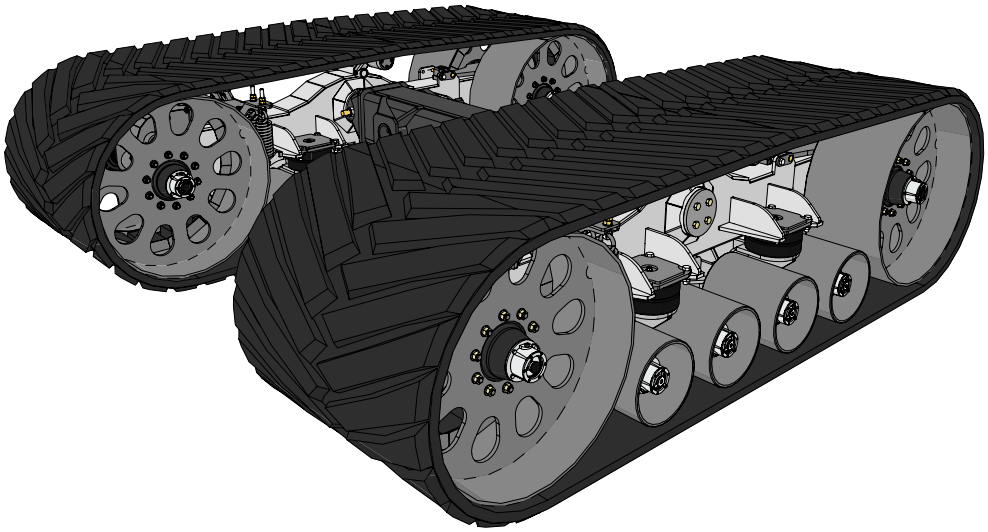
Manual

TRACKS

OPERATOR'S MANUAL

MODEL stabilizer trax-46



Rev. 9.20.2021

J&M Manufacturing Co, Inc
284 Railroad Street - P.O. Box 547 | Fort Recovery, OH 45846 | Ph: (419) 375-2376 | Fax: (419) 375-2708
www.jm-inc.com

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To the Dealer

TO THE DEALER

Read manual instructions and safety rules. Make sure all items on the Dealer's Pre-Delivery and Delivery Check Lists are completed before releasing equipment to the owner.
The dealer must complete the Warranty Registration found on the Dealer Portal website located at dealer.jm-inc.com and return it to J&M Mfg. Co., Inc. at the address indicated on the form. Warranty claims will be denied if the Warranty Registration has not been submitted.

EXPRESS WARRANTY:

J&M Mfg. Co. Inc. warrants against defects in construction or materials for a period of ONE year. We reserve the right to inspect and decide whether material or construction was faulty or whether abuse or accident voids our guarantee.

Warranty service must be performed by a dealer or service center authorized by J&M Mfg. Co., Inc. to sell and/or service the type of product involved, which will use only new or remanufactured parts or components furnished by J&M Mfg. Co., Inc. Warranty service will be performed without charge to the purchaser for parts or labor based on the Warranty Labor Times schedule. Under no circumstance will allowable labor times extend beyond the maximum hours indicated in the Warranty Labor Times schedule for each warranty procedure. The purchaser will be responsible, however, for any service call and/or transportation of the product to and from the dealer or service center's place of business, for any premium charged for overtime labor requested by the purchaser, and for any service and/or maintenance not directly related to any defect covered under the warranty. Costs associated with equipment rental, product down time, or product disposal are not warrantable and will not be accepted under any circumstance.

Each warranty term begins on the date of product delivery to the purchaser. Under no circumstance will warranty be approved unless (i) the product warranty registration card has been properly completed and submitted to the equipment manufacturer, and (ii) a warranty authorization number has been issued by the equipment manufacturer. This Warranty is effective only if the warranty registration card is returned within 30 days of purchase.

This warranty does not cover a component which fails, malfunctions or is damaged as a result of (i) improper modification or repair, (ii) accident, abuse or improper use, (iii) improper or insufficient maintenance, or (iv) normal wear or tear. This warranty does not cover products that are previously owned and extends solely to the original purchaser of the product. Should the original purchaser sell or otherwise transfer this product to a third-party, this warranty does not transfer to the third party purchaser in any way. J&M Mfg. Co., Inc. makes no Warranty, express or implied, with respect to tires or other parts or accessories not manufactured by J&M Mfg. Co., Inc. Warranties for these items, if any, are provided separately by their respective manufacturers.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE.

In no event shall J&M Mfg. Co., Inc. be liable for special, direct, incidental or consequential damages of any kind. The exclusive remedy under this Warranty shall be repair or replacement of the defective component at J&M Mfg. Co., Inc's. option. This is the entire agreement between J&M Mfg. Co., Inc. and the Owner about warranty and no J&M Mfg. Co., Inc. employee or dealer is authorized to make any additional warranty on behalf of J&M Mfg. Co., Inc.

The manufacturer reserves the right to make product design and material changes at any time without notice. They shall not incur any obligation or liability to incorporate such changes and improvements in products previously sold to any customer, nor shall they be obligated or liable for the replacement of previously sold products with products or parts incorporating such changes.

SERVICE:

The equipment you have purchased has been carefully manufactured to provide dependable and satisfactory use. Like all mechanical products, it will require cleaning and maintenance. Lubricate the unit as specified. Observe all safety information in this manual and safety signs on the equipment.

For service, your authorized J&M dealer has trained mechanics, genuine J&M service parts, and the necessary tools and equipment to handle all your needs.

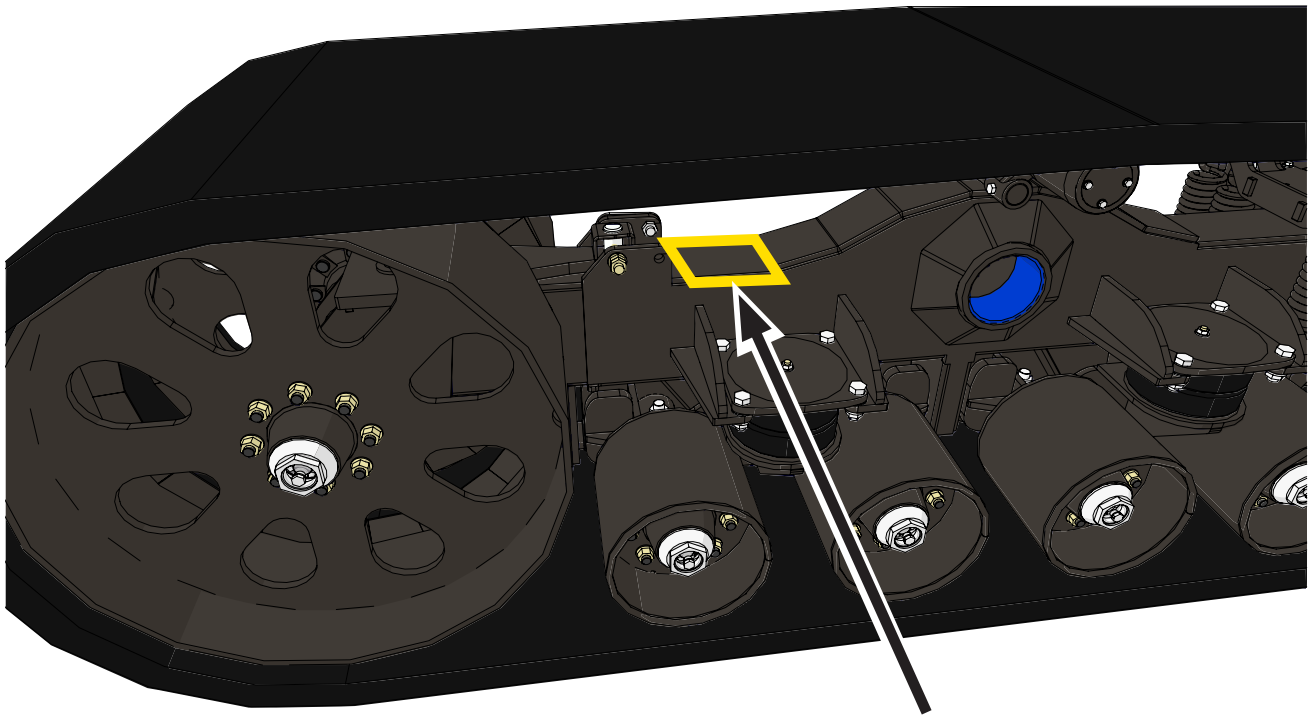
Use only genuine J&M service parts. Substitute parts may void warranty and may not meet standards required for safety and satisfactory operation. Record the model number and serial number of your equipment in the spaces provided:

Model No: STX-46 **Serial No:** _____ **Date of Purchase:** _____

Purchased From: _____

Provide this information to your dealer to obtain correct repair parts.

Serial Number



Serial Number Location

Serial Number:_____

Model Number:_____

Standard practice when ordering parts or obtaining information from your dealer requires the serial number and model number. Have numbers available before making contact.

General Information

TO THE OWNER:

The purpose of this manual is to assist you in operating and maintaining your Stabilizer Tracks in a safe manner. Read it carefully. It furnishes information and instructions that will help you achieve years of dependable performance and help maintain safe operating conditions. If this machine is used by an employee or is loaned or rented, make certain that the operator(s), prior to operating:

1. Is instructed in safe and proper use.
2. Reviews and understands the manual(s) pertaining to this machine.

Throughout this manual, the term IMPORTANT is used to indicate that failure to observe can cause damage to equipment. The terms CAUTION, WARNING and DANGER are used in conjunction with the Safety-Alert Symbol, (a triangle with an exclamation mark), to indicate the degree of hazard for items of personal safety. When you see this symbol, carefully read the message that follows and be alert to the possibility of personal injury or death.

⚠	This Safety-Alert symbol indicates a hazard and means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!
⚠ **DANGER**	Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.
⚠ **WARNING**	Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed.
⚠ **CAUTION**	Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury.
IMPORTANT	Indicates that failure to observe can cause damage to equipment.
NOTE	Indicates helpful information.

Safety Rules

⚠ ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED! ⚠

Safety is a primary concern in the design and manufacture of our products. Unfortunately, our efforts to provide safe equipment can be erased by an operator's single careless act. In addition, hazard control and accident prevention are dependent upon the awareness, concern, judgment, and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.

