

OPERATOR'S MANUAL

Riata® Rake

Precision ARENA DRAG

RA1084



RIATA®
FOR THE LAND THAT I LOVE™

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TO THE PURCHASER:

Assembly and proper installation of this product is the responsibility of the Riata dealer/customer. Read manual instructions and safety rules. To dealers: Make sure all items on the Dealer's Pre-Delivery and Delivery Check Lists in the Owner's/Operator's Manual are completed before releasing equipment to the owner.

The dealer/customer must complete the Warranty Registration with Riata.

TO THE OWNER:

Read this manual before operating your Riata equipment. The information presented will prepare you to set-up and operate your equipment safely. Keep manual for reference. Require all operators to read this manual carefully and become acquainted with all the adjustment and operating procedures before attempting to operate. Replacement manuals can be obtained direct from Riata at www.riataranch.com.

The equipment you have purchased has been carefully engineered and manufactured to provide dependable and satisfactory use. Like all mechanical products, it will require cleaning and upkeep. Lubricate the unit as specified. Observe all safety information in this manual and safety decals on the equipment.

For service, your authorized Riata dealer has trained mechanics, genuine Riata Rake service parts, and the necessary tools and equipment to handle all your needs.

Use only genuine Riata Rake service parts. Substitute parts will void the warranty and may not meet standards required for safe and satisfactory operation. Record the model number and serial number of your equipment in the spaces provided:

Model: _____ **Date of Purchase:** _____

Serial Number: (see Safety Decal section for location) _____

Provide this information to Riata or your dealer to obtain correct repair parts.

Throughout this manual, the term **IMPORTANT** is used to indicate that failure to observe can cause damage to equipment. The terms **CAUTION**, **WARNING** and **DANGER** are used in conjunction with the Safety Alert Symbol, (a triangle with an exclamation mark), to indicate the degree of hazard for items of personal safety.



This Safety-Alert Symbol indicates a hazard and means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!



Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.



Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed.



Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury.



Indicates that failure to observe can cause damage to equipment.



Indicates helpful information.

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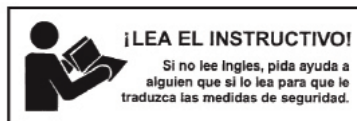
Purpose

The purpose of this manual is to assist you in operating and maintaining your Riata Rake. Read it carefully. It furnishes information and instructions that will help you achieve years of dependable performance.

These instructions have been compiled from field experience and engineering data. Some information may be general in nature, due to unknown and varying operating conditions. However, through experience and these instructions, you should be able to develop procedures suitable to your particular situation.

The illustrations and data used in this manual were current at the time of printing. However, due to possible production changes, your machine may vary slightly in detail. We reserve the right to redesign and change the machines as may be necessary without notification.

Throughout this manual, references are made to right and left direction. These are determined by standing behind the Power Unit facing the direction of forward travel.



GENERAL INFORMATION SPECIFICATIONS

| | |
|--------------|-------------|
| Model | 1084 |
|--------------|-------------|

| | |
|---|--------------------------------------|
| Models | 1084 |
| Specifications | |
| Trailed/Pulled Arena Drag | YES |
| Uses | Arena Conditioning and leveling tool |
| Operating Speed | 4-6 mph |
| Shipping | Single Units |
| Frame Tubing Size | 2"x2"x1/8" |
| Minimum HP/CC's - Power Unit/Gator/Quad | 15HP or 300 cc's |
| Power Unit HP (Max) | 45HP |
| Power Unit/Quad/Gator Width (Max) | 61" |
| Max Depth of Workable Footing | 3" |
| Tine Diameter | 1" |
| Tine Length | 12" |
| Tine Composition | High Carbon Steel Heat treated |
| Number of Tines | 17 |
| Tines Spacing | 2.75" center/center |
| Tine Beam Dimensions | 63" |
| Gauge Wheels | 15"x6"-6" |
| Working Width (Tines) | 61" |
| Working Width (Rear Finishing Comb) | 79" |
| Machine Width (Transport) | 79" |
| Machine Length | 78" |
| Max Working Height | 25" |
| Max Shipping Height | 24" w/ pallet |
| Assembly/Set-Up Time | 0.5 hr. |
| Duty Cycle | Light |
| Operating Weight (lb.) | 360 |
| Shipping Weight (lb.) | 390 |
| Warranty | 12 Month limited warranty |

SAFETY & INSTRUCTIONAL DECALS

**ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!
FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN SERIOUS INJURY
OR DEATH**

Replace Decals Immediately If Damaged!

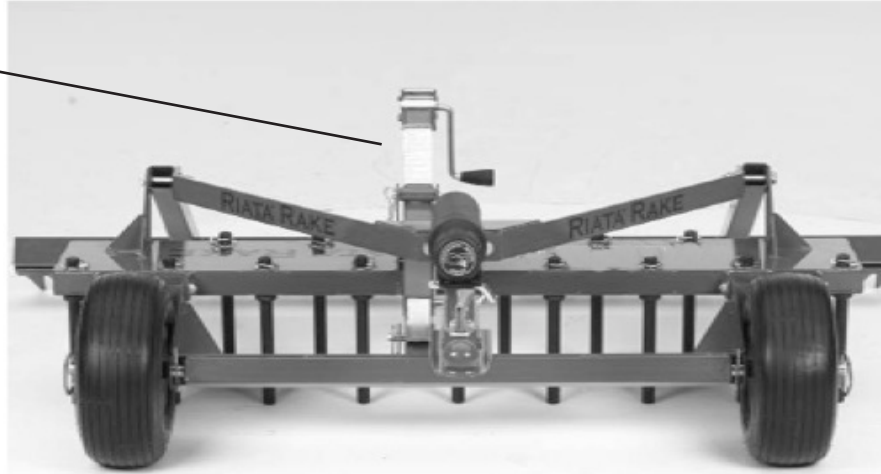
Check that all safety decals are installed and in good condition. Replace if decals are worn or damaged. Replacement Part numbers are listed here.

CAUTION

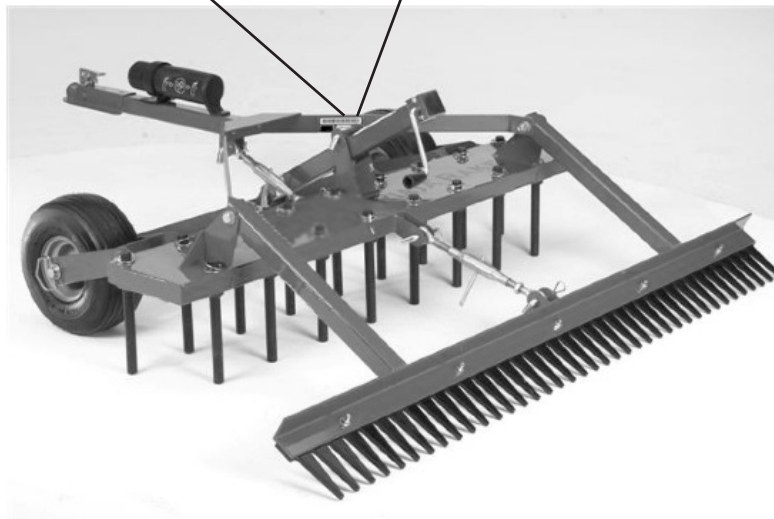
To avoid serious injury:

- Read Operator's Manual before operating, servicing or repairing equipment. Follow all safety rules and instructions. Manuals are available from your selling dealer.
- Never allow riders.
- Keep bystanders away from equipment during operation.
- Operate from power unit seat only.
- Do not transport or operate on public roadway.
- Stop engine, remove key and set brake before dismounting power unit.
- Never allow children or untrained persons to operate equipment.
- Do not transport or operate unit over 5 mph.
- Stand clear of machine when in operate or when it is being raised or lowered.
- Lower machine to ground before unhitching.

