

# TRACKS WITH HYDRAULIC TENSIONING

850 - 1100 Bushel Carts with 2 Bogie Track System 36" x 112" Track
Track Serial Number B38450100 and Higher

Part No. 267908

#### **Foreword**

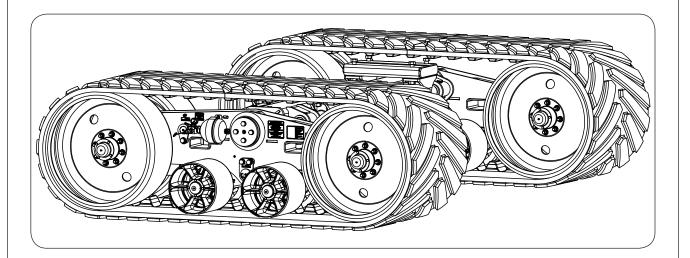


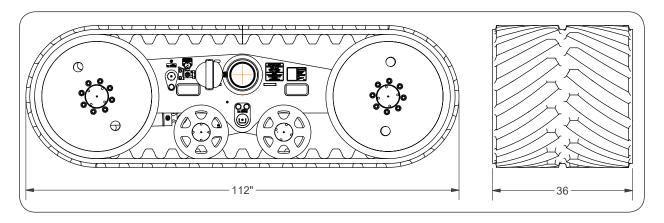
This symbol identifies important safety messages. When you see it, read the message that follows and be alert to the possibility of personal injury.

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**

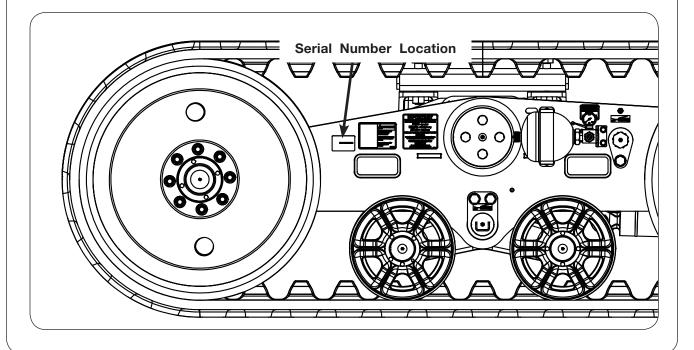
When ordering parts or when requesting further information or assistance, always give the following information:

- 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 Number	Serial Number	
Dealer	City		
Dealer Contact	Ph:	one	



#### 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

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#### **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



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

# A WARNING

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



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 speed of implement should never exceed 20 m.p.h. 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 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.



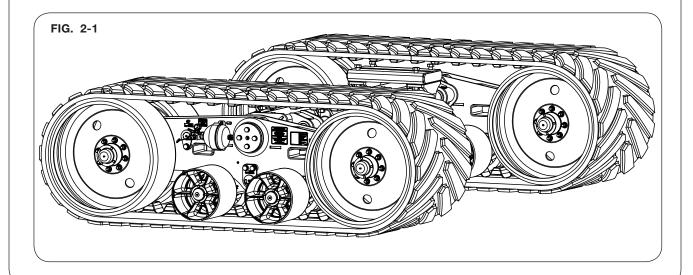
• Do not wear additional hearing impairing devices such as radio headphones, etc.



# Section II Operation & Maintenance

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#### 850 - 1100 Bushel Carts



#### **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**

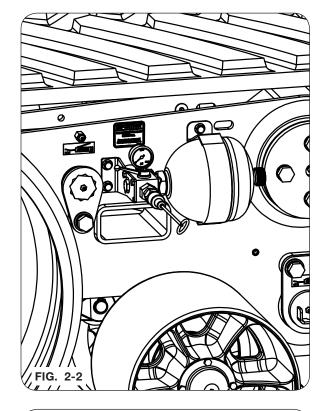
- HIGH-PRESSURE FLUIDS CAN PENETRATE THE SKIN AND CAUSE SERIOUS INJURY OR DEATH. USE CARDBOARD OR WOOD TO DETECT LEAKS IN THE HYDRAULIC SYSTEM. SEEK MEDICAL TREATMENT IMMEDIATELY IF INJURED BY HIGH-PRESSURE FLUIDS.
- THE HYDRAULIC SYSTEM MAINTAINS OIL AT A HIGH PRESSURE. PRESSURE MUST BE RELIEVED PRIOR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

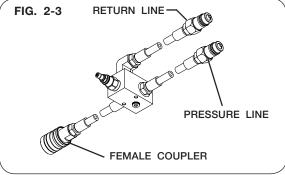
The accumulator in the hydraulic system is precharged with nitrogen to 850 PSI. Do not puncture or dent shell and do not weld near accumulator. Do not break fittings in accumulator. The accumulator itself is under pressure at all times. Once connected into the hydraulic system, the accumulator will maintain 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, see FIG. 2-2.

Attach the pressure and return couplers to the tractor and the female coupler to the track. (FIG. 2-3)





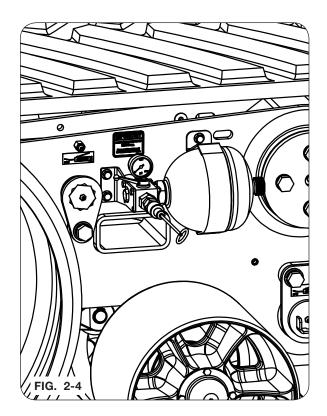
#### Track Maintenance (continued)

#### **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. 2-4.
- 3. Once the track has been pressurized close the valve on the track and replace cover on track coupler.
- Relieve the pressure in the hydraulic hoses and turn off tractor.
- 5. Remove tensioner hose.

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.

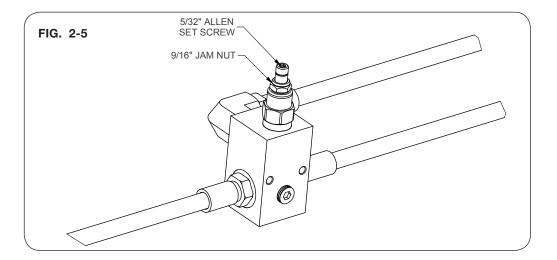


If the track pressure is high or low using the procedure above to tension the track, the valve in the tensioner hose assembly can be adjusted to get the pressure set to 1000 PSI. Follow the procedure below to make this adjustment.

- 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 <u>clockwise</u> slowly, while watching the pressure gauge on the track frame until it reaches 1000 PSI. (FIG. 2-5)
- 8. Tighten the 9/16" jam nut. (FIG. 2-5)
- 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.



