

# MANUAL

# 827 E





# Contents

<b>Product Information .....</b>	<b>5</b>
<i>Facts .....</i>	5
<i>Serial number.....</i>	5
<b>Operating Instructions .....</b>	<b>6</b>
<i>Workload adjustment .....</i>	6
<i>Cycle adjustments.....</i>	6
<i>Meter instructions.....</i>	7
<i>Heart rate .....</i>	8
<b>Trouble shooting guide .....</b>	<b>9</b>
<b>Service .....</b>	<b>10</b>
<i>Warranty .....</i>	10
<i>Service check and Maintenance .....</i>	10
<i>Batteries.....</i>	11
<i>Crank bearing .....</i>	11
<i>Flywheel bearing.....</i>	11
<i>Transportation .....</i>	11
<i>Replacement of brake belt.....</i>	11
<i>Brake belt contact surface .....</i>	11
<i>Chain 1/2" x 1/8" .....</i>	12
<i>Freewheel sprocket.....</i>	13
<b>Spare parts list .....</b>	<b>14</b>

## 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. Those 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 and 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: <http://www.monarkexercise.se>



# Product Information

## *Congratulations on your new exercise bike!*

The Monark Exercise cycle Model 827 E is a training cycle with an adjustable brake resistance.

The cycle is equipped with an electronic meter showing pedal revolutions per minute (RPM), heart rate in bpm (HR), exercise time in minutes and seconds (TIME), calculated cycling speed in km per hour or miles per hour (SPEED) and distance in km or mile (DISTANCE).

### **NOTE!**

Use of the product may involve considerable physical stress. It is therefore recommended that people who are not accustomed to cardiovascular exercise or who do not feel completely healthy, should consult a physician for advice.

## Facts

- Large, well-balanced flywheel 20 kg (48 lbs)
- Electronic meter with heart rate
- Adjustable saddle and handlebar
- Stable frame, solid steel tube
- Powder painted
- Wheels for easy transport

### Width

517 mm (20") at handlebar

640 mm (25") at support tubes

### Length

1120 mm (49")

### Height

945-1295 mm (37-51") at handlebar

780-1105 mm (31-44") at seat

### Weight

47 kg (2.2 lb)

Max user weight 250 kg (550 lbs)

### Accessories

Chest belt

## Serial number

The serial number is placed according to *Fig: Serial number*.

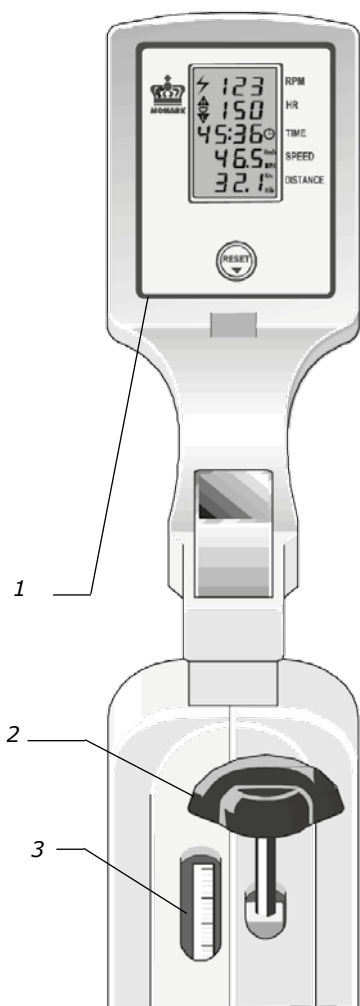


*Fig: Serial number (1)*

# Operating Instructions

## Workload adjustment

When pedalling the energy is stored in the flywheel. The flywheel is then braked by means of a brake belt/cord which runs around the flywheel. Changing of the braking effect occurs either through different pedalling speed, or by using the work load knob (2) to increase or decrease the brake band tension on the brake wheel. See *Fig: Workload adjustment*.



