Unverferth® **Grain Handling**

TRACKS WITH HYDRAULIC TENSIONING

1000 & 1100 Bushel Carts
36" x 131" with 2 Bogie Track System
Serial Number B39320100 and Higher

1100 - 2000 Bushel Carts
36" x 148" with 4 Bogie Track System
Serial Number B39320100 and Higher

Part No. 267997

Foreward

This symbol identifies important safety messages. When you see it, read the message that follows and be alert to the possibility of personal injury.

Remember, safety instructions stated in this manual are for your protection. Read them carefully and follow them closely when working around or using this machine.

Read and study this manual completely before attempting to operate this implement. Take this manual to the field for handy reference when operating, adjusting, or servicing your machine.

When referenced, “Right-Hand” (RH) and “Left-Hand” (LH) side of the machine are determined by standing behind the machine and facing in the direction of travel.

Product Information

When ordering parts or when requesting further information or assistance, always give the following information:

- Machine name
- Model number
- Serial number

All products manufactured by Unverferth Mfg. Co., Inc. are warranted to be free from material and workmanship defects for one full year from time of consumer delivery. Your local dealer will gladly assist you with any warranty questions.

Please fill out and retain this portion for your records. The serial number plate is located on the frame as shown below.

Purchase Date _____Model _____Serial No._____

Dealer _____ City _____

Dealer Contact _____ Phone _____

IMPORTANT

- *The information, specifications, and illustrations in the manual are based on information available at the time it was written. Due to continuing improvements in the design and manufacture of Unverferth products, all specifications and information contained herein are subject to change without notice.*

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Section I
Safety

General Hazard Information

No accident-prevention program can be successful without the wholehearted cooperation of the person who is directly responsible for the operation of the equipment.

A large number of accidents can be prevented only by the operator anticipating the result before the accident is caused and doing something about it. No power-driven equipment, whether it be transportation or processing, whether it be on the highway, in the field, or in the industrial plant, can be safer than the person who is at the controls. If accidents are to be prevented--and they can be prevented--it will be done by the operators who accept the full measure of their responsibility.

It is true that the designer, the manufacturer, and the safety engineer can help; and they will help, but their combined efforts can be wiped out by a single careless act of the operator.

It is said that, “the best kind of a safety device is a careful operator.” We, at Unverferth Mfg. Co., Inc. ask that you be that kind of operator.

REMEMBER:

THINK SAFETY

A CAREFUL OPERATOR IS THE BEST INSURANCE AGAINST AN ACCIDENT!

SIGNAL WORDS

DANGER

INDICATES AN EXTREMELY HAZARDOUS SITUATION OR ACTION THAT WILL RESULT IN SERIOUS INJURY OR DEATH.

WARNING

INDICATES A HAZARDOUS SITUATION OR ACTION THAT COULD RESULT IN SERIOUS INJURY OR DEATH.

CAUTION

INDICATES AN UNSAFE SITUATION OR ACTION THAT MAY RESULT IN PERSONAL INJURY.

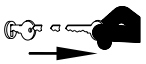
IMPORTANT

Is used for instruction on operating, adjusting, or servicing a machine.

Following Safety Instructions

- Read and understand this operator's manual before operating.

- All machinery should be operated only by trained and authorized personnel.
- To prevent machine damage, use only attachments and service parts approved by the manufacturer.
- Always shut tractor engine off and remove key before servicing.



- Avoid personal attire such as loose fitting clothing, shoestrings, drawstrings, pants cuffs, long hair, etc., that may become entangled in moving parts.
- Do not allow anyone to ride on the implement. Make sure everyone is clear before operating machine or towing vehicle.

Before Servicing

- Avoid working under an implement; however, if it becomes absolutely unavoidable, make sure the implement is safely blocked.

- Ensure that all applicable safety decals are installed and legible.

Before Operating

- Always make certain everyone and everything is clear of the machine before beginning operation.
- Verify that all safety shields are in place and properly secured.
- Ensure that all applicable safety decals are installed and legible.

During Operation

- Regulate speed to field conditions. Maintain complete control at all times.
- Never lubricate equipment when in operation.
- Use extreme care when operating close to ditches, fences, or on hillsides.
- Do not leave towing vehicle unattended with engine running.

Before Transporting

- This implement is not equipped with brakes. Ensure that the towing vehicle has adequate weight and braking capacity to tow this unit.

During Transport

- Use good judgment when transporting equipment on highways. Regulate speed to road conditions and maintain complete control.
- Maximum transport speed of this implement should never exceed 20 m.p.h. as indicated on the machine. Maximum transport speed of any combination of implements must not exceed the lowest specified speed of the implements in combination. Do not exceed 10 m.p.h. during off-highway travel.
- Slow down before making sharp turns to avoid tipping. Drive slowly over rough ground and side slopes.
- It is probable that this implement is taller, wider and longer than the towing vehicle. Become aware of and avoid all obstacles and hazards in the travel path of the equipment, such as power lines, ditches, etc.

Pressurized Oil

- Relieve the hydraulic system of all pressure before adjusting or servicing. See hydraulic power unit manual for procedure to relieve pressure.

- High-pressure fluids can penetrate the skin and cause serious injury or death. Use cardboard or wood to detect leaks in the hydraulic system. Seek medical treatment immediately if injured by high-pressure fluids.

- Accumulators used in this hydraulic system can retain fluid under pressure even after tractor hydraulic valve is placed in FLOAT. Remove residual pressure from accumulators by holding main hydraulic switches in DOWN position for at least 20 seconds after cylinders have stopped moving.

- Hydraulic system must be purged of air before operating to prevent serious injury or death.

- Do not bend or strike high-pressure lines. Do not install bent or damaged tubes or hoses.

- Repair all oil leaks. Leaks can cause fires, personal injury, and environmental damage.

- Route hoses and lines carefully to prevent premature failure due to kinking and rubbing against other parts. Make sure that all clamps, guards and shields are installed correctly.

- Check hydraulic hoses and tubes carefully. Replace components as necessary if any of the following conditions are found:
    - End fittings damaged, displaced, or leaking.
    - Outer covering chafed/cut or wire reinforcing exposed.
    - Outer covering ballooning locally.
    - Evidence of kinking or crushing of the flexible part of a hose.

Preparing for Emergencies

- Keep a first aid kit and properly rated fire extinguisher nearby.

- Keep emergency numbers for fire, rescue, and poison control personnel near the phone.

Wearing Protective Equipment

- Wear clothing and personal protective equipment appropriate for the job.

- Wear steel-toed shoes when operating.

- Wear hearing protection when exposed to loud noises.

- Do not wear additional hearing impairing devices such as radio headphones, etc.

Section II
Operation & Maintenance

1000 & 1100 Bushel Carts

1100 & Larger Bushel Carts

Track Operation

Track Tension: Check track hydraulic pressure daily and maintain recommended pressure of 1000 PSI.

⚠ WARNING

- **EYE PROTECTION AND OTHER APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT MUST BE WORN WHILE SERVICING IMPLEMENT.**
- **KEEP HANDS CLEAR OF PINCH POINT AREAS.**
- **HIGH-PRESSURE FLUIDS CAN PENETRATE THE SKIN AND CAUSE SERIOUS INJURY OR DEATH. USE CARDBOARD OR WOOD TO DETECT LEAKS IN THE HYDRAULIC SYSTEM. SEEK MEDICAL TREATMENT IMMEDIATELY IF INJURED BY HIGH-PRESSURE FLUIDS.**
- **THE HYDRAULIC SYSTEM MAINTAINS OIL AT A HIGH-PRESSURE. PRESSURE MUST BE RELIEVED PRIOR TO ANY TRACK MAINTENANCE.**
- **ACCUMULATOR MAINTAINS PRESSURE IN HYDRAULIC SYSTEM. DO NOT SERVICE HYDRAULIC SYSTEM WITHOUT FIRST DISCHARGING HYDRAULIC PRESSURE IN ACCUMULATOR.**

The accumulator in the hydraulic system is precharged with nitrogen to 850 psi. Do not puncture or dent shell and do not weld near accumulator. Do not break fittings in accumulator. The accumulator itself is under pressure at all times. Once connected into the hydraulic system, the accumulator will maintain pressure in the system until pressure is relieved by the tractor's hydraulic system.

FIG. 2-1

The cart is not equipped with brakes. Ensure that the towing vehicle has adequate weight and braking capacity to tow this implement. Never tow a loaded grain cart over public roads.

Do not exceed 10 m.p.h. during off-highway.

Regulate to road conditions. Maximum speed should never exceed 20 m.p.h.

Reduce speed prior to turning to avoid risk of tipping over.

⚠ WARNING

- **MOVING PARTS CAN CRUSH AND CUT. KEEP AWAY FROM MOVING PARTS.**

IMPORTANT

- *To maximize the life of the tracks, wide turns should be made whenever possible.*
- *To avoid belt damage, do not exceed 8 m.p.h. when loaded.*
- *Freezing mud can cause damage to track components. Clear mud out of the inside of track belt and between wheels, concentrating in the guide lug and between wheels before mud can potentially freeze.*

Track Alignment

⚠ WARNING

- **ENTANGLEMENT WITH MOVING PARTS CAN CAUSE SERIOUS INJURY OR DEATH. USE EXTREME CARE WHEN INSPECTING AND ADJUSTING BELT TRACKING. AVOID PERSONAL ATTIRE SUCH AS LOOSE FITTING CLOTHING, SHOESTRINGS, DRAWSTRINGS, PANTS CUFF, LONG HAIR, ETC., THAT MAY BECOME ENTANGLED IN MOVING PARTS.**
- **EYE PROTECTION AND OTHER APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT MUST BE WORN WHILE SERVICING IMPLEMENT.**
- **KEEP HANDS CLEAR OF PINCH POINT AREAS.**
- **TIPPING OR MOVEMENT OF THE MACHINE CAN CAUSE SERIOUS INJURY OR DEATH. BE SURE MACHINE IS SECURELY BLOCKED.**

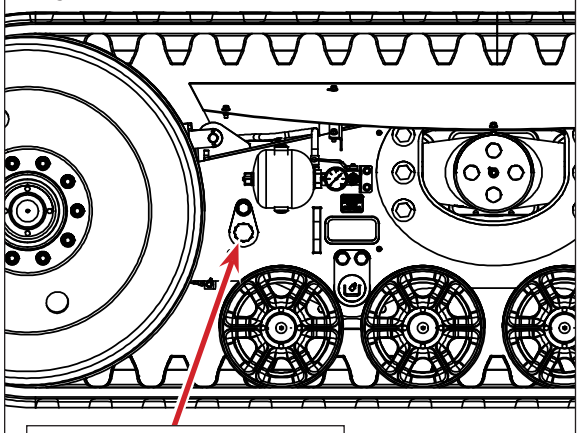
The maintenance criteria listed below are very important for proper track operation. Follow these recommendations before and during the adjustment process as necessary. Check these items every day to prevent undue wear to wheels and track.

All tracks have been factory adjusted. But as the tracks wear in they may need to be re-aligned. If wear is noticed on the track lugs, follow the instructions for realignment.

1. Park cart on a hard, level, and uniform surface before checking or adjusting track unit.

2. If adjustment is needed, the alignment bolt is located toward the front on the outside of the track frame. See Fig. 2-2.

FIG. 2-2



Track Alignment (continued)

NOTE: For current alignment with through-bolt, turning clockwise moves track belt in toward cart, and counter-clockwise moves belt out away from cart.

NOTE: For previous alignment with adjustment bolts on both inside and outside track frame, the alignment procedure is opposite. Turning outside bolt clockwise moves belt out away from cart, and turning inside bolt clockwise moves belt in toward cart.

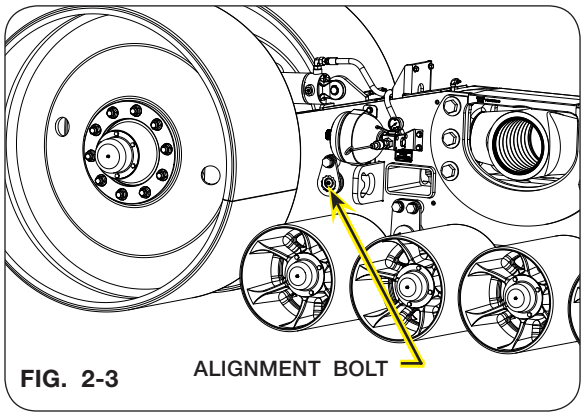


FIG. 2-3

3. Remove the bolt retainer plate and hardware. Adjust the bolt from the outside of the frame with 1/2 turn increments. See Fig. 2-3.

4. Replace the retainer flag.

5. If the track pressure changed during the alignment process, re-tension track to 1000 psi. Refer to next page (track maintenance) for tensioning instructions.

6. Check the alignment. Pull the cart for 1 mile and check for heat on the inside of the lugs. If one side is warm, the tracks are still rubbing. Repeat alignment procedure until track guide lugs are cool.

IMPORTANT

- *For new rubber belts, follow "Conditioning" instructions listed in Track Maintenance section.*

Track Maintenance

"Condition" Track Prior to Initial Usage

A new rubber track, fresh from the mold, tends to be slightly "tacky". This is a standard consequence of the vulcanization (curing) process. Generally, the track will perform better if this tackiness is removed, and thus it is recommended that all new tracks be "conditioned" with talc, dirt, Dries-All (an agent used in absorbing spills), or some other non-caustic particulate material. This is done by simply spreading a thin layer of the material over the undercarriage-engaging surface of the track, and then running the system for a brief period. This will serve to remove the tackiness of the rubber, and will promote optimum track-undercarriage engagement. "Conditioning" of the track in this manner is necessary only once, when the track is first installed on its undercarriage.

Rotate Tracks if Required

In some applications, wear on the tracks can be uneven (due to extensive side hill operation, excessive camber, non-uniform load distribution, etc.). In applications where the undercarriage adjustments necessary to correct these uneven wear patterns do not exist, "rotation" of the tracks (from side to side) may maximize their service life. This is particularly true in situations where the track exhibits accelerated wear on either the extreme inboard or extreme outboard edges.

