

*Rehab Trainer 881 E*



**Manual**  
English/Svensk

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# Product Information

Congratulations on your new Ergometer.

Monark Rehab Trainer 881 E is an arm and leg ergometer that provides the potential to individually adapt exercise at home or in the hospital, with continual following-up and adjustment of the exercise intensity. Ideal for exercise from a wheel chair.

## NOTE!

The use of Rehab Trainer 881 E can be physically strenuous. Always consult a doctor before beginning an exercise program and stop immediately if feeling faint or dizzy.

## Features

- The unit can be calibrated
- Graduated scale in watts, showing the work load at 50 rpm.
- Electronic display
- Adjustable crank arms (horizontally and vertically)
- Transport handle, adjustable vertically
- Powder painted
- Wheels for easy transport

## Width

470 mm (18,5")

## Length

540 mm (21")

## Height

550 mm (21,5")

## Weight

22 kg ( 48,5 lbs)

## Included

Pedals, handle

## Accessories

Wall bar table



# Operating Instruction

## Workload adjustments

Monark Rehab Trainer model 881E is an arm and leg ergometer provided with a brake belt. The power can be read in Watts at 50 pedal rpm moreover, the work can be read in kilopondmeters (kpm). The Rehab Trainer is also equipped with an electronic meter, showing pedal revolutions per minute (RPM), the total pedal revolutions (TOTAL COUNT) and time (TIME) function.

When cycling the test person put supplies the flywheel into kinetic energy. This is braked by means of a brake belt which runs around the bigger part of the brake surface of the flywheel. The workload is changed either by using another pedalling speed or by increasing or decreasing the tension of the brake belt against the flywheel by means of the work load control knob.

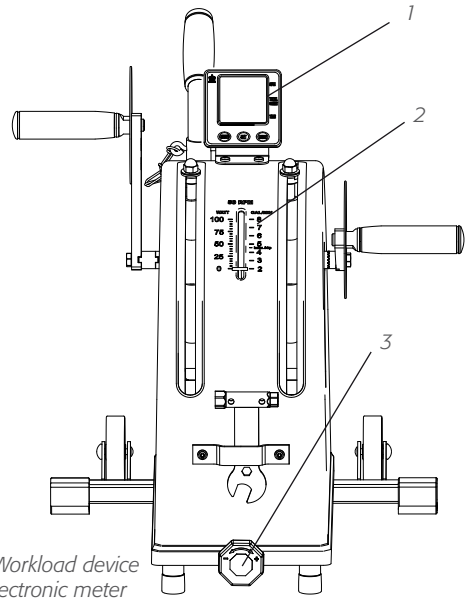
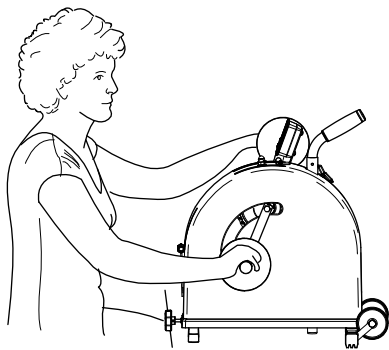
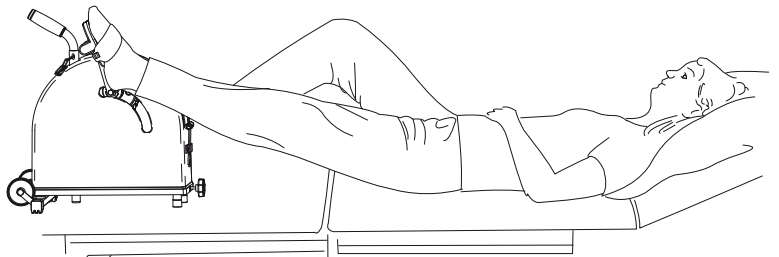


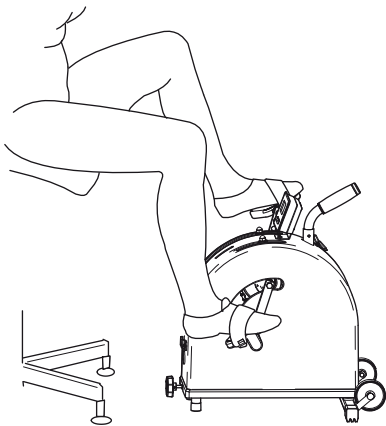
Fig: Workload device  
 1) Electronic meter  
 2) Graduated scale  
 3) Control knob for adjustment of work load