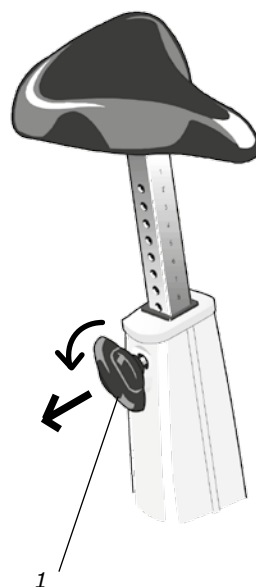
*Fig: Workload adjustment*  
1) Electronic meter  
2) Work load knob  
3) Indicator window

## Cycle adjustments

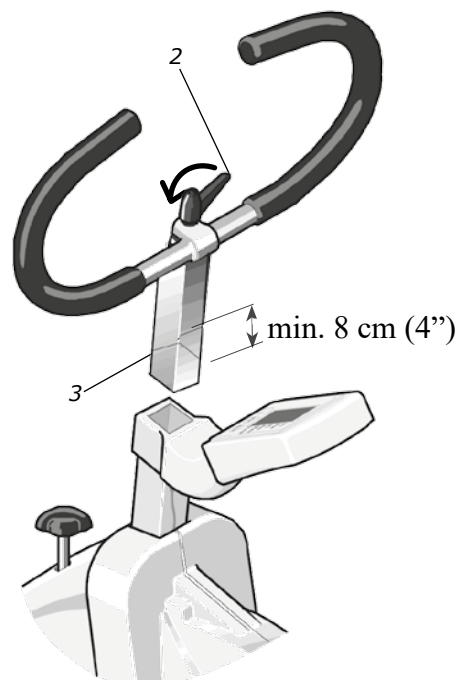
Seat height should be adjusted to a comfortable position. The appropriate height is to have the knee slightly bent when the sole of the foot is centred over the pedal axle with the pedal to the bottom position. To adjust the seat height loosen the lever(1) on the seat tube. See *Fig: Adjustments*.

The handlebar setting should be in a comfortable position when cycling. During longer exercise sessions it is recommended to occasionally change handlebar position. To adjust the handlebar, loosen the quick release lever(2). See *Fig: Adjustments*.

**NOTE!** The handlebar stem should be inserted into the frame tube at least 3 inches (about 8 cm). This measure is marked with "MAX" on the stem(3).



*Fig: Adjustments*  
1) Quick release bolt  
2) Quick release lever  
3) Inserted min. 3"



## Meter instructions

Display	Value	Unit
RPM	0 - 199	rev./min.
HR	50 - 240	bpm
TIME	0:00-99:59	min:sec
SPEED	0 - 99	km/h
DISTANCE	0.0 - 99.9	km