5RR1000DC06A



Serial Number Plate location



5RR100DC06A

⚠ Safety Rules ⚠

ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

Safety is a primary concern in the design and manufacture of our products. Unfortunately, our efforts to provide safe equipment can be wiped out by an operator's single careless act.

In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, judgement, and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.

It has been said "The best safety device is an informed, careful operator." We ask you to be that kind of operator.

TRAINING

- Safety instructions are important! Read all attachment and power unit manuals; follow all safety rules and safety decal information. (Replacement manuals are available at www.riataranch.com.) Failure to follow instructions or safety rules can result in serious injury or death.
- If you do not understand any part of this manual and need assistance, contact Riata or dealer.
- Operators must be instructed in and be capable of the safe operation of the equipment, its attachments, and all controls. Do not allow anyone to operate this equipment without proper instructions.
- Never allow children or untrained persons to operate equipment.
- Train all new personnel and review instruction's frequently with existing workers. A person who has not read and understood all operating and safety instructions is not qualified to operate the machine. An untrained operator exposes himself and bystanders to possible serious injury or death.

PREPARATION

- Always wear relatively tight and belted clothing to avoid getting caught in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.
- Make sure attachment is properly secured, adjusted, and in good operating condition.
- Power unit, when applicable, must be equipped with ROPS or ROPS cab and seat belt. Keep seat belt securely fastened. Falling off power unit can result in death from being run over or crushed. Keep foldable ROPS system in "locked up" position at all times.

TRANSPORTATION

- Always comply with all state and local laws governing highway safety and lighting and marking requirements.
- Never allow riders on power unit or attachment.
- Do not operate or transport on steep slopes.
- Use extreme care and reduce ground speed on slopes and rough terrain.
- Do not operate or transport equipment while under the influence of alcohol or drugs. Consult your doctor about operating this machine while taking prescription medications.
- Do not operate or transport equipment over 5 miles per hour.

Safety Rules continue on the next page

⚠ Safety Rules ⚠

ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

OPERATION

- Never go underneath equipment (lowered to the ground or raised) unless it is properly blocked and secured. Never place any part of body underneath equipment or between moveable parts even when the engine has been turned off. Hydraulic system leak down, hydraulic system failures, mechanical failures, or movement of control levers can cause equipment to drop or rotate unexpectedly and cause severe injury or death.
- Always comply with all state and local laws governing highway safety and lighting and marking requirements.
- Operate only in daylight or good artificial light.
- Keep bystanders away from equipment.
- Keep hands, feet, hair, and clothing away from equipment while engine is running. Stay clear of all moving parts.
- Power unit, when applicable, must be equipped with ROPS or ROPS cab and seat belt. Keep seat belt securely fastened. Falling off power unit can result in death from being run over or crushed. Keep foldable ROPS system in “locked up” position at all times.
- Never allow riders on power unit or attachment.
- Always sit in power unit seat when operating controls or starting engine. Securely fasten seat belt, place transmission in neutral, engage brake, and ensure all other controls are disengaged before starting power unit engine.
- Look down and to the rear and make sure the unit is in tow position and area is clear before operating in reverse.
- Use extreme care when working close to fences, ditches, other obstructions, or on hillsides. It is never advisable to use powered equipment in areas with livestock. Never operate Riata Rake in an arena while livestock is present.
- Do not operate or transport on steep slopes.
- Do not stop, start, or change directions suddenly on slopes. Always operate down slopes; never across the face.
- Use extreme care and reduce ground speed on slopes and rough terrain.
- Keep alert and watch the front as well as the rear when operating.
- Stop power unit and equipment immediately upon striking an obstruction. Turn off engine, remove key, inspect, and repair any damage before resuming operation.
- Before leaving operator’s seat. Engage brake, stop engine, remove key, and remove seat belt.

Safety Rules continue on the next page

⚠ Safety Rules ⚠

ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

Safety Rules continued from the previous page

MAINTENANCE

- Always wear relatively tight and belted clothing to avoid getting caught in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.
- Never go underneath equipment (lowered to the ground or raised) unless it is properly blocked and secured. Never place any part of the body underneath equipment or between moveable parts even when the engine has been turned off. Hydraulic system leak down, hydraulic system failures, mechanical failures, or movement of control levers can cause equipment to drop or rotate unexpectedly and cause severe injury or death.
- When performing maintenance or repairs make sure the equipment is in the lowered position. Failure to do so can cause serious injury or death.
- Make sure attachment is properly secured, adjusted, and in good operating condition.
- Before leaving operator's seat. Engage brake, stop engine, remove key, and remove seat belt.
- Never perform service or maintenance with engine running.
- Keep all persons away from operator control area while performing adjustments, service, or maintenance.
- Tighten all bolts, nuts, and screws to torque

chart specifications. Check that all cotter pins are installed securely to ensure equipment is in a safe condition before putting unit into service.

STORAGE

- Block equipment securely for storage.
- Keep children and bystanders away from storage area.

DEALER/CUSTOMER ASSEMBLY

Assembly Instruction

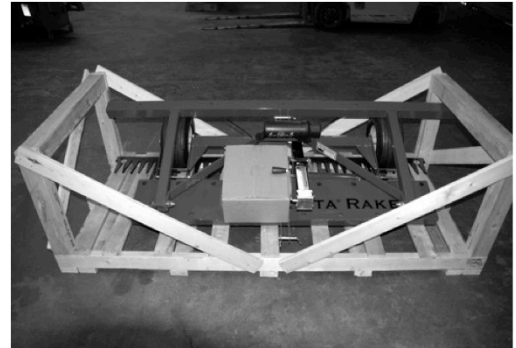
(Purchaser's Responsibility)

Inspect the equipment thoroughly before assembly to be certain it is complete and undamaged. This pictorial purchaser assembly guide should be followed sequentially during setup.



TIME REQUIRED: 30 Minutes
Riata Rake arrives bolted to a heavy duty pallet. Assemble on level ground with room to move around the implement.

Remove Owners Manual from tube. Read and follow all instructions.

