



RAD RACERUNNER USER MANUAL AND ASSEMBLY GUIDE



CONTACT

Address

RAD-Innovations LLC
2170 Route 125, Cornwall
VT 05753
United States

Phone

Phone: +1 (802) 382-0093

Online

info@rad-innovations.com
sales1@rad-innovations.com
www.rad-innovations.com

CONTENTS

1	PRODUCT OVERVIEW	
1.1	What is a RaceRunner?	3
1.2	What is Frame Running?	3
1.3	RaceRunner Features	3
2	SIZING AND FITTING	
2.1	Sizing Chart	4
2.2	Guiding Principles	4
2.3	Adjustments	5
3	ASSEMBLY GUIDE	
3.1	Unpack Your RaceRunner	7
3.2	Parts and Tools	8
3.3	Fork Assembly	9
3.4	Handlebar Assembly	10
3.5	Damper Installation and Adjustment	11
3.6	Chest Plate Assembly	13
3.7	Seat Link and Seat	13
3.8	Front Wheel Assembly	15
3.9	Rear Wheel Assembly	16
3.10	Front Brake Assembly	18
3.11	Rear Parking Brakes	19
3.12	Conditions of Warranty and Liability	21
4	SAFETY AND MAINTENANCE	
4.1	General Safety	22
4.2	Before You Ride	22
4.3	Maintenance Schedule	23
4.4	Running Frame Care Tips	24
4.5	Watching Out for Signs of Growth	24

SECTION 1

PRODUCT OVERVIEW

WHAT IS A RACERUNNER?

The RAD RaceRunner™ is a three-wheeled adaptive mobility device with chest support and steering capabilities. It is designed for children and adults with balance and mobility issues to achieve their exercising goals - be it recreation, competition, or rehabilitation.

Sitting on the seat and leaning forward, a rider can engage their lower body to propel forward and experience the freedom to move. The RaceRunner is designed for a range of users with diverse abilities. Specifically, it is tailored towards users with cerebral palsy, Parkinson's disease, spina bifida, muscular dystrophy, multiple sclerosis, general muscle weakness, or balance issues.

WHAT IS FRAME RUNNING?

Invented 30 years ago as an alternative to wheelchair racing for people with cerebral palsy (CP), Frame Running consists of runners competing in traditional track events using a Running Frame. Today, Frame Running has evolved into more than just a competitive sport. Most runners are ordinary people looking to get exercise, walk to the store, or run with their friends and families. It is developing rapidly and spreading globally, bringing adaptive inclusive solutions to a wider range of athletes and users.

RACERUNNER FEATURES

Optional Tire Set

Switch easily between racing tires for speed and optional all-purpose tires for stability and traction.

Interchangeable Seat

Universal seat system and optional droplink allows for comfort and easy wheelchair access.

Light, Slim, Stable

At under 29 lbs, the RaceRunner is easy to carry. The wheels fit standard tracks and sidewalks.

Customizable Chestplate

Different sizes, styles and straps available for additional support and comfort.

Adjustable Everywhere

It's all about fit! 7 adjustable joints for tailoring the ride to match the athlete.

Self-Centering Handlebar

Counteracts lateral movement for steering with one or both hands.



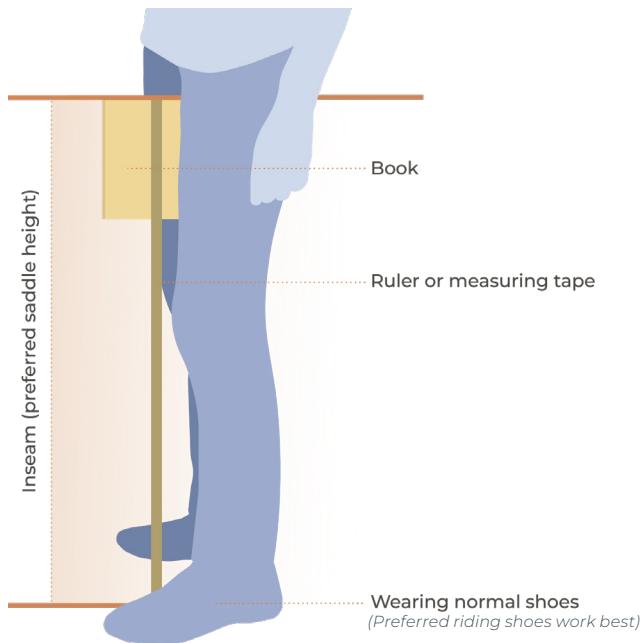
SECTION 2

SIZING AND FITTING

SIZING CHART

Running Frame Size	Seat Height*	Max User Height	Max User Weight (lbs)
Small	22" - 25"	4'7"	110
Medium	25" - 29"	5'3"	140
Large	29" - 33"	6'1"	190
Extra Large	33" - 37"	6'4"	220

*The height is based on touring tires and a straight droplink. In the case of optional racing tires the seat height sits 1" lower than listed. Please adjust sizing accordingly based on Running Frame build options.



CAUTION

Ignoring manufacturer specified height and weight limits can drastically impact a riders experience and safety on a Running Frame. When in doubt, please reach out to the RAD team at for guidance and support.



CAUTION

If your Running Frame does not fit properly, you may lose control. If you believe your new running frame doesn't fit or if you feel like are not equipped to properly gauge fit and adjust the frame, please reach out the RAD team to schedule a free consultation and fitting.

