



PTORG72 & PTORG96

***R**OTO**G**ROOMER*

Operator Instructions & Parts Manual
Serial # from P2842

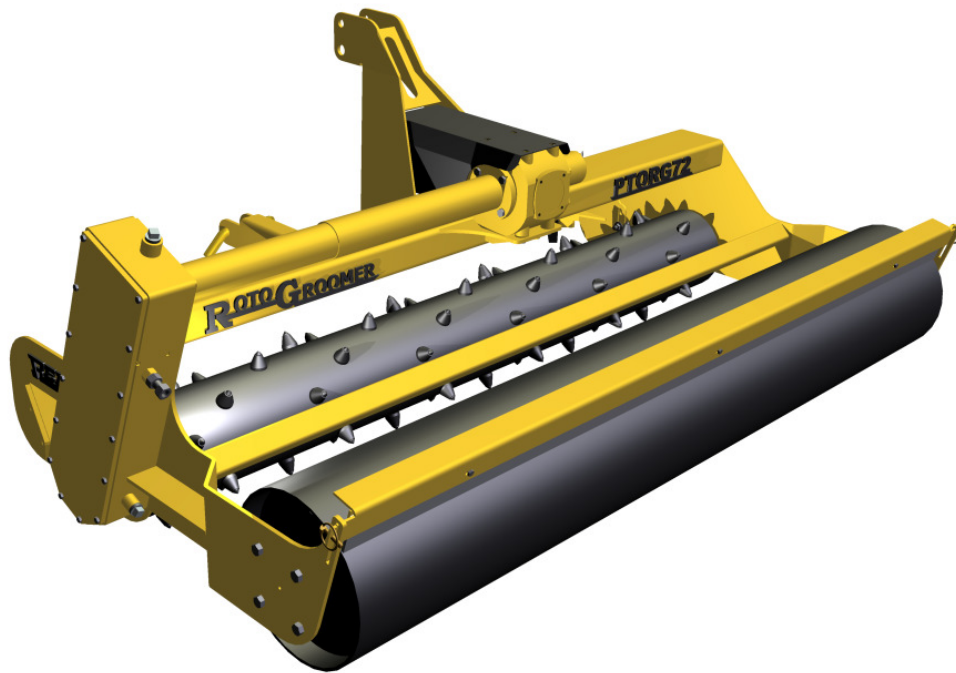



TABLE OF CONTENTS	
--------------------------	--

<u>ITEM</u>	<u>PAGE</u>
INTRODUCTION	2
SAFETY	3-4
SETUP INSTRUCTIONS.....	5
OPERATION INSTRUCTIONS	6
MAINTENANCE & ADJUSTMENTS	7
ROLLERS OPTIONS	8
PARTS	9-14
WARRANTY	15

CONGRATULATIONS!

Thank you for choosing the **REIST PTORG Series Roto-Groomer**. We feel confident that this equipment will meet your expectations in workmanship, reliability and performance.

This manual is to assist you with the safe operation of the **REIST PTORG series Roto-Groomer**; this manual also instructs safety information, maintenance intervals and proper storage instructions.

Leveling & Rejuvenating

Maintaining the riding arena footing is an important part to preventing leg injuries to horses at your facility. Whether you have an indoor or outdoor arena, a smooth and level footing is key. There are numerous types of footings, from basic sand to all sorts of high quality footings with mixtures of rubber, sand, synthetic materials and the list goes on. No matter what footing you have, the **Reist Roto-Groomer** will do the job.

Leveling is to quickly level the riding arena where as rejuvenating is when after a period of time the top of the footing material starts to separate and the firmness isn't consistent in all areas. When this happens it is time to rejuvenate the footing. This is done by setting the rotor deeper (3" to 5") but not too deep that you bring up the base material. This will mix the footing material back to its original state.

Setting up the Roto-Groomer properly is important and is explained in this manual.

GENERAL SAFETY



- Careful operation is the best assurance against accidents. It is the owner's responsibility to make sure that all operator's read this manual before operating the equipment.
- Familiarize yourself with all controls and always be ready to stop equipment quickly in case of emergency.
- Never let a child operate machinery.
- Protect yourself by wearing ear protection.

Horse Safety

To prevent injury to a horse

- Before using the Roto-Groomer check the complete machine including the tractor for broken or missing parts and repair if necessary.
- When done grooming, check the groomer again for broken or missing parts.
- If there is something missing find it before letting horses use the riding area. Use a metal detector if necessary to find the part.



CAUTION



OPERATING SAFETY

- **For proper safe operation we recommend that the tractor be equipped with an approved Roll-Over Protective Structure and Safety Belt.**
- **Do not operate an engine in confined or non ventilated area.**
- **Do not perform any adjustments or repairs with engine running.**
- **Always lower 3 PT hitch to ground before performing adjustments or repairs.**
- **Do not operate on excessive incline and always be careful when turning on slopes.**
- **Never carry passengers on implement or tractor.**
- **Stay clear when machine is in operation.**
- **Stop tractor when getting off.**

CAUTION

TRANSPORT SAFETY

- **Use proper safety lights on public roads.**
- **Be alert while driving on road and never carry passengers.**

Important Setup Instructions

It is **IMPORTANT** that proper adjustments are made to achieve best results.

The Roto-Groomer is mounted to the tractor with 3pth category 1. There are bushings that can be used if hitching to tractor with category 2.

