QTS

OWNERS MANUAL

GENIE S-60 and S-65

Rev 030109

Foreword

This manual contains safety, operation, maintenance, and adjustment information. The procedures are designed to provide the best performance of the machine in an effective and economical way. In order to obtain it, remember the next basic rules.

- This manual should be stored in the operator's compartment of any machine where this attachment is used.
- Before inspection, maintenance, or operating the QTS, read and understand this manual completely.
- Since all of the explanations in this manual may not be thoroughly understood at first, repeat reading it until abilities as an operator are obtained and developed for proper operation.
- Further abilities as an operator outside of descriptions in this manual can be obtained from experience during normal operations and under proper supervision.

Because of continuing improvement and advancement of product design, the shape of the attachment in the illustrations may be partly different from your machine. Whenever a question arises regarding your machine, or this publication, please consult your local Loegering dealer or Loegering Mfg. at 701-347-5441 for the latest information.

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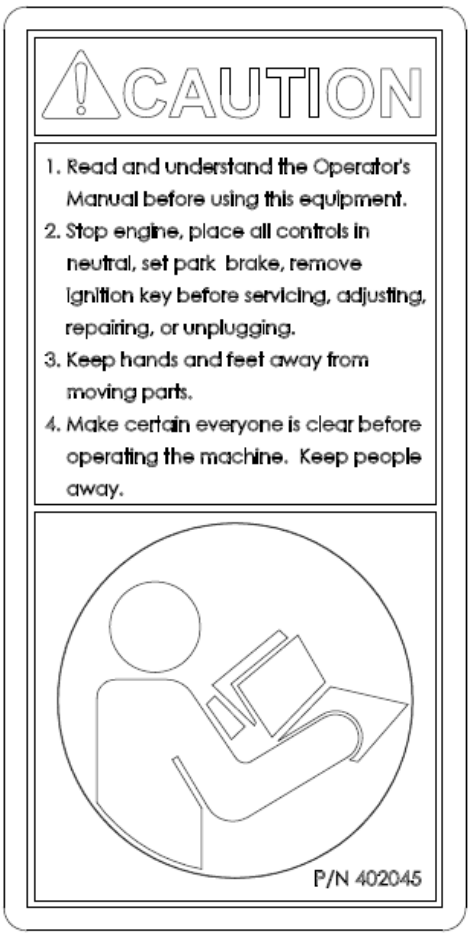
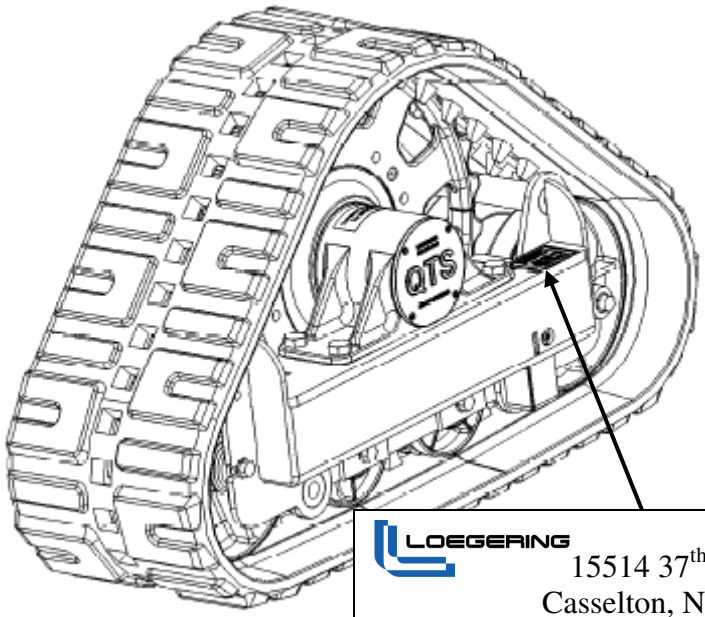
Serial Number Location

Always provide the serial number of your QTS when ordering parts, requesting service, requesting warranty, or any other information.

The serial number plate is located on top of the frame near the hub. Please record the serial numbers in the space provided and on the warranty registration card.

Serial Numbers: Right Front QTS_____ Left Front QTS _____
Right Rear QTS_____ Left Rear QTS_____





LOEGERING
15514 37th St SE
Casselton, ND58012
800-373-5441
www.loegering.com
Model #: xxxxxx
Serial #: 1x-xxxxxx-xxx
Date of Mfg: xx-xx (MM-YY)
Weight (lbs.): xxxx
Capacity: xxxxxxxxx

SAFETY INFORMATION

We offer you basic and important rules and precautions for safe operation.

Read, understand, and observe them before starting operation. This is the most essential way to prevent accidents.

Wrong operation, inspection, or maintenance can cause personal injury or death.

We have made every effort for you to prevent accidents during operation, however, we cannot be held responsible for predicting every kind of danger in all operating conditions. It is the owner or user of the machine who is responsible for **ALWAYS** paying attention to operate the machine; as well as reading and understanding this manual enough to obtain the essential knowledge and skills fundamental to correct machine operation.

Throughout this manual and on the QTS, precautions are provided with ⚠ marks and classified by the words "**Danger", "Warning",** and **"Caution"** according to their extent of danger.

The classification is as follows:

⚠DANGER: indicates an imminently hazardous situation which, if not avoided, will cause death.

⚠WARNING: indicates a potentially hazardous situation which, if not avoided could result in death or serious injury.

⚠CAUTION: indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury. It may also be used to alert against possible damage to the machine and its components.

⚠WARNING

- **BEFORE** inspection, operation, or maintenance of the QTS, be sure to read and understand this manual.
- Incorrect operation or maintenance of the machine can cause an accident and serious injury or death.
- Keep this manual on hand during operation so that you can immediately consult it when necessary. If it should be missing or damaged, a new manual can be downloaded from our website at www.loegering.com under the QTS section.
- There are various kinds of federal, state, and local regulations that effect construction and industrial machinery. Since the regulations are subject to change, and differ from one locale to another, it is impossible for us to provide such information in this manual. It is the responsibility of the owner or user to be familiar with the regulations.
- Specifications and materials of the QTS are subject to change without any obligation on the part of the manufacturer.

SAFETY

SAFETY TIPS

This section explains tips which you will find throughout this manual and on the QTS Track System. Periodically check labels and plates containing those tips for damage. If they are damaged, clean or replace them. For replacement, contact Loegering.

1-1 GENERAL

OBSERVE THE BASICS FOR SAFE AND EFFECTIVE OPERATION.

The operator's knowledge, skills, and experience are the most important to utilize the machine and QTS. Therefore, be sure to understand operation procedures and to take necessary training.

OPERATOR SHOULD BE QUALIFIED.

Only qualified operators should operate the machine, and those operators should only do so when physically and mentally alert.
The operator should be familiar with the hazards and necessary safety measures unique to the operation of QTS.

READ AND UNDERSTAND THE INSTRUCTIONS AND WARNINGS.

This manual, plates, and labels on the machine contain necessary instructions and warnings for safe operation. Read and understand all safety instructions and warnings, failure to do so can result in injury or death. Loegering will be glad to answer any questions. If the manual, plate, or label is missing or damaged, contact Loegering for a replacement.

Remember that the safety tips that we provide cannot cover every kind of danger that you may encounter during operation.

WEAR PROPER WORKING CLOTHES.

Wear working clothes that fit closely. Avoid loose jackets, shirt sleeves, rings, and other jewelry that may get caught in moving parts of the QTS. Always wear protective items such as hard hats, safety glasses, and ear protection as required.

PERFORM "WALK-AROUND" INSPECTION.

Walk around the machine to check for any safety concerns before operation of the machine.

PERFORM SYSTEM CHECK.

Use the QTS slowly at first to ensure proper operation of all moving parts. Slow operation allows the operator to notice potential safety hazards before they occur.

SAFETY

1-2 OPERATION

CONDUCT ALL MANEUVERS WITH THE QTS CAREFULLY.

Avoid making sharp turns with the QTS installed. Sharp turns may reduce the usable life of your QTS system and can lead to accidents.

CAREFULLY LOAD AND UNLOAD THE MACHINE.

The QTS system can increase the width of your machine. Always ensure that the trailer is the correct size to prevent damage to trailers and/or the QTS.

CAPACITIES

When using the QTS system the machine will be able to lift larger loads; however, Loegering Mfg. recommends you do not exceed the manufacture's lift maximums.

1-3 MAINTENANCE

PERFORM MAINTENANCE CAREFULLY.

Maintenance work can be hazardous if not done in a careful manner. All personnel should realize the hazards and strictly follow safe practices. Before performing any maintenance or repair work, consult the instruction manual.

BE CAREFUL AROUND MOVING PARTS.

Stay clear of all rotating or moving parts such as sprockets and rollers.
Do not allow any object to come near moving parts. The object could be thrown out of the undercarriage.

ALWAYS CLEAN THE QTS

Maintain the cleanliness of the machine and QTS to ensure proper and safe operation. Remove dirt, debris, and any tools used for maintenance from the undercarriage system.

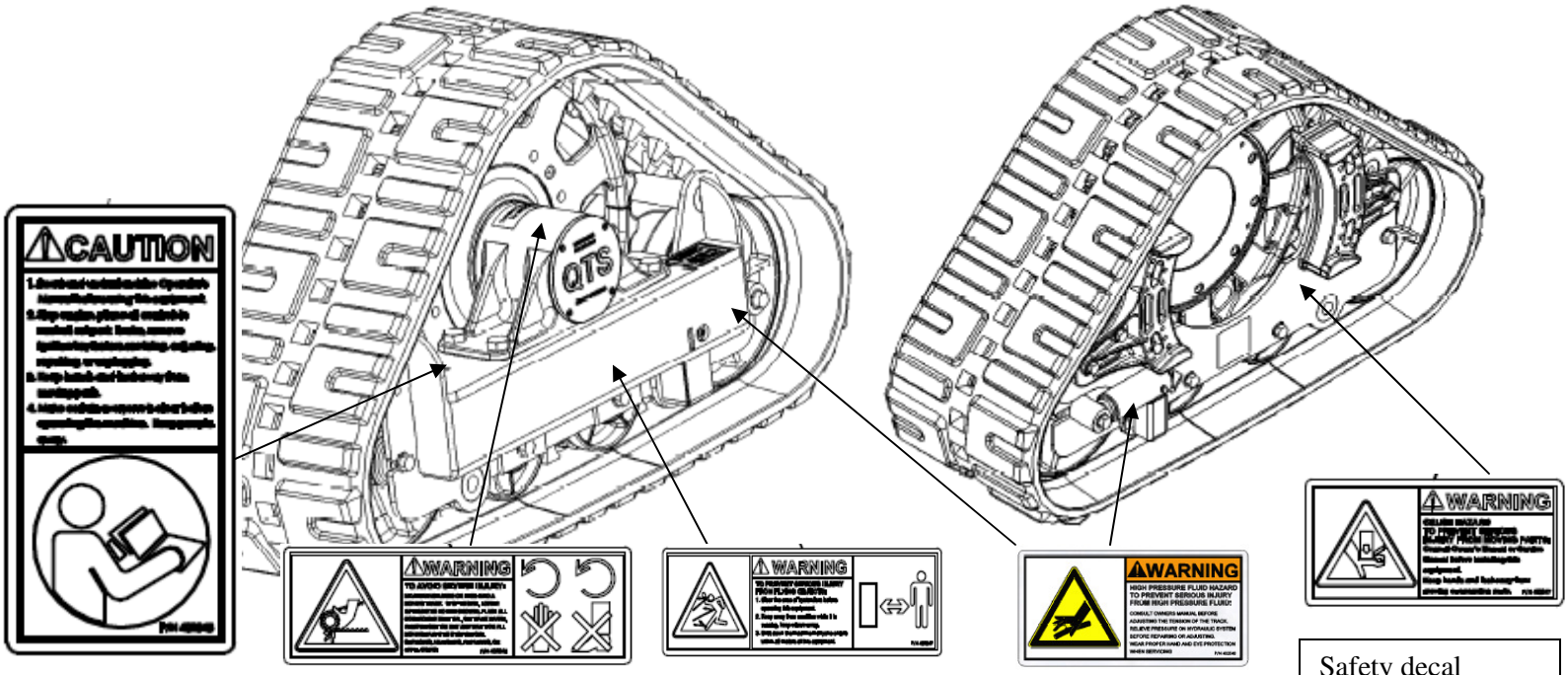
ALWAYS USE APPROPRIATE SAFETY EQUIPMENT.