#### **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**

# **A 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 HYDRAU-LIC 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 LIFTING DEVICES AND SUP-PORTS 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 and supports rated for 20,000 lbs., raise the axle and support.
- 2. Detension track using procedure listed on the previous page.

#### Track Maintenance (continued)

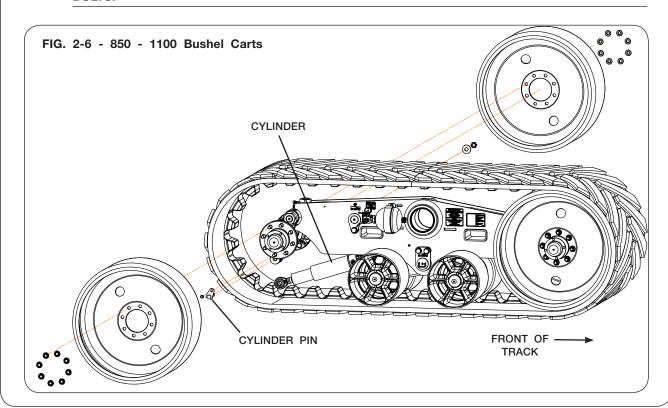
- 3. Remove front outside idler wheel by removing nuts securing the wheel to the hub. (FIG. 2-6)
- 4. Remove rod end cylinder pin from the track tensioner by removing the securing hardware. (FIG. 2-6)
- 5. Rotate rod end of cylinder up toward the top of the track exposing the fitting on the bottom of 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.

# A 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.

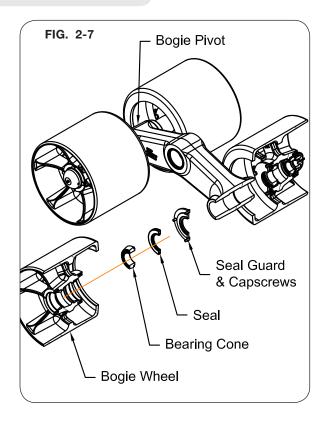


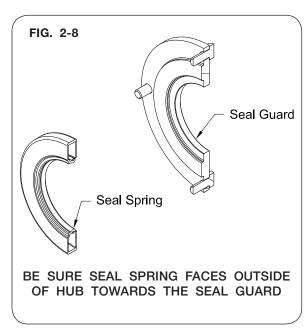
#### Track Maintenance (continued)

#### **Hub 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. Closest to the seal guard. The seal guard will cover the seal using capscrews. (FIG. 2-7 and 2-8)

<u>NOTE</u>: The spring side of the seal must face the outside of the bogie wheel to allow the grease to purge.





#### **Track Operation**

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

# **A 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.
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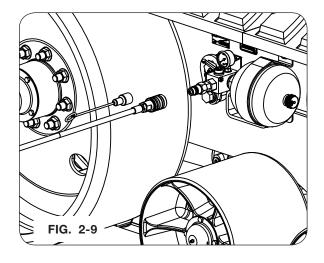
The accumulator in the hydraulic system is precharged with nitrogen to 850 PSI. Do not puncture or dent shell and do not weld near accumulator. Do not break fittings in accumulator. The accumulator itself is under pressure at all times. Once connected into the hydraulic system, the accumulator will maintain pressure in the system until pressure is relieved by the tractor's hydraulic system. (FIG. 2-9)

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.



# **A 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**

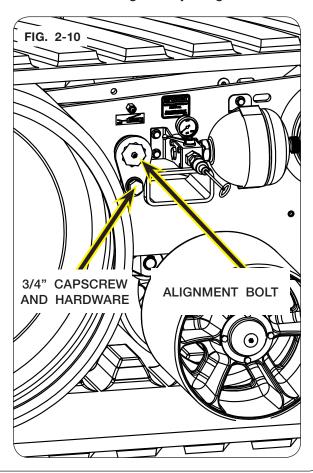
# A WARNING

- 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.

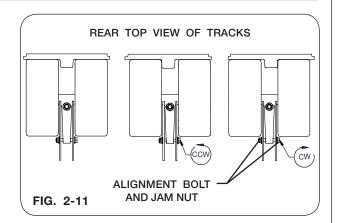
All tracks have been factory adjusted. But as the tracks wear in they may need to be realigned. If wear is noticed on the track lugs, follow the instructions for realignment.

- 1. Park cart on a hard, level, and uniform surface before checking or adjusting track unit.
- 2. Use the alignment bolt located on the outside rear of the track frame. (FIG. 2-10)
- 3. Remove 3/4"-10UNC x 1 3/4" capscrew and 3/4" flat washers retaining the alignment bolt plate to access the alignment bolt. Keep 3/4" hardware and alignment bolt plate. (FIG. 2-10)



#### Track Alignment (continued)

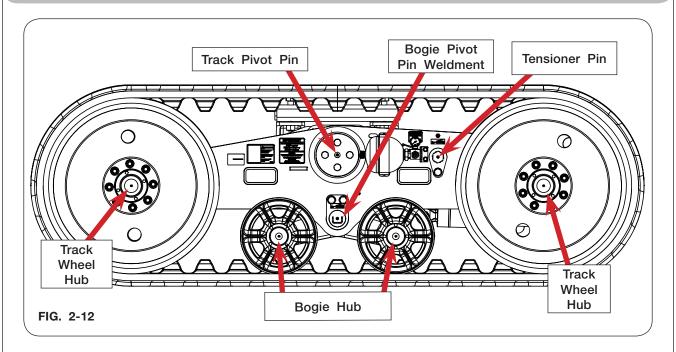
- Adjust the alignment bolt in the direction shown in FIG. 2-11 to align the track in the proper direction. Adjust bolt with 1/2 turn increments.
- 5. Make sure both alignment bolt and jam nut are tight.
- 6. Using the 3/4" capscrew and washers from step 3, reassemble the alignment bolt plate to the alignment bolt.
- 7. Verify track alignment. Pull the cart straight for 1 mile and check for heat on the inside of guide lugs. If one side is warm the tracks are still rubbing. Repeat alignment procedure until track guide lugs are equal temperature.



