

Manual 927 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



Product Information

Congratulations to your new Exercise cycle!

The Monark 927 E Cardio Care is designed to in a simple way be used for exercise and rehabilitation. This model has an easy adjustable brake system and a computer/electronic meter for readouts.

The Monark 927 E Cardio Care is equipped with a computer showing Speed in km/h, Distance in km, exercise Time in minutes and Heart rate in beats per minute.

The computer also includes a separate Timer/Dist. function display which can be set in minutes or in kilometres.

For complete directions please read the part "Computer specifications".

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

- Small flywheel, 12 kg (26 lbs)
- Adjustable saddle with quick release lever
- Adjustable handlebar with quick release lever
- Stable frame, solid steel tube
- Powder painted
- Wheels for easy transport
- Electronic display with heartrate and timer

Width

500 mm (19.7") at handlebar
640 mm (25") at support tubes

Length

1240 mm (49")

Height

1260 mm (49.6") at handlebar
780-1170 mm (30.7-46") at seat

Weight

46 kg (101 lbs)
Max user weight 250 kg (550 lbs)

NOTE!

Chestbelt is not included but available as an accessory.
Art. No: 9339-98.

Serial number

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

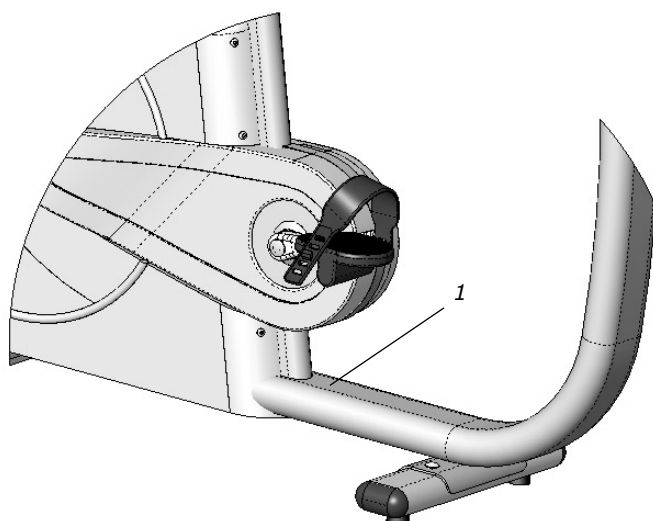


Fig: Serial number (1)

Operating Instruction

Workload device

Cycling makes the flywheel rotate and store energy. Applying a braking resistance - workload - will make the flywheel lose energy. A change of the workload is done by turning the workload adjusting knob. Turning the knob clockwise will increase the workload and turning it counter clockwise will decrease the workload. Fig: *Tension knob*.



Fig: *Tension knob*

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 turn the quick release bolt on the saddle post and pull until the saddle post is loose. See fig: *Adjustments*.

The handlebar setting shall give a comfortable position when cycling. During longer exercise sessions it can be recommended to change handlebar position. To adjust the handlebar loosen the quick release lever. See fig: *Adjustments*.



Fig: *Adjustments*.
1) Quick release bolt
2) Quick release lever

Computer specifications

Main display		
Speed:	0 - 99	km/h
Distance:	0 - 99,9	km
Time:	0 - 99	minutes
Heartrate:	50 -240	bpm
Lower display		
Timer setting:	1 - 99	minutes
Distance setting:	0.1 - 99.9	km
Calories:	0-999	kcal

Table: Display specifications

Battery: 4 x 1.5 V, R14
 Storing temperature: -10° C - +60° C
 Working temperature: 0° C - +50° C

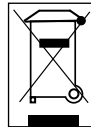


Fig: Display
 1) Main display
 2) Lower display
 3) MODE-key
 4) (+) -key
 5) (-) -key
 6) RESET-key

Main display

Press on any key or pedalling the bike will activate the computer.

This display shows Speed, Distance, Time and Heartrate.

As soon as the subject starts pedalling the display lights up and parameters are calculated and displayed. Time count starts when pedalling begins and Time count stops if pedalling is stopped. Time is only displayed in minutes.

A "P" in the Heartrate display indicate that the computer has not detected any heartrate signals. The signals comes from a wireless heartrate transmitter/ chestbelt which can be bought as an accessory (Art. No: 9339-98). The electrodes on the transmitter shall be moistened a little before it is put on the chest. Moistening makes the pulse signal good already from start. The chestbelt/transmitter is to be placed just below the chest muscles.

