

ABI Rascal Setup Instructions



ABI Rascal (Some Items shown may be optional)

Version 2.1.4

Please read and understand this setup guide prior to use of the ABI Rascal

Thank You,

On behalf of the ABI family we would like to thank you for your recent purchase of your Rascal. Our Company's goal is to provide you, our customer; with innovative, quality tools as well as first rate customer service.

These instructions are designed to help you get your new Rascal off the delivery pallet and into use. Once you have put your Rascal to work, if you have any questions, please feel free to call and talk with our friendly and knowledgeable Customer Service Department.

To contact our Customer Service Department call 855-211-0598, M- Th 8am-8pm EST and Friday 8am-5pm EST.

To order parts for your Rascal please contact our Customer Support Department by phone at: 855-211-0598 M-TH 8am – 8pm and Friday 8am-5pm EST

Additional Contact Information –

Additional information on the Rascal can be found on the ABI Support site at: www.abisupport.com

To contact ABI's Customer Service Department after hours go to the Help Desk on the ABI Support page at: www.abisupport.com and send our Customer Service Department an email regarding any issue you may be experiencing with the Rascal.

To the Operator -

The information presented in this manual will prepare you to operate the Rascal in a safe and knowledgeable manner. Operating the Rascal in a proper manner will provide a safer working environment and create a more efficient result. Read this manual fully and understand the entire manual prior to setup, operation, adjusting, performing maintenance, or storing the Rascal. This manual contains information that will allow you the operator to get years of dependable performance from the Rascal.

This manual will provide you with information on safely operating and maintaining the Rascal. Operating the Rascal outside of the stated safety and operations guidelines may result in injury to operator and equipment, or void the warranty.

The information provided in this manual was current at the time of printing. Variations may be present as Absolute Innovations, Inc. continues to improve and upgrade the Rascal for future use. Absolute Innovations, Inc. reserves the right to implement engineering and design changes to the Rascal as may be necessary without prior notification.

Operational Safety Rules-

Please exercise caution at all times when setting up, operating, or performing maintenance on the Rascal. Remember, any piece of equipment like the Rascal can cause injury/damage if operated improperly or if the user does not understand how to operate the equipment. Exercise caution at all times with using the Rascal.

- Never permit any person to ride or board the Rascal at any time. NEVER ALLOW RIDERS ON ANY ABI MODEL RASCAL!
- Use care and maintain minimum ground speed when operating the Rascal on a hillside, or when operating close to ditches, fences, or water sources.
- Never place any body part under the while the Rascal is in operation.
- Never allow anyone near the Rascal while in operation.
- Operate the Rascal in the daylight or under good artificial light. Operator should always be able to clearly see where they are going.
- Be alert for hidden hazards. Always operate the Rascal with caution over work environments that may have buried obstacles.
- Stay well and clear of all moving parts. Keep all limbs clear of attachments when making adjustments with all hydraulically operated attachments.
- Use caution when operating the Rascal in icy, wet, or snowy condition.
- Do not use the Rascal on highways or public thoroughfares. The Rascal is designed for off road use only.
- Always follow Tractor/UTV/RTV Manufacturer's rules for safe Operation of Tractor/UTV/RTV, and for proper procedures for towing attachments. Contact your local dealership for an Owner's Manual for any questions related to the safe operation of the Tractor/UTV/RTV.

Use caution when operating the Rascal. Using the Rascal outside of stated safety and operations guidelines may result in injury to operator or others, property damage, or a void in warranty.

Tools needed for assembly:

34" Combination Wrench 34" Socket with Wrench Utility knife / Metal Snips Tape measure

Setup Instructions:

Step 1 – Removing the Rascal from the pallet:

Note: It may be easier to setup the Rascal with two people. If working alone, or with another person, always be careful to watch pinch points on the tool to avoid bodily injury!

1) To remove the Rascal from the pallet, locate the Hitch bar sent with the Rascal; and remove the packaging from around it. The hitch bar will go into the slotted end of the tongue assembly, and attaches using the two ½" bolts pre-secured there. Once the Tongue is attached it will look similar to figure 1.