Make certain that the operator(s), prior to operating is instructed in safe and proper use and reviews and understands the manual(s) pertaining to this machine. Also make certain that the operator(s) reviews and understands the operator's manual of the grain cart and the tractor.

Read this manual before you operate this machine. If you do not understand any part of this manual, or need more information, contact the manufacturer or your authorized dealer.

⚠ SAFETY ⚠

Understand that your safety and the safety of other persons is measured by how you service and operate this machine.

The safety information given in this manual does not replace safety codes, federal, state or local laws. Make certain your machine has the proper equipment as designated by local laws and regulations.

A frequent cause of personal injury or death is from persons falling off equipment and being run over. Do not permit persons to ride on this machine.

Travel speeds should be such that complete control and machine stability is maintained at all times. Where possible, avoid operating near ditches, embankments and holes. Reduce speed when turning, crossing slopes and rough, slick or muddy surfaces. If a ditch must be crossed, do so at an angle. Avoid sharp turns to maximize the stability of the road. Reduce speed when turning, crossing slopes and rough, slick or muddy surfaces. Avoid running over hard objects protruding above the ground surface, if possible. Damage to the understructure or load may result. If the object is unavoidable, reduce speed.

Collision of high-speed road traffic and slow-moving machines can cause personal injury or death. Keep hands, feet, hair and clothing away from moving parts while unit is in operation. Make sure that everyone is clear of equipment before applying power or moving the machine.

Never adjust, service, clean, or lubricate track system until all power is shut off. Support equipment and attachments properly when working beneath them. Do not depend on hydraulic cylinders to hold them up. An attachment can fail if a control is moved, or if a hydraulic line breaks. Wear protective glasses when servicing equipment.

Specifications

stabilizer trax	
Belt Width	46"
Overall Length	151.25"
Weight (One Track)	8,000 lbs
Footprint Dimensions (One Track)	108.1" x 46"
Footprint Area (Both Tracks)	9,942 in^2
Average Ground Pressure with 1,500 Bushel Cart	14.1 psi
Center Pivot Spindle	7" Diameter

Bolt Torque Chart

Always tighten hardware to these values unless a different torque or tightening procedure is listed for specific application. Fasteners must always be replaced with the same grade as specified in the manual parts list. Always use the proper tool for tightening hardware. Ensure fastener threads are clean and you start thread engagement properly. **Use these values when tightening all bolts and nuts with the exception of wheel nuts.**

SAE Fasteners

Coarse Thread Series				
	Grade 5		Grade 8	
Diameter and Pitch (Inches)	*Dry*	*Oiled*	*Dry*	*Oiled*
1/4"-20	8 ft-lbs	6 ft-lbs	12 ft-lbs	9 ft-lbs
5/16"-18	17	13	25	18
3/8"-16	31	23	44	33
7/16"-14	49	37	70	52
1/2"-13	75	57	106	80
9/16"-12	109	82	154	115
5/8"-11	150	113	212	159
3/4"-10	267	200	376	282
7/8"-9	429	322	606	455
1"-8	644	483	909	681
Fine Thread Series				
Diameter and Pitch (Inches)	*Dry*	*Oiled*	*Dry*	*Oiled*
1/4"-28	10 ft-lbs	7 ft-lbs	14 ft-lbs	10 ft-lbs
5/16"-24	19	15	27	20
3/8"-24	35	26	49	37
7/16"-20	55	41	78	58
1/2"-20	85	64	120	90
9/16"-18	121	91	171	128
5/8"-18	170	127	240	180
3/4"-16	297	223	420	315
7/8"-14	474	355	669	502

Stud and Wheel Nut Torque Specifications

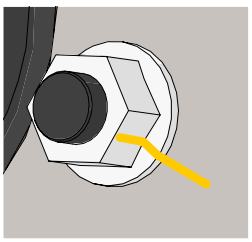
Always tighten hardware to these values unless a different torque or tightening procedure is listed for specific application. Fasteners must always be replaced with the same grade as specified in the manual parts list. Always use the proper tool for tightening hardware. Ensure fastener threads are clean and you start thread engagement properly. **Use these values when tightening all studs and wheel nuts.**

Stud	Tightening Torque
1/2"-20	120 ft-lbs
9/16"-18	170 ft-lbs
5/8"-18	300 ft-lbs
3/4"-16	400 ft-lbs
20mm	475 ft-lbs
22mm	640 ft-lbs

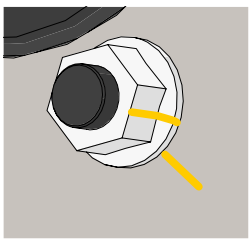
TIGHTENING WHEEL NUTS: Standard **3/4" wheel studs and flange nuts should be tightened to torque 400 ft-lbs** during initial operation of the tracks and then checked for proper torque after every 10 hours of use. Failure to do so may damage wheel nut seats. Once seats are damaged, it will become impossible to keep nuts tight.

RECOMMENDED TIP: Use a paint stick to mark the location of each nut prior to use. Mark on the wheel and lugnut. This provides a quick and accurate visual check for lug tightness.

Tight



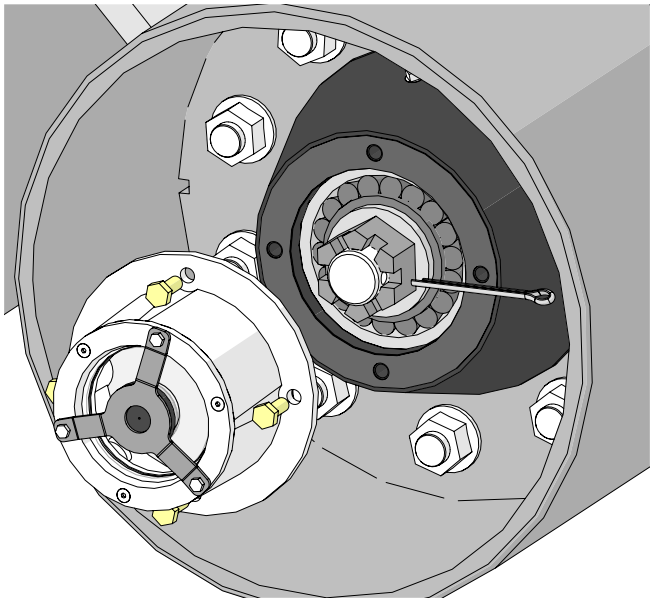
Loose



Castle Nut Torque Setting

Torque all idler and bogie wheel Stabilizer track model hubs at 30 ft-lb. Apply 200 ft-lb of torque to the castle nut while rotating the hub to ensure that the hub components are properly seated. Then loosen the castle nut one full turn. After that, apply the recommended torque (30 ft-lb) to the castle nut. Spin the hub several revolutions and re-apply the recommended torque. Continue spinning the hub and re-applying the torque until the castle nut no longer spins at the recommended torque. Install the cotter pin, locking the castle nut in place.

Note: If a slot in the castle nut does not line up with one of the cross holes in the spindle at the recommended torque setting, rotate the castle nut slightly so that a castle nut slot does line up with a spindle cross hole and so that the torque setting is as close as possible to the recommended torque setting. Never use an impact wrench when tightening or loosening castle nuts during this procedure.



Lubrication Schedule

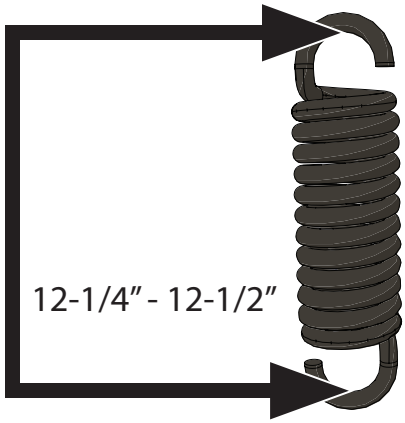
Check the oil level in the hubs by looking through the dust cap sight glasses. The oil level should be maintained between the top and bottom of the 1-1/4" diameter threaded portion of the spindle (as pictured below). If the oil is below the bottom of the threaded portion of the spindle, add a GL-5 SAE 75W-90 synthetic gear oil with rust and oxidation inhibitors. Change the oil in the hubs annually. If the old oil is observed to still be in good operating condition (clean and unstained) after successive oil changes, the frequency of oil changes may be reduced to bi-annually at the owner's discretion. When changing oil, add 13 oz of oil.

The center pivot spindles oscillate on self-lubricated sleeve bushings, which do not require grease. Grease can, however, reduce self-lubricated sleeve bushing wear by up to 8x. Because of this, the center pivot pin is greased initially at the factory during assembly.

Routine Maintenance

Check ALL wheel nuts for correct torque setting (400 ft-lb for 3/4"-16 wheel nuts). Tighten as needed. Re-check wheel nut torque settings during initial break-in period (during 1st, 2nd , 3rd loads, etc.), then periodically afterwards (every 10 hours of use for first 40 hours). Keep checking wheel nut settings until wheel nuts do not loosen. Failure to keep the wheel nuts tight could cause considerable damage to the grain cart and surroundings. Damage caused by failure to keep the wheel nuts tight is not warrantable.

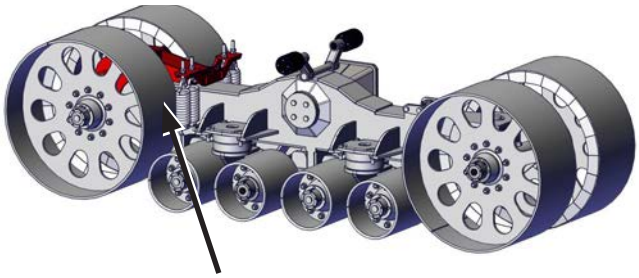
Belt tension is set at the factory and should not change significantly once set. Checking the belt tension periodically, however, is a good idea, as it may change slowly over time. Check the length of the tensioner springs. (See image for dimensions & location.) If the tensioner spring length(s) are too short or too long, loosen the 3/4" hex nuts on each spring with (2) 1-1/8" wrenches. Loosen or tighten the bottom hex nuts as needed so that each spring is the desired length. Tighten together the 3/4" hex nuts on each spring once adjustments have been completed.



Inspect the belt for any defects. If any defects are found, contact the J&M Service Department.

Check the track system periodically for cracks in welds and for other structural damage. Have cracked welds fixed immediately. Failure to do so could result in extensive damage to the track system and grain cart and greatly reduce the life of the equipment.