Track Maintenance (continued)

Track Tensioning & Detensioning

⚠ WARNING

- **HIGH-PRESSURE FLUIDS CAN PENETRATE THE SKIN AND CAUSE SERIOUS INJURY OR DEATH. USE CARDBOARD OR WOOD TO DETECT LEAKS IN THE HYDRAULIC SYSTEM. SEEK MEDICAL TREATMENT IMMEDIATELY IF INJURED BY HIGH-PRESSURE FLUIDS.**
- **THE HYDRAULIC SYSTEM MAINTAINS OIL AT A HIGH PRESSURE. PRESSURE MUST BE RELIEVED PRIOR TO ANY TRACK MAINTENANCE.**
- **ACCUMULATOR MAINTAINS PRESSURE IN HYDRAULIC SYSTEM. DO NOT SERVICE HYDRAULIC SYSTEM WITHOUT FIRST DISCHARGING HYDRAULIC PRESSURE IN ACCUMULATOR.**

The accumulator in the hydraulic system is precharged with nitrogen to 850 psi. Do not puncture or dent shell and do not weld near accumulator. Do not break fittings in accumulator. The accumulator itself is under pressure at all times. Once connected into the hydraulic system, the accumulator will maintain pressure in the system until pressure is relieved by the tractor's hydraulic system.

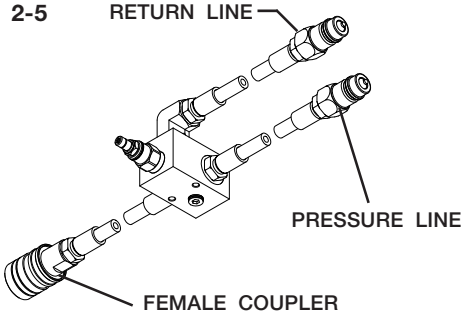
Use the tensioner hose kit provided with the tracks to add or relieve tension to tracks.

Make sure the valve is in the closed position before attaching hose to tracks. The valve is in the closed position when the handle is 90 degrees from the hose and open when the handle is in line with the hose, see FIG. 2-4.

Attach the pressure and return couplers to the tractor and the female coupler to the track. (FIG. 2-5)

FIG. 2-4

FIG. 2-5



Track Maintenance (continued)

Tensioning

NOTE: When repressurizing the track system, do not exceed 5 gpm on the tractor SCV remote during the procedure. Exceeding 5 gpm will result in inaccurate PSI or allow air into the hydraulic system of the track.

1. Start tractor and pressurize line to full pressure. The valve in the tensioner hose will regulate the pressure for the track.
2. Open the valve on the track and allow track to pressure up to 1000 psi. See FIG. 2-6.
3. Once the track has been pressurized close the valve on the track and replace cover on track coupler.
4. Relieve the pressure in the hydraulic hoses and turn off tractor.
5. Remove tensioner hose.

FIG. 2-6

NOTE: If system does not hold pressure, it is possible that there is air in the lines. Follow steps 1-3 but leave the track valve open and cycle the hydraulics on the tractor from extend to float. Engage the hydraulics long enough to completely tension the track then switch it to float and allow the track to detension. Follow these steps 3 to 4 times then retension to 1000 psi and shut the track valve.

If the track pressure is high or low using the procedure above to tension the track, the valve in the tensioner hose assembly can be adjusted to get the pressure set to 1000 psi. Follow the procedure below to make this adjustment.

1. Loosen the 9/16” jam nut.
2. Turn the 5/32” set screw counter-clockwise all the way out until it stops.
3. Set the tractor SCV remote to 5 gpm.
4. Attach the hose to the tractor SCV remote and to the track valve.
5. Turn the handle on the track valve to the open position.
6. Set the tractor SCV remote in detent.

Track Maintenance (continued)

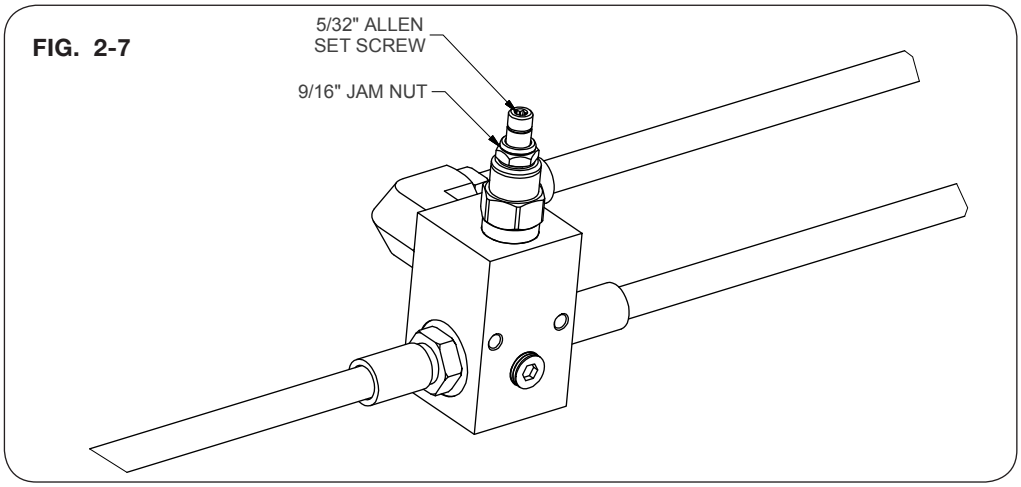
7. Turn the 5/32” set screw clockwise slowly, while watching the pressure gauge on the track frame until it reaches 1000 PSI.

8. Tighten the 9/16” jam nut.

9. Turn the handle on the track valve to the closed position.

10. Put the tractor SCV remote in the float position and detach the hose from the tractor and track valve.

FIG. 2-7



Detensioning

1. Install the tensioner hose to the track valve and to the tractor BEFORE opening the track valve.

2. Place the hydraulic lever in retract and open the valve on the track.

3. Allow track to detension for 5 minutes.

4. Close valve on track, and make sure there is no pressure in the hydraulic line.

5. Turn off tractor and remove hose.

Track Maintenance (continued)

Cylinder Replacement

⚠ WARNING

- **EYE PROTECTION AND OTHER APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT MUST BE WORN WHILE SERVICING IMPLEMENT.**
- **KEEP HANDS CLEAR OF PINCH POINT AREAS.**
- **HIGH-PRESSURE FLUIDS CAN PENETRATE THE SKIN AND CAUSE SERIOUS INJURY OR DEATH. USE CARDBOARD OR WOOD TO DETECT LEAKS IN THE HYDRAULIC SYSTEM. SEEK MEDICAL TREATMENT IMMEDIATELY IF INJURED BY HIGH-PRESSURE FLUIDS.**
- **ACCUMULATOR MAINTAINS PRESSURE IN HYDRAULIC SYSTEM. DO NOT SERVICE HYDRAULIC SYSTEM WITHOUT FIRST DISCHARGING HYDRAULIC PRESSURE IN ACCUMULATOR.**
- **FALLING OBJECTS CAN CAUSE SERIOUS INJURY OR DEATH. DO NOT WORK UNDER THE MACHINE AT ANY TIME WHILE BEING HOISTED. BE SURE ALL SAFE LIFTING DEVICES AND SUPPORTS ARE RATED FOR THE LOADS BEING HOISTED. THESE ASSEMBLY INSTRUCTIONS WILL REQUIRE SAFE LIFTING DEVICES UP TO 20,000 LBS. SPECIFIC LOAD RATINGS FOR INDIVIDUAL LOADS WILL BE GIVEN AT THE APPROPRIATE TIME IN THE INSTRUCTIONS.**

The accumulator in the hydraulic system is precharged with nitrogen to 850 psi. Do not puncture or dent shell and do not weld near accumulator. Do not break fittings in accumulator. The accumulator itself is under pressure at all times. Once connected into the hydraulic system, the accumulator will maintain pressure in the system until pressure is relieved by the tractor's hydraulic system.

1. Use a safe lifting device rated for 20,000 lbs. and raise up the axle and support.

2. Detension track using procedure listed on the previous page.

Track Maintenance (continued)

3. Remove front outside idler wheel by removing nuts securing the wheel to the hub.
4. Remove rod end cylinder pin from the track tensioner by removing the securing hardware.
5. Rotate rod end of cylinder up toward the top of the track exposing the fitting on the bottom of the base end of the cylinder.
6. Remove fitting and plug with a 3/4”-16 O-ring port plug to prevent excess oil leaking out.
7. Remove base end cylinder pin and replace cylinder using hardware previously removed.
8. Align, assemble and tighten hose fittings. Check hose routing clearance.

NOTE: Route hoses away from areas that may cause abrasion or kinking of hoses during operation.

9. Replace idler wheel using nuts previously removed. Torque wheel nuts per torque charts in this manual.

⚠ CAUTION

- **IMPROPERLY TORQUED WHEEL NUTS/BOLTS CAN CAUSE A LOSS OF IMPLEMENT CONTROL AND MACHINE DAMAGE. WHEEL NUTS/BOLTS MUST BE CHECKED REGULARLY. SEE WHEEL TORQUE CHART PAGE IN THIS MANUAL FOR PROPER WHEEL NUT/BOLT SPECIFICATIONS. WARRANTY DOES NOT COVER FAILURES CAUSED BY IMPROPERLY TORQUED WHEEL NUTS/BOLTS.**

FIG. 2-8 - 1000 & 1100 Bushel Carts

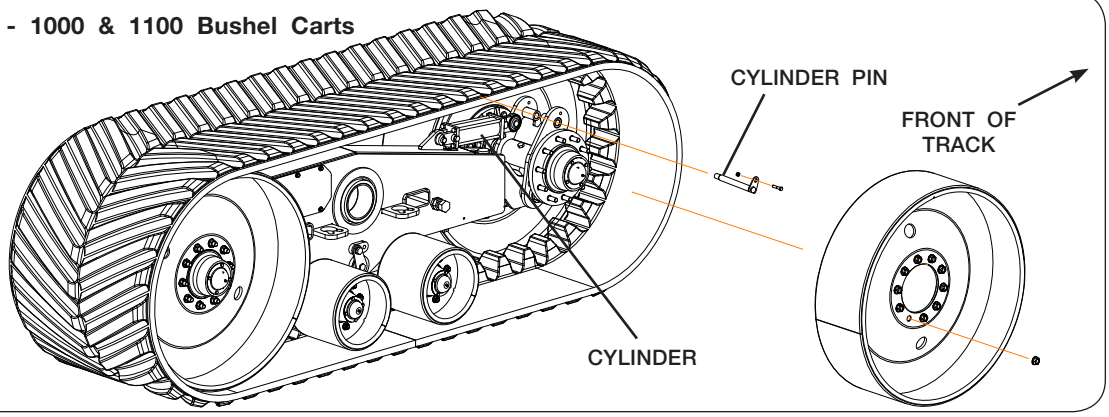
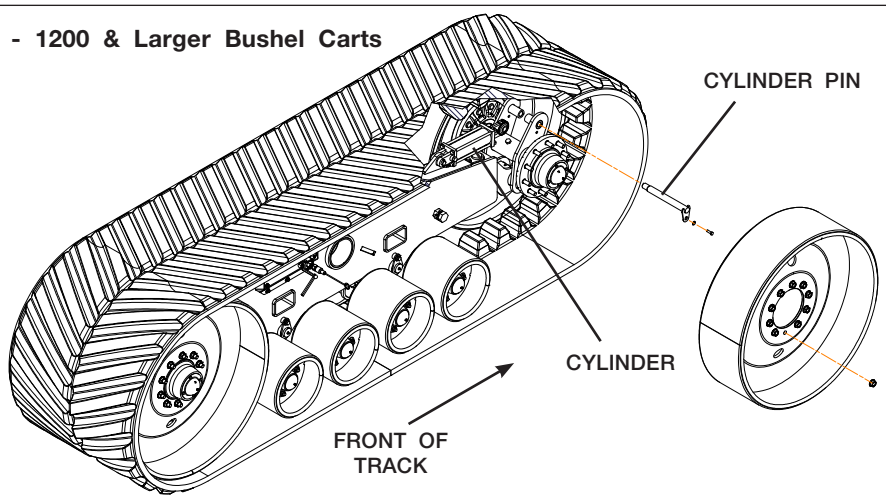


FIG. 2-8 - 1200 & Larger Bushel Carts



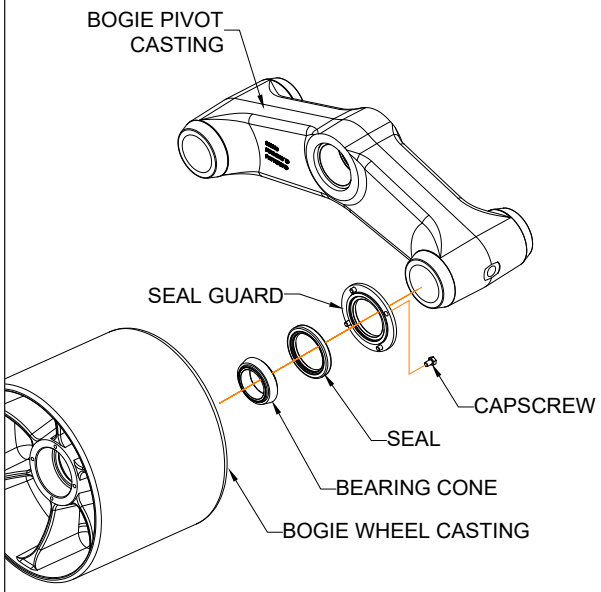
Track Maintenance (continued)

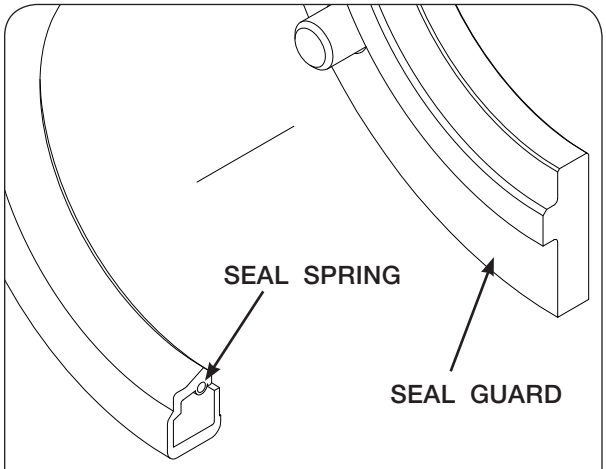
Bogie Wheel Seal Installation

When installing the seal make sure the spring on the inside of the seal is facing towards the outside of the bogie wheel casting. Closest to the seal guard. The seal guard will cover the seal using capscrews.

NOTE: The spring side of the seal must face the outside of the bogie wheel casting to allow the grease to purge.