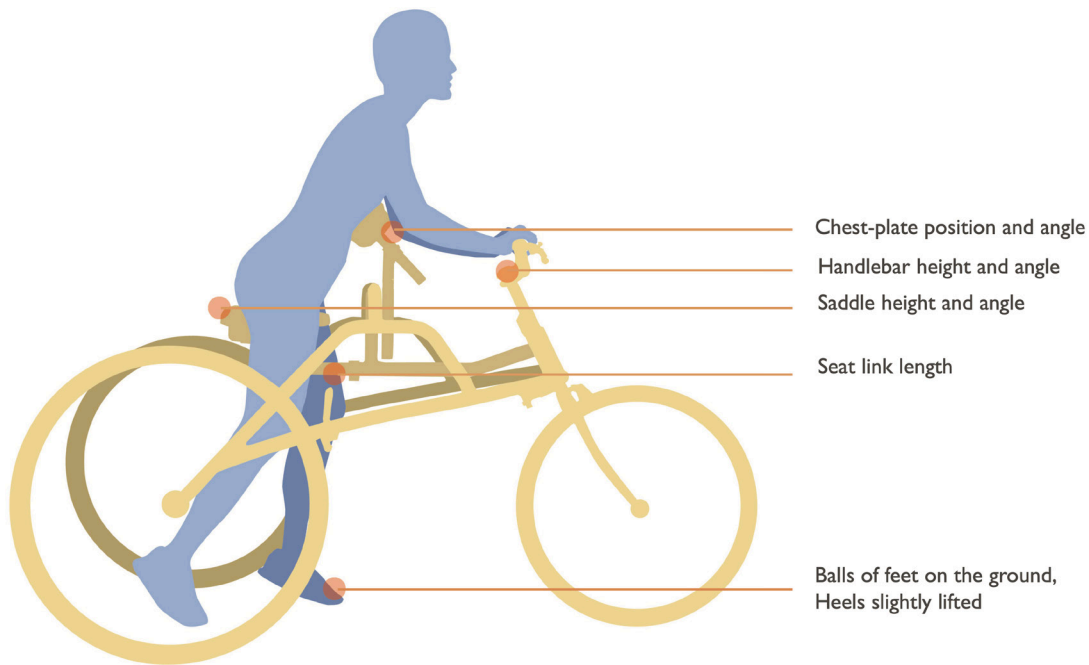
MEASURING YOUR INSEAM

To find the appropriate seat height for the Running Frames, measure the length of your inseam with shoes on. Hold a book (or something similar) between your legs, as high as you can keep it. Measure from the top of the book to the floor with a ruler or tape measure. You can also measure lying down.

SIZING AND GUIDING PRINCIPLES

1. Every runner is different. As runners grow and their abilities change, adjust the fitting accordingly.
2. Comfort versus performance. The diagram on the following page shows the most common fitting. Some runners prefer a more upright position as it reduces pressure on neck muscles, diaphragm and breasts. But a more forward leaning position may allow a rider to run faster, alleviate discomfort on the groin, and increase stability. Balancing comfort and performance is a matter of preference, and the bottom line is safety.
3. Experiment with the settings. It may take several tries to find the sweet spot. Try out different positions and angles of the different pieces. Consider extra support such as body straps, heavier-cushioned chest-plates, or a droplink for easier transfers. The goal is to find a fit that enables the runner to run independently.

FITTING DIAGRAM



ADJUSTMENT AREAS

Seat position – Adjust the seat height, angle and seat post length so that you can stand on the balls of your feet with your heels up. You should be able to propel yourself and glide forward by kicking your legs back without losing control or balance. Stride and gait should be natural and uninhibited by the ground.

Chest-plate – The chest-plate can move in two directions: up and down or in and out. You can also change the angle. It should rest between your abdomen and chest. When you put your body weight on the plate and hands on the handlebar, your lungs should not feel compressed. If you have difficulty breathing, stop running and adjust the position.

Handlebars – Your shoulder and upper body should feel relaxed when your hands are on the handlebars, with a slight bend to the elbows. Adjusting the handlebars down and away can help put you in a performance stance. Moving them closer to the rider will bring them into a more upright standing position. If the runner has limited grip, they can push/pull the self-centering handlebars to steer. You can also reverse the handlebar and bring it closer to you by rotating it 180 degrees.

ADDITIONAL ADJUSTMENTS BY CASE

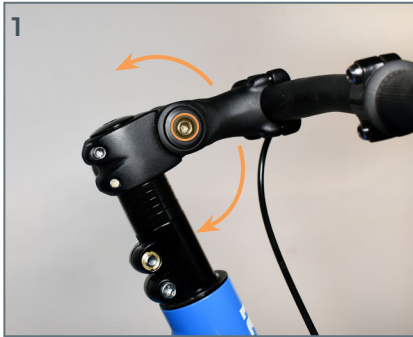
In the case of high spasticity – Frames for athletes with high spasticity are sized so that their feet only lightly touch the ground. This minimizes imbalances from spastic movement and unexpected ground contact. In this case, start with the seat high and lower it to the target height as the users gets more comfortable on their RaceRunner.

In the case of limited reach and grip – For athletes with less upper body flexibility and strength, the handlebars can be rotated 180 degrees and brought nearer to the body. This requires the front brake lever to detached from the bars and reattached after they've been rotated.

In the case of droplink use – Droplinks can provide smaller margins of adjustability between frame sizes. By changing the angle of the seatlink when in the locked position, the seat height can be brought a inch or so lower than the minimum height with a straight link. For younger athletes who are still growing, this can be a good solution when buying a slightly larger frame to grow into.

TECHNICAL ADJUSTMENT DETAILS

HANDLEBARS



Bar Angle

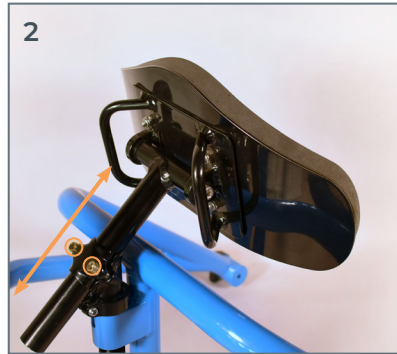
The bar angle can be adjusted by loosening the bolt on the bar stem. Adjust the bar up or down to suit the preferred height for the rider. If, when fully raised, the bar is still too far to reach, consider rotating the handlebars as shown in the following steps.

