

# Manual 871 E





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## Important

Read the manual carefully before using the cycle and save it for future use.

## **Monark Exercise AB**

Monark has 100 years' experience of bicycle production. The Monark tradition has yielded know-how, experience, and a real feel for the product and quality. Since the early 1900s, Monark's cycles have been living proof of precision, reliability, strength and service. These are the reasons why we are now the world leader in cycle ergometers and the market leader in Scandinavia in transport cycles.

We manufacture, develop and market ergometers, exercise bikes, transport bikes and specialized bicycles. Our largest customer groups are within health care, sports medicine, public authorities, industry and postal services.

For more information: [www.monarkexercise.se](http://www.monarkexercise.se)



# Product Information

*Congratulations on your new Ergometer!*

The Monark Compact Rehab 871 E is a small, handy arm/leg trainer which is easy to use and has smooth running. Ideal for warm up and exercise in hospitals and rehabilitations centers from wheelchair or standing up. Excellent choice for rehabilitation of disabled.

## NOTE!

Use of the product may involve considerable physical stress. It is therefore recommended people who are not accustomed to cardio or do not feel completely healthy to first consult a physician for advice before use.

## Facts

- Electronic display
- Control knob for adjustment of brake force
- Transport handle
- Powder painted

## Width

180 mm (7") at front support tube

450 mm (18") at rear support tube

## Length

600 mm (24")

## Height

530 mm (21")

## Weight

25 kg ( 55 lbs)

## Included

Pedals

Handles

## Accessories

Wall bar table

## Serial number

The serial number of your Ergometer is placed according to *fig: Serial number*.

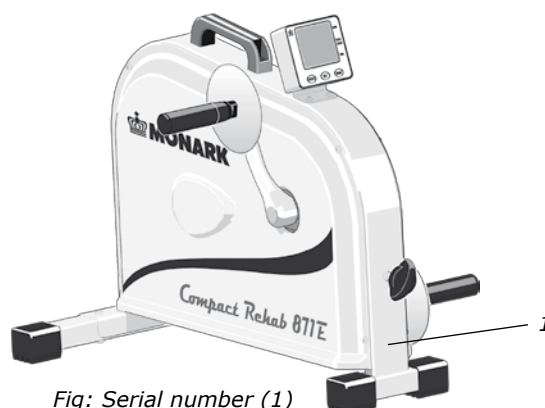


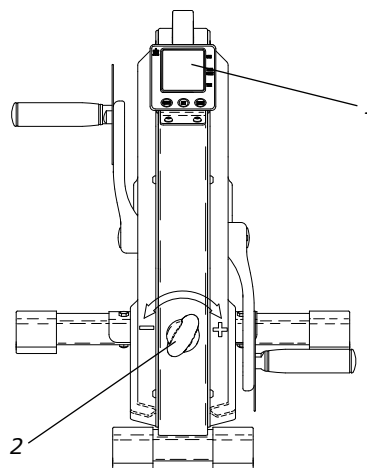
Fig: Serial number (1)

# Operating Instruction

## Workload device

Monark Compact Rehab 871 E is an arm and leg trainer provided with a flywheel and belt brake system. The workload can be changed either by increasing/decreasing the rotation speed or increasing/decreasing the brake force with the adjustment knob (2).

The Compact 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.



*Fig: Workload device*

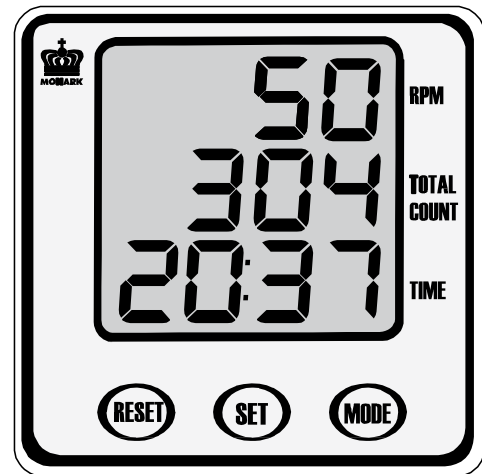
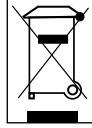
*1) Electronic meter*

*2) Control knob for adjustment of work load*

## Computer specifications

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

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



## 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 two 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 pedalling 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 pedalling is started, measurement of remaining revolutions will begin and the unit will count down to 0 at which time beeper will sound for five seconds.

