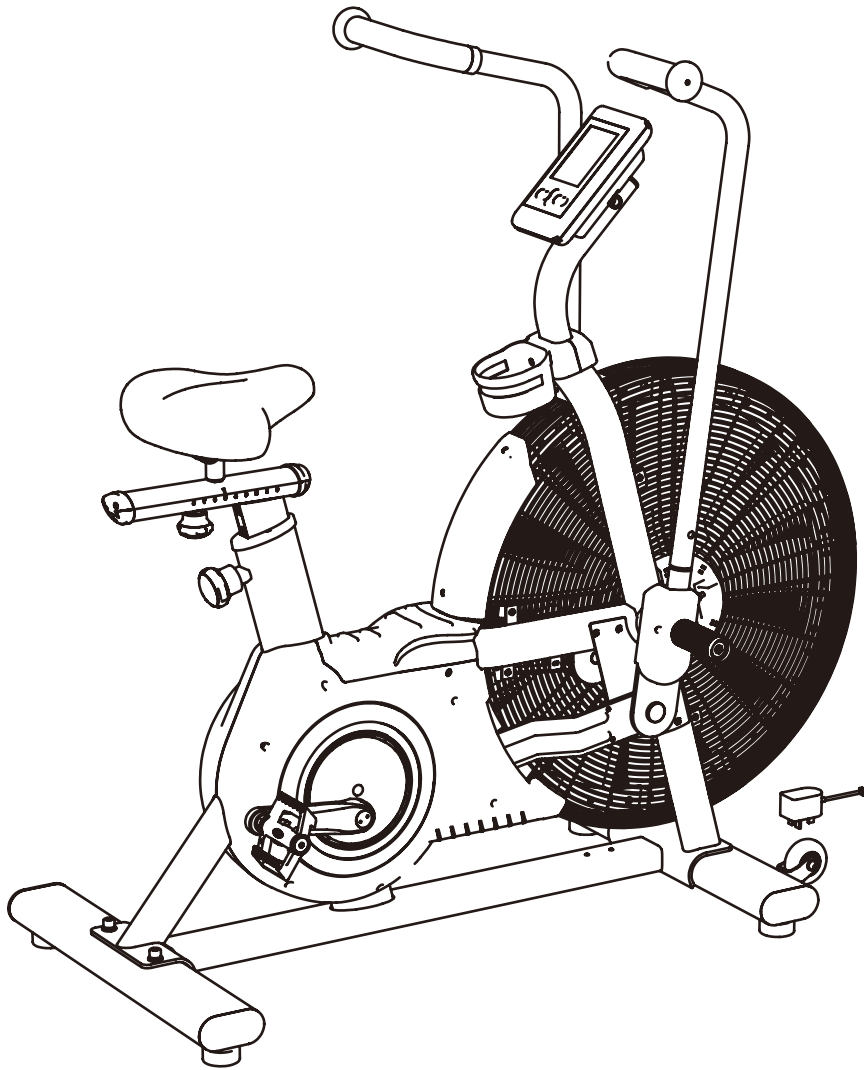


BLK BOX



BLK BOX AIR BIKE 16-1293 OWNER'S MANUAL

25D

CAUTION! Read all precautions and instructions in this manual before using this equipment.

! CAUTION

Read all precautions and instructions in this manual before using this equipment.

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Important Safety Instructions

WARNING! The safety of the product can be maintained only if it is examined regularly for damage and wear. See preventive maintenance section for details.

WARNING! Heart rate monitoring systems may be inaccurate. Over exercising may result in serious injury or death. If you feel faint stop exercising immediately.

LOCATION

1. Keep the area around the product clear of any obstructions, including walls and furniture. Provide at least three feet of clearance behind the unit.
2. Do not use the product outdoors, near swimming pools, or in areas of high humidity.
3. Do not allow other people to interfere in any way with the user or equipment during workout.
4. Supervise closely any children or disabled persons using the product.
5. The product should only be used on a level surface and is with 0.6 meters space around the product.

OPERATION

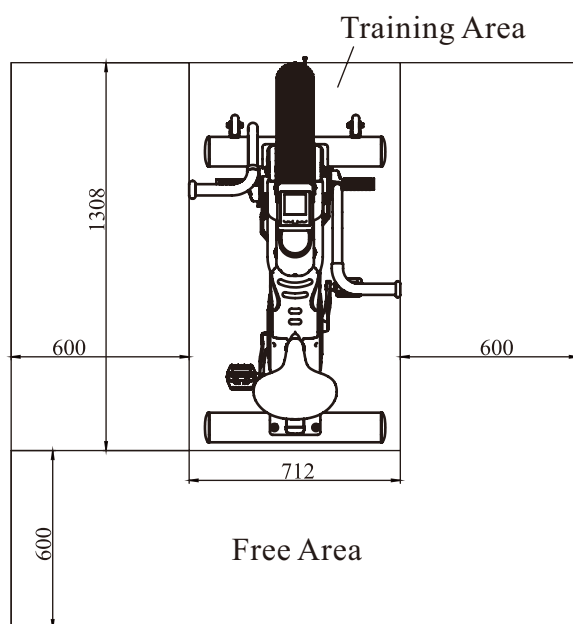
1. Always follow the console instructions for proper operation.
2. Do not reach into, or underneath, the unit, and do not tip the unit on its side during operation.
3. Never insert objects into any opening of the Bike. If any object fall into this equipment, carefully retrieve it while the unit is not in use. If the object can't be reached, please contact customer services.
4. Never place any containers filled with liquids on the unit, except in the accessory tray or water bottle holder. Containers should be covered with lids.
5. Wear shoes with rubber or high-traction soles. Do not wear shoes with high heels, leather shoes, slippers, or spikes. Make sure no sharp stuff is embedded in the soles.
6. Do not use the bike with bare feet.
7. Keep all loose clothing, shoelaces, and towels away from moving parts.
8. Take extra caution when stepping on or off the bike.

Important Safety Instructions

9. Never face backward while using the bike.
10. The exposed flywheel and pedals can cause risk, user and the people do not touch them.
11. If the user encounters emergency when he use the exercise bicycles he should press the function knob immediately.
12. If you want to stop training you can press the function knob immediately.
13. The equipment should be used in a supervised environment.
14. Before training user must put his feet into the pedal retention and tighten.
15. This adjustment of minimum insertion depth of the handlebar and the seat shall not exceed the mark indicating the minimum insertion depth.

Save these instructions for future reference

Training Area and Free Area



Specifications

Class: S

Maximum User Weight: 150kg/ 330lbs

Product Dimension: 712*1308*1349mm

Warm Up Exercises

EXERCISE GUIDELINES

WARNING! Before beginning this or any exercise program, you should consult your physician. This is especially important for individuals over the age of 35 or individuals with pre-existing health problems.

Warming up prepares the body for the exercise by increasing circulation, supplying more oxygen to the muscles and raising body temperature. Begin each workout with 5 to 10 minutes of stretching and light exercise to warm up. The photos on this page show several forms of basic stretching you may perform before your workouts. In order to achieve an adequate warm-up, perform each stretch three times.

TOE TOUCH STRETCH

Stand, bending your knees slightly and slowly bend forward from your hips. Allow your back and shoulders to relax as you reach down toward your toes as far as possible. Hold for 15 counts, then relax. This will stretch your hamstrings, back of knees, and back.

HAMSTRING STRETCH

Sit with one leg extended. Bring the sole of the opposite foot toward you and rest it against the inner thigh of your extended leg. Reach toward your toes as far as possible. Hold for 15 counts, then relax. This will stretch your hamstrings, lower back, and groin.

CALF/ACHILLES STRETCH

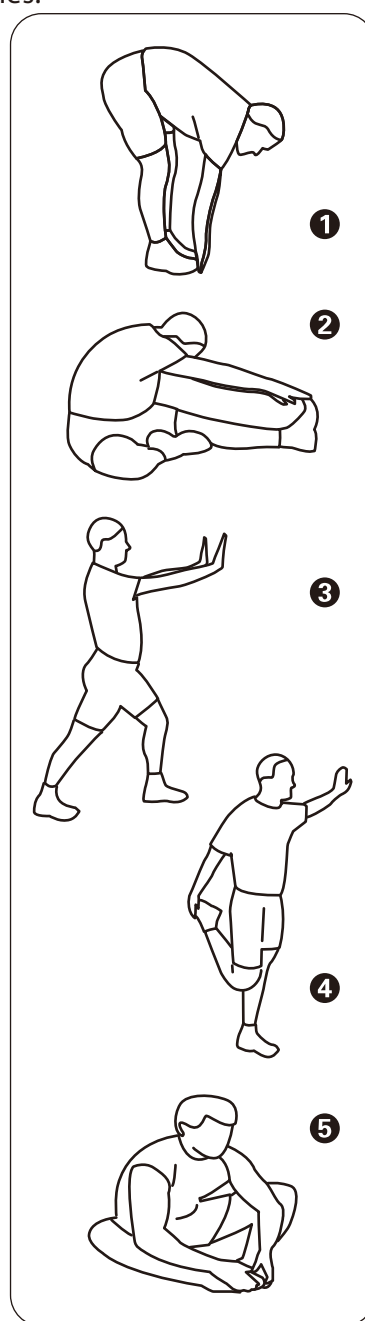
With one leg in front of the other, reach forward and place your hands against a wall. Keep your back leg straight and your back foot flat on the floor. Bend your front leg, lean forward and move your hips toward the wall. Hold for 15 counts, then relax. To cause further stretching of the achilles tendon, bend your back leg as well. This will stretch your calves, achilles tendons, and ankles.

QUADRICEPS STRETCH

With one hand against a wall for balance, reach back and grasp one foot with your other hand. Bring your heel as close to your buttocks as possible. Hold for 15 counts, then relax. This will stretch your quadriceps and hip muscles.

INNER THIGH STRETCH

Sit with the soles of your feet together and your knees outward. Pull your feet toward your groin area as far as possible. Hold for 15 counts, then relax. This will stretch your quadriceps and hip muscles.



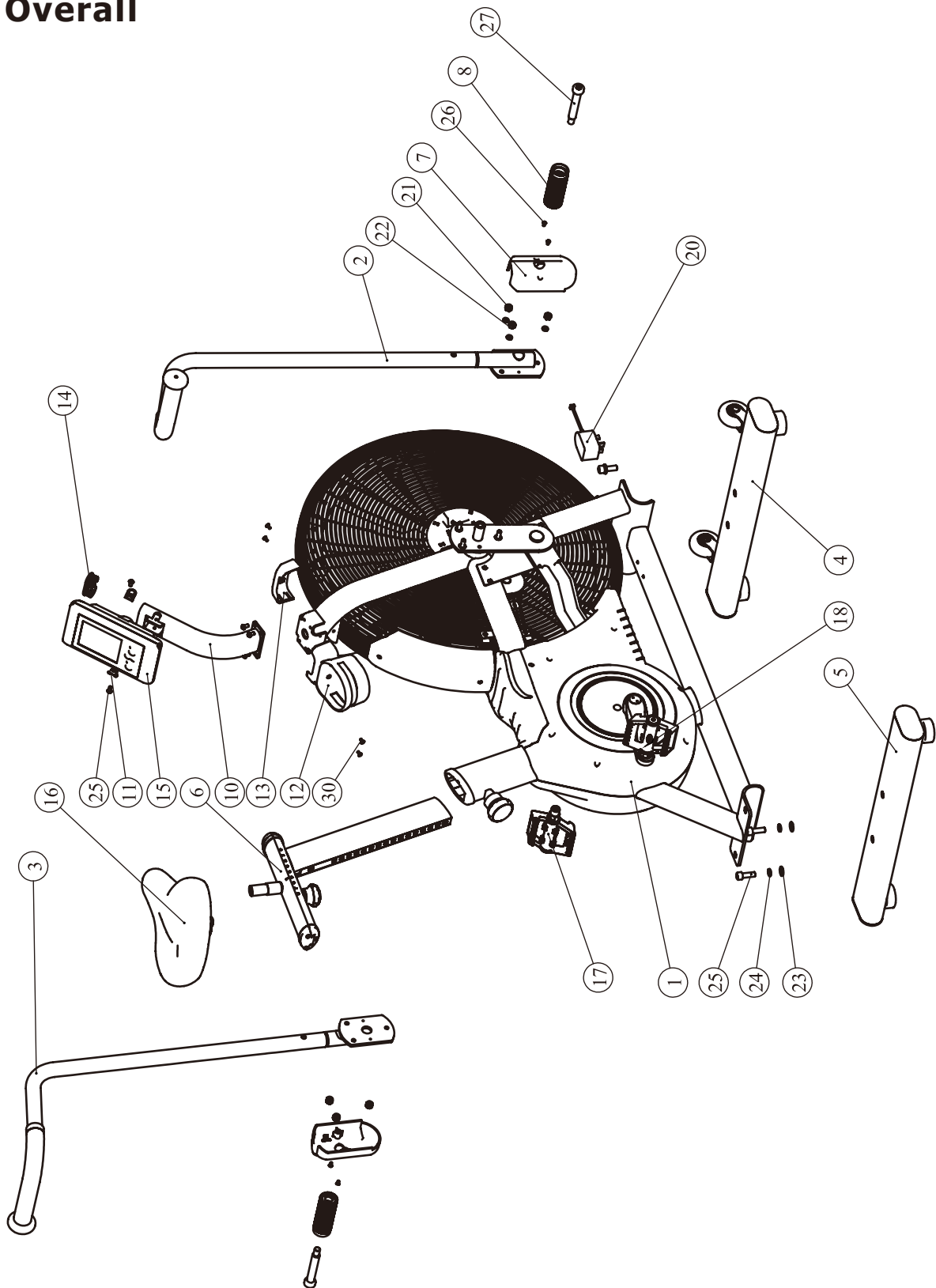
Exploded View and Parts List

Overall

Item No.	Part No.	Description	QTY
1	HB005CBLK01ASSY	Main Frame Assembly	1
2	HB0050200	Right Handlebar	1
3	HB0050300	Left Handlebar	1
4	HB00502ASSY	Front Base Assembly	1
5	HB00503ASSY	Rear Base Assembly	1
6	HB00504ASSY	Seat Frame Assembly	1
7	HB0053600	Plastic Jacket	2
8	HB005CBLK3700	Stationary Foot	2
10	HB0053900	Welding Base Of Console	1
11	HB0054000	Plug	2
12	HB0054100	Cup Holder-Front	1
13	HB0054200	Cup Holder-Back	1
14	FLPSR-2400	Plug	1
15	HB005B11ASSY	Console Assembly	1
16	SB-27	Seat	1
17	BR-04M18-L	Left Pedal	1
18	BR-04M18-R	Right Pedal	1
19	L320SMA-SMA-3	Cable Of Center Pillar-Sensor	1
20	DQSPQ12V1A-SMA-UK	Power Adapter	1
21	NM8N19	Nylon Insert Lock Nut M8	6
22	GB938N19	Spring Washer $\Phi 8$	6
23	GB9510N19	Washer $\Phi 11 * \Phi 20 * 2$	4
24	GB9310N19	Spring Washer $\Phi 10$	4
25	GB70M10*30*30N19	Socket Head Bolt M10*30	4
26	GB818M4*8DHS2	Screw M4*8	4
27	HB0054300	Shoulder Bolt	2
28	GB936N19	Spring Washer $\Phi 6$	4
29	PNLM6*12N19	Hex Head Bolt M6*12	6
30	GB819M4*10DHS2	Screw, M4*10	4