Setup:

1. It is important to use proper pin & bushing sizes when attaching Roto-Groomer to tractor.
2. Have the tractor and Roto-Groomer on level ground preferably concrete for initial setup.
3. Make sure rotor and roller are parallel. To adjust, loosen bolts on rear roller bearing. The holes in end plate are slotted to adjust the roller with the rotor. Adjust and tighten bolts.
4. Lift Roto-Groomer approx. 1 inch off of ground and adjust 3pth arm so that the Roto-Groomer is parallel with the floor. The distance should be the same (less than a 1/4") from side to side. See fig. 2.
5. Lower Roto-Groomer to ground, putting 3 PTH lever to max. down position and adjust top link until front rotor and rear roller touches the ground. See fig. 1.

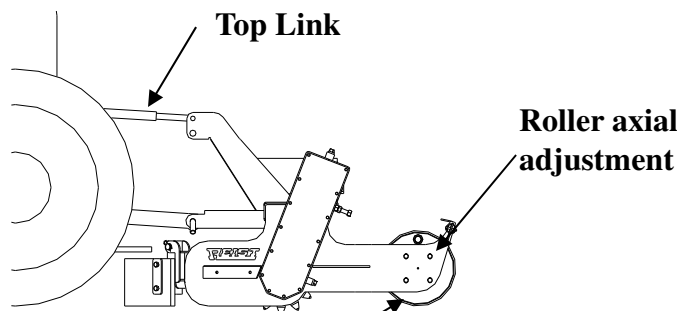


Fig. 1

Adjust Top Link until Rotor and roller touch.

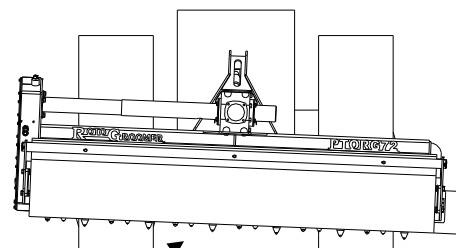


Fig. 2

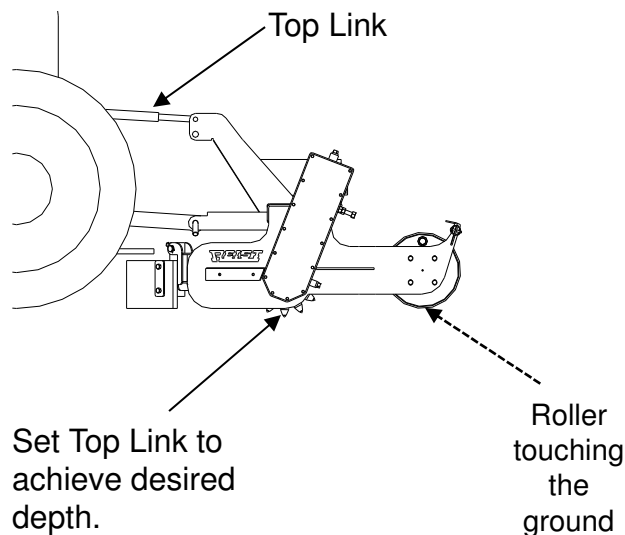
Adjust 3PHT arm until Groomer is parallel with floor.

Operation Instructions

The Roto-Groomer is mounted to the tractor 3pth category 1. If hitching to a tractor with category 2 it is important to use bushings on the pins. It is **IMPORTANT** that you first make the proper setup adjustments to achieve best results. (See Setup Instructions).

Operation:

1. Engage PTO on tractor to start the Roto-Groomer.
2. With 3 PTH lever in max. down position, Adjust the top link until grooming at desired depth.
3. With 3 PTH lever in max. down position start Grooming at 4 to 8 km per hour.
4. If only leveling is required, 1/2" to 1" depth is all that is needed. Using this method the Roto-Groomer will remove high spots & fill in low spots.
5. If loosening hard packed soils or if you want to mix up the complete footing right down to the base you might want to go as deep as 3". This will take more power and will have to reduce speed. **WARNING: If you go too deep you will bring up the base material!**
6. Driving in various patterns can improve leveling.