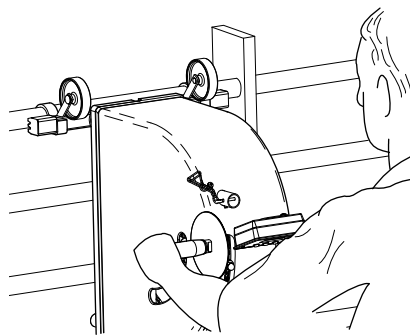
Arm exercise in a sitting position with the ergometer placed on a table.



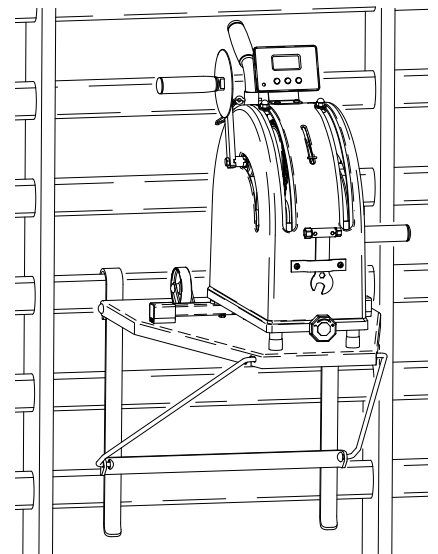
Leg exercise in a lying position at the same level as the ergometer.



Leg exercise in a sitting position with the ergometer placed on the floor.



Arm exercise with the ergometer hanging on the wall bars.

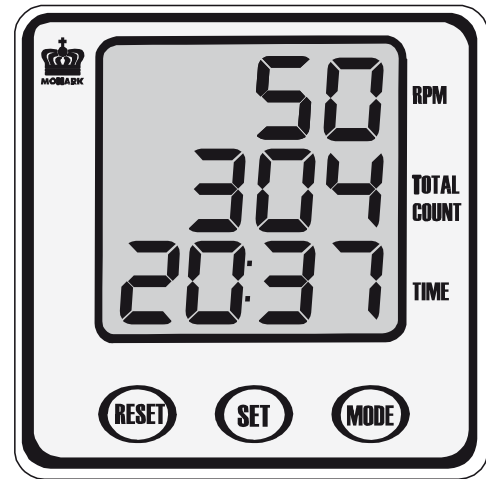


Ergometer placed on a table for wall bars.

## Computer specifications

Display		
RPM	0 - 250	rev./min
TOTAL COUNT	9999	rev. total
TIME	0:00-99:59	min:sec

Batteries: 1.5 V x 2 R6 (AA)  
 Storing temp.: -10°C - +60°C  
 Operating temp.: 0°C - 50°C



## Computer Instruction

Keys and functions:

### MODE key

Use the MODE key to cycle through the functions.

### SET key

Pressing this key will make it possible to set TIME and TOTAL COUNT. If you hold down this key for 2 seconds you can advance the function value at a faster rate.

### Programming TIME:

Press MODE key to advance to TIME function, and use SET to enter your desired time. Each press of SET will advance time by one minute. When pedaling is started, measurement of remaining exercise time will begin and the unit will count down to 0 at which time beeper will sound for 5 seconds.

### Programming TOTAL COUNT:

Press MODE key to advance to TOTAL COUNT function, and use SET to enter your desired value. Each press of SET will advance value by 10. When pedaling is started, measurement of remaining revolutions will begin and the unit will count down to 0 at which time beeper will sound for 5 seconds.

### RESET key

The RESET key will clear the values for TIME and TOTAL COUNT individually.

### NOTE:

1. Display will return to normal when not pressed any key for 5 seconds, or trainer is not used.
2. The computer starts automatically when one of the keys is pressed or when the trainer is used, that is meter gets rpm indication.
3. Auto shut off function when not pressed any key or device not used for 4 minutes.

