# **Owner's Manual**

Model No. 16207879500-1 Johnny G

- Assembly
- Operation
- Adjustments
- Parts
- Warranty

# **CAUTION:**

Read and understand this manual before operating unit





Retain For Future Reference

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Thank you for purchasing our product, please save these instructions. Please do not perform or attempt any customizing, adjustments, repair or maintenance that is not described in this manual.



# CONGRATULATIONS ON YOUR NEW BIKE AND WELCOME TO THE SPIRIT FAMILY!

Thank you for your purchase of this quality stationary bike trainer from Dyaco Canada Inc. Your new bike was manufactured by one of the leading fitness manufacturers in the world and is backed by one of the most comprehensive warranties available. Through your dealer, Dyaco Canada Inc. will do all we can to make your ownership experience as pleasant as possible for many years to come. The local dealership where you purchased this bike is your administrator for all Dyaco Canada Inc. warranty and service needs. Their responsibility is to provide you with the technical knowledge and service personnel to make your experience more informed and any difficulties easier to remedy.

Please take a moment to record the name of the dealer, their telephone number, and the date of purchase below to make any future needed contact easy. We appreciate your support, and we will never forget that you are the reason we are in business. Please go to <a href="https://www.dyaco.ca/warranty.html">www.dyaco.ca/warranty.html</a> and complete the online warranty registration.

Yours in Health, Dyaco Canada Inc.

Name of Dealer	
Telephone Number of Dealer_	
Purchase Date	

# **Product Registration**

#### **RECORD YOUR SERIAL NUMBER**

Please record the Serial Number of this fitness product in the space provided below.

<b>Serial Number</b>	ſ

#### REGISTER YOUR PURCHASE

Please visit us at www.dyaco.ca/warranty.html to register your purchase.

# **BEFORE YOU BEGIN**

Thank you for choosing the Johnny G bike. We take great pride in producing this quality product and hope it will provide many hours of quality exercise to make you feel better, look better, and enjoy life to its fullest. It is a proven fact that a regular exercise program can improve your physical and mental health. Too often, our busy lifestyles limit our time and opportunity to exercise. The Johnny G bike provides a convenient and simple method to begin your assault on getting your body in shape and achieving a happier and healthier lifestyle. Before reading further, please review the drawing below and familiarize yourself with the parts that are labelled.

Read this manual carefully before using the Johnny G bike. Although Dyaco Canada Inc. constructs its products with the finest materials and uses the highest manufacturing and quality control standards, there can sometimes be missing parts or incorrectly sized parts. If you have any questions or problems with the parts included with your Johnny G bike, please do not return the product. Contact us **FIRST!** If a part is missing or defective, call us toll-free at 1-888-707-1880. Our Customer Service Staff are available to assist you from 8:30 A.M. to 5:00 P.M. (Eastern Time) Monday through Friday. Be sure to have the name and model number of the product available when you contact us.

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# SAFETY PRECAUTIONS

# IMPORTANT SAFETY INFORMATION READ ALL INSTRUCTIONS BEFORE USING THIS BIKE

**CAUTION:** Before starting any exercise program, it is recommended that you consult your physician.

This exercise equipment was designed and built for optimum safety. However, certain precautions apply whenever you operate a piece of exercise equipment. Be sure to read the entire manual before the assembly and operation of this machine. Also, please note the following safety precautions:

- 1. Read the OWNER'S OPERATING MANUAL and all accompanying literature and follow it carefully before using your bike.
- 2. It is the responsibility of the facility to ensure that all users of the bike exerciser are adequately informed of all precautions.
- 3. If dizziness, nausea, chest pains, or any other abnormal symptoms are experienced while using this equipment, STOP the workout at once. CONSULT A PHYSICIAN IMMEDIATELY.
- 4. Inspect your exercise equipment prior to exercising to ensure that all nuts and bolts are fully tightened before each use.
- 5. The bike must be regularly checked for signs of wear and damage. Any part found defective must be replaced with a new part from the manufacturer.
- 6. Fitness equipment must always be installed on a flat surface, do not place the unit on a loose rug or uneven surface. It is recommended to use an equipment mat to prevent the unit from moving while it is being used, which could possibly scratch or damage the surface of your floor. Keep the bike exerciser indoors, away from moisture and dust.
- 7. No changes must be made which might compromise the safety of the equipment.
- 8. It is recommended to have a minimum of 1' safe clearance around the exercise equipment while in use.
- 9. Keep children and pets away from this equipment at all times while exercising.
- 10. Warm-up 5 to 10 minutes before each workout and cool down 5 to 10 minutes afterward. This allows your heart rate to gradually increase and decrease and will help prevent you from straining muscles.
- 11. Never hold your breath while exercising. Breathing should remain at a normal rate in conjunction with the level of exercise being performed.
- 12. Always wear suitable clothing and footwear while exercising. Do not wear loose-fitting clothing that could become entangled with the moving parts of your bike.
- 13. Always hold the handlebars when mounting, dismounting, or using the bike exerciser.
- 14. Keep your back straight when using the bike exerciser; do not arch your back.
- 15. If decals on the bike exerciser are missing or illegible, please call our customer service department toll-free at 1-888-707-1880 and order a replacement decal.
- 16. Care must be taken when lifting or moving the equipment so as not to injure your back. Always use proper lifting techniques
- 17. User weight should not exceed 350 lbs (160 kgs)

**WARNING**: Before beginning any exercise program, consult your physician. This is especially important for individuals over the age of 35 or persons with pre-existing health problems. Read all instructions before using any fitness equipment. We assume no responsibility from personal injury or property damage sustained by or through the use of this product.

# SAVE THESE INSTRUCTIONS

# IMPORTANT SAFETY INSTRUCTIONS

The following fitness safeguards and operating precautions are directed to purchasers and users of the Johnny G Spirit Bike. Club Managers should ensure that members and fitness staff are trained to follow these same instructions. Failure to follow these safeguards may result in injury or serious health risk.

**WARNING** - Read all instructions before using this equipment.

- Do not operate bike on deeply padded, plush or shag carpet. Damage to both carpet and bike may result.
- Keep children under the age of 13 away from the bike. There are obvious pinch points and other caution areas that can cause harm.
- Keep hands away from all moving parts.
- Never drop or insert any object into any openings.
- Do not use outdoors.
- Do not attempt to use your bike for any purpose other than for the purpose it is intended.
- Wear proper shoes. High heels, dress shoes, sandals or bare feet are not suitable for use on your bike. Quality athletic shoes are recommended to avoid leg fatigue.
- This equipment is not intended for use by persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge unless they have been given supervision or instruction concerning use of the equipment by a person responsible for their safety.
- Ensure that the seat height adjustment knobs are properly secured and do not interfere with range of motion during exercise.
- Do not dismount the bike until both the pedals and flywheel have stopped completely. Failure to comply may lead to loss of control and serious injury.
- Listen to your body; ride at a pace that feels right for you.
- Never turn the pedal crank arms by hand.
- Stay hydrated. Drink water throughout your ride as needed.
- Stay in control by executing all movements at a slow pace before attempting to increase your speed. Do not exercise at high speeds and intensity without having initially established a baseline fitness level and obtaining a medical clearance from your physician. Focus on form, posture and establishing a controllable pace before attempting any high-intensity short-duration sprints.
- Never place your feet in any position on the bike other than the pedals.

# **SAVE THESE INSTRUCTIONS - THINK SAFETY!**

# IMPORTANT OPERATION INSTRUCTIONS

- **NEVER** operate this bike without reading and thoroughly understanding the results of any operational change you request from the computer.
- Understand that changes in resistance do not occur immediately. Set your desired resistance on the console and release the adjustment key. The console will change the resistance gradually.
- Use caution while participating in other activities while pedalling on your bike, such as watching television, reading, etc. These distractions may result in serious injury.
- Always hold on to a handrail or hand bar while making control changes (resistance, etc.).
- Do not use excessive pressure on console control keys. They are precision set to function properly with little finger pressure. Pushing harder is not going to make the unit go faster or slower. If you feel the buttons are not functioning properly with normal pressure, contact your dealer.

# WARNING & COMMUNICATION LABELS

The following pages show examples of Johnny G Spirit Bike warning labels and communication stickers placed on the equipment as part of the manufacturing process. It is critical that owners maintain the integrity and placement of these stickers. If you find any stickers missing or damaged, contact your local dealer or distributor for a replacement.

#### NOTE: STICKERS AND LABELS ARE NOT SHOWN TO SCALE



**Exercise Warning Decal** 





# **ASSEMBLY & SETUP**

- 1. Position the shipping carton, so the Heavy End is located at the bottom.
- 2. Cut the straps, then lift the box over the unit and unpack. Remove all parts from the shipping carton and foam inserts, and verify that all parts are included in your shipment:
- 3. Locate the hardware package. Remove the tools first. Remove the hardware for each step as needed to avoid confusion. The numbers in the instructions that are in parenthesis (#) are the item number from the assembly drawing for reference.

**NOTE:** All tools required to assemble the bike are included within the packaging, except for a Rubber Mallet, which is recommended when assembling the pedals onto the bike.

**CAUTION:** Damage to the bike during assembly is not covered as part of the limited Spirit Fitness warranty. Take care not to drop or lean the bike on its side. Carefully stand the bike up in the normal upright position on a stable surface so it will not tip over during assembly.

Protect the environment by not disposing of this product with household waste. Check your local authority or approved waste center for recycling advice and facilities.

## **TOOLS NEEDED:**

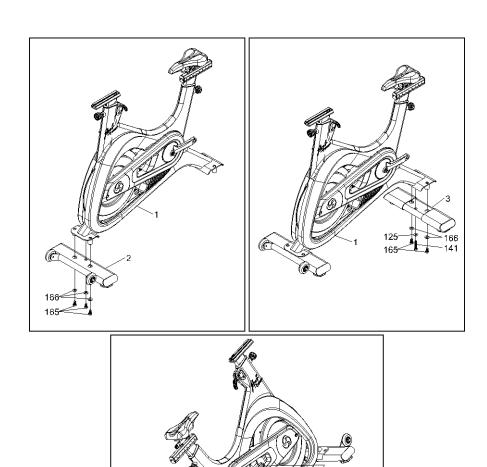
#155. L M4 Allen Wrench (1 pc)

#157. 17mm Wrench (1 pc)

#158. 13/15 Wrench (1 pc)

#159. L M2.5 Allen Wrench (1 pc)

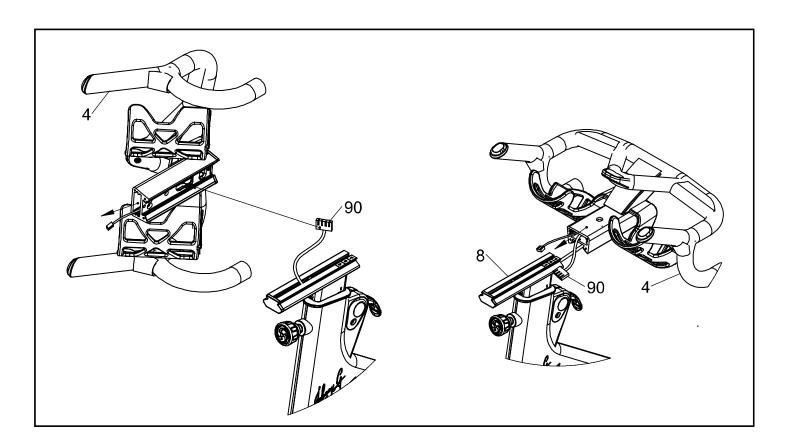
#167. 19mm Wrench (1 pc)



HARDWARE FOR STEP 1				
PART	TYPE	DESCRIPTION	QTY	
165	Short Hex Head Bolt	M12×1.25×20L	5	
141	Long Hex Head Bolt	M10×P1.5×55L	1	
166	Flat Washer	Ø12.7 × Ø26 × 2T	5	
125	Flat Washer	Ø10ר25×1.5T	1	
54	Pedals Set	Pedals L/R	1	

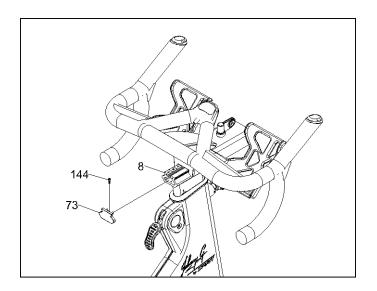
**STEP 1: ASSEMBLY OF STABILIZERS AND PEDALS** 

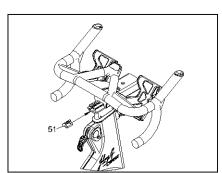
- 1. Assemble FRONT STABILIZER (2) to MAIN FRAME (1) using THREE HEX BOLTS (165) and three WASHERS (166) with 19MM WRENCH (167).
- 2. Assemble REAR STABILIZER (3) to MAIN FRAME (1) using 2 SHORT HEX BOLTS (165), 1 LONG HEX BOLT (141), 1 WASHER (125) and 2 WASHERS (166) with 19MM WRENCH (167). The LONG HEX BOLT (141) and WASHER (125) are used in the center hole and tightened with 17MM ALLEN WRENCH (157).
- 3. Assemble PEDALS (54) to bike using 15MM WRENCH (158). If using torque wrench, tighten to 30-35 lbf•ft.