Wear personal safety equipment when necessary and use mechanical lifting devices to aid in the service and maintenance of the QTS.

1-4 Warning Signs and Labels

There are several specific safety signs on your QTS. Their exact location and description of the hazard are reviewed in this section.

Please take the time to familiarize yourself with these safety signs.



Safety decal indicates:
CAUTION:
- Read and understand the operator's manual before using this equipment
- Stop engine, place all controls in neutral, set park brake, and remove ignition key before servicing, repairing, adjusting, or unplugging.
- Keep hands and away from moving parts.
-Make certain everyone is clear before operating the machine. Keep children, visitors, and untrained people away.

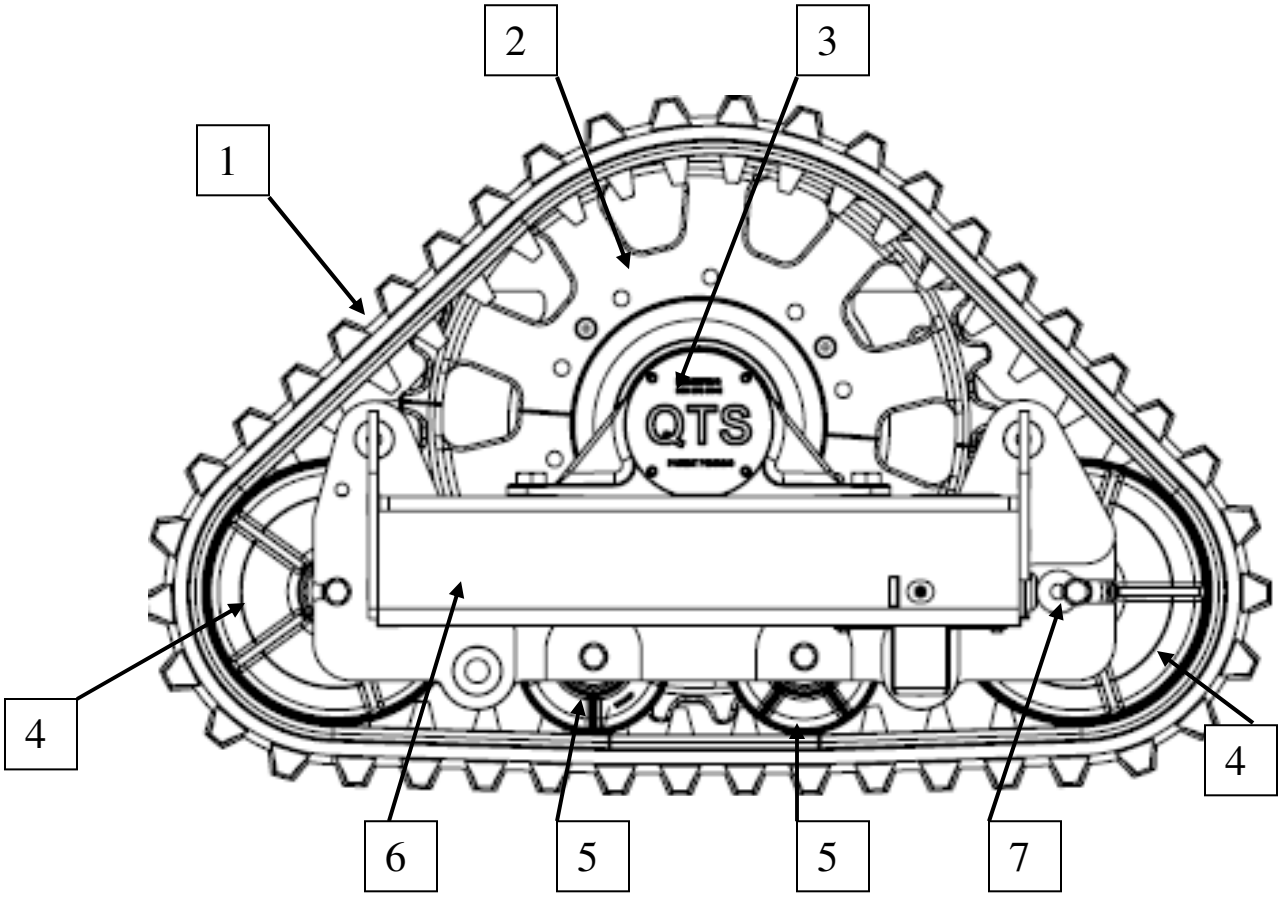
Safety decal indicates:
WARNING: To avoid severe injury.
- Never reach arms or legs into a moving track. Stop engine, lower implements to the ground, place all controls in neutral, set park brake, remove ignition key and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging.

Safety decal indicates:
WARNING: To prevent serious injury from flying objects.
- Clear the area of bystanders before operating this equipment.
- Keep away from machine while it is running, keep others away.
- Shut down the machine if anyone enters within 50 meters of this machine.

Safety decal indicates:
WARNING: High Pressure Fluid Hazard To Prevent Serious Injury from High Pressure Fluid
- Consult owner's manual before adjusting the tension of the track.
- Relieve pressure on hydraulic system before repairing or adjusting.
- Wear proper hand and eye protection when servicing.

Safety decal indicates:
WARNING: Crush Hazard, to prevent serious injury from moving parts:
Consult owner's manual or service manual before installing this equipment.
Keep hands and feet away from moving parts.

QTS Nomenclature



1. Track
2. Sprocket
3. Hub
4. Idler
5. Bogey
6. Undercarriage / Frame
7. Grease Cylinder

QTS Installation: Safety

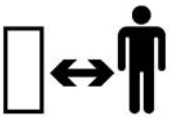
CAREFULLY READ THE FOLLOWING CAUTIONS AND NOTES BEFORE YOU START YOUR INSTALLATION:

⚠ CAUTION:

1. **Read the QTS installation procedure before starting installation. Failure to follow the installation instructions could cause equipment damage and/or void warranty. Failure to follow installation instructions could result in injury and/or death.**
2. **The installation of your QTS system includes the use of a forklift and/or mechanical hoist, read and understand the operation of this equipment before starting any QTS installation.**
3. **Always wear personal protective equipment any time work is performed on your QTS. This equipment should include safety glasses, ear protection, and appropriate work boots.**

4. **Visually inspect all equipment used in the installation of QTS.**
5. **The QTS is a heavy piece of equipment. Special precautions need to be taken to ensure the safety of all personnel. The QTS should be supported at all times by equipment that is rated to carry the amount of weight. Use of equipment that is not rated for the weight of the QTS could result in injury and/or death.**

6. **When the QTS is being moved, all personnel should stand clear of the QTS.**



7. **Follow your personnel lift manufacturer's operation manual and observe all safety precautions.**

Your QTS comes preset from the factory, complete and ready to install on your personnel lift.

It is easier to jack up the front of the Telescopic Boom Lift first and install the front set of QTS before moving to the rear. Jack up the front of the lift high enough so the QTS Track System can be mounted without touching the floor.

2-1. Mounting The Right Hand Front Hammer Limiter Bracket

- **a.** The Hammer Limiter Brackets for the front come in **left hand** and **right hand**, **Fig. 1. (RH Shown)**
- **b.** Slide the Limiter over the yoke casting.
- **c.** Mount the **U** shaped mount block using (1) 5/8-11NC x 1.5 cap screw. **Fig. 1 & 2**
- **d.** Mount the **L** shaped mount block on the opposite side of the Limiter Bracket using (1) 5/8-11NC x 1.5 cap screw. **Fig. 2.**
- **e.** Mount the Limiter Shims to the front of the Hammer Limiter using (2) ¾-10NC x 1.25 GR 8 plated bolts per Shim. **Fig. 1**
- **f.** This completes the assembly of the Front RH Hammer Limiter. The assembled Limiter Bracket should look like **Fig. 2.**

2-2. Mounting The Left Hand Front Hammer Limiter Bracket

- **a.** Repeat the procedure outlined above to mount the Left Side Hammer Limiter Bracket.

2-3. Wheel Spacer Installation

a. Align the holes in the spacers to the hub studs and slide onto the studs.

b. Use the existing wheel nuts that were used to secure the wheels and tighten the nuts to the standard wheel torque. **Fig. 3**

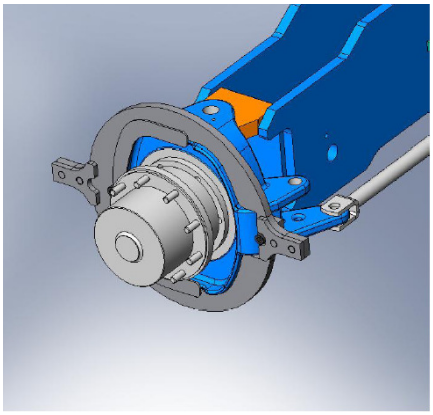


Fig. 1

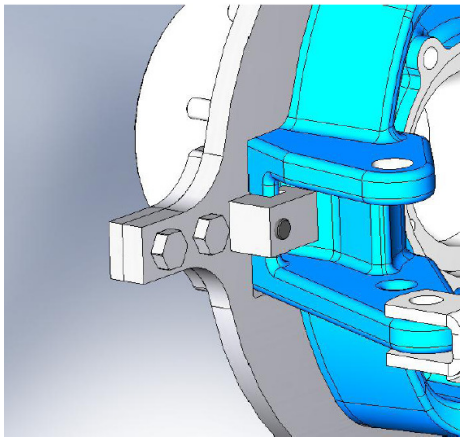


Fig. 2

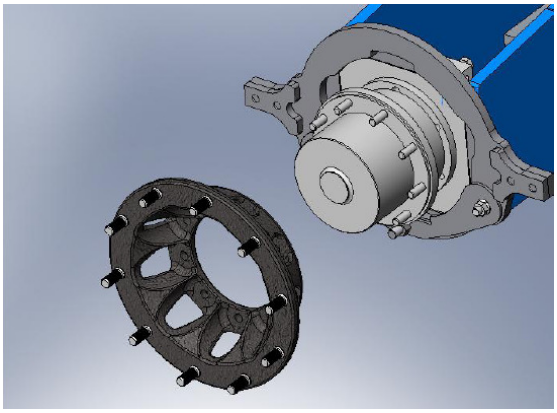


Fig. 3

2-4. Repeat this process to mount all 4 spacers.

2-5. Mounting The Rear Hammer Limiter Brackets

a. The Rear Hammer Limiter Brackets are universal and can be use on either side in the rear.
b. Jack up the rear of the Boom Lift and remove the tires, make sure the boom lift is high enough so the QTS does not drag on the ground.
c. Remove the Non-Steer Axle Cover.
d. Install the Limiter Rear Upper Bracket by sliding it down onto the hub block. The rear angle bracket sets on top of the hub block. **Fig. 7**
e. Bolt the Limiter Rear Lower Bracket to the Limiter Rear Upper bracket by using (2) 5/8-11NC x 2.00 Gr. 8 plated bolts and (2) 5/8-11 Gr. 8 plated Flange Nuts. **Fig. 8**
f. Install the ¾-10 NC x 11.0 long bolt , ¾-10 NC Nylock nut and Clamp Brace per **Fig. 9**
g. Bolt the 5/8 Hammer shims to the Hammer Limiter using (2) 3/4 NC x 1.50 Gr. 8 bolt and (2) ¾ Flat washers Gr.5 per shim. **Note:** Some systems do not have the washers and the ¾ -10 NC x 1.50 bolts; they will have the ¾-10NC x 1.25 bolts and no washers.
h. Bolt the Non-Steer Axle Cover back onto the Boom Lift. You can notch out the cover in the area of the Hammer Bracket of you can let the cover sit on top of the upper limiter bracket.

