



swisherinc.com

OWNER'S MANUAL

MODEL NO.

RBPRO48

STARTING SERIAL #:
L125-190001

IMPORTANT

Read and follow all Safety
Precautions and
Instructions before
operating this equipment.



ROAD BUSTER COMMERCIAL PRO GRAVEL GRADER



~Safety ~ Assembly~
~Operation~
~Service & Adjustment~
~Parts~

SWISHER®

MADE IN MISSOURI USA

BRINGING BACK AMERICAN MANUFACTURING

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INTRODUCTION

INTENDED USE & RECOMMENDED VEHICLES

The Road Buster Pro Gravel Grader, often referred to as a road grader or simply a grader, is primarily used in construction and maintenance to create a flat, even surface on roads, driveways, paths, parking lots, or other areas. It features hardened, adjustable teeth to break up compacted gravel and a leveling blade to spread the material evenly. Its intended use also includes:

- **Grading and Leveling:** Smoothing out gravel, dirt, or other materials to ensure a consistent surface, often for roads or building foundations.
- **Road Maintenance:** Maintaining unpaved roads by removing ruts, potholes, and uneven patches, especially in rural or construction settings.
- **Landscaping:** Preparing large areas of land by leveling soil or gravel for agricultural or aesthetic purposes.

A minimum of a 500cc ATV/UTV or a 20 HP, 500 lb. garden tractor is required to pull the grader. Four-wheel or all-wheel drive is recommended, when available, for optimal traction and performance.

Understand that The depth of ground engagement with the scarifiers depends on the vehicle type and the surface composition being refinished. Looser surfaces and vehicles with greater traction, such as heavier ATVs or tractors, allow deeper engagement. Conversely, harder-packed surfaces and lighter vehicles result in shallower engagement.

When grading an area, start with minimal scarifier engagement (1/4"–1/2"). As the ground loosens, gradually increase the scarifier depth for optimal results.

The grader's design allows the operator to add up to 100 lbs. of weight to break up tough ground when using a suitable vehicle. Place the weight in the main frame section on either side of the actuator mount and secure it firmly with straps, bolts, or other reliable methods.

LIMITED WARRANTY

The manufacturer's warranty to the original consumer purchaser is: This product is free from defects in materials and workmanship for the specified periods shown below beginning from the date of purchase by the original consumer purchaser. We will repair or replace, at our discretion, parts found to be defective due to materials or workmanship. This warranty is subject to the following limitations and exclusions:

Materials and Workmanship: 3 Years

Commercial Use:

The warranty period for this product when used for commercial or rental is limited to 1 year from the date of original purchase.

Limitation:

This warranty applies only to products which have been properly assembled, adjusted, and operated in accordance with the instructions contained within this manual. This warranty does not apply to any product of Swisher that has been subject to alteration, misuse, abuse, improper assembly or installation, shipping damage or to normal wear of product.

Exclusions:

Excluded from this warranty are normal wear items, normal or routine adjustments, and normal or routine maintenance.

In the event you have a claim under this warranty, you must return the product to an authorized service dealer. All transportation charges, damage, or loss incurred during transportation of parts submitted for replacement or repair under this warranty shall be borne by the purchaser. Should you have any questions concerning this warranty, please contact us toll-free at 1-800-222-8183. The model number, serial number, date of purchase, and the name of the authorized Swisher dealer from whom you purchased the splitter will be needed before any warranty claim can be processed.

THIS WARRANTY DOES NOT APPLY TO ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES AND ANY IMPLIED WARRANTIES ARE LIMITED TO THE SAME TIME PERIODS STATED HEREIN FOR ALL EXPRESSED WARRANTIES. Some states do not allow the limitation of consequential damages or limitations on how long an implied warranty may last, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may have other rights, which vary from state-to-state. This is a limited warranty as defined by the Magnuson-Moss Act of 1975.

SAFETY PRECAUTIONS

Understanding Safety Statements

You may find various types of safety information on the following pages and on the machine signs (decals) attached to the vehicle. This section explains their meaning.



The Safety Alert Symbol means **ATTENTION! YOUR SAFETY IS INVOLVED!**

NOTE

Means that failure to follow these instructions could cause damage to the equipment or cause it to operate improperly

NOTICE

Special notice - read and thoroughly understand



CAUTION

Caution means serious equipment or other property damage can occur if instructions on this label are not properly followed.



WARNING

Warning means serious injury or death can occur if safety measures or instructions on this label are not properly followed.



DANGER

Danger means a life-threatening situation exists. Death can occur if safety measures or instructions on this label are not properly followed.

NOTE

Make sure you read and understand the information contained in this manual and on the machine signs (decals) before you attempt to operate or maintain the SWISHER ROAD BUSTER PRO GRAVEL GRADER.

SAFETY PRECAUTIONS

IMPORTANT

- **It is the responsibility of the owner/operator to comply with all state and local laws.**
- **Read and Understand the Manual:** Before operating, thoroughly read the manual and familiarize yourself with all controls in a safe environment.
- **Operate Safely:**
 - Only responsible adults who have read the manual may operate the grader. Never allow children to use this equipment.
 - Never operate the grader while under the influence of alcohol, drugs, or medication, as full alertness is essential for safety.
 - Always wear protective gear, including safety goggles, steel-toed shoes, and a helmet when using an ATV/UTV.
- **Use as Intended:**
 - Use the grader only for its intended purpose (see manual, page 3). Misuse can result in injury.
 - Never alter the grader, as modifications may cause serious injury or death and will void the warranty.
 - The grader is a precision tool, not a toy—exercise extreme caution.
- **Towing and Setup:**
 - Before towing, ensure the grader is securely attached to the vehicle and the support leg is locked in the towing position.
 - Never allow passengers or carry cargo on the grader, except for up to 100 lbs. of weight securely fastened in the main frame weight tray.
 - Always watch for vehicles or pedestrians when operating near roadways.
- **Maintenance and Inspection:**
 - Before each use, inspect the grader for worn or damaged parts and replace them with manufacturer-recommended parts only.
 - Never attempt to repair the electric motor or electrical components yourself. Contact customer service for a referral to a qualified service center.
 - Always shut off the towing vehicle, engage the emergency brake, and block the wheels before servicing the grader.
 - When working on or under the grader, always secure it to prevent rolling.
- **Operating Conditions:**
 - Operate the grader only in adequate daylight.
 - Never use the grader on slopes exceeding 15°