#### **IMPORTANT**

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

#### Track Lubrication - 850 - 1100 Bushel Carts



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

<sup>\*</sup> 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**

# **A WARNING**

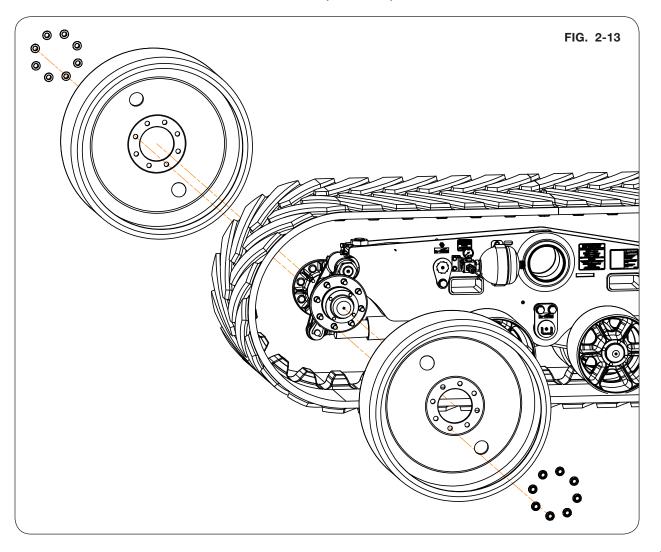
- TIPPING OR MOVEMENT OF THE MACHINE CAN CAUSE SERIOUS INJURY OR DEATH. BE SURE MACHINE IS SECURELY BLOCKED.
- EYE PROTECTION AND OTHER APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT MUST BE WORN WHILE SERVICING IMPLEMENT.
- KEEP HANDS CLEAR OF PINCH POINT AREAS.
- HIGH-PRESSURE FLUIDS CAN PENETRATE THE SKIN 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.
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- FALLING OBJECTS CAN CAUSE SERIOUS INJURY OR DEATH. DO NOT WORK UNDER THE
  MACHINE AT ANY TIME WHILE BEING HOISTED. BE SURE ALL 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 850 1100 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. lifting device for 850 1100 bushel grain carts, raise one side of the cart. Place equally rated 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.

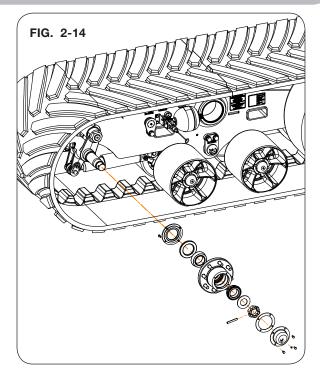
#### Tensioner Assembly & Alignment Hdw Replacement (continued)

- 3. Detension the tracks. See page 2-5.
- 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).

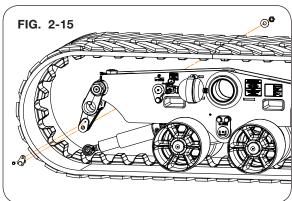


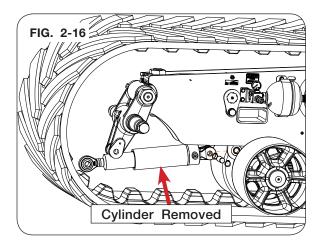
#### Tensioner Assembly & Alignment Hdw Replacement (continued)

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



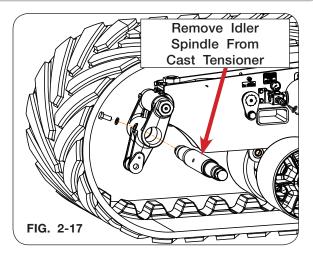
8. Remove the hydraulic cylinder and plug both ends of the hydraulic hoses (Fig. 2-15 & 2-16).



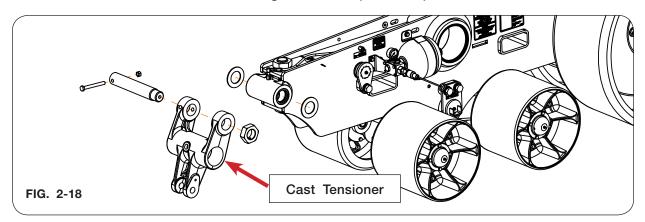


#### Tensioner Assembly & Alignment Hdw Replacement (continued)

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

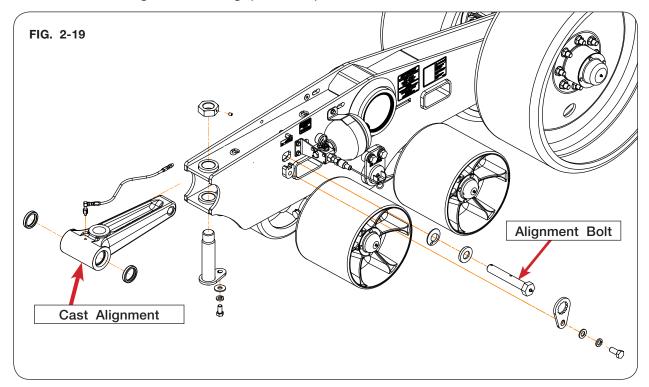


10. Remove the cast tensioner and alignment bolt (FIG. 2-18).

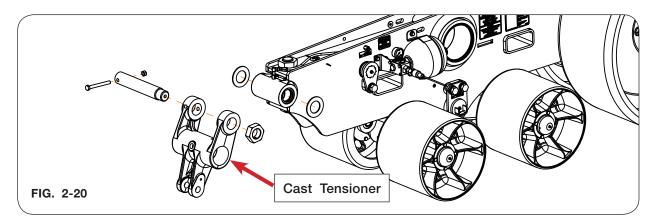


#### Tensioner Assembly & Alignment Hdw Replacement (continued)

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



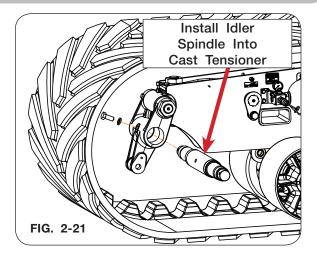
12. Install the new alignment casting and tensioner (FIG. 2-19 & FIG. 2-20).



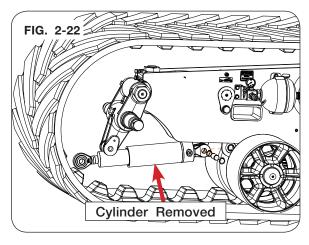
#### Tensioner Assembly & Alignment Hdw Replacement (continued)

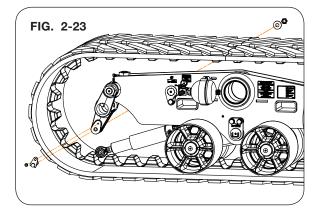
13. Place the idler spindle into the cast tensioner (FIG. 2-21). The orientation of the bolt and nut should be inserted with the nut on the opposite side from the alignment piece and the bolt on the same side as the alignment piece (FIG. 2-21).

