Set Up Guide

Model and Serial Number

Attached to the frame is an ID plate showing the serial number. Record your implement information and serial number in the space provided below. ABI will use this information to give you prompt, efficient service when you order parts.

Size: _____
Serial number: _____
Invoice number: _____
Purchaser's name: _____

Safety Precautions

Preparation

1. Before operating equipment, read and understand the operator's manual.
2. Thoroughly inspect the implement before initial operation to assure that all packaging materials, i.e., wires, bands, and tape have been removed.
3. Personal protection equipment including safety glasses, safety shoes, and gloves are recommended during assembly, installation, operation, adjustment, maintaining and/or repairing the implement.
4. Operate the implement only with a tractor equipped with an approved Roll-Over-Protective-System (ROPS). Always wear your seat belt. Serious injury or even death could result from falling off the tractor.
5. Operate only in daylight or good artificial light.
6. Ensure the implement is properly mounted, adjusted and in good operating condition.
7. As with all arena dragging equipment, always ensure footing material in the arena is at a consistent depth, if an arena base is installed, before engaging subsurface implements. If the footing layer depth is not consistent, you could damage your arena base layer.
8. Double check implement depth into the footing to ensure it will NOT go below the footing layer into the base layer of the arena. (If base exists) This double check must be completed upon entering the arena and again after pulling forward a short distance, to remove any slack from pins and linkages, after each time the implement or linkages are adjusted.

CAUTION: Our machines are designed considering safety as the most important aspect and are the safest available in today's market. Unfortunately, human carelessness can override the safety features built into our machines. Injury prevention and work safety, aside from the features on our tools, are very much due to the responsible use of the equipment. It must always be operated prudently following with great care, the safety instructions laid out in this manual.

Operation Safety

1. The use of this equipment is subject to certain hazards which cannot be prevented by mechanical means or product design. All operators of this equipment must read and under stand this manual, paying particular attention to safety and operating instructions, prior to using.
2. Do not operate the tractor/ATV/UTV and implement when you are tired, sick, or when using medication.
3. Keep all helpers and bystanders at least 50 feet away from the machine. Only properly trained people should operate this machine.
4. The majority of accidents involve operators being knocked off the tractor by low hanging limbs and then being run over by the implement. Accidents are most likely to occur with machines that are loaned or rented to someone who has not read the operator's manual and is not familiar with the implement.
5. Always stop the tractor/ATV/UTV, set brake, shut off the engine, remove the ignition key, lower implement to the ground, and allow rotating parts to come to a complete stop before dismounting tow vehicle. Never leave equipment unattended with the tow vehicle running.
6. Never place hands or feet under implement with tractor engine running or before you are sure all motion has stopped. Stay clear of all moving parts.
7. Do not reach or place yourself under equipment until it is blocked securely.
8. Do not allow riders on the implement or tractor at any time. There is no safe place for riders.
9. Never place hands or feet under implement with tractor/ATV/UTV engine running or before you are sure all motion has stopped. Stay clear of all moving parts.
10. Before backing up, disengage the implement from the ground and look behind carefully.
11. Keep hands, feet, hair, and clothing away from moving parts.
12. Never operate tractor and implement under trees with low hanging limbs. Operators can be knocked off the tractor and then run over by implement.
13. Stop implement immediately upon striking an obstruction. Turn engine off, remove key, inspect and repair any damage before resuming operation.
14. Stay alert for holes, rocks, and roots in the terrain and other hidden hazards. Keep away from drop-offs.
15. Use extreme care and maintain minimum ground speed when transporting over a hillside, over rough ground, and when operating close to ditches or fences. Be careful when turning sharp corners.
16. Reduce speed on slopes and sharp turns to minimize tipping or loss of control. Be careful when changing directions on slopes.
17. Inspect the entire machine periodically. Look for loose fasteners, worn or broken parts, and leaky or loose fittings.
18. Pass diagonally through sharp dips and avoid sharp drops to prevent "hanging up" tractor and implement.
19. Avoid sudden starts and stops while traveling up or downhill.
20. Always use down slopes; never across the face. Avoid operation on steep slopes. Slow down on sharp turns and slopes to prevent tipping and/or loss of control.

Initial Set Up

Step 1:
Remove the plastic wrap from your Rascal. The best way to do this is by using a utility knife and to cut around the base of the skid. Use caution not to cut the banding and be sure to stand off to the side in case any items have come loose during shipping.

Make sure the delivery driver stays while you remove the plastic so you can verify all parts are present and there is no damage. If there is any damage make sure to mark it on the bill of lading.

