

# Cardio Care 927 X



**Manual**  
English/Svensk

**Monark 927 X**

# Contents

<b>Monark Exercise AB</b>	<b>4</b>
<b>Product Information</b>	<b>5</b>
<b>Operating Instruction</b>	<b>6</b>
<i>Workload device</i>	6
<i>Cycle adjustments</i>	6
<i>Computer specifications</i>	7
<b>Service</b>	<b>10</b>
<i>Warranty</i>	10
<i>Service check &amp; maintenance</i>	10
<i>Connection</i>	11
<i>Brake force spring adjustment</i>	11
<i>Replacement of brake belt</i>	11
<i>Crank bearing</i>	11
<i>Flywheel bearing</i>	11
<i>Brake belt contact surface</i>	12
<i>Freewheel sprocket</i>	12
<i>Chain 1/2" x 1/8"</i>	13
<b>Exercising</b>	<b>14</b>
<b>Spare parts</b>	<b>16</b>

# Product Information

## Congratulation on your new Exercise cycle.

Monark Cardio Care 927 X is designed to be used for exercise and rehabilitation. This model has a computer/electronic meter with 12 different training programs. The exercise cycle provides a constant workload independent of pedal speed when training in WATT mode.

Model Cardio Care 927 X is equipped with a display showing Speed in km/h, Distance in km, exercise Time in minutes, heart rate in beats per minute and workload in watts.

NOTE that 927 X is an exercise cycle that can't be calibrated. It is not for testing when the display just shows an estimate value.

For complete directions please read section "Computer specifications".

### NOTE!

**The use of Cardio Care 927 X can be physically strenuous. Always consult a doctor before beginning an exercise program and stop immediately if feeling faint or dizzy.**

## Features

- Large, well-balanced flywheel 22kg (48 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 training programs
- Handgrip pulse

### Width

550 mm (22") at handlebar  
640 mm (25") at support tubes

### Length

1240 mm (49")

### Height

1260 mm (50") at handlebar  
790-1160 mm (31-46") at seat

### Weight

56 kg (122 lbs)



# Operating Instruction

## Workload device

The Cardio Care 927 X has an electronic workload device which consists of a computer and servo system in combination with a heavy flywheel and a brake belt system. Changing the workload is easily done using the display. Use the display to choose from a preset training program, heart rate program for manual mode. For complete instructions on how to use the device please read chapter, "Computer specifications".



Fig: Display  
1) Workload device



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

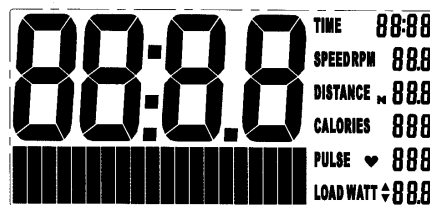
## Cycle adjustments

Seat height should be adjusted to a comfortable position. A suitable height is a slightly bent knee when the middle of the foot is straight above the pedal axle with the pedal is in its lowest 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*.

## Computer specifications

At power on LCD will display all segments for 2 seconds with a beep sound. *Fig. 1.*



*Fig. 1*

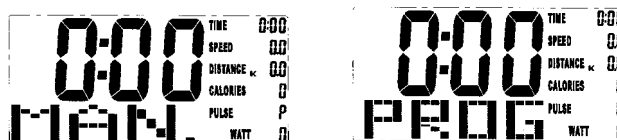
Adjust up and down to set year, month, day and clock. Press ENTER after each setting. *Fig. 2.*

After settings display will enter standby mode.



*Fig. 2*

MAN (manual) is glittering in the sleep mode (*fig. 3*). You may turn Up or Down button to select training mode MANUAL, PROGRAM, USER PROGRAM, H.R.C. or WATT (*fig. 3 - 7*) and press ENTER to confirm. The computer will enter MANUAL mode for training if no selection is done.



