Model shown may have additional options
Thank You,

On behalf of the ABI family we would like to thank you for your recent purchase of your MVP. 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 MVP off the delivery pallet and into use. Once you have put your MVP 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 MVP 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 MVP in a safe and knowledgeable manner. Operating the MVP 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 MVP. This manual contains information that will allow you the operator to get years of dependable performance from the MVP.

This manual will provide you with information on safely operating and maintaining the MVP. Operating the MVP 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 MVP for future use. Absolute Innovations, Inc. reserves the right to implement engineering and design changes to the MVP 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 MVP. Remember, any piece of equipment like the MVP 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 MVP.

- 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 MVP. Using the MVP 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:

- ¾” Combination Wrench
- ¾” Socket with Wrench
- Utility knife / Metal Snips
- Tape measure

Removing the MVP from the Pallet:

1) Remove all boxes containing additional parts from the shipping pallet and place them off to the side until needed later in the setup of the MVP.

2) Next, remove the drag mat bracket from the MVP, and place it off to the side for installation later in the process. The drag mat bracket will be attached after the hitch bar has been attached to the Rascal. To remove the drag mat bracket, remove the packing wrap from the top portion of the drag mat bracket. The quick strap will also need to be removed to free the drag mat bracket. Make sure to hold the drag mat bracket securely before cutting off the quick strap along the lower half of the drag mat bracket.

3) Locate the hitch bar for the MVP. The hitch bar is shipped removed from the MVP and will be wrapped in stretch wrap for the shipping process and will be secured to the MVP on the finish rake of the MVP along with the top link for the Rascal. See photo below for reference.

4) Secure the hitch bar to the MVP by inserting it into the receiver slot using the two provided bolts to secure it to the MVP frame. The nuts used to secure to bolts for the hitch bar is a throated nut and will feel cross threaded when securing. This is to prevent the hardware from loosening while the Rascal is in use.
5) Now the tongue of the MVP can be lowered down. To lower the tongue of the MVP down the metal bands and the quick strap will need to be removed first. Use metal snips to cut the metal bands free of the MVP. Use caution when removing the metal bands as the cut ends may be sharp. The MVP may shift in the process, so be sure to keep feet clear of any possible pinch points while lowering the tongue of the MVP. If possible to do so, connect the MVP to a tow vehicle at this time.

6) Connect the top link to the tongue of the MVP using the hitch pin securing the front square jack to the tongue of the MVP. Remove the lynch pin holding the hand jack in place, slide the pin out till the top link can be inserted between the ears and then secure the pin back in place with the top link attached.

7) Locate the drag mat bracket that was removed during step 1. This will now be attached to the back of the MVP. On the back of the MVP is an upright mast with 3 holes pre-drilled in it. See figure 2 for reference. The bottom hole secures the finish rake square hand jack, the middle hole is used to secure the top link to the upright mast, and the top hole will be used to bolt the drag mat bracket to the MVP. Using the provided hardware attach the drag mat bracket to the upright mast. The flat part of the drag mat bracket will point away from the tow vehicle. Start by inserting the bolt through the drag mat bracket and the top hole of the upright mats, securing the drag mat bracket to the Rascal. Now pull the pin from the second hole of the upright mast to allow the top link to be attached to the upright mast. The top link may need to be adjusted to secure it back to the upright mast. If the top link needs to be adjusted, hold the open end in one hand and spin the top link out using the center bar in the top link. Once, the top link is long enough for the end of the top link to line up with the open hole, insert the pin back through the hole securing the drag mat bracket and the top link to the upright mast.

8) The MVP is now ready to be attached to a tow vehicle, if not previously attached to a tow vehicle in step 4. ABI recommends using a tow vehicle to finish removing the MVP from the pallet. If a tow vehicle is not available at the time of assembly please refrain from removing the MVP from the pallet until one is available. See section – “Attaching the MVP to a Tow Vehicle” found on page 5 of this document for assistance on connecting the MVP to a tow vehicle.
9) Once the MVP is attached to a tow vehicle, lower the wheels on the MVP using the square hand jack located at the front of the MVP between the wheels, until all attachments raise fully clear of the shipping pallet.