Step 2:
Verify that all parts are there such as profile blade and the hitch/tongue. These components will be strapped to the frame of the tool.

Please also verify that all optional equipment is present. In the picture you will see how the optional railblade comes mounted to the Rascal. After verifying that all your parts are accounted for you can let the delivery person go on their way.

Rail Blade Shipping Postion

Step 3:
Next you will cut the banding that straps the Rascal to the pallet. Please be cautious when cutting the banding. Cut the center bands first and then work your way outward, keeping your body out of the way due to the possibility of falling parts.

Step 4:
Locate the hitch bar sent with the Rascal. The hitch bar will go into the slotted end of the tongue assembly. Remove the two bolts and nuts already installed on the tongue assembly. Slide the hitch bar into place as far as possible. If it does not lineup properly you can insert a punch or 3/8" ratchet extension and tap it down into place, then insert the bolts and nuts and tighten them down.

Step 5:
Locate the the pin securing the gold top link to the tower on the rear of the Rascal (refer to the Figure 1). Remove the gold pin that is holding the top link in place to keep the tool in the upright position during shipping.


Figure 1

Step 6:
Attach the top link with the pin removed in the previous step (refer to Figure 2). The top link should be installed into the center hole of the rear tower just above where the rear square jack is already installed. You will need to slowly lower the tongue to line up the top link up with the center hole of the tower and then insert the pin through the lined up holes. *For safety reasons, it is recommended to complete this step with two people*.


Figure 2

Step 7:
Use the rear jack to adjust the finsh rake turning it clockwise, lowering the finish rake. This will lower the hitch down to help match the height of your tow vehicle hitch. As the Rascal lowers, it may become unsteady on the pallet, so you may want to use the front jack to lower the wheels closer to the ground for safety

Step 8:
Using the combination of the rear finish rake jack and the front wheel jack, line up the Rascal hitch to the height of your tow vehicle. Then attach the Rascal to the hitch of the tow vehicle with the hitch pin that was provided. After attaching it to the tow vehicle lower the wheels as far as possible to lift the frame and turn the back jack counter clockwise to raise the finish rake off of the pallet. You are now ready to drive away

Components

Scarifying teeth:
The scarifying teeth loosen the ground to eliminate hard spots and easily penetrate compacted arena footing and gravel driveway material. They are primarily used in arena renovation and gravel driveway work to break up compaction.

Bolt On Scarifier Tips:
The Rascal has replaceable bolt on tips on the scarifying teeth. This feature not only ensures affordable and easy maintenance of this wear part, but also ensures peak ground penetration no matter the ground condition. If the tips wear to the point that performance is diminished, simply replace them, restoring optimal performance.

Profile Blades:
The profile blade cuts parallel to the arena grade, while riding along just above the base, to remove dangerous compaction layers and aerify the footing. This creates a sheet of material the finish rake is then able to break up as it flows through the tool. The Profile Blade attachment ensures that what the horse and rider see on the top surface, is also what the horse feels when his hooves penetrate into the footing material. It is important to remember that the profile blades are used for grooming, not the renovation of the arena.

Wheels:
The large 16.5” tall x 8” wide tires serve four important functions. First, they allow for quick and easy transport. Second, they stabilize the Arena Rascal Pro from pitching side-to-side ensuring consistency of grooming depth, the width of the unit, especially when maneuvering tight turns. Third, they enable the Arena Rascal Pro to “float” on loosened or wet material to minimize “sinking” into these soft material situations, which otherwise would alter grooming depth. This is a common problem for most competitive groomers. Forth, they gauge or control how deep the ground contact components go into the ground and hold a consistent grooming depth.

Finish Rake:
The rear rake pulverizes and breaks up clumps of material and leaves a beautiful signature finish behind in the arena. By adjusting the rear manual jack, the Arena Rascal Pro’s 1/2” thick hardened-steel-rake, can pivot up to 90° into a variety of finishing and grading positions. This adjustability enables the rake to pulverize clods of material, level and finish no matter the material consistency.