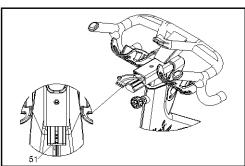


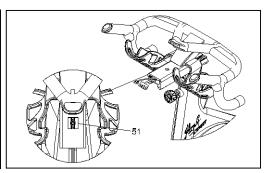
### **STEP 2: HANDLEBARS**

- 1. Run COMPUTER CABLE (90) thru opening at bottom of HANDLEBARS (4) and out of the front.
- 2. Slide HANDLEBAR ASSEMBLY (4) onto HANDLEBAR POST (8). While assembling, simultaneously pull COMPUTER CABLE (90) out of front to prevent wire from being jammed. Wire connector should protrude from front of handlebars when fully installed.







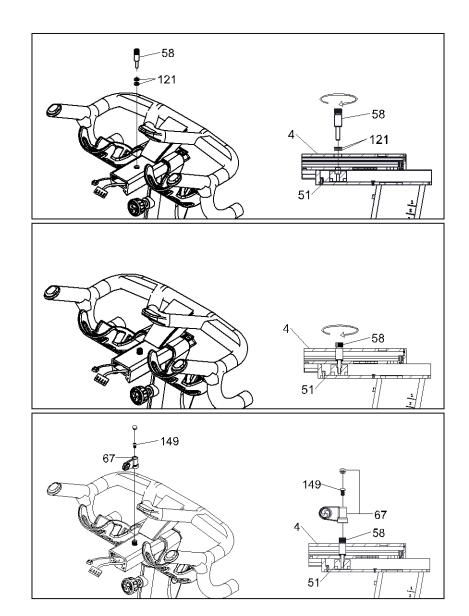


HARDWARE FOR STEP 3			
PART TYPE DESCRIPTION QTY			
73 Handlebar End Cap		1	
144 Socket Head Cap Bolt		M3xP0.5x10L	1
51	Handlebar Anchor		1

**STEP 3: HANDLEBARS LOCK** 

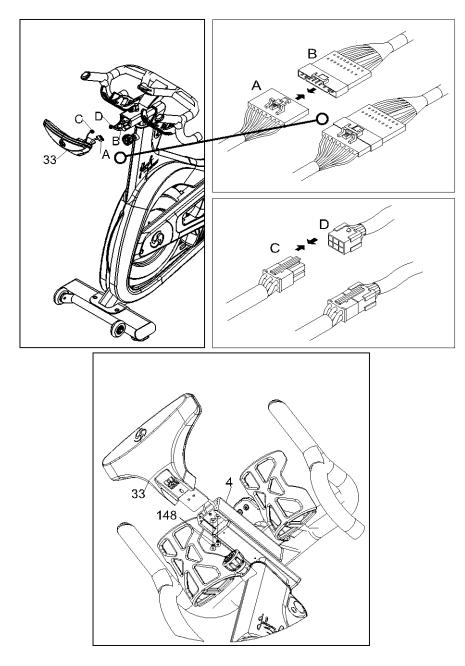
Install HANDLEBAR END CAP (73) onto end of HANDLEBAR POST (8) and secure with SOCKET HEAD CAP BOLT (144) using 2.5 MM ALLEN WRENCH (159).

- 1. The HANDLEBAR ANCHOR (51) has been pre-installed into ALUMINUM SLIDE RAIL (8).
- 2. Using a screwdriver or Allen Key, slide anchor forward to front endcap. Looking through handlebar hole slide handlebar forward to align with screw hole in anchor.



HARDWARE FOR STEP 3			
PART	TYPE	DESCRIPTION	QTY
58	Shaft		1
67	Adjusting Lever		1
149	Button Head Socket Bolt	M6 × 10L	1
121	Flat Washer	Ø1/4" × 13 × 1.0T	2
	Sealing Cap		1

- 4. Slide handlebars assembly so that HANDLEBAR ANCHOR (51) is visible thru hole on ALUMINUM SLIDE RAIL (9).
- 5. Thread ADJUSTING AXLE (58) through hole into HANDLEBAR ANCHOR (51) with 2 FLAT WASHERS (121). Tighten fully, using LEVER (67) as a tool if necessary.
- 6. Install LEVER (67) in a 12 o'clock position. Attach LEVER (67) to ADJUSTING AXLE (58) using BUTTON HEAD SOCKET BOLT (149) using 4MM ALLEN WRENCH (155).
- 7. Install plastic cap to seal lever.



HARDWARE FOR STEP 4			
PART	TYPE	DESCRIPTION	QTY
148 Flat Heat Countersunk Bolt		M6×P1.0×10L	2

### **STEP 4: CONSOLE**

- 1. Connect MAIN WIRE (A & B) and CONTROL WIRE (C & D) to CONSOLE (33).
- 2. Attach CONSOLE (33) to ALUMINUM SLIDE RAIL (4) secure using 2 FLAT HEAD COUNTERSUNK BOLTS (148) using 4MM ALLEN WRENCH (155).

NOTE: Before pedalling the bike, remove the Flywheel shim protecting the magnet spacing. Locate shim hang tag and pull-on cord removing shim. Keep shim, do not discard. Use shim when needing to transport bikes over long distances.

# **TESTING THE BIKE**

Use this checklist to perform the bike test procedure.

Recheck all the bolts and make sure they are all tightened to the proper torque specification (if indicated) and no parts are missing.
Test the seat post to make sure it moves freely, and you can lock in at different positions.
Check the seat to make sure it is level and tight and does not rotate around or tilt. Tighten and adjust as needed.
Test the horizontal seat adjustment for movement front to rear and check it by setting it at different settings.
Adjust seat post to your needs. Ride/test the bike for proper operation according to this owner's manual.
<b>CAUTION</b> : The flywheel will continue to rotate, and the crank arms and pedals will rotate with the flywheel. Pressing down on the red handle will apply the brake if you need to stop quickly.
Adjust seat post and handlebar post to your needs. Ride/test the bike for proper operation according to this owner's manual.
Pedal the bike at a moderate pace and test for proper and smooth resistance changes while pressing the + and – resistance buttons.
When the testing is complete, tip the bike forward using the handlebars and roll it on a smooth surface to the final location and adjust the levelling feet, so the bike is stable.

# **INSTRUCTIONS & ADJUSTMENTS**

Your Johnny G Spirit Bike will be an exhilarating indoor cycling experience. The bike allows the user full control over the magnetic resistance by simply pressing on the + and - Keys, located at two locations; either the Forward Control Pad or the Handlebars Shifters. Providing two resistance adjustment locations was purposely done for the rider's convenience. The Forward Control Pad is ideal for when the rider is in the saddle and hands are in the home position or position-one. The Handlebar Shifters are positioned for riders that are out of the saddle and going through challenging climbs.

Typically, lower resistance levels enable you to pedal at a faster pace, placing increased demand on the cardiovascular system. Higher resistance levels will normally deliver a greater muscle strength and endurance workout at lower RPM. RPM rates vary dramatically based on the type of ride you are doing (endurance vs. strength). The Johnny G Spirit Bike is capable of displaying pedal rates up to 150 RPM. If unsure how to properly use the bike's RPM capabilities and resistance system adjustments, seek help from a qualified indoor cycling instructor or take a class at your local indoor cycling facility as they will teach you how to ride properly and safely.

Additionally, the bike offers seat and handlebar adjustments, allowing the bike to be configured to each user's comfort zone. This section provides the instructions for making seat adjustments, handlebar adjustments, pedal strap adjustments, and for controlling resistance.

PLEASE NOTE: In a club setting, we recommend each user to initially be properly fitted on the bike by a certified indoor cycling instructor.

# Seat Adjustments

# Proper bike setup gives you a more comfortable ride and reduces your risk of injury.

Proper seat height helps ensure maximum exercise efficiency and comfort while reducing the risk of injury. Adjust the seat height so that the knee joint is slightly flexed when the extended leg is at the bottom of the pedal stroke. Once the proper height has been achieved, adjust the seat forward or back so that when the feet are in the 3 o'clock and 9 o'clock

positions, the forward knee is directly over the pedal axle. Recheck the seat height again after making the fore/aft adjustment, as moving the seat forward backward can have the same effect as moving it higher or lower.

# To adjust the seat height:

Dismount the bike. Turn the seat height pop-pin counterclockwise and pull out on the pin to release it from its current preset location. Raise or lower the seat to the desired height, then gently release the pop-pin. Raise or lower the seat slightly, if necessary, until the pop-pin engages a preset hole. Turn the pop-pin clockwise to secure. Be sure to tighten firmly.

## To adjust seat fore/aft:

Loosen the seat fore-and-aft tension handle by turning the handle counterclockwise. Move the handlebar forward or back to the desired position, then tighten the tension handle by turning clockwise. Be sure to tighten the handle firmly.



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# **Handlebar Adjustments**

Position the handlebar at the same height as your seat, or higher if you feel any discomfort in your back. The Johnny G Spirit Bike allows for adjustment handlebar height. Additionally, the bike allows for fore and aft adjustment of the handlebar.

## To adjust the handlebar height:

Loosen the handlebar height tension handle by turning the handle counterclockwise. Raise or lower the handlebar to the desired height, then tighten the tension handle by turning clockwise. Be sure to tighten firmly.

### To adjust the handlebar fore/aft:

Loosen the handlebar fore-and-aft tension handle by turning the handle counterclockwise. Move the handlebar forward or back to the desired position, and then tighten the tension handle by turning clockwise. Be sure to tighten the handle firmly.



# **Pedal Strap Adjustment**

### To adjust the pedal straps:

Place the balls of your feet securely in the toe cages, with the ball of the foot (or the widest part of your shoe) over the center of the pedals. As you pedal, concentrate on keeping feet flat, which enables a more powerful pedal stroke. The front of the shoe may not completely fill the toe cage.

