

Transport Box for Self-Propelled Windrower



Operator Manual



Includes installation, operating, adjustment, maintenance, technical, repair parts and safety instructions for the Windrow Pickup Attachment 96A.

Please retain this document for future reference.

RCI Engineering LLC
RC062087 DRAFT (30 June 2009)
www.RCIengineering.com

RCI Engineering LLC

New Attachments for Agricultural Equipment Warranty Statement

RCI Engineering LLC, hereinafter referred to as RCI, warrants new RCI attachments, to the Original Retail Purchaser to be free from defects in material and workmanship for a period of one (1) year from the date of sale.

RCI warranty includes:

Genuine RCI parts costs required to repair or replace equipment at the selling dealer's business location.

RCI MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED (INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE), EXCEPT AS EXPRESSLY STATED IN THIS WARRANTY STATEMENT.

RCI WARRANTY DOES NOT INCLUDE:

1. Transportation to the selling dealer's business location or, at the option of the Original Retail Purchaser, the cost of a service call.
2. Freight costs above standard shipping costs for the replacement parts.
3. Labor to make the repair or installation of the failed component.
4. Used equipment.
5. Components covered by their own non-RCI warranties, such as tires and trade accessories.
6. Repairs or adjustments caused by: improper use; non-intended use; failure to follow recommended maintenance procedures; use of unauthorized attachments; accident or other casualty.
7. Liability for incidental or consequential damages of any type, including, but not limited to lost profits or expenses of acquiring replacement equipment or damage to machines to which the attachment is installed.

No agent, employee, or representative of RCI has any authority to bind RCI to any warranty except as specifically set forth herein. Any of these limitations excluded by local law shall be deemed deleted from this warranty; all other terms will continue to apply.

Transport Box



Intended Use:

For transporting the John Deere SPW when the header or platform is removed.

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Product Setup

Assemble the unit as follows:

- 1/ Remove top covers of transport box.
- 2/ Remove all parts and packaging material from inside transport box.
- 3/ Install spindles in cross tube of unit. Install hardware from top-down and tighten properly. Grease spindles after installation.
- 4/ Install tires on unit and inflate to rated pressure as indicated on the tire sidewall.
- 5/ Install hitch at front using supplied hardware.
- 6/ Install light brackets as shown below in Figure 1. Adjust tension of bolt to allow for proper securing of light bar but tension low enough to allow moving the light bar to a raised position if needed. Red decal is to be oriented towards the side of the transport box that mounts to the front of the windrower.

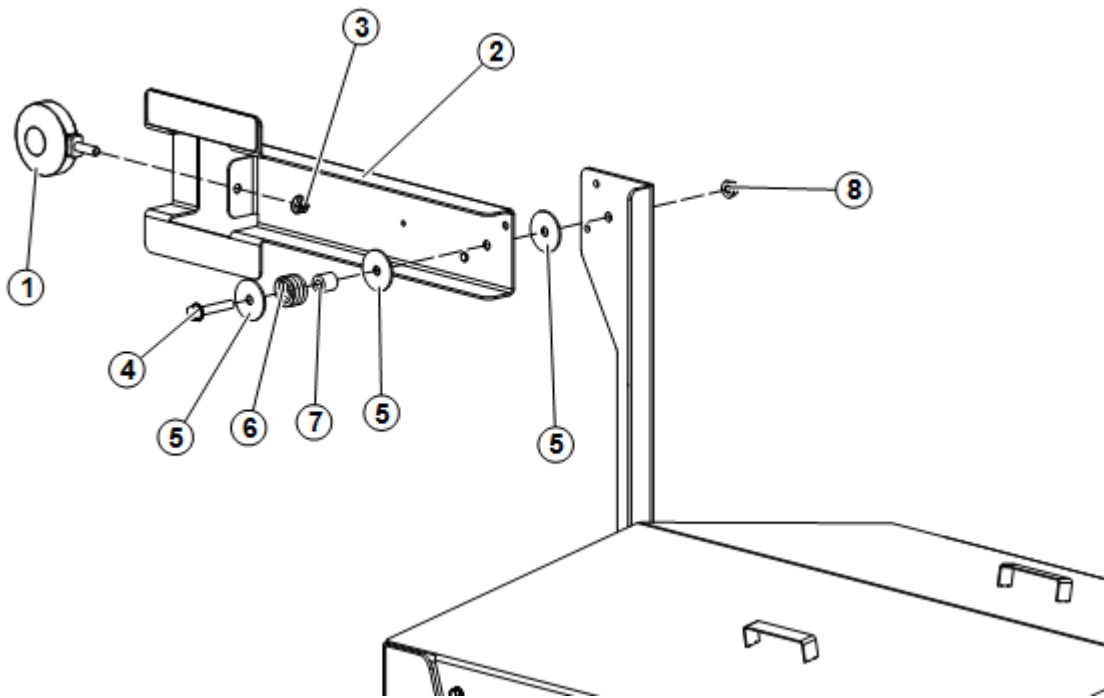


Figure 1. Light Bar Assembly

Key 1 - Light
Key 5 - Washer

Key 2 - Bar
Key 6 - Spring

Key 3 - Nut
Key 7 - Bushing

Key 4 - Bolt
Key 8 - Nut

7/ With the cover removed, fill the transport box with sand to necessary capacity.

IMPORTANT: To calculate necessary capacity, multiply the weight of the platform removed and multiply by 1.2.

WARNING: DO NOT EXCEED 8,000 LBS (3,630 kg) OF GROSS TRANSPORT BOX WEIGHT.

When filling the transport box with sand, fill the front of the transport box more than the rear and weigh the jack stand to determine the tongue weight of the trailer. The weight at the jack stand is approximately double the tongue weight. Do not exceed 1,000 lbs (454 kg) of tongue weight.

IMPORTANT: The jack is used only when connecting the unit to a vehicle with the hitch. When mounting the transport box, the jack stands are used. Failure to raise the jack stand before attaching to the windrower may result in jack damage due to side loading.

