



FH-440 Front Hitch

Owner's Manual & Parts Book

Grouser Products

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Purchase Date
Serial Number
Model Number
Tractor Model
Dealer

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Thank you for your recent purchase of a Grouser FH-440 Front Hitch. Welcome to the family of satisfied Grouser Front Hitch owners. Grouser Products is committed to offering quality products to help professionals in their daily jobs. We are also committed to providing you the highest level of customer satisfaction possible. Again, thank you for your patronage. We look forward to serving you.

This manual contains information concerning the operation, adjustment, safety and maintenance of the FH-440 Front Hitch. You have purchased a dependable, long lasting piece of equipment. You can expect to receive long lasting performance and long service built into our products with proper care and operation. Please have all operators read and understand this manual carefully. Keep the manual available for reference. If, for any reason, you have questions or comments, we would be happy to hear from you. Call our phone number, 701-282-7710, or send us an e-mail at info@grouser.com. You can expect us to respond to your e-mail in a timely manner.

A careful operator is the best operator. Most accidents can be avoided by observing certain precautions. To help prevent accidents, read and take the following precautions before operating this equipment. In addition, please follow all safety and operational instructions of your tractor manufacturer.

The FH-440 Front Hitch:

1. The FH-440 Front Hitch should be operated only by those who are responsible and instructed to do so.
2. Read the owner's manual carefully before using this equipment. Lack of operating knowledge can lead to accidents.
3. Keep the Front Hitch maintained in reliable and satisfactory condition to ensure your safety.
4. Make sure the area is clear of people before moving any equipment.
5. Do not modify or permit anyone else to modify or alter the equipment and its components without first consulting Grouser Products.
6. Lower the blade to the ground when not in use.

Servicing the FH-440 Front Hitch:

1. Read and follow all safety instructions provided by the tractor manufacturer.
2. Always use proper personal safety gear when performing maintenance on equipment.
3. Before servicing, relieve hydraulic pressure, stop engine and fully engage parking brake.
4. Escaping hydraulic fluid under pressure can penetrate skin causing serious injury. If fluid is injected into skin, obtain medical attention immediately.
 - DO NOT use your hand to check for leaks. Use a piece of cardboard or paper to search for leaks.
 - Stop the engine and relieve pressure before connecting or disconnecting lines.
 - Tighten all connections before starting the engine or pressurizing lines.

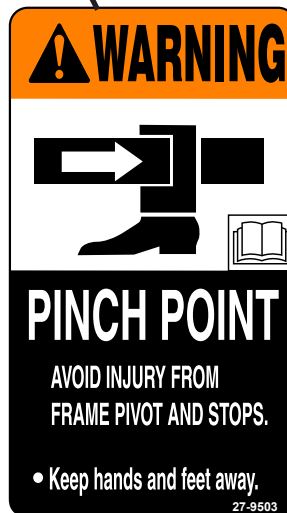
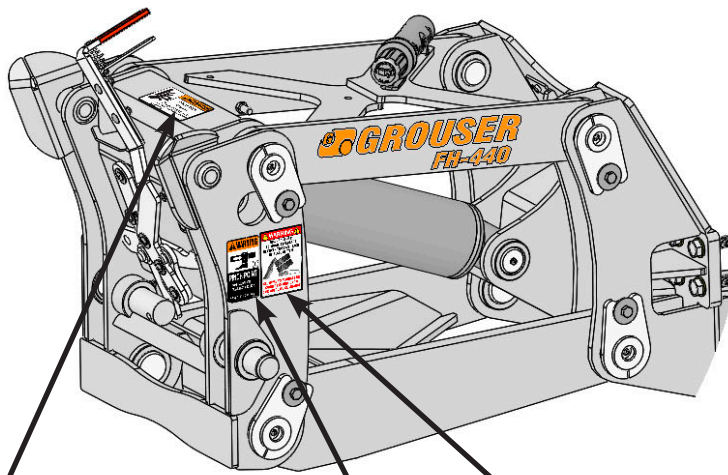
Storing the FH-440 Front Hitch:

1. Thoroughly clean the inside and outside of the Front Hitch before storage. Use paint where necessary to prevent rust.
2. Check the Front Hitch for worn or damaged parts. Install new parts as required.
3. Lubricate all pins and joints.

Tighten all bolts to the values listed below unless otherwise noted. Refer to the parts lists for proper length and grade of the bolts.

