XBU55

Service Manual

DYACO

Dyaco International Inc.

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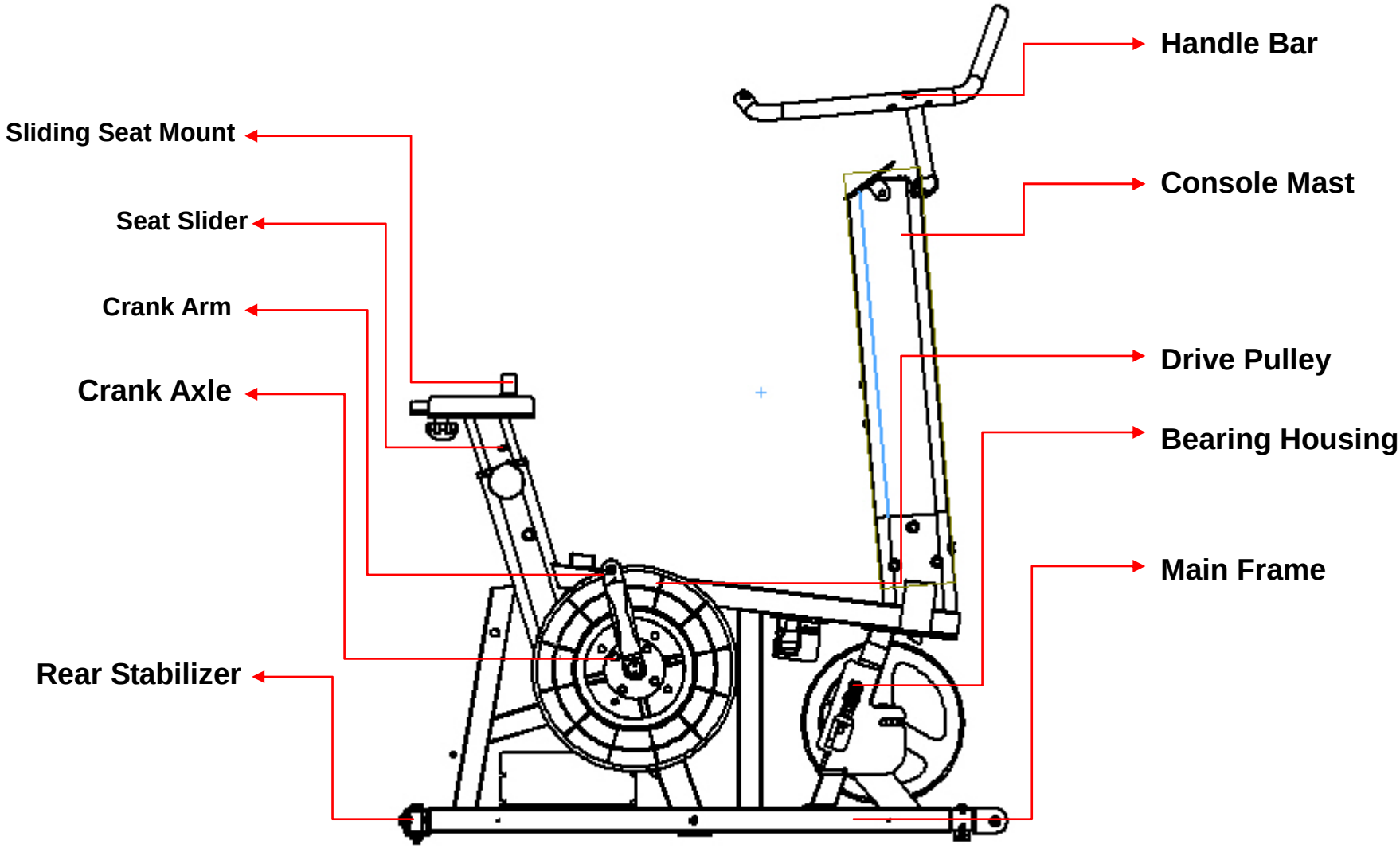
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CONSOLE:

Interface that controls all functions of the Bike.

TENSION MOTOR:

It can change to increase or decrease resistance level of brake.

GENERAL INFORMATION

CONSOLE

Contains Key controls and LCD Display.

Main controller Include power supply and motor driver control circuit .

