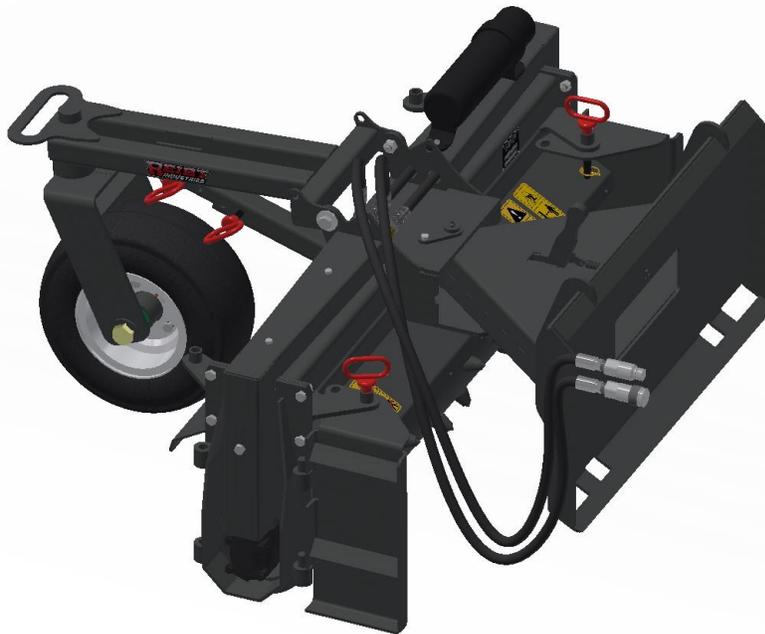




INNOVATION WORKING FOR YOU

RR48

48 Inch Roto-Rake Operator and Parts Manual



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Effective Serial Number X3841 to Y4400

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Record your product information for future reference:

Model Number: _____

Serial Number: _____

In Service Date: _____

Sold By: _____

INTRODUCTION

Thank you for choosing the REIST ROTO-RAKE.

We feel confident that this equipment will meet your expectations in workmanship, reliability and performance when used as designed. This manual is to assist you with the safe operation of the REIST ROTO-RAKE. It also has a parts list to help you when replacement parts are required. Any person who will be assembling, attaching, maintaining, or operating this product and the prime mover to which it is attached, are required to read and completely understand the information and instructions contained in this manual and that of the prime mover. Always obtain further assistance by contacting the dealer from which this product was purchased or by contacting REIST Industries at the telephone number or address below. Keep this manual available for reference whenever this product is being handled or used and we recommend that it is reviewed periodically and before seasonal use. Provide this manual to any new owners and/or operators and ensure they fully understand the safe operation of this equipment before it is placed in service.

Replacement copies of this manual are available for downloading at:
www.reistindustries.com

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The illustrations and information contained within this manual were current at the time of publication. Under our policy of continuous improvement, we reserve the right to change specifications and designs without prior notice. The illustrations do not necessarily show the standard version of product offered by REIST Industries.

PRODUCT CONFIGURATION

ROTO-RAKE RR48

Model	Working Width	GPM	Max PSI	Mount	Pounds	Kilograms
RR48	48"	10 to 20	3000	Mini Skid Steer	725	330



WARNING!

Exceeding the recommended specifications can result in damage to the equipment and will void all REIST Industries warranties.

The following references are used throughout this Operator's and Parts Manual:

Attachment, Implement	Refers to the ROTO-RAKE whether attached or separate from the prime mover
Prime Mover	The engine-driven machine to which this product is attached
Equipment	Refers to the Implement and or prime mover whether separate or connected
WARNING, DANGER, IMPORTANT	A notice that relates to the safe and efficient operation of the ROTO-RAKE or prime mover. Read and understand the reference before attaching or operating the ROTO-RAKE or the prime mover.

GENERAL SAFETY PRECAUTIONS

Careful operation is the best assurance against accidents. It is the owner's responsibility to make sure that all operators read and understand this manual and follow the recommendations, cautions and warnings before connecting to a prime mover and operating the equipment. The REIST ROTO-RAKE was designed for use to grade and level all types of soil including stone dust, gravel or similar products.

Familiarize yourself with all controls and know how to quickly stop the equipment and all rotating parts in the case of an emergency.

Never let an untrained person or a child operate equipment.



WARNING!