FIG. 2-9





BE SURE SEAL SPRING FACES OUTSIDE OF BOGIE WHEEL TOWARDS THE SEAL GUARD

FIG. 2-10

Track Lubrication — 1000 & 1100 Bushel Carts

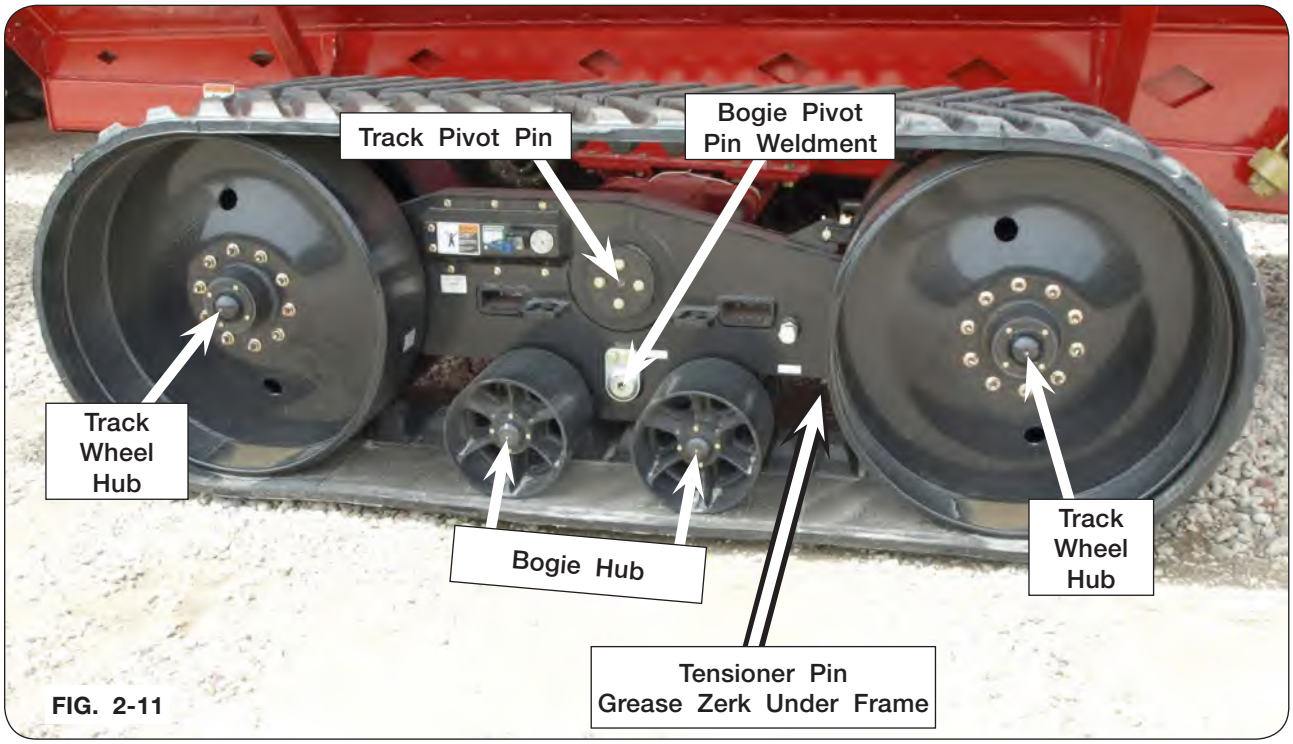
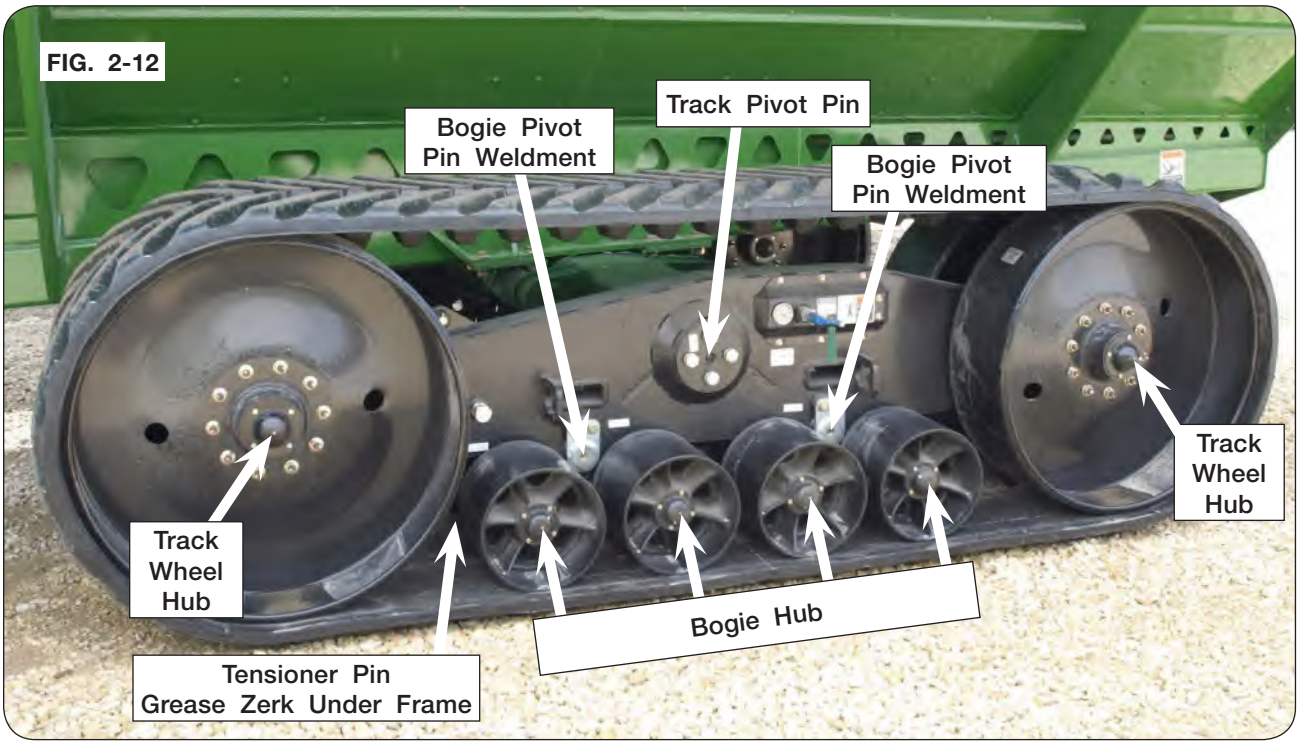


FIG. 2-11

DESCRIPTION	POINTS	LUBRICANT	QTY	HOURS
Track Wheel Hub	4 per Track	EP-2	2 Shots	Weekly* (50 - 75 Hours)
			Repack	2 Years
Bogie Hub	4 per Track	EP-2	2 Shots	Weekly* (50 - 75 Hours)
			Repack	2 Years
Bogie Pivot / Tensioner Pin	2 per Track	EP-2	1 Shot	Every 4 Hours
Track Pivot Pin	1 per Track	EP-2	3 Shots	Weekly

* If operating in wet or muddy conditions grease Daily (10 - 15 Hours).

Track Lubrication — 1100 & Larger Bushel Carts



DESCRIPTION	POINTS	LUBRICANT	QTY	HOURS
Track Wheel Hub	4 per Track	EP-2	2 Shots	Weekly* (50 - 75 Hours)
			Repack	2 Years
Bogie Hub	8 per Track	EP-2	2 Shots	Weekly* (50 - 75 Hours)
			Repack	2 Years
Bogie Pivot / Tensioner Pin	3 per Track	EP-2	1 Shot	Every 4 Hours
Track Pivot Pin	1 per Track	EP-2	3 Shots	Weekly

* If operating in wet or muddy conditions grease Daily (10 - 15 Hours).

Track Storage

1. Avoid storing in sunlight.
2. Avoid excessive moisture.

Ideally, rubber tracks should be stored indoors, in a draft-free area. If tracks must be stored outdoors, a tarpaulin or other covering should be used to protect it from the weather.

Tensioner Assembly & Alignment Hardware Replacement

⚠ WARNING

- **TIPPING OR MOVEMENT OF THE MACHINE CAN CAUSE SERIOUS INJURY OR DEATH. BE SURE MACHINE IS SECURELY BLOCKED.**
- **EYE PROTECTION AND OTHER APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT MUST BE WORN WHILE SERVICING IMPLEMENT.**
- **KEEP HANDS CLEAR OF PINCH POINT AREAS.**
- **HIGH-PRESSURE FLUIDS CAN PENETRATE THE SKIN AND CAUSE SERIOUS INJURY OR DEATH. USE CARDBOARD OR WOOD TO DETECT LEAKS IN THE HYDRAULIC SYSTEM. SEEK MEDICAL TREATMENT IMMEDIATELY IF INJURED BY HIGH-PRESSURE FLUIDS.**
- **ACCUMULATOR MAINTAINS PRESSURE IN HYDRAULIC SYSTEM. DO NOT SERVICE HYDRAULIC SYSTEM WITHOUT FIRST DISCHARGING HYDRAULIC PRESSURE IN ACCUMULATOR.**
- **FALLING OBJECTS CAN CAUSE SERIOUS INJURY OR DEATH. DO NOT WORK UNDER THE MACHINE AT ANY TIME WHILE BEING HOISTED. BE SURE ALL SAFE LIFTING DEVICES AND SUPPORTS ARE RATED FOR THE LOADS BEING HOISTED. THESE ASSEMBLY INSTRUCTIONS WILL REQUIRE SAFE LIFTING DEVICES UP TO 10,000 LBS. FOR 1200 & 1300 BUSHEL CARTS OR 20,000 LBS. FOR 1500, 1600 & 2000 BUSHEL CARTS. SPECIFIC LOAD RATINGS FOR INDIVIDUAL LOADS WILL BE GIVEN AT THE APPROPRIATE TIME IN THE INSTRUCTIONS.**

The accumulator in the hydraulic system is precharged with nitrogen to 850 psi. Do not puncture or dent shell and do not weld near accumulator. Do not break fittings in accumulator. The accumulator itself is under pressure at all times. Once connected into the hydraulic system, the accumulator will maintain pressure in the system until pressure is relieved by the tractor's hydraulic system.

1. Park the empty cart on a firm, level surface. Set the tractor's parking brake, shut off the engine, remove the ignition key and disconnect the PTO shaft and hydraulics from the tractor and cart.

2. Using a 10,000 lbs. safe lifting device for 1200 & 1300 bushel grain carts or 20,000 lbs. safe lifting device for 1500, 1600 & 2000 bushel carts, raise up one side of the cart. Place equally rated safe lifting devices under the axle nearest to the track that will be worked on. Place blocks on top of the frame and under the guide lugs.

Tensioner Assembly & Alignment Hardware Replacement (continued)

3. De-tension the tracks. See the operator's manual for the proper procedure.

4. Use a ratchet strap or come-a-long to help pull the idler wheel.

5. Place a strap rated for 2,000 lbs. under the track belt and over the idler wheel. Lift to hold the track in place when removing the idler wheels.

6. Remove the inner and outer idler wheels (FIG. 2-13).

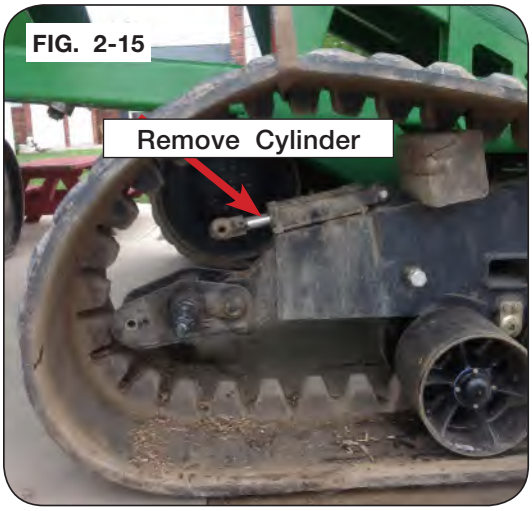
FIG. 2-13

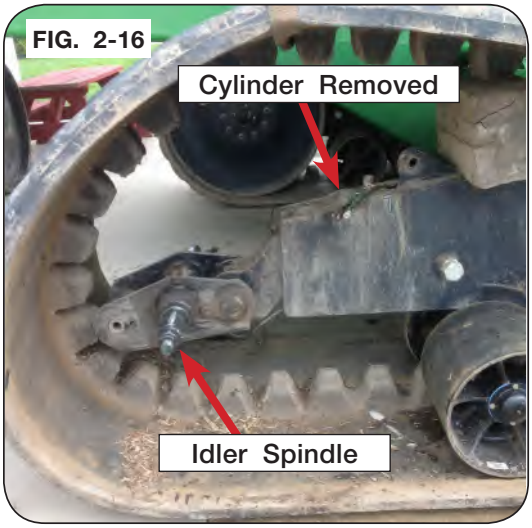
7. Remove the idler hubs (FIG. 2-14).