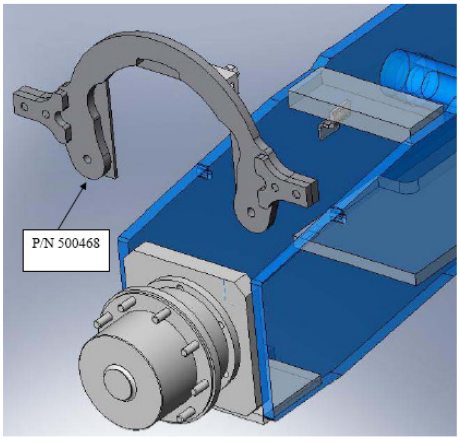


Fig. 7

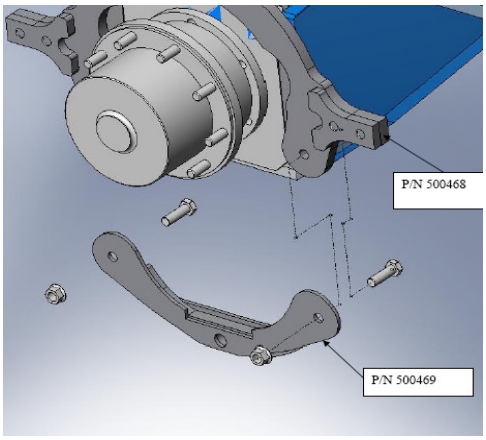


Fig. 8

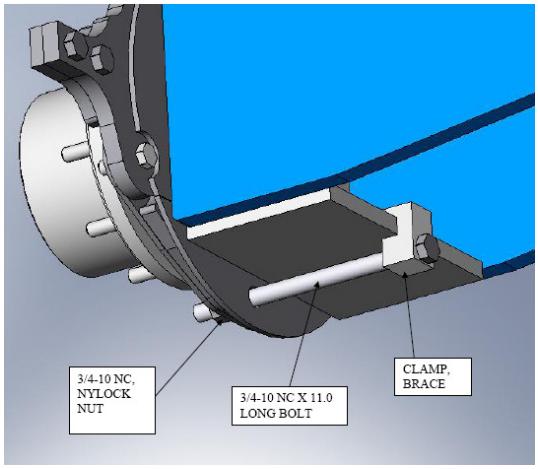


Fig. 9

2-6. Mounting The QTS Track Assembly to the Spacers

a. Use a strap or chain to hang the track on the tines of a fork lift. **Fig. 4**

b. Remove the 2 bolts holding the disconnect plate and push in the pin to disengage the hub. **Fig. 5**

c. Move the QTS Track System forward with the forklift until the spacer studs are approximately 3 to 4 inches from the mating holes in the spindle.

d. Rotate the hub till the spacer studs are lined up with the spindle holes.

e. Back up forklift and bolt the disconnect plate back onto the hub. **(If you are installing a QTS that has the brake disconnect plate on the QTS do not reinstall the factory disconnect plate. Fig. 6)**

f. Drive forward and slide the QTS Track System onto the spacer studs. (You may have to use a pry bar to help align the spacer studs with the spindle holes)

g. Turn on and tighten as many ¾ x 16 UNF Grade 8 flange nuts to the spacer studs as you can.

h. Once you have both sides on, drive the boom lift forward till you can turn on and tighten the remaining nuts.

i. Torque all ¾ x 16 UNF Grade 8 Flange Nuts to **375 ft/lbs.**

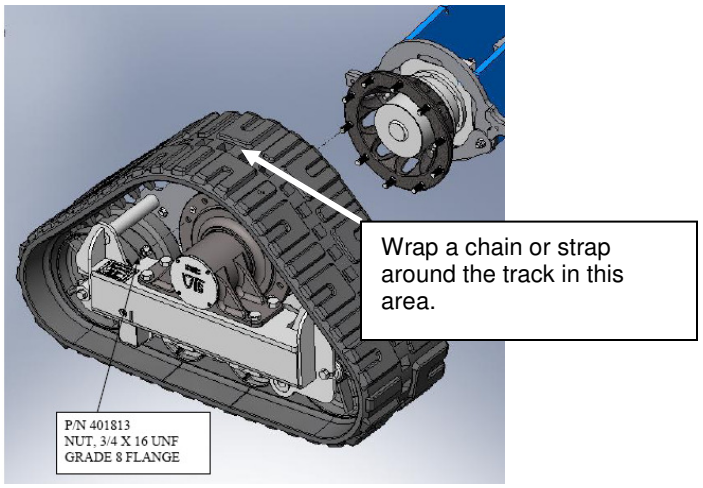


Fig. 4

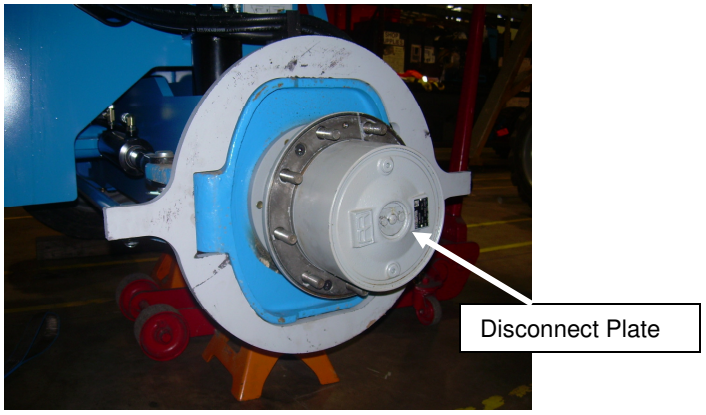


Fig. 5

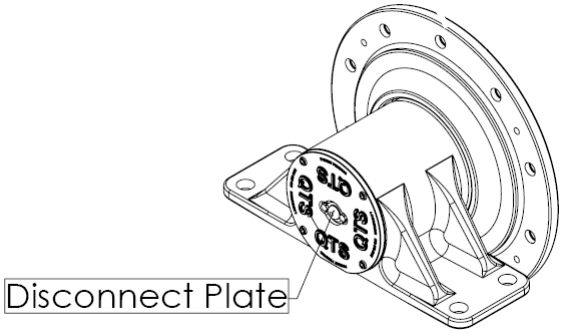


Fig. 6

QTS Inspection and Maintenance

3-1. Inspect your QTS before each operation session.

1. Check the rubber track for signs of wear. Check for any cracks, cuts, or missing pieces.

2. Ensure that all bolts are tight and that none are missing.

3. Check for any damage to the metal components of the undercarriage. Look for cracks, abnormal wear, or bent components.

4. Visually inspect all bogey wheels and idlers for signs of damage or excessive amounts of wear.

5. Inspect the sprocket for missing teeth, cracks, or excessive wear.

3-2. Perform regular maintenance too maximize the life of your QTS.

1. Regularly clean the track, undercarriage, and all rolling components to remove debris and material that can cause damage.

2. In cold environments, before shutting down the machine, allow QTS to sit for 30 minutes and then drive the machine forwards and then in reverse. This will prevent any ice buildup from disabling the machine.

3-2. QTS Maintenance Schedule

Item	Service Required	Interval	Notes
Rubber Tracks	Inspect	Daily	Look for Damage/Wear
Track Tension	Visual Inspection	Daily	Adjust tension if needed
Hub	Inspect	Daily	Look for Damage/Wear
Bogeys	Inspect	Daily	Look for Damage/Wear
Idlers	Inspect	Daily	Look for Damage/Wear
Sprocket	Inspect	Daily	Look for Damage/Wear
QTS Undercarriage	Clean Often (as needed)	Daily	Look for Damage
Bogey Bolts	Inspect	Daily	Look for loose bolts
Idler Bolts	Inspect	Daily	Look for loose bolts
Undercarriage Bolts	Inspect	Daily	Look for loose bolts

QTS Track Tension Adjustment

3-3. Checking the Track Tension

1. Visually inspect the track tension on a daily basis. This includes looking for obvious signs that tensioning is needed. Such as the track coming off, extra play in the track, and sprocket slippage.
2. Check the track tension on a monthly basis.
3. Once a month jack up each corner of the host machine to check the track tension.
4. Check the tension on the bottom of the QTS.
5. The inside surface of the track should be no more than one inch from surface of the bogey wheel. **Fig. 1**

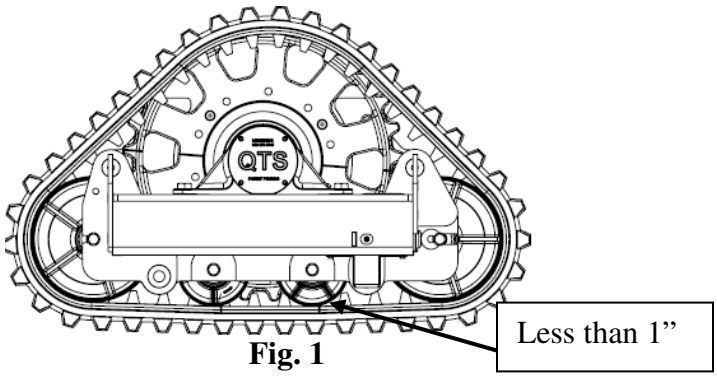


Fig. 1

3-4. Adjusting the Track Tension

1. Loosen the grease cylinder plug on the inside grease cylinder. **Fig. 2**
2. Pump grease into the grease zerk until grease comes out of the loosened plug. This eliminates any air pockets that can cause the track to loosen. **Fig. 3**
3. Tighten the grease cylinder plug.
4. Pump grease into the cylinders just until the idler moves.
5. Ensure the track is tight.
6. If necessary, continue to fill with grease until the track is tight.

Do not over tighten the track. This will cause the host machine to loose power during operation.

If the track becomes too tight, loosen the grease plug and push on the outside of the track on the idler to remove grease and loosen the track.

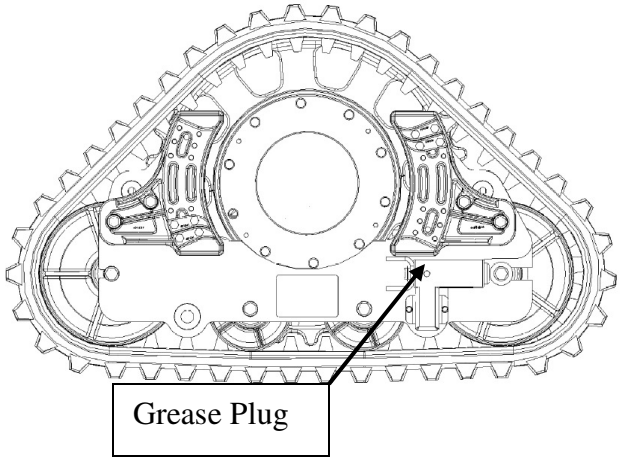


Fig. 2

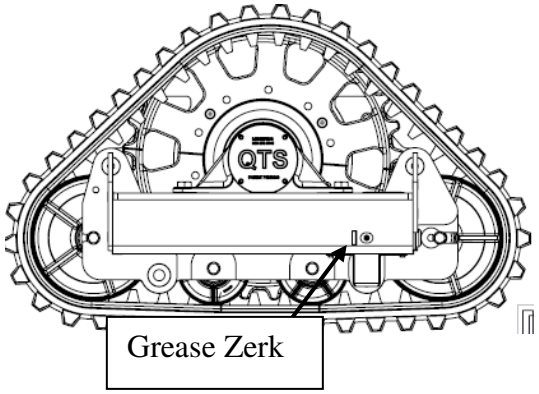


Fig. 3

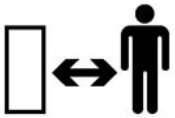
QTS Track Replacement: Safety

⚠DANGER: Please read all caution statements and notes before proceeding.

When elevated on the forks the QTS may work itself forward and could come off the forks. Frequently check to ensure the QTS is securely positioned on the forks.