TOWING SAFETY

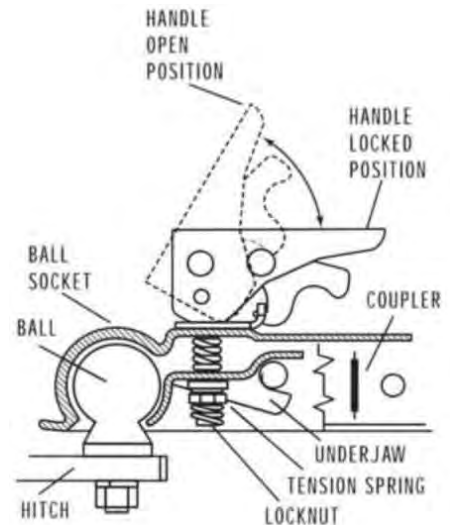
- Be sure the support jackstand is in the travel position and the coupling is secure. This must also be retracted so not to interfere while towing. Retract the jackstand by removing the pin, pivoting up, and replacing the pin.
- Never exceed 5 MPH while towing your grader. Be extra cautious when traveling over rough terrain.
- Always be careful while backing your grader. You could jackknife your grader if not careful.
- See tire and wheel specifications for PSI while towing.
- Be aware of the extra length of grader while turning, parking, crossing intersections, and in all driving situations.

OPERATION INSTRUCTIONS of POSI-LOCK BALL COUPLER

- Adjust the coupler locking pressure on the ball before use. Place handle in locked position with ball in coupler. Tighten locknut against tension spring so that coupler is not loose on ball. Correct adjustment will allow handle to be released with moderate pressure applied to handle.
- To open, pull up on coupler handle and rotate forward. Place coupler on ball when ball is completely nested in ball socket, rotate coupler handle backward until handle is in the locked position.
- After towing, check coupler for tightness on ball. Always check tightness before towing, be sure the coupler handle is in locked position.

WARNING

Never exceed weight capacity. Always use correct ball size, making sure ball is completely inserted into coupler. Lock coupler handle securely before towing. Always check for damages and replace if damaged. Avoid sharp turns and steep vertical angles when towing



CAUTION

When digging in a populated area, it is recommended that a call be made to area utilities to establish the location of any buried pipes, lines, or structures. When digging in open area, research and know the location of any underground structures and objects. Striking the teeth against surface or buried objects can cause damage to the grader and is considered abuse to the machine.

CAUTION

This machine is not intended for highway use and should be used off road only. If public roadway travel is necessary, be certain of regulations concerning width, lighting, and safety chain requirements

MAINTENANCE & STORAGE

Proper maintenance of your machine will, under normal operating conditions, help to keep it operating at or near its peak performance for an extended period. Proper maintenance is also a condition of keeping your warranty in good status.

Store the grader in a shed or under a weatherproof tarpaulin to protect it from rain, or snow, especially in local climates with high moisture. Place the scarifier teeth, tires, and jackstand on boards or a stable, dry surface to prevent contact with soil and reduce corrosion. Do not store the grader with the actuator supporting its weight; lower the unit fully to relieve strain on the actuator. Consider applying a rust-preventive coating in humid or coastal areas.

The service life of the grader will be extended by proper off-season storage practices. Prior to storing the unit, complete the following procedures:

1. Completely clean the unit.
2. Inspect the machine for worn or defective parts. Replace as needed.
3. Repaint all areas where the original paint is worn off.
4. Grease all exposed metal surfaces of teeth, and all pivot points with a general-purpose grease or motor oil.
5. Apply a light coating of oil or grease to the exposed cylinder rods to prevent it from rusting.



WARNING

Attaching, Detaching, and Storage

1. Do not stand between the tow vehicle and the grader when attaching or detaching implement unless both are not moving.
2. Block implement so it will not roll when unhitched from the tow vehicle.
3. Store in an area where children normally do not play.

Maintenance Safety

1. Understand the procedure before doing the work.
2. Use proper tools and equipment.
3. Make sure all moving parts have stopped.
4. Do not make any adjustments or lubricate implement while it is in motion.
5. Block the implement so it will not roll when working on or under it to prevent injury.



ASSEMBLY

This grader has been mostly assembled at the factory. Refer to uncrating and assembly instructions below to complete the final assembly steps. Refer to the drawings and part lists should it become necessary to disassemble the unit for repair or replacement of parts.

Inspect all components for damage. If you believe you have a damaged part, please contact customer service immediately at 1-800-222-8183.

Tools required:

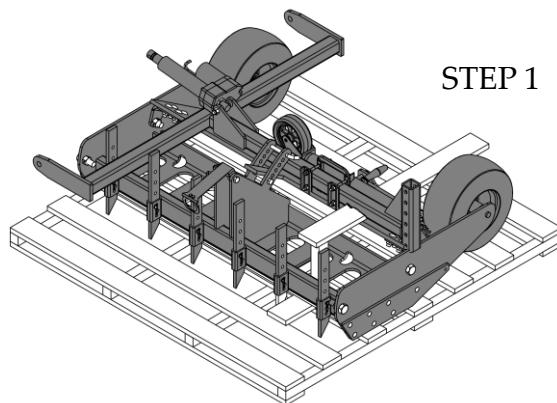
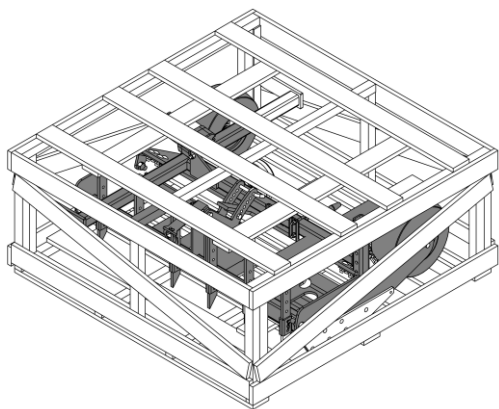
- (2) ¾" wrench or socket
- (2) 1 ¼" wrenches
- Hammer
- Crowbar/pry bar
- Wire cutters



CAUTION

Exercise extreme caution, as parts are very heavy. Sufficient persons or mechanical handling equipment should be used.