Bar Rotation

The handlebars can be rotated 180° to fit a wider range of reaches and upper body positions. To do so, begin by loosening the three bolts highlighted in Image 1. Make sure to remove the brake lever from the bar before rotating. Rotate the bars, re-tighten the bolts, and reattach the brake lever in the desired position.



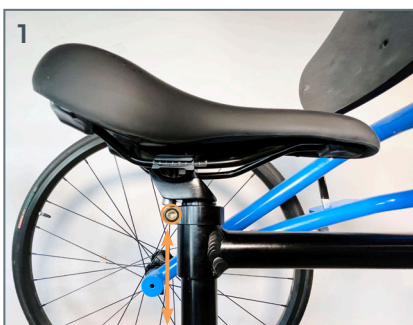
BODY PLATE



Depth and Height

The body plate can be adjusted in two directions. Loosen the highlighted bolts to move the plate as shown. Start by positioning it against the stomach of the rider while in a slight forward lean. Then adjust to comfort as the rider spends more time in the RaceRunner and develops their own preferred position and style.

SEAT POSITION



Post and Link

Similar to the body plate, the seat can be adjusted in two directions. The seat post, shown in Image 1, can move the seat up and down. The seat link, in Image 2, can move the seat in and out. When adjusting the seat link, be sure to abide by the *Minimum Insert* marking on the tube to ensure safe riding.

SECTION 3 ASSEMBLY GUIDE



BEFORE YOU BEGIN

While we aim to make assembly as simple and straightforward as possible, building a Running Frame does require some proficiency with tools and hardware. If you have any questions or concerns about your assembly, please reach out to RAD-Innovations or a local Running Frame shop for guidance.

If you would like to follow along with an interactive guide, check out our [RaceRunner Assembly Instruction video](#) on YouTube or scan the QR code at the top of this page.



WARNING

Never attempt to ride a RaceRunner frame that is not properly assembled. Make sure you properly assemble all elements of the frame. Correct tightening force on fasteners - nuts, bolts, and screws - on your running frame is important. Incorrect tightening force can result in component failure, which can cause you to lose control while riding.

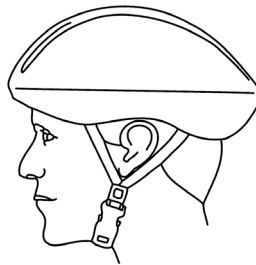
A NOTE ON HELMETS

Always wear an approved helmet when riding your Running Frames, and follow the helmet manufacturer's instructions for fit, use and care.

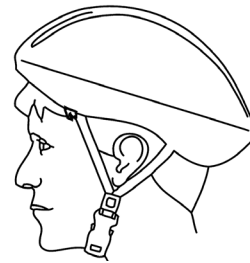


CAUTION

As with all running frames and trikes, wearing a helmet is important for safety. Please comply with all local regulations and laws regarding helmet usage.



CORRECT FITTING



INCORRECT FITTING

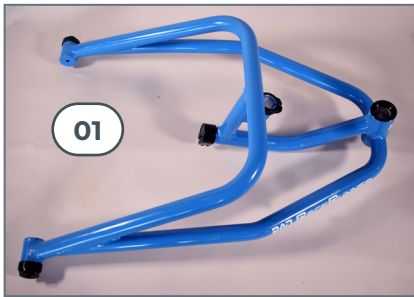
STEP 1 | UNBOX YOUR RACERUNNER



Unpack your box and lay out your parts. Pictured above is the packaging of your new running frame. For assembly purposes, we recommend keeping the parts in their respective bags until you reach the relevant section.

STEP 2 | PARTS AND TOOLS

The major pieces of your RaceRunner are shown below. This includes the frame, wheels, and steering elements.



- 01 RaceRunner Frame
- 02 Chest Plate
- 03 Front fork
- 04 Handlebars
- 05 Seat link
- 06 Chest plate stem
- 07 Front wheel
- 08 Rear wheels



Also included is a small parts box, the contents of which are shown below. This contains hardware and smaller elements of the frame and RaceRunner kit. **Along with the multitool included in the box, you will need a 10 mm open wrench for the damper installation.**



- | | | |
|----------------------------|-------------------------------|---------------------------------------|
| 09 Extra RaceRunner decals | 14 Rear axles | 19 Front axle quick release (19a - c) |
| 10 Seat post | 15 Damper hardware (15a - c) | 20 Damper |
| 11 Parking brakes | 16 Headset hardware (16a - f) | 21 Stem spacer |
| 12 Seat | 17 Headset riser (17a - b) | |
| 13 Multitool | 18 Brake mounts | |

STEP 3 | FORK ASSEMBLY**Headset Hardware**

16a Headset washer

16b Headset spacer (shown in profile, with small slit in the ring)



16c Bearing x 2 (shown in profile)



16d Dust cover

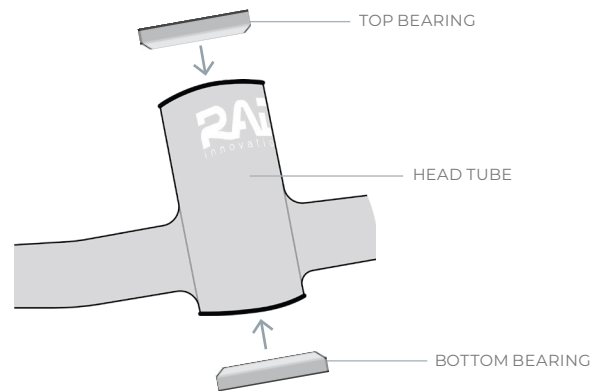
16e Extra riser cap (spare part)

Riser Hardware

17a Riser cap and bolt

17b Bar riser

21 Spacer

STEP 3.1

STEP 3.1 Begin by placing one bearing (16c) into the top of the fork-insert as shown above. Make sure the rounded top edge (see diagram) is pointing down into the fork-insert.

STEP 3.2**STEP 3.3**

STEP 3.2 Place the other bearing (16c) into the bottom of the fork-insert. Make sure the rounded top edge is pointing up into the fork-insert.

STEP 3.3 Insert the fork (03) into the fork-insert.



