



KNEAL KNEE CRUISER ST
USER'S MANUAL

KNEAL ORTHOPAEDIC CRUISER ST

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1. Note to Healthcare Professionals and DME Suppliers	4
2. Cruiser Controls	5
3. Preparing To Ride - Folding/Unfolding.....	6
4. Check Before Riding/Preflight	14
5. General Maintenance.....	10
6. Cleaning Kneal	11
7. Let's Ride - Propelling Kneal.....	7
8. Warnings	12
9. Troubleshooting	13
10. Limited Warranty.....	BC

DO NOT OPERATE THE KNEAL ORTHOPAEDIC CRUISER WITHOUT FIRST READING AND UNDERSTANDING THE INFORMATION CONTAINED IN THIS MANUAL.

If you are unable to understand the warnings, cautions or instructions contained in this manual, contact your healthcare provider, DME supplier or product technician before use—otherwise serious injury or product damage may occur.

Maintenance procedures other than those described in this manual must be performed by a qualified technician.

Do not use the Kneal orthopaedic cruiser following the consumption of alcohol or when taking medication that adversely affects coordination and mental processing.

NOTE TO HEALTHCARE PROFESSIONALS AND DME SUPPLIERS

- **Do Not issue to patients taller than 6'2"**
- **Do Not issue to patients shorter than 5'0"**
- **Do Not issue to patients with a weight greater than 300lbs**
- **Please complete the Kneal preflight checklist, prior to patient use. Downloadable copies are available at Vergonmed.com. Always check fasteners for tightness. Also, insure that braking, rear wheel lock, and steering systems are working correctly before issuing the Kneal Knee Cruiser to your patients.**
- **Before allowing independent use, take the time to review all safety warnings contained in this manual with your patient. Furthermore, insure that they can properly propel, steer and stop Kneal prior to independent use.**
- **Make sure your patient is properly balanced and positioned on the Kneal orthopaedic cruiser. This will both maximize the patient's experience and insure the utmost level of safety.**

When instructing patients on the use of the Kneal orthopaedic cruiser always follow prescribed written instruction.

Observe your patient while they are operating the Kneal orthopaedic cruiser. Establish their particular safety limits, including bending forward and side to side, reaching, transferring on and off of the Kneal orthopaedic cruiser, as well as loading and unloading it from a vehicle. It is critical that a patient is capable of completing these tasks in combination before using the Kneal orthopaedic cruiser independently.

IMPORTANT: Always provide a minimum of contact guard assist during all initial training.

Provide the patient with written instructions of any limitations you place on their use of the Kneal orthopaedic cruiser, (e.g. no leaning or reaching for one week, etc....) Don't forget to document the limitations in the patient's file.

QUESTIONS?

email: info@vergonmed.com

Phone 360.428.4890

8:00am-4:00pm Pacific Standard Time



WARNING

Knee Cruiser not designed for:
jumps, acrobatics, impact, collisions.
Maximum weight capacity 300lbs.
Read users manual before operating.



Fig A

PREPARING TO RIDE

Getting to know Kneal

Riding the Kneal orthopaedic cruiser can be an invigorating experience. The controls are very similar to those of a common bicycle with only a few subtle differences. Use the image on page 5 to locate each control. Please study the following section to insure proper setup and adjustment. Take the time to learn the feel of the cruiser before you begin riding. Remember to start slowly.

Unfolding

If your Kneal orthopaedic cruiser has not yet been prepared for cruising, lift the folded handlepost from along-side the knee rest. Secure the safety latch (see figs B & C). Insure that it is firmly pressed against the handlepost. Now your Kneal Knee Cruiser is ready to ride.



Fig B

Folding for Transport and Lifting

The process used for collapsing the Kneal orthopaedic cruiser is the opposite of unfolding. Locate the release lever at the base of the handlepost. Grasp the lever from behind (see fig B) and pull it forward until it falls away. Slowly tilt the handlebars inward, letting them settle next to the knee rest. To lift the cruiser, grasp the frame just forward of the knee rest (see fig D) and lift.



Fig C

Handlebar Height Adjustment

Locate the handlebar quick release. Unlock (pull open) the quick release while supporting the handlebar by the grip with the other hand (see fig E). Raise or lower the handlebars to the height established by your health care professional. Push the quick release back into its original position. The handlebars should not move independently of the cruiser, or slide up and down within the handlepost. Tighten if necessary (see page 11).



Fig D

Do not raise handlebars above the maximum height

Knee Rest Height Adjustment

Locate the knee rest quick release pin. Pull the release pin from behind while supporting the knee rest with the other hand. Do not adjust the knee rest while kneeling or sitting on it. Raise or lower the knee rest to the appropriate position, and reinsert the pin. There are five adjustment settings. If the pin does not pass completely through the knee rest post, it is not secure.