Step 1: Carefully remove top, sides, and ends of crate with hammer and pry bar.



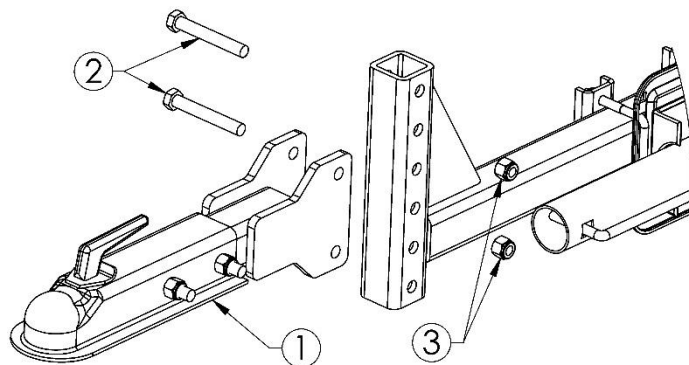
Step 2: Remove the ball coupler assembly #1 from within the frame assembly and install it on to the tongue assembly with the NB577 (bolts) #2 and NB281 (nuts) #3 provided.



CAUTION

Wear protective Gloves and eye protection. Be cautious of wood splinters and exposed wire staples!

STEP 2



ASSEMBLY CONTINUED

Step 3:

Remove main tongue assembly from crate and bolt both frame ends #1 to the inside of main frame rail sides using (2) 11431 bolts #2 and (2) 13997 nuts #3 provided. Tighten hardware snug but do not lock completely, allow frame assemblies to hinge. Fig. 1 & Fig. 2

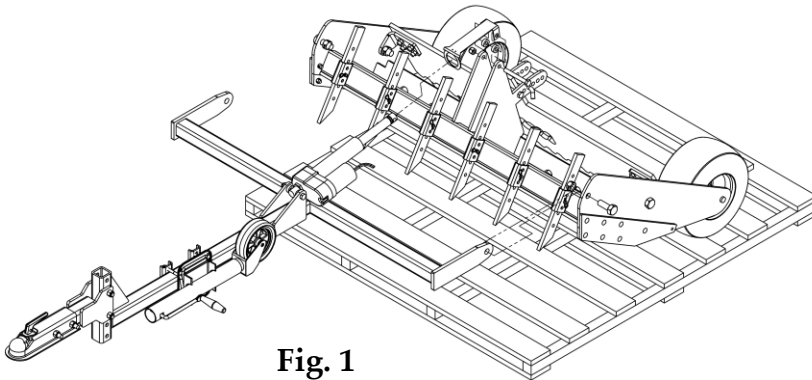


Fig. 1

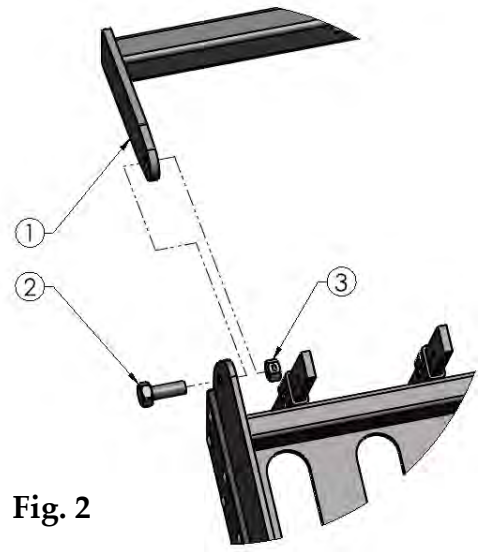


Fig. 2

Step 4:

Once the two main frame assemblies are fastened, install the 20008TK height indicator bracket #1 over the actuator #4 and slide towards front of unit. While holding actuator up run NB132 bolt #5 through frame, 20008TK #1, 19942TK #2, actuator, then through second spacer and opposite side of bracket. Capture the bolt with the NB281 nut #3 provided. Fig. 3

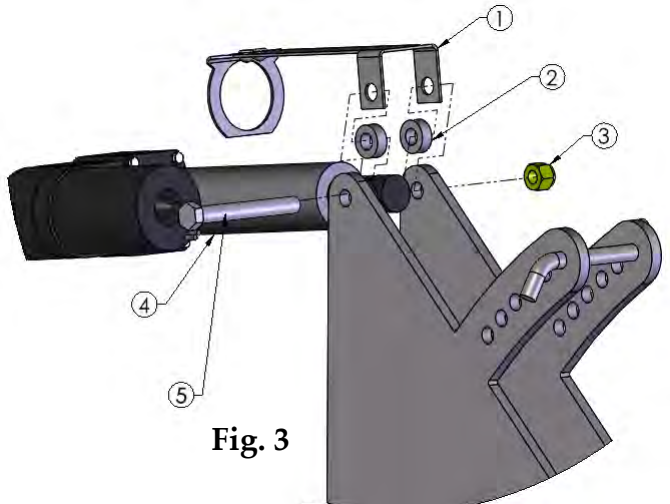


Fig. 3

Shown in Fig. 4 is the proper assembly of height indicator and actuator.