Exploded View and Parts List

Overall



Exploded View and Parts List

Main Frame Assembly

Grade No.	Part No.	Description	QTY
1.1	HB0050100	Main Frame	1
1.2	GB17880.3M5*13DS17	Hexagonal Rivet Nut	6
1.3	ECU7P3500	Nut,PA6	5
1.4	PS4501900V1	Retainer	1
1.5	PS4503200V1	Hollow Tube	1
1.6	PS45014P426UASSY	Big Knob Assembly	1
1.7	HB0052800	Tightener	1
1.8	GB5787AM8*16DHS20NL	Hexagon Bolt With Flange M8*16	1
1.9	DQ8DHS2A	Washer $\Phi 9*\Phi 22*2$	3
1.10	HB0051900	Sleeve, $\Phi 32*\Phi 25*38$	1
1.11	GB2766005-2RSC3TPI	Bearing 6005	6
1.12	HB0052200	Sleeve, $\Phi 32*\Phi 25*24$	2
1.13	HB005B02ASSY	Right Component Assembly	1
1.14	DQ25DHS2B	Washer $\Phi 25.5*\Phi 32*1$	1
1.15	DQ25DS2C	Washer $\Phi 25.4*\Phi 30.5*0.2$	1
1.16	HB005B03ASSY	Left Component Assembly	1
1.17	IF81212000	End Cover	1
1.18	CNLM10*25DHS20	Countersunk Head Bolt, M10*25	1
1.19	GB41M12FH18	Nut M12	1
1.20	GB9312DS12	Spring Washer $\Phi 12$	1
1.21	GB70M12*65FH21	Socket Head Bolt M12*65	1
1.22	DXD690J11A	690 Pulley	1
1.23	HB0052300	Welded Tumbler Assy	2
1.24	HB0052400	Bolt Column	4

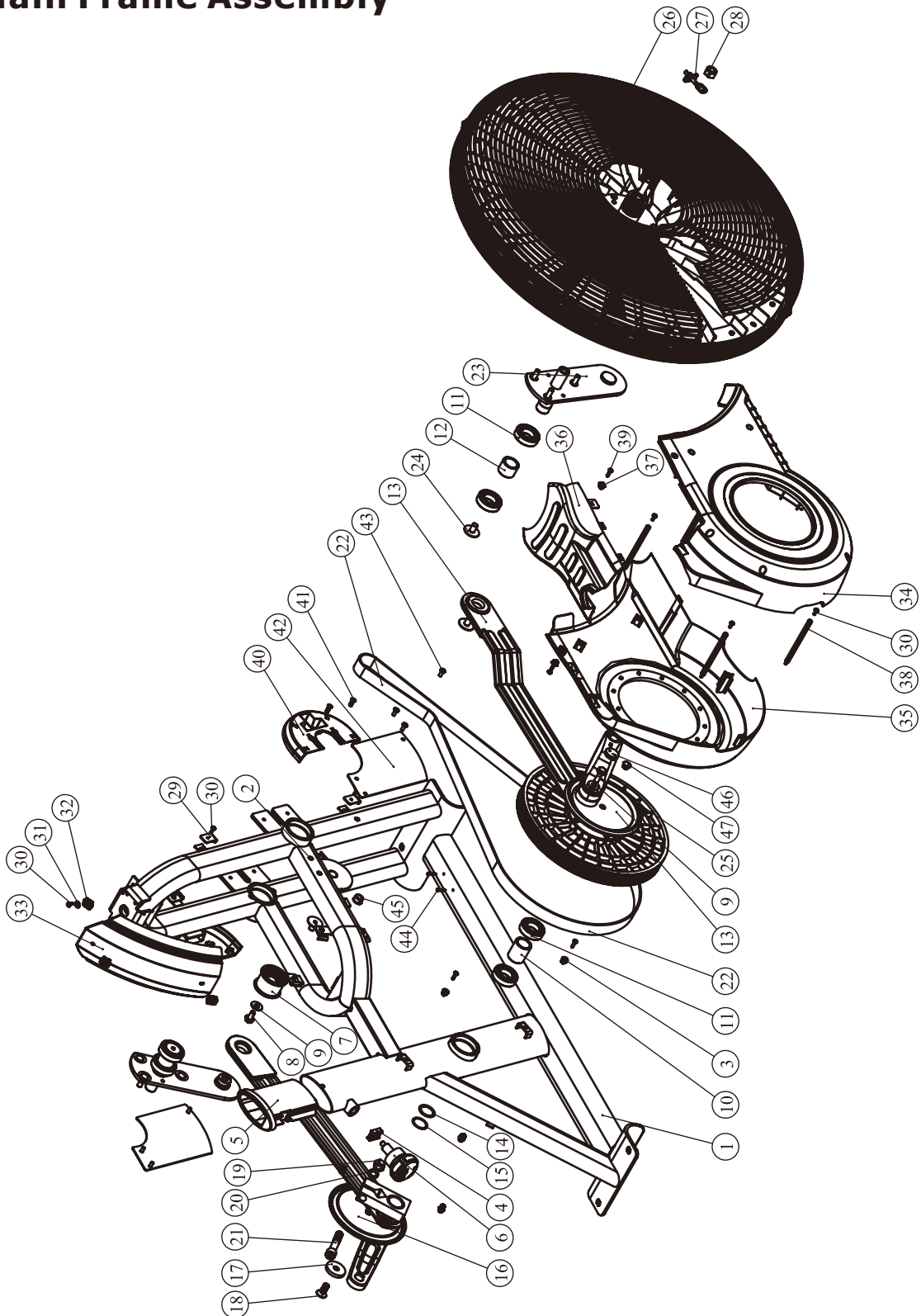
Exploded View and Parts List

Main Frame Assembly

Grade No.	Part No.	Description	QTY
1.25	GB5787AM8*25DHS20NL	Hexagon Bolt With Flange M8*25	2
1.26	HB005CBLK05ASSY	Windage Resistance Assembly	1
1.27	HB0051100	Adjusting Bolt Assembly	2
1.28	NM12DHS2	Nylon Insert Lock Nut M12	2
1.29	HB0054500	Bending Plate	7
1.30	GB818M4*10DHS2	Screw M4*10	12
1.31	DQ4DHS2	Washer $\Phi 5.3 \times \Phi 15 \times 1.2$	1
1.32	HB0051500	Clips	3
1.33	HB0054600	Wind Deflector	1
1.34	HB005CBLK08ASSY	Cover, Right	1
1.35	HB005CBLK09ASSY	Cover, Left	1
1.36	HB0053200	Right,Up	1
1.37	ECT74600	Nut,PA6	2
1.38	HB0054900	Hex Spacer:PCB	4
1.39	GB845ST4.2*16DHS	Screw ST4.2*16	7
1.40	HB0052900	Front Shield	2
1.41	GB819M5*15DHS19	Screw,M5*15	4
1.42	HB0053300	Flap	2
1.43	GB818M5*12DHS2	Screw M5*12	6
1.44	GB126183.2*15N11	Blind Rivets	2
1.45	XFT-2MFB1400	Ferrule	1
1.46	QBGM25	Crank Overlay	2
1.47	BNH0720	Ferrule	2
1.48	L400SMY-SMY-3	Switching Cable	1

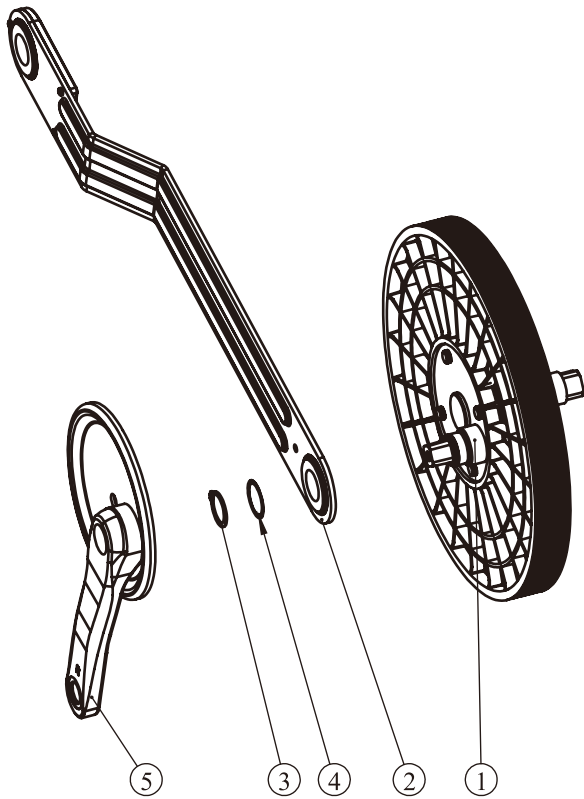
Exploded View and Parts List

Main Frame Assembly

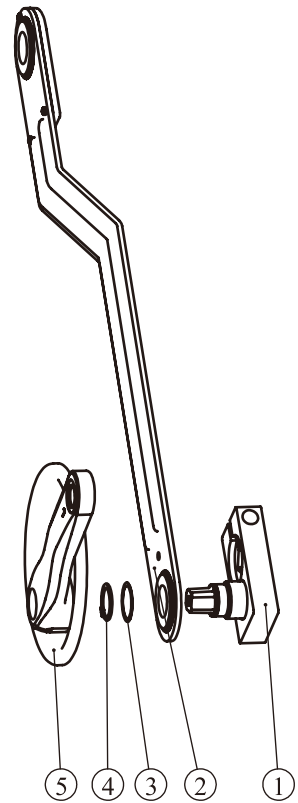


Exploded View and Parts List

Right component assembly



Left component assembly

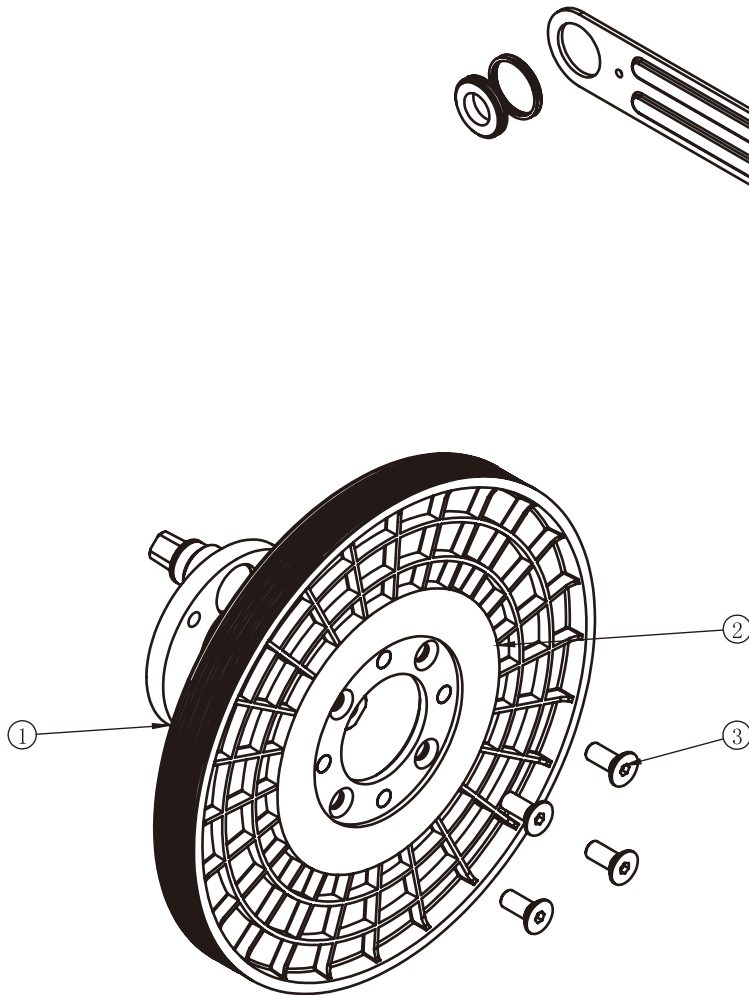


Grade No.	Part No.	Description	QTY
1.13.1	HB00507ASSY	Shaft Assembly	1
1.13.2	HB00510ASSY	Twisted Crank Assembly	1
1.13.3	DQ25DS2C	Washer $\Phi 25 * \Phi 28 * 0.35$	1
1.13.4	GB894.125FH12	Ring-Shield, $\Phi 25$	1
1.13.5	HB0052600	Crank Arm, Right	1

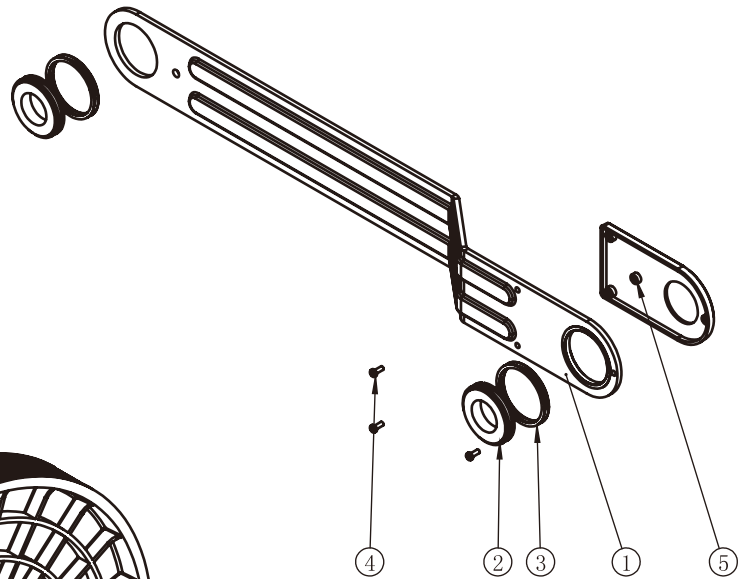
Grade No.	Part No.	Description	QTY
1.16.1	HB0052000	Eccentric Crank Assy	1
1.16.2	HB00510ASSY	Twisted Crank Assy	1
1.16.3	DQ25DS2C	Washer $\Phi 25 * \Phi 28 * 0.35$	1
1.16.4	GB894.125FH12	Ring-Shield, $\Phi 25$	1
1.16.5	HB0052500	Crank Arm, Left	1