Install the covers on the transport box.

Checklist:

- Transport box has been setup according to the instructions included with the unit.
- Both grease fittings have been lubricated.
- All guards, shields, and safety decals are in place, securely fastened, and operate correctly
- All nuts and bolts have been tightened
- Record all applicable warranty information

I acknowledge that the pre-delivery service was preformed and the unit is ready for delivery to the customer.

Dealership's Name Representative Date

Model Number Serial Number Date Sold

Owner's Name and Address
Name _____

Address _____

City, State, Zip _____

Delivery Checklist

The following items must be performed when delivering the attachment to the customer. Check off each item as it is performed.

- Provide the customer with the operating manual and instruct the customer to read prior to operating the unit.
- Review and explain all safety information and operating information.
- Review and explain maintenance and lubrication schedule that is required to ensure proper operation and long life.
- Show how to properly install the unit on the self-propelled windrower.
- Explain the limitations of ground speed for transport and explain safe practices of operating machines with the transport box.
- Make it be known that the customer can visit or call to discuss any questions or problems may be encountered.
- Complete the Owner's registration with the customer, ensure it is completely filled out, and return a copy to RCI Engineering LLC.

Date Delivered

Signature

Safe Operation of Machine

Operator Authorization

The machine owner *must* provide the operator of the machine this manual and ensure that the operator reads and understands the contents. This *must* be performed before the machine is put into operation.

Safety Alert Symbol



This safety alert symbol is used to alert the operator to the potential for personal injury. Whenever this symbol is noticed in this manual or on the machine, be alert to the situation and read the message near the symbol. Always be alert for the potential for personal injury.

General Safety Precautions / Accident Prevention

Before operation of the machine each time, check the entire machine for operational safety.

- 1/ Read Operator's Manual completely before transporting unit.
- 2/ Do not tow unit with a vehicle weighing less than 10,000 lbs (4535 kg).
- 3/ Use rear stand and jack to stabilize unit prior to removal from traction unit.
- 4/ Secure all pins and hitch chain in transport position.
- 5/ Do not tow at speeds greater than 15 mph (24 km/h).
- 6/ Reduce speeds for corners and slippery or rough conditions.
- 7/ Obey all applicable highway traffic regulations when transporting unit on public roads.
- 8/ Use slow moving emblem and flashing warning lights of vehicle when transporting unit unless prohibited by law.

Safety Warning Signs

Safety Messages

Whenever the words and symbols shown below are used in this manual or on the machine, the instructions **MUST** be followed as they relate to personal safety.

DANGER in white letters on a red background indicates an imminently hazardous situation that, if not avoided, will cause death or very serious injury.

WARNING in black letters on an orange background indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION in black letters on a yellow background

Safety Sign Locations

One safety sign is located on the transport box at the hitch end of the unit.

See Figure 2 for location information.



Figure 2. Safety Sign Location
Key 1 - Safety Sign

Machine Transport

For connection to the self-propelled windrower:

1/ Ensure the transport box is resting with both jack stands in the lowered position.

IMPORTANT: The jack should be in the transport position and is not used when connecting the transport box to the self-propelled windrower. Failure to do so can result in jack damage due to side loads.

2/ Connect lift arms of the self-propelled windrower to the pins at the ends of the transport box.

3/ Connect the center link to the slot at the center of the weight box.

4/ Connect the wire harness to the connector at the multi-coupler.

5/ Raise the transport box to transport position.

6/ Raise the jack stands.

7/ Level the transport box.

8/ Verify warning light function.

For connection to a towing vehicle via hitch:

1/ Place the jack stand at the side of the unit and use the jack to adjust the hitch height to connect to the hitch of the vehicle. Raise the front jack stand when appropriate. Raise the rear jack as appropriate if it interferes when raising the hitch.

2/ Connect to the vehicle using proper hitch pin and secure safety chain.

3/ Remove the jack stand and place in the transport position above the hitch.

3/ Raise light bars to avoid interference with the back of the towing vehicle.

4/ Follow safety warnings for proper transport (see Page 8).

Maintenance

Grease wheel hubs regularly as transport conditions require.

Check tire pressures each time the transport box is used.

Bolt and Screw Torque Values

Unified Inch Bolt and Screw Torque Values



Bolt or Screw	SAE Grade 1				SAE Grade 2 ^a				SAE Grade 5, 5.1 or 5.2				SAE Grade 8 or 8.2			
	Lubricated ^b		Dry ^c		Lubricated ^b		Dry ^c		Lubricated ^b		Dry ^c		Lubricated ^b		Dry ^c	
Size	N·m	lb-in	N·m	lb-in	N·m	lb-in	N·m	lb-in	N·m	lb-in	N·m	lb-in	N·m	lb-in	N·m	lb-in
1/4	3.7	33	4.7	42	6	53	7.5	66	9.5	84	12	106	13.5	120	17	150
													N·m	lb-ft	N·m	lb-ft
5/16	7.7	68	9.8	86	12	106	15.5	137	19.5	172	25	221	28	20.5	35	26
									N·m	lb-ft	N·m	lb-ft				
3/8	13.5	120	17.5	155	22	194	27	240	35	26	44	32.5	49	36	63	46
			N·m	lb-ft	N·m	lb-ft	N·m	lb-ft								
7/16	22	194	28	20.5	35	26	44	32.5	56	41	70	52	80	59	100	74
	N·m	lb-ft														
1/2	34	25	42	31	53	39	67	49	85	63	110	80	120	88	155	115
9/16	48	35.5	60	45	76	56	95	70	125	92	155	115	175	130	220	165
5/8	67	49	85	63	105	77	135	100	170	125	215	160	240	175	305	225
3/4	120	88	150	110	190	140	240	175	300	220	380	280	425	315	540	400
7/8	190	140	240	175	190	140	240	175	490	360	615	455	690	510	870	640
1	285	210	360	265	285	210	360	265	730	540	920	680	1030	760	1300	960
1-1/8	400	300	510	375	400	300	510	375	910	670	1150	850	1450	1075	1850	1350
1-1/4	570	420	725	535	570	420	725	535	1280	945	1630	1200	2050	1500	2600	1920
1-3/8	750	550	950	700	750	550	950	700	1700	1250	2140	1580	2700	2000	3400	2500
1-1/2	990	730	1250	930	990	730	1250	930	2250	1650	2850	2100	3600	2650	4550	3350