NOTE: Apply medium strength thread locker to spindle bolt upon reassembly. (FIG. 2-21)



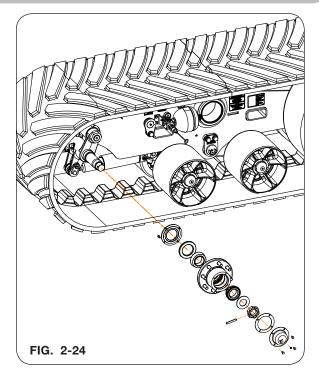
14. Attach the hydraulic hose and replace the hydraulic cylinder (FIG 2-22 & FIG. 2-23).

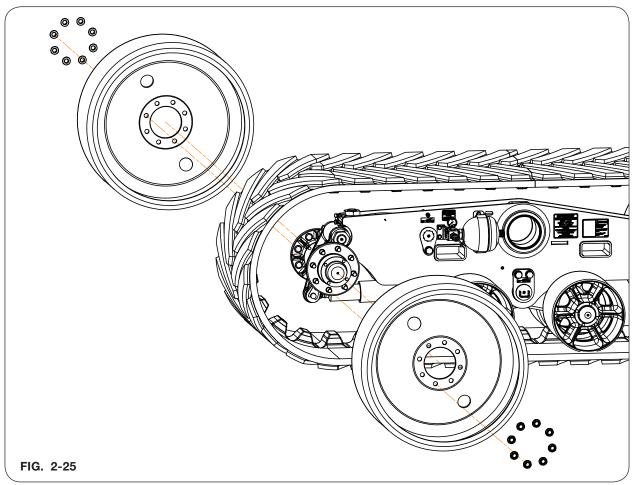




#### Tensioner Assembly & Alignment Hdw Replacement (continued)

- 15. Replace the hubs and wheels onto the spindle (FIG. 2-24 & FIG. 2-25). Torque wheel nuts per torque charts in this manual. Refer to this manual for proper tightening of slotted hex nuts. Refer to your operators manuals MAINTENANCE section for specific instructions on how to tighten the bearings for the wheels.
- 16. Repeat steps on the opposite side of the cart.





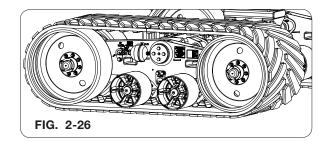
#### **Main Pivot Shaft Bushing Replacement**

# A 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 LIFTING DEVICES AND SUP-PORTS 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. 2-26)



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. 2-27).



- 3. Using a safe lifting device rated for 7,500 lbs., remove the track assembly from the cart. (FIG. 2-28)
- 4. Place the track on a flat surface and block it to prevent the track from moving.



#### Main Pivot Shaft Bushing Replacement (continued)

5. Using a punch and hammer, remove the center bushings from each end of the spindle hole (FIG. 2-29).



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. 2-30).



#### 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. 2-31 through FIG. 2-33).

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.

- 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.
- 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**

#### **Bogie Pivot Assembly**

# **A 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 HYDRAU-LIC 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 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 850 1100 BUSHEL CARTS.
  SPECIFIC LOAD RATINGS FOR INDIVIDUAL LOADS WILL BE GIVEN AT THE APPROPRIATE
  TIME IN THE INSTRUCTIONS.

#### **IMPORTANT**

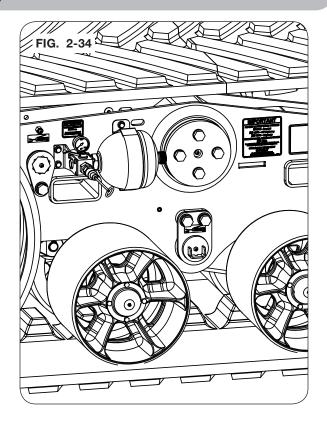
- Disconnect cart completely from tractor before welding on equipment. Damage may occur to the electrical system.
- Disconnect all scale indicator leads, if applicable, before welding on equipment. Damage may occur to the indicator and load cells.
- Attach the welder ground clamp as close as practical 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.

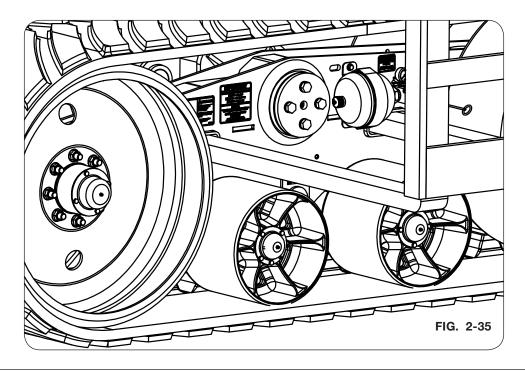
- 1. Park the empty cart on a firm, level surface. Set the tractor's parking brake, shut off the engine, remove the ignition key and disconnect the PTO shaft and hydraulics from the tractor and cart.
- 2. Using a 10,000 lbs. lifting device for 850 1100 bushel grain carts, raise up one side of the cart. Place equally rated 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. 2-34)

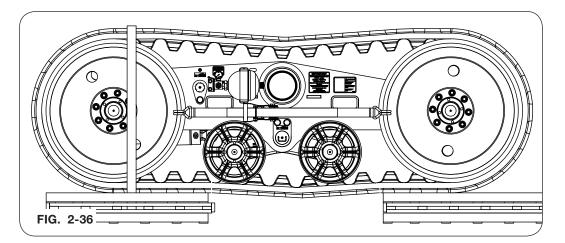


4. Remove track system from grain cart axle using fork lift as shown in FIG. 2-35.



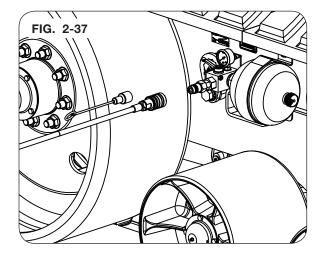
### **Bogie Pivot Assembly (continued)**

5. Place track system onto pallets, as shown in FIG. 2-36, 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 FIG. 2-36, to prevent rolling.