**Note:** The pedal straps should be adjusted to hold the foot snugly to the pedal.



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# **Resistance Control**

The bike allows the user full control over the magnetic resistance by simply pressing on the + and – Keys, located at two locations; either the Forward Control Pad or the Handlebars Shifters. Providing two resistance adjustment locations was purposely throughout for the rider's convenience. The Forward Control Pad is ideally positioned for when the rider is in the saddle and hands are in home position or position-one. The Handlebars Shifters are positioned for riders that are out of the saddle and going through tough climbs.



Resistance Forward Control Panel



Resistance Handlebar Shifters

NOTE: In case of emergency, you may press directly down on the Dynamic Braking Handle to bring the flywheel to an abrupt stop.



Dynamic Braking Handle

# TRAINING INFORMATION

This section will provide very basic information regarding the structure of an indoor cycling workout.

**IMPORTANT:** The user should be aware of the features, functions and proper operation of the bike **before** using the bike for the first time. If unsure how to properly use the bike's RPM capabilities and resistance system adjustments, seek help from a qualified indoor cycling instructor or take a class at your local indoor cycling facility as they will teach you how to ride properly and safely.

## **Before Beginning**

Be sure the seat, handlebar and pedal straps are adjusted for your body size and comfort before beginning your workout. Consult your physician before starting this or any other exercise routine. Discontinue any exercise that causes you discomfort, and consult a medical expert.

# Warm-Up

Once you are in position and sitting on the bike with your hands in a comfortable position on the handlebar, slowly begin pedalling. A gradual warm-up prepares the muscles and cardiovascular system for a more intense workout and helps prevent potential injuries from occurring. Your warm-up should be sufficient once your breathing rate begins to increase and you begin to perspire lightly. The warm-up period should last about five minutes.

### **Work Out**

A brisk and rhythmic workout will train the muscles and cardiovascular system to perform at a higher efficiency. The key is to exercise aerobically, typically, at 60% – 80% of your maximum heart rate.

### **Cool-Down**

Slow and relaxing activity after a workout allows the muscles and cardiovascular system to gradually return to a resting level.

# **Dismounting Bike**

**WARNING:** The flywheel momentum of the bike will keep the pedals turning even after the user stops pedalling, or in the event the user's feet slip off the pedals. DO NOT DISMOUNT THE BIKE OR REMOVE YOUR FEET FROM THE PEDALS UNTIL BOTH THE PEDALS AND THE FLYWHEEL HAVE STOPPED COMPLETELY.

Failure to comply may lead to loss of control and serious personal injury.

You may stop the bike using any of the following methods:

- Pedal slowly until the pedals come to a complete stop.
- Push down on Push Brake System handle until the pedals come to a complete stop.

The Johnny G Spirit Bike is compatible with ANT+ and Bluetooth enabled technologies including: Garmin™, MyZone™, and Strava™. Download and connect according to their individual app instructions. The bike also connects with leaderboards such as those from MyZone or Spirit Bike is compatible with ANT+ and Bluetooth enabled technologies including: Garmin™, MyZone™, and Strava™.

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Confirm that your bike is configured with the latest version of console software. Follow the link or copy and paste into a browser: <a href="https://www.johnnygspiritbike.com/connectivity">https://www.johnnygspiritbike.com/connectivity</a> The website provides documents to check the version of software in your bike. Updating your software is recommended to have the best console functionality.



# Johnny G Method The Ride Of Truth





# **WARM-UP MODE**

The WARM-UP MODE is the most basic function of the Johnny G Spirit Bike. Riders can use this mode to prepare themselves for a class or when just pedalling to warm up for other activities. This mode is the first function that occurs when the console awakens from sleep mode. Riders can stay in this mode for as long as desired.

Upon console awakening, the words WARM UP will flash three times, followed by PRESS PLAY KEY when ready to go. The Home Screen appears displaying Level, RPM, Time, Distance, Watts, Heart Rate. The console continues WARM-UP Mode until PLAY KEY is pressed.







NOTE: This cycle continues until PLAY KEY is pressed.

- During WARM UP mode, users can adjust the level of intensity.
  - Press + or KEY on either Forward Control Pad or handlebar ends to adjust resistance.
- WARM-UP Mode will last as long as the user stays in this mode.
- WARM-UP Mode will NOT display a summary screen. ONLY the program screens displays a summary.

## **MANUAL MODE**

The Manual Mode is another basic function of the Johnny G Spirit Bike. The Manual Mode is also the HR Zone program. Once HR is paired during the Warm-Up Mode, HR performance and zones will be tracked. Riders can use this mode for a complete workout or prepare themselves for other activities. The only difference between this mode and the Warm-Up Mode is that the rider will have a workout summary of their effort. At any time during Warm-Up Mode, press **Play Key** to enter Manual Mode. Pressing the **Play Key** displays *ENJOY THE RIDE* followed by the display screen. Any Time and Distance data collected during Warm-Up Mode will be erased.

- Press + or Key on Forward Control Pad or handlebar ends to adjust resistance.
- When ride is completed at desired Time, press Play Key. Current data will pause.
- Screen displays END WORKOUT, then NO will flash on display.
- Press either + or Key to toggle between NO and YES for desired action.
- Pressing Play Key while NO will revert to Manual Mode.
  - Time, Distance, Intensity and data will continue from moment data was paused.
  - o END WORKOUT function ends the workout.

#### If selecting YES:

- Screen displays WORKOUT RESULTS, followed by Summary Data: TIME in minutes, DISTANCE in miles/km's, WATT AVG, WATT PEAK, SPEED AVG in miles/km's, SPEED Peak in miles/km's, HR AVG, HR PEAK, RPM AVG, RPM PEAK.
  - Pressing + or Keys will scroll through Summary Data screens.
  - Summary data screens will scroll every 5 seconds if + or Keys are NOT pressed.
  - Pressing Play Key will reset display and revert to Warm Up Mode.







# **PROGRAMS**

**Programs Mode** provides the opportunity to pair a HR strap to the console and access to the training programs contained within the Johnny G Spirit Bike.

If just starting a ride and in the Warm-Up Mode press and hold the Play Key for 3 seconds, and the first program option will display, *PAIR HR DEVICE*. PAIR HR DEVICE is used to pair a HR strap. Once a HR strap is paired the HR Zone program will automatically be started. The HR LED light in the lower right of the console will illuminate.

#### Programs:

- Pair HR Device
- Power Zone with FTP Test
- Lap Program
- Exi

Descriptions for each of the programs are located on the program page. With the exception of the HR Zone program, the default setting for each program is *OFF* or *DISABLED*. Change their setting to *ON* or *ENABLED*. The HR Zone program has a default setting to *ON*.

## PAIR HEART RATE DEVICE

HR Zone program requires connection of a Heart Rate Strap prior to using program. Connecting the console to a Heart Rate Strap is accomplished by entering Programs Mode during the Warm-Up Mode.

If user puts on a HR strap after leaving the Warm-Up Mode and has not paired HR, console reset will be needed.

- While in the Warm-Up Mode, press and hold Play Key for 3 seconds.
- PAIR HR DEVICE displays on console. Press Play Key to scan for HR devices. The console may display SCAN HR DEVICES up to 12 times.
- If sensors are detected, the number of sensors displays.
- If needed, reset console by simultaneously holding + Key and Play Key for 3 seconds.

NOTE: Along with each device displayed is a number indicating the distance each device is from the console. The number is in decibel metres and may display as 65DBM. Usually, the smaller number is your chest strap, but not always. If another rider is wearing a chest strap in front of you, their device may be closer to your console than you are. Ideally, the rider should be familiar with their MyZone SN# located on the back of the MyZone module or their device's ANT+ number. This will simplify selecting the appropriate HR strap.

### for example:

2 SENSORS FOUND. Press + Key if the device shown is not your own.

- MYZONE-12345678 (SN# on your MYZONE device displays). NOTE: Ideally, user should need to be familiar SN # of their MYZONE module, located on the backside.
- ANT+ 12345 (ID # for your ANT+ device displays).
- After selecting sensor, press **Play Key** to connect heart rate strap to console.
- *ENTER AGE* displays and default age 35 flashes. Press **+ or Key** to adjust age. Press **Play Key**.
- MAX HR displays and estimated max HR flashes. Press **Play Key** to accept. NOTE: Calculation: 208 (0.7 x age) = MHR. Press + or Key to adjust MHR only if actual is known or wanting to adjust MHR down. Do not adjust up without medical clearance.
- WARM-UP MODE flashes 3 times.
- PRESS PLAY KEY, WHEN READY TO GO displays on console.
- Console HR LED light illuminates on the right side of the console.
- See page Power Training Zones for a full description of HR colour zones.









If zero sensors found:

- Re-scan displays.
- Dampen HR contacts on strap if dry.
- Press Play Key to re-scan.
- If not wanting to connect a heart rate strap, press + Key until screen displays DO NOT CONNECT.
- Press **Play Key**, and screen displays *WARM* UP, flashing 3 times, then reverting to Warm Up Mode. The HR on lower display will remain blank.
- After 30 seconds, Warm-Up Mode recycles and flashes 3 times, then continuing with home screen.
- Press **Play Key** when ready to go and begin a ride without HR tracking.

## HR ZONE PROGRAM

HR Zone Program estimates your Maximum HR (MHR) when riders' age is entered. The program will track the Time spent within the 5-heart rate zones; less than 59% MHR to greater than 90% MHR. The console includes an LED light that will provide a visual guide to the riders' effort. The Time spent in each of the HR Zones displays in the workout summary.

Console HR LED colour changes based on user percent of max HR (%MHR). The HR LED is on right side of console. HR LED colour spectrum is as follows:

- <59% = White</p>
- 60 69% = Blue
- 70 79% = Green
- 80 89% = Yellow
- >90% = Red

#### To Start:

- Pair HR strap as instructed in manual.
- Upon pressing Play Key, HR Zone Program will begin and ENJOY THE RIDE displays followed by the home screen.
- Any data collected during Warm-Up Mode will be erased.
- Home screen will appear and display: Level, RPM, Time, Distance, Watts, Heart Rate.
- Press + or Key on either Forward Control Pad or handlebar ends to adjust resistance.

To end the workout, refer to instructions later in the manual on Ending Ride or User and the workout summary.

## **END WORKOUT**

#### To End Ride or User:

- Press and hold **Play Key** for 3 seconds, and all current data will pause.
  - o Screen displays END RIDE or USER.
  - Press either + or Key to toggle between END RIDE and USER.
  - o Press Play Key to select.

#### If **END RIDE** is selected:

- Screen displays END WORKOUT.
- NO will flash on display.
- Press either **+ or Key** to toggle between *NO* and *YES* for desired action.
- Pressing Play Key while NO displayed will revert to existing program.









