

Rice Lake Mechanical Physician Scale

Model RL-MPS-50

Operation Manual



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1.0 Introduction

The Rice Lake Mechanical Physician Scale (RL-MPS-50) is ideal for use in health clinics and doctors' practices for height and weight measurement.

This manual guides the user through basic instructions on scale assembly and operation.



Manuals and additional resources are available from the Rice Lake Weighing Systems website at www.ricelake.com

Warranty information can be found on the website at www.ricelake.com/warranties

1.1 Safety

Safety Signal Definitions:



Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. Includes hazards that are exposed when guards are removed.



Indicates a potentially hazardous situation that, if not avoided, could result in serious injury or death. Includes hazards that are exposed when guards are removed.



Indicates a potentially hazardous situation that, if not avoided, could result in minor or moderate injury.



Indicates information about procedures that, if not observed, could result in damage to equipment or corruption to and loss of data.

General Safety



Do not operate or work on this equipment unless this manual has been read and all instructions are understood. Failure to follow the instructions or heed the warnings could result in injury or death. Contact any Rice Lake Weighing Systems dealer for replacement manuals.



Failure to heed could result in serious injury or death.

Do not exceed the recommended weight limit of 450 lb / 200 kg.

Do not transport the scale while someone is standing on it.

To avoid cross contamination, the scale should be cleaned regularly.

Avoid contact with excessive moisture.

Do not allow minors (children) or inexperienced persons to operate this scale.

Do not jump on the scale.

Do not place fingers into slots or possible pinch points.

Do not use in the presence of flammable materials.

Use the scale only to determine weight of people while standing.

Do not make alterations or modifications to the scale.

People with disabilities, or who are physically frail, should always be assisted by another person when using this scale.

Do not use the scale on slippery surfaces, such as a wet floor.

Do not use this scale when the body/feet are wet, such as after taking a bath.

Weight exceeding the maximum capacity may damage the scale.

Do not drop the scale or subject it to violent shocks.

For accurate weighing, the scale must be placed on a flat, stable surface.

2.0 Assembly

Place the shipping container in an open area with room for unpacking. Carefully remove the RL-MPS-50 from the shipping container. When unpacking, ensure that all assembly parts are accounted for. Check the scale for any visible damage.

If any parts were damaged in shipment, notify Rice Lake Weighing Systems and the shipper immediately.

IMPORTANT

Retain the original shipping materials and container should the product need to be returned. The product must be properly packed with sufficient packing materials prior to being moved or shipped.

Damage caused by improper packaging is not covered by the warranty.

The shipping container should contain the following:

- Scale platform
- Height rod
- Pillar with weigh beam and internal steel rod
- U-type external hexagon wrench
- External hexagon wrench
- Hook tool
- Wheels/wheel bracket
- Washers (4)
- M6 pillar nuts (4)



Figure 2-1. RL-MPS-50 Parts

2.1 Scale Assembly

Use the following sections to assemble the scale.

2.1.1 Pillar Installation

1. Remove banding from around the scale platform.
2. Set the scale platform on a hard, level surface.
3. Remove the banding connecting the rod hook to the pillar stud.



Figure 2-2. Rod Hook Packaging Tie

4. Remove nuts and washers from pillar studs.
5. Insert the four pillar studs located on the bottom of the pillar into the four holes in the scale platform. Ensure the pillar is held straight.