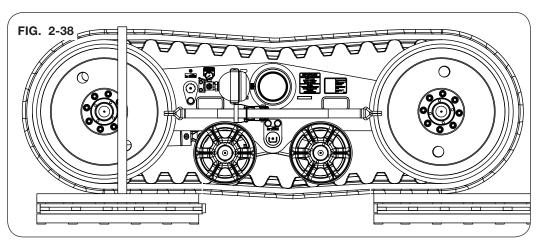


 Hook hydraulic tensioner hose (268345) to tractor and place tractor hydraulic lever in float position. Open valve to relieve belt tension pressure and drop pressure down to zero PSI. Allow track to de-tension for 5 minutes. (FIG. 2-37)

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

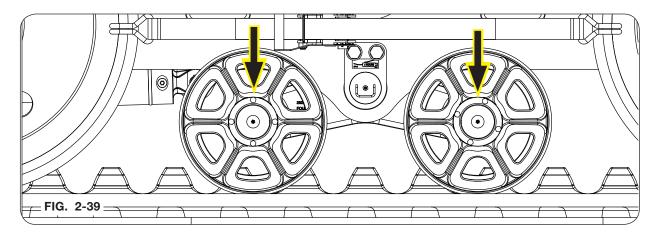


7. As track tension minimizes, attach a come along or large ratchet strap between the front and rear idler wheels as shown in FIG. 2-38.



## **Bogie Pivot Assembly (continued)**

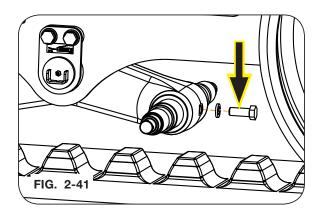
8. Disassemble one side of the (2) hub caps from the bogie wheels. (FIG. 2-39)



- 9. Remove the cotter pins from the bogie hub and spindle slotted hex nuts. Remove slotted hex nuts from 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. 2-40)



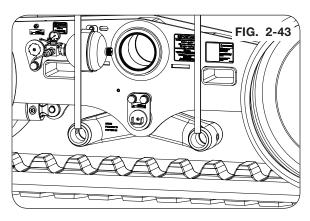
 Remove the spindle retainer bolts and hardware. Retain for use during reassembly. (FIG. 2-41)



### **Bogie Pivot Assembly (continued)**

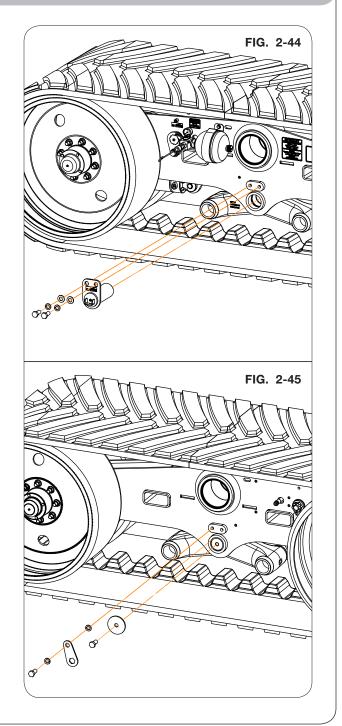
- 12. Remove the spindle, hub, and bogie wheel assembly by pulling through opposite side of removed hub and wheel using a similar technique to step 10. It may be necessary to use penetrating fluid around the spindle in order to facilitate removal. If use of a hammer is needed, reattach the slotted hex 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. 2-42)
- 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. 2-43)





# **Bogie Pivot Assembly (continued)**

14. Loosen hardware fastening bogie pivot pin to the track. Then remove the bogie pivot pin. (FIG. 2-44 and 2-45)

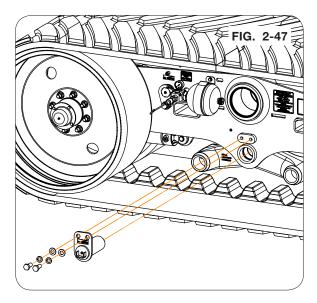


### **Bogie Pivot Assembly** (continued)

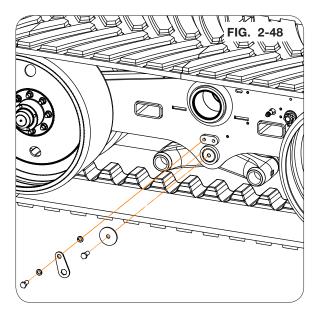
15. Remove the original bogie weldment. Loosen both ratchet straps and allow the bogie weldment to drop onto the rubber track below. Be sure to retain the thrust washers between the track main frame for use when installing the new bogie weldment. (FIG. 2-46)



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. Raise the bogie weldment by tightening each ratchet strap evenly. Be sure to install the thrust washers previously removed on both sides of the bogie pivot bushing. Install the new bogie pivot 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. 2-47)



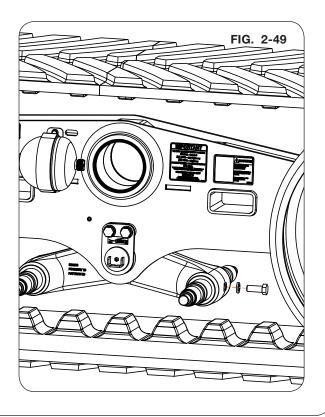
17. Retain bogie pivot pin in position using hardware previously removed. (FIG. 2-48)



## **Bogie Pivot Assembly (continued)**

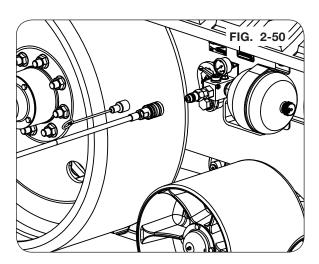
- 18. Reinstall the spindle, hub, and bogie wheel assemblies in the same orientation as removed. Be sure to align the hole in the spindle with the spindle retaining bolt hole in the bogie pivot. (FIG. 2-49)
- 19. Reinstall and tighten the spindle retaining hardware previously removed.

NOTE: Apply medium strength thread locker to spindle bolt upon reassembly. (FIG. 2-49)



### **Bogie Pivot Assembly (continued)**

- 20. Reinstall the bogie hub and wheel assemblies previously removed. 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.
- 21. Reinstall the slotted hex nuts and cotter pins previously removed. Refer to this manual for proper tightening of slotted hex nuts.
- 22. Reinstall the hub caps previously removed.
- 23. 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.
- 24. Refill bogie pivot pin bushing with grease at the pivot pin teardrop. Continuously walk bogie assembly until grease purges the seal.
- 25. Check the position of all track lugs between idler and bogie wheels making sure they are equally centered. Pressurize the belt tension cylinder to 1,000 PSI. (FIG. 2-50)



26. 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**



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 ftlbs.		