FIG. 2-14

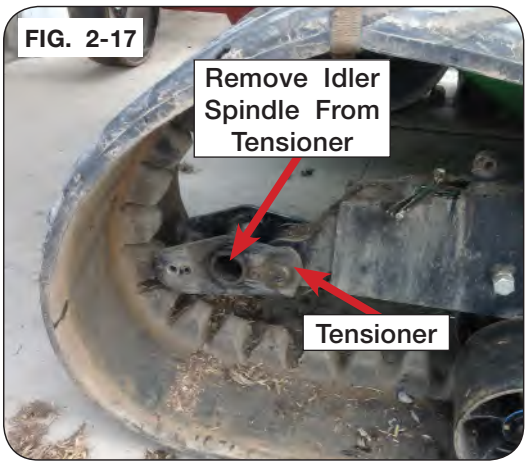
Tensioner Assembly & Alignment Hardware Replacement (continued)

8. Remove the hydraulic cylinder and plug both ends of the hydraulic hoses (Fig. 2-15 & 2-16).



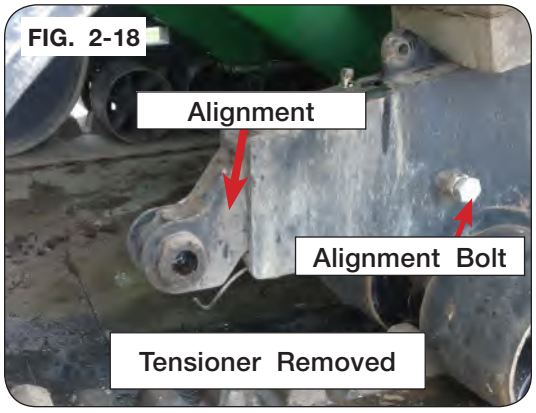


9. Remove the idler spindle. Fig. 2-17 shows spindle removed.



Tensioner Assembly & Alignment Hardware Replacement (continued)

10. Remove the tensioner and alignment bolt (Figure 2-18).



11. Remove the alignment (FIG. 2-19).

Tensioner Assembly & Alignment Hardware Replacement (continued)

12. Install the new alignment and tensioner (FIG. 2-20 & FIG. 2-21).

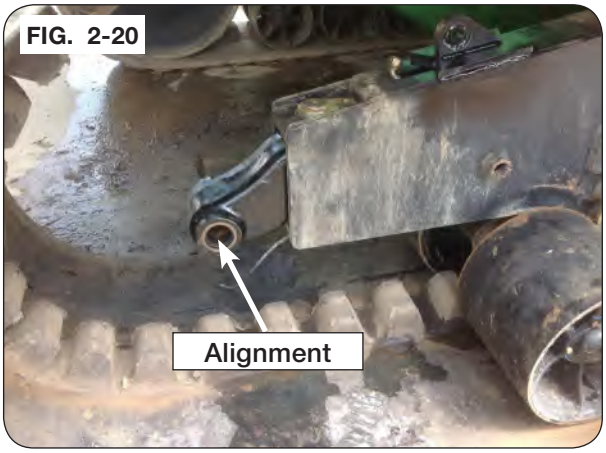


FIG. 2-20

FIG. 2-21

Tensioner Assembly & Alignment Hardware Replacement (continued)

13. Replace the alignment bolt, spherical washers and retaining nut. (FIG. 2-22).

NOTE: Make sure to assemble the larger diameter washer to the inside, and align the holes in the washer with the pins in the frame. Thread the bolt through the frame and alignment arm to remove the play in the washers on the head side. Assemble the washers and nut on the opposite side and tighten the nut leaving about 0.010" gap between the nut and outer washer. Overtightening the nut makes adjusting the alignment bolt difficult.

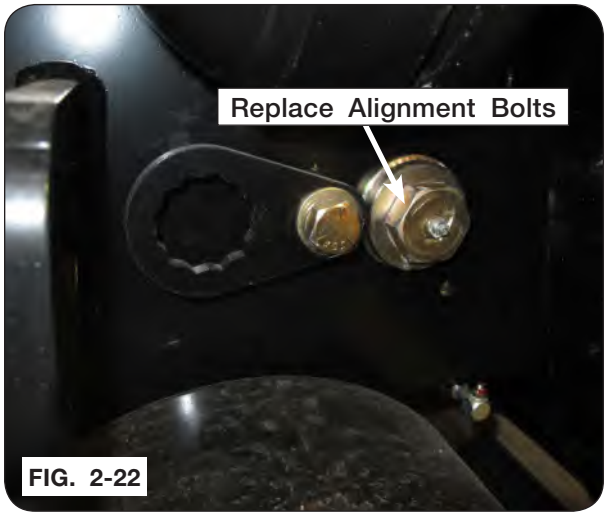


FIG. 2-22

14. Place the idler spindle into the cast tensioner (FIG. 2-23). The orientation of the bolt and nut should be inserted with the nut on the opposite side from the alignment piece and the bolt on the same side as the alignment piece (FIG. 2-23).

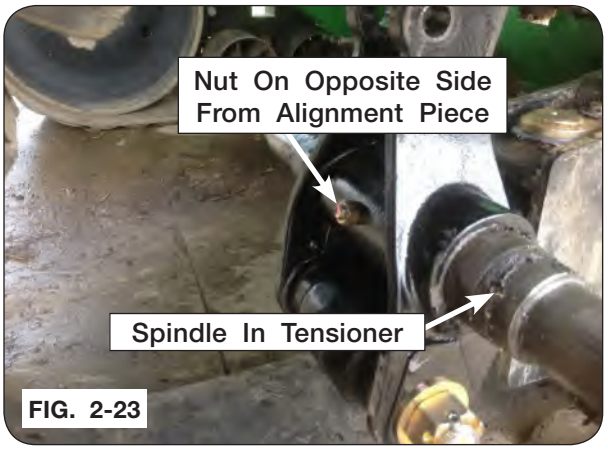


FIG. 2-23

Tensioner Assembly & Alignment Hardware Replacement (continued)

15. Attach the hydraulic hose and replace the hydraulic cylinder (FIG 2-24).

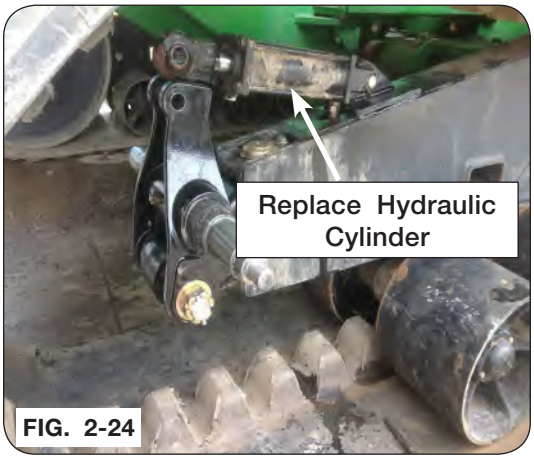


FIG. 2-24

16. Replace the hubs and wheels onto the spindle (FIG. 2-25 & FIG. 2-26). Torque wheel nuts per torque charts in this manual. Refer to this manual for proper tightening of slotted hex nuts. Refer to your operator's manual MAINTENANCE section for specific instructions on how to tighten the bearings for the wheels.

17. Repeat steps on the opposite side of the cart.

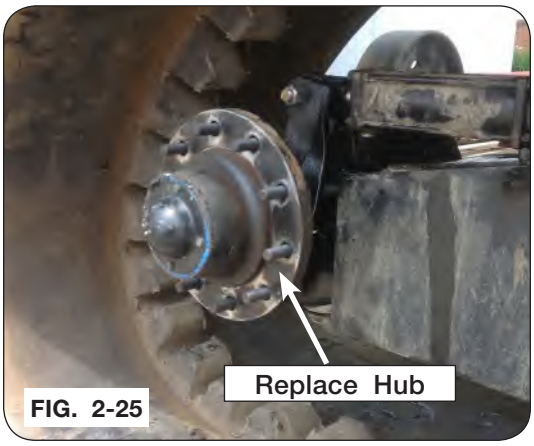


FIG. 2-25


FIG. 2-26

Main Pivot Shaft Bushing Replacement

⚠ WARNING

- **EYE PROTECTION AND OTHER APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT MUST BE WORN WHILE SERVICING IMPLEMENT.**
- **KEEP HANDS CLEAR OF PINCH POINT AREAS.**
- **FALLING OBJECTS CAN CAUSE SERIOUS INJURY OR DEATH. DO NOT WORK UNDER THE MACHINE AT ANY TIME WHILE BEING HOISTED. BE SURE ALL SAFE LIFTING DEVICES AND SUPPORTS ARE RATED FOR THE LOADS BEING HOISTED. THESE ASSEMBLY INSTRUCTIONS WILL REQUIRE SAFE LIFTING DEVICES UP TO 20,000 LBS. SPECIFIC LOAD RATINGS FOR INDIVIDUAL LOADS WILL BE GIVEN AT THE APPROPRIATE TIME IN THE INSTRUCTIONS.**

NOTE: It is recommended to annually replace the fiber bushings.

1. Raise the right side of the cart with a safe lifting device rated for 20,000 lbs.

FIG. 2-27

2. Remove the four bolts and retainer plate that attaches the track assembly to the cart. Retain the bolts and plate for later use (FIG. 2-28).

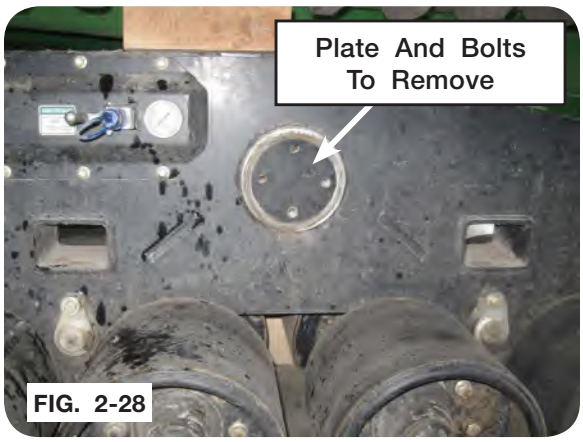


FIG. 2-28

3. Using a safe lifting device rated for 7,500 lbs., remove the track assembly from the cart. (FIG. 2-29)
4. Place the track on a flat surface and block it to prevent the track from moving.

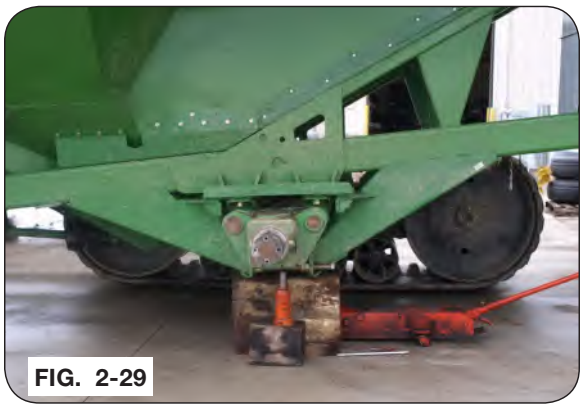


FIG. 2-29

Main Pivot Shaft Bushing Replacement (continued)

5. Using a punch and hammer, remove the center bushings from each end of the spindle hole (FIG. 2-30).

FIG. 2-30

6. Once the fiber bushings are removed, clean all debris from inside the spindle hole. Use a scratch pad to remove rust from the inside (FIG. 2-31).

FIG. 2-31

Main Pivot Shaft Bushing Replacement (continued)

7. Insert one fiber bushing into the spindle hole. Tap the bushing into the spindle hole using a board or flat plate and hammer. Fiber bushing should fit tight, if bushing installs easily or rotates once installed, remove bushing and add composite adhesive Kit #286099. The bushing should be flush with the spindle hole. Repeat on the other side of the hole with the remaining bushing for that track assembly (FIG. 2-32 through FIG. 2-34).


FIG. 2-32

NOTE: The composite bushing adhesive is a 2 part mixture requiring a mixing nozzle and plunger to apply. The working time once the adhesive is mixed is 10 MINUTES. Clean any rust and grease out of the bore prior to applying adhesive. Apply a 1/8" - 3/16" diameter bead around the outside edge on one end of the bushing. Place the end of the bushing with the adhesive into the bore first and press into place. Remove any excess adhesive from the outer edge of bushing after installation. See the adhesive tube information tag for additional directions.


FIG. 2-33

8. Clean off the outside of the shaft on the axle. Scrape or sand off any dirt or foreign material stuck to the outside of the pivot shaft. Be careful not to damage the surface finish of the pin. When the pin is cleaned off, grease or oil the outside of the pin and the inside of the bushings so they slide together better. Make sure the washer is installed on the pin prior to assembling the track.

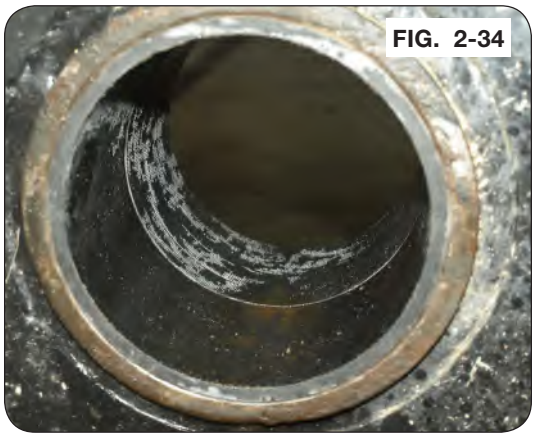


FIG. 2-34

9. Reassemble the track assembly onto the cart. Make sure the pin is lined up with the bushing and slowly slide the frame onto the pin.

10. Replace the outer washer, retaining plate and hardware removed in step 3.

11. Repeat steps 1 through 11 on the opposite side of the cart.

Bogie Pivot Assembly

⚠ WARNING

- **TIPPING OR MOVEMENT OF THE MACHINE CAN CAUSE SERIOUS INJURY OR DEATH. BE SURE MACHINE IS SECURELY BLOCKED.**
- **EYE PROTECTION AND OTHER APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT MUST BE WORN WHILE SERVICING IMPLEMENT.**
- **KEEP HANDS CLEAR OF PINCH POINT AREAS.**
- **HIGH-PRESSURE FLUIDS CAN PENETRATE THE SKIN AND CAUSE SERIOUS INJURY OR DEATH. USE CARDBOARD OR WOOD TO DETECT LEAKS IN THE HYDRAULIC SYSTEM. SEEK MEDICAL TREATMENT IMMEDIATELY IF INJURED BY HIGH-PRESSURE FLUIDS.**
- **THE HYDRAULIC SYSTEM MAINTAINS OIL AT A HIGH-PRESSURE. PRESSURE MUST BE RELIEVED PRIOR TO ANY TRACK MAINTENANCE.**
- **ACCUMULATOR MAINTAINS PRESSURE IN HYDRAULIC SYSTEM. DO NOT SERVICE HYDRAULIC SYSTEM WITHOUT FIRST DISCHARGING HYDRAULIC PRESSURE IN ACCUMULATOR.**
- **FALLING OBJECTS CAN CAUSE SERIOUS INJURY OR DEATH. DO NOT WORK UNDER THE MACHINE AT ANY TIME WHILE BEING HOISTED. BE SURE ALL SAFE LIFTING DEVICES AND SUPPORTS ARE RATED FOR THE LOADS BEING HOISTED. THESE ASSEMBLY INSTRUCTIONS WILL REQUIRE SAFE LIFTING DEVICES UP TO 10,000 LBS. FOR 1200 & 1300 BUSHEL CARTS OR 20,000 LBS. FOR 1500, 1600 & 2000 BUSHEL CARTS. SPECIFIC LOAD RATINGS FOR INDIVIDUAL LOADS WILL BE GIVEN AT THE APPROPRIATE TIME IN THE INSTRUCTIONS.**

IMPORTANT

- *Disconnect cart completely from tractor before welding on equipment. Damage may occur to the electrical system.*
- *Disconnect all scale indicator leads, if applicable, before welding on equipment. Damage may occur to the indicator and load cells.*
- *Attach the welder ground clamp as close as practical to the area where welding is to be performed. Make sure to clean the area to bare metal before attaching the grounding clamp.*

The accumulator in the hydraulic system is precharged with nitrogen to 850 psi. Do not puncture or dent shell and do not weld near accumulator. Do not break fittings in accumulator. The accumulator itself is under pressure at all times. Once connected into the hydraulic system, the accumulator will maintain pressure in the system until pressure is relieved by the tractor's hydraulic system.