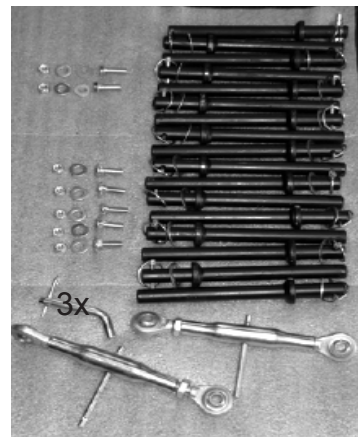


REMOVE BOX CONTENTS



CONTENTS OF BOX

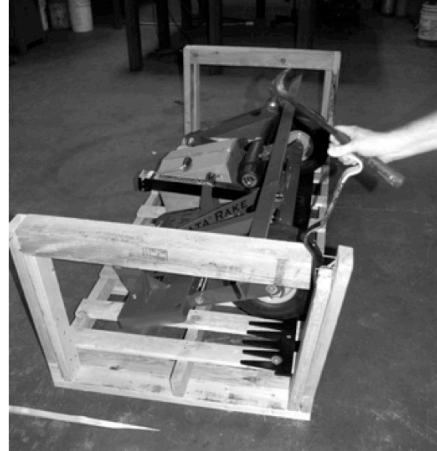
- 17- High carbon tines w/spring clips and washers
- 5- Carriage bolts with nuts and washers
- 2- Hex bolts with nuts and washers
- 2- Turnbuckles for leveling tine bar and setting comb angle.
- 3- Bent pin and clip



1

REMOVE PALLET SIDE/CROSS BRACING

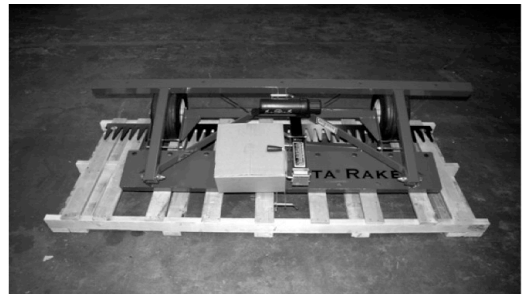
Removing the side bracing and cross bracing will provide access to assemble Riata Rake.



2

DISCARD PALLET BRACING

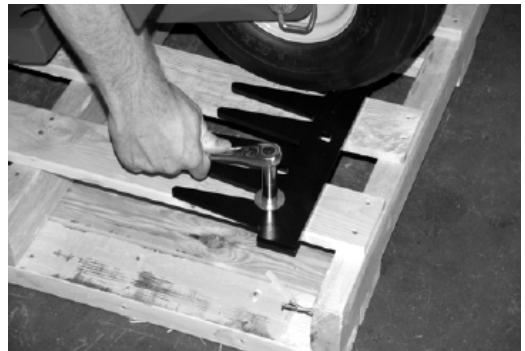
Removing the side bracing and cross bracing will provide access to assemble Riata Rake.



3

REMOVE THE LAG BOLTS

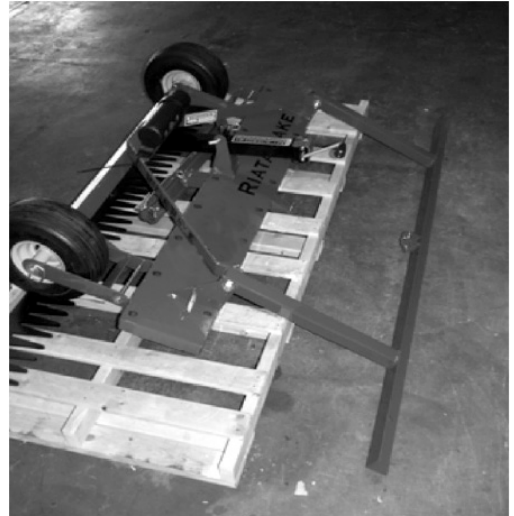
Remove all lag bolts attached in tine bar and rear comb.



4

LIFT THE REAR COMB FRAME
PLACE ON THE GROUND

Caution—Make sure the ground you have the
pallet on is level.



5

Place rear comb to the rear of the rake for
attachment to the frame.



6

Place rear comb under rear bracket—place
carriage bolts in from bottom of comb—Tighten
securely.
(two person operation)



7

Cut tie wrap and remove the Operators Manual Tube from yoke.



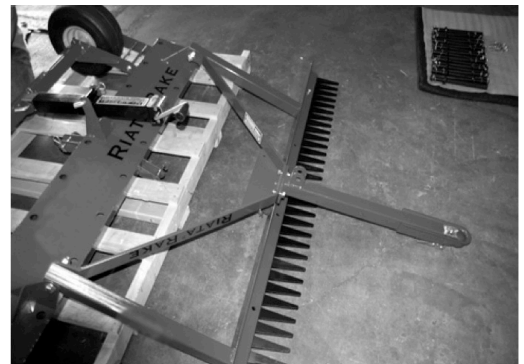
8

Attach tongue to rake yoke frame using hex bolts and nut



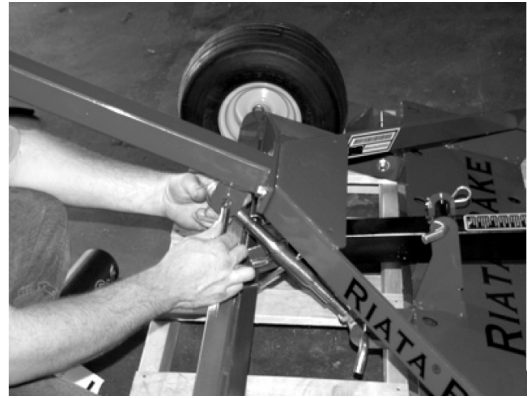
9

Alternatively, you can attach the tongue by rotating yoke over the top of rear comb.



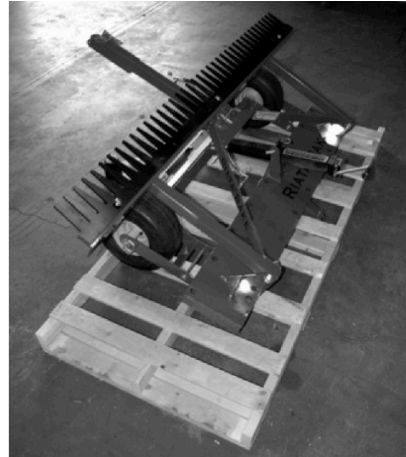
10

Attach the turnbuckle to the bottom of yoke and front of tine bar.



11

Rotate the rear comb back to the position above yoke.



12

Move the Riata Rake off Pallet.



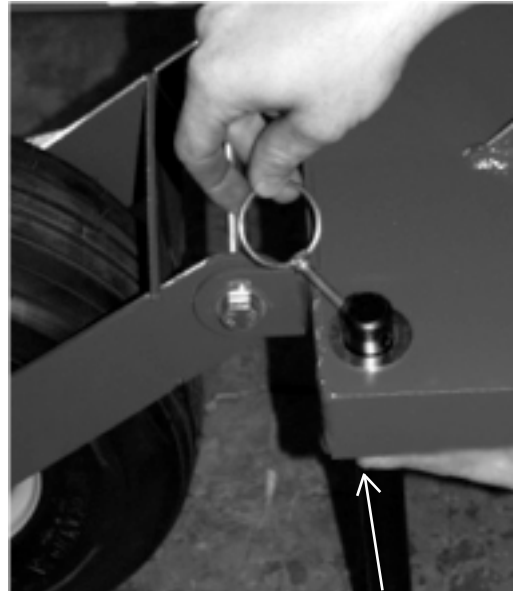
13

Attach to power unit ball (fork lift shown) for attaching the tines to the tine bar. Lock coupler into position on ball.



14

Attach all tines, insert through tine hole from the bottom of the tine bar using washers and spring clips to secure the tine into position.