Fitting Kneal

A proper fit is best determined when standing. The leg chosen for propulsion should be slightly bent (plantar-flexed). Heel should be slightly off of the floor (1 1/2" - 2"). The shin of the supported leg should be centered on the knee rest and as far forward on the cushion as possible (see fig H). Be sure that the pelvis is level. This can be achieved by raising or lowering the knee rest. Adjust the handlebars to a comfortable level (back erect, elbows bent). If after adjustment, the Kneal orthopaedic cruiser causes pain or discomfort, discontinue use and contact your health care professional.

LET'S RIDE

Your Knee Cruiser can provide you with the ability to carry out an active lifestyle during rehabilitation. With just a little practice you'll find that your limits are few, and when compared to crutches, the Kneal orthopaedic cruiser offers numerous advantages. In order to maximize your experience, practice moving forward, backward and side to side. Try turning and braking on a smooth level surface before venturing out.

Propelling Kneal

FORWARD

Position your injured leg on the knee rest aligning the kneecap with the frontmost edge of the pad (see fig H). Stand as erect as possible with your propulsion foot pointing downward into plantar-flexion. (see Fitting Kneal).

The inside of the propulsion leg should be a comfortable distance from the side of the knee rest. Rock your propulsion foot forward until pressure is felt on the tips of your toes and push forward. When the rear wheels are even with your and propulsion foot, repeat the operation (see figs G & H). With a little practice the movement will become familiar.



Fig E



Fig F



Fig G



Fig H



Fig I



Fig J



Fig K



Fig L

Practice with assistance until you are completely comfortable moving around. Always remember to travel at a safe speed.

BACKWARD

If it is imperative to move backward, take extreme caution when doing so. With your propulsion foot in plantar-flexion, place it even with your hip. Gently push forward with the toe of the propulsion leg. Be sure to keep the handlebars pointing straight, and the rear wheel lock engaged (see fig I). This is an extremely delicate maneuver that will compromise your balance. Practice with assistance until a high comfort level is reached. If possible, use the rear wheel lock to rotate the scooter 180 degrees in lieu of moving backward.

ON A SLOPE (not recommended)

Use extreme caution when traveling down a slope or ramp. Your center of gravity will change and the possibility of loss of control or injury is greatly increased.

First, enlist the support of a qualified helper, regardless of your comfort level. Remember to limit downhill navigating to slopes with a gradient of less than 10 degrees. (This is a slope that falls one foot in elevation for every ten feet of distance). Travel as straight as possible (see fig J). Do not change direction or turn rapidly.

When traveling down a ramp, always stay in the center of the ramp. Do not use the Kneal Knee Cruiser when the surface appears to be wet, icy or slippery in any way. Be sure to always cover your brakes (keep your fingertips in a ready position resting them on the brake levers).

Turning Kneal

FRONT WHEELS ONLY

General purpose maneuvers can be achieved by using the handlebar controlled front wheel steering. With both hands resting on the grips and correct body positioning (see Fitting Kneal), rotate the handlebars in the desired direction (see fig K). Rotate right to turn right, and left to turn left. The wheels will respond accordingly.

REAR WHEEL LOCK (advanced maneuver)

Tight turning and side to side maneuvers. When space is limited, greater maneuverability can be achieved by disengaging the rear wheel lock. This will allow the cruiser to pivot left, right, or in a circle.

Always keep front wheels pointing straight ahead when rear wheel lock is disengaged.

Using correct body positioning (see fig G). Release the rear wheel lock using the handlebar mounted lever (see fig L). With the lever depressed (parallel with handlebars), gently add lateral pressure to the knee rest while pushing or pulling in the desired direction with your propulsion foot (see fig M). Once the maneuver is complete, return the rear lock actuator to its original position (see fig N). Slowly move forward to reengage the rear wheel lock (see fig O). A distinctive click should be heard. Dependent upon the riding surface, the rear wheel lock may require a twitch of the supported knee to reengage. Practice using the rear wheel lock with your health care provider or DME supplier.

IMPORTANT: The rear wheel lock release is intended for non-moving maneuvers only! Do not attempt to travel forward or backward with the rear wheel disengaged. This will compromise stability and steering resulting in loss of control and possible injury.

STOPPING OR SLOWING

ON A LEVEL SURFACE

Kneal is equipped with mechanical disc brakes. This braking system is designed to provide superior braking with very little effort. Levers are located at each end of the handlebars (see page 5). Simply by pulling one lever, the rider can actuate both brakes. It is not necessary to pull both levers to stop.

