

ST-BSM1

ALGE-TIMING



Manual

Important Information

General

Before using your **ALGE-TIMING** device read the complete manual carefully. It is part of the device and contains important information about installation, safety and its intended use. This manual cannot cover all conceivable applications. For further information or in case of problems that are mentioned not at all or not sufficiently detailed, please contact your **ALGE-TIMING** representative. You can find contact details on our homepage www.alge-timing.com

Safety

Apart from the information of this manual all general safety and accident prevention regulations of the legislator must be taken into account.

The device must only be used by trained persons. The setting-up and installation must only be executed according to the manufacturer's data.

Intended Use

The device must only be used for its intended applications. Technical modifications and any misuse are prohibited because of the risks involved! **ALGE-TIMING** is not liable for damages that are caused by improper use or incorrect operation.

Power supply

The stated voltage on the type plate must correspond to voltage of the power source. Check all connections and plugs before usage. Damaged connection wires must be replaced immediately by an authorized electrician. The device must only be connected to an electric supply that has been installed by an electrician according to IEC 60364-1. Never touch the mains plug with wet hands! Never touch live parts!

Cleaning

Please clean the outside of the device only with a smooth cloth. Detergents can cause damage. Never submerge in water, never open or clean with wet cloth. The cleaning must not be carried out by hose or high-pressure (risk of short circuits or other damage).

Liability Limitations

All technical information, data and information for installation and operation correspond to the latest status at time of printing and are made in all conscience considering our past experience and knowledge. Information, pictures and description do not entitle to base any claims. The manufacturer is not liable for damage due to failure to observe the manual, improper use, incorrect repairs, technical modifications, use of unauthorized spare parts. Translations are made in all conscience. We assume no liability for translation mistakes, even if the translation is carried out by us or on our behalf.

Disposal

If a label is placed on the device showing a crossed out dustbin on wheels (see drawing), the European directive 2002/96/EG applies for this device.

Please get informed about the applicable regulations for separate collection of electrical and electronical waste in your country and do not dispose of the old devices as household waste. Correct disposal of old equipment protects the environment and humans against negative consequences!



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Subject to changes.

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1 General Information

For many disciplines in track cycling a starter is necessary. With the starter you can fasten and lock the race bike. With the start impulse the start machine unlocks the cyclist and he can start into the race.

The start machine is used for the following events:

- 500 meter
- 1 kilometer
- team speed
- individual pursuit
- team pursuit

The ST-BSM1 is a variable adjustable pneumatic start machine (with compressor) that meets the highest requirements for all levels of track cycling:

- start output (banana sockets)
- start input (banana sockets)
- connection for compressor
- meter for compressed air
- push button for back wheel holder - closing
- push button for back wheel holder - opening
- push button for saddle holder - closing
- push button for saddle holder - opening
- push button for back wheel stand
- 2 x operation switch
- fixing point for back wheel
- fixing point for saddle
- back wheel stand
- internal 12V rechargeable battery with integrated charger
- adjustable level for track slope



Compressor

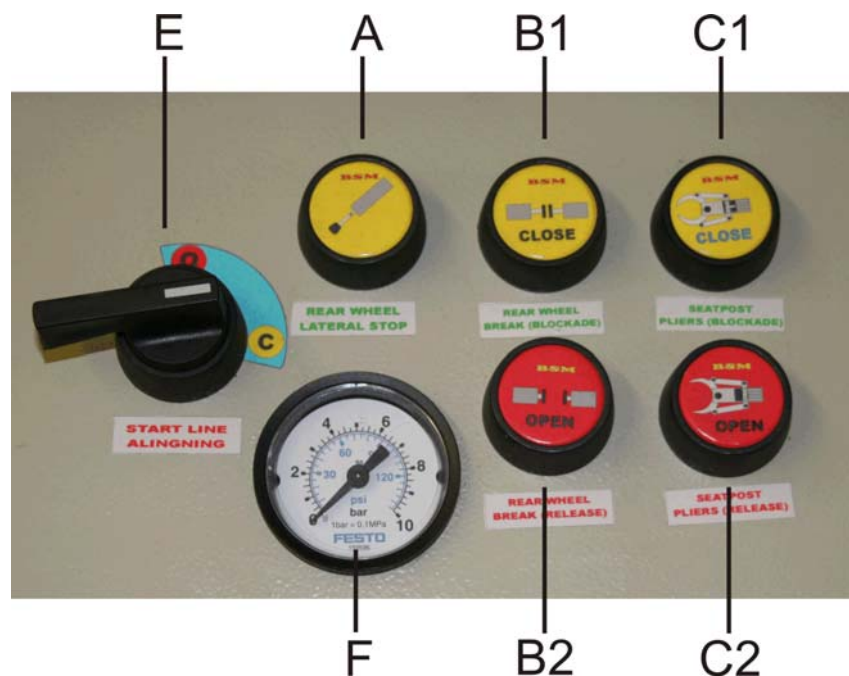


2 Operation

The ST-BSM1 is designed to use with the **ALGE-TIMING** Cyclestart System. Nevertheless, it can also be controlled with any other starting-device which is using a closing contact.

