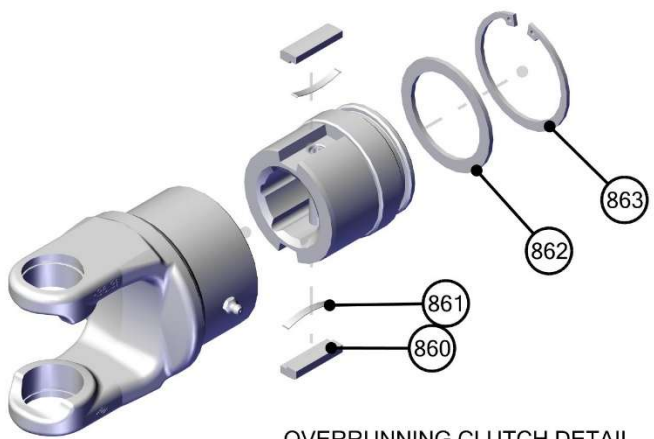
77021-2-01 FRONT DRIVELINE, 1000RPM, 1-3/4"

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	PTS-1025	Driveline, 1-3/4'-20 Spline, PWE580 HD Shaft	1		
801	PTS-1021A	Yoke, 1-3/4'-20 Spl. ASG	1		Special Order Only
802	PTS-1021B	Cross & Bearing Kit	1		Special Order Only
803	PTS-1005B	Double Yoke	1		Special Order Only
805	PTS-1021C	Inboard Yoke S5	1		Special Order Only
806	PTB-1014C	Spring Pin 10 X 75	1		Special Order Only
807	PTS-1025A	Outer Profile 55GL	1		
808	PTS-1024A	Overrunning Clutch & S4LGA Profile Assy.	1		
810	PTS-4001B	Extended Lube Cross & Bearing Kit	1	Walterscheid Yokes	Special Order Only
811	PTS-1021E	Cut-Out Clutch	1		Special Order Only
812	PTS-1021K	CV Guard & Bearing Assy	1	Replaces PTS-1005K	Special Order Only
813	PTS-1015M	Flex Net & Guard Assy	1		
814	PTS-1002J	PTO Shield Bearing Ring	2		Special Order Only
815	PTS-1025C	Guard Tube Outer	1		
816	PTS-1025B	Guard Tube Inner	1		
817	PTS-1021F	Guard Cone 9 Rib	1		Special Order Only
818	PTS-1002K	PTO Shield Safety Chain	2		Special Order Only
819	PTS-1010K	Screw	10		Special Order Only
820	PTS-1010L	Decal, Outer	1		Special Order Only
821	PTS-1010M	Decal, Inner	1		Special Order Only
822	PTS-8100D	Reinforcing Collar	1		Special Order Only
823	PTS-1021G	Cross & Bearing Kit	1		Special Order Only
824	PTS-1021H	Support Bearing	1		Special Order Only
825	PTB-1014L	Zerk	1		Special Order Only
826	PTS-1009J	Decal	1		Special Order Only
827	PTS-1021P	Lubrication Decal	1	Replaces PTS-1008Q	Special Order Only
828	PTS-1008C	Zerk, Double Yoke	1		Special Order Only
829	PTS-1008R	ASG Collar Kit	1		Special Order Only
830	PTS-1009K	CC Lock Assembly	1		Special Order Only
831	PTS-1025-FH	Front Half, Drive Shaft	1		
832	PTS-1025-RH	Rear Half, Drive Shaft	1		
850	PTS-1009E-G	Sealing Ring	1		Special Order Only
851	PTS-1009E-F	Retaining Ring	1		Special Order Only
852	PTS-1009E-E	Washer	1		Special Order Only
853	PTS-1009E-C	Hub	1		Special Order Only
854	PTS-1021E-B	Spring Pack	1		Special Order Only
855	PTS-1021E-A	Housing	1		Special Order Only
856	PTS-1009E-A	Cam	2		Special Order Only
857	PTS-1009K	CC Lock Assy	1		Special Order Only
860	PTS-1010F-A	Key	2		
861	PTS-1010F-B	Leaf Spring	2		
862	PTS-1010F-F	Supporting Ring	1		Special Order Only
863	PTS-1010F-G	Retaining Ring	1		Special Order Only

77021-2-01 FRONT DRIVELINE, 1000RPM, 1-3/4"



CUT-OUT CLUTCH DETAILS

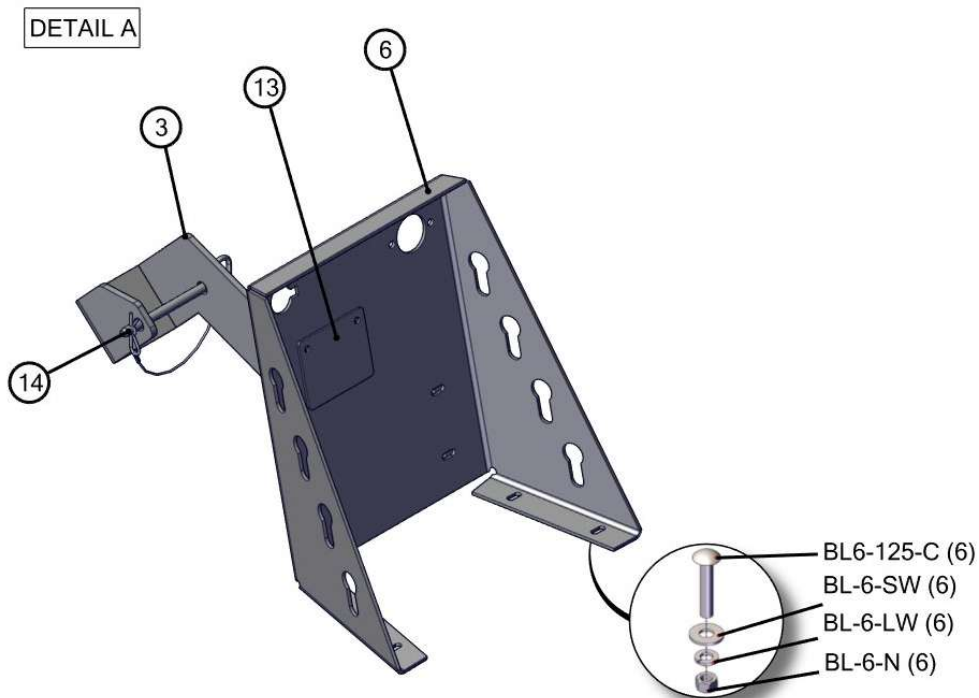
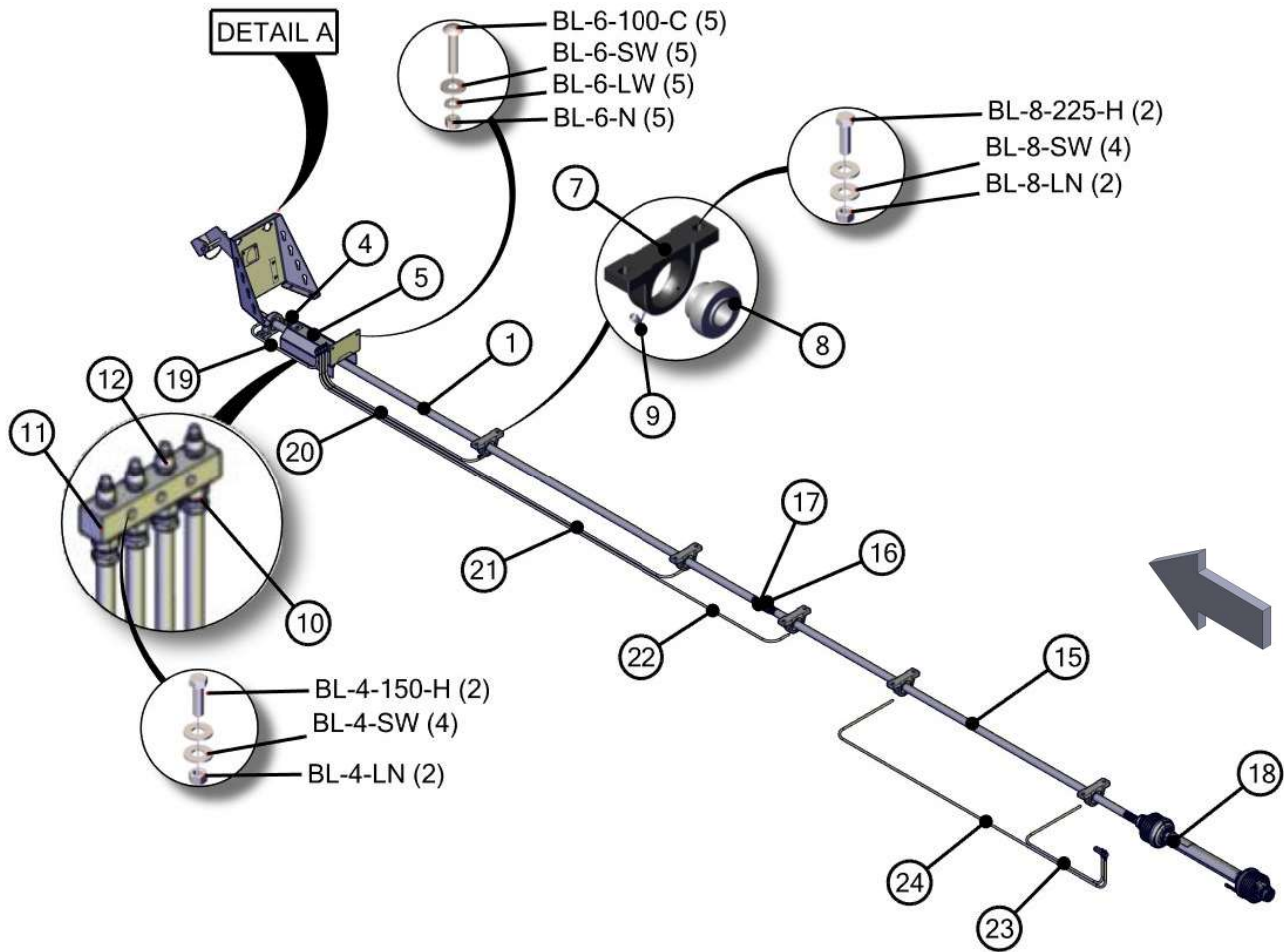


OVERRUNNING CLUTCH DETAIL

77023-2-02 MAIN DRIVE SHAFT

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	PR60101	Main Drive Shaft, HP900	1		
3	PR70606	PTO Holder, HP900	1		
4	PR70132	Mount, Driveline Shield	1		
5	PR72014	Drive Shaft Shield,, Lime/Litter	1		
6	PR70269	Hose Mount	1		
7	BR-100-RAK	Bearing Housing 100 mm	6	11001	*E1
8	BR-175-100	Heavy Duty 1-3/4" Bearing	6		*D1
9	A-1501-2-2	1/8 MP x 1/8 FPX90-	6		
10	A-1404-2-2	1/8 MP x 1/8 FPX	4		
11	GF-4-4	4' Grease Manifold	2		
12	GF-1827-45	Grease Fitting 1/8 NPT 45°	7		
13	PR70131	Cover, Flow Control Cutout	1		
14	PIN-500-575	Pin 1/2 x 5-3/4 w/Lanyard & hairpin Clip	1		
15	PR60402	Main Drive Shaft, HR880, HP880, HP900	1		
16	PIN-4-36	Roll Pin 1/4' x 2.25	1		
17	PR60404	Coupler, 1.75 x 20 Spline, 12/24 Pitch, P.A. 30-	1		
18	PTS-1026	Driveline, 1-3/4-20 Spline, 2500Series, Rear Drive	1	77023005-	
19	H2-39-2MP-2MP	1/8' Hose, 1/8' Male Pipe x 1/8' Male Pipe, 39	1		
20	H2-78-2MP-2MP	1/8 in grease Hose 1/8MP x 1/8MP x 78in Long	1		
21	H2-155-2MP-2MP	1/8' Hose, 1/8' Male Pipe x 1/8' Male Pipe, 155	1		
22	H2-191-2MP-2MP	1/8' Hose, 1/8' Male Pipe x 1/8' Male Pipe, 191	1		
23	H2-54-2MP-2MP	1/8in Hose x 1/8MP x 1/8MP x 54in	1		
24	H2-116-2MP-2MP	1/8 in grease hose 1/8MP x 1/8MP x 116 in long	1		
100	BL-4-150-H	1/4-20 X 1-1/2 HEX CAP G5 ZC	2		
101	BL-4-FW-8	1/4 FW G8	8		
102	BL-4-LN	1/4-20 HEX LN NE ZC	4		
103	BL-6-100-C	3/8-16 X 1 CARRIAGE BOLT G5 ZC	5		
104	BL-6-075-C	3/8 UNC X ¾ CARRIAGE BOLT GR5 ZINC	8		
105	BL-6-SW	3/8 SAE FW ZC	13		
106	BL-6-LW	3/8 SPLIT LW ZC	13		
107	BL-6-N	3/8-16 HEX NUT ZC	13		
108	BL-8-225-H8	1/2 X 2-1/4 HH G8	12		
109	BL-8-SW	1/2 SAE FW ZC	24		
110	BL-8-LN	1/2-13 LN NYLON INSERT ZC	12		
111	BL-4-225-H	1/4 UNC X 2-1/4 HH C/S BOLT G5 ZC	2		

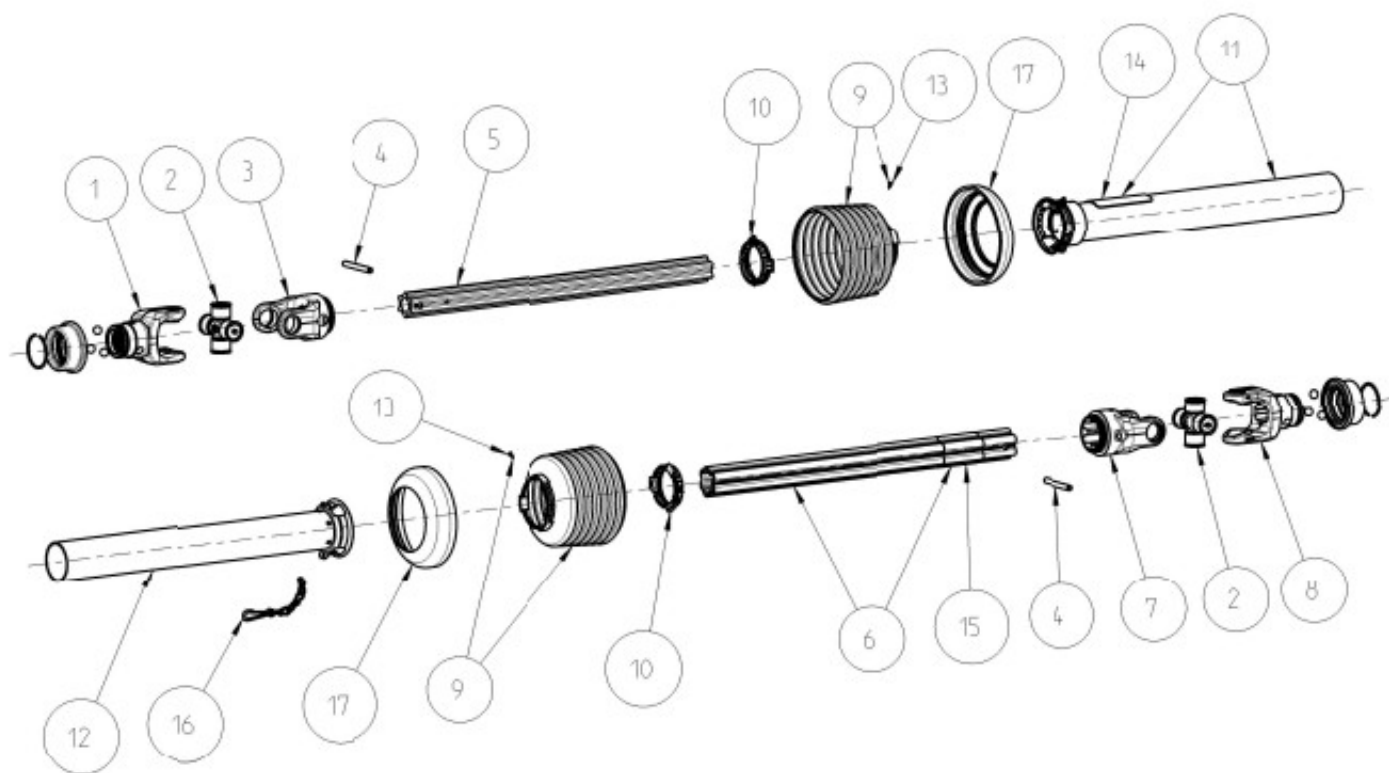
77023-2-02 MAIN DRIVE SHAFT



77024-2-02A REAR DRIVE SHAFT, PARTS BREAKDOWN

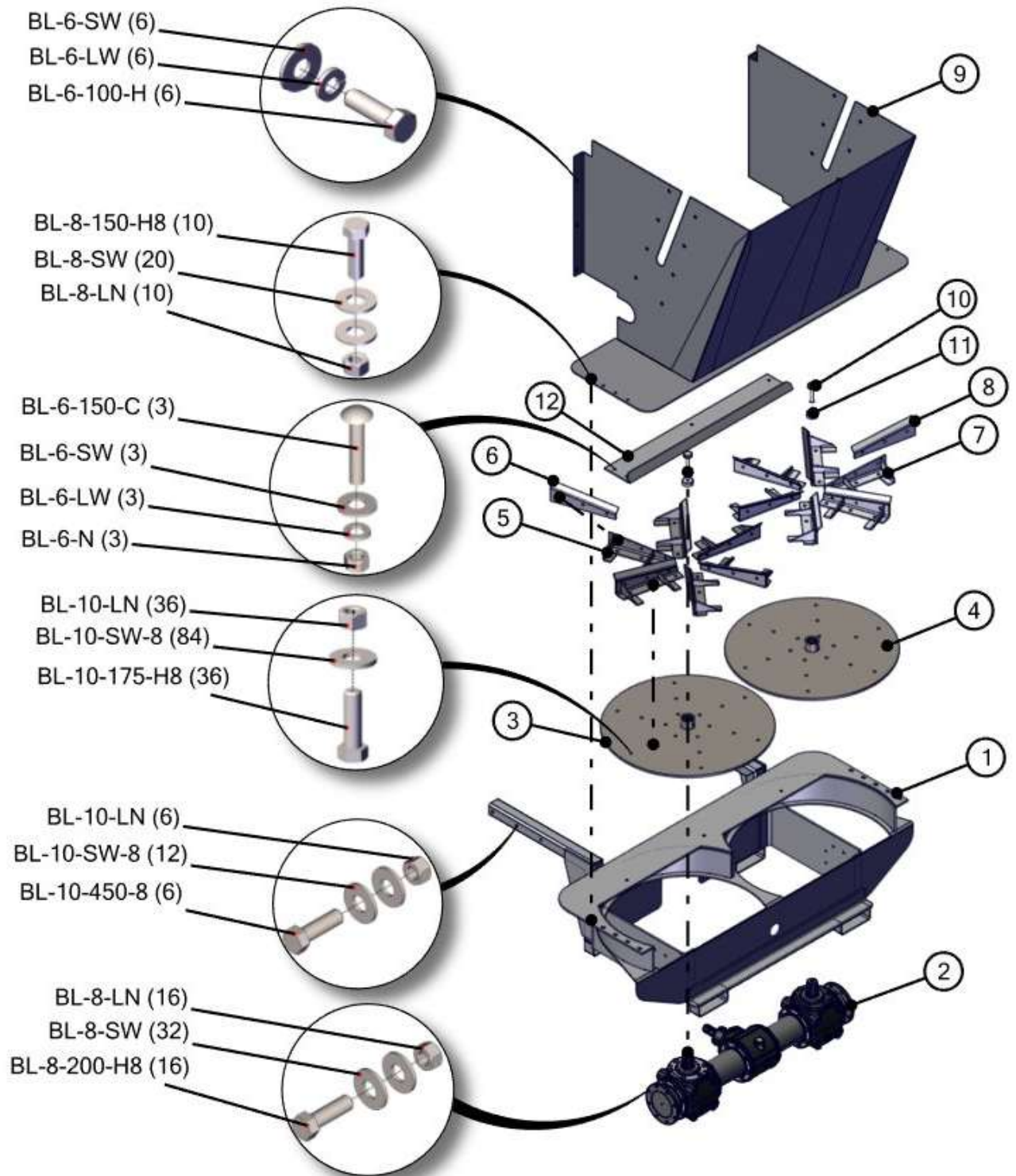
REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
0	PTS-1026	Driveline, 1-3/4-20 x 1-3/4-6, 2500 Series, Rear Drive	0		
0	PTS-1026FH	Half Shaft, Front	0		
0	PTS-1026RH	Half Shaft, Rear	0		
1	PTS-1002A	PTO Tractor Yoke (Walterscheid) 1-3/4 x 20 Spline	1	19101-	
2	PTS-1026A	Cross & Bearing Kit	2		
3	PTS-4001IY	Inboard Yoke, Tractor Half	1		Special Order Only
4	PTS-3001D	Spring Pin, 10 x 90	2		
5	PTS-1026B	Inner Profile S4	1		
6	PTS-1026C	Outer Profile S5	1		
7	PTS-1022C	Cross & Bearing Kit	1		
8	PTS-1026D	Yoke ASG	1		
9	PTS-1026E	Guard Cone 7 Rib	2		
10	PTS-1002J	PTO Shield Bearing Ring	2		Special Order Only
11	PTS-1026F	Guard Tube Outer	1		
12	PTS-1026G	Guard Tube Inner	1		
13	PTS-1010K	Screw	2		Special Order Only
14	PTS-1010L	Decal, Outer	1		Special Order Only
15	PTS-1010M	Decal, Inner	1		Special Order Only
16	PTS-1002K	PTO Shield Safety Chain	1		Special Order Only
17	PTS-8100D	Reinforcing Collar	2		Special Order Only