15

Lower the rear comb until it rests on the ground.



16

Attach the turnbuckle to the brackets on the rear of the tine bar.



17

Lengthen the top link so that it attaches to the rear comb bracket.



18

Attach the Owners Manual tube on tongue.



19

Set the level of the tine bar

Using a level for initial set up, make sure the tine bar is level front to back. This will ensure that the front and rear tines are at exactly the same depth in the footing.



20

FINAL SETUP IN ARENA

Now you are ready to connect your Riata Rake to the vehicle. The two turnbuckles determine the level of the tine bar and the angle of the rear comb. Make sure you set the rear comb so that it allows the tines to be in suspension between your receiver and the rear comb.

21

Set the depth of the tines

We recommend that you place electrical tape on the two outside tines to establish a visual indication of depth. If you desire 1.5" depth, place the bottom edge of the tape at 1.5" from the bottom of the tine. Adjust the turnbuckles so that you achieve your desired depth and be sure the tine bar is level.



After this set up, you should only need to raise the wheels and axel assembly using the side crank jack to raise and lower the implement.



DEALER/CUSTOMER INSTRUCTIONS

Pre-Delivery

Dealer Checklist

(Purchaser's Responsibility)

Inspect the equipment thoroughly after assembly to be certain it is set up properly before delivering it to the customer. The following check list is a reminder of points to inspect.

Check off each item if it is found satisfactory or after proper adjustment is made.

___ Check that all safety decals are installed and in good condition. Replace if damaged.

___ Check all bolts to be sure they are tight.

___ Check that all cotter pins and safety pins are properly installed.

___ It is important for the dealer to visually check and make sure all parts are in tact prior to delivery to customer.

___ Show customer the safe, proper procedures to be used when mounting, dismounting, and storing equipment.

___ Show customer how to make adjustments.

___ Check that tires are inflated and wheels are greased.

___ Present Operator's Manual and request that customer and all operators read it before operating equipment. Point out the manual safety rules, explain their meanings and emphasize the increased safety hazards that exist when safety rules are not followed.

___ Point out the safety decals. Explain their meaning and the need to keep them in place and in good condition. Emphasize the increased safety hazards when instructions are not followed.

___ Explain to customer the potential crushing hazards of going underneath raised equipment. Instruct customer that service work does not require going underneath unit and never to do so.

___ Complete the Warranty Registration located in the back of the owners manual. Make a copy and email to riata at sales@riataranch.com subject "New Warranty Registration".

Operation

Safety is a primary concern in the design and manufacture of our products. Unfortunately, our efforts to provide safe equipment can be wiped out by an operator's single careless act.

In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, judgement, and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.

It has been said "The best safety device is an informed, careful operator." We ask you to be that kind of operator".

The operator is responsible for the safe operation of this equipment. The operator must be properly trained. Operators should be familiar with the equipment, the Power Unit, and all safety practices before starting operation. Read the safety rules and safety decals on pages 2-6.

Owner should check and tighten all hardware after the first hour of operation. The break in stage of your new Riata Rake can cause minimal loosening of hardware. Please see Bolt Torque Chart (page 13) for proper torque information.

⚠ WARNING

mation.

- Power unit (when applicable) must be equipped with ROPS or ROPS cab and seat belt. Keep seat belt securely fastened. Falling off power unit can result in death from being run over or crushed.

Keep foldable ROPS systems in "locked up" position at all times.

- Never allow children or untrained persons to operate equipment.
- Keep bystanders away from equipment.

- NEVER BACK RIATARAKE UP WITH IMPLEMENT IN THE GROUND.

- NEVER GO UNDERNEATH EQUIPMENT. Never place any part of the body underneath equipment or between moveable parts even when the engine has been turned off. Hydraulic system leak down, hydraulic system failures, mechanical failures, or movement of control levers can cause equipment to drop or rotate unexpectedly and cause severe injury or death.

⚠ CAUTION

- Service work does not require going underneath.
- Read Manual for service instructions or have service performed by a qualified dealer.
- Stop Power Unit and implement immediately upon striking an obstruction. Turn off engine, remove key, inspect, and repair any damage before resuming operation.
- Always wear relatively tight and belted clothing to avoid entanglement in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head.

Owner/Operator (Owner's/Operator's Responsibility) Pre-operation list

____ Review and follow all safety rules and safety decal instructions on page 2 to page 6.

____ Check that equipment is properly and securely attached to Power Unit.

____ Check that all safety decals are installed and in good condition. Replace if damaged.

____ Check that all hardware is properly installed and secured.

____ Do not allow riders.

____ Make sure Power Unit ROPS or ROPS CAB (when applicable) and seat belt are in good condition. Keep seat belt securely fastened during operation.

____ Check that tires are inflated and wheels are greased.

____ Check and regularly grease all 3 grease zerks, (2) Wheels, (1) jack.

ADJUSTING YOUR TINE DEPTH

Your Riata Rake is equipped with a tine bar array and a dual adjustment (see figure 4 below).

One way of determining the depth that is best suited for your arena is to adjust the tine bar by extending the both turnbuckles until the tines are in the footing of your arena. Now continue to adjust the depth until you begin to see the rake frame raise off the ground—this is easy to detect if you watch the rear comb. Now raise the tines until the rear comb is solidly in the footing material.

This position depth is the lowest possible position at that location in your arena that the tine can be pulled. It is up to your particular sport and your footing preferences to determine the depth for your arena footing but as a rule of thumb, 1 1/2" - 2 1/2 " depth is typical for most equestrian sports. You should not attempt this method of depth setting if your arena is a deep sand arena.