*Fig. 3*

*Fig. 4*



*Fig. 5*



*Fig. 6*



*Fig. 7*

## Training in MANUAL mode

In MANUAL mode you may turn UP and DOWN button to select load level from 1 to 16. The preset level is 1.

After load level is selected you may preset function values for TIME, DISTANCE, CALORIES and PULSE by turning the UP and DOWN button and press ENTER to confirm.

Press START to begin training.

## Training in PROGRAM mode

In PROGRAM mode you may turn UP or DOWN button to select program P01, P02, P03 and so on up to P12. The selected program will show up on screen for 2 seconds and then display program profile accordingly. *Fig. 8 and 9.*



Fig. 8

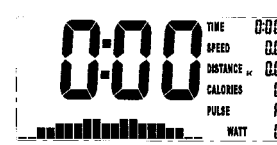


Fig. 9

LOAD 1 (preset value) is glittering after training program is selected. You may turn UP and DOWN button to select level from 1 to 16 and press ENTER to confirm. *Fig. 10.*

Work load level can be adjusted during training.

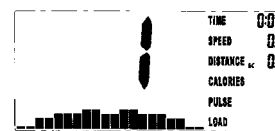


Fig. 10

## Training in USER PROGRAM mode

After USER PROGRAM is selected you may set preferred program profile by turning UP and DOWN button and press ENTER for each flashing column. There are 20 segments for setting. If you want to quit during setting you may hold on ENTER button for 2 seconds to quit. The previous setting will be saved for unfinished segments.

## Training in H.R.C. mode

Age is flashing after entering the H.R.C. mode. You may set your age by turning UP and DOWN button. The computer will calculate preset heart rate value automatically according to your age setting. Screen will show heart rate percentage 55%, 75%, 90% and target heart rate. You may select heart rate percentage by turning UP/DOWN button and press ENTER button for training. *Fig. 11.*

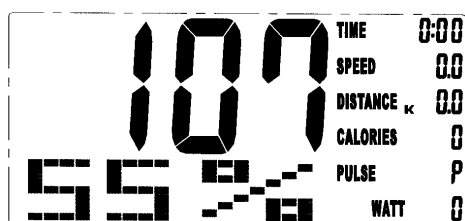


Fig. 11

## Training in WATT mode

The preset watt value 120 is flashing on screen in WATT setting mode. Turn UP/DOWN button and then press ENTER to set target value from 10 to 350. Press START button to begin training.

### NOTE!

Stopped training or no signal for over 4 minutes will turn screen off. After hold on ENTER for 2 seconds screen will display room temperature, clock and calendar. *Fig. 12.*

When computer displays abnormal segments, please turn it off and then turn it on again.



Fig. 12

## Buttons

ENTER:	To set function value for TIME, DIST, CAL, PULSE in sleep mode.
RESET:	Return to main function mode in STOP mode and clear all preset function values to zero.
START/STOP:	To start or stop training.
RECOVERY:	To test heart rate recovery status.
UP/DOWN:	To select training mode and adjust function value up/down.

## Functions

TIME:	Count up: No preset target, Time will count up from 00:00 to maximum 99:59 where each increment is 1 second. Count down: If training with preset Time, Time will count down from preset to 00:00. Each preset increment or decrement is 1 minute between 99:00 and 1:00.
SPEED:	Display current training speed from 0.0 to maximum 99.9 km/h.
RPM:	Displays current training rotation per minute.
DISTANCE:	Count up: No preset target, Distance will count up from 0.00 to maximum 99.90 km with each increment 0.1 km. Count down: If training with preset target, Distance will count down from preset to 0.00. Each preset increment or decrement is 0.1 km between 0.00 to 99.90.
CALORIES:	Count up: No preset target, Calories will count up from 0 to maximum 990 with 1 cal increment. Count down: If training with preset target, Calories will count down from preset value to 0. Each preset increment or decrement is 10 cal from 0 to 990 cal.
PULSE:	To display your current heart beat figures soon after the pulse sensor has been touched.
WATT:	Display of current training watt figures.
RECOVERY:	After exercising for a period of time, Press RECOVERY button and keep holding on handgrips. All function display will stop except TIME starts counting down from 00:60 to 00:00. Screen will display your heart rate recovery status with the F1, F2 up to F6. F1 is the best and F6 is the worst. User may keep exercising to improve the heart rate recovery status. (Press the RECOVERY button again to return to main display.)
TEMPERATURE:	Screen will display room temperature in sleep mode.
CALENDER:	Screen will display year/month/day in sleep mode.
CLOCK:	Screen will display time in sleep mode.

