

# KEISER<sup>®</sup> m3 TBT

USER MANUAL



# BEFORE ASSEMBLING

Always follow the steps in this manual as you assemble your M3 TBT. Do not skip, substitute or modify any steps or procedures of this assembly, as doing so could result in personal injury and will void your warranty. We have put a number of precautions in this manual.



**WARNING:** This symbol appearing throughout this manual means **PAY ATTENTION! BE ALERT!** When you see this warning symbol, your safety is involved. It is being used to call attention to **POTENTIAL** hazards that could result in personal injury or loss of life.



**NOTE:** Informs you about things we recommend you do or are aware of, before performing the assembly. These notes are placed in the manual to aid you during a certain procedure or to make you aware of any general mandatory actions or information.

# UNPACKING THE TBT

Carefully remove the TBT from the cardboard box. Lay-out all the components and check to assure all parts are present and undamaged. If parts are missing or damaged, contact your local dealer, distributor or Keiser Corporation Service Department. After unpacking and verifying parts, you are ready to start your assembly. You need an area that is free of dirt, dust or other foreign material that could impair the assembly of your machine.

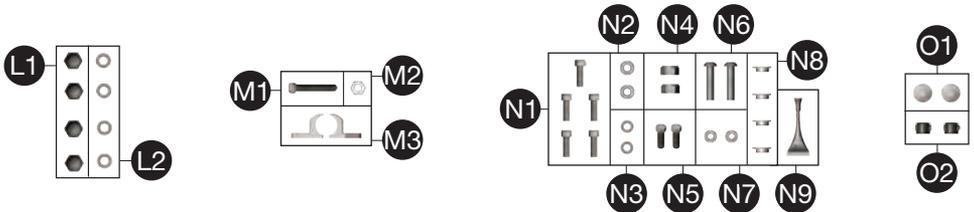
# PARTS INVENTORY

<b>A</b> - Left Handle (550832S/X)	<b>G</b> - Pedal Set (555438)
<b>B</b> - Right Handle (550833S/X)	<b>H</b> - Flywheel Guard & Cap (553101B/X & 555073)
<b>C</b> - Base Frame (550814G/X)	<b>I</b> - Shifter & Display Mt Cover (555082G/X)
<b>D</b> - TBT Main Frame (550826PBC/XXC)	<b>J</b> - Foot Rests (550834)
<b>E</b> - Flywheel (555003)	<b>K</b> - M Series Computer
<b>F</b> - Hubcap (555005)	



# LOOSE PARTS INVENTORY

<p><b>L - Loose Parts Pack #1</b>  <b>L1</b> - 4 Acorn Nuts (555022)  <b>L2</b> - 4 Aircraft Washers 7/16 (9384)</p>
<p><b>M - Loose Parts Pack #2</b>  <b>M1</b> - 1 Hex Nut M6x1 (9508)  <b>M2</b> - 1 Hex Head Cap Screw M6x1 X 45 (9525)  <b>M3</b> - 2 Flywheel Guard Clamps (555025)</p>
<p><b>N - Loose Parts Pack #3</b>  <b>N1</b> - 5 Socket Head Cap Screws M6x1 X 20 (9502)  <b>N2</b> - 2 Large 5/16 Washers (9344)  <b>N3</b> - 2 Aircraft Washers 3/8 (9355)  <b>N4</b> - 2 Hex Elastic Lock Nuts M10x1.5 (9507)  <b>N5</b> - 2 Hex Head Cap Screws M8x1.25 X 16 (9511)  <b>N6</b> - 2 Socket Button Head Cap Screws M10x1.5 X 45 (9526)  <b>N7</b> - 2 Nickel Plated Washers (115450)  <b>N8</b> - 4 Aluminum Caps with O-Rings (565005 &amp; 565406)  <b>N9</b> - 1 Hex Nut M6x1 (9508)</p>
<p><b>O - Loose Parts Pack #4</b>  <b>O1</b> - Foot Rest End Caps (555439)  <b>O2</b> - Loctite 242 (105550)</p>



## TOOLS YOU WILL NEED

Torque wrench (Minimum 47 Nm / 35 ft-lb)	16mm, or 5/8" crowfoot
6" extension for 3/8" drive	5mm Allen Wrench
15mm open-end wrench	6mm Allen Wrench
16mm, or 5/8" open-end wrench	Paste or spray wax (used to clean after assembly)
#2 Phillips screwdriver	Clean cloth
15mm crowfoot	LPS #3 Heavy Duty Rust Inhibitor w/straw
2 - 10mm Wrenches	Socket Wrench/Ratchet
13mm Socket	17mm Socket or Open-end Wrench



**NOTE:** The substitution or modification of any part or component, other than what is approved by Keiser, will void your warranty.