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

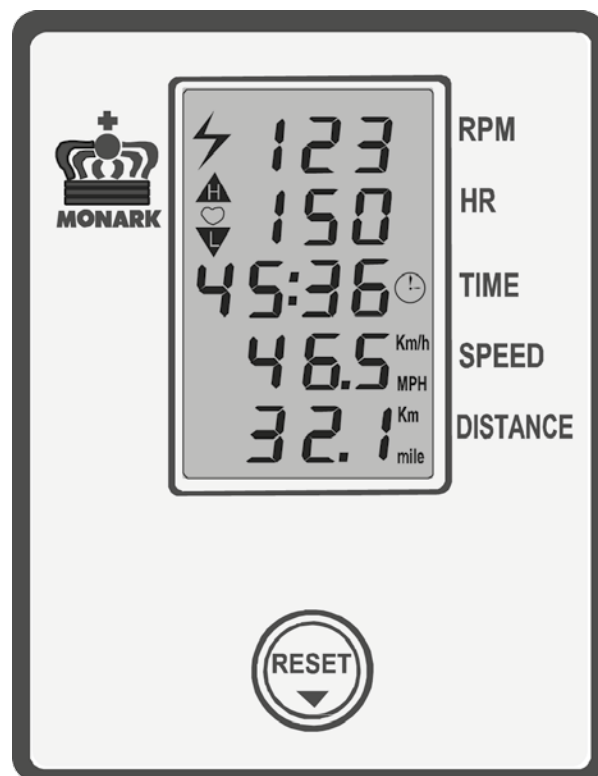


Fig: Meter instructions

Press the RESET-button or move the pedal to turn on the meter. At the display for heart rate (HR) a heart symbol is lit which means that the meter is trying to find a pulse signal from an external source, chestbelt with electrodes, (accessory, Art. No: 9328-190). If the meter cannot find such a signal this HR function is automatically turned off after 30 seconds. When the function is turned off the heart symbol is not lit any more. The heart rate function can be turned on again by pressing the RESET button.

The timer starts automatically when pedals are moved. Meter values for time and distance can be set to zero by pressing the RESET button for more than two seconds.

Put the batteries in the meter. These are sitting below the display which is easily opened using a screwdriver or similar, see *Fig: Battery replacement*. Insert the batteries into their position. Replace the display back on by first inserting the upper part of the display in the bracket and then push the bottom until it locks into place.

On the back of the meter it is also a switch for displaying in km / h and km or for displaying in mph and miles.

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

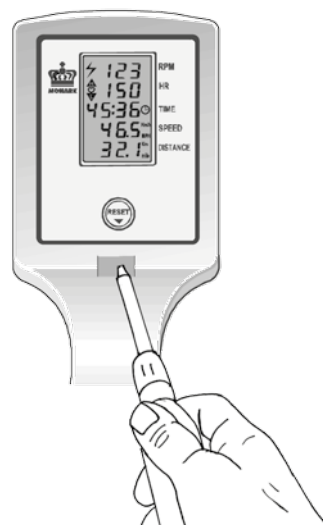
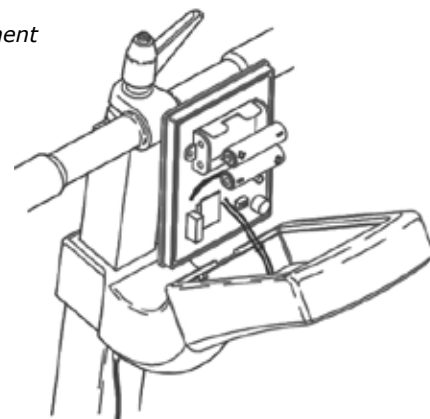


Fig: Battery replacement



## Heart rate

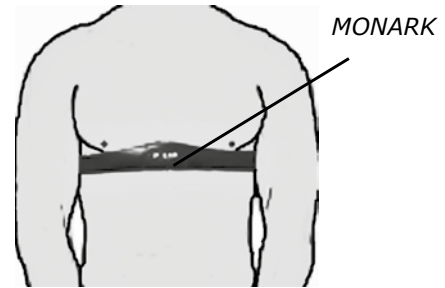
If chestbelt is used (available as a accessory)

A person's heart rate can be measured with a chest belt that senses the electronic output of the heart. Chestbelt is not included but available as an accessory.

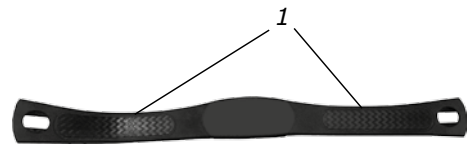
Fuss-free HR measurement requires that the belt is correctly placed. When it is correctly fitted the logo on the belt will be central and readable, outward and upright, by another person. Before putting on the belt, clean the skin where the belt is to be placed. The chest belt should be secured at a comfortable tension around the mid section, just below the breast muscle, see *Fig: Placement chest belt*. Moisten the electrodes before use, see *Fig: Electrodes on the back of the chest belt*. To make contact with the HR receiver on the bike, the distance should not be more than 100 cm. It is especially important when first used to identify the chest belt with the sensor, by standing close to get the HR (maximum 60 cm).