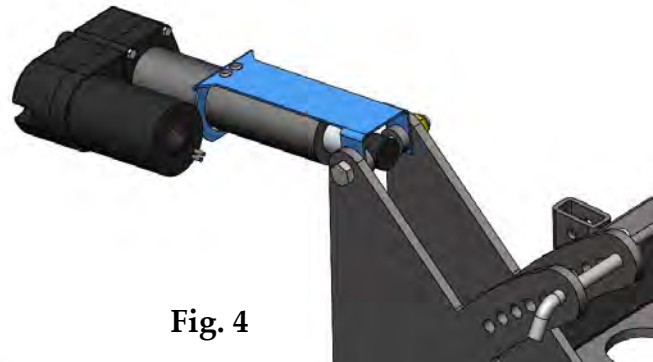


Fig. 4

Supplying Power to the Grader

The grader is supplied with a single wire harness used to extend and retract the actuator. The wire harness is designed to be attached to your ATV/UTV or other vehicles 12V battery and plugs directly into the grader's actuator. The harness requires (2) ¼-20 (NB524) nuts and (2) ¼-20 (NB690) bolts to fasten to most Atv/Utv & lawn and garden style battery posts. These are in the parts bag.

When connecting the wire harness to a 12V automotive battery prioritize safety to prevent injury, damage, or fire hazards. Follow these guidelines:

1.Turn Off Power: Ensure the vehicle and all electrical devices are off before connecting or disconnecting wires.

2.Wear Protective Gear: Use insulated gloves and safety glasses to protect against sparks or acid exposure.

3.Identify Terminals: Connect the positive (+) wire (typically red) to the positive terminal first, then the negative (-) wire (typically black) to the negative terminal. Reverse the order when disconnecting.

4.Secure Connections: Ensure wires are tightly fastened to prevent loose connections, which can cause sparks or overheating.

5.Avoid Short Circuits: Keep tools and metal objects away from battery terminals to prevent accidental short-circuiting.

6.Check for Damage: Inspect wires and terminals for fraying, corrosion, or damage before connecting. Replace damaged components.

7.Ventilation: Work in a well-ventilated area to avoid inhaling harmful battery gases.

8.Emergency Preparedness: Keep a fire extinguisher and first-aid kit nearby in case of accidents.

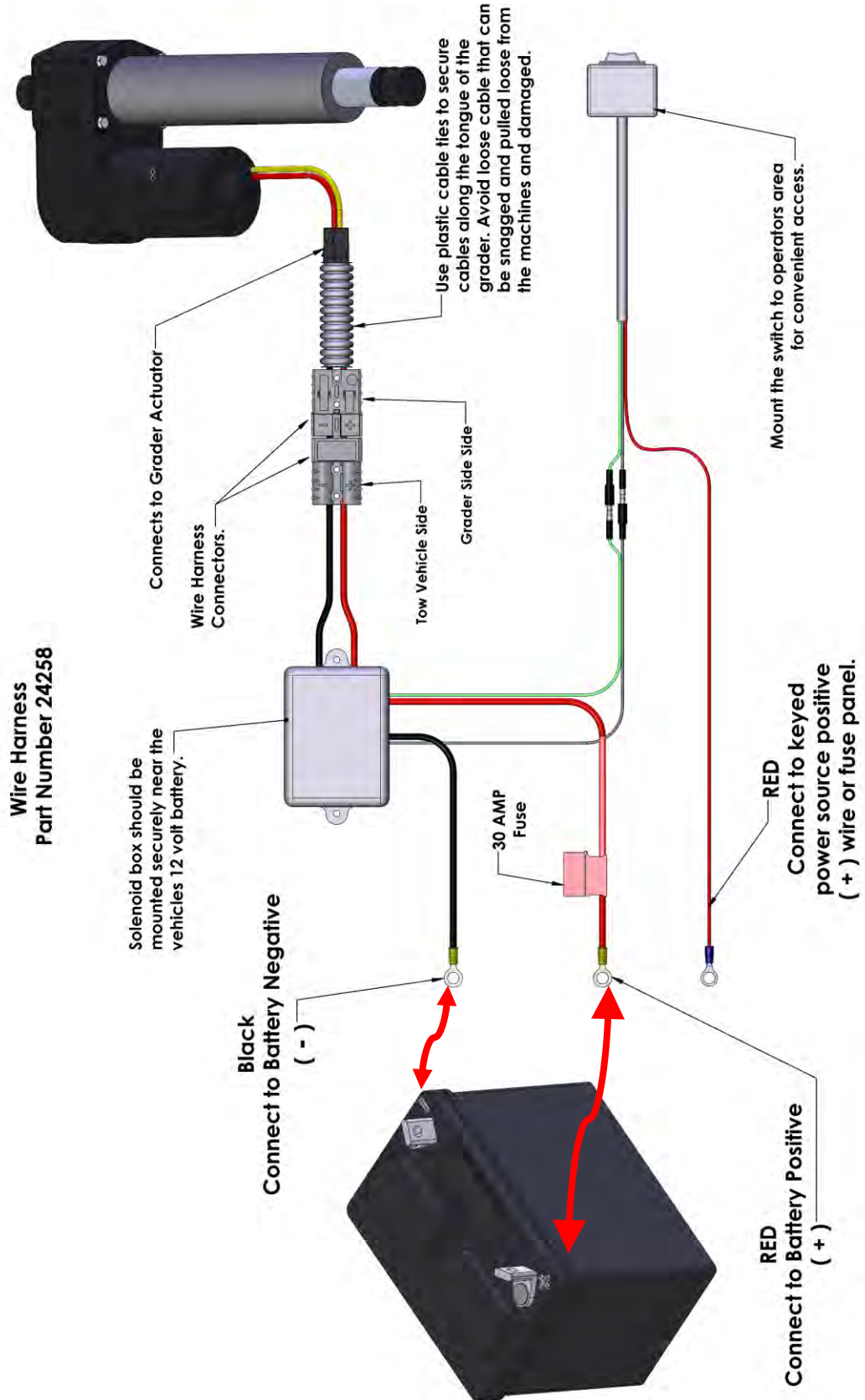
- Improper handling of 12V automotive batteries can result in electric shock, burns, or explosions. Consult the tow vehicles manual or a professional if unsure. Stay safe and follow all manufacturer instructions.

Caution: Use the supplied plastic ties to secure the wire harness to the tongue of the grader and vehicle so not to drag it on ground or become tangled in unit.

