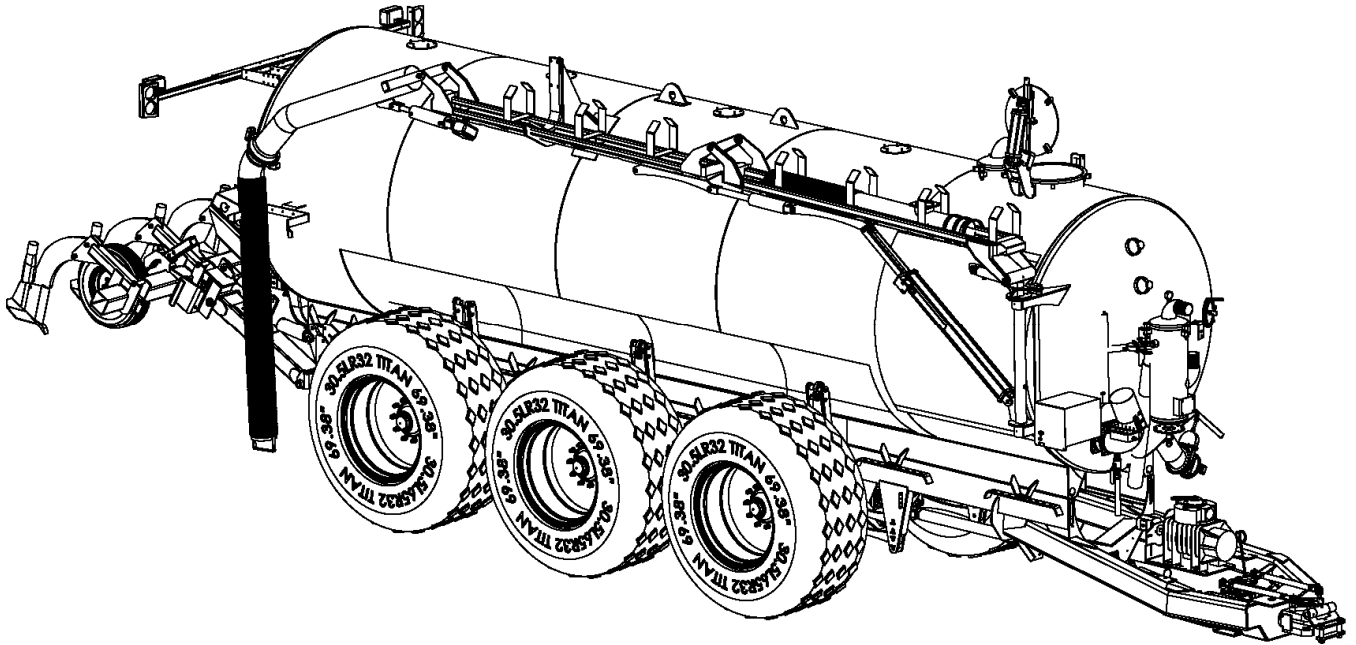


Manure Tanks



ES 6750 & ES 7500



USER MANUAL

April 2009

To the Purchaser



This is the safety alert symbol. It is used to alert the operator to an instruction concerning the personal safety and risk factor of this equipment. Always observe and heed these very important instructions to promote a safe operation with good preventive maintenance habits.

This new Balzer Inc. product is designed and manufactured to give years of very dependable service when used for the purpose for which it is intended, and when properly maintained.

NEVER OPERATE THIS EQUIPMENT AT SPEEDS OVER 20MPH

NEVER OPERATE THIS EQUIPMENT UNTIL USER FULLY UNDERSTANDS THE COMPLETE CONTENTS OF THIS MANUAL. FOR OWNERS WHO DO NOT OPERATE THIS EQUIPMENT, IT IS THE OWNER'S RESPONSIBILITY THAT THE USER IS PROPERLY INSTRUCTED AND IS FULLY AWARE OF THIS MANUAL'S CONTENTS.

This is important in the safe handling of this equipment and promoting an efficient operation. If there are any questions about areas in this manual, it is important to contact your dealer for clarification.

This machine is warranted as stated on the next page. A registration card is to be filled in by your dealer with your name and address, and promptly returned to the factory. The card provides a ready reference to help you in securing warranty and in answering questions that you may have at some later date.

Operating instructions and parts book are shipped with this machine. If parts of this book are missing or become unreadable, contact your dealer for a new set.

The serial number and identification tag is located to the front of the frame. Please refer to these numbers when parts or warranty communication is necessary.

PLEASE FILL IN THE FOLLOWING INFORMATION FOR YOUR RECORDS:

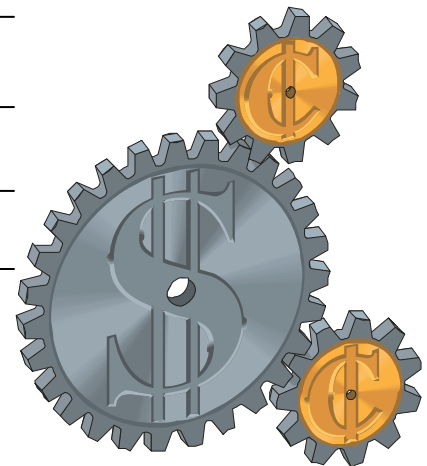
Date of purchase: _____

Owner's name: _____

Dealer's name : _____

Model #: _____

Serial # Identification # _____



Warranty



WARRANTY MANUFACTURER

Dealer or Distributor understands and agrees that the Manufacturer extends only the following Warranty to customers. In the event Dealer or Distributor extends any additional warranty (such as by enlarging the scope or period of warranty or undertaking a warranty of merchantability or fitness for any particular purpose) or any other obligation whatsoever, Dealer or Distributor shall: (1) be solely responsible therefore (2) have no recourse against Manufacturer thereof and (3) defend, indemnify and hold Manufacturer harmless against any claim or cause of action whatsoever arising out of, or occasioned by, Dealer or Distributor's extension of said additional warranty or obligation.

CERTIFICATE OF GENERAL EQUIPMENT WARRANTY



Balzer Inc. warrants new Products sold by it to be free from defects in material or workmanship for a period of one (1) year after date of delivery to the first user and subject to the following conditions. Balzer Inc.'s obligation and liability under this Warranty is expressly limited to repairing or replacing at Balzer Inc.'s option, any parts which appear to Balzer Inc. upon inspection to have been defective in material or workmanship. Such parts shall be provided at no cost to user, at the business establishment of the authorized Balzer Inc. dealer or distributor of the Product during regular working hours. This Warranty shall not apply to component parts or accessories of Products not manufactured by Balzer Inc. and which carry the warranty of the manufacturer thereof, or to normal maintenance (such as tune-up) or normal maintenance parts (such as oil filters). Replacement or repair parts installed in this Product covered by this Warranty are warranted only for the remainder of this Warranty as if such parts were original components of said Product. **BALZER INC. MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, AND MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.**

Balzer Inc.'s obligation under this Warranty shall not include any transportation charges, cost of installation, duty taxes or any other charges whatsoever, or any liability for direct, indirect, incidental or consequential damage or delay. If requested by Balzer Inc. products or parts for which a warranty claim is made are to be returned transportation prepaid to Balzer Inc. Any improper use, including operation after discovery of defective or worn parts, operation beyond rated capacity, substitution or parts not approved by Balzer Inc. company or any alteration or repair by others in such manner as in Balzer Inc. company's judgment affects the Products materially and adversely, shall void this Warranty.

“NO EMPLOYEE OR REPRESENTATIVE IS AUTHORIZED TO CHANGE THIS WARRANTY IN ANY WAY OR GRANT ANY OTHER WARRANTY UNLESS SUCH CHANGE IS MADE IN WRITING AND SIGNED BY AN OFFICER OF BALZER INC. AT ITS HOME OFFICE.”

LIABILITY FOR DELAYS

No liability shall attach to Manufacturer direct, or indirect, incidental or consequential damages or expenses due to loss, damage, detention of delay in delivery of Products resulting from acts or delays beyond its control.

Warranty Registration



Important- Read This First

The registration card is to be filled in completely and promptly returned to factory. It provides a ready reference to help you in securing parts and in answering questions that you may have at a later time.

This card does not put you on a mailing list. Nor is the information on the card made available to anyone else.

We urge the return of this card so that you will receive maximum service benefits.

Where a separate instruction manual has been received by the customer, a parts manual was sent with this machine. If you have not received the parts manual, ask your dealer.

Cut Along Dotted Line and Mail to: Balzer, Inc.
County Road 27 East
P.O. Box 458
Mountain Lake, MN 56159

Warranty Registration Card

This form must be filled out and signed by customer at the time of delivery.

Product _____
Model # _____
Serial # _____
Date of Purchase _____
Customer Name _____
Address _____
City _____ **State** _____ **Zip** _____
Dealers Name _____
Address _____
City _____ **State** _____ **Zip** _____

The above unit and Operator's Manual have been received and I understand and have been thoroughly instructed by my dealer as to Operator's Manual content, equipment care, adjustments, safe operation & explained and reviewed the warranty policy.

Owner's Signature _____



Balzer Inc is dedicated to providing the most reliable and durable AG related products. Balzer Inc has made every attempt to provide the most accurate and readily understandable information on our equipment. Due to our continuing efforts to produce the best products available, upgrades and improvements to our equipment may precede the manual updates. Therefore, contents of this manual are based on information in effect at the time of publication and are subject to change without notice.



Table of Contents

To the Purchaser.....Page 2

Warranty.....Page 3

Table of Contents.....Page 4

Safety.....

Operation.....

Lubrication and Maintenance.....

Troubleshooting.....

Parts.....


Safety





The following Safety Alert Symbols mean **ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!** They stress an attitude of “Heads Up for Safety” and can be found throughout this Operation Manual and on the machine itself.

BEFORE YOU ATTEMPT TO OPERATE THIS EQUIPMENT, READ AND STUDY THE FOLLOWING SAFETY INFORMATION. IN ADDITION, MAKE SURE THAT EVERY INDIVIDUAL WHO OPERATES OR WORKS WITH THIS EQUIPMENT, WHETHER FAMILY MEMBER OR EMPLOYEE, IS FAMILIAR WITH THESE SAFETY PRECAUTIONS.

Our Company **ALWAYS** takes operator safety into consideration when designing its machinery, guards, and exposed moving parts for operator protection. However, some areas can **NOT** be guarded or shielded in order to assure proper operation. In addition to this Operation Manual; decals on the machine warn of further danger and should be read and observed closely.

 DANGER	“DANGER” indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
--	---

 WARNING	“WARNING” indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
--	---

 CAUTION	“CAUTION” indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
--	--

READ and follow the instructions on all decals.

REMEMBER! It is the owner's responsibility for communicating information on the safe use and proper maintenance of this machine! This includes providing understandable interpretation of these instructions for operators who are not fluent in reading English.



MANDATORY SAFETY SHUTDOWN PROCEDURE

BEFORE cleaning, adjusting, lubricating or servicing the unit:

1. Remove the ignition key from the power unit engine.
2. **Make sure that all movement of the unit has ceased. ONLY** when you have taken these precautions can you be sure it is safe to proceed. Failure to follow the above procedure, could lead to death or serious bodily injury.
3. Attach jack to unit and raise up to transfer weight to the jack.
4. Keep hitch pin attached to help prevent unit from accidentally moving.
5. Disconnect the PTO.

ADDITIONAL SAFETY REMINDERS

USER/OPERATOR SAFETY PRACTICES are included in this Operation Manual and are intended to promote **SAFE OPERATION** of the unit.

These guidelines do not preclude the use of good judgment, care, and common sense as may be indicated by the particular job site work conditions.

It is essential that operators be physically and mentally free of mind altering drugs and chemicals and thoroughly trained in the safe operation of the unit. Such training should be presented completely to all new operators and not condensed for those claiming previous experience.

Some photographs used in this manual may show Doors, Guards, and Shields open or removed for illustration purposes **ONLY. BE SURE** that all Doors, Guards, and Shields are in their proper operating positions **BEFORE** operating the unit. **NEVER** operate this unit with any guards or shields not in place. Replace any missing or damaged ones.

Keep hands and feet away from all moving parts.

The operator **MUST** know the capabilities and work applications for the machine, and operate it at speeds slow enough to insure complete control at all times. When working on uneven ground or near the edge of roadbeds, there is no substitute for good judgment and only operators with sufficient experience should attempt such work.

NEVER assume that everybody is as safety conscious as you are.



PERSONAL SAFETY

- **Do not** allow minors and any unqualified trained personnel to operate or be near the unit unless properly supervised!
- **Do not** allow anyone to ride on the unit at anytime!
- **Never leave** the unit running unattended!
- **Always wear** appropriate personal safety gear as called for by the job or working conditions!
- **Never wear** loose clothing while working around moving parts.
- **Always be aware** of pinch point areas on the unit!
- Keep hands, feet, hair and clothing away from moving parts.
- Stop and disengage PTO and shut off tractor before doing any adjusting or servicing to unit.
- **Never step** on or over PTO drive-line at any time.



PER OPERATION SAFETY

- **Before each** tow: Check that the tail lights, brake lights and turn signals work correctly.
- Improper electrical connection between the tow vehicle and the trailer will result in inoperable lights and electric brakes, and can lead to collision.
- **Do not** operate on public roads after dark without warning lights.
- Be sure the rear of the unit has a clean “slow moving vehicle” emblem properly displayed. If towing at less than 20 mph on any public roadway at night, proper warning and running lights are necessary as required by state law!
- **DO NOT** pull the unit without having safety chains (not supplied) securing the unit to the tractor.
- Refer to local transportation laws for regulation on safety chain use. Maximum speed is 20 mph.
- Size of tractor must be sufficient to maintain vehicle stability when fully loaded.
- **Always use a hitch pin that has a safety clip pin!**
- If unit is equipped with the braking system, check oil level and braking capacity with a full load on unit before operating the unit.
- Check wheel bolts daily and tighten them as required.
- Keep hands, feet, hair and clothing away from moving parts.
- Insure all guards are in place before using.
- Replace any parts which show signs of excessive wear, cracking, or likelihood of failure, with original equipment service parts.
- Be familiar with the levers controlling all hydraulically controlled components.
- **Before loading**, make sure that the unit does not have any foreign object or material in it that can cause equipment damage or personal injury.
- **Never enter the unit** unless it is absolutely necessary. If a unit must be entered, take proper safety precautions. This includes someone at the site, outside the unit and a proper life support system. Contact your Balzer dealer for more information before you enter a unit.
- Check that PTO slides freely, is not damaged and is secured properly to tractor and unit. Make sure that there is approximately 1/3 over-lap of engagement. (Refer to Draw-Bar Adjustment)



OPERATION SAFETY

- **Be alert** and avoid loose, soft or icy surface conditions that could cause tipping or loss of control.
- When possible, travel by driving up or down the slope. Avoid traveling along side hills.
- **Always check** the job site for hazardous terrain, obstructions or bystanders.
- Slow down prior to going down any steep grade.
- **Never** take tractor out of gear when going downhill.
- **Do not exceed** the maximum weight carrying capacity of the equipment or the tractor manufacturer's maximum towing capacity; whichever is lower.
- Never use a tractor that is not recommended for the type of unit you are using. If you have any questions contact your Balzer Dealer.
- When agitating a pit, always be sure there is adequate ventilation in any confined area. (If Applicable)
- Keep hands, feet, hair and clothing away from moving parts.
- **Do not stand** in front, behind, or along side of the machine when machine is running.
- When parking unit, block wheels securely before unhitching from tractor.

TOWING SAFETY

- **THE MAX SPEED OF THE TOWING TRACTOR IS 20 MPH.**
- Observe recommended maximum road speeds, or local speed limits which ever may be lower.
- **Always move unit with a farm tractor only!**
- **ALWAYS ENGAGE** power-steering before turning with loaded unit. (Lever In Float Position)
- **DO NOT DISENGAGE** power-steering before turning process is over. (Lever In Float Position)
- **Stopping distance** increases with speed and weight of towed loads and on slopes. Towed loads with or without brakes that are too heavy for the tractor or are towed too fast can cause loss of control. Consider the total weight of the equipment and its load.
- Tractor must be heavy and powerful enough with adequate braking power for the towed load. Use additional caution when towing loads under adverse surface condition, when turning, and on inclines.



HYDRAULIC SYSTEM SAFETY

- **Do not smoke** while working on hydraulic systems!
- **Never** use your hand to search for hydraulic fluid leaks; escaping fluid under pressure can be invisible and can penetrate the skin and cause a serious injury!
- **USE A SCRAP PIECE OF CARDBOARD TO CHECK FOR LEAKS!**
- **If any fluid is injected** into your skin, see a doctor at once! Notify medical staff that there is an injection injury with hydraulic fluid. Injected fluid must be surgically removed by a doctor familiar with this type of injury or gangrene may result!
- **Do not attempt** to loosen or disconnect any hydraulic lines, hoses or fittings without first relieving hydraulic circuit pressure. Also, be careful not to touch any hydraulic components that have been in recent operation because they can be extremely hot!
- **Always** replace hydraulic components with manufacturer recommended replacement parts. Improperly rated components may result in system failure and/or injuries.
- Contact your local Balzer dealer to order replacement parts.

SAFETY SIGNS ARE IMPORTANT

Safety signs or decals provide very important information and instructions designed to alert you to dangers and hazards that can be present during operation of this equipment. However, safety sign instructions must be read, understood and followed to be effective.

REPLACEMENT OF SAFETY SIGNS

Safety signs or decals must be kept clean and readable. If they become unreadable for any reason, they must be replaced with an identical replacement decal. Safety decals must also be replaced if parts are repaired or replaced with new parts that do not already include the necessary safety decals.

APPLICATION OF SAFETY DECALS

Surface preparation is very important for safety decals to properly adhere. Grease, oil and dirt must be removed and the surface must be smooth and dry.

Most decals have a split backing which is meant to be removed from the split outward. To apply the decals follow these procedures:

1. Position the decal in the proper location and hold firmly over the largest portion of backing.
2. Use one hand to hold the decal in position, with the other hand carefully roll the loose end over and peel the backing outward. When the backing is removed as described and shown (Fig. 1), with even and gradual pulling, the decal will roll onto the surface smooth and wrinkle free.
3. With the smallest portion of the decal attached, the same procedure can be applied to the other half.

4. When the decal has been attached in place, use a cloth or soft paper towel to burnish the decal onto the cleaned surface. Work gently from the middle outwards to avoid creating any wrinkles.

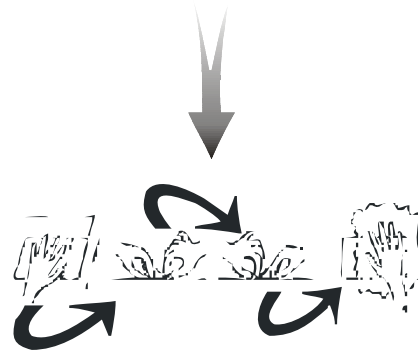


Fig. 1



REPLACEMENT DECALS

Order replacement decals by part number through your nearest dealer. Part numbers are printed on each decal.





! DANGER

MOVING PARTS HAZARD

- Keep hands, clothing, and hair away from moving belts and parts.
- Replace guard before operating.

21730

! DANGER

STOP: WAIT FOR ALL MOVEMENT TO STOP BEFORE SERVICING OR OPENING OF SHIELDS.

LOOK: THE IGNITION KEY IS REMOVED.

LISTEN: FOR ALL MOVEMENT TO STOP, ROTATING PARTS CONTINUE TO ROTATE AFTER POWER IS SHUT OFF.

14175



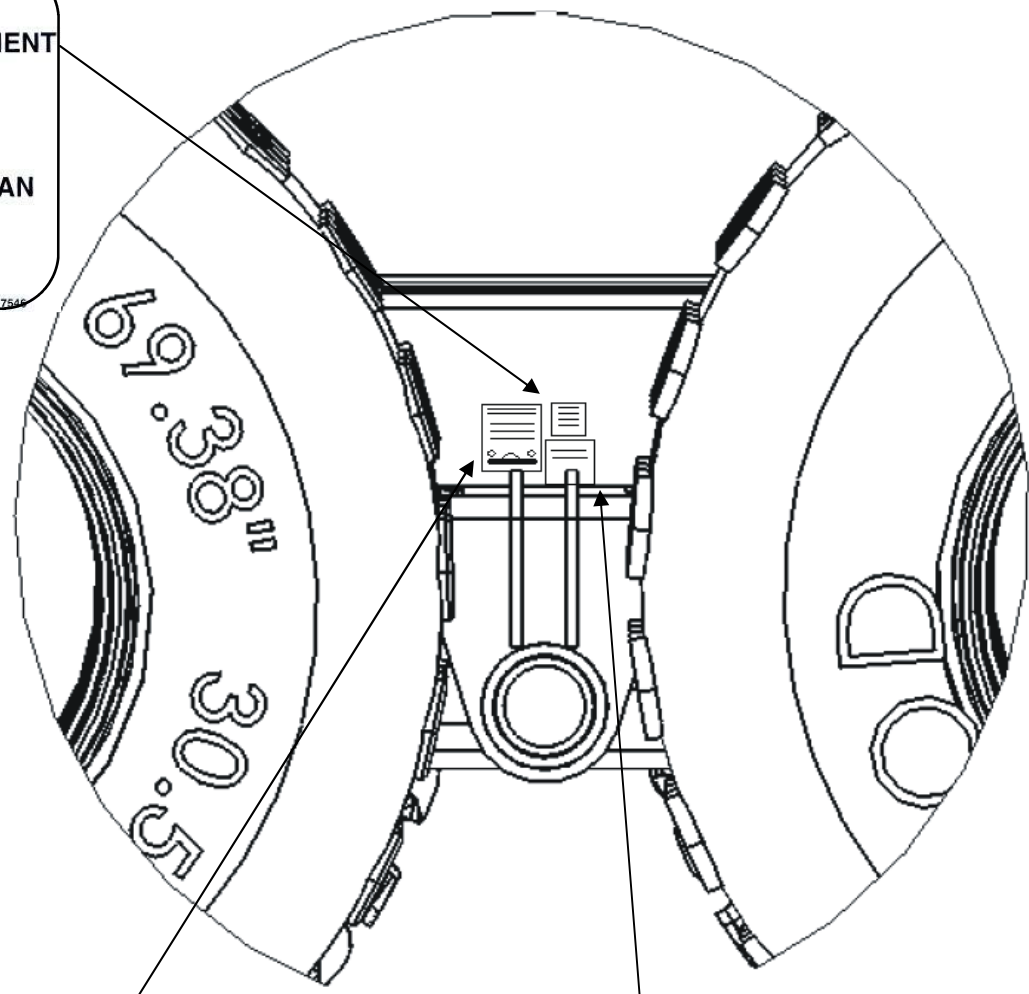
GUARD MISSING
DO NOT OPERATE

! DANGER



IMPORTANT
HUB BEARING ADJUSTMENT
 1. DELIVERY
 2. FIRST DAYS USE
 3. WEEKLY
 UNTIL NO END PLAY CAN
 BE DETECTED
 4. SEMIANNUALLY

P# 17546



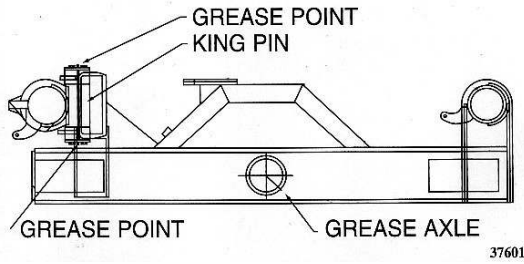
Grease all steering systems

The king pin requires grease every day the unit is used in the field.

Grease sufficiently two places on the top and bottom of king pin, position tires all right, then all left, and center to distribute grease around the king pin.

Grease well after washing the unit and at the end of the season.

Grease abundantly the tandem axle cross main tube every day.



P# 37601

IMPORTANT
TIGHTEN WHEEL BOLTS
BEFORE EACH DAY'S USE
FOR THE FIRST 5 DAYS

TO 450 FT/LB **TANK EMPTY**

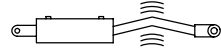
P# 11233

ECO #	REV.	NOTES	DATE	DRWN	APR
4358		COMBINED INTO ONE SLICKER	10/23/06	G-JH	FB
XXX		XXXX	xxx	xxx	xxx

6"

BALZER SUGGESTED MAXIMUM ALLOWABLE TIRE PRESSURE		
TIRE SIZE	RADIAL PSI	BIAS PSI
12.5L x16.1		40
16.5L x16.1		36
19.0L x16.1		34
21.5 x16.1		32
18.4 x26		23
23.1 x26		32
28.0L x26	54	26
30.5 x32	52	33
600/50-22.5		38
700/40-22.5		35
850/50-30.5		37
900/60-32	36-41	35

NOTICE !!



WHEN USING THE CONSTANT DOWN PRESSURE SYSTEM - THE CONTROL LEVER IN THE CAB MUST REMAIN ENGAGED WHILE THE UNIT IS INJECTING.

RETURNING THE CONTROL LEVER TO THE NEUTRAL POSITION WILL LOCK THE TOOLBAR AT THE PRESENT DEPTH AND MAY CAUSE DAMAGE TO THE TANK AND/OR THE INJECTOR SYSTEM.

NEVER EXCEED 1500 PSI OF DOWN PRESSURE.

DO NOT EXCEED 18 GPM TO HYD. MOTOR OR DAMAGE TO SEALS WILL OCCUR

WHEN THE MOTOR IS IN THE BACK OF THE WAGON AN ADDITIONAL 1/2" HOSE MUST BE CONNECTED TO THE BACK FITTING ON THE MOTOR AND DRAINED TO THE TRACTOR OIL TANK DIRECTLY (NOT TO VALVE)

"ATTENTION" MOTOR BYPASS LINE

CONNECT TO THE TRACTOR OIL RESERVOIR DIRECTLY, MAX BACK PRESSURE 20 PSI.

DAMAGE TO MOTOR WILL RESULT IF NOT CONNECTED

71702

13 3/4"

BALZER INC. CO. HWY 27 E MT. LAKE, MN 507-427-3133			UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES & TO FRANCES ARE	FRACTIONS +- 1/32	DECIMALS +- .005	ANGLES +- 1°	PARTNAME DECAL TIRE PRESSURE & WARNING W/ 29377/ 60829/ 37600/ 37443	
	TO TANK ASSEMBLY		MATERIAL PURCHASE				Julie	DWG. NO. 71702 SW
	PURCHASED		WHERE USED ALL TANKS					
	PROCEDURE	DESIGN	LAST SAVED DATE		Tuesday, October 24, 2006 8:17:41 AM			

Safety



Operation



Operation



Pre Operation Checks

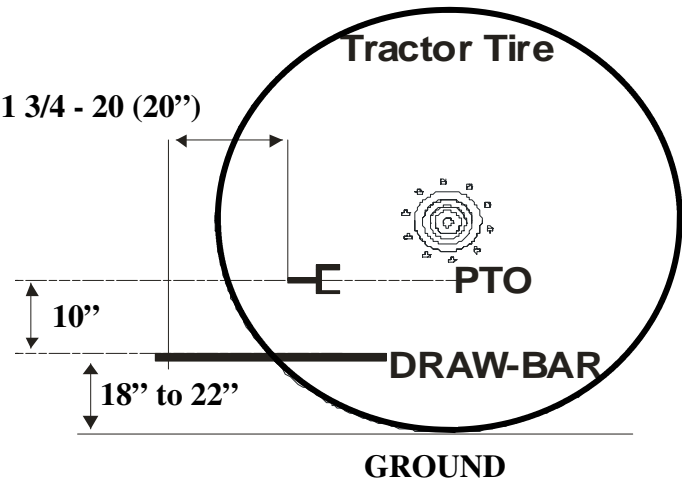
- Make sure safety shields are in place.
- Make sure there is no frozen material to obstruct moving components.
- Make sure tractor draw bar matches standards shown in draw bar adjustment diagram.

HOSE COLOR MARKINGS

- RED** - Brakes
- YELLOW** - Steering Lock Out
- BLUE** - 3 Way Valve
- BLUE/RED** - Down Pressure
- ORANGE** - Hydraulic Slurry
- GREEN** - Injector Arms
- GREEN/BLUE** - VAC Boom Valve
- YELLOW/BLUE** - Load Leveling
- ORANGE/BLUE** - VAC Pump

Required Draw-Bar Adjustment (CAT-3)

1000 RPM 1 3/4 - 20 (20")



 **DANGER** Improper PTO Length May Damage The Unit.

ATTACHING TO TRACTOR

- Attach tractor draw bar to hitch using the properly sized hitch pin that has a retainer device.
- Attach safety chain to tractor.



NOTE

Prior to connecting the tractor to a mechanical steering unit, adjust the two top tie bars to the gearbox so they are as short as possible. They should be up as much as the tolerance on the hitch assembly will allow without undue stress on the gearbox vertical shaft.

- **(Mechanical Steering Option Only)** Drop steering plate down onto draw bar and bolt-on spacer.
- Crank trailer jack down to slowly place pressure on draw bar. Move jack to storage location and secure.
- Check that the tractor's PTO has proper size splines. (If option is available)
- Check that PTO slides freely and is not damaged.
- Attach PTO shaft to tractor securely as required by its locking mechanism. PTO should have approximately 1/3 over-lap.
- **(Mechanical Steering Option Only)** Connect load leveling cylinder to tractor and pressurize cylinders to proper height for operation. Once cylinders have been leveled, remove hose and store on tank.
- Attach hydraulic lines making sure the connectors are clean and in good repair. See hose color code list above. Connect 7-pin connector and remote control wires. (If option is available)
- If unit comes with a zero return hydraulic line it needs to be hooked up to a zero return hydraulic connection on tractor. **(If this is not done, damage to unit will occur!!!)**

Initial Start-up

- **Never operate** this machine if shields are missing or if persons are in or on this machine.
- Do not leave tractor seat.
- Keep everyone away while operating this machine.
- Operate all hydraulic controls to become familiar with the function of each tractor lever and to visually see that the unit is responding correctly.
- **Engage PTO SLOWLY** with tractor throttle at slow idle. Use maximum modulation on tractor PTO control.
- **Watch and listen** to confirm that the unit is operating properly. Run at fast idle for 5 minutes, disengage PTO and shut off tractor engine and remove keys from ignition. Make all adjustments before any further operating is attempted.



NOTE

Make mental and/or physical notes concerning which way to move the lever to get the desired result.



CAUTION

To prevent premature drive line failure, tractor turning should be limited to approximately 10 degrees when drive line is rotating.



WARNING

Torque lug nuts to 420 ft/lbs. Tighten lug nuts before each day's use for the first 5 days.

Tank Loading Procedure

Hydraulic Driven Vacuum Boom Tanks

- Run VAC Boom Remote to insert hose into tank/pit.
- Adjust needle valve on 7 Bank Hydraulic Control Valve Mount on tank to control speed of the Boom if needed.
- Open the 8” Brass Valve Function on the Remote.
- Close the Load Hatch Function on the Remote.
- Move the lever on vacuum Pump to the VAC Position.
- Start the hydraulic motor that drives the vacuum Pump.



NOTE It will take a minute or so before manure is sucked up the hose to the tank.

- When tank is full, close 8” Brass Valve Function on the Remote.
- Shut off hydraulic motor that drives the VAC Pump.
- Remove Boom from tank/pit.
- The RED indicator light will illuminate when Boom is raised up high enough to swing into Boom Saddle. Park Boom for transport.
- Begin to apply manure to field.



Tank Loading Procedure

PTO Driven Vacuum Boom Tanks

- Run VAC Boom Remote to insert hose into tank/pit.
- Adjust needle valve on 7 Bank Hydraulic Control Valve Mount on tank to control speed of the Boom if needed.
- Open the 8” Brass Valve Function on the Remote.
- Raise plow up. This will close the 6” brass valve mount on slurry pump.
- Close the Load Hatch Function on the Remote.
- Move the lever on vacuum pump to the VAC Position.
- Engage tractor PTO slowly, then increase the PTO speed to the vacuum pump.



NOTE It will take a minute or so before manure is sucked up the hose to the tank.

- When tank is full, close 8” Brass Valve Function on the Remote.
- Disengage tractor PTO to the vacuum pump.
- Remove Boom from tank/pit.
- The RED indicator light will illuminate when Boom is raised up high enough to swing into Boom Saddle. Park Boom for transport.
- Begin to apply manure to field.

Tank Loading Procedure

Hydraulic Driven Vacuum Tanks

- Attach suction hose to Ball Coupler Flange.
- Open brass valve.
- Raise plow up. This will close the 6” brass valve mount on slurry pump.
- Move the lever on vacuum pump to the VAC Position.
- Close the Load Hatch Function on the Remote.
- Start the hydraulic motor that drives the vacuum pump.



NOTE It will take a minute or so before manure is sucked up the hose to the tank.

- When tank is full, close brass valve.
- Shut off hydraulic motor that drives the VAC Pump.
- Disconnect suction hose to Ball Coupler Flange.
- Begin to apply manure to field.

Tank Loading Procedure

PTO Driven Vacuum Tanks

- Attach suction hose to Ball Coupler Flange.
- Open brass valve.
- Raise plow up. This will close the 6” brass valve mount on slurry pump.
- Move the lever on vacuum pump to the VAC Position.
- Close the Load Hatch Function on the Remote.
- Engage tractor PTO slowly, then increase the PTO speed to the vacuum pump.



NOTE It will take a minute or so before manure is sucked up the hose to the tank.

- When tank is full, close brass valve.
- Disengage tractor PTO to the vacuum pump.
- Disconnect suction hose to Ball Coupler Flange.
- Begin to apply manure to field.

Tank Loading Procedure

Hydraulic/PTO Driven Slurry Tanks

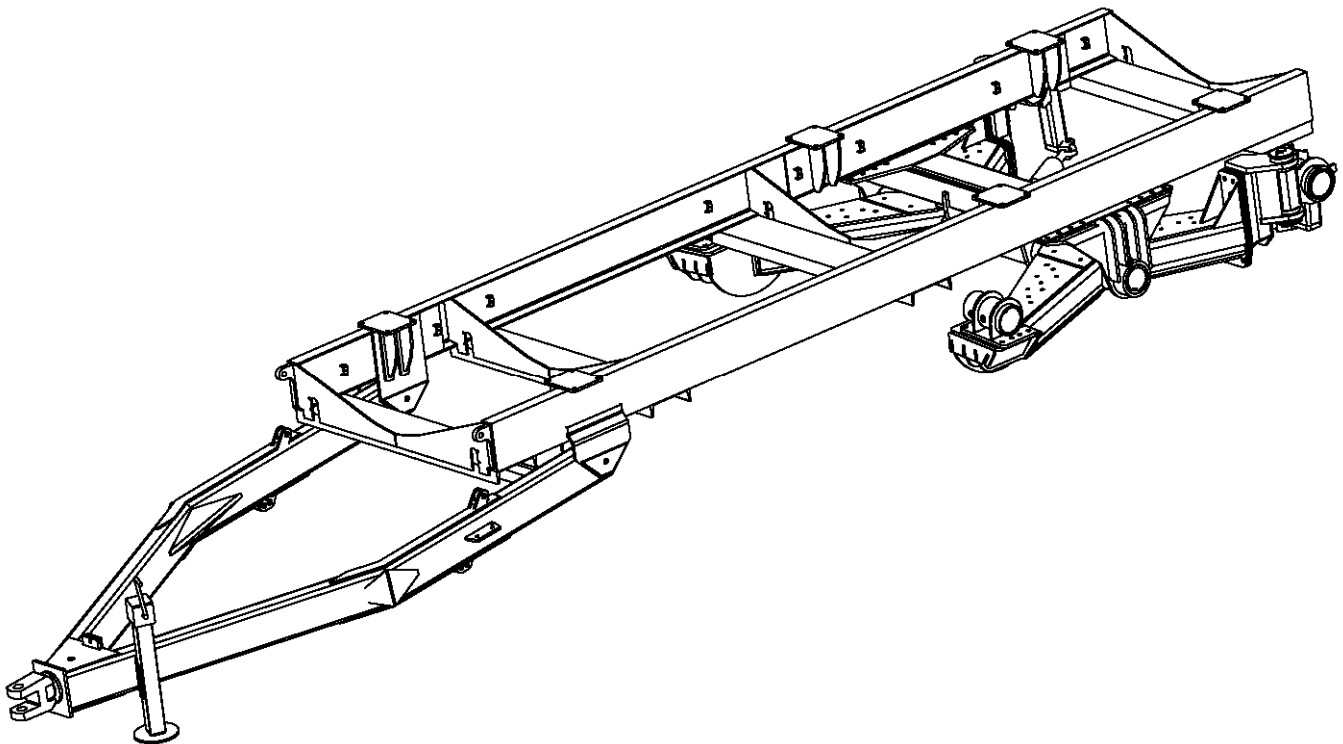
- Position tank under load stand or attach filling hose to Self-Load Function.
- Load tank full.
- Lower plow down into the ground. If Down-Pressure Block is available, increase or decrease pressure to control the plow's force in the ground.
- Start or engage the hydraulic motor or PTO that drives the slurry pump.
- Begin injecting manure into the ground.