Torque values listed are for general use only, based on the strength of the bolt or screw. **DO NOT** use these values if a different torque value or tightening procedure is given for a specific application. For plastic insert or crimped steel type lock nuts, for stainless steel fasteners, or for nuts on U-bolts, see the tightening instructions for the specific application. Shear bolts are designed to fail under predetermined loads. Always replace shear bolts with identical grade.

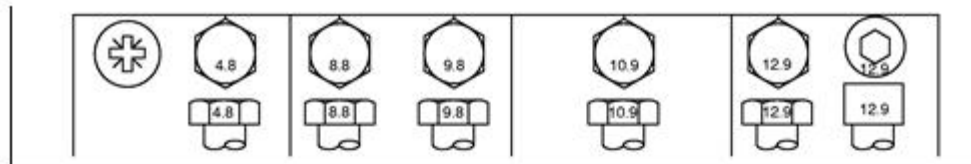
Replace fasteners with the same or higher grade. If higher grade fasteners are used, tighten these to the strength of the original. Make sure fastener threads are clean and that you properly start thread engagement. When possible, lubricate plain or zinc plated fasteners other than lock nuts, wheel bolts or wheel nuts, unless different instructions are given for the specific application.

^aGrade 2 applies for hex cap screws (not hex bolts) up to 6 in. (152 mm) long. Grade 1 applies for hex cap screws over 6 in. (152 mm) long, and for all other types of bolts and screws of any length.

^b"Lubricated" means coated with a lubricant such as engine oil, fasteners with phosphate and oil coatings, or 7/8 in. and larger fasteners with JDM F13C zinc flake coating.

^c"Dry" means plain or zinc plated without any lubrication, or 1/4 to 3/4 in. fasteners with JDM F13B zinc flake coating.

Metric Bolt and Screw Torque Values



Bolt or Screw	Class 4.8				Class 8.8 or 9.8				Class 10.9				Class 12.9			
	Lubricated ^a		Dry ^b		Lubricated ^a		Dry ^b		Lubricated ^a		Dry ^b		Lubricated ^a		Dry ^b	
Size	N·m	lb-in	N·m	lb-in	N·m	lb-in	N·m	lb-in	N·m	lb-in	N·m	lb-in	N·m	lb-in	N·m	lb-in
M6	4.7	42	6	53	8.9	79	11.3	100	13	115	16.5	146	15.5	137	19.5	172
									N·m	lb-ft	N·m	lb-ft	N·m	lb-ft	N·m	lb-ft
M8	11.5	102	14.5	128	22	194	27.5	243	32	23.5	40	29.5	37	27.5	47	35
			N·m	lb-ft	N·m	lb-ft	N·m	lb-ft								
M10	23	204	29	21	43	32	55	40	63	46	80	59	75	55	95	70
	N·m	lb-ft														
M12	40	29.5	50	37	75	55	95	70	110	80	140	105	130	95	165	120
M14	63	46	80	59	120	88	150	110	175	130	220	165	205	150	260	190
M16	100	74	125	92	190	140	240	175	275	200	350	255	320	235	400	300
M18	135	100	170	125	265	195	330	245	375	275	475	350	440	325	560	410
M20	190	140	245	180	375	275	475	350	530	390	675	500	625	460	790	580
M22	265	195	330	245	510	375	650	480	725	535	920	680	850	625	1080	800
M24	330	245	425	315	650	480	820	600	920	680	1150	850	1080	800	1350	1000
M27	490	360	625	460	950	700	1200	885	1350	1000	1700	1250	1580	1160	2000	1475
M30	660	490	850	625	1290	950	1630	1200	1850	1350	2300	1700	2140	1580	2700	2000
M33	900	665	1150	850	1750	1300	2200	1625	2500	1850	3150	2325	2900	2150	3700	2730
M36	1150	850	1450	1075	2250	1650	2850	2100	3200	2350	4050	3000	3750	2770	4750	3500

Torque values listed are for general use only, based on the strength of the bolt or screw. **DO NOT** use these values if a different torque value or tightening procedure is given for a specific application. For stainless steel fasteners or for nuts on U-bolts, see the tightening instructions for the specific application. Tighten plastic insert or crimped steel type lock nuts by turning the nut to the dry torque shown in the chart, unless different instructions are given for the specific application.

Shear bolts are designed to fail under predetermined loads. Always replace shear bolts with identical property class. Replace fasteners with the same or higher property class. If higher property class fasteners are used, tighten these to the strength of the original. Make sure fastener threads are clean and that you properly start thread engagement. When possible, lubricate plain or zinc plated fasteners other than lock nuts, wheel bolts or wheel nuts, unless different instructions are given for the specific application.

^a"Lubricated" means coated with a lubricant such as engine oil, fasteners with phosphate and oil coatings, or M20 and larger fasteners with JDM F13C zinc flake coating.

^b"Dry" means plain or zinc plated without any lubrication, or M6 to M18 fasteners with JDM F13B zinc flake coating.

Repair Parts

General Comments

The following pages include information regarding parts for the RCI Transport Box. Right or left hand parts are determined by sitting in the operator's seat facing forward. The abbreviation "A.R." in the "USED" column indicates "As Required." This is because a different number of the specific component may be needed for proper assembly depending on the tolerance of the individual machine.