### RESET key

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

#### NOTE:

1. The display will return to normal when no key is pressed for five seconds, or trainer is not used.
2. The computer starts automatically when one of the keys is pressed, or when the trainer is used and meter gets rpm indication.
3. Auto shut off function when not pressed any key or device not used for four minutes.

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

# Troubleshooting guide

<b>Symptoms</b>	<b>Probable Cause/Corrective Action</b>
There is a click noise with every revolution (increases with the weight).	The pedals/handles are not tight. Tighten them or change pedals/handles. The crank is loose. Tighten. The base bearing is loose. Contact your dealer for service.
Scratching sound is heard when cycling.	Check that the carriage block is taken off and that none of the covers is scratching.
There is a click noise and a squeak noise when cycling.	Loosen the chain.



## Service

Note that the text about service and maintenance is universal and that all parts may not be applied to your bike.

### Warning

Make sure the voltage indicated on the appliance corresponds to the local mains voltage before making connections.

### Warranty

#### EU countries - Private use

If you are a consumer living in the EU you will have a minimum level of protection against defects in accordance with EC Directive 1999/44/EC. In short, the directive states 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 Exercise 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, Monark Exercise will repair or replace the product. Monark Exercise will not, however, refund costs for labour or shipping.

#### Other countries

Monark Exercise 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 as above for labour or shipping.

## Regular service inspection & maintenance

It is important to carry out a regular service on your ergometer, to ensure it is kept in good condition.

Always keep the bike clean and well lubricated.

Service action:

- We recommend isopropyl alcohol to disinfect the surface of the bike. Use a damp but not wet cloth to clean the surface you wish to disinfect.
- Surface treatment with a rust inhibitor, especially when the bike is clean and the surfaces are dry. This is done to protect the chrome and zinc parts as well as the painted parts (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. When the Ergometer is new it is important to tighten the pedals after 5 hours of pedalling (4 times per year).
- Check that the pedal crank is secure to the crank axle (4 times per year).
- Be sure that the pedals are moving smoothly, and that the pedal axle is clear of dirt and fibres (4 times per year).
- When cleaning and lubricating be sure to check that all screws and nuts are properly tightened (twice a year).
- Check that the chain is snug and there is no play in the pedal crank (twice a year).
- Check that pedals, chain and freewheel sprocket are lubricated (twice a year).
- Be sure that the brake belt does not show significant signs of wear (twice a year).
- Check that the handlebars and seat adjustment screws are lubricated (2 times per year).
- Be sure that all moving parts, 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.
- Check that the flywheel is placed in the center and with plane rotation.
- Grind the brake belt contact surface, see section "Brake belt contact surface" (once a year).

## Batteries

If the meter is battery-operated, the batteries are in a separate package at delivery. If the storing time has been long the battery power can be too low to make the computer act correctly. Batteries must be changed.

## Crank bearing

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

## Flywheel bearing

The bearings in the flywheel are greased and do not normally require maintenance. If a problem arises, please contact your Monark dealer.

## Transport

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

## Replacement of brake belt

To replace the brake belt remove covers if necessary. Make sure that the belt is loose.

### **Pendulum bike with engine:**

To loosen the brake belt on pendulum bikes with engine, connect power to the unit and raise the pendulum to 4 kp. Hold it there until brake belt is loose. Please note how the belt is assembled. Remove it from the bike. Attach the new brake belt and assemble the bike in reverse order.

### **Weight basket bike:**

To loosen the brake cord on cycles with a weight basket set the basket to its upper position. Loosen the lock washer that is holding the cord and remove it from the tension center. Loosen or cut of the knot in the other end of the cord and then remove the hole cord from the bike. When assembling a new brake cord, first enter one end into the hole in the tension center, and tie a knot and let the knot fall into the bigger part of the hole. Lock the end of the cord with the lock washer.