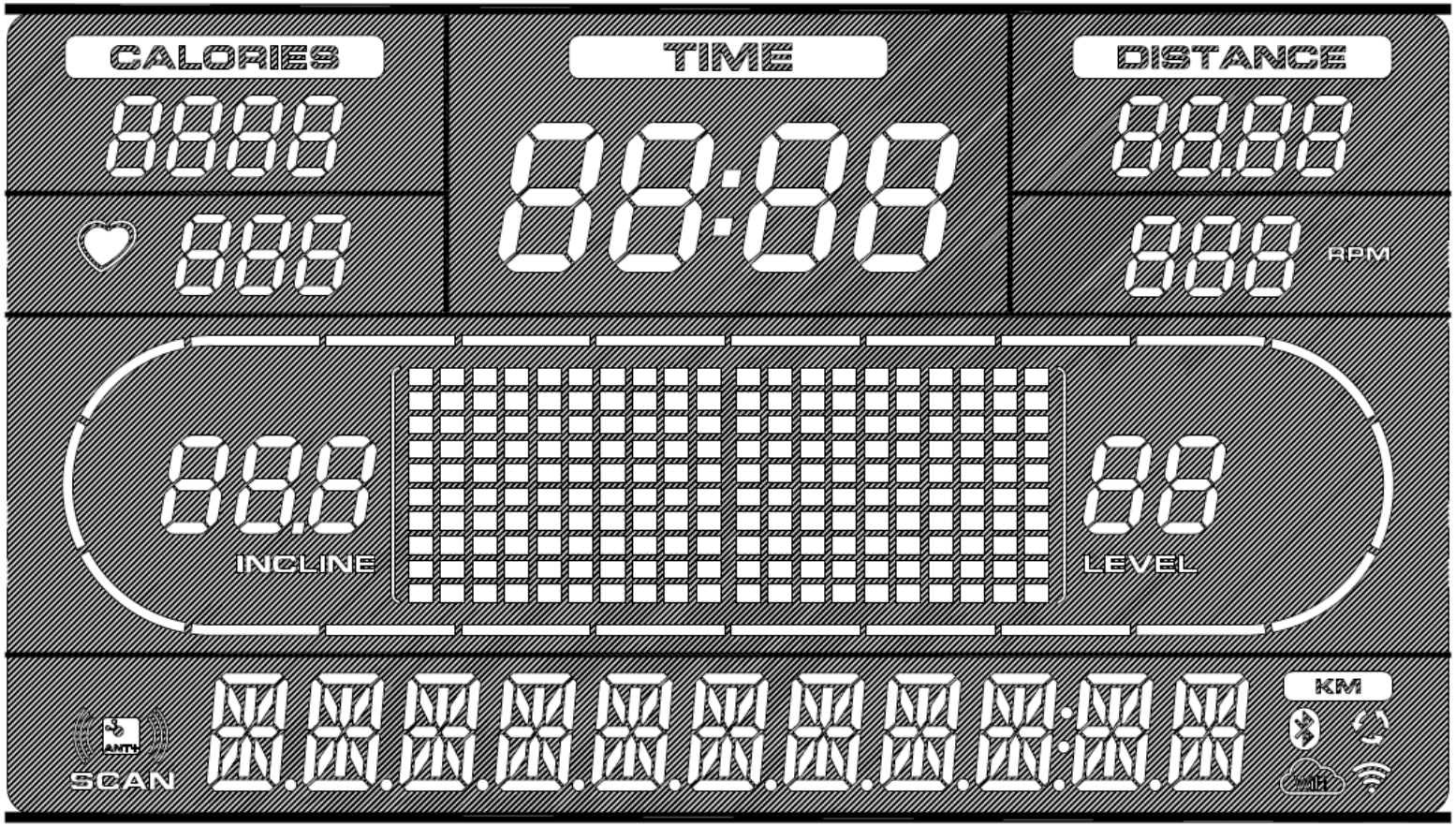
Work voltage:DC 4.5~7.5V

Control resistance increases and decreases.

4. XBU55 Product Operation

Display Windows

7.5” LCD Display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LCD Layout

Operation

Window Display Mode

IDLE MODE

1.1 Each program profile will be displayed on the MESSAGE WINDOW sequentially.And recycle display 『PRESS START FOR QUICK START OR PROGRAM BUTTON FOR SETUP』at the same time.

1.2 Heart rate bar LED and Track LED will be display stand light.
DATA window (7 segment display window) display RPM= 000，CALORIES= 000，TIME = 00:00，DISTANCE = 0.00，PULSE = - - -。
During 5 minutes no press any key will into IDEL MODE(no contain IDEL MODE)

DISPLAY MODE

2.1 Pre-set: DISPLAY ON(DISABLE), You could set the DISPLAY ON/OFF by ENGINEERING MODE.

2.2 The console will not get into SLEEP MODE when the set up is “ ON ” , unless turn off the power.There is no RPM input in IDEL MODE, and enter to SLEEP MODE after 30 minutes without pressing any key.

2.3 In DISPLAY MODE, LCD screen will has no display, and backlit will be off. Press any key to wake up the system, and back into IDEL MODE.

2.4 Resistance in SLEEP MODE: Incline =1

CHILD LOCK MODE

3.1 Pre-set: CHILD LOCK OFF (DISABLE). You could set the CHILD LOCK ON/OFF by ENGINEERING MODE.

3.2 The message window will display “ CONSOLE LOCKED ” after twice will show ” CHILD LOCK-ON PRESS START AND ENTER TO ENABLE OPERATION” , when CHILD LOCK setup is ON.You could setup the CHILD LOCK MODE OFF by pressing “ START ” and ” ENTER ” key for more then two seconds. After that it will enter to IDEL MODE.

3.3 All keys will be no action when CHILD LOCK MODE is active.

EXERCISE MODE（QUICK START）

4.1 In IDEL MODE, press START key enter to MANUAL MODE.The age, weight is presetting value.Time counting is count up from 00:00. All countable data will count up from “ 0 ” , and resistance is count up from “ 1 ” .

4.2 You could chose the program by pressing the key: MANUAL、PROGRAM、HRC . And then, press “START” key to start the workout. All parameter will be the preset value.

PAUSE MODE

5.1 Press “STOP” key enter to PAUSE MODE, and exercise parameters will be recorded.Message window will display “PAUSE”, and upper window will display the recorded exercise parameter.

5.2 In PAUSE MODE, it will display PAUSE.After 5 seconds,MW will show” PRESS START TO RESUME OR STOP TO END WORKOUT”

5.3 It will enter to IDLE MODE after waiting by five minutes without pressing any

5.4 The ramp incline level should back to “1” when the resistance level is “1”. The position of tension motor and ramp incline should back to the preset level before it pause when press “START” key.

END MODE

6.1 The message window will display “ WORKOUT SUMMARY ” after end workout and display workout data 1 minutes.

6.2 END MODE：

6.2.1 Display exercise data in message window each three seconds display『TOTAL TIME XX:XX』、『AVG SPD XX.X』、『AVG WATT XXX』、『AVG HR XXX』、『LAPS XX』

6.1.1 LEVEL Display exercise data in message window and show average value.

6.1.2 CALORIES ,TIME,DISTANCE display total data in message window .

6.3 When the time counting is end, and END MODE display is finished without pressing any key in 3 minutes.The system will enter IDLE MODE.

RESET MODE

7.1 In IDLE MODE, press STOP key for more than three seconds will enter to RESET MODE and reset the system. If the system is in CONSOLE LOCK MODE you have to quit CONSOLE LOCK MODE first, and you can execute the RESET MODE.

7.2 The message window will finished the reset.After that, the system is in IDLE MODE.

Function

SPEED

Display the current speed in mile per hour.
DISPLAY range is 0.0 to 99.9
WORK range is 0.0~99.9

LEVEL

Display the incline position from 1 to 20.
DISPLAY range is 0 to 999.
WORK range is 1 to 20.
LEVEL preset value is 1 to 20.
Press “UP” or ”DOWN” to adjust level, each increment and decrement is 1.

TIME

TIME is either COUNT UP or COUNT DOWN. System preset is COUNT UP; if user sets the time then timer is COUNT DOWN.
DISPLAY range is 0:00 to 99:99.
WORK range is 0:00 to 99:59.
COUNT DOWN setup range is 10:00 to 99:00.
When TIME is set, the count will go to zero.
In RUN Mode, press “STOP” button to save value of time and enter “RUN Mode” again that value will continue count up time.

LAPS

Display the total working laps quantity.
DISPLAY range is 0 to 99.
WORK range is 0 to 99.
Displays total laps quantity.

DISTANCE

Display the current distance in Mile.

DISPLAY range is 00.0 to 99.9.

WORK range is 00.0 to 99.9.

CALORIES

Displays the cumulative calories burned at any given time during your workout.

DISPLAY range is 00.0 to 999.

WORK range is 00.0 to 999.

PULSE

Displays the heart rate beat by using hand pulse or receiver. When use receiver, a chest belt must be worn.

DISPLAY range is 0 to 999.

WORK range is 40 to 220 BPM.

In RUN Mode, if the Bike doesn’t have a signal for 8 seconds then display value will become “0 ”.

Function Button Locations

PROGRAM BUTTONS
(Manual, Hill, Fat
Burn ,Cardio,Strength,
Interval,User1~2, HR1~2)

CONTROL KEYS

Fan Key
Cooling fan switch on or

Function Button In Main Mode

READY MODE

STOP button: Non-function.

START button: Pressing “ START ” button to start Bike, When pressing “START” button, there will be 3 second final count down on window display, then machine starts running. In MANUAL, Bike starts at MIN LEVEL .

LEVEL UP button: If user doesn’t enter a setting then this button is non-functional.

LEVEL DOWN button: If user doesn’t enter a setting then this button is non- functional.