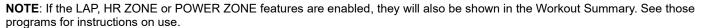




# **WORKOUT RESULTS**

Pressing PLAY KEY while YES will End Workout

- Screen displays WORKOUT RESULTS, followed by Summary Data
- Pressing + or KEY will scroll through Summary Data screens.
- Summary Data screens will automatically scroll every 5 seconds if + or KEYS are NOT pressed.
- Pressing PLAY KEY will reset display and revert to WARM UP Mode.
  - o TIME in minutes
  - o DISTANCE in miles/km's
  - WATT AVG
  - WATT PEAK
  - o SPEED AVG in MPH
  - SPEED Peak in MPH
  - o HR AVG
  - o HR PEAK
  - o RPM AVG
  - o RPM PEAK



**NOTE:** LAP, HR ZONE, or POWER ZONE results display after summary data listed above. The number of LAPS saved in memory for WORKOUT SUMMARY is the last 5 laps completed. Time displays in Time window. Distance displays in Distance window

- o LAP 1, LAP 2, LAP 3, LAP 4, LAP 5 Time and Distance.
  - If NO LAPS were recorded, this screen will not display.
  - Only the last 5 LAPS will display on separate screens if recorded.
- o POWER ZONE
- o Summary displays percent of total Time in each zone.
- o Press PLAY KEY to display results; press + KEY repeatedly to scroll POWER ZONE results.
  - WHITE ZONE TIME, PCT
  - BLUE TIME, PCT
  - GREEN ZONE TIME, PCT
  - YELLOW ZONE TIME, PCT
  - RED ZONE TIME, PCT
- Pressing PLAY KEY will revert to WORKOUT RESULTS.
- o Press + KEY to advance to next screen or happens automatically in 5 seconds.
- HR ZONE
- Summary displays the percent of Time in each zone.
- Press PLAY KEY to display results; press + KEY repeatedly to scroll HR ZONE results.
  - WHITE ZONE TIME, PCT
  - BLUE TIME, PCT
  - GREEN ZONE TIME, PCT
  - YELLOW ZONE TIME, PCT
  - RED ZONE TIME, PCT
- o Pressing PLAY KEY will revert to WORKOUT RESULTS.
- o Press + KEY to advance and repeat screens.
- Pressing PLAY KEY will reset display and revert to WARM UP Mode.

If **END USER** is selected: The User function adds another program to run concurrently. The console is capable of running All three programs at the same Time. The User feature is used to accomplish this. Once leaving the Warm-Up Mode, if the **Play Key** is pressed for 3 seconds while in any program, *END RIDE* or *USER* will display; from there any program can be ended or started.

- Press Play Key and if HR is paired then DISCONNECT HR will display.
- Press + Key to scroll through programs: Power Zone, LAP.
- Use the + Key and Play Key to activate or disable each of the programs.
  - o Refer to each of the programs pages for instructions.

NOTE: Because USER function is activated after leaving Warm-Up Mode, programs will not start with a Warm-Up. HR can ONLY be paired during Warm Up Mode. If HR is not already paired, then USER function cannot activate HR. Console reset is required.

- **Power Zone**: *USER* function can turn ON or OFF program.
- FTP Test: USER function can be used to access and run FTP tests inside the Power Zone program.
- LAP Program: USER function can enable or disable program.
  - Reset the console by pressing simultaneously and holding + Key and Play Key for 3 seconds. This action will revert to Warm Up Mode.





## **POWER ZONE PROGRAM**



POWER ZONE PROGRAM takes a rider's Functional Threshold Power or FTP in watts and tracks their performance across 5 training zones; less than 55% FTP to greater than 106% FTP. The console includes an LED light that will provide a visual guide to the riders' effort. The Time spent in each of the FTP Zones displays in the WORKOUT SUMMARY. Console can also administer an FTP test.

**NOTE:** POWER ZONE PROGRAM requires the use of users Functional Threshold Power or FTP in watts. If user Does Not have an FTP, console can administer FTP test. See FTP TEST for instructions.

Reset console by pressing simultaneously and holding + KEY and PLAY KEY for 3 seconds.

CONSOLE RESET displays on console.

Press and hold PLAY KEY for 3 seconds.

- LAP DISABLED or ENABLED displays on screen.
- Press + KEY until POWER ZONE displays.
  - Press PLAY KEY.
  - POWER ZONE OFF or ON displays.
  - Press + KEY to display POWER ZONE ON.
  - Console POWER ZONE LED illuminates on Lower Left.
  - Press PLAY KEY.
  - ENTER FTP displays and 150W flashes.
    - o Press + or KEY to adjust FTP if actual is known.
    - o Users can enter their FTP or perform FTP test.
    - o The default FTP level is 150W.
  - Press PLAY KEY.
  - RUN FTP TEST displays and NO flashes.
  - Press either + or KEY to toggle between NO and YES for desired action.
    - o Pressing PLAY KEY while NO will revert to WARM UP MODE.
    - If HR strap has not paired with console, HR DEVICE FOUND, PAIRING HR displays and YES flashes. Press PLAY KEY to accept.
  - Console POWER ZONE LED illuminates on Lower Left.
  - WARM-UP Mode flashes 3 times.
  - Press PLAY KEY when ready to go.

NOTE: Console continues in WARM UP Mode until PLAY Key is pressed.

- Upon pressing PLAY KEY, POWER ZONE Program will begin.
  - Pressing PLAY KEY displays ENYOY THE RIDE followed by home screen.
  - ANY data collected during WARM-UP Mode will be erased.
  - Home screen will appear and display: Level, RPM, Time, Distance, Watts, Heart Rate.
  - Press + or KEY on either Forward Control Pad or handlebar ends to adjust resistance.
- Console POWER ZONE LED colour changes based on user percent of max FTP.
  - Console POWER LED is on the Left side of console.
    - POWER ZONE LED colour spectrum is as follows:
      - <55% FTP = White
      - 56 75% FTP = Blue
      - 76 90% FTP = Green
      - 91 105% FTP = Yellow
      - >106% FTP = Red
    - Press + or KEY on either Forward Control Pad or handlebar ends to adjust resistance.
    - To END WORKOUT refer for instructions on ENDING RIDE OR USER and WORKOUT SUMMARY.









## **FTP TEST**

**NOTE:** A thorough Warm-Up is essential for a successful and accurate FTP test. Use consoles WARM-UP MODE for a minimum 5 minutes of steady pedalling and intervals before starting the FTP test.

- If user needs to establish their FTP, console can administer FTP test.
- During set-up process.
  - ENTER FTP displays and 150W flashes.
    - o Press + or KEY to adjust FTP if actual is known.
    - o Users can enter their FTP or perform FTP test.
  - Press PLAY KEY.
  - RUN FTP TEST displays and NO flashes.
  - Press either + or KEY to toggle to YES.
    - o Press PLAY KEY.
    - FTP TEST displays and 5 MIN flashes press either + or KEY to toggle between 5- and 20-MIN test.
    - User can take either 5- or 20-MIN FTP test. A 20-minute test is a better measure of a user's FTP. However, if choosing 5-minute test because of time constraints, attempt test again at a later date for repeatability of the results.
    - Press PLAY KEY.
    - o WARM-UP displays and 30 seconds counts down.
    - o GO Displays for 3 seconds.
    - o FTP test begins.
    - Test time counts down.
- Press + or KEY on either Forward Control Pad or handlebar ends to adjust resistance.



**NOTE:** Ideal pacing is a steady and consistent effort throughout the duration, where the average Power for the first half is also the same as the average Power for the second half. Listen to your body. Aim for a watt target that can be sustained.

- Test will continue until completed or until ended by pressing the PLAY KEY.
  - If test is terminated early, console displays TEST ENDED EARLY, then revert to FTP TEST.
  - If test is completed, console displays TEST COMPLETED with FTP watts value displayed.
    - FTP score after test = 95% of Average Watts during test.
    - Press PLAY KEY to exit, console will enter WARM-UP MODE.
    - Press PLAY KEY to return to POWER ZONE PROGRAM with FTP score entered program.
  - If desired, RESET CONSOLE by pressing simultaneously and holding + KEY and PLAY KEY for 3 seconds. This action will
    exit the rider from Power Program and revert to WARM UP.
- To END WORKOUT, refer for instructions on ENDING RIDE OR USER and WORKOUT SUMMARY.



# LAP PROGRAM

LAP PROGRAM allows riders to perform repeated measures of Time and Distance efforts. The program will compare your current LAP with your previous LAP. The rider may perform as many LAPS as desired, but only the last 5 LAPS will display in the WORKOUT RESULTS.

### **TO START**

- If beginning a riding session and HR strap has not been paired, refer to HR Pairing section in this manual and passing the Warm-Up Mode into the HR Zone program.
- Use the *USER* function as instructed in this manual to access the LAP program.
  - Press + Key to enable.
  - ENABLED setting is required for Lap Program to run and for lap results to display in the workout summary.
- Press and hold Play Key for 3 seconds to activate the LAP Program
- Home screen will appear and display: LEVEL, RPM, TIME, DISTANCE, WATTS, HEART RATE.
- **Press +** or  **Key** on either Forward Control Pad or handlebar ends to adjust resistance.
- Until Play Key is pressed to start a lap, the rider will remain in a Recovery Mode.



#### TO START LAP

- At desired Time of Recovery Mode, press PLAY KEY.
  - THIS.LAP displays on lower section of console, replacing display of Watts and Heart Rate.
    - The Time display will reset to 0.00.
    - o The Distance display will reset to 0.00.
  - LAP is being recorded.



#### TO END LAP

- Press PLAY KEY again and display temporarily goes away with END LAP displayed on lower section of console.
  - Display returns with Time paused and THIS.LAP displayed on lower section of console.
  - After 5 seconds, full display returns with total accumulated Time and Distance from beginning of program. Watts and Heart Rate return to lower section of screen.
- LAP has been recorded.
- At this point, rider is in a Recovery Phase prior to beginning another LAP or ending ride.

#### **NEXT LAP**

- If PLAY KEY is pressed again, the cycle described above will repeat.
  - THIS.LAP displays on lower section of console, replacing display of Watts and Heart Rate.
    - o The Time display will reset to 0.00.
    - o The Distance display will reset to 0.00.



- After 5 seconds, LAST LAP appears, flashing 3 times.
  - o Time and Distance will show Total Time and Distance from the Previous Lap.
  - o Words LAST LAP will flash.
  - o Display will show LAST LAP for 2 seconds, then back to THIS LAP for 5 seconds.
  - Cycle will repeat until PLAY KEY is pressed, then LAP data displays for 5 seconds, then last lap for 5 seconds, then exit to total workout display.
  - User may continue using LAP function, but the number of laps saved in memory for Workout Summary is last 5 laps completed.



To end the LAP Program and view workout results, refer to manual for complete instructions on ending workout.

- Press and hold Play Key for 3 seconds and all current data will pause.
- Screen displays END RIDE or USER with END RIDE flashing.
- Press Play Key to select.
- Screen displays END WORKOUT.
- NO will flash on display.
- Press + or Key to toggle between NO and YES for desired action.

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# MAINTENANCE MODE



MAINTENANCE MODE CONTAINS SENSITIVE SETTINGS FOR YOUR BIKES CONSOLE.

BECOMING FAMILIAR WITH THE MAINTENACE MODE INFORMATION LISTED IN THIS SECTION IS IMPORTANT FOR YOUR BIKES PROPER OPERATION.

IT IS NECESSARY THAT THE CONSOLE BE POWERED IN ORDER TO ACCESS MAINTENANCE MODE. PEDALLING ABOVE 30 RPM IS ALL THAT IS NEEDED TO ILLUMINATE CONSOLE.

MAINTENANCE MODE offers the following bike settings:

- KEY TEST
- DISPLAY TEST
- ODOMETER
- UNITS ENGLISH/METRIC
- BRAKE TEST
- RPM SENSOR
- UPDATE SOFTWARE
- LED BRIGHTNESS
- BIKE ID
- AUTO PAIR HR
- HR ZONE
- FTP TEST 5 MIN
- DEMO MODE
- CALIBRATION
- SOFTWARE VERSION
- EXIT

#### **ENTERING MAINTENACE MODE**

- It will be necessary for light to moderate pedalling of bike to Power On the console, enter MAINTENANCE MODE and change the settings.
- Simultaneously press and hold the two + keys (Forward Control Pad and handlebar end) for 3 seconds.
- Console displays MAINTENANCE MODE.
- Upon entering MAINTENACE MODE.
  - Press PLAY KEY.
  - KEY TEST displays on console.
  - Press the + KEY to scroll through different screens until the desired screen displays.
  - Press PLAY KEY to enter displayed setting.
    - Once within setting, use + or KEY adjust.
    - o Press PLAY KEY to confirm and exit some but not all settings.
    - Press the + KEY to scroll through to another screen.
    - When done, RESET CONSOLE to exit MAINTENANCE MODE.
  - Exit MAINTENANCE MODE by resetting console.
    - Press PLAY KEY and + KEY simultaneously for 3 seconds. CONSOLE RESET displays on console.