Reset key:

Press RESET key to zero Speed and Distance in the main display. An automatic reset is also made after an automatic turn off of the computer.

Turn off

After two minutes the computer will turn off automatically if there is no speed or HR-signal detected. At an automatic turn off all parameters are set to zero.

Lower display

The count down function in the lower display window can be set in time or distance - minutes or kilometres. Press MODE key to activate. Display will then start flashing. While flashing press MODE again and it will change between time and distance. As long as it is flashing the figures can be changed. Use the buttons (+) or (-) to increase or decrease value. At setting value flashes for 15 seconds. To change setting again activate by press the MODE key. When pedalling starts the count down begins. When reaching zero a beeper sounds.

The calorie consumption shows in the lower display. Press MODE to change view between time, distance and calories.

Km/Miles

For setting of km or miles press MODE until "km" start flashing. Use the buttons (+) or (-) to change to miles.

Maintenance

Do not expose the computer to direct sunlight or extremely high temperatures. Do not use solvents when cleaning, just a dry cloth.



Fig: Display
1) Main display
2) Lower display
3) MODE-key
4) (+) -key
5) (-) -key
6) RESET-key

Heart Rate

If chest belt is used (accessory).

A person's heart rate can be measured with a chest belt that senses the electronic output of the heart. The chest belt is 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 of the 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 can interfere with the telemetry system. Cellular phones are not allowed to be used near the bike when using the chest belt.

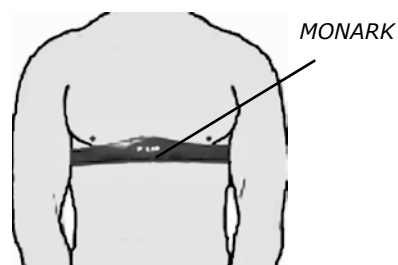


Fig: Placement of the chest belt

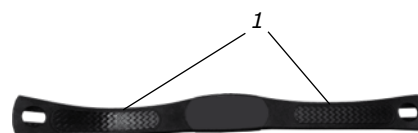


Fig: Electrodes on the back of the chest belt (1)

Trouble shooting guide

Symptom	Probable Cause/Corrective Action
The display is not working.	Check that the batteries are OK.
No heartrate. (chestbelt not included, Art. No: 9339-98)	<p>Check the chestbelt (battery). Wet the thumbs and place them on the electrodes. A low clicking sound will appear near battery lid while you click on the electrodes with one thumb. Use another external HR-monitor to check the belt.</p> <p>Check that the chestbelt is positioned correctly on test person and tight enough. Check that the electrodes are wet, in hard cases it is necessary to use a contact gel or a mixture of water with a few drops of washing-up liquid.</p> <p>The level for HR-signal can vary from person to person. Put chestbelt on another known person who has a good pulse rendering.</p>
Uneven heart rate.	<p>Use an external unit, for example a pulse watch, to check if it also indicates irregular pulse. If this is the case, there are probably disturbance in the room. Magnetic fields from high voltage cables, elevators, fluorescent tube etc. can cause the disturbance. Other electronic equipment could be placed to close.</p> <p>If irregular pulse remains we recommend measuring HR manually. If HR still remains irregular at workload test person's health need to be examined.</p>
There is a click noise with every pedal revolution (increases with the weight).	<p>The pedals are not tight. Tighten them or change pedals. The crank is loose. Check, tighten. The base bearing is loose. Contact your dealer for service.</p>
Scratching sound is heard when pedalling.	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 pedalling.	Loosen the chain.

Service

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.

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.
- Clean and lubricate your Ergometer weekly.
- 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 that pedals are firmly tightened. If not, the threading in the pedal arms will be damaged. Also check that the 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 (2 times per 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 (twice a 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.

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.

Alt. 1: To loosen the belt on pendulum bikes with a motor, turn the power on and move the pendulum to 4 kp. Hold it there until the brake belt is loose. Observe how the belt is connected. Take it apart and 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 off the knot on the other end of the cord and then remove the whole cord from the bike. When assembling a new brake cord, first enter one end into the hole in the tension center, 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 belt on other bikes remove all possible tension. Observe how the belt is connected. Take it apart and 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".