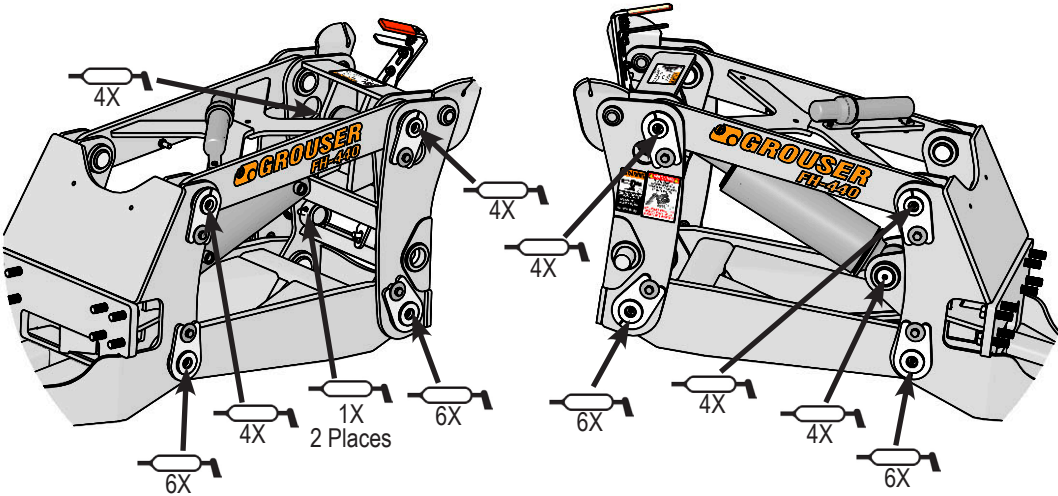
Size	Torque - Dry (ft-lbs)			
	SAE Grade 5		SAE Grade 8	
	UNC	UNF	UNC	UNF
5/16	17	19	24	27
3/8	30	35	45	50
7/16	50	55	70	80
1/2	75	85	110	120
9/16	110	120	150	170
5/8	150	170	210	240
3/4	260	300	380	420
7/8	430	470	600	670
1	640	720	910	1020

Size	Torque - Dry (ft-lbs)
	Grade 10.9
M18 x 2.50	284
M20 x 2.50	401
M22 x 2.50	547
M24 x 3.00	694



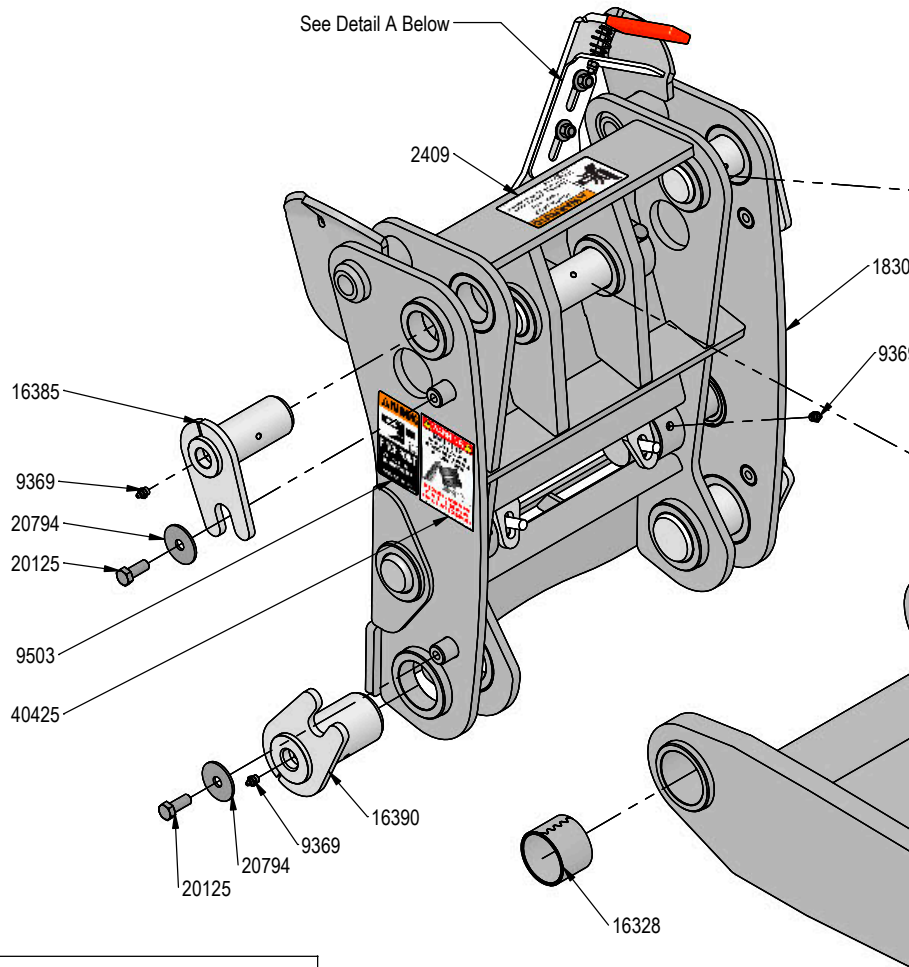
Due to the harsh environment this equipment operates in, the following tasks should be performed every 10 hours or less.

