OWNER'S MANUAL · MODEL MR220

DOUBLE OVERDRIVE 2 TRIKE TRAINER

Setup, riding and care



0
tools and assembly steps. Ready to ride out of the box.

16" to 700c
rear wheels. Nothing clamps to your axle.

Lifetime
warranty. Read this manual before your first ride.

BEFORE YOU START

WHAT'S IN THE BOX

Your Double OverDrive 2 comes fully assembled. There is nothing to put together and nothing to oil.



IN THE BOX

- One Double OverDrive 2 (MR220) trainer
- Rubber feet

KNOW YOUR TRAINER

Drums	Two identical red-capped ARC resistance drums. The red caps mark the two resistance drums.
Frame	Laser-cut steel, zinc-plated and powder coated.
Grab handle	A knurled bar for lifting and carrying the trainer.
Floor pads	Eight rubber pads, four on each side, keep the trainer flat and steady.
Bearings	Sealed and greased. No maintenance.

CHECK THE FIT FIRST

Tadpole trikes (two wheels in front): one trainer under the rear wheel.

Delta trikes that drive one rear wheel: one trainer under the drive wheel and a riser block under the other rear wheel. A second riser block under the front wheel levels the trike, if you like.

Delta trikes that drive both rear wheels through a differential: you need the TWD210, a trainer under each rear wheel.

Rear wheel: 16 in to 700c. Tires up to 3 in fit fine.

Handcycles: add the Handcycle Adapter 2 (HCT2).

Made for recumbent trikes only, not two-wheel bikes.

WHICH WHEELS DRIVE YOUR DELTA?

1. Lift one rear wheel and spin it backward by hand. Watch the pedals.
2. Do the same with the other rear wheel.
3. Pedals turn with only one wheel: one-wheel drive. Pedals turn with either wheel: both wheels drive.

Spin backward, because the freewheel lets a wheel spin forward without moving the pedals.

WHO IT IS FOR

Fit, strong riders who want hard intervals and sprints, on trikes with 21 or more speeds so they can reach the speeds where the second drum works.

SET UP

ROLL ON AND RIDE

Setup takes seconds. Lift the back of the trike, slide the trainer under, and ride.

1. **PICK A FLAT, HARD FLOOR**
   Level and clean, like a garage, a spare room or a patio. Not carpet: the fibers can get into the drums. A training mat helps. Keep it out of dusty or dirty areas.

2. **PUMP UP THE REAR TIRE**
   Use the maximum pressure printed on the tire's sidewall. Low pressure adds a lot of drag, especially at low speed.

3. **RED CAP TO THE BACK**
   Set the trainer so the red-cap end faces the back of the trike. That gives you full progressive resistance. Red cap toward the front gives lighter resistance.

4. **ROLL THE WHEEL ON**
   Lift the back of the trike a few inches and slide the trainer under, so the rear wheel rests between the two drums. Line it up by eye, then spin the wheel by hand. The tire settles near the middle of the drums.

5. **SET THE BRAKES**
   Set your parking brakes firmly. If they slip, wrap a short velcro strap around the brake levers.

6. **LEVEL THE FRONT, IF YOU LIKE**
   Tadpole front wheels can stay on the floor. For a level seat, put a block under them. Blocks are not included.



Rear wheel resting between the two drums.

DELTA TRIKE THAT DRIVES ONE WHEEL

Put the trainer under the drive wheel and a riser block under the other rear wheel. To raise the front wheel too, add a second riser block under it. The Delta Trike Kit includes the trainer and both riser blocks.



One-wheel-drive delta trike on a trainer with riser blocks.

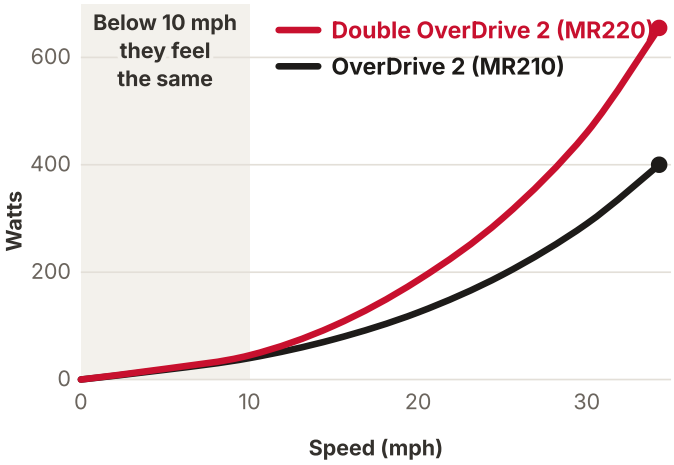
BEFORE EVERY RIDE

Tire at maximum pressure. Brakes set. Red cap facing the way you want. Floor clear of dust, grit and loose items. Keep children, pets and fingers away from the moving drums.

HOW IT RIDES

RESISTANCE THAT FOLLOWS YOU

The Double OverDrive 2 uses SportCrafters' patented ARC Technology. Magnets inside both red-capped drums move closer to the drum wall as they spin faster. The faster you pedal, the more it pushes back, much like riding outside. There are no knobs, cables or apps.