77024-2-02A REAR DRIVE SHAFT, PARTS BREAKDOWN



77024-2-03 SPINNER ASSEMBLY

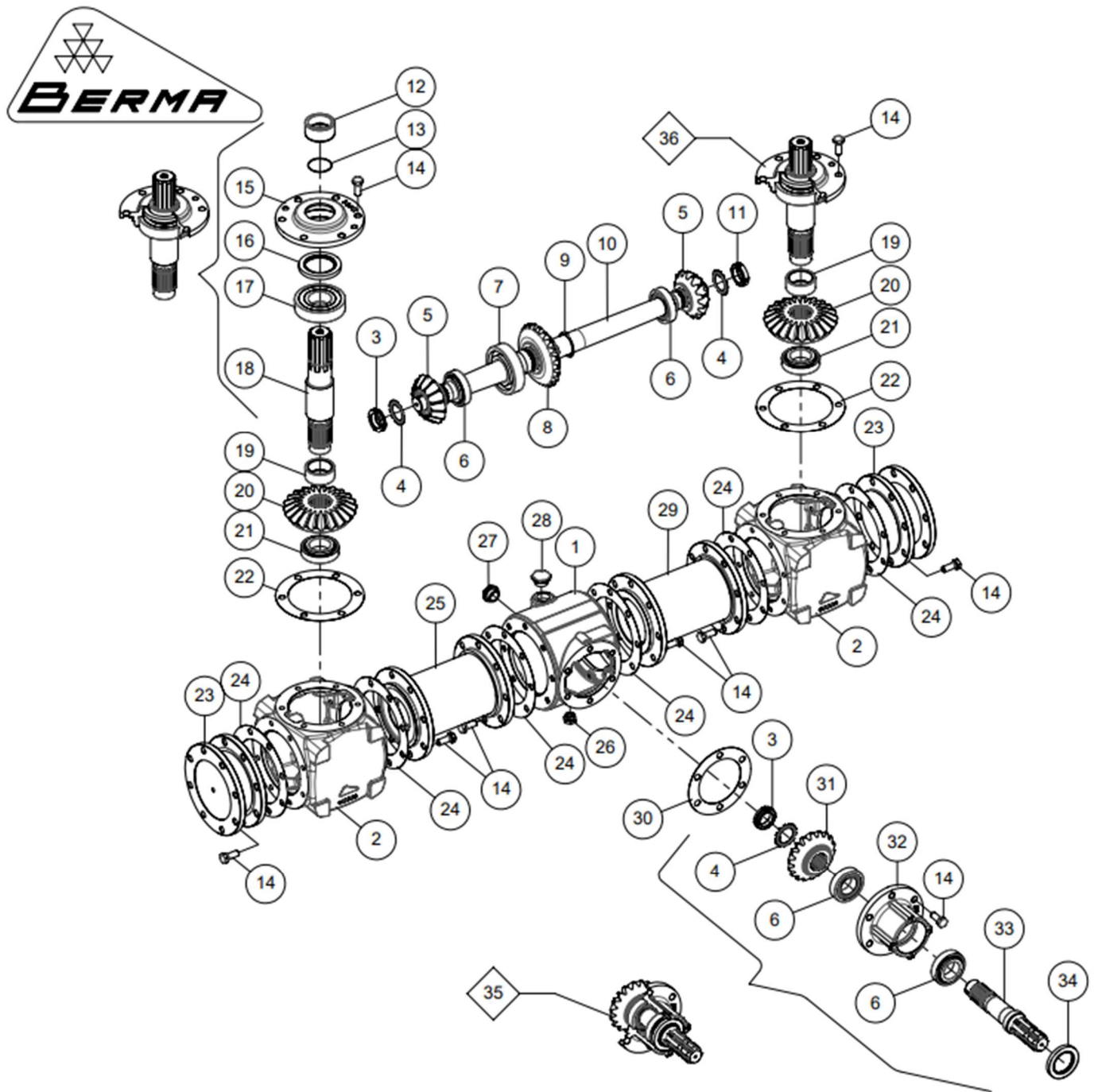
REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	PR72702	Spinner Pan, Rear Beater, Lime/Litter	1		
2	VTB-1905	Gearbox, Spinner Beater System, 1000rpm input, 520 Output	1		
3	PR72001	Spinner Disc, LH	1		
4	PR72003	Spinner Disc, RH	1		
5	PR72018	LH, Spinner Paddle, Low Base	3		
6	PR72019	LH, Low Spinner Blade, Hardox	3		
7	PR72020	RH, Low Spinner Blade, Hardox	3		
8	PR72021	RH, Spinner Paddle, Low Base	3		
9	PR72703	Spinner Shroud, Rear Beater	1		
10	VTB-CMP-2200-L	M14 X 2.0 X 45 HH Bolt	2		
11	VTB-CMP-2200-M	Disc Washer, Metric	2		
12	PR72704	Scraper, Bolt-On	1		
100	BL-10-450-8	5/8-11 X 4-1/2 HH CAP G8 ZC	6		
101	BL-10-SW-8	5/8 SAE FW G8	84		
102	BL-10-LN	5/8-11 HEX LN NE ZC	42		
103	BL-6-100-H	3/8-16 X 1 HH C/S BOLT G5 ZC	6		
104	BL-6-SW	3/8 SAE FW ZC	9		
105	BL-6-LW	3/8 SPLIT LW ZC	9		
106	BL-8-150-H8	1/2 X 1-1/2 HH G8	10		
107	BL-8-SW	1/2 SAE FW ZC	52		
108	BL-8-LN	1/2-13 LN NYLON INSERT ZC	32		
109	BL-10-175-H8	5/8-11 X 1-3/4 HH G8 ZC	36		
110	BL-8-200-H8	1/2-13 X 2 HH G8	16		
111	BL-6-150-C	3/8-16 X 1-1/2 CARRIAGE BOLT G5 ZC	3		
112	BL-6-N	3/8-16 HEX NUT ZC	3		



77023-2-03A GEARBOX ASSEMBLY, SPINNER

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	VTB-1887-A1	Housing	1		
2	VTB-1899-B1	Housing	2		Special Order Only
3	VTB-1899-D1	Threaded Ring, LH Thread	2		Special Order Only
4	VTB-1899-E1	Washer	3		Special Order Only
5	VTB-1905-A	Bevel Pinion Z=14	2		
6	VTB-1899-G1	Bearing 32209	4		Special Order Only
7	VTB-1899-H1	Bearing 6311	1		Special Order Only
8	VTB-1887-C1	Gear Z=22	1		
9	VTB-1899-K1	Circlip E 55	1		Special Order Only
10	VTB-1905-B	Shaft L=830	1		
11	VTB-1899-L1	Threaded Ring, RH Thread	1		Special Order Only
12	VTB-1899-M1	Spacer	2		Special Order Only
13	VTB-1899-N1	O-ring 2212	2		Special Order Only
14	VTB-1899-Z1	Screw, hex-hd M14X35	66		Reference Only, Special Order
15	VTB-1899-Q1	Calotte	2		Special Order Only
16	VTB-1899-S1	Oil Seal	2		Special Order Only
17	VTB-1905-C	Bearing 6311-2RS	2		
18	VTB-1899-U1	Shaft	2		Special Order Only
19	VTB-1899-V1	Spacer	2		Special Order Only
20	VTB-1905-G	Gear Z=22	2		
21	VTB-1899-X1	Bearing 32210	2		Special Order Only
22	VTB-1899-R1	Gasket	2		Special Order Only
23	VTB-1905-D	Spacer L=76	2		
24	VTB-1899-A2	Gasket	6		Special Order Only
25	VTB-1905-E	Right Spacer L=248	1		
26	VTB-1899-D2	Oil Plug, 1/2" Gas	1		Special Order Only
27	GBXA-5-ST10B	Oil Lev. Indicator 1/1" Gas	1		
28	VTB-1899-E2	Oil Plug, 1" Gas.	1		Special Order Only
29	VTB-1905-F	Left Spacer L=248	1		
30	VTB-1899-H2	Gasket	1		Special Order Only
31	VTB-1887-B1	Bevel Pinion Z=18	1		
32	VTB-1899-J2	Hub	1		Special Order Only
33	VTB-1899-L2	Shaft	1		Special Order Only
34	VTB-1899-K2	Oil Seal	1		
35	VTB-1887-D1	Hub Complete	1		
36	VTB-1899-N2	Calotte Complete, Gearbox	2		Special Order Only

77023-2-03A GEARBOX ASSEMBLY, SPINNER



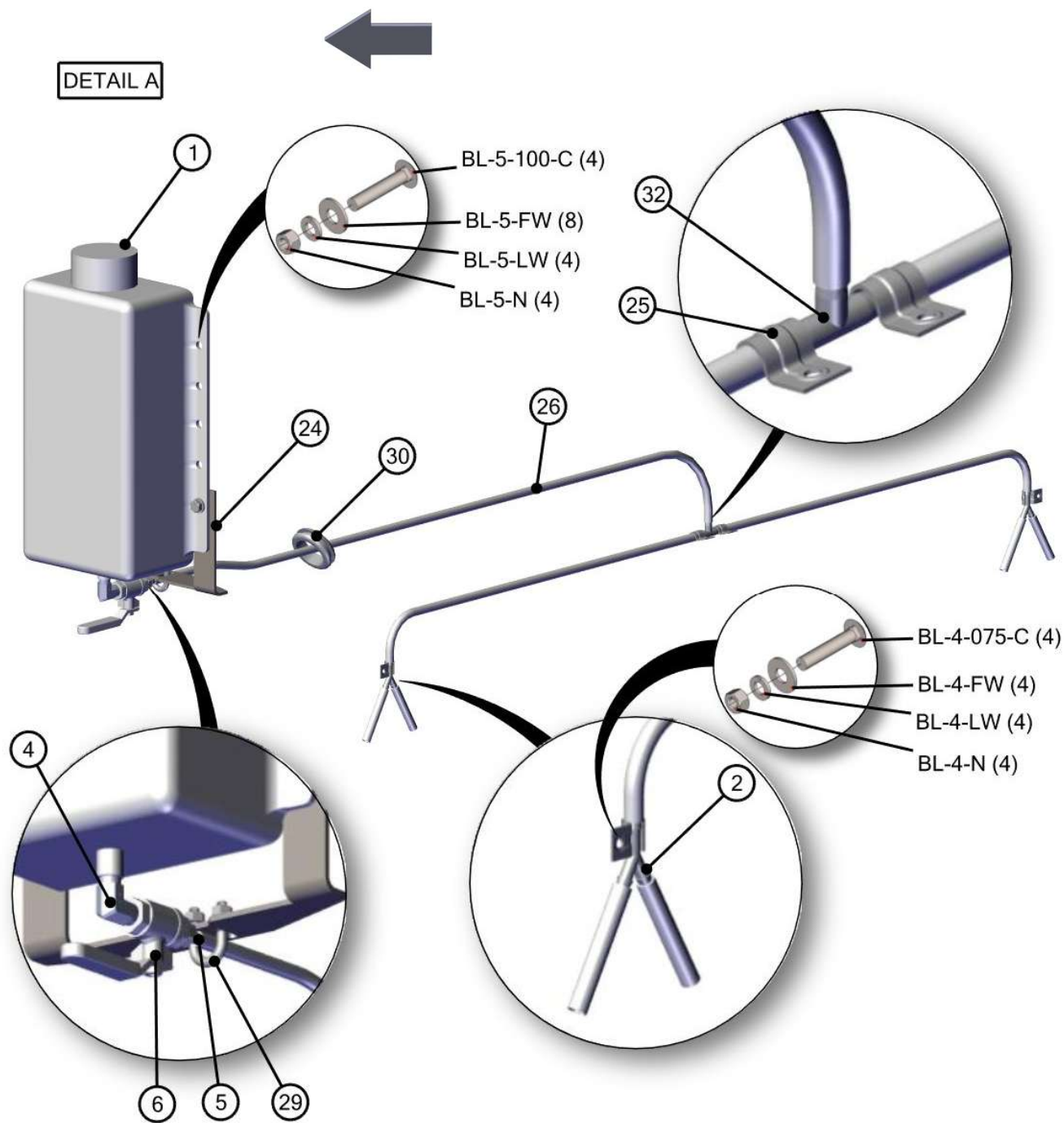
77023-2-04 WEB CHAIN & DRIVE

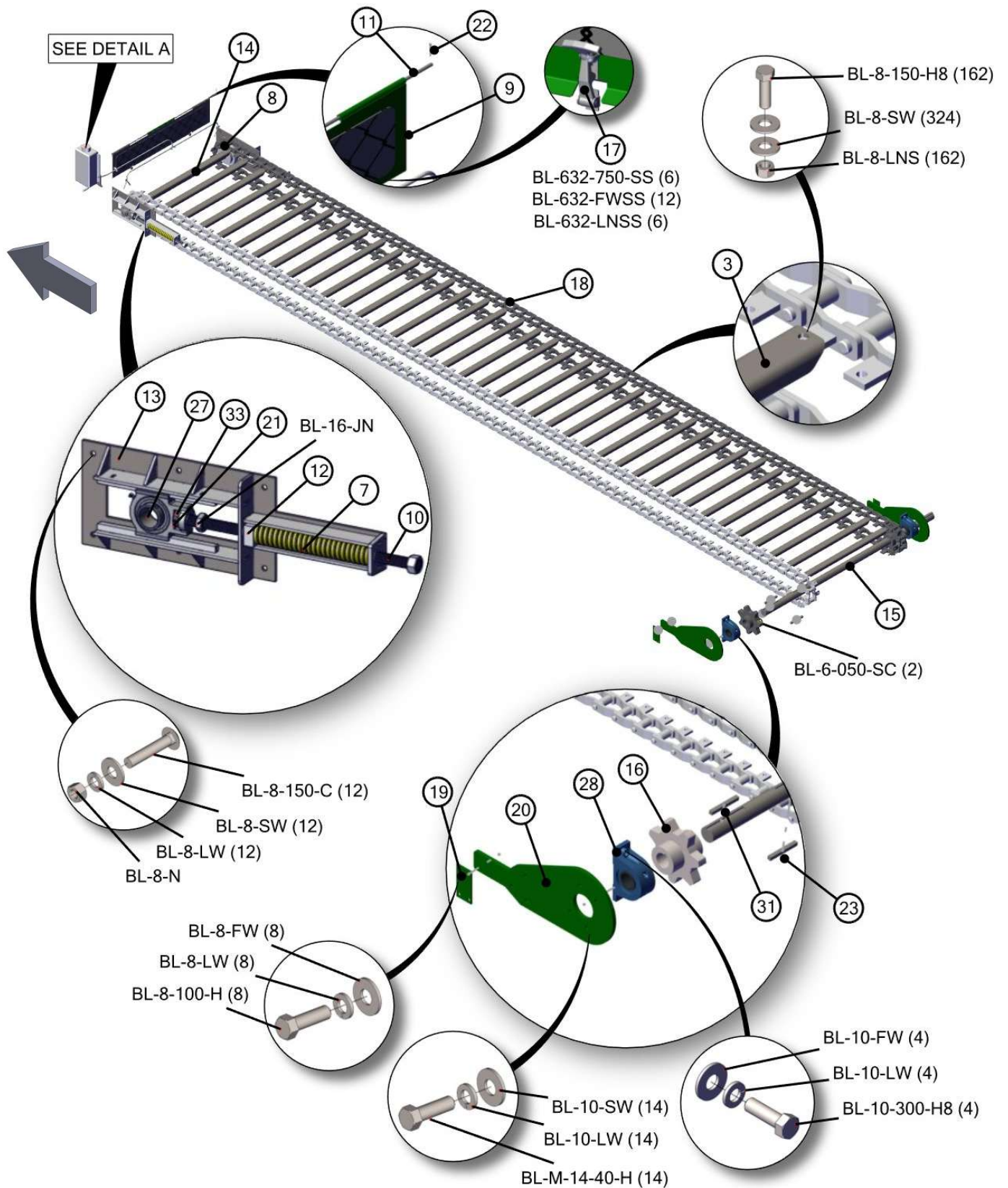
REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	VPA-MAS-36001	4 Quart Reservoir with Black Cap, Barb Conn.	1		Replaced VPA-NVE-36001 in 2026
2	AYN-4-4-4	1/4' x1/4' x 1/4' White Nylon Hose Barb Wye, Push Loc	2		
3	PR72404	Tube, Chain Flight, Center Tab, HP25LL	81		
4	A-5500-4	1/4' 90- Male Pipe Elbow	1		
5	A-4124-4-4	1/4 Male Pipe x 1/4 Push Loc	1		
6	VLV-025-B	Valve, Threaded, Full Port, Ball, 1/4'	1		
7	SPRG-1200-EH	Spring, Extra Heavy 2' Hole Dia., 1' Rod x 12' Long	2		
8	RLR-0030	Spreader Chain Roller	2		
9	PR72033	Door, Front	1		
10	PR70319	Tension Bolt, Chain Spreader	2		
11	PR72044	Hinge Rod	1		
12	PR70313	Machined Nut	2		
13	PR70309A	Takeup Bearing Mount, Short	2		
14	SFT-1896	Chain Shaft, Front Shaft, Hubs In, Lime/Litter	1		
15	SFT-1894	Drive Shaft, Rear, Lime/Litter	1		
16	PR60424	Drive Spocket, WH124 Pintle Chain, 2 Pc Sprocket, 2 1/2' Bore, 5/8 Keyway	2		
17	LA-1535	Medium Rubber T Latch Assembly	2		193-1535b
18	PR72403	Pull Chain, 161, Std Duty Pintle Style, SS Pins, Tab Every Link, Univ.	2		
19	PR60068	Mount, Torque Plate, Gearbox	2		
20	PR72701	Torque Plate, RT800 Gearbox, Lime/Litter	2		
21	PIN-4-28	Roll Pin 1/4' x 1.75'	2		
22	PIN-C2-16	Cotter Pin, 1/8' x 1'	2		
23	KEY-10-10-550-HCS	Shaft Key, 5/8 in x 5/8in x 5.50in Long	2		Rear sprockets
23	KEY-10-10-300-HCS	Shaft Key, 5/8 in x 5/8in x 3.0in Long	2		Front sprockets
24	PR72046	Valve Mount, Oiler	1		
25	HA-1031	Hydraulic Hose Holder 3/8	6		
26	H4-PL	Push Loc Hose 1/4' @ ft	7		
27	BRG-32-TU	Bearing, Takeup, 5/8' Keyway, 2.00' Shaft	2		
28	BR-250-HD	Heavy Duty 2-1/2' Brg Assy, W/Pillow Block	2		
29	BL-4-009-U	1/4-20 x 9/16' ID, U-Bolt, Zinc Plated, Round Bend	1		
30	EL-1398	Rubber Grommet, for 1-3/4' Hole, 1/4' Material Thickness	1		
31	KEY-10-08-550-HCS	Shaft Key, 5/8 in x 1/2in x 6.0in. Long, Plain 1095 High Carbon Steel	2		Rear gearbox
32	ATN-4-4-4	1/4' x1/4' x 1/4' White Nylon Hose Barb Tee, Push Loc	1		
33	PR70318	Jam Nut, Roll Pin Hole	2		
100	BL-4-075-C	1/4 UNC X 1/2 CARRIAGE BOLT G5 ZC	4		
101	BL-4-FW	1/4 USS FW ZC	4		
102	BL-4-LW	1/4 SPLIT LW ZC	4		

77023-2-04 WEB CHAIN & DRIVE

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
103	BL-4-N	1/4-20 HEX FIN NUT ZC	4		
104	BL-5-100-C	5/16-18 x 1, Z5	4		
105	BL-5-FW	5/16 USS FW ZC	4		
106	BL-5-LW	5/16 SPLIT LW ZC	4		
107	BL-5-N	5/16-18 UNC HEX NUT A563 GrA ZINC	4		
108	BL-8-100-H	1/2-13 X 1 HEX CAP G5 ZC	8		
109	BL-8-150-H8	1/2 X 1-1/2 HH G8	162		
110	BL-8-LNS	1/2-13 STOVER LN	162		
111	BL-8-SW	1/2 SAE FW ZC	336		
112	BL-8-LW	1/2 SPLIT LW ZC	20		
113	BL-10-300-H8	5/8-11 X 3 HEX CAP G8	4		
114	BL-10-FW	5/8 USS FW ZC	4		
115	BL-10-LW	5/8 SPLIT LW ZC	4		
116	BL-M-14-40-H	Hex Head Bolt, 14mm x 40mm	14		
117	BL-10-SW	5/8 SAE FW ZC	14		
118	BL-6-050-SC	3/8-16 x 1/2' Knurled Point Set Screw	2		
119	BL-8-150-C	1/2-13 X 1-1/2 CARRIAGE BOLT G5 ZC	12		
120	BL-8-N	1/2-13 HEX FIN NUTS ZC	12		
121	BL-8-FW	1/2 USS FW ZC	8		
122	BL-632-750-SS	6-32 x 1/2 SS Machine Screw (Slotted)	6		
123	BL-632-FWSS	6-32 SS Flat Washer	12		
124	BL-632-LNSS	6-32 SS Lock Nuts	6		
125	BL-16-JN	1-8 JAM NUT HEX Gr 5 YZ	2		