### NOTE!

Electromagnetic waves may disturb heart rate function. Cellular phones are not allowed to be used near the bike during test.



*Fig: Placement chest belt*



*Fig: Electrodes on the back of the chest belt (1)*



## Trouble shooting guide

Symptoms	Probable Cause/Corrective Action
There is a click noise with every pedal revolution (increases with the weight).	<ul style="list-style-type: none"><li>• The pedals are not tight. Tighten them or change pedals.</li><li>• The crank is loose. Check, tighten.</li><li>• The base bearing is loose. Contact your dealer for service.</li></ul>
Scratching sound is heard when pedalling.	<ul style="list-style-type: none"><li>• Check that the carriage block is taken off and that none of the covers is scratching.</li></ul>
There is a click noise and a squeak noise when pedalling.	<ul style="list-style-type: none"><li>• Loosen the chain.</li></ul>

# Service

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

## NOTE!

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.

## Service check and Maintenance

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

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.
- Always keep the bike clean and well lubricated (once a 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 (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 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 normally 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.

## 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 then be changed.

## Crank bearing

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

## Flywheel bearing

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

## Transportation

During transport the brake cord 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.

Alt. 1: 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.

Alt. 2: 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.

Alt. 3: To loosen the brake belt on the bike remove all 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 potential covers and all workload on the brake belt and then remove it. Grind with a fine sand paper. Grinding 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 sand paper 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".

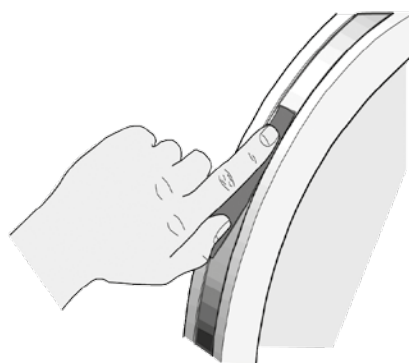


Fig: Brake belt contact surface

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

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) the chain must be tightened. Otherwise it will cause abnormal wear of the chain and sprockets. Therefore 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 shall be replaced with a new one.

To adjust and replace the chain, remove covers if required.

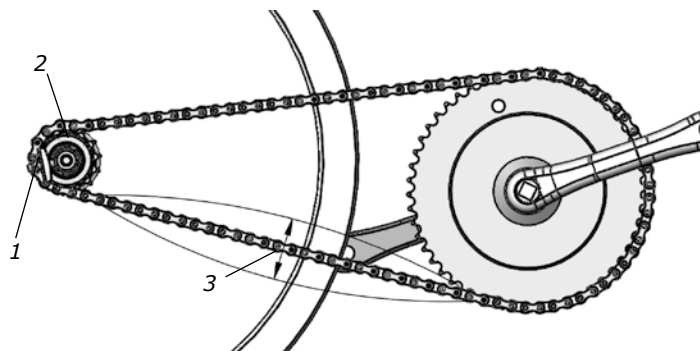
To adjust the chain the hub nuts(2) should be loosened. Loosening or tightening the nuts on the chain adjusters(1) will then move the hub and axle forward or backward. Then tighten the nuts on the hub axle again. See *Fig: Chain adjustments*.

To replace the chain, loosen the chain adjusters as much as possible. Dismantle the chain lock(6) and remove the chain. Use a pair of tongs for dismantling spring. 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*.

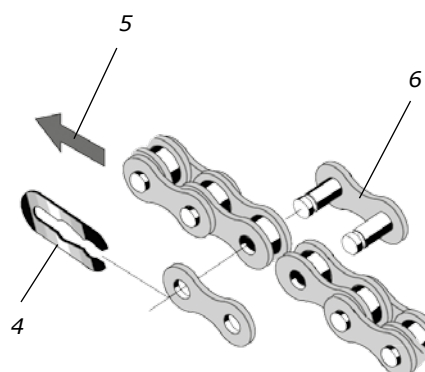
### NOTE!