FAN button: It can to control ON/OFF for the fan.

ENTER KEY：

Press ENTER key enter to parameter setting, and confirm the every setting by pressing START key no pressing ENTER key..

Pressing ENTER key confirm the every setting or modify parameter use.

RUN MODE

STOP button: press “STOP” button to stop Bike.

START button: non-functional.

ENTER button: non-functional.

LEVEL UP button: Press the button to increase your level and each increase is 1.

LEVEL DOWN button: Press the button to decrease your level and each decrease is 1.

Fan button: It can to control ON/OFF for the fan.

ENTER KEY：

Press ENTER key to switch the exercise data when you are workout. If the display information is the latest data , press ENTER key the message window SCAN ICON will lightness and change to auto display every four seconds recycle. The information as below,

『SPEED XX.X MPH』

『WATT XXX』

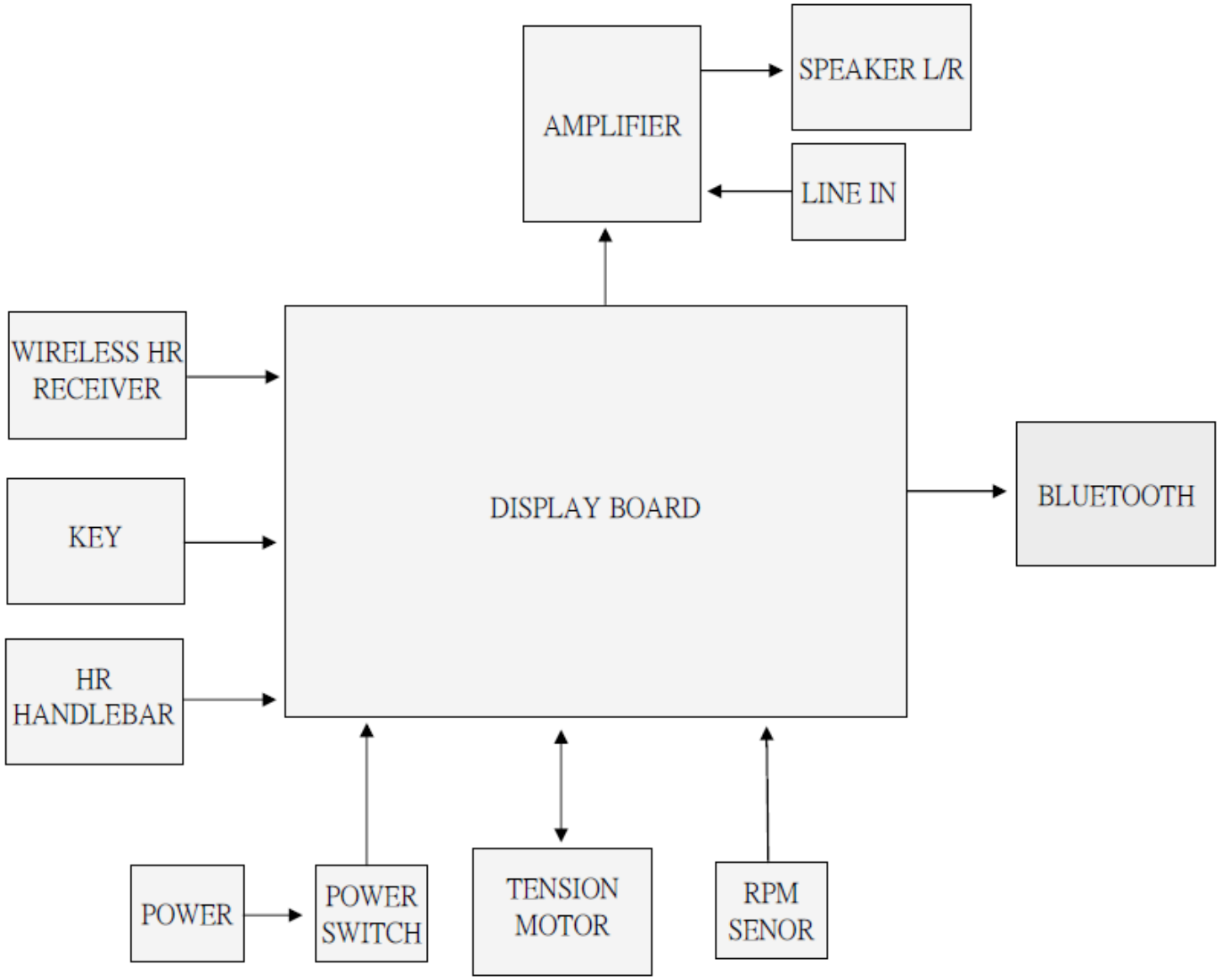
『LAPS XX』

『TIME XX:XX』

『MAX LV XX』(ONLY PROGRAM MODE DISPLAY)

