

12. THE ROLLERSKI

One thing is for sure – winter will be with us again before we know it. And if you want to be fully prepared for it, you will want to be training with ski-like sessions as far as possible in summer, too. And who but the leading brand in Nordic skiing can give you everything you need for this in terms of equipment? Fischer is the only ski manufacturer to offer a comprehensive rollerski line, and has been since the 2015 summer season. The many years of experience and proven materials from ski production go into the development of the rollerskis, together with sound expertise in the production of the appropriate boots and poles. The result: a top-level ski-like feeling which is as close as possible to winter skiing. With a complete line of products ranging from rollerskis and the appropriate boots and poles to matching accessories, cross country enthusiasts have ideal training equipment in summer as well for optimum preparation for the winter season.

12.1 ROLLERSKI SELECTION

As with cross country skiing, you also have the choice between skate and classic models with rollerskis. These differ above all in terms of the frame geometry and wheel dimensions.

SKATE

The frame on skate models is considerably shorter than on classic models. The diameter of the wheels (100mm) is larger and they are relatively narrow (24mm). These are the optimum characteristics for the generally higher speeds which are reached when skating. The narrow wheels are designed for a safe kick action when using the skate technique.

CLASSIC

The frame on skate models is considerably shorter than on classic models. Compared to skating, the diameter of the wheels is smaller and they are relatively wide. This shape ensures stable tracking and a safe position on the rollerskis. Another difference is the backstop which is featured on the classic models. This locks the rear axle on Fischer rollerskis which enables a safe kick action when skiing classic style.

12.2 FRAME

As mentioned above, the length of the frame is different on skate and classic models. The frame of the classic models is considerably longer, which means that the centre distance (axle to axle) is larger. This ensures constant ground contact of the front wheel for clean and stable tracking of the rollerski.

AIR CORE COMPOSITE



The optimised Air Core Composite frame is used for both Carbonlite models. Thanks to the high-class materials and special processes as used in ski making, the Air Core Composite frame offers a unique, ski-

like feel. The frame construction optimally absorbs the vibrations which occur while in use, giving you smooth performance every time.

Customer Benefits

- Smooth performance and optimum absorption of vibrations
- Top-class ski-like feel

RAZOR SHAPE BASE



The unique frame geometry found on all Carbonlite models maximizes ground clearance especially for the extreme push-off angles of skate skiers.

Customer Benefits

- Sufficient space above the ground
- Lowered balance point for stable and safe rollerskiing

ALUMINIUM FRAME



Very robust and torsionally stiff aluminium frame which also delivers optimum weight performance at the same time. The overall package runs very smoothly as a result and offers optimum stability when rollerskiing.

Customer Benefits

- Torsionally stiff frame
- Very robust frame with good weight performance



12.3 ROLLERSKI BRAKE



For your own safety we recommend using a brake when rollerskiing. The Fischer Rollerski Brake is a universal brake that can be used in connection with Fischer rollerskis and rollerski boots. The brake works completely detached from the rollerski, because it is directly attached to the boot. Due to the very low weight the brake remains

virtually unnoticed during the running performance. The perfect accessory for increased safety and optimal control on rollerskis.

12.4 WHEELS

Speed is controlled by the rubber compound of the wheels. The harder the rubber compound, the faster the speed. This means: the slower the wheels, the higher the training effect.

Different types of Fischer wheels are available:

	SKATE	CLASSIC	
SLOW		X	
MEDIUM	Х	Х	
FAST	Х	Х	

LOW PROFILE WHEEL



The all-rubber wheel with aluminium (ø 100mm) rim offers optimum grip on surfaces for a powerful kick action. The wheel also has perfect damping characteristics with very good weight performance.

Customer Benefits

- Optimum grip
- Perfect vibration damping
- Lightweight

FULL RUBBER WHEEL



Solid rubber wheel offers durability for classic or skating, especially on rough surfaces. Better cushioning and less vibration help ride quality.

Customer Benefits

- Durability especially on rough surfaces
- Better cushioning and less vibration

SPLASH GUARD 80 / 100



New splash guard developed for all wheels with 80 or 100mm diameter. The very light and robust plastic part can easily be mounted and removed with only one screw.