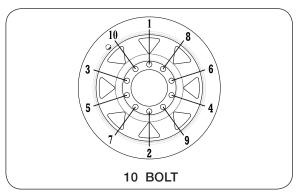


DIAGRAM 1

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

## **IMPORTANT**

• Follow these torque recommendations except when specified in text.

### **Complete Torque Chart**

### **Capscrews - Grade 8**

#### NOTE:





- · 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		
5/16-18	20-22	27-30		
5/16-24	21-23	28-31		
3/8-16	35-39	47-53		
3/8-24	36-41	49-55		
7/16-14	54-58	73-78		
7/16-20	55-60	75-80		
1/2-13	82-88	110-120		
1/2-20	94-99	125-135		
9/16-12	127-134	170-180		
9/16-18	147-155	199-210		
5/8-11	160-170	215-230		
5/8-18	165-175	225-235		
3/4-10	280-295	380-400		
3/4-16	330-365	445-495		
7/8-9	410-430	555-580		
7/8-14	420-440	570-595		
1-8	630-650	850-880		
1-14	680-700	920-950		
1 1/8-7	900-930	1220-1260		
1 1/8-12	930-950	1260-1290		
1 1/4-7	1250-1300	1695-1760		
1 1/4-12	1280-1320	1735-1790		

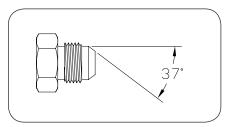
# **IMPORTANT**

Follow these torque recommendations except when specified in text.

## **Hydraulic Fittings - Torque and Installation**

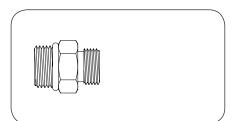
#### SAE FLARE CONNECTION (J. I. C.)

- 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

- 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.

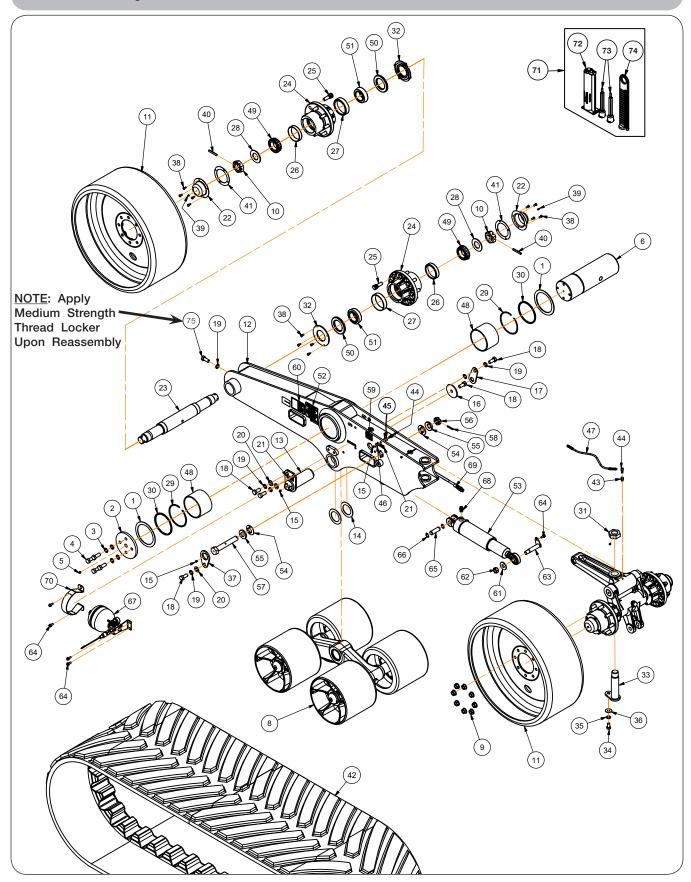


Notes

# Section III Parts

Track	Components	3-2
Bogie	Pivot Components	3-5
Track	Tensioner Components	3-6
Accun	nulator & Tensioner Hose Components	3-8

## **Track Components**



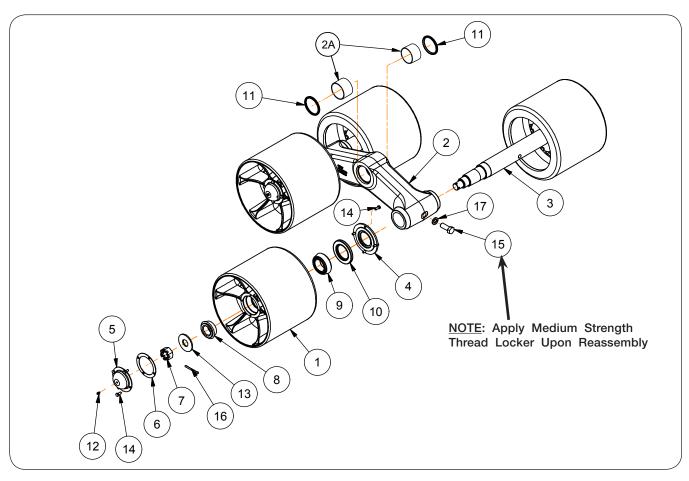
## **Track Components**

ITEM	PART NO.	DESCRIPTION	QTY.	NOTES
1	268619	Washer	4	
2	268121B	Cover Plate	2	
3	9404-033	Lock Washer 3/4"	8	
4	9390-145	Capscrew 3/4"-10UNC x 2" Gr.5	8	
5	93426	Grease Zerk 1/8-27	2	
6	267124	Pivot Pin 5.992" Dia. x 18 7/16"	2	
7	267800B	Track Assembly LH Complete	1	SHOWN
7	267801B	Track Assembly RH Complete	1	
8	282361B	Bogie Pivot Assembly =Black=	1	See Page 3-5
9	92458	Wheel Nut 3/4"-16UNF Gr.8	32	
10	92470	Castle Nut 2-12UNF Gr.5	4	
11	110384B	Idler Wheel Weldment =Black=	4	
12	267802B	Track Frame Weldment =Black=	1	
13	282376	Bogie Pin Weldment	1	
14	282377	Washer 4 1/2" OD	2	
15	93426	Grease Zerk 1/8-27	3	
16	282379B	Washer =Black=	1	
17	282378B	Retainer Plate =Black=	1	
18	9390-144	Capscrew 3/4"-10UNC x 1 3/4" Gr.5	4	
19	9404-033	Lock Washer 3/4"	6	
20	9405-104	Flat Washer 3/4" SAE	4	
21	93458	Decal, Grease 4 Hours	2	
22	281881B	Hub Cap =Black=	4	
23	267143	Spindle 3 1/4" Dia. x 29	2	
24	267145B	Hub Assembly 8-Bolt =Black=	4	Includes Items 25, 26, 27
25	9004943	Stud Bolt 3/4"-16UNF x 2.75"	8	
26	92733	Bearing Cup 4.4375" Dia.	1	
27	92462	Bearing cup 4.8125" Dia.	1	
28	267146	Spindle Washer 3 3/4" OD x 2.047" ID	4	
29	9007745	Retaining Ring 6 1/2" Dia.	2	
30	9006409	Seal 6.518" OD	2	
31	9005290	Heavy Hex Jam Nut 1 3/4"-5UNC Gr.5	2	
32	267165B	Seal, Guard Plate =Black=	4	
33	267167	Alignment Pin Weldment	1	
34	9390-121	Capscrew 5/8"-11UNC x 1 1/4" Gr.5	2	
35	9404-030	Lock Washer 5/8"	2	
36	9405-100	Flat Washer 5/8" USS	1	
37	282771B	Bolt Alignment Retainer Plate =Black=	2	
38	9390-028	Capscrew 5/16"-18UNC x 3/4" Gr.5	32	
39	91160	Grease Zerk 1/4-28	4	
40	9392-201	Roll Pin 7/16" Dia. x 3"	4	
41	284229	Gasket for Hub 5 Bolt	4	