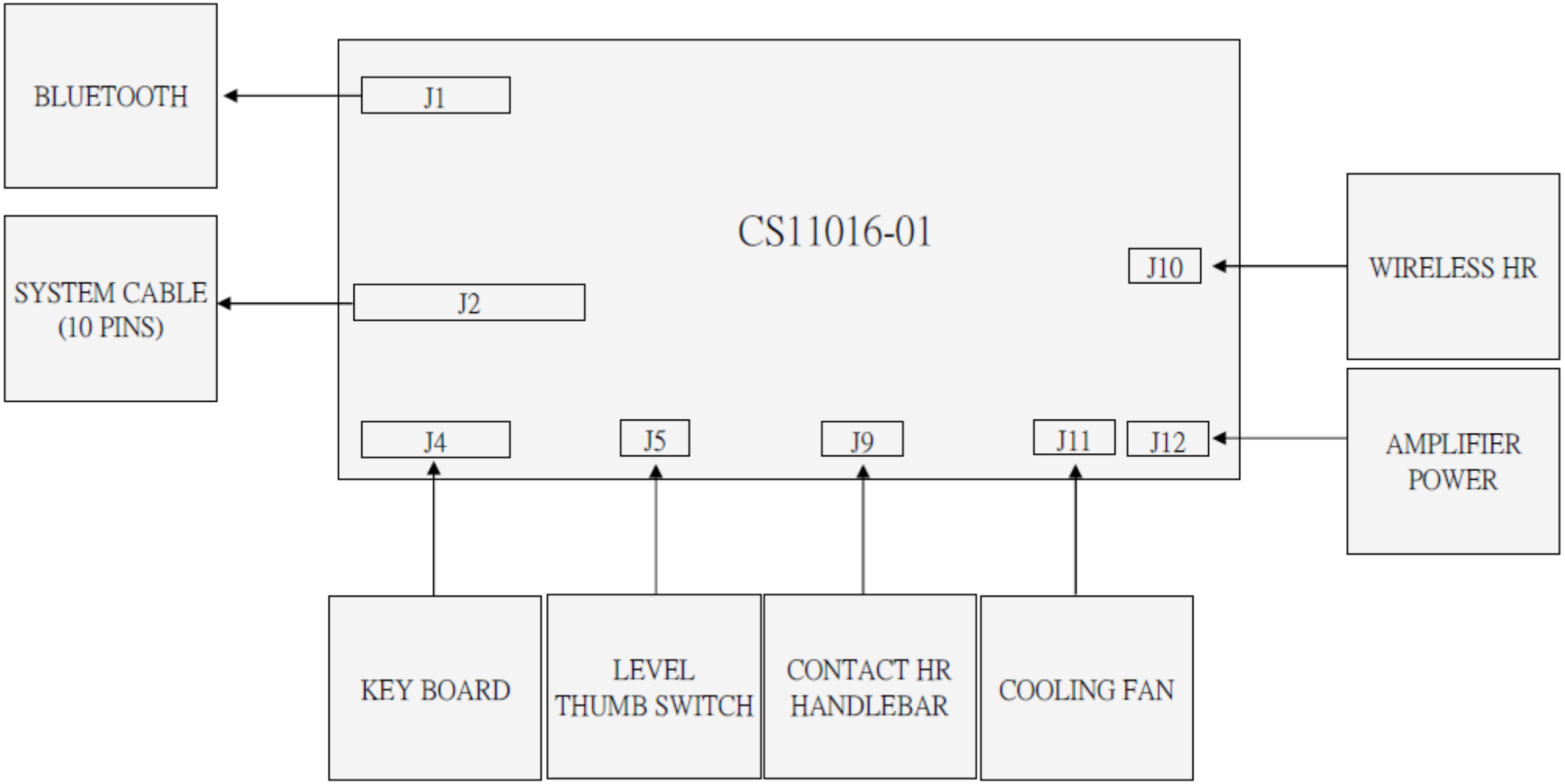
5. XBU55 Unit Block Diagrams

Bike Configuration



6. XBU55 Basic Connections and Wiring

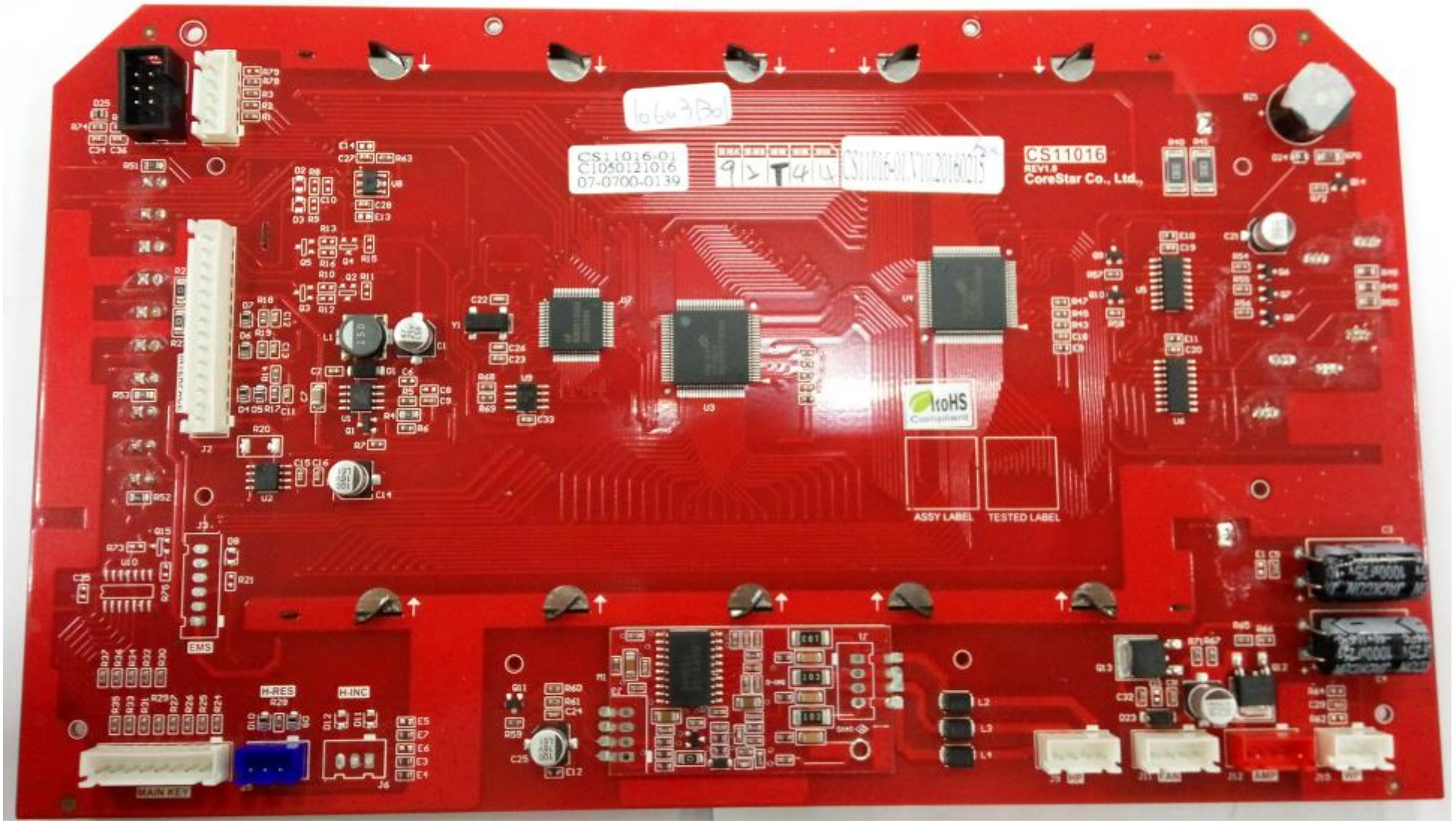
Display Board wire Connections



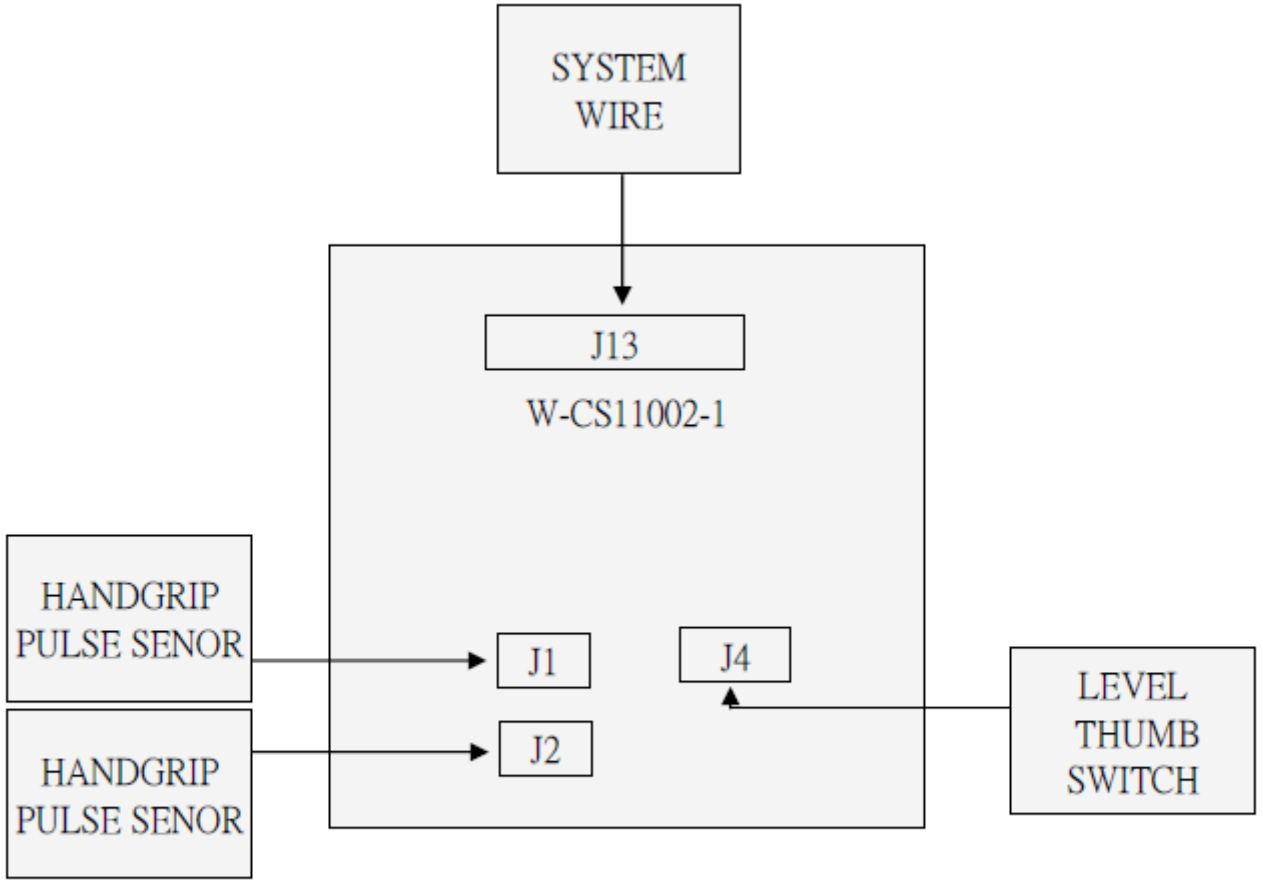
Display Board PCB Component Locations

PCB Board Top

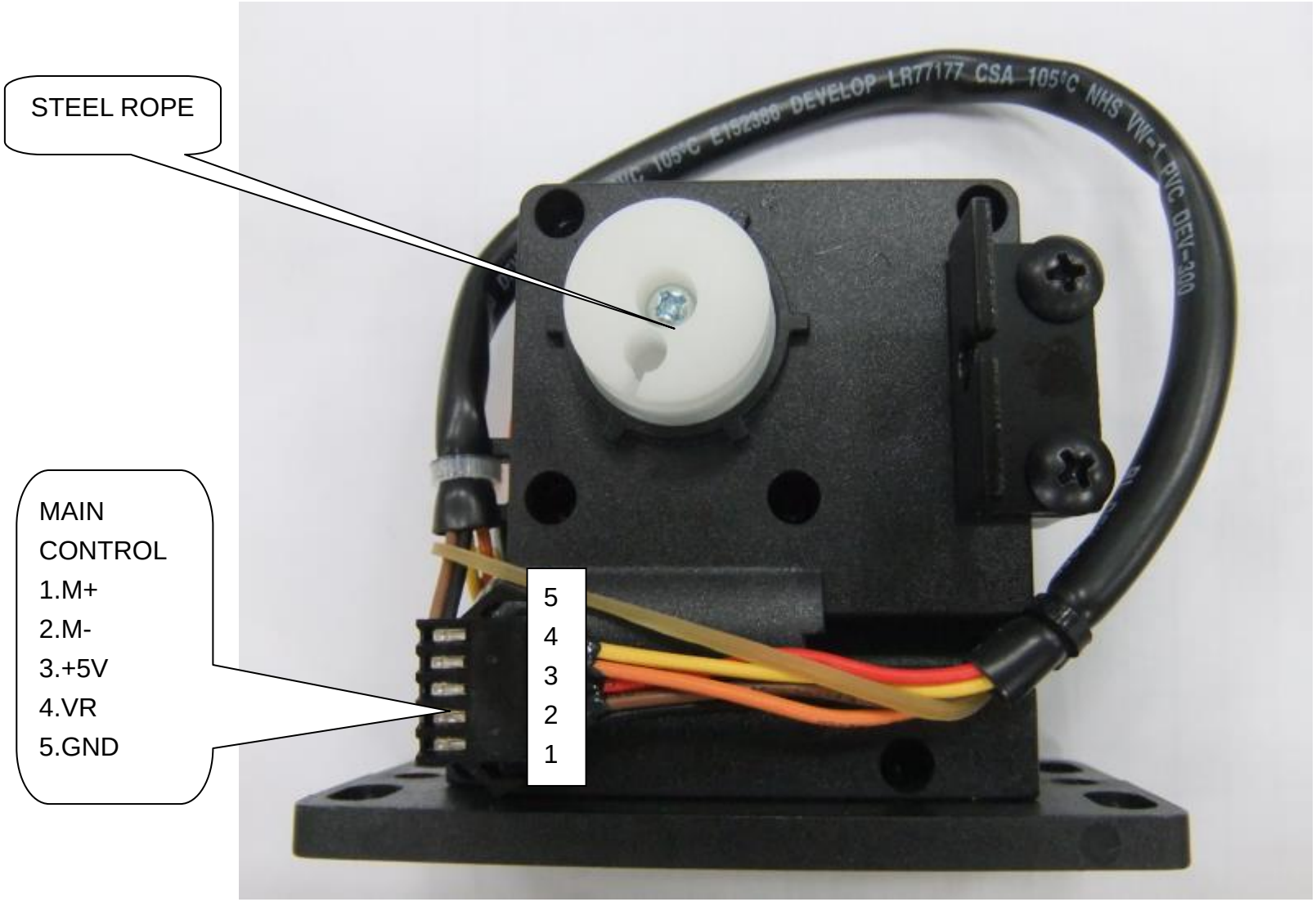
PCB Board Bottom



The console Interface Board wire Connections



Tension Motor connector definition function



7. Product Safety Instructions

Important Safety Instructions

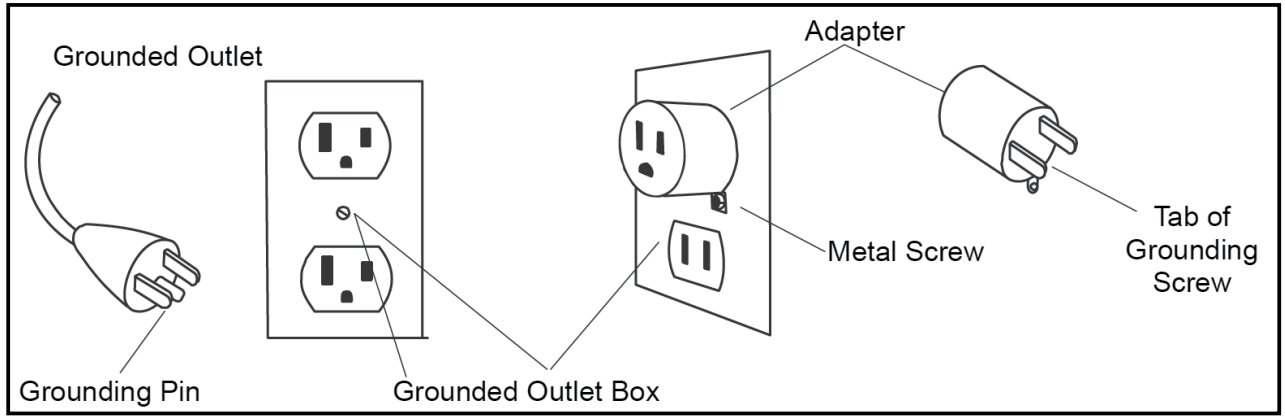
- To reduce the risk of electric shock disconnect your Bike from the electrical outlet prior to cleaning and/or service work.
- To reduce the risk of burns, fire, electric shock, or injury to persons, install the Bike on a flat level surface with access to a 115-volt, 15-amp grounded outlet with only the Bike plugged into the circuit.
- Do not use an extension cord unless it is a 16 AWG or better with only one outlet on the end. Do not attempt to disable the grounded plug by using improper adapters or in any way modify the cord outlet.

Important Electrical Instructions