NOTE Do Not Turn the unit if plow is in the ground. This will damage the plow.

- To stop injecting manure into the ground, stop or disengage the hydraulic motor or PTO that drives the pump.
- Raise plow up.

Tandem Axle Frame



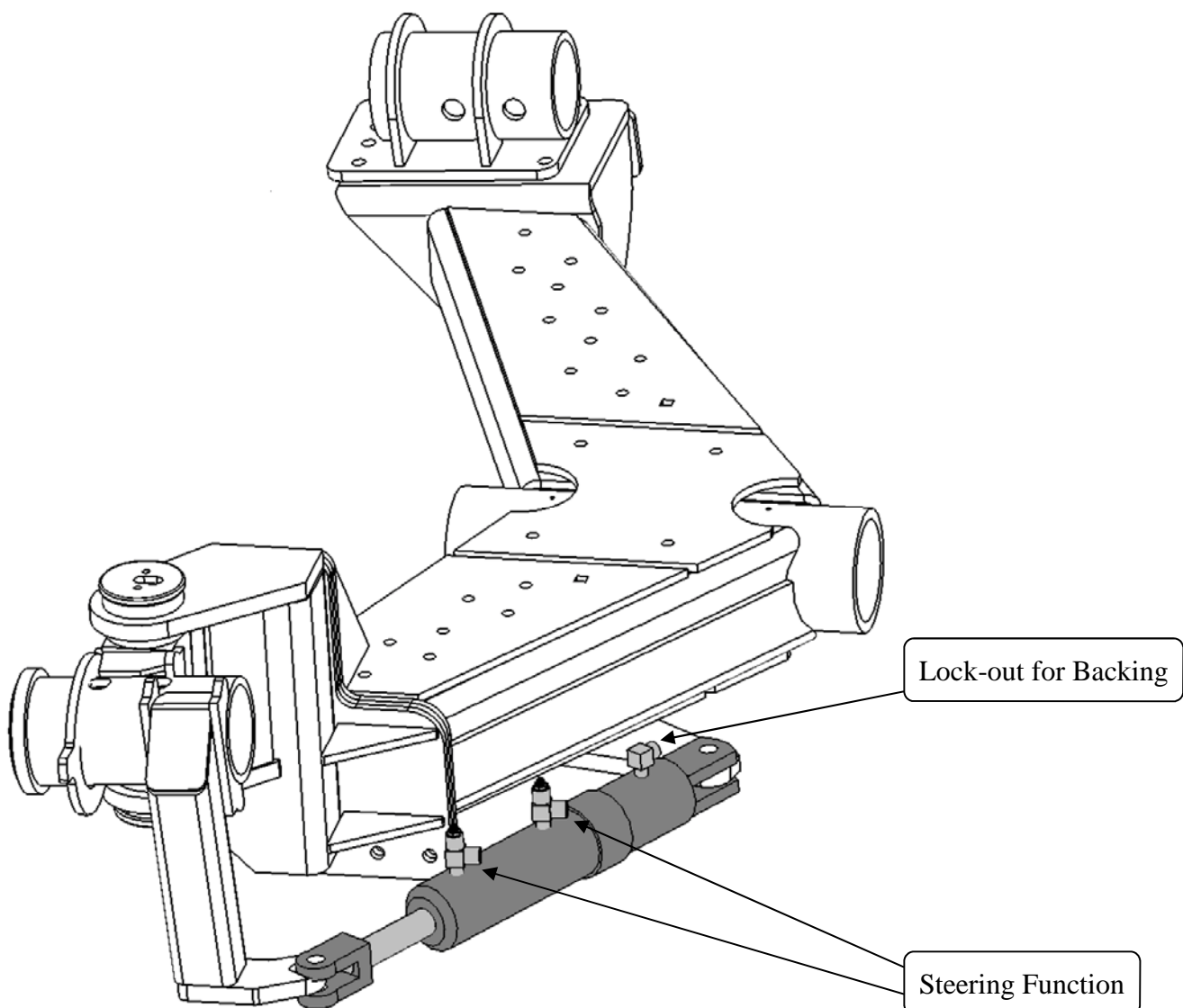
Tandem Auto Steering System

The steering cylinders have two internal functions.

First, moving the tractor hydraulic level to the “**Float Position**” allows the unit to steer. This is accomplished by hydraulic hoses connected to each cylinder. When the unit is turning, oil is forced out of one cylinder and into the other cylinder. This requires that there is no air in the hydraulic hoses or cylinders to function correctly.

The second function is used for backing up. Move tractor hydraulic lever to engage the cylinder. This will force the cylinder to align the steering to the “Center” or straight position.

If oil is lost or air enters into the system, it must be bled. See “**Bleeding Instructions for Tandem Auto Steering**” or “**Bleeding Instructions for Bleeding Tridem Auto Steering**” to correct the issue.



Bleeding Instructions for Tandem Auto Steering System



WARNING

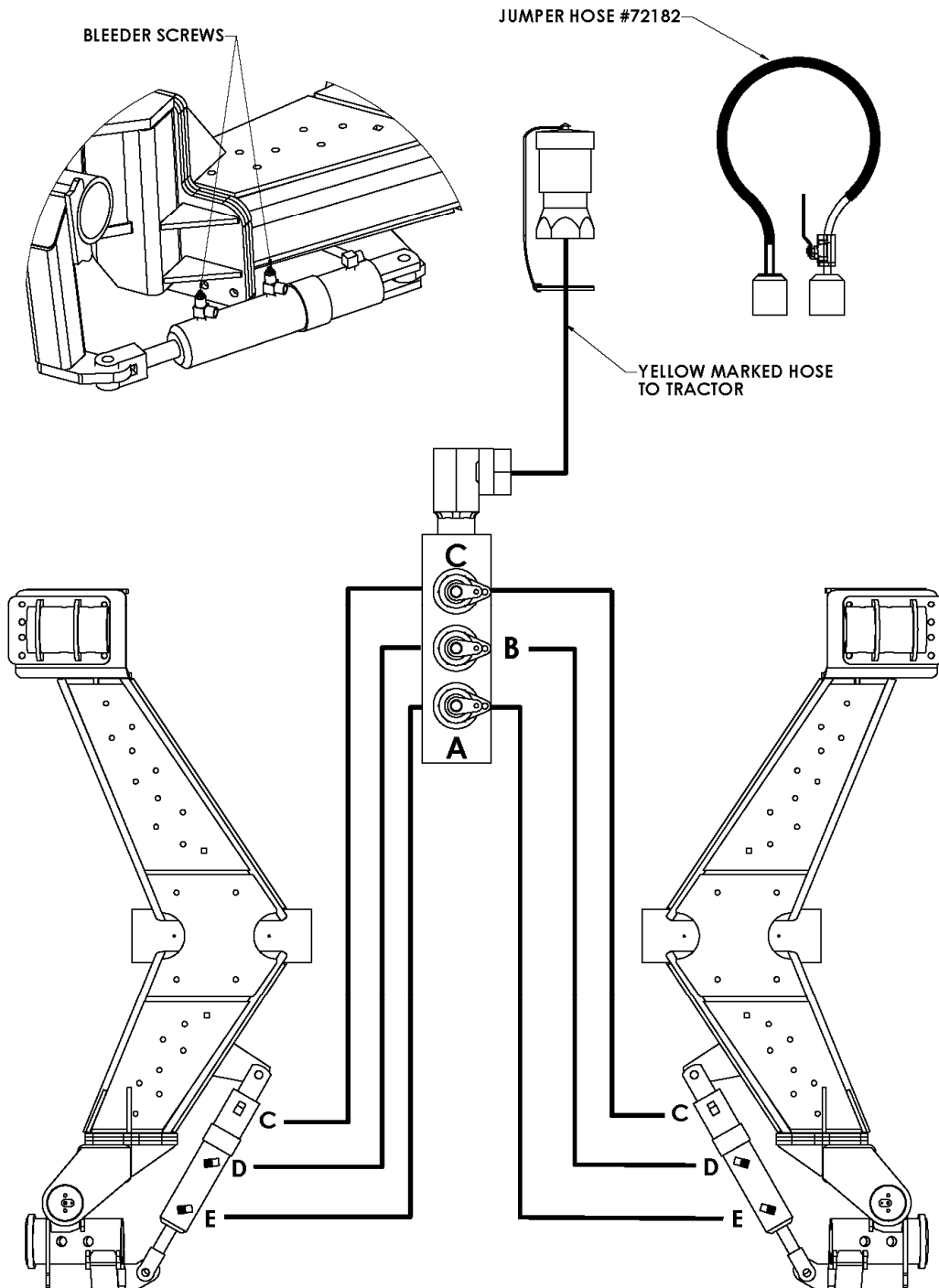
Do not remove hydraulic fitting from the (“C” port) until all pressure has been relieved from the hydraulic line from the tractor (YELLOW marked hose).

Balzer recommends the following bleeding procedure: (see illustration “Tandem Auto Steering Schematic”)

1. Attach jumper hose #72182 to (“C” port) and (“B” port).
2. Pressurize hydraulic line from tractor (YELLOW marked hose).
3. Open ball valve to (“B” port).
4. Open the (“D” port) bleeder screw on each cylinder one at a time until no air bubbles come out. Then close bleeder screw. (Cylinder will stroke out)
5. Open the (“E” port) bleeder screw on each cylinder one at a time until no air bubbles come out. Then close bleeder screw.
6. Close ball valve to (“B” port).
7. Move jumper hose #72182 from (“B” port) to (“A” port).
8. Open ball valve to (“A” port).
9. Open the (“E” port) bleeder screw on each cylinder one at a time until no air bubbles come out. Then close bleeder screw.
10. Open the (“D” port) bleeder screw on each cylinder one at a time until no air bubbles come out. Then close bleeder screw. (Cylinder will stroke in)
11. Close ball valve (“A” port).
12. Move jumper hose #72182 from (“A” port) to (“B” port).
13. Open ball valve to (“B” port).
14. Open the (“D” port) bleeder screw on each cylinder one at a time until no air bubbles come out. Then close bleeder screw.
15. Close ball valve to (“B” port).
16. Relieve all pressure from the hydraulic line from the tractor (YELLOW marked hose).
17. Remove jumper hose #72182 from (“C” port) and (“B” port).

Air bleeding is complete.

Tandem Auto Steering System Schematic



Braking System

Pressure Releasing Spring

Some tractors hydraulic systems keep a small amount of pressure in the hydraulic lines even when the control lever is set to “float” position. A pressure releasing spring is used to counteract the hydraulic pressure coming from the tractor.

Brake Operation

Tractors with “closed center or open center” hydraulic circuit.

1. To apply the brakes, the lever must be pulled fully backward.
2. To release the brakes, the lever must be pushed fully forward to the “float position”.

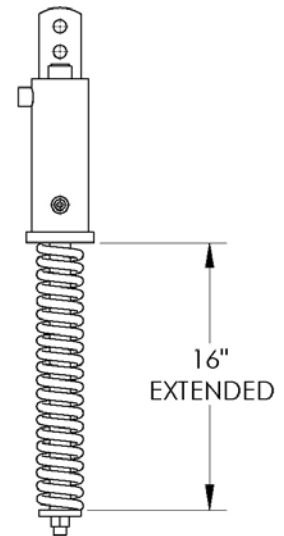
Inspection Of Braking Fluid Level

If the spring is compressed down to 8” or less when braking, add hydraulic fluid as per “**Fill Instructions for Master Cylinder**”.

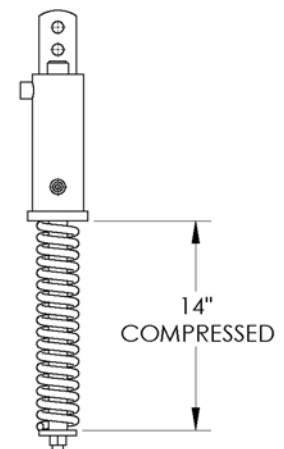
Fill Instructions for Master Cylinder

The master cylinder of the braking system is designed to create a vacuum in the hydraulic lines leading to the calipers. When the brakes are fully released, the vacuum created pulls the piston of the calipers to fully retract, which disengages the brakes on the unit. To do so, the master cylinder must never be full of hydraulic fluid when braking.

1. Attach jumper hose #72182 to (“A” port) and (“B” port).
2. Connect the hydraulic hoses to the tractor (RED marked hoses).
3. Open ball valve to (“A” port).
4. Apply and hold pressure to braking system from tractor hydraulics.
5. Relieve all pressure from the hydraulic lines from the tractor for the braking system (RED marked hoses).
6. Close Ball Valve to (“A” port).
7. Remove jumper hose #72182 from (“A” port) and (“B” port).
8. Apply and hold pressure to braking system.
9. Open bleeder screw on any brake caliper.
(This will allow the master cylinder spring to compress down to 14” long.
10. When the master cylinder has compressed down to 14” long, tighten bleeder screw.



When the master is fully extended, the pressure release spring measures roughly 16” long.



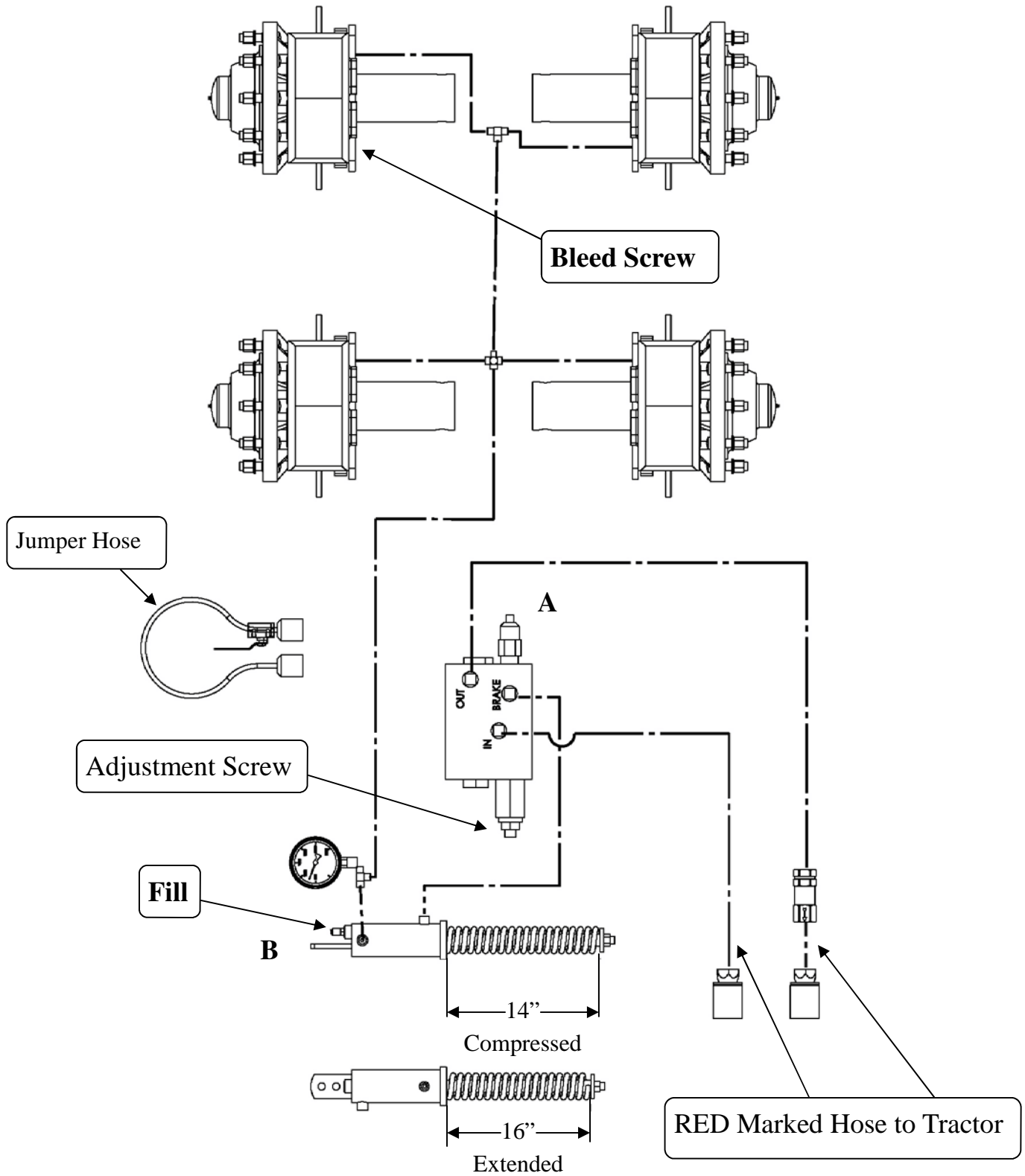
When adding braking fluid to the master cylinder for the last time, the pressure releasing spring must be held compressed at 14” long.

Braking System

How To Bleed The Wheel Brakes

1. Attach jumper hose #72182 to (“A” port) and (“B” port).
2. Connect the hydraulic hoses to the tractor (**RED marked hoses**).
3. Apply and hold pressure to braking system from tractor hydraulics.
4. Open ball valve to (“A” port).
5. Loosen bleeder screw on brake caliper of closest wheel to tractor first, until no air bubbles come out.
6. Repeat procedure until all brakes are bled.
7. Relieve all pressure from the hydraulic lines from the tractor for the braking system (**RED marked hoses**).
8. Close Ball Valve to (“A” port).
9. Remove jumper hose #72182 from (“A” port) and (“B” port).
10. Apply and hold pressure to braking system.
11. Open bleeder screw on any brake caliper.
(This will allow the master cylinder spring to compress down to 14” long.)
12. When the master cylinder has compressed down to 14” long, tighten bleeder screw.

Braking System Schematic



PTO/JACK

PTO

The PTO has 1 3/4—20 tractor ends and 1 3/4—20 implement ends. The implement end provides a friction clutch or shear bolt that protects the gear box and drive-line from overload. The PTO must be engaged slowly, use max modulation on tractor. **Do not slam engage!**



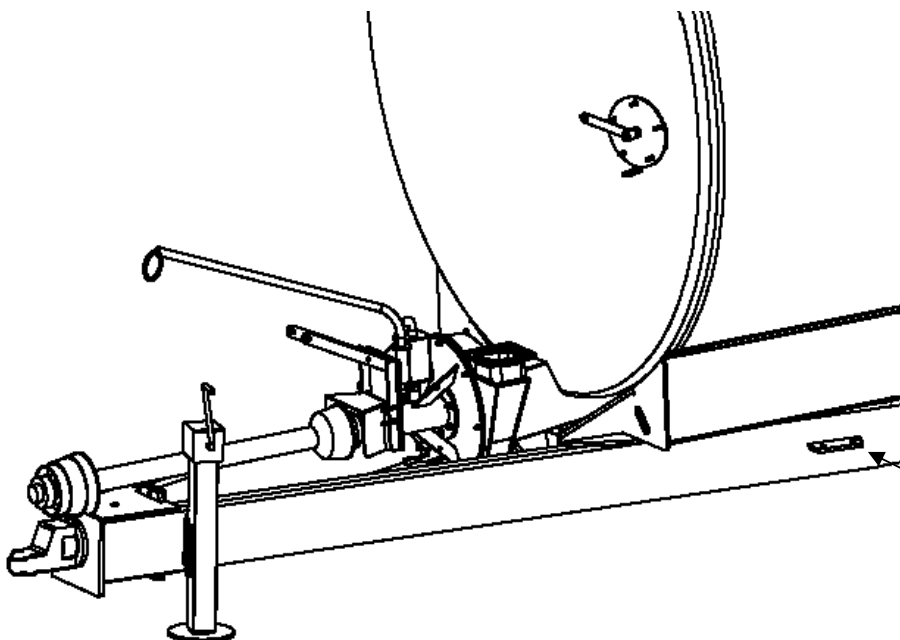
Shear Bolt



Never operate without PTO Guards!

Jack Storage

The jack storage location is pictured below. This location keeps it out of the way of the tires and removes the possibility of dragging.



Jack Storage





Periodic Maintenance



CAUTION

Before doing any maintenance to the hydraulic system, turn the tractor engine off and relieve all pressure from the hydraulic systems.

DAILY MAINTENANCE & INSPECTIONS BEFORE USE

1. Check air pressure in tires. **(as per recommended tire pressure)**
2. Torque wheel nuts on all tires. **(as per recommended torque specifications)**
3. Inspect all suspension parts for damage. **(repair or replace as needed)**
4. Check all oil chambers for proper oil level. **(as per recommended oil specifications)**
5. Inspect all moving components for damage. **(repair or replace as needed)**
6. Check that brakes are working correctly.
7. Check for any hydraulic oil or any oil that may be leaking out. **(repair or replace as needed)**
8. During cold weather conditions check that there is no ice build up on any moving parts. **(could prevent components from moving)**

DAILY GREASING (AS PER LUBRICATION INSTRUCTIONS)

1. PTO, joints and telescoping shafts.
2. Swivel tow bar hitch.
3. All cylinders pivot bushings.
4. All moving parts that can be greased.
5. Steering system kingpins and axle tube bushings.

EVERY 40 HOURS OF OPERATION

1. Check all oil chambers for proper oil level.
2. Grease hubs of wheel bearings.
3. Torque wheel nuts on all tires. **(as per recommended torque specifications)**

EVERY END OF SEASON OF OPERATION

1. Change oils in all oil chambers with recommended oil.
2. Grease steering system kingpins and axle tube bushings with extra amount of grease while turning axle in both directions in order to push out all the old grease.
3. Remove brass breather vent from bottom of steering cylinder and clean with solvent and compressed air. **DO NOT USE WIRE BRUSH, VENT WILL BE DAMAGED.**



NOTE Refer to “HYD STEERING TANDEM” in Parts Section for location.

4. **Empty unit completely.**
5. Clean exterior and interior of unit thoroughly with a high pressure washer.
6. Drain unit completely. Open all drain plugs and or doors.
7. Wipe a thick coat of grease on all cylinder rods before storing unit.
8. Proceed to a complete lubrication of the unit.
9. Store inside out of the weather.
10. Check for any hydraulic oil or any oil that may be leaking out. **(Repair or replace as needed)**



WARNING

Torque lug nuts to 420 ft/lbs.
Tighten lug nuts before each day's use for the first 5 days.

Lubrication & Maintenance

Steering Lubrication Tandem Axle

There are four (4) grease fittings located on the center pivot tube; two (2) on the top and two (2) on the bottom of the round center pivot tube of each Tandem arm.

There are four (4) grease fittings located on the kingpins. Two (2) on the top and two (2) on the bottom.

To grease the hinge kingpins, it is best to have the wheels steering straight one time, to the left the next time and finally to the right. This process insures that grease is getting to all areas of the kingpin.

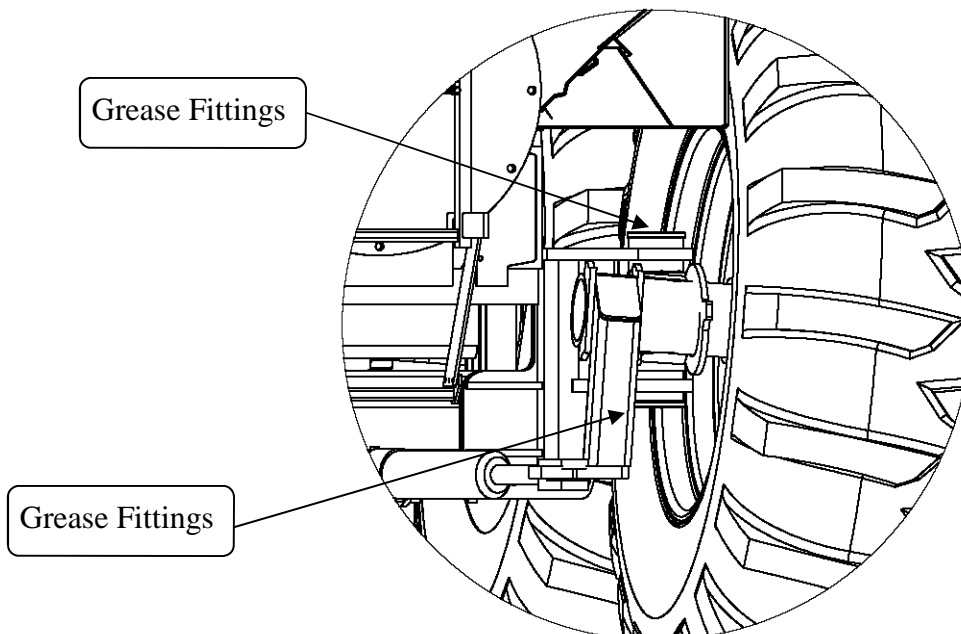
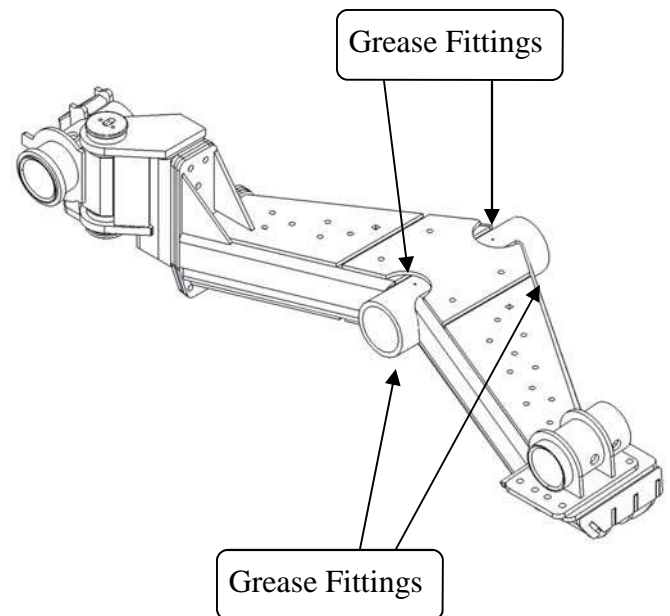
Grease each location until new grease can be seen being pushed out.

The king pin requires grease every 4 hours the unit is in operation.

Proper steering is dependant upon adequate greasing.

When conditions are dry and dusty, the tandem arms and kingpins will require grease more often.

The tandem axle pivot tube requires grease every 8 hours the unit is in operation.

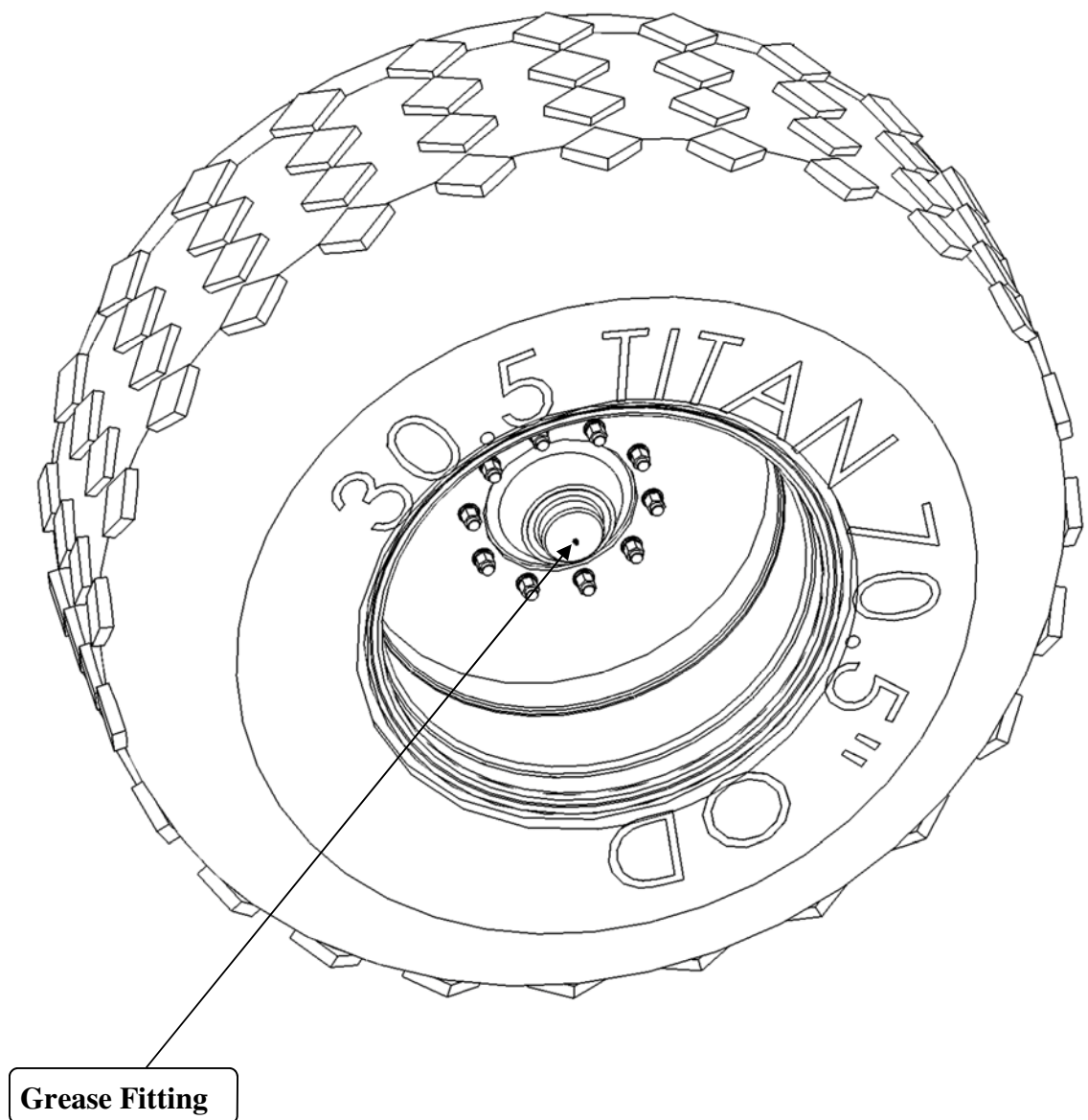


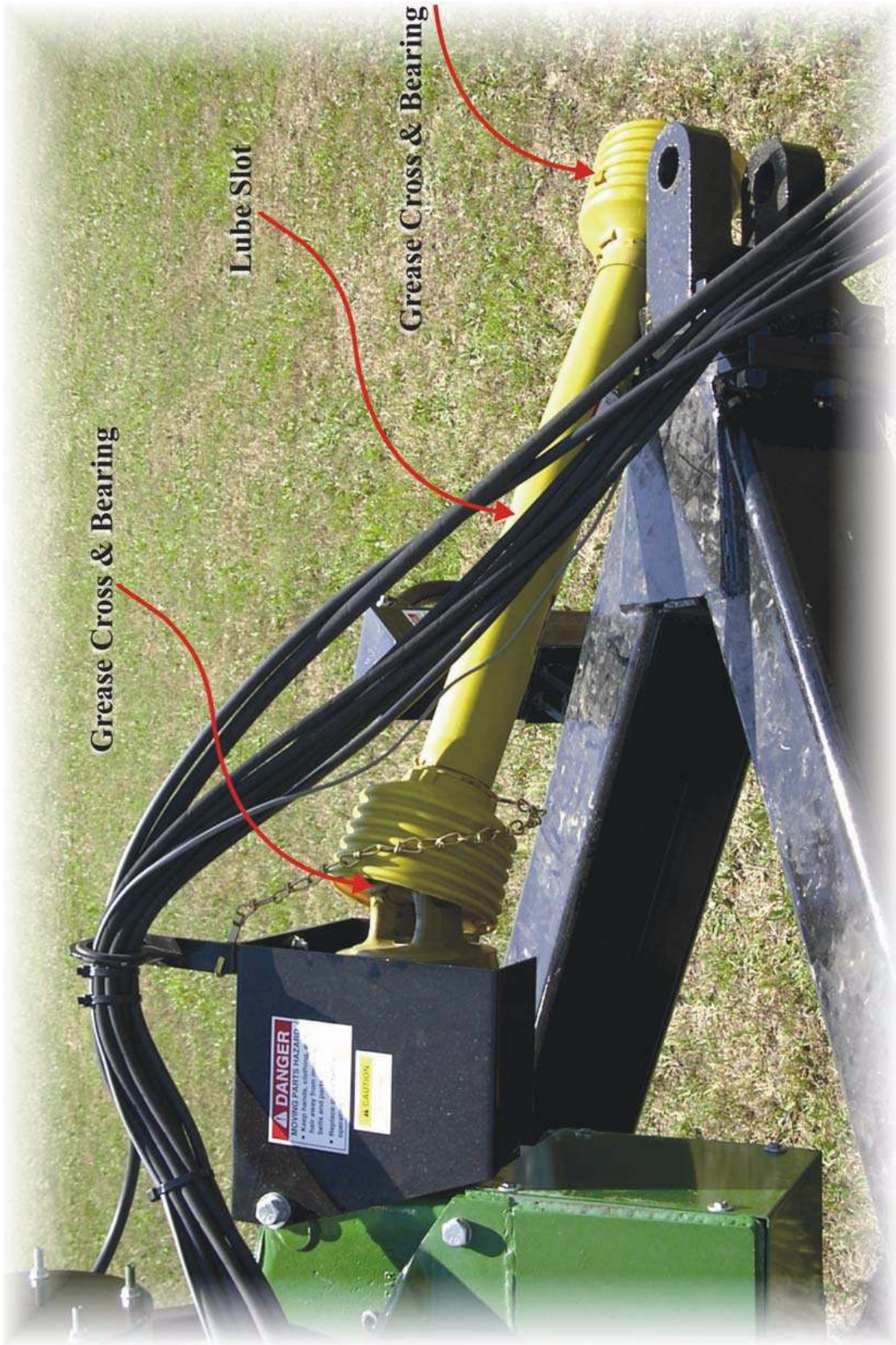
NOTE Grease thoroughly before pressure washing near kingpins.

Hub:

Check and pack wheel hub bearings seasonally.

Grease every 40 hours of operation.