# **MAINTENANCE MODE - SETTINGS**

#### **KEY TEST**

- Purpose of this setting is to ensure that each of the buttons are signaling properly.
  - Press PLAY KEY to enter setting.
  - Press PLAY KEY and follow console direction PRESS ALL KEYS.
  - There are 5 buttons that control the bike:
    - o Forward Control Panel: + KEY, KEY and PLAY LEY.
    - Handlebar Ends: Right Side + KEY, Left Side KEY.
  - TEST PASSED displays if all Keys are communicating properly.
  - System will revert to setting screen.
  - Press + KEY for next screen or RESET CONSOLE to exit MAINTENANCE MODE.

#### **DISPLAY TEST**

- Purpose of this setting is to ensure that each of the 23 LED Panels are fully functional.
  - Press PLAY KEY to enter setting.
  - All sections of each of the 23 LED Panels will illuminate.
  - Press PLAY KEY to turn off.
  - Press PLAY KEY again.
    - o All LED Panels will illuminate the #1, then automatically cycle from #1 − 9 and A-Z.
    - LED colour lights for HR ZONE and POWER ZONE cycle through colours.
  - Display will turn off then will revert to setting screen.
  - Press + KEY for next screen or RESET CONSOLE to exit MAINTENANCE MODE.

### **ODOMETER**

- Purpose of this setting is to track the number of hours bike has been in use.
  - System will automatically display ODOMETER HRS.
  - HOLD PLAY TO RESET appears.
  - To Reset Odometer, press and hold PLAY KEY.
    - o It is useful to keep track of bike usage for routine maintenance considerations.
    - o It is useful when considering moving bike around in studio to even usage.
  - System will revert to setting screen.
  - Press + KEY for next screen or RESET CONSOLE to exit MAINTENANCE MODE.

#### **UNITS**

- Purpose of this setting is to change from ENGLISH (Imperial) to METRIC distance calculation.
  - Press PLAY KEY to change setting.
  - Default setting is ENGLISH.
    - SPD AVG and SPD PEAK in Workout Results will Only display MPH.
  - Press + KEY for next screen or RESET CONSOLE to exit MAINTENANCE MODE.

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#### **BRAKE TEST**

# BRAKE TEST CONTROLS A SENSITIVE SETTING FOR YOUR BIKES FUNCTIONALITY. PROPER TRAINING IS REQUIRED FOR THIS SETTING.

- Purpose of this setting is to test the magnetic resistance system.
  - Press PLAY KEY to enter BRAKE TEST.
  - MOTOR TEST AUTO is displayed.
    - o Press + KEY or KEY to switch to MOTOR MANUAL and LIMIT SENSOR and EXIT.
  - Press PLAY KEY.
  - LEVEL TO 20 displays, Press PLAY KEY.
    - Auto-run motor in a look from L-1 to L-20 and back to L-1.
    - o Press PLAY KEY to end, revert to BRAKE TEST.
  - MOTOR TEST MANUAL.
  - Use + KEY and KEY to move motor.
  - Press PLAY KEY to end, revert to BRAKE TEST.
    - ENCODER displays. This is ENCODER count or digital value.
    - o Upper Right of display displays LIMIT SENSOR CONDITION.
      - 1 = HOME
      - 2 = ACTIVE RANGE
      - 3 = END
    - o Lower display displays Encoder Set Value.
  - CONSOLE RESET is required to exit this test.
    - o Press PLAY KEY and + KEY simultaneously for 3 seconds

#### LIMIT SENSOR

- Limit Sensor tests for the proper movement of the flag the moves between the home sensor (S1) and the limit sensor (S2). This test is performed only when motor error has occurred.
  - o S1 OFF, S2 OFF, bottom number is encoder wheel count (0)
  - o Using the + and Keys, adjust the motor to try and change S1 to ON.
  - Pedalling resistance should change as keys are pressed.
  - o If S1 ON, stop pedalling immediately, allow console to turn off and let stand for 15 minutes minimum for memory to clear before trying bike.
  - o EXIT will revert to setting screen.
  - o Press + **Key** for next screen or reset console to exit Maintenance Mode.

### **RPM SENSOR TEST**

# RPM SENSOR CONTROLS A SENSITIVE SETTING FOR YOUR BIKES FUNCTIONALITY. PROPER TRAINING IS REQUIRED FOR THIS SETTING.

- Purpose of this setting is to test the functionality of the RPM detection system.
  - Press PLAY KEY to enter RPM SENSOR TEST.
    - o REED ON RPM displays ON or OFF.
    - o When REED Switch is Closed, displays ON.
    - o When REED Switch is Open, displays OFF.
    - o RPM displays Pedal RPM.
  - Press PLAY KEY to exit to setting screen.
  - Press + KEY for next screen or RESET CONSOLE to exit MAINTENANCE MODE.

#### **UPDATE SOFTWARE**

**NOTE:** Updating Software requires a <u>Blank</u> USB memory stick and a computer to transfer updates from service website, to USB, to console. NO other material besides the updates should be in USB drive.

- Purpose of this setting is to Update Console Software with the use of a USB inserted into console.
- USB port is located underneath the console.
- Insert USB with software update files into console
- Press PLAY KEY to display BOOTLOADER OFF.
  - Press + KEY or KEY switch to BOOTLOADER ON.
  - o Press PLAY KEY to exit out of SOFTWARE UPDATE
  - o RESET CONSOLE
  - o Press PLAY KEY and + KEY simultaneously for 3 seconds
    - If successful, displays UPDATE DONE (flashing)
    - If unsuccessful, displays UPDATE FAIL or SEARCH UPDATE, check USB for proper insertion and attempt again.
- Press PLAY KEY to exit to setting screen.
- Press + KEY for next screen or RESET CONSOLE to exit MAINTENANCE MODE.



### **LED BRIGHTNESS**

- Purpose of this setting is to change the brightness of the display.
- Press PLAY KEY to change setting.
- Default brightness setting is 2.
  - o Press + KEY or KEY switch between LED Brightness 1, 2, or 3.
  - o Press PLAY KEY to accept and exit to setting screen.
- Press + KEY for next screen or RESET CONSOLE to exit MAINTENANCE MODE.

#### **BIKE ID SETUP**

- Purpose of this setting is to allow numbering of the bike when using a Leaderboard<sup>™</sup> software, such as Performance IQ or similar.
- · Press PLAY KEY to change setting.
- Console will display ANT+ ID SETUP, and 0 on the lower console and flash.
  - o Press + KEY or KEY adjust the bike number to the desired number. Over 1,000 are available.
  - o Press PLAY KEY to accept, The bike number will stop flashing momentarily, then turn off, indicating set.
- Press + KEY for next screen or RESET CONSOLE to exit MAINTENANCE MODE.

### **AUTO PAIR HR**

The purpose of this setting is to turn ON or OFF the HR pairing function during the Warm-Up Mode. Not all cycling classes are done using HR. Facilities have the option to simplify the user set-up and facilitate getting into the Manual Mode where HR tracking is not used. The default setting is OFF.

When OFF, pairing HR can only be done using the PAIR HR DEVICE function within the Programs Mode.

- Press Play Key to change setting.
- Default HR pairing setting is OFF.
- Press + or Key switch OFF and ON.
- Press Play Key to accept and exit to setting screen.
- Press + Key for next screen or reset console to exit Maintenance Mode.

#### **HR ZONE**

The purpose of this setting is to turn ON or OFF the HR Zone LED light when a HR strap is paired. A facility may choose to deactivate this light if it were a distraction or against their class structure. If a HR strap is paired, the console maintains tracking of HR training performance regardless of the LED lights activation. The default setting is ON.

- Press Play Key to change setting.
- Default HR pairing setting is ON.
- Press Play Key to change between ON and OFF.
- Press + Key for next screen or reset console to exit Maintenance Mode.

### **FTP TEST 5 MIN**

The purpose of this setting is to allow for the changing of the coefficient used for the 5- minute FTP Test. Some testers use a coefficient of 85% in determining the watts level result for the 5-Min FTP Test. Others suggest it should be 80%. We have the ability to change the coefficient depending on the setting. The default setting is 80%.

- Press Play Key to change setting.
  - o Default 5-Min FTP is 80%.
  - The coefficient will display as 80 PCT with 80 flashing.
  - o Press + or **Key** to change between 80% and 85%.
  - o Press Play Key to accept and exit to setting screen.
  - o Press + Key for next screen or reset console to exit Maintenance Mode.

### **DEMO MODE**

**NOTE:** For the console to continually display DEMO MODE, a plug-in cord would be required that can connect with the bikes electrical board. This setting is primarily used for manufacturer Trade Shows and requires access to electricity. The required plug-in cord does not come standard with the bike and may not be available in all markets

- Purpose of this setting is to allow the console to cycle through various display screens.
- Press PLAY KEY to enter DEMO MODE and display in a loop.
  - o JOHNNY G. METHOD
  - THE RIDE OF TRUTH
  - o ENJOY THE RIDE
- Press PLAY KEY to exit to setting screen.
- Press + KEY for next screen or RESET CONSOLE to exit MAINTENANCE MODE.

#### **CALIBRATION**

CALIBRATION CONTAINS FACTORY SENSITIVE SETTINGS FOR THE BIKES RESISTANCE SYSTEM. DO NOT ENTER AND MAKE ADJUSTMENTS AS THEY WILL NEGATIVELY AFFECT THE BIKES RESISTANCE PROFILE.

#### SOFTWARE VERSION

The purpose of this setting is to display the current version of the software contained in the console. Knowing the version is necessary for customer service when providing software updates.

- Press Play Key to view the software version.
- Press Play Key to exit to setting screen.
- Press + Key for next screen or reset console to exit Maintenance Mode.

#### **EXIT**

• Pressing *EXIT* will automatically end Maintenance Mode, reset the console, and flash *JOHNNY G*. The console is ready for a new ride.

# **FUNCTIONAL POWER THRESHOLD**

## Power/Watts - What is it?

It has been said that from a coaching perspective, the Watt is the measurement of truth: why is this?

Because you either can perform at a set wattage at a given time or you can't, the response is instant. For the coach and athlete, this is very useful as it provides unequivocal feedback of what has been performed in terms of intensity, duration and total workload. This adds a level of precision to workouts not otherwise possible with other metrics such as heart rate or RPE. Power provides an objective measure of progress and is an excellent indication of fitness.

# **Functional Threshold Power (FTP)**

Functional Threshold Power is one of the key factors of your power cycling armoury, but what is it? FTP is the maximal power output that can be **sustained** for the duration of one hour, the classic time trial.

This is why FTP is important. We know that the exercise intensity at which lactate begins to accumulate - the lactate threshold (LT) - is a powerful predictor of endurance ability, this is because although cardiovascular fitness, i.e., maximal oxygen uptake (VO2max), sets the upper limit to the rate of aerobic energy production, it is the metabolic fitness indicated, LT, that determines the percentage of VO2max that can be utilized for a given period of time. Consequently, LT - especially when expressed as a power output, is the single most important physiological determinant of performance. This provides a physiologically sound basis around which to design power meter-based training programs.

# How do we Measure FTP?

There are a number of ways to test riders' FTP, but the two most commonly employed by riders are the 20-minute test and the other being much shorter at 5 minutes. Each of these has a high correlation to the 60-minute test but were developed for practical reasons of Time and ability of the majority of individuals.