Maintaining Battery:

Review your vehicles instructions. It is very important to maintain a proper battery charge.

Electrical Connections



Operation

Attaching the Grader to a tow vehicle.

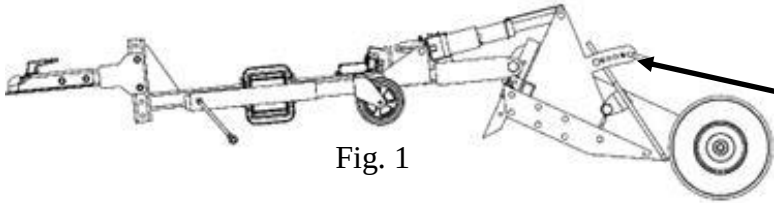
1. Attach the wire harness to the tow vehicle as indicated in the "Electrical Connection" section of this manual.
2. Adjust the graders jackstand to the correct height so the tow vehicles ball hitch will be below the graders ball coupler. Review the instructions on page 7 for proper ball coupler adjustments and operation.
3. On flat level ground, carefully back up the vehicle next to the tongue. Put the vehicle in park, chock the wheels and turn off the tow vehicles ignition.
4. Move the grader as needed to position the ball hitch coupler directly over the vehicles ball hitch.
5. Use the handle on the jackstand to lower the tongue to secure the ball hitch and lock the ball hitch lever in the down position and secure the lever with a pin.
6. Fold the graders jack stand up and out of the way.
7. Route the wire harness lead from the tow vehicle to the graders actuator and plug the lead in to the actuator's connector. Use the supplied plastic ties to route the cable along the tongue. Do not tighten the ties too snug so the cable can be pulled back out when disconnecting the grader when finished.
8. Use the IN/OUT switch to raise the tines off the ground if needed so the grader can be towed to the work area.
9. Once the grader is secured to the tow vehicle, any wheel chocks blocking the grader may be removed.

Disconnecting the Grader.

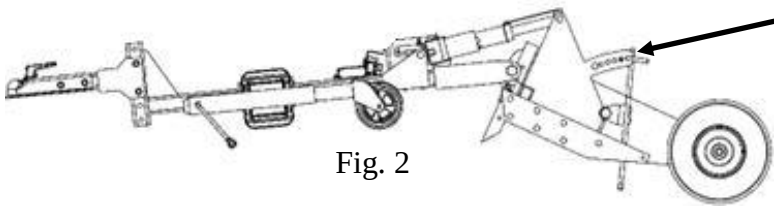
1. With the grader parked in the storage location on flat level ground, put the vehicle in park, chock the vehicles wheels and turn off the tow vehicles ignition.
2. Replace the wheel chocks around the grader's wheels.
3. Disconnect the wire harness from the actuator and secure the lead in the tow vehicle.
4. Release the latch on the ball coupler.
5. Rotate the jackstand down and latch it in the vertical position. Raise the tongue from the ball hitch with the jackstand.
6. The Grader is free from the tow vehicle.

Operation - Continued

The rear blade on the grader can be used in several positions depending on the work you are doing.



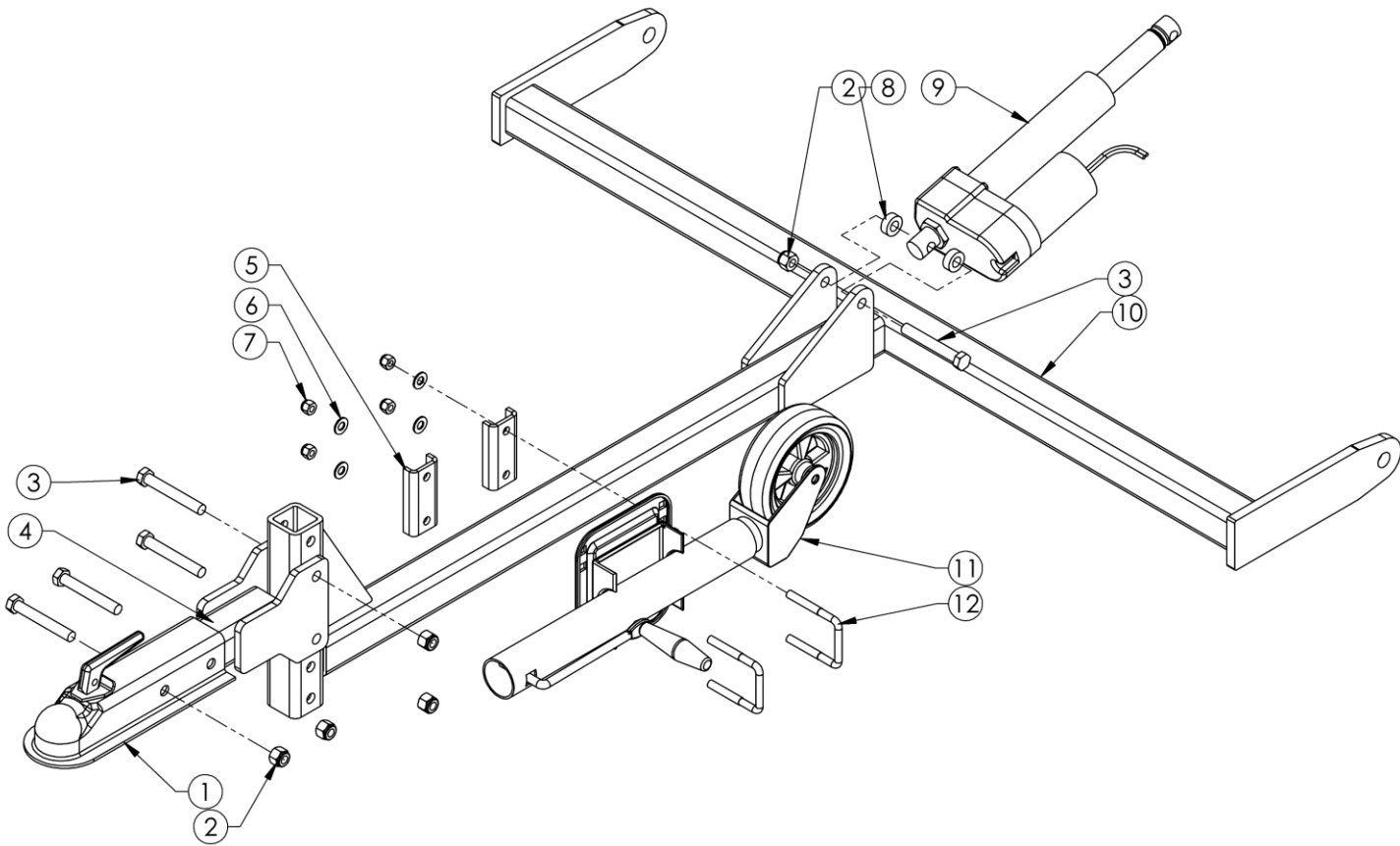
In fig. 1 the blade is free floating and only restrained by the pin in the last pin position. This allows the blade to swing freely, and the weight of the blade helps level and smooth loose media.