DO NOT MODIFY THE ROTO-RAKE OR PRIME MOVER

Modifications may weaken the integrity of the ROTO-RAKE and may impair the operation, safety, and performance of the product. When making repairs, only qualified technicians using the manufacturer's genuine parts, following authorized instructions, shall attempt the repair. Never modify any ROPS (Roll Over Protection Structure) or FOPS (Falling Object Protective Structure) equipment or other safety device or remove guarding. Any modifications must be sanctioned in writing by an authorized representative of the manufacturer.



WARNING!

MAINTAIN AND REPAIR EQUIPMENT SAFELY

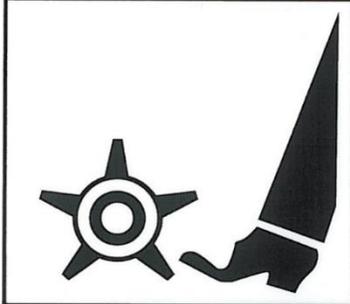
- Do not wear loose clothing, or any accessories that can catch in moving parts
- If you have long hair, cover or secure it so that it does not become entangled in the equipment
- Work on a level surface in a well-lit area.
- Always lower raised equipment to the ground or securely support it to prevent unintentional movement
- Remove and retain the prime mover's ignition key
- Use the correct tool for the job at hand. Make sure they are in good condition for the task required
- Wear the protective equipment specified by the tool manufacturer
- Use care when working on hydraulic systems and understand how to check for and release trapped hydraulic pressure



WARNING!

STAY CLEAR OF ROTATING OBJECTS

Keep hands, feet and clothing away from power driven rotating parts.



Never use your hands to clear if clogged. Never allow anyone to reach into the rotor housing. The rotor can crush and/or dismember. Keep everyone clear of the rotor until the prime mover engine is off and the hydraulic pressure has been relieved.

OPERATION AND TRANSPORTATION ON PUBLIC ROADS AND AREAS

Always adhere to the local laws and regulations concerning traveling or operating on public roadways and areas. Clean all lights, reflectors and mirrors ensuring that all lighting is in working order before moving. Know the area! i.e. Elevations, steep side drop offs. Watch out for pedestrians and use caution when approaching pedestrians, hazardous objects (stones, etc.) may inadvertently be discharged. Always be alert while transporting or operating the equipment. Select a safe ground speed when transporting from one area to another. When operating, or driving on roadways, travel in such a way that faster moving vehicles may pass you safely.

SAFETY DECALS

Contact REIST Industries if replacement safety signs are required.

DECAL PART NUMBERS

Item	Part Number	Description
	WD114	<u>Drive Line Decal</u>
	Serial	<u>Serial Number Decal</u>
	WD111	<u>WARNING Rotating Knives & Spikes</u>
	WD112	<u>Read Manual Decal</u>
	RD107	<u>REIST Decal</u>
	RD115	<u>Made in Canada Decal</u>
	WD116	<u>Flying Objects Decal</u>



WARNING!

READ OPERATOR'S MANUAL BEFORE OPERATING

Do not operate equipment until you are completely trained by a qualified operator in how to use the controls, understand the machine's capabilities, dimensions, and all safety requirements. Refer to your operator's manual for these instructions.

- Do not operate an engine in confined or non-ventilated area
- Do not perform adjustments or repairs with the engine running
- Always lower raised equipment to the ground or securely support it to prevent unintentional movement
- Do not operate on excessive inclines or side slopes – know the limitations of the prime mover – be careful when turning on slopes as a rollover condition may exist
- Never carry passengers
- Keep bystanders away from the machine when in operation
- Be aware of pedestrians
- Know how to quickly stop the equipment and all rotating parts in the case of an emergency
- Stop the prime mover, lower implements and turn off the engine before dismounting
- Refer to the prime mover's Operator's Manual for additional information

MAINTENANCE

Refer to the General Safety Precautions, page 4 of this manual before performing any maintenance.

1. Always ensure the ROTO-RAKE is properly installed, the prime mover is positioned on a level surface with the park brake set and the ROTO-RAKE positioned on the ground
2. Shut-off the engine and remove and retain the ignition key
3. Chock the wheels to prevent movement and release residual hydraulic pressure
4. Grease hinge points every 50 hrs.
5. At the beginning of each season, ensure that all fasteners are properly torqued, all safety guards are in place and that operator's manual is reviewed and understood
6. At the end of season, perform all maintenance activities protect exposed hose ends. Always check for missing or damaged parts and repair as required

SETUP INSTRUCTIONS

Improper installation, operation, or maintenance of this equipment could result in serious injury or death. FOLLOW ALL SAFETY INSTRUCTIONS IN THIS MANUAL AND THE PRIME MOVER'S MANUAL(S).