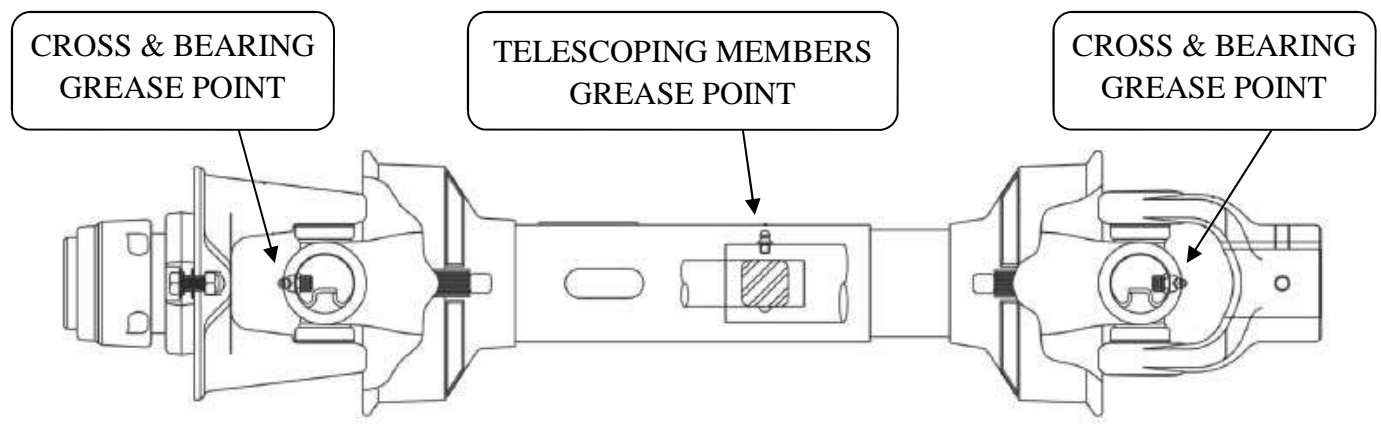






Lubrication & Maintenance

PTO Lubrication Specification



LUBRICATE ALL FITTINGS WITH A GOOD QUALITY LITHIUM SOAP BASE E.P. GREASE MEETING THE N.L.G.I. #2 SPECIFICATIONS AND CONTAINING NO MORE THAN 1% MOLYBDENUM DISULFIDE. (EX. SHELL SUPER DUTY OR EQUIVALENT)

AN E.P. GREASE MEETING THE N.L.G. I. #2 SPECIFICATIONS AND CONTAINING 3% MOLYBDENUM DISULFIDE MAY BE SUBSTITUTED IN THE TELESCOPING MEMBERS ONLY. (EX. MOBIL OIL COMPANY, "MOBILE GREASE COMPANY", SHELL OIL COMPANY, "RETINAX AM", TEXACO, "MOLYTEX EP #0 AND #2.")

GREASE RECOMMENDATIONS

<u>INTERVAL</u>	<u>LOCATIONS</u>	<u>AMOUNT</u>
2 HRS.**	CROSS & BEARINGS	1 PUMP
2 HRS.**	TELESCOPING MEMBERS	4-8 PUMPS

CAUTION!! REPLACEMENT PARTS ARE NOT LUBRICATED

REPLACEMENT PARTS MUST BE LUBRICATED AT TIME OF ASSEMBLY. USE AMOUNT LISTED ABOVE PER LOCATION THEN FOLLOW LUBE RECOMMENDATIONS ABOVE FOR LUBRICATING INTERVALS.

PTO Maintenance

This Manual is intended to point out some of the basic safety situations which may be encountered during the normal operation and maintenance of your machine and to suggest possible ways of dealing with these conditions. Read the manufacturer's operator manuals before operating the equipment. If there are no manuals with the machine — request them from the manufacturer. Study them before you start work.

If there is something in the manuals you don't understand, ask your supervisor or equipment dealer to explain it to you.



**This Safety Alert Symbol means
Attention! Become alert!
Your safety is involved!**

Operating the PTO

When finishing operation of PTO driven equipment, shift PTO control to neutral, shut off the engine and wait until the PTO stops before getting off the tractor.

Do not wear loose fitting clothing or long, free hanging hair when operating the power take-off, or when near rotating equipment.

When operating stationary PTO driven equipment, always apply the tractor parking brake lock and block the rear wheels front and back.

To avoid injury, do not clean, adjust, unplug or service PTO driven equipment when the tractor engine is running.

Never exceed the recommended operating speed for the particular equipment in use (see implement operator's manual).

PTO mounted drive shafts must only be used for their intended purpose

Implement input drivelines, clutches and freewheels are designed for specific machine types and power requirements. They must not be replaced by any shaft other than that recommended by the implement manufacturer. Note the tractor and implement manufacturers' Operating Instructions. Ensure that the implement input driveline is securely connected at both ends.

Lubrication & Maintenance

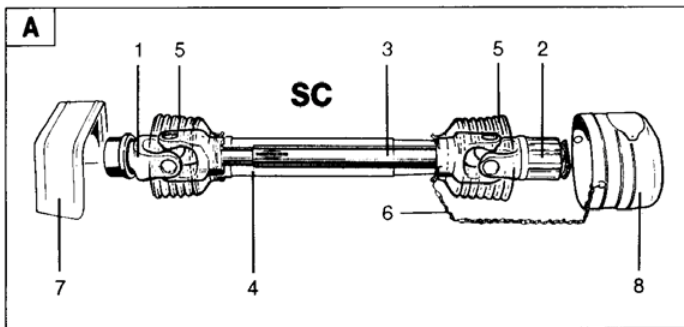
PTO Maintenance

A) Only use a completely guarded drive system:

PTO drive systems with complete guarding, include the tractor master shield (7), the implement input driveline guard (4 - 6) and the implement shielding (8) and must be installed at all times

If any component of the guarding system has been removed for any reason, it must be replaced or repaired prior to operation of the machine.

- | | |
|--|---|
| 1. Quick-release end yoke | Implement input driveline |
| 2. Overload and overrunning clutches | |
| 3. Inner and outer sliding profiles | |
| 4. Inner and outer guard tubes | Complete implement input driveline guard SC |
| 5. Guard cone | |
| 6. 1 chain, 2 chains (depending on design) | |
| 7. Tractor master shield | |
| 8. Implement safety shield | |

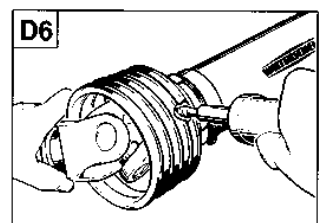
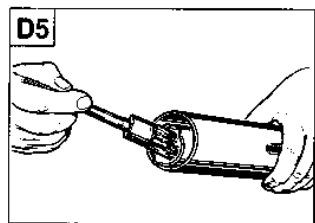
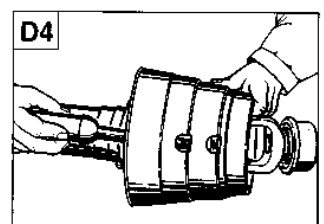
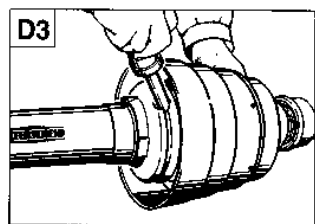
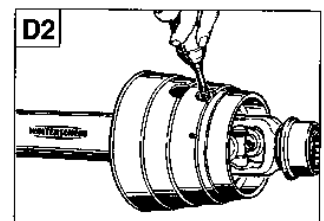
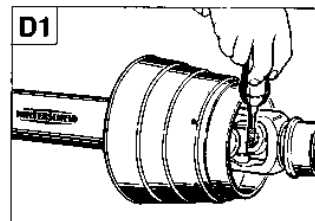
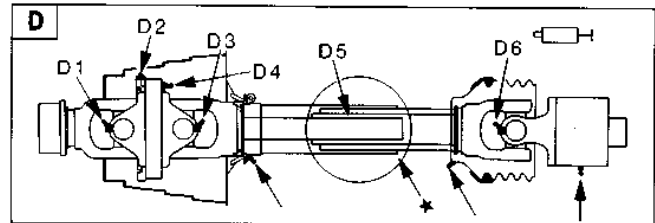


D) Lubrication (Figures D1 - D6)

→ Lubricate with quality grease before starting work and every 8 operating hours. Clean and grease the implement input driveline before each prolonged period of non-use.

Molded nipples on the guard near each guard bearing are intended as grease fittings and should be lubricated every 8 hours of operation! Telescoping members must have lubrication to operate successfully regardless whether a grease fitting is provided for that purpose! Telescoping members without fittings should be pulled apart and grease should be added manually.

* Check and grease the guard tubes in winter to prevent freezing.



PTO Maintenance

E) Coupling the implement input driveline (Figures. E1—E3)

Clean and grease the PTO and implement input connection (II C)

AS-Lock

1. Pull locking collar and simultaneously push implement input driveline onto PTO shaft until the locking device engages.

QD Pin-Lock

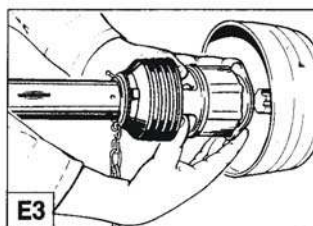
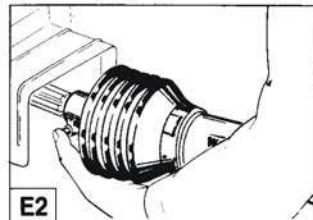
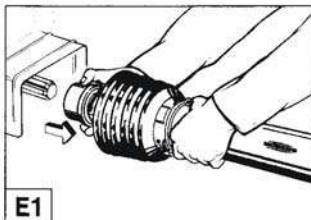
2. Press QD pin and simultaneously push implement input driveline onto PTO shaft until pin engages.


Push-Pull Lock

3. Pull Locking collar and simultaneously push implement input driveline onto PTO shaft until the locking device engages



Check to insure all the locks are securely engaged before starting work with the implement input driveline.



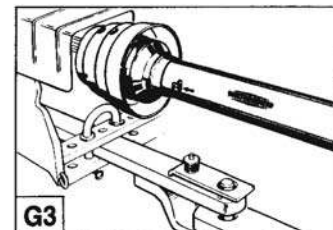
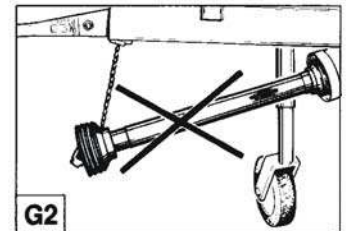
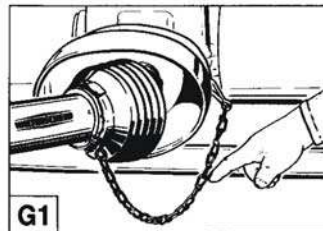
- F)  **Check the length of the telescoping members to insure the driveline will not bottom out or separate when turning and/or going over rough terrain.**

Length modification of the implement input driveline should only be done at the direction of the implement manufacturer!

G) Chains (Figure G1 - G3)

Note: The chain is intended to prevent the guard from rotating against non-moving parts and thereby reducing the likelihood of damage. A properly installed chain will increase the service life of the guard when properly maintained.

1. Chains must be attached to allow sufficient articulation of the shaft in all working positions. Care must be taken to be sure that chain does not become entangled with drawbar hitch or other restrictions during operation or transport of machine.
2. The chain is not designed to carry the weight of the implement input driveline. Damage will occur if suspended by chain.



PTO Maintenance

H) Overload and overrunning clutches (Figures. H1—H8)

1. Radial pin™ clutch

When overload occurs, the torque is limited and, during the period of slipping, is transmitted in a pulsating manner. Noise acts as a warning.

2. Cut-out clutches — 3. Cam-type cut-out clutches

When the torque is exceeded, power flow is interrupted. The torque is re-established by reducing the speed of and disengaging the PTO.

4. Shear bolt clutches

When the torque is exceeded, power flow is interrupted due to the bolt shearing. The torque is re-established by replacing the broken shear bolt. Use only the bolt specified in the operator's manual for a replacement!

5. Friction clutches

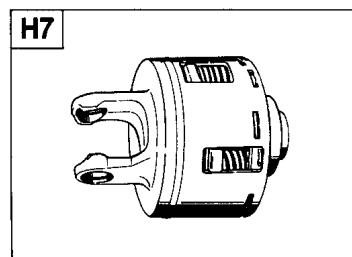
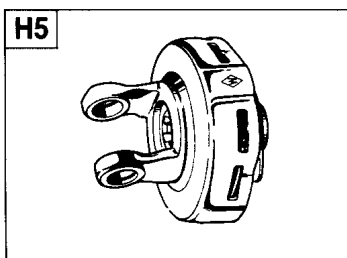
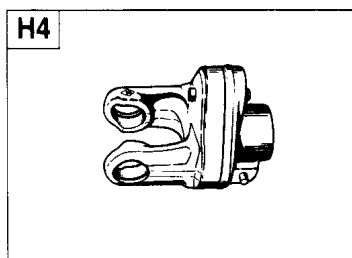
When overload occurs, the torque is limited and transmitted constantly during the period of slipping. Short-duration torque peaks are limited.

! Prior to initial operation and after long periods out of use, release the pressure on the disks to insure proper function.

- Tighten nuts until friction disks are released. Rotate clutch fully.
- Turn nuts fully back. Now the clutch is ready for use.

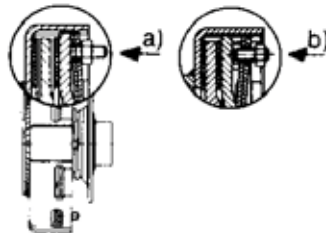
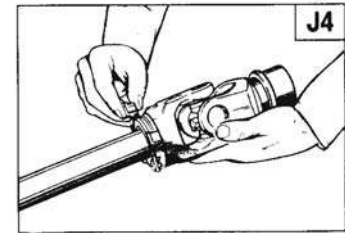
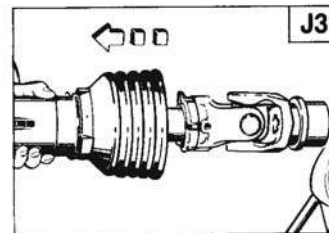
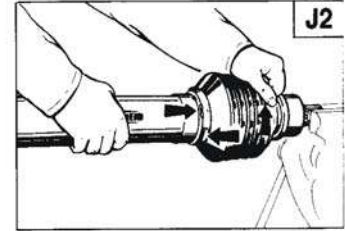
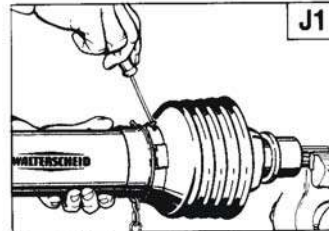
Figure. H5 shown, also applies to other models of friction clutch (see Figure H7)

- Overrunning clutches** protect the drive against heavy rotating masses.
- Friction-type overrunning clutches** are a combination of friction clutches and overrunning clutches.
- Elastic clutches** absorb shocks and vibrations.



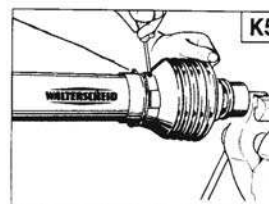
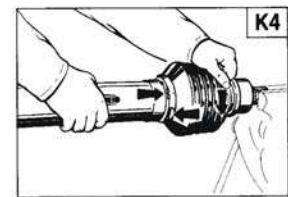
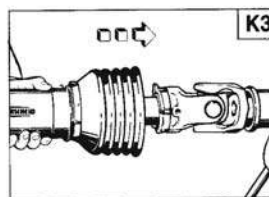
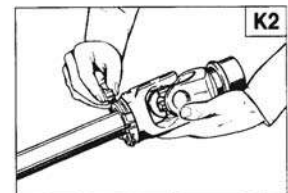
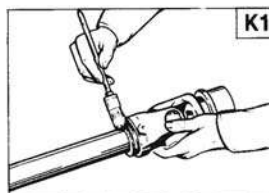
J) To disassemble guard: (Figures. J1—J4)

- Remove locking screw.
- Align bearing tabs with cone pockets.
- Remove half-guard.
- Remove bearing ring.



K) To assemble guard: (Figures. K1—K5)

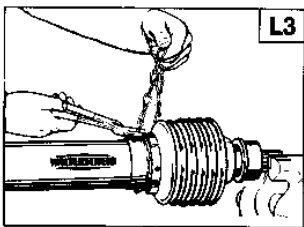
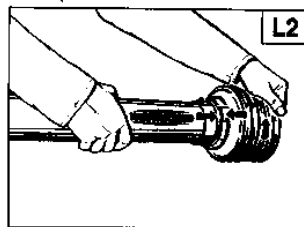
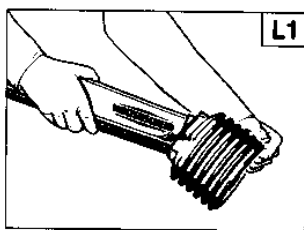
- Grease yoke groove and inner profile tube.
- Fit bearing ring in groove with recesses facing profile tube.
- Slip on half-guard.
- Turn cone until it engages correctly.
- Install locking screw.



PTO Maintenance

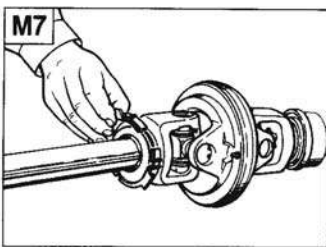
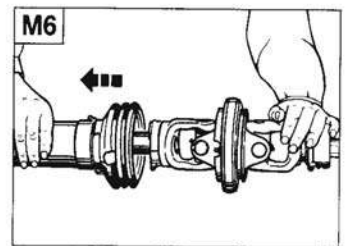
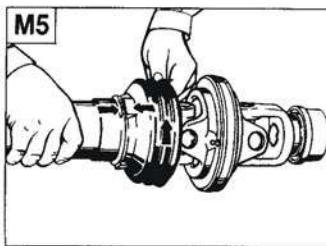
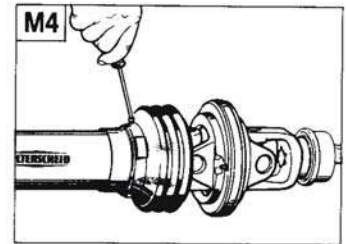
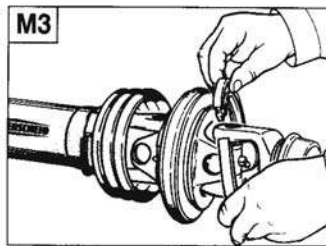
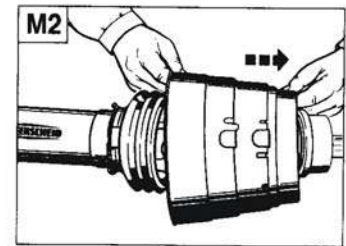
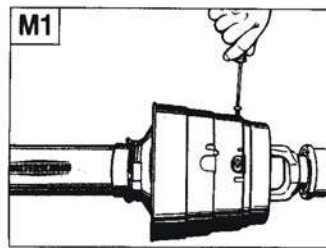
L) To assemble cone:

1. Disassemble guard (Figures. J1 - J3). Remove old cone (e.g. cut open with knife) Take off chain. Place neck of new cone in hot water approx 80°C / 180° F and pull onto bearing housing (Figure. L1)
2. Turn guard cone into assembly position (Figure. L2). Further assembly instructions for guard (Figures. K1 - K5).
3. Reconnect chain if required (Figure. L3).



M) Disassembly: Wide-angle implement input driveline guard (Figures. M1 – M7)

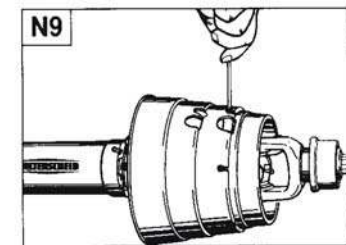
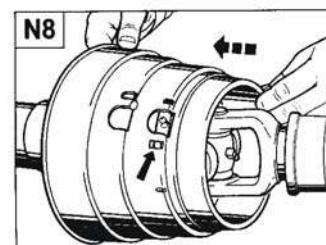
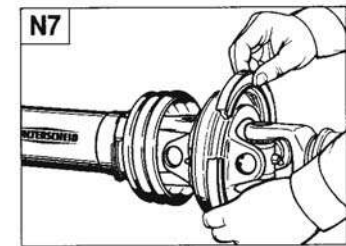
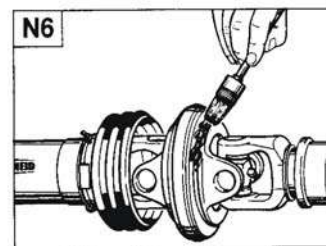
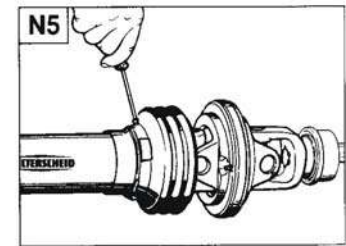
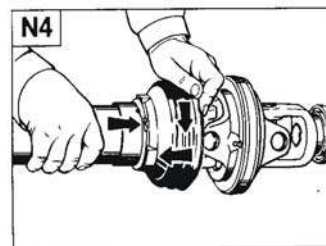
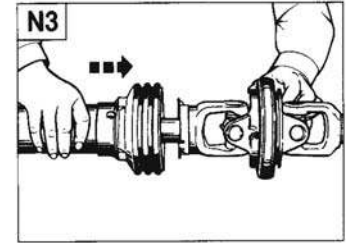
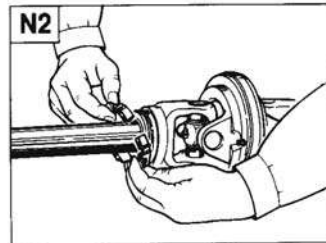
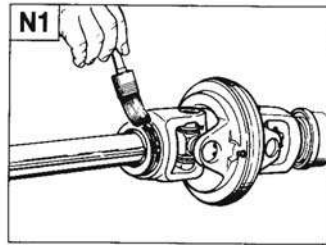
1. Remove locking screws
2. Remove double yoke guard cone.
3. Remove bearing ring
4. Remove locking screw.
5. Turn cone to assembly position.
6. Remove half-guard.
7. Remove bearing ring.



PTO Maintenance

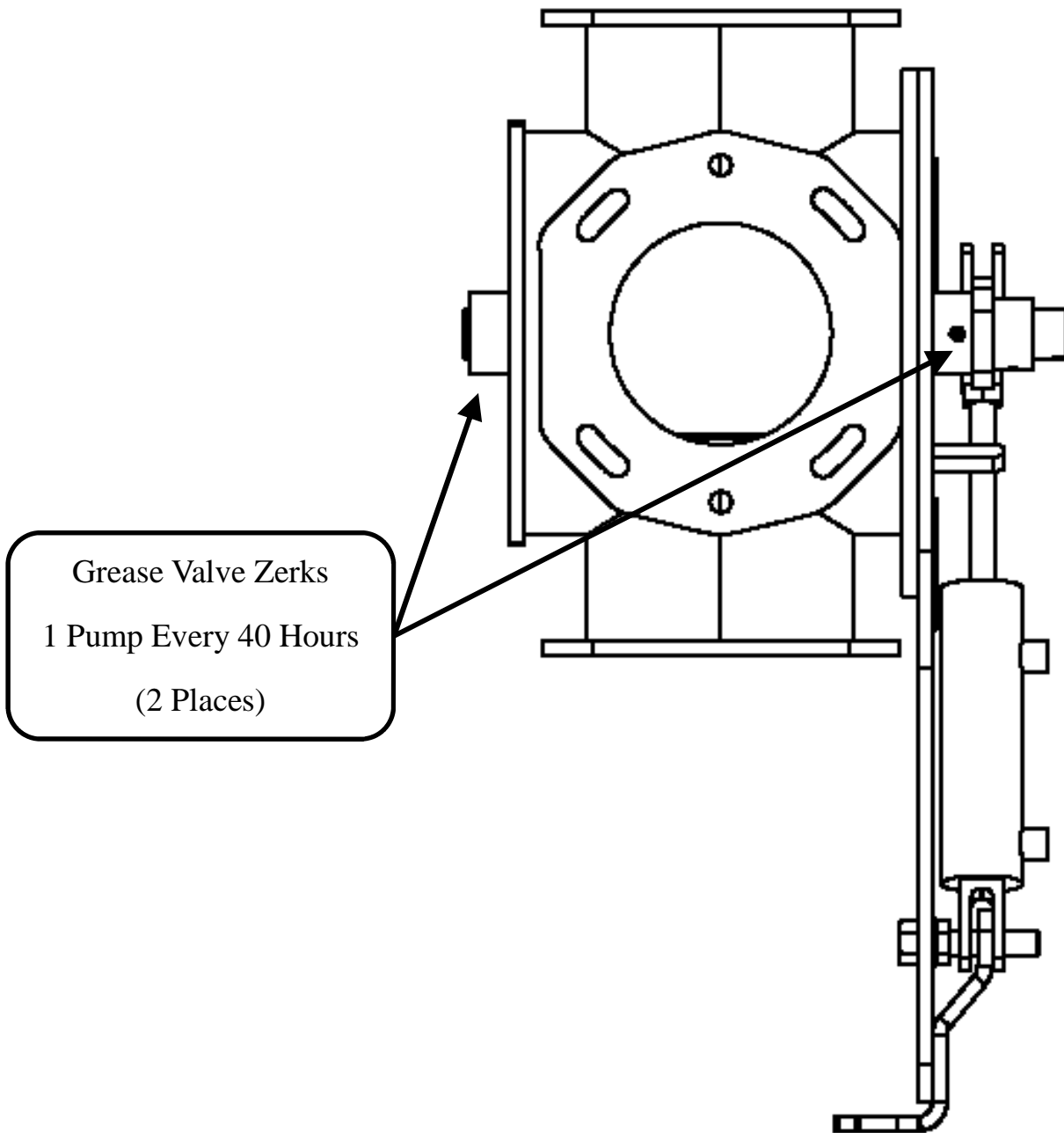
N) Assembly: Wide-angle implement input driveline guard (Figures. N1 - N9)

1. Grease yoke groove and inner profile tube.
2. Fit bearing ring in groove with recesses facing profile tube.
3. Slip on half-guard.
4. Turn cone until it engages correctly.
5. Tighten locking screw.
6. Grease bearing groove in double yoke.
7. Insert bearing ring.
8. Slide guard cone for double yoke over cam from the connecting end. Make sure that holes for screws are visible in the recesses.
9. Tighten locking screws.



Lubrication & Maintenance

Grease Instructions for 3-Way Valve P# 84640





1) Trouble with steering of rear axles on tandem or front and rear of Tridem models.

- A. Ensure the hydraulic line for the steering (**YELLOW** color) is in the right side of the tractors hydraulic bank.
- B. Grease the kingpin assemblies two (2) grease fittings on both sides in the straight position and in the turned position. This kingpin assembly must be greased daily in order for the steering system to function properly.
- C. System may have air trapped inside resulting in a malfunction. This requires the hydraulic steering system to be bled. See Steering System Bleeding Instructions.
- D. If the system is still not steering properly, call Balzer's Service Department at 1-800-795-8551 Extension 134 or 0 for the operator.

2) Trouble backing up with steering wheels going in the wrong direction (Note: This may occur in extreme conditions such as mud, ice and/or snow.)

- A. Take the hydraulic line out of the float position and then move the lever to pressurize the cylinders. This will straighten the tires and then lock them.
- B. System is still not steering properly, call Balzer's Service Department at 1-800-795-8551 Extension 134 or 0 for the operator.

3) Trouble figuring out which hydraulic hoses go where.

- A) RED marked hose = Brake Cylinders (Note: if option is available on your cart.)
- B) YELLOW marked hose = Steering System
- C) BLUE marked hose = ?????
- D) BLUE/RED = ?????
- E) ORANGE marked hose = ?????
- F) NO COLOR = ?????



County Road 27 East, PO Box 458, Mountain Lake, MN 56159

Phone Number:

(800) 795-8551

(800) 727-3133

Main:

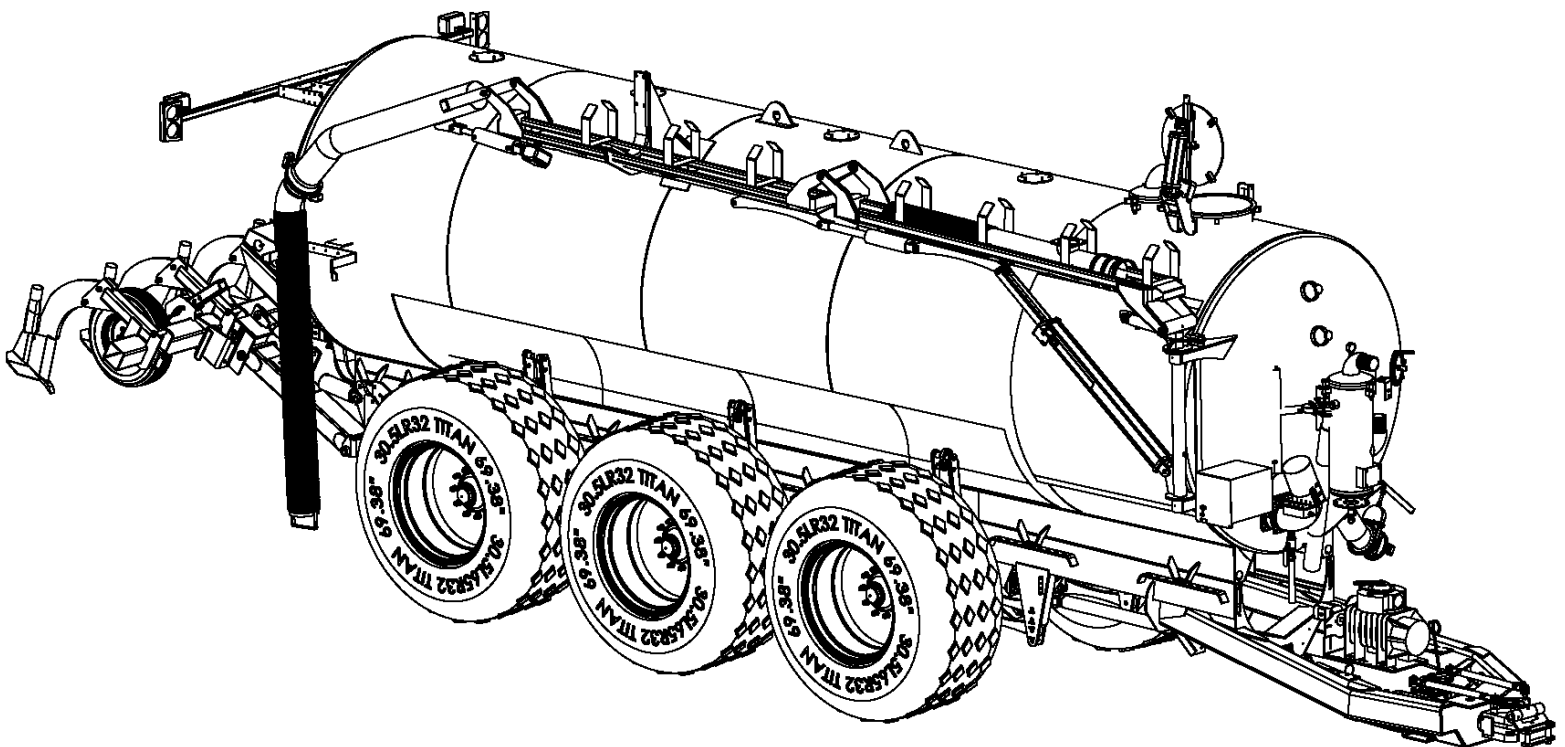
(507) 427-3133

Fax Number:

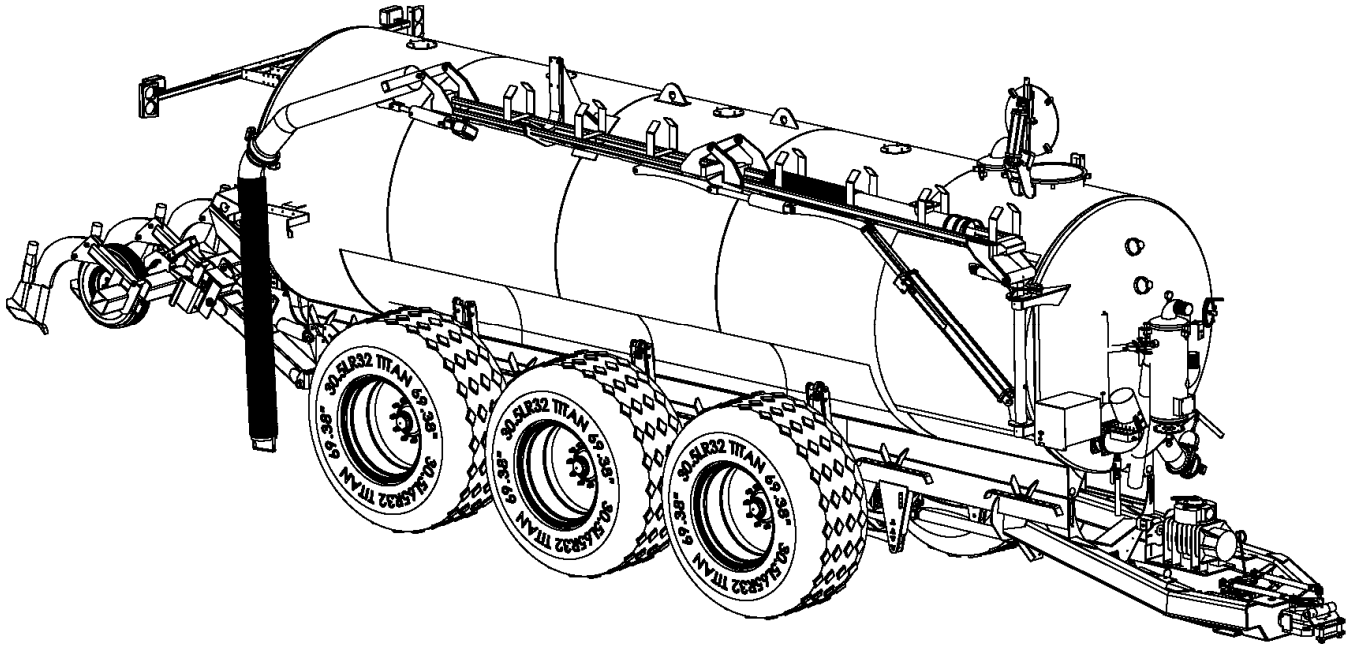
(507) 427-3640

Website:

<http://www.balzerinc.com>



Manure Tanks



ES 6750 & ES 7500

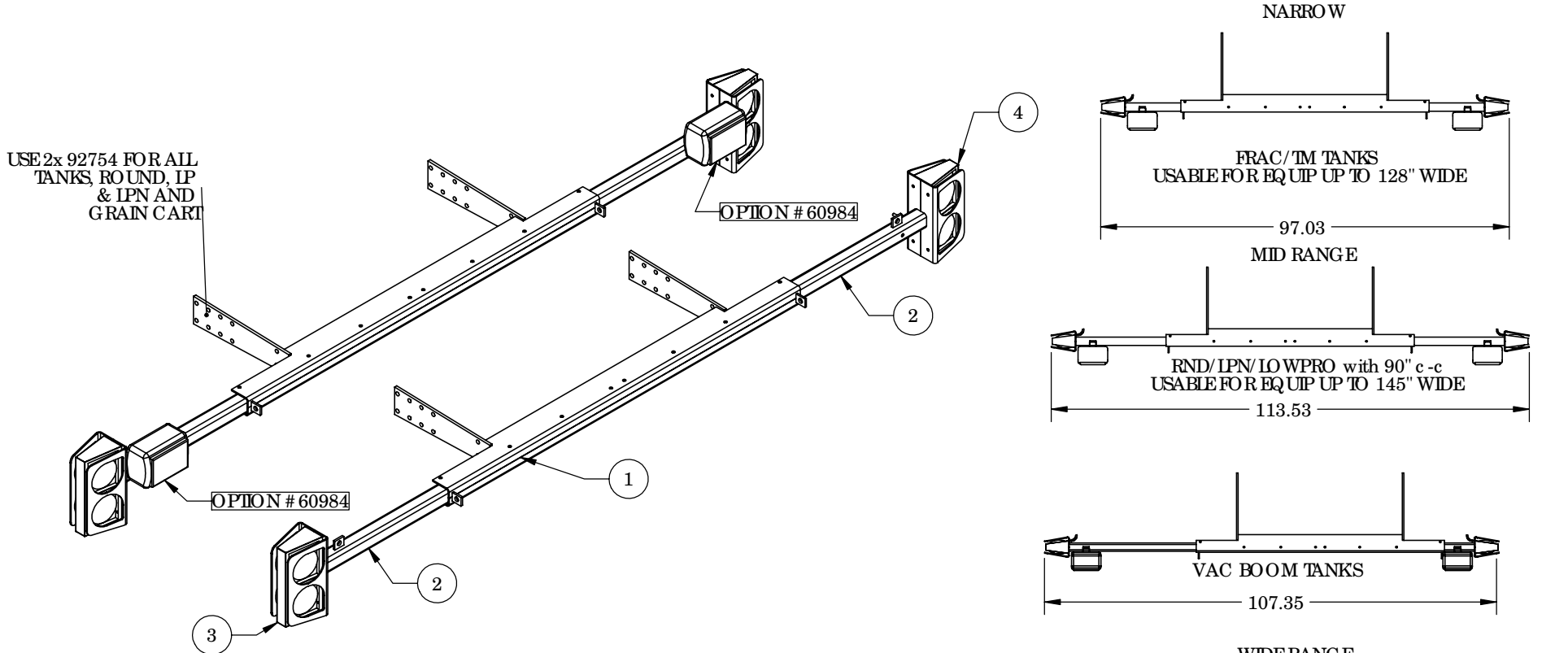


PARTS MANUAL

April 2009

Parts

91350 Light Bar



2QTY -# 60984 WORKLIGHT3"X5" HALGON

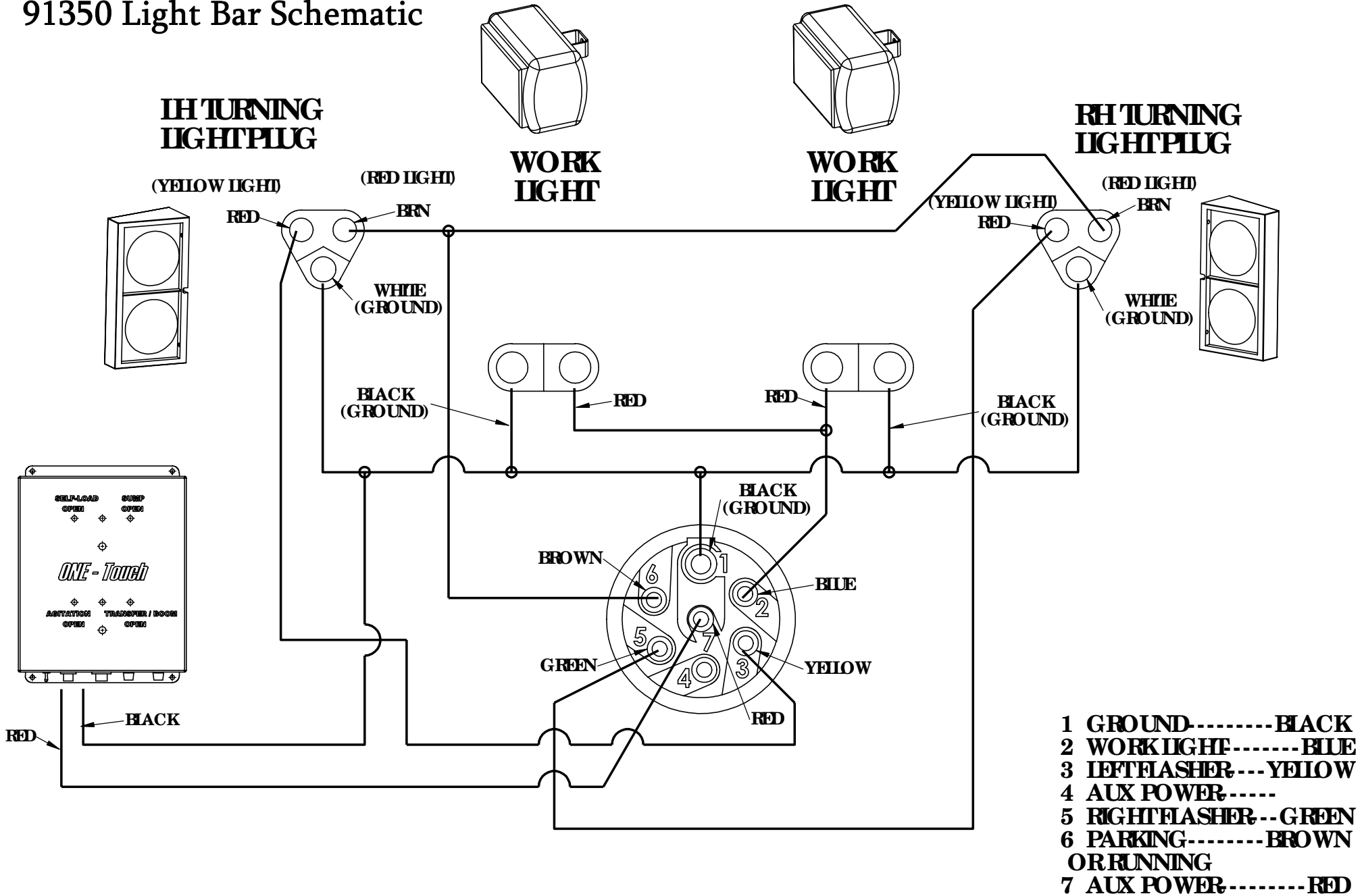
ITEM #	QTY.	PART#	DESCRIPTION
1	1	92755	LIGHTBAR RECEIVER
2	2	91352	LIGHTBRACKETWELD
3	1	40763	LIGHTTURNING LH
4	1	40762	LIGHTTURNING RH
5	43	29937	ELECTRICAL WIRE 16/6 (PER FT)
6	6	2081	NUT.31 WHIZ LOCK ZP.
7	6	1185	BOLT HEX HEAD .31" x 1" GRD5
8	1	33224	RUBBER BOOT FOR 27701
9	2	40766	WIRING PIG TAIL/ TAIL LIGHT
10	11	31441	WIRE NUT 22-14 GA ORANGE
11	1	27701	PLUG ELECT 7 CONNECTOR FML
12	3	15742	CLAMP, PIPE 1/4"

LAST REVISED
Friday, May 01, 2009 2:28:01 PM

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Parts

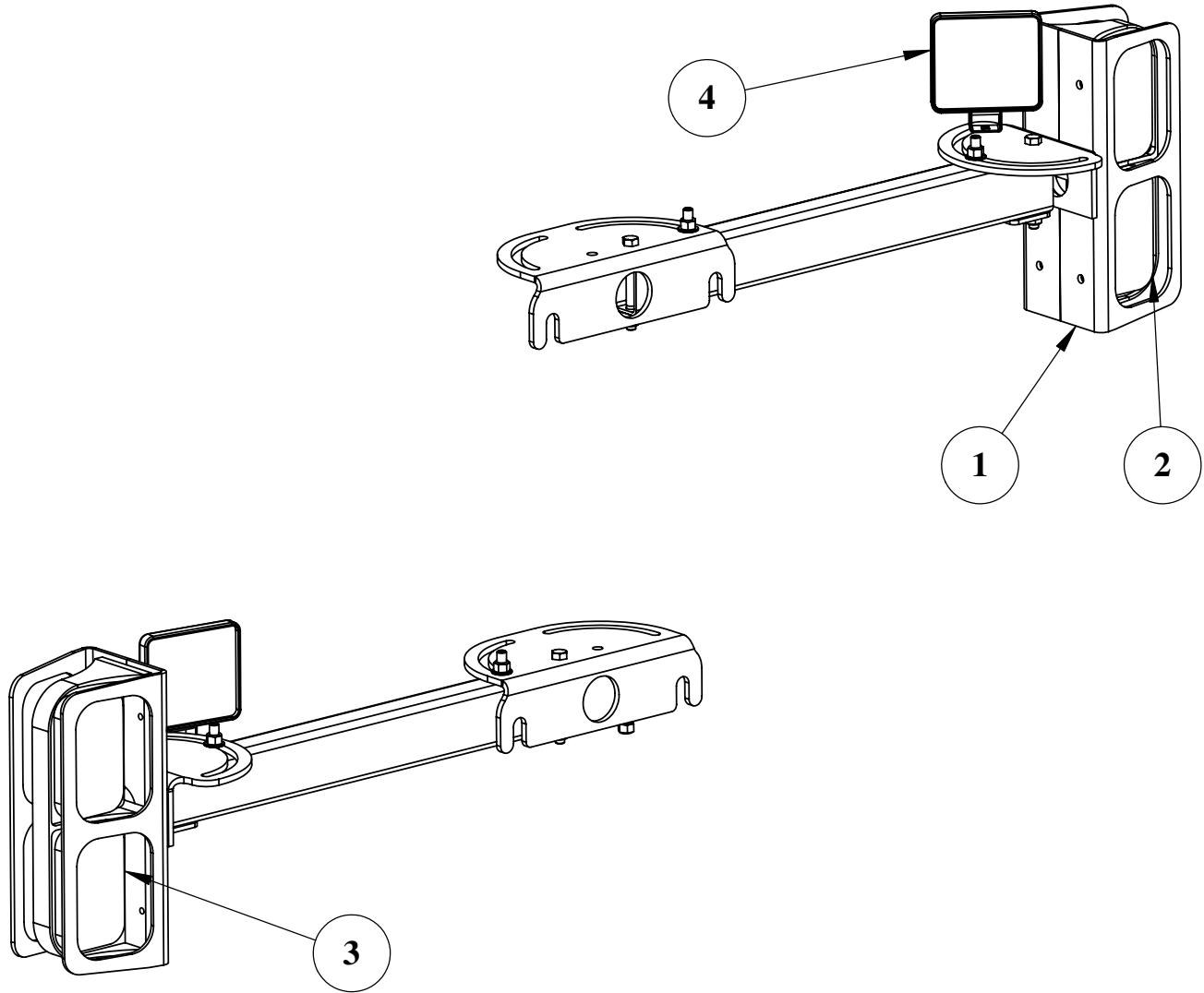
91350 Light Bar Schematic



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Tuesday, March 03, 2009 8:53:57 AM

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72785 Running Light Assembly



ITEM #	PART #	DESCRIPTION	QTY.
1	72786	LIGHT BRACKET WELD	2
2	40762	LIGHT TURNING RH	1
3	40763	LIGHT TURNING LH	1
4	60984	WORK LIGHT LED	2
5	72855	WIRE HARNESS KIT GRAIN CART	1

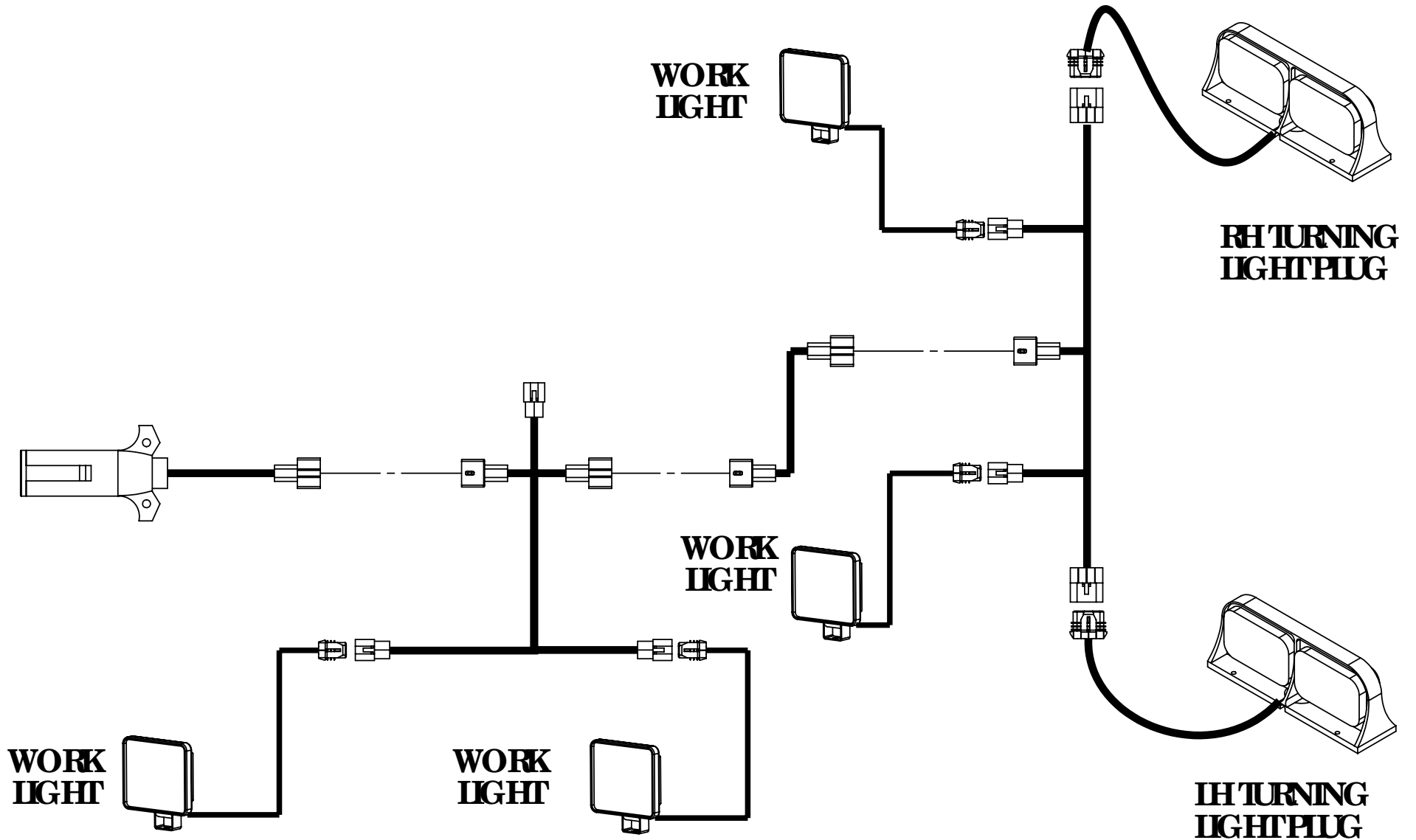
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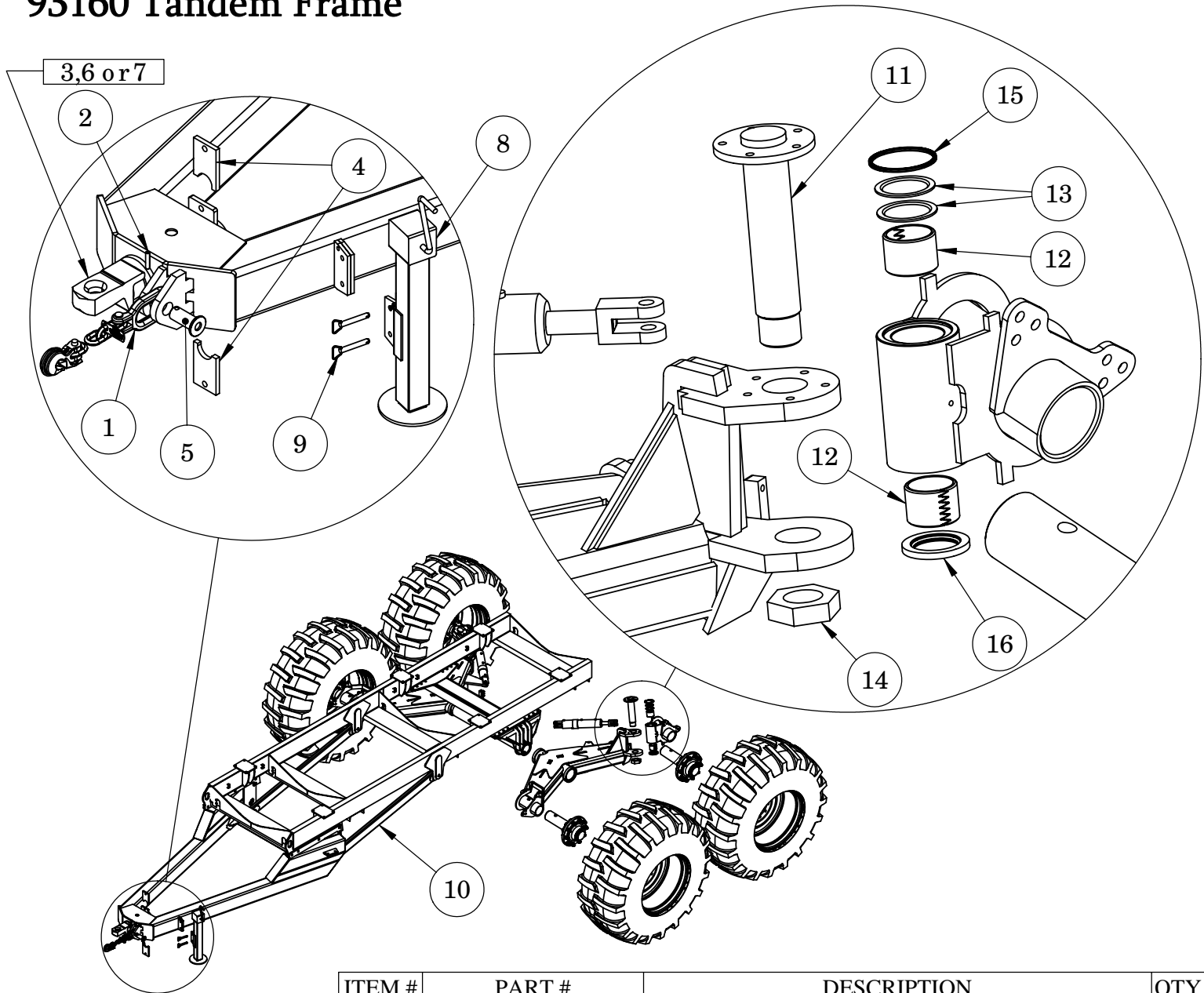
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72785 Running Light Assembly



Parts

93160 Tandem Frame



Items 3, 6 and 7 show available hitch options.

ITEM #	PART #	DESCRIPTION	QTY.
1	96169	CHAIN SAFETY 80,000 LB	1
2	1972	ROLL PIN .5" DIA x 2.50" LG	1
* 3	85517	HITCH PINTLE SWIVEL 2.18" HOLE	1
4	91779	HITCH RETAINING PLATE	2
5	96193	PIN WELD SAFETY CHAIN	1
* 6	72760	HITCH SWIVEL PINTLE -1.69"	1
* 7	93162	HITCH SWIVEL PINTLE -2.88" /CAT 5	1
8	83338	JACK CRANK W/BACKET- SIMOL	1
9	90646	PIN & CHAIN .63x3 WORKING	2
10	900289	TUBE WELDMENT	2
11	900082	AXLE KING PIN BOLT	2
12	28089	TENSION BUSHING 3.50" x 3.00" x2.50" LG	4
13	70123	THRUST WASHER	4
14	900085	NUT JAM 2.75" -12 UNF	2
15	900116	O-RING QUAD 4.12" OD x 0.21"TH -346	2
16	900117	SEAL 3.00" x4.50" x0.43" -TA BUNA	2

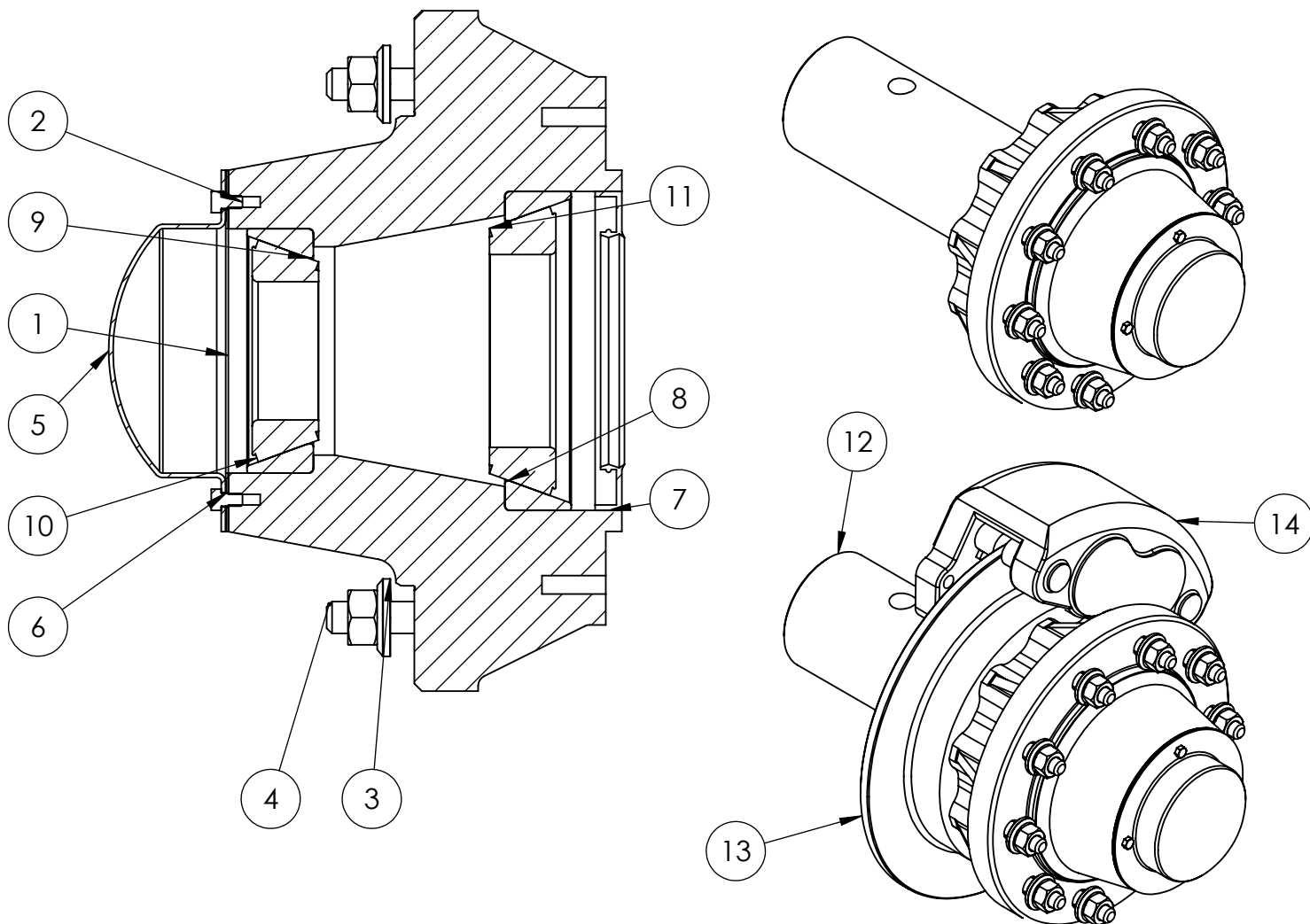
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Hub and Spindles 6" 10 Bolt 6" Solid 13.18" Bolt Circle



ITEM #	PART #	DESCRIPTION	QTY.
1	91851	HUB ASBY 6" / 25,000 LBS / 10-BOLT / 13.18" BC / BRAKE	1
2	1181	BOLT HEXHEAD .31" x .50" - UNC 18 GR5	4
3	91849	NUT LUG 22mm x 1.5 -SWIVEL FLANGE	10
4	50400	HUB STUD 22MM X 100MM	10
5	50823	HUB CAP 6"	1
6	50824	GASKET 6" HUB	1
7	50825	SEAL 5.50ID x 7.50OD x 0.62 TH BUNA	1
8	50819	BEARING TAPER CUP 5" HUB INNER	1
9	50820	BEARING TAPER CUP 5" HUB OUTER	1
10	50822	BEARING TAPER CONE 5" HUB OUTER	1
11	50821	BEARING TAPER CONE 5" HUB INNER	1
12	900123	SPINDLE ASBY 6" /25,000 LB / 4140HTSR / 13.750	1
13	91858	BRAKE ROTOR DISC 25,000 LBS /19"OD x6"	1
14	91853	BRAKE CALIPER CARLISLE AA4	1

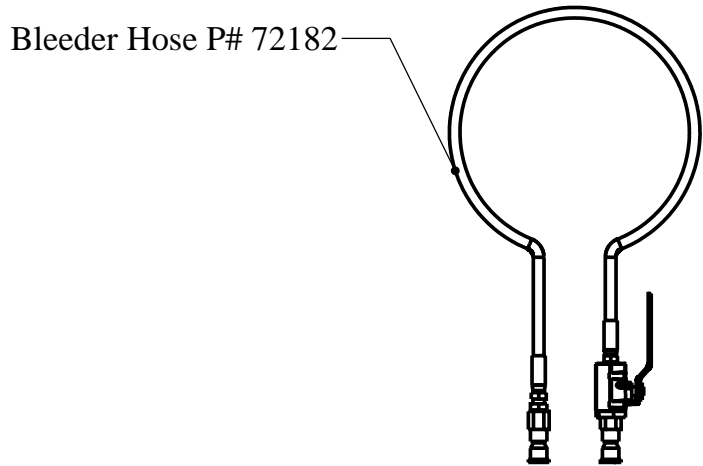
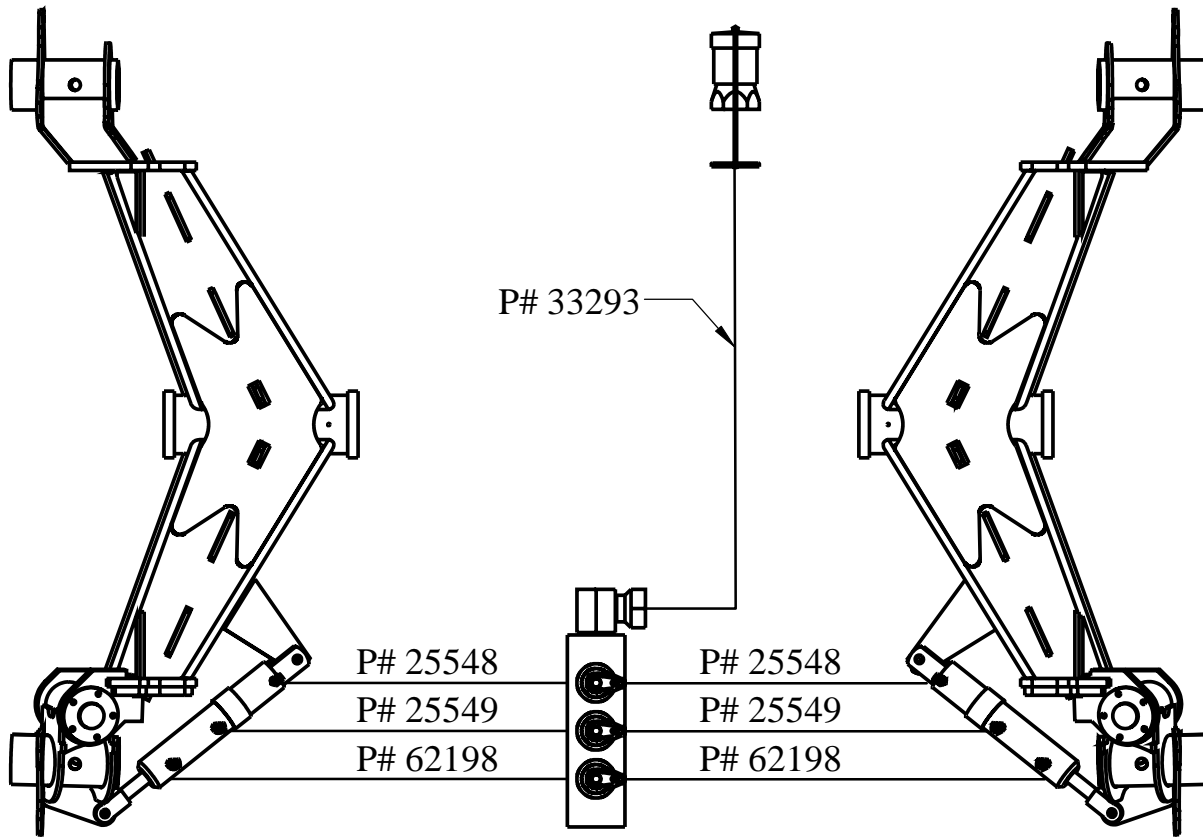
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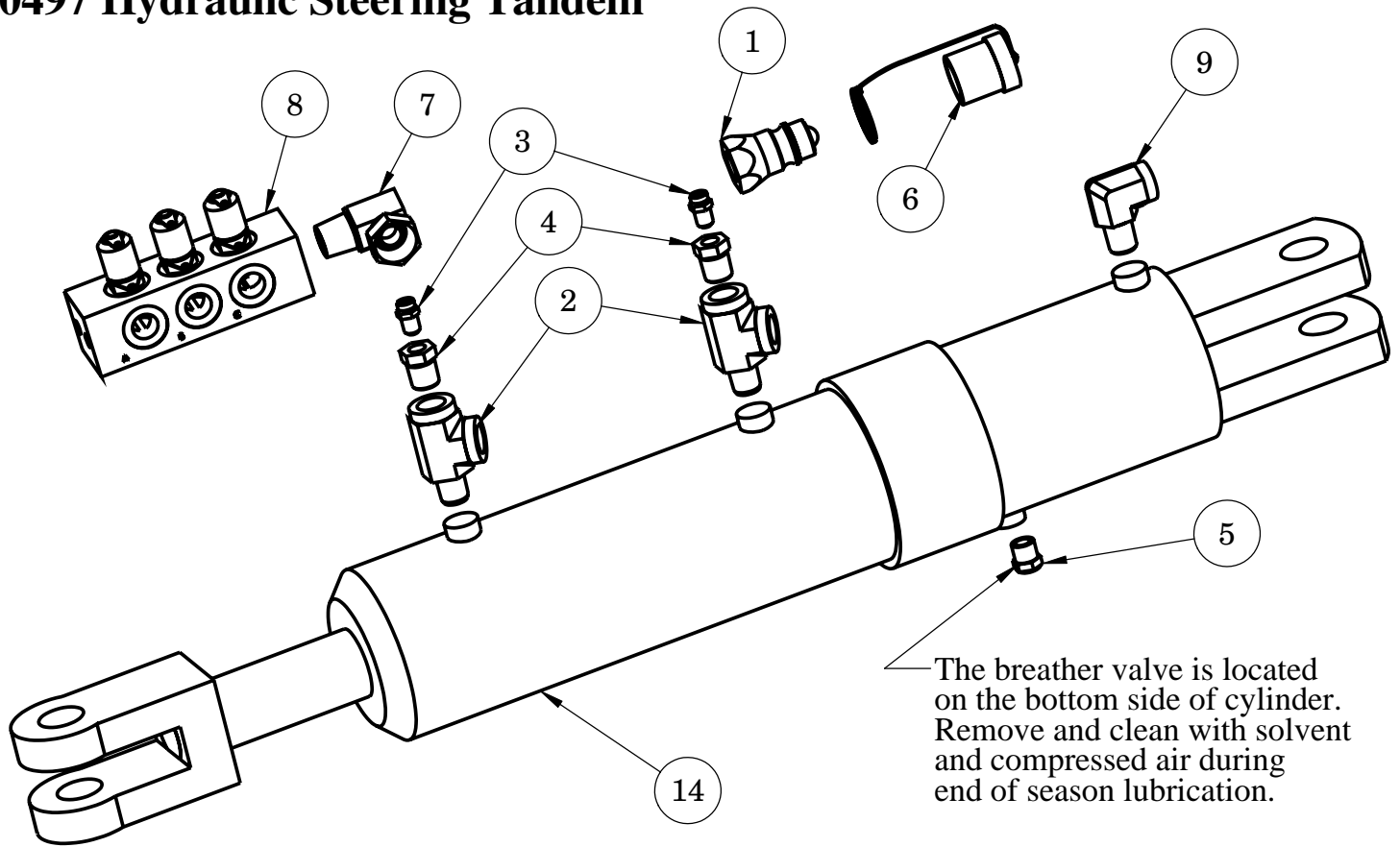
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90497 Hydraulic Steering Tandem



ITEM #	PART#	DESCRIPTION	QTY.
1	25548	HYD HOSE .37X .37NPTMX .560 RMSX 35"LG	2
2	25549	HYD HOSE .37X .37NPTMX .560 RMSX 42"LG	2
3	62198	HYD HOSE .37X .37NPTMX .560 RMSX 37"LG	2
4	33293	HYD HOSE .50X .50NPTMX .50NPTMSX 336"LG	1

90497 Hydraulic Steering Tandem



ITEM #	PART#	DESCRIPTION	QTY.
1	11023	HYD MISC PIONEER MALE/.50NPTFM (S71-4)	1
2	25372	HYD TEE .37NPTMX .37NPTFMX .37NPTFM (5602-6)	4
3	25466	HYD PLUG BLEEDER .12" NPTM	4
4	25467	HYD REDUCER .37NPTMX .12NPTFM (5406-6-2)	4
5	25975	BREATHER .25 NPTBRASS (BV-2)	2
6	28392	HYD MISC PIONEER DUSTCAP (S49-4)	1
7	33166	HYD ELBOW .50NPTMX .50NPTFMS 90DEG (15018-8)	1
8	37520	HYD BLOCKSIEER W/3 1620TESTFIGS	1
9	8216	HYD ELBOW .37NPTMX .37NPTFM X 90 DEG (5502-6)	2
10	62198	HYD HOSE .37X .37NPTMX .560RMSX 37'LG	2
11	33293	HYD HOSE .50X .50NPTMX .50NPTMSX 336'LG	1
12	25548	HYD HOSE .37X .37NPTMX .560RMSX 35'LG	2
13	25549	HYD HOSE .37X .37NPTMX .560RMSX 42'LG	2
14	40761	HYD CYL BOREX STROKEX ROD- STEERING	2