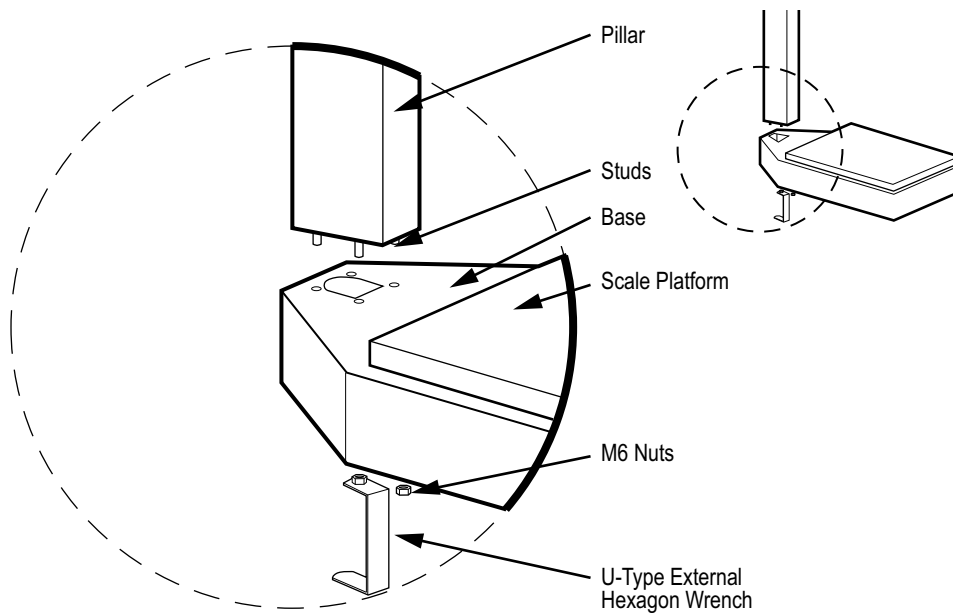


Figure 2-3. Pillar Placement

6. Gently lift the scale onto a table face down so that the base hangs over the edge of the table while holding the pillar in place against the scale platform. Ensure that the internal steel rod inside the pillar is not twisted and the hook extends out of the hole in the base of the scale.
7. Ensure the pillar is held firmly against the scale platform (there should be no space between the pillar and scale platform).
8. Place the four washers on each pillar stud.

- Secure the pillar to the scale platform by using the supplied U-type external hexagon wrench to tighten the pillar nuts on each pillar stud.

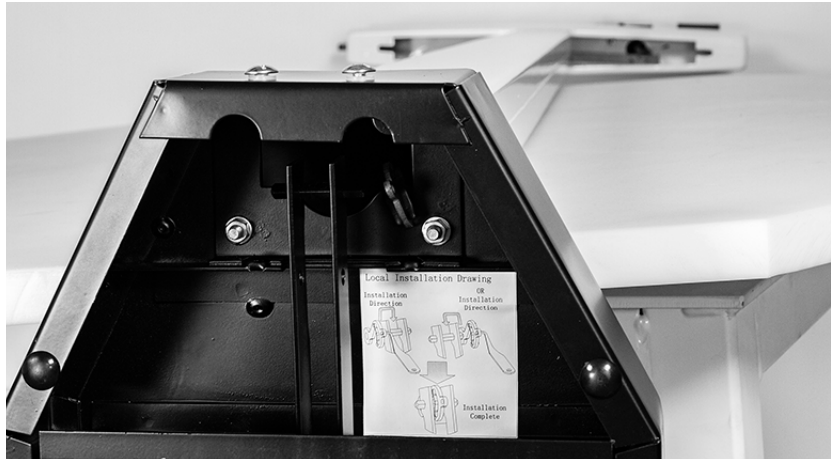


Figure 2-4. Pillar Studs Placement

2.1.2 Rod Connection

- Use the supplied hook tool to reach the eye on the larger hook at end of the internal steel rod inside the pillar.
- Pull the rod hook toward the base of the scale platform.
- Push the lever on the bottom of the scale platform toward the pillar and hook the internal steel rod around the pivot.