# KEISER M3 TBT

Total TBT Weight:	113 lbs (51.3 kg)
Footprint:	Length 49 in (1245 mm) x Width 29 in (737mm)



1 - Saddle	9 - Resistance Shifter
2 - Forward/Backward Seat Adjustment Handle	10 - Water Bottle Holder
3 - Up/Down Seat Adjustment	11 - Foot Rests
4 - Flywheel	12 - Eccentrics
5 - Belt Cover	13 - Crank Arm
6 - Base	14 - Platform Pedals
7 - Handles	15 - Transport Wheels
8 - Multi-Function Computer System	

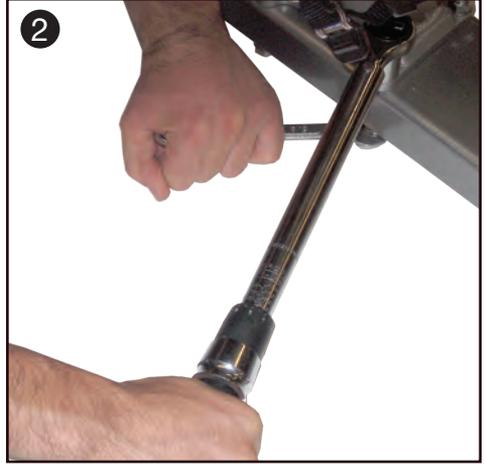
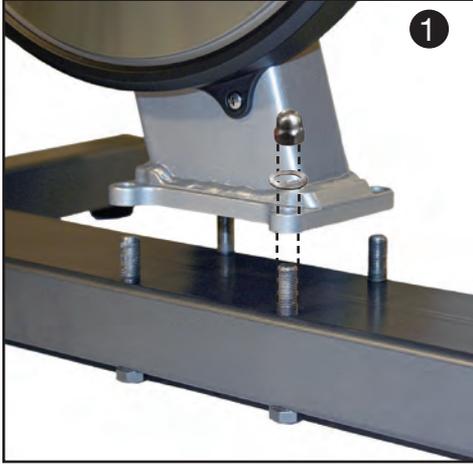
# TBT ASSEMBLY

## ASSEMBLING MAIN FRAME TO THE BASE FRAME

**Step 1:** Carefully lower the Main Frame onto the base frame over the base screws, with the front of the TBT facing the transport wheels on the Base Frame. (Fig. 1)

**Step 2:** Insert one washer on each of the four base frame studs. (Fig. 1)

**Step 3:** Install the acorn nuts (L1) and the aircraft washers (L2) on the studs and hand tighten Torque the acorn nuts with a 16mm or 5/8" crowfoot and torque wrench to 47 Nm (35 ft-lbs) using a 16mm, or 5/8 inch open-end wrench to hold in position. (Fig. 2)



## ASSEMBLING PLASTIC COVER

**Step 1:** Obtain the #2 Phillips screwdriver and remove the screws from the plastic sweat guard. (Fig. 3)

**Step 2:** Slide on the Platstic Cover and snap it over and align with the mounting holes of the Sweat Guard. (Fig. 4)

**Step 3:** Insert and secure the screws removed in Step 1 using the #2 Phillips screwdriver. (Fig. 5)



# ASSEMBLING FLYWHEEL, HUB, AND HUB CAP

**Step 1:** Before starting the assembly of the flywheel, hub, and hub cap, make sure that the shifter lever is in the downward position. (Fig. 6)

**NOTE:** Not following this step may scratch the flywheel.

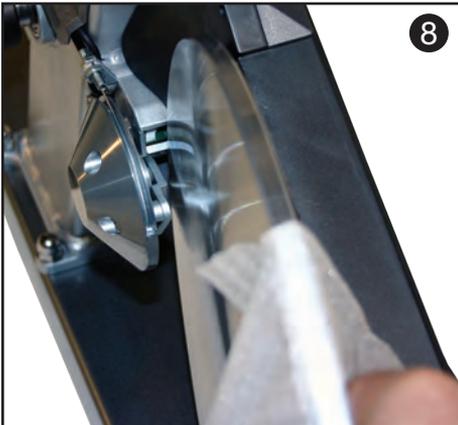
**Step 2:** Remove the plastic wrapping from around the axle, hub, and hub cap. Remove the hub cap and set it aside along with the five socket head cap screws (N1). Remove the plywood protector. Remove partial of the flywheel from its foam envelope leaving the foam envelope to grab the flywheel with.