STEP 3.4 Slide the headset spacer (16b) bottom first (see diagram) over the top of the fork. The tapered edge should face down.

STEP 3.5 Place the headset washer (16a) over the spacer.

STEP 3.6 Place the dust cover over the washer. The branding and logo should face up.

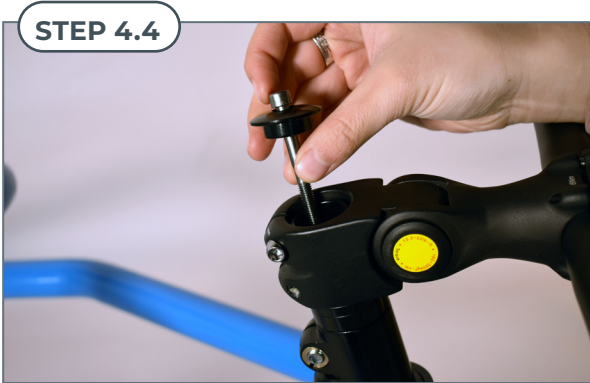
STEP 4 | HANDLEBAR ASSEMBLY



STEP 4.1 Add the spacer (21) to the bar riser. It is better to start with it on and adjust later if the bars are too high for the rider. Note that a spacer comes pre-installed on the bar riser.

STEP 4.2 Place the bar riser over the top of the fork. Do not force the riser down but make sure the dust cap sits snugly over the headset assembly. **Wait to tighten the bar riser bolts until Step 4.6.**

STEP 4.3 Place the handlebar and stem over the riser. Tighten the stem bolts with the 6 mm Allen wrench



STEP 4.4 Insert the stem cap into the stem. Make sure the bars are aligned with the fork.

STEP 4.6 Tighten the stem cap with the 5 mm Allen wrench.



STEP 4.6 Adjust the handlebars and the fork so everything faces forward in alignment. Tighten the two bolts with the 6 mm Allen wrench.

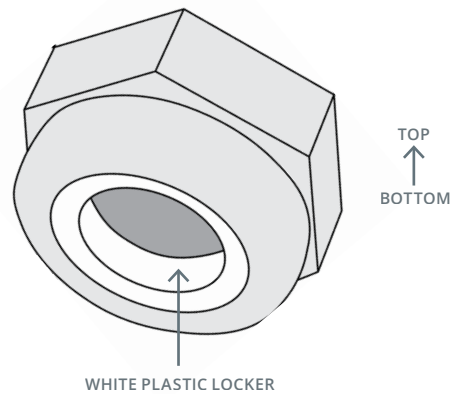
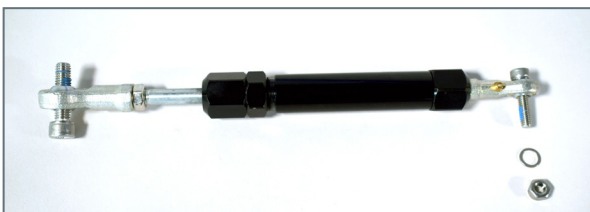
STEP 4.7 Adjust the handlebars. Loosening the highlighted bolts will allow you to position and align the handlebars such that they suit the riders reach and positioning. This can be adjusted later as well.

STEP 5 | DAMPER INSTALLATION



Damper Hardware

- 20 Damper arm
- 15a Hex bolts (8 mm and 5 mm)
- 15b Washer
- 15c Lock nut (diagram below)





STEP 5.1 Begin by attaching the fork side of the damper with the smaller of the two bolts (15a). Insert the bolt into the hole farthest from the fork. Place the washer (15b) on to the bottom of the bolt, and then the lock nut (15c). Ensure the lock nut is facing up (see diagram on previous page) and the white plastic lock mechanism is facing down.

STEP 5.2 Tighten the bolt with the 5 mm Allen wrench. Use a 10 mm open wrench to hold the lock nut in place while you tighten the bolt.



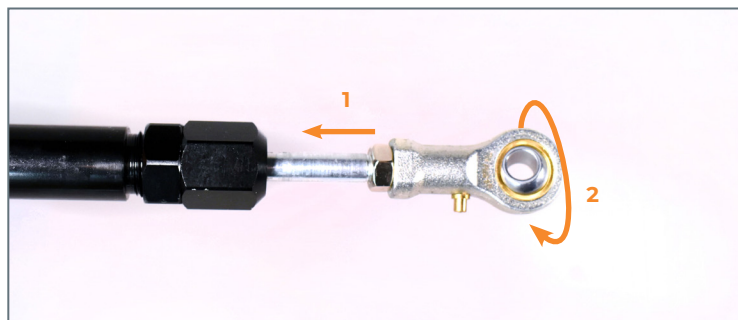
STEP 5.3 Attach the other end of the damper to the frame with the 8 mm bolt (15a). You should be able to screw the bolt in place with your fingers and then tighten with the 6 mm Allen wrench.

STEP 5.4 Damper adjustments can be made by moving the bolt on the fork to one of the three holes highlighted above. As mentioned, first use the RaceRunner with the damper attached to the farthest hole. Only adjust if the self-centering mechanism is not working properly.

STEP 5.5 Optionally, you can also make fine adjustments by loosening or tightening the damper itself. First, loosen the nut. Tighten the damper end to shorten, or loosen to lengthen.

Optional Damper Adjustment

If the self-centering steering is continually pulling to one direction or the other, you can make further fine adjustments by loosening or tightening the damper itself. First, detach the damper from the frame side. Then, as shown in the diagram below, loosen the lock nut (1). Then you can rotate the damper end (2) to either shorten or lengthen. Rotating clockwise will shorten, and counter-clockwise will lengthen.



STEP 6 | CHEST PLATE ASSEMBLY

STEP 6.1



STEP 6.2



STEP 6.3



STEP 6.1 Insert the chest plate stem (06) into the upright bracket in the center of the frame. Tighten it with the 5 mm Allen wrench.