## Maintenance

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

Error message E1: Something wrong with the servo system.

# Service

## Warranty

As on any quality product there may be an exceptional fault due to material or manufacture. If such a fault should arise on your Ergometer, contact your place of purchase to inquire about repair.

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.

Parts found to need replacement due to normal wear and tear, such as brake belts, are not covered. This guarantee covers parts only, not labor costs associated with the repair. This guarantee does not apply to cases of abuse or vandalism, nor does it extend to any injury or loss to person or property caused directly or indirectly by any Monark products.

In the event of a defect in material or workmanship during the warranty period, 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.

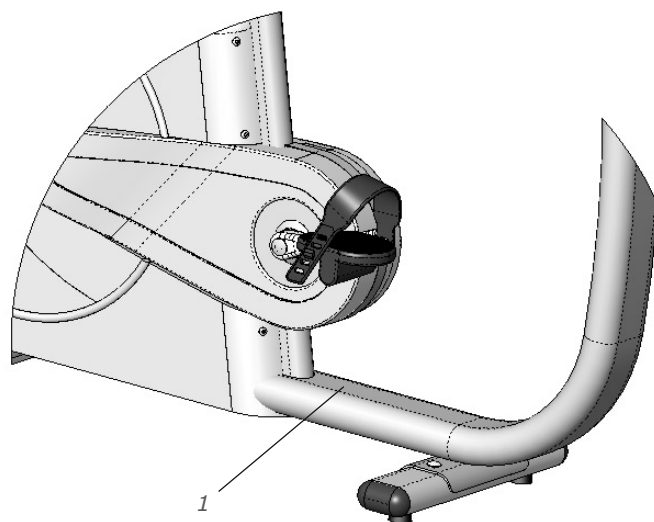
## Service check & maintenance

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

- Keep your Ergometer clean and properly lubricated.
- 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.
- When cleaning and lubricating be sure to check that all screws and nuts are properly tightened.
- 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.

- 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.
- Check that the chain is snug and there is no play in the pedal crank
- Be sure that the pedals are moving smoothly, and that pedal axle is clear of dirt and fibers
- Check that the pedal crank is secure to the crank axle
- Check that pedals, chain and freewheel sprocket are lubricated
- Check that the handlebars and seat adjustment screws are lubricated
- Be sure that the brake belt does not show significant signs of wear

Please note: The production number of your Exercise cycle is placed according to *fig: Serial number*.



*Fig: Serial number (1)*

## Connection

The exercise bike is powered with the supplied wall adaptor. The small round connector at the end of the adaptor cord is put into the bike connector located at the far back on the right frame cover.

## Brake force spring adjustment

After a service where the bike has been taken apart, partly or completely, and put together again, the following check should be performed to be sure the workload is adjusted according to the display.

Detach the left cover, if not already done. Connect power adaptor. On the console adjust WATT to level 2 (LOAD 2). The spring should now be hanging straight but not stretched.

If spring is too straight or too loose adjust with the adjustment screw at the other end of the brake belt until correct state is reached. See *fig. Spring, adjustment screw*. Lock the adjustment screw and put on the cover again. The bike is now ready for use.

NOTE that 927 X is an exercise cycle that can't be calibrated. It is not for testing when the display just shows an estimate value.