Replacement Hardware

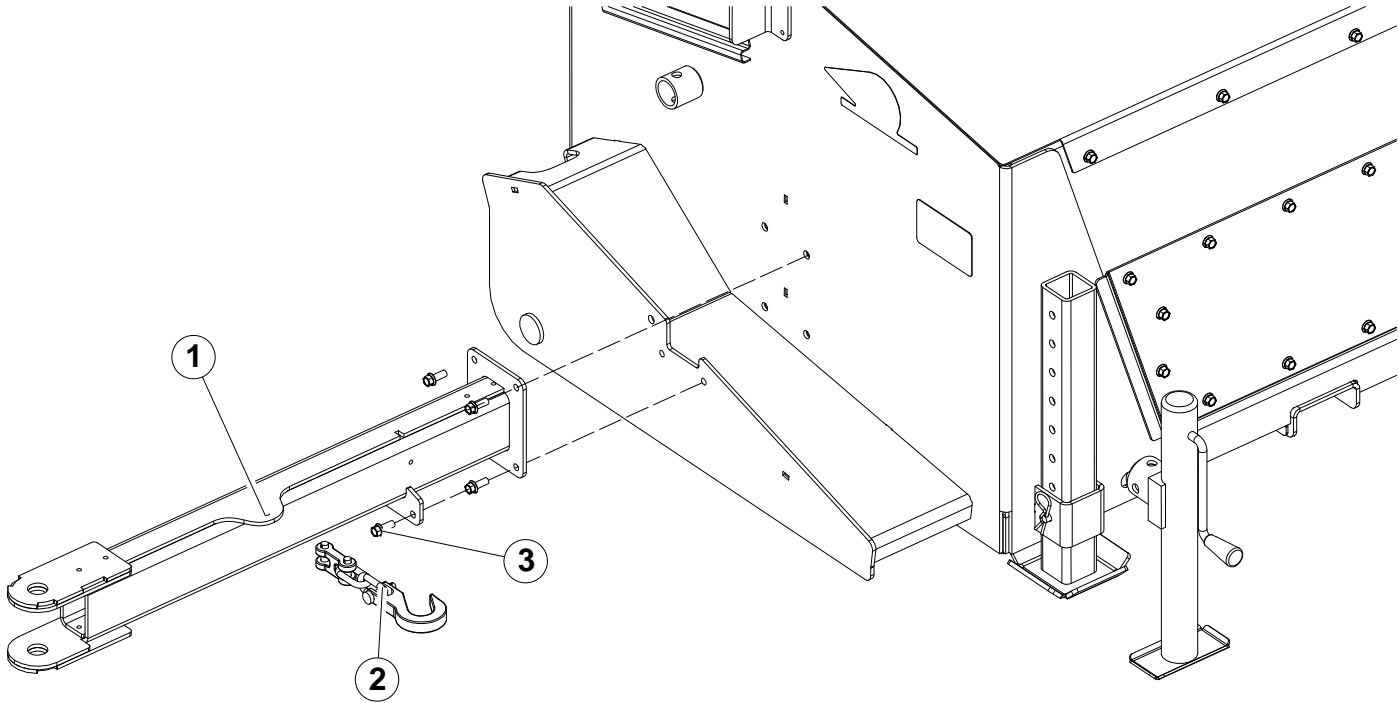
All bolts, cap screws, washers and machine screws are grade 8.8 and zinc plated unless markings on the part indicate otherwise. Flange bolts and flange nuts are metric grade 8.8 and zinc plated unless markings on the part indicate otherwise.

The use of improper hardware in any location can result in the failure of the component fastened with the hardware or related structures, and can cause personal injury, further damage to the product, or loss of property.

Replacement Parts

Replacement parts may have occasional differences to the parts being replaced. This difference is typically providing the benefit of a design change made after the release of this publication.