Refer to the operator's manual(s) for your prime mover and follow the mounting instructions contained therein.



WARNING!

STAY CLEAR OF ROTATING OBJECTS

Keep hands, feet and clothing away from power driven rotating parts.

SKID-STEER HOOKUP INSTRUCTIONS

The standard 48" ROTO-Rake has a Mini Skid Steer mount. Attach Skid steer to Roto-Rake and attach the two Hydraulic hoses. Different makes of skid steers have different wiring configurations. You might have to rewire or get a convertor plug from your skid steer dealer.

OPERATION OF ROTO-RAKE

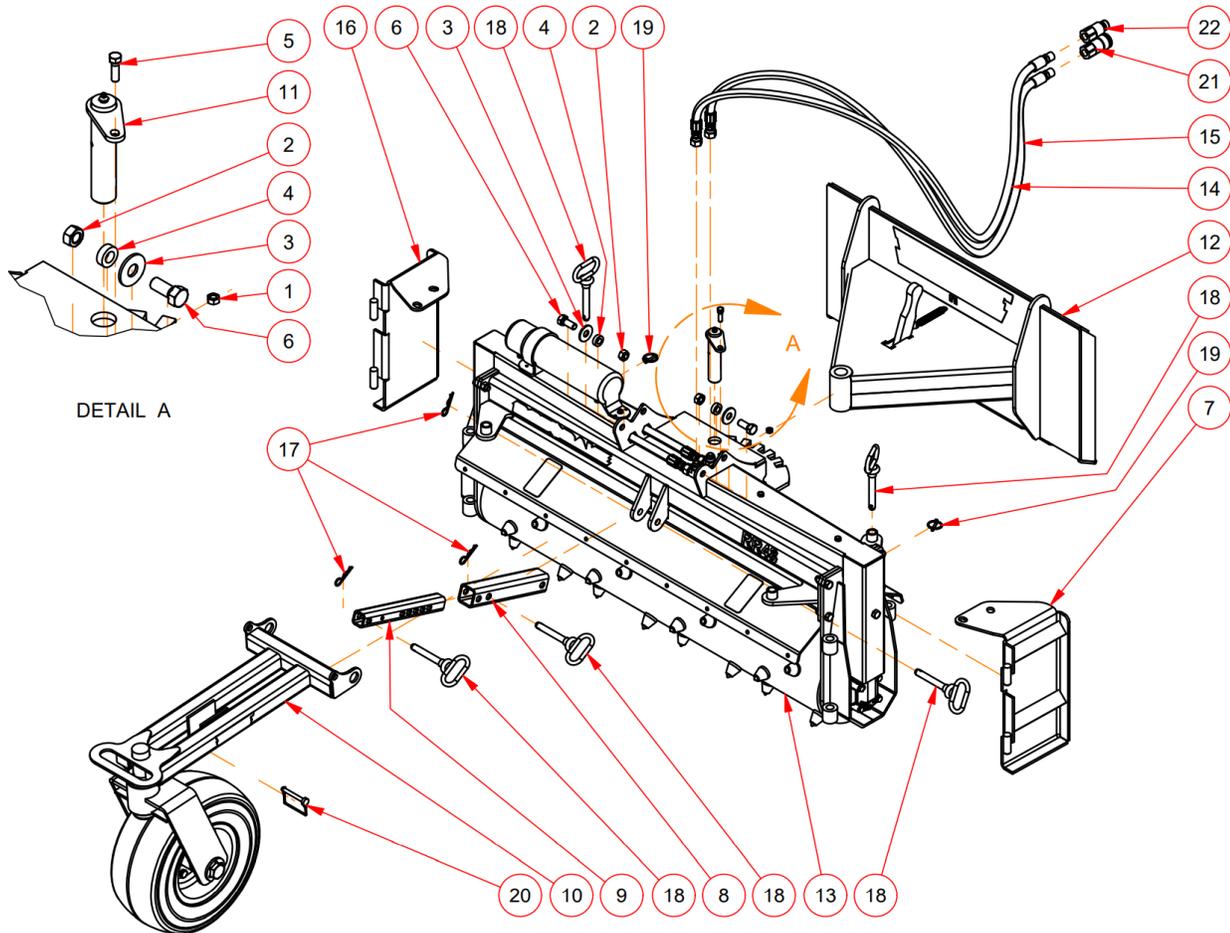
- Be sure the area is clear of all bystanders
- Refer to the prime mover starting instructions
- Lower ROTO-RAKE to ground, putting skid steer arms in float position.
- For leveling control, you want the weight on the wheels of the Roto-Rake
- Tip the bucket cylinders of the skid steer until tips of rotor are at desired depth.