2) After the Hitch bar is attached to the Rascal, the Rascal will need to be attached to a tow vehicle using a ½" hitch pin to secure it. To hook the Rascal to a tow vehicle, remove the straps holding the Rascal to the pallet it was shipped on. To remove these straps pull the short tail, or small

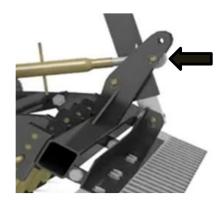
loose end; and pull each strap loose. If there are no ends exposed cut the straps using a utility knife. Some Rascal models are shipped with metal banding securing them to the pallet. If your Rascal has metal bands securing it to the pallet, use metal snips to cut the bands free. Be careful when cutting the metal bands as they may have sharp edges. Also, be careful to watch the tongue assembly, as it may fall in the process. If the tongue assembly is suntil in the upright position, after removing the straps; the top link



Figure 2

may be preventing the tongue assembly from lowering. Locate the top link, use figure 2 for reference on the top link; and see if the handle is placed behind the top link tower. The top link tower is located at the back of the Rascal above the Finish rake. If the top link is preventing movement, remove the top link from the top link tower by lifting out the top link, and then slowly lower the tongue assembly down. Now the Rascal can be attached to the tow vehicle. This will make the rest of the assembly process much easier.

3) Next, attach the top link to the top link tower. The top link tower is the bracket located at the back of the Rascal directly above the finish rake. To attach the top link to the top link tower, extend out the top link using the turn handle in the middle of the body of the top link, until the end of the top link lines up to the second hole from the top of the top link tower. To extend out the top link, grasp the end that is not attached to the Rascal, and turn the handle in the center of the top link. Both ends of the top link will open at the same time. Once the top link is open enough



for the hole on the top link and top link tower to line up, insert the hitch pin and secure it with the lynch pin. Use figure 3 for reference on what the top link will look like once attached to the Rascal properly.

- 4) To remove the Rascal from the shipping pallet lower the wheels of the Rascal using the hand jack on the front of the Rascal between the wheels, raising the Rascal off the pallet. Make sure to ensure proper clearance from the shipping pallet of attachments. Once all attachments have proper clearance, and all the bolts on the Rascal are properly secured, slowly pull the Rascal off the shipping pallet.
- 5) Before using the Rascal it is important to put the Rascal into Standard Operating Position for use. Instructions on adjusting the Rascal into Standard Operating Position are below.

Step 2 – Standard Operating Position:

- 1) To adjust the Rascal to Standard Operating Position, transport the Rascal to a hard level surface. This will help to ensure an easy means to adjust the Rascal for first time use. Note: The Rascal must be hooked up to a tow vehicle in order to finish setting it up. ABI does not recommend making any adjustments to your Rascal without it being secured to a tow vehicle.
- 2) Note that the scarifier's/profile blade(s) come shipped in the second hole from the top of the scarifier tube. Figure 4 shows the scarifier's in the third hole from the top of the scarifier tube. This is the recommended position for the scarifier's/profile blade(s), and it is easier to make your initial adjustments with the scarifier's/profile blades in these holes. For first time use we strongly recommend using the full basic setup. This ensures that if any problem does arise in the setup it will be easier to adjust and troubleshoot.



Figure 4

3) Adjusting for Standard Operating Position - Start by adjusting your top link to set the cutting angle. This angle is to allow proper ripping, and to ensure the Rascal is used at its greatest potential. Adjust the top link, either opening or closing it, until around 2" of thread is exposed on both ends of the top link. If more thread is showing on one side of the top link, it may offset the angle of the Rascal and change the way that it performs. To ensure a good setup try to keep the thread on both sides of the top link the same at all times. To close up the thread on the top

link, disconnect the top link at one side. Spin the whole top link to close up the side suntil connected to the Rascal, then spin the free connecting head until no thread is visible. Holding the free head of the top link, use the handle in the center of the top link to let out enough thread to re-secure the top link to the Rascal. Last, close up the top link until about 2" of thread is showing on both ends of the top link. Figure 5 shows the top link with about 2" of thread showing once attached.