### **Manual pendulum bike / exercise bike:**

To loosen the brake belt on other bikes remove all possible tension. Please note how the belt is assembled. Remove it from the bike. Attach the new brake belt and assemble the bike in reverse order.

### **NOTE!**

When replacing the brake belt it is recommended to clean the brake surface. See "Brake belt contact surface".

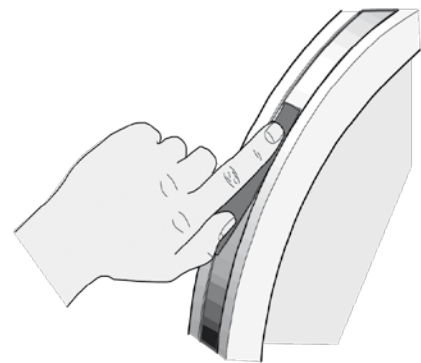
## Brake belt contact surface

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 contact surface of the flywheel should be smoothed with fine sandpaper and any dust removed with a clean dry cloth.

Remove any covers and loosen the tension on the brake belt. Smooth with fine sandpaper. This is easier to perform if a second individual cautiously and carefully pedals the cycle.

Irregularities on the brake belt contact surface are removed by means of a fine sandpaper or an abrasive cloth. Otherwise unnecessary wear on the brake belt may occur and the unit can become noisy.

Always keep the brake belt contact surface clean and dry. No lubricant should be used. We recommend replacing the brake belt when cleaning the contact surface. In regard to assembly and adjustment of the brake belt, see "Replacement of brake belt".



*Fig: Brake belt contact surface*

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

It is strongly recommended to keep the chain clean. Dirt build-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. In the middle of its free length the chain should have a minimum play(3) of 10 mm (1/4 inch). See *fig: Chain adjustments*. When the play in the chain is about 20 mm (3/4 inch) it must be tightened otherwise it will cause abnormal wear of the chain and chainwheels. Because of this it is always recommended to keep the chain play as little as possible. Loosen the hub nut(2) on both sides and tense the chain with the chain adjuster(1) when needed.

When the chain has become so long that it can no longer be tightened with the chain adjusters it is worn out and should be replaced with a new one.

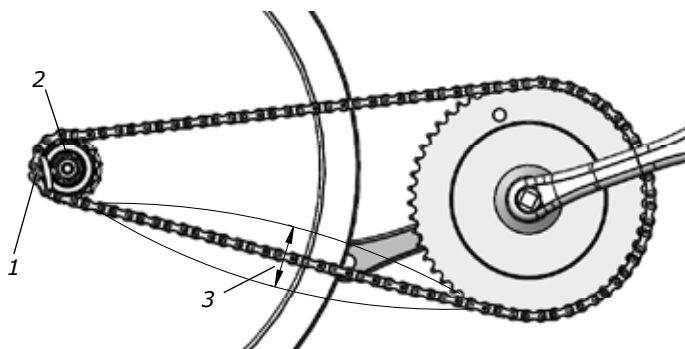
To adjust or replace the chain remove frame covers if necessary.

To adjust the chain the hub nuts(2) should be loosened. Loosening or tightening the nuts on the chain adjusters(1) will then move the hub and axle forward or backward. Adjust according to above recommendation. Then tighten the nuts on the hub axle again. See *fig: Chain adjustments*.

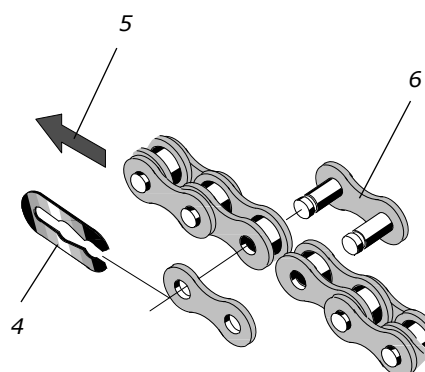
To replace the chain, loosen the chain adjuster as much as possible. Dismantle the chain lock(6) and remove the chain. Put on a new chain and assemble the chain lock. The spring of the chain lock should be assembled with the closed end in the movement direction(5) of the chain. Use a pair of tongs for dismantling and assembling the spring(4). See *fig: Chain replacement*.

