# TOMAHAWK



### **CAUTION !**

Read all precautions and instructions in this manual before using this equipment. Keep this manual for future reference.

#### Improper assembly, maintenance or use can void the warranty terms.

# TABLE OF CONTENTS

Important Precautions	page 3
Before You Begin	page 4
How to Assemble the Indoor cycle	page 5-7
How to Adjust the Indoor cycle	page 8
Pedal Strap Adjustment	page 8
Saddle Height Adjustment	page 8
Saddle Horizontal Adjustment	page 9
Handlebar Adjustment	page 10
Resistance Adjustment	page 11
How to Move the Indoor cycle	page 11
Preventative Maintenance	page 12
Daily Maintenance	page 12
Weekly Maintenance	page 12
Bi-Weekly Maintenance	page 13-14
Monthly Maintenance	page 14-17
Maintenance Activity Plan & Checklists	page 18-19
Explosion Drawings of Structural Components	page 20-26
Spare Part Reference List	page 27-28
Limited Warranty S – X Series	page 28-30

#### **Technical specifications:**

The Tomahawk S-Series Bike is according to EN 957 a Class S product for professional and / or commercial use. Such training equipment is intended for the use in training areas of organizations such as fitness clubs or sport associations, where access and control is specially regulated by the person who has the legal responsibility.

The Bike is designed to accommodate most users from 150 to 205 cm / 59 to 81 inch body height.

# IMPORTANT PRECAUTIONS

#### WARNING!

To reduce the risk of serious injury, read the following important precautions and information before operating the indoor cycle.

- 1. It is the responsibility of the owner to ensure that all users of the indoor cycle are informed of all warnings and precautions.
- 2. Operate and maintain the indoor cycle only as described in this manual.
- 3. Do not operate the indoor cycle until it is properly assembled (see page 5-8).
- Keep the bike indoors, away from moisture and dust. Do not place the indoor cycle in a garage or covered patio or near water.
- Place the indoor cycle on a level surface. To protect the floor or carpet from damage, place a
  mat beneath the indoor cycle. Make sure that there is adequate room around the indoor cycle to
  mount, dismount, and operate it.
- Regularly inspect and properly tighten all parts of the indoor cycle as recommended in this manual. Please replace defective parts immediately and do not use the Bike until repair is performed. Only use original parts from the manufacturer.
- Children under the age of 14 should only be allowed use of the indoor cycle with parental consent and guided by a specially trained instructor.
- 8. The indoor cycle should not be used by persons weighing more than 290 pounds (130 kg).
- 9. Always wear appropriate athletic clothes and shoes while operating the indoor cycle. Do not wear loose clothes that could become caught on the indoor cycle or shoes with loose laces.
- 10. Before using the indoor cycle, make sure that you are familiar with the operation of the indoor cycle (see pages 8-11).
- 11. The indoor cycle does not have an independently moving flywheel (wheel); the pedals will continue to move together with the flywheel until the flywheel stops.
- 12. Always regulate the flywheel resistance so that your pedalling motion is controlled (see page 11).
- 13. Keep your back straight while using the indoor cycle; do not arch your back.
- 14. If you feel pain or dizziness while exercising, stop immediately, rest and cool down.
- 15. If replacement parts are needed, use only manufacturer supplied parts.

#### WARNING:

Before beginning any exercise program, consult your physician. This is especially important for persons over the age of 35 or persons with pre-existing health problems. Read all instructions before using. Be aware that incorrect or extensive training may result in serious health injuries. The manufacturer assumes no responsibility for personal injury or property damage sustained by or through the use of this product.

# **BEFORE YOU BEGIN**

#### Dear Customer,

Congratulations for selecting the TOMAHAWK indoor cycle. The TOMAHAWK indoor cycle offers an impressive array of features designed to enhance cardiovascular fitness, tone muscles, and develop endurance. Whether users are beginners or experienced athletes, the indoor cycle offers workouts that will help users to reach their individual fitness goals.

#### IMPORTANT: Read this manual carefully before assembling or using the indoor cycle.

If you have questions after reading this manual, please contact your local distributor or refer to the website www.indoorcycling.com. Before reading further, please familiarize yourself with the parts that are labeled in the drawing below.



You will find the production code on the left side of the indoor Cycles within the lower range of the frame. Please register to these in servicing and maintenance lists.