Remove debris buildup from the surface of idler wheels. Debris buildup on the surface of idler wheels can temporarily alter the belt alignment and cause guide lug wear. Debris buildup on the surface of idler wheels can also cause the belt to become overly tensioned, leading to damage to the tensioner system as well as to the idler wheel assemblies. Damage done to the track system as a result of debris build-up is not covered under warranty. Debris buildup on the bogie wheels is less problematic than on the idler wheels, but should be removed periodically as well. Check belt alignment according to "Alignment" on page 11.



Remove any debris below the Tensioner Lever Arm.

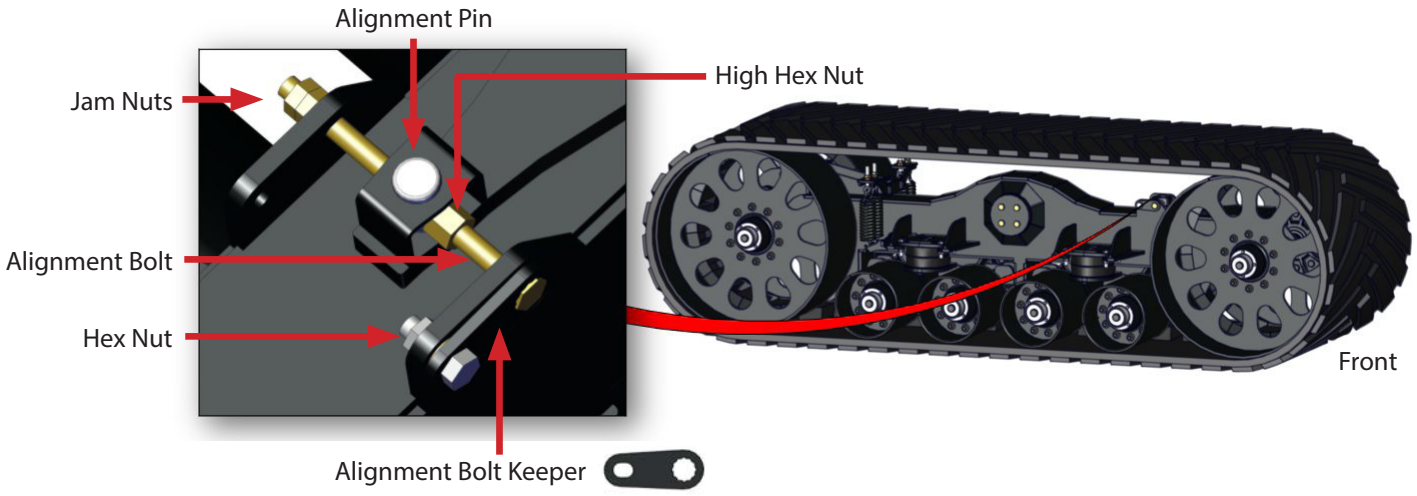
Alignment

The track belts are held in proper alignment by the Swivel Alignment Weldments. Track alignment is set at the factory but may need further adjustment during the initial belt break-in period, and sometimes occasionally throughout the life of the belt. During the break-in period, the track belt loses its initial tackiness, and the track rolling components undergo a polishing process to achieve a smoother steel-to-rubber interface with the guide lugs. Track alignment should be monitored closely and may need adjusted more frequently during the break-in period. If the cart is towed to/by the customer from the dealership, the alignment needs to be checked within the first mile of towing. Towing speeds should NOT exceed 25 mph. It is highly recommended to add several cups of talc to the inside of the belt over the guide lugs before and during initial towing to help lubricate the guide lugs, remove the initial tackiness of the belt, and reduce guide lug wear during the break-in process. If the towing/transport duration exceeds 30 minutes, a 15-minute cool down period is recommended before resuming towing/transport.

To determine if track alignment needs adjusted, pull the tracks 500-1,000 ft in a straight line on level terrain. Then measure the temperature on each side of the guide lugs. If the temperature of one side is significantly higher (10-20°F or more) than the other, adjust the alignment by following the instructions below. Repeat the process, allowing the guide lugs to cool in between adjustments, until there is no longer a significant temperature difference between sides of the guide lugs. (Note that all nuts and bolts for the alignment adjustment require 1-1/8" sockets/wrenches. An impact wrench is **NOT** recommended for adjusting the alignment bolts, as the alignment bolt threads may be damaged by the impact.)

Note: **Do NOT loosen the jam nuts** on the far side of the alignment bolt at any point during the adjustment process. They should remain jammed at all times such that there is no gap between the alignment bolt head and the undercarriage beam side or between the alignment bolt jam nuts and the undercarriage beam side. If the jam nuts do loosen or if a gap does develop, tighten the alignment bolt until there is no gap on either the bolt head side or the jam nut side. Then tighten another 1/8" turn and tighten the jam nuts together.

1. Loosen the hex nut on the alignment bolt keeper. Remove the alignment bolt keeper from the alignment bolt.
2. Loosen the high hex nut on the alignment bolt from the alignment pin.
3. Correct the alignment by moving the tracking arm with the alignment bolt. Turn the alignment bolt 1/3 turn in the direction that moves the alignment paddle handle towards the guide lugs that have more heat.
4. Replace the alignment bolt keeper back on the alignment bolt. Tighten the hex nut on the alignment bolt keeper.
5. Tighten and lock the high hex nut on the alignment bolt against the alignment pin.
6. Check the alignment. Pull the track a short, straight distance on flat ground. Feel the guide lugs for heat. If the guide lugs on the rubber belt stay cool, the belt is properly aligned.



Service

BELT INSPECTION

The rubber track contains several layers of cables. These layers include a tension cable layer, reinforcement plies, and alignment plies. The orientation of the cables varies for each layer.

When any of the cables are exposed to moisture by cuts or gouges in the rubber, they can deteriorate by rusting. Because of this, any exposed cables should be repaired as soon as possible. Any damaged cables that protrude above the surface of the track should be clipped or ground down to below the surface of the track to prevent additional damage due to unraveling.

Cuts, gouges and minor wear on guide lugs are not expected to cause operational problems. However, a track that has two or more consecutive guide lugs missing should be replaced since this could lead to untracking, possibly damaging other undercarriage components.

ROTATE TRACKS

If one track belt becomes more worn than the other due to certain operating conditions (e.g., side hill operation or frequent travel on crowned roads), rotating the track assemblies from one side of the cart to the other may increase the service life of the tracks.

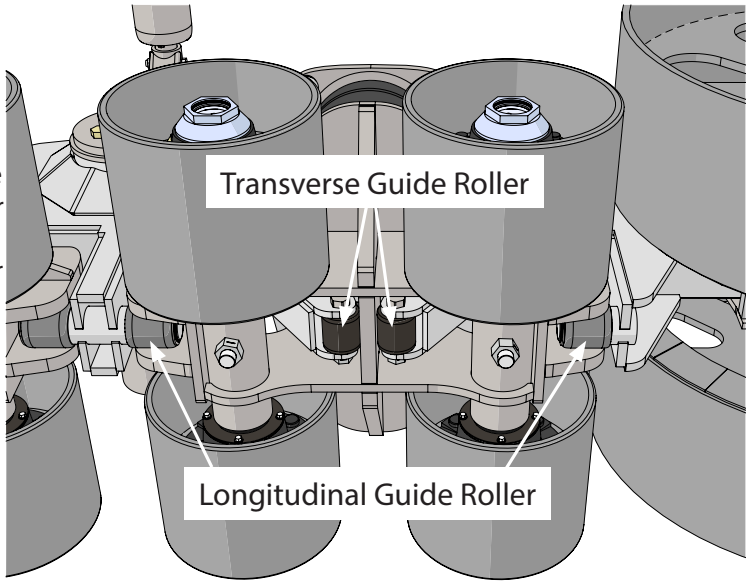
STORAGE PREPARATION

IMPORTANT: When the track system is not going to be used for a length of time, thoroughly clean the tracks, removing all dirt/debris from the track system. Store the tracks in a dry, protected place. Leaving your track system outside, open to the weather, will shorten its life. Park the track system on level ground. Block the front and rear of the belts to prevent the tracks from rolling unexpectedly. Inspect the track system and touch-up spots where the paint has been worn away (use a good quality primer paint).
To maximize the life of the rubber springs, do not store grain in the cart when the cart is in storage.

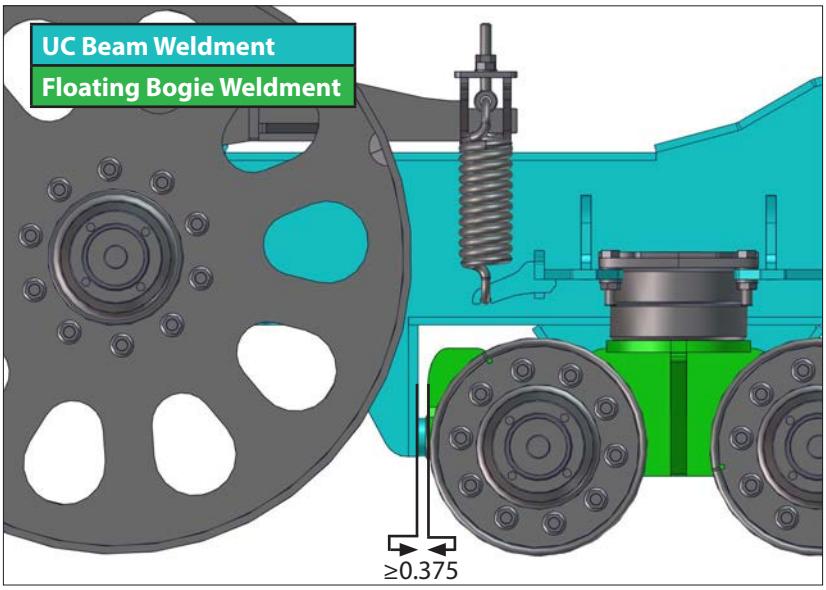
REMOVING FROM STORAGE

1. Inspect rubber belt for cuts or gouges and repair any damaged cables.
2. Check the belt for missing or damaged guide lugs and replace as necessary.
3. Check belt alignment.
4. Check belt tension.
5. Check the oil level in each idler/bogie hub. If the oil level in a hub is low, inspect the front and rear of the hub for potential leaks. Repair/replace dust caps and/or seals as needed on leaking hubs to remove the leak.
6. Check the distance between the bottom of the track bogie wheels and the bottom of the track idler wheels on a flat, hard surface with the grain cart empty. If the bogie wheels are ≤ 2" below the idler wheels, the rubber spring suspension system may need adjusted. Contact the J&M Service Department if adjustment appears needed.
7. Inspect center pivot spindle sleeve bearings for excess wear. Contact the J&M Service Department if bushings need replaced.
8. Inspect tensioner pivot pin bushings for excess wear. Tensioner pin slop is an indication that excess bushing wear may be present. Contact the J&M Service Department if bushings need replaced.
9. Inspect upper midrollers for free rotation and quiet, smooth operation. Do so by lifting the belt near the upper midrollers so that the belt is no longer contacting the rollers. If an upper midroller does not spin freely, smoothly, and quietly, remove the roller and replace the seals and bearings. It is estimated that the seals and bearings may need replaced every 3-6 years, depending on operating conditions.
10. Check the wheel lugnuts and make sure the nuts are properly torqued to 400 ft-lbs.
11. Inspect all track pivot locations (shown in "Lubrication Schedule" on page 9) for excessive bushing wear. Translational pin movement within a bushed spool in excess of 1/16" from one side of the spool to the other is an indication that excess bushing wear may be present.
12. Inspect longitudinal and transverse guide rollers for exterior roller wear. The following measurement indicate that guide rollers should be replaced:

Roller	Replace if Roller Diameter is Less than:
Longitudinal Guide Roller	2.875"
Transverse Guide Roller	2.375"

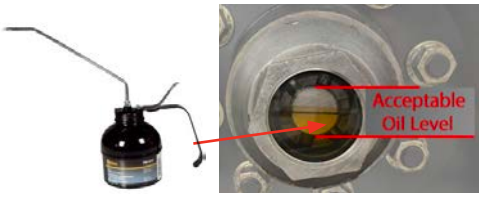


The distance from the Floating Bogie Weldment to the UC Beam Weldment should be ≥ 0.375". If this distance falls below 0.375" at any point during operation of the track system, inspect the transverse guide rollers for exterior or bushing wear.



HOW TO FLUSH THE OLD OIL OUT OF THE OIL BATH HUBS

1. Roll the hub until the fill plug is on top.
2. Drain the hub by removing the cap.
   *There is no need to tilt the track, the oil will flow through the bearing easily.
3. Replace cap and torque the four bolts based on the table in "Bolt Torque Chart" on page 8.



HOW TO ADD OIL TO OIL BATH HUBS

1. Remove the fill plug. Alternatively you can remove the dust cap plug and retainer and fill from there.
2. Use an oiler hand pump to add a GL-5 SAE 75W-90 synthetic gear oil with rust and oxidation inhibitors. When empty, it takes **13 oz of oil** to fill hubs to recommended level.
3. Replace the fill plug (dust cap plug and retainer). Use PTFE tape on the fill plug threads for a tight seal.

When performing maintenance work, wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing and head. Follow the instructions in this Operator's Manual to ensure safe and proper maintenance and repair.

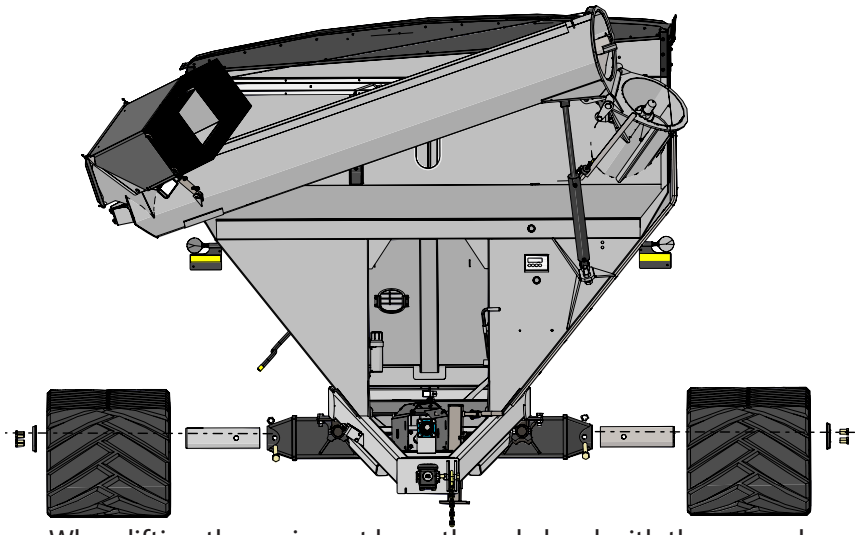
Your local, authorized dealer can supply genuine replacement parts. Substitute parts may not meet original equipment specifications and may be dangerous.

BE CERTAIN THAT ALL POWER IS SHUT OFF TO THE GRAIN CART BEFORE PERFORMING ANY MAINTENANCE OR REPAIR WORK.

Installation

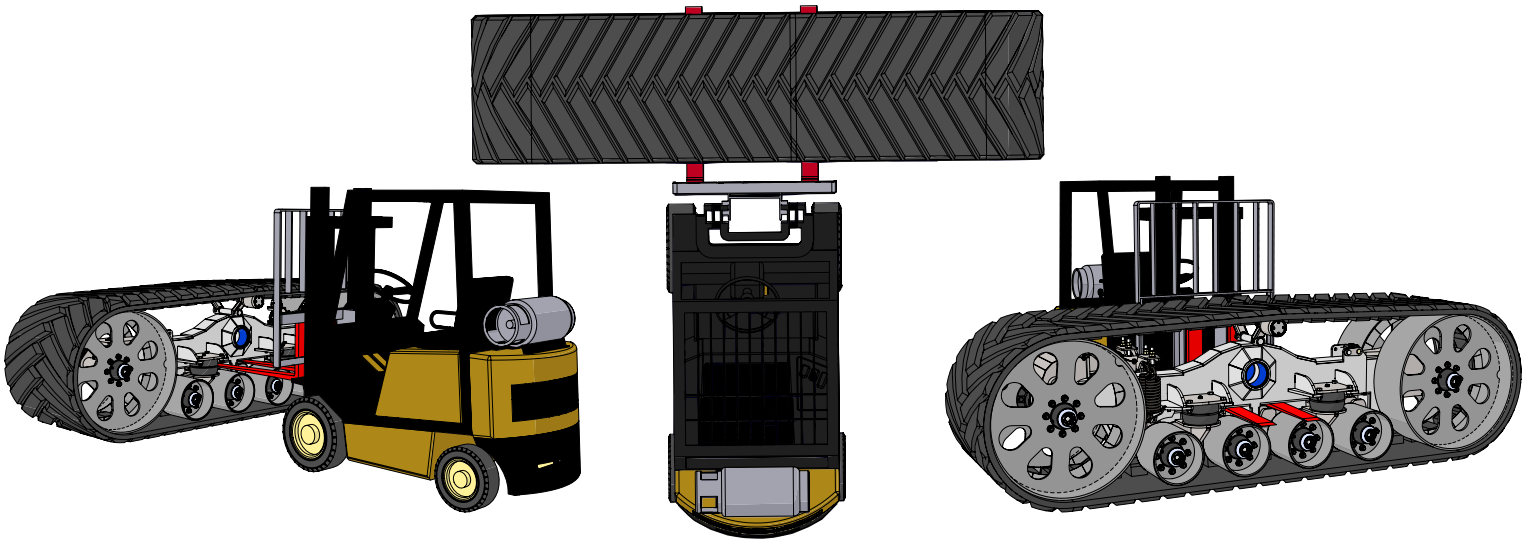
Step 1 - Install both spindles. Use (2) 1-1/4"-7 x 11" Gr8 YZ Hex Bolts and (2) 1-1/4"-7 Gr2 Z Nylon Locking Hex Nuts to attach the spindles to the axle.

Step 2 - Use an overhead hoist to pick up the grain cart. Use a hoist and chains that are rated for the specific weights. The weights are located in the grain cart operator's manual. When raising the grain cart, keep the axle level with the ground.



When lifting the grain cart keep the axle level with the ground.

Step 3 - Pick the tracks up with a forklift. Put both of the forks in between two bogie wheels. It is recommended to use a forklift with the side shift option available. Use a forklift that is rated for at least 8,000 lbs for the 46" tracks.



Step 4 - Slide the tracks onto the spindle. Be sure to center the track bushings with the spindle prior to attempting to slide the track on so that no damage is done to the bushing's liner. Grease both the bushing liner, and the spindle prior to assembly.

Step 5 - Install the Center Pivot Spindle Retainer Weldment. Use (4) 3/4"-10 x 2" Gr8 YZ Hex Bolts to fasten the Center Pivot Spindle Retainer Weldment to the spindle.

Step 6 - Tighten all of the hardware according to the "Bolt Torque Chart" on page 8.

Operation Guidelines

The track system offers benefits which can be maximized by following recommended operational practices. In reviewing these guidelines, you will learn the best ways to gain these benefits.

The four basic rules for maximizing track life are:

1. **Follow track break-in procedures**
2. **Verify and maintain alignment**
3. **Understand ways to maximize tread life**
4. **Use correct operational techniques**

By understanding these rules, you learn operational techniques and methods which help achieve years of trouble-free service.

1. TRACK BREAK-IN

Before any road transport is done, especially when new, expose the inside of the tracks to soil, or a dry lubricant. Keep speeds down when breaking in new tracks.

Guide lug life benefits from correct break-in procedures. Correct break-in reduces initial guide lug wear. During the break-in period, rolling components undergo a polishing process to achieve a smooth steel-to-rubber interface with the guide lug. Rubber surfaces use dust and dirt as a dry lubricant during break-in to minimize heat and reduce rubber stickiness. New tracks lacking a coating of dust should be exposed to dry and dusty soil conditions as soon as possible. Do not road transport a new track system without first exposing the inside of the track to soil, dirt, or other dry lubricant. Road transport of new rubber without dry lubricant may generate damaging heat and can cause guide lug damage/wear. If roading must be done, then a dry lubricant such as soil, talc, or floor-dry should be applied to the guide lugs periodically during roading until exposure to the field commences.

2. TRACK ALIGNMENT

Monitor track alignment and recheck periodically.

Track alignment is the most important periodic check that can be made on a track system. ALWAYS check alignment very carefully before road transport is done. Alignment can change due to component wear, track damage, end wheel buildup, operation on sloped surfaces, or following track replacement. Misalignment causes wear to guide lugs, so periodic alignment checks are important. By checking if there is significant difference in surface temperatures or wear between the inner and outer guide lug faces, you can determine if the track is in proper alignment. See "Alignment" on page 11.