With the palm of both hands resting on the grips, grasp either brake lever with your fingertips. Gently squeeze the the left or right lever to slow the Cruiser. Release the lever once the scooter has come to a complete stop (see fig P). The harder you squeeze, the quicker Kneal will stop.



Fig M



Fig N



Fig O



Fig P



Fig Q

ON A GRADE (advanced maneuver)

Slowing or stopping on a grade can be achieved by “feathering” the brakes. As you are traveling down a slope simply engage and disengage the brakes lightly, allowing the cruiser to roll forward in small increments until the slope is navigated. This requires that a “feel” for the cruiser be acquired. Always keep your fingertips resting on either brake lever. This insures that you are prepared to stop rapidly. Also remember to maintain correct riding posture (see fig G).

LOCKING BRAKES

To lock brakes, engage either brake lever and depress the brake lock button (see figs Q & R). To release, reengage the brake lever and the lock button will “pop up” disengaging the brake lock.



Fig R

Mounting or dismounting?

Be sure to engage the brake locks!

GENERAL MAINTENANCE

Brake Adjustment

The Kneal Knee Cruiser uses a mechanical disc brake system. Essentially, when the cable is pulled by the user's hand, a lever on the brake caliper moves upward. This in turn pushes a pad inward toward the brake rotor (see page 5 rotor). The friction between the brake pad and the rotor brings the Knee Cruiser to a stop. From time to time adjustment may be necessary. This tutorial provides basic brake adjustment instructions. There are three basic brake adjustment points on the Kneal Knee Cruiser:

UPPER BARREL ADJUSTER - This adjustment removes or adds slack to the upper cable. This cable starts at the brake lever and ends at doubling device. Adjusting these will tighten or loosen the parking brake (see fig S).

INNER BRAKE PAD ADJUSTMENT - This adjuster is primarily used to move the inner brake pad in and out. This adjustment will handle most braking problems. Insert the 3mm allen wrench (included with the scooter), into the hole in the caliper (see fig W). Turn the wrench clockwise to move the pad closer to the brake rotor and counter clockwise to move it away. Make small adjustments. Test after each change.



Fig S



Fig T

The most common issue is brake pull. The scooter will pull left or right when the brake are applied. For example, if the cruiser is pulling to the left, insert the 3mm wrench into the hole on the left wheel, turn it counterclockwise 1/8 of a turn and test. Continue making small adjustments until braking is even (no pulling).

OUTER BRAKE PAD ADJUSTER - This adjuster is primarily used to move the outer brake pad in and out. The outer brake pad is fixed and will not move when the brakes are applied. Make sure that it does not rub when adjusting. Using a 5mm allen wrench (included with the scooter), Insert it into the hole in the caliper (see fig X). Turn the wrench clockwise to move the pad closer and counter clockwise to move it away. An arrow is printed on the caliper as a reminder.

Steering and Rear Lock Adjustments

The steering and rear lock systems on the Kneal orthopaedic cruiser are designed to be maintenance free. If steering or rear lock malfunctions, contact your health care provider, DME supplier, or Vergon Medical Products. (see page 4 contact information).

Quick Release Adjustment

If the quick release found on the handle post appears loose, open it and turn the knurled nut clockwise slightly with your fingers (see fig V). Attempt to close it again. A moderate amount of resistance should be felt when closing the quick release and no movement should be evident in the handlebars when pressed down upon.

Cleaning

There is no need for expensive equipment. Use mild degreaser and wipe dry. DME/HME suppliers, be sure to follow CDC (Center for Disease Control) requirements for appropriate disinfecting procedures.

Lubrication

Go to www.vergonmed.com/community



Fig U



Fig V



Fig W



Fig X

GENERAL WARNINGS

Serious bodily injury may occur if the warnings contained in this manual are not strictly adhered to. Failure to follow these safety and operating instructions can cause a change in stability of the Kneal Orthopaedic Cruiser and increase the risk of fall or tip-over, resulting in serious bodily injury to the patient and the Kneal.

DO NOT attempt to use the Kneal unless you have received instructions regarding safety and operation of the device from your healthcare provider or durable medical equipment supplier.

DO NOT traverse, climb or go down slopes greater than 10 degrees.

DO NOT attempt to move up or down a wet, icy, or oily incline.

THE KNEAL is not a street legal mobility device. Follow local traffic laws. Do Not operate it on public roads, streets, or highways.

DO NOT attempt to ride over curbs or obstacles. Doing so may cause Kneal to tip over causing bodily harm and damage to the scooter and will void the warranty.