Exploded View and Parts List

Belt Pulley Assembly



Twisted Crank Assembly

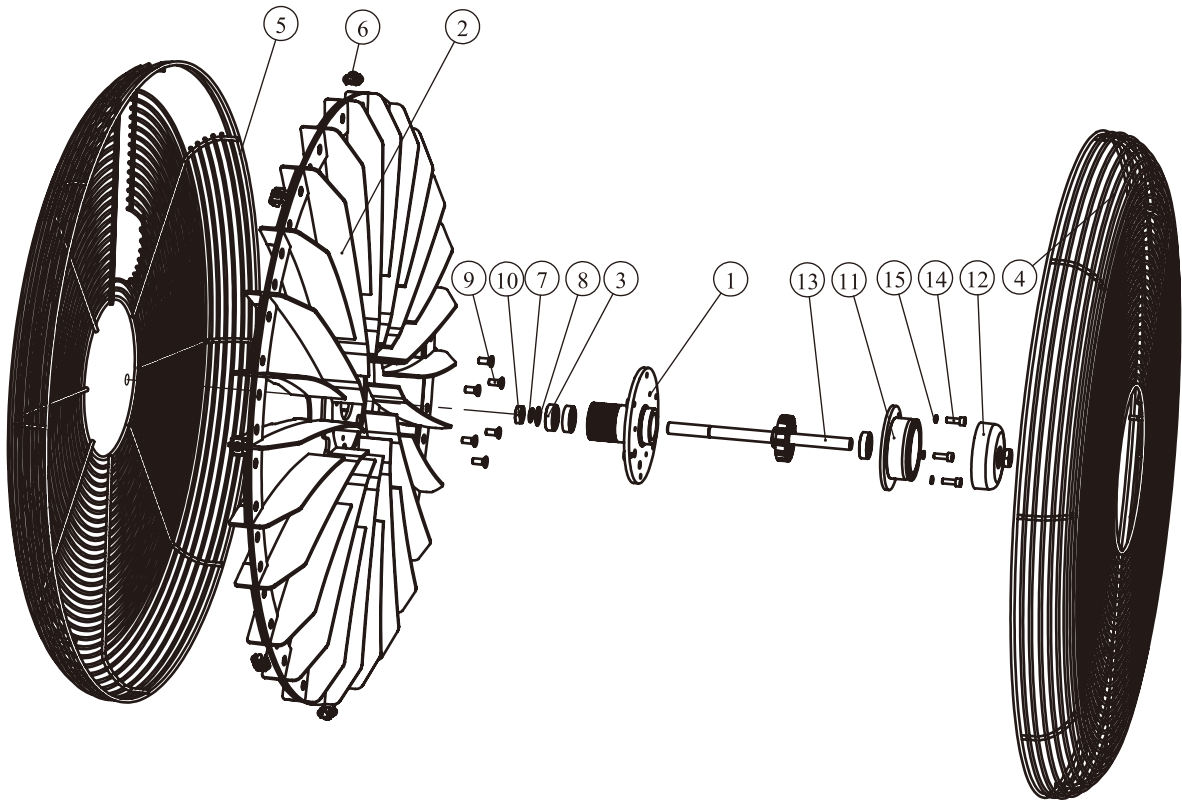


Grade No.	Part No.	Description	QTY
1.13.1.1	HB0051700	Shaft Assembly	1
1.13.1.2	HB0051800	Belt Pulley	1
1.13.1.3	CNLM10*25DHS18NL	Countersunk Head Bolt, M10*25	4

Grade No.	Part No.	Description	QTY
1.13.2.1	HB0052100	Twisted Crank	1
1.13.2.2	GB30561905-2ZNBK	Double Side Grooved Bearing	2
1.13.2.3	HB0052700	Thin Washer $\Phi 42.5 \times \Phi 48 \times 0.2$	6
1.13.2.4	GB818M3*8DS2	Screw M3*8	3
1.13.2.5	HB0054400	Decorative Cover	1

Exploded View and Parts List

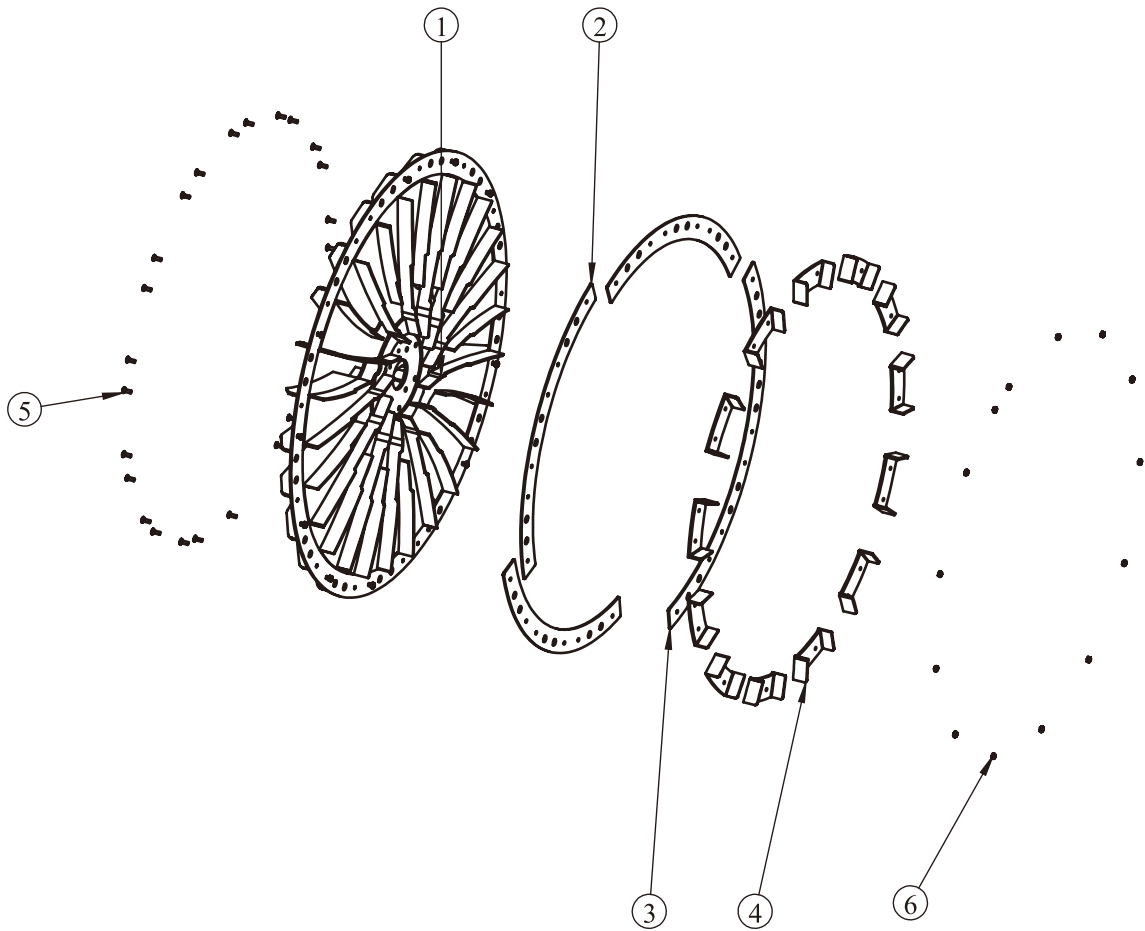
Windage Resistance Assembly



Grade No.	Part No.	Description	QTY
1.26.1	HB0050400V1	Impeller	1
1.26.2	HB005CBLK06ASSY	Impeller Assembly	1
1.26.3	GB2766001-2RSC3TPI	Bearing 6001	3
1.26.4	HB0051300	Left Welding Shield	1
1.26.5	HB0051400	Right Welding Shield	1
1.26.6	HB0051500	Clips	8
1.26.7	GB894.112FH12	Ring-Shield,Φ12	1
1.26.8	DQ12DHS2H	Washer	1
1.26.9	CNLM6*15DS20NL	Countersunk Head Bolt, M6*15	6
1.26.10	GB6172.1M12DS2	Hexagon Thin Nut M12	2
1.26.11	HB005B5700	Rotor Assembly	1
1.26.12	HB005B5200	Shield	1
1.26.13	HB005B5300	Stator Assembly	1
1.26.14	GB70M5*15DHS4	Screw,M5*15	3
1.26.15	GB935DHS12	Washer	3

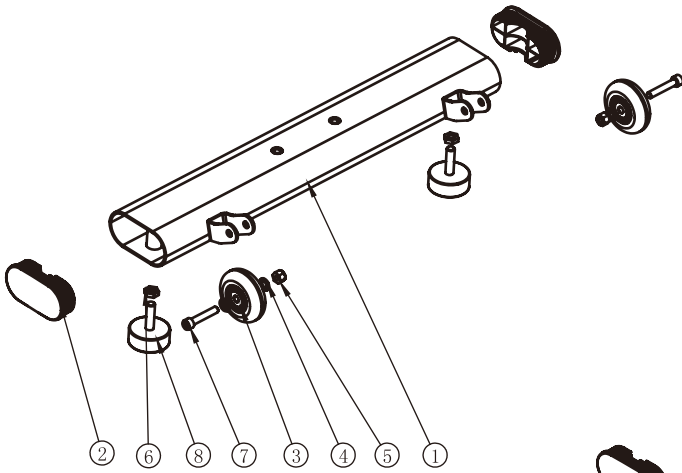
Exploded View and Parts List

Impeller Assembly

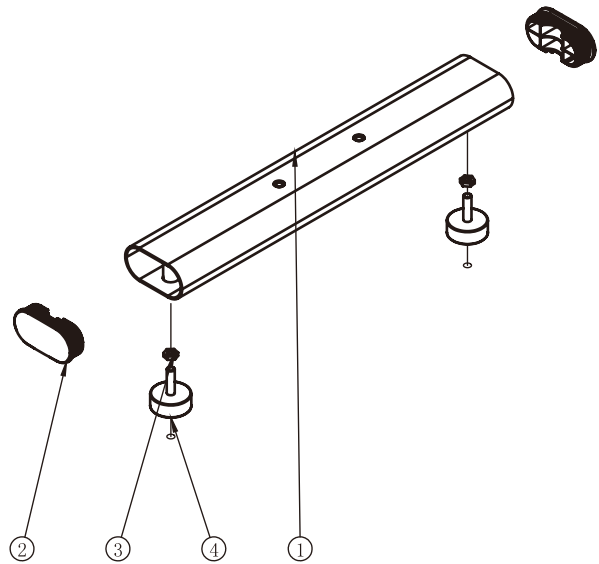


Grade No.	Part No.	Description	QTY
1.26.2.1	HB0050500V2	Impeller	1
1.26.2.2	HB0050600	Fixed Plate Of Impeller	3
1.26.2.3	HB0050700	Fixed Plate Of Impeller	1
1.26.2.4	HB0050800PBC	Intensive U Plate	13
1.26.2.5	GB819M4*12DS2	Screw,M4*12	26
1.26.2.6	NM4DS2	Nylon Insert Lock Nut M4	26

Front Base Assembly



Rear Base Assembly

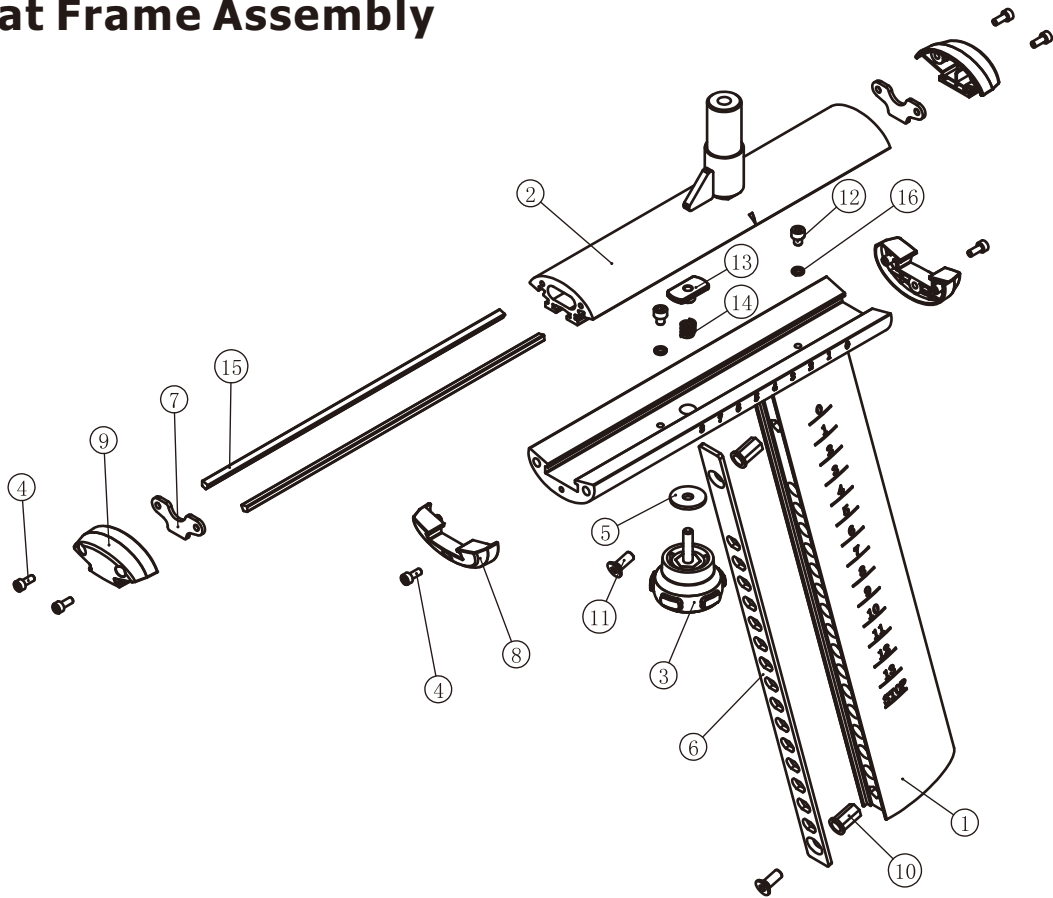


Grade No.	Part No.	Description	QTY
4.1	HB0054700	Front Base	1
4.2	IT90013800	Plug	2
4.3	DP86703100V1	PU Wheel	2
4.4	GB958N19	Washer $\Phi 9 * \Phi 16 * 1.6$	4
4.5	NM8N19	Nylon Insert Lock Nut M8	2
4.6	GB6174M10DS2	Nut M10	2
4.7	GB70M8*45N19	Screw M8*45	2
4.8	PS3000900	Foot	2

Grade No.	Part No.	Description	QTY
5.1	GR500A2500	Rear Base	1
5.2	IT90013800	Plug	2
5.3	GB6174M10DS2	Nut M10	2
5.4	PS3000900	Foot	2