Note: *Minimizing guide lug inner/outer temperature difference is the best way to achieve correct alignment.*

3. MAXIMIZE TREAD LIFE

Use care during road transport. DO NOT TRANSPORT A FULL LOAD ON THE ROAD.

Avoid conditions that cause high tread wear rates.

Several operational factors influence tread wear:

- Amount of roading (roading increases wear)
- Field soil conditions (abrasive increases wear)
- Operating weight and distribution
- Operator techniques

Tread life decreases with higher percentages of roading. Tread wear rates can be minimized by staying off pavement, and reducing transport weight and speed. The greatest rate of tread wear occurs on a hot day with a poorly balanced or heavily, loaded system. Always transport during cooler parts of the day and at reduced travel speeds and weight, as this will lower temperatures of the treads, guide lugs, and rolling components. Remember that frequent sharp turning of the track system (i.e. skidding around a tight turn) especially if done on hard surfaces and fully loaded, dramatically increases tread wear and puts high stresses on the mechanical components. Take wide turns whenever possible. 36" Stabilizer tracks are rated up to 25 mph. J&M recommends towing an empty grain cart at no faster than 20 mph and a loaded grain cart should not travel faster than 8 mph**. Speed in excess of these limits may lead to excessive belt and/or seal wear. Damage incurred in this manner is not warrantable.**

Do not transport a loaded grain cart outside the field. Transporting a loaded grain cart on a hard surface or road can lead to excessive heat buildup in the treads and cause permanent damage. Damage incurred in this manner is not warrantable. Refer to your grain cart operator's manual to understand the maximum speed and duration limitations, as well as the maximum load limitations, while transporting your equipment. Always respect these limits.

Operation Guidelines

4. OPERATIONAL TECHNIQUES

Use recommended practices from J&M to improve track performance.

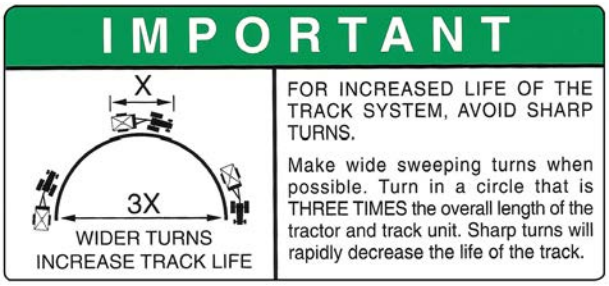
- Maintain correct track tension. For instructions on adjusting track tension, see "Routine Maintenance" on page 10.
- Proper tension is important for best track performance. Tension can change during service. Improper tension can increase the potential for derailing or untracking, or reduce the life of bearings and rolling components.
- Keep material out of the undercarriage. A track system will allow some material to ingest and pass through it, but sharp noncompressible objects cause high localized loads to both track and wheels, which if severe enough, can result in track and wheel damage. Inspect and clean material from the undercarriage before starting work.

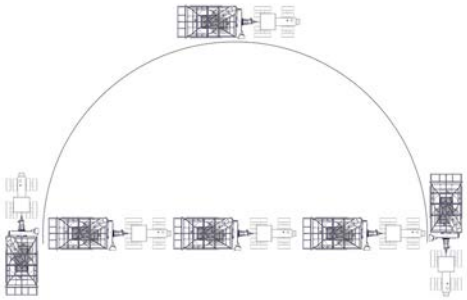
Crossing ditches or diagonal transitions

During transitions from sloped to flat areas (or vice versa), the front and rear of the track may be in contact with the ground while the mid-section is unsupported. If turning is attempted at this time, the risk is higher for derailing or misalignment to occur.

Limit sharp turns

When pulling grain carts with a track system, avoid sharp turns or pivots. Sharp turns cause one or both tracks to slide across the surface resulting in berming, road surface damage, and excessive tread wear. To maximize the life of your track system, it is recommended that wide turns be consistently made whenever possible. Turning in a circle that is **THREE TIMES** the overall length of the tractor and track unit will reduce premature wear on the belt and undercarriage.





Repair Parts List and Diagrams

When performing maintenance work, wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing and head. Follow the Operator's Manual instructions to ensure safe and proper maintenance and repair.

Your local, authorized dealer can supply genuine replacement parts. Substitute parts may not meet original equipment specifications and may be dangerous.

⚠ WARNING

MAKE SURE ALL POWER IS SHUT OFF BEFORE PERFORMING ANY MAINTENANCE OR REPAIR WORK.

Decals

1

2

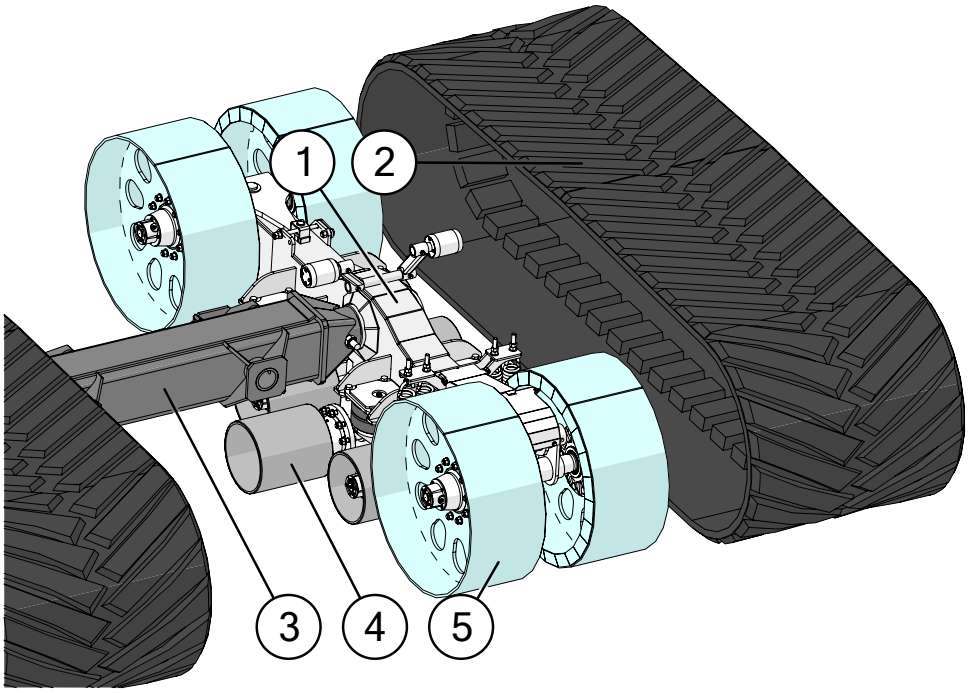
3

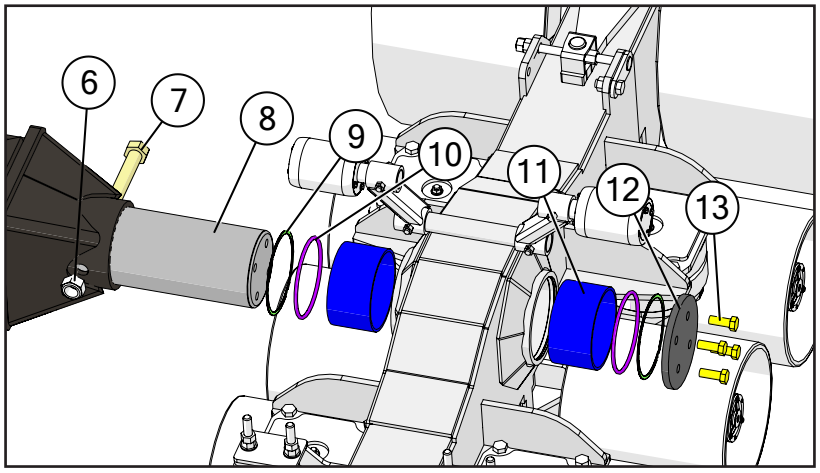
4

5

	Description	Part No.
1	J&M Oval Decal (Small) 3-5/8" x 5-1/4"	JM0015150
2	Front Decal Right (STX)	JM0041711
3	Front Decal Left (STX)	JM0041710
4	Stabilizer Trax Decal	JM0043919
5	Warning, Keep Lug Nuts Tightened Decal 1-5/8" x 4"	JM0010150