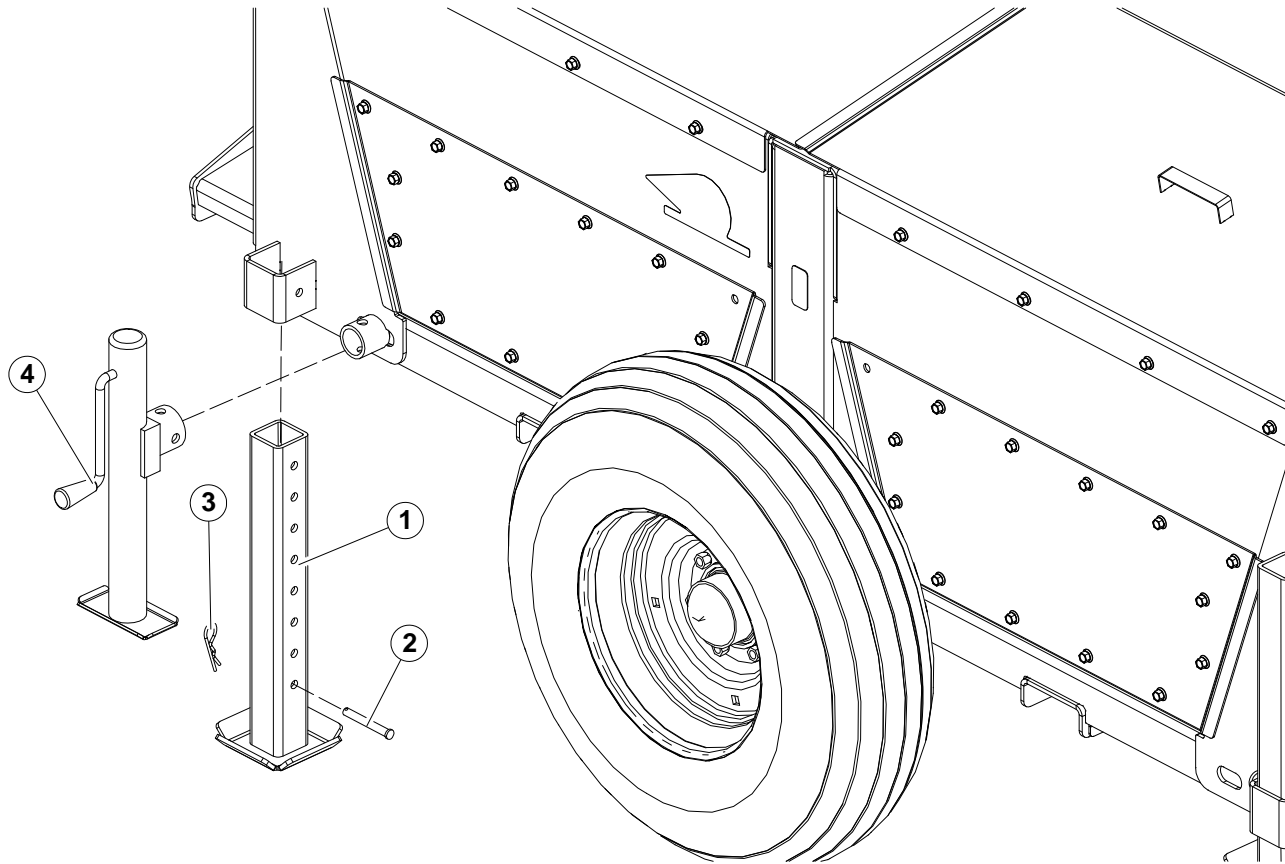
HITCH



Key	Part No.	Description	Qty	Comments
1	RC062030	Hitch	1	
2	RC062038	Chain, Tow	1	

Key	Part No.	Description	Qty	Comments
3	0161832	M10-25 Flange Bolt	6	

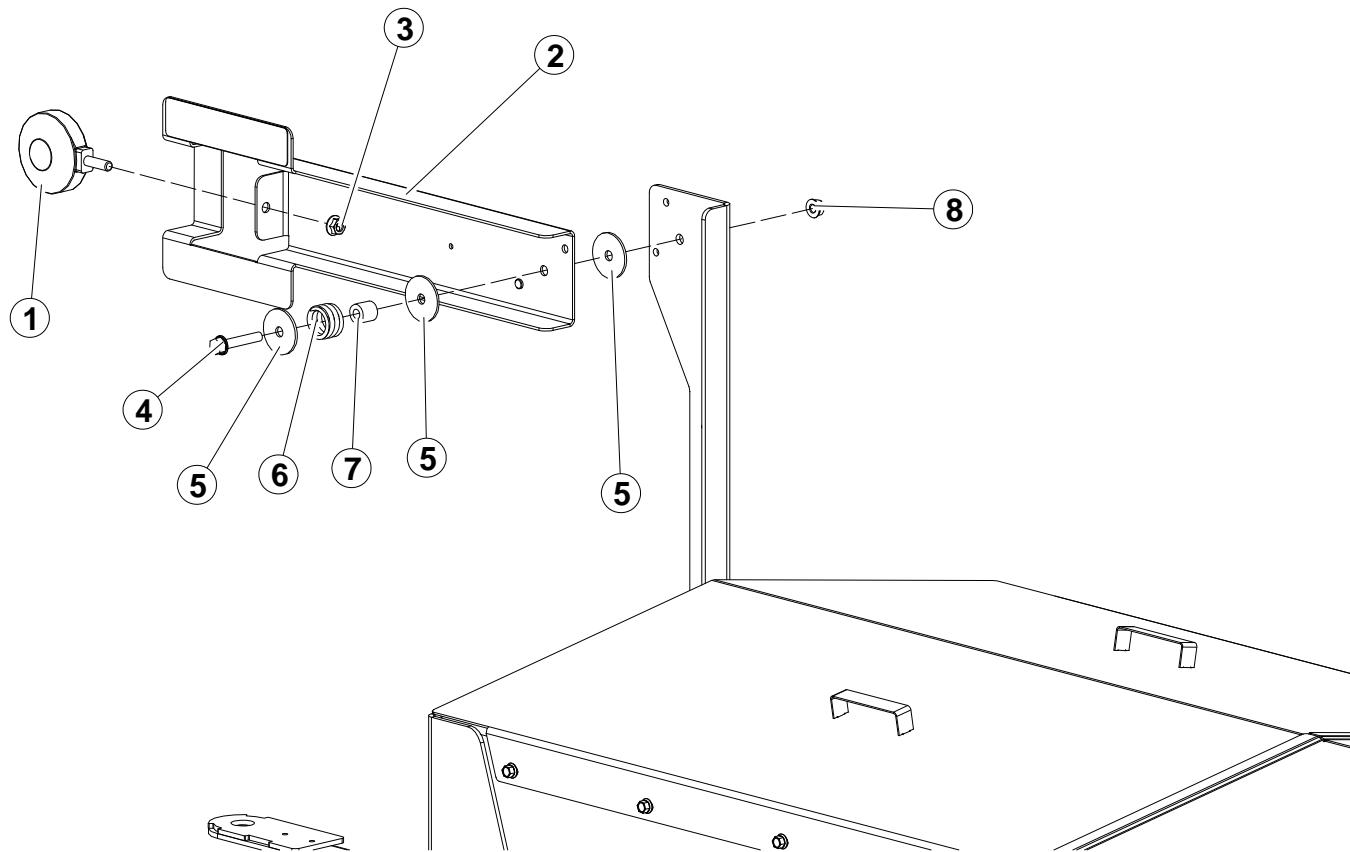
JACK STAND AND JACK



Key	Part No.	Description	Qty	Comments
1	RC062076	Stand	2	
2	66097	7/16 X 3 1/2 Clevis Pin	2	
3	45286	Hitch Pin	2	