- Never use a ground fault circuit interrupt (GFCI) wall outlet with this Bike. As with any appliance with a large motor, the GFCI will trip often. Route the power cord away from any moving part of the Bike including the elevation mechanism and transport wheels..
- **Circuit Breakers**: Some circuit breakers used in homes are not rated for high inrush currents that can occur when a Bike is first turned on or even during use. If your Bike is tripping the house circuit breaker (even though it is the proper current rating) but the circuit breaker on the Bike itself does not trip, you will need to replace the home breaker with a high inrush type. This is not a warranty defect. This is a condition we as a manufacture have no ability to control. This part is available through most electrical supply stores. Examples:Grainger part # 1D237, or available online at ***www.squared.com*** part # QO120HM.

Important Grounding Instructions

- **This product must be grounded.** If the Bike should malfunction or breakdown, ground-ing provides a path of least resistance for electric current, reducing the risk of electric shock. This product is equipped with a cord having an equipment-grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.
- **DANGER - Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or serviceman if you are in doubt as to whether the product is properly grounded. Do not modify the plug provided with the product if it will not fit the outlet; have a proper outlet installed by a qualified electrician.** This product is for use on a nominal 115-volt circuit, and has a grounding plug that looks like the plug illustrated below. A temporary adapter that looks like the adapter illustrated below may be used to connect this plug to a 2-pole receptacle as shown below if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet, (shown below) can be installed by a qualified electrician. The green colored rigid earlug, or the like, extending from the adapter, must be connected to a permanent ground such as a properly grounded outlet box cover. Whenever the adapter is used, it must be held in place by a metal screw.



8. XBU55 Error Messages / Troubleshooting

Error code items：

Error Message	Explain
EEPROM ERR	EEPROM failure
- -	Tension motor is failure

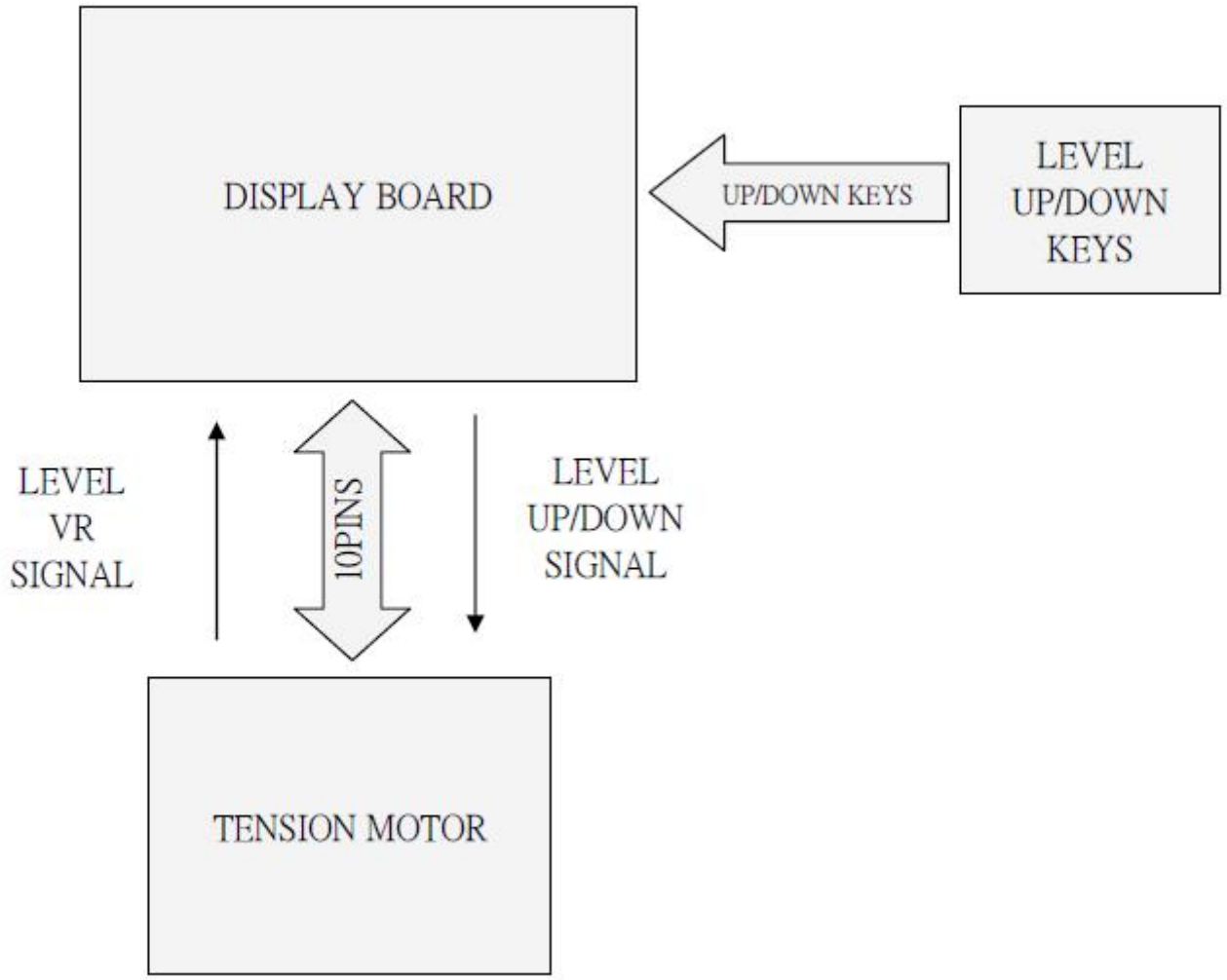
- Prepare：

Picture	Tool name
	Multi-meter

- **Error Message：EEPROM ERR**
- **Definition: All screens are off, and outputs are stop when EEPROM damaged or malfunction.Display message will show “EEPROM ERR”.**
- **Troubleshooting: Replace upper controller.**