1. **Replacing the track on your QTS system includes the use of a forklift and/or mechanical hoist, read and understand the operation of this equipment before starting any QTS track replacement.**
2. **Always wear personal protective equipment any time work is performed on your QTS. This equipment should include safety glasses, ear protection, and appropriate work boots.**
3. **Visually inspect all equipment used in the track replacement.**
4. **The QTS is a heavy piece of equipment. Special precautions need to be taken to ensure the safety of all personnel. The QTS should be supported at all times by equipment that is rated to carry the amount of weight. Use of equipment that is not rated for the weight of the QTS could result in injury and/or death.**

5. **When the QTS is being moved, all personnel should stand clear of the QTS.**



6. **Follow your personnel lift manufacturer's operation manual and observe all safety precautions.**
7. **When lifting components of the QTS that weigh over 30 lbs. (13.6 kg) it may be necessary to use an approved hoist.**

THE QTS MUST BE REMOVED FROM THE PERSONNEL LIFT BEFORE YOU CAN PROCEED WITH THE TRACK REPLACEMENT

QTS Track Replacement

1. Remove the QTS from the host machine.
2. Loosen the grease zerk or the grease plug to relieve the tension on the track.
3. Remove the two sprocket retaining bolts from one half of the sprocket. **Fig. 1**
4. Remove the half sprocket.
5. Remove the track from the frame.

Fig. 1

6. Lay the QTS frame on its side on the ground. Fig. 2

Fig. 2

7. Lay the track onto the frame **Fig. 3**

Fig. 3

8. Pick the QTS up by the track and set upright on a table or on the floor to remove any sag in the track. **Fig. 4**

Fig. 4

QTS Track Replacement

9. Install the second half of the half sprocket
    a. Start with the half sprocket that is already on the QTS angled slightly down, the split tooth on the lower side. **Fig. 5**
    b. Lift up on the rubber part of the track to make room to insert the half sprocket.
    c. Slide the uninstalled half sprocket into the QTS ensuring that the half tooth ends of the sprockets match up and that the sprocket is in the guide teeth.
    d. Using a strap, lift up on the half sprocket. **Fig. 6**
    e. Line up the wheel stud hole closest to the split tooth and insert a pry bar through the sprocket and into the spindle to lock it. **Fig. 7**
    f. Rotate the sprocket with a pry bar so the split tooth side moves upwards. **Fig. 7**

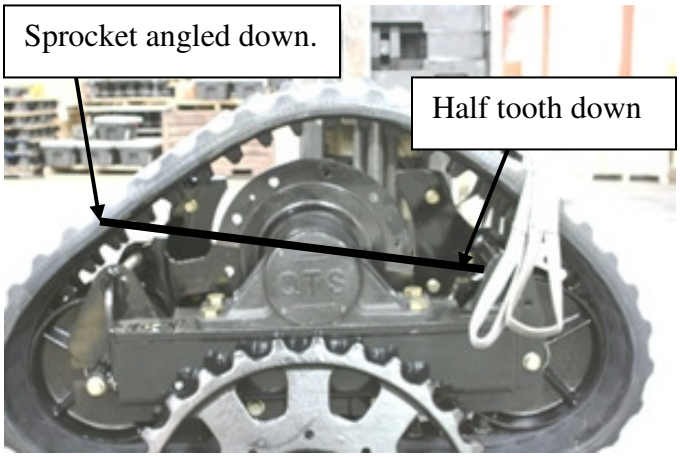


Fig. 5

Fig. 6

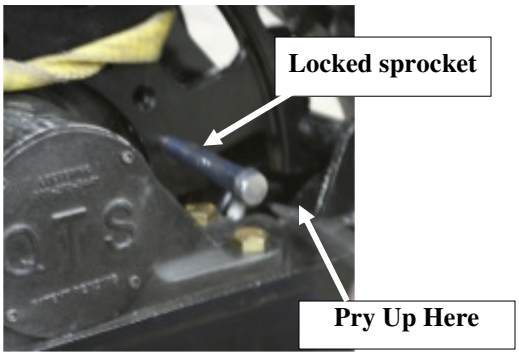


Fig. 7

QTS Track Replacement

g. Line up the top wheel stud hole with another pry bar. **Fig. 8**
h. Insert another pry bar in the wheel stud hole that is opposite the split tooth. **Fig. 8**
i. Pry up on this pry bar and the half sprocket will slide into place.

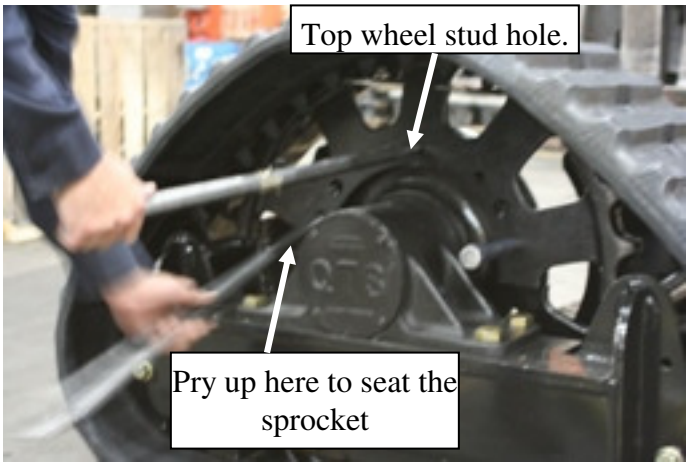


Fig. 8

j. Install the two sprocket retaining bolts. **Fig. 9**

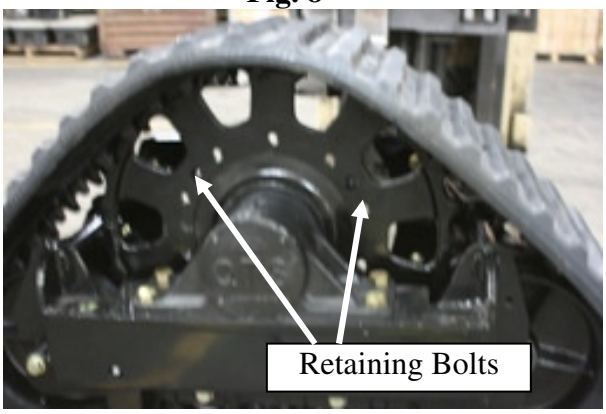
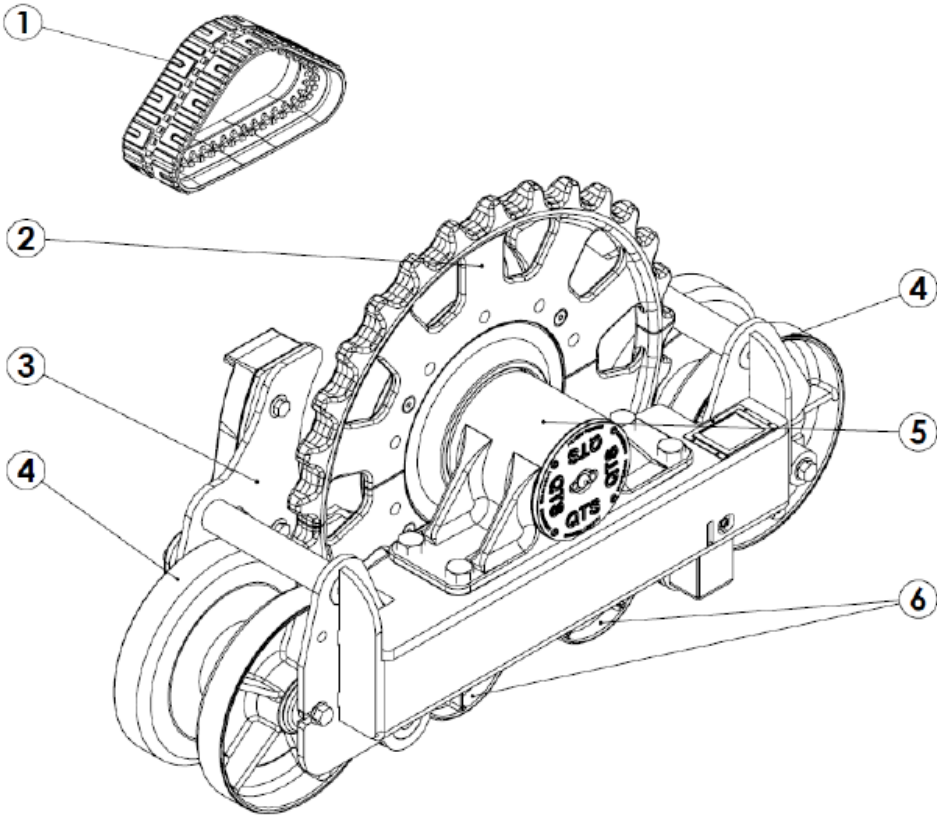


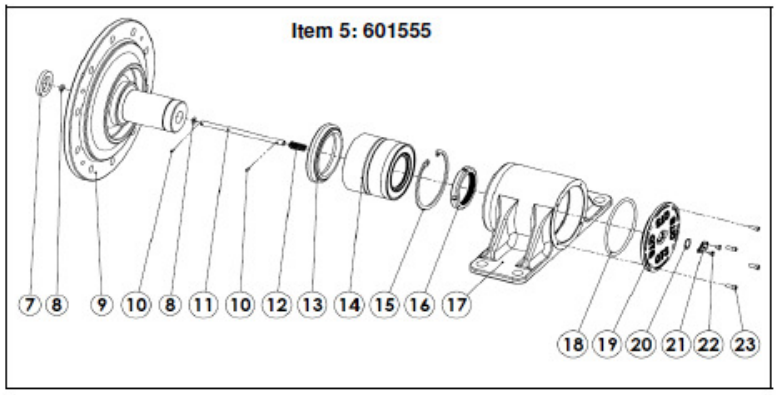
Fig. 9

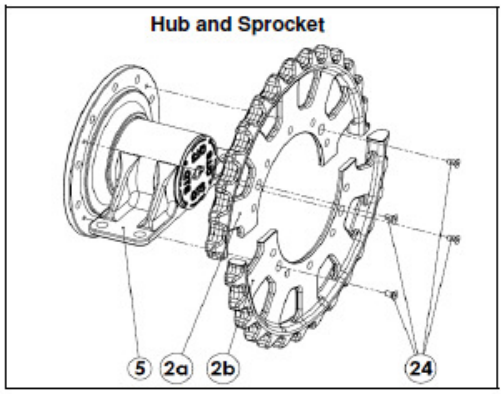
QTS Part Prices for Genie 9-Bolt *Use on Genie S-60 and S-65 Machine Serial Number after 9153* *Use on Genie Z60 Machine Serial Number 4551 and up*			
Item	***Fig.***	***Part #***	***DESCRIPTION***
1	1	401908	Track, Rubber,AW45086 (Qty.1)
2a	1,2	401664L	Sprocket, Machine Half Left
2b		401664R	Sprocket, Machine Half Right
3	1	500400	Right Tunnel, Welment (Shown)
		500401	Left Tunnel, Weldment
4	1,2	601155	Assembly, End Bogey
5	1,2	601154	Hub, Main
		601555	Hub, Main with Brake Disconnect
6	1,2	600458	Assembly, Split Bogey
7	2	402495	Rubber Brake Release Seal
8	2	402424	O-Ring
9	2	402428	Spindle, Main
10	2	402422	Pin Spring (3/16 x .625 long)
11	2	402420	Plunger Pin
12	2	402421	Compression Spring (id .53 x 1.94" long)
13	2	401642	Seal, Hub
14	2	401641	Tapered Roller Bearing
15	2	401694	Ring, Snap
16	2	401643	Nut, Spanner
17	2	401639	Hub, Main Cast
18	2	401695	O-Ring
19	2	402429	Dust Cover
20	2	402431	O-Ring
21	2	402430	Brake Release Cover
22	2	PD0130-.375BP	Bolt 1/4" - 20UNC x .375", Gr. 5 Plated
23	2	402909	Socket Head Cap Screw, 5/16-18x.75
24	2	PDF170-1BP	Flat Head Socket Cap Screw, 1/2 - 13 x 1"
25	2	PD5210-1.75CP	Bolt, Flange, 3/4" -10NC x 1.75", Gr. 8 Plated
26	2	401111	Dust Cover for 601155 (2 required per Bogey)
27	2	401405	Guard, Seal for 600458 (1 required per Bogey)
28	2	PD5210-1.5CP	Bolt, Flange, 3/4" -10NC x 1.5", Gr. 8 Plated
29	2	PD5210-4.5CP	Bolt, Flange, 3/4" -10NC x 4.50", Gr. 8 Plated
30	2	401705	Hose , Hydralic Assembly - 3000 PSI
31	2	401699	Hose Guard
32	2	PD6140-.50CP	Bolt,5/16-18NC x .50, Gr 5 Z PL TR
33	2	401696	Snap Ring
34	2	401702	Pipe Plug, 1/4 NPT
35	2	401758	Elbow, 90 degree1/4-18 NPT Female-Brass
36	2	401697	Hose Guard
37	2	401755	Fitting, 1/4" NPT Straight Zerk Grease
38	2	401766	Nipple, Steel Pipe, 1/4 NPT X 2-1/2 LG
39	2	401646	Piston, Hydraulic
40	2	401807	Nipple, Steel Pipe, 1/4 NPT X 1.0 LG
41	2	401704	NPT Coupling, 1/4 NPT
	3	601351	Assembly, Rotational Limiter Solid Axle
42	3	401936	Plate, Hammer Shim 5/8
43	3	PH5190-4CP	ASTM Flange Locknut, 5/8-11. Gr 8 Plated
44	3	500468	Weldment, Hammer Limiter Rear Upper