LASTREVISED

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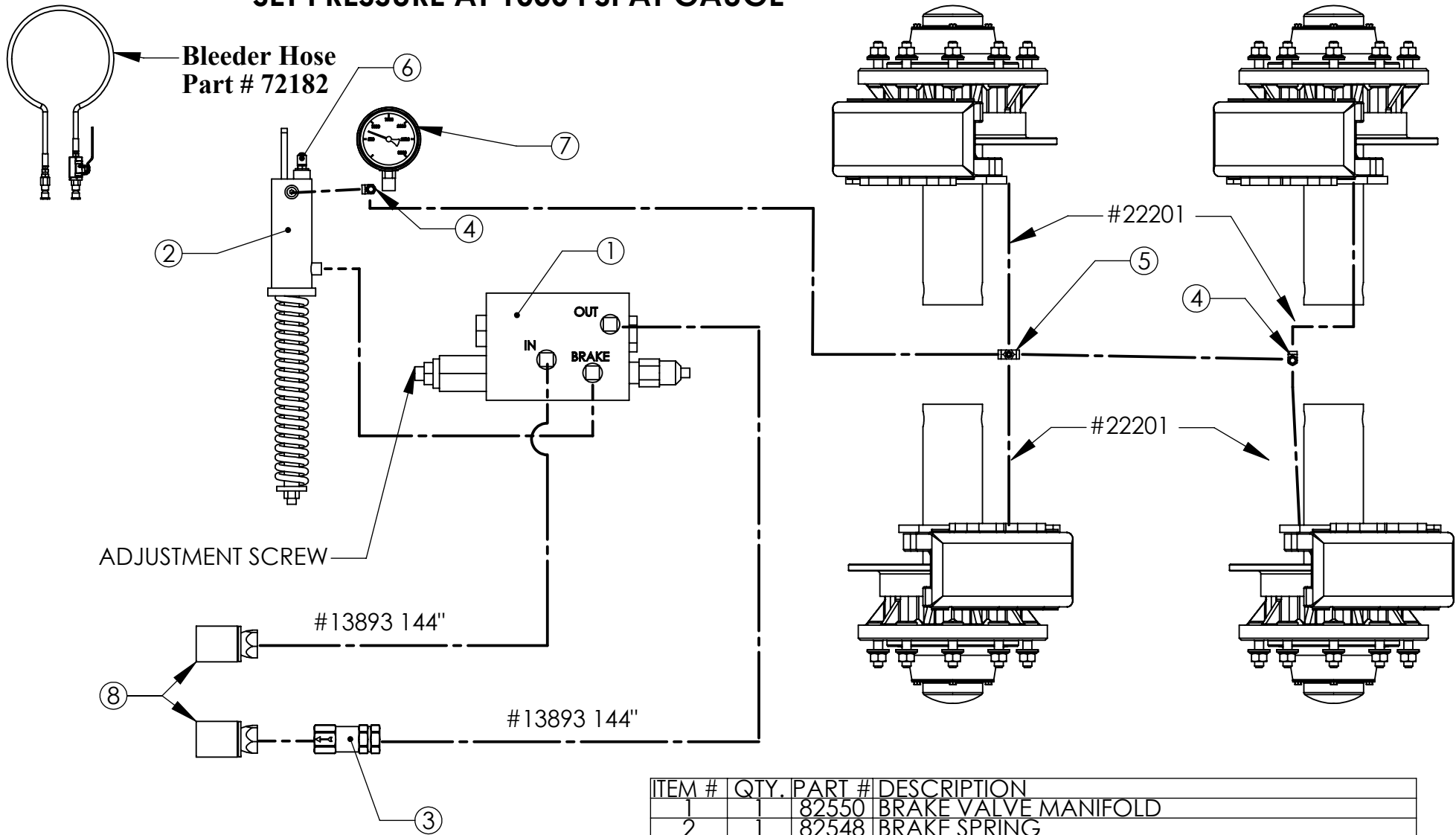
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Parts

Hydraulic Brake Return

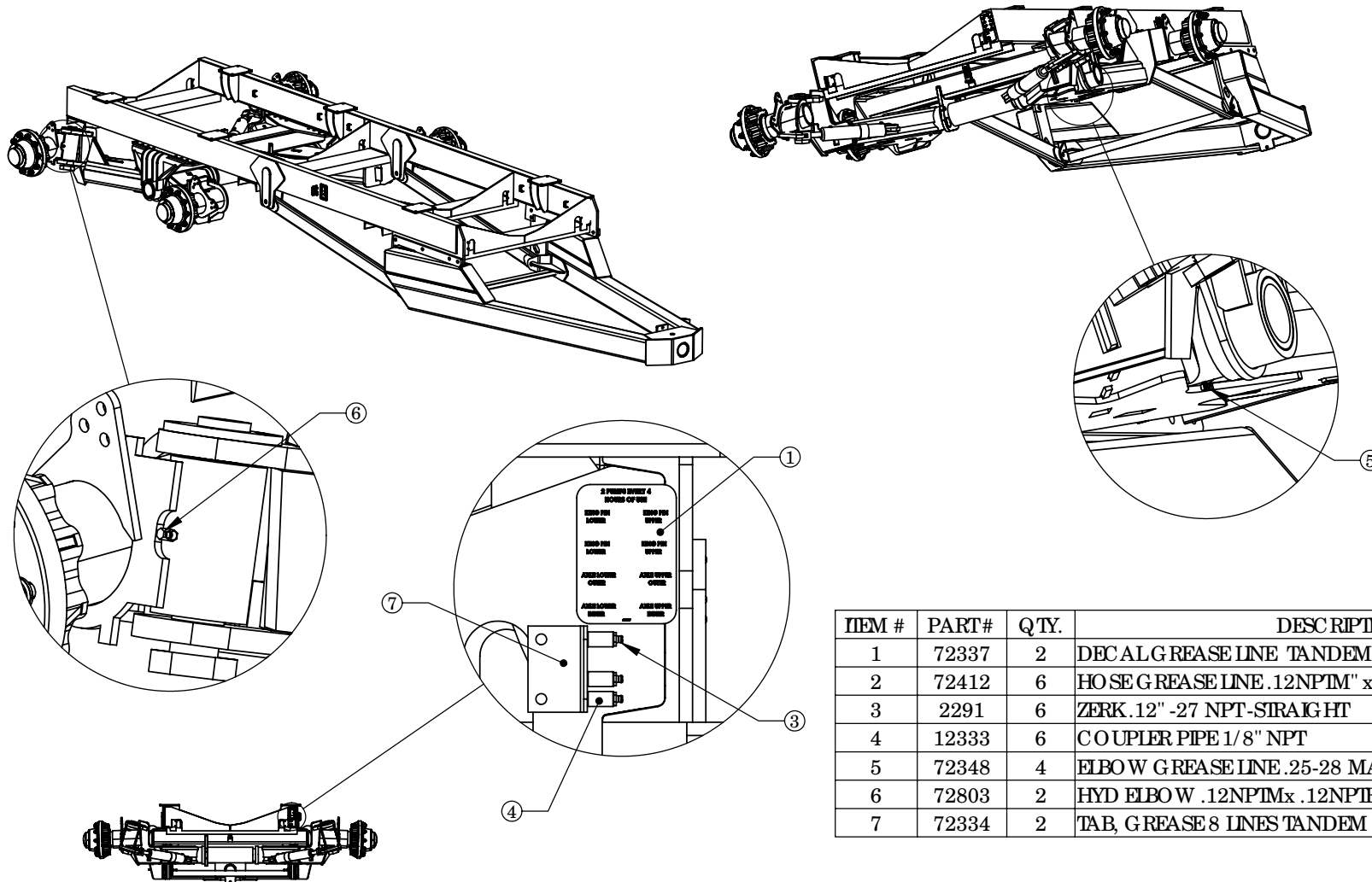
SET PRESSURE AT 1000 PSI AT GAUGE



ITEM #	QTY.	PART #	DESCRIPTION
1	1	82550	BRAKE VALVE MANIFOLD
2	1	82548	BRAKE SPRING
3	1	10459	HYD VALVE CHECK .50" NPTFM x .50" NPTFM
4	2	9957	HYD TEE .25NPTFMX .25NPTFMX .25NPTFM (5605-4)
5	1	36069	HYD CROSS .25NPTFMX .25NPTFMX .25NPTFM (5
6	1	37521	FITTING TST PNT w/ METAL CAP
7	1	8638	GAUGE PRESSURE
8	2	8634	COUPLER QUICK .5NPT M&F SET

Parts

900325 Tandem Grease Bank



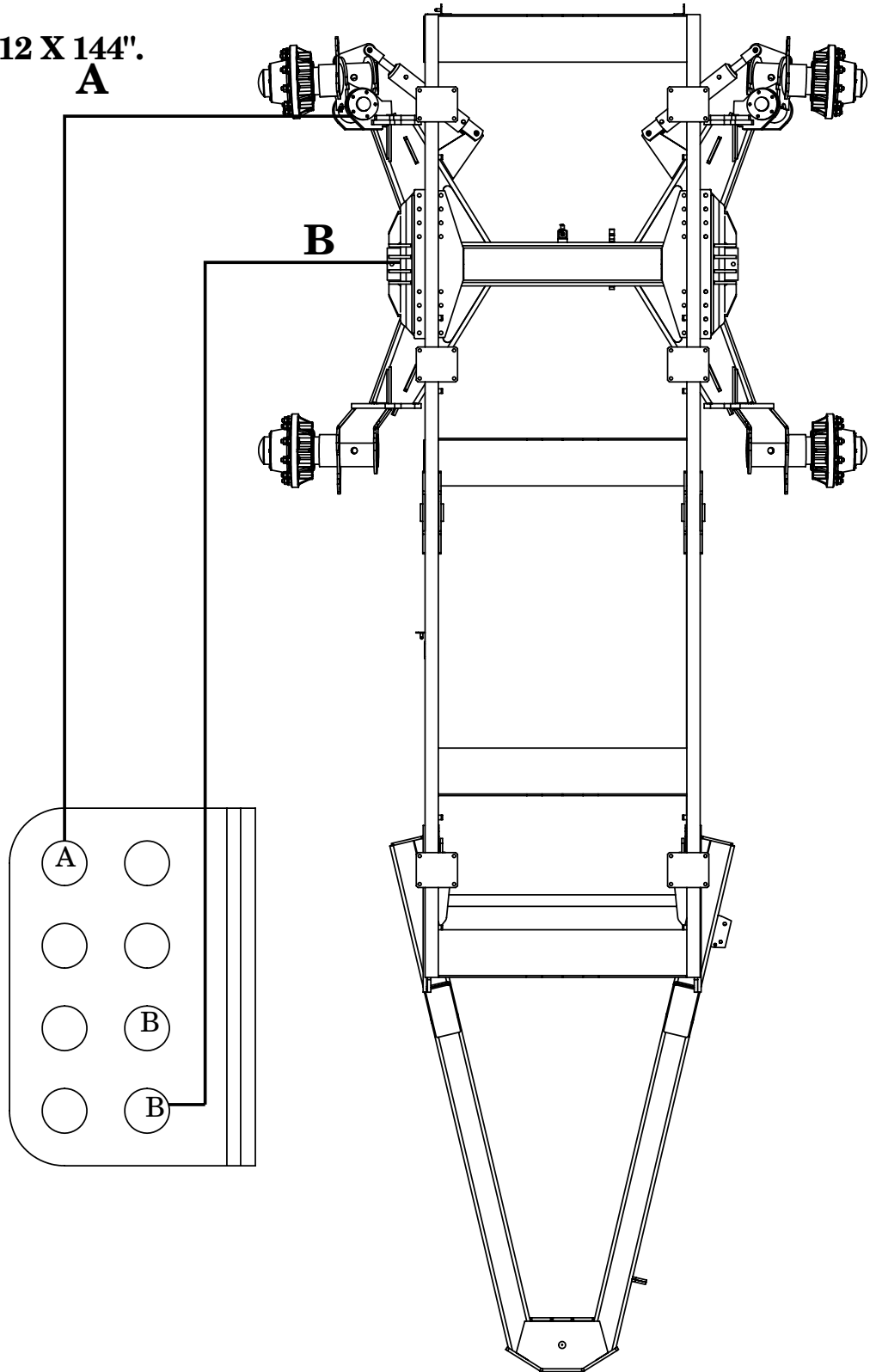
ITEM #	PART#	QTY.	DESCRIPTION
1	72337	2	DECAL GREASE LINE TANDEM
2	72412	6	HOSE GREASE LINE .12NPTM" x .12NPTM" x 144"
3	2291	6	ZERK .12" -27 NPT-STRAIGHT
4	12333	6	COUPLER PIPE 1/8" NPT
5	72348	4	ELBOW GREASE LINE .25-28 MALE X .12NPTFEMALE
6	72803	2	HYD ELBOW .12NPTMx .12NPTFMS 90DEG (1501 2-2)
7	72334	2	TAB, GREASE 8 LINES TANDEM G-RAIN CART

900325 Tandem Grease Bank

HOSE DESCRIPTIONS.

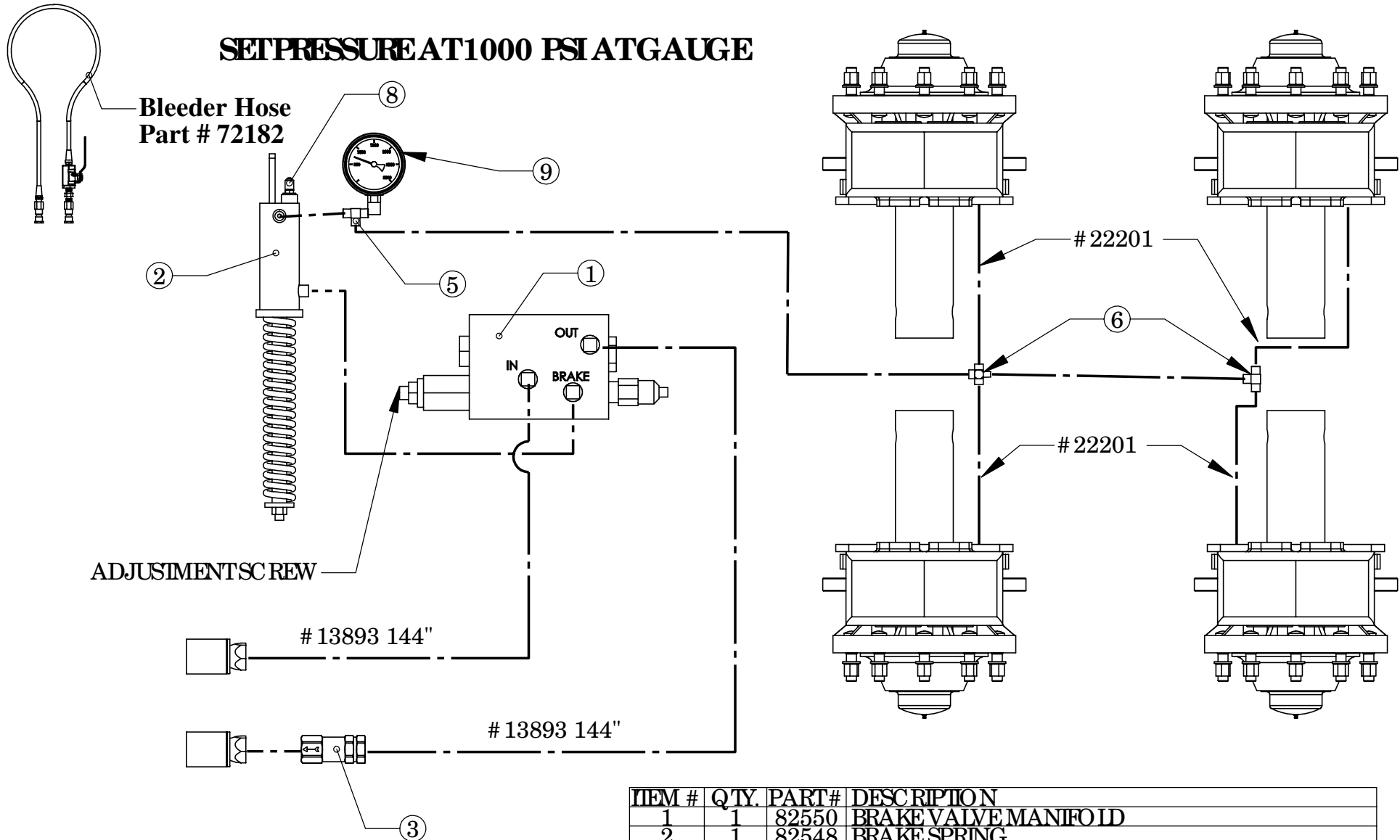
**A. HOSE GREASELINE #72412 X 144".
(1 PER SIDE)**

**B. HOSE GREASELINE #72412 X 144".
(2 PER SIDE)**



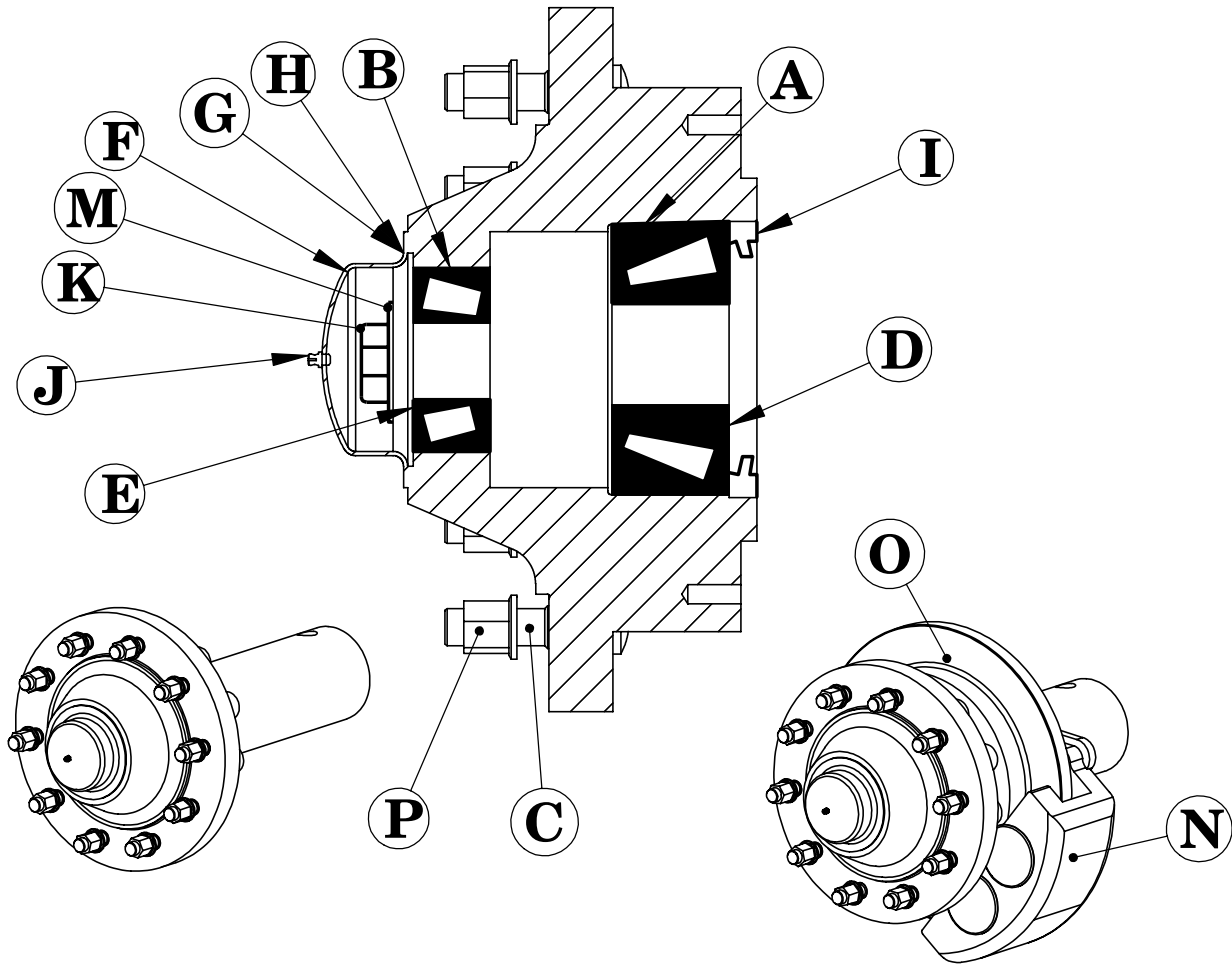
2 PUMPS EVERY 4 HOURS OF USE	
KING PIN LOWER	KING PIN UPPER
KING PIN LOWER	KING PIN UPPER
AXLE LOWER OUTER	AXLE UPPER OUTER
AXLE LOWER INNER	AXLE UPPER INNER

HYD BRAKE RETURN



ITEM #	QTY.	PART#	DESCRIPTION
1	1	82550	BRAKE VALVE MANIFOLD
2	1	82548	BRAKE SPRING
3	1	10459	HYD VALVE CHECK .50" NPTM x .50" NPTM
5	2	9957	TEE .25EP x .25EP x .25EP
6	1	36069	CROSS (3).25EP x (1).25EP (5655-4)
7	2	8634	COUPLER QUICK .5NPTM&F SET
8	1	37521	FITTING TSTPNT w/ METALCAP
9	1	8638	GAUGE PRESSURE

HUB AND SPINDLES 6" 10 BOLT 6" SOLID 13.18" BOLT CIRCLE



	DESCRIPTION	10 BOLT 6" ULTRA
	HUB & SPINDLE NO BRAKE	91855
	HUB & SPINDLE BRAKE MOUNT	82192
	COMPLETE HUB ASSY	91851
	COMPLETE SPINDLE ASSY	91857
A	INNER TAPPER BEARING CUP	50819
B	OUTER TAPPER BEARING CUP	50820
C	STUDS OR BOLTS	50400
D	INNER TAPPER BEARING CONE	50821
E	OUTER TAPPER BEARING CONE	50822
F	HUB CAP	50823
G	HUB CAP GASKET	50824
H	HUB CAP BOLTS	1181
I	SEAL	50825
J	GREASE ZERK	2291
K	CASTLE NUT	50827
L	COTTER PIN/ROLLPIN	1953
M	FLAT WASHER	50828
N	BRAKE CALIPER	91853
O	BRAKE ROTOR	91858
P	LUGNUT	91849

seal kit# 52134

Brake pads# 52013

1/2 x 3 1/2 bolts hold
rotor on hub grade 8

BALZER 10-BOLT HUB AND SPINDLE PARTS BREAKDOWN

NEW PAGE

DESCRIPTION	10-BOLT 3"	10-BOLT 4"	10-BOLT 5" Ultra	10-BOLT 5" Dana*1020*	10-BOLT 5" Dana*2023*	10-BOLT 5" Dana*2033*	10-BOLT 5.75" IMT	10-BOLT 5.75" Ultra	10-BOLT 6" Ultra
HUB & SPINDLE NO BRAKE	14245	17872	91854	22402	22402		25216	91874	91855
HUB & SPINDLE, LH BRAKE			82189	22401	22401		25215		82192
HUB & SPINDLE RH BRAKE			82189	22400	22400		25214		82192
COMPLETE HUB ASSY	14287	17874	91850					91851	91851
HUB W/CUPS & STUDS	14335	17139	50814	21634	37356	50799	50393 *W/Drum*	50818	50818
INNER CUP	14325	17146	21651	21651	21651	21651	50395	50819	50819
OUTER CUP	14328	14325	21652	21652	21652	21652	50397	50820	50820
STUDS OR BOLTS	14326	19295	50400	21633	37354	50400	50400	50400	50400
WHEEL NUT	14329	19293	91849	14329	14329	91849	33123/91849	91849	91849
WHEEL NUT WASHER		19294			19294		33122/NONE		
INNER CONE	14324	17145	21622	21622	21622	21622	50394	50821	50821
OUTER CONE	14327	14324	21621	21621	21621	21621	50396	50822	50822
HUB CAP	14331	17149	17149	21630	21630	21630	50402	50823	50823
HUB CAP GASKET	14334	17147	17147	21629	21629	21629	50403	50824	50824
HUB CAP BOLTS	1183	1181	1181	1183	1183	1183	1183	1181	1181
SEAL	14322	17569	50815	21620	21620	21620	50711	50825	50825
GREASE ZERK	2291	2291	2291					2291	2291
COMPLETE SPINDLE	14288	17151	91856					91875	91857
SPINDLE	14288	17140	50816	21641	21641	21641	50404/52063	50829	50826
CASTLE NUT	14332	17143	50817					50827	50827
COTTER PIN/ ROLL PIN	2065	2074	81767					1953	1953
FLATWASHER	14330	17142	11814					50828	50828
SPINDLE LOCKWASHER				21624	21624	21624	50407		
SPINDLE STARWASHER				21623	21623	21623			
INNER SPINDLE NUT				21626	21626	21626	50406		
OUTER SPINDLE NUT				21625	21625	21625	50408		
BRAKE DRUM OR BRAKE ROTOR	15301	15301	91859	21643	37351			91858	91858
BRAKE CALIPER			91853					91853	91853
STUD BOLTS CENTER TO CENTER	11.25"	11.25"	13.2"	11.25"	11.25"	13.2"	13.2"	13.2"	13.2"
BRAKE MNTG. PAT.	6-8.25	6-8.25	10-11BC					10-11 BC	10-11 BC
WHEEL PILOT WHOLE	8.69"	8.69"	11.25"	8.69"	8.69"	11.25"	11.25"	11.25"	11.25"

Balzer 8-Bolt And Less Hubs And Spindles

NEW PAGE

DESCRIPTION	4-BOLT 1.25"	5-BOLT 1.25"	6 BOLT 1.75" OLD	6 BOLT 1.75"NEW	6 BOLT 1.75" HD	8-BOLT 3" LIGHT	8-BOLT 3" HEAVY
HUB & SPINDLE	16302	22468	18240	18240	84030	13136	13145
COMPLETE HUB ASSY		26735	12440	12440		14395	14411
HUB W/CUPS & STUDS	12122	22467	12441	12441	84026	13137	13146
INNER CUP	12161	12161	6574	6574	52146	13139	13149
OUTER CUP	12161	12161	6663	6663	52145	13141	13141
STUDS OR BOLTS	12167	12167	9089	50700	84032	13152	13152
WHEEL NUT			NA	2605	2605	13496	13496
INNER CONE	12160	12160	6573	6573	84027	13138	13150
OUTER CONE	12160	12160	6665	6665	84028	13140	13140
HUB CAP	12165	12165	6666	6666	52147	14393	14393
HUB CAP GASKET							
HUB CAP BOLTS							
SEAL	12159	12159	6572	6572	36143(2)	13142	13151
GREASE ZERK	2286	2286	2286	2286		2291	2291
COMPLETE SPINDLE			18241	18241	84025	16789	14410
SPINDLE	16303	16303				16788	13154
CASTLE NUT	12163	12163	1754	1754	12163	13144	14336
COTTER PIN/ ROLL PIN	2047	2047	2045	2045	2055	2045	14333
FLATWASHER	NA	NA	6672	6672	6672	6672	14337
WHEEL MNTG. PAT.	4-4 BC	4-4 BC	6-6 BC	6-6 BC	6-6 BC	8-8 BC	8-8 BC
BRAKE MNTG. PAT.	NA	NA	NA	NA		8-5.5 BC	8-5.5 BC
HUB FACE TO HOLE	4.75	4.75	7 7/8	7 7/8	7 7/8	8 15/16	9 13/16
BRAKE FACE TO HOLE	NA	NA	NA	NA		7	7
WHEEL PILOT WHOLE	2.5	2.5	4.5	4.5	4.5	6	6

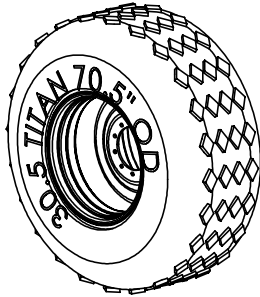
BALZER HUBS SPINDLES

NEW PAGE

DESCRIPTION	4-BOLT 1.25"	5-BOLT 1.25"	6 BOLT 1.75" OLD	6 BOLT 1.75"NEW	6 BOLT 1.75"HD	8-BOLT 3" LIGHT	8-BOLT 3" HEAVY	10-BOLT 3"	10-BOLT 4"	10-BOLT 5" Ultra	10-BOLT 5.75" Ultra	10-BOLT 6" Ultra
HUB & SPINDLE	16302	22468	18240	18240	84030	13136	13145	14245	17872	91854	91874	91855
COMPLETE HUB ASSY		26735	12440	12440		14395	14411	14287	17874	91850	91851	91851
HUB W/CUPS & STUDS	12122	22467	12441	12441	84026	13137	13146	14335	17139	50814	50818	50818
INNER CUP	12161	12161	6574	6574	52146	13139	13149	14325	17146	21651	50819	50819
OUTER CUP	12161	12161	6663	6663	52145	13141	13141	14328	14325	21652	50820	50820
STUDS OR BOLTS	12167	12167	9089	50700	84032	13152	13152	14326	19295	50400	50400	50400
WHEEL NUT			NA	2605	2605	13496	13496	14329	19293	91849	91849	91849
INNER CONE	12160	12160	6573	6573	84027	13138	13150	14324	17145	21622	50821	50821
OUTER CONE	12160	12160	6665	6665	84028	13140	13140	14327	14324	21621	50822	50822
HUB CAP	12165	12165	6666	6666	52147	14393	14393	14331	17149	17149	50823	50823
HUB CAP GASKET								14334	17147	17147	50824	50824
HUB CAP BOLTS								1183	1202	1181	1181	1181
SEAL	12159	12159	6572	6572	36143(2)	13142	13151	14322	17569	50815	50825	50825
GREASE ZERK	2286	2286	2286	2286		2291	2291	2291	2291	2291	2291	2291
COMPLETE SPINDLE			18241	18241	84025	16789	14410	14288	17151	91856	91875	91857
SPINDLE	16303	16303				16788	13154	14288	17140	50816	50829	50826
CASTLE NUT	12163	12163	1754	1754	12163	13144	14336	14332	17143	50817	50827	50827
COTTER PIN/ ROLL PIN	2047	2047	2045	2045	2055	2045	14333	2065	2074	81767	1953	1953
FLATWASHER	NA	NA	6672	6672	6672	6672	14337	14330	17142	11814	50828	50828
WHEEL MNTG. PAT.	4-4 BC	4-4 BC	6-6 BC	6-6 BC	6-6BC	8-8 BC	8-8 BC	10-11.25	10-11.25	10-13.2	10-13.2	10-13.2
BRAKE MNTG. PAT.	NA	NA	NA	NA		8-5.5 BC	8-5.5 BC	6-8.25	6-8.25	10-11 BC	10-11 BC	10-11 BC
HUB FACE TO HOLE	4.75	4.75	7 7/8	7 7/8	7 7/8	8 15/16	9 13/16	7 7/8	8 3/16			
BRAKE FACE TO HOLE	NA	NA	NA	NA		7	7	6 1/4	6 1/4			
WHEEL PILOT WHOLE	2.5	2.5	4.5	4.5	4.5	6	6	8.69	8.69	11.25	11.25	11.25

TIRE ASSEMBLIES

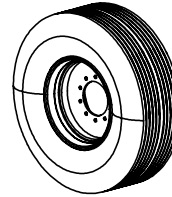
DIAMOND R3



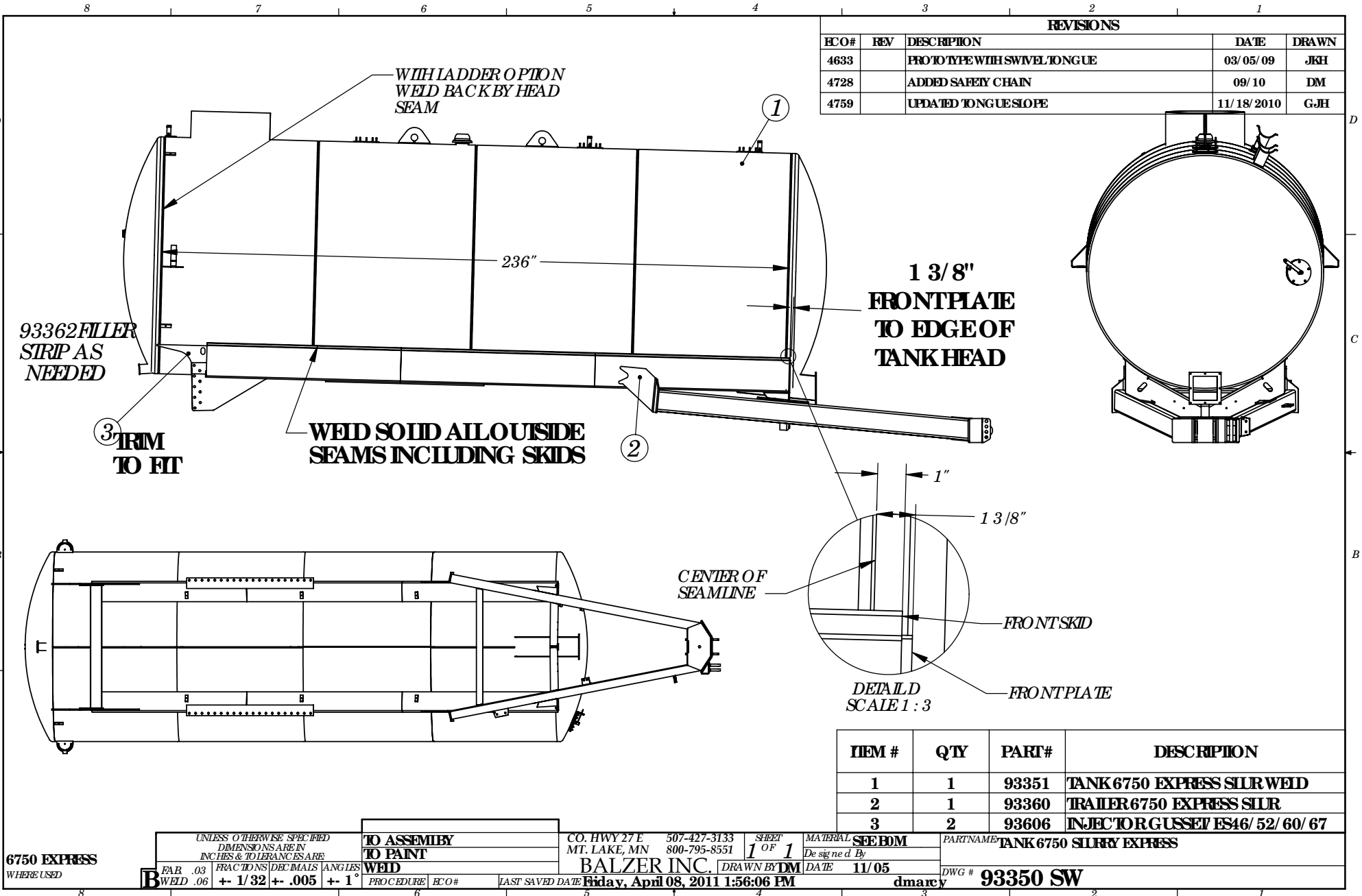
LUG R1



RIBBED



TIRE/ RIM	TIRE / RIM #	TIRE #	RIM #	TIRE PRESSURE
12 X3 RIBBED	18076			
18.5 - 4 BOLT - 5.50"BC	17511	17512	17513	
20.5 x 8 - 5 BOLT - 4.50"BC	26737	26733	26734	
P205/75R15 - 5 BOLT - 6.00"BC	31530		31529	
14 x 7.5 - 6 BOLT	27889			
11L x 15 - 8 PLY - 6 BOLT	31006			
9.5L x 15 - 8 PLY - 6 BOLT	65670		65671	
15 x 22.5 SUPER RIGR - 8 BOLT - 8.00" BC	62061	92390	92391	
15 x 22.5 SUPER RIGR - 10 BOLT - 11.25" BC	65561	92390	65562	
18.4 x 26 R3 - 10 BOLT - 11.25" BC	20283	20284	20285	23
18.4 x 26 R3 - 10 BOLT - 13.19" BC	28205	20284	27676	23
21.5 x 16.1 RIBBED - 8 BOLT - 8.00" BC - 18.00" WHEEL	26633	11472	26634	32
21.5 x 16.1 RIBBED - 10 BOLT - 11.25" BC - 18.00" WHEEL	90128	31432	90129	32
23.1 x 26 R3 - 10 BOLT - 11.25"BC	18531	16515	16516	32
23.1 x 26 R3 - 10 BOLT - 13.19"BC	28796	16515	28797	32
28L x 26 R3 - 10 BOLT - 11.25"BC	17610	17611	17612	26
28L x 26 R3 - 10 BOLT - 13.19"BC	28386	17611	28387	26
28LR26 R3 - 10 BOLT - 13.19"BC	91882	92639	28387	54
30.5 x 32 R1 - 10 BOLT -13.19"BC	91340	91341	27385	33
30.5 x 32 R3 - 10 BOLT -13.19"BC	27674	22692	27385	33
30.5LR32 R1 - 10 BOLT -13.19"BC	91586	94587	27385	52
30.5LR32 R3 - 10 BOLT -13.19"BC	92640	92641	27385	52
445/65 R22.5 L1 8 BOLT - 8.00"BC	83780	91889	20033	
445/65 R22.5 L1 10 BOLT - 11.25"BC	14246	91889	91884	
445/65 R22.5 L1 10 BOLT - 13.19"BC	92880	91889	92881	
600/50 22.5 - 8 BOLT - 8.00"BC	91777	25551	91888	38
600/50 22.5 - 10 BOLT - 11.25"BC	25550	25551	25552	38
850/50 30.5 - 10 BOLT - 11.25"BC	29978	40977	29999	37
850/50 30.5 - 10 BOLT - 11.25"BC - 8 PLY	91128	91129	29999	37
850/50 30.5 - 10 BOLT - 13.19"BC - 10 PLY	40976	40977	40978	37
900/60 32 R1 - 10 BOLT - 13.25"BC - 0" OFFSET	91900	91901	27385	35