Do not expose the fitness computer to direct sunlight or extremely high temperature. Do not use any solvents when cleaning. Use only dry cloth.

# Service

## Warranty

### EU countries private use

If you are a natural person you will have a minimum level of protection against defects in accordance with EC Directive 1999/44/EC. In short, the directive provides for that your Monark Dealer will be liable for any defects, which existed at the time of delivery. In case of defects, you will be entitled to have the defect remedied within a reasonable time, free of charge, by repair or replacement.

### EU countries professional use

Monark products and parts are guaranteed against defects in materials and workmanship for a period of one year from the initial date of purchase of the unit. In the event of a defect in material or workmanship during that period above, Monark Exercise will repair or replace (at its option) the product. Monark Exercise will do so at its expense for the cost of materials but not for labor or shipping.

### Other countries

Monark products and parts are guaranteed against defects in materials and workmanship for a period of one year from the initial date of purchase of the unit. In the event of a defect in material or workmanship during that period above, Monark Exercise will repair or replace (at its option) the product. Monark Exercise will do so at its expense for the cost of materials but not for labor or shipping.

## Service check & maintenance

To keep your Ergometer in good shape you should make a regular service.

Service action	Time?	Service interval
Keep your Ergometer clean and properly lubricated	5 min	once per week
Periodically wipe the surface with a rust preventative, especially when it has been cleaned and the surface is dry. This is done to protect the chrome and zinc parts as well as the painted parts.	5 min	4 times per year
Check now and then that both pedals are firmly tightened. If not the threading in the pedal arms will be damaged. Also check that pedal arms are firmly tightened on the crank axle, tighten if necessary. When the Ergometer is new it is important to tighten the pedals after 5 hours of pedaling.	5 min	4 times per year
Check that the pedal crank is secure to the crank axle.	5 min	4 times per year
Be sure that the pedals are moving smoothly, and that pedal axle is clear of dirt and fibers.	5 min	4 times per year
When cleaning and lubricating be sure to check that all screws and nuts are properly tightened.	10 min	2 times per year
Check that the chain is snug and there is no play in the pedal crank.	15 min	2 times per year
Check that pedals, chain and freewheel sprocket are lubricated.	5 min	2 times per year
Be sure that the brake belt does not show significant signs of wear.	15 min	2 times per year
Be sure that all moving parts as crank and flywheel are working normal and that no abnormal play or sound exists. I.e. play in bearings causes fast wearing and with that follows a highly reduced lifetime.		Pay attention, if any mislead or malfunction. The faults must be attend to at once before any further use of the bike.

## Transport

At transport the brake cord should be somewhat tightened to prevent it from falling off the flywheel.

Please note: The production number of your Ergometer is placed according to *fig: Serial number*. The number is able to read through the opening on the front of the cover without dismantle the ergometer.

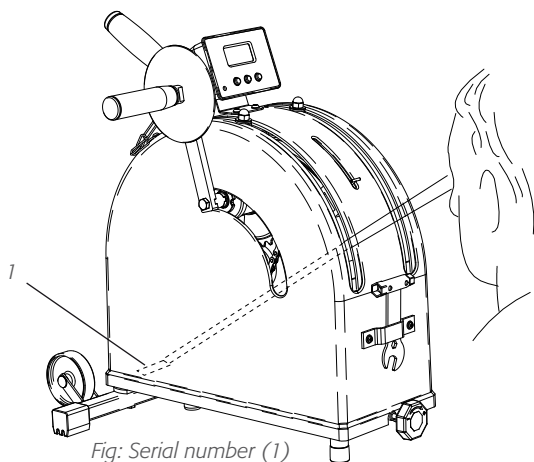


Fig: Serial number (1)

## Batteries

The batteries, 2 x 1.5V size AA(R6), which are placed in a holder inside of the meter. These can easily be changed.

Remove the battery hatch and take out the old batteries and replace them with new ones.

**NOTE!** Be careful to put in the new batteries with + and - correctly positioned.

Put on the hatch.