### 20-minute Functional Threshold Power protocol\*

- 20 minutes easy warm-up
- 3 x 1-minute speed bursts with a minute rest between (100 RPM pedal cadence)
- 5 minutes easy
- 5 minutes all out (hard at first, but not so hard that you can't complete the effort)
- 10 minutes easy
- 20-minute steady max effort (this is the test like the previous 5-minute all-out effort, keep in control, hard but steady, you don't want to burn too many matches and get toasted in the end)
- 10 to 15-minute cool-down

#### 5-minute Functional Threshold Power protocol

- 20 minutes easy warm-up
- 3 x 1-minute speed bursts with a minute rest between (100 RPM pedal cadence)
- 5 minutes easy
- 5 minutes all out (this is the test so go hard at first, but not so hard that you can't complete the effort)
- 10 to 15-minute cool-down

# **FTP and Zones**

Zones, be it in Heart rate or describing energy systems, can mislead people into thinking that the levels are compartmentalized into set and discrete physiological responses. It has to be emphasized that there is a sliding continuum that blends across one level to the next. There is no physiological 'switch' from one level to the next but a sliding scale of effort across the identified training outcomes. We use zones because it offers coaches a framework for understanding and developing a structure for sustained improvement.

A simple way to remember it in relation to time is: "the harder you do it, the less time you can do it for."

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<sup>\*</sup> Training and Racing with a Power Meter: Allen and Coggan, 2<sup>nd</sup> Ed 2010.

# Power Training Levels - Basis for the System/Number of Levels

The industry standard has been set at 5 levels as that was felt to be the optimum number needed to represent the range of physiological responses and to describe the different types of training required/used to meet the demands of fitness-based cycling. These zones are a guide only and are used alongside other information related to an individual's fitness capacity and specific goal-based training programs.

The table shown below lists the primary physiological adaptations expected to result from training at each level. However, these will be influenced by factors such as the initial fitness of the individual, the duration of each workout, the Time taken between each interval effort, etc.

Zone	FTP%	Associated Health and Fitness Benefits	
Red	106 - >150%	Threshold Zone – Red Line zone	
		Improved VO2 threshold and higher lactate tolerance ability. For performance and athletes. High interval zone. Also known as injury zone.	
Yellow	91-105%	Aerobic Zone or the Transition Zone – Shifting ratio of fuel	
		Benefits: improved functional capacity, increases number and size of blood vessels, respiratory rate, max pulmonary ventilation, pulmonary diffusion, increase in difference in arterial – oxygen, increase in size and strength of heart.	
Green	76-90%	The Temperate Zone or Recovery Zone	
		Benefits: healthy heart, fat mobilization by moving fat from cell, fat to muscle, increase of mitochondria, increase of fat release from fat cell.	
Blue	56-75%	Healthy Heart Zone - Easiest and most comfortable "working" zone	
		Benefits: lowered blood pressure, lowered cholesterol, and decreased risk of degenerative diseases.	
White	<55%	Starting zone, also used for complete recovery	
		Basic physiological changes linked to 'warming up', 'warming down' and "recovery."	

# Power is a Useful Tool for the following reasons:

- It correctly evaluates training sessions to avoid misinterpretation.
- It verifies the workouts have been executed correctly.
- It evaluates training status and performance.
- It enables training load, overload and progression to be monitored.
- It allows the design of appropriate number and length of intervals in training.
- It helps decide and structure a race strategy or training session based on an athlete's strengths.

HR and Power are the two portions of that equation: what is being produced and at what cost to our body. Both are equally important to assess performance. If we only measure the body's response using a heart rate monitor and have no gauge of the output, we are limited in determining changes in fitness. Having output-measuring devices such as a power meter gives a lot of options for workouts and, essentially, makes every workout a test of fitness progress.

The ratio of HR/Power is a good indicator of fitness and progression in a training program. In a well-structured, progressive and appropriate training program, this ratio should get smaller, that is, a lower HR for the same power output. The caveat here is that the Heart Rate values being used to evaluate an adequate output response are founded on as accurate as possible. Personally tested Max Heart Rate and Max Threshold Heart Rate determine the correct identification of the relevant working zones.

The leading authors in Power and its application to cycling are coaches such as Andrew Coggan, Hunter Allen, Joe Friel, Chris Carmichael, and Allen Lim. These authors have led the way in developing complex algorithms, software and websites to make training with Power a reasonably simple method for the cyclists and the coach. It is their successful utilization of Power for training cycling professionals that has led the way. The Internet will bring up many fascinating articles when you enter any of the names mentioned above, as they are the leading authorities in pro riding with Power.

# **MAINTENANCE**

A regular preventative maintenance schedule with all fitness equipment ensures that products are working at an optimal condition without affecting the end user exercise experience. To assist in the maintenance regiment, it is recommended to break service into: Daily, Weekly, & Monthly activities. Details on each activity can be found in the "Maintenance" section of this document.

## **Tools**

Working on this product will require basic and/or sometimes specialty tools based on the type of service that will be performed at any time. To assist, Spirit Fitness recommends having the tools listed (Fig. 1) available when performing maintenance.

Tool	Purpose
Crank Puller	Removing cranks & pedals
Metric Allen (Hex Key) Wrench Set	Tightening or removing various Allen head screws throughout the product.
Metric Sockets Set	Tightening or removing various hex nuts used throughout the product.
Metric Open Wrench Set	Tightening or removing various hex nuts used throughout the product.
Square Drive Ratchet Wrenches	To use in conjunction with Allen head and or hex socket sets.
Torque Wrench	Tightening various critical bolts throughout the product to specific torque specifications.
Phillips Head Screwdriver Set	Tightening or removing various Phillips head screws used throughout the product.
Flat Head Screwdriver Set	Prying off specific shrouds from wedged locations.

Fig. 1

# Moving & Levelling

#### To move the bike to a new location:

Lift the bike from the rear and use the front wheels (located on the front leg, below the handlebar) to roll the bike from one location to another.

#### To level the bike:

Use the four levelling adjusters (located on the underside of the front and rear legs) to compensate for uneven floor surfaces.

# **Preventive Maintenance**

Perform regular scheduled preventive maintenance procedures to maintain your Johnny G bike in serviceable condition.

# **Daily Maintenance**

The life of your product will be determined by how consistently you perform the daily maintenance procedures. Dry the Johnny G bike after each use to remove sweat and moisture. It is best to use a liquid non-abrasive cleaner diluted with water.

## Wipe Down / Cleaning

To prevent the build-up of rust and other forms of corrosion, wipe down the bike at the end of each day (or preferably at the end of each class). Raise all posts to the highest setting to expose moisture. Using an absorbent cloth, focus on all areas that perspiration can settle. Give particular attention to the following areas:

- Handlebar
- Seat / adjustable slide for the seat
- Flywheel
- · Back leg assembly
- Chain guard
- · Brake knob and bolt assembly
- Pop-pins
- Levelling feet

NOTE: Never use abrasive cleaning liquids or petroleum-based solvents when wiping down the bike.

## Inspection and Adjustment

Inspect major moving parts that require constant proper torque. Loose or misadjusted parts can result in personal injury or damage to the bike. Check the following parts for security and/or proper torque.

#### **Pedals**

Verify that the pedals are re-torqued after the first 10 hours of use and every 100 hours of operation, thereafter. Use a torque wrench if components are loose.

NOTE: The pedal to the crank arm bolt torque is: 30 - 35 lb-ft.

**IMPORTANT**: It is not recommended that members change out the pedals on the bike.

# **Weekly Maintenance**

Weekly maintenance should focus on the overall performance of your Johnny G Spirit Bike. During these inspections, look for vibration and possible loose assemblies.

Have an experienced rider ride each bike to identify and help diagnose any vibration, noises, and any "unusual" feeling from the drive belt. Either faulty flywheel alignment or a loose belt can cause vibration.

- Check for proper flywheel alignment. If flywheel requires adjustment, refer maintenance to a trained service tech.
- Inspect each bike for loose assemblies, parts, bolts and nuts. Give particular attention to the following:
- Tighten all frame base hardware.
- Tighten all pop-pin handles.
- Tighten seat hardware.
- Tighten pedal toe clip/toe straps.

# **Monthly Maintenance**

The monthly maintenance check should be a comprehensive inspection of the overall frame and main assembly components of the Johnny G Spirit Bike in addition to the Weekly Maintenance.

## **Inspection and Adjustment**

Inspect the frame and main assembly components for rust or corrosion. Tilt the bike to locate areas where rust and corrosion may develop. Use a small, wire brush to remove rust build-up in small crevasses, such as levelling feet, pop pin handles and other bolt assemblies. Give particular attention to the following areas:

- Levelling feet
- Pop pin handles
- Inspect all wear items for adjustments or possible part replacement. Give particular attention to the following:
- Inspect seat pad for wear. Rips, tears or excessive movement indicate replacement is required.
- Inspect pedals for play. Excessive movement of pedals indicates replacement is required.
- Tighten seat hardware.
- Levelling feet.

#### Frame Care

It is recommended that the frame on the bike be cleaned and sealed to help protect from sweat that may speed the corrosion process at least once a month, depending on the class usage.

#### Cleaning

Using a clean terry cloth that is dampened in 30 parts water to 1-part non-abrasive detergent or car wash soap rub over the frame of the product.

#### Wash/Dry

Dampen a clean terry cloth using **only** water to wipe away any soap residue, using a second clean and dry terry cloth to dry off any liquid residue.

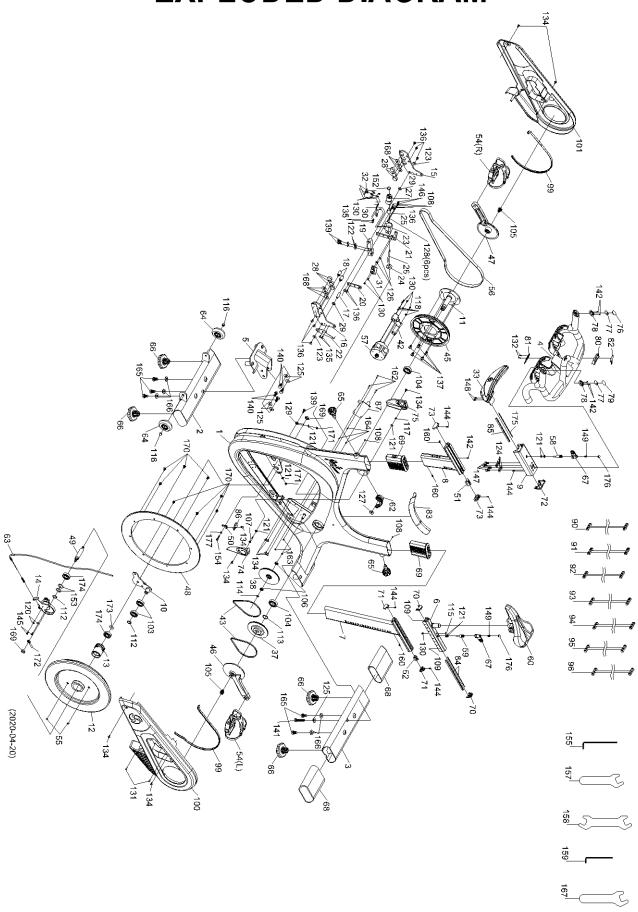
#### Sealing

The frame can be sealed by applying a wax or polishing coat to help repel away liquids like sweat. Apply the wax or polish per the manufacturer's instructions for best results

# Parts Replacement

Depending on the use and maintenance of the product, certain items may need to be replaced upon inspection due to wear. These can be identified during scheduled inspections as described in the Preventative Maintenance section of this owner's manual.