1. Park the empty cart on a firm, level surface. Set the tractor's parking brake, shut off the engine, and remove the ignition key.

2. Using a 10,000 lbs. safe lifting device for 1200 & 1300 bushel grain carts or 20,000 lbs. safe lifting device for 1500, 1600 & 2000 bushel carts, raise up one side of the cart. Place equally rated safe lifting devices under the axle nearest to the track that will be worked on. Place blocks on top of the frame and under the guide lugs.

Bogie Pivot Assembly (continued)

3. Remove (4) retainer bolts on axle cover plate.

FIG. 2-35

FIG. 2-36

4. Remove track system from grain cart axle using fork lift as shown.

FIG. 2-37

Bogie Pivot Assembly (continued)

5. Place track system onto pallets, as shown in Figure 2-38, allowing track to sag in between. The track system should be supported by the idler wheels. Strap one side of the track assembly to the pallets, as shown in Figure 2-38, to prevent rolling.

FIG. 2-38

6. Hook hydraulic tensioner hose (268345) to tractor and place tractor hydraulic lever in float position. Open valve to relieve belt tension pressure and drop pressure down to zero PSI. Allow track to de-tension for 5 minutes.

NOTE: Tensioner hose assembly (268345) is provided with the grain cart.

FIG. 2-39

7. As track tension minimizes, attach a come along or large ratchet strap between the front and rear idler wheels as shown in Figure 2-40.

FIG. 2-40

Bogie Pivot Assembly (continued)

8. Disassemble one side of the (4) hub caps from the bogie wheels.

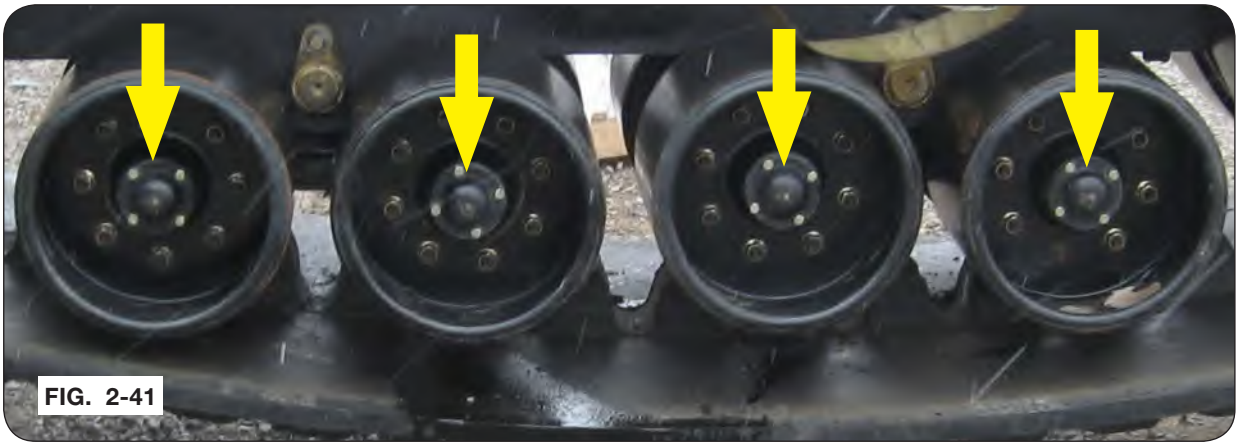


FIG. 2-41

9. Remove the cotter pins (4) from the bogie hub and spindle slotted hex nuts. Remove slotted hex nuts (4) from all four bogie wheels.

10. By grabbing behind the bogie wheel and hub assembly, remove the hub and wheel from the spindle. Retain the outer bearing and spindle washer with the hub and wheel assembly during removal. Be careful not to damage the inner seal.

FIG. 2-42

11. Remove the (4) spindle retainer bolts and hardware. Retain for use during reassembly.

FIG. 2-43

Bogie Pivot Assembly (continued)

12. Remove the spindle, hub, and bogie wheel assembly by pulling through opposite side of removed hub and wheel using a similar technique to step 10. It may be necessary to use penetrating fluid around the spindle in order to facilitate removal. If use of a hammer is needed, reattach the slotted hex nut to the end of the spindle. Thread the slotted hex nut until flush with the end of the spindle. Place a board between the spindle and hammer.


FIG. 2-44

13. After hub, wheel and spindle assemblies are removed, attach ratchet straps, rated for a minimum of 300 lbs. lift capacity, through each of the spindle holes and over top of the rubber track. Tighten both straps evenly.

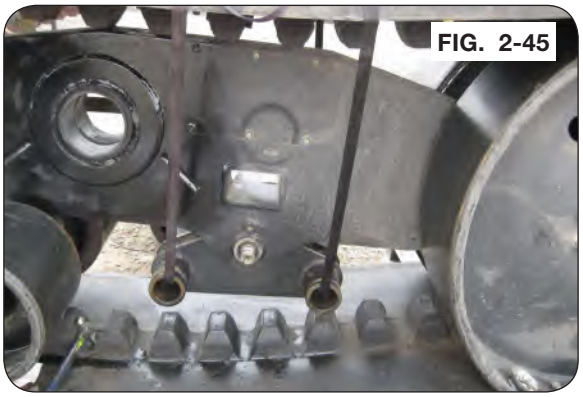


FIG. 2-45

14. Loosen hardware fastening bogie pivot pin to the track. First, remove the roll pin on the slotted hex nut. Next, remove the slotted hex nut and finally remove the bolt holding the teardrop. Once removed, the bogie pivot pin can be discarded.


FIG. 2-46


FIG. 2-47

Bogie Pivot Assembly (continued)

15. Remove the original bogie weldment. Loosen both ratchet straps applied in step 13 and allow the bogie weldment to drop onto the rubber track below. Be sure to retain the thrust washers between the track main frame for use when installing the new bogie weldment.

FIG. 2-48

16. Install the new bogie weldment by placing the bogie weldment underneath the pivot hole on the rubber track. Attach ratchet straps, rated for a minimum of 300 lbs. lift capacity, through each of the spindle holes and over top of the rubber track as in step 12. Raise the bogie weldment by tightening each ratchet strap evenly. Be sure to install the thrust washers removed in step 14 on both sides of the bogie pivot bushing. Install the new pin in the same orientation as the original bogie pivot pin was located. The double pin teardrop should be on the hydraulic pressure valve side of the track assembly.

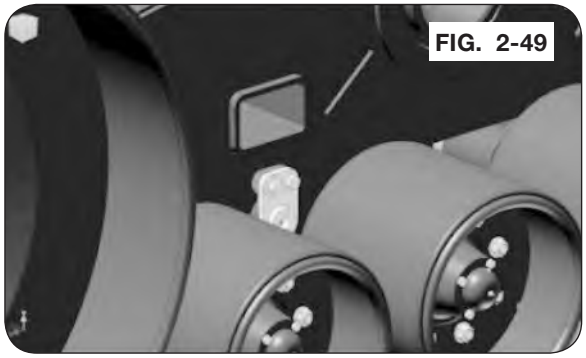


FIG. 2-49

17. With the pin slid out roughly 1-2", install the new hardware along with the new hardware retainer bushing onto the inside of the new double teardrop pin. Tighten new hardware. Align the new bushing against the mainframe of the track in a vertical up and down direction as shown.

18. With the hardware installed in the bushing, add a 1/4" weld around the sides of the new bushing first and then the top of the bushing.

NOTE: Be sure hardware is installed in the bushing prior to welding to ensure that there is no weld splatter compromising threads. Once welding is complete, repaint using provided paint.

Bogie Pivot Assembly (continued)

19. Tighten the slotted hex nut on the cart side of the track assembly. Install roll pin removed in step 14.

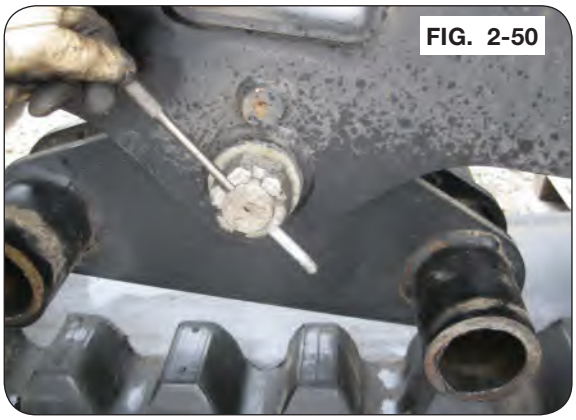


FIG. 2-50

20. Reinstall the (4) spindle, hub, and bogie wheel assemblies in the same orientation as removed. Be sure to align the hole in the spindle with the spindle retaining bolt hole in the bogie pivot.

21. Reinstall and tighten the spindle retaining hardware removed in step 11.

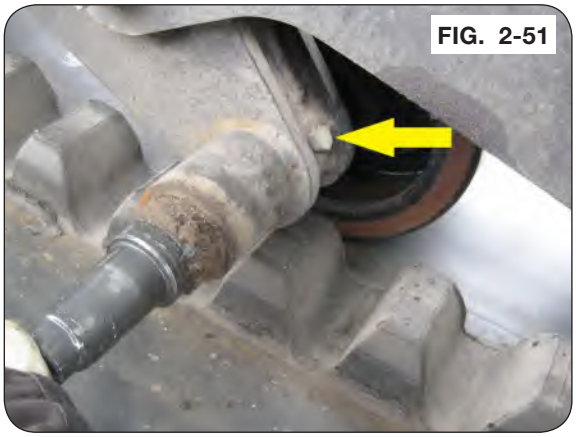


FIG. 2-51

Bogie Pivot Assembly (continued)

22. Reinstall the (4) bogie hub and wheel assemblies removed in step 10. By grabbing behind the bogie wheel and hub assembly, reinstall the hub and wheel to the spindle. Retain the outer bearing and spindle washer with the hub and wheel assembly during installation. Be careful not to damage the inner seal.

23. Reinstall the (4) slotted hex nuts and cotter pins removed in step 9. Refer to this manual for proper tightening of slotted hex nuts.

24. Reinstall the (4) hub caps removed in step 8.

25. Refill each hub at the dust cap grease fitting with approved bearing grease. Continuously rotate hub while pumping grease until the inner seal equally purges grease.

26. Refill bogie pivot pin bushing with grease at the pivot pin teardrop. Continuously walk bogie assembly until grease purges the seal.

27. Check the position of all track lugs between idler and bogie wheels making sure they are equally centered. Pressurize the belt tension cylinder to 1000 PSI.

FIG. 2-52

28. Reinstall track system on grain cart by reversing steps 1-5.

NOTE: Refer to “track alignment” in this section.

Wheel Torque Chart

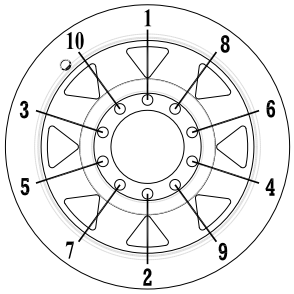
Wheel Nut Torque Requirements

⚠ CAUTION

- IMPROPERLY TORQUED WHEEL NUTS/BOLTS CAN CAUSE A LOSS OF IMPLEMENT CONTROL AND MACHINE DAMAGE. TORQUE WHEEL NUTS/BOLTS TO VALUES IN TABLE. CHECK TORQUE BEFORE USE, AFTER ONE HOUR OF UNLOADED USE OR AFTER FIRST LOAD, AND EACH LOAD UNTIL WHEEL NUTS/BOLTS MAINTAIN TORQUE VALUE. CHECK TORQUE EVERY 10 HOURS OF USE THERE-AFTER. AFTER EACH WHEEL REMOVAL START TORQUE PROCESS FROM BEGINNING. WARRANTY DOES NOT COVER FAILURES CAUSED BY IMPROPERLY TORQUED WHEEL NUTS/BOLTS.

Failure to check torque before first load may damage wheel nut/bolt seats. Once seats are damaged, it will become impossible to keep nuts/bolts tight. Tighten nuts/bolts to applicable torque value shown in table. Start all nuts/bolts by hand to prevent cross threading. Torque nuts/bolts in the recommended sequence as shown in Diagram 1.

WHEEL HARDWARE	
SIZE	FOOT-POUNDS
3/4-16 (UNF)	365 ft.-lbs.



10 BOLT

DIAGRAM 1

Proper Tightening of Hub Slotted Hex Nuts

1. Tighten the slotted hex nut while spinning the hub until drag can be felt in the hub.
2. Loosen the slotted hex nut until there is no pressure on the hub.
3. Tighten the slotted hex nut until resistance can be felt in the hub. Back off the nut to the nearest hole. If there is any side play in the hub, tighten to the next hole.

Complete Torque Chart

Capscrews - Grade 5

NOTE:

- Grade 5 capscrews can be identified by three radial dashes on the head.

- For wheel torque requirements, refer to Wheels and Tires.
- Tighten U-bolts evenly and equally to have the same number of threads exposed on each end.