Tine Depth Adjustment

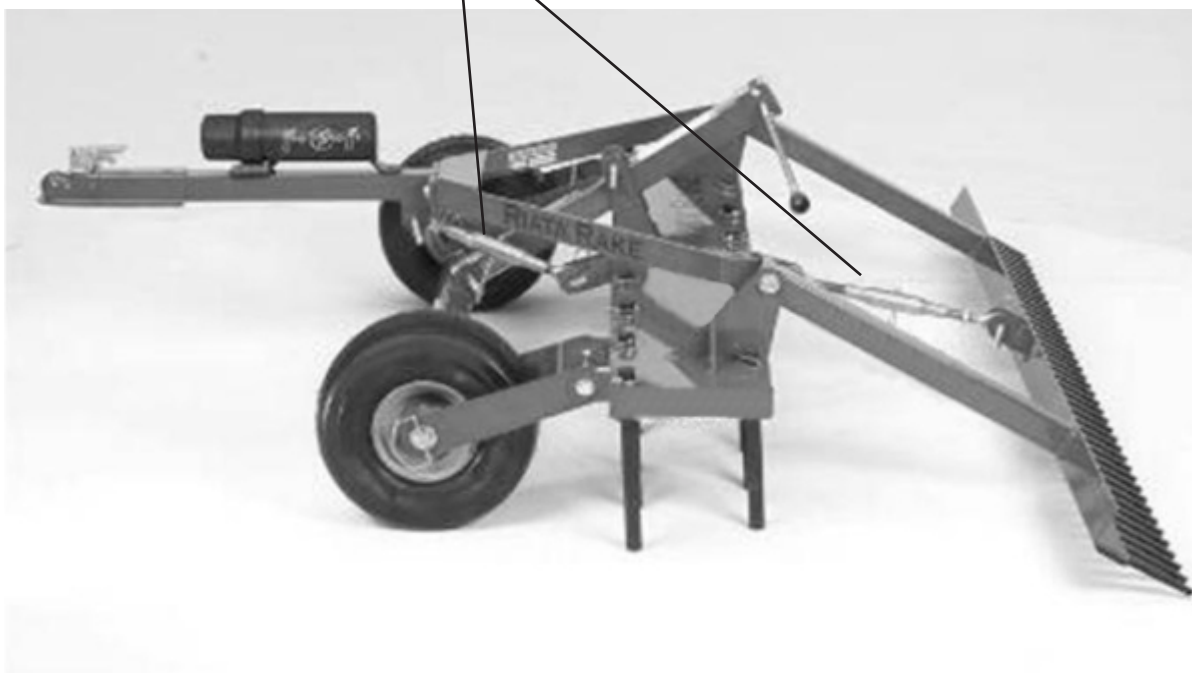


Figure 4, Tine Depth Adjustment

Typical Use Position

WHEEL HEIGHT SETTING

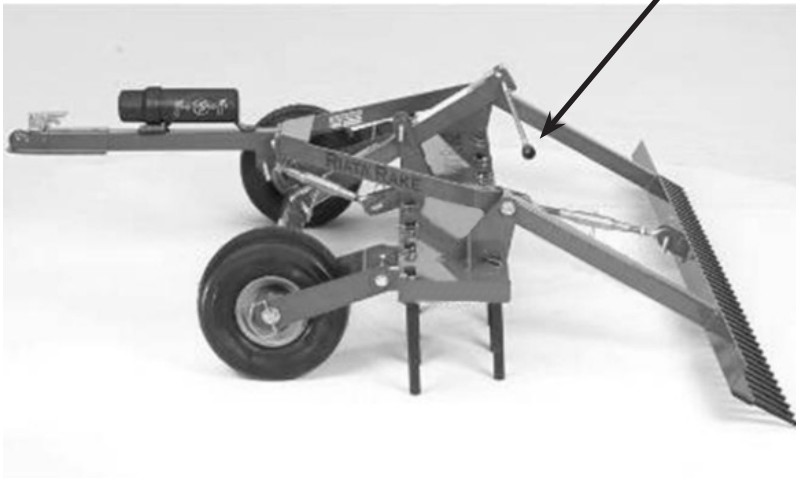
Your Riata Rake has adjustable wheel heights positions.

The wheels on your Riata Rake are designed to function as gauge wheels and they work to keep your arena level. The correct wheel position is elevated approximately 1 - 2" above the surface of your arena footing. Do not carry significant load while in operation. You may see daylight under them at times—this is correct. They keep the tines from following any low areas in your base in your base to provide a method for leveling the base as well as the footing.



1" - 2" above footing surface

Use the side crank jack to adjust the wheel height position.



OPERATION Continued

⚠ CAUTION

HITCH CHECK: The Riata Rake is equipped for use with a 1 7/8" Ball. Always confirm which ball size your coupler requires. Be sure the Ball Hitch is secured and in a locked position.

BEFORE DISENGAGING BALL COUPLE FROM BALL, BE SURE REAR COMB IS ON THE GROUND

SET UP THE RIATA RAKE

Leveling frame:

Use the two turnbuckles to set the tine bar level and at the proper depth. The tine bar should be set at parallel to the earth in a horizontal position.

Be sure that the tine bar is level. This is key to excellent footing. Be sure that the tines are at the appropriate depth for your arena and equine sport.

IMPORTANT Never back your Riata Rake With Rake In Ground!

OPERATING GROUND SPEED:

It is recommended that the machine be operated at 4-6mph. Do not operate at a speed which will cause the rear comb to come off the surface of the arena. If this occurs reduce your speed.

GROUND SPEED WHILE TRANSPORTING:

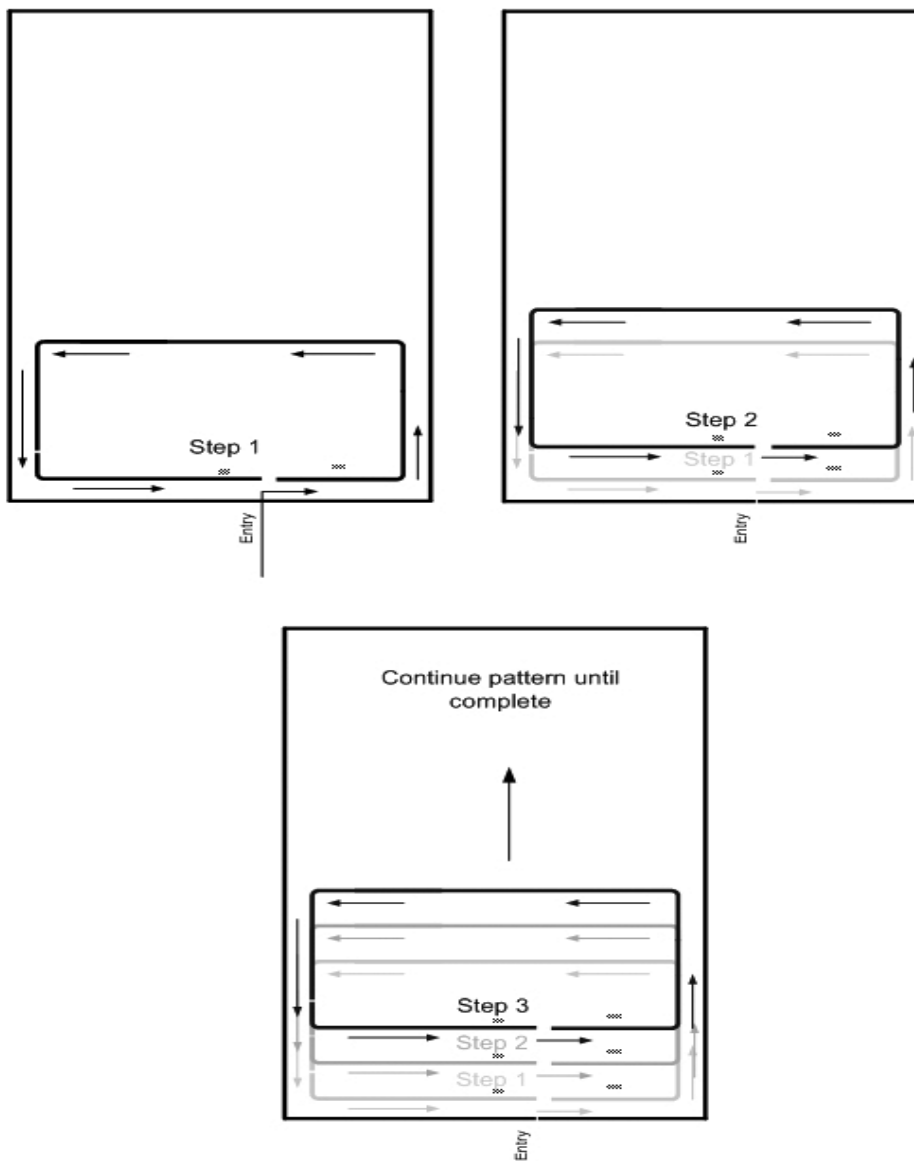
Never transport unit (wheels in full down position) over 4 mph. Do not operate at a speed which will cause the unit to bounce. If this occurs, immediately reduce your speed.