# HOW TO ASSEMBLE THE INDOOR CYCLE







# HOW TO ADJUST THE INDOOR CYCLE

The indoor cycle can be adjusted for maximum comfort and exercise effectiveness. The instructions below describe one approach to adjusting the indoor cycle to ensure optimal user comfort and ideal body positioning; you may choose to adjust the indoor cycle differently.

#### Pedal strap adjustment:

Sit on the saddle and position your feet on the pedals, with the balls of your feet directly above the spindles of the pedals (see the drawing below). Adjust the pedal straps so the toe clips (cages) are snug but not too tight. Note: In the case of a Bike being fitted with Combi-pedals, the pedals feature toe clips on one surface and SPD cleats on the opposite surface. If desired, use the SPD cleats with cycling shoes instead of the toe clips.



#### Saddle height adjustment:

Sit on the saddle and slowly pedal until the right pedal is in the lowest position. Your knees should be slightly bent without a dropping of the hips. **To avoid hyper extending your knees, make sure that your legs are not completely** 

straight.

#### Saddle horizontal adjustment:

Proper horizontal adjustment of the saddle is very important in avoiding injury to the knees. Sit on the saddle and move the pedals until the crank arms are in horizontal position.

Using your forward most leg as a marker, your kneecap should be directly above the center of the pedal so that a straight line is created between knee and center of the pedal (see the dotted line in image below). To adjust the horizontal position of the saddle, first dismount the indoor cycle. Next, loosen the rear adjustment knob, slide the saddle forward or backward as required, and then retighten the knob.



#### Handlebar adjustment:

Begin with the top of the handlebar at relatively the same height or just slightly higher than the top of the saddle (dotted horizontal line A in the drawing below) and at a neutral fore/aft position (see dotted vertical line B in drawing below). If your knees touch the handlebars or if you experience back discomfort while pedalling for extended periods of time, the height of the handlebars can be adjusted. First, dismount the indoor cycle. Next, turn the front adjustment knob counter clockwise, slide the handlebar post up or down, and then retighten the adjustment knob.



Next, the horizontal position of the handlebar should be adjusted. If the handlebar is too close to the saddle, your breathing may feel restricted; if the handlebar is too far from the saddle, you may experience back discomfort. To adjust the horizontal position of the handlebar, first dismount the indoor cycle. Check for proper handlebar position by positioning your elbow so that it is touching the front tip of the saddle at a 90 degree angle and checking that the fingertip of your middle finger is touching the handlebar at the mid-point. If it is not as described then loosen the fore-aft lock handle and slide the handlebar forward or backward until your middle finger is touching the handlebar at the mid-point, and then retighten the lock handle.

The handlebar offers a wide variety of hand positions for personal preferences. Changing your hand position can change the angle of your back, neck, and arms. To minimize the stress on your muscles during your workouts, change your hand position frequently.

### HOW TO OPERATE THE INDOOR CYCLE

#### **Resistance adjustment:**

The preferred level of difficulty in pedalling (resistance) can be regulated in fine increments by use of the resistance knob. To increase the resistance, turn the resistance knob clockwise. To decrease the resistance, turn the knob counter clockwise.

**IMPORTANT:** To stop the flywheel (wheel) while pedalling, pull up the red emergency handle. The flywheel should quickly come to a complete stop. Please make sure your shoes are fixed into the toe clip or in case cycling shoes are used your shoe cleat is connected to the pedal binding while riding.

The indoor cycle does not have a free moving flywheel (wheel); the pedals will continue to move together with the flywheel until the flywheel stops. Reducing speed in a controlled manner is required. To stop the flywheel immediately, pull up the red emergency break handle. Always pedal in a controlled manner and adjust your desired cadence according to your own abilities. Pull the red emergency handle up = emergency Stop



#### How to move the indoor cycle:

Due to the weight of the indoor cycle, it is recommended that two persons move it. While one person lifts the back of the indoor cycle, the second person firmly holds the handlebar and tips the indoor cycle forward until it rolls on the wheels. Carefully move the indoor studio cycle to the desired location and then lower it. **CAUTION: To reduce the risk of injury, use extreme caution while moving the indoor studio cycle. Do not attempt to move it over uneven surfaces and make sure a safety space of min 20 inch to the nearest equipment is redeemed.** 

If the indoor cycle rocks on the floor after being set down, turn the levelling feet (see diagram) underneath the front or rear stabilizer until the rocking motion is eliminated. **Important**: Please do not unscrew the levelling feet more then ½ inch!