MAINTENANCE & ADJUSTMENTS

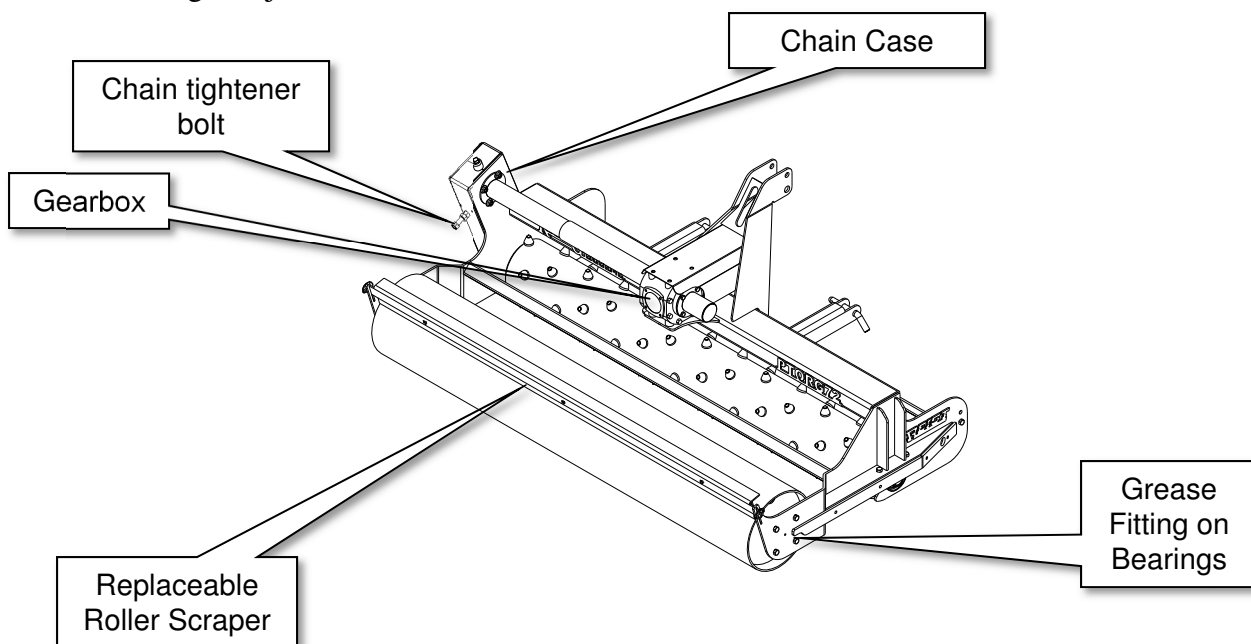


	10 hrs	100 hrs	500 hrs	1000 hrs
Grease bearings ½ pump			✓	
Check oil in gearbox 80W90 gear oil		✓		
Check Backlash on Rotor	✓			
Change oil in Gearbox & Chain Case				✓

- Clean grease fittings before adding grease to avoid injecting dirt and sand.
- 1 liter 80W90 gear oil and ½ tube grease in chain case .

To check rotor backlash and adjust chain tension:

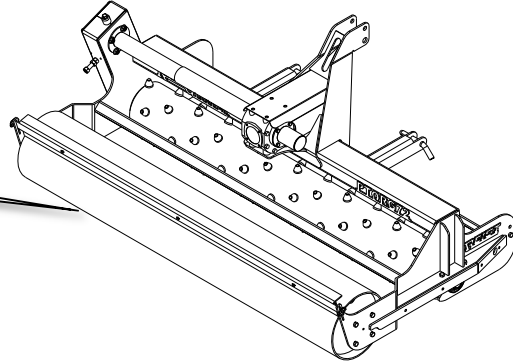
1. This can be done without taking off the cover.
2. Lift the Roto-Groomer a couple inches off the ground.
3. Take hold of the rotor and turn it back and forth. You should be able to feel the play in chain. Or watch the PTO when you turn the rotor back and forth. If you can turn the rotor more than ¼ of an inch before the PTO starts to move the chain needs to be tightened.
4. Loosen lock jam nut on chain tightener bolt.
5. Tighten chain tightener bolt until backlash is reduced to less than 1/4”.
6. Tighten jam nut.