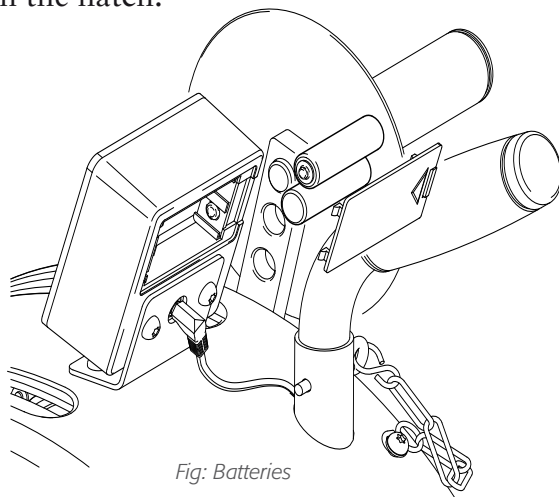


Fig: Batteries

## Chain 1/2" x 1/8"

It's strongly recommended that a chain solvent is used to keep the chain clean. Much dirt built up on the chain will cause excess wear. A chain lubricant and solvent for normal road bikes may be used.

Check the lubrication and tension of the chain at regular intervals. If the chain, in the middle of its free length have a play of 15 mm, it must be replaced with a new one.

## Crank bearing

The crank bearing is long term greased and needs normally no supplementary lubrication. If problem arises, please contact your Monark dealer.

## Flywheel bearing

The bearings in the flywheel are lifetime greased and require normally no maintenance. If problem arises, please contact your Monark dealer.

## Brake belt

The brake belt should be regularly checked to ensure that it has not suffered excessive wear. If it looks worn it should be replaced. Deposits of dirt on the brake belt and on the contact surface may cause the unit to operate unevenly and will also wear down the brake belt. The brake belt contact of the flywheel surface should then be ground off with fine sand paper and any dust removed with a clean dry cloth.

Always keep the brake belt contact surface clean and dry. No lubricant should be used. We recommend to replacing the brake belt when cleaning the contact surface.

## Calibration

Calibration is done at the factory. If you for some reason want to check the calibration, do as follows:

Tighten the brake belt through turning the control knob so that pointer goes up to about 25-50 Watt at rotation of the crank. Put the Rehab Trainer at the edge of a table. Loosen the screws for the clamping plate(3), so that the end of the belt is loose. See *fig: Calibration*. Fasten a 2 kg weight (our part no. 9000-212) to the brake belt(2). This weight should now be read on the scale at 2 kp. See *fig: Watt scale*.

Should there be a deviation between the position of the pointer and the 2 kp marked on the scale, adjust the loading spring by turning the adjusting screw until the correct position is obtained. See fig 5 and 6. Turn clockwise if the pointer is placed too high and turn counter clockwise if the pointer is placed too low. Remove the weight and fasten the brake belt with the screw for the clamping plate so that the pointer does not go below the zero ("0") marked on the scale.

The height level of the cranks is adjustable when loosen the nuts according to fig 6. Set the crank arms at the desired position and fasten with the nuts. If the cranks are not in line, adjust these. First set the left hand crank straight upwards. Then loosen the right hand crank by undoing the crank arm screw. See fig 7. Adjust the position of the right hand crank so it is in line with left hand crank and tighten the screw.