Customer Benefits

- Lightweight and durable
- Easy to mount

12.5 BEARINGS

The precision of the bearings determines the performance and smoothness of the skiing. The more precise the bearings, the smoother the rollerski performs and the longer the service life of the bearings.

PRECISION DRIVE



All components used for the suspension of the wheels are made with minimised tolerances. The provided precision is the basis for smooth running wheels with high durability. The bearings

are double-sealed and maintenance free.

Customer Benefits

- Smooth running
- High durability
- Maintenance free

BEARING CLASSIFICATION ISO492 VS ABEC

The quality of a bearing is defined primarily by the precision of the manufacturing tolerances. There are various standards for the classification of the bearings. The bearings in Fischer's rollerskis are manufactured in tolerance class 3 in accordance with ISO 492.

If you compare the bearing classification to the ABEC scale – a standard which is often used for sports equipment – the bearing tolerances are to be classed as between ABEC 7 and ABEC 9.

IS0492	Class 6	Class 5	Class 4	Class 2	Class 1
ABEC	ABEC 3	ABEC 5	ABEC 7	ABEC 9	ABEC 11

12.6 MOUNTING BINDINGS

In the case of rollerskis without premounted TURNAMIC® bindings the appropriate holes have to be predrilled using a suitable drill / bit and the mounting gauge provided for this purpose. Care should be taken here that the sizing is in line with the boot size.



12.6.1 MOUNTING THE CARBONLITE MODELS

Positioning the mounting gauge: there are small marks on the frame which act as indicators for the positioning of the mounting gauge.



Position the drill sleeves according to the preselected size over the marks. The starting point is the rearmost mark.



This gives you the optimum stand position on the rollerski and the right distance to the rear wheel.

Drill the holes using a $3.5 \, \text{mm}$ diameter x $15 \, \text{mm}$ deep bit. If you do not have a mounting gauge available the marks on the frame can also be used for drilling without the gauge.



As the design is similar to that of skis, the drill holes have to be sealed to prevent water from entering the frame. Use a standard binding glue before tightening screws on the Carbonlite models.



Tighten the binding screws by hand to avoid over-tightening the screws.



To ensure that the glue hardens properly, do not use the rollerskis for 24 hours.

12.6.1 MOUNTING THE ALUMINIUM MODELS

Positioning the mounting gauge: the rear end of the mounting gauge is shaped so that it exactly matches the shape of the spray protection and exactly represents the shape of the heel plate of the TURNAMIC® binding. Position the mounting gauge so a 2mm gap remains between the mounting gauge and the spray protection. This is also the exact position of the heel plate.



Drill the holes using a 3.5mm diameter x 15mm deep bit.

No glue is required when screwing on the binding. Turn the binding screws by hand to avoid over-tightening the screws. The aluminium models are ready for use immediately after mounting.



12.6.2 WHEEL MOUNTING/REPLACEMENT

The wheels have to be replaced from time to time. This may be due to wear and tear or because the user has decided in favour of a different wheel hardness. Changing/mounting wheels is described in the following steps.



01. Use two wrenches to undo the bolts. One is used to secure, the other to loosen the first bolt. Do the same with the second bolt. Once both have been loosened you can remove the bolts.



05. Now mount the new wheels. To do so, put the wheel in the wheel holder. With classic models the forks may have to be opened a little again with a slotted screwdriver to insert the wheel. Make sure that the wheel clicks into place – you will hear a quiet click when the axle is in the right position.



02. When both bolts have been loosened and removed you can remove the wheels. With skate models you simply pull off the wheels. With classic models the forks can be bent outwards slightly to make it easier to remove the wheel.



06. The new bolts which come with the wheel set must be used in order to ensure safety when using the rollerskis. Apply some threadlocker to the thread before fastening the bolts. Bear in mind that the adhesive has to dry for 24 hours before the rollerskis can be used.



03. Select the new wheels with the desired wheel speed (see table on page 61). Make sure that you only use wheels from the Fischer Sports spare parts range. With skate models you use four identical wheels. With classic models you use two different wheel types. The two rear wheels have an integrated backstop. The two front wheels turn freely in both directions.



07. Now turn both bolts into the axle. Tighten them by hand first and then use two wrenches to secure them firmly. Once again, use one of the wrenches to hold on one side while the other bolt is tightened. Once the first bolt is securely in place, tighten the other.