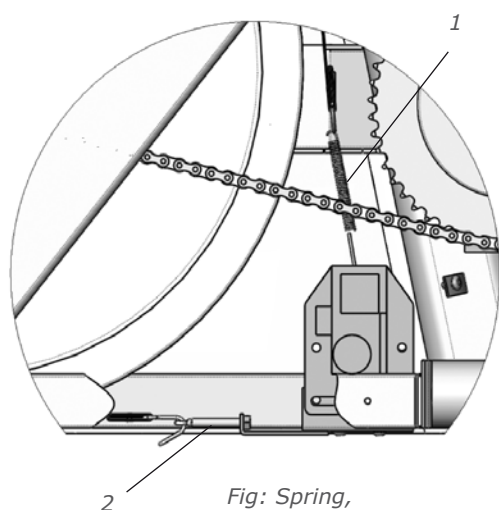


Fig: Spring, adjustment screw  
1) Spring  
2) Adjustment screw

## Replacement of brake belt

Loosen the belt tension as much as possible. Remove the left cover. Loosen the brake belt at both ends and replace with a new one. See *fig: Brake belt*.

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".

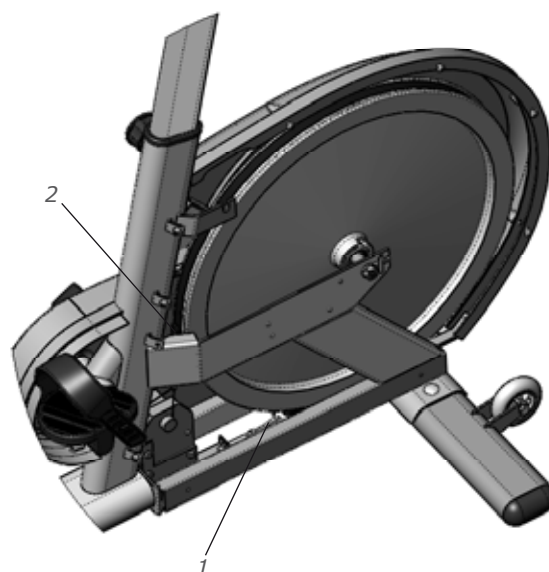


Fig: Brake belt  
1,2) Loosen hooks

## 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.

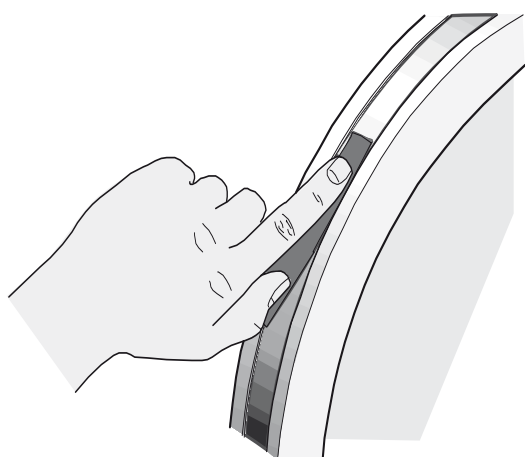
## Brake belt contact surface

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.

Remove left cover. Set the tension device to minimum load/tension. Take off the brake belt to the side. Grind with a fine sand paper. See *fig: Brake belt contact surface*. 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*

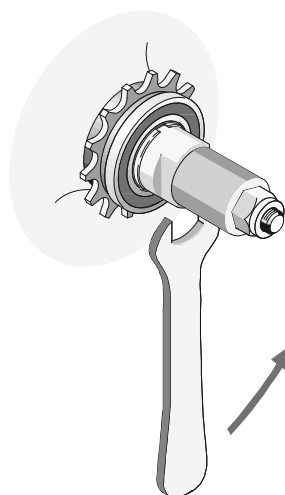
## Freewheel sprocket

When replacing the freewheel sprocket remove left and right frame cover. Dismantle the chain as described in part "Chain 1/2" x 1/8" ".