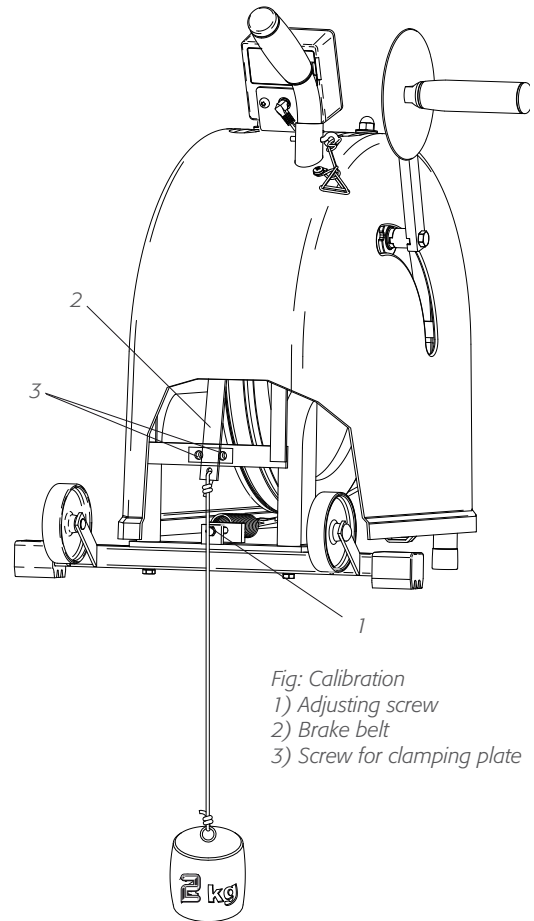


Fig: Calibration  
 1) Adjusting screw  
 2) Brake belt  
 3) Screw for clamping plate

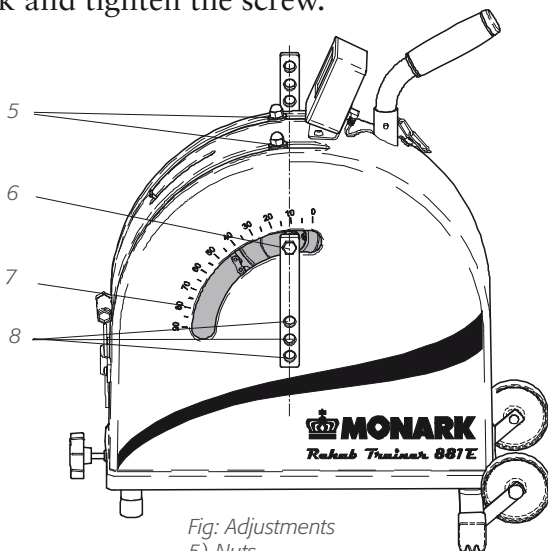
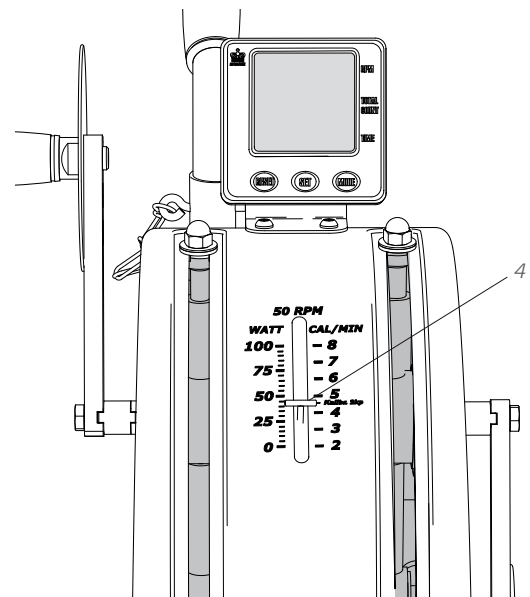


Fig: Adjustments  
 5) Nuts  
 6) Crank arm screw  
 7) Graduated scale  
 8) 3 different positions



Watt scale  
 4) 2 kp

# Exercising

The human body is built for action – not for rest. Once upon a time this was a necessity: the struggle for survival demanded good physical condition. But optimal function can only be achieved by regularly exposing the heart, circulation, muscles, tendons, skeleton and nervous system to some loading, i.e. training.

In the old days the body got its exercise both in work and at leisure. In our modern society, however, machines have taken over an ever increasing share of the tasks which were formerly accomplished with muscular power alone. Our life has at an accelerated tempo been dominated by sitting, riding and lying. Thus, the natural and vital stimulation that tissues and internal organs receive through physical exercise has largely disappeared. Certain tissues such as muscles, bone and blood and also a number of bodily functions can adapt to inactivity – and to stress. Studies have proved that if you use 30 minutes for exercise like brisk walking, running, bicycling, swimming or skiing 2-3 times a week, your condition has been improved by some 15 per cent after a few months. The efficiency of the heart muscle will increase and joints and muscles grow in strength. The capillary density increases in the trained muscle and their enzymatic activities are enhanced. The body adapts to the new demands. The perceived exertion at a given rate of exercise becomes reduced.

With increased physical activity fatness is concentrated, the appetite functions “safer”, you can eat more without risk for overweight and thereby the risk of lack of important essential food nutrients decreases. For many individuals the effect of habitual physical activity also improves the wellbeing and it is a good feeling to have a potential to cope with straining situations.