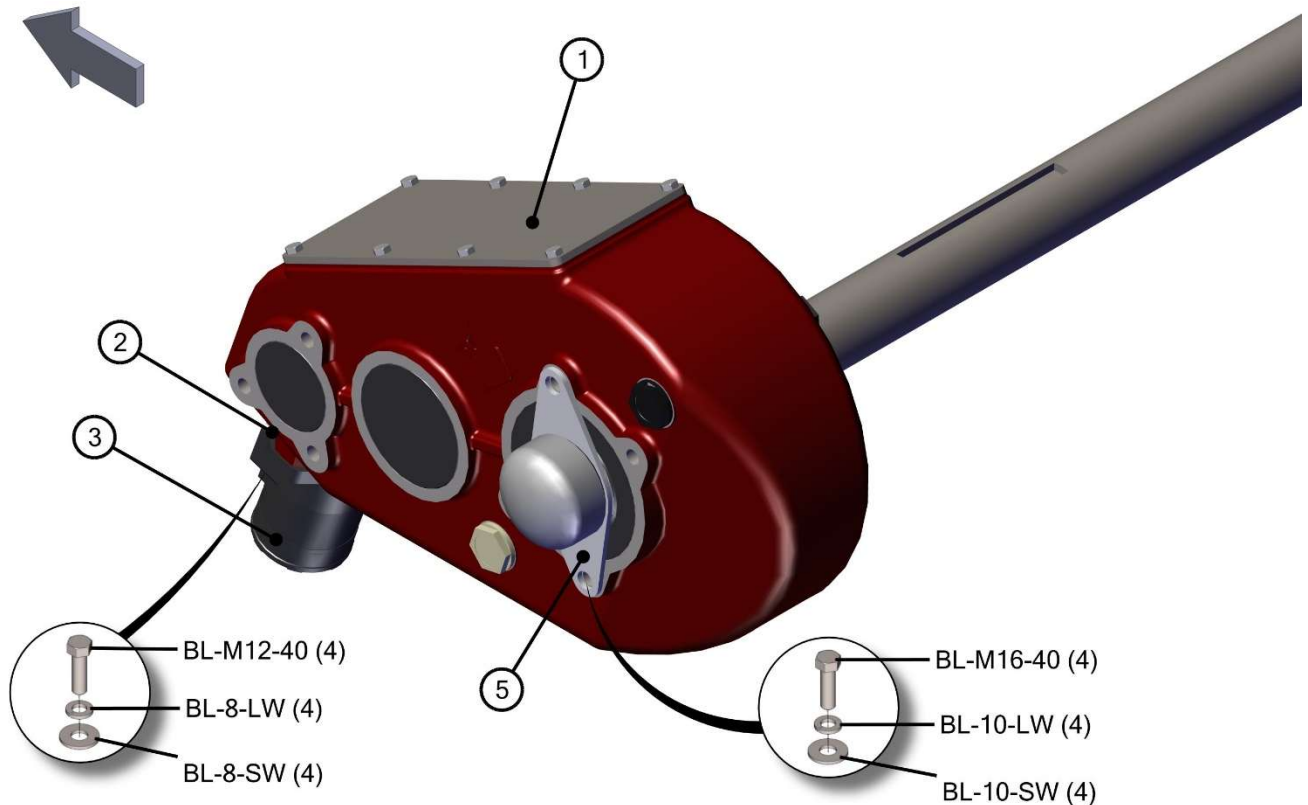
77023-2-04 WEB CHAIN & DRIVE





77024-2-05 WEB CHAIN GEARBOX AND MOTOR

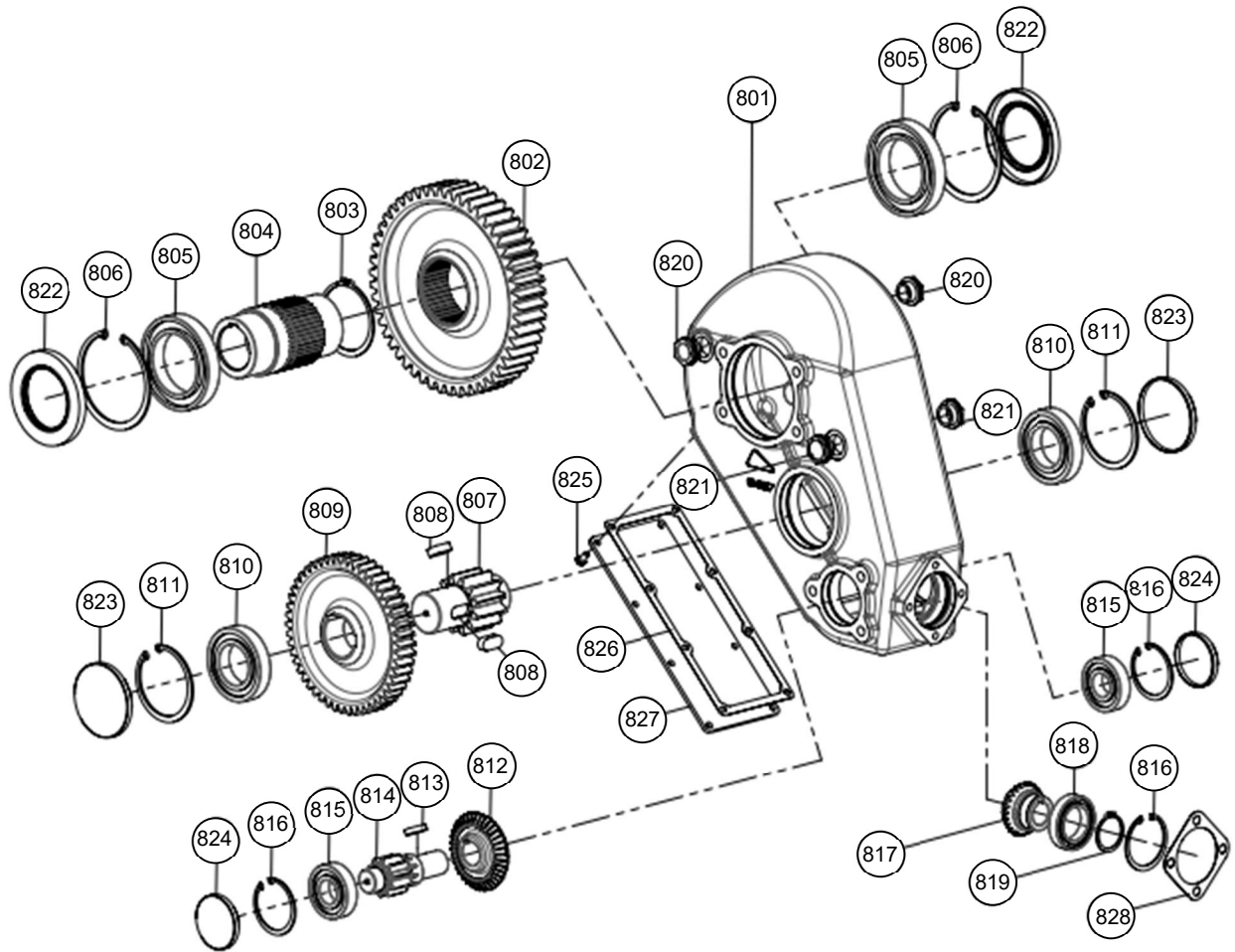
REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	GBX-1898	Gearbox, RT800 Custom 2.5" Straight Bore, 25mm	2		
2	PR60026	Flange Gasket, Apron Drive Gear Box	2		
3	HM-1903	Orbital Motor, Apron Drive, 200cc, 11.84cu, 25mm	2	77024001-	
3	HM-1900	Orbital Motor, Apron Drive, 160cc, 14.83cu, 25mm	2		
4	HP-1038	Gear Lube, 80W90 @ Quart	5	Hydra Ram Spreader	
5	PR70558	Cap, RT800 Gearbox	2		
100	BL-10-LW	5/8 SPLIT LW ZC	4		
101	BL-10-SW	5/8 SAE FW ZC	8		
102	BL-8-LW	1/2 SPLIT LW ZC	4		
103	BL-8-SW	1/2 SAE FW ZC	4		
104	BL-M12-40	12MM Bolt,Coarse Thread,40mm Length	4		
105	BL-M16-40	Hex Bolt, 16mm x 40mm	4		



PAGE LEFT BLANK
INTENTIONALLY

77024-2-05A GEARBOX PART BREAKDOWN

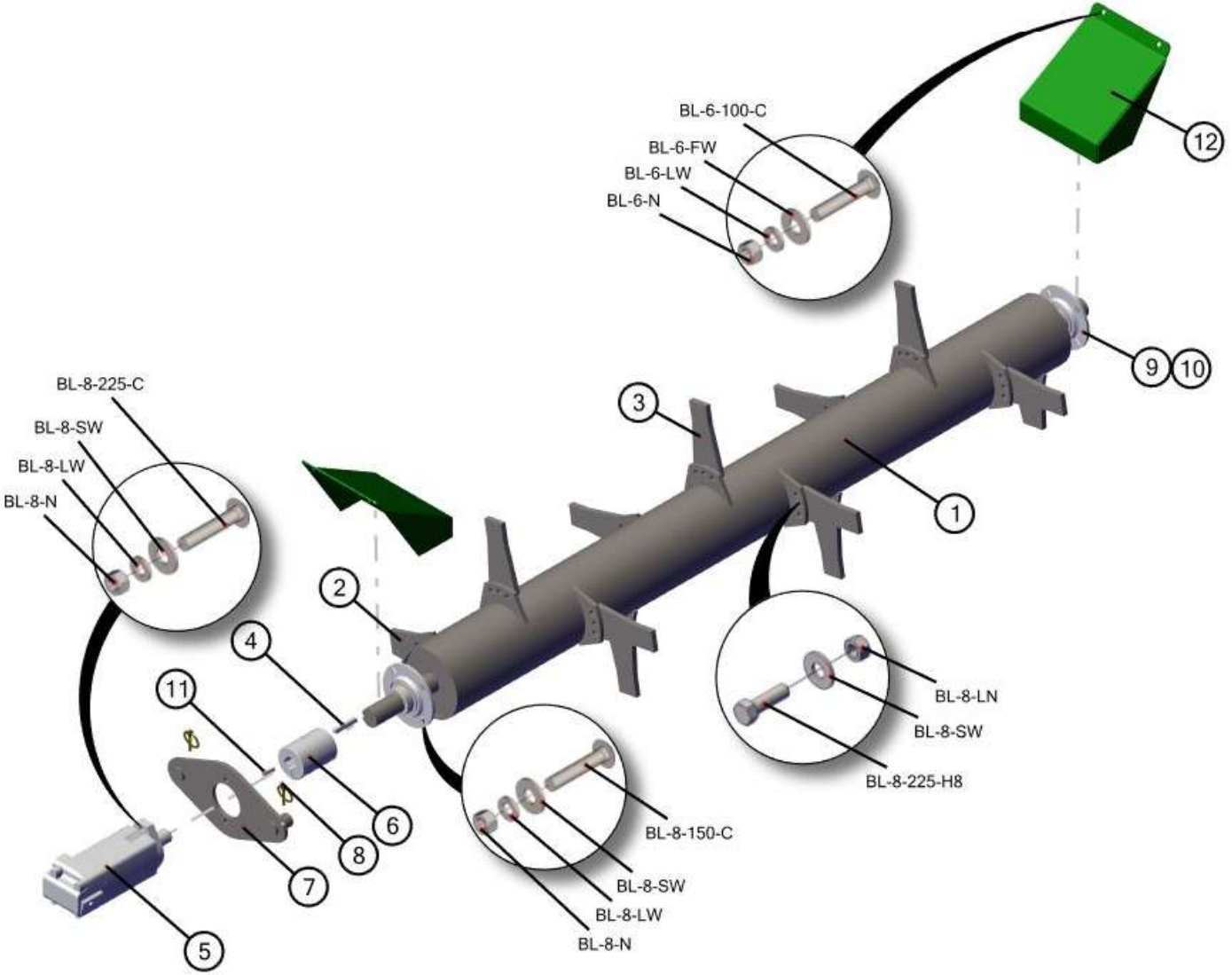
REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
801	GBX-1896-A	Housing	1		
802	GBX-1896-B	Gear Z=50	1		
803	GBX-1896-C	Snap Ring	1		
804	GBX-1896-D	Hub 2-1/2	1		
805	GBX-1896-E	Bearing 6018	2		
806	GBX-1896-F	Snap Ring	2		
807	GBX-1896-G	Pinion Z=12	1		
808	GBX-1896-H	Key	2		
809	GBX-1896-J	Gear Z=50	1		
810	GBX-5-ST10-D	Line Shaft Bearing	2		Reference Only, Special Order
811	GBX-1896-K	Snap Ring	2		
812	GBX-1896-L	Gear Z=38	1		
813	GBX-1896-M	Key 10x8x40	1		
814	GBX-1896-N	Pinion Z=10	1		
815	GBX-5-ST10-B1	Bearing	2		Reference Only, Special Order
816	GBX-1893-K	Circlip I 80	3		
817	GBX-1898-P	Pinion Z=25	1		
818	GBX-1893-S	Bearing	1		
819	GBX-1893-T	Circlip E 50	1		
820	GBX-1893-U	Oil Plug Ø1" Gas	2		
821	GBX-1893-V	Oil Level Indic Ø1" Gas	2		
822	GBX-1896-Q	Oil Seal	2		
823	GBX-1896-R	Plug	2		
824	GBX-1893-X	Plug	2		
825	GBX-1893-B1	Screw, hex-hd M8x16	8		
826	GBX-1896-S	Gasket	1		
827	GBX-1896-T	Cover	1		
828	GBX-1896-U	Gasket	1		



77025-2-06 OPTIONAL INNER BEATER ASSEMBLY

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	PR72040	Beater, Inner	1		
2	PR72708-1	Beater Knife, Shortt, LL	2		
3	PR72708-2	Beater Knife, Med. Length, Beater, LL	10		
4	KEY-6-6-40	Keystock 3/8' x 3/8' x 2 1/2' Square Cut (1018)	1		
5	HM-1420-HE	Hydraulic Motor	1		Can substitute HM-1420-CH
6	CPS-2820	Steel Coupler 1 1/2' x 1 1/4' ID with 3/8' Keyway on 1 1/2' ID	1		
7	PR72047	Motor Mount, Inner Beater	1		
8	PIN-250L	1/4' Lynch Pin	2		
9	BR-085-MS	Stamped Bearing Housing for 1 1/2' Bearing	4		
10	BR-175-085-I	Bearing, 1 1/2' ID, TS	2		
11	KEY-4-5-20	Keystock, Stepped, 1/4' x 5/16' x 1-1/2' Long	1		
12	PR72045	Bearing Cover, Inner Beater	2		
13	PR72048	Shield, Inner Beater, No Bearing	-2		
100	BL-8-225-H8	1/2 X 2-1/4 HH G8	36		
101	BL-8-SW	1/2 SAE FW ZC	46		
102	BL-8-LN	1/2-13 LN NYLON INSERT ZC	36		
103	BL-6-100-C	3/8-16 X 1 CARRIAGE BOLT G5 ZC	8		
104	BL-6-FW	3/8 USS FW ZC	8		
105	BL-6-LW	3/8 SPLIT LW ZC	8		
106	BL-6-N	3/8-16 HEX NUT ZC	8		
107	BL-8-150-C	1/2-13 X 1-1/2 CARRIAGE BOLT G5 ZC	8		
108	BL-8-225-C	1/2-13 X 2-1/4 CARRIAGE BOLT G5 ZC	2		
109	BL-8-FW	1/2 USS FW ZC	10		
110	BL-8-LW	1/2 SPLIT LW ZC	10		
111	BL-8-N	1/2-13 HEX FIN NUTS ZC	10		

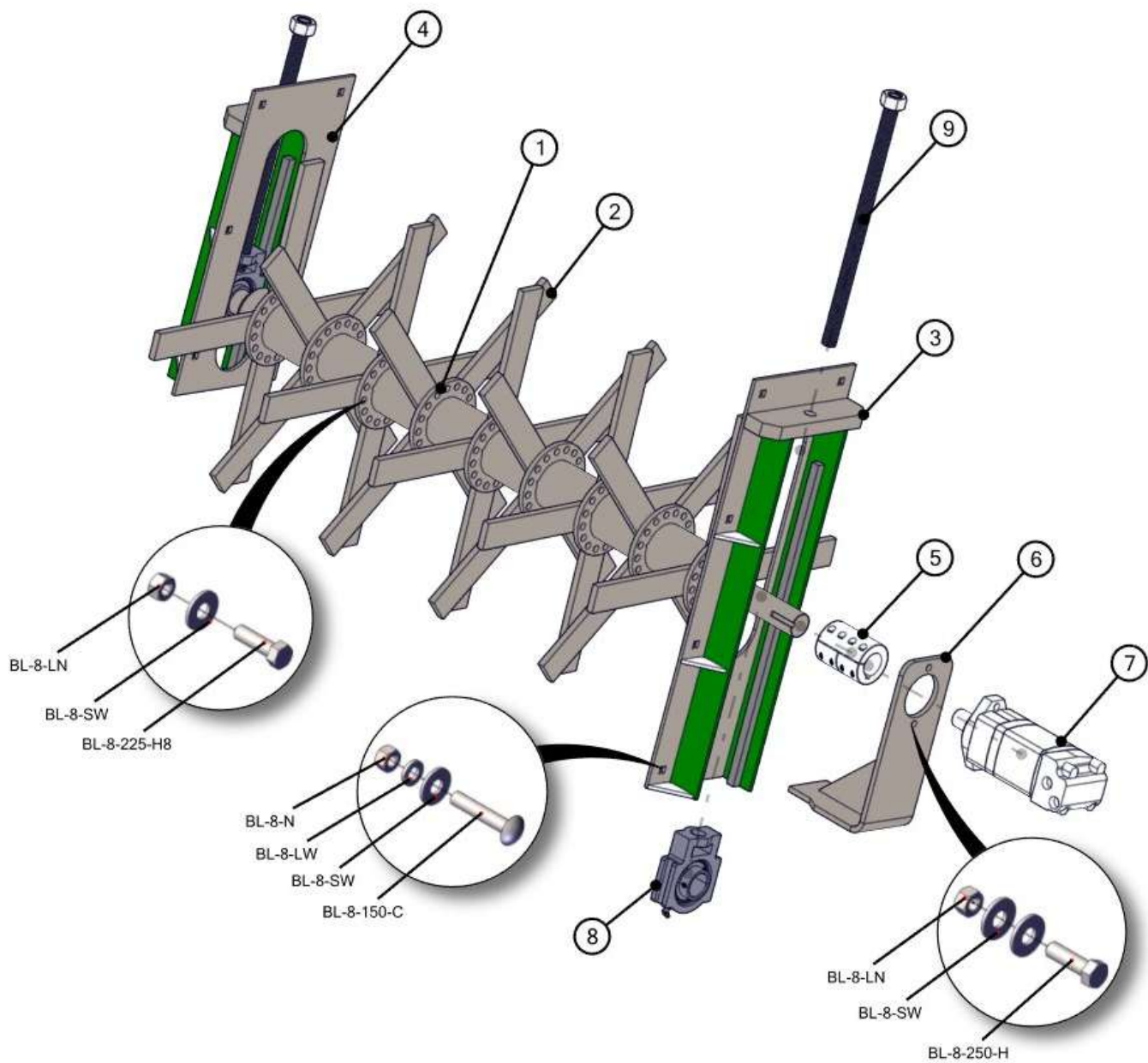
77025-2-06 INNER BEATER ASSEMBLY



77024-2-07 REAR BEATER ASSEMBLY

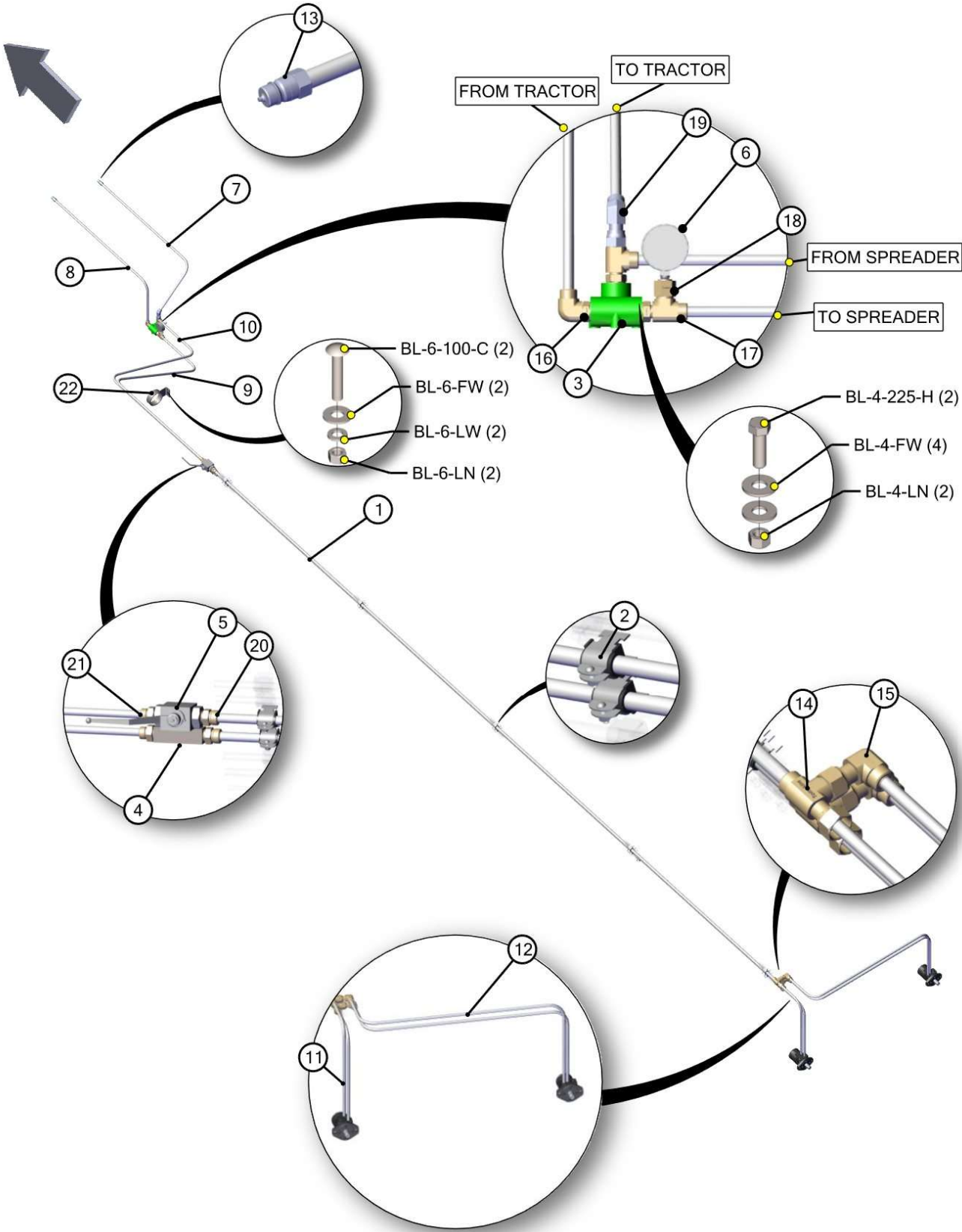
REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	PR72707	Beater Hub, Rear	1		
2	PR72708	Beater Knife, Rear Beater	36		
3	PR70309B	Takeup Bearing Mount, Long, 25LL	1		
4	PR70309C	Takeup Bearing Mount, Short, 25LL	1		
5	CPS-2820	Steel Coupler 1 ½' x 1 ¼' ID with 3/8' Keyway on 1 ½' ID	1		
6	PR72711	Motor Stop, Rear Beater	1		
7	HM-1420-HE	Hydraulic Motor	1		Can substitute HM-1420-CH
8	BRG-28-TU	Bearing, Takeup, 5/8' Keyway, 1.75' Shaft	2		
9	PR72716	Adjuster Bolt Weldment	2		
10	KEY-6-6-32	Shaft Key, 3/8' x 3/8' x 2' Square Cut (1018)	1		
101	BL-8-SW	1/2 SAE FW ZC	126		
102	BL-8-LN	1/2-13 LN NYLON INSERT ZC	110		
103	BL-8-150-C	1/2-13 X 1-1/2 CARRIAGE BOLT G5 ZC	14		
104	BL-8-LW	1/2 SPLIT LW ZC	14		
105	BL-8-N	1/2-13 HEX FIN NUTS ZC	14		
106	BL-8-250-H	1/2-13 X 2-1/2 HH C/S G5 ZC	2		
110	BL-8-225-H8	1/2 X 2-1/4 HH G8	108		