REVISIONS				
ECO#	REV	DESCRIPTION	DATE	DRAWN
4633		PROTOTYPE WITH SWIVEL TONGUE	03/05/09	JKH
4728		ADDED SAFETY CHAIN	09/10	DM
4759		UPDATED TONGUE SLOPE	11/18/2010	GJH

ITEM #	QTY	PART#	DESCRIPTION
1	1	93351	TANK 6750 EXPRESS SLUR WELD
2	1	93360	TRAILER 6750 EXPRESS SLUR
3	2	93606	INJECTOR GUSSET ES46/ 52/ 60/ 67

6750 EXPRESS
WHERE USED

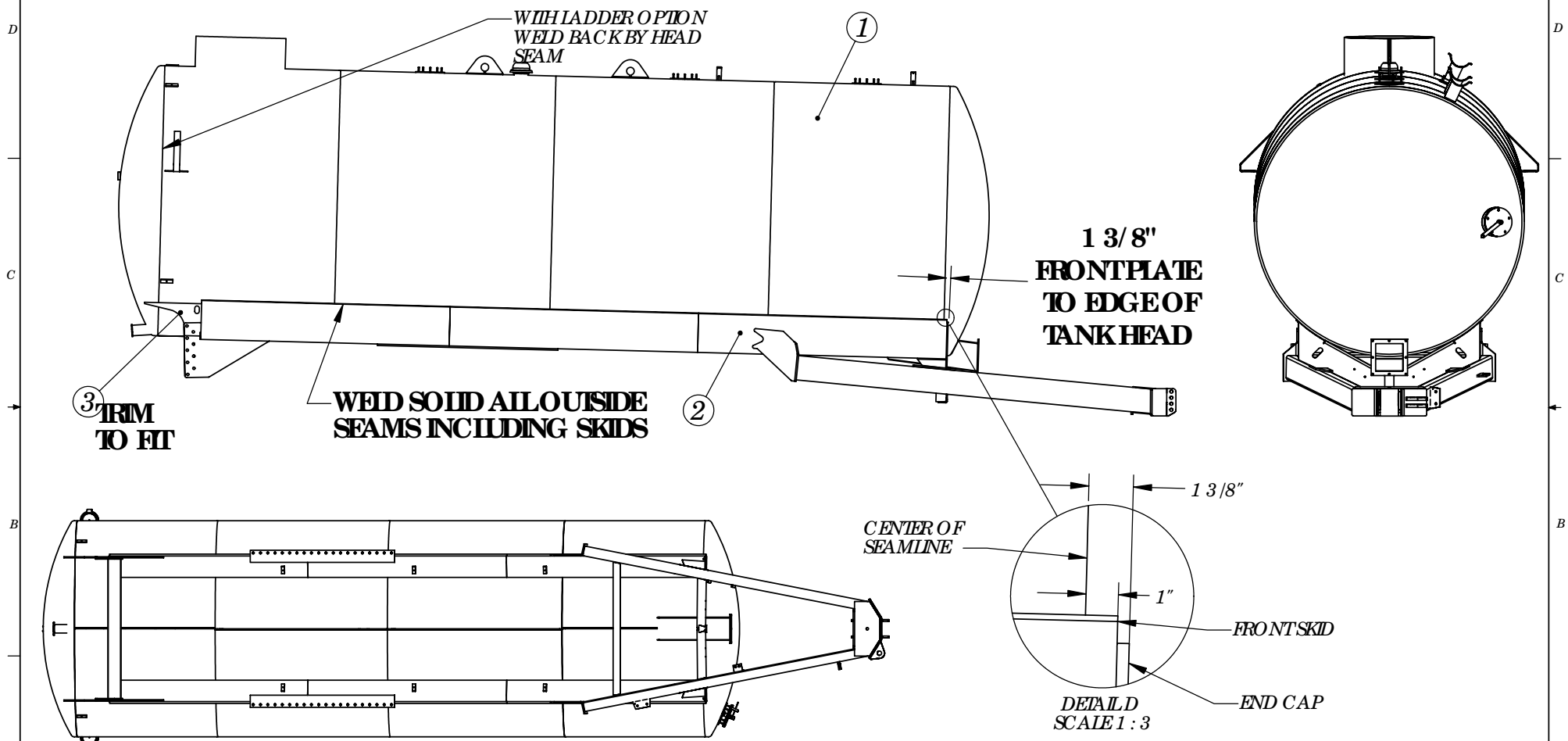
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES & TOLERANCES ARE			
FAB .03	FRACTIONS	DECIMALS	ANGLES
BWELD .06	± 1/32	± .005	± 1°

TO ASSEMBLY	CO. HWY 27 E	507-427-3133	SHEET
TO PAINT	MT. LAKE, MN	800-795-8551	1 OF 1
WELD	BALZER INC. DRAWN BY DM		
PROCEDURE	ECO#	LAST SAVED DATE	Friday, April 08, 2011 1:56:06 PM

MATERIAL	SEE BOM	PARTNAME	TANK 6750 SLURRY EXPRESS
Desig ne d By		DATE	11/05
dmarcy		DWG #	93350 SW

SEE PROTOTYPES \ ES75mtREADY

ECO#	REV	NOTES	DATE	DRWN	APR
4633		RELEASED FOR NEW SWIVEL TONGUE	04/09/09	G-JH	FB
4728		ADDED SAFETY CHAIN	09/10	DM	FB

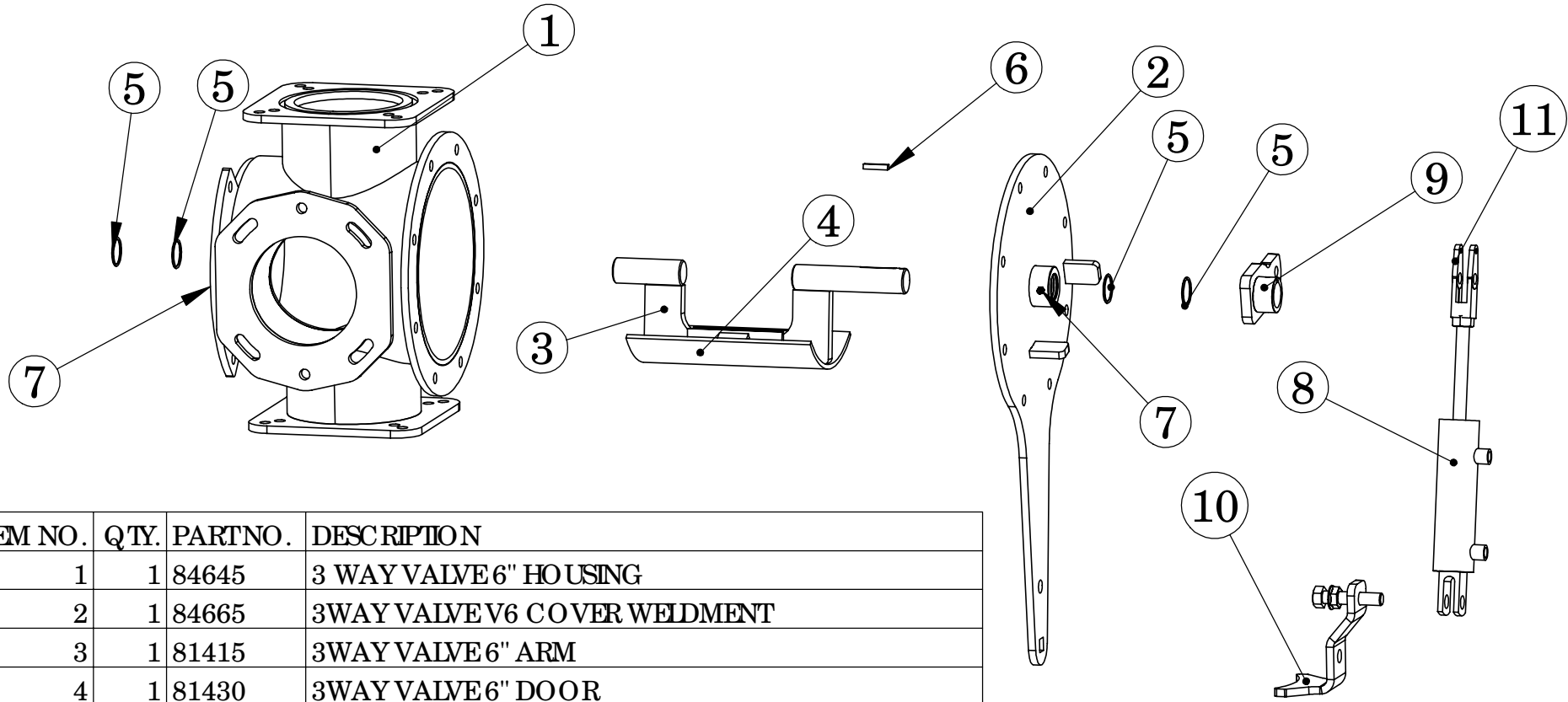


ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	94251	TANK 7500 EXPRESS SLUR WELD
2	1	94252	TRAILER 7500 EXPRESS WELD
3	2	93606	INJECTOR GUSSET/ES46/52/60/67

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES & TOLERANCES ARE		BALZER INC.	
WELD .06	FAB .03	CO. HWY 27 E	507-427-3133
		MT. LAKE, MN	800-795-8551
TO ASSEMBLY	MATERIAL SEE BIL OF MATERIALS	PART NAME	
TO PAINT	WHERE USED	TANK 7500 SLURRY EXPRESS	
WELD	LAST SAVED BY dmarcy		
PROCEDURE	DESIGN	LAST SAVED DATE	DWG NO
		Monday, February 27, 2012 9:36:31 AM	94250 SW

Parts

3-Way Valve



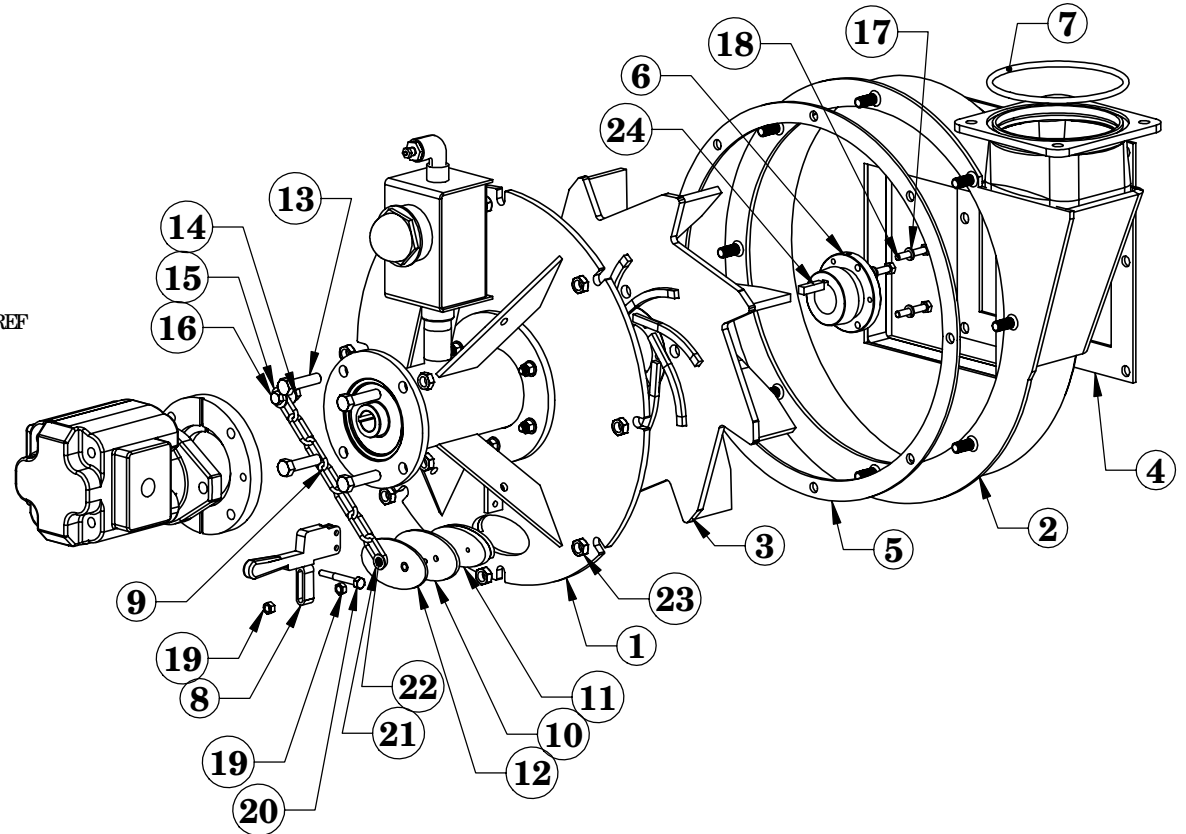
ITEM NO.	QTY.	PARTNO.	DESCRIPTION
1	1	84645	3 WAY VALVE 6" HOUSING
2	1	84665	3WAY VALVE V6 COVER WELDMENT
3	1	81415	3WAY VALVE 6" ARM
4	1	81430	3WAY VALVE 6" DOOR
5	4	81524	O RING # 142 1 1/4" ID x 1 7/16" OD x 3/32" THICK
6	1	2352	KEY .25" x .25" x 1.25" LG
7	2	2281	ZERK .25"-28 UNF - STRAIGHT
8	1	41710	HYD CYL 1.50"B X 04.00"S X 0.75R - WELD
9	1	84641	3WAY VALVE AGIT LEVER
10	1	84643	3WAY VALVE 6" AGIT CYL MOUNT
11	1	41709	CLEVIS BRAKE LINKAGE
12	1	1295	HEX HEAD BOLT 5/8" x 3"
13	1	2085	NUT HD 5/8-11UNC RH WHIZLOC

Parts

83715 Hydraulic Slurry Pump

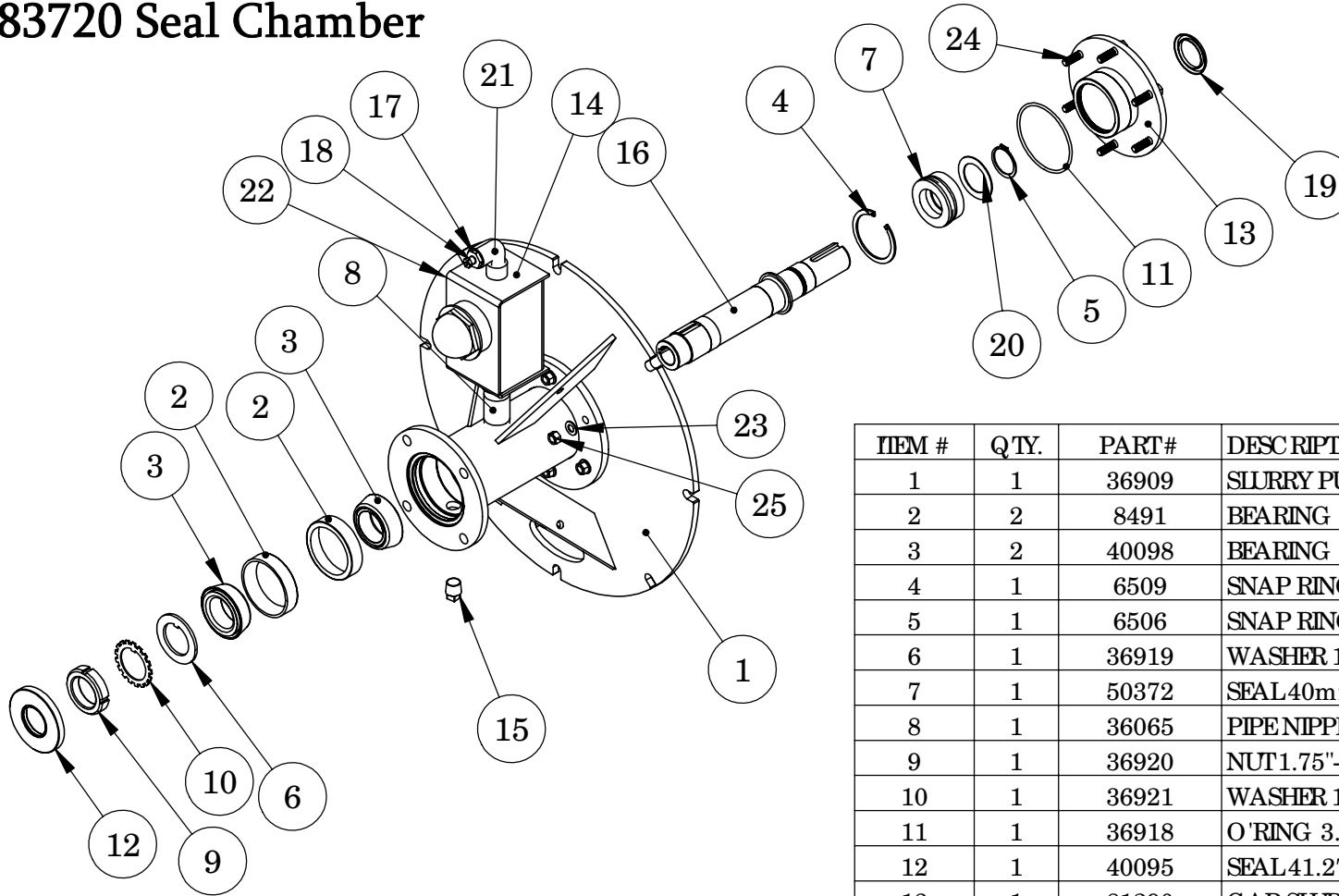
ITEM #	QTY.	PART#	DESCRIPTION
1	1	83720	SLURRY PUMP SEAL CHAMBER -HYD A36
2	1	71931	MAGNUM DAIRY PUMP HOUSING (A36)
3	1	81300	IMPELLER 8 BLADES 17 1/2" (A36)
4	1	16036	GASKET 12 x 12
5	1	16034	GASKET RUBBER .19x19.62"OD
6	1	81770	Q D BUSHING
7	1	15621	O RING 6.31"ID x6.87"OD x.28"TH -6" FLANGE VALVE
8	1	33001	TOGGLE CLAMP/ SLURRY
9	1	71896	CHAIN STRAIGHT LINK 5/0 (7 LINKS)
10	1	71887	GASKET NEO PRENE 3/16"
11	1	71879	DRAIN SLURRY WELD
12	1	71888	PLUG DRAIN OUTER COVER
13	4	1252	BOLT HEXHEAD .5" x 2" GR D5
14	1	2082	NUT .37 WHIZ LOCK
15	1	1598	FLAT WASHER .37"
16	1	1207	BOLT HEXHEAD .37" x 1.25" LG
17	3	1635	Lock Washer 5/16"
18	3	18911	BOLT HEXHEAD .31" x 1.87" LG -STAINLESS STEEL
19	2	2475	NUT TO LOCK .31" - 16 UNC
20	1	1191	BOLT HEXHEAD .31" x 2.50" LG -18 UNC
21	1	1596	FLAT WASHER .25"
22	2	1165	BOLT HEXHEAD .25" x 1.25" -UNC 20 GR 5
23	12	2539	NUT TO LOCK .50"-20 UNC
24	1	2400	KEY .37" x .37" x 1.37" LG
25	1	33316	HYD MOTOR 6.35 CU/IN 26 GA.
26	1	41456	SLURRY PUMP 98' HYD DRIVE

REF



Parts

83720 Seal Chamber

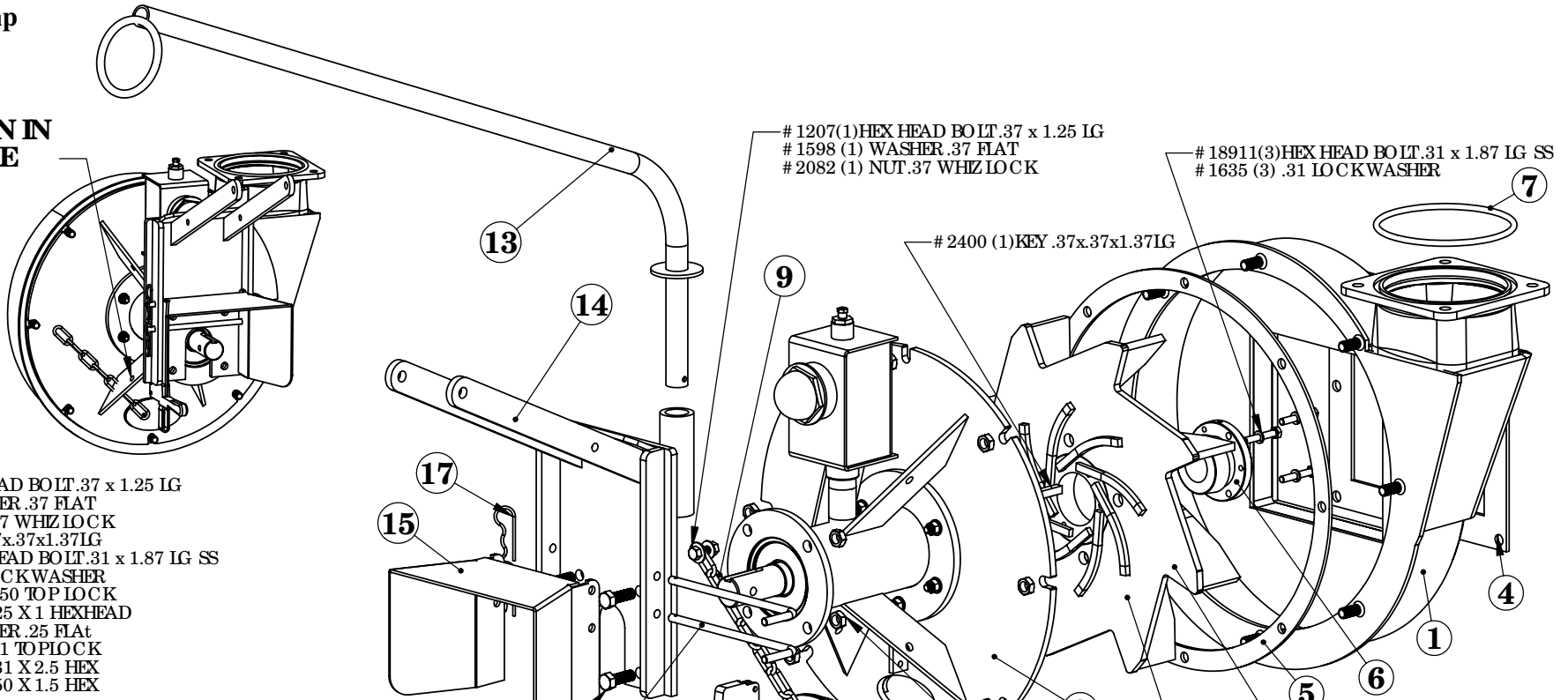


ITEM #	QTY.	PART#	DESCRIPTION
1	1	36909	SLURRY PUMP CHAMBER (A36)
2	2	8491	BEARING CUP
3	2	40098	BEARING 1.75" CONE
4	1	6509	SNAP RING INTERNAL 68mm x 2.4mm
5	1	6506	SNAP RING EXTERNAL 40mm x 1.6mm
6	1	36919	WASHER 1.75" TONGUED
7	1	50372	SEAL 40mm MECHANICAL ASSY
8	1	36065	PIPE NIPPLE 1.00" NPTM x 1.00" NPTM x 3.00" LG
9	1	36920	NUT 1.75"-18 CLASS 2B SPANNER
10	1	36921	WASHER 1.75" TANGLED STAKING
11	1	36918	O'RING 3.609" ID x .139" THCK
12	1	40095	SEAL 41.27mm x 90mm x 10mm
13	1	81290	CAP SLURRY SEAL
14	1	36930	OIL RESERVOIR -SLURRY
15	1	8907	PIPE PLUG 1/2" NPTSQ. HEAD
16	1	83719	SHAFT DAIRY PUMP W/HYD
17	1	13038	HYD REDUCER .50" NPTM x .12" NPTM - (
18	1	13097	BREATHER .12" NPT BRASS, 5# PSI VENT
19	1	17054	SEAL 40 x 57 x 4.5mm AFS
20	1	61441	SHIM 1 5/8" x 18 GA not there
21	1	8215	PIPE ELBOW .50" NPTM x .50" NPTM x 90 DEG
22	1	71976	DECAL FILL ONLY 890 VARI-PURPOSE
23	6	37090	FLATE WASHER .37" BRASS
24	6	1208	BOLT HEXHEAD .37" x 1.50" LG
25	6	2496	NUT TO PLOCK .37"-18 UNC

Parts

Slurry Pump

INSTALL CHAIN IN EXISTING HOIE



51

- # 1207(1)HEX HEAD BOLT.37 x 1.25 IG
- # 1598 (1) WASHER .37 FLAT
- # 2082 (1) NUT.37 WHIZ LOCK
- # 2400 (1)KEY .37x.37x1.37IG
- # 18911(3)HEX HEAD BOLT.31 x 1.87 IG SS
- # 1635 (3) .31 LOCKWASHER
- # 2539 (12) NUT.50 TOP LOCK
- # 1165(2) BOLT.25 X 1 HEXHEAD
- # 1596 (1) WASHER .25 FLAT
- # 2475 (2) NUT.31 TOPLOCK
- # 1191(1) BOLT.31 X 2.5 HEX
- # 1250(4) BOLT.50 X 1.5 HEX

ITEM #	QTY	PART#	DESCRIPTION
1	1	71931	MAGNUM DAIRY PUMP HOUSING (A36)
2	1	81720	MAGNUM DAIRY SEAL CHAMBER
3	1	81300	IMPELLER 8 BLADES 17 1/2" (A36)
4	1	16036	GASKET 12 x 12
5	1	16034	GASKET RUBBER. 19x19.62"OD
6	1	81770	QD BUSHING
7	1	15621	ORING 6.31"ID x6.87"OD x.28"TH-6" FLANGE VALVE
8	1	33001	TOGGLE CLAMP SLURRY
9	1	71896	CHAIN STRAIGHTLINK 5/0 (7 LINKS)
10	1	71887	GASKET NEDPRENE 3/16"
11	1	71879	DRAIN SLURRY WELD
12	1	71888	PLUG DRAIN OUTER COVER
13	1	83078	HOSE HANGER
14	1	83075	SHIELD AND PTO SUPPORT
15	1	36933	SHIELD PTO - SLURRY / IAG
16	2	83079	PIN .37" DIA x 7 9/16" WORKING
17	2	2611	HAIR PIN .12" x 2.75" IG

- # 1207(1)HEX HEAD BOLT.37 x 1.25 IG
- # 1598 (1) WASHER .37 FLAT
- # 2082 (1) NUT.37 WHIZ LOCK

- # 18911(3)HEX HEAD BOLT.31 x 1.87 IG SS
- # 1635 (3) .31 LOCKWASHER

- # 2400 (1)KEY .37x.37x1.37IG

- # 2539 (12) NUT.50 TOP LOCK

- # 1165(2) BOLT.25 X 1 HEXHEAD
- # 1596 (1) WASHER .25 FLAT

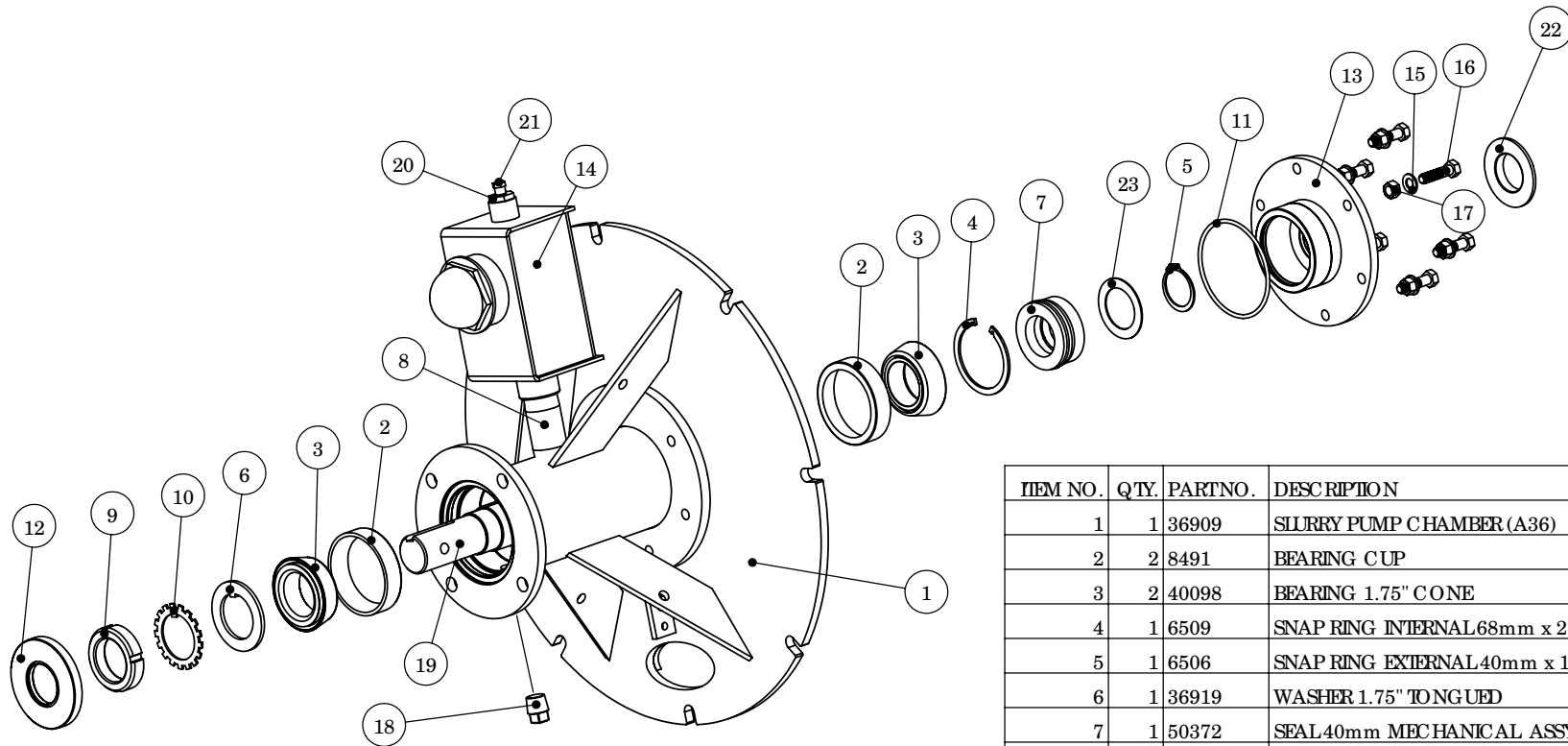
- # 2475 (2) NUT.31 TOPLOCK
- # 1191(1) BOLT.31 X 2.5 HEX

- # 1250(4) BOLT.50 X 1.5 HEX

(REF SEE IMPELLER OPTIONS A ABOVE)

OPTION A: IMPELLER A36 17.5" #81300
IMPELLER A36 15" #33049

Magnum Dairy Seal Chamber

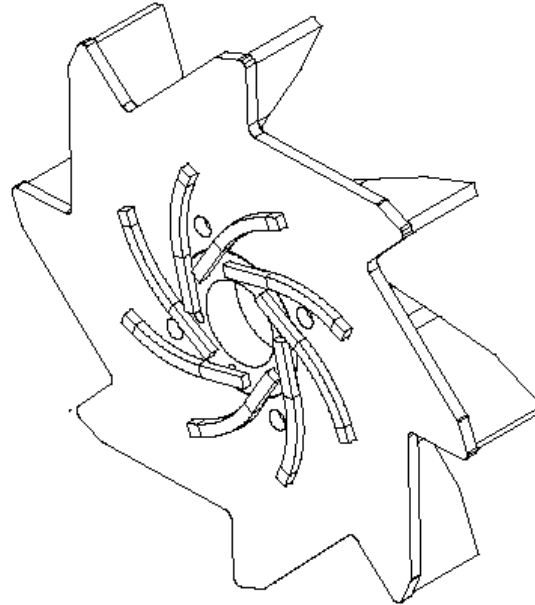


ITEM NO.	QTY.	PARTNO.	DESCRIPTION	
1	1	36909	SLURRY PUMP CHAMBER (A36)	
2	2	8491	BEARING CUP	
3	2	40098	BEARING 1.75" CONE	
4	1	6509	SNAP RING INTERNAL 68mm x 2.4mm	
5	1	6506	SNAP RING EXTERNAL 40mm x 1.6mm	
6	1	36919	WASHER 1.75" TONGUED	
7	1	50372	SEAL 40mm MECHANICAL ASSY	
8	1	36065	PIPE NIPPLE 1.00" NPIM x 1.00" NPIM x 3.00" LG	
9	1	36920	NUT 1.75"-18 CLASS 2B SPANNER	
10	1	36921	WASHER 1.75" TANGLED STAKING	
11	1	36918	O RING 3.609" ID x .139" THCK	
12	1	40095	SEAL 41.27mm x 90mm x 10mm	
13	1	81290	CAP SLURRY SEAL	
14	1	36930	OIL RESERVOIR - SLURRY	
15	6	37090	FLATE WASHER .37" BRASS	
16	6	1208	BOLT 3/8" UNC 1 1/2" LONG HEX	
17	6	2496	NUT 3/8" TO PLOCK	
18	1	8907	PIPE PLUG 1/2" NPT SQ. HEAD	
19	1	81758	SHAFT DAIRY PUMP W/ PTO	
20	1	13038	HYD REDUCER .50" NPIM x .125" NPIM	
21	1	13097	BREATHER .12" NPT BRASS, 5# PSI VENT	
22	1	17054	SEAL RUBBER WASHER	
23	1	61441	SHIM 1 5/8" x 18 GA	not there

IMPELLER BLADE OPTIONS

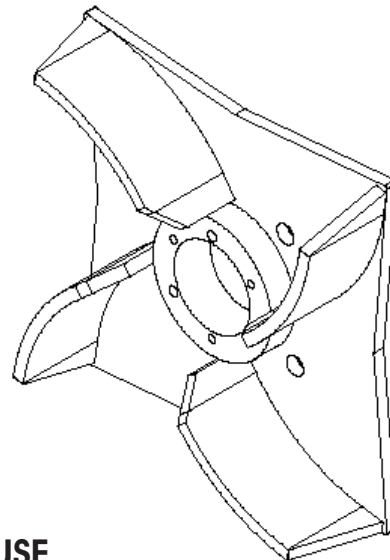
17 1/2":

The 17 1/2" Impeller blade is available for Slurry Tanks with the Magnum Pump option. The part # is: 81300.