Track Beam Connections and Wheels

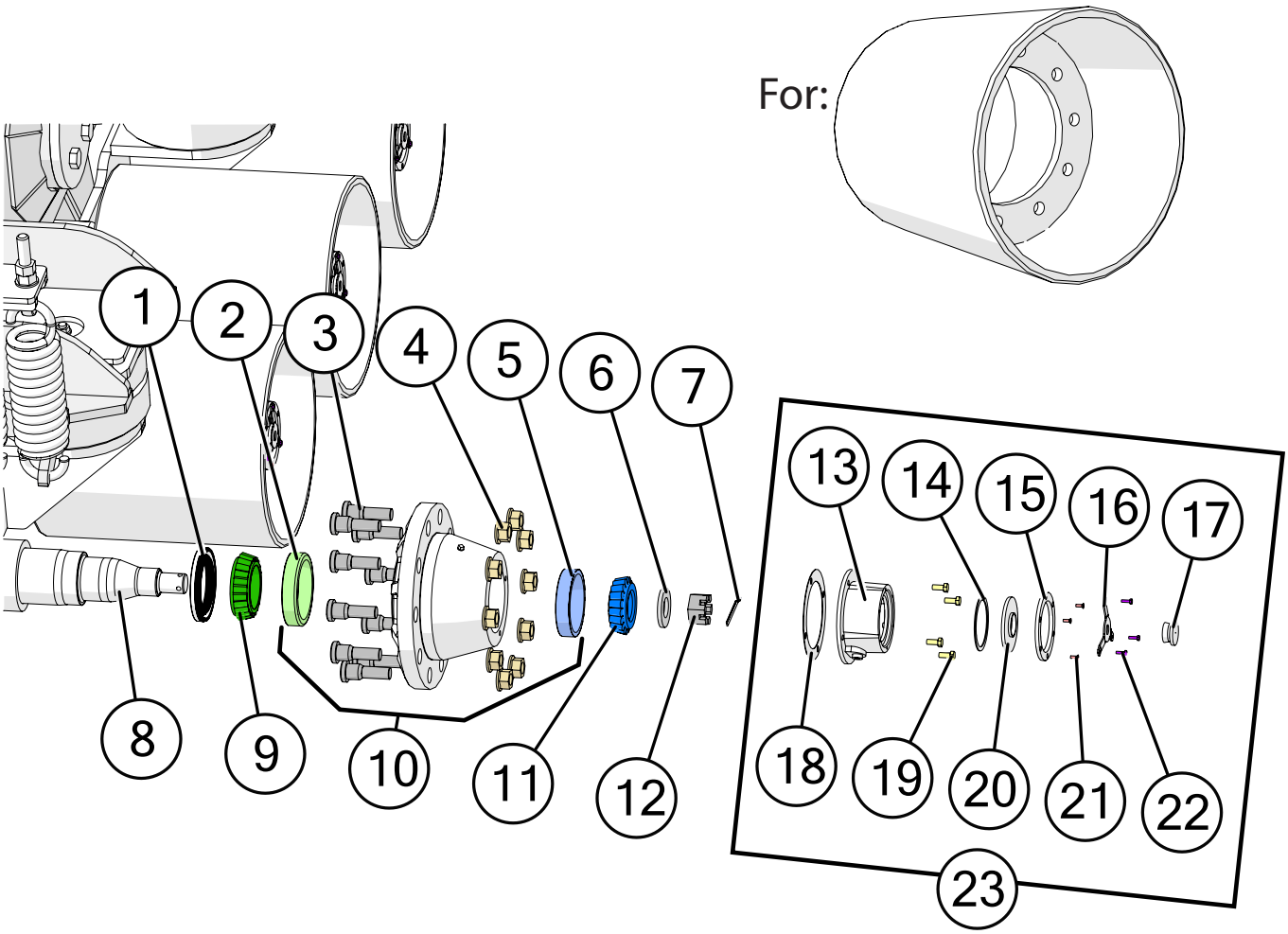




	Description	Part No.
1	STX-46 Track Undercarriage Beam Weldment	JM0041433
2	46" x 336" Rubber Belt	JM0041343
3	Track Axle Weldment 87-7/8" for STX-46	JM0041861
4	14" Bogie Wheel Weldment (46" Stabilizer Trax)	JM0041385
5	38" End Wheel Track Weldment (46" Stabilizer Trax)	JM0041382
6	1-1/4"-7 Gr2 Z Nylon Locking Hex Nut	JM0026789
7	1-1/4"-7 x 11" Gr8 YZ Hex Bolt	JM0042644
8	STX-46 Center Pivot Spindle 7" x 25-1/2"	JM0041913
9	7-1/2" Housing Diameter Spirolox WH-750 Retaining Ring	JM0050245
10	O-Ring - 175 mm ID x 191 mm OD x 8 mm W (STX-46)	JM0050253
11	7" ID x 7-1/2" OD x 4" Self-Lubricated Bushing	JM0041919
12	STX-46 Track Spindle Retainer (8-1/2" OD)	JM0041914
13	3/4"-16 x 2" Gr8 YZ Hex Bolt	JM0043611

Mid Roller Hub and Spindle Assembly

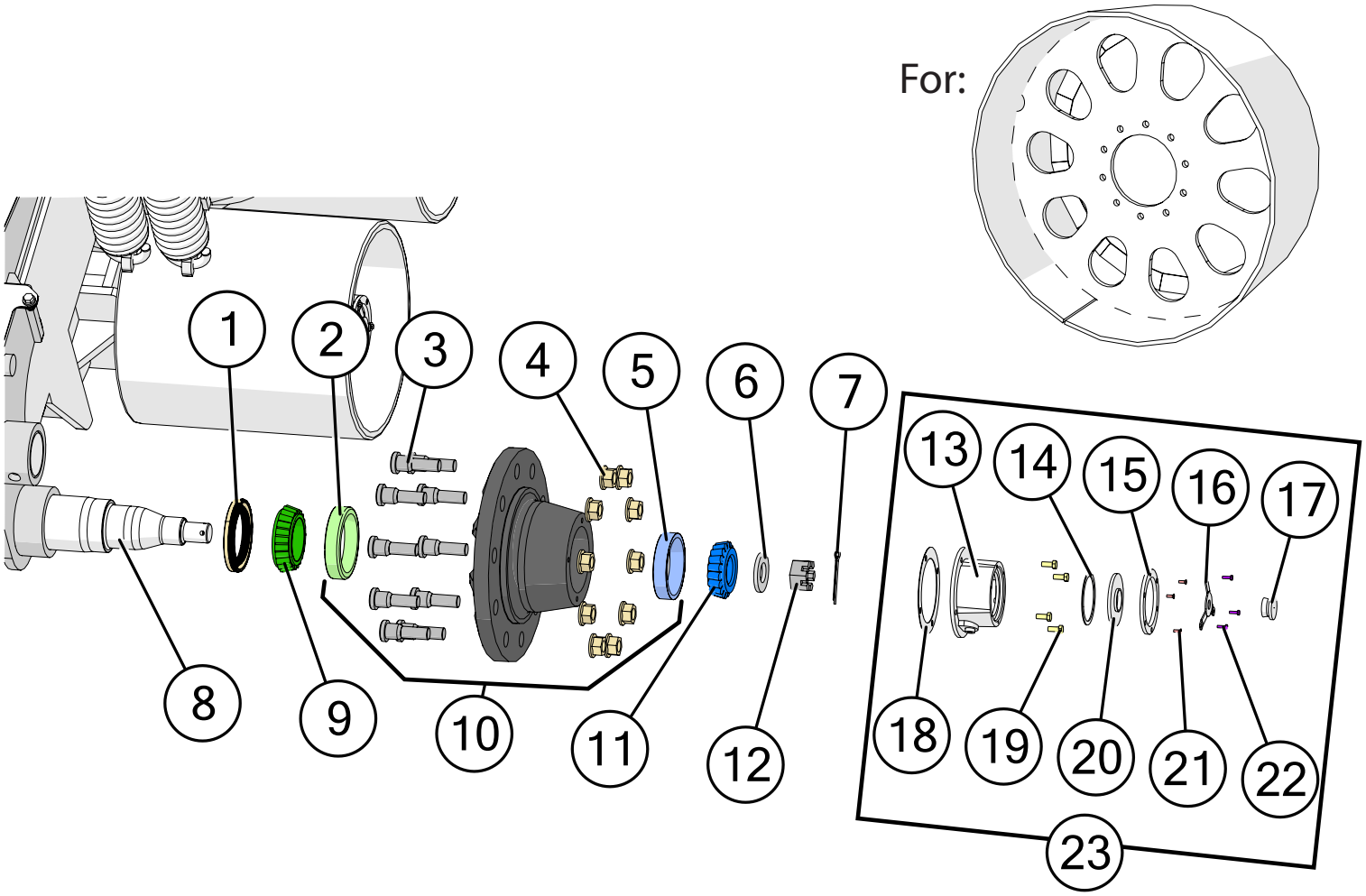
For:



	Description	Part No.
1	Cassette Seal 4-5/8" OD x 3-3/8" ID	JM0059340
2	Large Race (4T-33462)	JM0025689
3	3/4"-16 x 1-3/4" Wheel Stud	JM0018957
4	3/4"-16 Flange Lugnut	JM0034718
5	Small Race (4T-453A)	JM0025695
6	1-9/32" ID x 2-1/2" OD x 1/4" Through-Hardened Washer	JM0047840
7	3/16" x 2-1/2" Cotter Pin	JM0027684
8	Track Spindle 3-1/2" x 37.53" (STX-46)	JM0041489
9	Large Bearing (4T-33275)	JM0025687
10	877-200 Hub with Studs, Lugs, and Races (Bogie STX-46)	JM0041818
11	Small Bearing (4T-460)	JM0025688
12	1-1/4"-12 Gr2 Castle Hex Nut	JM0010113
13	873 Oil Bath Hub Dust Cap	JM0035157
14	Dust Cap Glass Gasket - 870 Series OB Hub	JM0044078
15	Dust Cap Glass Retainer - 870 Series OB Hub	JM0044081
16	870 Series Dust Cap Plug Retainer	JM0047574
17	Dust Cap Plug - 870 Series OB Hub	JM0044085
18	Dust Cap Gasket G877	JM0043908
19	5/16"-18 x 3/4" Gr5 Z Hex Bolt	JM0047589
20	Dust Cap Glass - 870 Series OB Hub	JM0044077
21	M4-0.7mm x 12mm SS Flat Head Socket Cap Screw	JM0047587
22	M4-0.7 x 14 Gr8.8 Z Hex Bolt	JM0047588
23	Dust Cap ASM - 870 Series OB Hub	JM0044070