- Inspect all equipment before operation for existing or potential damage.
- Lubricate all joints with high quality grease. See below for grease locations.
- Inspect all bolts, and tighten any loose bolts to torque specifications on page 3.
- Check hydraulic cylinders and hoses for damage or leaks. For replacement parts, see hydraulic pages for your specific system.
- Make sure all non-rotating pins are secured properly.
- Inspect all decals and order replacement decals from your dealer if any are damaged or worn.
- Replace parts with original parts only.

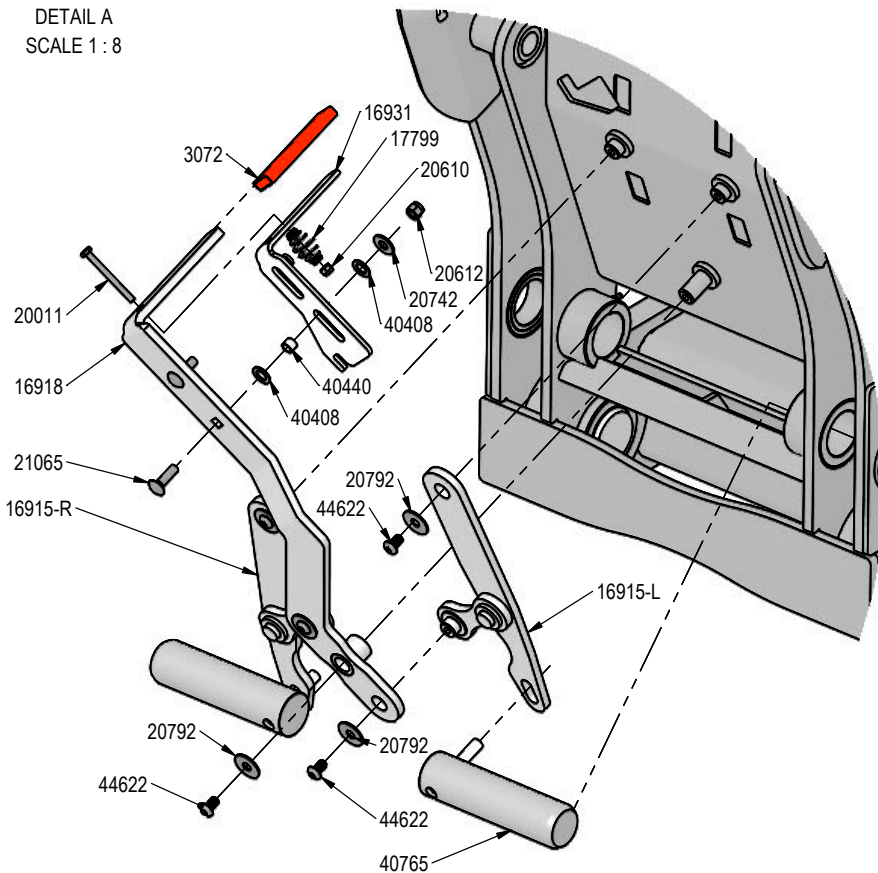


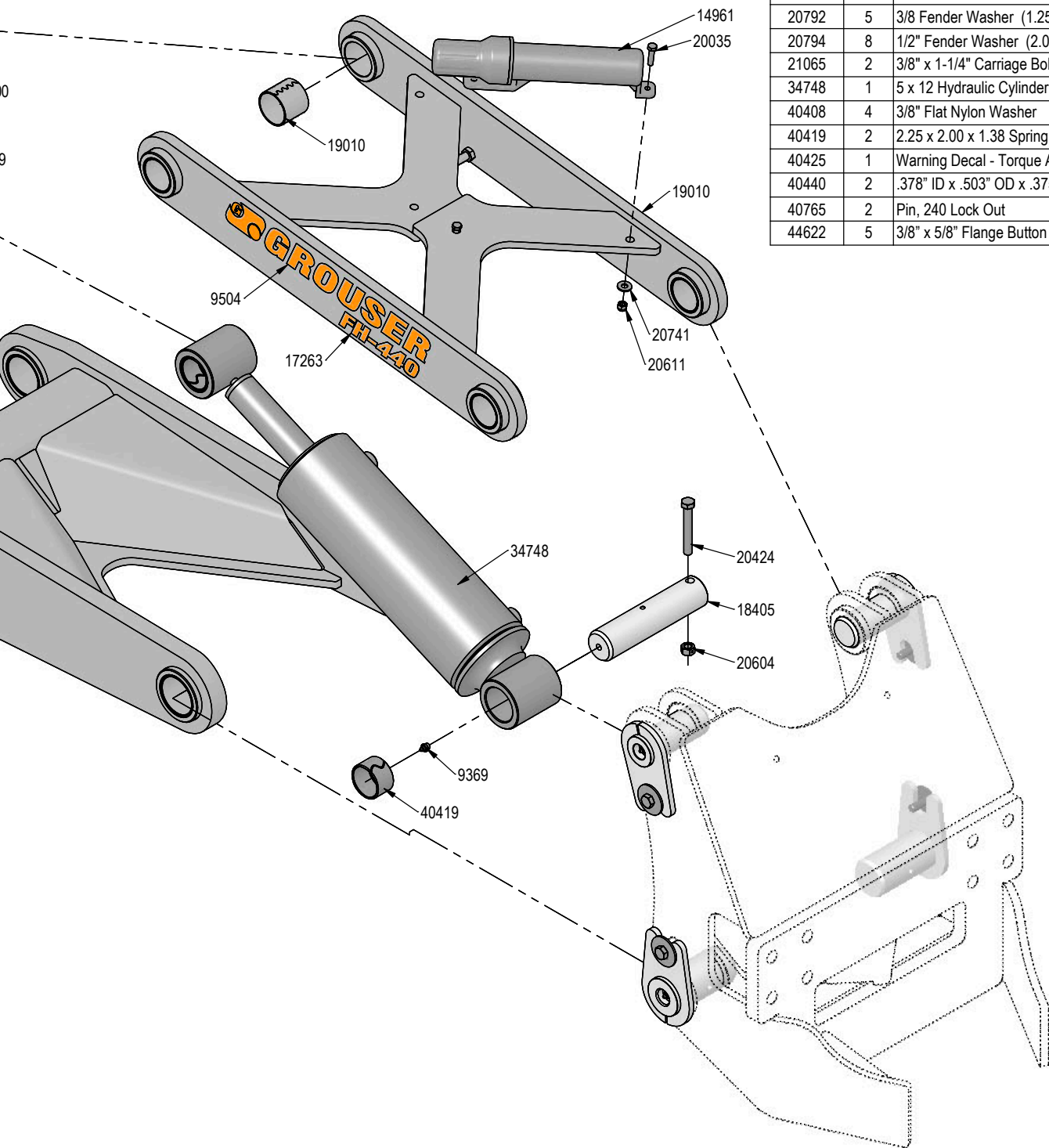
	Grease Locations
Lift System	12

PART NO.	QTY.	DESCRIPTION
2409	1	Pinch Area, Hand
3072	1	Rubber Handle
7954	4	2.25 x 2.00 x 2.00 Spring Bushing
9369	12	Straight 1/8" NPT Grease Zerk
9503	1	Pinch Point, Foot
9504	2	Grouser Horizontal Decal
14961	1	Manual Canister Small
16328	4	2.75 x 2.50 x 2.00 Spring Bushing
16385	4	Top Pin Assy.
16390	4	Bottom Pin
16915-L	1	16915-L
16915-R	1	16915-R
16918	1	Pin Pulling Arm Assembly
16931	1	Latch
17263	2	FH-440 Decal
17799	1	Latch Spring
18300	1	Quick Attach
18405	2	Cylinder Pin
19000	1	Lower Arm
19010	1	Top Arm
20011	1	1/4" X 2-3/4" Hex Bolt Gr 5 NC CZ
20035	2	5/16" X 1-1/4" Hex Bolt Gr 5 NC CZ