77024-2-07 REAR BEATER ASSEMBLY



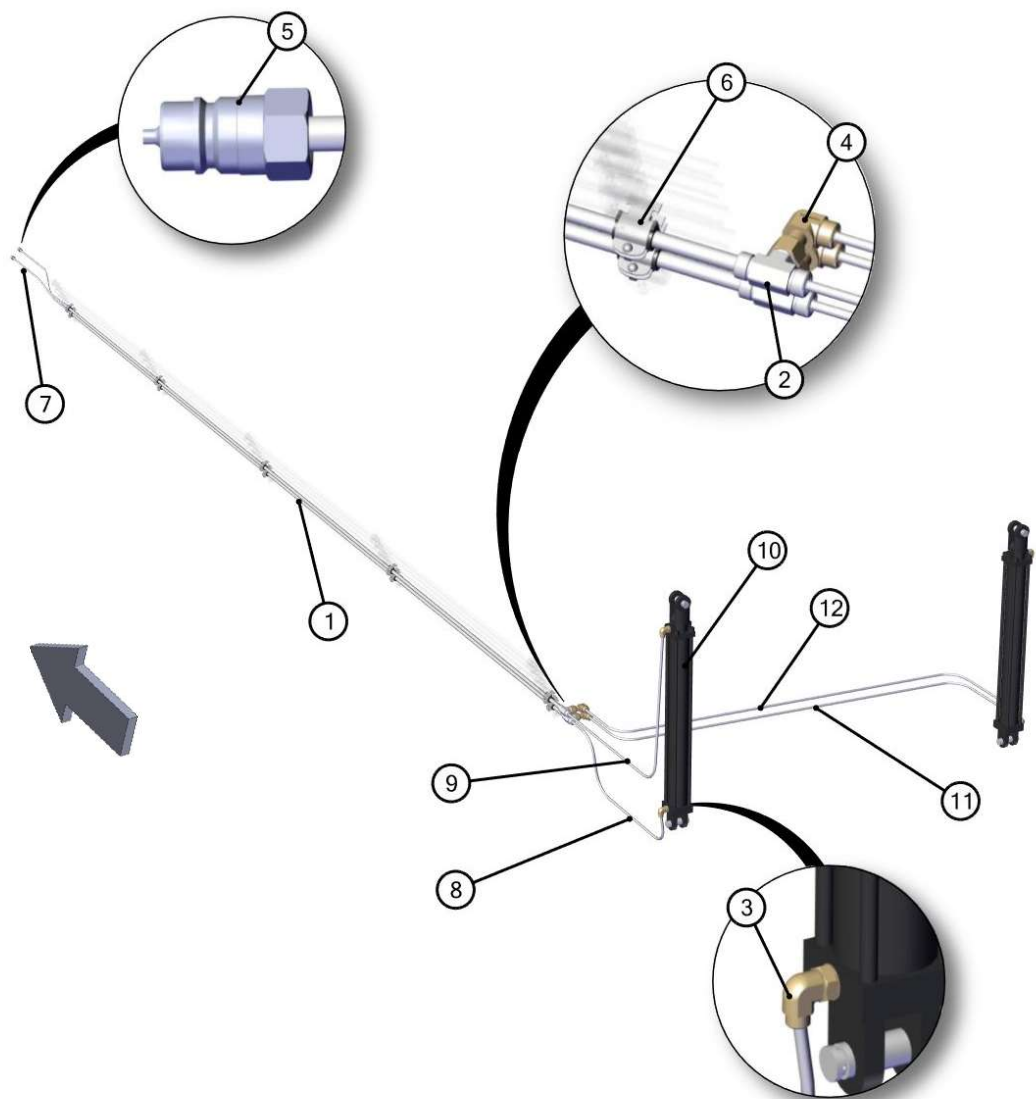
77023-3-01 HYDRAULICS, WEB DRIVE

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	H-T5009F	3/4" SS Hydraulic Tube, 240', ORFS	2		
2	HA-1072-H	Hydra-zorb Tube Clamp 1" (3 pc.)	10	19401-	
3	HV-RV-3H	Relief Valve w/ SAE #10 Ports, Preset @ 2500psi	1		
4	HV-CKV-C1220S	#12 Check Valve, 5 psi Crack, 25 gpm	1		
5	VLV-075-BHP	Ball Valve, #12 SAE, High Pressure (58000psi)	1		
6	HA-1004-G	Hydraulic, Pressure Gauge w/1/4 NPT Stem, 3000 PSI	1		
7	H10-96-10FFFX-8MOR	5/8" Hose, 5/8" Female ORFS x 1/2" Male SAE, 96'	1		
8	H10-100-10FFFX-8MOR	5/8" Hose, 5/8" Female ORFS x 1/2" Male SAE, 100'	1		
9	H10-72-10FFFX-10FFFX	5/8" Hose, 5/8" Female ORFS x 5/8" Female ORFS, 72'	1		
10	H10-78-10FFFX-10FFFX	5/8" Hose, 5/8" Female ORFS x 5/8" Female ORFS, 78'	1		
11	H10-32-10FFFX-12MFF	5/8" Hose, 5/8" Female ORFS x 3/4" Male ORFS, 32'	2		
12	H10-86-10FFFX-12FFFX	5/8" Hose, 5/8" Female ORFS x 3/4" Female ORFS, 86'	2		
13	A-QDS71X15	Ag Quick Coupler, 1/2" ISO5675 x 8SAE	2		
14	A-FF6602-12-12-12	Run Tee, 12MFF X 12MFF X 12FFFX	2		
15	A-FF6500-12-12	Elbow, 90, 3/4" MFF x 3/4" FFFX	2		
16	A-FF6801-10-10	Elbow, 5/8" MFF x 5/8" SAE	1		
17	A-FF6804-10-10-10	Run Tee, 10SAE x 10MFF x 10MFF	2		
18	A-FF304-C-10-4N	Adapter, #10 Female ORFS, 1/4" NPT Port	1		
19	A-FF6502-10-10	Elbow, 45, 10MFF x 10FFFX	1		
20	A-FF6400-12-12	Union, 12MFF x 12SAE	2		
21	A-FF6400-10-12	Union, 10MFF x 12SAE	2		
22	PR72043	Hose Holder, Bolt-On	1		
100	BL-4-225-H	1/4 UNC X 2-1/4 HH C/S BOLT 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-6-100-C	3/8-16 X 1 CARRIAGE BOLT G5 ZC	2		
104	BL-6-FW	3/8 USS FW ZC	2		
105	BL-6-LW	3/8 SPLIT LW ZC	2		
106	BL-6-N	3/8-16 HEX NUT ZC	2		



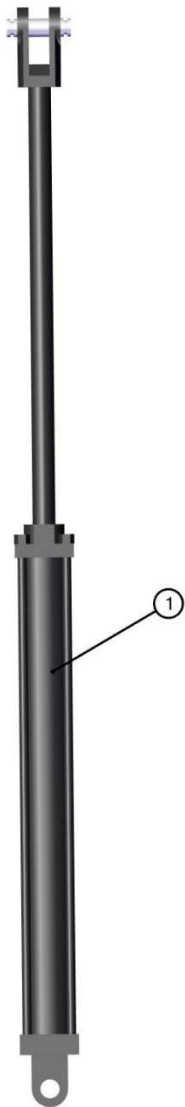
77023-3-02 HYDRAULICS, ENDGATE

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	H-T7081F	5/8" SS Hydraulic Tube, 240', ORFS	2		
2	A-FF2603-10-10-10	TEE, 10MFF X 10MFF X 10MFF	2		
3	A-FF6801-06-08	ELBOW, 90, 6MFF X 8SAE	4		
4	A-FF6500-10-10	Elbow, 90, 10MFF x 10FFFX	2		
5	A-QDS71X15	Ag Quick Coupler, 1/2" ISO5675 x 8SAE	2		
6	HA-1062-H	Hydra-zorb Tube Clamp 5/8" (3 pc.)	10		
7	H6-180-10MFF-8MOR	3/8" Hose, 5/8" Male ORFS x 1/2" Male SAE, 180'	2		
8	H6-33-6FFFX-10FFFX	3/8" Hose, 3/8" Female ORFS x 5/8" Female ORFS, 33'	1		
9	H6-56-6FFFX-10FFFX	3/8" Hose, 3/8" Female ORFS x 5/8" Female ORFS, 56'	1		
10	HC-250-2408-ORP	Hydraulic Cylinder 2 1/2 x 24 #8 SAE w/ O-Piston Ring Seal	2		34.25' pin-to-pin, 24' Stroke
11	H6-88-10FFFX-6FFFX	3/8" Hose, 5/8" Female ORFS x 3/8" Female ORFS	1		
12	H6-110-6FFFX-10FFFX	3/8" Hose, 3/8" Female ORFS x 5/8" Female ORFS, 110'	1		



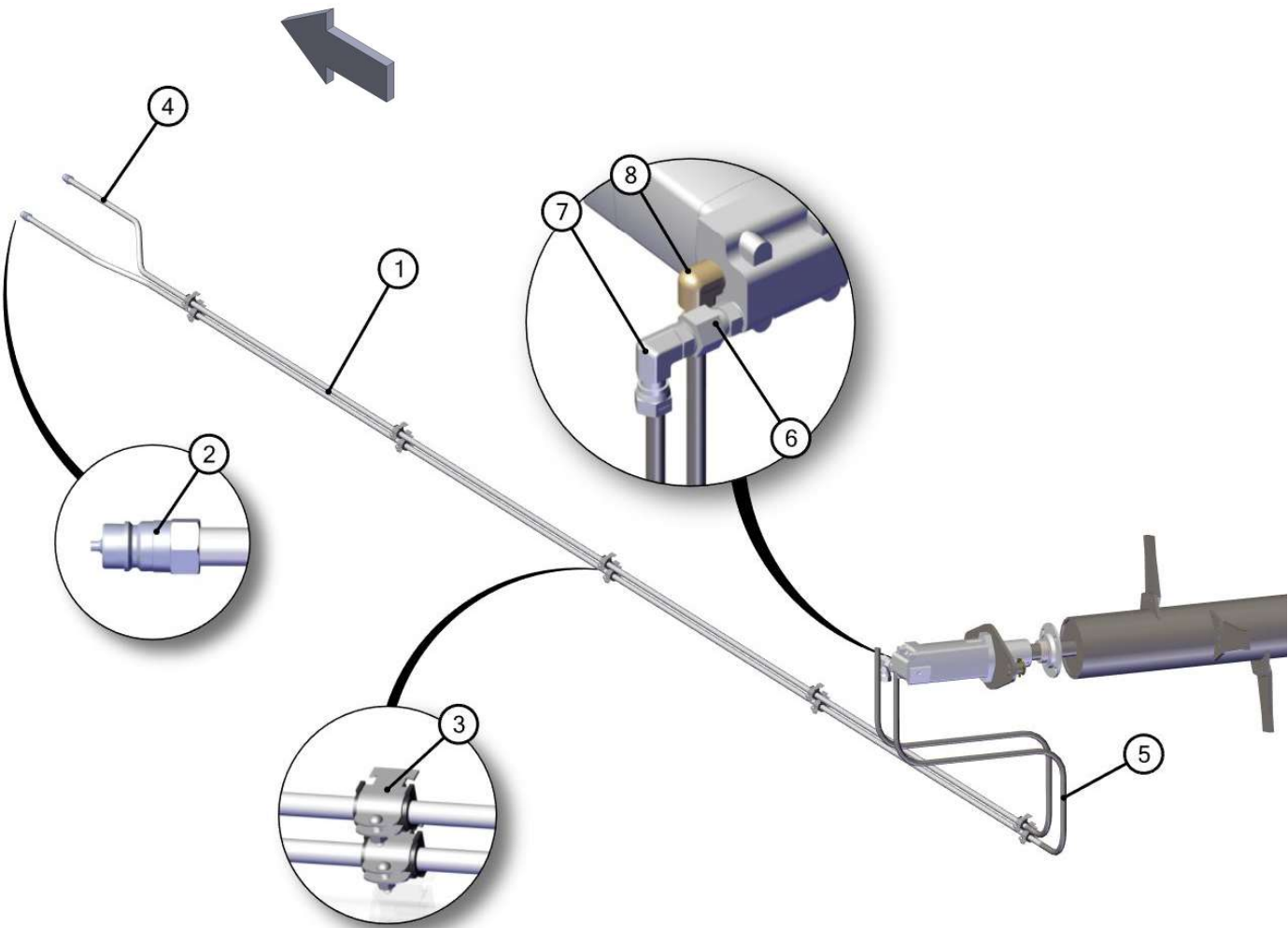
74521-3-03A ENDGATE CYLINDER

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	HC-250-2408-ORP	Hydraulic Cylinder 2 1/2 x 24 #8 SAE w/ O-Piston Ring Seal	0		34.25' pin-to-pin, 24' Stroke



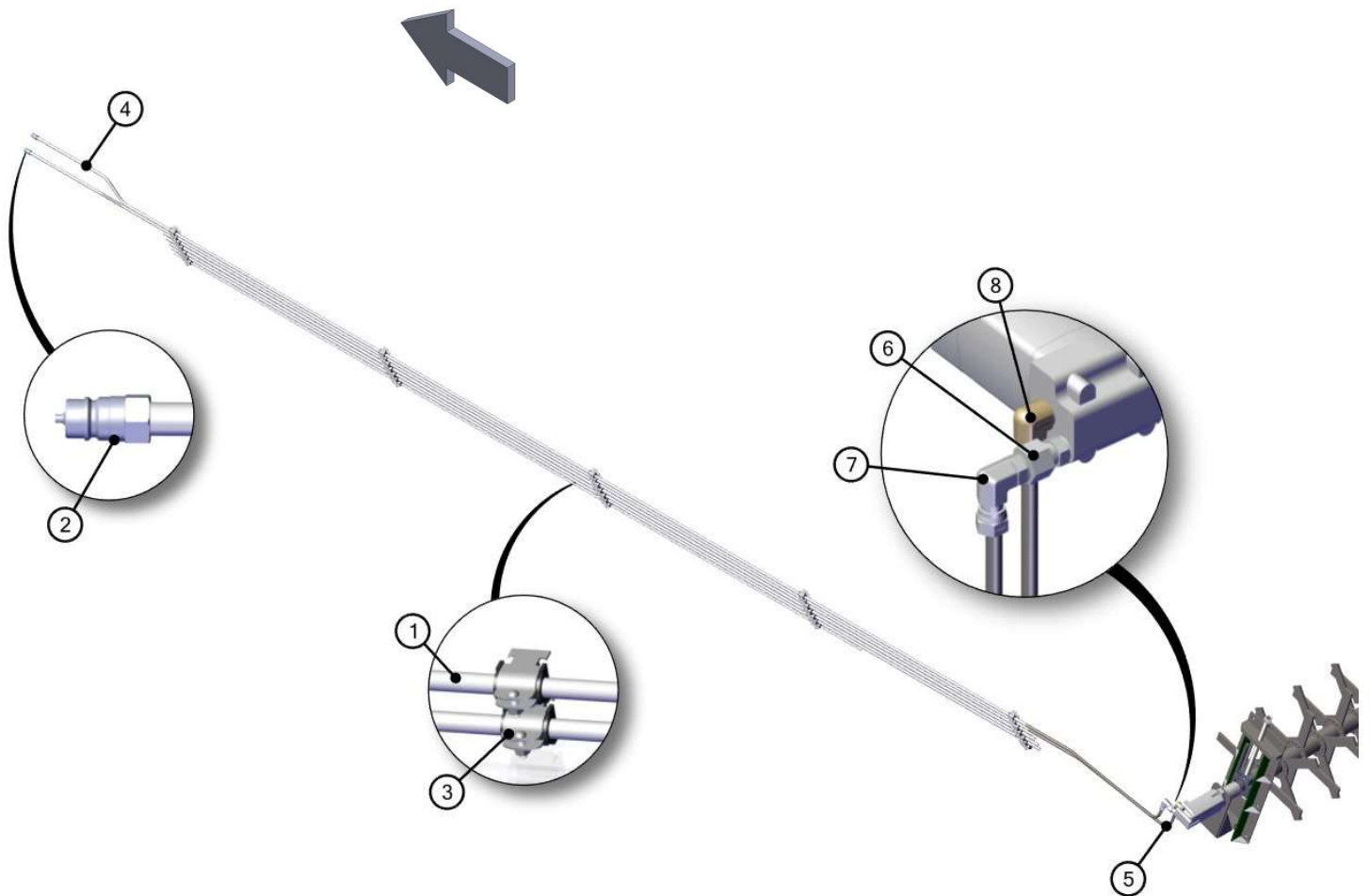
77023-3-03 HYDRAULICS, OPTIONAL INNER BEATER

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	H-T7081F	5/8" SS Hydraulic Tube, 240', ORFS	2		
2	A-QDS71X15	Ag Quick Coupler, 1/2" ISO5675 x 8SAE	2		
3	HA-1062-H	Hydra-zorb Tube Clamp 5/8" (3 pc.)	10		
4	H10-180-10MFF-8MOR	5/8" Hose, 5/8" Male ORFS x 1/2" Male SAE, 180'	2		
5	H10-37-10MFF-10MFF	5/8" Hose, 5/8" Male ORFS x 5/8" Male ORFS, 37'	2		
6	A-FF6507-10-10	Swivel Straight Adapter, 5/8" FFFX x 5/8" SAE	1		
7	A-FF6500-10-10	Elbow, 90, 10MFF x 10FFFX	1		
8	A-FF6809-10-10	Elbow, 10SAE x 10FFFX	1		



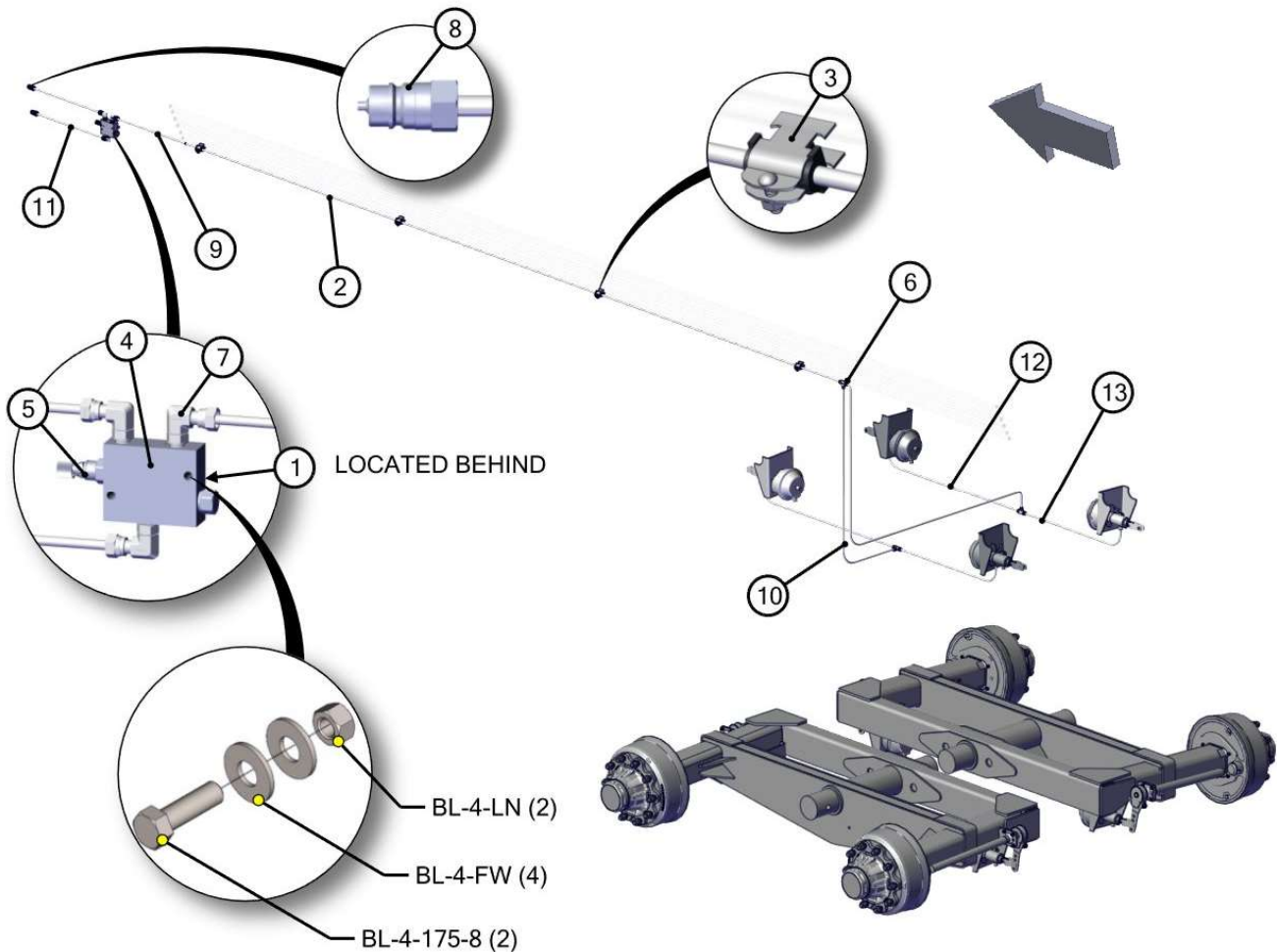
77024-3-03A HYDRAULICS, REAR BEATER

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	H-T7081F	5/8" SS Hydraulic Tube, 240', ORFS	2		
2	A-QDS71X15	Ag Quick Coupler, 1/2" ISO5675 x 8SAE	2		
3	HA-1062-H	Hydra-zorb Tube Clamp 5/8" (3 pc.)	10		
4	H10-180-10MFF-8MOR	5/8" Hose, 5/8" Male ORFS x 1/2" Male SAE, 180'	2		
5	H10-70-10MFF-10MFF	5/8" Hose, 5/8" Male ORFS x 5/8" Male ORFS, 70'	2		
6	A-FF6507-10-10	Swivel Straight Adapter, 5/8" FFFX x 5/8" SAE	1		
7	A-FF6500-10-10	Elbow, 90, 10MFF x 10FFFX	1		
8	A-FF6809-10-10	Elbow, 10SAE x 10FFFX	1		



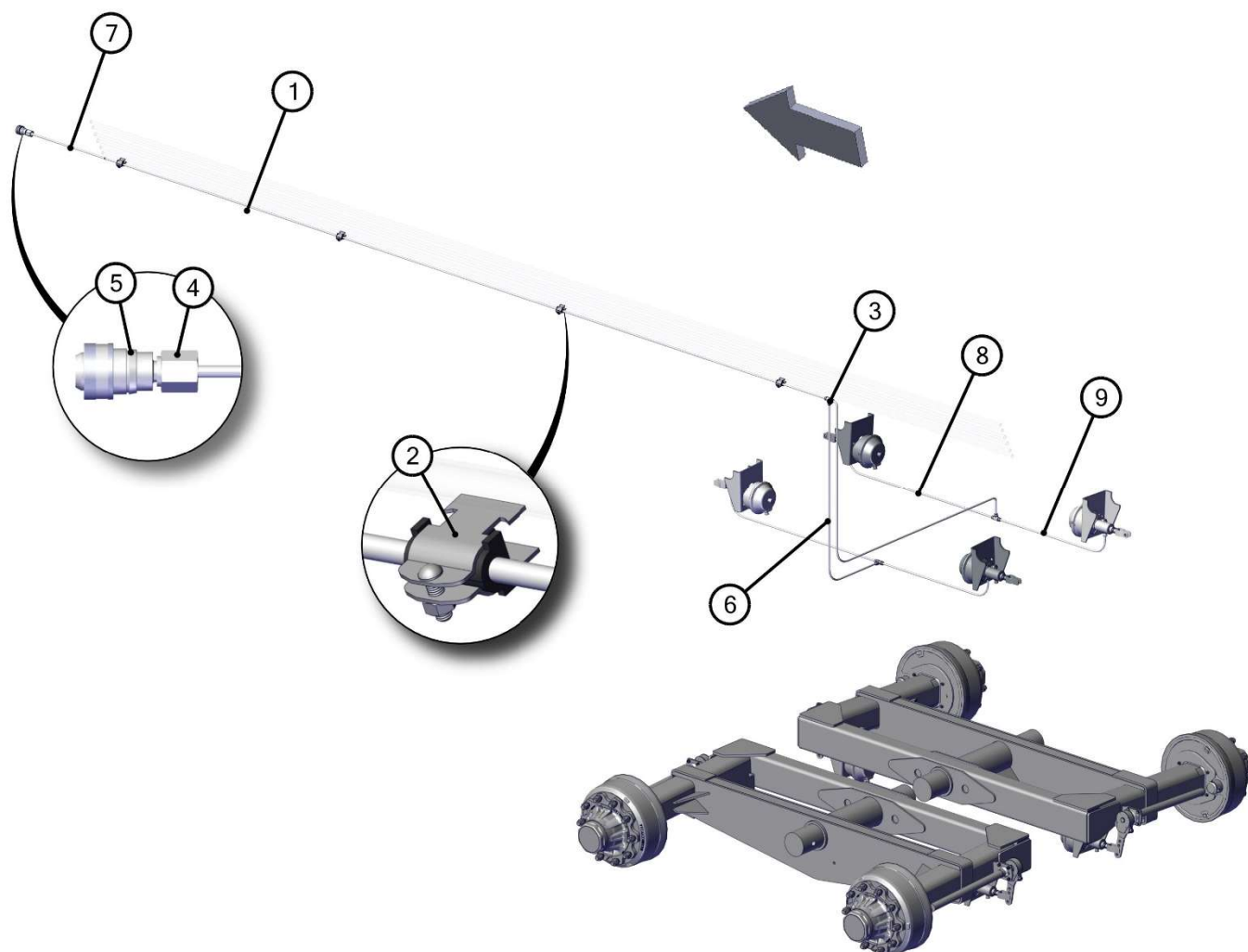
77023-3-04 HYDRAULICS, DRUM BRAKES, REMOTE

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	HA-1004-T	Test Point Plug, 1/4" NPT	1		Not Pictured
2	H-T7063F	3/8" SS Hydraulic Tube, 190', ORFS	1		
3	HA-1074-H	Hydra-zorb Tube Clamp 3/8" (3 pc.)	3		
4	HV-1002	Pressure Reducing/Relieving Valve 50-1500 w/RFF Body	1		
5	HV-1002-K	Standard Knob for HV-1002	1		
6	A-FF2603-06-06-06	Tee, 6MFF x 6MFF X 6MFF	3		
7	A-FF6809-6-6	Elbow, 90, 3/8" SAE x 3/8" FFFX	3		
8	A-QDS71X15	Ag Quick Coupler, 1/2" ISO5675 x 8SAE	2		
9	H4-80-6MFF-6MFF	1/4" Hose, 3/8" Male ORFS x 3/8" Male ORFS, 80'	1		
10	H4-77-6FFFX-6FFFX	1/4" Hose, 3/8" Female ORFS x 3/8" Female ORFS, 77'	2		
11	H4-100-8MOR-6MFF	1/4" hose, 1/2" SAE x 3/8" Male ORFS, 100'	2		
12	H6-48-6FFFX-6FBSPX90	3/8in Hose, 3/8 Female ORFS x 3/8 Female BSP 90X, 48in Long	2		
13	H6-36-6FFFX-6FBSPX90	3/8in Hose, 3/8 Female ORFS x 3/8 Female BSP 90X, 36in Long	2		
100	BL-4-175-H	1/4-20 X 1-3/4 HH C/S 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		