Exploded View and Parts List

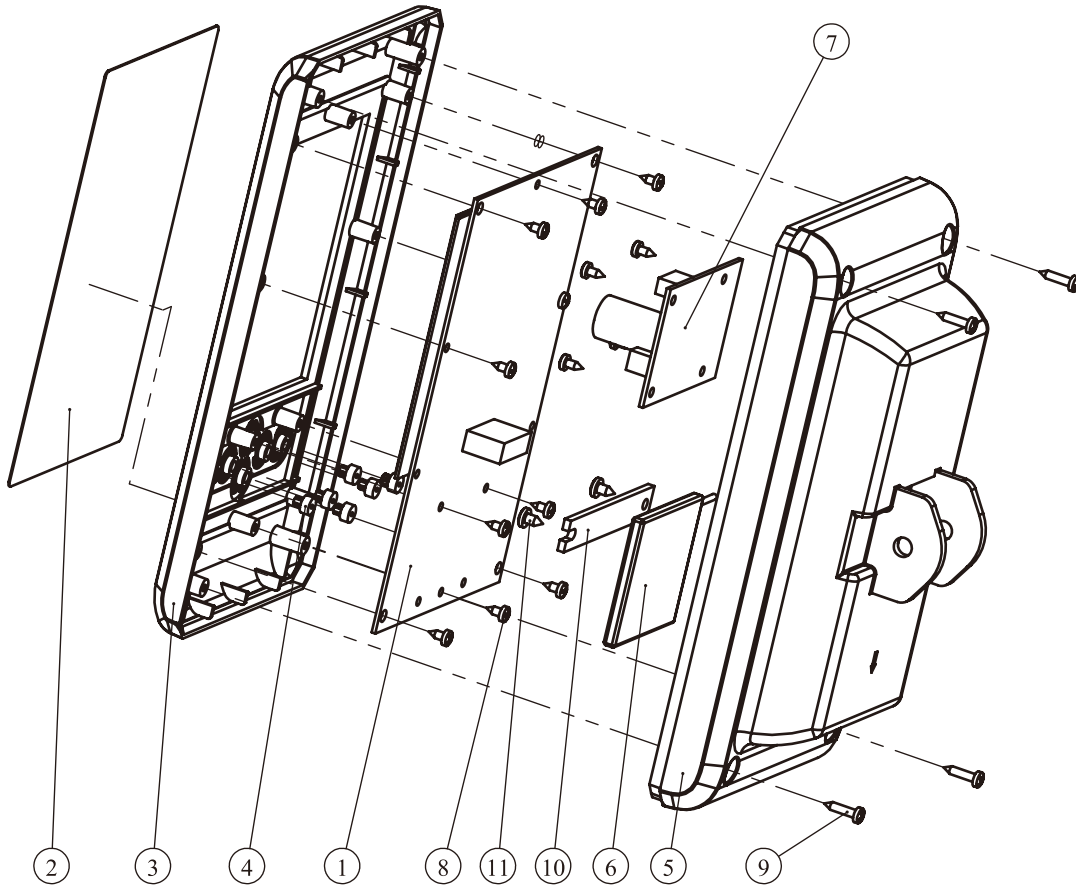
Seat Frame Assembly



Grade No.	Part No.	Description	QTY
6.1	HB0053400	Seat Support Frame	1
6.2	HB0055000	Seat Frame	1
6.3	PS4503700P426U	Knob	1
6.4	GB70M4*10N19	Screw M4*10	6
6.5	DQ6N19	Stainless Steel Washer	1
6.6	HB0053500	Stainless Steel Plate	1
6.7	PS4501603V1	Fixed Plate On Both Sides	2
6.8	PS4501506	Upper Sliding Block End Cover	2
6.9	PS4501507	Lower Sliding Block End Cover	2
6.10	GB17880.5M6*16.5DS17	Rivet Nut M6	2
6.11	CNLM6*16N19	Countersunk Head Bolt, M6*16	2
6.12	GB70M5*6N19	Screw M5*6	2
6.13	PS4501509V1	Knob Slider	1
6.14	MT13700	Compression Spring	1
6.15	PS4501508	Plastic Strip	2
6.16	GB935DHS12	Spring Washer Φ 5	2

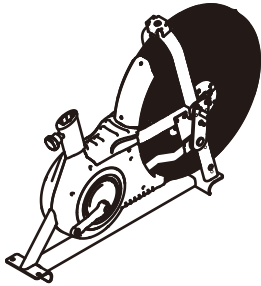
Exploded View and Parts List

Console Assembly

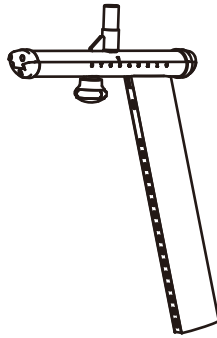


Grade No.	Part No.	Description	QTY
15.1	B254C-BLKDZB	PCB:Console	1
15.2	HB005CMM01	Mask:Console	1
15.3	HB005C4100	Front:Console	1
15.4	ECT74800	Cushion:TPU	6
15.5	HB005B5600	Rear Cover:Console	1
15.6	HB005B-DC3.7	Battery	1
15.7	B342-HB005B	PCB:Console	1
15.8	GB845ST2.9*6.5DHS	Screw ST2.9*6.5	14
15.9	GB845ST2.9*13N19	Screw ST2.9*13	4
15.10	HB005B5900	Battery Platen	1
15.11	GB845ST3.5*6.5DS2	Screw ST3.5*6.5	2
15.12	L150XHB-M43025-4	Control Board To Electronic Watch Cable	1
15.13	L150SMY-XHB-5	Meter Head Generator Cable	1
15.13	L150XHS-XHS-2	Control Board To Battery Cable	1

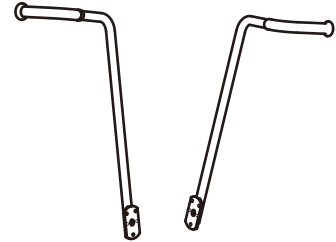
Subassembly Parts List



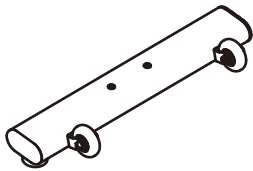
Main Frame Assembly



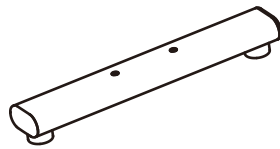
Seat Frame Assembly



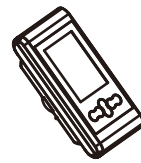
Right & Left Handlebar



Front Base Assembly



Rear Base Assembly



Console Assembly



Cup-front & back



Plastic jacket



Stationary foot



Welding base of Console



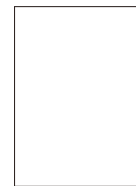
Seat



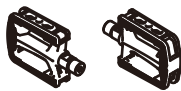
Plug



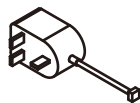
Hardware



Manual

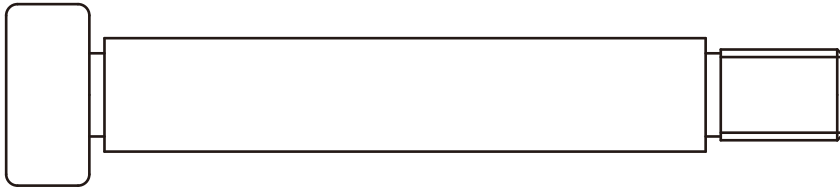


Left & Right Pedal



Power Adapter

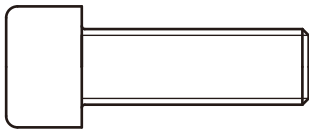
Hardware List



two Shoulder Bolt (#27)



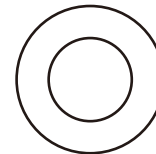
Plug



four M10*30 Socket Head Bolt (#25)



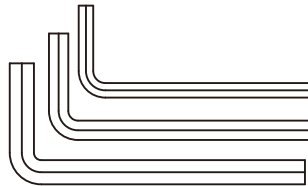
six M8 Nut (#21)



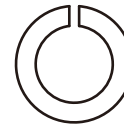
four Φ11*Φ20*2 Washer (#23)



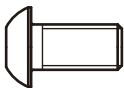
four M4*10 Screw (#30)



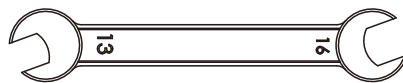
one S=4, 8, 10 Hex Key



four Φ10 Spring Washer (#24)



six M6*12 Hex Head Bolt (#29)



one Double-ended Wrench



six Φ8 Spring Washer (#22)



four M4*8 Screw (#26)



one S=6 Hex Key



four Φ6 Spring Washer (#28)

Diameter of bolt (mm/inch)	M6(1/4")	M8(5/16")	M10(3/8")	M12(1/2")	M16(5/8")
Tightening torque (N.m)	9~12	22~30	45~59	78~104	193~257
Operational methods for adult men	The strength of the wrist	The strength of the wrist and forearm	The strength of the entire arm	The strength of the arm and upper body	with all strength

Assembly

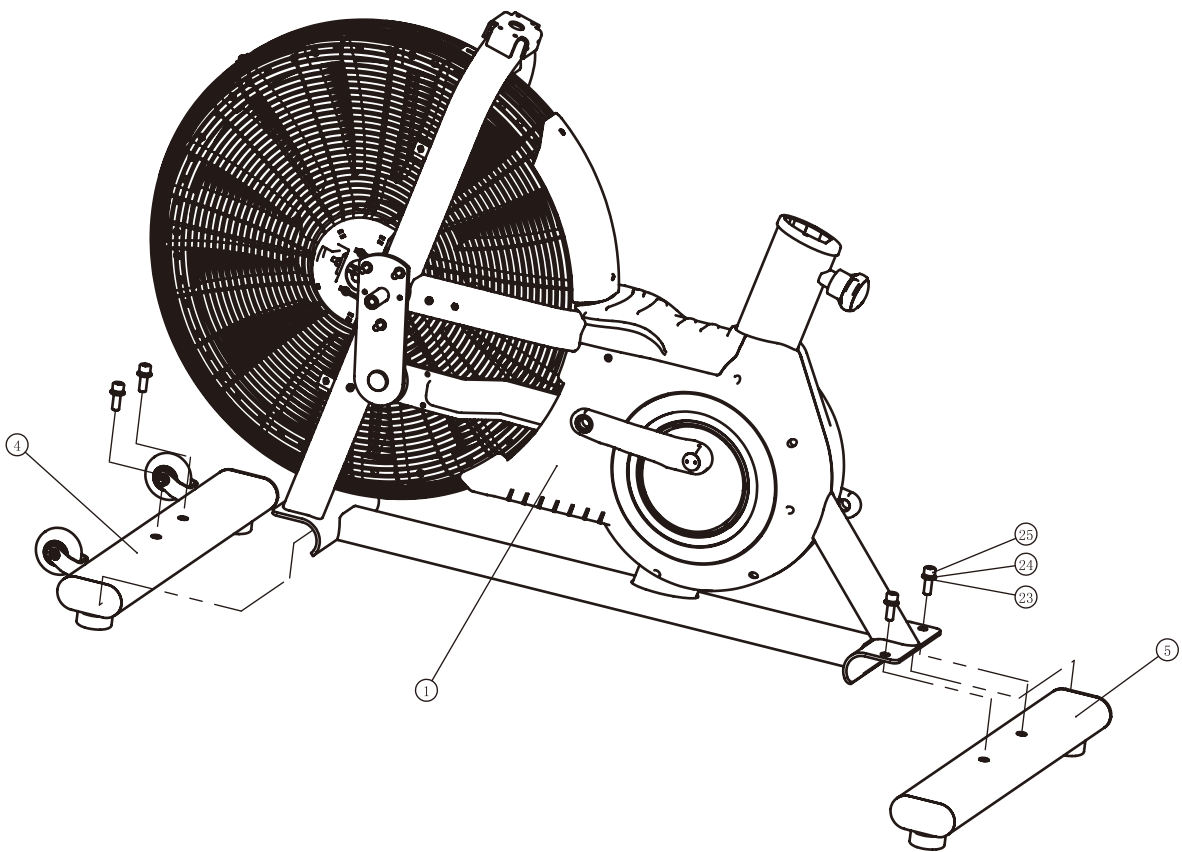
STEP 1

Fixing Front Base Assembly (#4) and Rear Base Assembly (#5) to Main Frame Assembly (#1) using:

four M10*30 Socket Head Bolt (#25)

four $\Phi 11*\Phi 20*2$ Washer (#24)

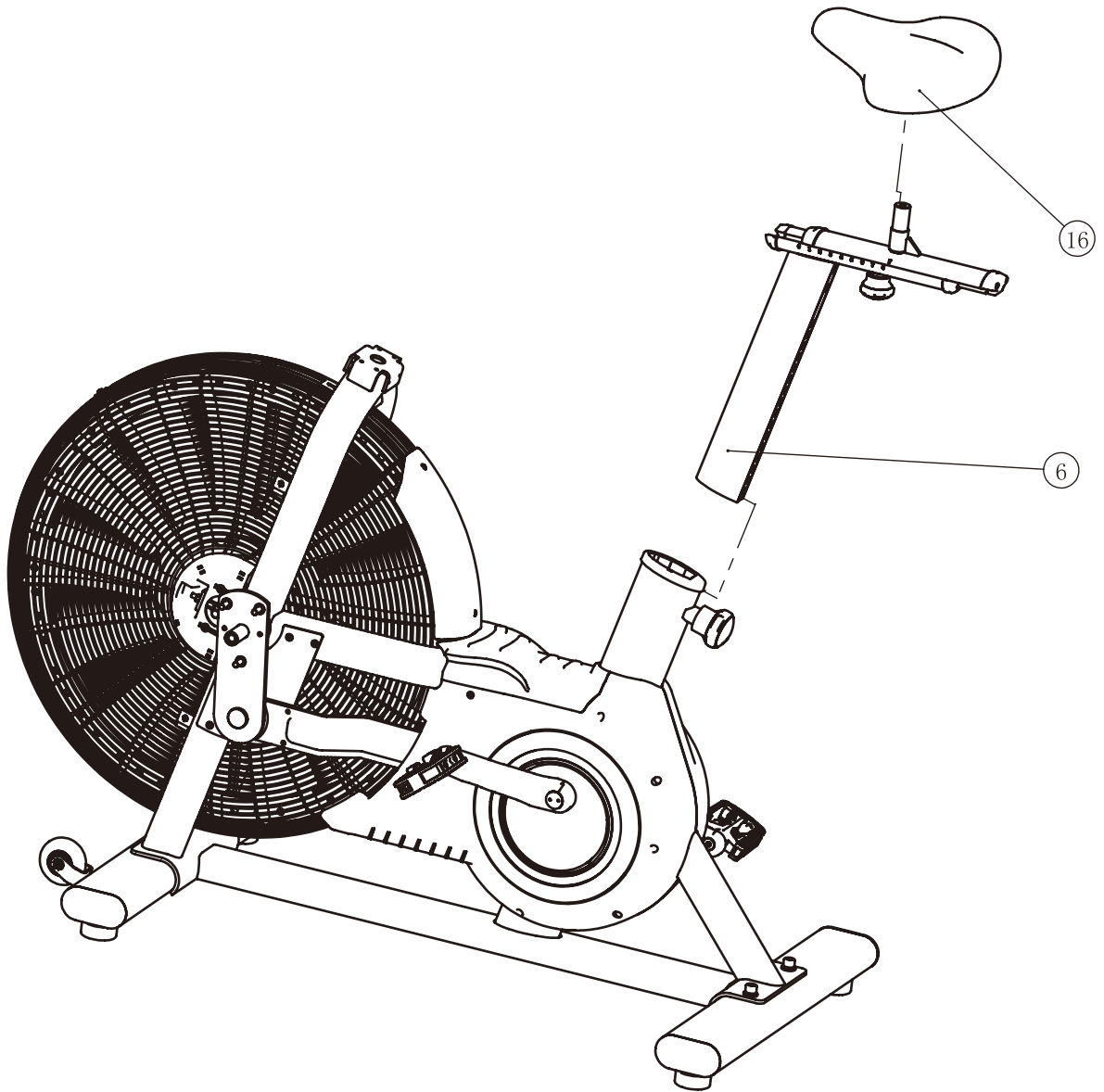
four $\Phi 10$ Washer (#10)