DETAIL A
SCALE 1 : 8

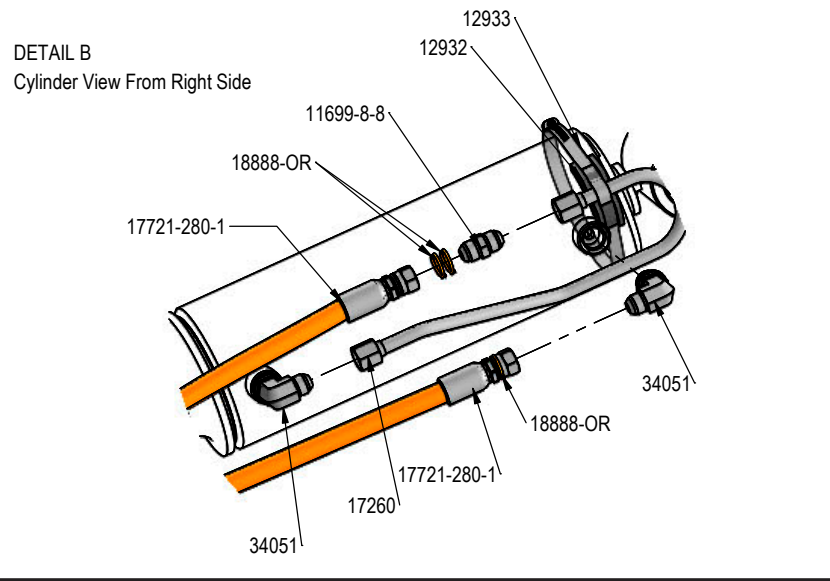
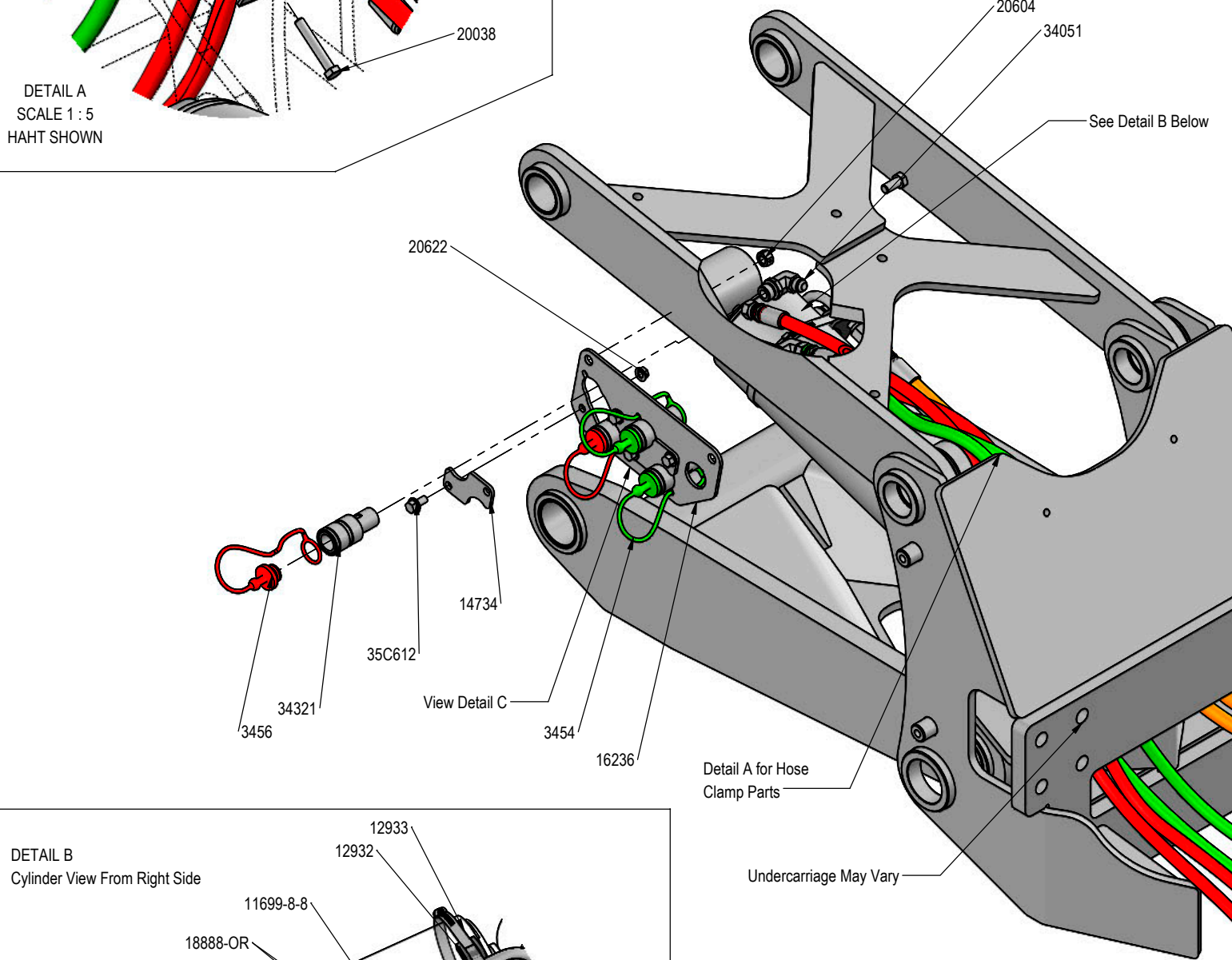
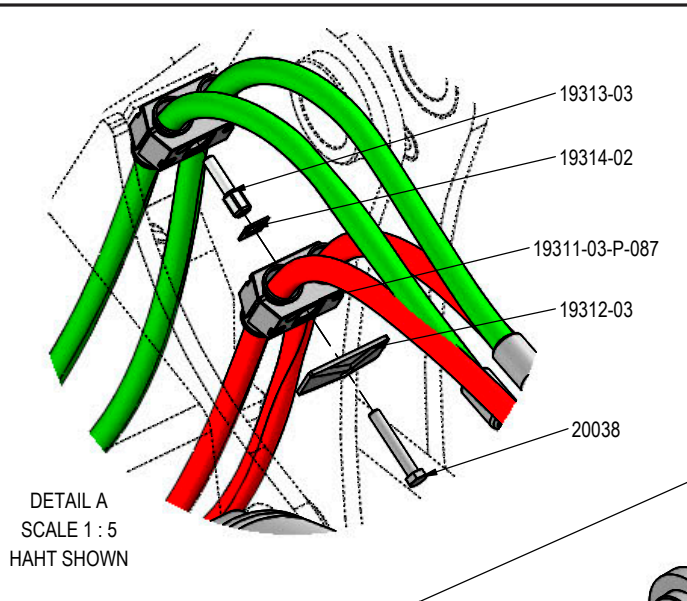