## **Track Components**

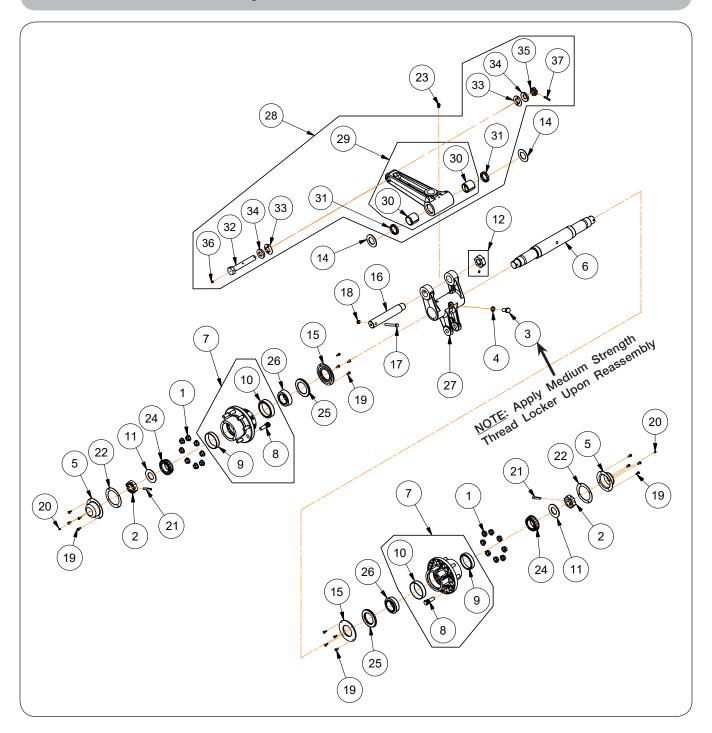
ITEM	PART NO.	DESCRIPTION	QTY.	NOTES
42	9007386	Track/Belt 252" x 36"	1	
43	9006816	Adapter 1/8" NPT	1	
44	9006803	90° Adapter 1/8" NPT	2	
45	9405-074	Flat Washer 3/8" SAE	2	
46	9003949	Coupling Pipe 1/8"	1	
47	9007871	Grease Hose 18 1/2"	1	
48	9007872	Self-Lubricated Bushing 6.514" OD	2	
49	92734	Bearing Cone 2.5" Bore	4	
50	9007915	Seal 4.875" OD	4	
51	92464	Bearing Cone 2.625" Bore	4	
52	9008161	Decal, Important Track Guidelines	1	
53	282603	Ram Cylinder 3 x 8	1	
54	286355	Spherical Inner Washer	2	
55	286356	Spherical Outer Washer	2	
56	9008016	Slotted Jam Nut 1 1/4"-7UNC G2	1	
57	286319	Bolt Alignment 1 1/4"-7UNC G5	1	
58	9392-159	Roll Pin 5/16" Dia. x 2"	1	
59	9006247	Decal, IMPORTANT "Track Pressure"	1	
60	900024	Decal, WARNING "High-Pressure Oil"	1	
61	9405-112	Flat Washer 7/8" USS	1	
62	91141	Locknut/Center 7/8"-9UNC	1	
63	268189	Pin Weldment 1" Dia. x 5 1/2"	1	
64	91262	Flange Screw 3/8"-16UNC x 1" G5	5	
65	272587	Pin 1" Dia. x 3 3/16"	1	
66	91192	Retaining Ring 1"	2	
67	267808B	Accumulator Assembly	1	
68	9005438	Adapter 3/4"-16 O-Ring Male x 13/16-16UN O-Ring Face Seal	1	
69	9008375	Hose 3/8" Dia. x 18"	1	
70	267817B	Accumulator Clamp	1	
71	286099	Fiber Bushing Adhesive Kit	1	Includes Items 72, 73, 74
72	9008155	2 Part Adhesive	1	
73	9008156	Static Mixing Nozzle	2	
74	9008157	Plunger	1	
75	91299-145	Capscrew, 3/4"-10UNC x 2" G8	1	Apply Medium Strength Thread Locker Upon Reassembly

## **Bogie Pivot Components**



ITEM	PART NO.	DESCRIPTION	QTY.	NOTES
1	18053B	Bogie Wheel with Cups =Black=	4	
2	252339B	Bogie Pivot =Black=	1	Includes Item 2A
2A	9005800	Split Tension Bushing 3 1/2" OD	2	
3	282368	Spindle 2 3/4" Dia. x 28 11/16"	2	
4	282371B	Seal, Guard Plate	4	
5	282372B	Hub Cap	4	
6	284221	Gasket 4 5/8" OD	4	
7	9002721	Slotted Nut 1 1/4"-12UNF	4	
8	9005794	Bearing Cone 1.75" Bore	4	
9	9005796	Bearing Cone 2.25" Bore	4	
10	9005798	Seal 4.438" OD	4	
11	9005799	Seal 3.50" OD	2	
12	91160	Grease Zerk 1/4-28	4	
13	92471	Spindle Washer 3 1/4" OD	4	
14	9390-028	Capscrew 5/16"-18UNC x 3/4" Gr.5	32	
15	91299-145	Capscrew, 3/4"-10UNC x 2" G8	2	Apply Medium Strength Thread Locker Upon Reassembly
16	9391-061	Cotter Pin 1/4" Dia. x 2 1/2"	4	
17	9404-033	Lock Washer 3/4"	2	