Power at each speed, redrawn from SportCrafters' original test chart. Values are approximate. Two ARC progressive resistance drums. Over 500 watts at 30 mph in SportCrafters testing.

MAKE IT HARDER OR EASIER

- **Shift gears.** Shift up to work harder, shift down to ease off, just like the road.
- **Turn it around.** Lift the trike off, turn the trainer 180 degrees so the red cap faces the front, and roll back on. You get a lighter, low-to-moderate resistance, so everyone in the house can ride.
- **Below about 10 mph** both directions feel about the same. The difference shows up as you go faster.

A LITTLE ROCKING IS NORMAL

The trainer does not clamp your trike in place, so you may feel a gentle forward and back rocking as you pedal. How much depends on how firmly your brakes hold and how stiff your trike frame is. To calm it, set the brakes firmly, pedal with a smooth, round stroke, and use pedals with clips or straps. Many riders use that feedback to smooth out their stroke.

If that motion would bother you, for example after a brain injury, a clamp-style stationary trainer may suit you better.

TRACK YOUR RIDE

Put a wheel-mounted bike computer on the wheel that sits on the trainer to track speed and distance. Sensors mounted on the trainer itself do not work. The trainer does not measure power, so apps like Zwift need a power meter on your trike.

CARE AND SUPPORT

KEEP IT ROLLING

AFTER EACH RIDE

- Wipe the drums and frame with a damp cloth. No cleaners or solvents.
- Store it indoors, dry, out of direct sun and heat.
- New tires: ride a few miles outside first. Their slick coating can rub off on the drums.

EVERY MONTH

- Check the bolts. Snug, not over-tight.
- Spin each drum by hand. It should turn freely and quietly.
- The bearings are sealed and greased. No oil needed.



IF SOMETHING FEELS OFF

WHAT YOU NOTICE	WHAT TO DO
Hard to get going	Pump the tire to maximum pressure. Start in a low gear and shift up as you pick up speed.
Too hard	Shift to your lowest gear, or turn the trainer around for a lighter spin.
Wheel walks to one side	Lift the trike, straighten the trainer under the wheel, and spin the wheel to let it settle.
Rocks forward and back	Set the brakes firmly. Smooth your stroke. Use clips or straps. Ask us about the Rhythm accessory.
Hum or noise	Knobby tires hum more than smooth ones. A cold tire can squeak until it warms up. More air pressure helps.
Vibration	Have your tire and wheel checked for balance first. That fixes it most of the time.
A part is damaged	Do not ride. Contact SportCrafters support.

LIFETIME WARRANTY

SportCrafters warrants this trainer against manufacturer defects. Damage from abuse or misuse is not covered. Full terms at sportcrafters.com/pages/warranty.

GET SUPPORT

support@sportcrafters.com
sportcrafters.com
3808 Auburn Blvd, Suite 54
Sacramento, CA 95821

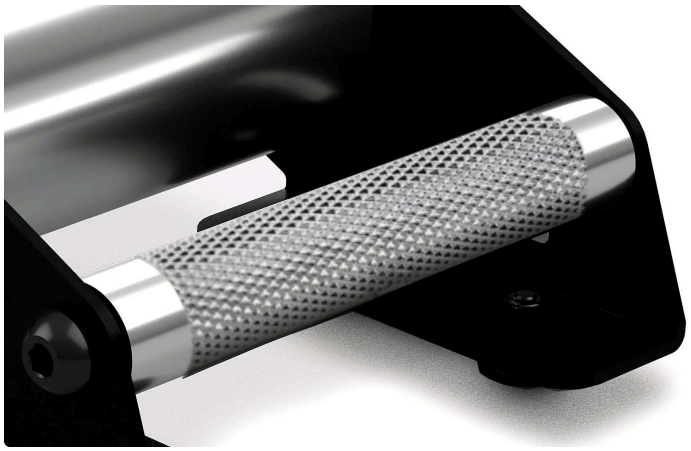
SPECIFICATIONS

DOUBLE OVERDRIVE 2 (MR220)

Resistance	Two ARC progressive resistance drums. Over 500 watts at 30 mph in SportCrafters testing.
Drums	Aluminum, 3.25 in (82.5 mm) diameter, 1/8 in (3 mm) wall. Lathed on the axle and spin balanced. Molded polycarbonate end caps.
Bearings	Sealed and greased. No maintenance.
Frame	Laser-cut steel, zinc-plated and powder coated, with a knurled grab handle and 8 rubber floor pads.
Wheel sizes	16 in to 700c. Nothing clamps to the axle.
Trainer size	21 × 4.25 × 10 in (53.3 × 10.8 × 25.4 cm)
Box size	22 × 9 × 6 in (56 × 23 × 15 cm)
Shipped weight	About 9.6 lb (4.4 kg)
Assembly	None. Ready to ride out of the box.
Warranty	Lifetime



Eight rubber floor pads, four on each side.



Knurled grab handle for lifting and carrying.