In Fig. 2 the blade is pinned in the upright position and the grader can act as a scraping blade when scarifiers are raised up away from media.

1. Once the scarifier teeth and the rear blade are adjusted to the desired positions, pinned, and the grader has been towed to the work area. Bring the vehicle to a complete stop.
2. Use the IN/OUT switch to lower the scarifier teeth to the surface and adjust the downward force in small increments until the desired depth is achieved.
3. Begin towing the grader slowly forward. Never reverse with the scarifier teeth engaged with the ground, this could damage the actuator.
4. Be patient, time and experience will produce expert results. Going too fast or trying to grade with the teeth too deep will make poor results and may cause "wash boarding".
5. Make several shallow passes to effectively break up the material.
6. For potholes and washouts, make several passes and increase the depth gradually until the surrounding material has been graded to the same depth as the bottom of the pothole or washout.
7. Go back over the area with just the rear blade to smooth out and spread the loose material evenly.
8. The frame of the grader is designed to carry extra weight if needed to increase the downward pressure of the scarifier teeth or rear blade. Carefully add concrete blocks or similar weights to either side of the actuator mount. Be sure to secure the additional weight with proper straps.

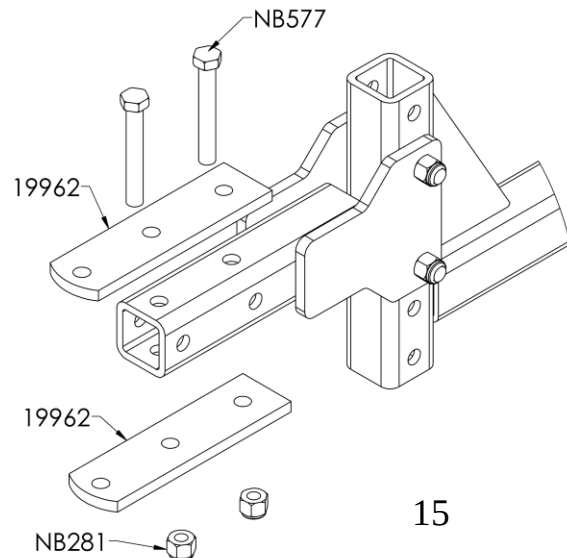
PARTS BREAKDOWN



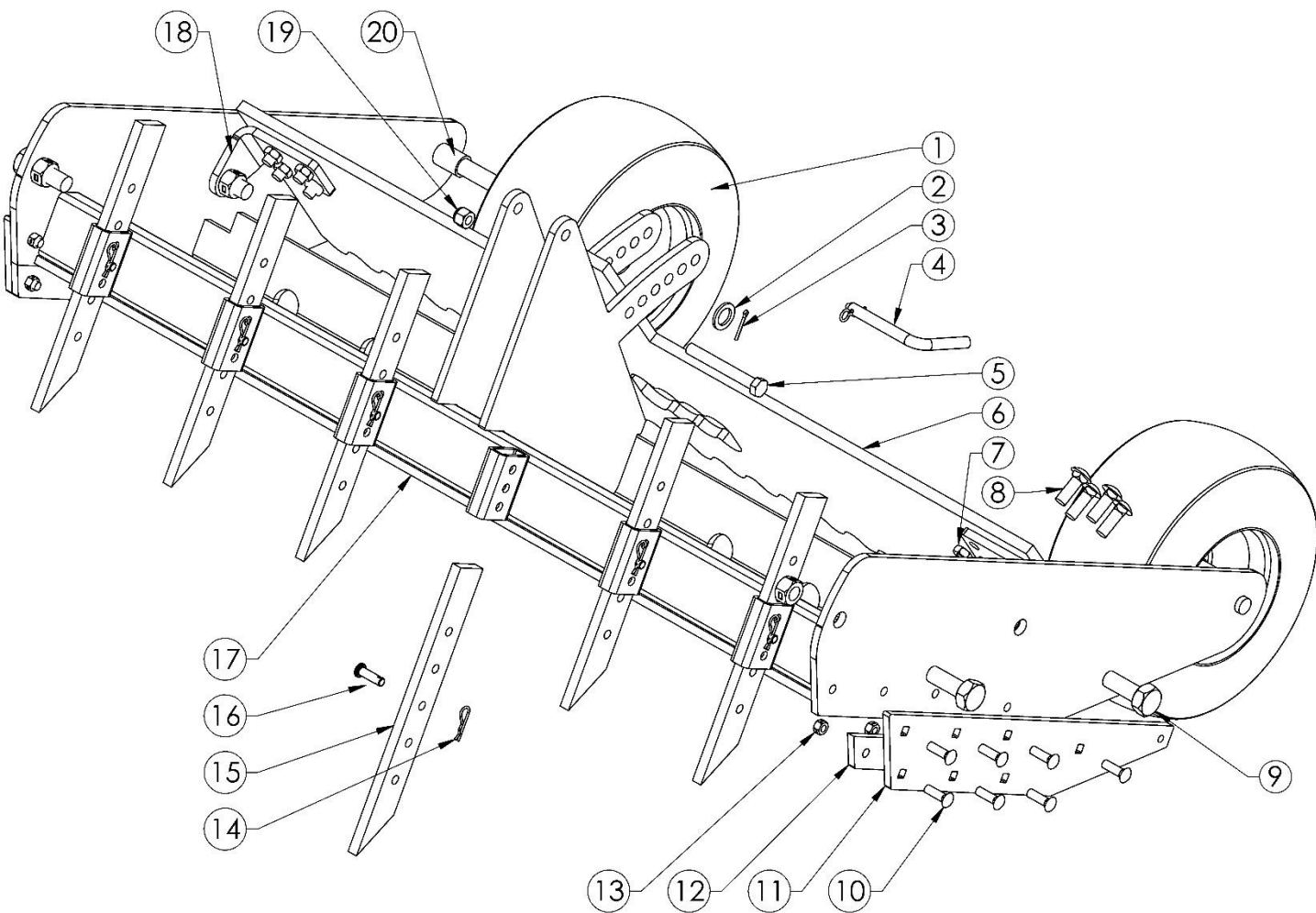
LATCH PIN OPTION

(Latch pin plates included in parts bag)
Ball coupler must be removed.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	7365	2" Ball Coupler	1
2	NB281	1/2-13 Nyloc Nut	5
3	NB577	1/2-13 X 3.50 UNC 2A Bolt	5