SIZE	FOOT POUNDS	NEWTON METERS
1/4-20 1/4-28	8-10 9-11	11-13 12-15
5/16-18 5/16-24	15-17 17-19	20-23 23-26
3/8-16 3/8-24	25-28 28-31	34-38 38-42
7/16-14 7/16-20	40-45 45-50	54-61 61-68
1/2-13 1/2-20	62-68 68-75	84-92 92-102
9/16-12 9/16-18	90-98 100-110	122-133 134-148
5/8-11 5/8-18	120-135 124-137	162-183 168-186
3/4-10 3/4-16	200-220 210-230	270-300 285-310
7/8-9 7/8-14	330-350 360-380	425-475 460-515
1-8 1-14	500-525 540-560	675-710 730-760
1 1/8-7 1 1/8-12	600-635 665-700	815-860 920-950
1 1/4-7 1 1/4-12	850-895 940-990	1150-1215 1275-1340
1 3/8-6 1 3/8-12	1125-1175 1280-1335	1525-1590 1735-1810
1 1/2-6 1 1/2-12	1500-1560 1685-1755	2035-2115 2285-2380

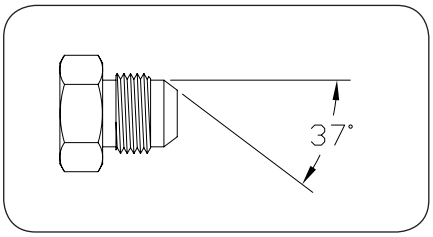
IMPORTANT

- *Follow these torque recommendations except when specified in text.*

Hydraulic Fittings – Torque and Installation

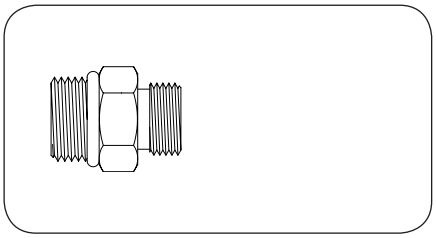
SAE FLARE CONNECTION (J. I. C.)

1. Tighten nut with finger until it bottoms the seat.
2. Using a wrench, rotate nut to tighten. Turn nut 1/3 turn to apply proper torque.



SAE STRAIGHT THREAD O-RING SEAL

1. Insure jam nut and washer are backed up to the back side of smooth portion of elbow adapter.
2. Lubricate o-ring.
3. Thread into port until washer bottoms onto spot face.
4. Position elbows by backing up adapter.
5. Tighten jam nut.

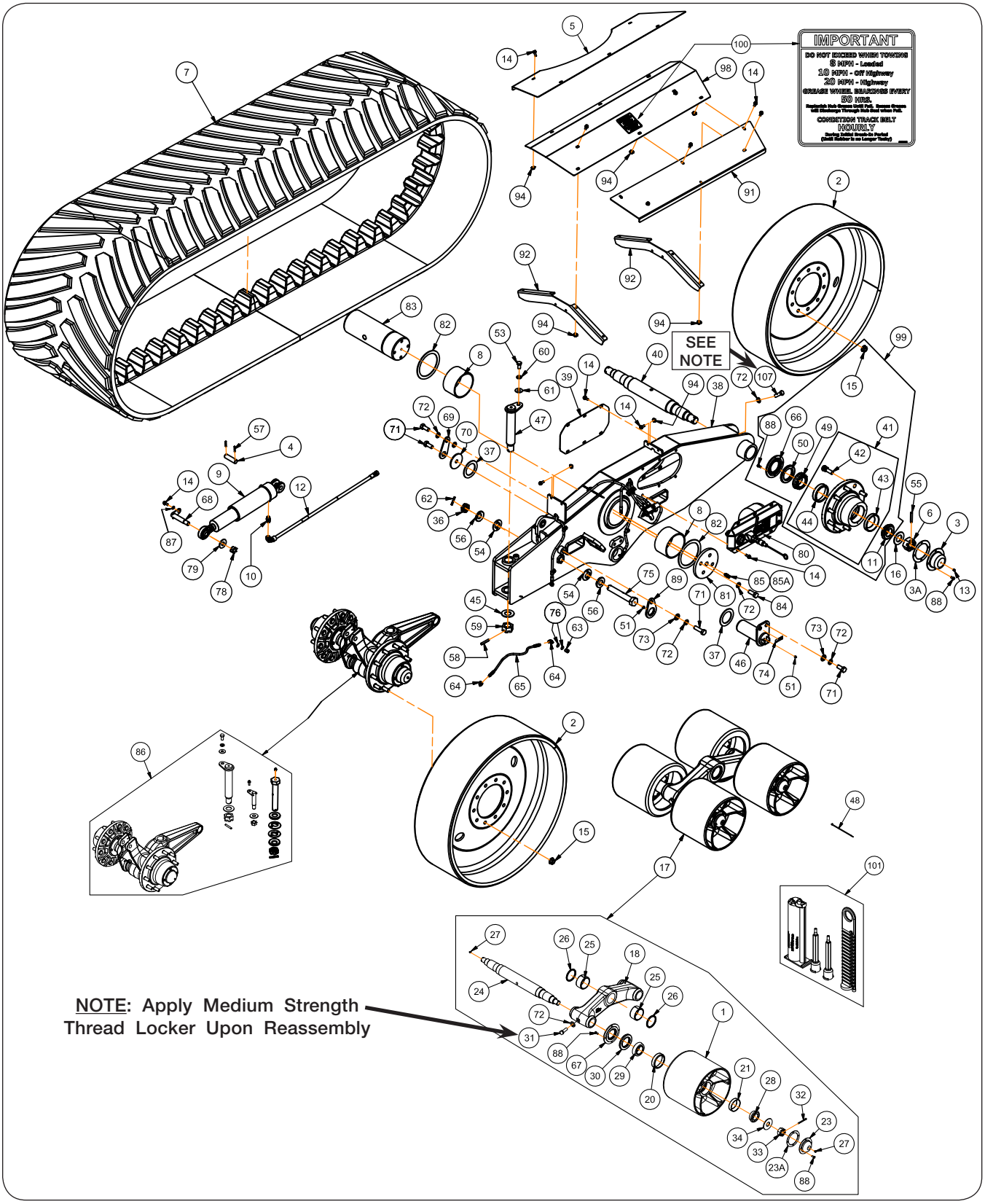


Notes

Section III
Parts

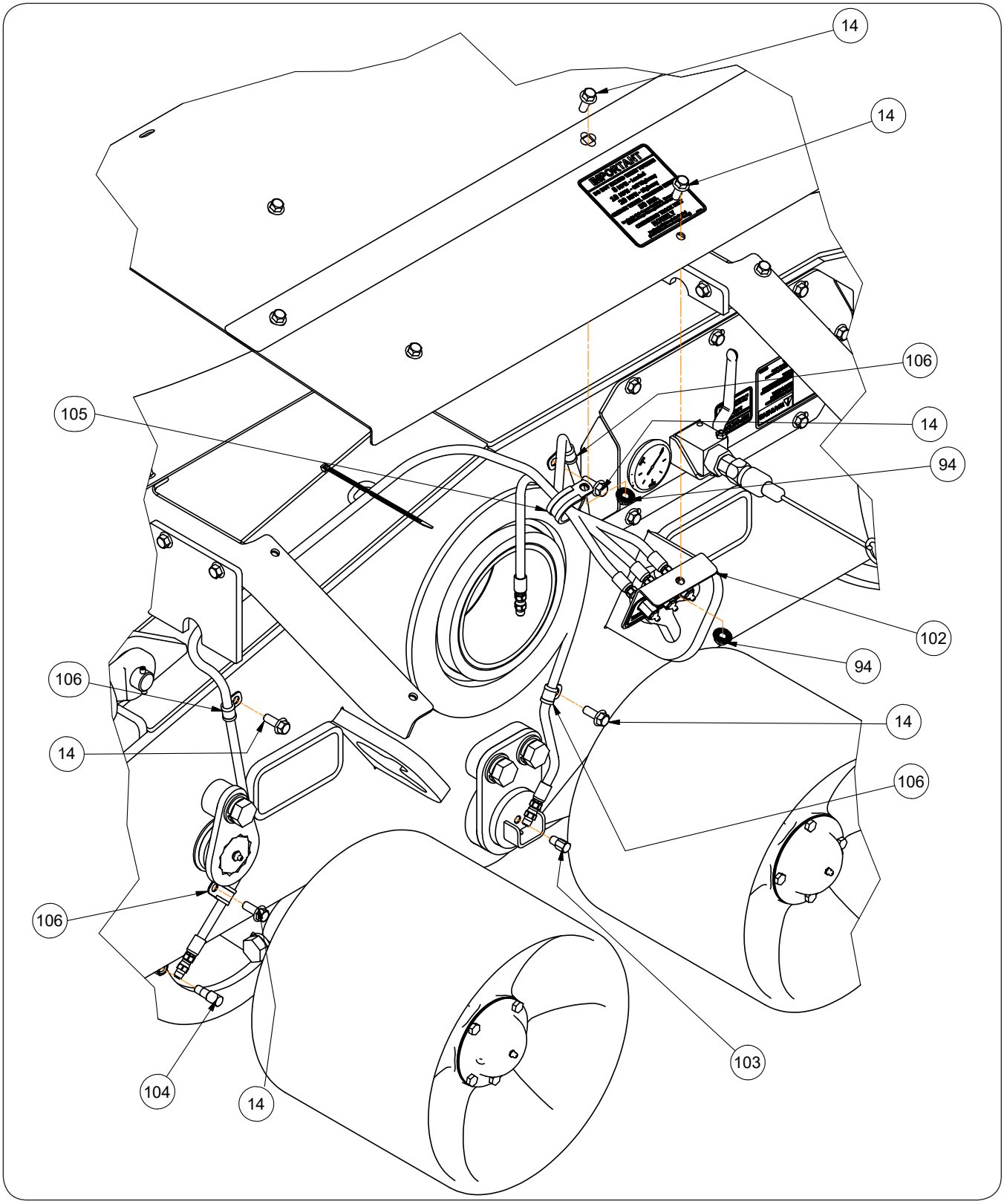
1000 & 1100 Bushel Carts

36”x131” 2-Bogie Track Components



1000 & 1100 Bushel Carts

36”x131” 2-Bogie Track Components (continued)



1000 & 1100 Bushel Carts

36"x131" 2-Bogie Track Components (continued)

ITEM	PART NO.	DESCRIPTION	QTY.	NOTES
	282352B	Track Assembly LH Complete	1	
	282353B	Track Assembly RH Complete	1	
1	18053B	Cast Bogie Wheel 12x14	8	
2	19011B	Track End Wheel	8	
3	281881B	Hub Cap	4	
3A	284229	Hub Cap Gasket	4	
4	804572	Pin 1" Dia. x 3 1/2-Axle Lift	2	
5	267944B	Debris Deflector Plate =Black=	1	
6	9007231	Slotted Hex Nut 1 3/4"-12UNF	4	
7	9006959	Track - 300" x 36"	2	
8	9005101	Self-Lubricated Bushing 6 1/2"OD	4	
9	282603	Cylinder 3 x 8	2	
10	9005438	Adapter	2	
11	9005458	Bearing Cone #55200C	4	
12	9005802	Hydraulic Hose, 3/8x37 (3000 PSI)	2	
13	91160	Grease Zerk	2	
14	91262	Screw/Flange 3/8"-16UNC x 1"	67	
15	92458	Wheel Nut 3/4-16UNF	40	
16	9007230	Spindle Washer 3 1/4"OD	4	
17	282361B	Bogie Pivot Assembly	2	Includes Items 18 through 34
18	252339B	Bogie Pivot Casting	2	Includes Items 21, 22 & 25
20	9005797	Bearing Cup #45220	2	
21	9005795	Bearing Cup #HM803110	2	
23	282372B	Hub Cap	8	
23A	284221	Gasket	8	
24	282368	Spindle 2 3/4" Dia.	4	
25	9005800	Tension Bushing 1 3/4" Long	4	
26	9005799	Seal 3 1/2"OD	4	
27	91160	Grease Zerk	8	
28	9005794	Bearing Cone #HM803149	8	
29	9005796	Bearing Cone #45289	8	
30	9005798	Seal 4 7/16" OD	8	
31	91299-145	Capscrew, 3/4"-10UNC x 2" G8	4	Apply Medium Strength Thread Locker Upon Reassembly
32	9391-061	Cotter Pin 1/4" Dia. x 2 1/2"	8	
33	9002721	Slotted Nut 1 1/4"-12UNF	8	
34	92471	Flat Washer/Spindle Washer	8	
36	9008016	Slotted Jam Nut, 1 1/4"-7UNC	2	
37	282377	Washer 4 1/2"OD	4	
38	267910B	Track Frame Weldment =Black=	1	
39	268551B	Cover Plate	2	
40	281880	Spindle with 1 3/4" Threads	2	
	281883B	Spindle Replacement Kit	-	Includes Spindle & Items 3, 6 & 55
41	268606B	Hub Assembly #871	4	Includes Items 42 through 44
42	9004943	Stud Bolt 3/4"-16UNF x 2 3/4"	40	
43	9005457	Bearing Cup #55437	4	
44	92733	Bearing Cup #39520	4	
45	268620	Washer 3"OD	2	
46	282376	Bogie Pivot Pin Weldment	2	
47	268627	Alignment Pin Weldment	2	
48	9000106	Cable Tie, 7 1/2" Lg	A/R	
49	92734	Bearing Cone #39585	4	
50	92825	Seal 4 1/2 OD	4	
51	93426	Grease Zerk 1/8 NPT	6	