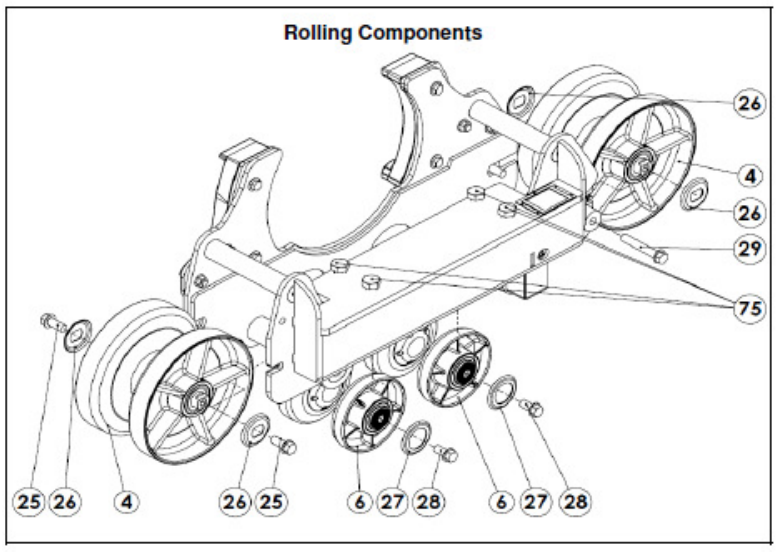
QTS Part Prices for Genie 9-Bolt *Use on Genie S-60 and S-65 Machine Serial Number after 9153* *Use on Genie Z60 Machine Serial Number 4551 and up*			
Item	***Fig.***	***Part #***	***DESCRIPTION***
45	3	PD0190-2CP	ASTM Bolt. 5/8-11NC X 2.00", Gr 8 Plated
46	3	PJ0210-1BP	Washer Flat-3/4". Gr. 5 Plated
47	3	PD0210-1.5CP	ASTM Bolt. 3/4-10NC X 1.50", Gr 8 Plated
48	3	500469	Weldment, Hammer Limiter Front Rear Lower
49	3	PH0210-9BP	Nut, 3/4-10 NC. NYLOCK Gr 8 plated
50	3	401935	Clamp, Brace
51	3	PD0210-11BP	Bolt, 3/4-10NCX11.0. Gr 5 Plated
	3	601358	Assembly, Rotational Limiter Right Steering Axle
52	3	PD0210-1.25CP	ASTM Bolt, 3/4"-10NC X 1.25" Gr 8 Plated
53	3	401940	Mount, Machined Block
54	3	401938	Mount, Machined Block
55	3	401937	Plate, Hammer Shim 1/2
56	3	401939	Screw, Socket Head Cap. 5/8-11 NC X 1.5
57	3	500478	Weldment, Hammer Limiter Right
	3	601352	Assembly, Rotational Limiter Left Steering Axle
58	3	500467	Weldment, Hammer Limiter Front Left
	3	601356	Assembly, Rotational Limiter Z60 Steering Axle
59	3	PD5190-2.5CP	Flange Bolt, 5.8"-11NC x 2.5" Gr. 8 Plated
60	3	401975	Mount, Machined Block
61	3	401979	Plate Hammer Shim .375
62	3	500476	Rotational limiter weldment Z60 Steering Axle
	3	601357	Assembly, Rotational Limiter Z60 Solid Axle
63	3	PD0210-10.5CP	ASTM Bolt, 3/4"-10NC, Gr. 8 Plated
64	3	PD0190-3CP	ASTM Bolt, 5/8"-11NCx 3" Gr. 8 Plated
65	3	500477	Rotational limiter weldment rear
	3	601341	Assembly, Spacer Genie 9-Bolt
66	3	401813	Lug Nut, 3/4-16 UNF
67	3	401898	Spacer, Genie 9-Bolt
68	3	401698	Wheel Stud, 3/4-16 UNF x 2.5 Long
69	4	PD5190-1.5CP	Bolt, Flange, 5/8" -11NC x 1.5" Gr. 8 Plated
70	4	401839	Cast, Limiter Stop Bracket - Left
71	4	PD5190-2.25CP	Bolt, Flange, 5/8" -11NC x 2.25" Gr. 8 Plated
72	4	401841	Cast Shim, Stop Limit Bracket
73	4	PD0170-1.5CP	ASTM Bolt, 1/2"x13NCx1.5" Gr. 8 Plated
74	4	401840	Cast, Limiter Stop Bracket - Right
75	2	400665	Bolt, 1"-14 x 2.00", Gr. 8 Plated