15":

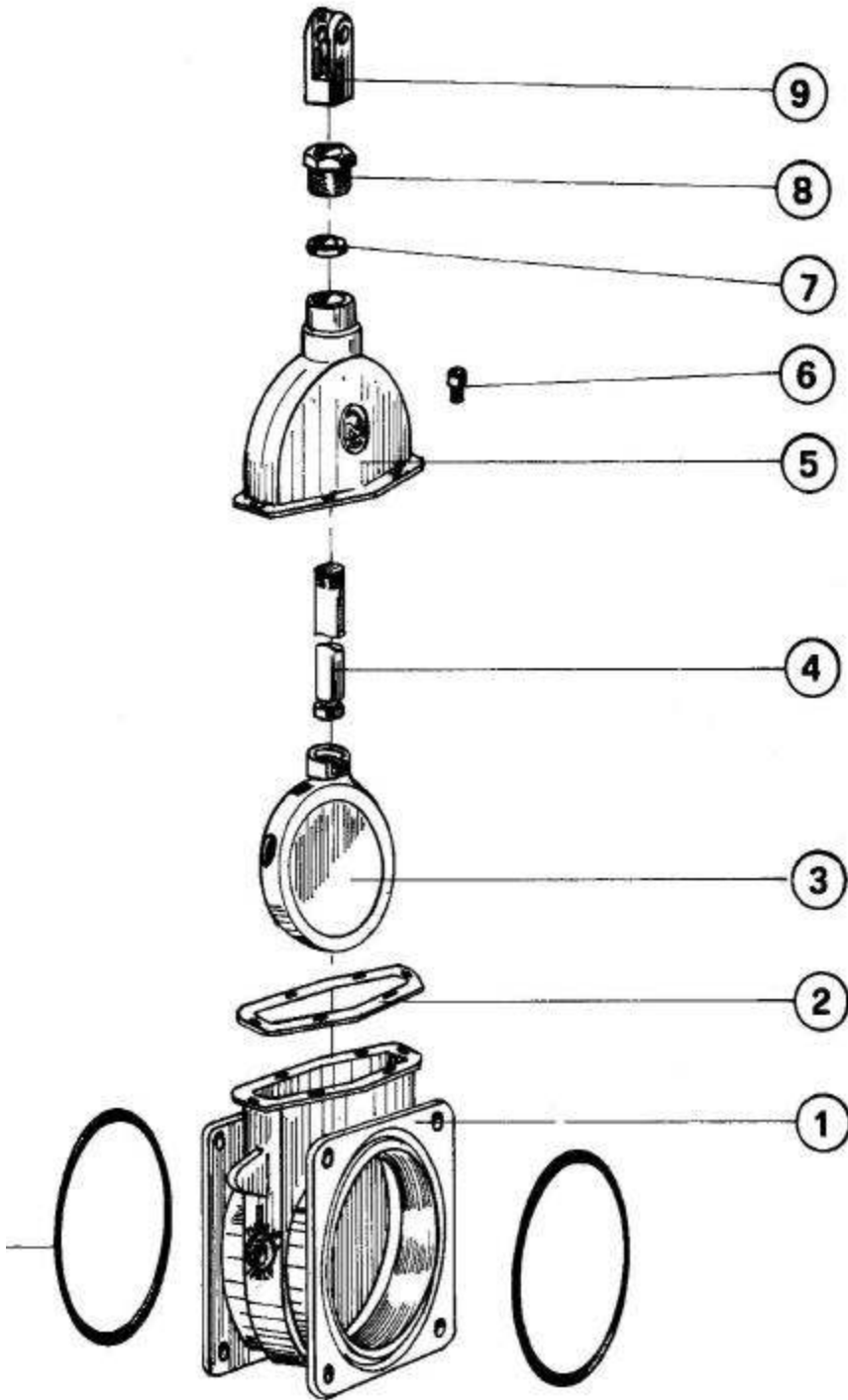
The 15" Impeller blade is available for Slurry Tanks With the Magnum Pump Option. The Part # is: 33049.



NOTE: BOTH THE 17 1/2" AND THE 15" BLADES USE THE SAME PTO AND THE SAME HYDRAULIC HOUSING CHAMBERS.

BALZER VALVES

VALVE DIAMETER	4"	6"	8"
COMPLETE VALVE:	15965	15616	16598

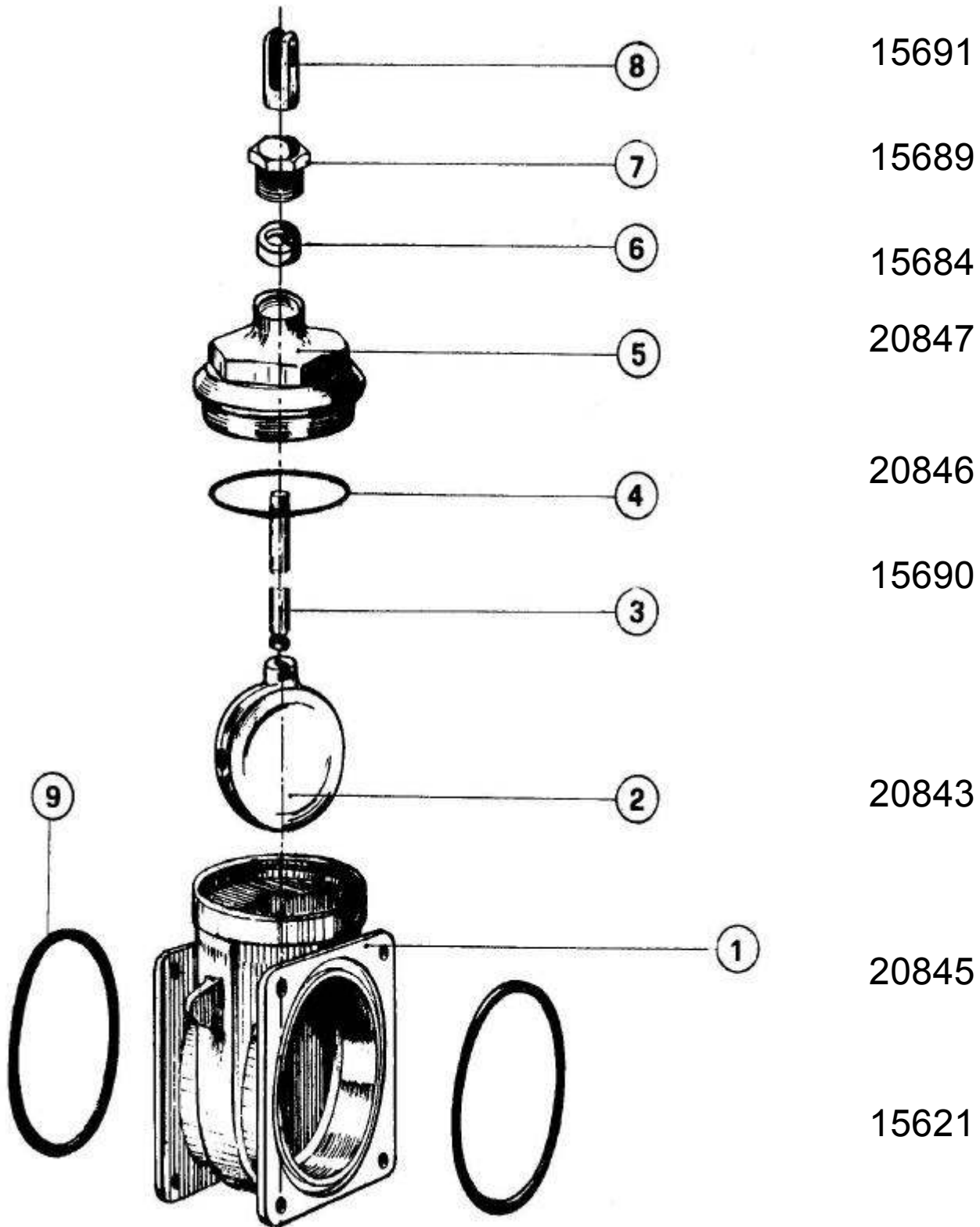


9	15691	15691	15691
8	15689	15689	50324
7	15684	15684	50091
6	15683	15683	15683
5	15969	15682	16600
4	15970	15690	16599
3	15967	15680	16601
2	15968	15681	16602
1	15966	15679	16603
	15621	15621	16604

4 BOLT FLANGE TO 4 BOLT FLANGE VALVES

6/21/04

BALZER VALVES

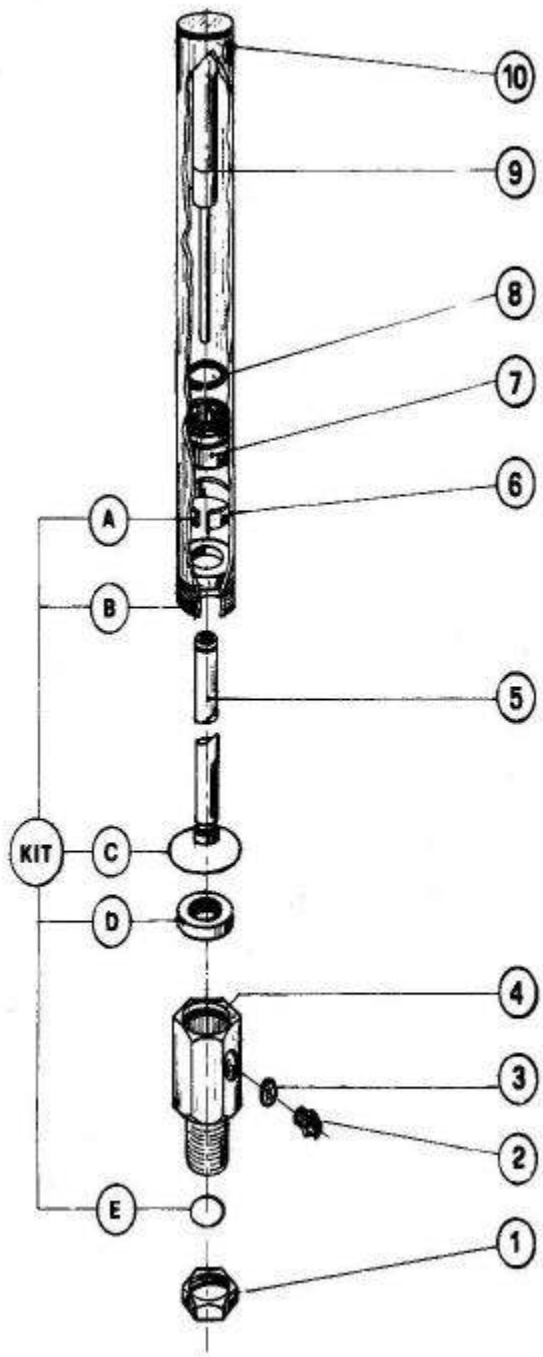


6" DOMEHEAD VALVE--PART# 20844

6/21/04

BALZER VALVES

VALVE DIAMETER	4"	6"	8"
COMPLETE ACTUATOR:	16097	15688	20258



10	HOUSING TUBE	17066	17066	19052
9	BREATHER SEE BELOW	18429	SAME	SAME
	GAS SPRING	19056	SAME	SAME
8	DECAL	15694	SAME	SAME
	SNAP RING	19057	SAME	SAME
7	PISTON(STEEL)	19058	SAME	SAME
6	GUIDE	19059	SAME	SAME
	WASHER(FLARE DOWN)	19060	SAME	SAME
5	ROD	19061	19062	19063
	O-RING	19064	SAME	SAME
	WASHER(GROOVE TO TOP)	19065	SAME	SAME
4	O-RING	19066	SAME	SAME
3	ADAPTER	19067	SAME	SAME
2	BRASS WASHER	50527	SAME	SAME
	REDUCER TO .25"	15687	SAME	SAME
1	O-RING	19068	SAME	SAME
	NUT 30mm	15685	SAME	SAME

HOUSING TUBE

SEAL KIT ** CONSISTS OF #S 7,8,10,11,12,&15 **

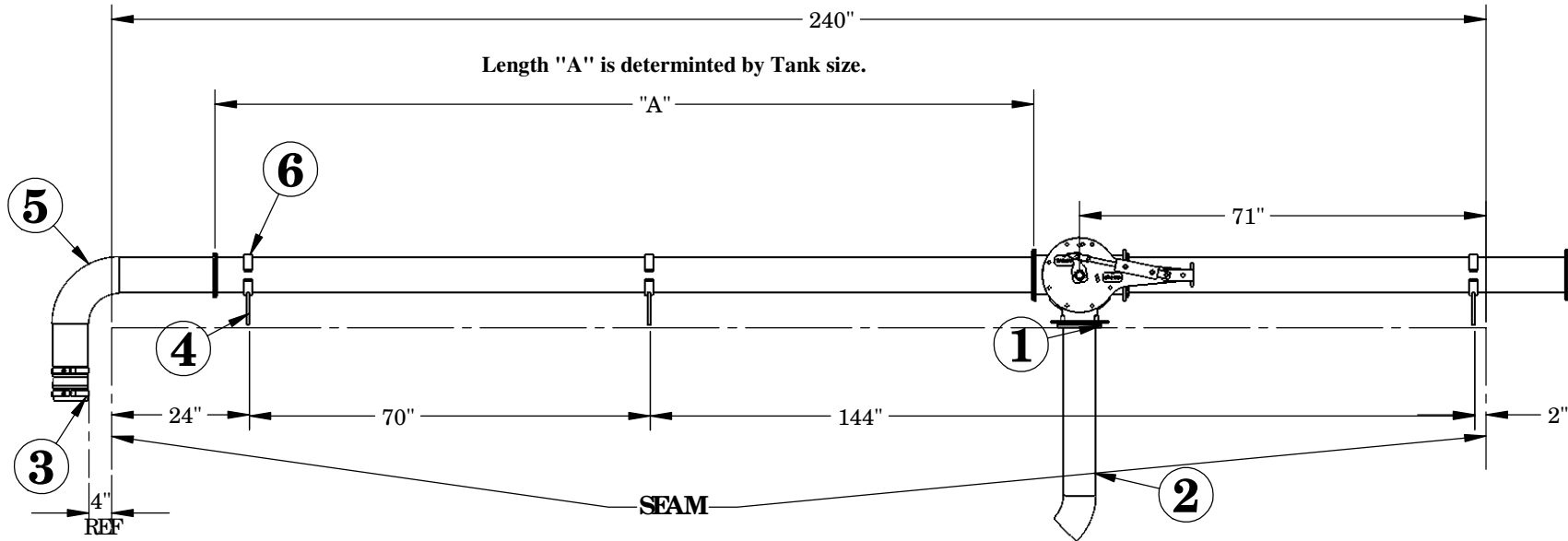
19069 SAME 50873

ONE WAY HYDRAULIC ACTUATORS FOR VALVES

6/21/04

Parts

94500 Agitation Tube

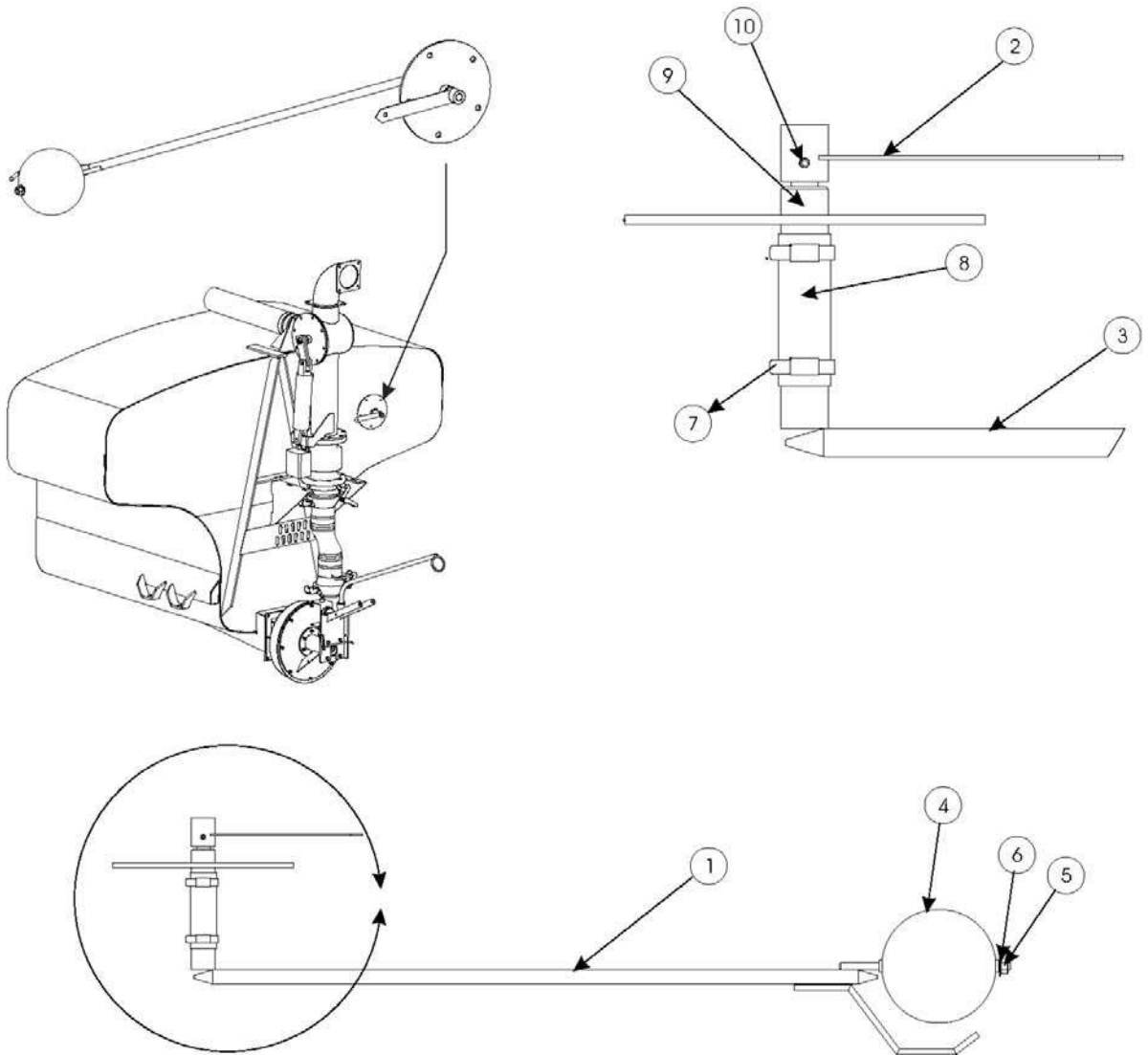


ITEM #	QTY.	PART#	DESCRIPTION
1	1	80718	RECEIVING PLATE
2	1	80713	INTAKE ELBOW W/ FLANGE & PIPING
3	2	16009	HOSE CLAMP 149-161mm
5	1	15924	FIG 6" HOSE BARB x0.18BC 04BH x25.25' LG -W/ 90DEG
6	3	15870	BRACKET DISCHARGE TUBE
8	1	84640	3 WAY VALVE 6" AGITASSEMBLY
9	1	94510	TOP TUBE 6" DISCHARGE REAR

Parts



ITEM #	QTY	PART #	DESCRIPTION
1	1	10949	INDICATOR
2	1	15904	FLOAT PLATE
3	1	40404	FLOAT WELD SS
4	1	17024	BALL SS FLOAT ARM 6"
5	1	37454	NUT .37" TOPLOCK HX HD SS
6	1	37455	FLATWASHER .37" SS
7	2	10912	HOSE CLAMP 1" -2"
8	1	10952	SEAL HOSE
9	1	2288	ZERK 3/16 DRIVE IN W/BALL
10	1	1908	1/4" PIN SPRING 1 1/2" LONG

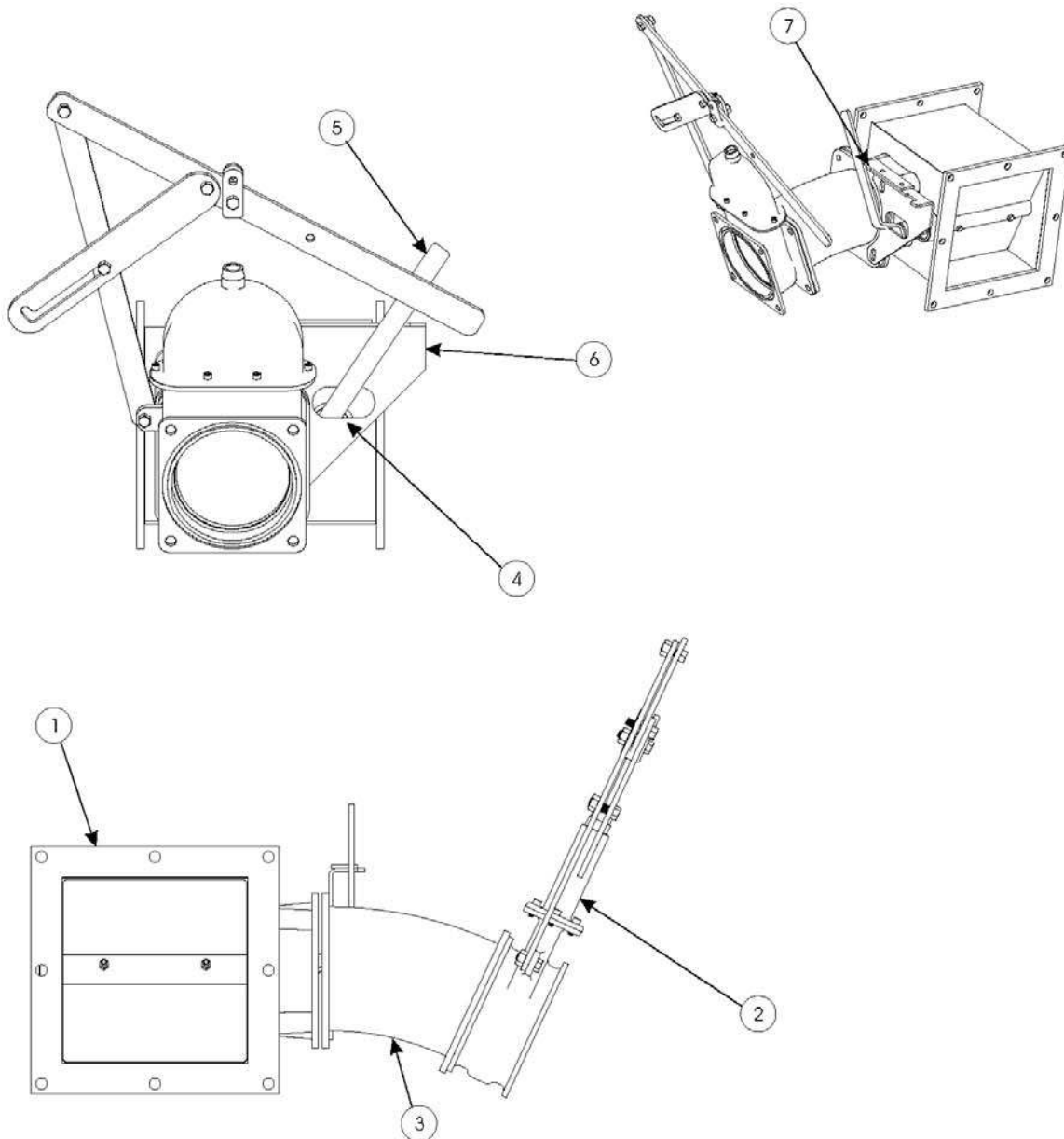


5TH WHEEL FLOAT ARM (40401)

Parts

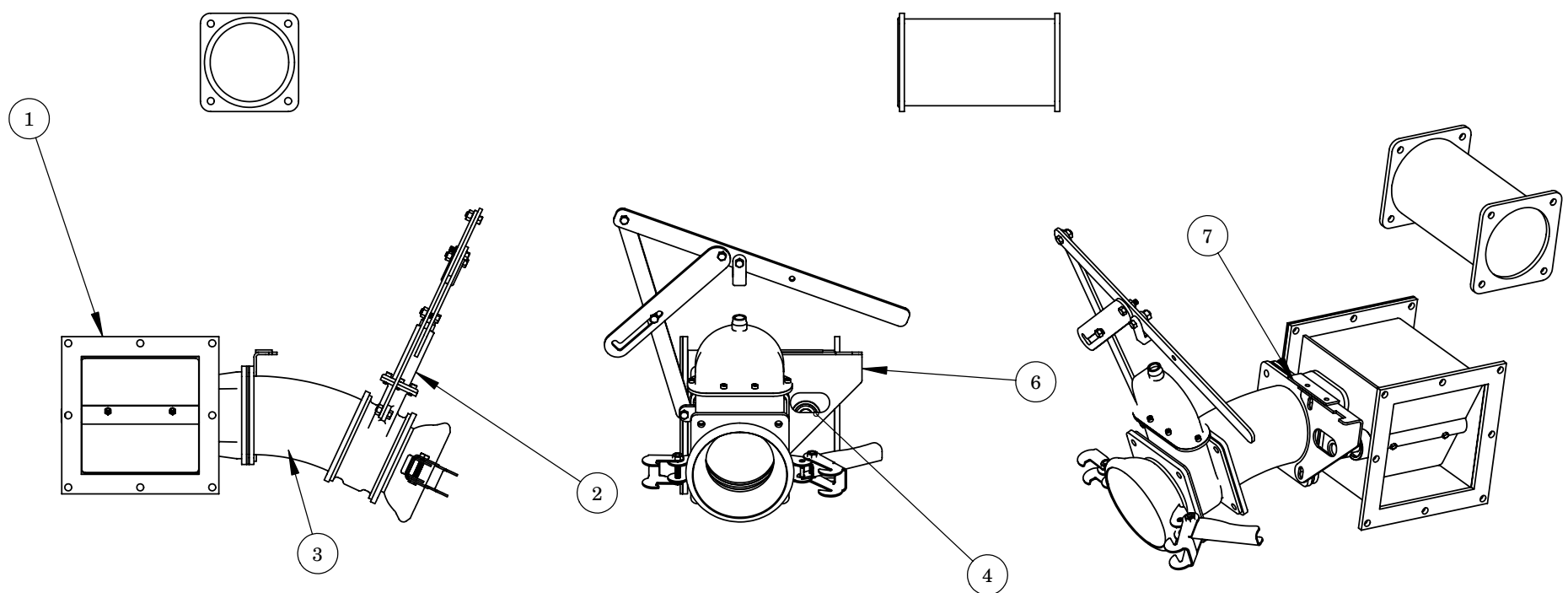


ITEM #	QTY	PART #	DESCRIPTION
1	1	41508	BUTTERFLY VALVE
2	1	6826	VALVE 6" w/ HANDLE
3	1	18880	ELBOW 6" 4 BOLT, 4 BOLT 25 DEG
4	2	7590	SEAL 1" ID x 1.75" OD
5	1	92566	VALVE HANDLE (MANUAL)
6	1	92568	HANDLE POSITION BRACKET
7	1	92569	HANDLE LOCK SELF LOAD



SELF LOAD KIT w/o PIPE & VALVE (92565)

ECO#	REV	NOTES	DATE	DRWN	APR
		RELEASED	09/07		
xx		XXXX	xx	xxx	xx



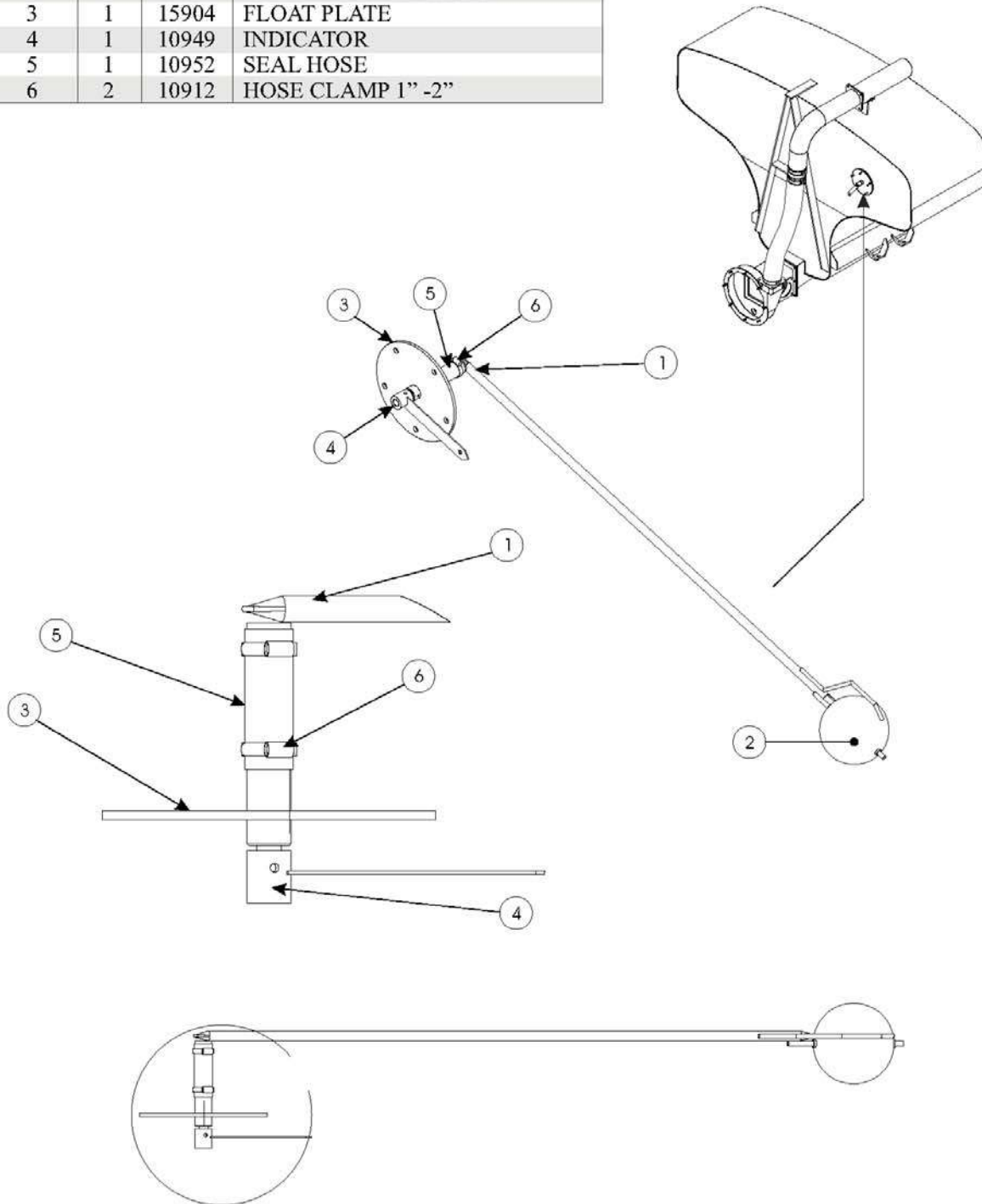
ITEM NO.	QTY.	PARTNO.	DESCRIPTION
1	1	41508	BUTTERFLY VALVE WELDMENT
2	1	6826	Valve 6" w/Handle
3	1	18880	ELBOW 6"RMIXPFL04.18BCGKXPFL04.18BCGKX25DEG
4	2	7590	SEAL 1" ID x 1.75" OD
5	1	92566	VALVE HANDLE WELD MANUAL
6	1	92568	HANDLE POSITION BRACKET
7	1	92569	HANDLE LOCK SELF LOAD
8	1	16035	GASKET 04.18BC04BH06.00ID07.50SQ0.18TH
9	1	91070	FIG 6RMTX04.18BCGKX04.18BCORX12.25"LG
10	1	15621	O'RING, 4" & 6" FLANGED VALVES
11	1	16036	GASKET 12 x 12
12	1	15564	FIG 6'X2HKFXPFL04.18BC04BH0R

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES & TOLERANCES ARE		BALZER INC.	
WELD .06	FAB .03	CO. HWY 27 E 507-427-3133 MT. LAKE, MN 800-795-8551	
MATERIAL SEE BILL OF MATERIALS		PART NAME	
WHERE USED OPTIONS		SELF LOAD KIT w/ V6 AGIT	
LAST SAVED BY Don			
PROCEDURE	DESIGN	LAST SAVED DATE Friday, September 07, 2007 12:33:39 PM	DWG NO 33797 SW

Parts



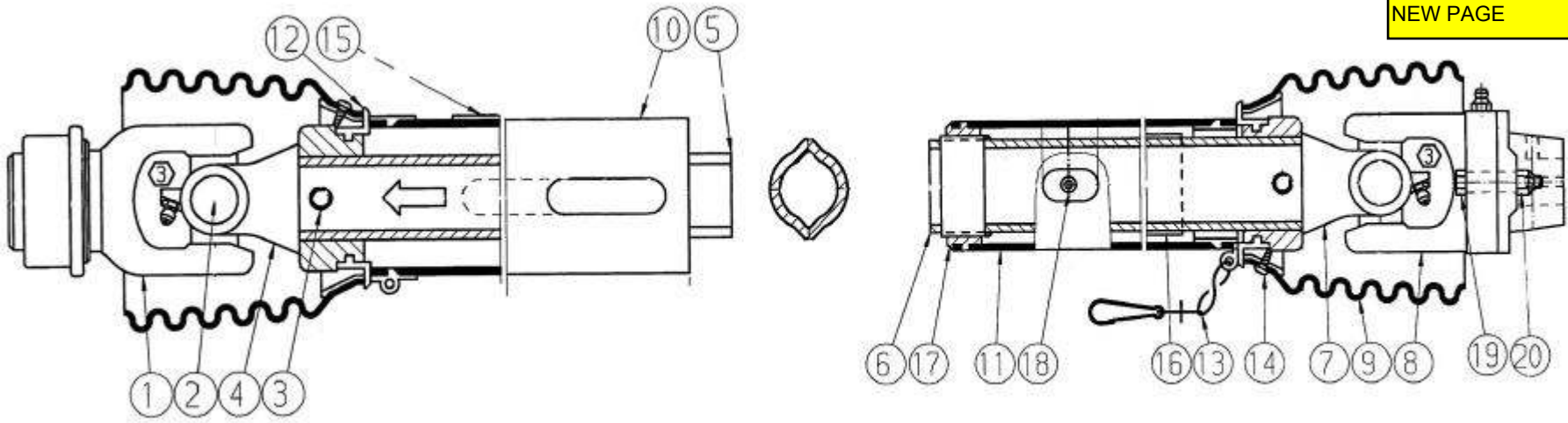
ITEM #	QTY	PART #	DESCRIPTION
1	1	40963	FLOAT WELD
2	1	17024	BALL SS FLOAT ARM 6"
3	1	15904	FLOAT PLATE
4	1	10949	INDICATOR
5	1	10952	SEAL HOSE
6	2	10912	HOSE CLAMP 1" -2"



FLOAT ARM MECHANICAL STEER (40962)

WALTERSCHEID MECH. STEER TANK STD. PTO, 1 3/4-20 1000 RPM

NEW PAGE



OVERALL COMPRESSED LENGTH, YOKE TO YOKE IS 57.72"