GROUND SPEED:

- Travel speed is governed by the condition of the surface being graded.
- The deeper the cut made, and the harder the material is, the more power is required and the speed has to be reduced accordingly.

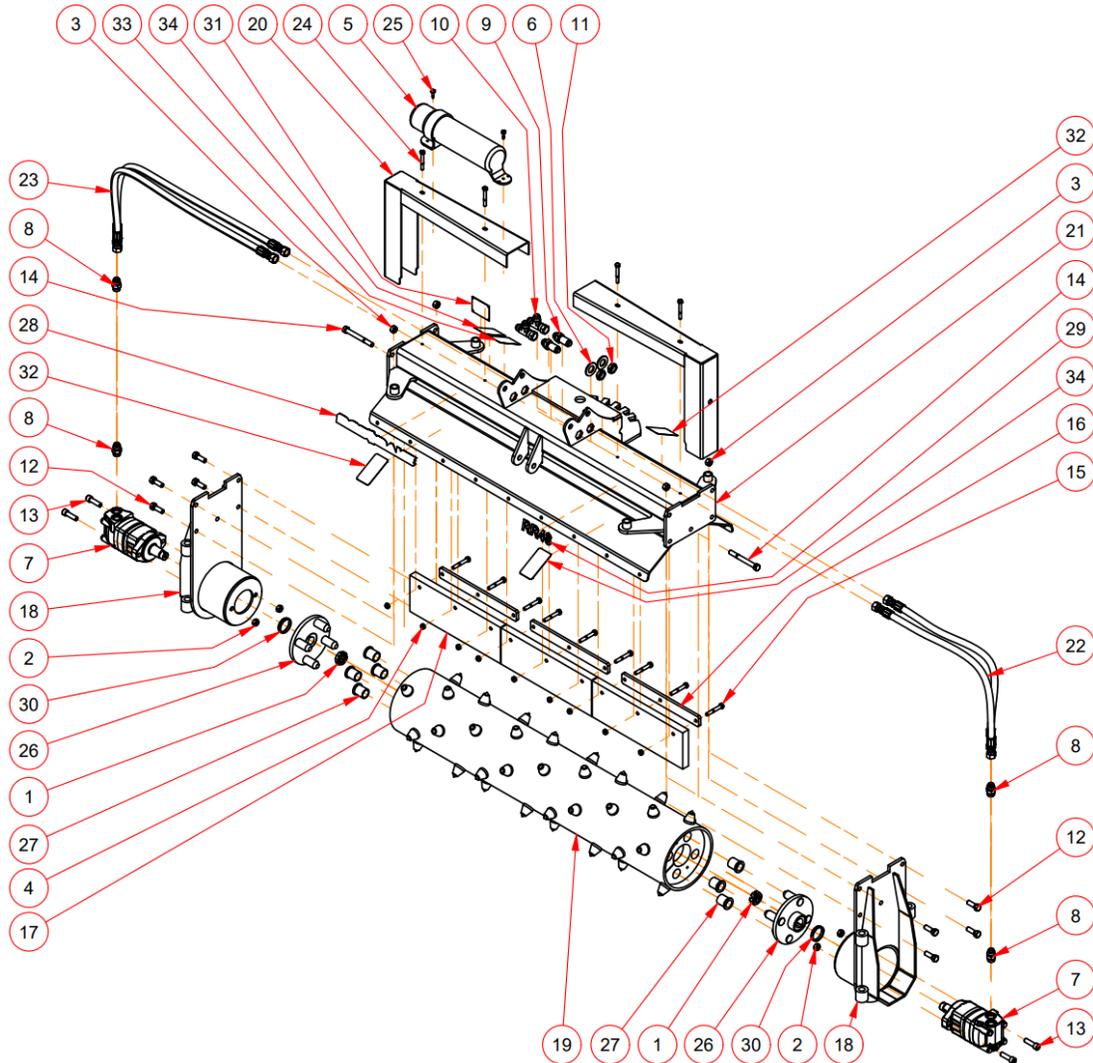
RR48 Parts

RR48 MAIN ASSEMBLY



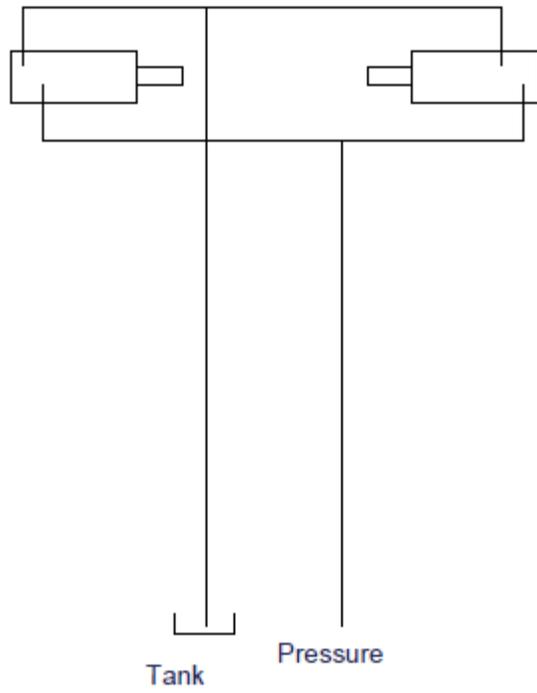
Parts List				Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION	ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	38CLN	NC Lock Nut	13	1	114823	Roto Rake 48
2	2	58CLN	NC Lock Nut	14	1	114867	Hydraulic Hose H24508-08U610-08U610-55
3	2	58F	Flat Washer	15	1	114869	Hydraulic Hose H24508-08U610-08U610-55
4	2	5100	Bushing	16	1	122412	Side Gate Left Assembly
5	1	38114	Hex Bolt	17	3	383503	COTTERS, HAIRPIN
6	2	58112	Hex Bolt	18	5	384502	Draw Pin 58
7	1	100183	Side Gate Assembly	19	2	385501	3/16 Lynch Pin
8	1	114742	Slider Tube	20	1	387113	Pin
9	1	114743	Slider Tube Inner	21	1	FEM501-28FP	Female Flat Face Coupler
10	1	114805	Wheel Attachment	22	1	FEM502-28FP	Male Flat Face Coupler
11	1	114816	Pin				
12	1	114820	Base Swivel Frame				