**Step 3:** Carefully slide the flywheel between the two magnets (Fig 7. & Fig. 8) and onto the hub at the same time. Make sure that the flywheel is flush against the hub and align the screw holes.

**NOTE:** Use the foam envelope to handle the flywheel during assembly.



**Step 4:** Holding the flywheel in position with one hand, install the hubcap and align the screw holes. Install the socket head cap screws (N1). Using the 5mm Allen wrench, tighten the screws in a star pattern until snug (as shown in Fig. 9).



## ASSEMBLING PEDAL TO CRANK ARM

**Step 1:** Unwrap the pedal set and Loctite 242, obtain the Torque wrench, 15mm crowfoot, 6" extension, and 15mm open-end wrench.



**Step 2:** With a clean cloth, wipe the threaded area of the pedals. Apply Loctite 242 to the pedal threads. Install the pedals into the crank arms, use the 15mm open-end wrench to tighten. Finish with the torque wrench, 15mm crowfoot, and 6" extension. Torque pedals to 47 Nm (35 ft-lbs) (Fig. 10).

 **NOTE:** Left pedal is LH threads and right pedal is RH threads.



### WARNING!

Failing to install the pedals with Loctite 242, or crossing the threads will damage them, and could result in serious injury to the user.

## MOUNTING COMPUTER

**Step 1:** Obtain the #2 Phillips screwdriver and remove the computer mounting screw from the display mount.

**Step 2:** Coil the computer cable into the computer mount cavity (Fig. 11).

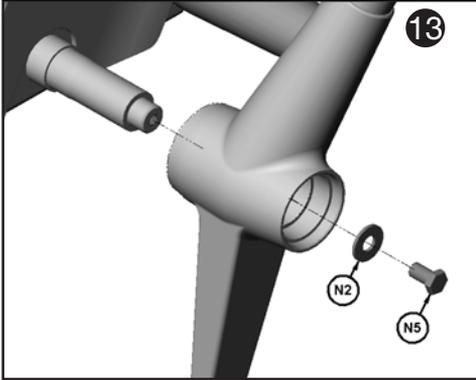
**Step 3:** Slide the computer up into the two locking ears. Insert and secure the screw you removed in Step 1 using the #2 Phillips screwdriver (Fig. 12).



# MOUNTING HANDLES AND LINKS

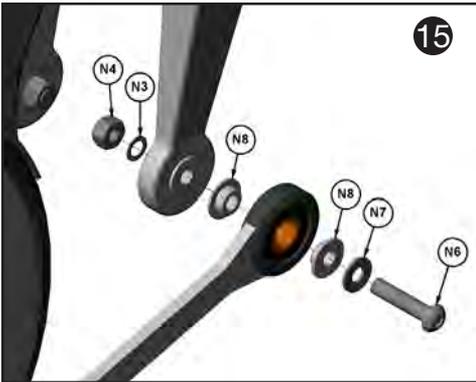
**Step 1:** Obtain the Left (A) or Right (B) Handle, and slide it over the pivot shaft as shown (Fig. 13).

**Step 2:** While holding the Handle, secure the Large Washer (N2) and the Hex Head Cap Screw (N5) using a ratchet and the 13mm socket. Torque the screw to 23 Nm (17 ft-lbs) (Fig. 13 & 14).



**Step 3:** Align and assemble the Handle to the link as shown (Fig. 15). While holding the 6mm Allen Wrench on the Socket Button Head Cap Screw (N6), Tighten and torque the Hex Elastic Lock Nut (N4) to 23 Nm (17 ft-lbs) using a 17mm socket and torque wrench.