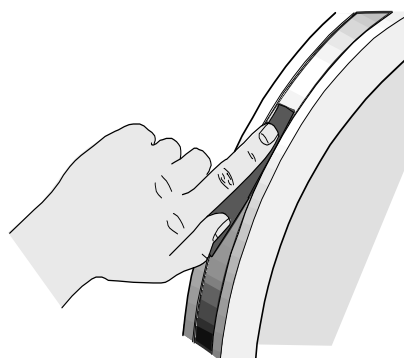


Fig: Brake belt contact surface

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.

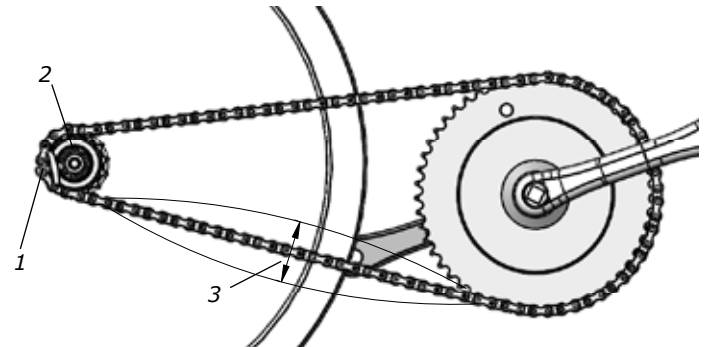


Fig: Chain adjustments
1) Chain adjuster
2) Hub nut
3) Chain play

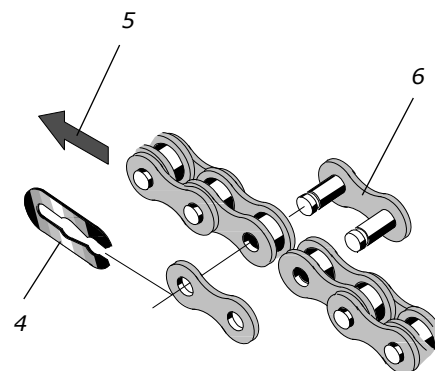


Fig: Chain replacement
4) Lock spring
5) Movement direction
6) Chain lock

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)

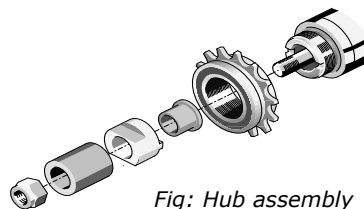
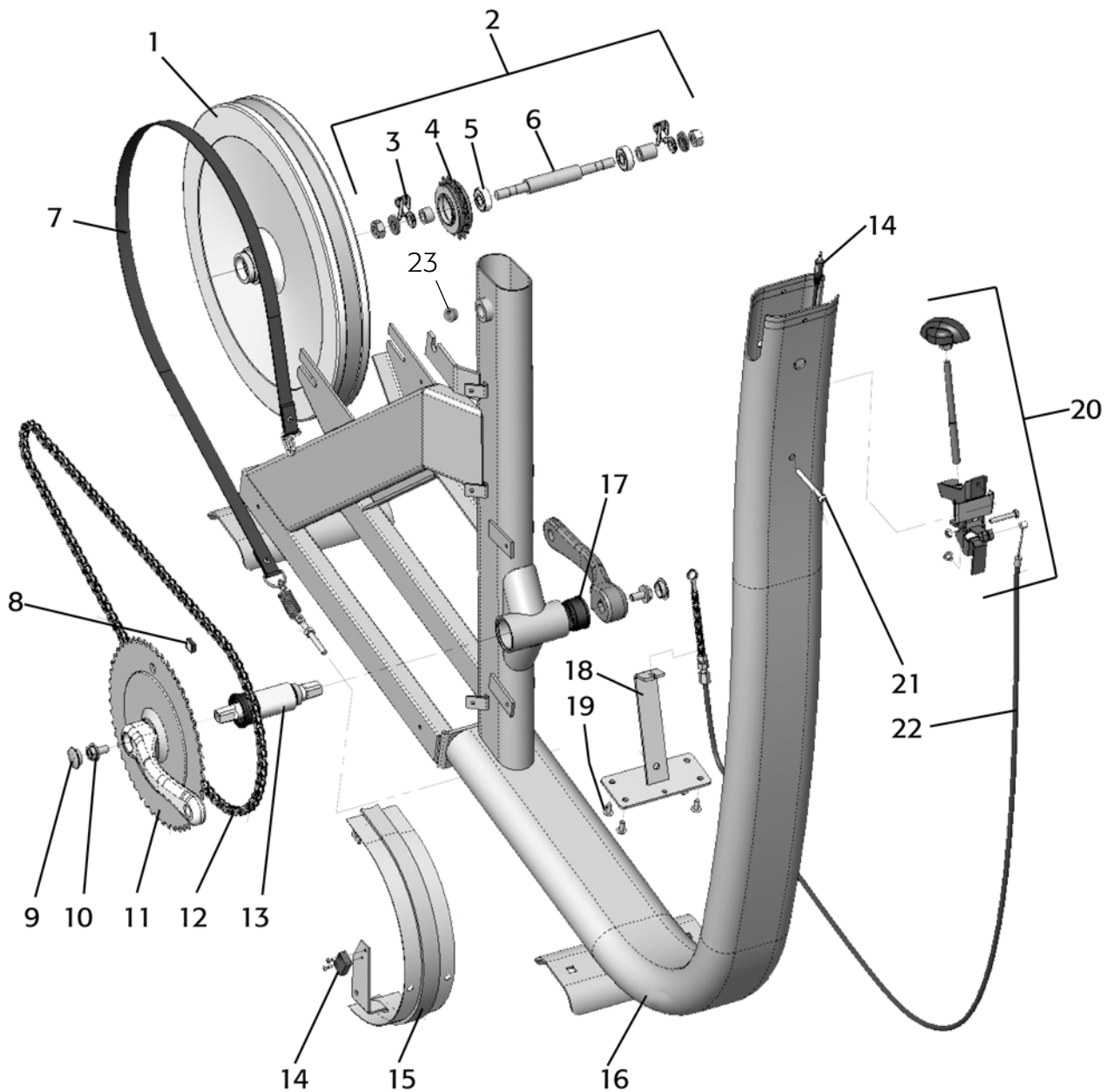