PART NO.	QTY.	DESCRIPTION
20125	8	1/2" X 1-1/4" Hex Bolt Gr 5 NC CZ
20424	2	1/2" X 3-1/2" Hex Bolt Gr 8 NC YZ
20604	2	1/2" Hex Center Lock Nut Gr 5 NC CZ
20610	1	1/4" Nylock Hex Nut Gr 5 NC CZ
20611	2	5/16" Nyloc Hex Nut Gr 5 NC CZ
20612	2	3/8" Nyloc Hex Nut Gr 5 NC CZ
20741	2	1/4" Flat Washer CZ
20742	2	3/8" Flat Washer CZ
20792	5	3/8 Fender Washer (1.25" OD)
20794	8	1/2" Fender Washer (2.00" OD x .500" ID x .125")
21065	2	3/8" x 1-1/4" Carriage Bolt Gr 5 NC CZ
34748	1	5 x 12 Hydraulic Cylinder
40408	4	3/8" Flat Nylon Washer
40419	2	2.25 x 2.00 x 1.38 Spring Bushing
40425	1	Warning Decal - Torque Arm
40440	2	.378" ID x .503" OD x .375" Spacer
40765	2	Pin, 240 Lock Out
44622	5	3/8" x 5/8" Flange Button Socket Cap Bolt

Note: When ordering cylinder seal kits, the part number on the cylinder is needed. The number is stamped on the base end of the cylinder opposite of the hydraulic ports.

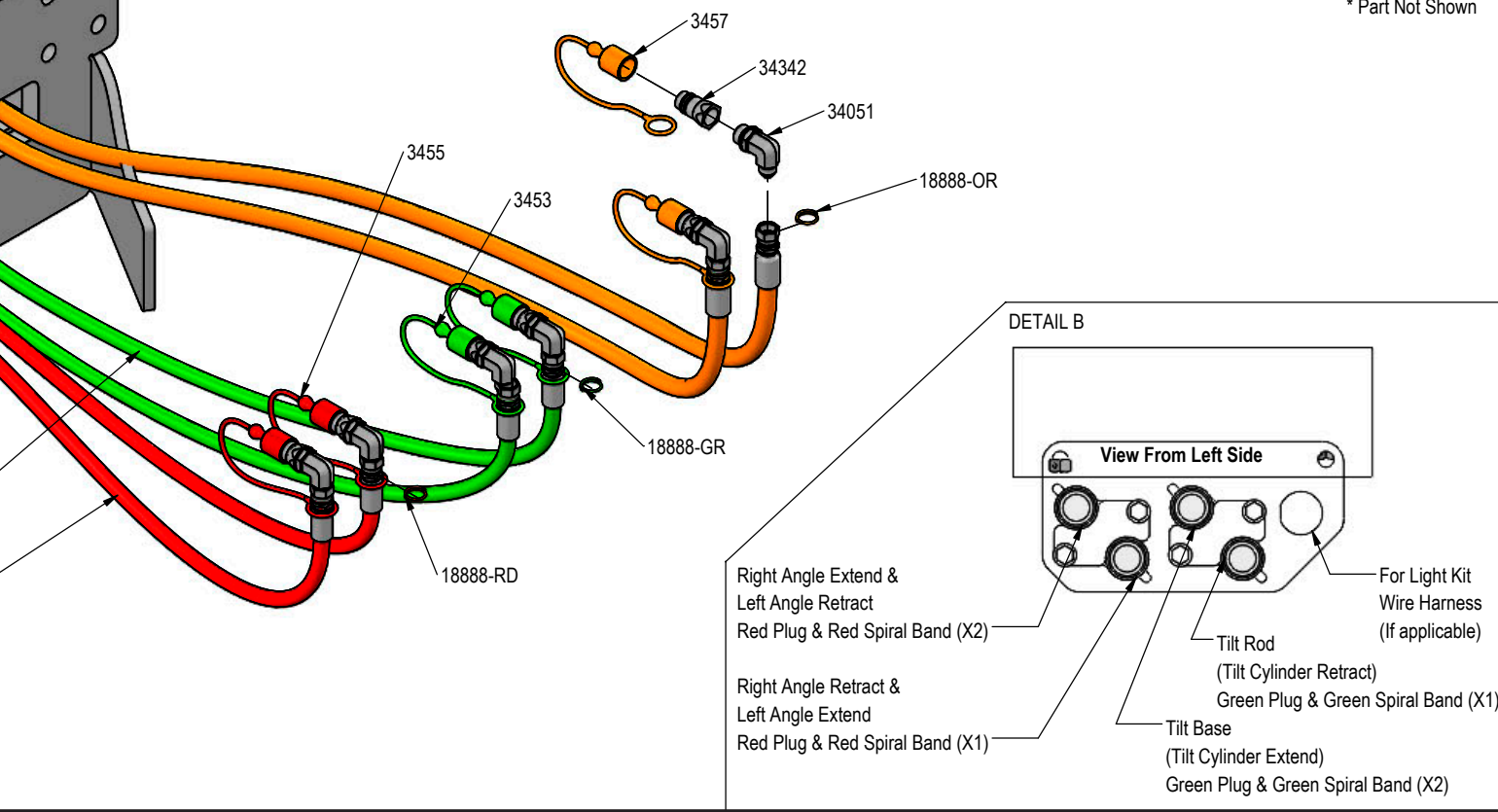
No. On Cylinder	Part No.	Description
26-34748	49-12277	Seal Kit 5 x 12 - Nitrided Rod