RR48 ROTO-ASSMBLY

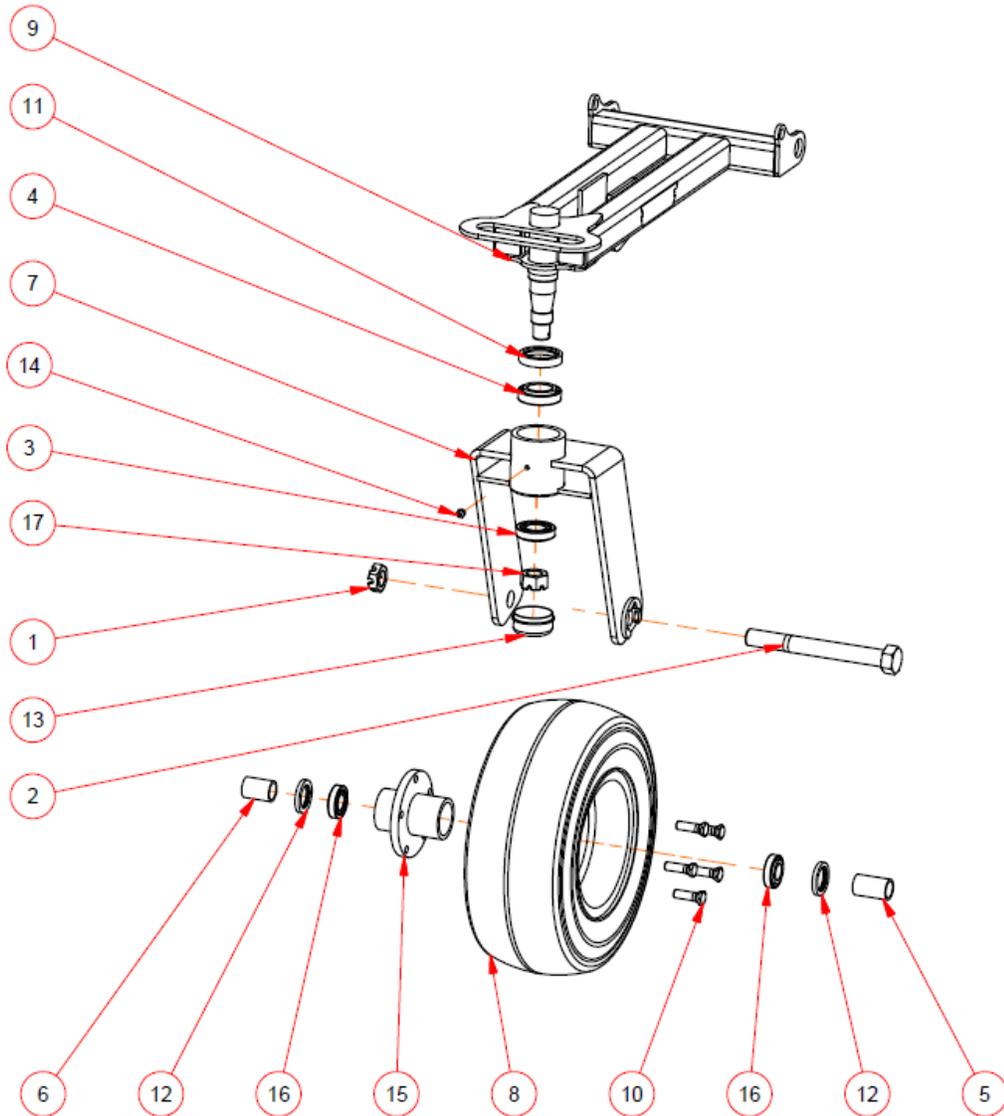


Parts List				Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION	ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	SJ-114	Slotted Hex Nut	19	1	114822	Rotor 48
2	4	12CLN	NC Lock Nut	20	2	114824	Hose Shield Side 48
3	8	12N	Hex Nut	21	1	114826	Roto Rake Frame Weldment 48
4	9	38CLN	NC Lock Nut	22	2	114843	Hydraulic Hose H24508-08U610-08U610-30
5	1	67.222.000	Manual Holder	23	2	114858	Hydraulic Hose H24508-08U610-08U610-40
6	2	78FL	BP Flat Washer	24	4	516212	Hex Bolt
7	2	104-4216-006	Hyd Motor 2000 Tapered Shaft 4.9 in	25	2	2167121	Self Drilling 14x1 Metal Screw
8	4	5315*10	Fitting	26	2	HRG04	Rotor Drive Adaptor Weldment
9	2	5325*10	Bulkhead JIC Union	27	8	MF1-1620-24	Igus bushing
10	2	5706*10	Swivel Nut Run Tee	28	1	RD132	Roto-Rake Decal
11	2	5924*10	Nut Bulkhead 7/8 14	29	1	RD133	RR48 Decal
12	8	12112	Hex Bolt	30	2	RVA-045	Oil Seal
13	4	12134CSH	Socket Head	31	1	Serial	Serial # Plate
14	2	12412	Hex Bolt	32	2	WD111	Danger to Feet - Stay Clear of Front! Decal
15	9	38212NC	BP NC Hex Bolt	33	1	WD112	WARNING - Read Manual Decal
16	3	113079	Plate	34	2	WD116	WARNING Flying Object Decal
17	3	114712	Rubber				
18	2	114814	Hyd Motor Mount RR48				