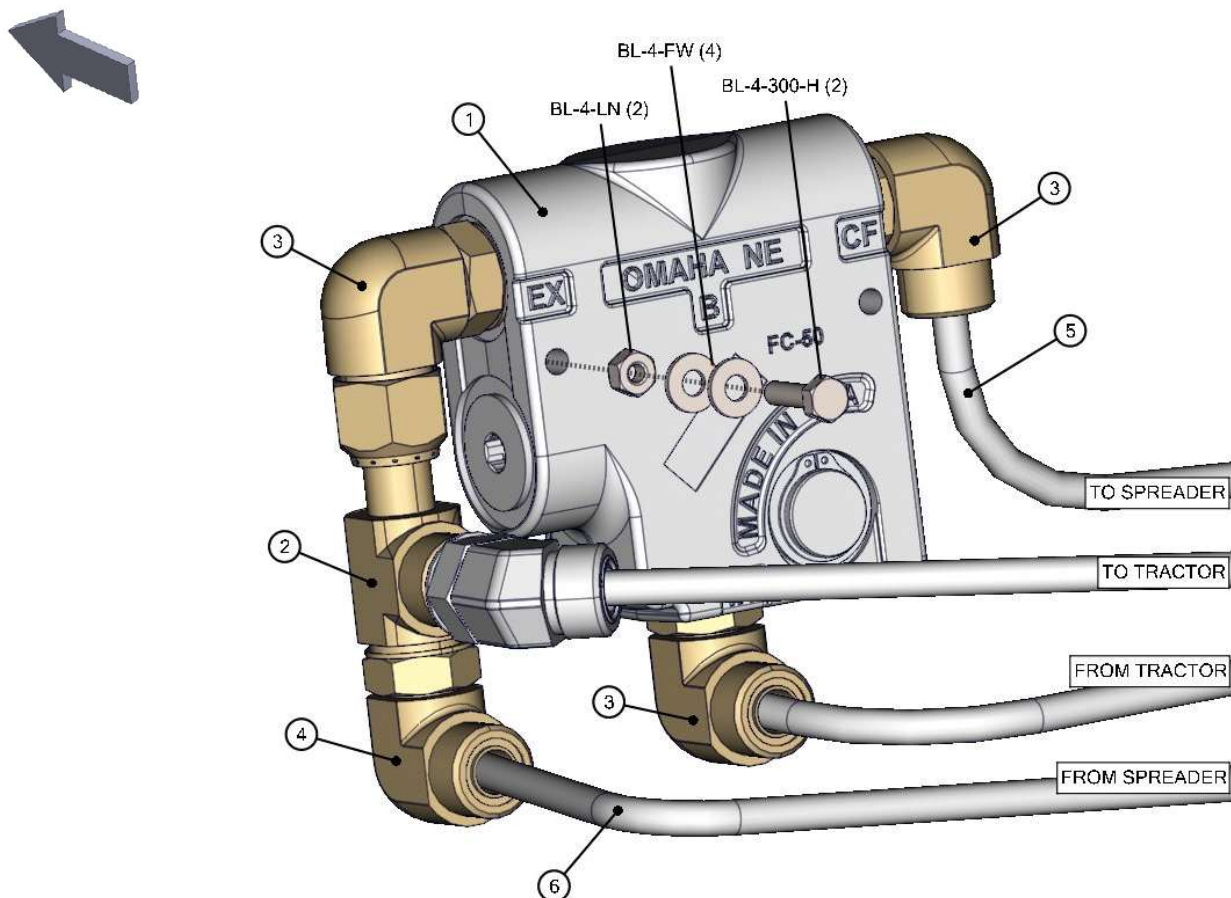
77023-3-04A HYDRAULIC DRUM BRAKES, EURO FF

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	H-T7063F	3/8' SS Hydraulic Tube, 190', ORFS	1		
2	HA-1074-H	Hydra-zorb Tube Clamp 3/8' (3 pc.)	3		
3	A-FF2603-06-06-06	Tee, 6MFF x 6MFF X 6MFF	3		
4	A-7455-08-18	Metric To Pipe Adapter, 1/2in Pipe to 18mm	1		
5	AQ-160559	Hyd. Quick-Connect Coupler, JD Hydraulic Brake	1		
6	H4-77-6FFFX-6FFFX	1/4' Hose, 3/8' Female ORFS x 3/8' Female ORFS, 77'	2		
7	H4-180-8MP-6MFF	1/4' Hose, 1/2' Male Pipe x 3/8' Male ORFS, 180'	1		
8	H6-48-6FFFX-6FBSPX90	3/8in Hose, 3/8 Female ORFS x 3/8 Female BSP 90X, 48in Long	2		
9	H6-36-6FFFX-6FBSPX90	3/8in Hose, 3/8 Female ORFS x 3/8 Female BSP 90X, 36in Long	2		



77023-3-05 OPT. HYDRAULICS, MANUAL FLOW CONTROL, WEB DRIVE

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	HV-FC5510	Flow Control, #10 SAE, 0-16 GPM, Free Reverse Flow	1		
2	A-FF6602-10-10-10	Run Tee, 10MFF X 10MFF X 10FFFX	1		
3	A-FF6801-10-10	Elbow, 5/8" MFF x 5/8" SAE	3		
4	A-FF6500-10-10	Elbow, 90, 10MFF x 10FFFX	2		
5	H10-17-10FFFX-10FFFX	5/8' Hose, 5/8' Female ORFS x 5/8' Female ORFS	1		
6	H10-36-10FFFX-10FFFX	5/8' Hose, 5/8' Female ORFS x 5/8' Female ORFS	1		
7	PR70131	Cover, Flow Control Cutout	-1		
100	BL-4-300-H	1/4-20 X 3 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		

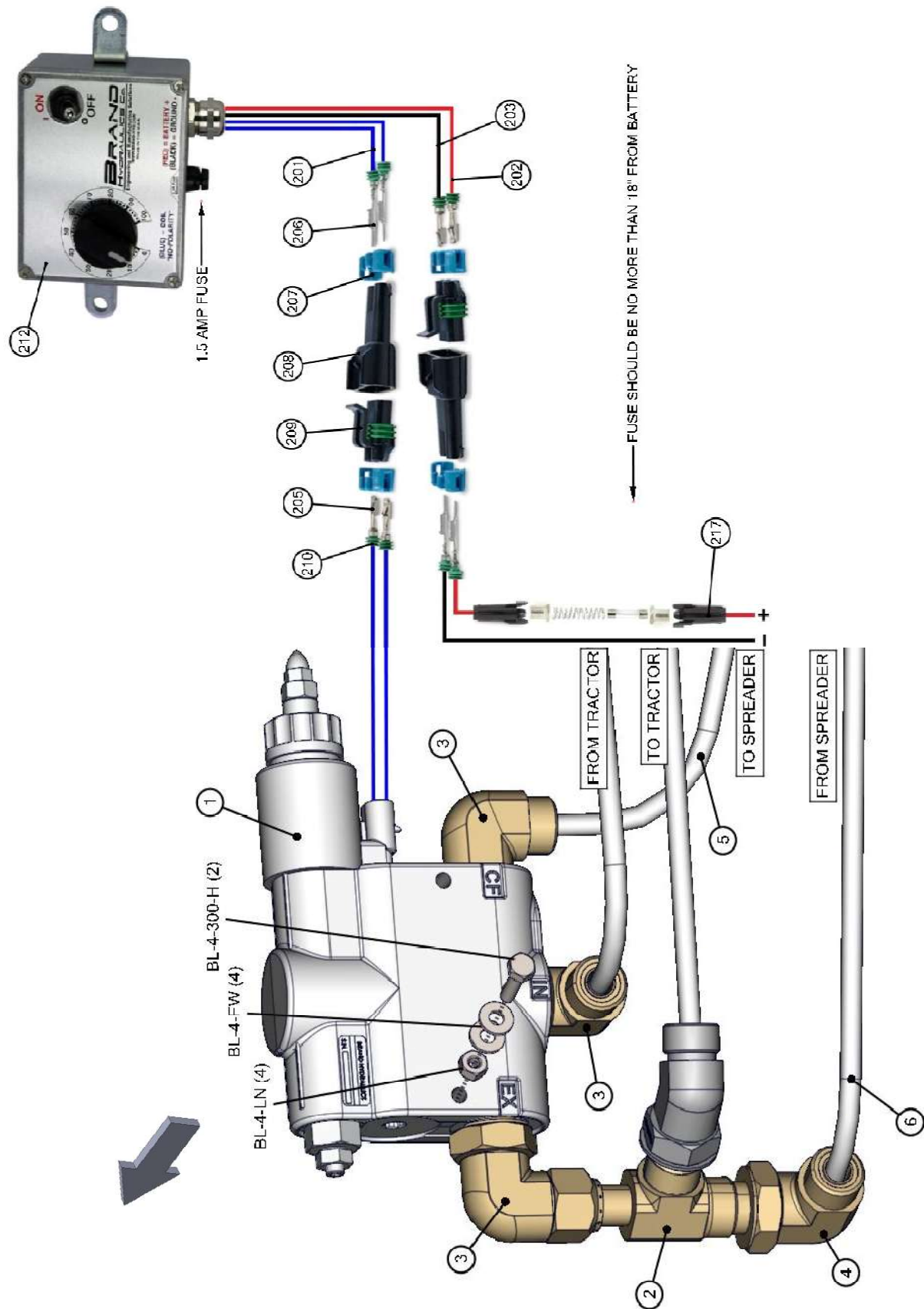


PAGE LEFT BLANK
INTENTIONALLY

77023-3-06 OPT. HYDRAULICS, REMOTE, ELECTRIC FLOW CONTROL, WEB DRIVE

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	HVE-3001	Electronic Flow Control	1	77023004-	HVE-C122012 Prior
2	A-FF6602-10-10-10	Run Tee, 10MFF X 10MFF X 10FFFX	1		
3	A-FF6801-10-12	Elbow, 10MFF x 12SAE	3		
4	A-FF6500-10-10	Elbow, 90, 10MFF x 10FFFX	2		
5	H10-17-10FFFX-10FFFX	5/8' Hose, 5/8' Female ORFS x 5/8' Female ORFS	1		
6	H10-36-10FFFX-10FFFX	5/8' Hose, 5/8' Female ORFS x 5/8' Female ORFS	1		
100	BL-4-300-H	1/4-20 X 3 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		
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, Metri-Pack, 280 Series	2		
209	EL-38063	Female Connector Body, Metri-Pack, 280 Series	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		*B2
216	EL-70150	1.5 Amp Fuse, Type GMA	1		
217	EL-46000	Inline Fuse Holder	1		
801	ELC-0067	Harness, Communication	1		
802	ELC-0068	Harness, Power	1		

77023-3-06 OPT. HYDRAULICS, REMOTE, ELECTRIC FLOW CONTROL, WEB DRIVE



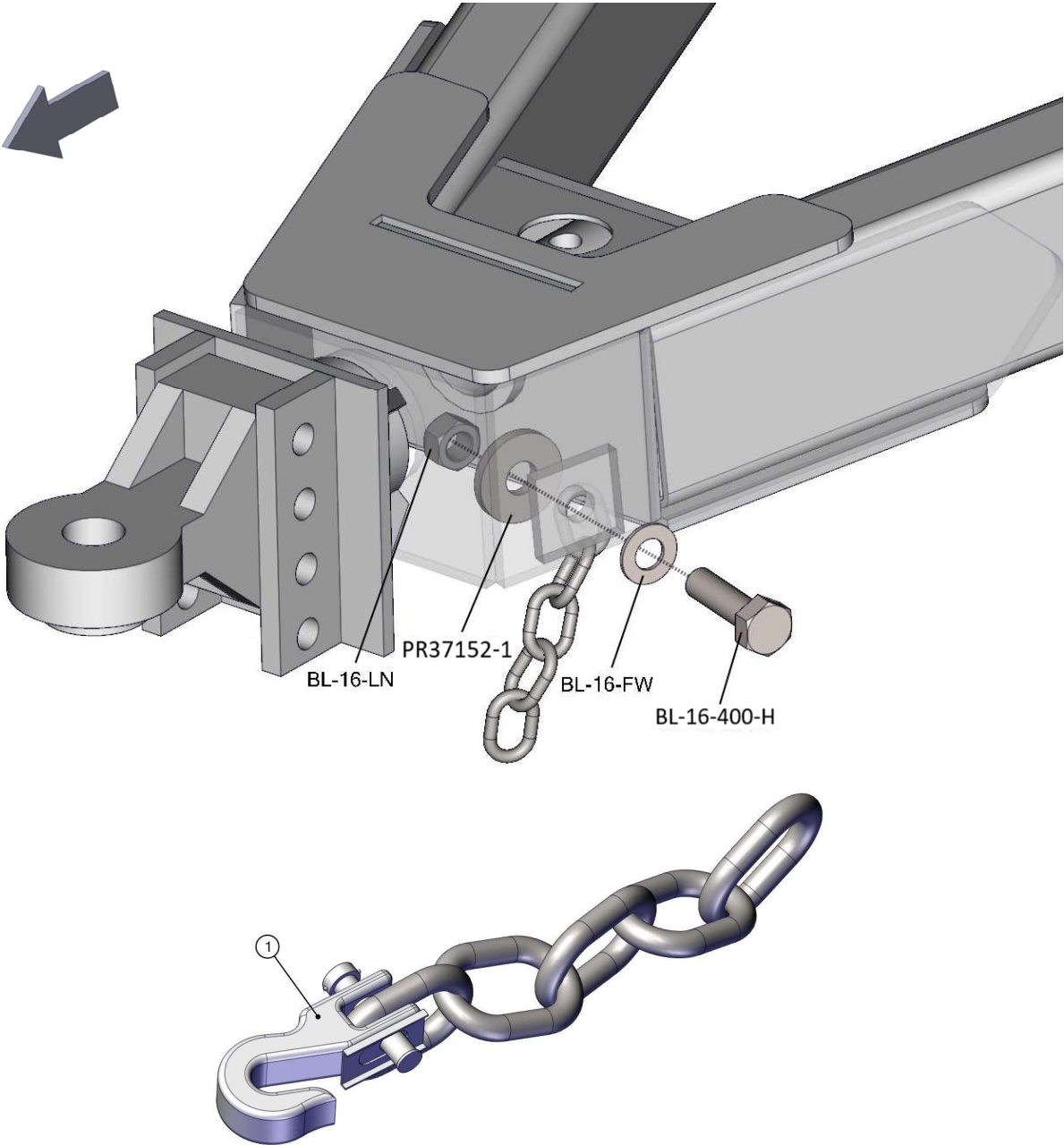
77023-3-07 OPT. AIR BRAKES, ADR AXLES

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	TRL-BRK-0001	Trailer Air Brake, Brake Actuating Kit	1		
2	TRL-BRK-0002	Air Line Set for Air Brakes	1		
3	AIR-N6DOT	3/8' Nylon Tubing @ ft., Meets D.O.T. Specs, Black	23.875		
4	A-1405-8-8	1/2' NPT Coupler w/Swivel	2		
5	A-1501-12-12	3/4 MP x 3/4 FPX 90°	1		
6	A-1404-12-12	3/4 MP x 3/4 FPX	1		
7	A-5405-4-6	Pipe Adapter 3/8 FPT x 1/4 MPT	2		
8	LA-309	Universal Gladhand Holder	2		
9	TRL-BRK-0001-34	Air Chamber Assembly	4		
10	PR60032	Panel, Air Compressor Shield	1		
11	PR60000-Z2	Air Tank Mount	2		
100	BL-8-150-C	1/2-13 X 1-1/2 CARRIAGE BOLT G5 ZC	4		
101	BL-8-FW	1/2 USS 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		
601	H10-300-10FJ-10FJ	5/8' Hose x 5/8' Female JIC x 300 Long	1		
801	TRL-BRK-0003	Gladhand - Service	1		
802	TRL-BRK-0004	Gladhand - Emergency	1		
803	TRL-BRK-0005	1/2' Bulkhead Coupling	2		
804	TRL-BRK-0006	3/8 x 1/4 Male Connector	2		
805	TRL-BRK-0007	3/8 x 3/8 Male Connector	3		
806	TRL-BRK-0008	3/8 x 3/8 Male Elbow	5		
807	TRL-BRK-0009	1/4' Drain Valve	1		
808	TRL-BRK-0010	3/4' Hex Nipple	1		
809	TRL-BRK-0011	3/8' Pipe Plug	1		
810	TRL-BRK-0012	Air Tank - Standard 9'x28', 6.5 Gallon	1		
811	TRL-BRK-0013	Emergency Spool	1		
812	TRL-BRK-0014	Air Relay Valve	1		
814	TRL-BRK-0016	3/8' x 40' Air Brake Hose Assy	2		
815	TRL-BRK-0017	3/8' X 72' Air Brake Hose Assy	2		

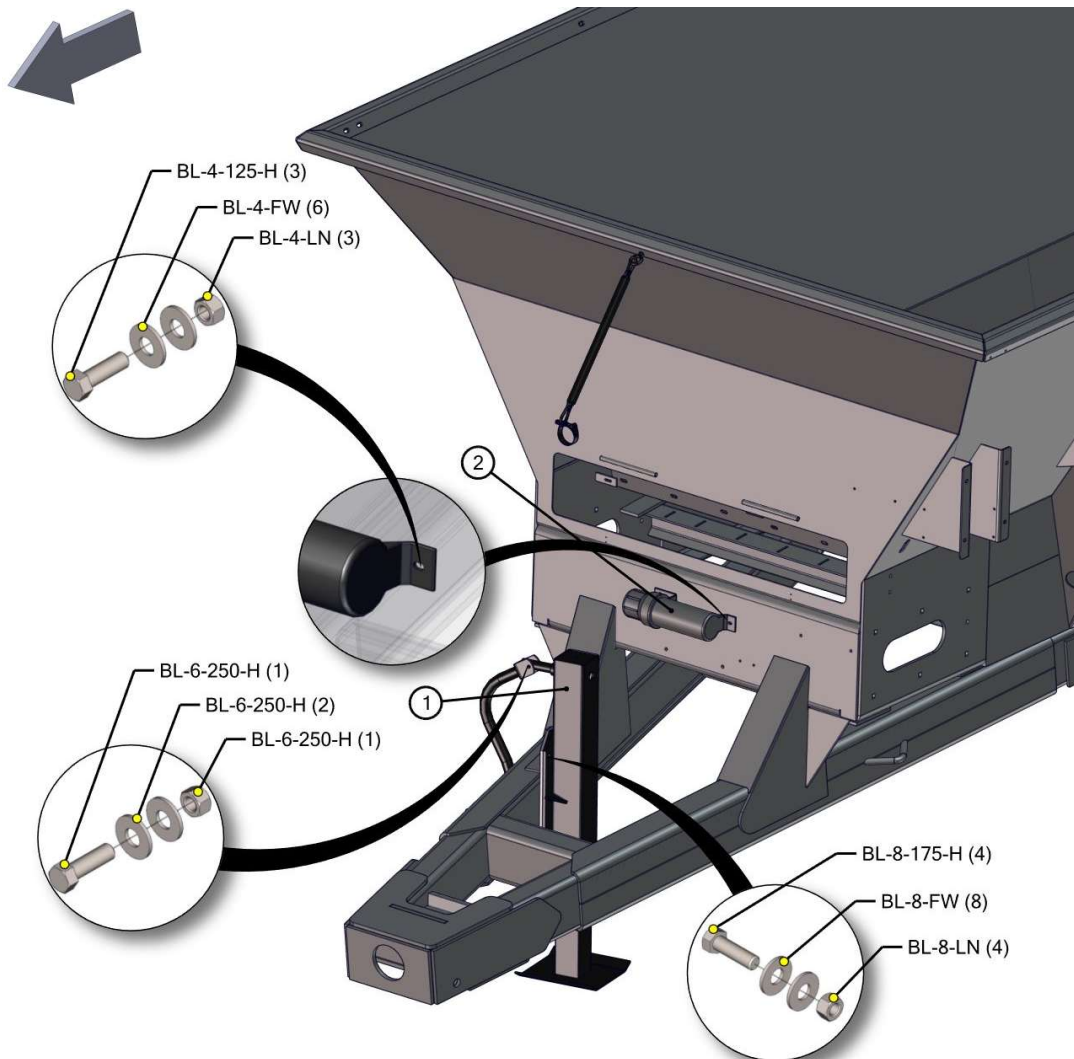


77021-4-01 SAFETY CHAIN

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	FRM-3172	Safety Chain, Agricultural, 60,600 lb. Capacity	1		
2	PR37152-1	Safety Chain Washer, 3.25" O.D.	1		
101	BL-24-FW	1-1/2 USS FW	1		
102	BL-16-LN	1 LN w/ NYLON INSERTS	1		
103	BL-16-400-H	1 X 4 HH BOLT ZC G5	1		