### **PREVENTATIVE MAINTENANCE**

Regular maintenance must be performed on the indoor cycle for optimal performance and longevity. Please read and follow all instructions below. If the indoor cycle is not maintained as described, components may wear excessively and the indoor cycle may become damaged. Improper maintenance will void the warranty terms. If you have questions about maintenance, contact your local distributor or refer to www.indoorcycling.com

Note: Many maintenance procedures require lubricant spray. Manufacturer recommends WD40, Brunox or any other solvent free lubricant.

#### Daily maintenance:

1. Make sure that the indoor cycle is level. If the indoor cycle rocks on your floor, turn the levelling feet underneath the front or rear stabilizer until the rocking motion is eliminated (see HOW TO MOVE THE INDOOR CYCLE on page 11).

2. After each user finishes exercising, the indoor cycle should be disinfected and cleaned to maintain a hygienic environment. First, apply a disinfectant spray to the handlebars and the saddle. Using a lint-free cloth, dry the handlebars and the saddle. Next, apply a small amount of disinfectant to a lint-free cloth and clean the adjustment knobs and the lock handles. Avoid using strong detergents on the indoor cycle frame.

#### Weekly maintenance:

1. Apply a small amount of the lubrication spray to a lint-free cloth, and thoroughly clean the frame, the handlebar slider and seat sliders the flywheel and the plastic parts of the indoor cycle.

2. For optimal performance of the Resistance system, and to minimize wear on the brake pad, the solvent free lubricant spray should be applied to the brake pad using the lubrication holes on the plastic part of the brake pad. If fuzz or lint appears on the brake pad, the brake pad has become too dry—lubricant spray should be applied more frequently. Make sure brake pad is thoroughly soaked from end to end with lubricant spray. Then, wipe the excess off.



#### **Bi-weekly maintenance:**

1. The indoor cycle should not be used if the emergency brake system is not working properly. While sitting on the saddle and pedalling, test the brake by pulling the emergency brake handle upward. The flywheel should come to a quick and complete stop.

2. To maintain the easy adjustability of the saddle post, the saddle post should be cleaned and lubricated. Turn the rear adjustment knob counter clockwise and slide the saddle post out of the frame. Apply a small amount of lubricant spray to a lint-free cloth, and clean the saddle post (A). Next, apply a small amount of lubricant spray inside of the rear frame sleeve. Then, reinsert the saddle post into the frame and adjust it to the desired height.

Next, loosen the rear lock handle and slide the saddle carriage as far backward as possible. Apply a small amount of lubricant spray to a lintfree cloth, and clean the top of the saddle slide (**B**). Then, slide the saddle carriage as far forward as possible and clean the top of the saddle slide. Finally, adjust the saddle to the desired position.



3. To maintain the easy adjustability of the handlebar post, the handlebar post should be cleaned and lubricated. First, turn the front adjustment knob counter clockwise and slide the handlebar post out of the frame. Apply a small amount of lubricant spray to a lint-free cloth, and clean the handlebar post (A). Next, apply a small amount of lubricant spray inside of the front frame sleeve.

Then, reinsert the handlebar post into the frame and adjust it to the desired height. Next, loosen the front lock handle and slide the handlebar carriage as far backward as possible. Apply a small amount of lubricant spray to a lint-free cloth, and clean the surface of the handlebar slide. Then, slide the handlebar carriage as far forward as possible and clean the top of the handlebar slide. Finally, adjust the handlebar to the desired position.



#### Monthly maintenance:

1. To maintain the smooth function of the adjustment knobs controlling the handlebar and saddle, the metal threads **(A)** on the adjustment knobs must be lubricated.

2. To maintain the easy adjustability of the Resistance system, the threads on the lower end of the brake rod should be lubricated. First, turn the Resistance knob clockwise until it stops. Next, look under the right or left side of the frame and locate the brake rod, which has two lock nuts on its lower end. Apply a small amount of synthetic grease (white lithium grease) to the threads on the brake rod above the two lock nuts. Then, turn the resistance knob counter-clockwise until it stops.