4	19958	Hitch Weldment	1
5	19477	Plate-Support, Jackstand	2
6	NB272	3/8 SAE Washer	4
7	NB182	3/8-16 Nyloc Nut	4
8	19942	Spacer-Actuator	2
9	19957	Actuator - 12VDC, 20:1, ACME 6", 1500#	1
10	24256	Weldment - Main Tongue, Grader	1
11	19179	Jackstand	1
12	12447	U-Bolt 3/8-16 X 2.437 X 3 Long	2

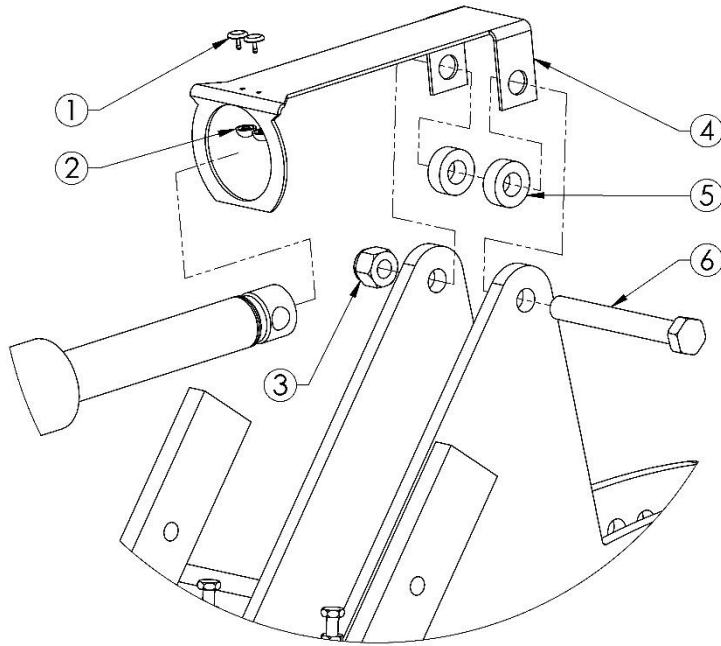


PARTS BREAKDOWN



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	19971	Tire -13 X 650-6 3/4 ID Smooth	2
2	NB195	Washer - 13/16 X 1 1/4 X 1/8 ZY; Mild	2
3	NB126	Pin - Cotter, 1/8 X 1, Crbn Stl Ext Prng	2
4	15177	Bent Pin - W/ Hair Pin 1/2OD X 3.5, ZP	1
5	NB132	Bolt -1/2-13 X 4 HCC GR5 ZY	1
6	19944TK	Plate - Rake, Grader, Txt Blk	1
7	NB121	Nut - Jam Lock, 1/2-13 2-Way Gr A	8
8	20057	Bolt - Carriage, 1/2-13 X 1 1/2 GR5 ZY	8
9	11431	Bolt - 3/4-10 X 2 GR8 ZY	4
10	10501	Bolt - Carriage 3/8-16 X 1 1/4 GR5 ZY	14
11	19941TK	Plate - Outer Skid, Grader, Txt Blk	2
12	19940TK	Plate - Inner Skid, Grader, Txt Blk	2
13	NB280	Nut - 2 Way Lock 3/8-16 ZY & Wax Gr A	14
14	NB127	Pin - Hair, #39 (A155H) ZY St d	6
15	19943TK	Scarifier - 4140 Rc28-32, Txt Blk	6
16	20051	Pin - Clevis, St d 3/8 X 1 1/4 ZY	6
17	19929TK	Weldment - Main Frame, Txt Blk	1
18	19945TK	Bracket - Rake Hinge, Grader; Txt Blk	2
19	NB281	Nut - Nyloc 1/2-13 ZY	1
20	19961TK	Spacer - .750 ID X 1 OD X 1.250, Txt Blk	2

PARTS BREAKDOWN

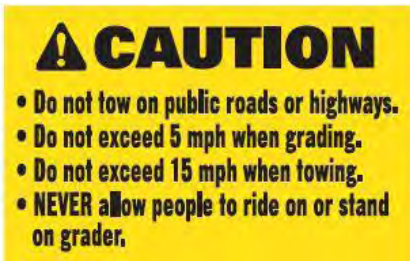


HEIGHT INDICATOR

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	19858	Button - Plastic, Top	2
2	19857	Button - Plastic, Bottom	2
3	NB281	Nut - Nyloc 1/2-13 ZY	1
4	20008TK	Bracket - Height Indicator Txt Blk	1
5	19942TK	Spacer - .515"ID X 1"OD X .500", Txt Blk	2
6	NB577	Bolt - 1/2-13 X 3 1/2 GR5 ZY	1

SAFETY DECALS

Replace decals immediately if damaged.