DO NOT attempt to reach objects if reaching requires a sideways shift in weight. Instead, release the rear wheel lock and move yourself closer.

AVOID reaching for objects with both hands. It is important that both hands remain on the handlebars at all times.

ASK for help when picking items up from the floor. Never bend over while using Kneal.

KNEAL IS NOT ESCALATOR FRIENDLY. Do not attempt to move Kneal on to the rotating steps of an escalator. Instead locate an elevator or ramp.

DO NOT attempt to transfer on or off of the Kneal Orthopaedic Cruiser independently without first being educated in safe transfer methods by your health care professional or durable medical equipment supplier.

LIFT the Kneal orthopaedic cruiser at the designated lift point only.

DO NOT stand on the frame, handlebars, or knee rest of the Kneal orthopaedic cruiser.

DO enjoy the freedom that your Kneal orthopaedic cruiser offers. Go to the park, to the store, to work, to school.....be free!

TROUBLESHOOTING

My Kneal orthopaedic cruiser's brakes don't work! Symptoms.....

- **Too tight, rubbing**
- **Brakes pull to one side**
- **Brake lock does not function**

All of the symptoms listed above can be remedied by adjusting brake pads or cable slack. See brake adjustment on page 10. Or, visit www.vergonmed.com/community for more specific information on brake adjustment.

The knee rest won't stay up

The knee rest is held by a post that is attached to the cruiser frame using a detent pin. Make sure the pin is correctly inserted in one of the adjustment holes. The ball bearing must be visible on the side opposite to the lanyard ring.

My handlebars fail to stay up, even when the quick release is closed

The quick release used on the handlepost has a small knurled wheel attached. Loosen the quick release handle. With the quick release in the open position, turn the knurled wheel clockwise, just slightly. Attempt to retighten the quick release. Repeat the procedure if necessary. Test the handlebars, be sure that they do not move independently of the handlepost tube (see page 5 and fig V).

When the rear wheel lock lever is depressed, the rear wheel will not release

The Kneal rear wheel lock mechanism does not contain any user serviceable components. If the rear wheel fails to engage or reengage, discontinue using the Kneal Knee Cruiser and contact your healthcare provider, durable medical equipment supplier or Vergon Medical Products for assistance.

PREFLIGHT CHECK LIST

- GRIPS:** Clean. No rips, tears or improper wear.
- REAR WHEEL LOCK:** Functioning properly, all fasteners are properly tightened.
- BRAKE LEVERS:** Pull levers, brakes engage and disengage properly. Insure that levers and all other braking components are not loose.
- HANDLEBAR HEIGHT ADJUSTMENT:** Insure it is locked and handlebars do not slide up and down, or rotate under force.
- HANDLE POST:** Nut should fit snugly into the groove with handlepost lever pointing upward and pressed firmly against the handle post. Shake handlebars, there should be no excessive movement or play.
- STEERING COMPONENTS:** Check steering function, make sure all steering nuts & tie rod bolts are snug (see page 5).
- FRONT WHEELS:** The wheels Must be free of lateral play and mounting nuts should be snug, but not binding.
- KNEE REST:** Insure that the knee rest is in good condition. No excessive wear, rips or tears.
- KNEE REST HEIGHT ADJUSTMENT (RELEASE PIN):** Insure that the release is properly secured. Rest should not move up down or rotate with the release in the locked position.
- REAR WHEELS AND REAR WHEEL LOCK ASSEMBLY:** All mounting nuts and bolts should be tight. No excessive play in rear wheel or rear wheel mount. Wheels must be free of play, mounting nuts should be snug, but not binding.
- TIRES:** No excessive wear; tires are not cracked, loose, or damaged.

1 Year Limited Warranty

Your Vergon Medical Product is warranted to be free of defects in materials and workmanship for 1 Year. This device was constructed to precise standards and carefully inspected prior to shipment. This limited warranty is an expression of our confidence in the material and workmanship of our products and assures convenient dependable service. This warranty does not extend to nondurable components such as handgrips, tires, brake pads and knee rests, which carry a 90 Day warranty.

In the event of a defect or failure covered by this warranty, contact us at 360-428-4890. Vergon Medical Products will at its option, repair or replace your Kneal orthopaedic cruiser. The warranty does not extend to damage or failure occurring as a result of owner misuse or negligence, normal wear and tear, or other causes unrelated to the manufacture and design of the product. This express warranty is Vergon's sole and exclusive warrant and your sole remedy in the event of default or failure. Vergon is not responsible for any consequential or incidental damages or costs arising from the use of warranted products, or any defect therein or failure thereof. Vergon disclaims all other warranties including but not limited to the implied warranties of merchantability and fitness of a particular purpose.



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