FIRST USE IN YOUR ARENA

We have developed an excellent arena pattern for you to follow for the first few time you use your Riata Rake.

You can see a larger picture of the pattern on the www.riataranch.com web site.

Riata Arena Pattern #6 1/3 Progression Pattern Periodic Maintenance



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Owner Service

WARNING

- NEVER GO UNDERNEATH EQUIPMENT. Never place any part of the body underneath equipment or between moveable parts even when the engine has been turned off. Hydraulic system leak down, hydraulic system failures, mechanical failures, or movement of control levers can cause equipment to drop or rotate unexpectedly and cause severe injury or death.
- Service work does not require going underneath.

WARNING

- Read Operators Manual for service instructions or have service performed by a qualified dealer.

CAUTION

The information in this section is written for operators who possess basic mechanical skills. If you need help, your dealer has trained service technicians available. For your protection, read and follow the safety information in this manual.

WARNING

- Keep all persons away from operator control area while performing adjustments, service, or maintenance.
- Before dismounting power unit or performing any service or maintenance, follow these steps: disengage power to equipment, set parking brake, stop engine, remove key, and unfasten seat belt.
- Always wear relatively tight and belted clothing to avoid entanglement in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head.

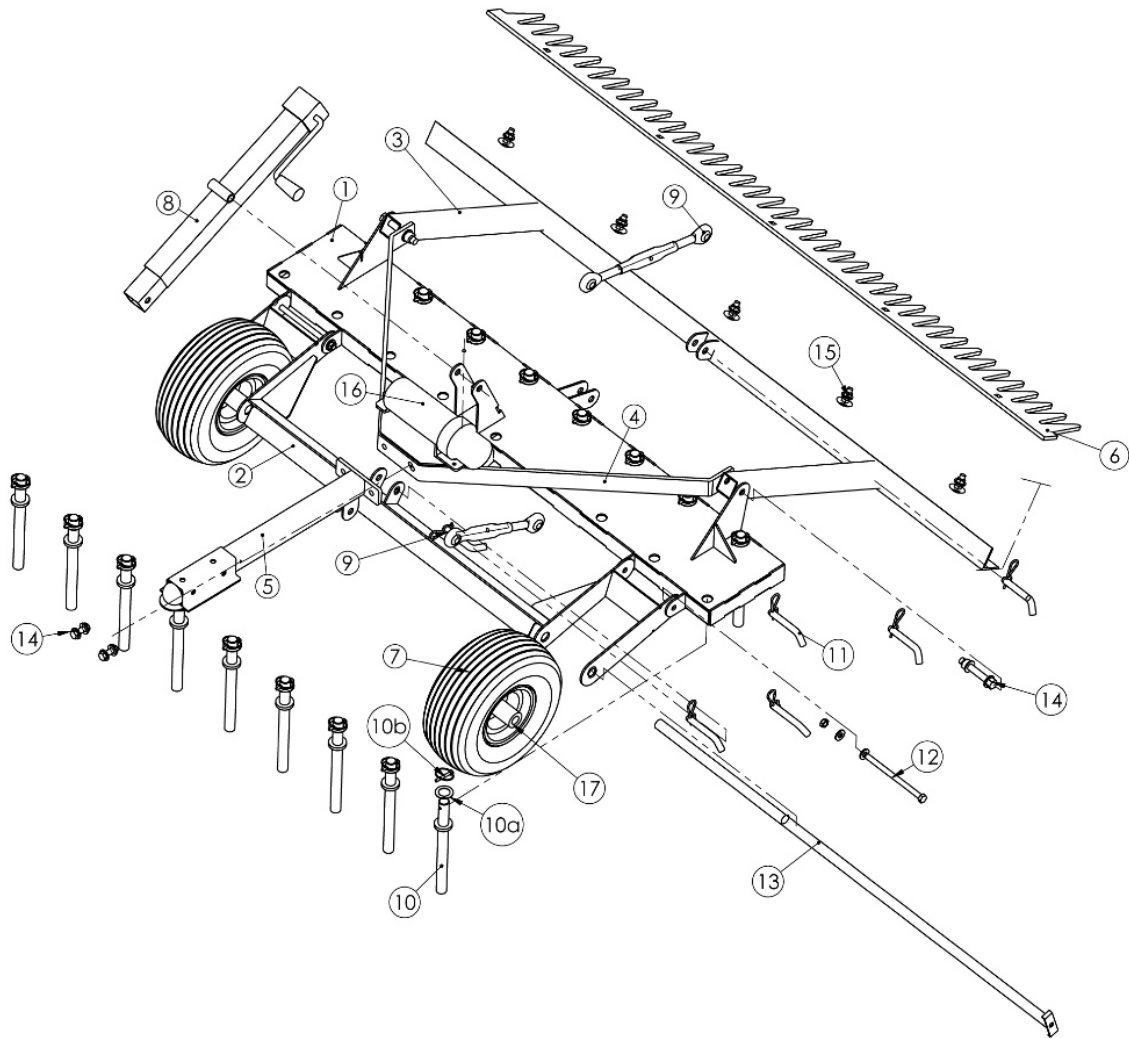
Storage

When storing your Riata Rake make sure the

CAUTION

unit is placed on level ground and clear of any obstructions. Use caution when disconnecting the Riata Rake from the Power Unit.