20068



20082



OD33

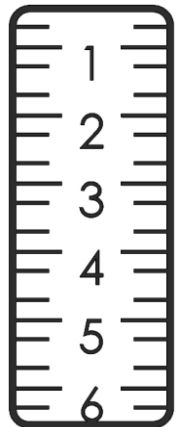
Product Decals



19976



19988



20009



20123

SPECIFICATIONS

Dimensions

Length	95"
Width	50"
Weight	380lbs

Working Dimensions

Working Width	48"
Max. Teeth Ground Clearance	10"
Grading Depth Range	1-10" 2" max. ground engagement recommended with ATV/UTV
Total Scarifier Adjustment	9"

Material

Frame	Welded 3/8" Steel & Tube
Scarifiers	Hardened 1/2" Alloy Steel
Hardware	Minimum Grade 5

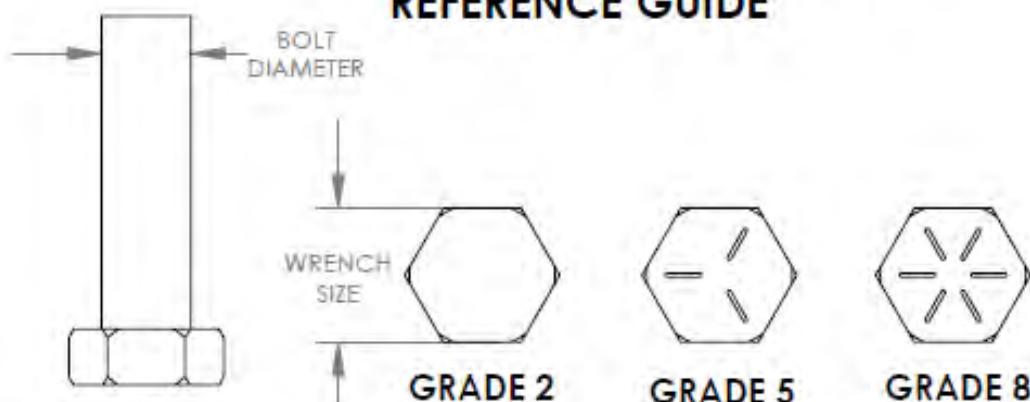
Towing

Recommended Towing Vehicle	Minimum 500cc ATV/UTV 4X4 Desired
Hitch Style	2" Ball Coupler and Hitch Pin both Standard

Miscellaneous

Actuator	1500 # Industrial Remote Controlled Linear
Tires/Wheels	13 X 650-6 3/4 ID Smooth
Power Source	12V

TORQUE SPECIFICATIONS REFERENCE GUIDE



Bolt Diameter (INCH)	Wrench Size	SAE GRADE 2 lb-ft (Nm)		SAE GRADE 5 lb-ft (Nm)		SAE GRADE 8 lb-ft (Nm)	
1/4	7/16	5.5	(7)	9	(12)	12.5	(17)
5/16	1/2	11	(15)	18	(24)	26	(35)
3/8	9/16	20	(27)	33	(45)	46	(62)
7/16	5/8	32	(43)	52	(70)	75	(102)
1/2	3/4	50	(68)	80	(108)	115	(156)
9/16	7/8	70	(95)	115	(156)	160	(217)
5/8	15/16	100	(136)	160	(217)	225	(305)
3/4	1-1/8	175	(237)	280	(380)	400	(542)
7/8	1-5/16	175	(237)	450	(610)	500	(678)
1	1-1/2	270	(366)	540	(732)	750	(1017)
1-1/8	1-11/16	300	(407)	675	(915)	1075	(1457)
1-1/4	1-7/8	425	(576)	950	(1288)	1500	(2034)

Torque values are for reference. 10% variance is allowable. Use these values unless specific torque values are given for a specific application.

Fasteners should be replaced with the same grade. Make sure fasteners threads are clean and that you properly start thread engagement. This will prevent them from failing when tightening.

Tighten toothed or serrated-type lock nuts to the full torque value.



SWISHER HISTORY

Back before electricity came to rural Missouri Max Swisher was producing lawn mowers from his mother's chicken house. Max never liked to mow grass. He installed a gearbox on his family's lawn mower creating a self-propelled unit. By tying one end of a rope to the mower and the other end to a tree in the center of the yard the mower circled the tree, shortening the rope and guiding the mower in concentric circles. Max enjoyed relaxing under a shade tree while his invention did all the work.

Max had designed his first self-propelled rotary lawn mower to do his dirty work for him. Neighbors noticed his new invention and began asking him to make more. Today, 60 years later, Swisher is still producing innovative lawn and garden and ATV/UTV equipment designed to give us all more "relaxing in the shade" time.

Swisher products have been featured nationally on television programs such as Regis and Kathie Lee and seen in publications like ATV Magazine, Country Journal, Popular Mechanics Magazine and others. In January 2000 Popular Mechanics Magazine named Max's zero turning radius riding mower one of the 20th century's top household inventions.

Swisher offers value and function in its products to meet your grounds maintenance needs.

CELEBRATING OVER 70 YEARS OF INNOVATION

SINCE 1945

OWNER'S MANUAL

MODEL NO.

RBPRO48

ROAD BUSTER COMMERCIAL PRO GRAVEL GRADER

HOW TO ORDER REPAIR PARTS:

Each Grader has its own serial number.

All Grader parts listed herein may be ordered directly from Swisher, your nearest Swisher dealer, or from our website.

WHEN ORDERING PARTS, PLEASE HAVE THE
FOLLOWING INFORMATION AVAILABLE:

- * PRODUCT – SWISHER GRADER
- * SERIAL NUMBER - _____
- * MODEL NUMBER - _____
- * PART NUMBER
- * PART DESCRIPTION

www.swisherinc.com
TELEPHONE - 1-800-222-8183
FAX - 1-660-747-8650

1602 CORPORATE DRIVE
WARRENSBURG, MO 64093

SWISHER®

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