10) When all the attachments on the MVP have properly cleared the shipping pallet the MVP can be removed from the shipping pallet.

**Ensure that all bolts are tightened prior to using the MVP. If any bolts are loose, secure them properly before use.**

MVP Standard Operating Procedure –

Once the MVP is removed from the shipping pallet, it will need to be adjusted for first time use. Below are setup instructions for setting up the MVP for use with the scarifier’s, profile blades, or Vibraflex.

Profile Blades:

1) To setup the MVP for use with the profile blades/scarifier’s take the MVP to an area that has a hard flat surface

2) Raise the finish rake up so that it will not hinder the setup process. Next, raise the wheels off the ground using the square hand jack until the profile blades are resting on the ground. Raise the wheels fully off the ground allowing the profile blades to rest fully on the ground. This will make the rest of the setup much easier.

3) Using the top link, increase/decrease the amount of thread showing on the top link using the center handle on the top link. Continue until the profile blades are sitting level with the surface.

4) The MVP is now ready to be used with the profile blades.

Scarifier’s:

To setup the MVP for use with the scarifier’s, extend out the top link until both ends of the top link show about 2” of thread on both ends. If the top link is showing more thread on side of the top link you will need to disconnect the top link from one side of the MVP. Use caution when doing this as the MVP may shift in the process. Close up both sides of the top link until no thread is showing on either end. Then, while holding one end of the top link; use the handle in the center of the top link to extend out the top link until it can be reconnected. Decrease the amount of thread showing until roughly 2” of thread is showing on both ends.

The MVP is now ready to be used with the scarifier’s.
Vibraflex:

For assembly of the Vibraflex refer to the Vibraflex setup guide.

1) To setup the MVP for use with the Vibraflex take the MVP to an area with a hard flat surface.
2) Raise the finish rake up so that it will not hinder the setup process. Next, raise the wheels off the ground using the square hand jack until the Vibraflex is resting on the ground.
3) Using the top link, increase/decrease the amount of thread showing on the top link using the center handle on the top link. Continue until the Vibraflex is sitting level with the surface.
4) The MVP is now for use with the Vibraflex

Attaching the MVP to a Tow Vehicle –

1) To attach the MVP to a tow vehicle raise or lower the wheels as needed to raise or lower the tongue on the MVP.
2) Once the tongue lines up just above the ball hitch on the tow vehicle stop.
3) Next, lift the safety latch on the ball hitch coupler on the MVP.
4) Using the square hand jack located to the front of the MVP raise the wheels on the MVP until the ball hitch coupler rests on the ball hitch. You may need to push down on the MVP tongue to ensure the ball hitch coupler rest full on the ball hitch.
5) Once the ball hitch coupler is fully resting on the ball hitch, lower the safety latch on the MVP ball hitch coupler. Ensure the ball hitch coupler is fully secure before transporting, or using the MVP.
6) The MVP is now ready for use.
Disconnecting the MVP from a Tow Vehicle –

Use caution when disconnecting the MVP from a Tow Vehicle. Below is the recommended disconnect procedure for the MVP.

1) Using the square hand jack on the back of the MVP, 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 4 below shows what the finish rake should look like when in the grading position.

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

3) Continue to raise the wheels on the MVP until the square hand jack can be slid side to side without binding up. This will indicate that the weight of the MVP is resting on finish rake; the weight may also be resting on the scarifier’s/profile blade(s)/Vibraflex at this time as well.

4) Once the weight of the MVP is sitting on the finish rake, and the scarifier’s/profile blade(s); the ball hitch connector connecting the MVP to the tow vehicle can be disconnected. The MVP 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.

**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.
Please read fully and understand before operating the MVP!

For additional setup or usage questions feel free to contact ABI’s Customer Service Staff at 855-211-0598 M-T 8am-8pm EST - Friday 8am-5pm EST. Additional information on the MVP is available on the ABI support page at www.abisupport.com.

For questions on purchasing parts for your MVP please contact the ABI Customer Service Department at 877-788-7253 M-T 8am-8pm EST - Friday 8am-5pm EST.