Assembly

STEP 3

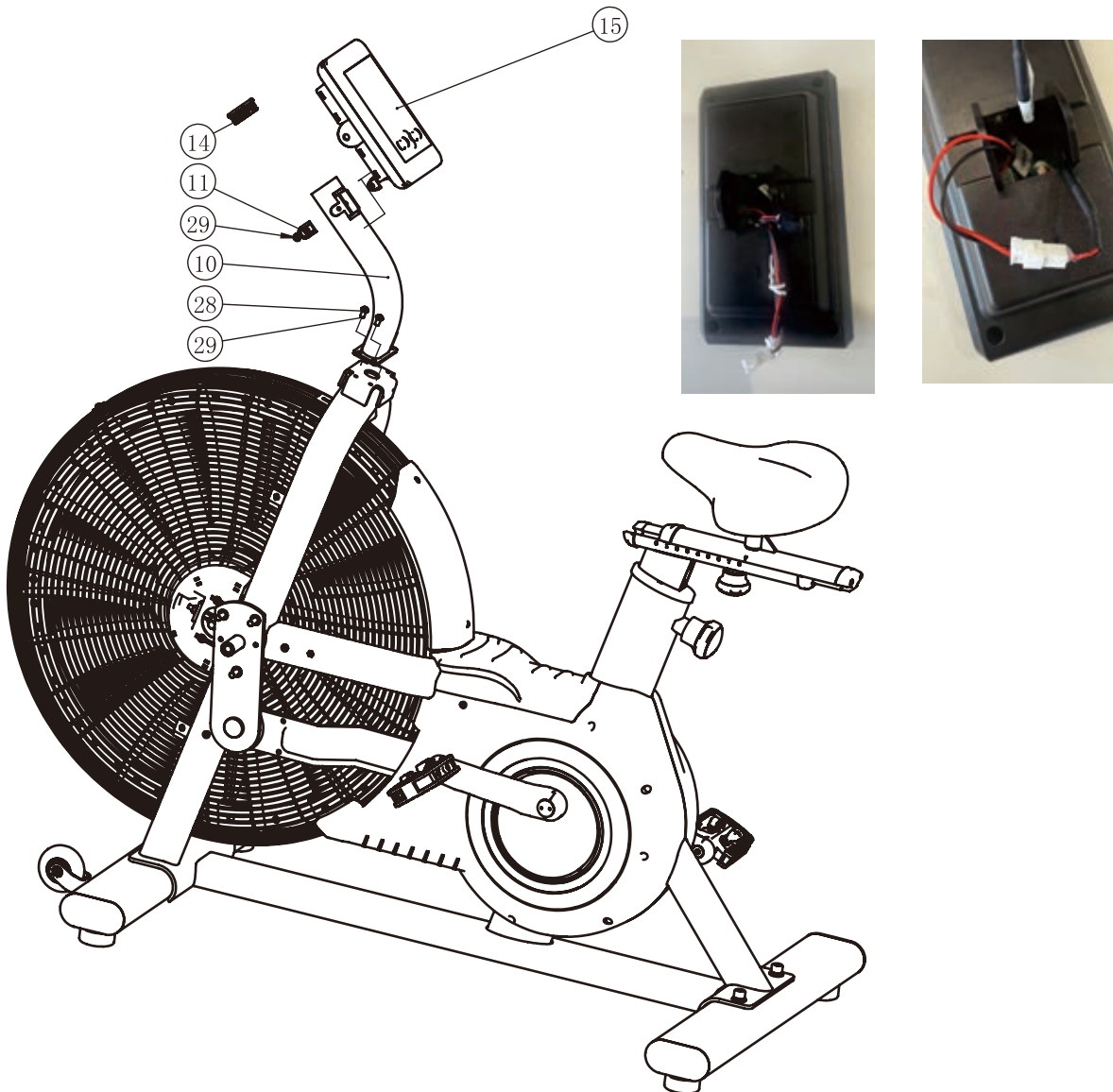
1. Attach Seat Frame Assembly (#6) to the Main Frame Assembly (#1).
2. Attach Seat (#16) to the Seat Frame Assembly (#6), lock tightly.



Assembly

STEP 4

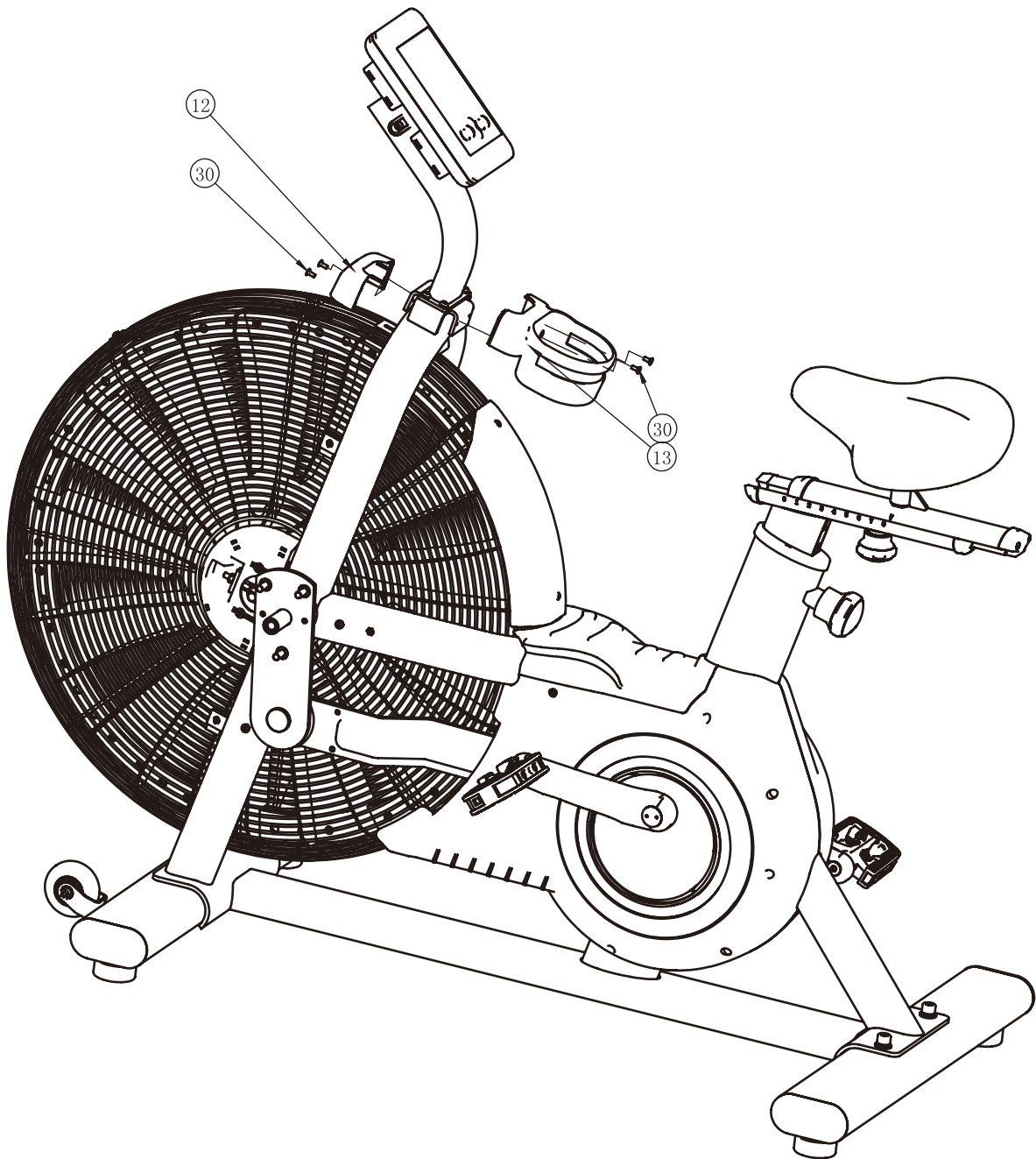
1. Connect console Wire down to the console Wire middle (#20), then Attach Welding base of Console (#10) to the Main Frame Assembly (#1) using:
four M6*12 Hex Head Bolt (#29) four $\Phi 6$ Washer (#28)
2. Connect the plugs of the two bundled wires coming out of the console as shown in the figure.
3. Connect console Wire middle (#20) to the console Wire, then Attach Console (#15) to the Main Frame Assembly (#1) using:
two Plug (#11) two M6*12 Hex Head Bolt (#29)
4. Attach Plug (#14) to the Main Frame Assembly (#1).



Assembly

STEP 5

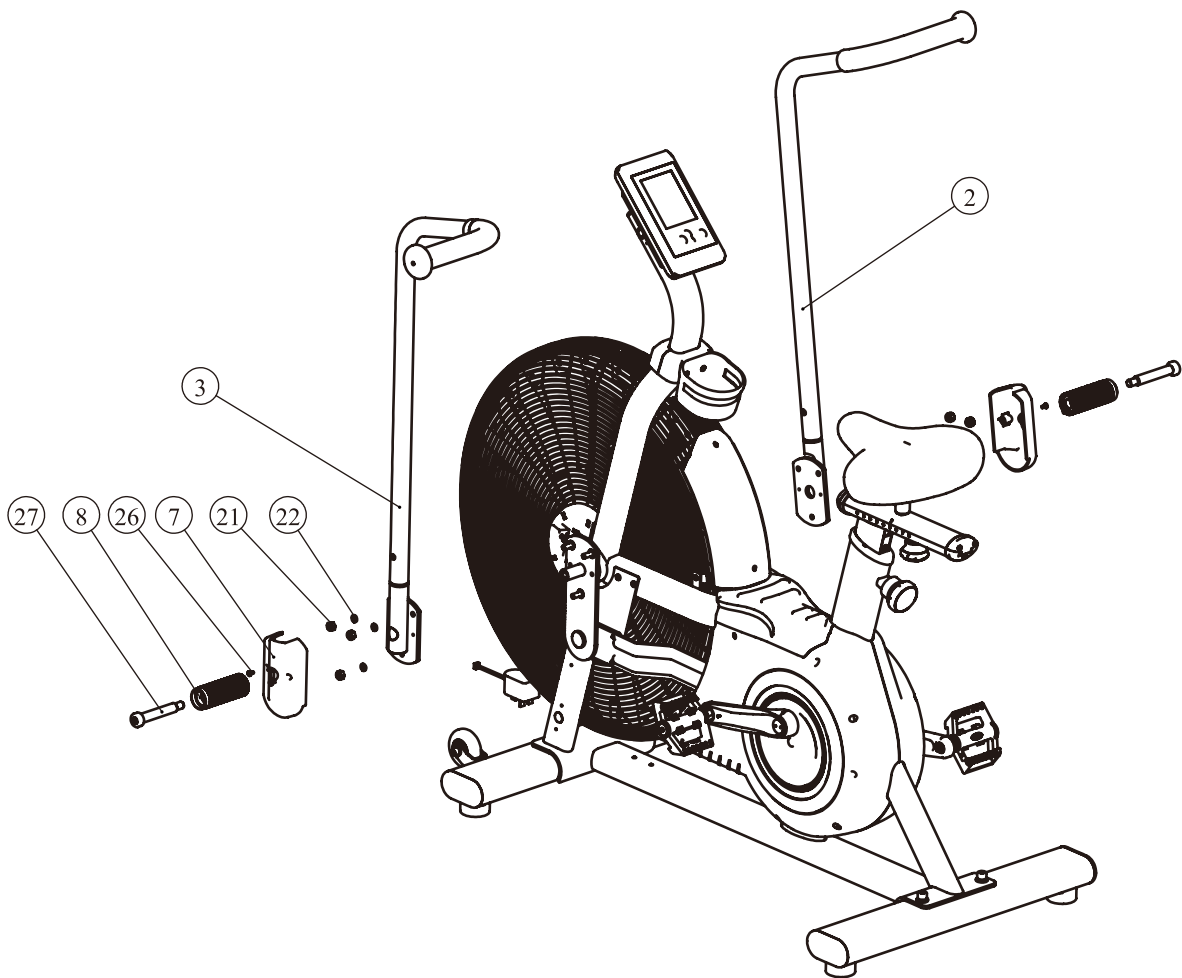
Attach Cup holder-front (#12), Cup holder-back (#13) to the Main Frame Assembly (#1) using:
four M4*10 Screw (#30)



Assembly

STEP 6

1. Attach Left Handlebar (#3), Right Handlebar (#2) to the Main Frame Assembly (#1) using:
 - six $\Phi 8$ Washer (#22)
 - six M8 Nylon Insert Lock Nut(#21)
2. Attach two Plastic jacket (#7) to the Left Handlebar (#3) and Right Handlebar (#2) using:
 - four M4*8 Screw (#26)
3. Attach two Stationary foot (#8) to the Handlebar's shaft using two Shoulder bolt, then Attach two Stationary foot cover to Stationary foot (#8).