#### ! ONLY CHAIN DRIVE !

#### 3. Chain driven bike

Important: A loose chain as well as an overtightened chain will cause damage to the chain and drive system. Checking Chain Tension: To check for an over-tightened chain, sit on the saddle, place your feet on the pedals, and begin pedaling while feeling for excess vibration. Unusual noises or vibrations are indications that the chain may be over tightened or that the flywheel is at an angle (misaligned). To check for a loose chain, sit on the saddle, place your feet on the pedals, move the pedals until the crank arms are horizontal. Next, push down the emergency brake handle and hold it. Then, stand on the pedals and rock forward and backward. There should be no more than 1/8th inch (2-3 mm) of play in the chain. If there is too much play in the chain, or if the chain makes a clicking noise, this indicates that the chain is too loose. To correct an over-tightened chain: To adjust the chain, pull off the right and the left maintenance covers (A). Loosen the axle nut (B) on both ends of the flywheel axle by two full turns. Loosen the inner adjustment nut (D) facing the flywheel axle nut on each side of the flywheel. Then, turn both (right and left sides) of the outer adjustment nuts (C) on the outside of the flywheel bracket 1/4 of a turn at a time (downward on the R side and upward on L side) until the chain is properly adjusted. Make sure to turn both adjustment nuts exactly the same amount to avoid misalignment of the flywheel. Re-check the amount of play in the chain as described at the beginning of this step. If necessary, readjust the chain.

#### ! ONLY CHAIN DRIVE !



Graphics are the right side of the Bike (ridding position)

Finally, retighten the two inner adjustment nuts (D) and the two axle nuts (B), and reattach the maintenance covers. To correct a loose chain: To adjust the chain, pull off the right and the left maintenance covers (A). Loosen the axle nut (B) on both ends of the flywheel axle by two full turns. Loosen the outer adjustment nut (C) facing the head of the allen bolt on each side of the flywheel. Then, turn both (right and left sides) of the inner adjustment nuts (D) on the inside of the flywheel bracket 1/4 of a turn at a time (upward on the R side and downward on L side) until the chain is properly adjusted. Make sure to turn both adjustment screws exactly the same amount to avoid misalignment of the flywheel. Re-check the amount of play in the chain as described at the beginning of this step. If necessary, readjust the chain. Finally, retighten the two outer adjustment nuts (C) and the two axle nuts (B), and reattach the maintenance covers. To avoid damage to the flywheel bearings, do not over tighten the axle nuts (B). Unusual noises or vibrations are indications that the chain has been over tightened or that the flywheel is at an angle.

Check if **belt drive** is firmly tighten and does not slip while riding under resistance load. In case that the belt slips, proceed using the same technique as described above. Please note that a belt drive gear never shows slack. In case of adjustment do not apply to much tension.

The manufacturer recommends using an ultrasonic voltage meter adhering to a natural frequency of the belt of 3200 Hz  $\pm$  150th. Ball bearing damage due to incorrect belt tension is excluded from warranty.



#### ! ONLY CHAIN DRIVE !

4. Check the chain for proper lubrication. To do this, run your fingers along the chain (not shown) in the service opening provided **(A)**. Make sure that the chain is not in movement during this checkup! If the chain feels dry, slowly turn the flywheel with one hand while equally applying a small amount of bicycle chain grease along the chain. To avoid injuring your hands, keep your hands away from moving parts.

#### ! ONLY CHAIN DRIVE !

5. Some parts of the indoor cycle may become loose as a result of repeated use. Check pedals, toe clips, and pedal straps, and make sure that they are properly tightened. Next, check all exposed screws, bolts, and nuts, and make sure that they are properly tightened. Finally, check the saddle to make sure that it is not lose damaged.

6. The brake pad will become worn as a result of repeated use. The indoor cycle should not be used if the emergency braking system is not working properly (see page 13)! Should you feel that the resistance system's functions are deficient, it is essential to fine-tune the resistance system before the bike is used again! Please check the setting of the brake system as follows: First turn the resistance regulator on the brake system as far as it will go to the left (minimum braking effect). If the setting is correct, the brake pads should be flush with the flywheel and barely touching so that it's possible to cycle with a hardly noticeable amount of resistance. The brake pad can be adjusted using a 10 mm wrench. Next, check the brake pad for signs of wear. If the brake pad does show signs of excessive wear, thoroughly soak the brake pad with lubricant spray using the 2 lubrication holes (**B**), and then wipe the excess off.