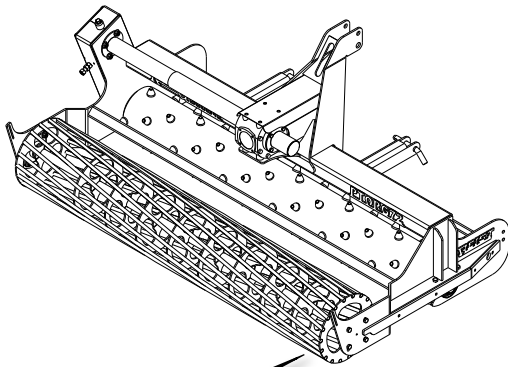
Roller Options



Smooth Roll



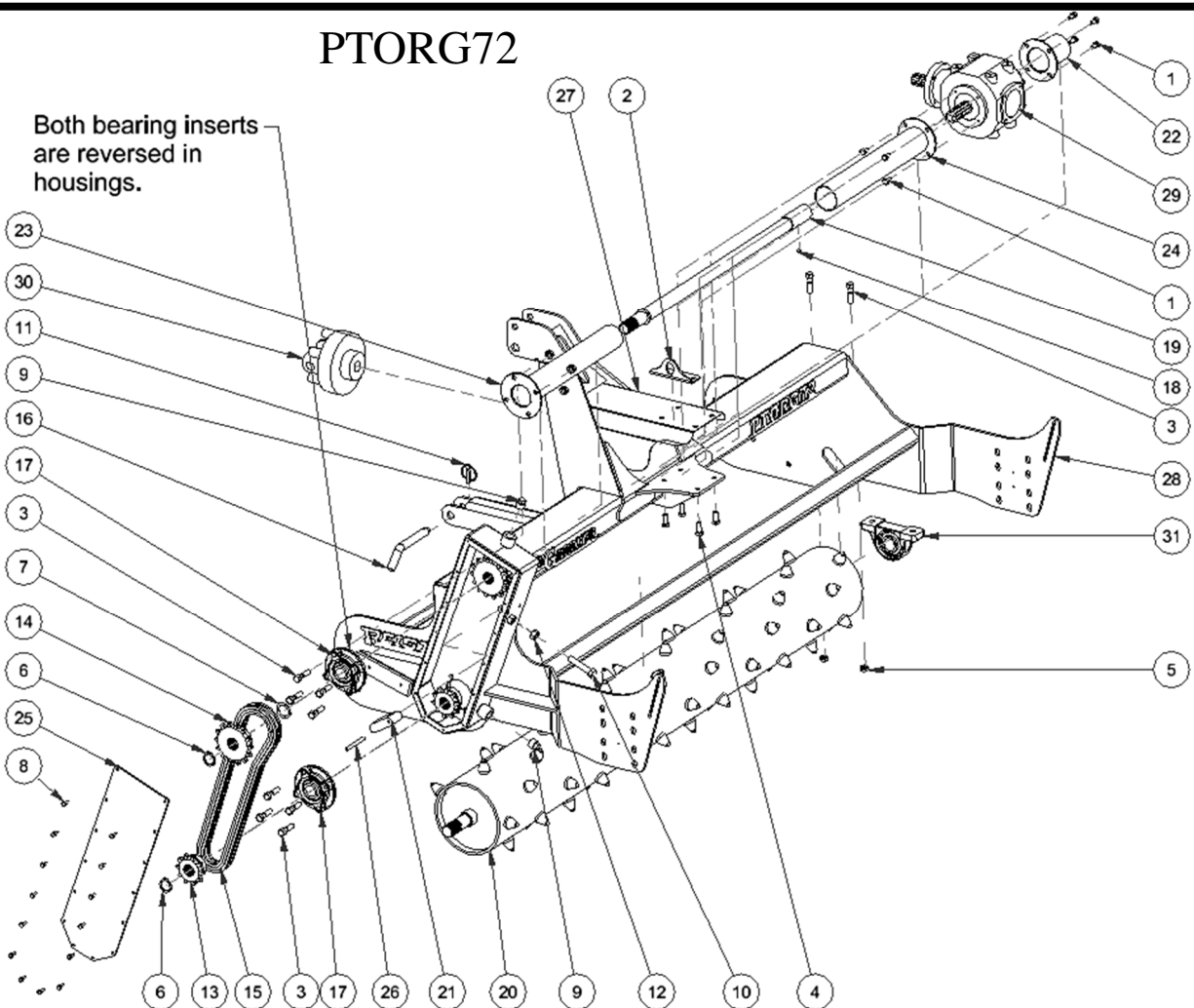
Bar Reel



Parts List (main assembly)