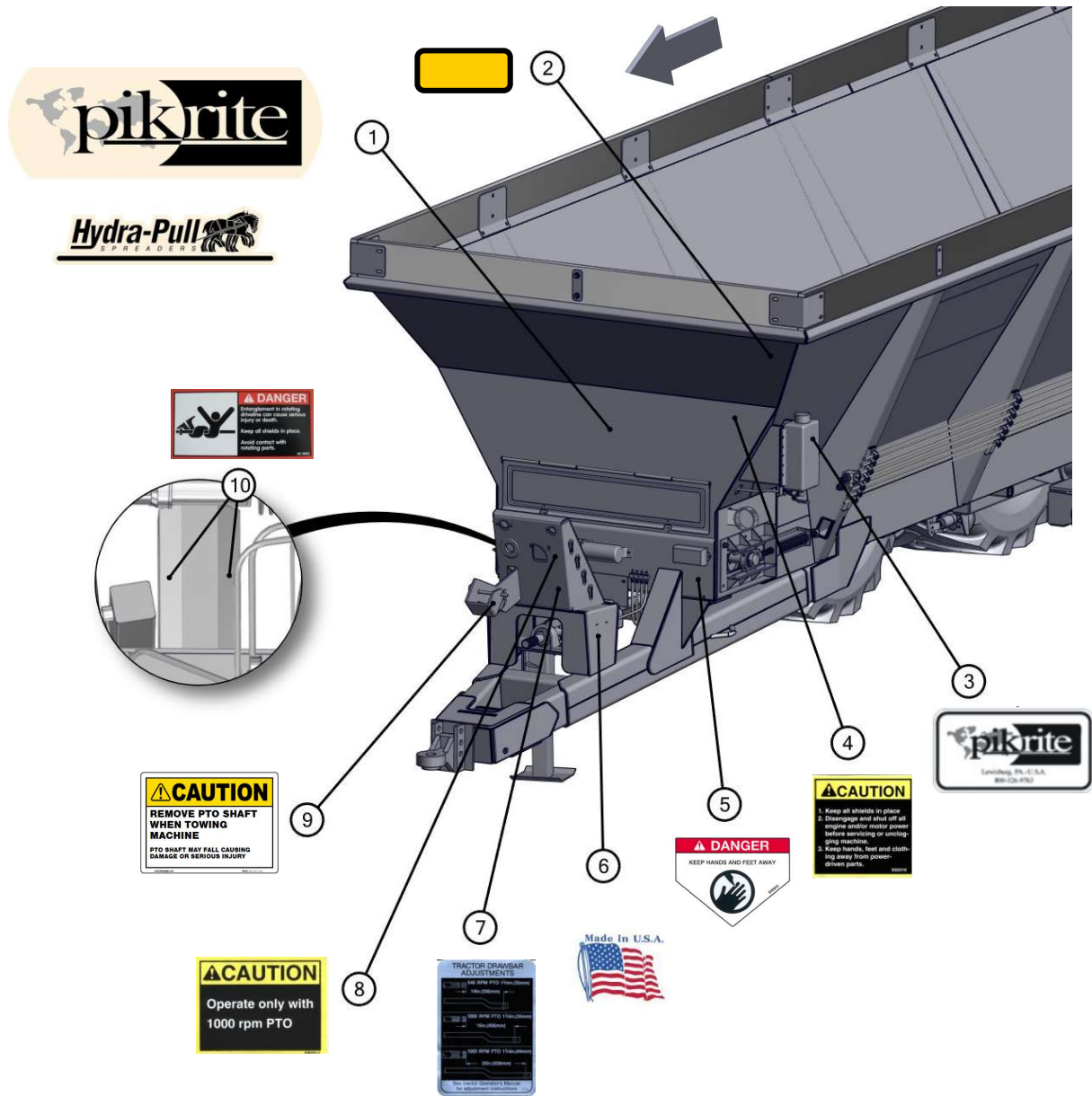


REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	WH-1135	Jack, HP900 Spreader	1		
2	MAN-67670	Manual Holder/Canister	1		
3	SPG-0014	Hose Tender, 16', Single	1		
4	CL-225	2 1/4" T-Bolt Clamp	1		
5	BL-6-125-ES-SS	3/8-16 X 1-1/4 EYE BOLT, w/ SHOULDER, SS	1		
100	BL-4-125-H	1/4-20 X 1-1/4 HEX CAP G5 ZC	3		
101	BL-4-FW	1/4 USS FW ZC	6		
102	BL-4-LN	1/4-20 HEX LN NE ZC	3		
103	BL-6-250-H	3/8-16 X 2-1/2 HH C/S G5 ZC	1		
104	BL-6-FW	3/8 USS FW ZC	2		
105	BL-6-LN	3/8-16 FIN H LN NE A563 GA ZC	1		
106	BL-8-175-H	1/2-13 X 1-3/4 HH G5 ZC	4		
107	BL-8-FW	1/2 USS FW ZC	8		
108	BL-8-LN	1/2-13 LN NYLON INSERT ZC	4		



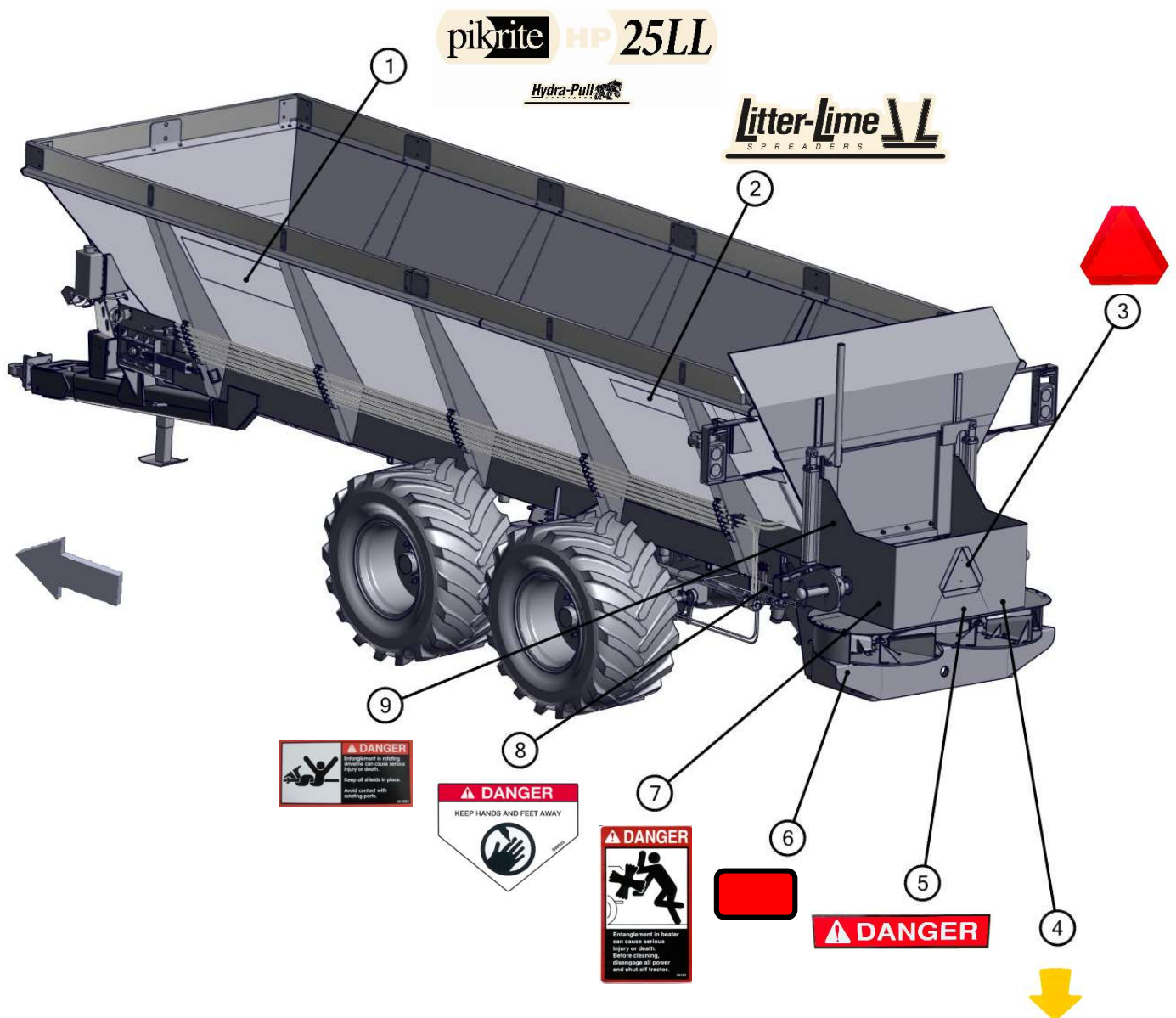
77021-4-03 DECALS ON FRONT OF SPREADER

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	DC-0103	Pikrite/Hydra-Pull Spreaders 14.23' x 22.8'	1		
2	EL-1226	Decal Reflector, Rectangle, Yellow, 2x3.5, Adhesive	2		
3	DC-4W	Decal, Logo, White, 5.25' Long, Tanks, 1/29/99	1		
4	DC-0023	Decal, Caution, Keep All Shields In Place	1		
5	DC-1174	Decal, Danger Keep Hands and Feet Away	2		
6	DC-0011	Decal, All, 'Made in USA', White Back w/ Red & Blue Letters	1		
7	DC-0022	Decal, Tractor Drawbar Adjustments	1		
8	DC-0021	Decal, Caution, 1000 rpm PTO	1		
9	DC-0221	Decal, Caution, Stationary Use	1		
10	DC-0025	Decal, Danger, Entanglement In Rotating Drive	2		



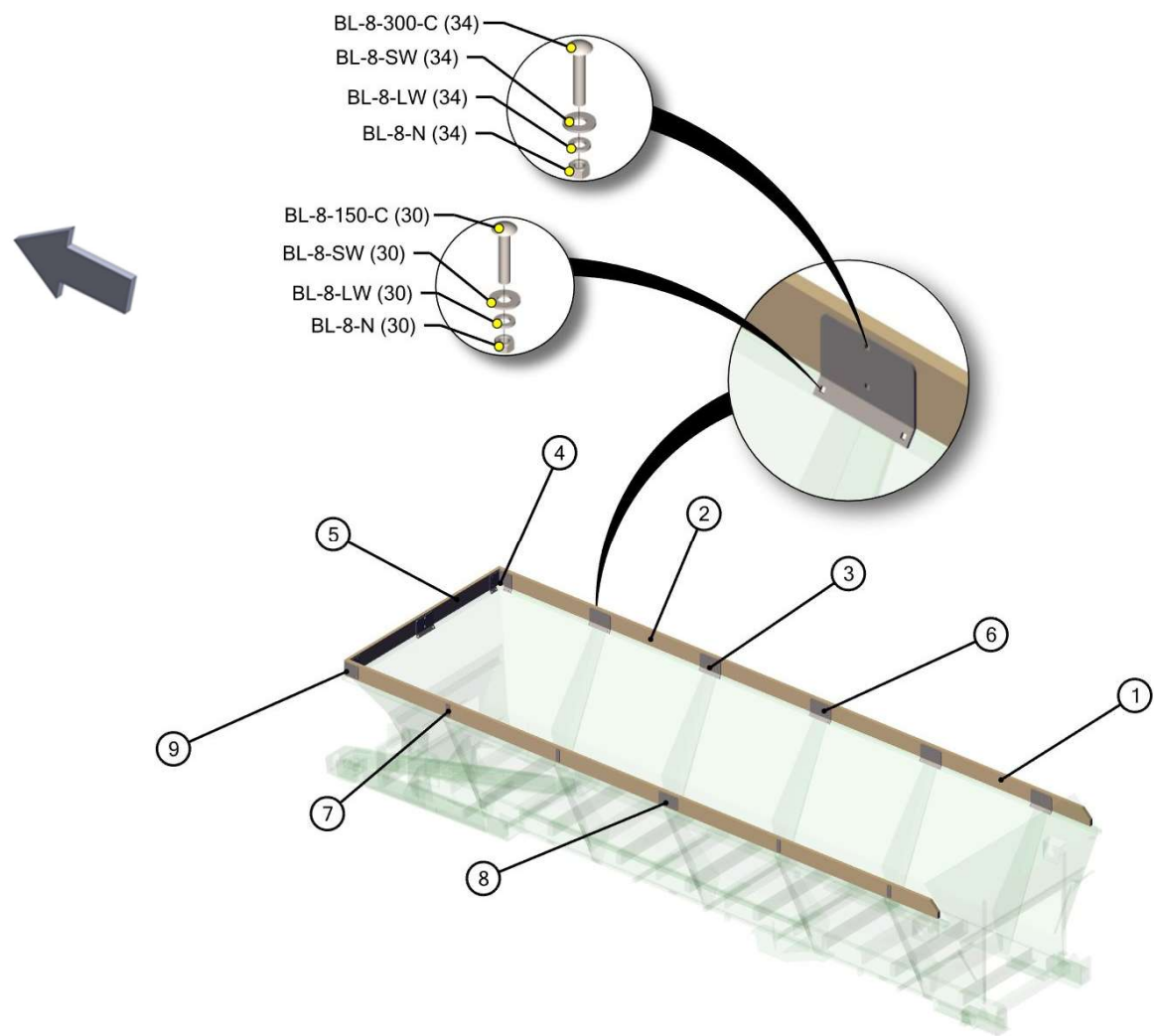
77021-4-04 DECALS ON SIDES & REAR OF SPEADER

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	DC-0128	Pikrite/Hydra-Pull/Litter-Lime HP25LL Spreaders 14.32' x 42.09'	2		
2	DC-0129	Decal, Litter-Lime Spreaders, White, Approx 9.66' x 32'	2		
3	SMV-D	SMV Sign, Decal	1		
4	DC-ARROW	Decal, Yellow Direction Arrow	2		
5	DC-1184	Danger Decal, 3' x 16'	1		
6	DC-0033	Decal, Red, Reflector, Spreader	4		
7	DC-0030	Decal, Danger, Entanglement In Beater	2		
8	DC-1174	Decal, Danger Keep Hands and Feet Away	2		
9	DC-0025	Decal, Danger, Entanglement In Rotating Drive	2		



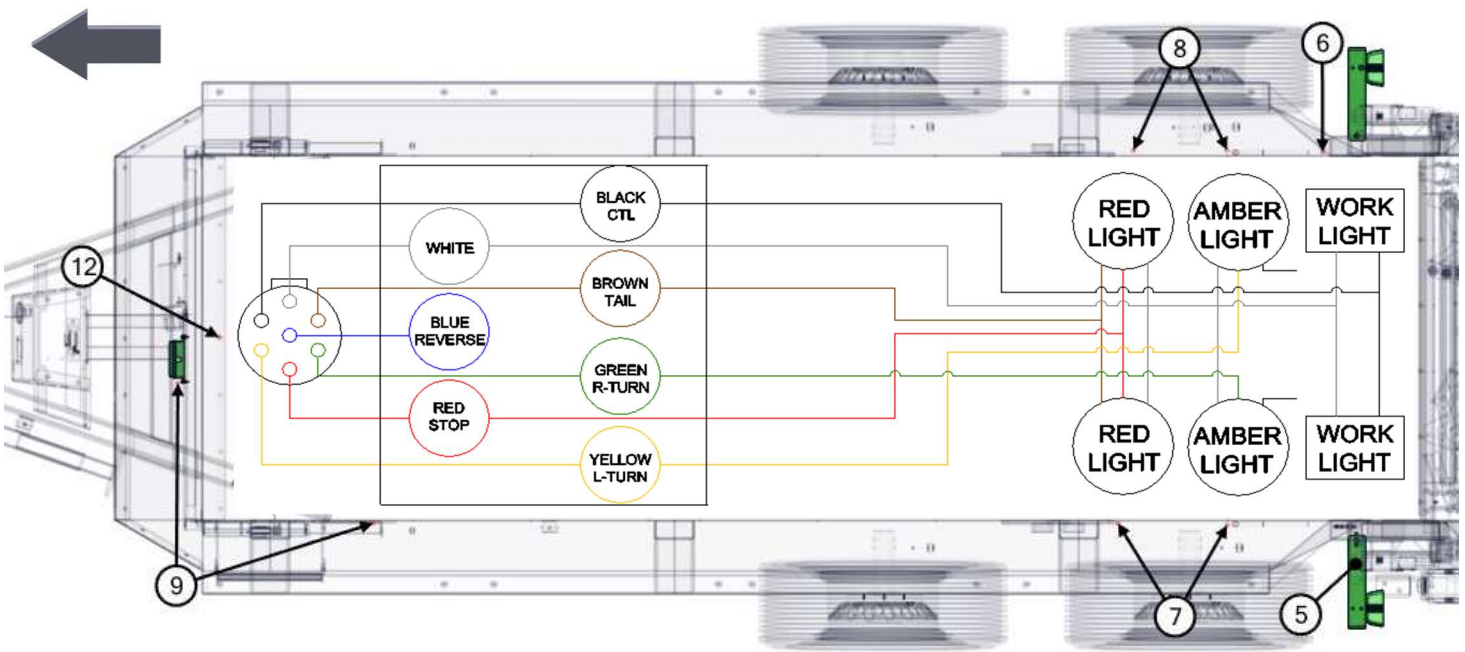
77023-4-05 SIDE EXTENSIONS

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	PR72037	Side Extension, Rear Board	2		
2	LUM-2X8-168	Lumber, 2x8x14'	2		
3	PR72035	Bracket, Side Extension	9		
4	PR72036	Bracket, Side Extension, Corner	2		
5	LUM-2X8-96	Lumber, 2x8, 8'	1		
6	PR72038	Bracket, Extension, Splice	2		
7	PR72039	Washer, Narrow	9		
8	PR72041	Washer, Side Extension, Splice	2		
9	PR72042	Washer, Side Extension, Corner	2		
100	BL-8-150-C	1/2-13 X 1-1/2 CARRIAGE BOLT G5 ZC	30		
101	BL-8-300-C	1/2-13 X 3 CARRIAGE BOLT G5 ZC	34		
102	BL-8-SW	1/2 SAE FW ZC	64		
103	BL-8-LW	1/2 SPLIT LW ZC	64		
104	BL-8-N	1/2-13 HEX FIN NUTS ZC	64		

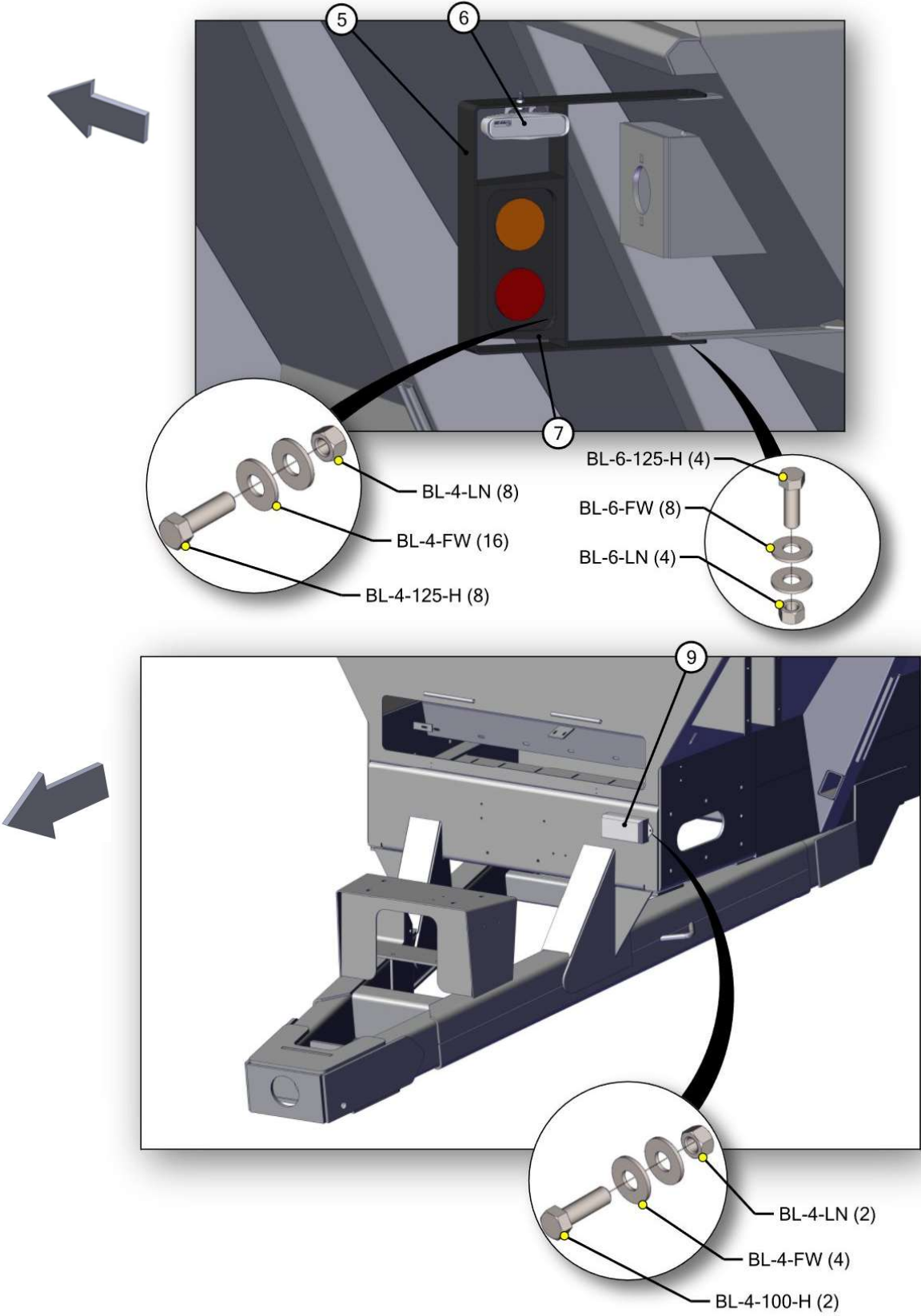


77021-5-01 ELECTRICAL AND LIGHTING

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	EL-40603-426	Harness, Left Side Spreader Lights			
3	EL-40604-13	Harness, Work Lights, Spreader	2		
4	EL-50781-55	7 Conductor x 55' Long, Harness	1		
5	PR63007	Light Bracket	2		
6	EL-12340	Work Light, Signal Stat, Rectangle LED, 2400 Lumen	2		Spreaders June 2022
7	EL-1501	LED Ag Light, LH, w/ brake light	1		
8	EL-1502	LED Ag Light, RH, w/ brake light	1		
9	EL-1361	Junction Box, (7) Studs, (5) Entry, High Impact PE, 2.5x3.5x8.0	1		
10	ELC-127-144	12 Gauge 7 Conductor Spiral Cord, 12' Long	1		
11	ELL-375	3/8" Wire Loom @ft	2		
12	ELL-16-120SS	1' Conduit @ Foot, Stainless Steel	2		
13	HA-1075-H	Hydra-zorb Tube Clamp 1' Pipe/Conduit (3 pc.)	5		
100	BL-4-100-H	1/4-20 X 1 HH C/S G5 ZC	2		
101	BL-4-125-H	1/4-20 X 1-1/4 HEX CAP G5 ZC	8		
102	BL-4-FW	1/4 USS FW ZC	20		
103	BL-4-LN	1/4-20 HEX LN NE ZC	10		
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	10		
106	BL-6-LN	3/8-16 FIN H LN NE A563 GA ZC	4		
107	BL-6-075-H	3/8-16 X 3/4 HHCS G5 ZC	2		
108	BL-6-LW	3/8 SPLIT LW ZC	2		
109	BL-6-N	3/8-16 HEX NUT ZC	2		

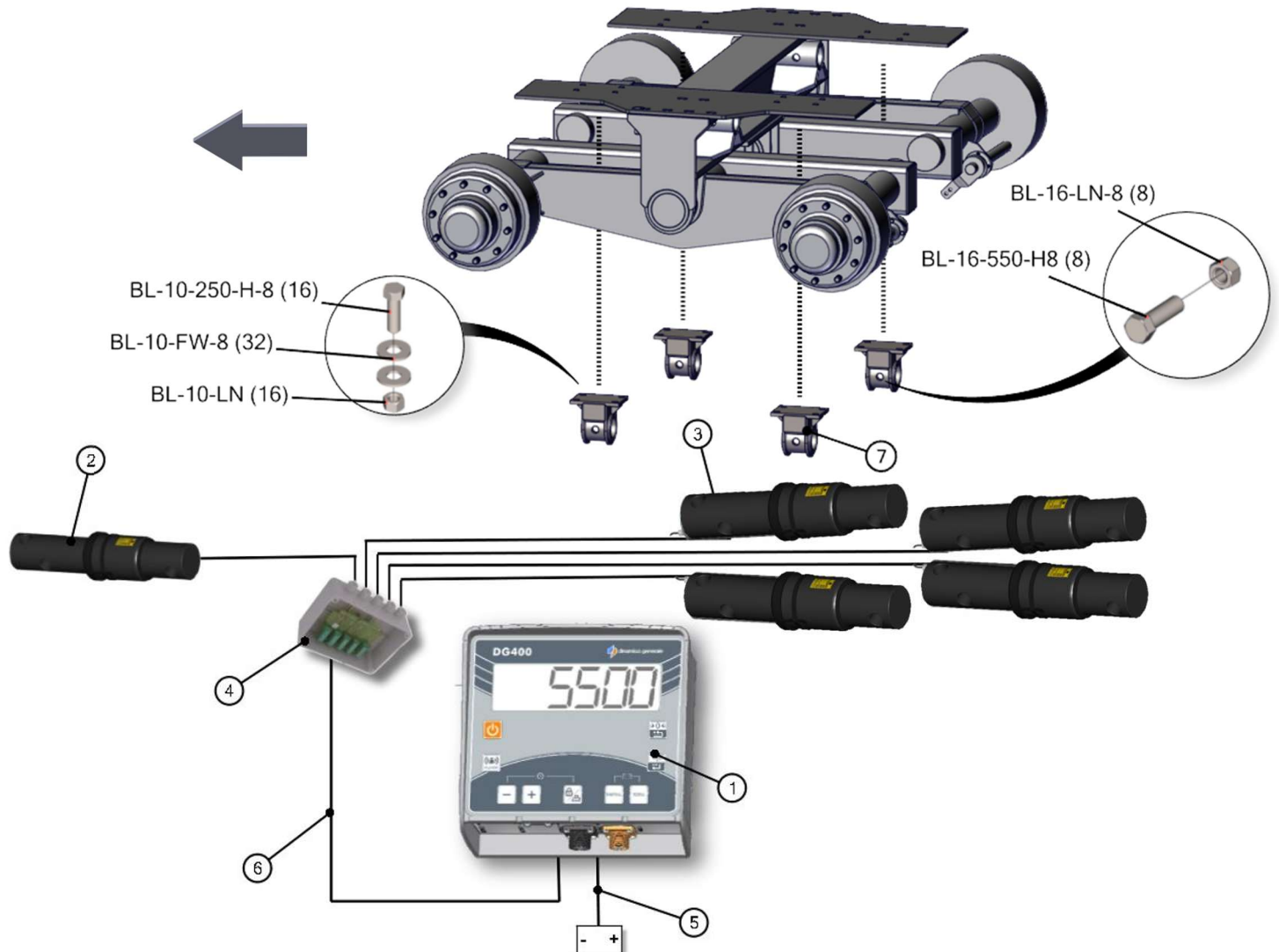


77021-5-01 ELECTRICAL AND LIGHTING CONT.



