Manual 827 E







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ImportantRead 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. That 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: www.monarkexercise.se



Product Information

Congratulations on your new Ergometer.

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 people who are not accustomed to cardio or not feel completely healthy to first consult a physician for advice.

Facts

- Large, well-balanced flywheel 20 kg (44 lbs)
- Electronic display with heart rate
- Adjustable seat height
- Adjustable handlebar with quick release lever
- Stable frame, solid steel tube
- Powder painted
- Wheels for easy transport

Width

517 mm (20,3") at handlebar 640 mm (25") at support tubes

Length

1120 mm (44")

Height

945-1295 mm (37,2-51") at handlebar 780-1105 mm (30,7-43,6") at seat

Weight

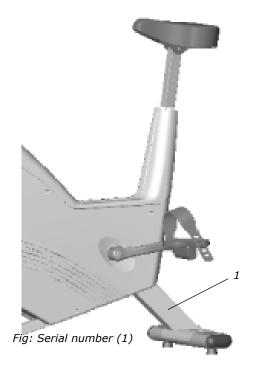
47 kg (103.6 lbs) Max user weight 250 kg (551 lbs)

Accessories

Chestbelt

Serial number

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

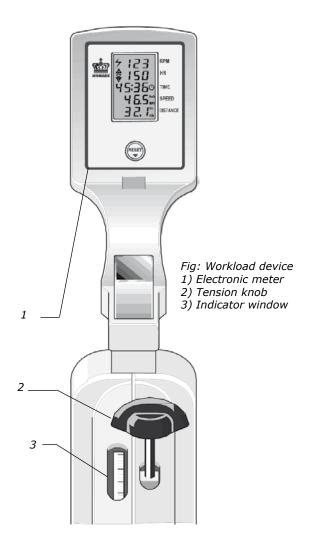


Operating Instruction

Workload device

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The 827 E uses a brake belt system to control the resistance. The brake power can be changed by increasing or decreasing the tension of the brake belt against the flywheel using the tension knob(2). See *fig:* Workload device.

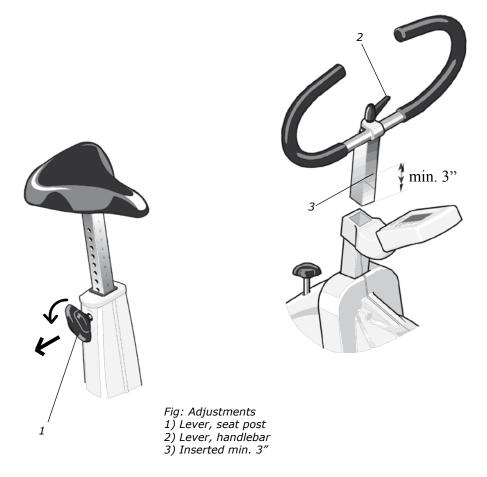


Cycle adjustments

Seat height should be adjusted to a comfortable position. The appropriate height can be 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 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(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).



Computer specifications

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

Batteries: 1.5 V x 2, R6 (AA) Storing temperature: $-10^{\circ}\text{C} - +60^{\circ}\text{C}$ Operating temperature: $0^{\circ}\text{C} - 50^{\circ}\text{C}$



Computer Instruction

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 - not included. Art. No: 9339-98). 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.

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

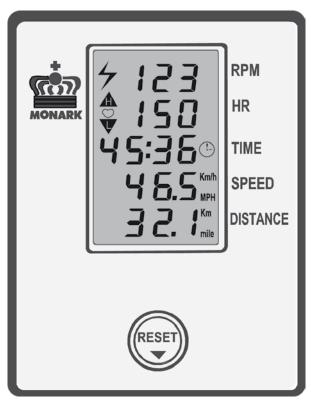


Fig: Electronic meter

Troubleshooting guide

Symptoms	Probable Cause/Corrective Action
There is a click noise with every pedalling (increases with the weight).	The pedals are not tightly drawn, tighten them or change pedals. There is a loose in the crank cheek, tighten. There is a loose in the base bearing, contact your dealer for service.
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.	Untighten the chain a bit.

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 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 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 do so at its expense for the cost of materials but not 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 do so at its expense for the cost of materials but not for labour or shipping.

Service check & Maintenance

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

Service action:

- If you wish to disinfect the surface of the bike we recommend isopropyl alcohol. Use a damp but not wet cloth to clean the surface you wish to disinfect.
- Keep your Ergometer clean and properly 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 chromeand 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 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 (2 times per year).
- Check that the chain is snug and there is no play in the pedal crank (2 times per 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 (2 times per year).
- Check that the handlebars and seat adjustment screws are lubricated (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.
- Check that the flywheel is placed in the centre 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 long term greased and require 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.

Transport

At transport the brake belt should be somewhat 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 motor, turn the power on and move the pendulum to 4 kp. Hold it there until 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 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 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".

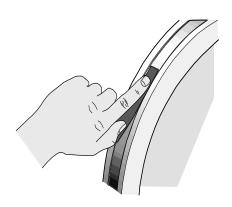
Brake belt contact surface

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 brake belt contact of the flywheel surface should then be ground off with fine sandpaper and any dust removed with a clean dry cloth.