STEP 6.2 Loosen the bolts on the chest plate tube with the 6 mm Allen wrench.

STEP 6.3 Insert the chest plate (02) into the chest plate stem and tighten with the 6 mm Allen wrench.

You can adjust the chest plate height by loosening the bolts shown in Step 6.2 and sliding the chest plate in or out.

STEP 7 | SEAT LINK AND SEAT

STEP 7.1



STEP 7.2



STEP 7.1 Insert the seat link (05) into the frame at the desired length. This can be adjusted later depending on the preferences of the rider.

STEP 7.2 Tighten the bolts on the frame with the 5 mm Allen wrench.



Note that all seat links have a minimum insert marking on the tube. Make sure that seat link is inserted up to the minimum point in order to ensure a safe riding experience. Failure to do so could result in injury to the rider or damage to the frame.



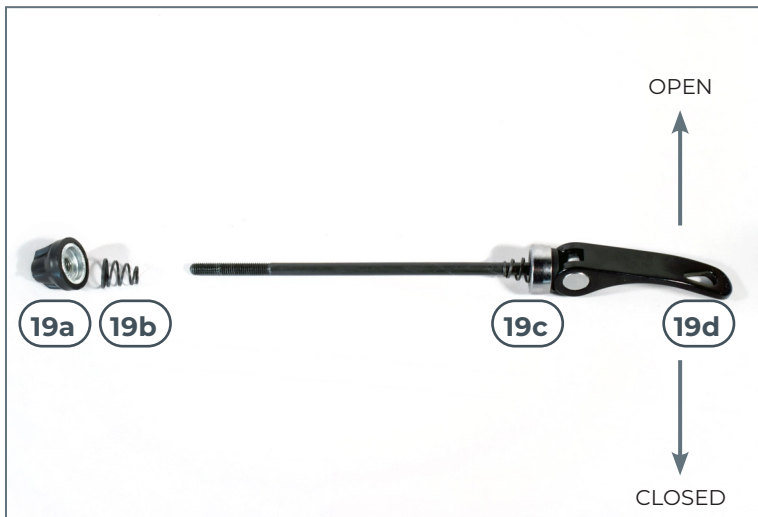
- STEP 7.3** To attach the seat (12) to the seat post (10), loosen the bolt on the seat post and twist open the clamp, as shown in the above images.
- STEP 7.4** Flip the saddle upside down on a work surface. Hold the seat post upside down as shown, so the clamp hangs open.
- STEP 7.5** Place the seat post on to the seat rails and rotate the clamp 90 degrees so it locks onto the seat. Tighten the bolt.
- STEP 7.6** Insert the seat post into the seat link clamp and tighten. The height can be adjusted later to suit the rider.

Note that the angle of the seat and position in the clamp can be adjusted by loosening the bolt. The seat should point slightly downward for the ideal running position.

Optional Seatpost Shortening

If, once the seat height has been adjusted to the rider, there appears to be several inches of post extending below the seat link clamp, then it is possible the post is too long for the rider. If this is the case, we advise to have the seat post trimmed so as not to impact the experience while riding the frame. Any local bike shop will have the experience and tools to assist with this process.

STEP 8 | FRONT WHEEL ASSEMBLY



Front Axle Quick Release

- 19a Lock nut
- 19b Lock nut spring
- 19c Lever spring
- 19d Quick release lever

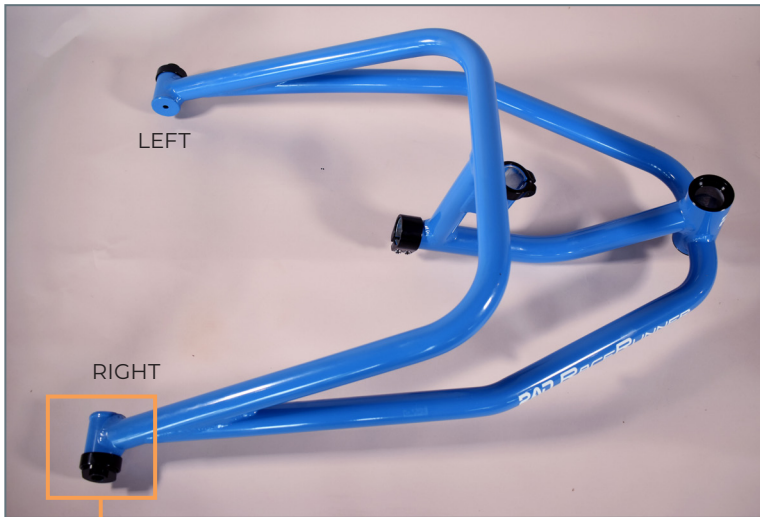
To **open** the front axle quick release, flip the lever up. To **close** the front axle quick release, flip the lever down.



STEP 8.1 Begin by unscrewing the nut (19a) from the quick release axle and remove the spring. Insert the axle through the front wheel hub. Replace the lock nut spring and the lock nut on the axle and lightly screw on (4-5 turns, just enough so it doesn't fall off).

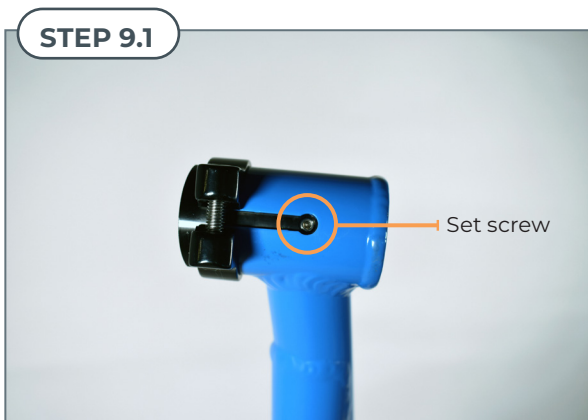
STEP 8.2 Align the front fork with the quick release axle. Ensure the wheel sits squarely in the fork. To tighten, hold the axle lever and screw the lock nut down until you start to feel tension. Then close the quick release lever to the closed position (shown above). You should have to use slight force in order to close the lever, enough so that it leaves an imprint on your palm.