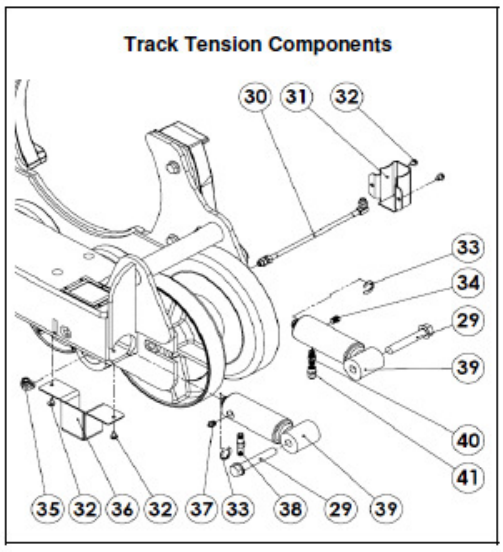


QTS 9 Bolt Figure 1

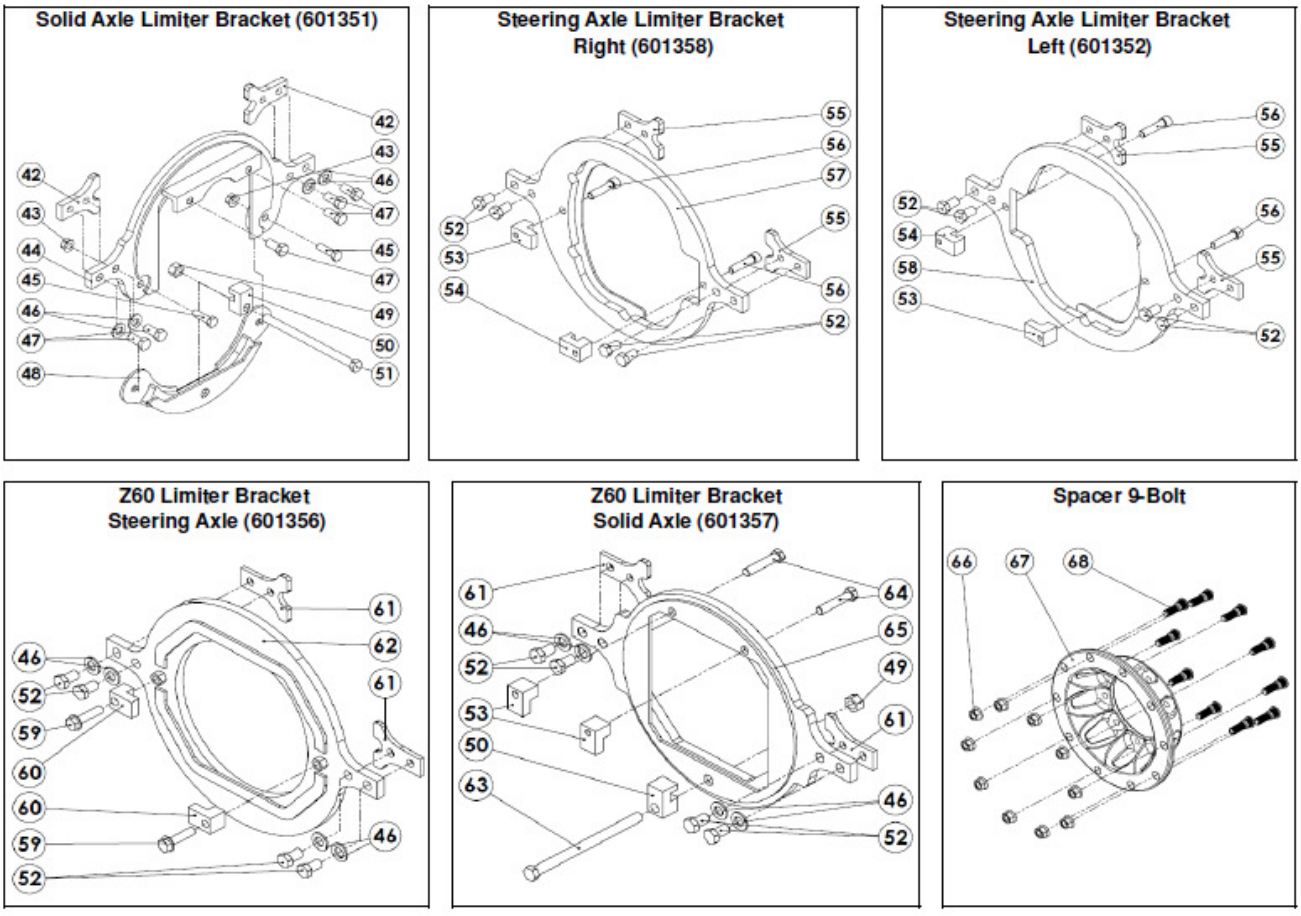




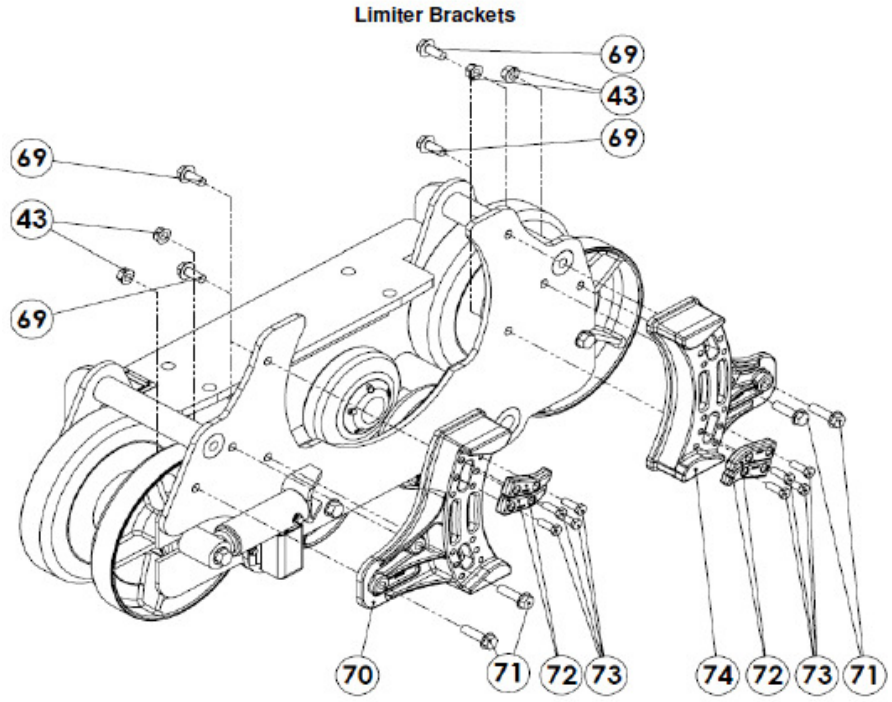




QTS 9 Bolt Figure 2



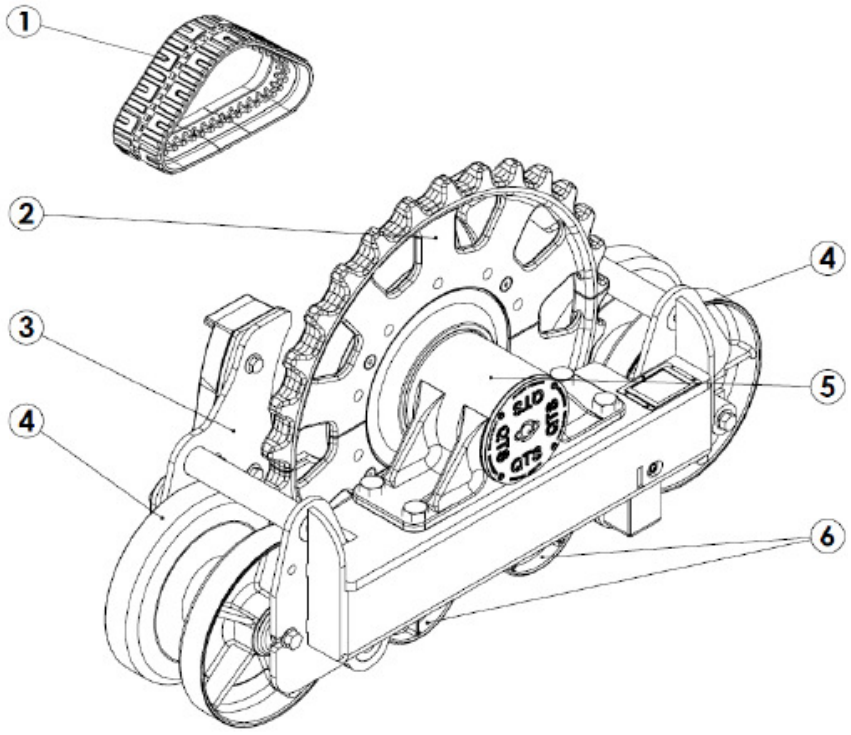
QTS 9 Bolt Figure 3



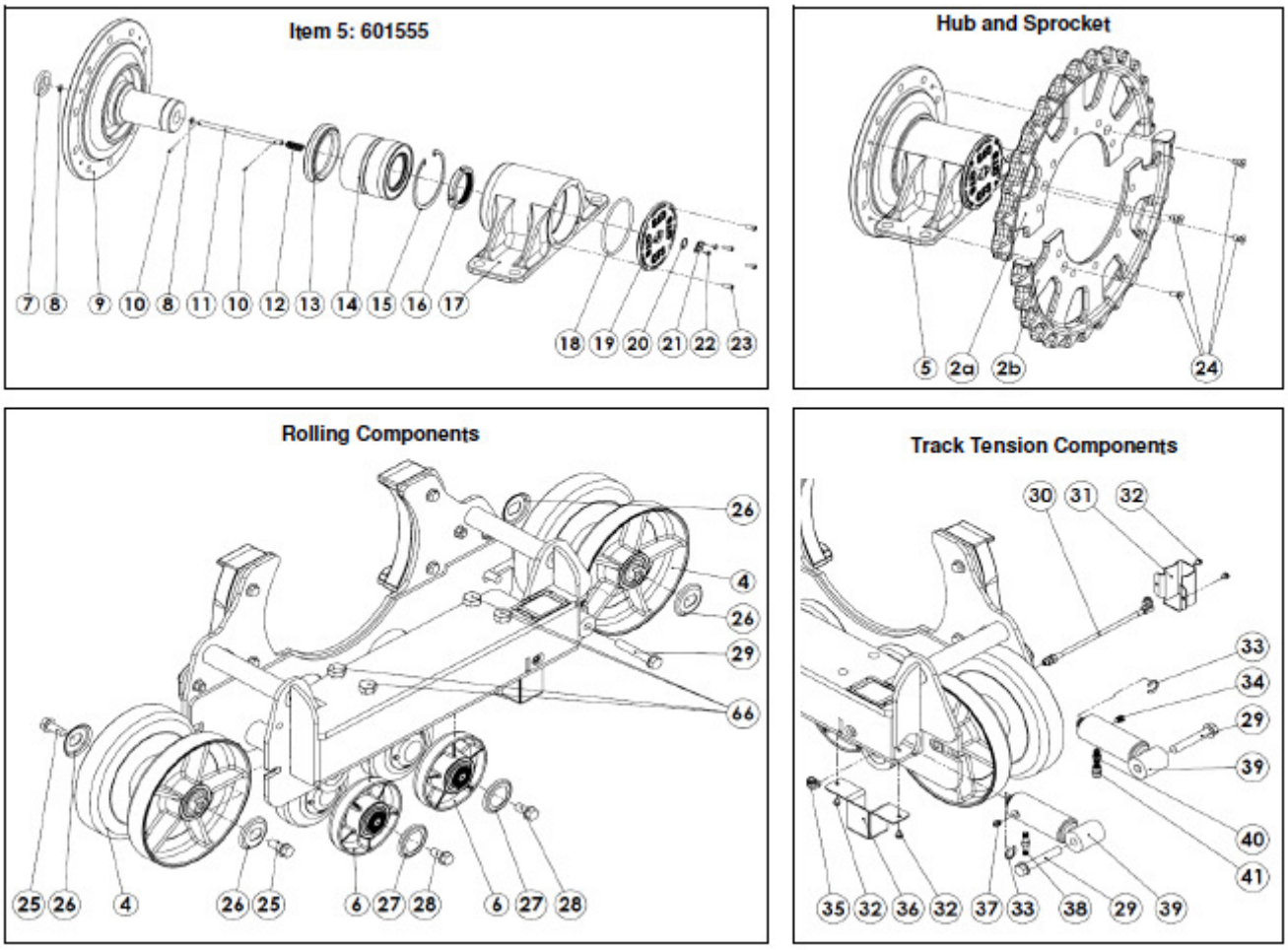
QTS 9 Bolt Figure 4

QTS Part Prices Genie 10-Bolt *Use only on Genie S-60 and S-65 machine serial number from 2573 to 9153* *Left Hand and Right Hand*			
Item	***Fig.***	***Part #***	***DESCRIPTION***
1	1	401908	Track, Rubber,AW45086 (Qty.1)
2a	1,2	401664L	Sprocket, Machine Half Left
2b		401664R	Sprocket, Machine Half Right
3	1	500400	Right Tunnel, Welment (Shown)
		500401	Left Tunnel, Weldment
4	1,2	601155	Assembly, End Bogey
5	1,2	601154	Hub, Main
		601555	Hub, Main with Brake Disconnect
6	1,2	600458	Assembly, Split Bogey
7	2	402495	Rubber Brake Release Seal
8	2	402424	O-Ring
9	2	402428	Spindle, Main
10	2	402422	Pin Spring (3/16 x .625 long)
11	2	402420	Plunger Pin
12	2	402421	Compression Spring (id .53 x 1.94" long)
13	2	401642	Seal, Hub
14	2	401641	Tapered Roller Bearing
15	2	401694	Ring, Snap
16	2	401643	Nut, Spanner
17	2	401639	Hub, Main Cast
18	2	401695	O-Ring
19	2	402429	Dust Cover
20	2	402431	O-Ring
21	2	402430	Brake Release Cover
22	2	PD0130-.375BP	Bolt 1/4" - 20UNC x .375", Gr. 5 Plated
23	2	402909	Socket Head Cap Screw, 5/16-18x.75
24	2	PDF170-1BP	Flat Head Socket Cap Screw, 1/2 - 13 x 1"
25	2	PD5210-1.75CP	Bolt, Flange, 3/4" -10NC x 1.75", Gr. 8 Plated
26	2	401111	Dust Cover for 601155 (2 required per Bogey)
27	2	401405	Guard, Seal for 600458 (1 required per Bogey)
28	2	PD5210-1.5CP	Bolt, Flange, 3/4" -10NC x 1.5", Gr. 8 Plated
29	2	PD5210-4.5CP	Bolt, Flange, 3/4" -10NC x 4.50", Gr. 8 Plated
30	2	401705	Hose , Hydralic Assembly - 3000 PSI
31	2	401699	Hose Guard
32	2	PD6140-.50CP	Bolt,5/16-18NC x .50, Gr 5 Z PL TR
33	2	401696	Snap Ring
34	2	401702	Pipe Plug, 1/4 NPT
35	2	401758	Elbow, 90 degree1/4-18 NPT Female-Brass
36	2	401697	Hose Guard
37	2	401755	Fitting, 1/4" NPT Straight Zerk Grease
38	2	401766	Nipple, Steel Pipe, 1/4 NPT X 2-1/2 LG
39	2	401646	Piston, Hydraulic
40	2	401807	Nipple, Steel Pipe, 1/4 NPT X 1.0 LG
41	2	401704	NPT Coupling, 1/4 NPT
		601354	Rotational Limiter Assembly Front
42	3	500474	Weldment, Hammer Limiter Front
43	3	401975	Mount, Machined Block
44	3	PD5190-3.5CP	ASTM Bolt, 5/8"-11NC X 3.5", GR.8 Plated