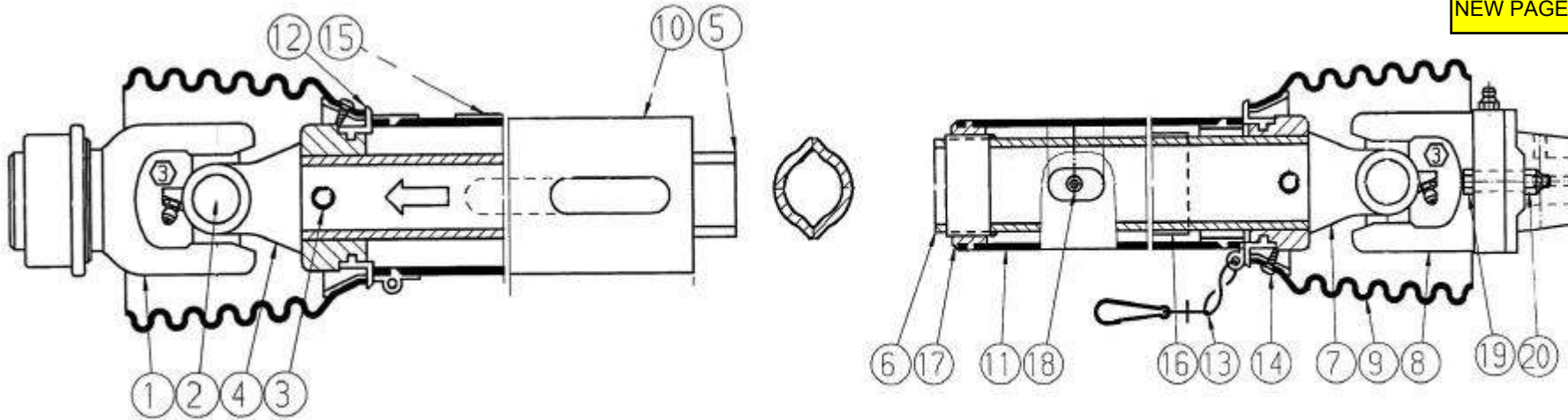
ITEM	PART#	QTY	DESCRIPTION	ITEM	PART#	QTY	DESCRIPTION
1	50974	1	YOKE 1 3/4 20 SP WALTERSCHEID	11	50670	1	INN SHIELD TUBE RND
2	50961	2	CROSS & BEARING KIT	12	16814	1	BEARING RING SC25
3	50955	2	SPRING PIN 10x80	13	16815	1	SAFETY CHAIN
4	50975	1	YOKE INBOARD 1b	14	16818	2	SCREWS IN 9
5	50667	1	INNER PROFILE 1b	15	16816	1	DECAL OUT-IN ITEM 10
6	50668	1	PROFILE & SLEEVE W. A.	16	16817	1	DECAL INN-IN ITEM 6
7	50958	1	INBOARD YOKE 2a	17	17171	1	SUPPORT BEARING
8	50970	1	SHEARBOLT CLUTCH, 1 1/2"	18	16820	1	ZERK IN ITEM 6
9	50965	2	SHIELD CONE 6 RIB	19	3028	1	BOLT 8mm x 60mm
10	50669	1	SHIELD TUBE OUTER OVAL	20	3105	1	TOPLOCK NUT, 8mm
				21	17173	1	LOCK COLLAR KIT

COMPLETE PTO PART# 37491

12/22/06

WALTERSCHEID MECH. STEER TANK STD. PTO, 1 3/8-21 1000 RPM

NEW PAGE



OVERALL COMPRESSED LENGTH, YOKE TO YOKE IS 57.72"

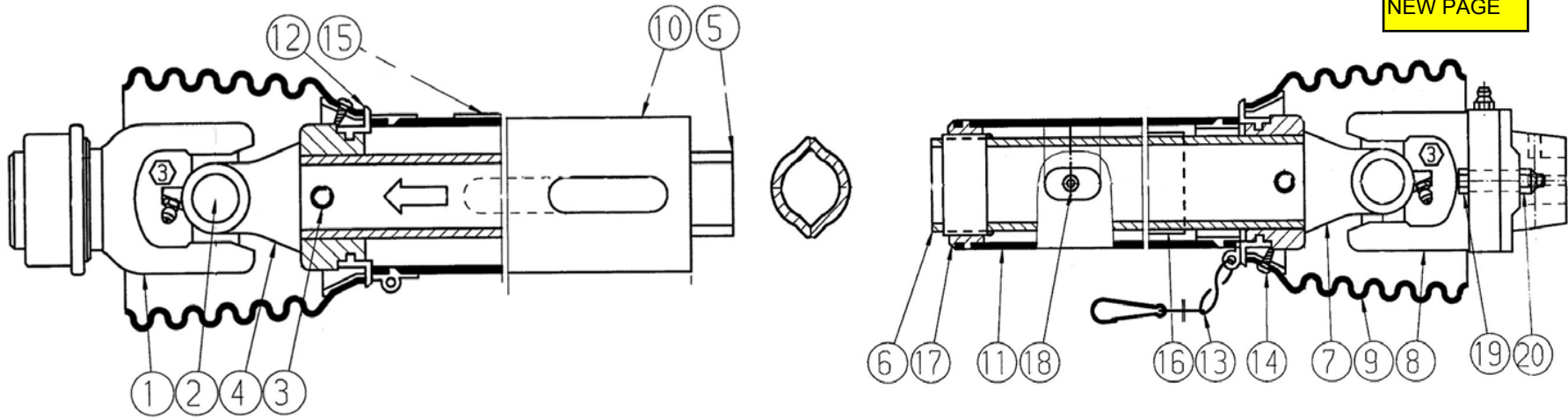
ITEM	PART#	QTY	DESCRIPTION	ITEM	PART#	QTY	DESCRIPTION
1	50973	1	YOKE 1 3/8-21 SP WALTERSCHEID	11	50670	1	INN SHIELD TUBE RND
2	50961	2	CROSS & BEARING KIT	12	16814	2	BEARING RING SC25
3	50955	2	SPRING PIN 10x80	13	16815	1	SAFETY CHAIN
4	50975	1	YOKE INBOARD 1b	14	16818	2	SCREWS IN 9
5	50667	1	INNER PROFILE 1b	15	16816	1	DECAL OUT-IN ITEM 10
6	50668	1	PROFILE & SLEEVE W. A.	16	16817	1	DECAL INN-IN ITEM 6
7	50958	1	INBOARD YOKE 2a	17	17171	1	SUPPORT BEARING
8	50970	1	SHEARBOLT CLUTCH, 1 1/2"	18	16820	1	ZERK IN ITEM 6
9	50965	2	SHIELD CONE 6 RIB	19	3028	1	BOLT 8mm x 60mm
10	50669	1	SHIELD TUBE OUTER OVAL	20	3105	1	TOPLOCK NUT, 8mm
				21	50980	1	LOCK COLLAR KIT

COMPLETE PTO PART# 37492

12/22/06

WALTERSCHEID MECH. STEER TANK STD. PTO, 1 3/4-20 1000 RPM

NEW PAGE



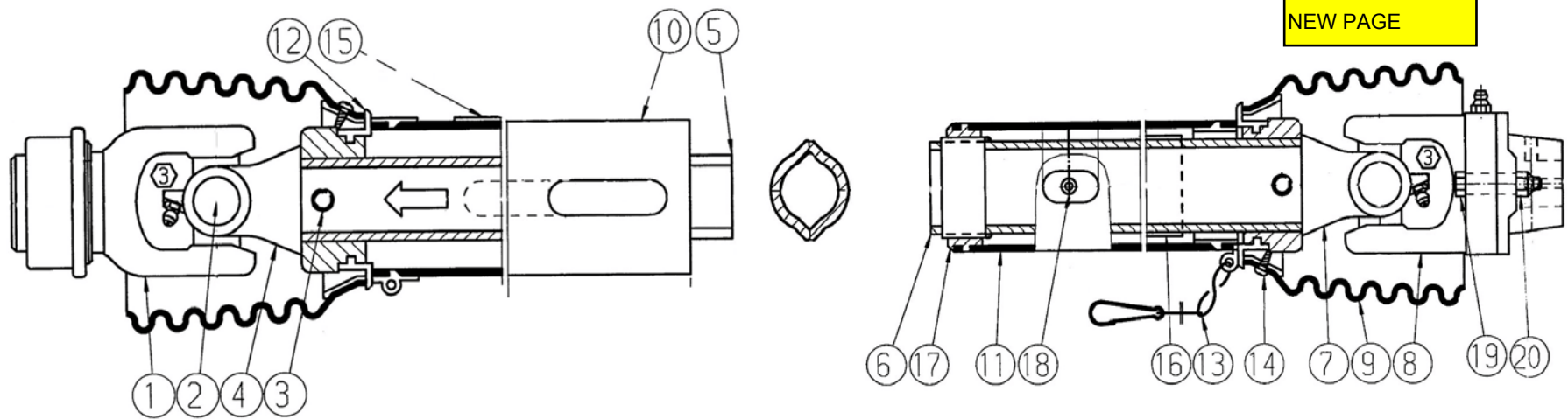
OVERALL COMPRESSED LENGTH, YOKE TO YOKE IS 49.84"

ITEM	PART#	QTY	DESCRIPTION	ITEM	PART#	QTY	DESCRIPTION
1	50974	1	YOKE 1 3/4 20 SP WALTERSCHEID	11	50979	1	INN SHIELD TUBE RND
2	50961	2	CROSS & BEARING KIT	12	16814	1	BEARING RING SC25
3	50955	1	SPRING PIN 10x80	13	16815	1	SAFETY CHAIN
4	50975	1	YOKE INBOARD 1b	14	16818	2	SCREWS IN 9
5	50976	1	INNER PROFILE 1b	15	16816	1	DECAL OUT-IN ITEM 10
6	50977	1	PROFILE & SLEEVE W. A.	16	16817	1	DECAL INN-IN ITEM 6
7	50958	1	INBOARD YOKE 2a	17	17171	1	SUPPORT BEARING
8	50970	1	SHEARBOLT CLUTCH, 1 1/2"	18	16820	1	ZERK IN ITEM 6
9	50965	2	SHIELD CONE 6 RIB	19	3028	1	BOLT 8mm x 60mm
10	50978	1	SHIELD TUBE OUTER OVAL	20	3105	1	TOPLOCK NUT, 8mm
				21	17173	1	LOCK COLLAR KIT

COMPLETE PTO PART# 37486

7/27/2009

WALTERSCHEID MECH. STEER TANK STD. PTO, 1 3/8-21 1000 RPM



OVERALL COMPRESSED LENGTH, YOKE TO YOKE IS 49.84"

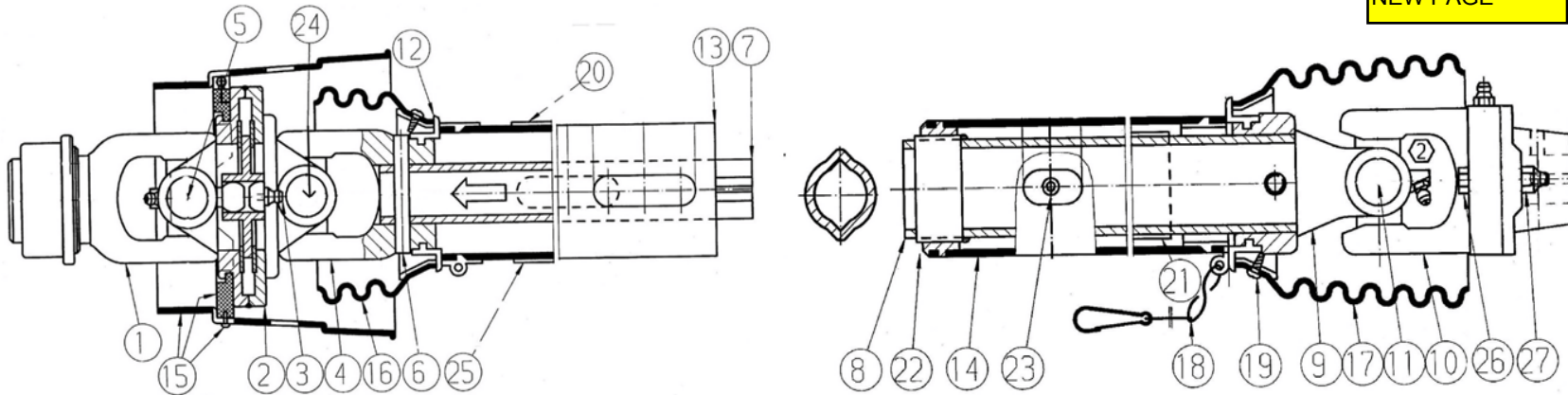
ITEM	PART#	QTY	DESCRIPTION	ITEM	PART#	QTY	DESCRIPTION
1	50973	1	YOKE 1 3/8 21 SP WALTERSCHEID	11	50979	1	INN SHIELD TUBE RND
2	50961	2	CROSS & BEARING KIT	12	16814	1	BEARING RING SC25
3	50955	1	SPRING PIN 10x80	13	16815	1	SAFETY CHAIN
4	50975	1	YOKE INBOARD 1b	14	16818	2	SCREWS IN 9
5	50976	1	INNER PROFILE 1b	15	16816	1	DECAL OUT-IN ITEM 10
6	50977	1	PROFILE & SLEEVE W. A.	16	16817	1	DECAL INN-IN ITEM 6
7	50958	1	INBOARD YOKE 2a	17	17171	1	SUPPORT BEARING
8	50970	1	SHEARBOLT CLUTCH, 1 1/2"	18	16820	1	ZERK IN ITEM 6
9	50965	2	SHIELD CONE 6 RIB	19	3028	1	BOLT 8mm x 60mm, GRADE 8
10	50978	1	SHIELD TUBE OUTER OVAL	20	3105	1	TOPLOCK NUT, 8mm
				21	50980	1	LOCK COLLAR KIT

COMPLETE PTO PART# 37487

7/27/2009

WALTERSCHEID MECH. STEER TANK CV PTO, 1 3/4-20 1000 RPM

NEW PAGE



OVERALL COMPRESSED LENGTH, YOKE TO YOKE IS 51.81"

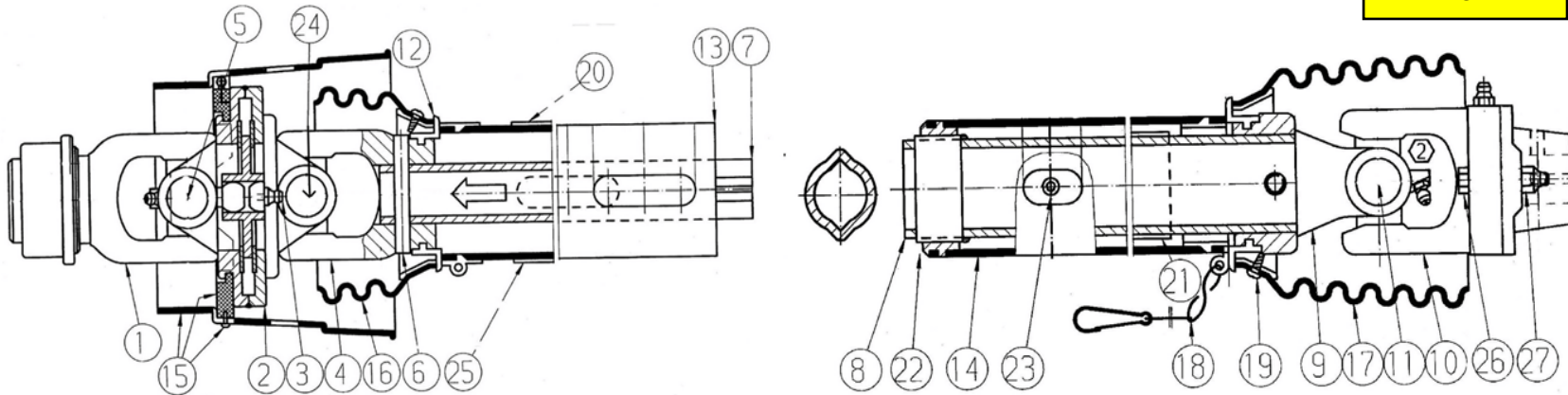
ITEM	PART#	QTY	DESCRIPTION	ITEM	PART#	QTY	DESCRIPTION
1	50950	1	YOKE 1 3/4- 20 SPL	15	50964	1	CV CONE & BRG ASSY
2	50952	1	DOUBLE YOKE	16	17202	1	SHIELD CONE 3 RIB
3	17195	1	ZERK-IN ITEM 2	17	50965	1	SHIELD CONE 6 RIB
4	50953	1	INBOARD YOKE 1B	18	16815	1	SAFETY CHAIN
5	50954	1	CROSS & BEARING KIT	19	16818	8	SCREWS IN 15,16,&17
6	50955	2	SPRING PIN 10x80	20	16816	1	DECAL OUT-IN ITEM 13
7	50968	1	INNER PROFILE 1bGA	21	16817	1	DECAL INN-IN ITEM 8
8	50969	1	PROFILE & SLEEVE W. A.	22	17171	1	SUPPORT BEARING
9	50958	1	INBOARD YOKE 2A	23	16820	1	ZERK-IN ITEM 8
10	50970	1	SHEARBOLT CLUTCH, 1 1/2"	24	50966	1	CROSS & BEARING KIT
11	50961	1	CROSS & BEARING KIT	25	50981	1	LUBRICATION DECAL
12	16814	2	BEARING RING SC25	26	3028	1	BOLT 8mm x 60mm
13	50971	1	SHIELD TUBE INNER ROUND	27	3105	1	TOPLOCK NUT, 8mm
14	50972	1	SHIELD TUBE INNER ROUND	28	17173	1	LOCK COLLAR KIT

COMPLETE PTO PART# 37488

11/29/06

WALTERSCHEID MECH. STEER TANK CV PTO, 1 3/8-21 1000 RPM

NEW PAGE



OVERALL COMPRESSED LENGTH, YOKE TO YOKE IS 51.81"

ITEM	PART#	QTY	DESCRIPTION	ITEM	PART#	QTY	DESCRIPTION
1	50951	1	YOKE 1 3/8- 21 SPL	15	50964	1	CV CONE & BRG ASSY
2	50952	1	DOUBLE YOKE	16	17202	1	SHIELD CONE 3 RIB
3	17195	1	ZERK-IN ITEM 2	17	50965	1	SHIELD CONE 6 RIB
4	50953	1	INBOARD YOKE 1B	18	16815	1	SAFETY CHAIN
5	50954	1	CROSS & BEARING KIT	19	16818	8	SCREWS IN 15,16,&17
6	50955	2	SPRING PIN 10x80	20	16816	1	DECAL OUT-IN ITEM 13
7	50968	1	INNER PROFILE 1bGA	21	16817	1	DECAL INN-IN ITEM 8
8	50969	1	PROFILE & SLEEVE W. A.	22	17171	1	SUPPORT BEARING
9	50958	1	INBOARD YOKE 2A	23	16820	1	ZERK-IN ITEM 8
10	50970	1	SHEARBOLT CLUTCH, 1 1/2"	24	50966	1	CROSS & BEARING KIT
11	50961	1	CROSS & BEARING KIT	25	50981	1	LUBRICATION DECAL
12	16814	2	BEARING RING SC25	26	3028	1	BOLT 8mm x 60mm
13	50971	1	SHIELD TUBE OUTER OVAL	27	3105	1	TOPLOCK NUT, 8mm
14	50972	1	SHIELD TUBE INNER ROUND	28	17172	1	LOCK COLLAR KIT

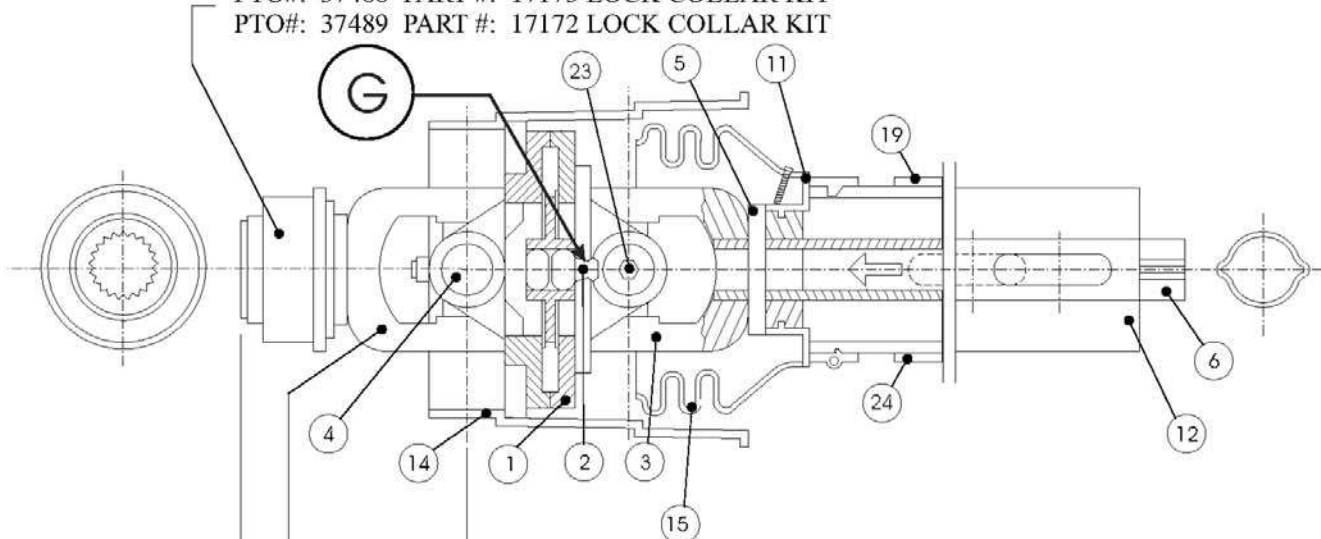
COMPLETE PTO PART# 37489

Parts



ITEM #	QTY	PART #	DESCRIPTION	ITEM #	QTY	PART #	DESCRIPTION
1	1	50952	DOUBLE YOKE	14	1	50964	CV CONE & BRG ASSY
2	1	17195	ZERK	15	1	17202	SHIELD CONE 3 RIB
3	1	50953	INBOARD YOKE 1B	16	1	50965	SHIELD CONE 6 RIB
4	1	50954	CROSS & BEARING KIT	17	1	16815	SAFETY CHAIN
5	2	50955	SPRING PIN 10 x80	18	8	16818	SCREWS
6	1	50968	INNER PROFILE	19	1	16816	DECAL OUT
7	1	50969	PROFILE & SLEEVE	20	1	16817	DECAL INNER
8	1	50958	INBOARD YOKE 2A	21	1	17171	SUPPORT BEAM
9	1	50970	SHEAR BOLT CLUTCH 1 1/2"	22	1	16820	ZERK
10	1	50961	CROSS & BEARING KIT	23	1	50966	CROSS & BEARING KIT
11	2	16814	BEARING RING Sc25	24	1	50981	LUBRICATION DETAIL
12	1	50971	SHIELD TUBE OUTER OVAL	25	1	3028	BOLT 8mm x 60mm
13	1	50972	SHIELD TUBE INNER ROUND	26	1	16828	TOP LOCK NUT 8mm

PTO#: 37488 PART #: 17173 LOCK COLLAR KIT
 PTO#: 37489 PART #: 17172 LOCK COLLAR KIT

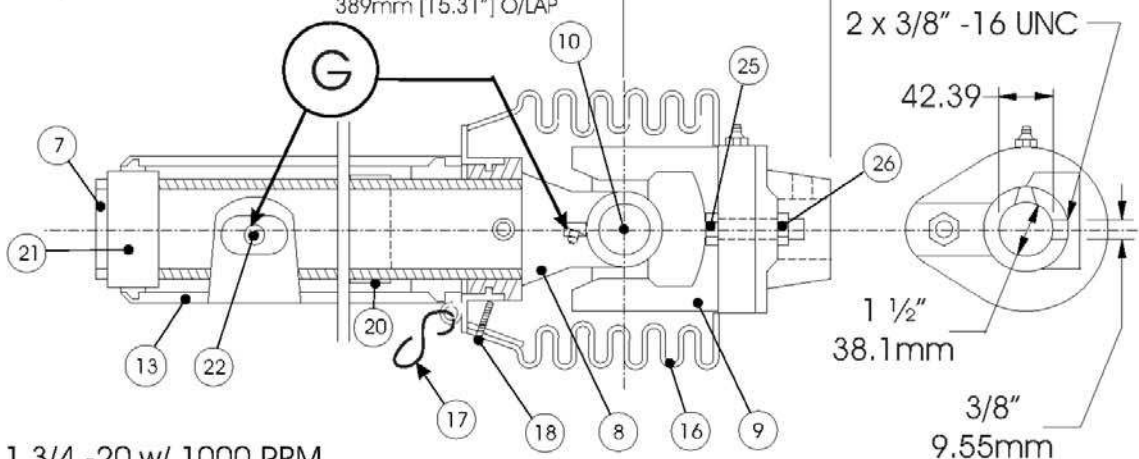


PTO#: 37488 PART #: 50950 YOKE 1 3/4" 20 SPLINE
 PTO#: 37489 PART #: 50951 YOKE 1 3/8" 21 SPLINE

MIN: 1060mm [41.73"]
 MAX: 1449mm [57.05"]

← 126mm [4.96"] → → 129mm [5.08"] →

WHEN AT MAX THERE IS
 389mm [15.31"] O/LAP



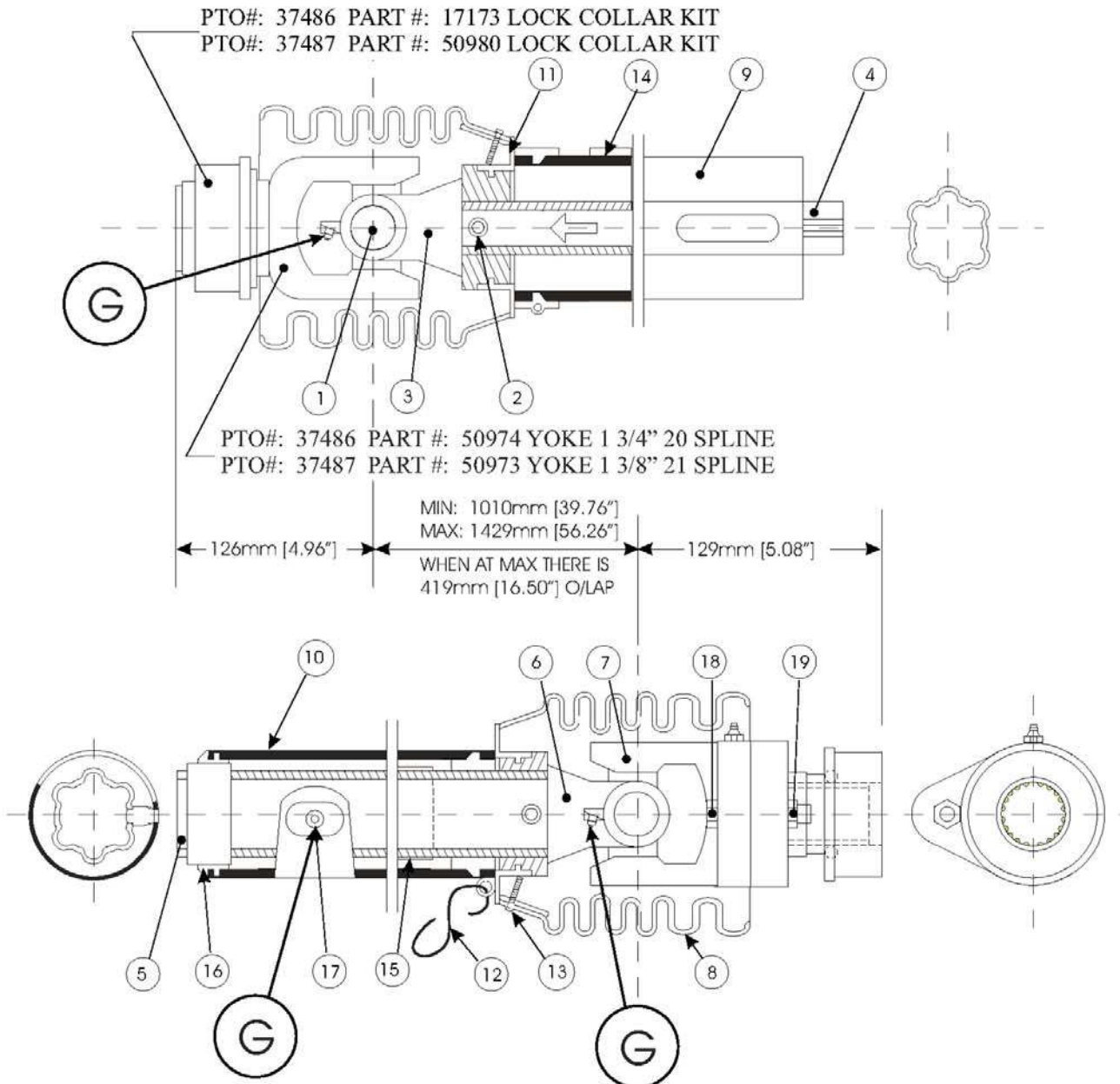
37488: 1 3/4 -20 w/ 1000 RPM
 37489: 1 3/8 -21 w/ 1000 RPM

MECH. STEER TANK CV PTO

Parts



ITEM #	QTY	PART #	DESCRIPTION	ITEM #	QTY	PART #	DESCRIPTION
1	2	50961	CROSS & BEARING KIT	11	1	16814	BEARING RING Sc25
2	1	50955	SPRING PIN 10 x 80	12	1	16815	SAFETY CHAIN
3	1	50975	INBOARD YOKE 1B	13	2	16818	SCREWS
4	1	50976	INNER PROFILE 1B	14	1	16816	DECAL OUT
5	1	50977	PROFILE & SLEEVE W. A.	15	1	16817	DECAL INN
6	1	50958	INBOARD YOKE 2A	16	1	17171	SUPPORT BEARING
7	1	50970	SHEAR BOLT CLUTCH 1 1/2"	17	1	16820	ZERK
8	2	50965	SHIELD CONE 6 RIB	18	1	3028	BOLT 8mm x 60mm
9	1	50978	SHIELD TUBE OUTER OVAL	19	1	16828	TOP LOCK NUT, 8mm
10	1	50979	INNER SHIELD TUBE				

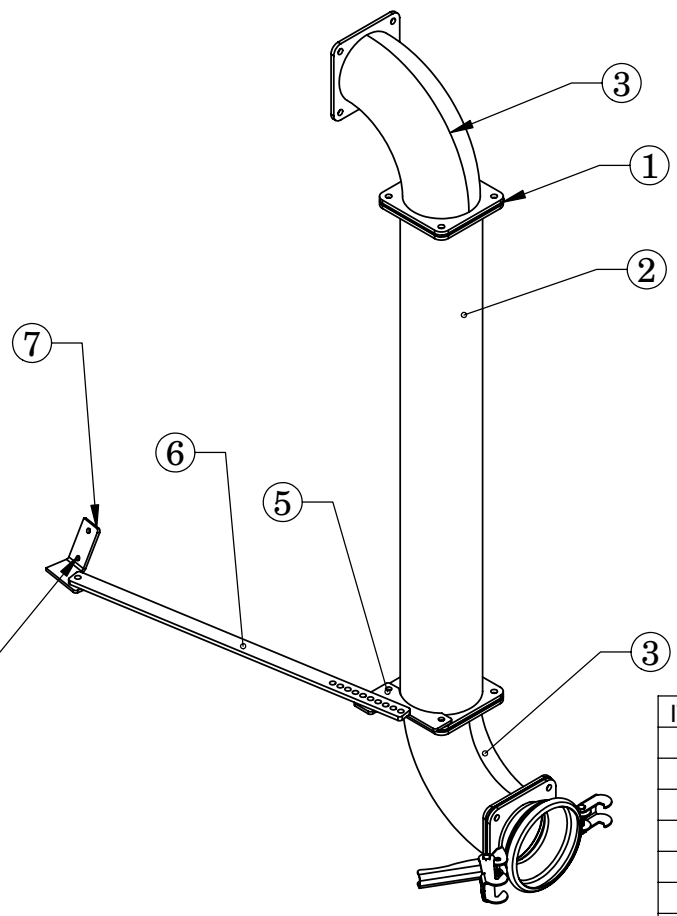


37486: 1 3/4 -20 w/ 1000 RPM
 37487: 1 3/8 -21 w/ 1000 RPM

STANDARD PTO

ECO#	REV	NOTES	DATE	DRWN	APR
		RELEASED	03/08/05	G.JH	PB
xx		XXXX	xx	xxx	xx

THIS OPTION IS TO ALLOW SLURRY TO BE DUMPED LOWER TO GROUND AND TO SUPPORT DISCHARGE TUBE



TO BE DRILLED AND SECURE TO TANK BOTTOM SUPPORT

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	3	16035	GASKET .18 x 7.5 x 7.5 W/6"ID
2	1	83377	TUBE DISCHARGE 6" 48" LG
3	2	80377	CUT ELBOW W/FLANGES
4	1	15564	COUPLER, FLANGED FEMALE
5	1	83358	BRKT TUBE ADJUSTING
6	1	83359	BRKT ADJUSTABLE TUBE ON TANK
7	1	83376	PLATE FORMED 4" X6" X 1/4 W/HOLES

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES & TOLERANCES ARE		BALZER INC.	
WELD .06	FAB .03	CO. HWY 27 E	507-427-3133
		MT. LAKE, MN	800-795-8551
TO ASSEMBLY	MATERIAL SEE BILL OF MATERIALS	PART NAME	
TO PAINT	WHERE USED	DISCHARGE TUBE W/ ADJUSTABLE SUPPORT	
WELD	LAST SAVED BY Frank	LOWER TO GROUND	
PROCEDURE	DESIGN SV	LAST SAVED DATE Tuesday, March 08, 2005 5:17:27 PM	DWG NO 83379 SW

Parts



IT IS THE POLICY OF BALZER COMPANY TO CONSTANTLY IMPROVE ITS PRODUCTS WHENEVER IT IS PRACTICAL TO DO SO. THEREFORE, BALZER COMPANY RESERVES THE RIGHT TO REDESIGN OR CHANGE ITS EQUIPMENT OR COMPONENT PARTS THEREOF WITHOUT INCURRING THE OBLIGATION TO INSTALL OR FURNISH SUCH CHANGES ON EQUIPMENT PREVIOUSLY DELIVERED.

INSTRUCTIONS FOR ORDERING PARTS

To enable our customer service department to provide you with the correct replacement parts promptly and accurately, follow the ordering instructions as listed below.

Identify your equipment by serial number whenever possible.

Use part numbers and descriptions from the illustration drawings furnished to assist in identifying the needed parts.

Owners, order all parts through your local dealer.

Dealers must indicate company name, shipping point and mailing address for notification if different from shipping point. State whether freight, express, parcel or other handling is desired.

Send all parts to:

Balzer Inc.
County Road 27 East
PO Box 458
Mountain Lake, Mn 56159



INSTRUCTIONS FOR RETURNING PARTS FOR ADJUSTMENT

Dealers should inspect all parts when received. Shortages or damage should be noted by the carrier agent at the time the parts are accepted. Shippers responsibility ceases upon delivery of shipment to customer in good order. Claims for damage, loss, or malfunction are to be reported within thirty (30) days for warranty considerations.

All returned parts must have return authorization, a copy of the original packing list and transportation prepaid.

For replacement parts contact:

Ken Classen Extension 104
Doug Wellman Extension 108

For Service Contact:

Dave Bennett Extension 134

Phone Number: (800) 795-8551

(800) 727-3133

Main: (507) 427-3133

Fax Number: (507) 427-3640

Website: <http://www.balzerinc.com>