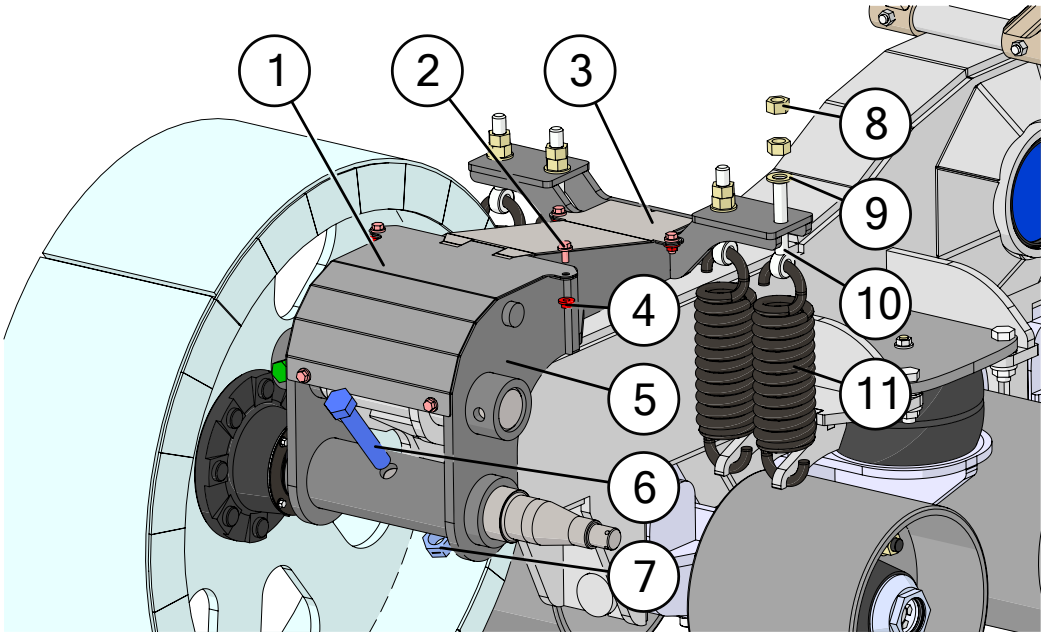
End Idler Hub and Spindle Assembly

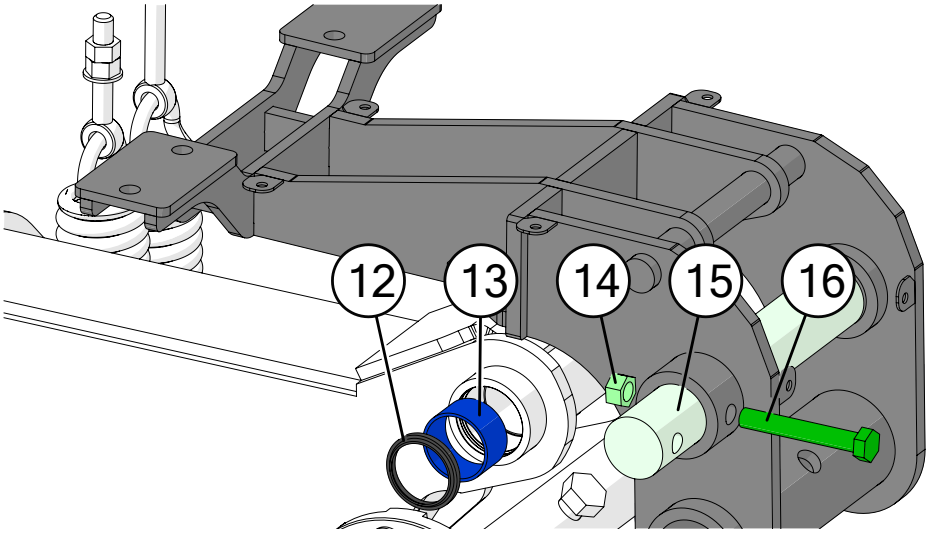
For:



	Description	Part No.
1	Cassette Seal 4-5/8" OD x 3-3/8" ID	JM0059340
2	Large Race (4T-33462)	JM0025689
3	3/4"-16 x 1-3/4" Wheel Stud	JM0018957
4	3/4"-16 Flange Lugnut	JM0034718
5	Small Race (4T-453A)	JM0025695
6	1-9/32" ID x 2-1/2" OD x 1/4" Through-Hardened Washer	JM0047840
7	3/16" x 2-1/2" Cotter Pin	JM0027684
8	Track Spindle (37.53" Length) (46" Stabilizer Trax)	JM0041489
9	Large Bearing (4T-33275)	JM0025687
10	877 Hub with Studs, Lugs, and Races (End Idler STX-46)	JM0041812
11	Small Bearing (4T-460)	JM0025688
12	1-1/4"-12 Gr2 Castle Hex Nut	JM0010113
13	873 Oil Bath Hub Dust Cap	JM0035157
14	Dust Cap Glass Gasket - 870 Series OB Hub	JM0044078
15	Dust Cap Glass Retainer - 870 Series OB Hub	JM0044081
16	870 Series Dust Cap Plug Retainer	JM0047574
17	Dust Cap Plug - 870 Series OB Hub	JM0044085
18	Dust Cap Gasket G877	JM0043908
19	5/16"-18 x 3/4" Gr5 Z Hex Bolt	JM0047589
20	Dust Cap Glass - 870 Series OB Hub	JM0044077
21	M4-0.7mm x 12mm SS Flat Head Socket Cap Screw	JM0047587
22	M4-0.7 x 14 Gr8.8 Z Hex Bolt	JM0047588
23	Dust Cap ASM - 870 Series OB Hub	JM0044070

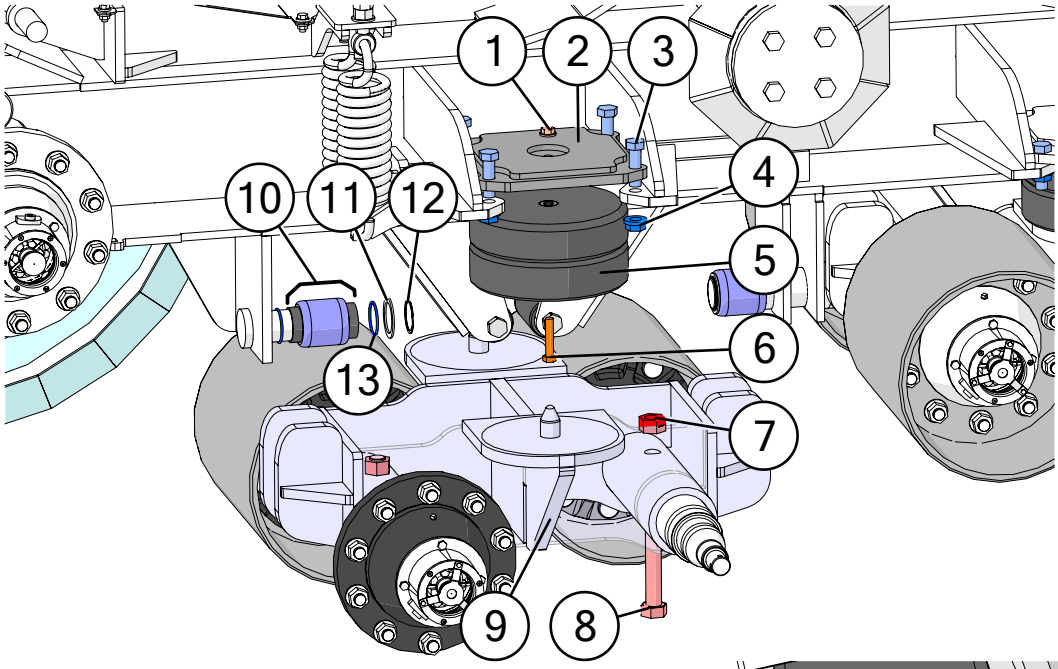
Tensioner

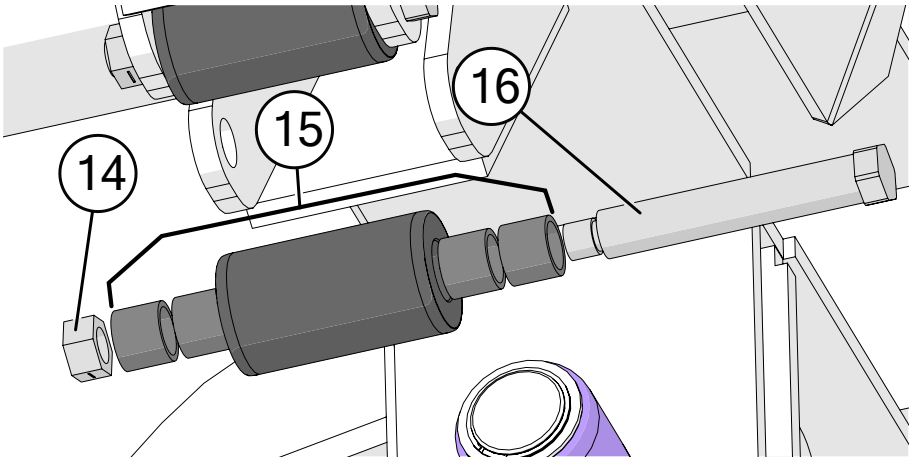




	Description	Part No.
1	Tensioner Shield - Outer Beam (46" Stabilizer Trax)	JM0044162
2	3/8"-16 x 3/4" Gr5 Z SF Hex Bolt	JM0001750
3	Tensioner Shield - Inner Beam (46" Stabilizer Trax)	JM0044163
4	3/8"-16 Gr5 Z SF Hex Nut	JM0002152
5	Track Tensioner Weldment (46" Stabilizer Trax)	JM0041467
6	1"-8 x 5-1/2" Gr5 Z Hex Bolt	JM0002110
7	1"-8 Gr2 Z Centerlock Hex Nut	JM0002149
8	3/4"-10 Gr8 YZ Hex Nut	JM0042265
9	3/4" Hardened YZ SAE Flat Washer	JM0042264
10	3/4"-10 x 5" B7 Z Rod End Eye - Fully Threaded	JM0040917
11	Extension Spring 11.385" Length x 3.5" OD x .594" Diameter Wire	JM0042205
12	3" Rod Dia. x 3-1/2" Groove Dia. x 1/4" Groove Width Rod Wiper	JM0050254
13	3" ID x 3-1/4" OD x 1-1/2" Self-Lubricated Bushing	JM0041920
14	3/4"-10 Gr2 Z Centerlock Hex Nut	JM0002147
15	Track Tensioner - Pivot Pin (3" OD x 17-1/32" Length) (STX-46)	JM0041504
16	3/4"-10 x 5" Gr5 Z Hex Bolt	JM0009997