Operation

Transport the Rascal to a hard level surface to acheive the most accurate adjustments. Be sure to keep the Rascal attached to the tow vehicle as adjustments are made. *ABI does NOT recommend any adjustments be made to the Rascal unless it is attached to a tow vehicle.*

Setting up for use with scarifiers

Start by adjusting your top link to set the cutting angle. For the best ripping angle, you will want about 2" of thread on both ends of the top link (Shown in Figure 1). This will give the scarifiers the proper angle for ripping. You can adjust them later if you find a different angle works for your usage. If the top link is showing more thread on one side of the tip link, you will need to disconnect that end from the Rascal and turn that end so each side is showing the same amount of thread. *Use caution when disconnecting top link this as the Rascal may shift in the process.*

Figure 1

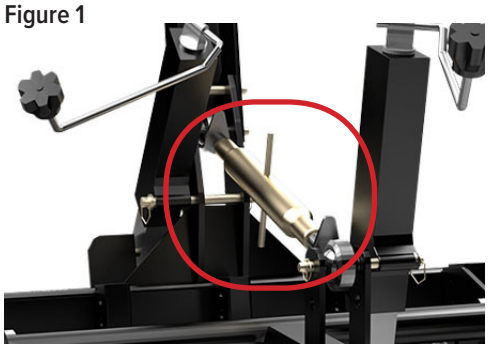
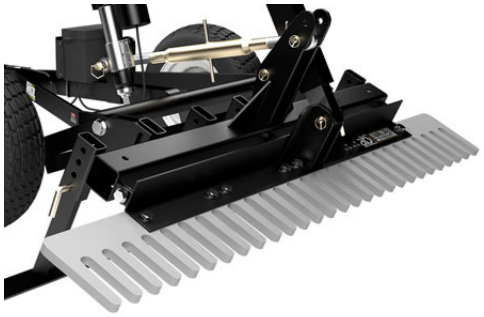


Figure 2

Setting up for use with profile blades

On a flat surface, raise the wheels of the Rascal off the ground. It may be helpful to rest the wheels on some blocks for this adjustment, otherwise you can rest the blades on the ground. You can then lower the blade to the depth you want it to run in the arena. Remember, the wheels maintain the depth, so if the blade is 2" below the bottom of the wheel, that is how deep it will run in the footing. Now use the top link to adjust the pitch of the blade. The blade should always sit level to the surface of the ground. If the blade is tilted upwards, this will cause the Rascal to "ski" upward, causing waves in the footing. If the blade is tilted downwards, this will cause the Rascal to dig in more, endangering the base. The profile blade should always run level to the base.

Adjusting the finish rake



The finish rake will be adjusted with the Rascal in use. Take the Rascal to the area where it will be used. Raise the wheels to allow the scarifiers/ profile blades to enter the surface at the desired depth. Pull the Rascal forward several feet and come to a slow stop. Adjust the finish rake to rest firmly on the surface of the material (about 1/2" of penetration) using the square jack on the rear of the tool.

Attaching the Rascal to a tow vehicle

1. Back up the tow vehicle within close range of the Rascal tongue. Put the tow vehicle in park or block up the wheels and turn off the tow vehicle.
2. Move the Rascal as needed to allow the tongue of the Rascal to sit closer to the pin hitch receiver on the tow vehicle.
3. Raise or lower the wheels of the Rascal, using the square hand jack located on the front of the Rascal; until the tongue of the Rascal is sitting level to the pin hitch receiver. The tongue may need to be pushed down slightly to fully line up.
4. Slide the Rascal tongue over the pin hitch receiver until the holes on the tongue and the pin hitch receiver line up.
5. Insert a 1/2" hitch pin in the hole and secure using a lynch pin.
6. Once the tongue is fully secured to the pin hitch receiver, confirm the hitch pin is secured using a lynch pin. Lower the wheels to raise ground engaging components and the Rascal is ready for transport and use.

Disconnecting the Rascal from a tow vehicle

Use caution when disconnecting the Rascal from a tow vehicle. Below is the recommended disconnect procedure for the Rascal.

Figure 1

1. Using the square hand jack on the back of the Rascal, lower the finish rake down until it is in a grading position. The finish rake does not need to be at a perfect 90 degree angle, just in a downward position. Figure 1 shows what the finish rake should look like when in the grading position.
2. Raise the wheels on the Rascal until the weight of the Rascal is sitting on the finish rake. The scarifiers/profile blades may also rest on the ground at this time as well.
3. Continue to raise the wheels on the Rascal until the square hand jack can slide from side to side without binding up. This will indicate that the weight of the Rascal is resting on the finish rake. The weight may also be resting on the scarifiers/profile blades at this time as well.
4. Once the wight of the Rascal is sitting on the finish rake and the scarifiers/profile blades, the pin connecting the rascal to the tow vehicle can be removed. The Rascal is now free from the tow vehicle.