77023-5-02 WEIGH SCALE SYSTEM, DG400

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	SWS-1001	DG400 Slim Box w/ Isobus, Weigh Scale Display Module, 'Auto-On'	1		
2	SWS-1007	Load Cell, Hitch, 2-7/8" Dia, HD	1		
2	PR63101	Hitch Shaft, Hardened, Long	-1		
3	SWS-1002	Load Cell, Axle, 2-7/8" Dia, SD	4		
4	SWS-4605-003	J-Box, 6 Load Cells	1		
5	SWS-1005	Power Cable, 16 ft w/ Ring Terminals	1		
6	SWS-1006	Sensor Cable, 22 ft w/ Connectors, J-Box to Scale Head	1		
7	PR80005	Wide Mount, Load Cell, Over Channel	4		HP900: 74522003-
100	BL-16-550-H8	1-8 X 5-1/2 BOLT HH C/S G8 ZC	8		
101	BL-16-LN-8	1 H LN ZC G8	8		
102	BL-10-FW-8	5/8 FW G8	32		
103	BL-10-250-H-8	5/8-11 X 2-1/2 HH G8 ZC	16		
104	BL-10-LN	5/8-11 HEX LN NE ZC	16		



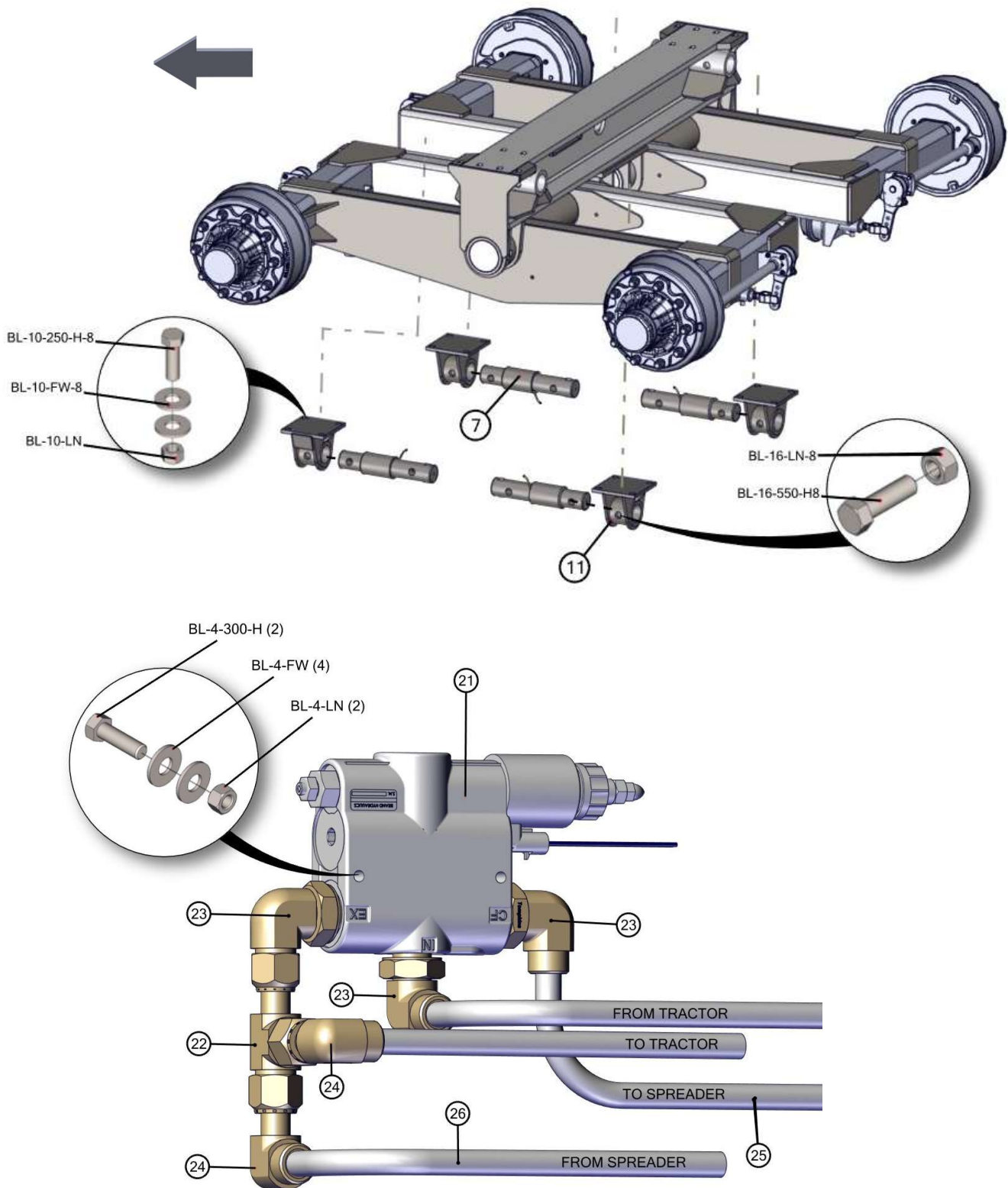
77023-5-02C OPTIONAL WEIGH SCALE SYSTEM, ATHENE VARATE CONTROLLER, ISOBUS READY TRACTOR WITH UT & GPS

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	SWS-1101	Athene Kit, SM-1, Fert / Manure Spreader	1		
2	SWS-1102	SL2140 ISO 4TB/R/S/ACC/BR	1		
3	SWS-1103	Harness, Athene, Power/Comms, 5M	1		
4	SWS-1104	Harness, Athene, SL2 Interface	1		
5	SWS-1105-01	Harness, Belt Spinner Control, Athene Drive, Single System	1		
6	SWS-1006	Sensor Cable, 22 ft w/ Connectors, J-Box to Scale Head	1		
7	SWS-1007	Load Cell, Hitch/Axle, 2-7/8' Dia, HD	5		
8	SWS-4605-003	J-Box 6 Pt	1		
9	HVE-IFM-004	Incremental Encoder With Solid Shaft And Display, 1024PPR	1		
10	HVE-IFM-002-C	Female Sensor Cable, M12, 8P, Straight, 10m	1		
11	PR80005	Wide Mount, Load Cell, Over Channel	4		HP900: 74522003-
12	ELC-1023-E	3-Pin Plug, Triangle, Deutsch DT	2		
13	ELC-0035-A	Socket, Size 16, 16-20 AWG, Nickel, Deutsch	5		
14	ELC-1023-F	3-Pin Wedgelock, Plug, Deutsch DT Series	1		
15	ELE-2015A	Electrical Enclosure, Converter Box for Junction Box	0		
15	PR63034	Encoder Cover, RT800 Gearbox	1		
16	ELC-1023-G	4-Pin Plug, Deutsch DT	1		
17	ELC-1012	Sealing Plug, Deutsch DT Series, White	17		
18	ELC-1014-C	12-Pin Plug, Deutsch DT Series, B Key Black	1		
19	HVE-IFM-004-C	Coupler, Encoder, Shaft End, Thread-on	1		
19	HVE-IFM-004-A	Coupler, Encoder, Shaft End, Weld-on	0		Prior to 04/24 when no 3/8 tapped hole is present
20	HVE-IFM-004-B	Bracket, Rotation Stop, Encoder	1		
21	HVE-2500	Electronic Flow Control Valve	1		
22	A-FF6602-10-10-10	Run Tee, 10MFF X 10MFF X 10FFFX	1		
23	A-FF6801-10-12	Elbow, 10MFF x 12SAE	3		
24	A-FF6500-10-10	Elbow, 90, 10MFF x 10FFFX	2		
25	H10-17-10FFFX-10FFFX	5/8' Hose, 5/8' Female ORFS x 5/8' Female ORFS	1		
26	H10-36-10FFFX-10FFFX	5/8' Hose, 5/8' Female ORFS x 5/8' Female ORFS	1		
27	EL-124141	Amber/Clear, 1' LED Auxiliary Micro Strobe Light	2		
28	ELC-1023-C	2-Pin Receptacle, Deutsch DT	2		
29	ELC-1023-D	2-Pin Wedgelock, Receptacle, Deutsch DT Series	1		
30	ELC-1005-C	Pin, Size 16, 16-20 AWG, Nickel	2		
31	ELC-1014-B	12-Pin Wedgelock, Plug, Deutsch DT Series	1		
32	ELC-218	18 Gauge-2 Conductor @ Foot	14		
33	PR72022	Light Bracket, HP25LL Top Rail, Athene Load Limit	2		
35	DC-0136	Decal, Spreaders, Not a Step & Pressure Wash, 4"x4", CAUTION	1		

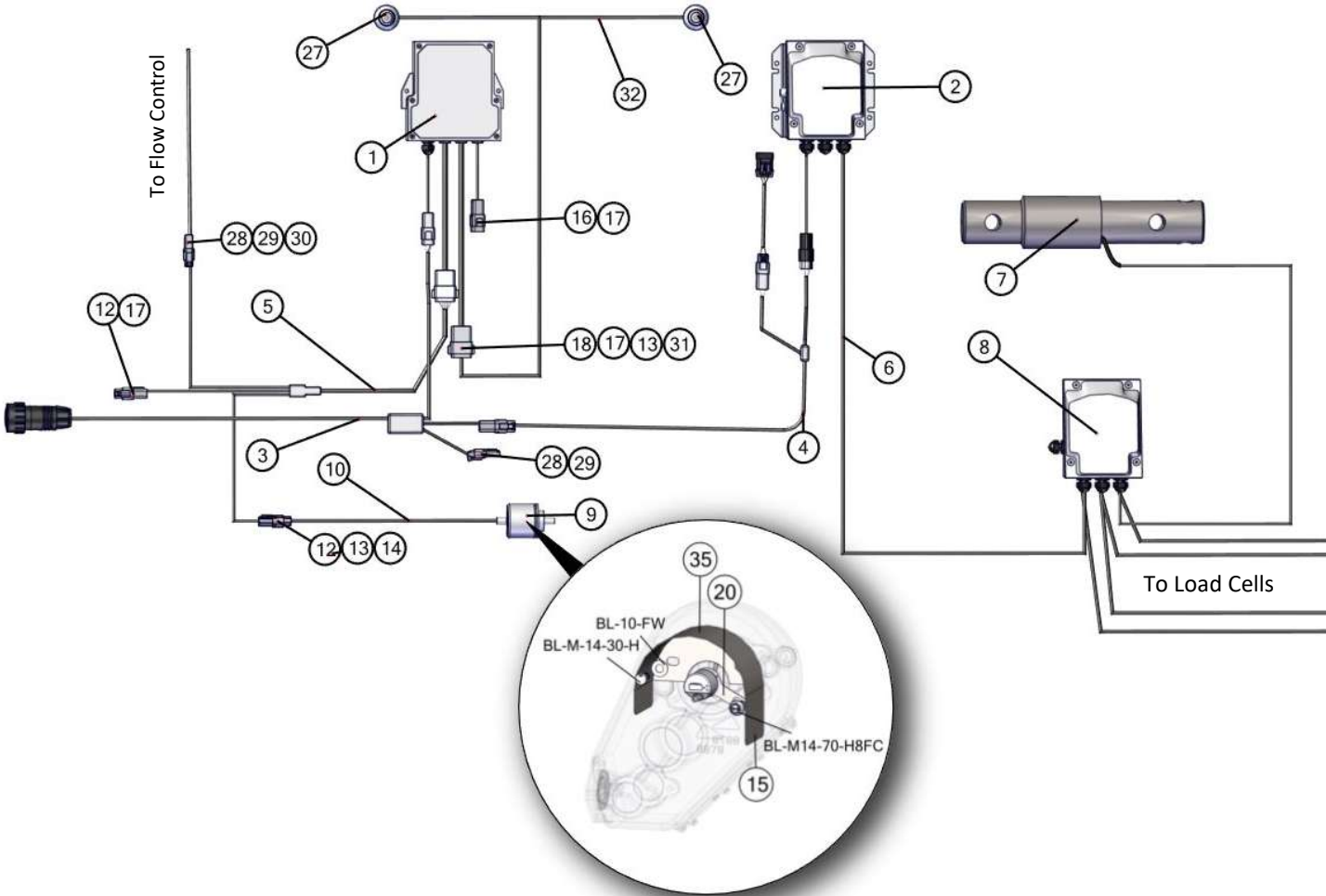
77023-5-02C OPTIONAL WEIGH SCALE SYSTEM, ATHENE VARATE CONTROLLER, ISOBUS READY TRACTOR WITH UT & GPS

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
100	BL-4-300-H	1/4-20 X 3 HEX CAP G5 ZC	2		
101	BL-4-FW	1/4 USS FW ZC	8		
102	BL-4-LN	1/4-20 HEX LN NE ZC	4		
103	BL-16-550-H8	1-8 X 5-1/2 BOLT HH C/S G8 ZC	8		
104	BL-16-LN-8	1 H LN ZC G8	8		
105	BL-10-FW-8	5/8 FW G8	32		
106	BL-10-250-H-8	5/8-11 X 2-1/2 HH G8 ZC	16		
107	BL-10-LN	5/8-11 HEX LN NE ZC	16		
108	BL-M4-8-SC	M4-0.7 x 8mm Socket Cap Screw, Black, Class 12.9	3		
109	BL-4-200-H	1/4-20 X 2 HH C/S G5 ZC	2		
110	BL-4-025-SCF	1/4-28 x 1/4' Knurled Point Set Screw	1		
111	BL-M14-70-H8FC	M14 x 70 MM, HH Flange G10.9, Course Thread	1		
112	BL-M-14-30-H	Hex Head Bolt, 14mm x 30mm, Zinc, Grade 10.9	2		
113	BL-10-FW	5/8 USS FW ZC	2		

77023-5-02C OPTIONAL WEIGH SCALE SYSTEM, ATHENE VARATE CONTROLLER, ISOBUS READY TRACTOR WITH UT & GPS



77023-5-02C OPTIONAL WEIGH SCALE SYSTEM, ATHENE VARATE CONTROLLER, ISOBUS READY TRACTOR WITH UT & GPS



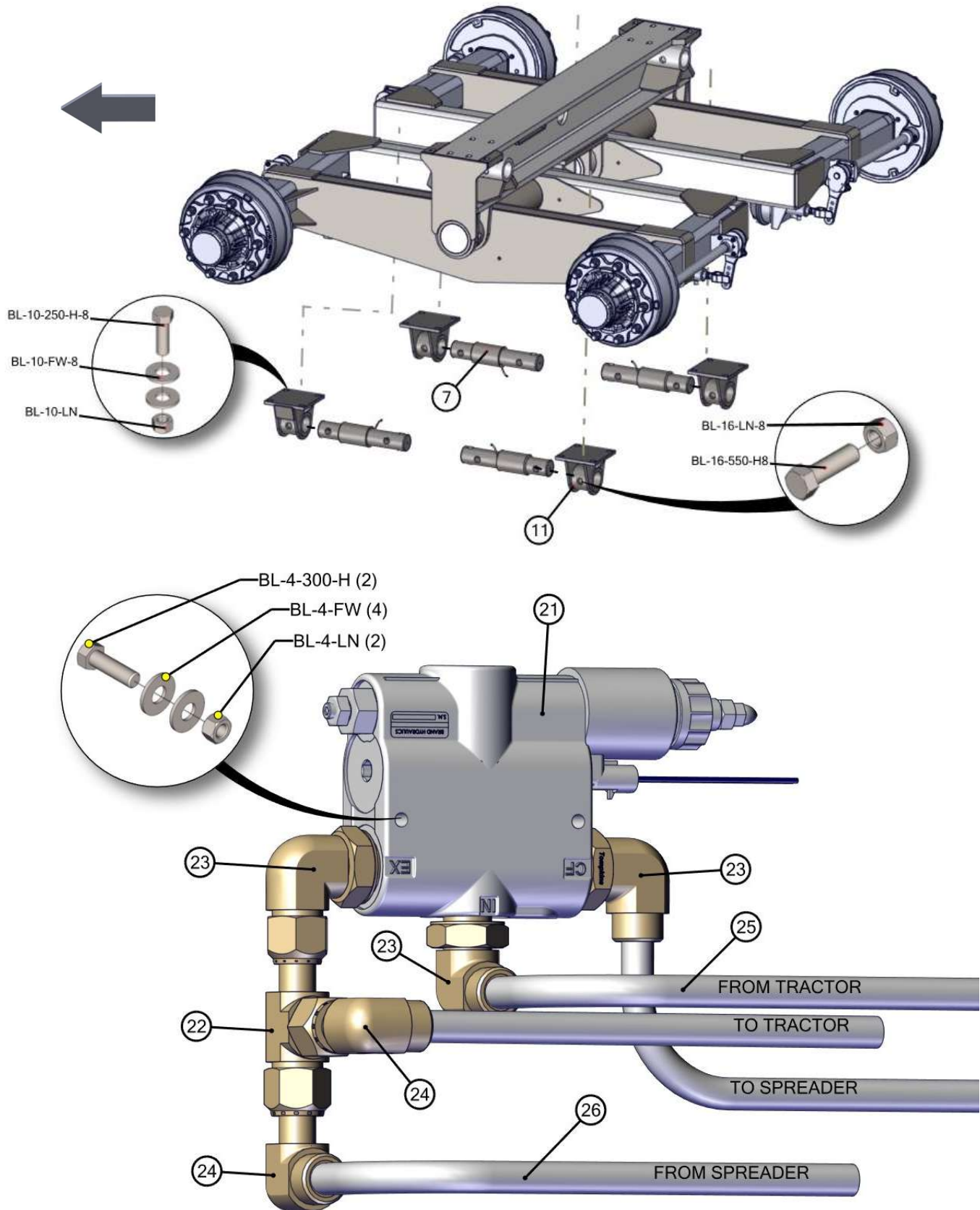
77023-5-02D OPT. SCALES, ATHENE VAR.RATE CONTROL, X25 UT & GPS, NON-ISOBUS TRACTOR

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	SWS-1101	Athene Kit, SM-1, Fert / Manure Spreader	1		
2	SWS-1102	SL2140 ISO 4TB/R/S/ACC/BR	1		
3	SWS-1103	Harness, Athene, Power/Comms, 5M	1		
4	SWS-1104	Harness, Athene, SL2 Interface	1		
5	SWS-1105-01	Harness, Belt Spinner Control, Athene Drive, Single System	1		
6	SWS-1006	Sensor Cable, 22 ft w/ Connectors, J-Box to Scale Head	1		
7	SWS-1007	Load Cell, Hitch/Axle, 2-7/8' Dia, HD	5		
8	SWS-4605-003	J-Box 6 Pt	1		
9	HVE-IFM-004	Incremental Encoder With Solid Shaft And Display, 1024PPR	1		
10	HVE-IFM-002-C	Female Sensor Cable, M12, 8P, Straight, 10m	1		
11	PR80005	Wide Mount, Load Cell, Over Channel	4		HP900: 74522003-
12	ELC-1023-E	3-Pin Plug, Triangle, Deutsch DT	2		
13	ELC-0035-A	Socket, Size 16, 16-20 AWG, Nickel, Deutsch	5		
14	ELC-1023-F	3-Pin Wedgelock, Plug, Deutsch DT Series	1		
15	ELE-2015A	Electrical Enclosure, Converter Box for Junction Box	0		
15	PR63034	Encoder Cover, RT800 Gearbox	1		
16	ELC-1023-G	4-Pin Plug, Deutsch DT	1		
17	ELC-1012	Sealing Plug, Deutsch DT Series, White	17		
18	ELC-1014-C	12-Pin Plug, Deutsch DT Series, B Key Black	1		
19	HVE-IFM-004-C	Coupler, Encoder, Shaft End, Thread-on	1		
19	HVE-IFM-004-A	Coupler, Encoder, Shaft End, Weld-on	0		Prior to 04/24 when no 3/8 tapped hole is present
20	HVE-IFM-004-B	Bracket, Rotation Stop, Encoder	1		
21	HVE-2500	Electronic Flow Control Valve	1		
22	A-FF6602-10-10-10	Run Tee, 10MFF X 10MFF X 10FFFX	1		
23	A-FF6801-10-12	Elbow, 10MFF x 12SAE	3		
24	A-FF6500-10-10	Elbow, 90, 10MFF x 10FFFX	2		
25	H10-17-10FFFX-10FFFX	5/8' Hose, 5/8' Female ORFS x 5/8' Female ORFS	1		
26	H10-36-10FFFX-10FFFX	5/8' Hose, 5/8' Female ORFS x 5/8' Female ORFS	1		
27	EL-124141	Amber/Clear, 1' LED Auxiliary Micro Strobe Light	2		
28	ELC-1023-C	2-Pin Receptacle, Deutsch DT	2		
29	ELC-1023-D	2-Pin Wedgelock, Receptacle, Deutsch DT Series	1		
30	ELC-1005-C	Pin, Size 16, 16-20 AWG, Nickel	2		
31	ELC-1014-B	12-Pin Wedgelock, Plug, Deutsch DT Series	1		
32	ELC-218	18 Gauge-2 Conductor @ Foot	14		
33	SWS-1106	Harness, Full ISOBUS Adaptor	1		To upgrade standard ISOBUS kit to U/T and GPS add SWS-1108-01 & SWS-1106.
34	SWS-1108	Console, X35 w/ AGM-1 (Kit), Non-ISOBUS Ready Tractor	0		Optional