**Step 4:** Insert the Aluminum Cap (O1) into the Handle (Fig. 16). Be careful not to damage the attached O-Ring.



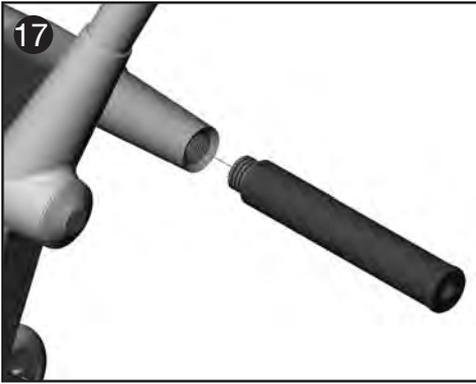
**Step 5:** Repeat Step 2 and Step 4 for the Handle and Link on the other side.

# ASSEMBLING FOOT REST

**Step 1:** Obtain both Foot Rests (J) and apply some Loctite 242 (N9) to the threads.

**Step 2:** Screw and hand tight both Foot Rests into the tapped holes on both sides of the TBT (Fig. 17 - NEXT PAGE).

**Step 3:** Using the ratchet and a 6" extension, tighten and torque the Foot Rests to 47 Nm (35 ft-lbs) (Fig.18).



**Step 4:** Insert the Foot Rest End Caps (O2) into both Foot Rests (Fig. 19).



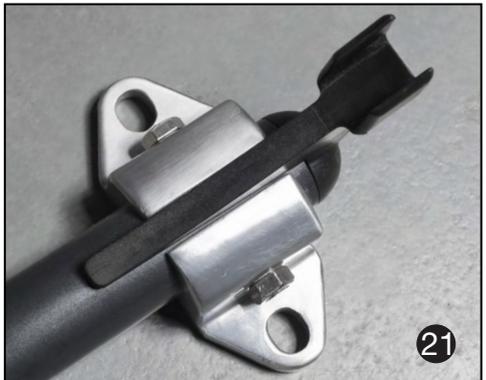
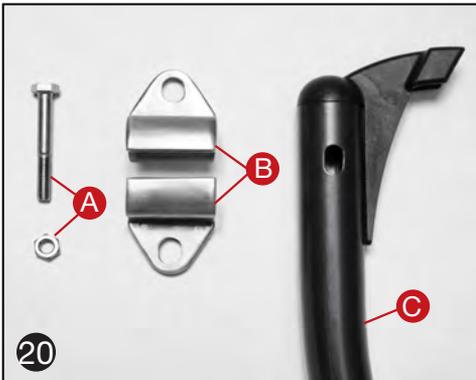
## FLYWHEEL GUARD INSTALLATION

**Step 1:** Make sure to have all parts and tools present prior to assembly.

**Step 2:** Assemble the brackets (B) to the tube (C) With the bolt and nut (A) finger tight.

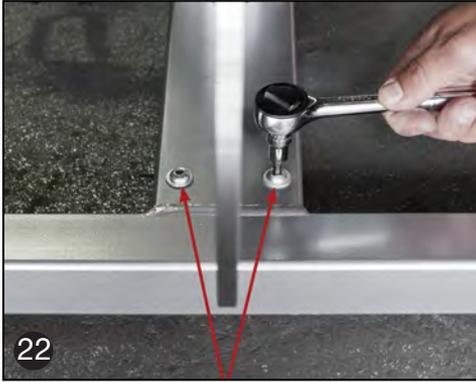
### PARTS INVENTORY

A) Bolt and Nut B) Brackets C) Tube



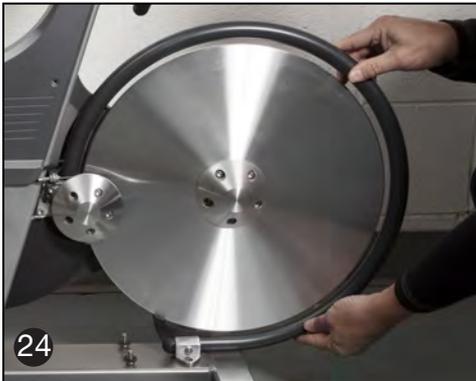
**Step 3 (Next Page):** Make sure the flywheel is centered in the middle of the 2x4 tube of the base frame. Remove the two (6mm allen) screws and washers from the base frame. These screws will be used to mount the flywheel guard in step 6.

**Step 4:** Place the assembled flywheel guard over the holes and hold the tube guard as shown, to the left of the flywheel. Place the open end of the tube guard over the casting.