PTORG72

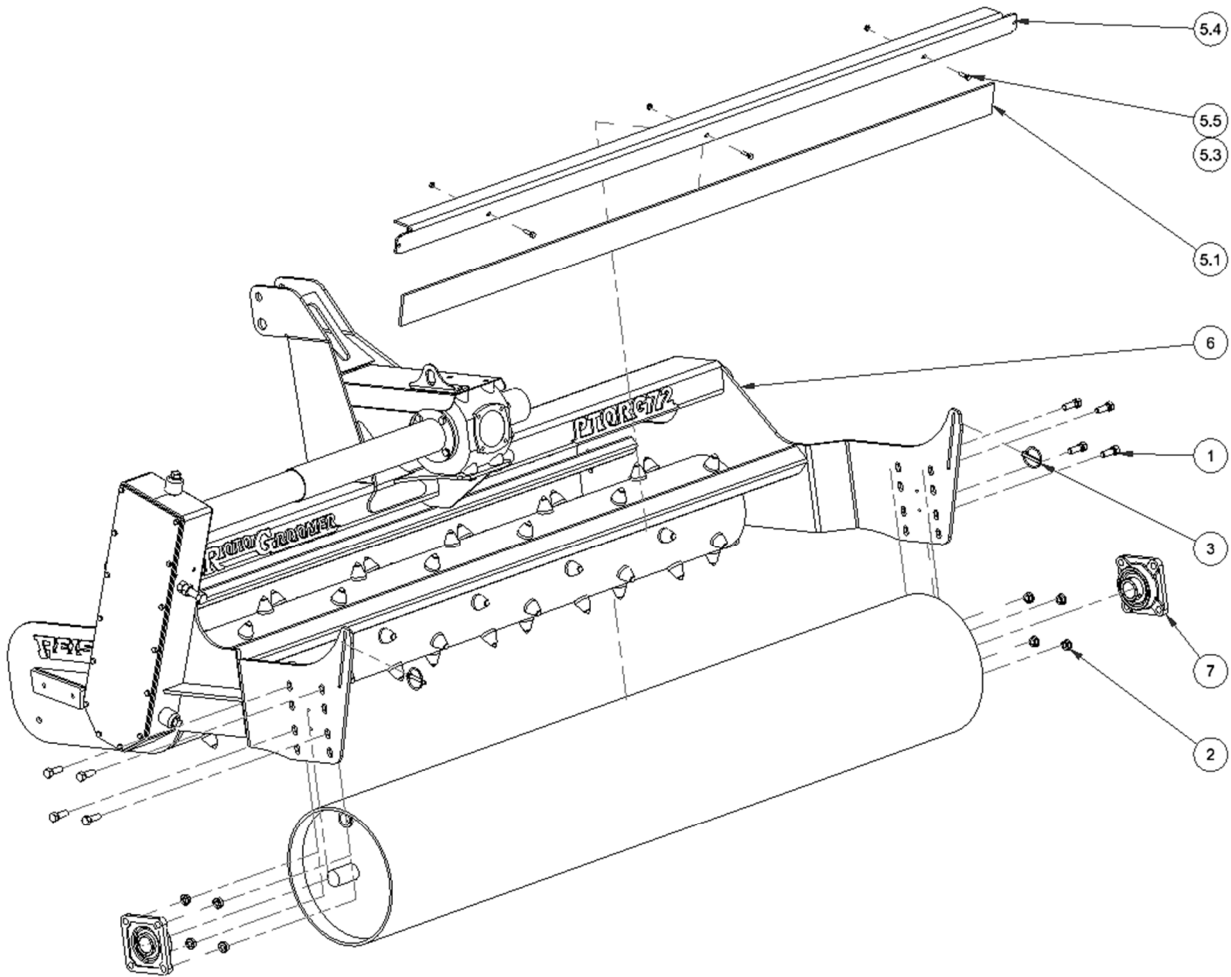


Parts List				Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION	ITEM	QTY	PART NUMBER	DESCRIPTION
1	8	1020	Metric Bolt	17	2	FC207106-RM	Bearing (Insert Reversed)
2	1	103784	Lifting Lug	18	1	GF	1/8 NPT ST Zerk
3	10	12*2	Hex Bolt	19	1	P-PTORG0272	Spline Shaft
4	4	1230	Metric Bolt	20	1	P-PTORGR72-Rotor	Rotor
5	6	12FSLN	Flange Nut	21	1	PTORG01	UHMW Chain Tightener Block
6	2	138HSR	Snap Ring	22	1	PTORG03	Stub Shaft Shield
7	1	138M	Machinery Washer	23	1	PTORG04_ _	Shaft Shield Inner
8	14	1434	Hex Bolt	24	1	PTORG05	Shaft Shield
9	2	3/4P	3/4 Square Plug,	25	1	PTORG06	Chain Shield Lid
10	1	326-360	58X3 Threaded Bolt	26	1	PTORG07	Tightener Pin
11	2	385507	7/16 Lynch Pin	27	1	PTORG08	PTO Shield
12	1	58N	Hex Nut	28	1	PTORGF72	Roto Rake Frame Weldment
13	2	80B1013821	Sprocket	29	1	R2400221	gearbox
14	2	80B1413821	Sprocket	30	1	T50-071P	Slip Clutch / PTO Shaft
15	1	80HRC48	Roller Chain			024430-241001-W1GRF	
16	2	CAT1-784	Cat 1 Arm Pin	31	1	UCP208-108	Pillow Block Bearing

Parts List (smooth roll & scraper)



PTORG72

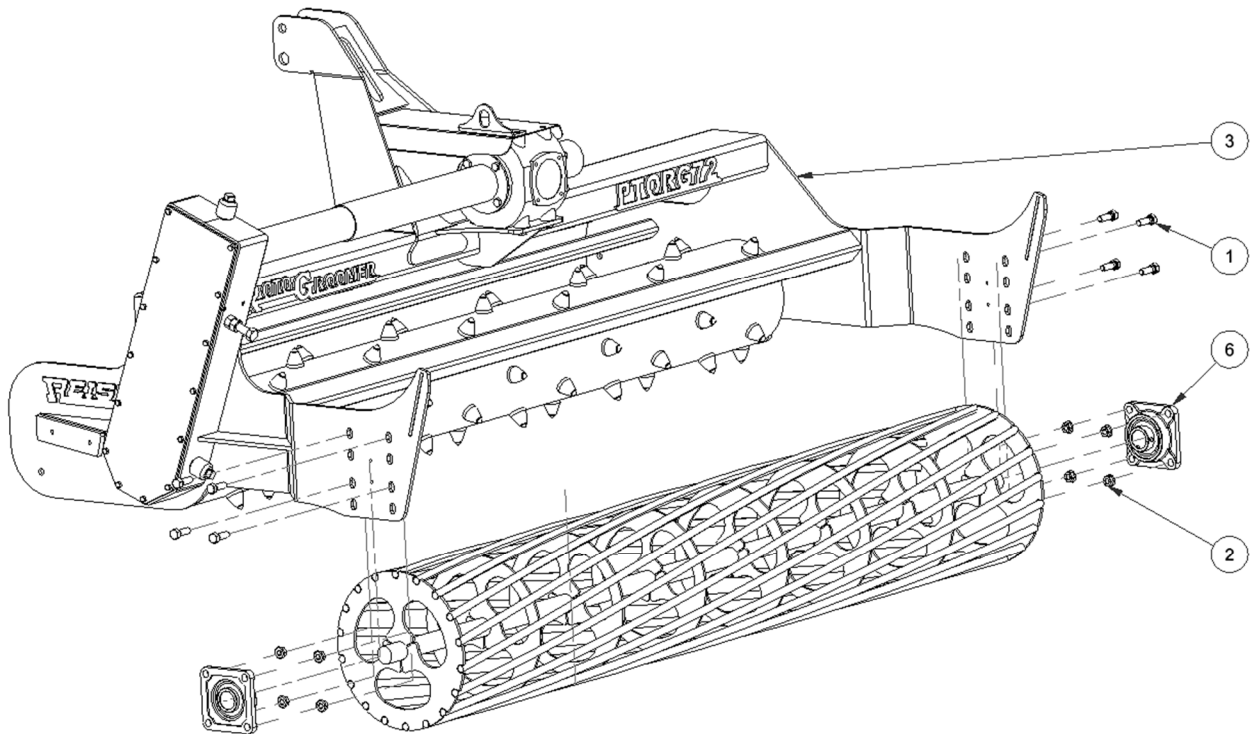


Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	8	12112	Hex Bolt
2	8	12FSLN	Flange Nut
3	2	385503	5/16 Lynch Pin
5	1	PTORG1072	Smooth Roll Water Tank
5	1	PTORG1372	Smooth Roll Scraper Assembly
5.1	1	1/4x3x76UHMW	UHMW Scraper
5.3	3	14CLN	NC Lock Nut
5.4	1	PTORG1172	Smooth Roll Scraper Angle
5.5	3	14*1	Hex Bolt
6	1	PTORG72	PTO Roto-Groomer
7	2	UCF208-108	4 Bolt Flange Bearing

Parts List (Reel)