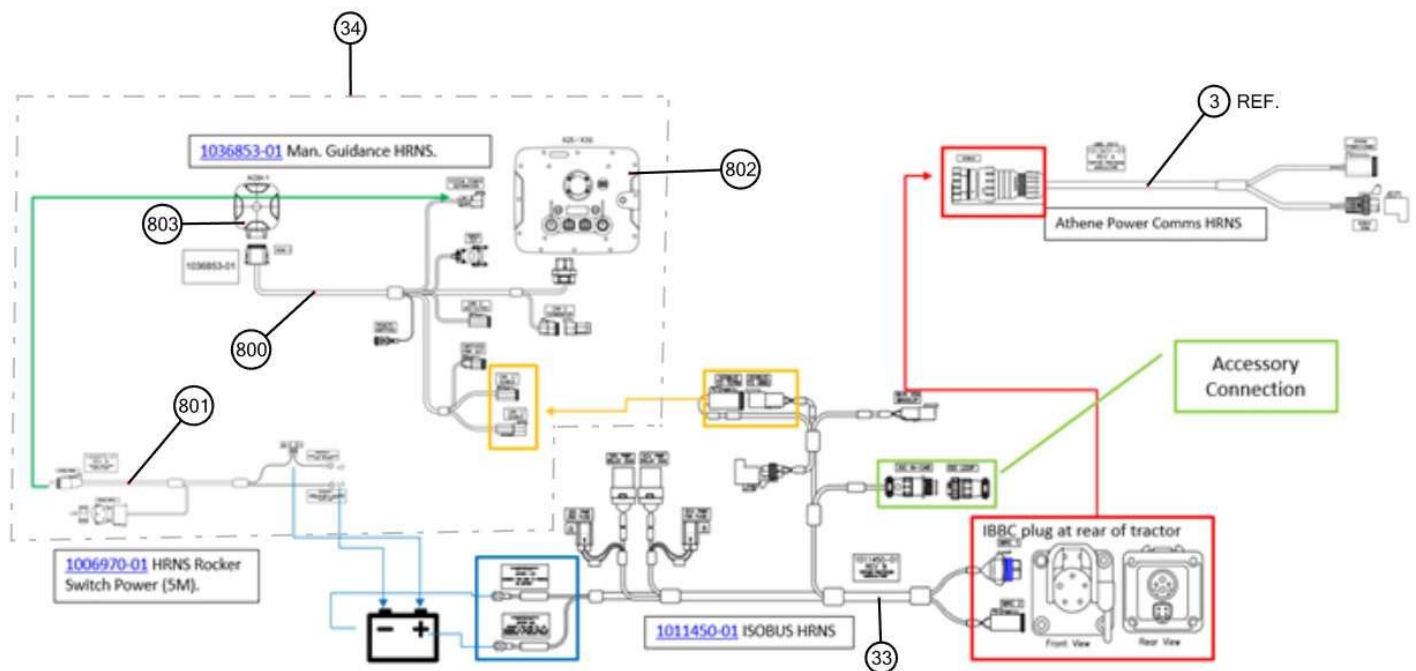
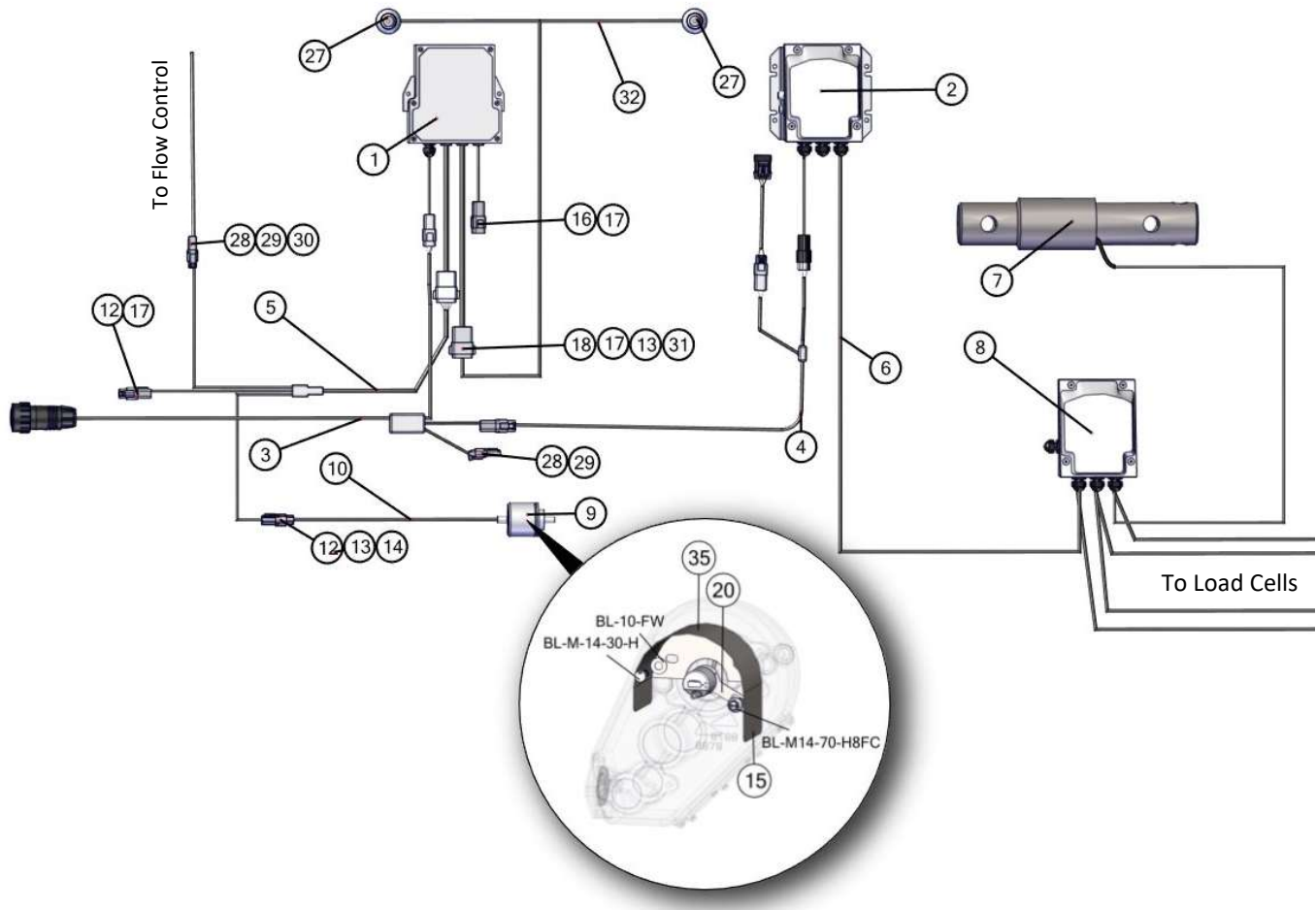
77023-5-02D OPT. SCALES, ATHENE VAR.RATE CONTROL, X25 UT & GPS, NON-ISOBUS TRACTOR

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
34	SWS-1108-01	Console, X25 w/ AGM-1 (Kit), Non-ISOBUS Ready Tractor	1		To upgrade standard ISOBUS kit to U/T and GPS add SWS-1108-01 & SWS-1106.
35	DC-0136	Decal, Spreaders, Not a Step & Pressure Wash, 4"x4", CAUTION	1		
36	PR72022	Light Bracket, HP25LL Top Rail, Athene Load Limit	2		
100	BL-4-300-H	1/4-20 X 3 HEX CAP G5 ZC	2		
101	BL-4-FW	1/4 USS FW ZC	8		
102	BL-4-LN	1/4-20 HEX LN NE ZC	4		
103	BL-16-550-H8	1-8 X 5-1/2 BOLT HH C/S G8 ZC	8		
104	BL-16-LN-8	1 H LN ZC G8	8		
105	BL-10-FW-8	5/8 FW G8	32		
106	BL-10-250-H-8	5/8-11 X 2-1/2 HH G8 ZC	16		
107	BL-10-LN	5/8-11 HEX LN NE ZC	16		
108	BL-M4-8-SC	M4-0.7 x 8mm Socket Cap Screw, Black, Class 12.9	3		
109	BL-4-200-H	1/4-20 X 2 HH C/S G5 ZC	2		
110	BL-4-025-SCF	1/4-28 x 1/4' Knurled Point Set Screw	1		
111	BL-M14-70-H8FC	M14 x 70 MM, HH Flange G10.9, Course Thread	1		
112	BL-M-14-30-H	Hex Head Bolt, 14mm x 30mm, Zinc, Grade 10.9	2		
113	BL-10-FW	5/8 USS FW ZC	2		
800	SWS-1109	Harness, AGM-1 To X Console w/ CAN	0		
801	SWS-1110-01	Harness, Rocker Switch Power	0		
802	SWS-1108-04	Console, X35	0		
802	SWS-1108-05	Console, X25	0		
803	SWS-1113	AGM-1 Receiver	0		

77023-5-02D OPT. SCALES, ATHENE VAR.RATE CONTROL, X25 UT & GPS, NON-ISOBUS TRACTOR



**77023-5-02D OPT. SCALES, ATHENE VAR.RATE CONTROL, X25 UT & GPS,
NON-ISOBUS TRACTOR**



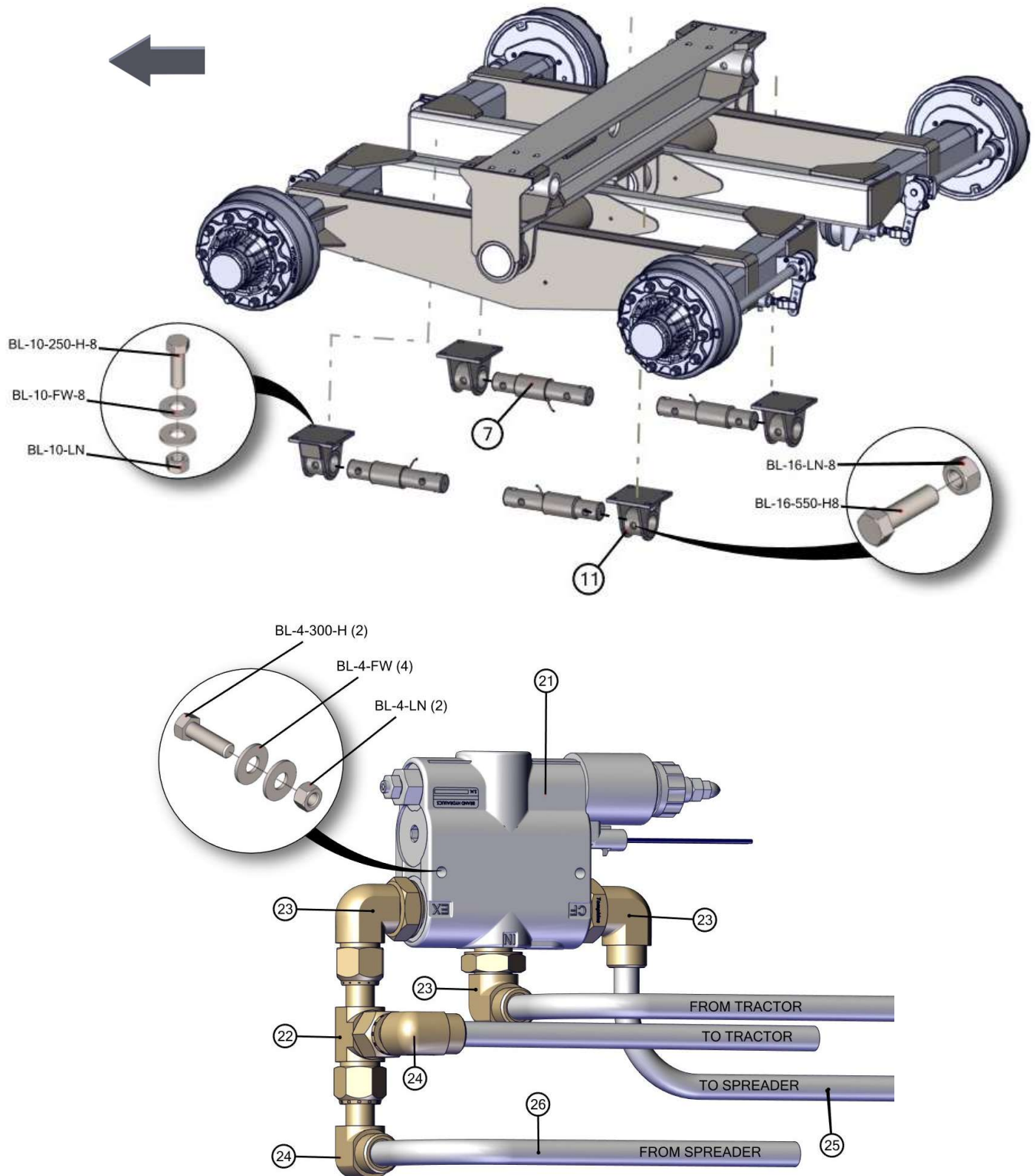
77023-5-02E OPT. SCALES, ATHENE VAR.RATE CONTROL, X25 UT & GPS, ISOBUS-READY TRACTOR

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
1	SWS-1101	Athene Kit, SM-1, Fert / Manure Spreader	1		
2	SWS-1102	SL2140 ISO 4TB/R/S/ACC/BR	1		
3	SWS-1103	Harness, Athene, Power/Comms, 5M	1		
4	SWS-1104	Harness, Athene, SL2 Interface	1		
5	SWS-1105-01	Harness, Belt Spinner Control, Athene Drive, Single System	1		
6	SWS-1006	Sensor Cable, 22 ft w/ Connectors, J-Box to Scale Head	1		
7	SWS-1007	Load Cell, Hitch/Axle, 2-7/8' Dia, HD	5		
8	SWS-4605-003	J-Box 6 Pt	1		
9	HVE-IFM-004	Incremental Encoder With Solid Shaft And Display, 1024PPR	1		
10	HVE-IFM-002-C	Female Sensor Cable, M12, 8P, Straight, 10m	1		
11	PR80005	Wide Mount, Load Cell, Over Channel	4		HP900: 74522003-
12	ELC-1023-E	3-Pin Plug, Triangle, Deutsch DT	2		
13	ELC-0035-A	Socket, Size 16, 16-20 AWG, Nickel, Deutsch	5		
14	ELC-1023-F	3-Pin Wedgelock, Plug, Deutsch DT Series	1		
15	ELE-2015A	Electrical Enclosure, Converter Box for Junction Box	0		
15	PR63034	Encoder Cover, RT800 Gearbox	1		
16	ELC-1023-G	4-Pin Plug, Deutsch DT	1		
17	ELC-1012	Sealing Plug, Deutsch DT Series, White	17		
18	ELC-1014-C	12-Pin Plug, Deutsch DT Series, B Key Black	1		
19	HVE-IFM-004-C	Coupler, Encoder, Shaft End, Thread-on	1		
19	HVE-IFM-004-A	Coupler, Encoder, Shaft End, Weld-on	0		Prior to 04/24 when no 3/8 tapped hole is present
20	HVE-IFM-004-B	Bracket, Rotation Stop, Encoder	1		
21	HVE-2500	Electronic Flow Control Valve	1		
22	A-FF6602-10-10-10	Run Tee, 10MFF X 10MFF X 10FFFX	1		
23	A-FF6801-10-12	Elbow, 10MFF x 12SAE	3		
24	A-FF6500-10-10	Elbow, 90, 10MFF x 10FFFX	2		
25	H10-17-10FFFX-10FFFX	5/8' Hose, 5/8' Female ORFS x 5/8' Female ORFS	1		
26	H10-36-10FFFX-10FFFX	5/8' Hose, 5/8' Female ORFS x 5/8' Female ORFS	1		
27	EL-124141	Amber/Clear, 1' LED Auxiliary Micro Strobe Light	2		
28	ELC-1023-C	2-Pin Receptacle, Deutsch DT	2		
29	ELC-1023-D	2-Pin Wedgelock, Receptacle, Deutsch DT Series	1		
30	ELC-1005-C	Pin, Size 16, 16-20 AWG, Nickel	2		
31	ELC-1014-B	12-Pin Wedgelock, Plug, Deutsch DT Series	1		
32	ELC-218	18 Gauge-2 Conductor @ Foot	14		
33	SWS-1107	Harness, ISOBUS Adaptor CAN Only	1		
34	SWS-1108	Console, X35 w/ AGM-1 (Kit), Non-ISOBUS Ready Tractor	0		Optional

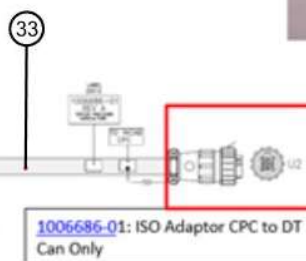
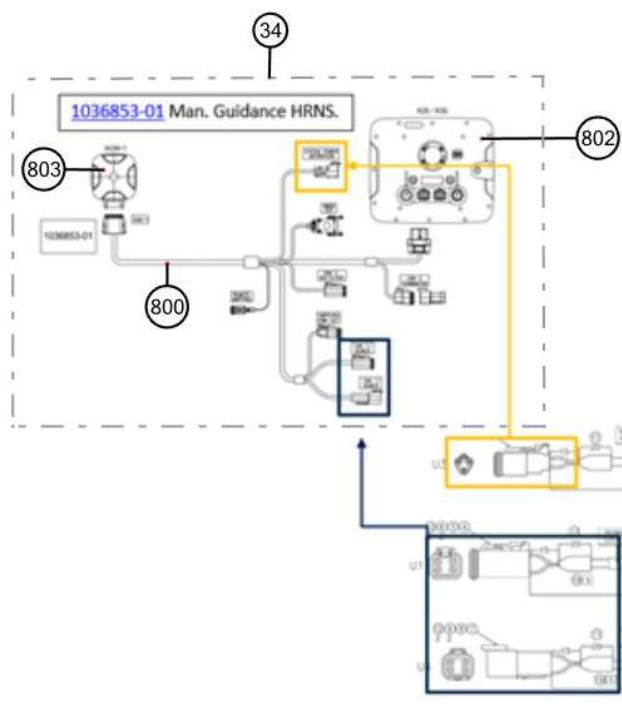
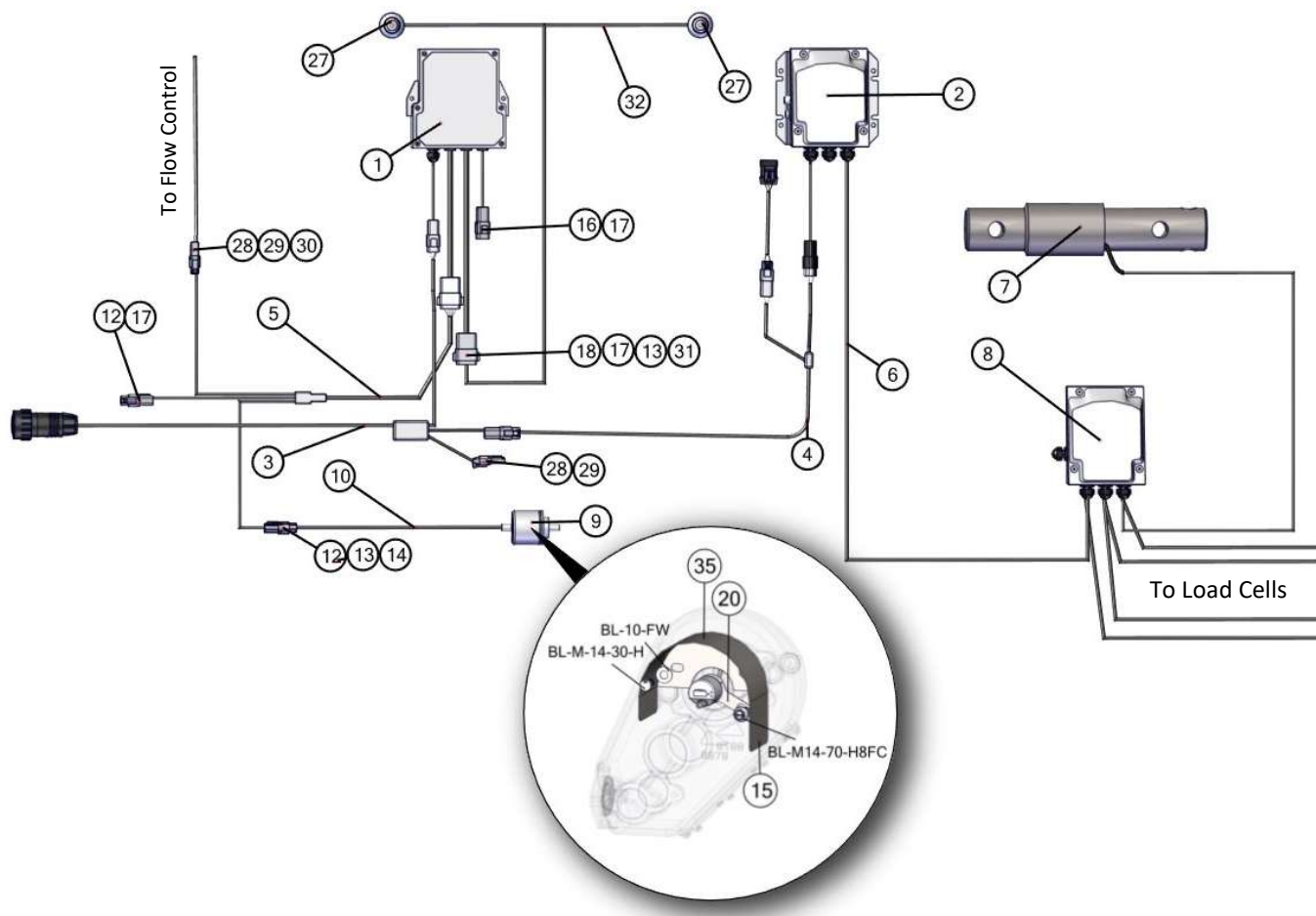
77023-5-02E OPT. SCALES, ATHENE VAR.RATE CONTROL, X25 UT & GPS, ISOBUS-READY TRACTOR

REF	PART	DESCRIPTION	QTY	WILL FIT SN	REMARKS
34	SWS-1108-01	Console, X25 w/ AGM-1 (Kit), Non-ISOBUS Ready Tractor	1		To upgrade standard ISOBUS kit to U/T and GPS add SWS-1108-01 & SWS-1106.
35	DC-0136	Decal, Spreaders, Not a Step & Pressure Wash, 4"x4", CAUTION	1		
36	PR72022	Light Bracket, HP25LL Top Rail, Athene Load Limit	2		
100	BL-4-300-H	1/4-20 X 3 HEX CAP G5 ZC	2		
101	BL-4-FW	1/4 USS FW ZC	8		
102	BL-4-LN	1/4-20 HEX LN NE ZC	4		
103	BL-16-550-H8	1-8 X 5-1/2 BOLT HH C/S G8 ZC	8		
104	BL-16-LN-8	1 H LN ZC G8	8		
105	BL-10-FW-8	5/8 FW G8	32		
106	BL-10-250-H-8	5/8-11 X 2-1/2 HH G8 ZC	16		
107	BL-10-LN	5/8-11 HEX LN NE ZC	16		
108	BL-M4-8-SC	M4-0.7 x 8mm Socket Cap Screw, Black, Class 12.9	3		
109	BL-4-200-H	1/4-20 X 2 HH C/S G5 ZC	2		
110	BL-4-025-SCF	1/4-28 x 1/4' Knurled Point Set Screw	1		
111	BL-M14-70-H8FC	M14 x 70 MM, HH Flange G10.9, Course Thread	1		
112	BL-M-14-30-H	Hex Head Bolt, 14mm x 30mm, Zinc, Grade 10.9	2		
113	BL-10-FW	5/8 USS FW ZC	2		
800	SWS-1109	Harness, AGM-1 To X Console w/ CAN	0		
802	SWS-1108-04	Console, X35	0		
802	SWS-1108-05	Console, X25	0		
803	SWS-1113	AGM-1 Receiver	0		

**77023-5-02E OPT. SCALES, ATHENE VAR.RATE CONTROL,
X25 UT & GPS, ISOBUS-READY TRACTOR**



77023-5-02E OPT. SCALES, ATHENE VAR.RATE CONTROL, X25 UT & GPS, ISOBUS-READY TRACTOR



WARRANTY

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 operator’s 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:_____	HP25LL	DEALER:_____
SERIAL NUMBER:_____		ADDRESS:_____
PURCHASE DATE:_____		_____
		PHONE:_____
		SALESMAN:_____

Keep Page for Your Records