STEP 9 | REAR WHEEL ASSEMBLY



Take a moment to familiarize yourself with the rear wheel axle insert points on your frame. Please note that when referring to left or right, it is always in the riding direction. Left and right is indicated on the image to the left.

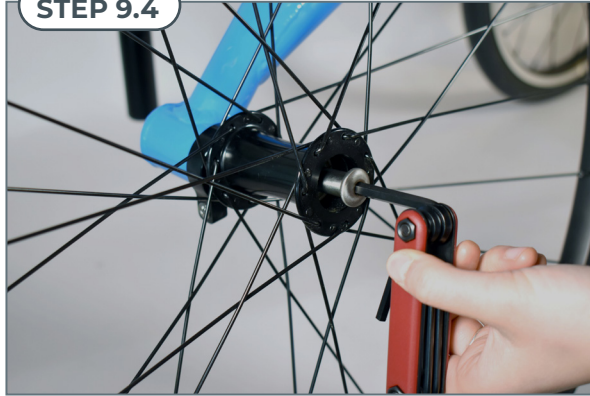
Also note that each rear wheel is marked with a wheel tag indicating to which side it belongs (shown in Step 9.2). Please ensure that you have a left and a right before continuing.



STEP 9.1 Check the bottom of the axle insert on both the left and right side. Make sure the set screw is visible and at the position shown. If the screw is not visible, rotate the black axle insert until the screw is at this desired position.



STEP 9.2 Inspect the spokes of each wheel and identify the left and right wheel tag. Ensure you connect the correct wheel to the correct side of the RaceRunner frame.

STEP 9.3**STEP 9.4****STEP 9.5**

STEP 9.3 Take note of the indent in the hub of each wheel. This indent should face *outward from the frame*, away from the rider.

STEP 9.4 Use the multitool to screw the axle into the hub of the rear wheel. The axle should screw in smoothly. If you feel significant resistance, please refer to the note below for guidance.

STEP 9.5 Ensure the axle is screwed all the way in, as shown in the image to the left.

Axle Assembly Troubleshooting

There are several troubleshooting steps you can take if you experience issues threading your rear axles into your frame. First, it is important to remember that the axle threads are very sharp and this process requires precision and patience. Do not force the axle as this can damage the axle receiver and axle bolt.

1. Liberally apply additional grease to the axle threads. If you do not have grease, butter or vegetable oil can be used as an alternative. This is the most common solution for axle threading issues.
2. If additional grease doesn't solve the issue, try threading the axle *without* the wheel — this will determine if there is a defect with the axle or receiver or if it is a matter of changing the angle of wheel and frame. If you are unable to thread the axle, please contact RAD-Innovations for next steps.
3. Adjust the positioning of the frame. Lay the RaceRunner on it's side and thread the axle in vertically. Alternatively, have one person hold the frame while another threads the axle while adjusting the angle of the wheel.

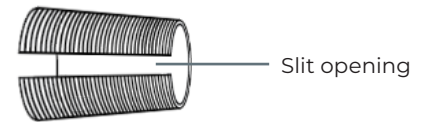
If you have continued issues with rear wheel assembly, please reach out to our team via phone or email at (802) 382-0093 or team@rad-innovations.com.

STEP 10 | FRONT BRAKE ASSEMBLY

STEP 10.1



STEP 10.1 Examine the brake on the handlebars. Note that the barrel adjuster (04a) rotates. Ensure that the slit opening in the barrel adjuster (shown in the diagram below) aligns with the opening in the brake lever, as shown in the image to the left.



STEP 10.2



STEP 10.3



STEP 10.4



STEP 10.2 Uncoil the brake cable housing connected to the front fork. Ensure the metal cable end fits into the brake barrel adjuster as shown.

STEP 10.3 Insert the cable end into the brake. Align the brake end and brake cable with the opening in the bottom of the brake lever.

STEP 10.4 Pull the brake cable housing away from the brake lever and fit the exposed cable into the slit opening of the brake lever and barrel adjuster. Note that you will need to pull aggressively in order to do so — this is normal.

STEP 10.5

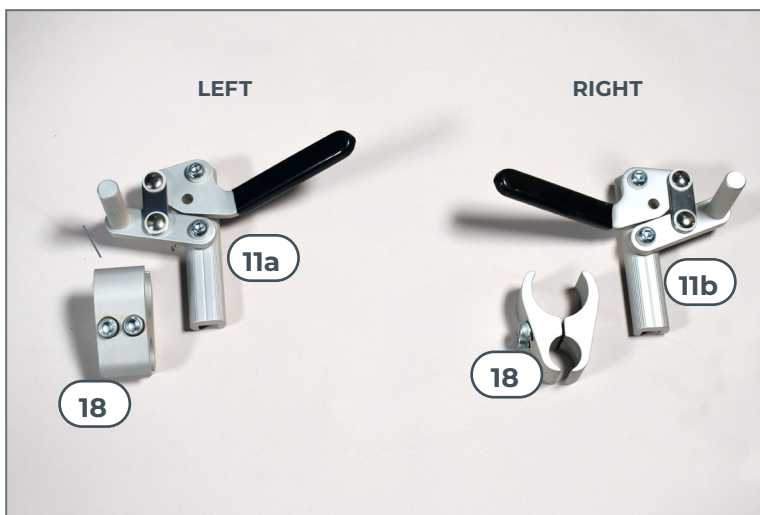
STEP 10.5 Turn the barrel adjuster so that the slit opening is facing the opposite direction, away from the front of the frame, and locking the cable in place.

STEP 10.6

STEP 10.6 You may need adjust the brake pad positioning for your front brake. To do so, use the multitool to loosen the brake pad nut. Line up the brake pads with the rim of the tire (without touching the tire itself). Re-tighten the nut and make sure that the brake pads fully connect with the rim when engaging the front brake.