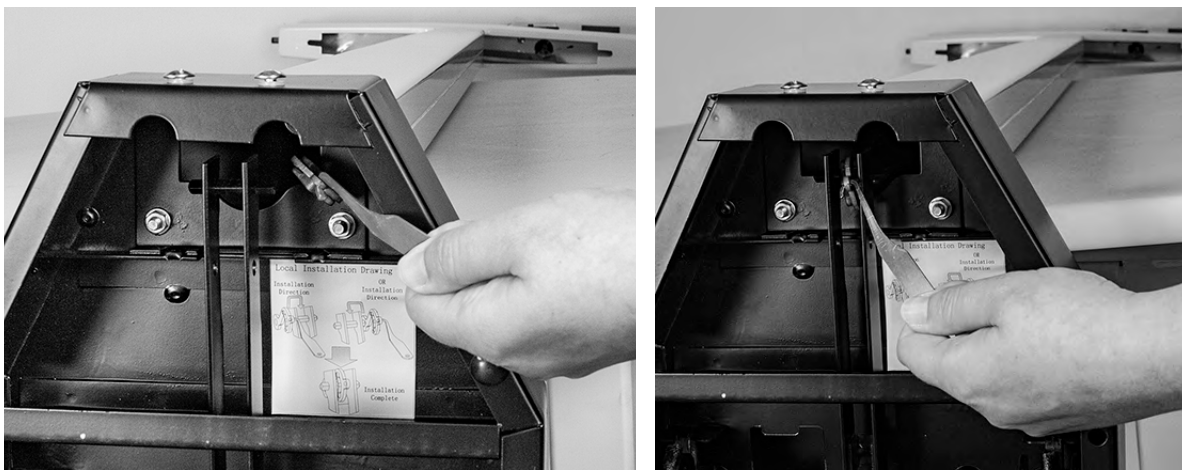


Figure 2-5. Hooking the Steel Rod around the pivot

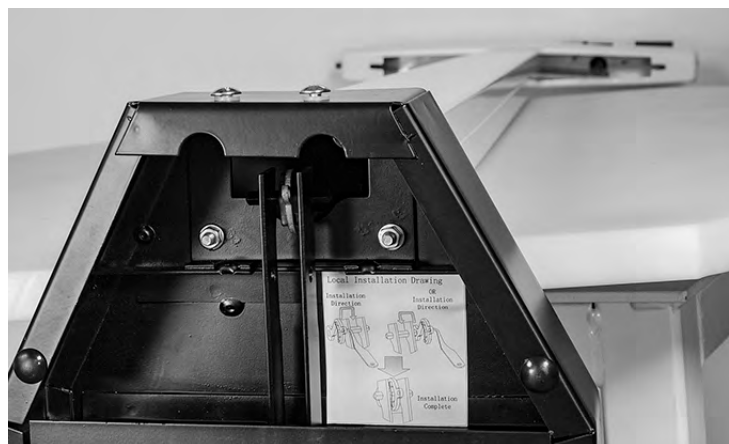


Figure 2-6. Steel Rod Hooked around the Pivot

2.1.3 Wheel Installation

1. Align the wheel bracket to the scale frame, making sure the bracket is facing downwards (an upside down bracket can cause weighing errors).

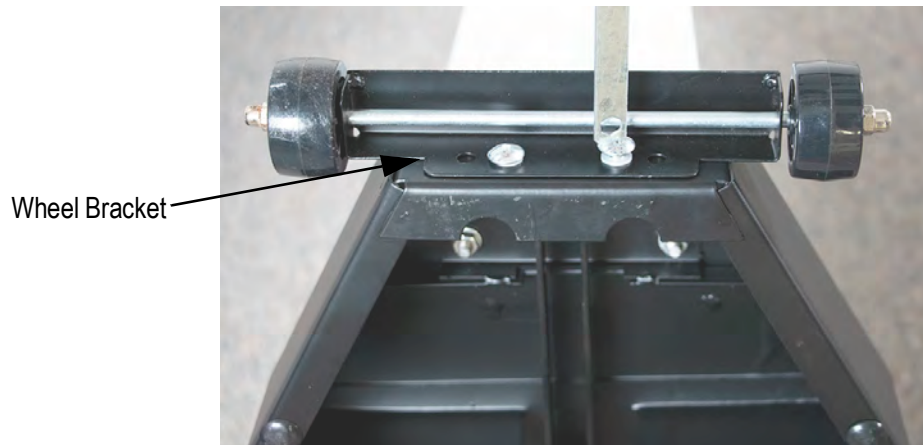


Figure 2-7. Wheel Bracket

2. Insert the screws through the bracket and scale frame.
3. Adjust the bracket to a level position and tighten screws with the supplied wrench.
4. Bring the scale to an upright position.
5. Move the scale by holding both sides of the pillar top, slightly tipping the front side of the platform away from the floor and pushing to the new location.

2.1.4 Height Rod Installation

1. Adjust the two screws on the pillar if necessary, leaving enough room to slide the plate of the height rod brackets into the space between the head of the screw and the pillar.
2. Place the slots of height rod brackets over the heads of both screws on the pillar and let the plates settle into place.
3. Use the supplied wrench to tighten both screws. Do not over tighten.