# **EXPLODED DIAGRAM**



# **PARTS LIST**

NO.	DESCRIPTION	Q'TY							
8795001	Main Frame	1							
8795002	Front Stabilizer	1							
8795003	Rear Stabilizer	1							
8795004	Handlebar	1							
8795005	Front Stabilizer Connecting Assembly	1							
8795006	Seat Front Read Adjusting	1							
8795007	Seat Inner Slide	1							
8795008	Handlebar Post								
8795009	Aluminum Slide Rail								
8795010	Idler Wheel Assembly	1							
8795011	Crank Axle	1							
8795012	Flywheel	1							
8795013	Flywheel Pulley	1							
8795014	Drum Brake	1							
8795015	Braking Pad Holder (L)	1							
8795016	Braking Pad Holder (R)	1							
8795017	Magnet Shaft	1							
8795018	Magnet Axle	2							
8795019	Anchor	1							
8795020	Motor Fixing Plate								
8795021	Fixing Plate								
8795022	Plate								
8795023	POM_Anchor								
8795024	Ø28 × 20L_Anchor	1							
8795025	Motor Connect the shaft								
8795026	Motor screw	1							
8795027	DC Motor	1							
8795028	Ø25 × 10L_Braking Magnet	6							
8795029	Bushing	2							
8795030	Board	1							
8795031	Optical Sensor Board	1							
8795032	Motor Optical Sensor Board	1							
8795033	Console Assembly	1							
<del>8795036</del>	Drive Pulley	4							
8795037	Main Pulley	1							
8795038	Adaptor Pulley	1							
8795042	Bracket Board	1							
8795043	Elasticity Belt	2							
8795045	Aluminum Flywheel Pulley	1							
8795046	Crank Arm (L)	1							
8795047	Crank Arm (R)	1							
8795048	Aluminum Flywheel Ring	1							

NO	DESCRIPTION								
8795049	Flywheel Axle	1							
8795050	Switch Beverage Holder	1							
8795051	Handlebar Anchor	1							
8795052	Rear Anchor	1							
8795054	Pedal (L,R)	1							
8795055	Ø10 × 3T_Braking Magnet	2							
8795056	Belt	1							
8795057	Generator/Brake Controller								
8795058	Adjusting Axle								
8795059	Seat Axle	1							
8795060	Seat	1							
8795062	Resistance Adjustment Pin Holder	1							
8795063	Steel Cable	1							
8795064	Transportation Wheel	2							
8795065	Knob Adjustor	2							
8795066	Foot Pad	4							
8795067	Adjusting Lever	2							
8795068	Rear Stabilizer Cover	2							
8795069	Sleeve	2							
8795070	Top Seat End Cap								
8795071	Bottom Seat End Cap	2							
8795072	Bottom Handlebar End Cap								
8795073	Bottom Handlebar End Cap								
8795074	Left Adjustment Cover, Resistance								
8795075	Right Adjustment Cover, Resistance								
8795076	1key Resistance Button W/Cable (R)	1							
8795077	Handle Switch Plate	2							
8795078	Handle Switch Bracket	2							
8795079	1key Resistance Button W/Cable (L)	1							
8795080	Top Cover	1							
8795081	Bottom Cover	1							
8795082	3key Resistance Button W/Cable (Middle)	1							
8795083	Frame Foot Rail	1							
8795084	Seat Wear-Resistant Film	2							
8795085	Handgrip Wear-Resistant Film	1							
8795086	1350m/m_Sensor W/Cable	1							
8795087	Console Display Board	1							
8795090	1580m/m_Computer Cable	1							
8795091	150m/m_Switch Cable								
8795092	560m/m_Switch Cable (Upper)	1							
8795093	650m/m_Switch Cable (Lower)	1							
8795094	650m/m_Switch Cable (R)	1							
8795095	1300m/m_Connecting Wire	1							

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NO.	DESCRIPTION							
8795096	600m/m_Connecting Wire							
8795099	Foot Rail	2						
87950100	Chain Cover (L)	1						
87950101	Chain Cover (R)	1						
87950103	6004_Bearing	2						
87950104	6005_Bearing	2						
87950105	M12 × P1.0 × 14L_Axle Button Head Socket Bolt	2						
87950106	6800_Bearing	2						
87950107	Ø6 × 25L × M5 × P0.8_Bolt	1						
87950108	M4 × P0.7 × 6L_Slotted Set Screws	4						
87950109	M3 × P0.5 × 10L_Slotted Set Screws	2						
87950112	Ø20_C Ring	2						
87950113	Ø25_C Ring	1						
87950114	Ø10_C Ring	1						
87950115	M4 × P0.7 × 8T_Cap Nut	1						
87950116	M8 × P1.25 × 15T_Cap Nut	2						
87950117	M5 × 5T_Nyloc Nut	1						
87950118	Ø4 × Ø10 × 1T_Flat Washer	4						
87950120	Ø5 × Ø15 × 1.0T_Flat Washer	2						
87950121	Ø1/4" × 13 × 1.0T_Flat Washer	8						
87950122	Ø8 × Ø18 × 3T_Knurled Lock Washer	2						
87950124	Ø8.5 × Ø18 × 1.5T_Flat Washer	4						
87950125	Ø10 × Ø25 × 1.5T_Flat Washer	5						
87950126	Bushing	2						
87950127	Ø10 × Ø24 × 3T_Nylon Washer	1						
87950128	Wear Plate	6						
87950129	M6 × 45L_Eye Bolt	1						
87950130	M4 × 8m/m_Phillips Head Screw	9						
87950131	Ø3.5 × 16m/m_Sheet Metal Screw	2						
87950132	M3 × P0.5 × 10L_Phillips Head Screw	2						
87950134	M5 × P0.8 × 12L_Phillips Head Screw	11						
87950135	M5 × 8L_Button Head Socket Bolt	4						
87950136	M6 × P1.0 × 10L_Button Head Socket Bolt	10						
87950137	M10 × P1.5 × 16L_Hex Head Bolt	5						
87950139	M8 × P1.25 × 15L_Hex Head Bolt	3						
87950140	M10 × P1.5 × 20L_Hex Head Bolt	4						
87950141	M10 × P1.5 × 55L_Hex Head Bolt	1						
87950142	M3 × P0.5 × 6m/m_Socket Head Cap Bolt	5						
87950144	M3 × P0.5 × 10m/m_Socket Head Cap Bolt	5						
87950145	M5 × P0.8 × 12L_Socket Head Cap Bolt	2						
87950146	M5 × P0.8 × 15L_Socket Head Cap Bolt	2						
87950147	M8 × P1.25 × 15L_Socket Head Cap Bolt	4						

NO.	DESCRIPTION							
87950148	M6 × P1.0 × 10L_Flat Head Countersink Bolt	2						
87950149	M6 × 10L_Button Head Socket Bolt	2						
87950152	Plastic discs	1						
87950153	Ø20 × Ø30 × 0.5T_Flat Washer							
87950154	M5 × 30L_Phillips Head Screw							
87950155	M4_L Allen Wrench	1						
87950157	17m/m_Single Open End Wrench	1						
87950158	13/15m/m_Wrench	1						
87950159	2.5m/m_L Allen Wrench	1						
87950160	M4 × P0.7 × 10L_Socket Head Cap Bolt	3						
87950162	M4×16H-N66_Metric Head Socket Bolt	3						
87950163	M4HN-N66_Metric Luck Nut	3						
87950164	Nylon sleeve							
87950165	M12 × P1.25 × 20L_Hex Head Bolt	5						
87950166	Ø12.7 × Ø26 × 2T_Flat Washer	5						
87950167	19m/m (3T)_Wrench	1						
87950168	Ø3/8" × Ø25 × 2T_Flat Washer	6						
87950169	M12 × P1.25 × 8T_Nyloc Nut	2						
87950170	M8 × 12m/m_Button Head Socket Bolt	8						
87950171	M6 × 6T_Nyloc Nut	2						
87950172	M6 × 45L(Ø12)_Eye Bolt	1						
87950173	Ø13 × Ø26 × 1T_Flat Washer	1						
87950174	6004_Bearing	2						
87950175	Handgrip Wear-Resistant Film	1						
87950176	Adjusting Lever End Cap	2						
87950177	M5 × 4T Luck Nut	1						

# TRAINING GUIDELINES

## **EXERCISE**

Exercise is one of the most important factors in the overall Health of an individual. Listed among its benefits are:

- Increased capacity for physical work (strength endurance)
- Increased cardiovascular (heart and arteries/veins) and respiratory efficiency
- Decreased risk of coronary heart disease
- · Changes in body metabolism, e.g. losing weight
- Delaying the physiological effects of age
- Physiological effects, e.g. reduction in stress, increase in self-confidence, etc.

## BASIC COMPONENTS OF PHYSICAL FITNESS

There are four all-encompassing components of physical fitness, and we need to define each and clarify its role briefly.

**Strength** is the capacity of a muscle to exert a force against resistance. Strength contributes to Power and speed and is of great importance to a majority of sports people.

**Muscular Endurance** is the capacity to repeatedly exert a force over a period of Time, e.g., your legs' capacity to carry you 10 Km without stopping.

**Flexibility** is the range of motion about a joint. Improving flexibility involves stretching muscles and tendons to maintain or increase suppleness and provide increased resistance to muscle injury or soreness.

Cardio-Respiratory Endurance is the most essential component of physical fitness. It is the efficient functioning of the heart and lungs

## **Aerobic fitness**

The largest amount of oxygen that you can use per minute during exercise is called your maximum oxygen uptake (MVo2). This is often referred to as your aerobic capacity.

The effort that you can exert over a prolonged period of Time is limited by your ability to deliver oxygen to the working muscles. Regular vigorous exercise produces a training effect that can increase your aerobic capacity by as much as 20 to 30%. An increased MVO2 indicates an increased ability of the heart to pump blood, of the lungs to ventilate oxygen and of the muscles to take up oxygen.

## Anaerobic Training

This means "without oxygen" and is the output of energy when the oxygen supply is insufficient to meet the body's long-term energy demands. (For example, 100-meter sprint).

## The Training Threshold

This is the minimum level of exercise required to produce significant improvements in any physical fitness parameter.

# **Progression**

As your become fitter, a higher intensity of exercise is required to create an overload and therefore provide continued improvement

## **Overload**

This is where you exercise at a level above that which can be carried out comfortably. The intensity, duration and frequency of exercise should be above the training threshold and should be gradually increased as the body adapts to the increasing demands. As your fitness level improves, so the training threshold should be raised.

Working through your program and gradually increasing the overload factor is important.

# **Specificity**

Different forms of exercise produce different results. The type of exercise that is carried out is specific both to the muscle groups being used and to the energy source involved. There is little transfer of the effects of exercise, i.e. from strength training to cardiovascular fitness. That is why it is important to have an exercise program tailored to your specific needs.

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# Reversibility

If you stop exercising or do not do your program often enough, you will lose the benefits you have gained. Regular workouts are the key to success.

# Warm-up

Every exercise program should start with a warm-up where the body is prepared for the effort to come. It should be gentle and preferably use the muscles to be involved later.

Stretching should be included in both your warm-up and cool-down and should be performed after 3-5 minutes of low-intensity aerobic activity or callisthenic type exercise.

## Warm Down or Cool Down

This involves a gradual decrease in the intensity of the exercise session. Following exercise, a large supply of blood remains in the working muscles. If it is not returned promptly to the central circulation, pooling of blood may occur in the muscles

## **Heart Rate**

As you exercise, so the rate at which your heart beat also increases. This is often used as a measure of the required intensity of exercise. You need to exercise hard enough to condition your circulatory system and increase your pulse rate, but not enough to strain your heart.