The main advantage of the ST-BSM1 starter is that it keeps the bicycle fastened by those three points that are more applicable for its safety. We have illustrated these points in fig. 1 and 2.

Two frames form the starter's main body. While the lower one is firm, the upper one can slide along, so we can place different bicycle sizes without further adjustments of the starter.



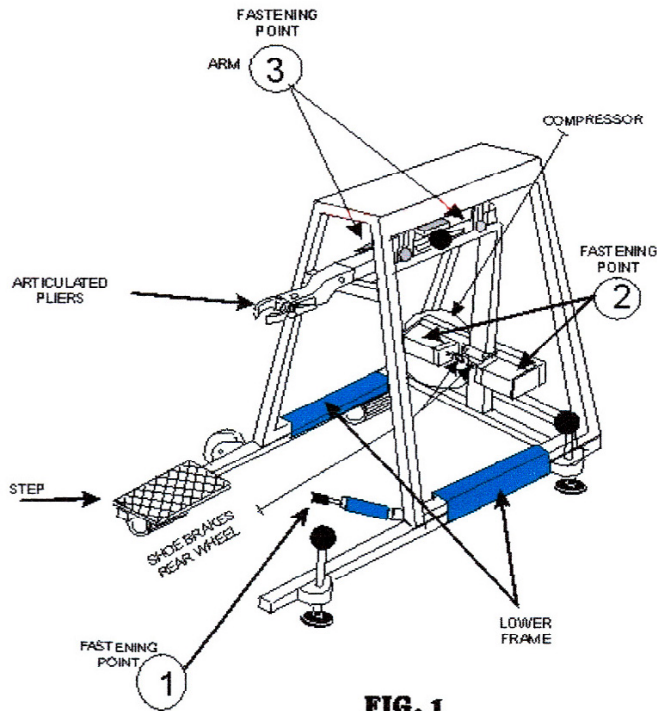


FIG. 1

1. By means of a pneumatic cylinder, a lateral stop is set to avoid that the rear wheel slides if the racer moves. This cylinder is situated at the bottom of the wheel. We name it fastening point 1. It is controlled with yellow button A.
2. Two pneumatic cylinders, with a non-turning piston each, fix the rear wheel by means of two brake shoes. We call it fastening point 2. It is placed at 120° from fastening point 1. The two buttons B control this fastening point: the yellow B1 blocks the system and the red B2 releases it, e.g. in case that pedals or connecting rods are not in a correct position. Also, those cylinders can reduce the width to adjust the different rim thick and the height for 26" and 28" wheels.

3. An arm fastens the bicycle's upper part, equipped with articulated pliers that fasten the seat post. This is the fastening point 3. Button D releases and blocks the arm, so we can adjust it for different bicycle sizes in height. Yellow button C1 opens the pliers and red button C2 closes them.
4. Button E releases and blocks the upper frame and lets us align the bicycle towards the start line.
5. The Manometer F shows the pressure. It should have always above 4 bar so the system works.
6. On one side of the cycle start machine are two white banana sockets G. Connect here the start line that gives the opening command. The red push button H is to test the start machine (to open simulate a start manually).

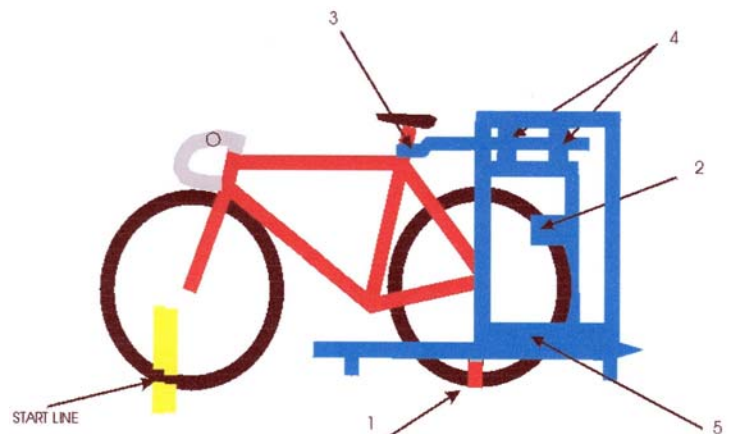


FIG. 2
FASTENING POINTS - LATERAL VIEW

3 Charging

The ST-BSM1 has an integrated rechargeable battery which has to be charged at least 14 hours. A charger is built into the start machine, so you have to connect only the power cable at the power socket I and at the mains.

The starter can then be used for more than 10,000 starts or for 5 competition days without recharging the battery.