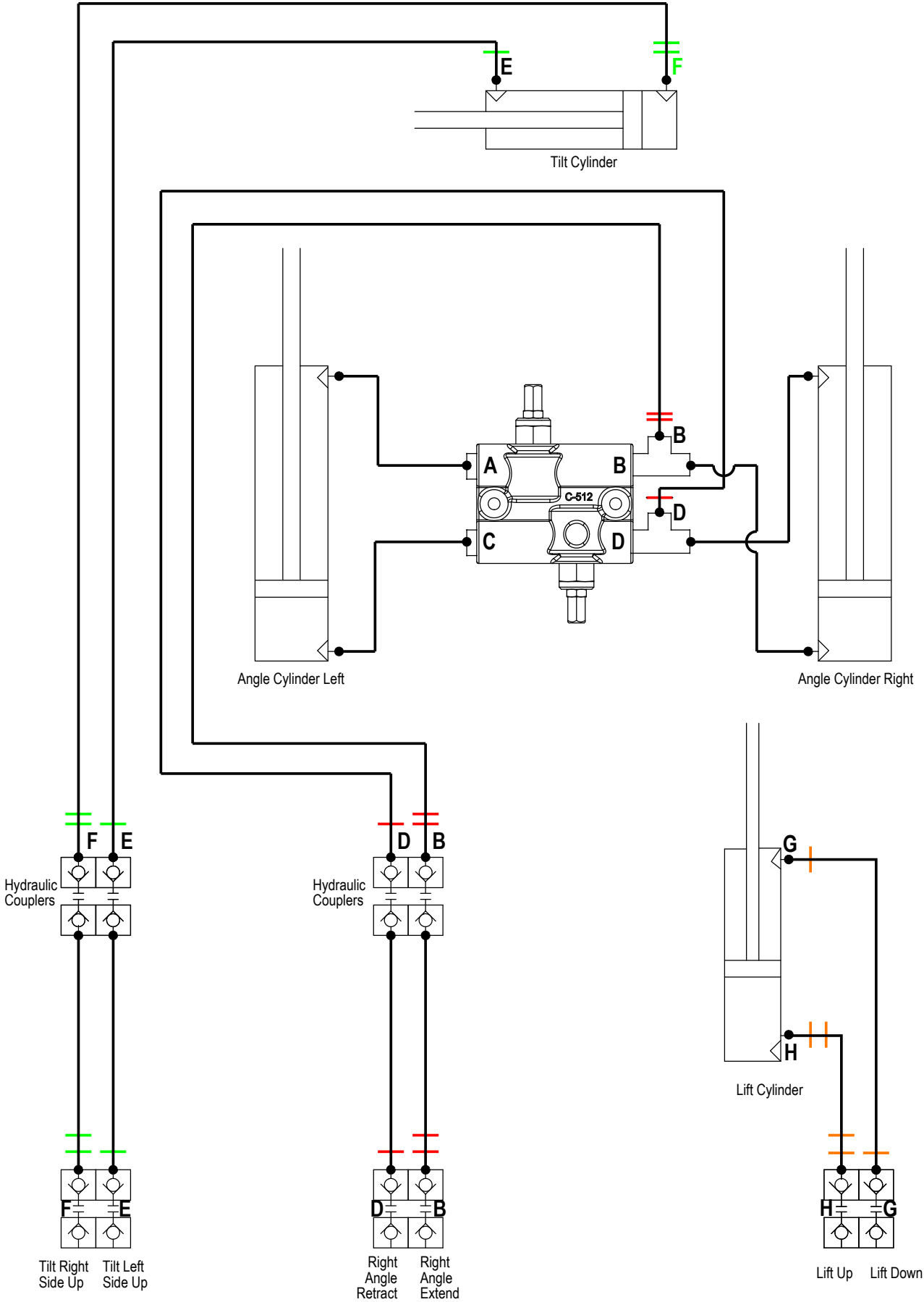
17722-280-2
17722-280-1

PART NO.	HAHT & LIFT Qty.	HANT & LIFT QTY.	NANT & LIFT QTY.	DESCRIPTION
35C612	4	2	-	3/8" x 3/4" Flange Bolt
3453	2	-	-	Pioneer Dust Cap Tilt (Green)
3454	2	-	-	Pioneer Dust Plug Tilt (Green)
3455	2	2	-	Pioneer Dust Cap Angle (Red)
3456	2	2	-	Pioneer Dust Plug Angle (Red)
3457	2	2	2	Pioneer Dust Cap Lift (Orange)
11699-8-8	1	1	1	JIC Union
12932	1	1	1	Cylinder Saddle
12933	1	1	1	Hose Clamp (worm drive - 5.0)
14734	2	1	-	Plate, Retainer
15528*	-	1	-	Round Tube
16236	1	1	-	Plate, Coupler Mount
17260	1	1	1	Tube Assembly
17721-280-1	2	2	2	280" (23.3") x 1/2" -8JIC/-8JIC Hose w/Cordura
17722-280-1	2	2	-	280" x 3/8" -8JIC/-8JIC Hose (w/Cordura & 21" Collar)
17722-280-2	2	-	-	280" x 3/8" -8JIC/-8JIC Hose (w/Cordura & 18.5" Collar)
18888-GR	6	-	-	-12 Green - Spiral Band
18888-OR	6	6	6	-12 Orange - Spiral Band
18888-RD	6	6	-	-12 Red - Spiral Band
19311-03-P-087	2	1	-	Hose Clamp
19312-03	1	1	-	Twin Cover Plate
19313-03	1	-	-	Twin Stacking Bolt
19314-02	1	-	-	Twin Safety Plate
20038	1	-	-	5/16" X 2" Hex Bolt Gr 5 NC CZ
20042*	-	1	-	5/16" X 3" Hex Bolt Gr 5 NC CZ
20604	2	2	-	1/2" Hex Center Lock Nut Gr 5 NC CZ
20622	4	2	-	3/8" Flange Hex Nut Gr 5 NC CZ
34051	12	8	4	Straight Thread Elbow 90° JIC x O-Ring
34321	4	2	-	Female Pioneer Coupler
34342	6	4	2	Tappet Quick Coupler Male - Poppet Style

* Part Not Shown



Colored Lines = Quantity of Colored Spiral Bands



Tractor Service Valve

Improvements

Grouser Products Inc. is continually striving to improve its products. We reserve the right to change prices, specification, or equipment at any time without notice. We also reserve the right to make improvements or changes when it becomes practical and possible to do so without incurring any obligation to make changes or additions to the equipment sold previously.

Warranty

Grouser Products warrants to the original purchaser of each item that the product be free from defects in material and workmanship under normal use and service for a period of **two (2) years for Agriculture Series Blades and one (1) year for Heavy Duty Series from date of original retail delivery.**

The obligation of the consumer under this warranty:

1. To read the operators manual and to operate, lubricate, maintain and store equipment in accordance with the instructions listed in the operators manual.