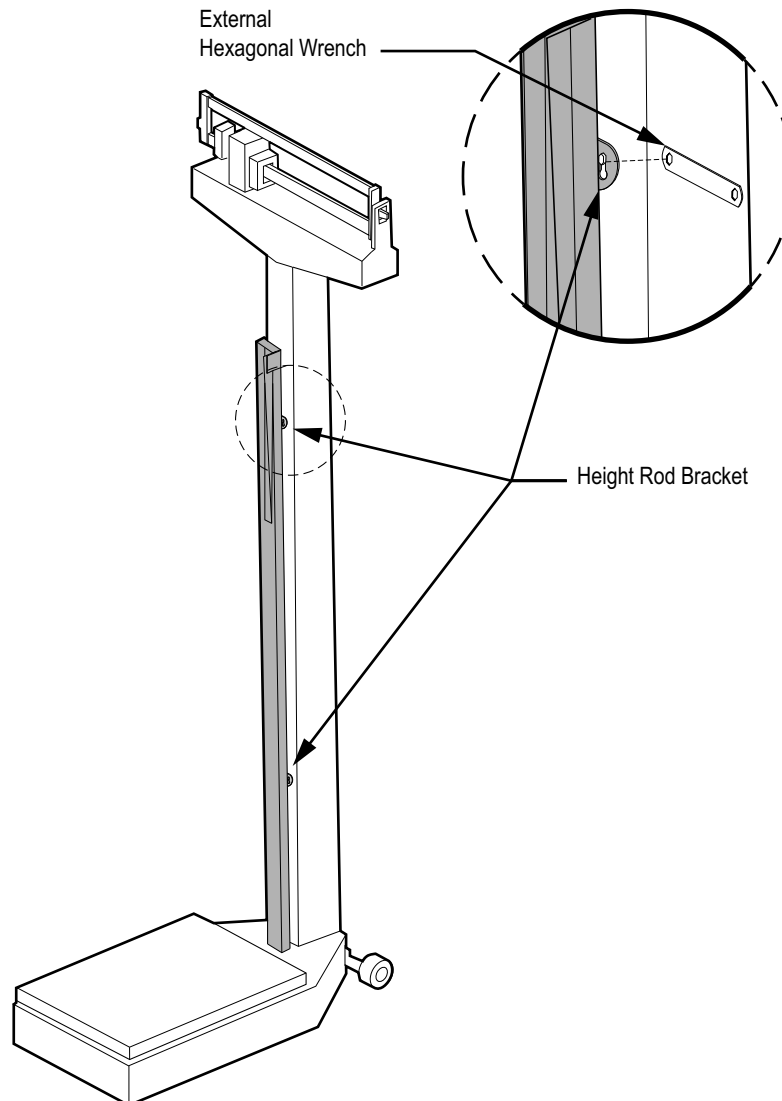


Figure 2-8. Height Rod Installation

3.0 Operation

The following sections explain how to operate the *RL-MPS-50*.

3.1 Zero Adjustment

To ensure accurate weighments, a zero adjustment should be done to the scale after assembly is complete. To perform zero adjustment:

1. Ensure the scale is sitting on a level surface.
2. Move the upper and lower poise weights to zero. The scale pointer should rise up and down in the eye loop area.



Figure 3-1. Poise Weights Set to Zero

3. Adjust the zero point adjustment screw on the left of the weighing beam with a screwdriver until the scale pointer settles in the center of the eye loop area.



Figure 3-2. Pointer/Eye Loop Area

3.2 Weighing Instructions

1. Ensure the weigh beam is in either LB/KG mode. You can change from LB/KG by flipping the top and bottom beams. The beams are black for LB mode and white for KG mode. See [Figure 3-3](#) and [Figure 3-4](#).



Note

The top and bottom beams can be changed from LB/KG independently.

Ensure that both are set to the same unit of measure or weight measurements will be inaccurate.