- **Error Message ： - -**

- Definition：When you press the Level Up or Down key,the motor does not move.” --” appears on the display.
- Configuration：



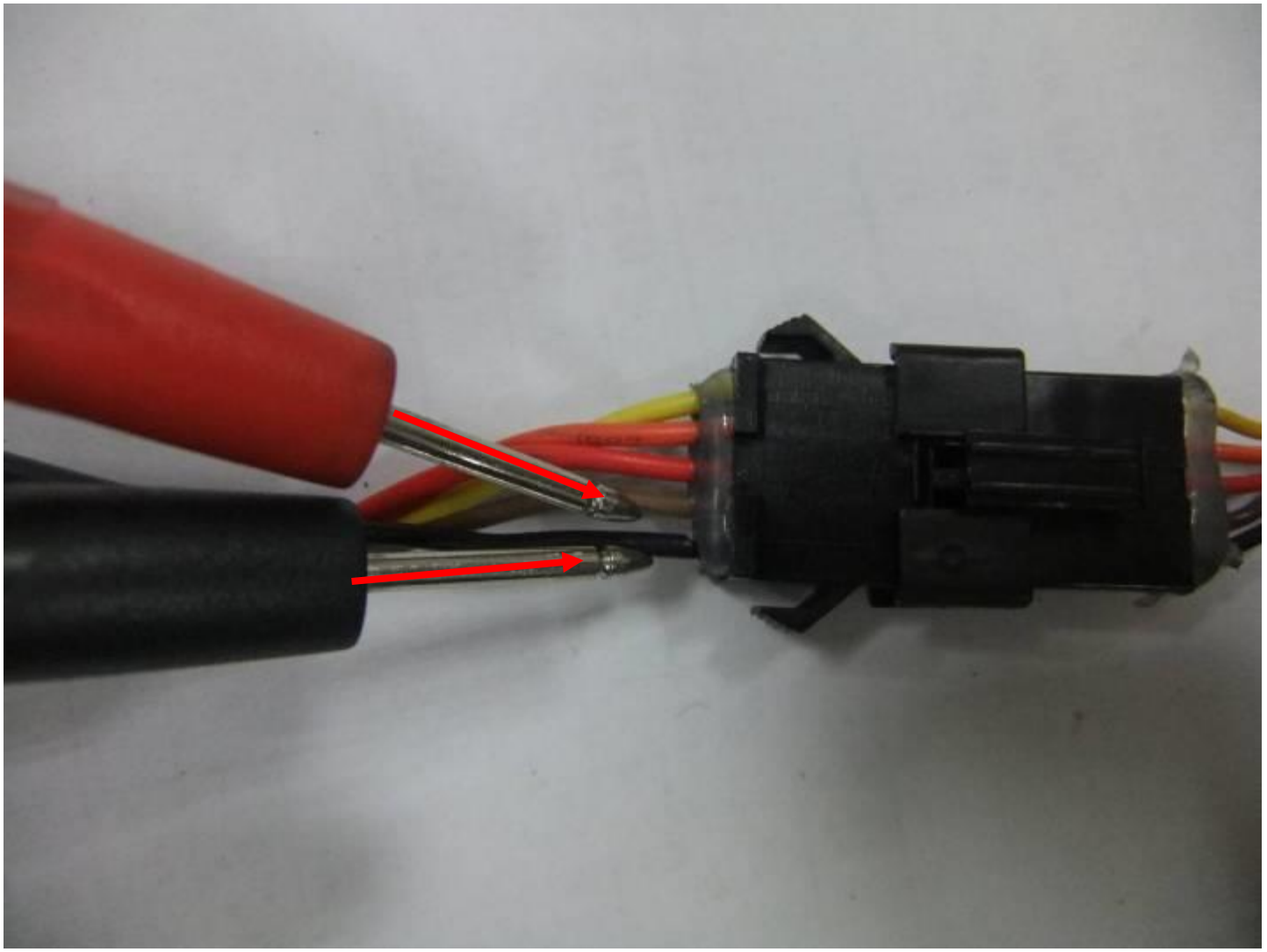
- Tension Motor Operation

Part	Description
Display	Key signal travels to the display.The main program IC then sends a command signal to the drive board.
Drive Board	Drive board receives the signal and responds by putting out power to the motor.Level UP:+5VDC;Level DOWN:-5VDC

- Tension Motor Troubleshooting

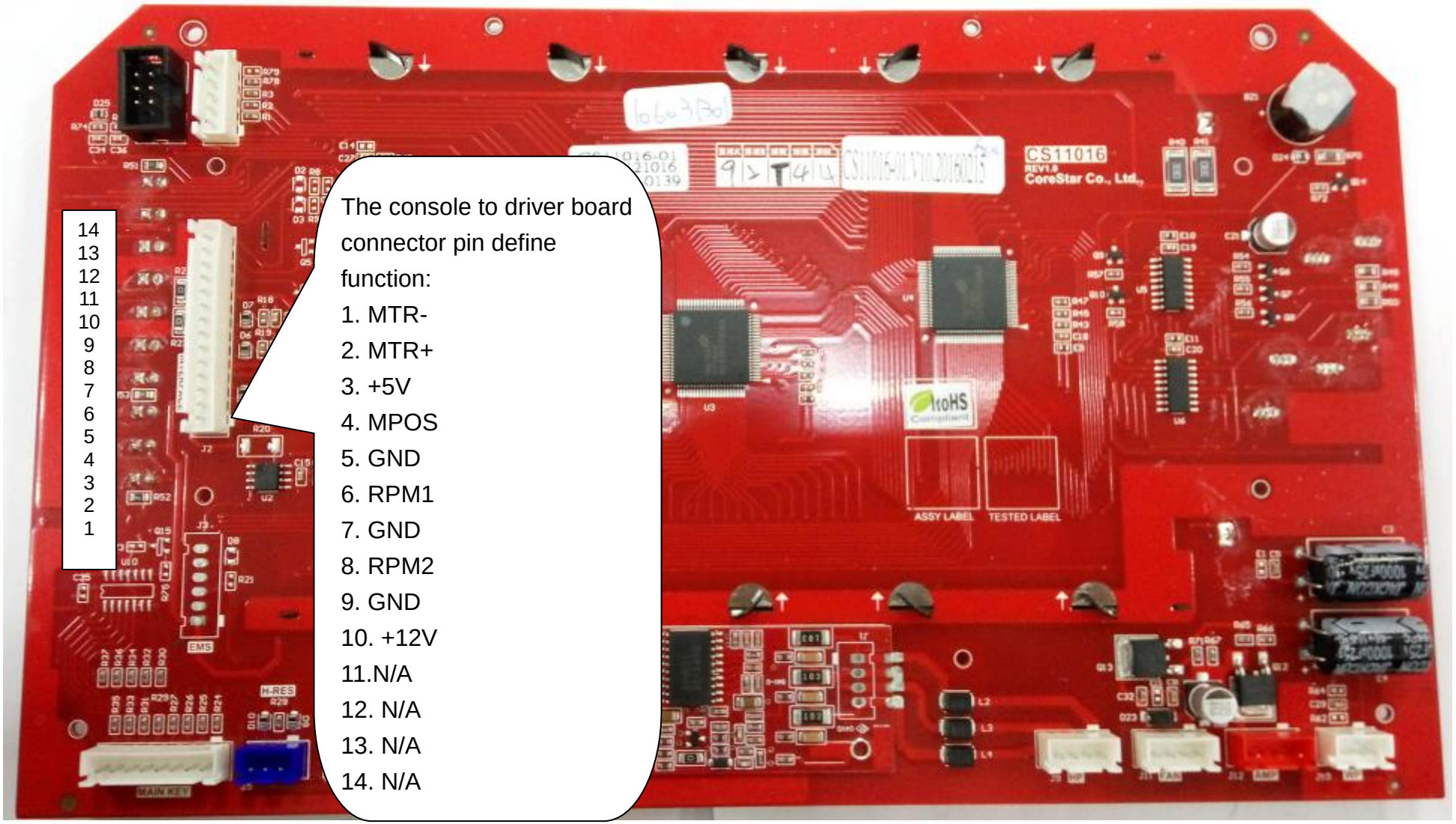
Part	Description
Display	If the key beeps when pressed,assume that the signal was sent.
Data cable	Inspect the cable and connections.
Drive Board	Inspect drive board power output to the motor.Press the Level Up is +5VDC;Level DOWN is -5VDC.If there is power to the motor,but the motor does not operate,replace it.If there is no power output,inspect whether the drive board has power.