2. To inspect equipment and if any part needs repair or replacement when continued use would cause damage or wear to other parts or safety.
3. All equipment or parts claimed to be defective in material or workmanship must be made available for inspection at the place of business of a dealer authorized to handle the equipment covered by this warranty, or, upon request by Grouser Products, shipped to the Grouser Products factory in West Fargo, North Dakota.

The obligation of the dealer under this warranty:

1. Complete warranty registration form and submit within 30 days of sale.
2. Contact Grouser Products for authorization prior to performing any warranty repairs or part replacement.
3. Complete warranty request form and submit with photos and supporting documentation.

The obligation of Grouser Products under this warranty:

1. Repair or replace, any equipment or parts, in the judgment of Grouser Products to be defective in material or workmanship.
2. Grouser Products will cover the cost of parts and ground shipping at dealer invoice only.
3. Grouser Products shall have no obligation to bear the cost of labor or transportation in connection with replacement or repair of any such defective parts.

This warranty does not cover:

1. Depreciation or damage caused by normal wear, accident, improper assembly, improper adjustments.
2. Improper maintenance including lack of proper lubrication, or improper use. Including loose bolts, nuts, or fitting due to over tightening or vibration after 20 hours of operation.
3. Repairs or alterations without authorization from a Grouser Products representative.
4. Grouser Products shall have no liability if the equipment has been altered or reworked without the written authorization of Grouser Products.

Grouser Products' parts, which are furnished under this warranty and properly installed, shall be warranted to the same extent as the original parts under this warranty if, and only if, such parts are found to be defective within the original warranty period covering the original equipment.

NO EMPLOYEE OR REPRESENTATIVE OF GROUSER PRODUCTS IS AUTHORIZED TO CHANGE THE WARRANTY IN ANY WAY OR GRANT ANY OTHER WARRANTY.

Contact Us

As always, if you have any questions about your system or other products made by Grouser, feel free to contact us.



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