At assembly the flywheel has to be parallel with the centerline of the frame. Otherwise the chain and sprockets makes a lot of noise and wears out rapidly.

Then assemble the removed parts as above but in reverse order.



*Fig: Chain adjustments*  
1) Chain adjuster  
2) Axle 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. Remove the chain according to section "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. Replace sprocket-adapter and assemble the new parts in reverse order according to the above.

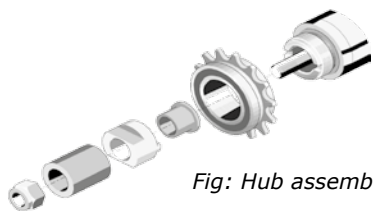
### NOTE!

Do not tighten the axle nut completely. It must be possible to loosen the adapter-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*.

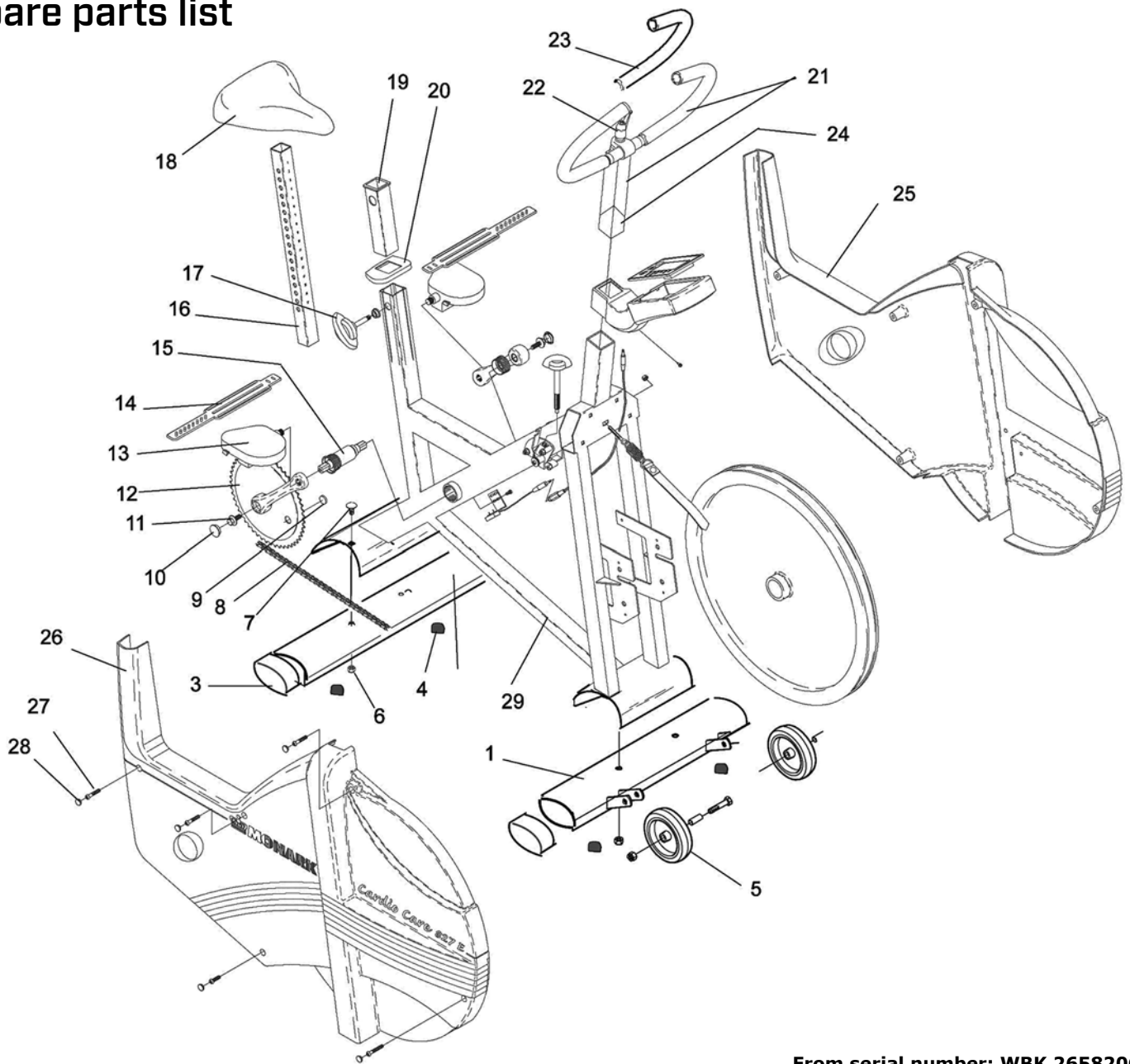


*Fig: Lubrication*



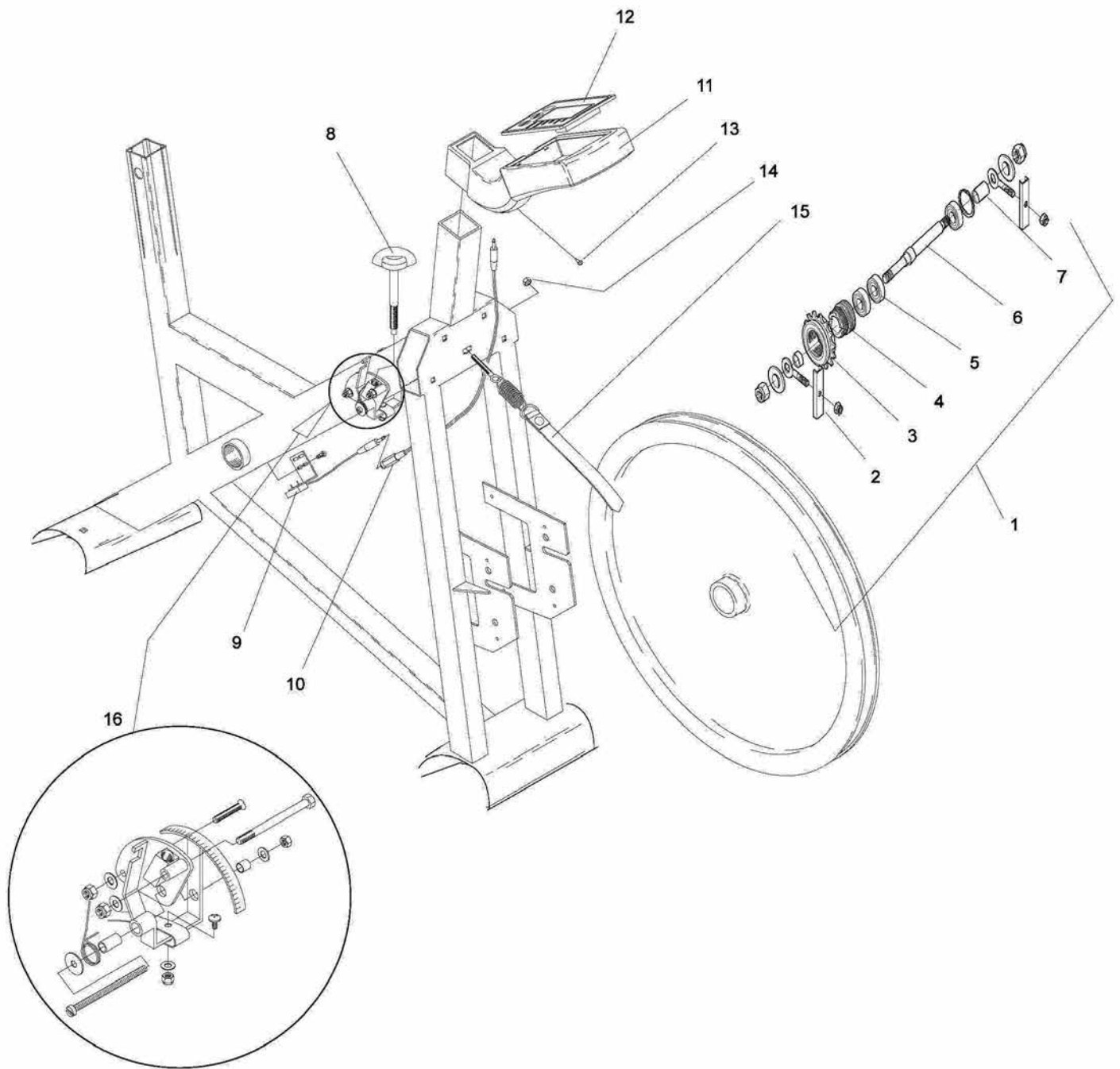
*Fig: Hub assembly*

# Spare parts list



From serial number: WBK 265820C