Usage And Maintenance

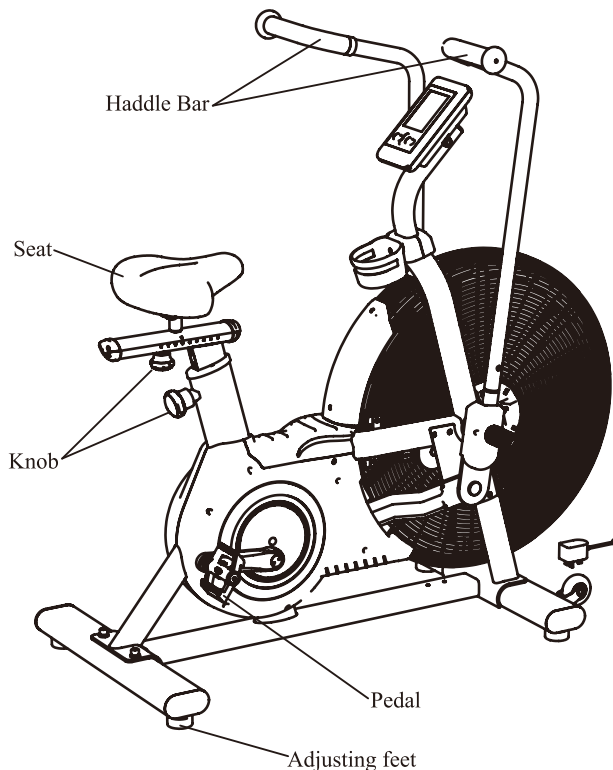
Using introduce

1. When moving the machine, you can grasp the Rear Base Frame and pull it up. Then you can move it by the wheel.
2. When using the machine, you must ensure it stand steadily on the ground. If it isn't steady, you can adjust the Adjusting Feet.
3. Adjust the Seat to the suitable position according to your stature, lock the knob tightly.
4. Before using the machine, you must insure the Pedal is locking tightly.

Maintenance

1. Tighten the pedals every 1 months.
2. If the bolts and screws have the trend of losing, please lock them timely.
3. After assembling the fan car for the first time, if the user pedals >40 RPM and the electronic display does not light up, the internal LiPo battery is in a discharged state and needs to be externally charged for one hour.
4. Always connect the battery and battery wire first before operating the console.
5. Don't use console alone to prevent battery drain.
6. If drained, using the adapter to recharge.

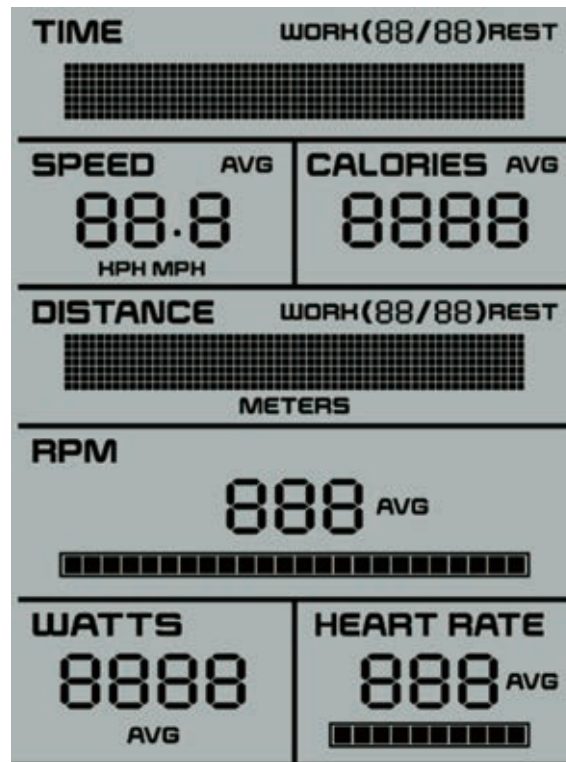
Charging Method: Connect the black plug of the Console to the adapter, as shown in the picture below.



Console Panel Functions

1. The console overview

The fan bike console LCD display screen is shown below:



2. LCD parameter display and Function keys







2.1 LCD displays: time, speed, calories, distance, RPM, watts, heart rate.

	Range	unit
Time	0:00--99:59	Minutes: seconds
Distance	0.00--99999	Meter
Calories	0.00--9999.99	Kcal
Speed	###	Km/h
Average speed	##	Average kilometers per hour
RPM	0-255	RPM
Average RPM	0-255	RPM
Power	0-9999	watts
Average Power	0-9999	watts
Heart Rate	0-255	BPM
Average Heart Rate	0-255	BPM

Console Panel Functions

2.2 Button section: SELECT WORKOUT button, START/ENTER button, UP/DOWN button, STOP button, BLUETOOTH/LIGHT button, a total of 6 buttons.



	This is the SELECT WORKOUT button that will provide the user with the ability to select from a list of available workouts.
	This is the START/ENTER button that provides the user with the ability to begin a workout or accept a selection choice as applicable.
	This is the UP button which allows the user to increment program and settings values.
	This is the DOWN button which allows the user to decrement program and settings values.
	This is the STOP button that allows a user to end a workout or exit a setting menu as applicable.
	This is the BLUETOOTH/LIGHT button which is used to connect Bluetooth devices to the console (e.g. Bluetooth wireless heart rate straps for example). When the button is pressed the console will search for available Bluetooth devices and also make itself available for pairing. This button is also used to turn on/off the screen light.

3. SYSTEM MODEL OVERVIEW

Wake Mode – This is the mode the system enters upon power up or when it awakes from Sleep Mode. All system initializations happen in this mode.

Idle Mode – This is the mode the system enters upon successful power up of the system. At this point the system is waiting for the user to select their desired workout or begin exercising. Refer to section **4 IDLE MODE** below for all relevant details.

Console Panel Functions

Program Setup Mode – This is the mode the system is in after the user has selected a program and needs to enter the required parameters prior to the program actually starting. Refer to section **5 PROGRAM SELECTION AND SETUP** below for all relevant details.

Program Mode – This is the mode the system is in during a given workout. Refer to section **6 PROGRAM MODE (I.E. IN-WORKOUT FUNCTIONALITY)** below for all relevant details.

Pause/Summary Mode – This is the mode the system enters when the user stops exercising (i.e. RPM of flywheel is less than a predetermined value). User data is maintained and displayed in the applicable indicators during this mode waiting for the user to resume or terminate their workout. Refer to section **7 PAUSE/ SUMMARY MODE** below for all relevant details.

Configuration Mode – This is the mode the system needs to be in prior to making any configuration changes, perform systems tests, update firmware, or review maintenance or performance metrics. Refer to section **8 CONFIGURATION MODES** below for all relevant details.

Sleep Mode – This is the mode the system enters to conserve power when the console is not in use. In this mode the console LCD shall be blank.

4. IDLE MODE

During the IDLE MODE the system is waiting for the user to press either the **START** or **SELECT WORKOUT** buttons.

The following sentence that will be scrolled from right to left repeated until a user makes a selection or the system times out due to 120 seconds of inactivity:

PRESS START OR SELECT PROGRAM TO BEGIN

To begin a workout quickly the user can press the **START** button on the keypad. Pressing this button will transition the system to **PROGRAM MODE**. See section **6 PROGRAM MODE (I.E. In-WORKOUT FUNCTIONALITY)** below for more details.

To select a specific workout the user can press the **SELECT WORKOUT** button. Pressing this button shall transition the system to **PROGRAM SETUP MODE**. See section **5 PROGRAM SETUP MODE** below for more details.

Console Panel Functions

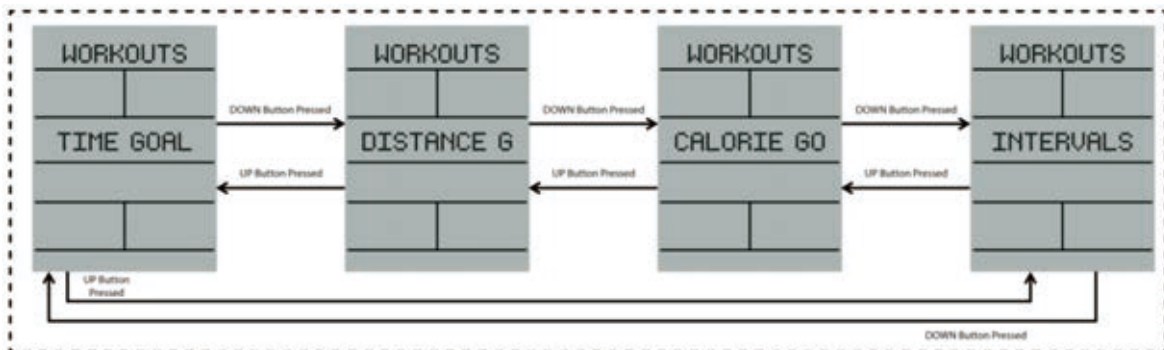
In addition to these features, the user shall also be able to enter **CONFIGURATION MODE** if they press the START, UP, and STOP buttons simultaneously. See section **8 CONFIGURATION MODE** below for more details. Also, if the user does not press any buttons to select or start a workout, then the console shall transition to **SLEEP MODE** with 120 seconds of inactivity.

5. PROGRAM SETUP MODE

To enter the **PROGRAM SETUP** mode the user needs to press the **SELECT WORKOUT** button on the IDLE screen

5.1 WORKOUT SELECTION SCREENS

In this mode the user shall be asked to select the type of program that they would like to do. The graphic below shows the available **WORKOUTS** screens that can be displayed during this mode.



There shall be four workout types that can be selected and they are as follows:

- Time Goal
- Distance Goal
- Calorie Goal
- Heart Goal
- Intervals

“DISTANCE GOAL” and “CALORIE GOAL” are longer than can be displayed at once on the screen, so each of these prompts shall scroll from right to left and repeat continuously until a new workout choice is made or the displayed workout is chosen (i.e. user pressed ENTER).

Console Panel Functions

The first screen that will be shown is the one for **TIME GOAL**. To select between the available workouts, the user shall press either the **DOWN** or **UP** button to navigate to the next or previous choice respectively.

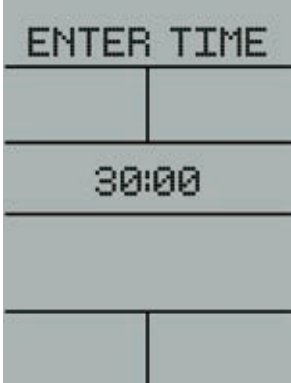
If the user presses the **ENTER** button they are selecting the displayed workout and the system shall transition to the applicable setup screen.

To exit the **WORKOUTS** screen and return to the **IDLE** screen the user shall press the **STOP** button.

5.2 TIME GOAL SCREEN

The **TIME GOAL** screen is shown below:

On the **TIME GOAL** screen the user shall be able to choose the duration of their workout. The user shall be able to enter a duration from 1 to 99 minutes. The default value shall be 30:00 minutes. The user can adjust the value up or down by using the **UP** and **DOWN** buttons respectively. Each press of either the **UP** or **DOWN** button shall change the current displayed value by 1. The **UP** button shall be used to increase the duration and the **DOWN** button shall be used to decrease the duration.




The screenshot shows a console display with the text "ENTER TIME" at the top. Below it is a grid of buttons. The central display area shows "30:00".

Once the duration is set to the desired value for the given workout the **ENTER** button shall be pressed. Upon pressing the **ENTER** button the system shall transition to **PROGRAM MODE** and the workout shall begin. See section **6 PROGRAM MODE (I.E. IN-WORKOUT FUNCTIONALITY)** below for more details. To exit the **TIME GOAL** screen and return to the **WORKOUTS** screen the user shall press the **STOP** button.

5.3 DISTANCE GOAL SCREEN

The **DISTANCE GOAL** screen is shown below:

On the **DISTANCE GOAL** screen the user shall be able to choose the desired distance for their workout. The user shall be able to enter a length from 100 to 99900 meters. The default value shall be 2500 meters. The user can adjust the value up or down by using the **UP** and **DOWN**



The screenshot shows a console display with the text "ENTER DIST" at the top. Below it is a grid of buttons. The central display area shows "2500".

Console Panel Functions

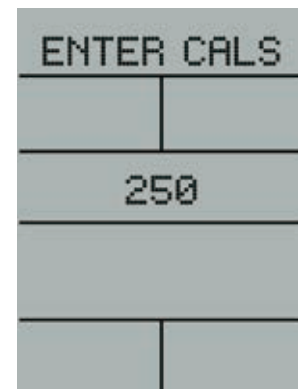
buttons respectively. Each press of either the **UP** or **DOWN** button shall change the current displayed value by 100. The UP button shall be used to increase the length and the **DOWN** button shall be used to decrease the length.

Once the distance is set to the desired value for the given workout the **ENTER** button shall be pressed. Upon pressing the **ENTER** button the system shall transition to **PROGRAM MODE** and the workout shall begin. See section **6 PROGRAM MODE (I.E. In-WORKOUT FUNCTIONALITY)** below for more details. To exit the **DISTANCE GOAL** screen and return to the **WORKOUTS** screen the user shall press the **STOP** button.

5.4 CALORIE GOAL SCREEN

The CALORIE GOAL screen is shown below:

On the **CALORIE GOAL** screen the user shall be able to choose the desired calorie goal for their workout. The user shall be able to enter a goal from 5 to 1000 calories. The default value shall be 250 calories. The user can adjust the value up or down by using the **UP** and **DOWN** buttons respectively. Each press of either the **UP** or **DOWN** button shall change the current displayed value by 5. The UP button shall be used to increase the length and the **DOWN** button shall be used to decrease the length.



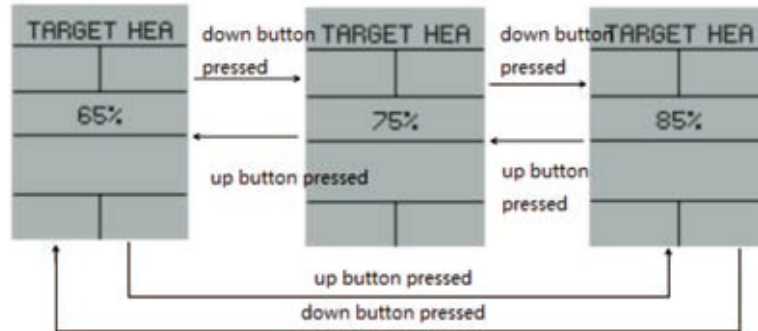
Once the calorie value is set as desired for the given workout the **ENTER** button shall be pressed. Upon pressing the **ENTER** button the system shall transition to **PROGRAM MODE** and the workout shall begin. See section **6 PROGRAM MODE (I.E. In-WORKOUT FUNCTIONALITY)** below for more details.

To exit the **CALORIE GOAL** screen and return to the **WORKOUTS** screen the user shall press the **STOP** button.

5.5 HEART GOAL

The HEART GOAL screen is shown below:

Console Panel Functions



The heart rate training mode includes the following three target heart rates:

- 65% Heart Rate Goal
- 75% Heart Rate Goal
- 85% Heart Rate Goal

The system first displays the "65%" heart rate training mode, and the user can click the **UP and DOWN** buttons to select other target heart rate training modes. The user clicks the **ENTER** button to select the "65%" target heart rate, and the system displays the following age input screen.