Key	Part No.	Description	Qty	Comments
4	RC062039	Stand, Jack	1	

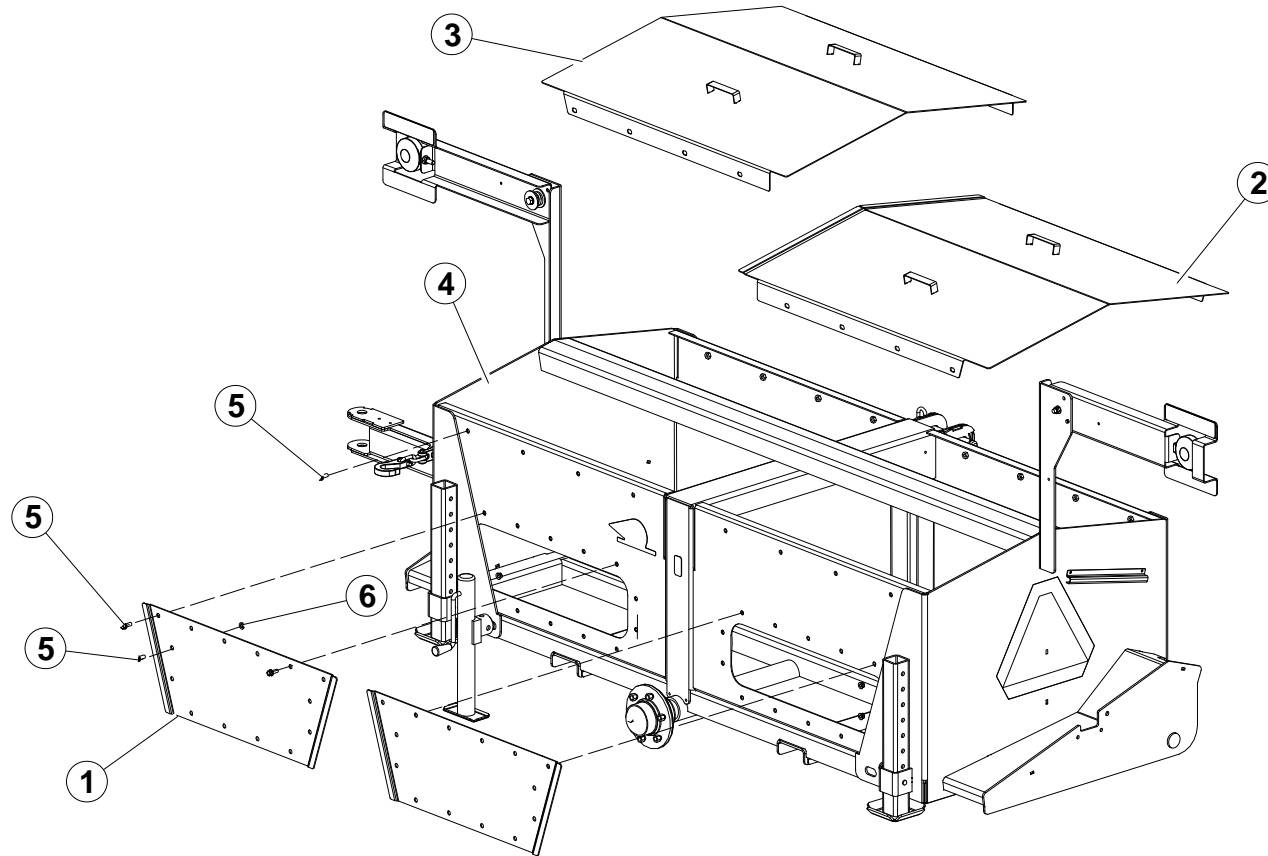
WARNING LIGHT



Key	Part No.	Description	Qty	Comments
1	RC062051	Light, Warning	2	
2	RC062067	Bar, Light	2	
3	36160	1/2-20 Flange Nut	2	
4	0161848	Bolt, M12 x 70 Flange Head	2	
5	RC062064	Washer	6	

Key	Part No.	Description	Qty	Comments
6	RC062066	Spring	2	
7	RC062065	Bushing	2	
8	90703	M12 Flange Nut	2	