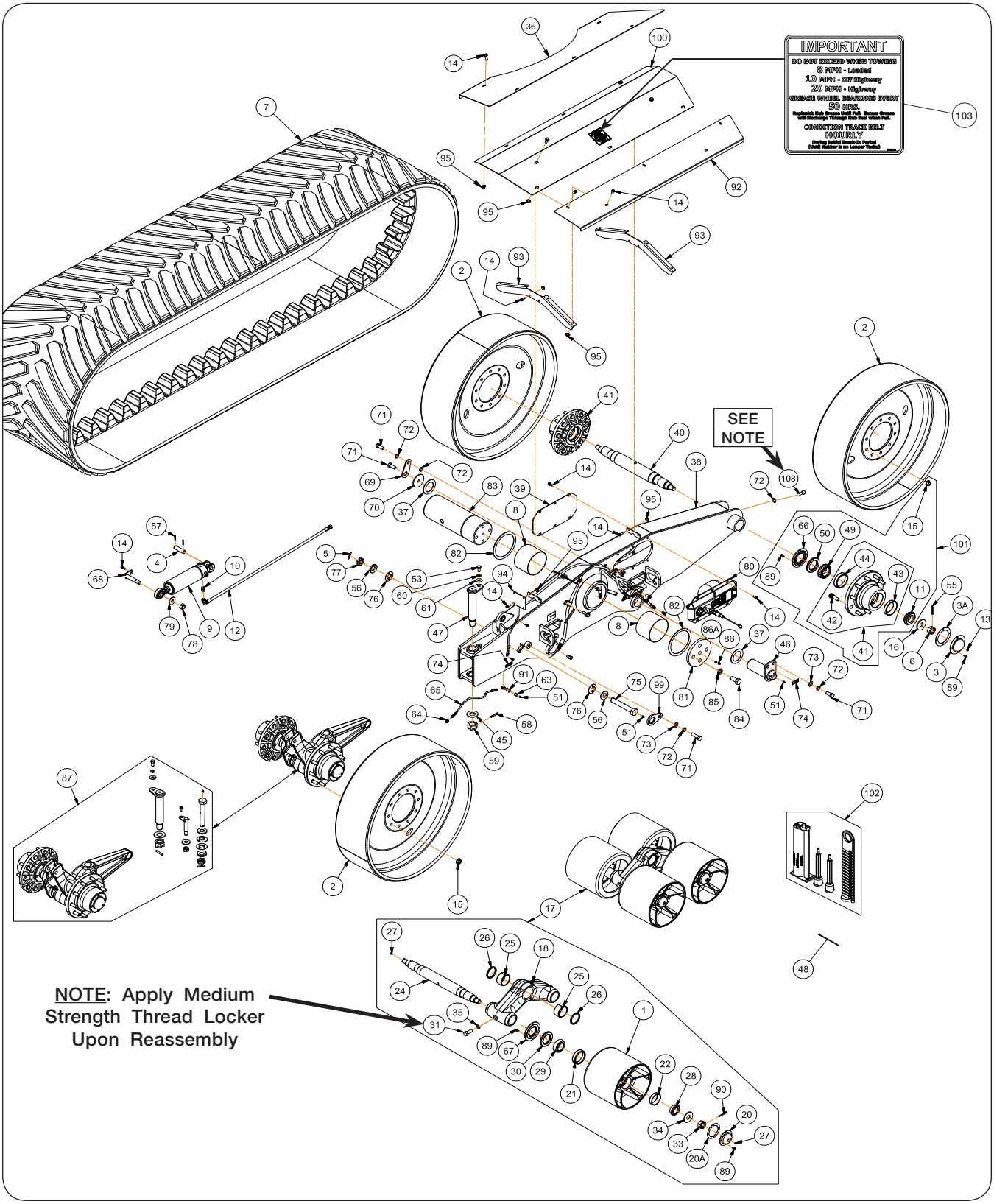
1000 & 1100 Bushel Carts

36"x131" 2-Bogie Track Components (continued)

ITEM	PART NO.	DESCRIPTION	QTY.	NOTES
53	9390-121	Capscrew 5/8"-11UNC x 1 1/4"	2	
54	286355	Inner Spherical Washer	4	
55	902614-225	Spiral Pin 7/16" Dia. x 2 3/4"	4	
56	286356	Outer Spherical Washer	4	
57	9392-136	Roll Pin 1/4" Dia. x 1 1/2"	4	
58	9392-182	Roll Pin 3/8" Dia. x 2 1/2"	2	
59	9393-028	Slotted Hex Nut 1 1/2-12UNF	2	
60	9404-030	Lock Washer 5/8"	2	
61	9405-100	Flat Washer 5/8"	2	
62	9392-159	Roll Pin 5/16" Dia. x 2"	2	
63	9003949	Female Hex Pipe Coupling	2	
64	9006817	90° Elbow 1/8-27 Male x 1/8-27 Female	4	
65	9006807	Hose 1/4 x 20 (Grease)	2	
66	268164B	Seal Guard, 5 3/4D (3.028" ID) =Black=	4	
67	282371B	Seal Guard, 5 3/4D (2.653" ID) =Black=	8	
68	268189	Pin Weldment	2	
69	282378B	Bolt Retainer Plate	2	
70	282379B	Washer 1/4" Dia.	2	
71	9390-144	Capscrew 3/4"-10UNC x 1 3/4"	4	
72	9404-033	Lock Washer 3/4"	6	
73	9405-104	Flat Washer 3/4"	8	
74	93458	Decal, Grease Every 4 Hours	4	
75	286319	Alignment Bolt	2	
76	9405-074	Flat Washer 3/8"	4	
78	91141	Locknut 7/8-9UNC	2	
79	9405-112	Flat Washer 7/8	2	
80	268356B	Accumulator Assembly	2	*Refer to "Track Accumulator Components" in this section
81	268121B	Cover Plate =Black=	2	
82	268619	Washer, 7 1/2" Dia.	4	
83	268640	Axle Pivot Shaft, 6" Dia.	2	
84	9390-145	Capscrew, 3/4-10UNC x 2	8	
85	9006816	Adapter 1/8" NPT	2	
85A	9006785	90° Adapter 1/8" NPT	2	
86	267367B	Track Tensioner Assembly =Black=	2	*Refer to "Track Tensioner Components" in this section
87	9404-021	Lock Washer 3/8	2	
88	9390-028	Capscrew 5/16"-18UNC x 3/4"	100	Grade 5
89	282771B	Alignment Retainer Bolt Plate	4	
91	281848B	Debris Deflector Plate	2	
92	281821B	Support Plate	4	
94	91263	Large Flange Nut 3/8"-16UNC	37	
98	267943B	Debris Deflector Plate =Black=	1	
99	283889B	Track Hub Assembly =Black=	1	Includes Items: 11, 15, 41, 49, 50, 66, 88
100	9008161	Decal, IMPORTANT "Track Guidelines"	2	
101	286099	Adhesive Kit - Fiber Bushing	1	
102	291409B	Grease Bank Assembly	1	
103	9006785	90° Adapter 1/8" NPT	1	
104	9006803	90° Long Adapter 1/8" NPT	1	
105	9008246	Metal Cable Clamp	1	
106	TA0-903850-0	Cable Clamp	4	
107	91299-145	Capscrew, 3/4"-10UNC x 2" G8	1	Apply Medium Strength Thread Locker Upon Reassembly
	281855B	Debris Deflector Replacement Kit	-	Includes Items 5, 14, 91, 94 & 98

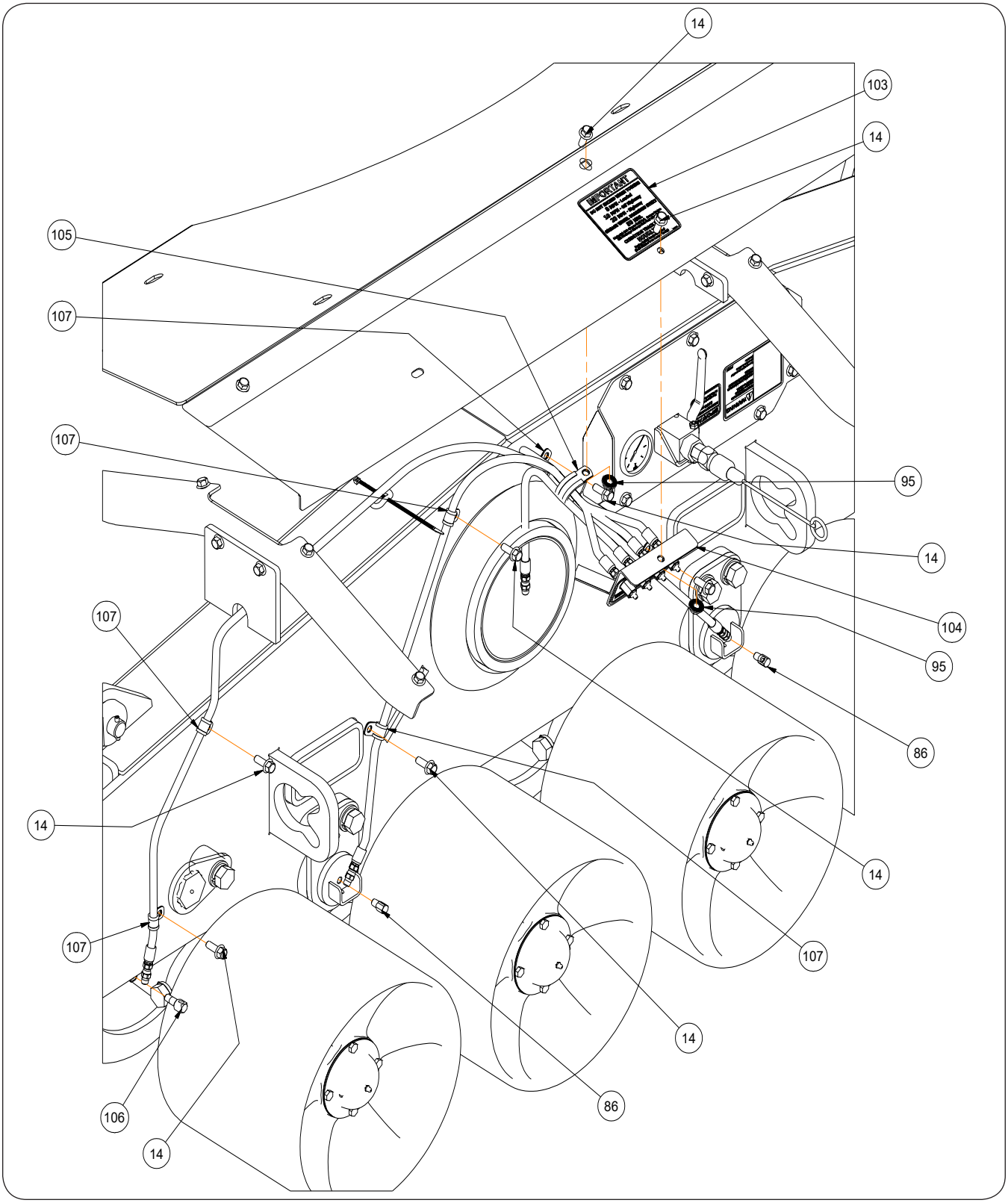
1100 & Larger Bushel Carts

36”x148” 4-Bogie Track Components



1100 & Larger Bushel Carts

36”x148” 4-Bogie Track Components (continued)



1100 & Larger Bushel Carts

36”x148” 4-Bogie Track Components (continued)

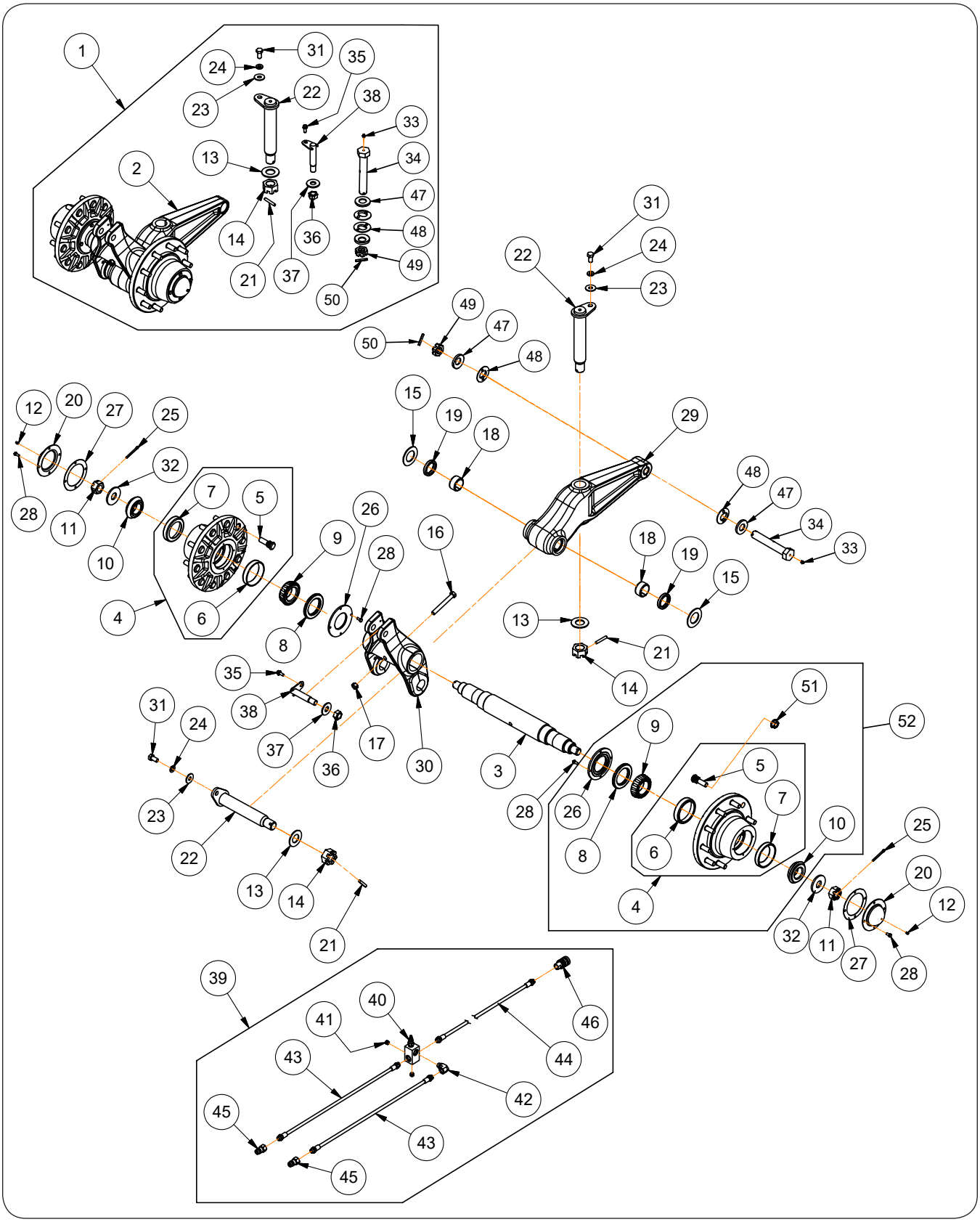
ITEM	PART NO.	DESCRIPTION	QTY	NOTES
	282681B	Track Assembly LH Complete	1	
	282680B	Track Assembly RH Complete	1	
1	18053B	Cast Bogie Wheel 12x14	16	
2	19011B	Track End Wheel	4	
3	281881B	Hub Cap	4	
3A	284229	Hub Cap Gasket	4	
4	804572	Pin 1” Dia. x 3 1/2-Axle Lift	2	
5	9392-159	Roll Pin 5/16” Dia. x 2”	2	
6	9007231	Slotted Hex Nut 1 3/4”-12UNF	4	
7	9006960	Track - 336” x 36”	2	
8	9005814	Self-Lubricated Bushing 7 1/2”OD	4	
9	282603	Ram Cylinder 3 x 8	2	
10	9005438	Adapter	2	
11	9005458	Bearing Cone #55200C	4	
12	9005462	Hydraulic Hose, 3/8x48 (3000 PSI)	2	
13	91160	Grease Zerk	4	
14	91262	Screw/Flange 3/8”-16UNC x 1”	65	
15	92458	Wheel Nut 3/4”-16UNF	80	
16	9007230	Spindle Washer 3 1/4“OD	4	
17	282703B	Bogie Pivot Assembly	4	Includes Items 18 through 35
18	282963B	Cast Bogie Pivot Replacement Kit	4	Includes Items 20A, 25, 26, 30, 31, 35
20	282372B	Hub Cap	16	
20A	284221	Gasket	16	
21	9005797	Bearing Cup #45220	16	
22	9005795	Bearing Cup #HM803110	16	
24	282368	Spindle 2 3/4" Dia.	8	
25	9005800	Tension Bushing 1 3/4" Long	8	
26	9005799	Seal 3 1/2”OD	8	
27	91160	Grease Zerk	16	
28	9005794	Bearing Cone #HM803149	16	
29	9005796	Bearing Cone #45289	16	
30	9005798	Seal 4 7/16" OD	16	
31	91299-145	Capscrew, 3/4”-10UNC x 2” G8	8	Apply Medium Strength Thread Locker Upon Reassembly
33	9002721	Slotted Nut 1 1/4”-12UNF	16	
34	92471	Flat Washer/Spindle Washer	16	
35	9404-033	Lock Washer 3/4”	8	
36	267946B	Debris Deflector Plate =Black=	1	
37	282377	Washer 4 1/2” OD	8	
38	282677B	Track Frame Kit	2	
39	268551B	Cover Plate	2	
40	281883B	Spindle Replacement Kit	2	Includes Spindle & Items 3, 6, & 55
41	268606B	Hub Assembly #871	4	Includes Items 42 through 44
42	9004943	Stud Bolt 3/4”-16UNF x 2 3/4”	40	
43	9005457	Bearing Cup #55437	4	
44	92733	Bearing Cup #39520	4	
45	268620	Washer 3”OD	2	
46	282376	Bogie Pivot Pin Weldment	4	
47	268627	Alignment Pin Weldment	2	
48	9000106	Cable Tie, 7 1/2"	A/R	
49	92734	Bearing Cone #39585	4	
50	92825	Seal 4 1/2" OD	4	
51	93426	Grease Zerk 1/8 NPT	8	
53	9390-121	Capscrew 5/8”-11UNC x 1 1/4”	2	
55	902614-225	Spiral Pin 7/16” Dia. x 2 3/4”	4	