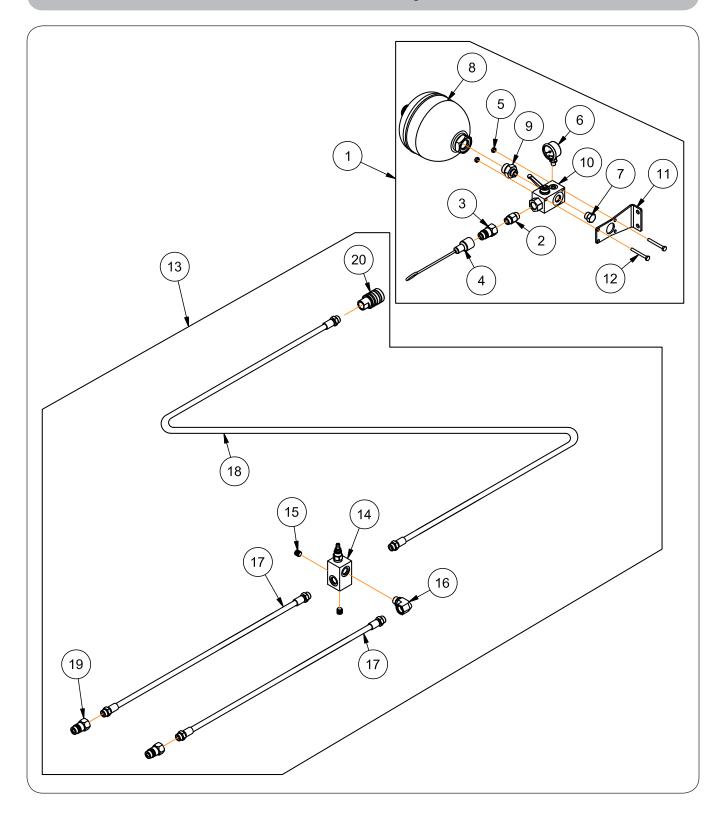
## **Track Tensioner Components**



## **Track Tensioner Components**

l1	TEM	PART NO.	DESCRIPTION	QTY.	NOTES
	1	92458	Wheel Nut 3/4"-16UNF G8	16	
	2	92470	Castle Nut 2"-12UNF G5	2	
	3	91299-145	Capscrew, 3/4"-10UNC x 2" G8	1	Apply Medium Strength Thread Locker Upon Reassembly
	4	9404-033	Lock Washer 3/4"	1	
	5	281881B	Hub Cap =Black=	2	
	6	267143	Spindle 3 1/4" Dia. x 29"	1	
١.	7	267145B	Hub Assembly 8-Bolt =Black=	2	Includes Items 8 through 10
	8	9004943	Stud Bolt 3/4"-16UNF x 2.75"	8	
	9	92733	Bearing Cup 4.4375" Dia. (Ref. #39520)	1	
	10	92462	Bearing cup 4.8125" Dia. (Ref. #HM212011)	1	
	11	267146	Spindle Washer 3 3/4" OD x 2.047" ID	2	
	12	9005290	Heavy Hex Jam Nut 1 3/4"-5UNC G5 w/Set Screw	1	
	14	268542	Washer 3 1/2" Dia.	2	
	15	267165B	Seal, Guard Plate =Black=	2	
	16	267150	Tensioner Pin 2" Dia. x 11 7/8"	1	
	17	9390-112	Capscrew 1/2"-13UNC x 4 1/2" G5	1	
	18	94981	Locknut/Center 1/2"-13UNC	1	
	19	9390-028	Capscrew 5/16"-18UNC x 3/4" G5	16	
	20	91160	Grease Zerk 1/4-28 STT	2	
	21	9392-201	Roll Pin 7/16" Dia. x 3"	2	
	22	284229	Gasket for Hub 5" Bolt Circle	2	
	23	9006816	Adapter 1/8" NPT	1	
	24	92734	Bearing Cone 2.5" Bore (Ref. #39585)	2	
	25	9007915	Seal 4.999" OD	2	
	26	92464	Bearing Cone 2.625" Bore (Ref. #HM212049)	2	
	27	267366B	Track Tensioner Casting =Black=	1	
	28	267358B	Alignment Replacement Kit =Black=	1	Includes Items 29 - 37
	29	286357B	Alignment Casting =Black=	1	Includes Item 30
	30	9006073	Split Tension Bushing 2 1/2" OD	2	
	31	9005461	Seal 2.75" OD	2	
	32	286319	Alignment Bolt	1	
	33	286355	Inner Spherical Washer	2	
	34	286356	Outer Spherical Washer	2	
	35	9008016	Slotted Jam Nut 1 1/4-7UNC	1	
	36	93426	Grease Zerk	1	
	37	9392-159	Roll Pin, 5/16 Dia. x 2	1	

## **Accumulator & Tensioner Hose Components**



## **Accumulator & Tensioner Hose Components**

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	267808B	Accumulator Assembly	1	Includes Items 2-12
2	267812B	Accumulator Bracket	1	
3	9006262	Accumulator-850 PSI Precharge	1	
4	9008356	Reducer 1 1/16" O-Ring Male x 3/4"-16 O-Ring Male	1	
5	9008368	Hydraulic Gauge (0-3000 PSI)	1	
6	9008373	High-Pressure Ball Valve	1	
7	91383	Male Tip Coupling	1	
8	91511	Dust Cap	1	
9	93657	Plug 3/4"-16 O-Ring Male	1	
10	9390-010	Capscrew, 1/4"-20UNC x 2 1/4" G5	2	
11	98508	Adapter 3/4-16 O-Ring Male x 3/4-16 O-Ring Male	1	
12	9936	Locknut, 1/4"-20UNC	2	
13	268345	Tensioner Hose Assembly	1	Includes Items 14 - 20
14	9005562	Pressure Relief Valve	1	
15	98522	Plug 1/4-18 NPTF Male Hollow Hex Plug	2	
16	9005566	Fitting 90° O-Ring	1	
17	9005563	Hose 1/4" x 30" 3/4"-16 O-Ring Male x 3/4"-16 O-Ring Male	2	
18	9005564	Hose 1/4" x 305" 3/4"-16 O-Ring Male x 3/4"-16 O-Ring Male	1	
19	91383	Male Tip Coupling 3/4"-16 O-Ring Female	2	
20	97286	Coupler	1	