Guide to Using the Front Parking Brake

The parking brake is incorporated into the front brake component. To engage, squeeze the brake lever tightly and press down on the parking brake button. Release the brake lever and check to make sure the button stays depressed. To release, simply pull on the brake. The brake button should release with an audible pop.

**STEP 11 | REAR PARKING BRAKES****Rear Brake Hardware**

18 Brake mount clamp (x2)

11a Left parking brake

11b Right parking brake

The rear parking brakes are made up of two components, the brake lever and the brake mount. The levers cannot be used interchangeably, so lay out the hardware as shown and make double check before installing.



STEP 11.1 Loosen the two bolts on the top of the clamp. Place the brake mount clamp onto the right hand side of the RaceRunner frame.

STEP 11.2 The location of the brake mount clamp determines how much pressure is applied to the tire when engaged – you want it to roughly align with the front edge of the tire as shown in the image above.

Note that the diagrams above show the rear parking brake installation for the right hand side only.



STEP 11.3 Insert the parking brake rod into the slot of the break clamp. Lightly tighten the bolts but leave them loose enough to adjust the clamp position and rotation on the tube.

STEP 11.4 Ensure the brake lever is perpendicular to the rear wheel when in the engaged position. Position the brake lever rod in the clamp so that the brake applies enough stopping power to the tire when engaged. Test your parking brakes in a safe and controlled environment.



Test your rear parking brakes in a safe and controlled environment. Make sure that the brake attachment clamps are properly tightened and the brake lever contacts the tire effectively.



Congratulations! You have finished assembling your RAD RaceRunner. Before you take it for a spin, check the position of the front wheel and steering damper. You want the Running Frame to roll straight with the wheels aligned. If not, check your wheel alignment, or refer to Step 5 for detailed directions to adjust the damper.

If you have any questions, don't hesitate to contact us at [802-382-0093](tel:802-382-0093) or at www.rad-innovations.com

CONDITIONS OF WARRANTY AND LIABILITY

- ▶ A warranty period of 2 years applies to all RAD RaceRunners. This warranty excludes parts that wear, such as the seat cushions, tires, brakes, etc. The warranty period of 24 months begins on the date of shipment.
- ▶ RAD-Innovations LLC will only be held liable for defects resulting from faulty frame manufacturing and designs. For accessories and parts, the relevant manufacturer is liable.
- ▶ Warranty only applies to the original owner and if usage is in accordance with the user's manual.
- ▶ Within the warranty period of 2 years, RAD-Innovations LLC will repair, or if necessary replace, any broken frame part free of charge. Any defective parts replaced by RAD-Innovations LLC become the property of RAD-Innovations LLC.
- ▶ Any further claims beyond the scope of this warranty are excluded. RAD-Innovations LLC will not cover the costs of assembly or repair by an unauthorized mechanic or bike shop. RAD-Innovations LLC will not cover shipping and will not accept postal deliveries with insufficient postage.
- ▶ The maximum permissible load (rider and additional accessories/luggage), as specified per the sizing chart in Section 2 (page 4) must not be exceeded.
- ▶ If the RaceRunner is subjected to abnormally excessive stress, the statutory and additional warranty becomes void.
- ▶ Damage caused by accidents is not covered by the warranty.
- ▶ The warranty becomes void if the trike has been fitted with incompatible accessories or if accessories are installed incorrectly. Therefore, always have components replaced and installed by an authorized retailer.
- ▶ The warranty becomes void if improper modifications or alterations (e.g., grinding, drilling, bending, etc.) are made to the frame and accessories.
- ▶ It is not possible to extend the warranty or commence a new warranty period.
- ▶ Warranty claims can only be handled by RAD-Innovations LLC or approved representatives.
- ▶ Any defect or fault of a RAD RaceRunner should be reported to RAD-Innovations LLC for proper assessment and response.

SECTION 4

SAFETY AND MAINTENANCE

GENERAL SAFETY

Walking or running on your RaceRunner is fun, healthy, and a great way to be independent. But it is important to remember that a Running Frame is not a toy, so make sure you follow some basic safety tips when you ride. You should always inspect your Running Frame to make sure all parts are secure and working properly. Remember to:

1. Wear a properly fitted helmet.
2. Adjust your RaceRunner to fit (see Section 2 for guidance).
3. Check your equipment. Before walking or running, inflate tires properly and check that your brakes work.
4. See and be seen. Whether daytime, dawn, dusk, foul weather, or at night, you need to be clearly visible. Always wear neon, fluorescent, or other bright colors when riding during the day or night. Wear something that reflects light, such as reflective tape or markings, or flashing lights.
5. Control your RaceRunner. Always ride with both hands on the handlebars. If unable to do so, ride with supervision or assistance or ensure you're riding in a controlled environment.
6. Watch for and avoid road hazards. Be on the lookout for hazards such as potholes, broken glass, gravel, puddles, leaves, and dogs. All hazards can cause a crash.
7. Avoid riding at night. It is far more dangerous to ride at night than during the day because you are harder for others to see. If you have to ride at night, wear bright colors and/or ride in areas with partial lighting (roads with street lamps or lighted sidewalks). Make sure you have reflectors on the front and rear of your RaceRunner (white lights on the front and red rear reflectors are required by law in many States), in addition to reflectors on your tires.
8. Follow the local road rules.
9. Be careful of the terrain in which you ride your Running Frame, as well as weather conditions. For example, rainy or muddy weather might not be a good fit for using your Running Frame outdoors. We suggest all riders start on paved and level ground to get settled and comfortable on their frame.

BEFORE YOU RIDE

First Ride

When you buckle on your helmet and go for your first familiarization ride on your new RaceRunner, be sure to pick a controlled and safe environment, away from cars, other cyclists, obstacles or other hazards. Make sure you become familiar with the controls, features and performance of your new frame. Familiarize yourself with its braking action. Sudden or excessive application of the front brake could pitch you over the handlebars. Applying brakes too hard can lock up a wheel, which could cause you to skid, lose control, and fall. If you have any questions, or if you determine anything about the RaceRunner is not as it should be, consult RAD-Innovations at +1 (802)-382-0093 or reach out at www.rad-innovations.com.