PTORG72

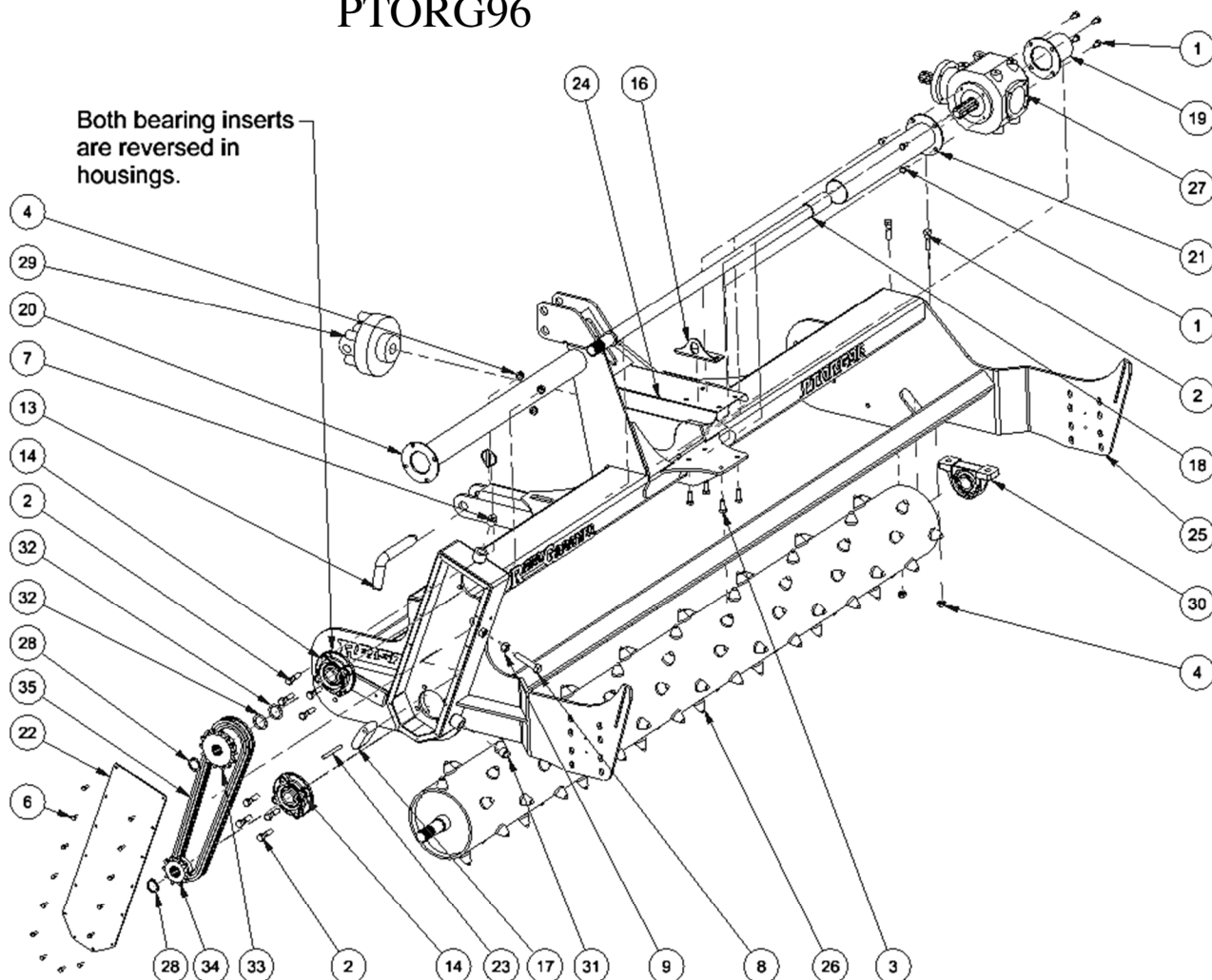


Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	8	12112	Hex Bolt
2	8	12FSLN	Flange Nut
3	1	PTORG72	PTO Roto-Groomer
6	2	UCF208-108	4 Bolt Flange Bearing
7	1	R78	Rolling Harrow Reel

Parts List (main assembly)