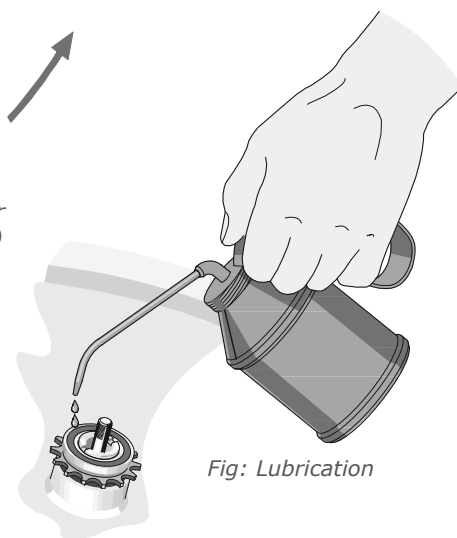
Loosen the axle nuts and lift off the flywheel. Remove the axle nut, washer, chain adjuster and spacer on the freewheel side. Place the special remover (part No. 9100-14) in the adapter and place the spacer and axle nut outside. See *fig: Special remover*.

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

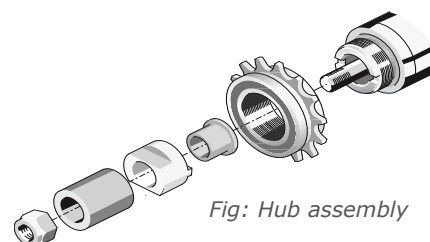
The sprocket should be lubricated with a few drops of oil once a year. Tolt the cycle somewhat to make it easier for the oil to reach the ball bearing. See *fig: Lubrication*.



*Fig: Special remover (part no: 9100-14)*



*Fig: Lubrication*



*Fig: Hub assembly*

## 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.

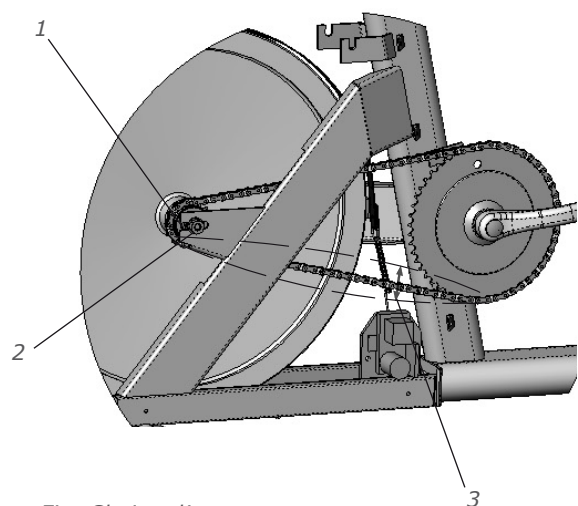
Check the lubrication and tension of the chain in regular intervals. In the middle of its free length the chain should have a minimum play of 10 mm (1/4 in). See *fig: Chain adjustments*. When the play in the chain is about 20 mm (3/4 inch) the chain must be tightened otherwise it will cause abnormal wear of the chain and chainwheels. Because of this it is always recommended to keep the chain play as little as possible. 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 replace the chain remove left frame cover. Loosen the bike connector on the left cover. Then remove the frame cover. To adjust the chain the hub nuts should be loosened. Loosening or tightening the nuts on the chain adjusters 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*.