Remove if there are any covers and loosen the tension on the brake belt. Grind with a fine sandpaper. 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 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".



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(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 shall 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 center line of the frame otherwise the chain and chain wheels makes a lot of noise and wears out rapidly.

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

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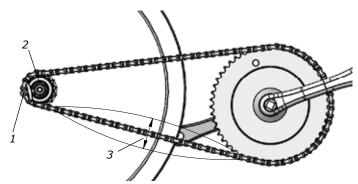


Fig: Chain adjustments

- 1) Chain adjuster
- 2) Hub nut
- 3) Chain play

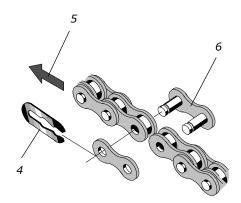


Fig: Chain replacement

- 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 adapter and place the spacer and axle nut outside. See *fig: Special remover*. Replace sprocket-adapter and assemble the new parts in reverse order according to the above.

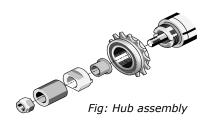
NOTE: Do not tighten the axle nut completely. It must be possible to loosen the adapter-sprocket half a turn.

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

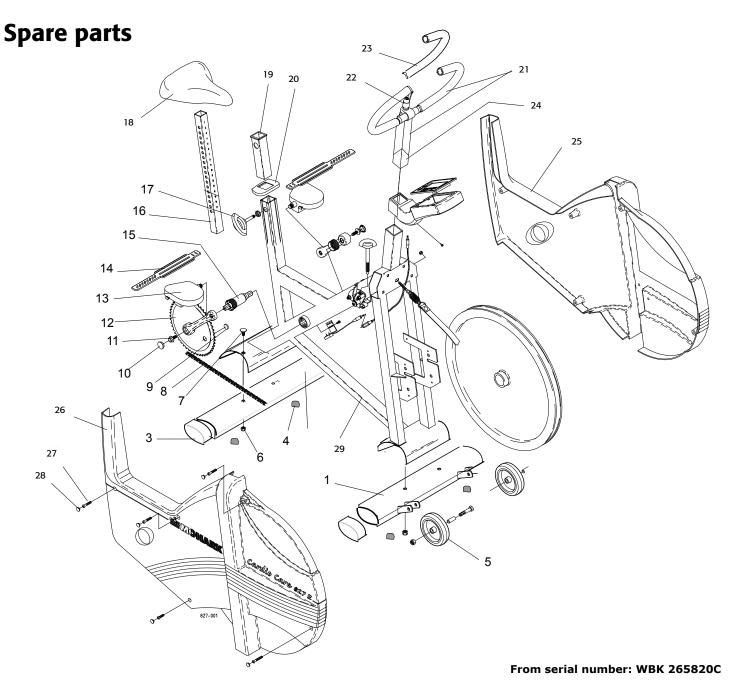




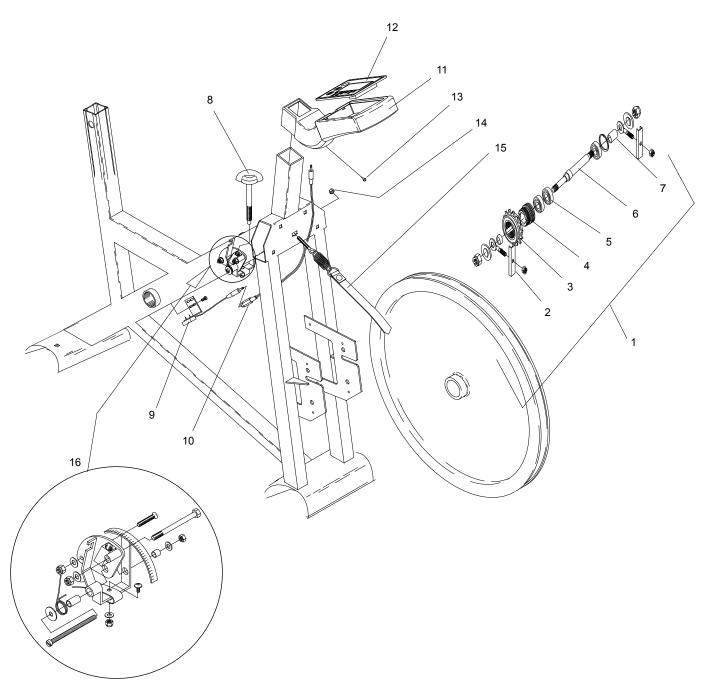
Fig: Special remover (Art. No: 9100-14)



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Pos.	Qty.	Art. No.	Description	Pos.	Qty.	Art. No.	Description
1	1	9301-15	Support tube, front	17	1	9300-133	Locking screw, 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 compl. (pair)		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	-Lever M10
10	2	8523-2	Dust cover	23	1	9126-72	-Handgrip (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, complete	28	10	9306-12	Plastic plug
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 complete 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	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 device, compl.
8	1	9300-125	Tension screw, complete		1	9339-98	Chestbelt (accessory)
9	1	9326-162	Crank sensor with cable		1	9106-550	Decal set
10	1	9326-263	Cable 550 mm				



Version 1010 Art. No: 7950-294