1084 PARTS CATALOG

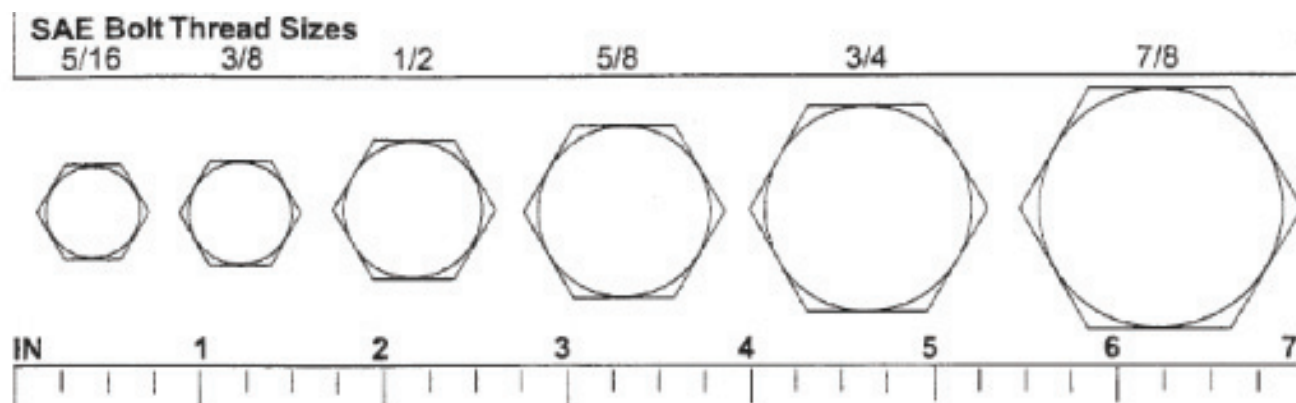


1084 PARTS CATALOG (CONTINUED.)

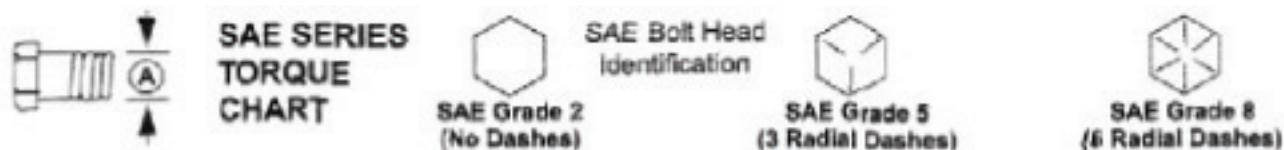
Component and Replacement Parts RA1084

| Item | Part Number | Name | Qty | Description |
|------|--------------|-------------------|-----|--|
| 1 | 5RR1084W001A | Tine bar assembly | 1 | Weldment |
| 2 | 5RR1084W002A | Axle assembly | 1 | Weldment |
| 3 | 5RR1084W003A | Rear comb frame | 1 | Weldment |
| 4 | 5RR1084W004A | Yoke | 1 | Weldment |
| 5 | 5RR1084W005A | Tongue | 1 | Weldment |
| 6 | 5RRCRP00101A | Rear comb | 1 | 3/8" mild steel comb 79" |
| 7 | 5RRCRP00104A | Wheel assembly | 2 | 15x6/6" wheel & tire |
| 8 | 5RR10841008A | Jack | 1 | Jack Assembly |
| 9 | 5RRCRP00106A | Turn Buckle | 2 | Cat. 0 top link 5/8" hole |
| 10 | 5RRCRP00107A | Tine | 17 | 1" tine w/ clip & washer |
| 10a | 5RRCRP00115A | Tine washer | 17 | 18 gauge bushing |
| 10b | 5RRCRP00116A | Tine clip | 17 | spring over clip |
| 11 | 5RRCRP00108A | Pivot pins | 1 | (6) 5/8"x3" bent pin w/ clip |
| 12 | 5RR1084K012A | Axle bolts | 1 | (2) 1/2"x8" bolt w/nut& 2washers |
| 13 | 5RR1084K013A | Axle Shaft | 1 | Axle shaft w/ 1/2"-13 x 3/4" bolt & USS washer |
| 14 | 5RR1084K014A | Yoke bolts | 1 | (2) 1/2"x2"bolts & (2) 5/8"x4" bolts w/nuts & washer |
| 15 | 5RRCRP00110A | Comb bolts | 1 | (5) 1/2"x1 1/2" Carriage bolts w/ nut & washer |
| 16 | 5RRCRP00112A | Manual Tube | 1 | Owners Manual Tube |
| 17 | 5RRCRP00113A | Wheel bushings | 4 | 1" id bushing |
| 18 | 5RR10XXM00A | Operators Manual | 1 | Operators Manual and Dealer Assembly Guide |

Bolt Size Chart



SAE Torque Chart



| A Diameter (Inches) | Wrench Size | MARKING ON HEAD | | | | | |
|---------------------------|----------------|-----------------|-----|--------|-----|--------|------|
| | | SAE 2 | | SAE 5 | | SAE 8 | |
| | | lbs-ft | N-m | lbs-ft | N-m | lbs-ft | N-m |
| 1/4" | 7/16" | 6 | 8 | 10 | 13 | 14 | 18 |
| 5/16" | 1/2" | 12 | 17 | 19 | 26 | 27 | 37 |
| 3/8" | 9/16" | 23 | 31 | 35 | 47 | 49 | 67 |
| 7/16" | 5/8" | 36 | 48 | 55 | 75 | 78 | 106 |
| 1/2" | 3/4" | 55 | 75 | 85 | 115 | 120 | 163 |
| 9/16" | 13/16" | 78 | 108 | 121 | 164 | 171 | 232 |
| 5/8" | 15/16" | 110 | 149 | 170 | 230 | 240 | 325 |
| 3/4" | 1-1/8" | 192 | 261 | 297 | 403 | 420 | 569 |
| 7/8" | 1-5/16" | 306 | 416 | 474 | 642 | 669 | 907 |
| 1" | 1-1/2" | 467 | 634 | 722 | 979 | 1020 | 1363 |

WARRANTY

Please enter information below and save for future reference:

Date Purchase: _____ From (Which Dealer, or Direct): _____

Model Number: _____ Serial Number: _____

Riata Ranch Company, Inc. ("Riata") warrants this product to be free from defect in material and workmanship. Except as otherwise set forth below, the duration of this Warranty shall be for TWELVE (12) MONTHS COMMENCING ON THE DATE OF DELIVERY OF THE PRODUCT TO THE ORIGINAL PURCHASER. The applicable warranty period for commercial or rental use shall be SIX (6) MONTHS from the date of purchase. This Warranty will apply if notified to RIATA within thirty (30) days after such defect is discovered.

Under no circumstances will this Warranty apply in the event that the product, in the good faith opinion of RIATA, has been subjected to improper operation, improper maintenance, misuse, or an accident. This Warranty does not apply in the event that the product has been materially modified or repaired by someone other than RIATA, a RIATA authorized dealer or distributor, and/or a RIATA authorized service center. This Warranty does not cover normal wear or tear, or normal maintenance items. Such items include, but are not limited to, tires, scarifiers, combs, and tines. This Warranty also does not cover repairs made with parts other than those obtainable through RIATA.

This Warranty is extended solely to the original purchaser of the product. Should the original purchaser sell or otherwise transfer this product to a third party, this Warranty does not transfer to the third party purchaser in any way. There are no third party beneficiaries of this Warranty.

RIATA makes no warranty, express or implied, such as but not limited to: tines, scarifiers, hydraulic components, bearings, tires, and other RIATA accessories not manufactured by RIATA. Warranties for these items, if any, are provided separately by their respective manufacturers in conjunction with RIATA.

RIATA's obligation under this Warranty is limited to, at RIATA's option, the repair or replacement, free of charge, of the product if RIATA, in its sole discretion, deems it to be defective or in noncompliance with this Warranty. Such parts shall be provided by the selling dealer to the user during regular working hours. If requested, the product must be returned to RIATA with proof of purchase within thirty (30) days after such defect or noncompliance is discovered or should have been discovered, routed through the dealer and distributor from whom the purchase was made, transportation charges prepaid. RIATA shall complete such repair or replacement within a reasonable time after RIATA receives the product. THERE ARE NO OTHER REMEDIES UNDER THIS WARRANTY. THE REMEDY OF REPAIR OR REPLACEMENT IS THE SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE OF THIS WARRANTY. RIATA MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, AND RIATA SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY AND/OR ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE (EXCEPT WHERE PROHIBITED BY LAW).