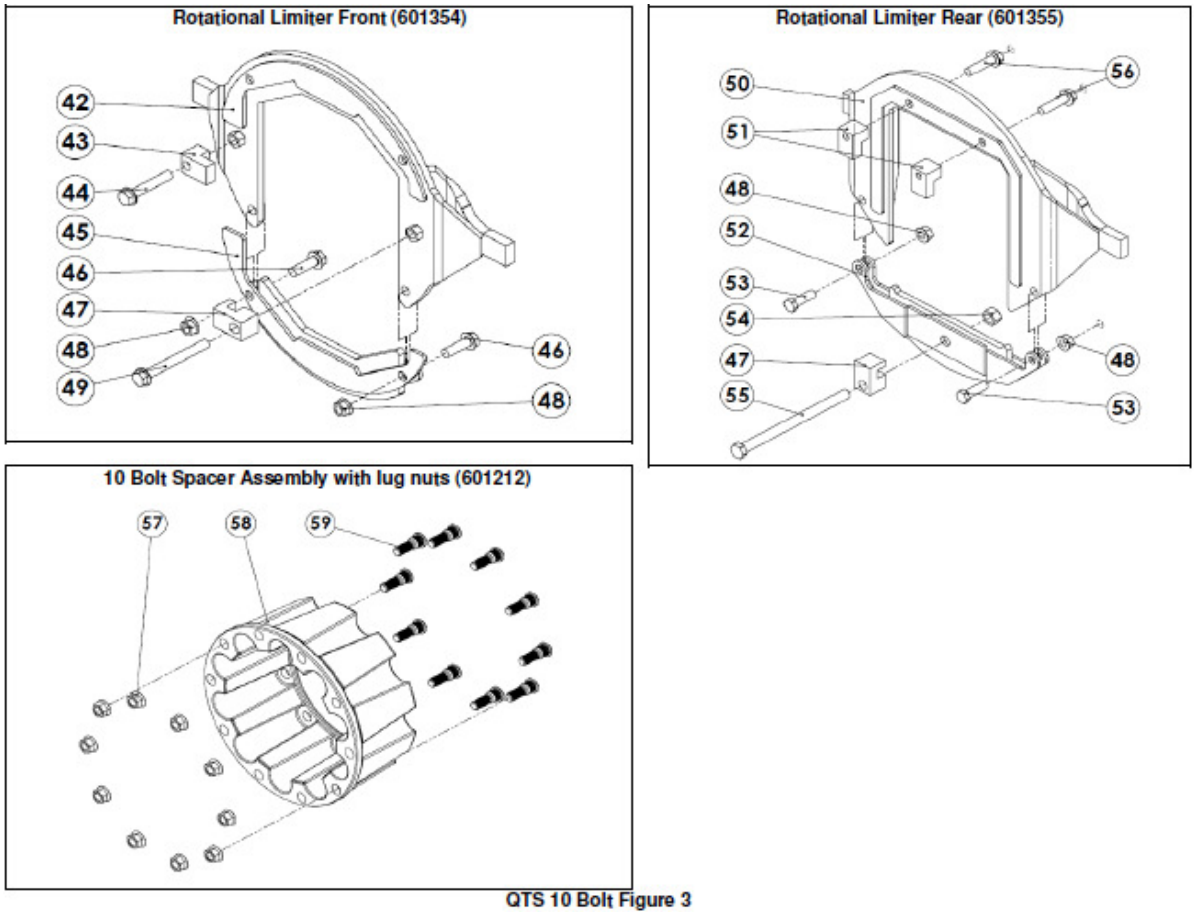
QTS Part Prices Genie 10-Bolt *Use only on Genie S-60 and S-65 machine serial number from 2573 to 9153* *Left Hand and Right Hand*			
Item	***Fig.***	***Part #***	***DESCRIPTION***
45	3	500490	Weldment, Lower Rotational Limiter Front
46	3	PD5190-2.00CP	Bolt, Flange, 5/8" -11NC x 2.0" Gr. 8 Plated
47	3	401935	Clamp, Brace
48	3	PH5190-4CP	Flange Lock Nut, 5/8 - 11, Gr. 8 Plated
49	3	PD5190-5.5CP	ASTM Bolt, 5/8"-11NC X 5.5", GR.8 Plated
		601355	Rotational Limiter Assembly Rear
50		500475	Weldment, Hammer Limiter Rear Upper
51		401940	Mount, Machined Block
52		500489	Weldment, Lower Rotational Limiter Rear
53		PD0190-2CP	ASTM Bolt, 5/8"-11NC X 2.00", GR.8 Plated
54		PH0210-9BP	Nut. 3/4-10 NC. NYLOCK GR. 8 Plated
55		PD0210-10.5CP	AStM Bolt, 3/4"-10NC X 8.00", GR.8 Plated
56		PD5190-2.5CP	ASTM Bolt, 5/8"-11NC X 2.125", GR.5 Plated
57		401813	Lug Nut 3/4-16 UNF
		601212	Spacer Assembly AWP 10 Bolt
58		401698	Stud 3/4-16 UNF x 2.5 Long
59		401723	Spacer, AWP Adapter
60	4	PD5190-1.5CP	Bolt, Flange, 5/8" -11NC x 1.5" Gr. 8 Plated
61	4	401839	Cast, Limiter Stop Bracket - Left
62	4	PD5190-2.25CP	Bolt, Flange, 5/8" -11NC x 2.25" Gr. 8 Plated
63	4	401841	Cast Shim, Stop Limit Bracket
64	4	PD0170-1.5CP	ASTM Bolt, 1/2"x13NCx1.5" Gr. 8 Plated
65	4	401840	Cast, Limiter Stop Bracket - Right
66	2	400665	Bolt, 1"-14 x 2.00", Gr. 8 Plated



QTS 10 Bolt Figure 1

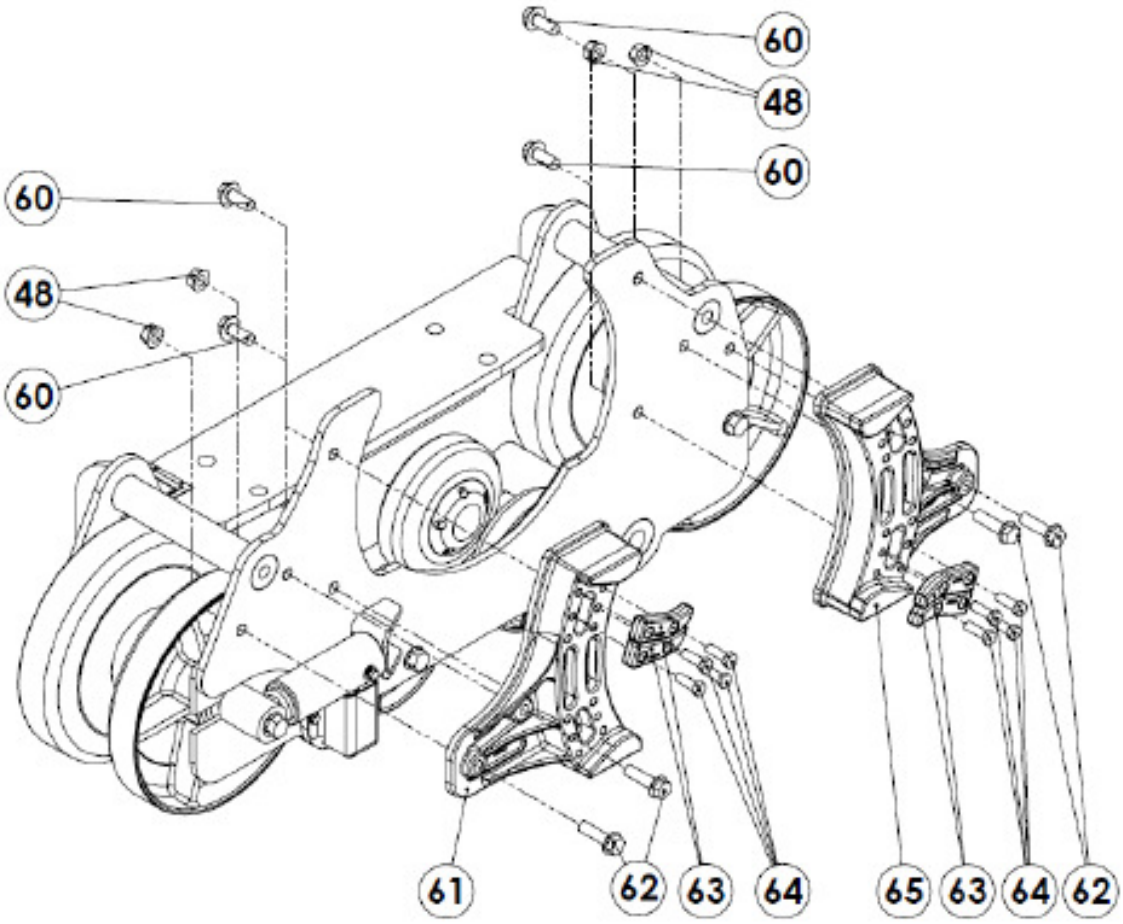


QTS 10 Bolt Figure 2



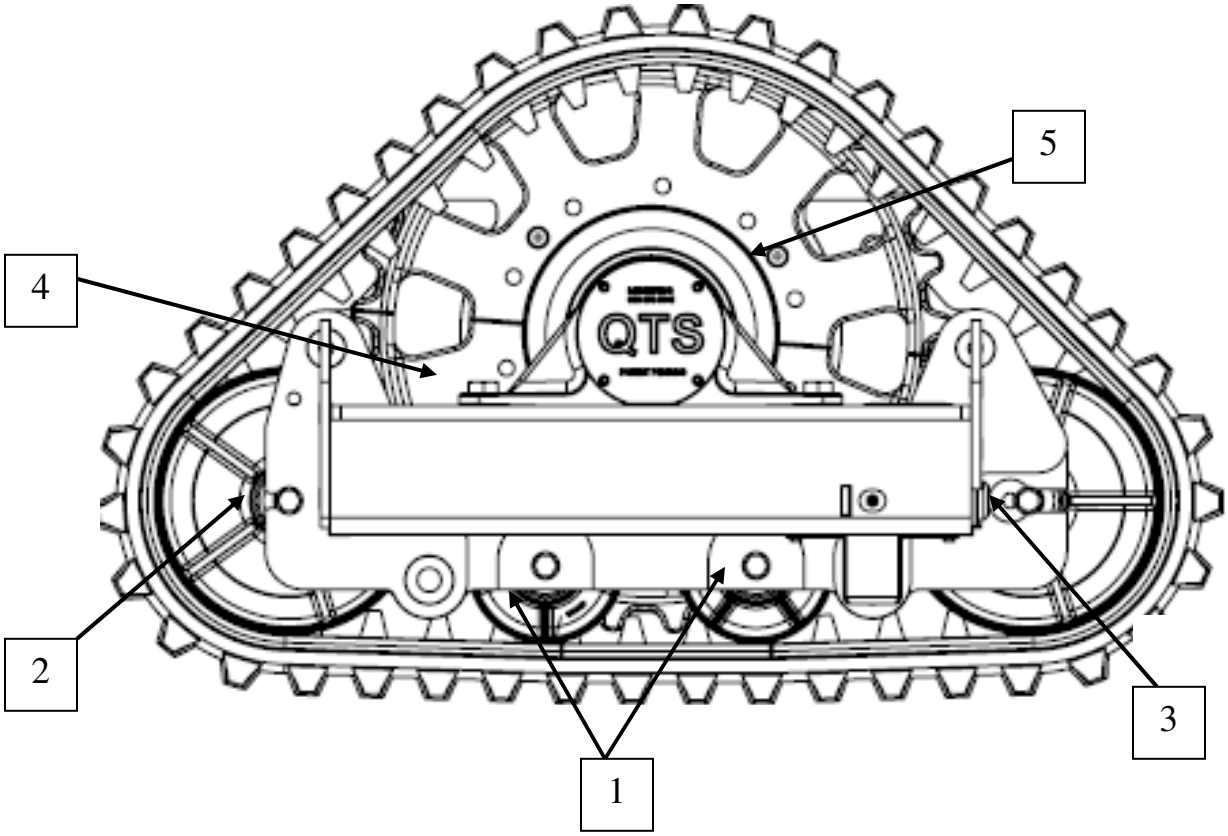
QTS 10 Bolt Figure 3

Limiter Brackets



QTS 10 Bolt Figure 4

QTS Torque Specifications



Item	Description	Torque(ft/lbs)	Torque(N m)
1	3/4 -10UNC x 1.5" Gr. 8	375	508.425
2	3/4 -10UNC x 1.75" Gr. 8	375	508.425
3	3/4 -10UNC x 4.5" Gr. 8	375	508.425
4	1"-14 x 2" Gr. 8	650	881.27
5	Flat Head Socket Cap Screw	80	108.464

MATERIAL SAFETY DATA SHEET

Polytac(TM) EP-2

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Synonyms: Not Established
Formula: Mixture
Chemical Family: Hydrocarbon
CAS Number: Mixture
SAP Code: 1013026; 1013027; 1013028; 1013029; 1013030; 1033017
Product Code: 94250
MSDS Number: US422400
NFPA Ratings: Health 0, Flammability 1, Reactivity 0
HMIS Ratings: Flammability 1, Reactivity 0, Health 0
Intended Use(s): General Purpose grease for automotive, industrial and agricultural use

The intended use of this product is indicated above, if any additional use is known please contact us at the Technical Information number listed below.