The input age range is 5 to 99 years old, and the default user age is 40 years old.

Increase and decrease user age settings by the **UP or DOWN** buttons respectively.

ENTER AGE	
18	

Once the age value is set as desired for the given workout the **ENTER** button shall be pressed. Upon pressing the **ENTER** button the system shall transition to **PROGRAM MODE** and the workout shall begin. See section **6 PROGRAM MODE (I.E. In-WORKOUT FUNCTIONALITY)** below for more details

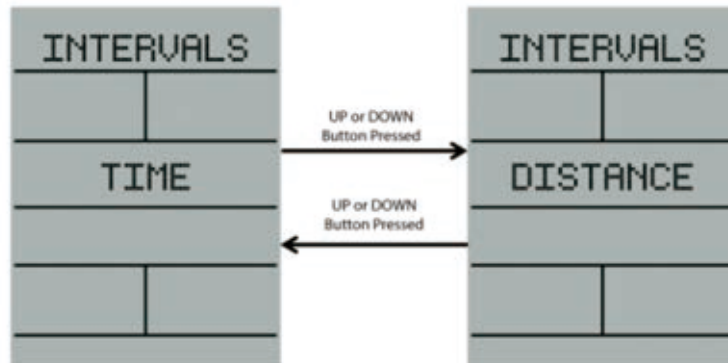
To exit the **HEART GOAL** screen and return to the **WORKOUTS** screen the user shall press the **STOP** button.

Note: Under this program, the user needs to wear the heart rate belt to transfer the real-time heart rate to the console and display.

Console Panel Functions

5.6 INTERVALS SCREEN

The INTERVALS screens are shown below:



There shall be two interval types that can be selected and they are as follows:

- Time Intervals
- Distance Intervals

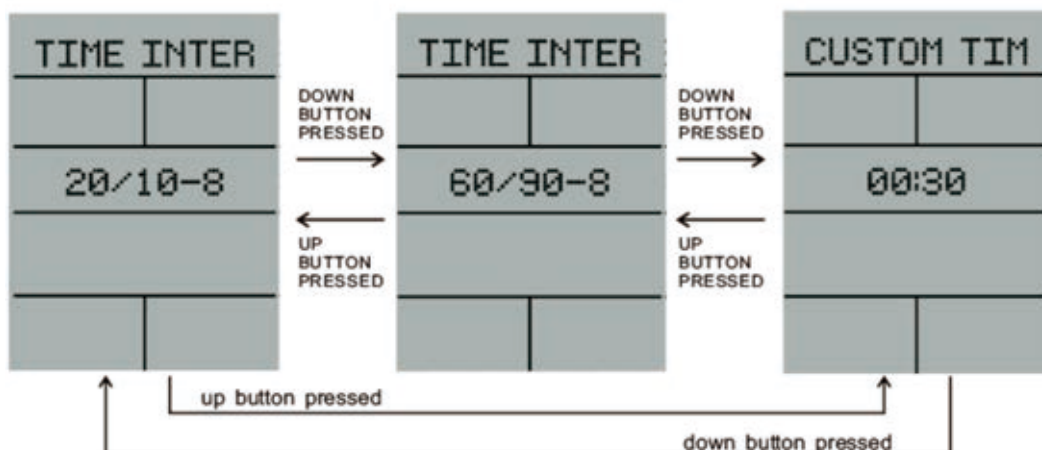
The first screen that will be shown is the one for **TIME INTERVAL GOAL**. To select between the available Interval types, the user shall press either the **DOWN** or **UP** button to navigate to the next or previous choice respectively.

If the user presses the **ENTER** button they are selecting the displayed Interval workout type and the system shall transition to the applicable setup screen.

To exit the **INTERVALS** screen and return to the **WORKOUTS** screen the user shall press the **STOP** button.

5.6.1 TIME INTERVALS SCREEN

The TIME INTERVALS screen is shown below:



Console Panel Functions

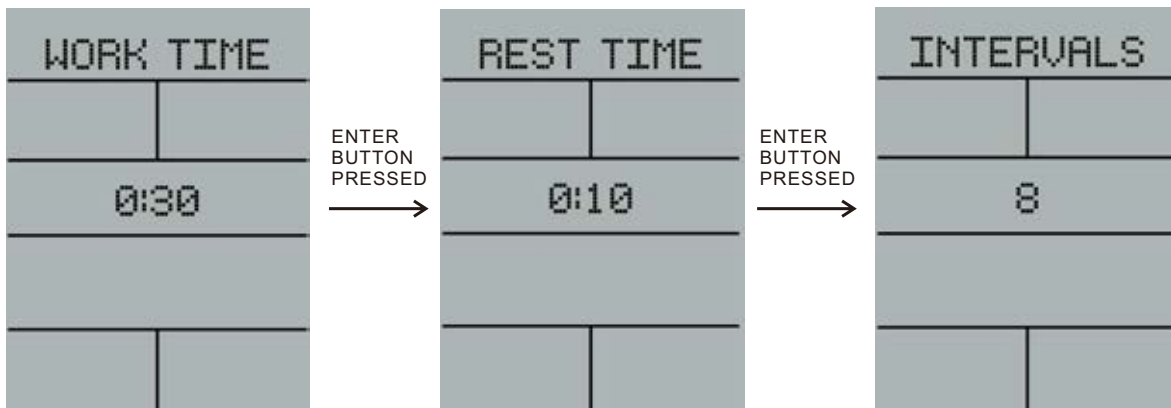
Enter the time interval program, the system first displays the screen "Time Interval 1", the preset program is 20s for exercise, 10s for rest, and 8 intervals of training are completed.

Click the **UP or DOWN** button to display the "Time Interval 2" and "Customized Interval" programs.

In the "Time Interval 1" screen, upon pressing the **ENTER** button the system shall transition to **PROGRAM MODE** and the workout will begin. See section **6 PROGRAM MODE (I.E. In-WORKOUT FUNCTIONALITY)** below for more details. In the "Time Interval 2" screen, upon pressing the **ENTER** button the system shall transition to **PROGRAM MODE** and the workout will begin. See section **6 PROGRAM MODE (I.E. In-WORKOUT FUNCTIONALITY)** below for more details.

To exit the **TIME INTERVALS** screens and return to the **INTERVALS** screen the user shall press the **STOP** button.

In the "custom time interval" screen, press the **ENTER** button, and the screen displays as follows:



An interval consists of a segment of high intensity and segment of low intensity exercise. The high intensity segment is defined by the **WORK TIME**. The low intensity segment is defined by the **REST TIME**. On the **TIME INTERVALS** screens the user shall be able to specify the duration for the work and rest segments and the total number of intervals desired for the given workout. The user shall be able to enter a duration from 5 seconds to 999 seconds for the work segment and the

Console Panel Functions

rest segment. The default value for the work segment shall be 30 seconds. The default value for the rest segment shall be 10 seconds. The user shall be able to enter between 1 and 99 intervals. The default value for the number of intervals shall be 8.

Upon entering the setup for this program the **WORK TIME** screen shall be the first one displayed. The user can adjust the value up or down by using the **UP and DOWN** buttons respectively. Each press of either the **UP or DOWN** button shall change the current displayed value by 5 seconds. The UP button shall be used to increase the duration and the DOWN button shall be used to decrease the duration.

Once the **WORK TIME** duration is set to the desired value for the given workout the **ENTER** button shall be pressed. Upon pressing the **ENTER** button the screen shall switch to the **REST TIME** screen.

The user can adjust the value up or down by using the **UP and DOWN** buttons respectively. Each press of either the **UP or DOWN** button shall change the current displayed value by 5 seconds. The UP button shall be used to increase the duration and the DOWN button shall be used to decrease the duration.

Once the **REST TIME** duration is set to the desired value for the given workout the **ENTER** button shall be pressed. Upon pressing the **ENTER** button the screen shall switch to the **NUMBER OF INTERVALS** screen.

The user can adjust the value up or down by using the **UP and DOWN** buttons respectively. Each press of either the **UP or DOWN** button shall change the current displayed value by 1. The UP button shall be used to increase the number of intervals and the DOWN button shall be used to decrease the number of intervals.

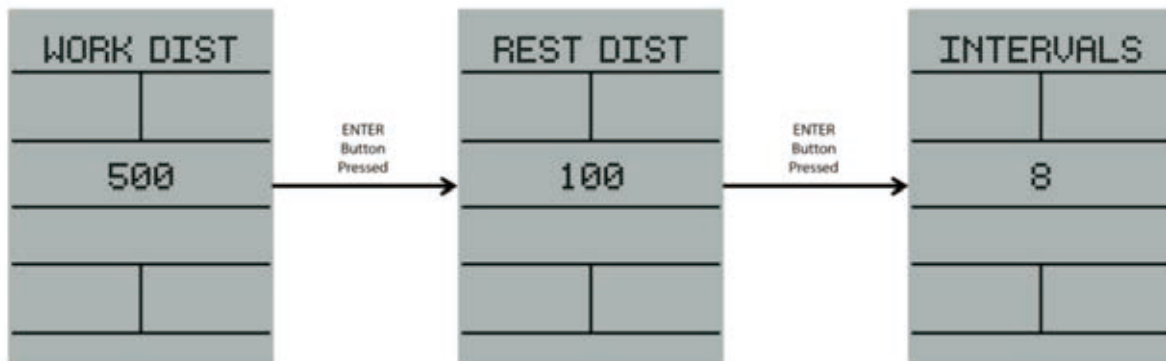
Once the **NUMBER OF INTERVALS** is set to the desired value for the given work out the **ENTER** button shall be pressed. Upon pressing the **ENTER** button the system shall transition to **PROGRAM MODE** and the workout will begin. See section **6 PROGRAM MODE (I.E. In-WORKOUT FUNCTIONALITY)** below for more details.

To exit the **TIME INTERVALS** screens and return to the **INTERVALS** screen the user shall press the **STOP** button.

Console Panel Functions

5.6.2 DISTANCE INTERVALS SCREEN

The DISTANCE INTERVALS screen is shown below:



An interval consists of a segment of high intensity and segment of low intensity exercise. The high intensity segment is defined by the **WORK DISTANCE**. The low intensity segment is defined by the **REST DISTANCE**. On the **DISTANCE INTERVALS** screens the user shall be able to specify the desired distance for the work and rest segments and the total number of intervals desired for the given workout. The user shall be able to enter a distance from 100 to 10000 meters for the work segment and the rest segment. The default value for the work distance shall be 500 meters. The default value for the rest distance shall be 100 meters. The user shall be able to enter between 1 and 99 intervals. The default value for the number of intervals shall be 8.

Upon entering the setup for this program the **WORK DISTANCE** screen shall be the first one displayed. The user can adjust the value up or down by using the **UP and DOWN** buttons respectively. Each press of either the **UP or DOWN** button shall change the current displayed value by 100. The UP button shall be used to increase the distance and the DOWN button shall be used to decrease the distance.

Once the WORK DISTANCE is set to the desired value for the given workout the **ENTER** button shall be pressed. Upon pressing the **ENTER** button the screen shall switch to the **REST DISTANCE** screen.

The user can adjust the value up or down by using the **UP and DOWN** buttons respectively. Each press of either the **UP or DOWN** button shall change the current displayed value by 100. The UP button shall be used to increase the distance and the DOWN button shall be used to decrease the distance.

Console Panel Functions

Once the **REST DISTANCE** is set to the desired value for the given workout the **ENTER** button shall be pressed. Upon pressing the **ENTER** button the screen shall switch to the **NUMBER OF INTERVALS** screen.

The selection arrow signifies that the **NUMBER OF INTERVALS** value is editable. The user can adjust the value up or down by using the **UP and DOWN** buttons respectively. Each press of either the **UP or DOWN** button shall change the current displayed value by 1. The UP button shall be used to increase the number of intervals and the DOWN button shall be used to decrease the number of intervals.

Once the **NUMBER OF INTERVALS** is set to the desired value for the given workout the **ENTER** button shall be pressed. Upon pressing the **ENTER** button the system shall transition to **PROGRAM MODE** and the workout will begin. See section **6 PROGRAM MODE (I.E. In-WORKOUT FUNCTIONALITY)** below for more details.

To exit the **DISTANCE INTERVALS** screens and return to the **INTERVALS** screen the user shall press the **STOP** button.

6. PROGRAM MODE (I.E. IN-WORKOUT FUNCTIONALITY)

Upon transitioning to this mode time shall begin incrementing, distance shall begin accumulating, calories shall begin accumulating, and all other displays shall become active. The specifics of the workout views are described below.

6.1 STANDARD WORKOUT SCREENS

For quick workouts that are initiated by hitting the **QUICK START** button from the **IDLE SCREEN** or workouts that are initiated by selecting a TIME GOAL, DISTANCE GOAL, CALORIE GOAL the following screens shall be provided during the workout.

Console Panel Functions

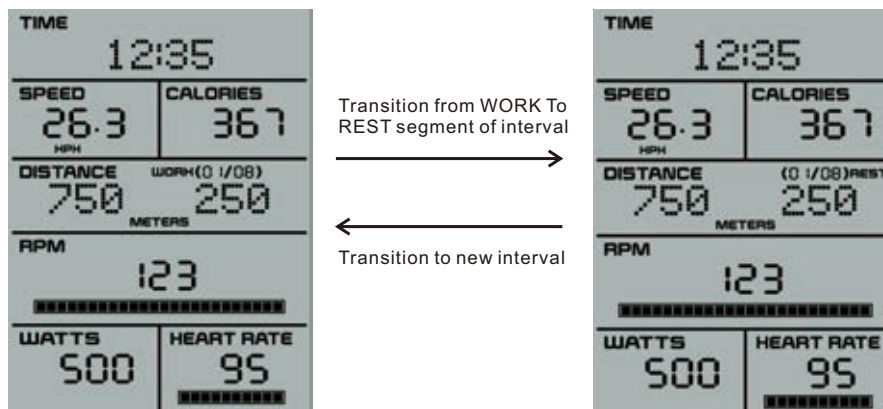
The following fields are present:

- **Time** – The elapsed time for the workout in MM:SS format
- **WORK (X/Y)** –The time remaining in the current WORK segment displayed in MM:SS format; the initial value for WORK was established during program setup; the X denotes the current segment number while the Y denotes the total number of segments that will be run in the current workout and was defined in program setup; the example above on the left shows "WORK (01 / 08)" signifying that the first segment is in process and there are 8 total segments in the workout; the WORK segment would be followed by the REST segment (screen shown on right above)
- **REST (X/Y)** –The time remaining in the current REST segment displayed in MM:SS format; the initial value for REST was established during program setup; the X denotes the current segment number while the Y denotes the total number of segments that will be run in the current workout and was defined in program setup; the REST segment follows the WORK segment; the X shall increment to the next segment once the current REST segment has been completed
- **Speed** – How many distances per hour, KM/H
- **Calories** – The amount of calories the user has burned through the workout
- **Distance** – The distance, in meters, the user has "traveled" in the given workout
- **RPM** – Flywheel speed per minute
- **Watts** – The amount of work the user is currently performing in the workout
- **Heart Rate** – The user's current heart rate as measured from their wireless HR strap

6.3 DISTANCE INTERVAL WORKOUT SCREENS

For DISTANCE INTERVAL workouts the following initial screen shall be provided during the workout.