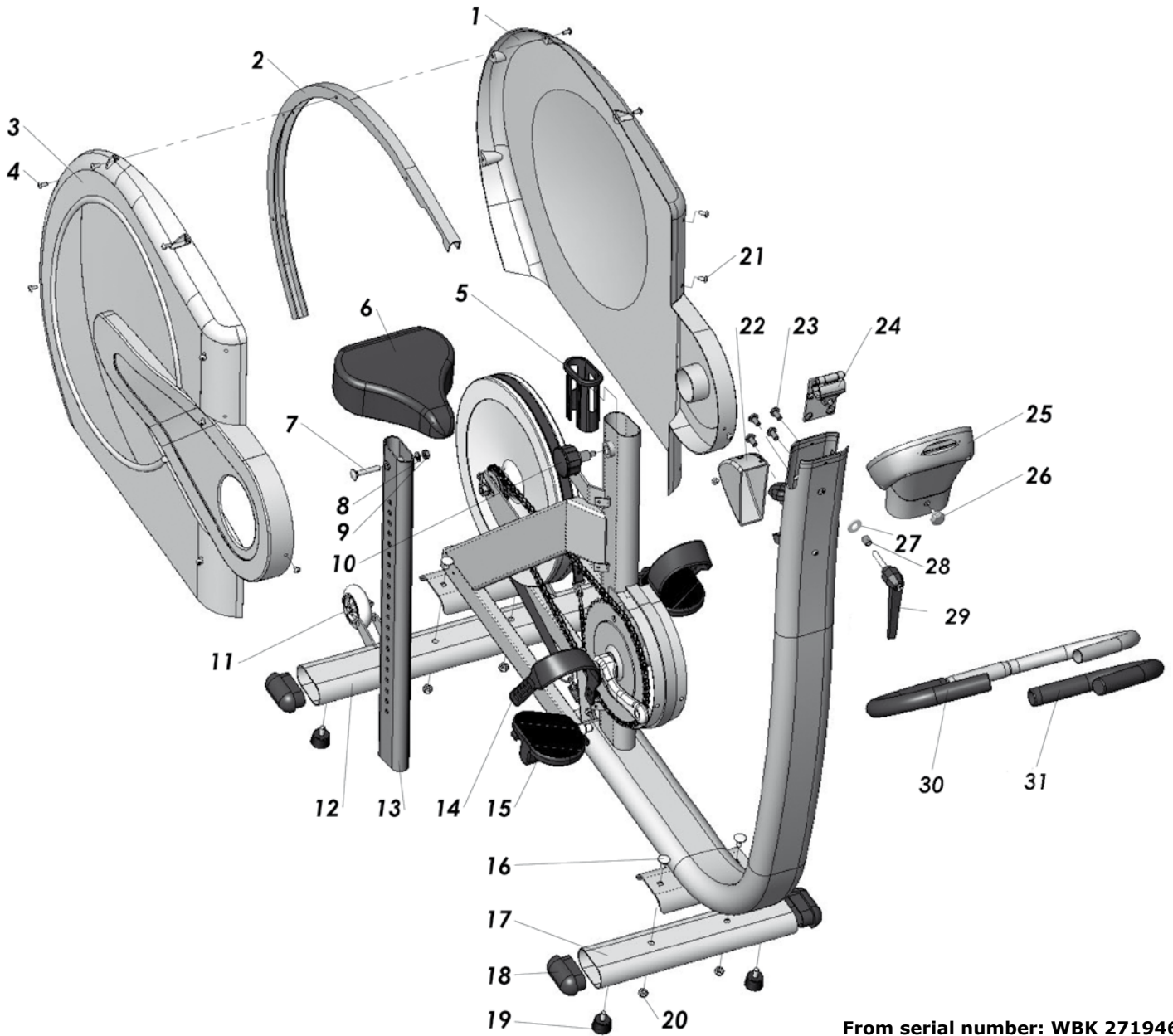
Fig: Hub assembly

Spare parts



From serial number: WBK 271946

Pos.	Qty.	Art. No.	Description	Pos.	Qty.	Art. No.	Description
1	1	9309-30	Flywheel	12	1	9326-54	Chain, 100 L
2	1	9309-45	Wheel suspension, compl. set	13	1	8966-175	BB cartridge bearing
3	1	9000-12	-Chain adjuster (pair)	14	1	9328-162	Crank sensor w. 1750 mm cable
4	1	76441	-Sprocket	15	1	9309-3	Joint clamp
5	2	19001-6	-Bearing 6001-2z	16	1	9328-1	Frame
6	3	9309-18	-Axle	17	1	8966-176	Support casing for BB-bracket
7	1	9309-65	Brake belt, complete	18	1	9309-10	Cable holder
8	1	9371-16	Magnet	19	4	5673-9	Screw M5x12
9	2	8523-2	Dust cover for crank	20	1	9309-72	Tension device, complete
10	2	8523-115	Screw M8x1x20	21	1	5698	Screw M5x55
11	1	9300-430	Steel crank set, complete	22	1	9309-24	Tension cable, complete
				23	1	9328-33	Adaptor M20/M16



From serial number: WBK 271946

Pos.	Qty.	Art. No.	Description	Pos.	Qty.	Art. No.	Description