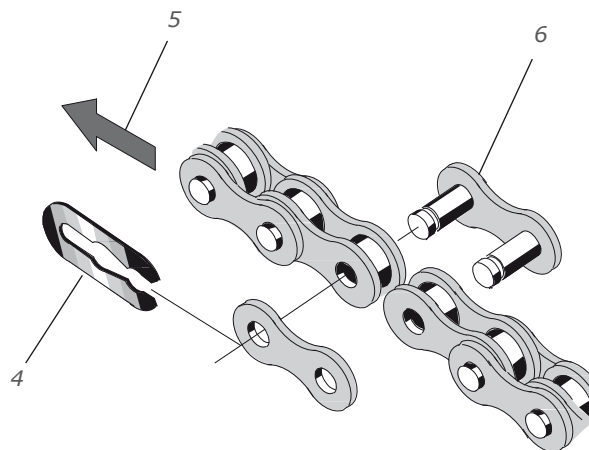
Loosen the chain adjuster as much as possible. Dismantle the chain lock and remove the chain. Put on a new chain and assemble the chain lock. The spring of the chain lock should be assembled with the closed end in the movement direction of the chain. Use a pair of tongs for dismantling and assembling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

Adjust chain adjusters to aoolw chain play according to above. Tighten axle nuts firmly. Put on frame covers again.

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



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



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

# 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:*

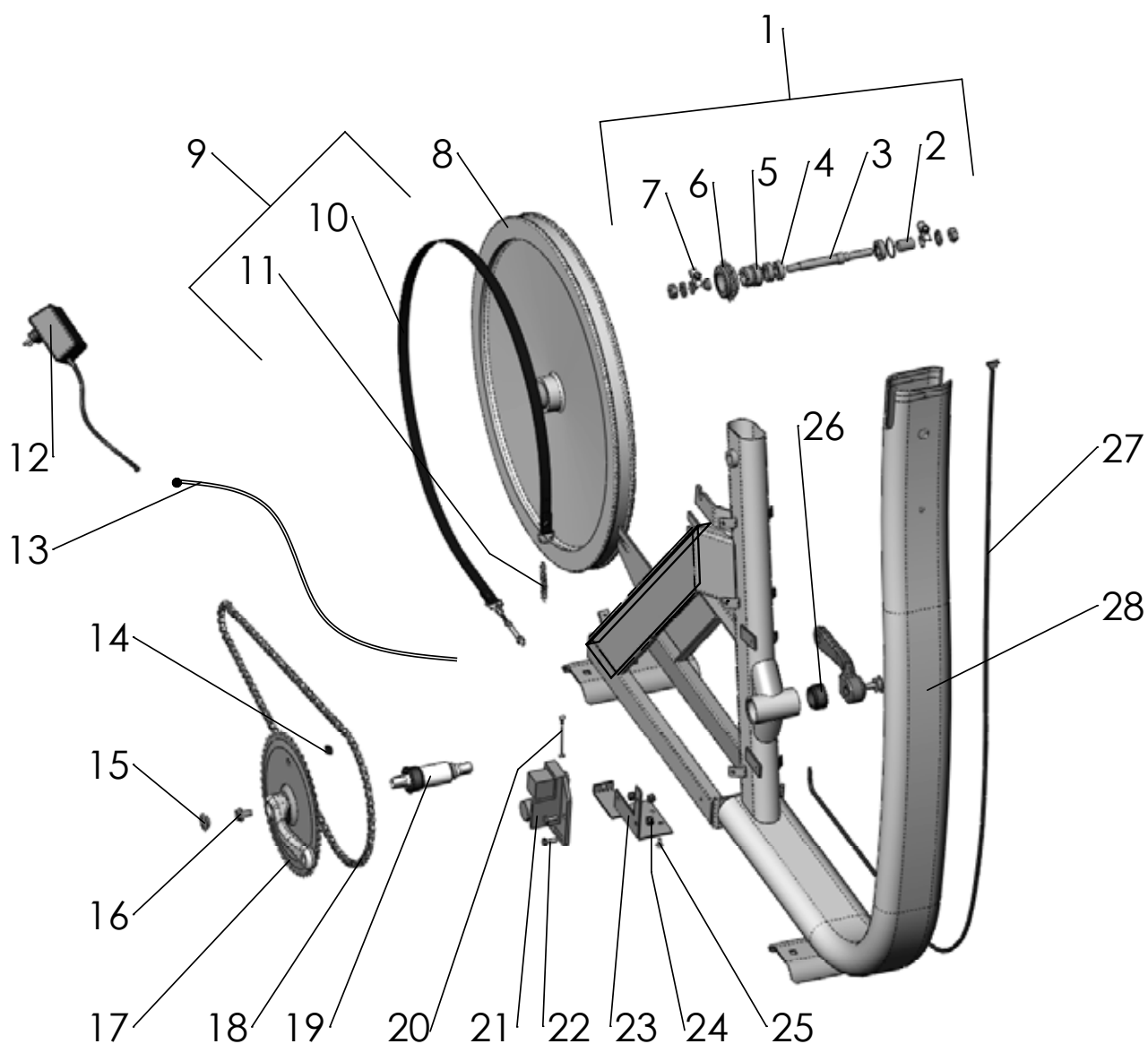
1. Give yourself a thorough warm-up.
2. Pedal with a heavy resistance for 5-10 seconds, then rest 45-60 seconds. Repeat this 5-10 times.