# MAINTENANCE ACTIVITY REQUIRED SCHEDULE

Activity	Rotation	Details found on
Feet leveling, disinfection and cleaning of the bike	daily	page 11-12
Servicing brake pads, detailed cleaning of the entire bike	weekly	page 12
Check emergency brake function	bi-weekly	page 13
Clean and lubricate saddle and handlebar sliders / posts	bi-weekly	page 13-14
Check adjustment knobs	monthly	page 14
Check brake pad for signs of wear	monthly	page 12
Check brake system, lubricate	monthly	page 12,15
Check chain play	monthly	page 15-17
Check chain lubrication	monthly	page 17
Check pedals, toe clip and straps for signs of wear	monthly	page 17
Check all connections and fixings if they are secure and correctly tighten	monthly	page 17

### Examples of Maintenance Plan Charts for in house service technicians:

Weekly Maintenance Checklist					
Bike No.	Production code	Observations	Action Taken	Result	Name / date
		<u> </u>			

Bi-Weekly Maintenance Checklist					
Bike No.	Production code	Observations	Action Taken	Result	Name / date

Monthly Maintenance Checklist					
Bike No.	Production code	Observations	Action Taken	Result	Name / date

S-SERIES

### SPARE PARTS





ENG



Chain Drive Kit 02 40 F 4 02 40 D Cycle Well Kit (Optional) 01 21 S · 02 32 10 · 02 32 00 ·







# SPARE PARTS LIST

### **Drive Gear Parts**

02 40 D	Chain
02 40 F 4	Chain ring
02 40 90	Chain ring bolt
02 40 CrMo R SX 08	Right crank
02 40 CrMo L SX 08	Left crank
02 40 C S 08	Flange nuts for crank
02 40 C MD20 08	BB assembly MD20
02 40 C 2 RS	Ball bearing SKF 6004Z

### **Brake Parts**

02 50 A SX	Brake adjustment knob
02 50 02	Adjustment ball
02 50 01	Emergency brake handle
02 50 06 SX	Bell crank
02 50 04	Brake pad
02 50 03 A SX	Upper brake rod
02 50 05 SX	Lower brake rod
02 50 03 B	Adjustment drum

### Flywheel

02 40 H	Flywheel axle
02 40 02	Chain tensioner
02 40 H L	Flywheel bearing 6001Z
02 40 08 ES 08	S-Series flywheel

### Handlebar

02 30 02 AL	Horizontal & vertical adjustable handlebar
02 10 E	Lock handle
02 10 B 08	Pop pin adjustment knob

# Chain Guard

02 42 02 SX 08	Outer chain guard
02 42 04	Plastic cover
02 42 01 SX 08	Inner chain guard
02 99 05	Plastic washer
02 42 03 SX 08	Left cover
02 99 03	Allen bolt M4x15

### Frame

2004 RASX	S-Series frame
02 10 A	Vertical insert sleeve
02 20 04	Rubber stop handleb.tube
02 10 B 08	Pop pin adjustment knob
02 99 02 SX 08	Bottle holder

### Belt drive kit

02 40 BE	Belt
----------	------

# Cycle Well (optional)

02 32 10	Cycle Well Kit
01 21 S	Cycle Well Saddle
02 32 00	Cycle Well Modul

# Saddle Support

0121VL-3125sw	Tomahawk Saddle
02 21 AK	Saddle mounting bracket
02 21 05 AL	Horizontal & vertical saddle support
02 10 E	Lock handle

### Pedals

01 40 A 2	Combi-Pedals

# SPARE PARTS LIST

### **Rear Stabilizer**

02 11 E	PVC gasket
02 11 02 SX 08	Rear stabilizer
02 11 06 SX 08	Plastic end cover
02 11 05 B	Rubber foot stand
02 99 11	Rear protection plates (3pc.)

### Front Stabilizer

02 11 01 SX 08	Front Stabilizer
02 11 B	Stabilizer mounting kit
02 99 10	Front protection plates (3pc.)
02 11 A	Transport Wheel

Indoorcycling Group GmbH warrants that all new equipment will be free of manufacturing defects in workmanship and materials, becoming effective on the date of original installation. Parts repaired or replaced under the terms of this warranty will be warranted for the remainder of the original warranty period only. **Warranty may vary by region or country.** 

### LIMITED WARRANTY S-SERIES INDOOR CYCLE

#### S-Series Indoor Cycle

10 Year warranty: Frame

**3 Year warranty:** Handlebar and saddle assembly, brake system (excluding brake pad), lever handles and knobs, cranks, belt drive system, bottom bracket assembly, flywheel and hub assembly, powder coating.

**2 Year warranty:** Pedals, insert sleeves for handle bar and saddle post, leveling feet.

1 Year warranty: Saddle

The following wear items are excluded from warranty: Pedal straps, pedal binding system, water bottle holder.