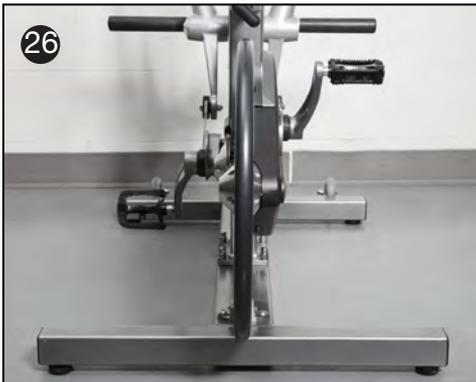


**Step 5:** Swing the tube over the flywheel, aligning the tube centered with the flywheel.

**Step 6:** Tighten the brackets to the base frame with the screws and washers that were removed in step three. Do not fully tighten the bolts.



**Step 7:** By not fully tightening the bolts, the brackets allow the tube to move left to right to some degree. Center the tube with as much clearance as possible from the flywheel, then fully tighten all the bolts. Make sure the tube is centered over the flywheel. The flywheel must be completely hidden behind the tube as shown below.

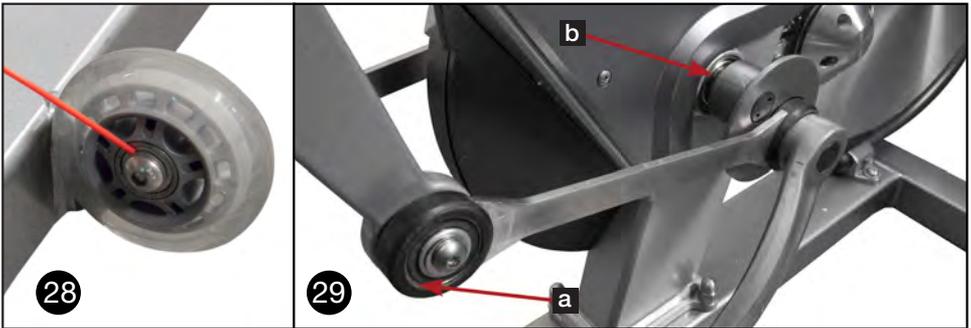




**WARNING:** Perform the operations below before riding to make sure the TBT is fully operational. Failing to test a bike prior to normal use will void your warranty and could result in serious injury.

## CHECKING FOR PROPER OPERATION

- All Parts Correctly Installed
- Acorn Nuts Torqued to 47 Nm (35 ft-lbs)
- Pedals Loctited and Torqued to 47 Nm (35 ft-lbs)
- Foot Rests Loctited and Torqued to 47 Nm (35 ft-lbs)
- Handle to Pivot Shaft Bolts Torqued to 23 Nm (17 ft-lbs)
- Handle to Link Mount Bolts Torqued to 23 Nm (17 ft-lbs)
- Seat Adjustment Operates Properly
- Apply LPS #3 to flange and screws mounting TBT Main Frame (D) to Base Frame (C)
- Apply LPS #3 to each side of both transport wheel bearings (Fig. 28)
- Apply LPS #3 to the front end link bearing of both links (Fig 29a)
- Apply LPS #3 to left bottom bracket bearing (Fig. 29b)



- TBT Has Been Polished With Paste or Spray Wax and a Clean Cloth
- Computer Installed and Calibrated and in Working Order (See M Series Computer Overview)



**NOTE:** Since we are always striving to improve our products; our products are subject to change without notice.



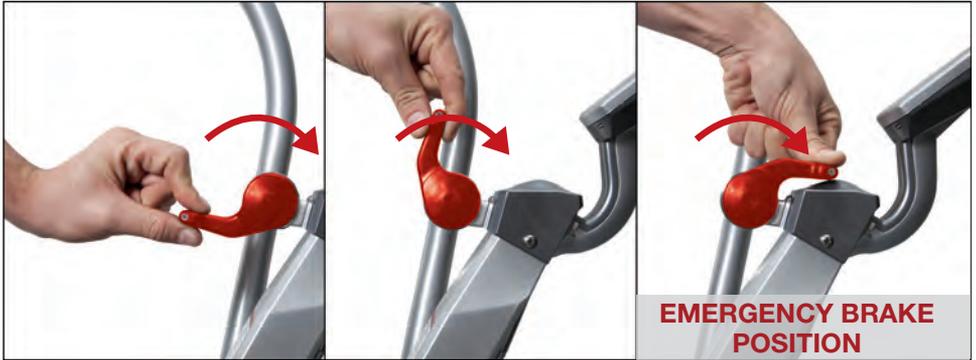
**WARNING:** Failure to follow the below safety information and instructions could result in personal injury or loss of life. Use this equipment only for its intended use as described in this manual. Please read all the information provided for safe operation.