1100 & Larger Bushel Carts

36”x148” 4-Bogie Track Components (continued)

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
56	286356	Outer Spherical Washer	4	
57	9392-136	Roll Pin 1/4” Dia. x 1 1/2”	4	
58	9392-182	Roll Pin 3/8” Dia. x 2 1/2”	2	
59	9393-028	Slotted Hex Nut 1 1/2”-12UNF	2	
60	9404-030	Lock Washer 5/8”	2	
61	9405-100	Flat Washer 5/8”	2	
63	9003949	Female Hex Pipe Coupling	2	
64	9006817	90° Elbow 1/8-27 Male x 1/8-27 Female	4	
65	9006807	Hose 1/4 x 20 (Grease)	2	
66	268164B	Seal Guard, 5 3/4D =Black=	4	
67	282371B	Seal Guard, 5 3/4D =Black=	16	
68	268189	Pin Weldment	2	
69	282378B	Bolt Retainer Plate	4	
70	282379B	Washer 1/4" Dia.	4	
71	9390-144	Capscrew 3/4-10UNC x 1 3/4”	8	
72	9404-033	Lock Washer 3/4”	16	
73	9405-104	Flat Washer 3/4"	12	
74	93458	Decal, Grease Every 4 Hours	6	
75	286319	Alignment Bolt	2	
76	286355	Inner Spherical Washer	4	
77	9008016	Slotted Jam Nut, 1 1/4”-7UNC	2	
78	91141	Locknut 7/8”-9UNC	2	
79	9405-112	Flat Washer 7/8”	2	
80	268356B	Accumulator Assembly	2	*Refer to “Track Accumulator Components” in this section
81	282689B	Cover Plate =Black=	2	
82	282690	Washer, 8 1/2" Dia.	4	1500, 1600 & 2000 Bushel Carts
	282397	Washer, 8 1/2” Dia.		1200 & 1300 Bushel Carts
83	282742	Axle Pivot Shaft, 7" OD	2	1500, 1600 & 2000 Bushel Carts
	282395	Axle Pivot Shaft, 6”/7” OD		1200 & 1300 Bushel Carts
84	9390-184	Capscrew, 1”-8UNC x 2 1/4”	8	
85	9404-041	Lock Washer, 1"	8	
86	9006785	90° Adapter 1/8” NPT	4	
86A	9006816	Adapter 1/8” NPT	2	
87	267367B	Tensioner & Alignment Casting Asy Kit =Black=	2	*Refer to “Track Tensioner Components” in this section
89	9390-028	Capscrew 5/16”-18UNC x 3/4”	160	Grade 5
90	9391-061	Cotter Pin 1/4” Dia. x 2 1/2”	16	
91	9405-074	Flat Washer 3/8” SAE	4	
92	281846B	Debris Deflector Plate	2	
93	281821B	Support Plate	4	
94	281820B	Plate	2	
95	91263	Large Flange Nut 3/8”-16UNC	43	
99	282771B	Alignment Retainer Bolt Plate	4	
100	267945B	Debris Deflector Plate =Black=	1	
101	283889B	Track Hub Assembly =Black=	1	Includes Items: 11, 15, 41, 49, 50, 66, 89
102	286099	Adhesive Kit - Fiber Bushing	1	
103	9008161	Decal, IMPORTANT “Track Guidelines”	2	
104	291415B	Grease Bank Assembly	1	
105	9006213	Metal Cable Clamp	1	
106	9006803	90° Long Adapter 1/8” NPT	1	
107	TA0-903850-0	Cable Clamp	6	
108	91299-145	Capscrew, 3/4”-10UNC x 2” G8	1	Apply Medium Strength Thread Locker Upon Reassembly
	281854B	Debris Deflector Replacement Kit	-	Includes Items 14, 36, 92, 95 & 100

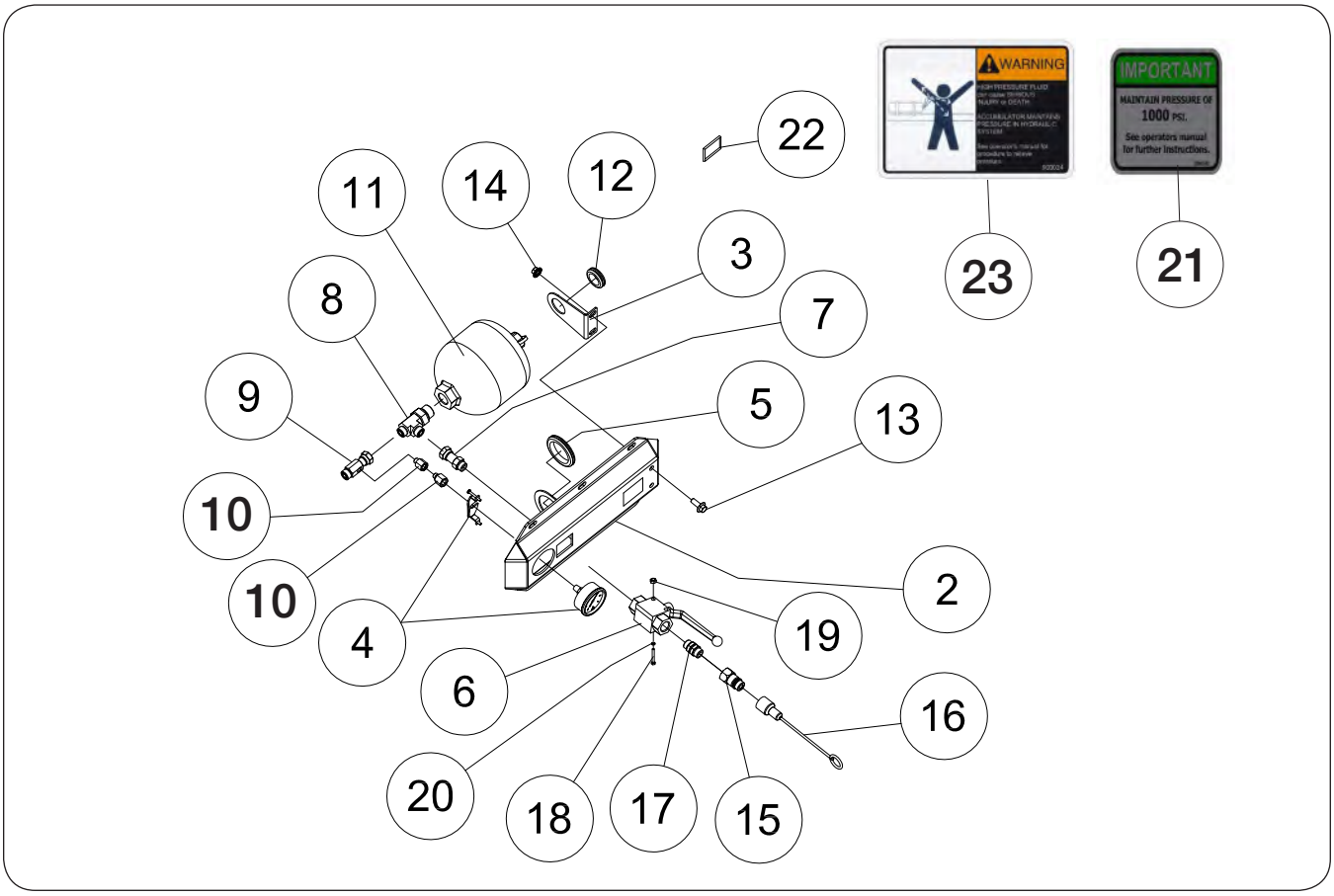
Track Tensioner Components



Track Tensioner Components

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	267367B	Alignment/Tensioner Assembly Replacement Kit	-	Includes: Items 2, 22, 38 & Hardware
2	267918B	Track Tensioner Assembly =Black=	-	
3	281883B	Spindle Replacement Kit	1	Includes: Spindle & Items 11, 20, & 25
4	268606B	Hub Assembly #871	2	Includes Items 5 - 7
5	9004943	Stud Bolt, 3/4-16UNF x 2 3/4	20	
6	92733	Bearing Cup #39520	2	
7	9005457	Bearing Cup #55437	2	
8	92825	Seal 4 1/2" OD	2	
9	92734	Bearing Cone #39585	2	
10	9005458	Bearing Cone #55200C	2	
11	9007231	Slotted Hex Nut 1 3/4-12UNF	2	
12	91160	Grease Zerk, 1/4-28	2	
13	268620	Washer, 3" OD	1	
14	9393-028	Slotted Hex Nut, 1 1/2-12UNF	1	
15	268542	Washer, 3 1/2" OD	2	
16	9390-134	Capscrew, 5/8-11UNC x 5	1	
17	95905	Locknut, 5/8-11UNC	1	
18	9005456	Tension Bushing, 2 3/8" OD	2	
19	9005461	Seal 2 3/4" OD	2	
20	281881B	Hub Cap	2	
21	9392-182	Roll Pin, 3/8 Dia. x 2 1/2	1	
22	268627	Tensioner Pin Weldment	1	
23	9405-100	Flat Washer, 5/8"	1	
24	9404-030	Lock Washer, 5/8"	1	
25	902614-225	Spiral Pin 7/16" Dia. x 2 3/4	2	
26	268164B	Seal Guard, 5 3/4" OD =Black=	2	
27	284229	Gasket	2	
28	9390-028	Capscrew, 5/16-18UNC x 3/4 Grade 5	16	
29	267600B	Alignment Replacement Kit =Black=	1	Includes: Items 18, 19, 29, 33, 34, 47, 48, 49 & 50
30	282933B	Tensioner Replacement Kit	1	Includes: Items 38 & Hardware
31	9390-121	Capscrew, 5/8-11UNC x 1 1/4 Grade 5	2	
32	9007230	Spindle Washer 3 1/4"OD	2	
33	93426	Grease Zerk	1	
34	286319	Alignment Bolt	1	
35	91262	Flange Screw 3/8-16UNC x 1 Grade 5	1	
36	91141	Locknut, 7/8-9UNC	1	
37	9405-112	Flat Washer, 7/8"	1	
38	268189	Pin Weldment	1	
39	268063	Tensioner Hose Assembly	1	Includes Items 40 - 46 Preset to 1000 psi
40	9006248	Pressure Relief Valve	1	Preset to 1000 psi
41	98522	Plug	2	
42	9005566	90° Elbow	1	
43	9005563	Hose 1/4 x 30	2	
44	9005564	Hose 1/4 x 280	1	
45	91383	Male Tip Coupling	2	
46	97286	Pioneer Coupler	1	
47	286356	Outer Spherical Washer	2	
48	286355	Inner Spherical Washer	2	
49	9008016	Slotted Jam Nut 1 1/4-7UNC	1	
50	9390-159	Roll Pin, 5/16 Dia. x 2	1	
51	92458	Wheel Nut 3/4-16UNF	80	
52	283889B	Track Hub Assembly =Black=	1	Includes Items: 4, 8, 9, 10, 26, 28, 51

Track Accumulator Components



Track Accumulator Components

ITEM	PART NO.	DESCRIPTION	NOTES
1	268356B	Accumulator Assembly	includes Items 1 - 23
2	268355B	Cover Weldment	
3	268468B	Accumulator Bracket	
4	267695	Gauge Replacement Kit	
5	9004468	Grommet 2 1/2"OD	
6	9005426	Ball Valve (7250 PSI)	
7	9005428	Coupler	
8	9005436	Tee	
9	9005437	Adapter	
10	9006193	Adapter, 7/16-20 OR M x 7/16-20 OR F	
11	9006262	Accumulator-850 psi Precharge	
12	9005466	Grommet 1 3/8" Dia.	
13	91262	Screw/Flange 3/8-16UNC x 1	
14	91263	Nut/Large Flange 3/8-16UNC	
15	91383	Male Tip Coupling	
16	91511	Dust Cap	
17	98508	Adapter 3/4-16 O-Ring Male x 3/4-16 O-Ring Male	
18	9390-009	Capscrew, 1/4-20UNC x 2	
19	9936	Locknut, 1/4-20UNC	
20	9405-064	Flat Washer 1/4	
21	9006247	Decal, Track Pressure 1000 psi	
22	401781	Rest Pad	
23	900024	Decal, High Pressure Oil	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