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.

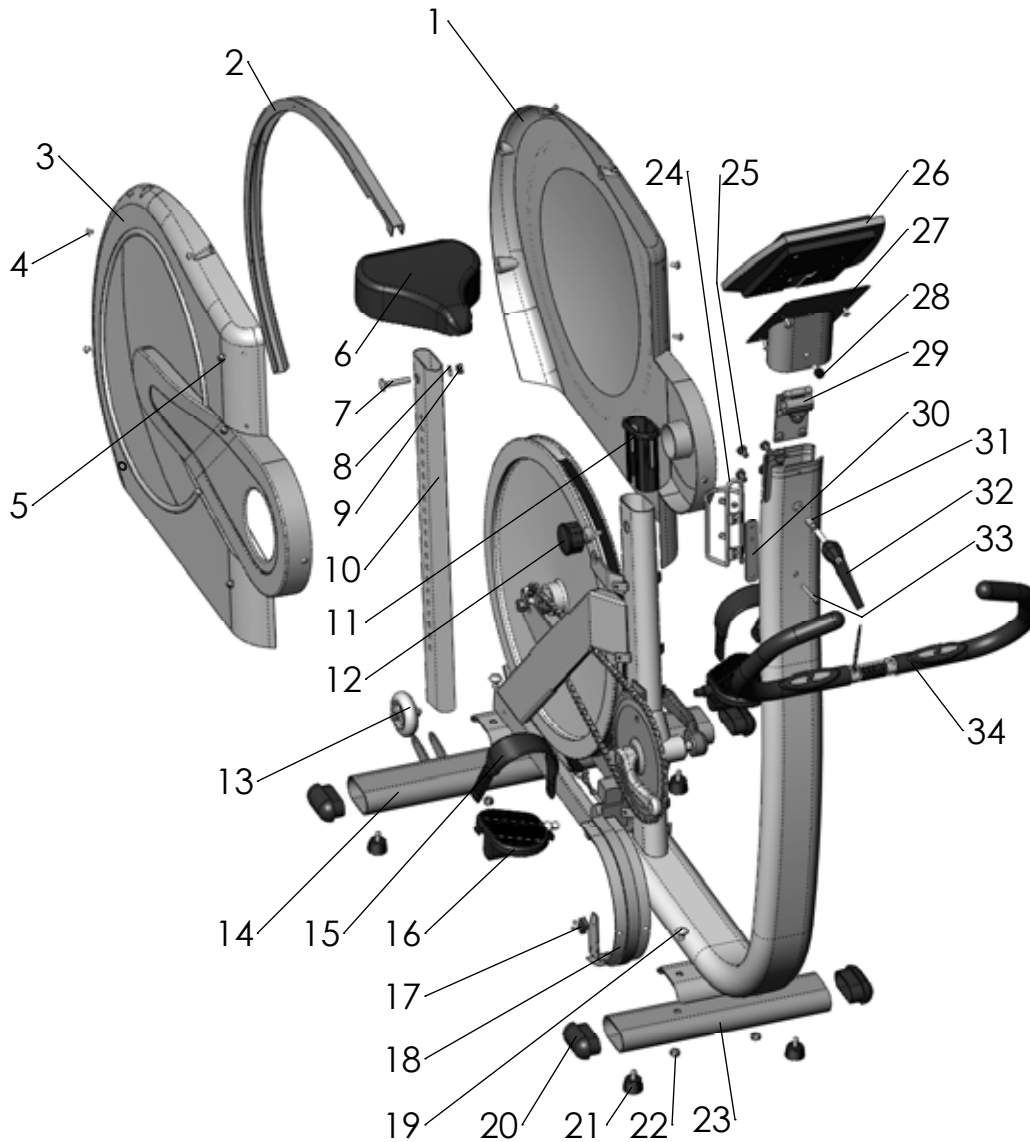
**Elderly people and physically weak persons should consult a doctor before starting their training.**