PTORG96

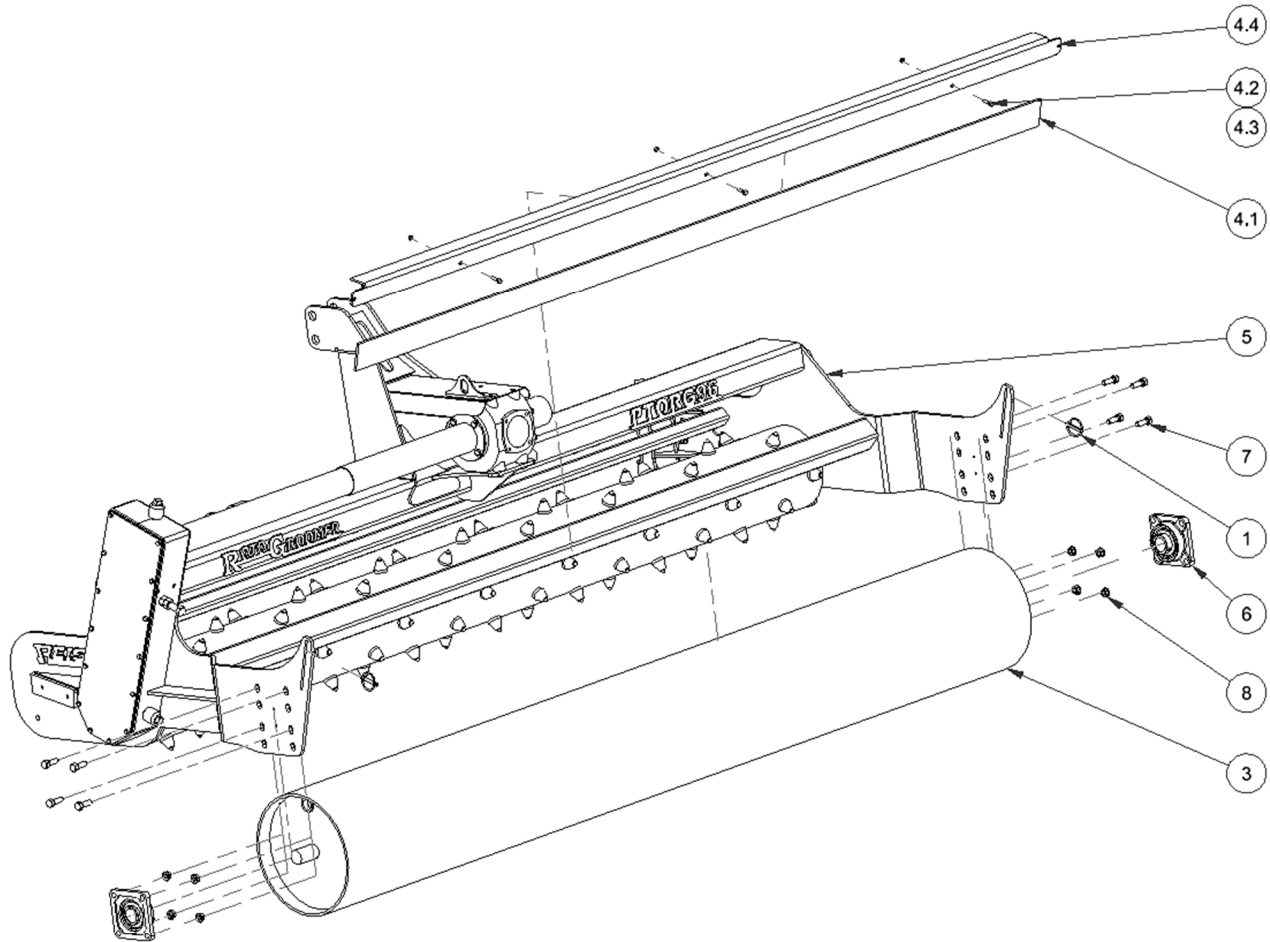


Parts List				Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION	ITEM	QTY	PART NUMBER	DESCRIPTION
1	8	1025	Metric Bolt	21	1	PTORG05	Shaft Shield
2	10	12*2	Hex Bolt	22	1	PTOGR06	Chain Shield Lid
3	4	1225	Metric Bolt	23	1	PTORG07	Tightener Pin
4	6	12FSLN	Flange Nut	24	1	PTORG08	PTO Shield
6	14	1434	Hex Bolt	25	1	PTORGF96	Roto Rake Frame Weldment 96
7	1	3/4P	3/4 Square Plug,	26	1	P-PTORGR96-Rotor	Rotor
8	1	326-360	58X3 Threaded Bolt	27	1	R2400221	gearbox
9	1	58N	Hex Nut	28	2	138HSR	Snap Ring
13	2	CAT2-1185	Cat 2 Arm Pin	29	1	T50-071P	Slip Clutch / PTO Shaft
14	2	FC207106-RM	Bearing (Insert Reversed)			024430-241001-W1GRF	
15	1	GF	1/8 NPT ST Zerk	30	1	UCP208-108	Pillow Block Bearing
16	1	103784	Lifting Lug	31	1	3/4P	3/4 Square Plug,
17	1	PTORG01	UHMW Chain Tightener Block	32	2	138M	Machinery Washer
18	1	P-PTORG0296	Spline Shaft	33	1	80B1413821	Sprocket
19	1	PTORG03	Stub Shaft Shield	34	1	80B1013821	Sprocket
20	1	PTORG0496	Shaft Shield Inner	35	1	Roller Chain	
				36	2	385507	7/16 Lynch Pin

Parts List (smooth roll & scraper)