Regular Safety Check

1. Check your tire pressure

Generally, you can get a sense of tire pressure from simply pressing on your tire with the palm of your hand. Try this after initially inflating your tires to get a sense of proper inflation. Before riding, make sure both tires feel balanced and properly pressured. Alternatively, use a tire pump to get an exact PSI reading.

The recommended pressure for your tires is printed on the sidewall. It will be measured in PSI (pounds per square inch), and usually will be listed as a range (e.g. 40 - 65 psi). In most conditions, such as riding on streets or paved trails, you'll want to use the maximum pressure provided by the range.

2. Check wheel quick-releases

If your wheels are held in place with quick-release levers, check to make sure that the levers are closed with the proper tension. If you're not familiar with the proper use of wheel quick-release levers, ask for help from a qualified mechanic.

3. Check your brakes

Grasp the brake lever firmly, and rock the Running Frame forward and backward. The brakes should hold firmly without slipping or squealing. If the brake does not hold firmly, do not ride the Running Frame, and have the brakes checked by a qualified mechanic.

4. Check your wheels

With the Running Frame resting on the ground, hold the handlebars with one hand, and hold the top of the front wheel with the other. Gently rock the wheel side-to-side; there should NOT be any "play" or movement in the lateral direction. Make sure the wheels of the Running Frame spins properly as well.

5. Check stem, headset and damper

The stem is the component that holds the handlebars in place. Stand over the Running Frame with the front wheel between your legs. Grasp the handlebars firmly and try to turn the handlebars without turning the wheel. If the handlebars turn, DO NOT ride the Running Frame and check the bolts in the headset for proper tightness.

Similarly, check that the damper is bringing the wheel back to center properly. Test the damper action while the Running Frame is stationary. Ensure that the damper, when in its natural position, keeps the front wheel pointing straight ahead.

**WHEEL CHECK CAUTION**

Wheels must be true for the brakes to work effectively. Wheel truing is a skill which requires special tools and experience. Do not attempt to true a wheel unless you have the knowledge, experience and tools needed to do the job correctly.

**GENERAL SAFETY CHECK**

Many states require specific safety devices. It is your responsibility to familiarize yourself with the laws of the state/region where you ride and to comply with all applicable laws, including properly equipping yourself and your Running Frame as the law requires. Observe regulations about lighting, licensing, riding on sidewalks, laws regulating path and trail use, helmet laws, special traffic laws. It's your responsibility to know and obey the laws.

MAINTENANCE SCHEDULE

We have created this easy-to-follow schedule for you to keep your Running Frames at tip-top condition.

Product safety checks	Each Run	Weekly	Monthly	Ongoing
Regular safety check (see above section)	✓			✓
Use tire pump to check and inflate tires		✓		
Check / replace worn tires as necessary				✓
Check that size is still appropriate for the user, adjust seat height if necessary				✓
Check frame structure, welds etc. (important for clubs and shared use)			✓	
Grease horizontal seat tube, grease handlebar stem if necessary			✓	
Spin wheels for trueness. Check and tighten spokes with spoke key if loose.			✓	
Check product for ANY damage and report any causes for concern.		✓		✓

RUNNING FRAME CARE TIPS

- ▶ Keep your Running Frame inside. Avoid storing it outside as rain, moisture, and dirt can cause your parts to wear quickly and cost you more in repairs and service.
- ▶ Running Frames ridden in rain and/or off-road typically require more frequent and extensive service. If you are a frequent rider, you may find that your Running Frames needs service more often. (Probably because you're having more fun. Nice work!)
- ▶ If your Running Frame has been crashed, we recommend bringing it to a qualified bike mechanic for a thorough check-up to ensure that it is functioning properly and safely.



SERVICE WARNING

MANY FRAME RUNNING SERVICE AND REPAIR TASKS REQUIRE SPECIAL KNOWLEDGE AND TOOLS.

Do not begin any adjustments or service on your Running Frame until you have learned from our team or local dealer how to properly complete them. Improper adjustment or service may result in damage to the Running Frame or in an accident which can cause serious injury.

WATCHING OUT FOR SIGNS OF GROWTH

How can I tell if my child's Running Frame is too big?

The RAD-Innovations team does our best to match customers and athletes with frames that fit their body and abilities. We encourage anyone interested in Fame Running to reach out discuss sizing to ensure we match you to the proper frame. Regardless, it is still important to look out for signs of a poorly fitted frame. First, make sure that the athlete's feet can firmly touch the ground when seated on the frame. Weight should be on the balls of the feet, but the body should be supported by both the seat and the legs. Ensure that the rider can also comfortably reach the handlebars and operate the brake. Note that there are several points of adjustment on the frame, and if you are unsure if it is properly setup, please reach out to our team for a fitting consultation.

How can I tell if my child grew out of the Running Frames?

First, we suggest you familiarize yourself with the RAD RaceRunner sizing chart (page 4) as the first point of reference when checking to see if your child outgrew their frame. Alternatively, if your child has been riding the frame for some time, you will notice a change in comfort and riding stance as they grow. As you adjust the seat height and bar reach, keep an eye out for significant bend and flex in the knees and elbows. If, with the maximum height and reach set, your child is still bending or hunching to reach the bars and swing their legs, then the frame is most likely too small. Please note that the seatlink and seatpost have a minimum insertion marker – do not extend the reach or seat height past these points as that might endanger the rider.

As always, if in doubt about your child's frame and fit, reach out to RAD-Innovations for guidance. We provide virtual and in-person consultations and can often provide guidance for fitting from photos and video of an athlete on their frame. Ultimately, all runners are different and success on a RaceRunner comes when the rider is comfortable. There are many ways to fit a frame, so experiment and reach out with questions! Happy running!



RAD-Innovations LLC

2170 Route 125, Cornwall VT 05753, United States

www.RAD-Innovations.com