Manufactured By:
Phillips 66 Company
A Division of Phillips Petroleum Company
Bartlesville, Oklahoma 74004

Phone Numbers
Emergency: (918) 661-8118
Technical Information: (800) 766-0050
For Additional MSDSs: (918) 661-5974

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Specification and CAS #	Weight % In Product	ACGIH TLV	ACGIH Short Term Exposure Limit	ACGIH Ceiling Limits	ACGIH Skin Designation	OSHA Final PEL	OSHA - Final PELs - Ceiling Limits	OSHA - Final PELs - Skin Notation
Severely Hydrotreated Naphthenic Oil 64742-52-5	< 38	NE	NE	NE	NE	NE	NE	NE
Base stock 64741-88-4	< 34	NE	NE	NE	NE	NE	NE	NE
Petroleum based lubricants 64742-54-7	< 34	NE	NE	NE	NE	NE	NE	NE
Solvent-Dewaxed Heavy Paraffinic Petroleum Distillates 64742-65-0	< 34	NE	NE	NE	NE	NE	NE	NE
Proprietary/Unknown ingredient	20	NE	NE	NE	NE	NE	NE	NE
Polyurea thickeners	< 8	NE	NE	NE	NE	NE	NE	NE

See Section 8 for additional Exposure Limits.

3. HAZARDS IDENTIFICATION

Emergency Overview

Non-Hazardous. Pressure Injection.

Potential Acute Health Effects

Eye Contact: May cause mild irritation.

Skin Contact: May cause mild irritation with prolonged or repeated contact.

Inhalation: No acute effects expected due to low vapor pressure.

Ingestion: Slightly toxic (LD50 > 5 gm/kg).

Subchronic and Chronic Effects:

No Known Applicable Information

Aggravated Medical Conditions: No Known Applicable Information

4. FIRST AID MEASURES

Eye Contact: Flush eyes with running water. If irritation or adverse symptoms develop, seek medical attention.

Skin Contact: Wash skin with soap and water. If irritation or adverse symptoms develop, seek medical attention.

Inhalation: Remove from exposure. If illness or adverse symptoms develop, seek medical attention.

Ingestion: If illness or adverse symptoms develop, seek medical attention.

Notes To Physician: For injection injuries, immediate medical treatment is required. Physicians may call the emergency number (918) 661-8118.

5. FIRE FIGHTING MEASURES

Flash Point:	> 342F (>172C)
FP Method:	COC, ASTM D-92
Ignition Temperature:	Unknown

Flammable Limits (% by Volume in Air)

Lower Exposure Limit -	Not Established
Upper Exposure Limit -	Not Established

Fire Extinguishing Media: Carbon Dioxide, Dry Chemicals, Foam

Fire Fighting Procedures: Evacuate area and fight fire from a safe distance. Shut off source, if possible. Use NIOSH approved self-contained breathing apparatus and other protective equipment and/or garments described in Section 8 if conditions warrant. Use water spray to cool nearby containers and structures exposed to fire.

Fire and explosion hazards: Carbon oxides and various hydrocarbons forms when burned.

6. ACCIDENTAL RELEASE MEASURES

Sweep or gather up material and place in proper container for disposal or recovery.

7. HANDLING AND STORAGE

Avoid contact with eyes, skin or clothing. Avoid breathing vapors, mist, fume or dust. Use with adequate ventilation. Wear protective equipment and/or garments described in Section 8 if exposure conditions warrant. Wash thoroughly after handling. Launder contaminated clothing before reuse. Store in well-ventilated area. Store in closed container.

If pressure injected under the skin, can cause gangrene if not treated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection: Wear safety glasses.

Respiratory Protection: For concentrations exceeding an applicable exposure limit, use NIOSH approved air purifying respirator equipped with P95 filters, for particulate with time weighted average exposure limit not less than 0.05 mg/M3.

Skin Protection: Use gloves resistant to the material(s) contained in this product.

Ventilation: Use adequate ventilation to control concentrations below applicable exposure limits.

Other Personal Protection: Personal protection information shown in Section 8 is based upon general information as to normal uses and conditions. Where special or unusual uses or conditions exist, it is suggested that the expert assistance of an industrial hygienist or other qualified professional be sought.

Exposure Limits: OSHA PEL and ACGIH TLV for oil mists is 5 mg/m3

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Semi-Solid
Appearance:	Green-colored semi-solid
Odor:	Mild
Odor Threshold (ppm):	Unknown
Boiling Point:	Not Established
Melting/Freeze Point:	Not Established
Vapor Pressure:	Not Established
Vapor Density (Air=1):	Not Established
Specific Gravity @ 20 C (Water=1):	1.0 @ 77F (25C)
Percent Volatile by Volume:	Not Established
Evaporation Rate (Butyl Acetate=1):	Not Established
Water Solubility:	Negligible
Viscosity:	>100 SUS @ 100F (38C)

10. STABILITY AND REACTIVITY

Stability: Stable

Hazardous Polymerization: Will Not Occur

Incompatability (Materials to Avoid): Oxygen and strong oxidizing agents.

Hazardous Decomposition Products: Carbon oxides and various hydrocarbons are formed when burned.

11. TOXICOLOGICAL INFORMATION

Other Health Effects:

Pressurized injection of product under the skin can lead to seriously inflammed tissue. If left untreated injury can become gangrenous.

Prolonged and repeated exposure to oil mist poses a risk of pulmonary disease such as lung inflammation. This condition usually causes no symptoms.

Continuous skin contact with used motor oils has caused skin cancer in laboratory animals. Avoid prolonged skin contact with used motor oil.

These products may contain petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking or severe hydrotreating. None of the oils require a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

12. ECOLOGICAL INFORMATION

No data at this time.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT Shipping Description:	Not Regulated
IMDG Shipping Description:	Not Regulated
ICAO/IATA Proper Shipping Name:	Not Regulated

15. REGULATORY INFORMATION

EPA SARA 311/312 (Title III Hazard Categories)

Acute Health:	No
Chronic Health:	No
Fire Hazard:	No
Pressure Hazard:	No
Reactivity Hazard:	No

Severely Hydrotreated Naphthenic Oil < 38 64742-52-5
Regulated Substance on TSCA Inventory: Listed
Canada - Domestic Substances List: Listed

Base stock < 34 64741-88-4
Regulated Substance on TSCA Inventory: Listed
Canada - Domestic Substances List: Listed

Petroleum based lubricants < 34 64742-54-7

Regulated Substance on TSCA Inventory: Listed
Canada - Domestic Substances List: Listed

Solvent-Dewaxed Heavy Paraffinic Petroleum Distillates < 34 **64742-65-0**
Regulated Substance on TSCA Inventory: Listed
Canada - Domestic Substances List: Listed

Proprietary/Unknown ingredient 20
Regulated Substance on TSCA Inventory: Listed

Polyurea thickeners < 8
Regulated Substance on TSCA Inventory: Listed

16. OTHER INFORMATION

Revision Summary: Section 3 - Format Change.

Preparer: Health, Environment and Safety Department
Date Prepared: 05/11/2001
Supersedes: 03/09/2001

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Loegering
15514 37th Street SE
Casselton, ND 58012 USA
Ph: 800-373-5441
Fax: 701-347-4323

Warranty Registration Form

Please complete and return to Loegering to validate warranty.

Purchase Date:	Form Completion Date:
Order #:	

Dealer Name:		
Contact Name:		
Address:		
City:	State:	Zip:
Phone Number:		
Fax Number:	Email Address:	

User Name:		
Contact Name:		
Address:		
City:	State:	Zip:
Phone Number:		
Fax Number:	Email Address:	

Part Number	Description	Serial Number	Model

Was there evidence of damage upon receipt?	Yes		No	
If yes, explain:				

Tell us about the equipment you plan to use your new attachment on.		
Manufacturer:	Model:	Tire Size (tracks only):
Serial Number:		
* Hours of use on machine prior to installation of attachment: _____Hours.		
*** Hour information is very important to warranty resolution. Warranty may not be valid without completion of this section.**		
Application description:		

LIMITED WARRANTY AND DISCLAIMER OF WARRANTIES

Loegering Mfg. Inc. warrants its tracks against operational failures caused by defective material or workmanship, which occur during normal use within twelve (12) months from the date the product is first put into service. Your sole remedy under this Warranty is repair or replacement of the tracks that are determined by Loegering Mfg. Inc. to be defective in material or workmanship. Any modifications (welding, cutting, etc.) to the machine, tracks, or track accessories without proper authorization will void the warranty. Written authorization for any return of goods on a warranty claim must first be obtained from Loegering Mfg. Inc. All returns must be accompanied by a Returned Material Authorization Number (RMA #) and a written explanation of claimed defects with the exact circumstances of operational failure. Any product returned for warranty inspection must be shipped prepaid and will be returned freight collect. All costs of product removal and product installation are at the customer's expense. Loegering Mfg. Inc. does not warrant that its tracks will meet your requirements, nor does it assume responsibility for costs and/or damages resulting from use. Since tire size often varies from the stated size, the customer is solely responsible for checking track-to-tire fit and/or providing proper clearance and safety shielding. There are no other warranties. **THE ABOVE WARRANTY IS EXCLUSIVE AND IN LIEU OF AND TO THE EXCLUSION OF ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT. NO ORAL OR WRITTEN INFORMATION OR ADVICE GIVEN BY LOEGERING MFG. INC., IT'S EMPLOYEES, OR DEALERS SHALL ALTER, MODIFY, OR INCREASE THE SCOPE OF THE ABOVE WARRANTY OR CREATE ANY NEW WARRANTIES.** Some states do not allow the exclusion of implied warranties, so the above exclusion may not apply to you. In that event, any implied warranties are limited in duration to ninety (90) days from the date of delivery of our tracks. This Warranty gives you specific legal rights. You may have other rights, which vary from state to state.

LIMITATIONS OF REMEDIES

Loegering Mfg. Inc.'s entire liability and your exclusive remedies shall be repair or replacement of the tracks for any alleged breach, failure, or malfunction. Regardless of whether any remedy set forth herein fails of its essential purpose, in no event will Loegering Mfg. Inc. be liable to you for any special, consequential, indirect, or similar damages, including any claimed damage to person (except in the case of consumer goods) or other property, any lost time, or lost profits arising out of the use or inability to use the tracks. Some states do not allow limitation or exclusion of liability for incidental or consequential damages, so the above limitation or exclusion may not apply to you.

QTS WARRANTY

Loegering Limited Warranty

Note the additional warranty information listed below in specific regards to the Loegering QTS. This attachment is a supplement to the Loegering Limited Warranty.

- The rubber track warranty is Pro-Rated (by the number of hours on the QTS system) for 12 months or 1000 hour's whichever comes first after it is installed on the host machine or put into service. Hours are determined by warranty registration card, be sure to complete at time of purchase.
- System components are warranted for a period of 24 months first after it is installed on the host machine or put into service. The warranty covers defective material and/or workmanship. This does not cover the normal wear of components due to application and use. Hours are determined by warranty registration card, be sure to complete at time of purchase.
- Host machine specifications should not be exceeded with the use of the Loegering QTS. Consult your machine operator's manual for machine capacities and specifications.
- Proper track tension is essential to the normal wear of the Loegering QTS. Consult your QTS owner's manual for proper QTS track tension specifications.
- Loegering QTS rubber track is subject to cuts, tears, etc. when used in abrasive material. This will significantly decrease the life of your rubber track and articles such as gravel, demolition material, rebar, broken concrete, rocks, clearing debris, stumps, sand, etc. should be avoided for longer track life. The more abrasive your application, the less life you will see on your system components and rubber track.
- Loegering QTS rubber track is also subject to increased wear if used on concrete and asphalt, particularly during extreme heat. This application will also affect the life of your rubber track.
- Avoid abrupt turns on inclines to decrease the chance of derailing your rubber track from the system.
- Avoid abrupt turns to decrease the wear on the rubber track and the track assembly components.
- Loegering QTS should not be used in temperatures below -13^{o} F.

Warranty only covers the replacement components if they are installed at an authorized Loegering QTS Dealer.

The Warranty Registration form must be filled out and sent to LOEGERING MFG. upon sale of the QTS System or at the time the QTS System is put into Service.

THE QTS SYSTEM IS NOT COVERED BY WARRANTY UNLESS THE WARRANTY REGISTRATION FORM IS SENT TO LOEGERING MFG.