## What kind of exercise to choose?

You should have fun when exercising. Choose something you find pleasure in doing regularly.

To get a good effect out of the training you should choose a form of exercise that engages large muscle groups. Then the demand of increased blood flow and oxygen transport will be so great that heart will increase its pump capacity. Jogging, calisthenics, aerobic dancing, bicycling, swimming, skiing and walking are excellent examples of exercises meeting this requirement.

**In a few months you can get 10-15 years younger**  
If you cycle 30 minutes a few times a week you can lower your condition age with 10-15 years! Scientifically this is described as a reduction on the biological age. Externally, you are your usual self. Internally, however, you feel much younger. In other words: You can work harder. You feel more alert and healthy. Your ability to handle stress and problems increases. There are few better ways to improve your physical condition than to cycle. It does not over-tax your joints. It builds up your condition progressively and at your own pace – and you can make your training fit weather conditions.

## Do I loose weight when I Cycling?

Yes! You do lose calories. A few miles on your bike every day over one year, you will have lost the equivalent of 20 pounds of body fat. You will achieve best results if you combine exercise with healthier eating. A little less sugar, less butter on your bread or less fat in your frying pan. And a few miles on your bike every day. In a year you will have lost 20 pounds.

## Do I get stronger?

Cycling strengthens the muscles of the back, abdomen and legs. Daily chores become easier. Cycling also makes your heart stronger. Your pulse rate gets lower even when you exert yourself a little extra. Regular exercise also has a favourable influence on high blood pressures.

## How do I train?

1. Warm up 3-5 minutes with a low pedal resistance. Pedal about 12 mph (20 km/h).
2. Increase the resistance until you feel the training “somewhat hard”. Keep the speed for 2-5 minutes. Get off the Exercise cycle and rest a few minutes. Cycle again and then rest. Train at your own pace and with a comfortable pedal resistance. After a few weeks you can increase the resistance.
3. Before ending, pedal a few minutes with a light resistance, in order to step down your training. Total time about 30 minutes.

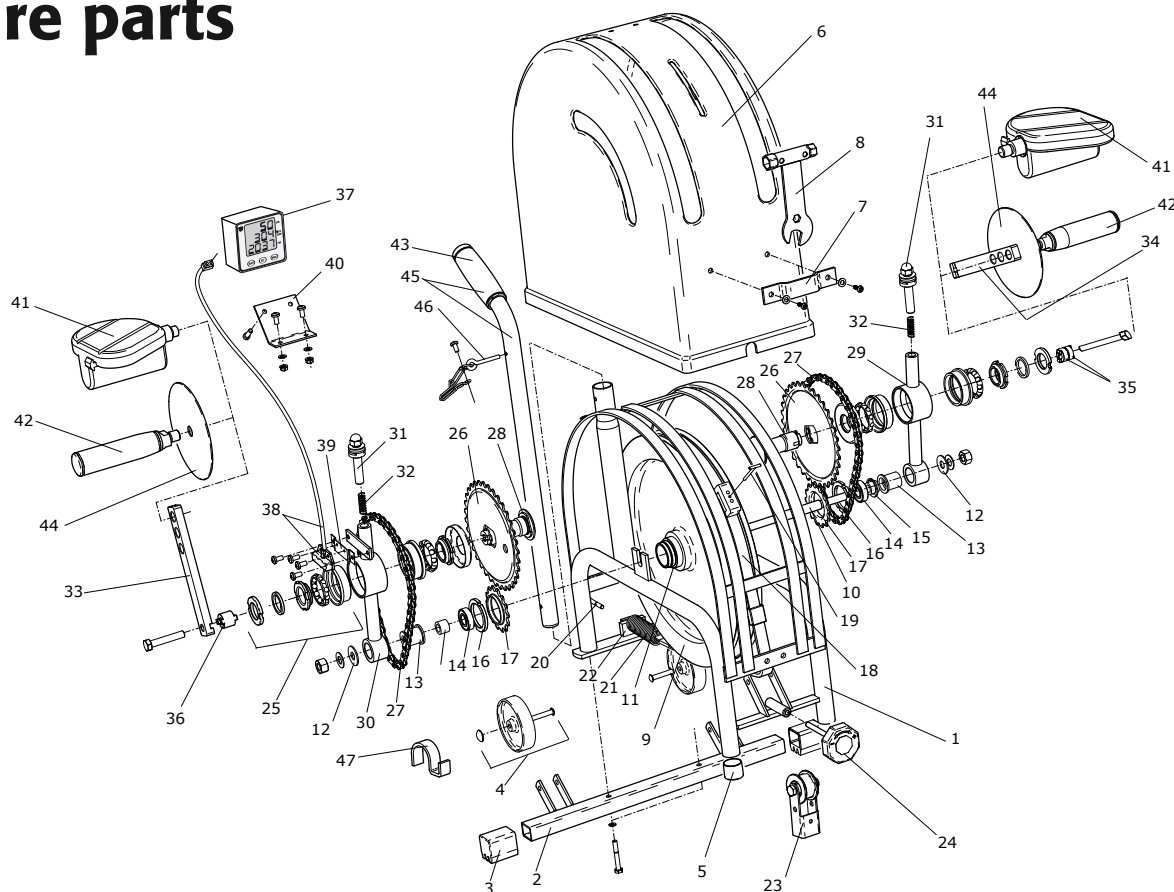
## Strength training:

1. Give yourself a thorough warm-up.
2. Pedal with a heavy resistance for 5-10 seconds, then rest 45-60 seconds. Repeat this 5-10 times.

It is a good idea to combine your cycle training with gymnastics for 5 minutes, as this will give you a physiologically well-balanced form of training.

**Elderly people and physically weak persons should consult a doctor before starting their training.**

## Spare parts



Pos.	Qty.	Art.No.	Description	Pos.	Qty.	Art.No.	Description
1	1	9145-2	Frame	27	2	9145-55	Chain 1/2 x 1/8",42 l, incl.lock
2	1	9030-6	Support tube, rear	28	2	9145-145	Crank axle
3	2	9100-5	Plastic cap, blue	29	1	9145-146	Crank bearing arm, right
4	2	9010-12	Transport wheel, complete	30	1	9145-147	Crank bearing arm, left
5	2	1066	Plastic cap, white	31	2	9045-50	Arm extension fastener compl.
6	1	9145-10	Cover with decals, complete	32	2	9145-49	Spring for above
	5	21015-5	Mounting screw for cover	33	1	9145-60	Crank arm, left
7	1	9145-18	Rubber belt	34	1	9145-63	Crank arm, right
8	1	9145-20	Combination key	35	2	9045-65	Collar
9	1	9145-24	Flywheel 11kg, complete	36	1	9145-66	Double keyed collar
10	1	9045-27	Axle length 160 mm 26g			9145-72	Meter set compl. (for all 881)
11	1	9010-38	Tension Pin 5x18 mm	37	1	9371-68	-Digital meter
12	2	9145-50	Washer 10x18 mm	38	1	9326-162	-Crank sensor with cable
13	2	9145-28	Bearing bushing	39	1	9145-69	-Holder for sensor
14	2	19001-6	Ball bearing 6001-2z	40	1	9371-67	-Holder for digital meter
15	1	9000-15	Lock ring SgH 028		1	9326-164	-Magnet
16	2	2420-49	Sprocket nut	41	1	9300-205	Pedal, pair
17	2	1210	Sprocket 14t		1	9300-207	Footstraps, pair
18	1	9145-30	Brake belt, complete	42	1	9045-70	Handle, pair
19	1	9145-32	Indicator	43	1	9145-75	Grip, pair
20	2	9145-92	Plate	44	1	9045-71	Hand guard
21	1	9145-33	Spring		1	9145-550	Decal set for 881 E
22	1	9145-34	Bracket	45	1	9145-100	transport handle
23	1	9145-136	Tension lever, complete	46	1	9145-101	Locking pin with chain
24	1	9145-140	Handwheel, complete	47	1	9045-101	Wall bar fastener
25	1	6720	Crank bearing set, complete		1	9145-150	Screw, washer and nut set
26	2	9007-36	Chain wheel, 34T				