1	1	9309-53	Frame cover, left	18	4	9309-51	Plastic cap, black
2	1	9309-4	Aluminium profile	19	4	9328-26	Rubber foot
3	1	9309-52	Frame cover, right	20	4	5845	Locking nut
4	8	5675-9	Screw M5x6,5	21	16	5673-9	Screw M5x12
5	1	9309-131	Bushing for saddle post	22	1	9309-74	Control cover
6	1	4992-7	Saddle	23	4	9337-38	Screw M8x16
7	1	5605-1	Screw M8x46	24	1	9328-2	Handlebar clamp
8	1	5864	Washer M8	25	1	9309-160	Digital meter, complete
9	1	5844	Locking nut	26	1	9000-105	Screw, M5x10
10	1	9308-132	Locking knob	27	1	5864	Washer
11	1	9328-37	Transport wheel compl. (pair)	28	1	9326-89	Spacer
12	1	9328-6	Support tube, rear	29	1	9326-707	Lever, complete
13	1	9328-130	Saddle post	30	1	9309-9	Handlebar, complete
14	1	76424	Foot straps (pair)	31	1	9309-71	-Handgrip (pair)
15	1	74435	Pedal (pair)		1	9309-150	Screw set
16	4	9300-12	Screw M8x16		1	9309-550	Decal set
17	1	9328-5	Support tube, front		1	9309-78	Handlebar black, complete with clamp and lever



Version 1207
Art. No: 7950-316