- 4) If using the profile blades continue on to step 5 for setup of the profile blades. If the scarifier's will be used continue on to step 6 for setup of the finish rake.
- 5) Adjusting the Rascal for use with the Profile Blades With the Rascal on a hard flat surface, raise the tires on the Rascal until they just clear the ground and profile blade(s) are resting firmly on the ground. To ensure proper contact of the profile blades lift the finish rake up using the jack on the back of Rascal. This will ensure the profile blades make proper contact to the surface or adjustment. If the profile blade(s) need to be



Figure 6

- adjusted to sit flat to the surface, adjust the angle of the profile blade(s) using the top link. Once the profile blade(s) sit level to the surface the finish rake will need to be adjusted. For reference refer to figure 6.
- 6) 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 up to allow the scarifier's/profile blade(s) to enter into the surface. Pull the Rascal forward about 2-3 foot and come to a slow stop. Adjust the finish rake so that it rests firmly on the surface of the material. Adjust the finish rake to make more or less contact as needed to get the desired finish in the arena. For reference refer to figure 7.

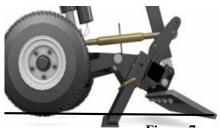


Figure 7

7) Now the Rascal is in Standard Operating Position and ready for use.

Attaching the Rascal to a Tow Vehicle –

To hook the Rascal to a tow vehicle from storage follow the steps below:

- 1) Back up the tow vehicle within close range of the tongue of the Rascal. Put the tow vehicle in park or block up the wheels, ensuring it will not roll on its own; 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) Next, 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 pin hitch receiver line up.
- 5) Insert a $\frac{1}{2}$ " hitch pin in the hole and secure using a lynch pin.
- 6) Ensure that the tongue is fully secured to the pin hitch receiver, and that the hitch pin is secured using a lynch pin. Now the Rascal is ready for transporting 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.

1) Using the square hand jack on the back of the Rascal, lower the finish rake down until 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 8 below shows what the finish rake should look like when in the grading position.

2) Next, raise the wheels on the Rascal until the weight of the Rascal is sitting on the finish rake. The scarifier's/profile blade(s) may also rest on the ground at this time as well.



Figure 8

- 3) Continue to raise the wheels on the Rascal until the square hand jack can be slid side to side with out binding up. This will indicate that the weight of the Rascal is resting on finish rake; the weight may also be resting on the scarifier's/profile blade(s) at this time as well.
- 4) Once the weight of the Rascal is sitting on the finish rake, and the scarifier's/profile blade(s); the pin connecting the Rascal to the tow vehicle can be removed. The Rascal is now free from the tow vehicle.

Maintenance:

Wheels and Hubs - Make sure to check the pressure in the tires to ensure they are properly inflated. If the wheels look to be low on air, fill them until they reach the Manufacturer's suggested P.S.I. The proper P.S.I for the wheel 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.

Make 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 Rascal – 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 off of the Rascal, if needed. If using a pressure washer, make sure to stand away from the Rascal as the pressure may remove paint from the Rascal. If cleaning the Rascal with the Optional Electric Actuator attachment, do not spray water directly on the wiring harness or control box. This may damage the Electric Actuator, control box, or wiring harness.

Please read fully and understand setup guide prior to use of the ABI Rascal

Removing rust from the Rascal/Paint touch up — Remove rust 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 paint 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 that none of the attaching hardware on the Rascal is loose or damaged, i.e. nuts, bolts, or pins. If any is found to be loose, ensure it is properly secured prior to using the Rascal. If hardware is damaged replace it prior to operation. All hardware on the Rascal is Standard S.A.E Grade 5 hardware.

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For additional Information on the use or setup of the Rascal please feel free to contact ABI's Customer Support Department at: 855-211-0598 M-Th 8am-8pm EST and Friday 8am-5pm EST.

For basic parts replacement – go to ABI's support web page or click the Parts ordering link at the bottom of any ABI Attachments web page. For ABI's website go to: www.abiattachments.com. For any parts not found on the ABI support website please call 855-211-0598 for additional parts help.

Additional Customer Support Videos – Additional support videos for the ABI Rascal can be found on the ABI support web page under each tool.

Warranty Information and Return Policies - Warranties and Return Policy paper work can also be found on the ABI support web page under each tool. For additional questions regarding Warranty or Return Policy contact ABI's Customer Support Staff at 855-211-0598.