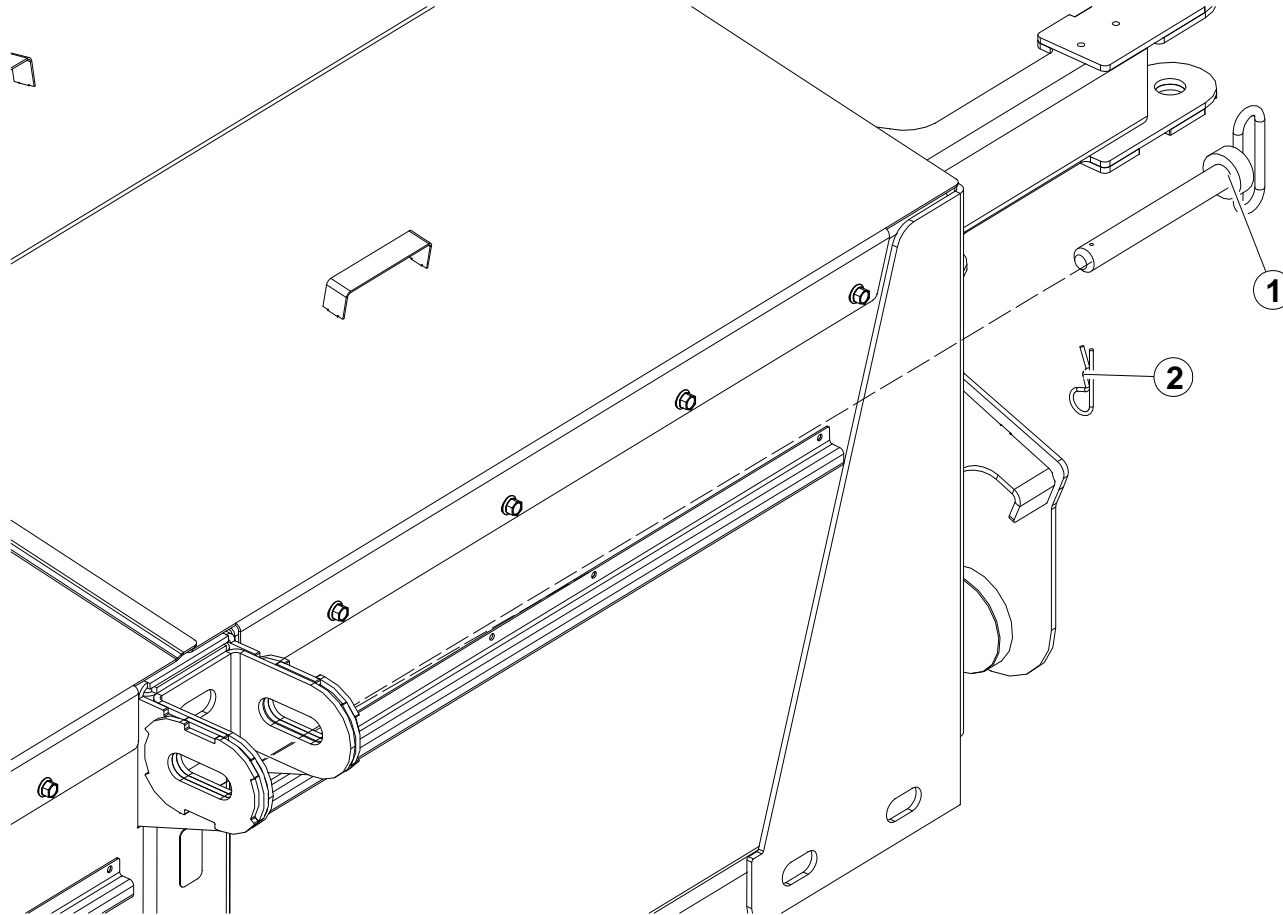
COVERS



Key	Part No.	Description	Qty	Comments
1	RC062072	Cover	2	
2	RC062081	Cover	1	
3	RC062082	Cover	1	
4	RC062002	Weldment, Main Frame	1	

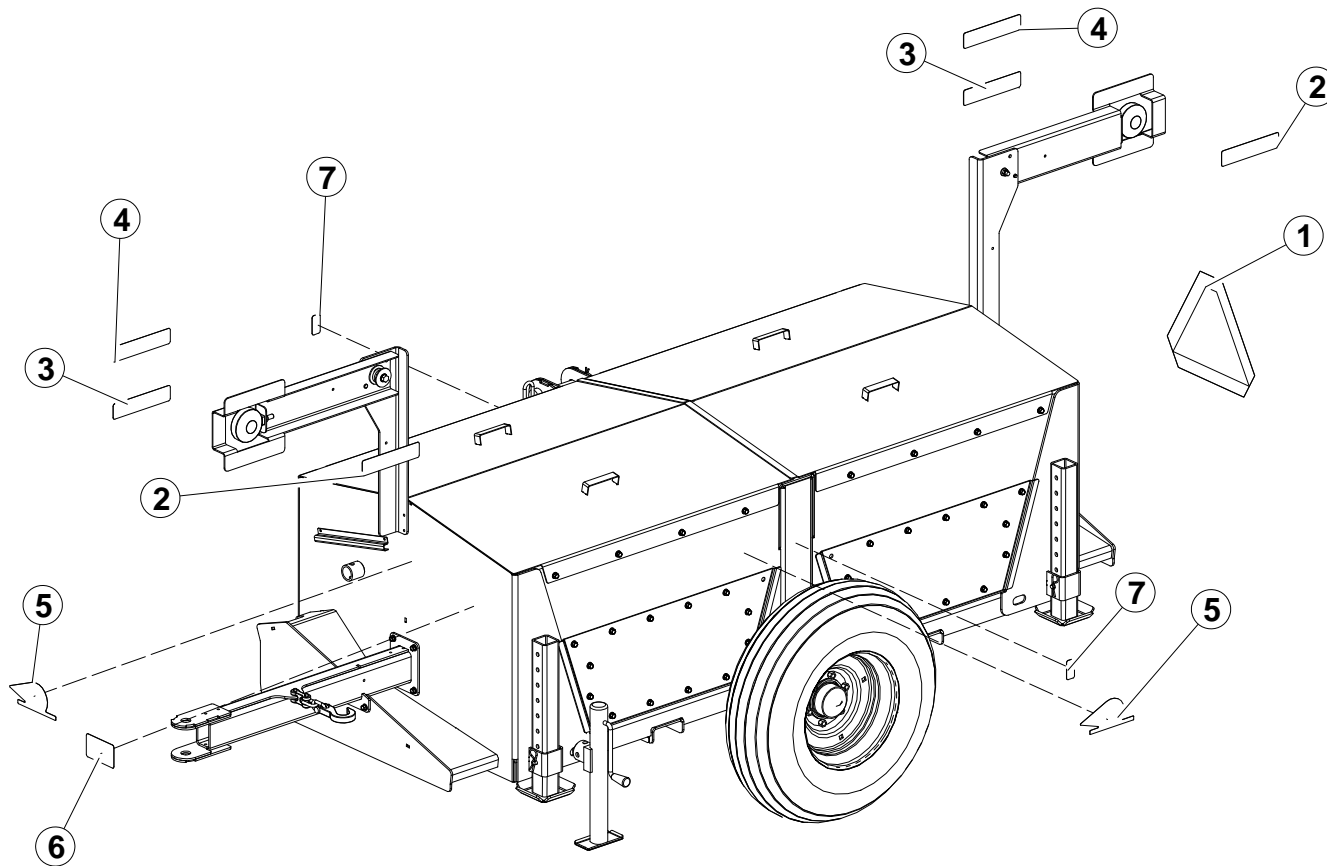
Key	Part No.	Description	Qty	Comments
5	0161832	M10-25 Flange Bolt	4	
6	90702	M10 Flange Nut	4	