Console Panel Functions



The following fields are present:

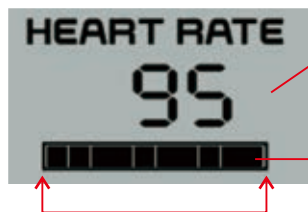
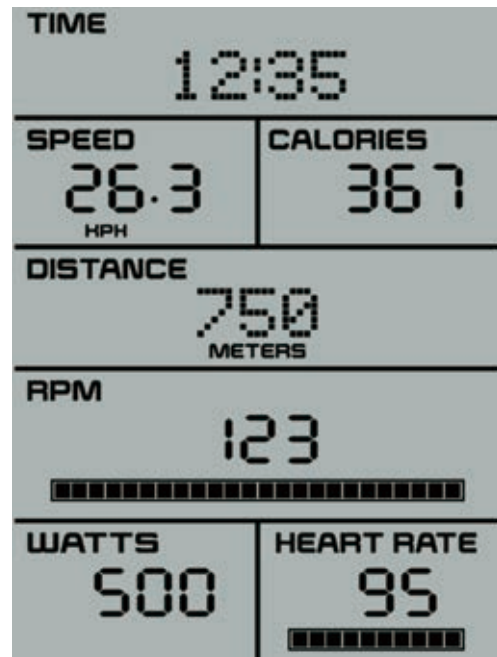
- **Time** – The elapsed time for the workout in MM:SS format
- **WORK (X/Y)** – The distance remaining in the current WORK segment displayed in meters; the initial value for WORK was established during program setup; the X denotes the current segment number while the Y denotes the total number of segments that will be run in the current workout and was defined in program setup; the example above on the left shows "WORK (01 / 08)" signifying that the first segment is in process and there are 8 total segments in the workout; the WORK segment would be followed by the REST segment (screen shown on right above)
- **REST (X/Y)** – The distance remaining in the current REST segment displayed in meters; the initial value for REST was established during program setup; the X denotes the current segment number while the Y denotes the total number of segments that will be run in the current workout and was defined in program setup; the REST segment follows the WORK segment; the X shall increment to the next segment once the current REST segment has been completed
- **Speed** – How many distances per hour, KM/H
- **Calories** – The amount of calories the user has burned through the workout
- **Distance** – The distance, in meters, the user has "traveled" in the given workout
- **RPM** – Flywheel speed per minute
- **Watts** – The amount of work the user is currently performing in the workout
- **Heart Rate** – The user's current heart rate as measured from their wireless HR strap

Console Panel Functions

6.4 HEART GOAL SCREENS

The following fields are present:

- **Time** – The elapsed time for the workout in MM:SS format
- **Speed** – How many distances per hour, KM/H
- **Calories** – The amount of calories the user has burned through the workout
- **Distance** – The distance, in meters, the user has "traveled" in the given workout
- **RPM** – Flywheel speed per minute
- **Watts** – The amount of work the user is currently performing in the workout
- **Heart Rate** – The user's current heart rate as measured from their wireless HR strap



Actual age of the user

Enter the 65% target heart rate value calculated by the actual age

The actual heart rate is a percentage of the 65% target heart rate value. The rightmost grid represents the target heart rate value of 65%.

Under the 75% target heart rate exercise program: After the user enters the age, the target heart rate value is calculated according to the encore treadmill 75% target heart rate program.

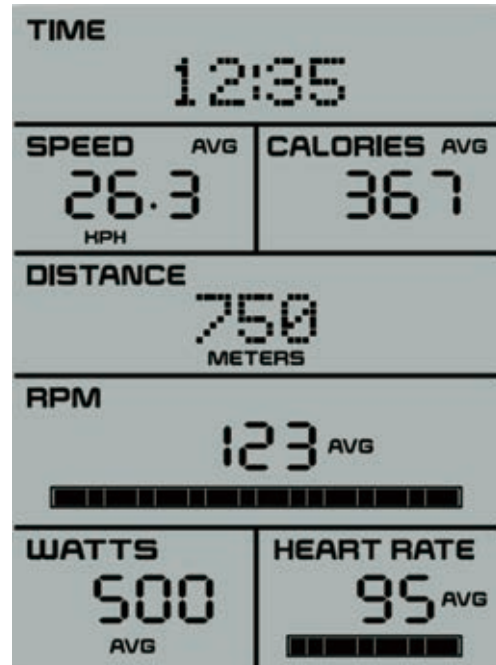
Under the 85% target heart rate exercise program: After the user enters the age, the target heart rate value is calculated according to the 85% target heart rate program of the encore treadmill.

Console Panel Functions

7. PAUSE/SUMMARY MODE

7.1 USER STOPS EXERCISING

If the user stops exercising (i.e. the RPM has been less than 25 RPM for 4 or more seconds) during a workout the system shall transition to **PAUSE/SUMMARY MODE**, the elapsed time shall stop incrementing, the distance and calories shall stop accumulating and the system shall start displaying the average values for pace, stroke/rate, watts, and heart rate as shown in the screen image below. Once this mode has been initiated a 120 seconds countdown timer shall be started and once it elapses, the system shall transition back to **IDLE MODE**. See section **4 IDLE MODE** above for the desired behavior during **IDLE MODE**.



If the user resumes exercising before the timer has elapsed then the system shall transition back to **PROGRAM MODE** and continue the workout from where the user left off. It is assumed that an acceleration of the flywheel (i.e. increase in RPM) is the user resuming their workout. A user may also resume their workout by pressing the START button.

To end this mode before the timer elapses the user shall press the **STOP** button to immediately transition to **IDLE MODE**.

7.2 USER PRESSES STOP BUTTON WHILE IN WORKOUT

If the user presses the **STOP** button while exercising the system shall immediately transition to **PAUSE/SUMMARY MODE**, the elapsed time shall stop incrementing, the distance and calories shall stop accumulating and the system shall start displaying the average values for pace, stroke/rate, watts, and heart rate as shown in the screen image below. Once this mode has been initiated a 120 second countdown timer shall be started and once it elapses, the system shall transition back to **IDLE MODE**. See section **4 IDLE MODE** above for the desired behavior during **IDLE MODE**.

Console Panel Functions

If the user resumes exercising before the timer has elapsed then the system shall transition back to **PROGRAM MODE** and continue the workout from where the user left off. It is assumed that an acceleration of the flywheel (i.e. increase in RPM) is the user resuming their workout. A user may also resume their workout by pressing the **START** button.

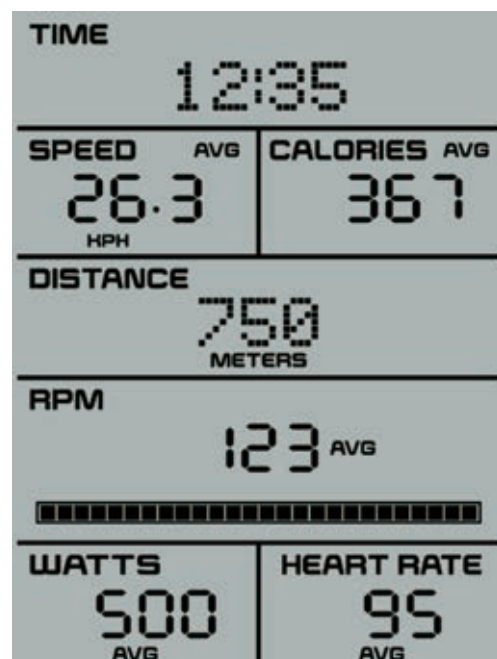
To end this mode before the timer elapses the user shall press the **STOP** button to immediately transition to **IDLE MODE**.

7.3 WORKOUT GOAL IS REACHED

If the user reaches their chosen workout goal then the system shall also transition to **PAUSE/SUMMARY MODE**, the elapsed time shall stop incrementing, the distance and calories shall stop accumulating and the system shall start displaying the average values for pace, stroke/rate, power, and heart rate as shown in the screens images below. Once this mode has been initiated a 30 second countdown timer shall be started and once it elapses, the system shall transition back to **IDLE MODE**. See section **4 IDLE MODE** above for the desired behavior during **IDLE MODE**.

To end this mode before the timer elapses the user shall press the **STOP** button to immediately transition to **IDLE MODE**.

7.4 PAUSE MODE SCREEN



Console Panel Functions

8. CONFIGURATION MODES

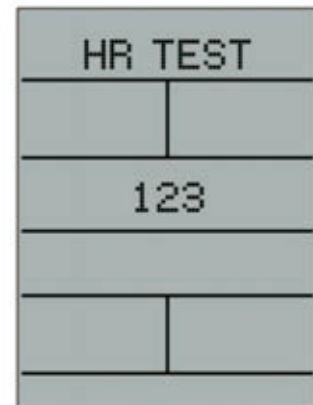
8.1 SETTINGS SCREENS

To enter CONFIGURATION MODE the user shall press START, UP, and STOP simultaneously.

8.1.1 Heart rate test screen

The figure below shows the heart rate test screen:

The heart rate test allows the user to monitor whether the heart rate belt is connected to the console.



The system is connected with a Bluetooth heart rate belt.

Under this screen, the user can click the

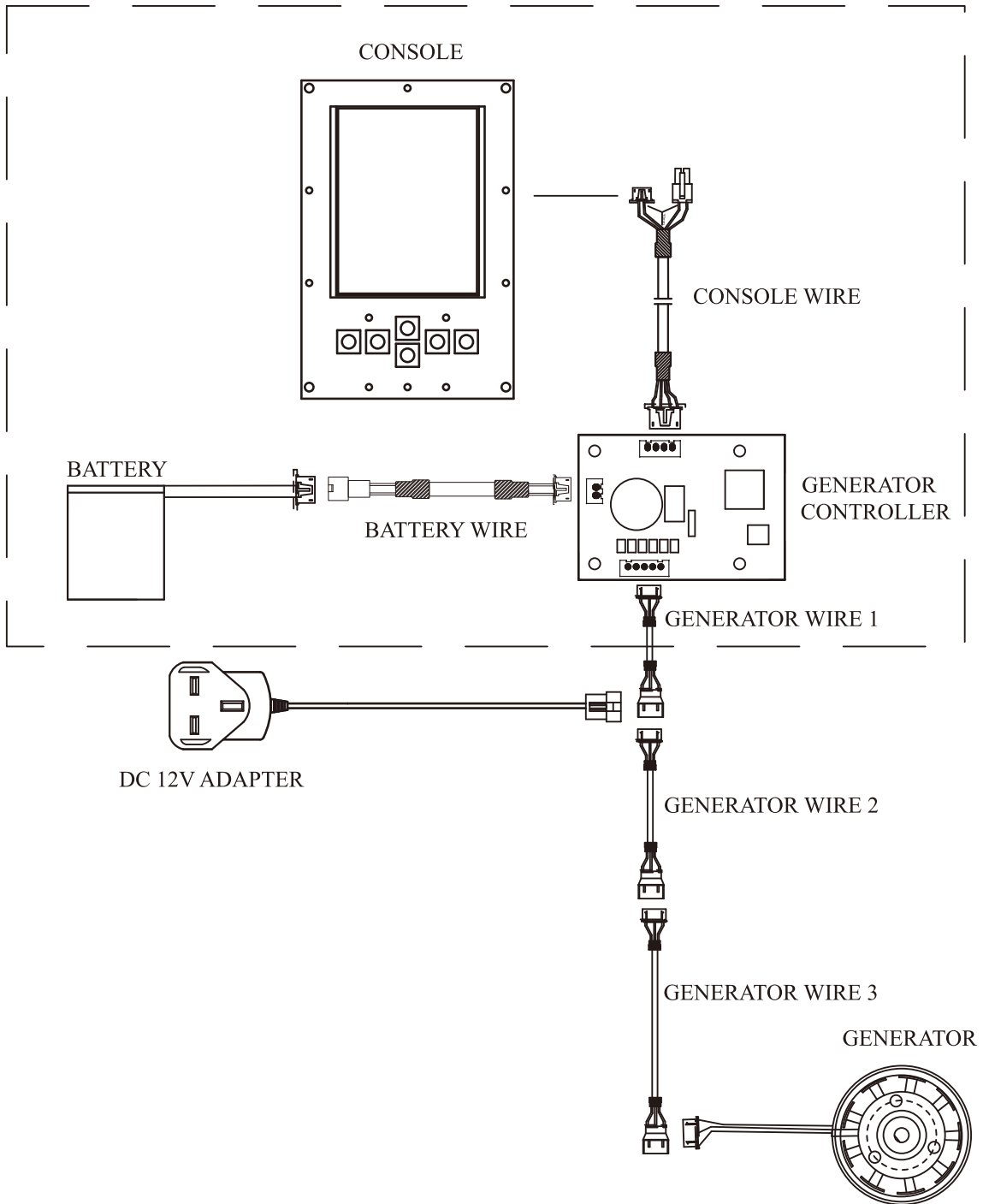
BLUETOOTH/LIGHT button to connect the heart rate belt to the console. Clicking this button can trigger the required software system to connect the console and

the heart rate belt through Bluetooth. Once the heart rate belt is connected, the user's current heart rate is displayed on the console screen. If the user does not detect the heart rate band with Bluetooth within 10 seconds after clicking the **BLUETOOTH/LIGHT** button, the console screen will display "0000" in the above picture number and flash 5 times.

To exit the **HR TEST** screens and return to the **SETTINGS** screen the user shall press the **STOP** button.

Console Panel Functions

9. Electrical connection diagram



Maintenance Check List

PREVENTIVE MAINTENANCE SCHEDULE						
CARDIO						
<i>Item</i>	<i>Daily</i>	<i>Weekly</i>	<i>Monthly</i>	<i>Quarterly</i>	<i>Biannual</i>	<i>Annual</i>
<i>Mounting Bolts</i>					Inspect	
<i>Frame</i>	Clean				Inspect	
<i>Power Cord</i>			Inspect			
<i>Display Console</i>	Clean		Inspect			
<i>Cover</i>	Clean					
<i>Handlebar</i>	Clean					
<i>Seat</i>	Clean					
<i>Pedal</i>	Clean	Lock				
<i>Belt Tension</i>				Inspect		
<i>Belt</i>					Inspect	
<i>Lubricate Sliding Bearing and Linear Bearing</i>			Inspect			