RR48 SCHEMATIC

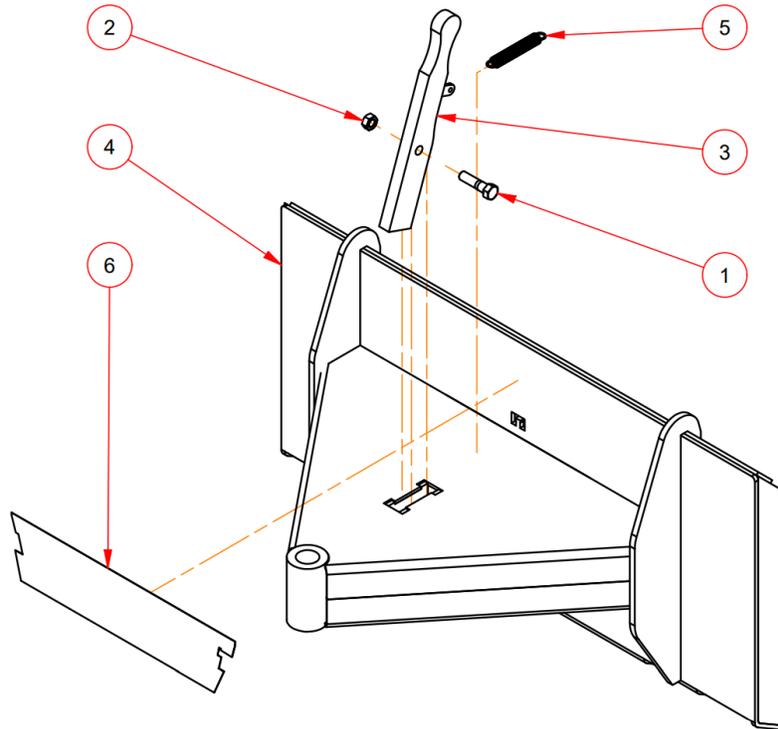


RR48 WHEEL ASSEMBLY



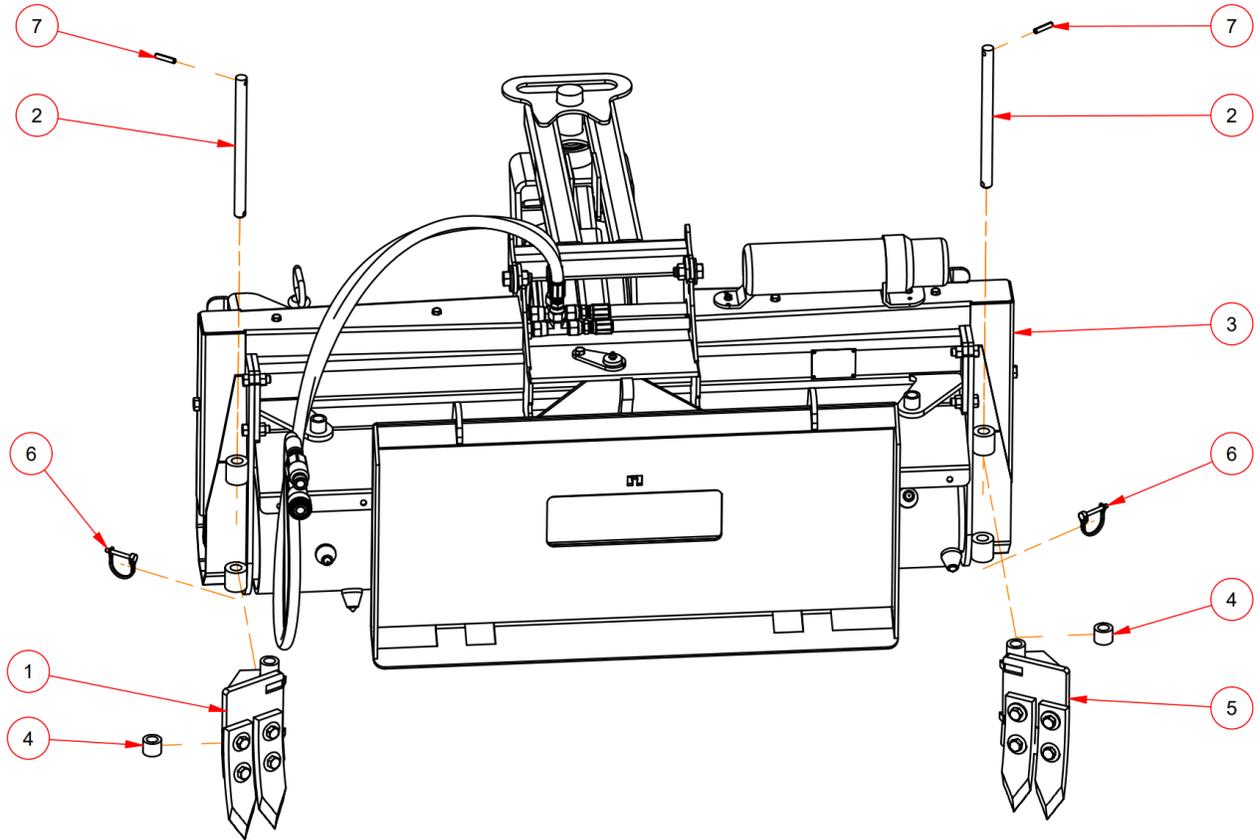
Parts List				Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION	ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	SJ-114	Slotted Hex Nut	9	1	114806	Wheel Attachment Frame
2	1	1-9NF	BP NF Hex Bolt	10	5	500-20	Wheel bolt Bolt
3	1	1.25 x 2.328 x 0.625 - LM67045 LM67010	Tapered Roller Bearing	11	1	CR17415	SEAL
4	1	1.5 x 2.5625 x 0.71 - LM29749 LM29710X	Tapered Roller Bearing	12	2	CR523696	Seal
5	1	107106	Spacer L	13	1	D4000	Dust Cap
6	1	107107	Spacer S	14	1	GF	1/8 NPT ST Zerk
7	1	107233	Swivel Wheel Weldment	15	1	H010005450	Hub
8	1	108110	Wheel 16.5x8 5 on 4.5	16	2	L44643 L44610	Tapered Roller Bearing
				17	1	SJ-114	Slotted Hex Nut