PIN



Key	Part No.	Description	Qty	Comments
1	RC062056	Pin, Hitch	1	
2	45286	Hitch Pin	1	

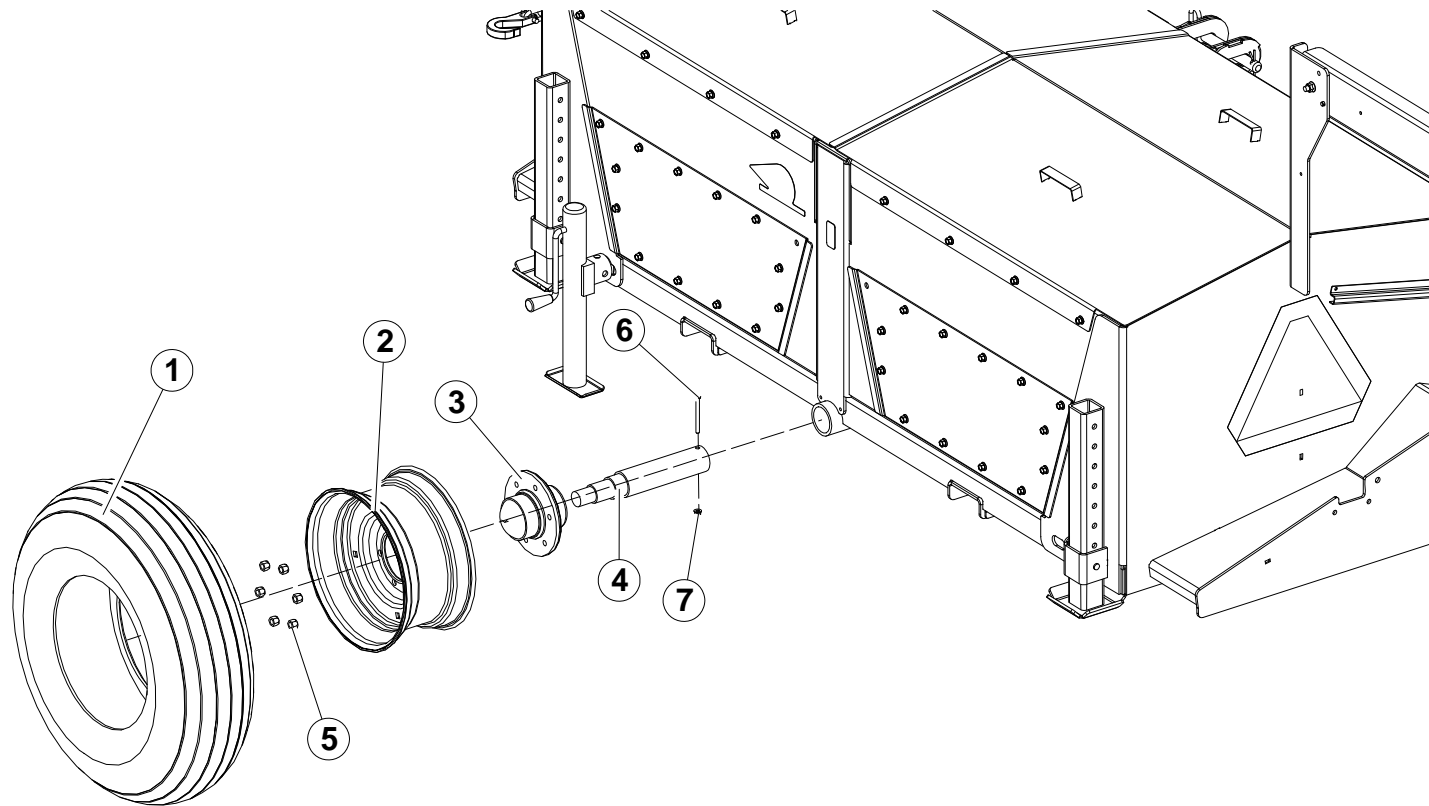
DECALS



Key	Part No.	Description	Qty	Comments
1	RC062052	Decal, SMV	1	
2	RC062053	Reflector, Amber	2	
3	RC062070	Reflector, Orange	2	
4	RC062054	Reflector, Red	2	

Key	Part No.	Description	Qty	Comments
5	RC062083	Decal, RCI	2	
6	RC062055	Decal, Caution	1	
7	RC062084	Decal, Grease	2	

WHEELS



Key	Part No.	Description	Qty	Comments
1	RC062022	Tire	2	
2	RC062021	Rim	2	
3	RC062018	Hub	2	
4	RC062017	Spindle	2	

Key	Part No.	Description	Qty	Comments
5	Lug Nut	xxxx	12	
6	0121813	M8x90 Hex Bolt	2	
7	90701	M8 Flange Nut	2	

Contact Info

970 Metalcraft Drive

Mayville, WI 53050

Phone: 920-387-9804

Fax 920-387-9806

Website: www.rciengineering.com



Warranty Claim / Policy Allowance Form

For Claims of Warranty or Policy Allowance on any product of RCI Engineering LLC, please fill in the form below. Return by email, mail, or fax and send the failed parts within 2 weeks of replacement to:

RCI Engineering LLC
Re: Warranty Claim
970 Metalcraft Drive
Mayville, WI 53050

Email: support@RCIengineering.com
Fax: 920-387-9806

Bundle Number: _____ Dealership: _____

Bundle Serial Number: _____ Contact: _____

Base Machine Model: _____ Phone: _____

Base Machine S/N: _____ Address: _____

Estimated Hours on Bundle: _____

Date of Failure: _____ Email: _____

Description of Failure: _____

Ship Failed Parts back to RCI Engineering LLC with a copy of this form at the following address:

RCI Engineering LLC
Re: Warranty Return
970 Metalcraft Drive
Mayville, WI 53050



970 Metalcraft Drive • Mayville, WI 53050 • 920-387-9804 • Fax 920-387-9806
Info at: www.rciengineering.com