Your initial level of fitness is important in developing an exercise program for you. If you are starting off, you can get a good training effect with a heart rate of 110-120 beats per minute (BPM). If you are fitter, you will need a higher threshold of stimulation.

To begin with, you should exercise at a level that elevates your heart rate to about 65 to 70% of your maximum. If you find this is too easy, you may want to increase it, but it is better to lean on the conservative side.

The maximum heart rate is 220 minus your age. As you increase in age, your heart, like other muscles, loses some of its efficiency. Some of its natural loss is won back as fitness improves.

The following table is a guide to those who are "starting fitness."

Age	25	30	35	40	45	50	55	60	65	
Target heart Rate 10 Second Count	23	22	22	21	20	19	19	18	18	
Beats per Minute	138	132	132	126	120	114	114	108	108	

## **Pulse Count**

The pulse count (on your wrist or carotid artery in the neck, taken with two index fingers) is done for ten seconds, taken a few seconds after you stop exercising. This is for two reasons: (a) 10 seconds is long enough for accuracy, (b) the pulse count is to approximate your BPM rate at the Time you are exercising. Since heart rate slows as you recover, a longer count isn't as accurate.

The target is not a magic number but a general guide. If you're above average fitness, you may work quite comfortably, a little above that suggested for your age group.

The following table is a guide to those who are keeping fit. Here we are working at about 80% of maximum.

Age	25	30	35	40	45	50	55	60	65	
Target heart Rate 10 Second Count Beats per Minute			_		23 138		22 132	21 126	20 120	

Don't push yourself too hard to reach the figures on this table. It can be very uncomfortable if you overdo it. Let it happen naturally as you work through your program. Remember, the target is a guide, not a rule; a little above or below is just fine.

Two final comments:

- 1) Don't be concerned with day-to-day variations in your pulse rate. Being under pressure or not enough sleep can affect it
- 2) Your pulse rate is a guide, don't become too fixated on it.

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# **Endurance circuit training**

Cardiovascular endurance, muscle, strength, flexibility and coordination are all necessary for maximum fitness. The principle behind circuit training is to give a person all the essentials at one Time by going through your exercise program moving as fast as possible between each exercise. This increases the heart rate and sustains it, which improves the fitness level. Do not introduce this circuit training effect until you have reached an advanced program stage.

# **Body Building**

Is often used synonymously with strength training. The fundamental principle here is OVERLOAD. Here, the muscle works against greater loads than usual. This can be done by increasing the load you are working against.

## **Patronization**

This is the term used to vary your exercise program for both physiological and psychological benefits. In your overall program, you should vary the workload, frequency and intensity. The body responds better to variety, and so do you. In addition, when you feel yourself getting "stale', bring in periods of lighter exercise to allow the body to recuperate and restore its reserves. You will enjoy your program more and feel better for it.

## **Muscle Soreness**

For the first week or so, this may be the only indication you have that you are on an exercise program. This, of course, does depend on your overall fitness level. A confirmation that you are on the correct program is a very slight soreness in most major muscle groups. This is quite normal and will disappear in a matter of days.

If you experience major discomfort, you may be on a program that is too advanced or you have increased your program too rapidly.

If you experience PAIN during or after exercise, your body is telling you something.

Stop exercising and consult your doctor.

## What to wear

Wear clothing that will not restrict your movement in any way while exercising. Clothes should be light enough to allow the body to cool. Excessive clothing that causes you to perspire more than you normally would while exercising gives you no advantage. The extra weight you lose is body fluid and will be replaced with the next glass of water you drink. It is advisable to wear a pair of gym or running shoes or "sneakers."

# **Breathing During Exercise**

Do not hold your breath while exercising. Breathe normally as much as possible. Remember, breathing involves the intake and distribution of oxygen, which feeds the working muscles.

## Rest periods

Once you start your exercise program, you should continue through to the end. Do not break off halfway through and then restart at the same place later on without going through the warm-up stage again.

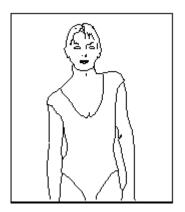
The rest period required between strength training exercises may vary from person to person. This will depend mostly on your level of fitness and the program you have chosen. Rest between exercises by all means, but do not allow this to exceed two minutes. Most people manage with half-minute to one-minute rest periods.

# **STRETCHING**

Stretching should be included in both your warm-up and cool-down and should be performed after 3-5 minutes of low-intensity aerobic activity or callisthenic type exercise. Movements should be performed slowly and smoothly, with no bouncing or jerking. Move into the stretch until slight tension, but no pain is felt in the muscle and hold for 20-30 seconds. Breathing should be slow, rhythmical and under control, making sure never to hold your breath.

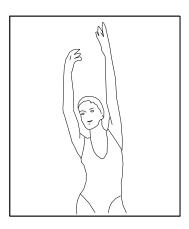
#### **HEAD ROLLS**

Rotate your head to the right for one count, feeling the stretch up the left side of your neck. Next, rotate your head back for one count, stretching your chin to the ceiling and letting your mouth open. Rotate your head to the left for one count, and finally, drop your head to your chest for one count.



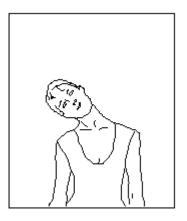
#### SIDE STRETCHES

Open your arms to the side and continue lifting them until they are over your head. Reach your right arm as far upward toward the ceiling as you can for one count. Feel the stretch up your right side. Repeat this action with your left arm.



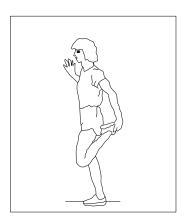
#### SHOULDER LIFTS

Lift your right shoulder up toward your ear for one count. Then lift your left shoulder up for one count as you lower your right shoulder.



#### QUADRICEPS STRETCH

With one hand against a wall for balance, reach behind you and pull your right foot up. Bring your heel as close to your buttocks as possible. Hold for 15 counts and repeat with left foot up.



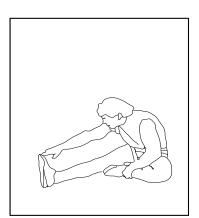
#### INNER THIGH STRETCH

Sit with the soles of your feet together with your knees pointing outward. Pull your feet as close into your groin as possible. Gently push your knees towards the floor. Hold for 15 counts.



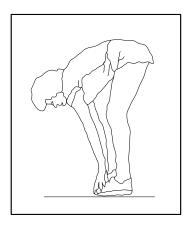
#### HAMSTRING STRETCHES

Sit with your right leg extended. Rest the sole of your left foot against your right inner thigh. Stretch as far as possible. Hold for 15 counts. Relax and then repeat with left leg extended.



#### **TOUCHES**

Slowly bend forward from your waist, letting your back and shoulders relax as you stretch toward your toes. Reach down as far as you can and hold for 15 counts.



#### **CALF / ACHILLES STRETCH**

Lean against a wall with your left leg in front of the right and your arms forward. Keep toward your toe your right leg straight and the left foot on the floor then bend the left leg and lean forward by moving your hips toward the wall. Hold, then repeat on the other side for 15 counts.



# MANUFACTURER'S LIMITED WARRANTY

Dyaco Canada Inc. warrants all its bike parts for a period of time listed below, from the date of retail sale, as determined by a sales receipt. Dyaco Canada Inc.'s responsibilities include providing new or remanufactured parts at Dyaco Canada Inc.'s option and technical support to our independent dealers and service organizations. In the absence of a dealer or service organization, these warranties will be administered by Dyaco Canada Inc. directly to the facility. The warranty period applies to the following components:

#### **Commercial Warranty (All Facilities)**

Frame 10 Years
Electronics 2 Years
Parts 2 Years
Labour 2 Years
Wear items 1 Year

This warranty is not transferable and is extended only to the original owner.

#### NORMAL RESPONSIBILITIES OF THE FACILITY

The facility is responsible for the items listed below:

- 1. The warranty registration can be completed online: Go to www.dyaco.ca/warranty.html and complete the online warranty registration.
- 2. Proper use of the bike in accordance with the instructions provided in this manual.
- 3. Proper installation in accordance with instructions provided with the bike and with all local electric codes.
- 4. Expenses for making the bike accessible for servicing, including any item that was not part of the bike at the Time it was shipped from the factory.
- 5. Damages to the bike finish during shipping, installation, or following installation.
- 6. Routine maintenance of this unit as specified in this manual.

#### **EXCLUSIONS**

This warranty does not cover the following:

- 1. CONSEQUENTIAL, COLLATERAL, OR INCIDENTAL DAMAGES SUCH AS PROPERTY DAMAGE AND INCIDENTAL EXPENSES RESULTING FROM ANY BREACH OF THIS WRITTEN OR ANY IMPLIED WARRANTY.
  - Note: Some areas do not allow the exclusion or limitation of incidental or consequential damages, so this limitation or exclusion may not apply to you.
- 2. Service call reimbursement to the facility. Service call reimbursement to the dealer that does not involve malfunction or defects in workmanship or material, for units that are beyond the warranty period, for units that are beyond the service call reimbursement period, for bikes not requiring component replacement.
- 3. Damages caused by services performed by persons other than authorized Dyaco Canada Inc. service companies; use of parts other than original Dyaco Canada Inc. parts; or external causes such as corrosion, discoloration of paint or plastic, alterations, modifications, abuse, misuse, accident, improper maintenance, or acts of God.
- 4. Products with original serial numbers that have been removed or altered.
- 5. Products that have been: sold, transferred, bartered, or given to a third party.
- 6. Products that do not have a warranty registration card on file at Dyaco Canada Inc. Dyaco Canada Inc. reserves the right to request proof of purchase if no warranty record exists for the product.
- THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE.
- 8. Warranties outside of Canada may vary. Please contact your local dealer or Dyaco Canada for details.

#### SERVICE

The sales receipt establishes the labour warranty period should service be required. If service is performed, it is in your best interest to obtain and keep all receipts. This written warranty gives you specific legal rights. Service under this warranty must be obtained by following these steps in order:

- Contact your selling authorized dealer or Dyaco Canada.
- 2. If you have any questions about your new product or questions about the warranty contact Dyaco Canada Inc. at 1-888-707-1880.
- 3. If no local service is available, Dyaco Canada Inc. will repair or replace the parts, at Dyaco Canada Inc.'s option, within the warranty period at no charge for parts. All transportation costs, both to our factory and upon return to the facility, are the responsibility of the facility. The facility is responsible for adequate packaging upon return to Dyaco Canada Inc. Dyaco Canada Inc. is not responsible for damages that occur during shipping. Make all freight damage claims with the appropriate freight carrier. DO NOT SHIP ANY UNIT TO OUR FACTORY WITHOUT A RETURN AUTHORIZATION NUMBER. All units arriving without a return authorization number will be refused.
- 4. For any further information, or to contact our service department by mail, send your correspondence to: Dyaco Canada Inc. 5955 Don Murie Street. Niagara Falls, ON. L2G 0A9.

Product features or specifications as described or illustrated are subject to change without notice.

All warranties are made by Dyaco Canada Inc.



Please visit us online for information about our other brands and products manufactured and distributed by Dyaco Canada Inc.



spiritfitness.ca



xterrafitness.ca



dyaco.ca/UFC/UFC-home.html



solefitness.ca



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trainorsports.ca

For more information, please contact Dyaco Canada Inc.
T: 1-888-707-1880 | 5955 Don Murie St., Niagara Falls, Ontario L2G 0A9 | sales@dyaco.ca