Pos.	Qty.	Art. No.	Description	Pos.	Qty.	Art. No.	Description
1	1	9301-15	Support tube, front	17	1	9300-133	Locking knob, complete
2	1	9301-16	Support tube, rear		1	9300-122	-Locking knob
3	4	9328-51	Plastic cap, blue		1	9300-134	-Pressure washer
4	4	9328-26	Rubber foot	18	1	4994-5	Saddle
5	1	9328-37	Transport wheel, (pair) complete		1	9300-114	-Saddle bracket
6	4	5845	Locking nut M8	19	1	9300-115	Bushing for saddle post
7	2	9300-12	Screw MVBF M8x16 mm	20	1	9300-123	Top cover
8	1	9300-55	Chain 1/2 x 1/8", 116 l	21	1	9300-280	Handlebar, complete
9	1	9326-164	Magnet	22	1	9100-180	-Locking lever M10
10	2	8523-2	Dust cover	23	1	9126-72	-Handgrip, blue (pair)
11	2	8523-115	Screw M6S 8.8 M8 x 20 FZB	24	1	9300-291	Expander wedge
12	1	9300-430	Steel crank set, complete	25	1	9300-81	Frame cover, left
13	1	9300-220	Pedal (pair)	26	1	9300-80	Frame cover, right
14	1	9300-207	Pedal strap, (pair)	27	4	5673-9	Mounting screw LKT-TT 5x12mm
15	1	8966-175	BB cartridge bearing	28	10	9306-12	Dust cover
16	1	9300-138	Saddle post	29	1	9301-5	Frame



From serial number: WBK 265820C

Pos.	Qty.	Art. No.	Description	Pos.	Qty.	Art. No.	Description
1	1	9300-24	Wheel suspension compl. set	11	1	9300-82	Instrument cover
2	1	9000-12	-Chain adjuster (pair)	12	1	9300-180	Digital meter
3	1	9106-13	-Sprocket	2	1	2151	Battery
4	1	9106-14	-Connection	13	1	9103-40	Screw RXS B4 x 9.5 FZB
5	3	91001-6	-Bearing 6001-2z	14	1	5770	Nut
6	1	9300-18	-Axle	15	1	9306-36	Brake belt, complete
7	1	9300-17	-Bush, 23 mm	16	1	9300-126	Tension lever, complete
8	1	9300-125	Tension screw, complete		1	9328-190	Chestbelt (accessory)
9	1	9326-162	Crank sensor with cable		1	9106-550	Decal set
10	1	9326-263	Cable 550 mm				

**PRODUCTS FOR LIFE AND PERFORMANCE**



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Version 1709  
Art. No.: 7950-294