PTORG96

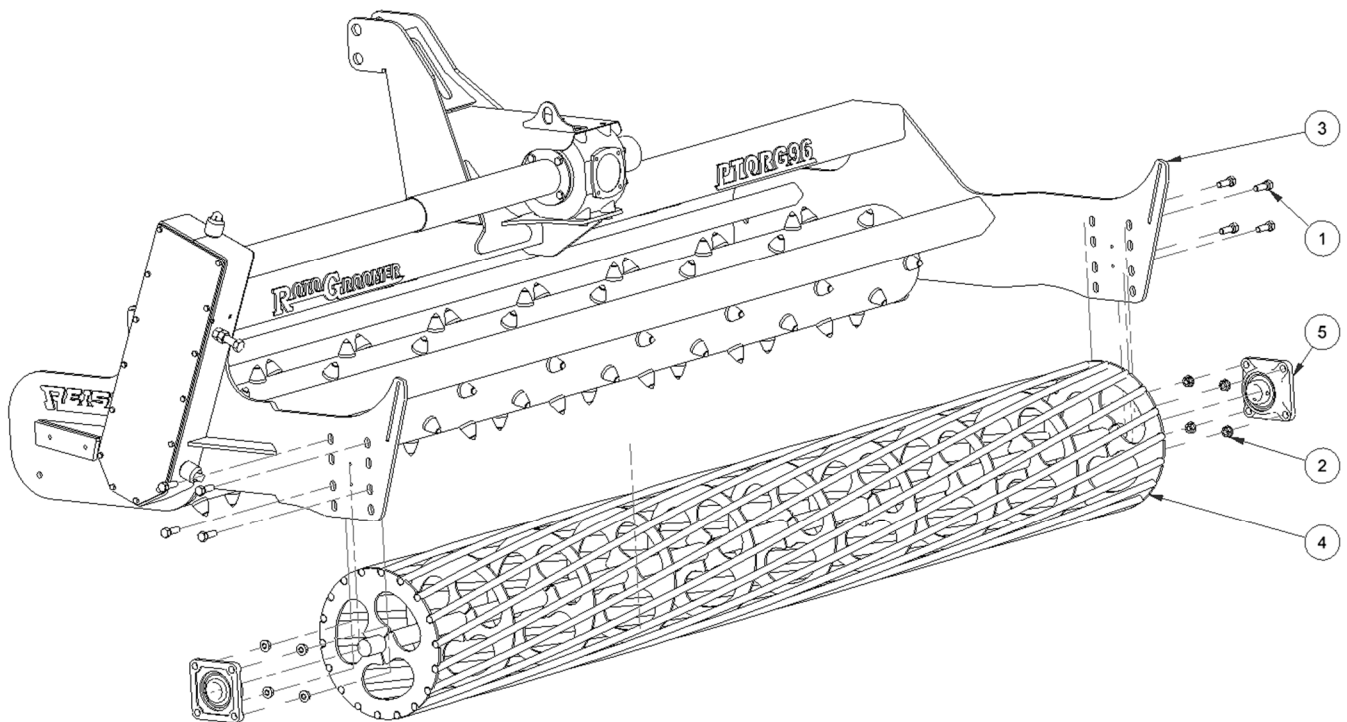


Parts List				Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION	ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	385503	5/16 Lynch Pin	4.4	1	1003900	Smooth Roll Scraper Angle
3	1	PTORG1096	Smooth Roll Water Tank	5	1	PTORG96	Roto Rake
4	1	PTORG1396	Smooth Roll Scraper Assembly	6	2	UCF208-108	4 Bolt Flange Bearing
4.1	1	103901	1/4x3x100 UHMW Scraper	7	10	12112	Hex Bolt
4.2	3	14*1	Hex Bolt	8	10	12FSLN	Flange Nut
4.3	3	14CLN	NC Lock Nut				

Parts List (Reel)

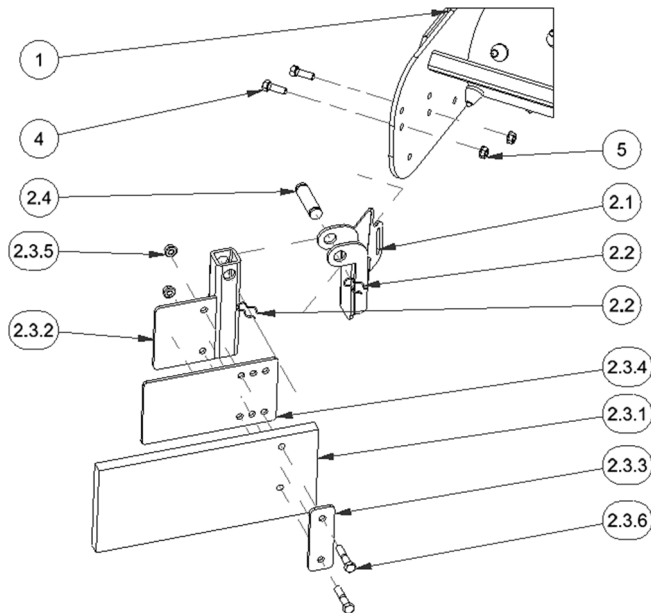


PTORG96



Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	8	12112	Hex Bolt
2	8	12FSLN	Flange Nut
3	1	PTORG96	Roto Rake
4	1	R102	Rolling Harrow Reel
5	2	UCF208-108	4 Bolt Flange Bearing

Parts List (Board Scraper)



Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	PTORG96	Roto Rake
2.1	1	MG17	Swing Base Mount
2.2	2	637856	Hair Pin
2.3	1	103730	Swing Arm Assembly
2.3.1	1	MG16	Rubber Scraper
2.3.2	1	MG18	Swing Arm
2.3.3	1	MG19	Metal Washer Plate
2.3.4	1	MG62	Rubber Reinforcement
2.3.5	2	12FSLN	Flange Nut
2.3.6	2	12212	Hex Bolt
2.4	1	100x262	Pin
3	2	UCF208-108	4 Bolt Flange Bearing
4	10	12112	Hex Bolt
5	10	12FSLN	Flange Nut

WARRANTY



All new Reist machinery is warranted to be free from defects in material or workmanship, which may cause failure under normal usage and service when used for the purpose, intended, for a period of 12 months. This warranty applies only to a new Reist product, there being no warranty of any nature in respect to new products that have been modified or altered, repaired, neglected, or used in any way, which, in the opinion of Reist adversely affects its performance.

In the event of failure of a part or parts, and upon inspection, Reist is satisfied that failure is due to defective material or workmanship within 12 calendar months, from the date of delivery to an end user, such defective part or parts will be repaired or replaced by Reist at his business location. It is the responsibility of the buyer, at his expense, to transport the machine or equipment to the manufacturer service shop or, to an authorized service depot or, alternatively, to reimburse Reist for any travel or transportation expense involved in fulfilling this warranty.

When requested by Reist, part or parts shall be returned for inspection, transportation prepaid, to a place designated by Reist. **IN NO EVENT SHALL THE BUYER BE ENTITLED TO RECOVER FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, LOSS OF PRODUCT, INCONVENIENCE, RENTAL OR REPLACEMENT EQUIPMENT, LOSS OF PROFIT, OR OTHER COMMERCIAL LOSS.**

This warranty becomes void and null if the equipment is modified, breaks down as the result of an accident, is not operated according to manufacturers recommendations, damaged by negligence or if maintenance has not been carried out as specified.

THIS WARRANTY IS NOT TRANSFERABLE

Proof of Purchase

Date of purchase (yyyy mm dd)		Model		Serial #	
Dealer purchased from		City		State or Province	Country
First Name		Last Name		Phone # (include area code)	
Address				State or Province	Country
City	Postal Code	Reist Industries Inc. 100 Union St. Elmira Ontario N3B 2Z2		519-669-1501	

Proof of Purchase

Date of purchase (yyyy mm dd)		Model		Serial #	
Dealer purchased from		City		State or Province	Country
First Name		Last Name		Phone # (include area code)	
Address				State or Province	Country
City	Postal Code	Reist Industries Inc. 100 Union St. Elmira Ontario N3B 2Z2		519-669-1501	

**Reist Industries Inc. Ont.
100 Union St., Elmira
Ontario, Canada, N3B 2Z2
www.reistindustries.com**