## IMPORTANT SAFETY INFORMATION & INSTRUCTIONS

• The Keiser M3 TBT is NOT designed with a freewheel, but a fixed gear system. The Handles are attached to the crank arms through the links and the eccentrics. The crank arms and Handles can not be disengaged independently. When the flywheel is in motion, both the pedals and the handles will also be in motion. Never remove your feet and/or let them hang while in motion as serious user injury may occur. Never take your hands off the Handles while in motion. Remain seated in the saddle at all times while operating the M3 TBT. When utilizing the M3 TBT for independent upper body exercises, always place your feet (arch, or heel section of foot) on the Foot Rests. Proper foot placement is important to ensure clearance from the path of the moving pedals. Never adjust the resistance shifter while the TBT is in motion. To raise or lower resistance levels, slowly bring the motion of the Handles and/or Pedals to a controlled stop, adjust the resistance,

then resume exercising. Never pick up a water bottle from the TBT water bottle holder while handles are in motion.

- The resistance shifter allows you to safely slow or stop the motion of the flywheel. Move the resistance shifter away from you to increase the gear and slow the motion of the flywheel. This method can also be used as an emergency operation to stop the motion of the flywheel. To use the resistance shifter as an emergency brake, move the lever all the way forward to stop all motion within one revolution. Be very cautious about the moving handles while using the shifter as emergency stop. Always attempt to stop the motion with the Handles or the Pedals instead of using the shifter.



- The Keiser M3 TBT is intended for cardiovascular fitness training. Consult a qualified physician or fitness professional to determine an appropriate training routine and determine if cardiovascular training should be a part of your exercise program. Serious injury or death can occur from over-training and should be taken very seriously.

- The Keiser M3 TBT is to be operated in a commercial fitness environment, all use should be supervised by a qualified fitness professional.

- Keep children and pets clear from the unit at all times, especially while in use.

- The Keiser M3 TBT should be positioned on a stable, level, horizontal surface with a recommended clearance of 18-24"/45-60cm on all sides.

- Movements such as pedaling at high speeds are considered advanced techniques, and should only be performed when the rider has reached an advanced level and has practiced basic cycling and pedaling techniques at slow to normal speeds.

- Ensure that all adjustment handles that could interfere with the user's movement are not left projecting as to come in contact with the rider during operation.

- Before dismounting, bring the pedal to the lowest position on the dismount side, push the resistance lever to the most forward position to bring both the flywheel and pedals to a complete stop. Remove your feet from the pedals and dismount the TBT.

# TBT FITTING



**WARNING:** Maximum weight of the rider shall not exceed 300lbs /136kg.

## SEAT POST HEIGHT POSITIONING

- Stand beside the TBT, close to and beside the saddle.
- Position the seat so that the top of the saddle is level with your iliac crest (hip), then re-tighten the T-Handle after adjustment.
- Sit on the saddle with the balls of each foot over the center of the pedals.
- Begin to pedal very slowly. There should be a 5-15 degree bend in the knee as it extends down into the six o'clock position.



**WARNING:** If your hips are rocking back and forth in the saddle with each pedal stroke, the seat position may be too high. Uneven rocking from side to side may result in hip or back injuries.



**WARNING:** If a participant's knees are bowed outward (beyond their normal ergonomic position), the seat may be too low. If the knees are too flexed, unwanted stress is placed on the knee caps. The knee should never be in a locked-out (overextended) position.

## POSTURE AND BODY POSITION

We suggest that you keep your back upright during any exercise on the TBT. Avoid leaning your body forward or backward while exercising.