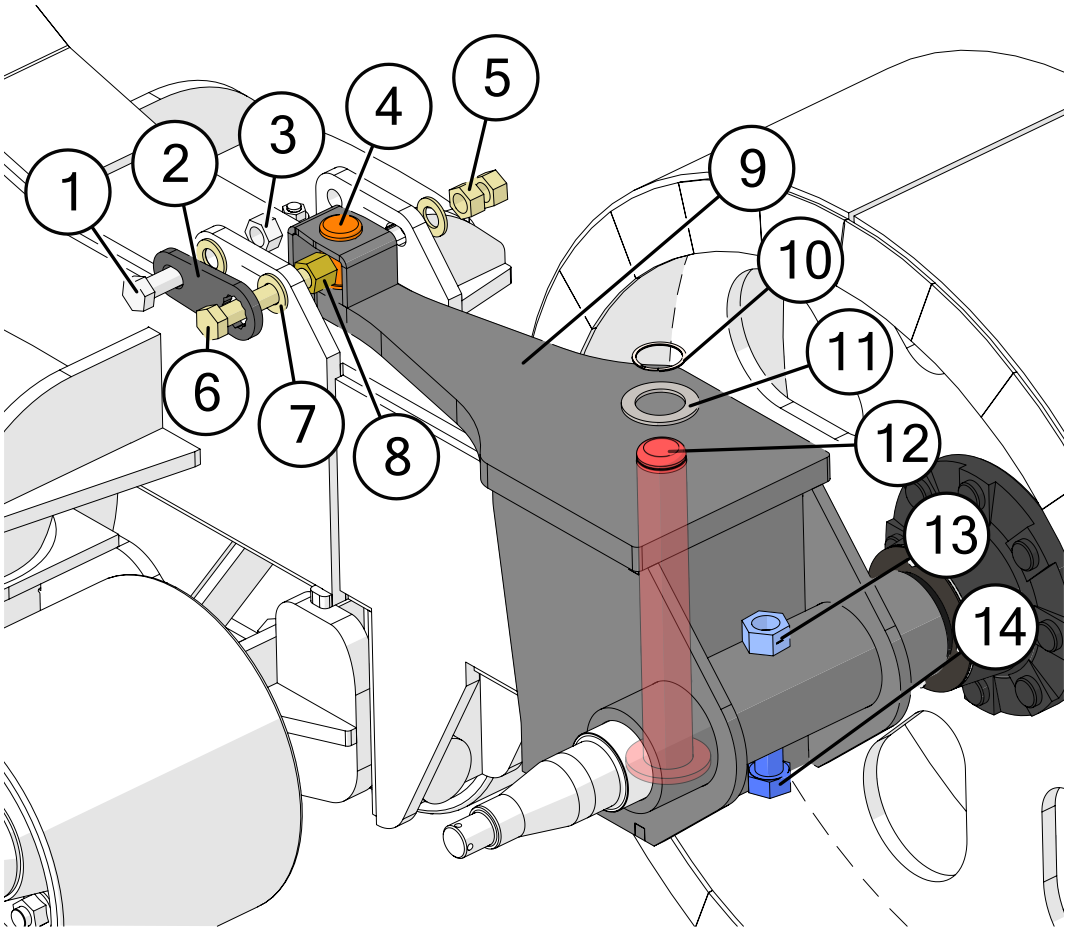
Spring and Mid Rollers





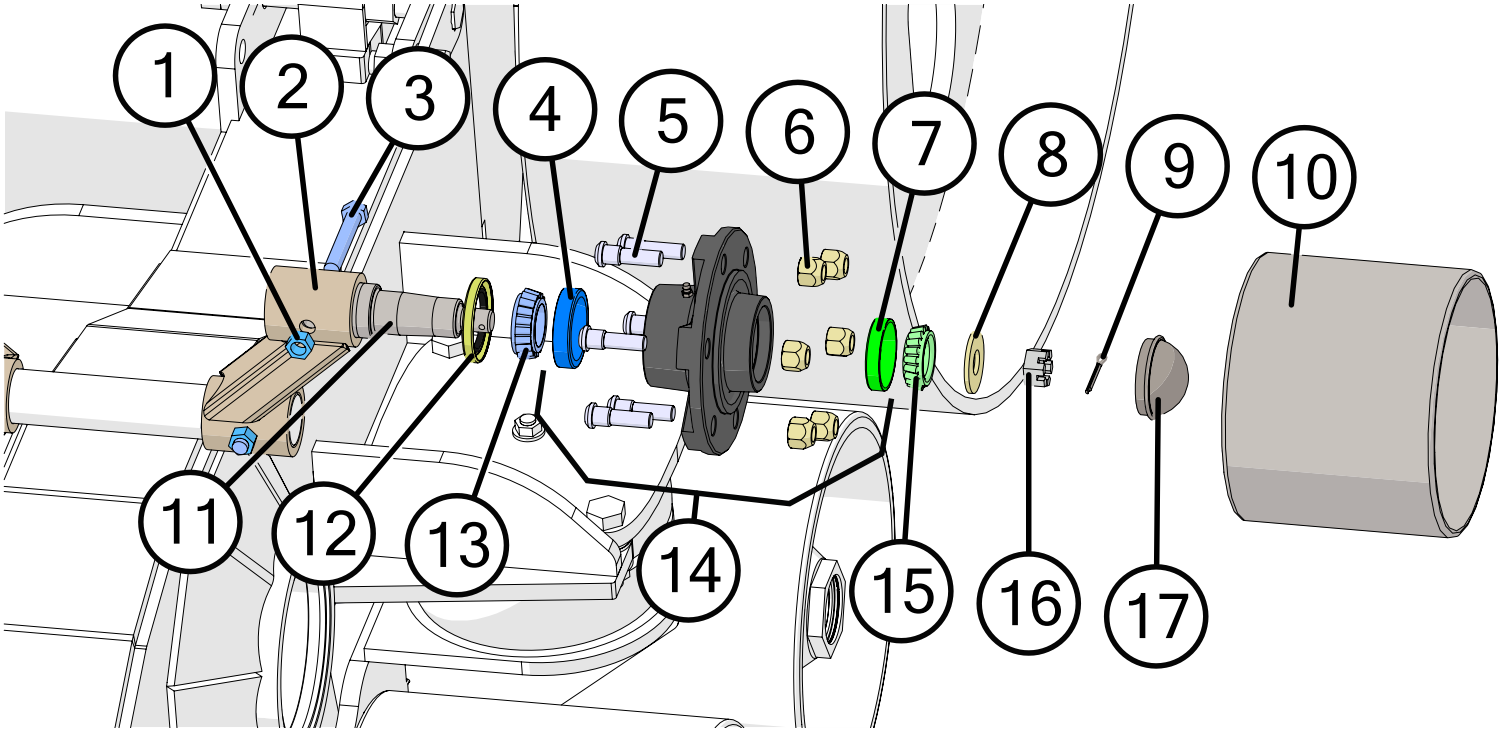
	Description	Part No.
1	1/2"-13 Gr5 Z SF Hex Nut	JM0002153
2	Upper Spring Plate Weldment (46" Stabilizer)	JM0042495
3	3/4"-10 x 2-1/2" Gr5 Z Hex Bolt	JM0042591
4	3/4"-10 Gr5 Z SF Hex Nut	JM0009921
5	Aeon Hollow Rubber Spring A590-65 (STX-46)	JM0044600
6	1/2"-13 x 2-1/2" Gr8 Z Hex Bolt	JM0045896
7	1"-8 Gr2 Z Centerlock Hex Nut	JM0002149
8	1"-8 x 5-1/2" Gr5 Z Hex Bolt	JM0002110
9	Floating Bogie Weldment (46" Stabilizer Trax)	JM0041402
10	Longitudinal Guide Roller (2-31/32" x 3") with Bushings	JM0042222
11	Longitudinal Roller Washer (2-5/8" OD x 2-1/32" ID) (Stabilizer, V4)	JM0038648
12	2" Shaft Diameter Spirolox WSM-200-S02 Retaining Ring	JM0050227
13	O-Ring Size #226 - 1.984ID x 2.262OD x 0.139W	JM0041177
14	3/4"-10 Gr2 Z Centerlock Hex Nut	JM0002147
15	Transverse Guide Roller (STX-46)	JM0049375
16	Shoulder Bolt for Transverse Guide Roller (STX-46)	JM0049284

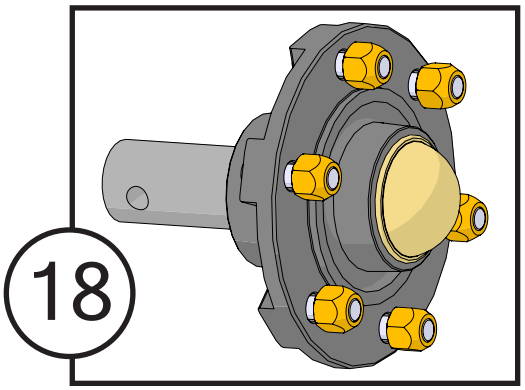
Hitch



	Description	Part No.
1	3/4"-10 x 2" Gr5 Z Hex Bolt	JM0002106
2	Swivel Hitch - Alignment Bolt Keeper (Stabilizer Trax)	JM0038501
3	3/4"-10 Gr5 Z Hex Nut	JM0002125
4	Swivel Hitch - Alignment Pin (1-1/2" Dia. x 3-3/8") (Stabilizer)	JM0038471
5	3/4"-16 Gr8 YZ Hex Nut	JM0041245
6	3/4"-16 x 10" Gr8 Fully-Threaded YZ Hex Bolt	JM0041570
7	3/4" Hardened YZ SAE Flat Washer	JM0042264
8	3/4"-16 Gr8 YZ High Hex Nut	JM0038709
9	Track Swivel Hitch Weldment (STX-46)	JM0041537
10	2-1/4" Shaft Diameter Spirolox WSM-225-S02 Retaining Ring	JM0050275
11	Swivel Hitch Pin Washer (3-1/4" OD, 2-9/32" ID, .135" Thick)	JM0042123
12	Swivel Hitch Pin Weldment (2-1/4" OD x 14-5/8" Length) (46" Stabilizer Trax)	JM0042122
13	1"-8 Gr2 Z Centerlock Hex Nut	JM0002149
14	1"-8 x 5-1/2" Gr5 Z Hex Bolt	JM0002110

Upper Rollers





	Description	Part No.
1	1/2"-13 Gr5 Z Centerlock Hex Nut	JM0001511
2	Upper Midroller Bracket Weldment (Stabilizer Trax)	JM0043987
3	1/2"-13 x 3" Gr5 Z Hex Bolt	JM0016678
4	Large Cup for 6-8 Ton (LM48510) (104580)	JM0026565
5	Wheel Stud for Hub, 6-8 Ton (1/2"-20 x 1-7/8") (4187)	JM0019559
6	1/2"-20 Lug Nut, 6-8 Ton (5552)	JM0003062
7	Small Cup for 6-10 Ton (LM67010) (200500)	JM0026564
8	3/4" USS Hardened YZ Flat Washer	JM0058394
9	5/32" x 1-1/2" Cotter Pin	JM0014348
10	STV4 - Upper Midroller Wheel Weldment	JM0047173
11	STX1 - Upper Midroller Repair Spindle	JM0068856
12	Grease Seal, 6-8 Ton (103953)	JM0026572
13	Large Inner Bearing for 6-8 Ton (LM48548) (104579)	JM0019563
14	G25 Hub with Races, Studs and Nuts, 7-8 Ton (105218)	JM0026566
15	Small Outer Cone for 6-10 Ton (LM67048)	JM0019564
16	3/4"-16 Gr2 Castle Hex Nut	JM0002130
17	Dust Cap, 6-10 Ton (103969)	JM0026567
18	Upper Midroller Hub and Spindle Assembly for STX1	JM0068860