RIATA shall not be liable for any incident or consequential losses, personal injuries or death, private property loss, damages or expenses, arising directly or indirectly from the product, whether such claim is based upon breach of contract, breach of warranty, negligence, misuse, strict liability in tort or any other legal theory. RIATA's obligation under this warranty, to the extent allowed by law, is in lieu of all warranties, implied or expressed for a particular purpose and any liability for incidental and consequential damages with respect to the sale or use of the items warranted. Without limiting the generality of the foregoing, RIATA specifically disclaims any damages relating to (i) lost profits, business, revenues or goodwill; (ii) loss of crops; (iii) loss because of delay in harvesting; (iv) any expense or loss incurred for labor, supplies, substitute machinery or rental; or (v) any other type of damage to property or economic loss.

This Warranty is subject to any existing conditions of supply, which may directly affect RIATA's ability to obtain materials or manufacture replacement parts.

No agent, representative, dealer, distributor, service person, salesperson, or employee of any company, including without limitation, RIATA, its authorized dealers, distributors, and service centers, is authorized to alter, modify, or enlarge this Warranty.

This Warranty is subject to the warranty registration being submitted. For warranty services, contact your selling dealer.

REPLACEMENT PARTS WARRANTY

RIATA RANCH COMPANY, INC. ("RIATA") warrants its parts to be free from defect in material and workmanship for a period of ninety (90) days from the date of delivery of the part(s) to the original purchaser.

Replacement or repair parts installed in the equipment covered by warranty are warranted for ninety (90) days from date of purchase of such part or to the expiration of the applicable new equipment warranty period, whichever occurs later.

Under no circumstances will this Warranty apply in the event that the part(s), in the good faith opinion of RIATA, has (have) been subjected to improper operation, improper maintenance, misuse, or accident. This Warranty does not cover normal wear or tear, or normal maintenance items. Such items include, but are not limited to tires, scarifiers, combs, and tines. This Warranty also does not cover repairs made with parts other than those obtainable through RIATA.

This Warranty is extended solely to the original purchaser of the parts. Should the original purchaser sell or otherwise transfer the parts to a third party, this Warranty does not transfer to a third party purchaser in any way. There are no third party beneficiaries of this Warranty.

RIATA's obligation under this Warranty is limited to, at RIATA's option, the repair or replacement, free of charge, of the replacement part if RIATA, in its sole discretion, deems it to be defective or in noncompliance with this Warranty. The selling dealer shall provide such parts to the user during regular working hours. If requested, the replacement part must be returned to RIATA with proof of purchase within thirty (30) days after such defect or noncompliance is discovered or should have been discovered, routed through the dealer and distributor from whom the purchase was made, transportation charges prepaid. RIATA shall complete such repair or replacement within a reasonable time after RIATA receives the replacement part. THERE ARE NO OTHER REMEDIES UNDER THIS WARRANTY. THE REMEDY OF REPAIR OR REPLACEMENT IS THE SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE OF THIS WARRANTY. RIATA MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, AND RIATA SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY AND/OR ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE (EXCEPT WHERE PROHIBITED BY LAW).

RIATA shall not be liable for any incident or consequential losses, personal injuries or death, private property loss, damages or expenses, arising directly or indirectly from the product, whether such claim is based upon breach of contract, breach of warranty, negligence, misuse, strict liability in tort or any other legal theory. RIATA's obligation under this warranty, to the extent allowed by law, is in lieu of all warranties, implied or expressed for a particular purpose and any liability for incidental and consequential damages with respect to the sale or use of the items warranted. Without limiting the generality of the foregoing, RIATA specifically disclaims any damages relating to (i) lost profits, business, revenues or goodwill; (ii) loss of crops; (iii) loss because of delay in harvesting; (iv) any expense or loss incurred for labor, supplies, substitute machinery or rental; or (v) any other type of damage to property or economic loss.

This Warranty is subject to any existing conditions of supply which may directly affect RIATA's ability to obtain materials or manufacture replacement parts.

No agent, representative, dealer, distributor, service person, salesperson, or employee of any company, including without limitation, RIATA, its authorized dealers, distributors, and service centers, is authorized to alter, modify, or enlarge this Warranty.

For warranty services, contact your selling dealer.

RA1084 Tine Bar Set-up Instructions

After unit is completely assembled and attached to tow vehicle in the arena, follow these steps:

1. Determine your ball height (measured at top of ball to ground/footing). We recommend using a 14-16' ball.
2. Determine desired tine depth in arena
3. Find corresponding dimensions in the chart below
4. Set the corresponding turnbuckles to the dimensions from the chart

| Ball Height Inches | Tine Depth 1" | | Tine Depth 2" | | Tine Depth 3" | |
|-----------------------|---------------------|--------------------|---------------------|--------------------|---------------------|--------------------|
| | Front Turnbuckle | Rear Turnbuckle | Front Turnbuckle | Rear Turnbuckle | Front Turnbuckle | Rear Turnbuckle |
| 10 | ---- | 15 3/16 | ---- | 15 7/16 | 11 1/8 | 15 3/4 |
| 11 | ---- | 15 3/16 | 11 1/8 | 15 7/16 | 11 3/8 | 15 3/4 |
| 12 | 11 1/8 | 15 3/16 | 11 3/8 | 15 7/16 | 11 1/2 | 15 3/4 |
| 13 | 11 3/8 | 15 3/16 | 11 1/2 | 15 7/16 | 11 3/4 | 15 3/4 |
| 14 | 11 1/2 | 15 3/16 | 11 3/4 | 15 7/16 | 11 15/16 | 15 3/4 |
| 15 | 11 3/4 | 15 3/16 | 11 15/16 | 15 7/16 | 12 3/16 | 15 3/4 |
| 16 | 11 15/16 | 15 3/16 | 12 3/16 | 15 7/16 | 12 3/8 | 15 3/4 |
| 17 | 12 3/16 | 15 3/16 | 12 3/8 | 15 7/16 | 12 5/8 | 15 3/4 |
| 18 | 12 3/8 | 15 3/16 | 12 5/8 | 15 7/16 | 12 7/8 | 15 3/4 |
| 19 | 12 5/8 | 15 3/16 | 12 7/8 | 15 7/16 | 13 1/8 | 15 3/4 |
| 20 | 12 7/8 | 15 3/16 | 13 1/8 | 15 7/16 | 13 3/8 | 15 3/4 |
| 21 | 13 1/8 | 15 3/16 | 13 3/8 | 15 7/16 | 13 5/8 | 15 3/4 |
| 22 | 13 3/8 | 15 3/16 | 13 5/8 | 15 7/16 | 13 7/8 | 15 3/4 |
| 23 | 13 5/8 | 15 3/16 | 13 7/8 | 15 7/16 | 14 3/16 | 15 3/4 |
| 24 | 13 7/8 | 15 3/16 | 14 3/16 | 15 7/16 | 14 7/16 | 15 3/4 |
| 25 | 14 3/16 | 15 3/16 | 14 7/16 | 15 7/16 | 14 11/16 | 15 3/4 |
| 26 | 14 7/16 | 15 3/16 | 14 11/16 | 15 7/16 | 15 | 15 3/4 |
| 27 | 14 11/16 | 15 3/16 | 15 | 15 7/16 | 15 1/4 | 15 3/4 |

Note:

- Turnbuckle length measured center of pin to center of pin
- Small adjustments make large movements in tine depth
- All dimensions are given as a baseline, fine adjustment may be necessary
- Tighten turnbuckle lock nuts once setting are complete

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**MANUAL PART NO.
5RR10XXM00A**

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