NOTE: At assembly, the flywheel has to be parallel with the centerline of the frame otherwise the chain and chain wheels make a lot of noise and wear out rapidly.

Adjust chain adjusters to allow chain play according to above. Tighten hub nuts firmly. Replace frame covers.



*Fig: Chain adjustments*  
1) Chain adjuster  
2) Hub nut  
3) Chain play



*Fig: Chain replacement*  
4) Lock spring  
5) Movement direction  
6) Chain lock

## Freewheel sprocket

When replacing the freewheel sprocket remove frame covers if necessary. Dismantle the chain as described in part "Chain 1/2" x 1/8" ".

Loosen the axle nuts and lift off the flywheel. Remove the axle nut, washer, chain adjuster and spacer on the freewheel side. Place the special remover (Art. No: 9100-14) in the adaptor and place the spacer and axle nut outside. See *fig: Special remover*. Replace sprocket-adaptor and assemble the new parts in reverse order according to the above.

NOTE: Do not tighten the axle nut completely. It must be possible to loosen the adaptor-sprocket half a turn.

The sprocket should be lubricated with a few drops of oil once a year. Tilt the cycle to make it easier for the oil to reach the bearing. See *fig: Lubrication*.

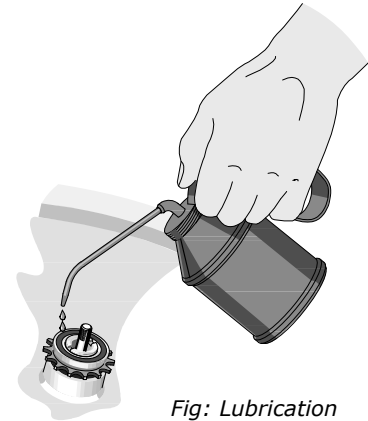


Fig: Lubrication



Fig: Special remover  
(Art. No: 9100-14)