RR48 MINI SKID STEER SWIVEL FRAME ASSEMBLY



Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	12*2	Hex Bolt
2	1	12CLN	NC Lock Nut
3	1	100185	Roto Rake Swivel Lock Lever
4	1	114819	Base Swivel Frame Weldment
5	1	114841	Spring TE1588-203-1016
6	1	RD105	Reist Decal

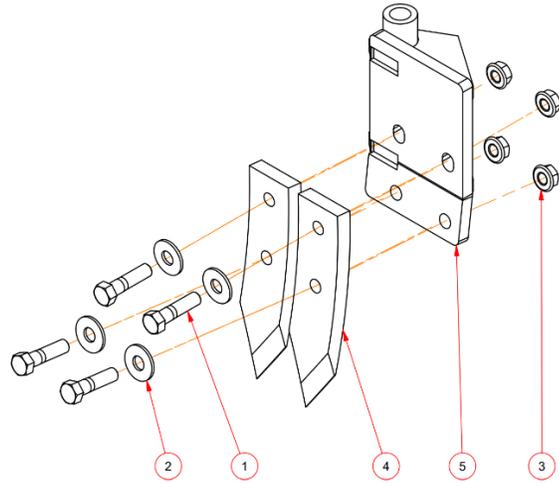
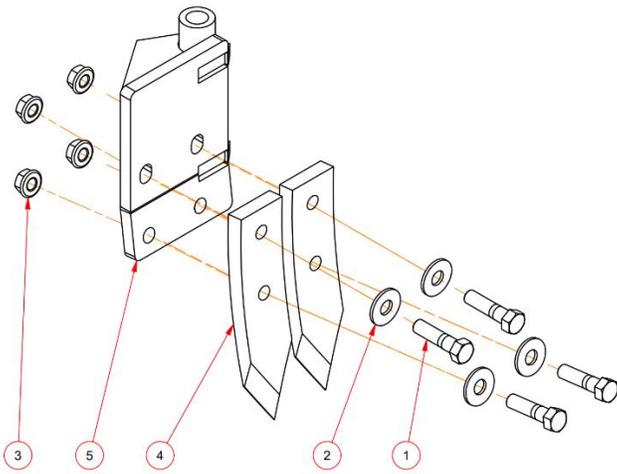
OPTIONAL SIDE CUTTERS - RRSCK



Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	100192	Plow Attachment
2	2	100193	Pin
3	1	114823	Roto Rake 48
4	2	120359	Spacer Bushing
5	1	123311	Plow Attachment Left
6	2	387104	Snapper Pin 1/4 x 1-3/8
7	2	516112RP	5/16 x 1-1/2 Roll Pin

Note: Item #4 120359-Spacer Bushing can be placed above or below the Plow Attachments depending on the depth of cut desired.
Side gates and optional side cutters can be exchanged depending on direction of travel.

OPTIONAL PLOW ATTACHMENT ASSEMBLY



Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	4	12*2	Hex Bolt
2	4	12F	Flat Washer
3	4	12FSLN	Flange Nut
4	2	1009	5/8x2 Spike Tooth
5	1	104898	Plow Weldment

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	4	12*2	Hex Bolt
2	4	12F	Flat Washer
3	4	12FSLN	Flange Nut
4	2	1009	5/8x2 Spike Tooth
5	1	123310	Plow Weldment Left

WARRANTY INFORMATION

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 Industries Inc. 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 manufacturer's recommendations, damaged by negligence or if maintenance has not been carried out as specified.

THIS WARRANTY IS NOT TRANSFERABLE

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