## Spare parts



Pos.	Qty.	Art.No.	Description	Pos.	Qty.	Art.No.	Description
1	1	9300-24	Wheel suspension complete set	15	2	8523-2	Dust cover for crank
2	1	9300-17	-Bush, 23mm	16	2	8523-115	Screw M8x1x20
3	1	9300-18	-Axle	17	1	9300-430	Steel crank set, complete
4	3	19001-6	-Bearing 6001-2z	18	1	9326-55	Chain, 98 L
5	1	9106-14	-Connection	19	1	8966-175	BB cartridge bearing
6	1	9106-13	-Sprocket	20	1	9327-39	Motor wire
7	1	9000-12	-Chain adjuster (pair)	21	1	9328-172	Motor
8	1	9300-3	Flywheel	22	3	14323	Screw M6x16
9	1	9327-60	Brake belt complete	23	1	9327-37	Motor attachment
10	1	9327-51	-Brake belt	24	3	5843	Locking nut M6
11	1	9327-54	-Spring	25	2	5673-9	Screw M5x12
12	1	9328-178	Adapter	26	1	8966-176	Support casing for BB-bracket
13	1	9328-177	Cable to adapter	27	1	9328-175	Cable 1700 mm to computer
14	1	9371-16	Magnet	28	1	9302-5	Frame



Pos.	Qty.	Art.No.	Description	Pos.	Qty.	Art.No.	Description
1	1	9309-53	Frame cover, left	18	1	9309-3	Chain cover, front
2	1	9328-4	Aluminium profile	19	4	9300-12	Screw M8x16
3	1	9309-54	Frame cover, right from Serial No:WBK 266961D	20	4	9309-51	Plastic cap, black
4	8	5675-9	Screw M5x6,5	21	4	9328-26	Rubber foot
5	22	5673-9	Screw M5x12	22	4	5845	Locking nut
6	1	4994-7	Saddle	23	1	9328-5	Support tube, front
7	1	5605-1	Screw M8x46	24	1	8116-7	Bottle holder
8	1	5864	Washer M8	25	4	9337-38	Screw M8x16
9	1	5844	Locking nut	26	1	9328-171	Computer
10	1	9328-130	Saddle post	27	1	9327-38	Computer holder
11	1	9309-131	Bushing f. saddle post	28	1	9000-105	Screw M5x10
12	1	9308-132	Locking knob	29	1	9328-8	Handlebar clamp
13	1	9328-37	Transport wheel compl. (pair)	30	1	9327-57	Attachment for bottle holder
14	1	9328-6	Support tube, rear	31	1	9326-89	Spacer
15	1	76424	Foot strap (pair)	32	1	9100-290	Lever, complete
16	1	74435	Pedal (pair)	33	1	5698	Screw M5x55
17	1	9328-176	Sensor with 300 mm cable	34	1	9327-77	Handlebar, complete