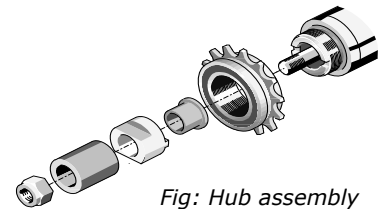
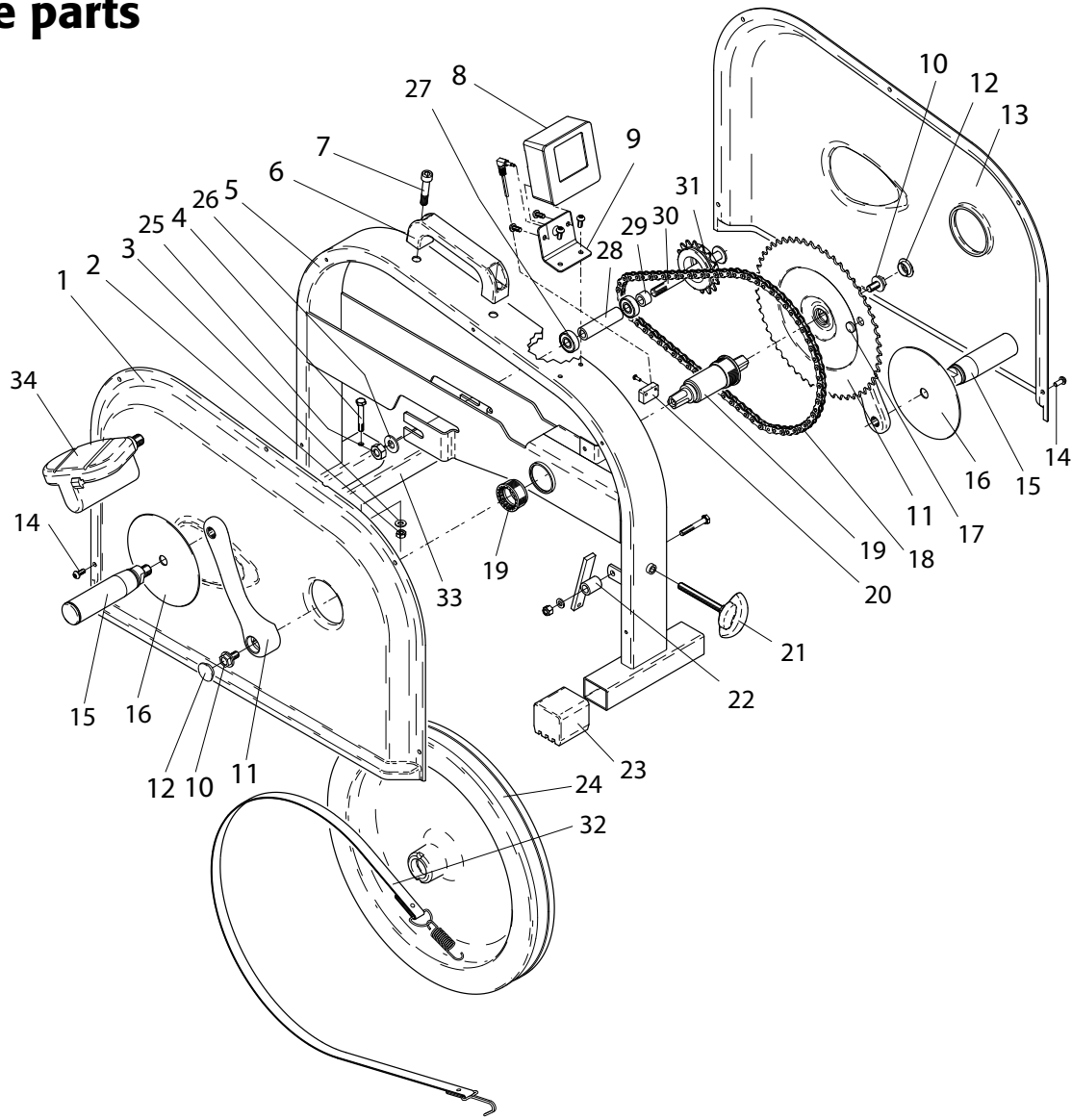


Fig: Hub assembly

# Spare parts



Pos.	Qty.	Art. No.	Description	Pos.	Qty.	Art. No.	Description
1	1	9371-52	Cover, left	20	1	9371-162	Sensor with cable
2	2	5843-9	Nut M6	21	1	9371-8	Tension screw
3	2	5863	Washer	22	1	9371-33	Tension lever
4	2	14332	Screw M6x40	23	4	9327-7	Plastic cap, blue
5	1	9371-1-5	Frame	24	1	9371-3	Flywheel, complete set
6	1	9371-31	Handle grip	25	2	9309-39	-Nut M10
7	2	73712	Screw M8 x 35	26	2	5881	-Washer
8	1	9371-68	Digital meter	27	2	19001-5	-Bearing 6000-2z
9	1	9371-67	Meter holder	28	1	9309-38	-Spacer
10	2	8523-115	Screw	29	2	9000-17	-Spacer
11	1	9300-460	Crank set, complete 52T, 152 mm	30	1	9371-35	-Axle
12	2	8523-2	Dust cover	31	1	1210	-Sprocket 14T
13	1	9371-51	Cover, right	32	1	9371-30	Brake belt, complete
14	10	5673-9	Screw	33	1	9327-6	Support tube
15	1	9145-71	Handle, pair	34	1	9300-215	Pedal, pair
16	2	9371-71	Handcover		1	9300-207	Footstraps, pair
17	1	9371-16	Magnet		1	9371-150	Screw set
18	1	9371-55	Chain		1	9371-550	Decal set
19	1	9300-330	BB cartridge bearing				

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Version 1010  
Art. No: 7950-304