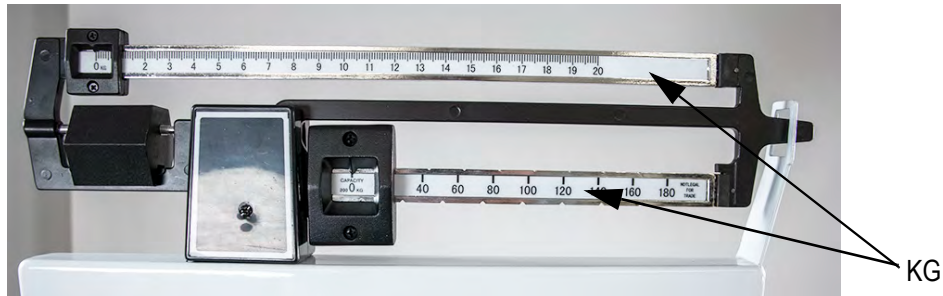


Figure 3-3. Weigh Beam in KG

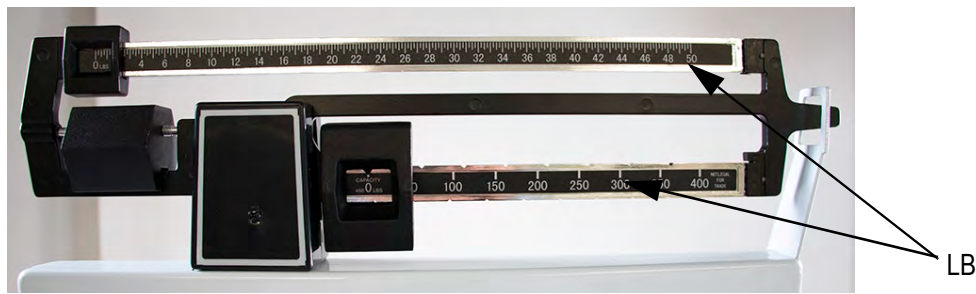


Figure 3-4. Weigh Beam in LB (Black)

2. Perform a zero adjustment. See [Section 3.1 on page 7](#).
3. Set both poise weights to indicate approximate weight.
4. Step onto the scale.
5. Move both poise weights until pointer is in the center of the eye loop.
6. Add the weight value indicated on the upper and lower poise bars to get total weight.

3.3 Height Rod Instructions

1. Before a patient steps onto the scale platform, the headpiece should be rotated to the horizontal position and raised well above their apparent height. The patient may now step onto the scale platform.
2. The headpiece should be held horizontal and above the patient's head.
3. Ensure that the patient's posture is upright and the patient's head is straight and level.
4. Carefully lower the headpiece, while keeping it horizontal, until it rests gently upon the top of the patient's head.
5. If the patient is shorter than 3' 5.25" (104.5 cm), push the latch to the right while simultaneously pushing down on the headpiece until it rests horizontally upon the top of the patient's head.
6. Read the height.



Note Above 3' 5.25" height is read at the indicator (read) line from the upper (inner) height rod.

Below 3' 5.25" height is read below the indicator (read) line on the bottom (outer) height rod.

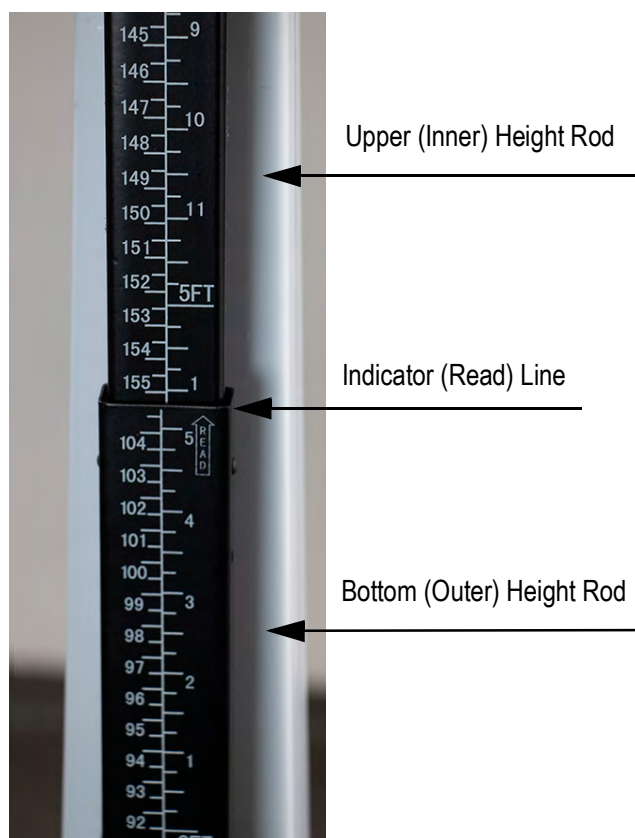


Figure 3-5. Height Rod Reading

7. While holding the headpiece horizontally, raise the headpiece above the patient's head. The patient may now step off the scale platform.
8. Rotate the headpiece back to the vertical position and adjust the height rod back to the rest position (i.e. the headpiece should be locked in place within the inner height rod and the inner rod should be at its lowest position).

4.0 Specifications

Scale Capacity

450 lb (200 kg)

Scale Resolution

0.25 lb (100 g)

Height Range

29.5" - 78.75" (75 – 200 cm)

Height Divisions

0.25" (5 mm)

Platform Size

14.77" x 10.83" (375 x 275 mm)

Overall dimensions

22.25" (L) x 18.27" (W) x 58.47" (H) (565 x 464 x 1485 mm)

Scale Weight

34.2 lb (15.5 kg)