Optional Attachments

Electric Actuator
The optional electric acuator replaces the manual square hand jack to raise and lower the wheel system on the Rascal. This allows the operator to raise and the unit from the seat of the tow vehicle using a switch secured to the handlebars or a wireless remote. An installation video and set up guide can be found on the support page at abisupport.com.

3-Point Conversion Kit
The 3-Point conversion kit can be installed in place of the removable tow bar tongue, allowing the Rascal to be compatable with both category 0 and category 1 3-point hitch types for tractors under 35 horse power. An installation guide is available at abisupport.com.

Rail Blade
The rail blade attaches to the frame with a large pin. The shovel cuts into the built up material along arena walls and rails and pulls it away, saving the user time and effort.

To use the rail blade, pin the scarifiers/profile blades out of play. Use the top link to adjust the rail blade angle so it is level with the footing. The rail blade is meant to be used with only the finish rake in play. This allows it to pull material in from the edge and then be spread out by the rake.

Maintenance

Wheels and Hubs
Make sure to check the pressure in the tires to ensure they are properly inflated. If the tires look to be low on air, fill them until they reach the manufacturer's suggested PSI. The proper PSI for the tire can be located on the side wall of the tire.

General information on the PSI for the Rascal tires:
4-ply Rascal Tire: 45 PSI
2-ply Rascal Tire: 50-60 PSI
Information on the ply of the tire can be found on the side wall of the tire.

Be sure to grease the hubs, either using a grease gun or by manually packing the bearings every 2-3 months, or more frequently for high volume use of the Rascal. The hubs will also need to be greased before any period of storage and prior to use after a period of storage.

Cleaning the Rasal
Clean the Rascal using soap and water as needed. Avoid using any strong chemicals as it may damage the paint on the Rascal. A pressure washer may be used to remove built up material on the Rascal. If using a pressure washer, be sure to stand away from the Rascal as the pressure may remove paing from the Rascal. If cleaning the Rascal with the optional electric actuator attachment, do not spay water directly on the wiring harness or control box. This may damage the electric actuator, control box, or wiring harness.

Removing Rust from the Rascal/Paint Touch Up
Remove resut from the Rascal using a wire brush or piece of fine sand paper. Wash area with soap and water, rinse, and allow area to dry. Spray the area with a rust inhibiting spray paint and allow to dry before use. If desired, a primer can be used before painting the surface with the finished color. Black semi-gloss or gloss spray paint may be used.

Checking Hardware
Before each use, check to make sure none of the attaching hardware on the Rascal is loose or damaged (i.e. nuts, bolts, pins). If any is found to be loose, make sure it is properly secured or tightened prior to using the Rascal. If hardware is damaged, replace it prior to operation. All hardware on the Rascal is standard SAE Grade 5 hardware.

Top Link
Be sure to keep the threaded bolts on your top link greased so they do not seize over time.

Finish Rake
Occasionally over the life of your tool, you may have a bent finger on the finish rake. If this occurs, you can place a pipe over the bent finger and use the pipe to straighten the finger back out.

All of your ground engaging components are considered wear parts and will need to be replaced as they wear out from use. You can refer to the scarifier tip guide on the following page to gauge wear on your scarifying components. To reorder, please contact the ABI Support department at 855.211.0598.

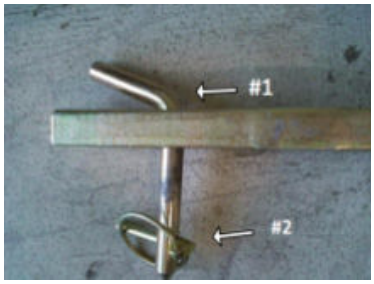
Scarifier Tips and Shanks Guide

The tip on the left is worn and the tip on the right is new. The while line shows the maximum wear point before there is damage to the shank. Going much higher than the white line will mean that the shank will need to be replaced.

Pictured here is a close up of the phone number on the side. If you hit the phone number, the tips should be replaced as soon as possible.

The tip bolted on a standard 9” shank.

The shank is held on to the Rascal by a bent pin (#1) and a lynch pin (#2).



ARENA RASCAL PRO

ABI Attachments, Inc
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Mishawaka, IN 46544
abiattachments.com

The setup video and additional support material is available at abisupport.com under Arena Rascal Pro.

For additional information on the use or setup of the Arena Rascal Pro, please contact the ABI customer support team at 855.211.0598.

Additional support videos are available at the ABI support page (abisupport.com) under each tool.

Warranty Information and Return Policy - Warranty and return policy information can also be found on the ABI support page under each tool. For additional questions regarding warranty or return policy, contact the ABI customer support team at 855.211.0598.