## FORE AND AFT (FORWARD AND BACKWARD) SEAT POSITIONING

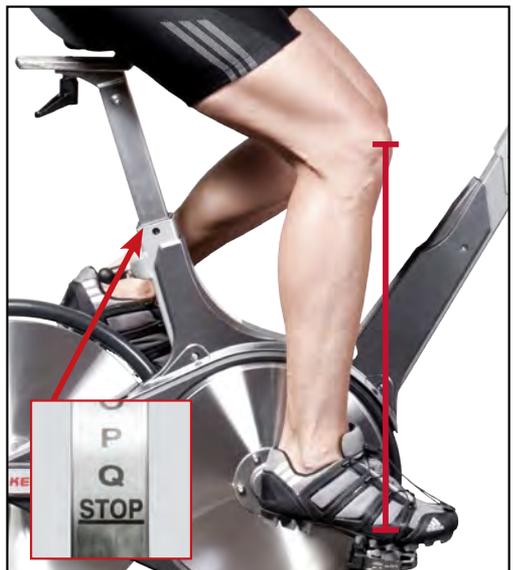
- With the seat in the correct height position. Keep both hands on the handles while checking fore and aft positioning.



**WARNING:** This adjustment shall not exceed the mark "STOP" indicating minimum insertion depth for safe operation. See inset image, below right.

- Sitting on the saddle with your feet on the pedals in the three-o'clock and nine-o'clock position (left or right crank arm in line with the link). When looking down, the front of your knee cap (patella) should be in line with the middle of the pedal at the point where the crank arm meets the pedal.

- If when looking down, you can't see your toes, the seat should be shifted back. Similarly, if you can see your entire foot, the seat should be shifted forward. Adjust, then and re-check the knee cap alignment.



# M SERIES CARDIO CALIBRATION

All M Series cardio equipment is calibrated with a tool at the factory and there is no need to calibrate, unless a component associated with the resistance mechanism or computer require service. For more information visit: [www.keiser.com/service](http://www.keiser.com/service), or contact the Keiser service department at 1-800-888-7009 | 559-256-8000 | [service@keiser.com](mailto:service@keiser.com).

## COMPUTER BATTERY REPLACEMENT

To test the computer batteries rotate the crank arm until the computer “wakes up”. If the battery is low, a “LO-BA” will display in the Odometer (ODO) display at the bottom of the computer. To replace the batteries unscrew the back of the computer housing and remove old AA batteries and replace with a set of two new AA batteries. If you have multiple machines, we suggest all computer batteries be changed at the same time.



**WARNING:** Do not burn batteries. Do not place batteries in waste bins. Batteries must be disposed of by a Licensed Waste Collector. Battery leakage is extremely caustic and contact with bare skin should be avoided. In the event that battery leakage comes in contact with your skin, flush the area for 15 minutes with copious amounts of water and seek medical attention. Gloves, overalls, safety shoes and eye protectors must be used when handling leaking batteries. Follow manufacturer’s recommendations when handling and maintaining batteries.



**WARNING:** The safety level of the equipment can only be maintained if it is regularly inspected for damage and wear. Immediately replace defective parts and do not use the equipment until all repairs have been completed and thoroughly tested.



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**FOR INFORMATION ON THE RESISTANCE SYSTEM & M SERIES COMPUTER, VISIT [MSERIES.KEISER.COM](http://MSERIES.KEISER.COM).**

# PREVENTATIVE MAINTENANCE CHART

## Every Class

**Member thoroughly inspect each TBT (1)**

**Member wipe off sweat (2)**

## Weekly For The 1st Month

**Check and re-torque eccentrics, crank arms, handles, pedals, foot rests & main frame mount nuts (3)**

## Weekly

**Thoroughly inspect each TBT (4)**

**Clean with warm water and soft towel (5)**

**Check computer for low battery indication (6)**

## Monthly

**Check and re-torque eccentrics, crank arms, handles, pedals, foot rests & main frame mount nuts (3)**

**Wax those areas most in contact with sweat (7)**

**Lubricate adjustment handle threads (8)**

1. Each member should thoroughly inspect each TBT to make sure it is in safe and proper working order.
2. Each member should wipe off their own sweat after each class with a soft towel (their towel) or cloth.
3. Check and re-torque the screws holding the eccentrics (to 47 Nm or 35 ft-lbs), crank arms (to 47 Nm or 35 ft-lbs), handles (to 23 Nm or 17 ft-lbs). Check and re-torque the pedals (to 47 Nm or 35 ft-lbs). Check and re-torque the foot rests (to 47 Nm or 35 ft-lbs). Also, check and re-torque the nuts securing the main frame to the bottom frame (to 47 Nm or 35 ft-lbs).
4. Thoroughly inspect each TBT to make sure it is in safe and proper working order. Pay particular attention to loose screws, nuts & bolts, crank arms, eccentrics, pedals, handles, saddle, T-Handle adjustment, etc.
5. Clean with warm water and a soft cloth the parts of the cycle that are dirty or come in contact with sweat. Do not use household or industrial cleaners, because many of them are designed to clean, glass, tile, porcelain, and greasy or oily surfaces and can destroy the protective finish of the paint. If you need to use soap, use a mild dish washing soap followed by an automotive treatment such as Meguiar's Quick Detailer Mist and Wipe.
6. Check batteries. IF YOU HAVE MULTIPLE MACHINES, WE SUGGEST ALL COMPUTER BATTERIES BE CHANGED AT THE SAME TIME (2 AA batteries per bike). See "Computer Battery Replacement" section for instruction.
7. It is not necessary to wax the entire machine monthly, but it is very important to wax those areas that come in contact with sweat and that are the most vulnerable to rust. Use an easily applied automotive treatment such as Meguiar's Quick Detailer Mist and Wipe. Please note that failure to apply a coat of wax to high sweat areas at least once a month will decrease paint and frame life due to corrosion and will void the warranty.
8. Remove, clean, and lubricate the threads on the adjustment handle. Since both the threaded stud and the threaded nut are stainless steel it is very important to keep the threads lubricated with a heavy grease, preferably white or clear in color, such as Hydrotex MT-55 or Dow Corning 111.

## **KEISER M SERIES CARDIO WARRANTY TERMS**

The Keiser M3 TBT is warranted to the original purchaser, to be free from defects in materials and workmanship.

### **NOT COVERED UNDER WARRANTY**

- Loss caused by accident, abuse, improper use or neglect.
- Improper maintenance.
- Improper assembly by the purchaser.
- Failure to follow instructions as stated in any of the manuals provided with the Keiser M3 TBT

The warranty terms begin with the date of original delivery to be evidenced by appropriate shipping documents. Any alteration of the equipment so listed without express written consent of Keiser shall constitute a waiver by the buyer of this warranty. This warranty does not cover other brand name products distributed, but not manufactured by Keiser, which are subject to their respective manufacturers warranties. During the warranty period, warranted defects will be repaired at Keiser, Fresno California, or the defective part will be replaced, at the option of the manufacturer, without charge for either parts or labor to repair the defective part. This warranty does not cover the removal of the defective part and installation of the repaired part. All claims under the warranty must be in writing and authorization obtained from the manufacturer, Keiser, to return the defective parts for exchange. Defective parts must be returned to Keiser. The customer is responsible for all transportation costs on returned items to and from the point of manufacture.

Users, agents, or anyone directing the use of said equipment shall determine the suitability of the product for its intended use, and said parties are specifically put on notice that they shall assume all risk and liability in connection herewith.

The foregoing warranties are in lieu of and exclude all other warranties not expressly set forth herein, whether expressed or implied by operation of law or otherwise, including but not limited to any implied warranties of merchantability or fitness. Keiser shall in no event be liable for incidental or consequential losses, damages or expenses in connection with exercise products. Keiser's liability hereunder is expressly limited to the replacement of parts not complying with this warranty or, at Keiser's election, to the repayment of an amount equal to the purchase price of the parts in question. Keiser is not responsible for labor charges incurred in the replacement of defective parts. Keiser may, at its discretion, require the return of all defective parts. The customer is responsible for all transportation costs on warranted items to and from the point of manufacture. Replacement products are warranted for the balance of the original warranty period.

All Keiser equipment sold by Keiser distributors, dealers, or salespeople must be registered for warranty purposes. The warranty registration form must be filed within seven days of the sale or installation. Keiser equipment exported out of the US or Canada will be void of warranty unless purchased directly through a Keiser international distributor or dealer in the country of installation, or direct from Keiser's international division.

If you experience any problems please contact our Service Department  
phone: 559.256.8000 | toll free: 1.800.888.7009 | email: [service@keiser.com](mailto:service@keiser.com)

**KEISER CORPORATION**  
**2470 S. CHERRY AVE.**  
**FRESNO, CA. 93706**

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**THE POWER IN HUMAN PERFORMANCE**