- Tension Motor Voltage Test Procedure
  1. Put multi-meter to the 20VDC setting.Place probes on the motor control wire(Red probe in blue wire,Black probe in green wire) on the drive board.
  2. Turn on unit power.The display lights up.
  3. Press LEVEL UP. Normal reading : +5.5~6.0VDC.Motor operates.Resistance increases.
  4. Press LEVEL DOWN. Normal reading : -5.5~6.0VDC.Motor operates.Resistance decreases.
  5. If there is no voltage,inspect power socket the holder FUSE.If broke replace it.
  6. Inspect the drive board POWER LED whether lit.If no lit the drive board is bad.Replace it.



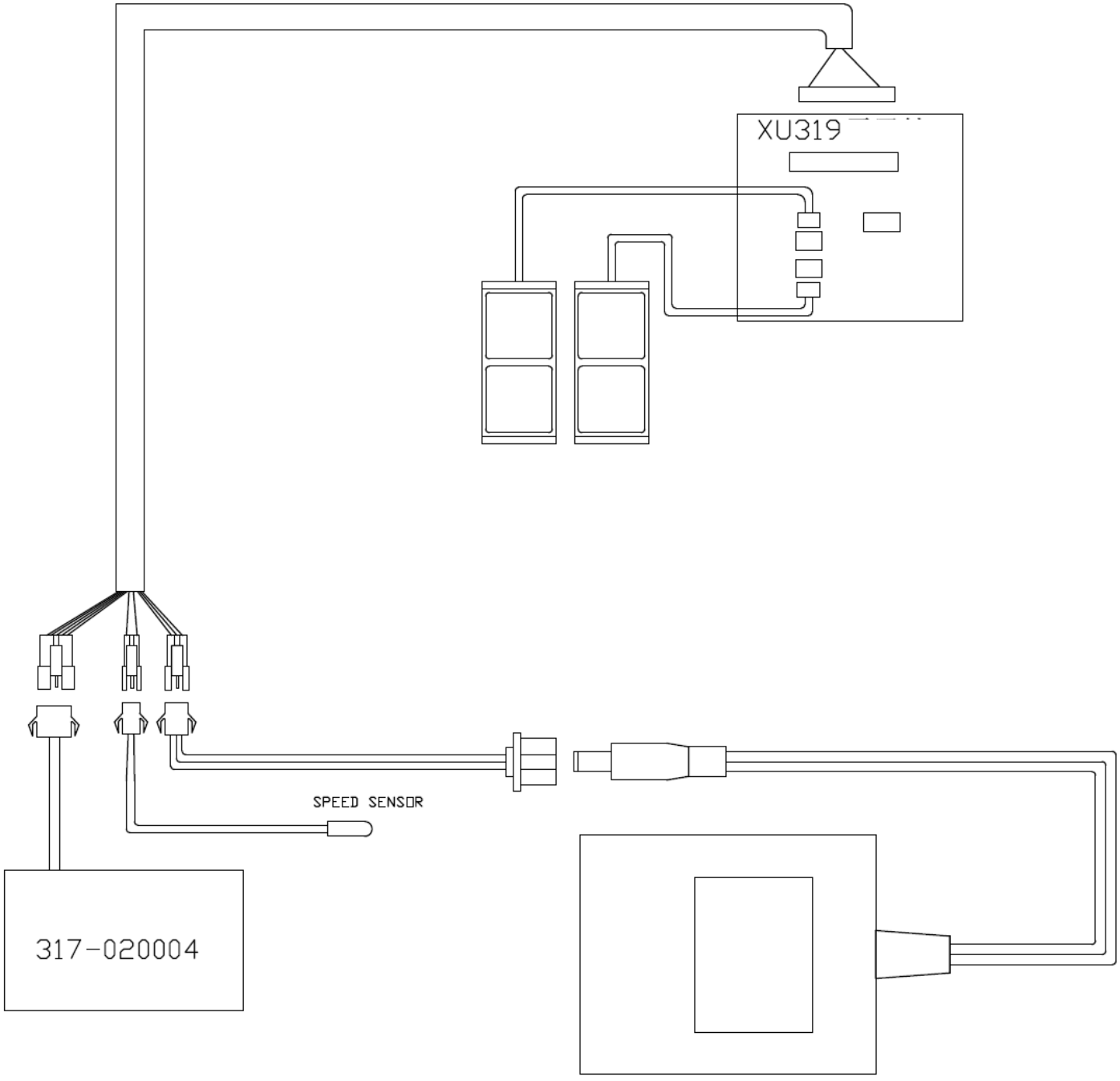
Place probes on the motor control wire(Red probe in palm wire,Black probe in black wire) on the drive board.

- **Test configuration. The console to driver board connector pin define function**



XBU55

BIKE CIRCUIT DIAGRAM



MAINTENANCE MENU IN CONSOLE SOFTWARE

The console has built in maintenance/diagnostic software. The software will allow you to change the console settings from English to Metric and turn off the beeping of the speaker when a key is pressed for example. To enter the Maintenance Menu (may be called Engineering Mode, depending on version) press and hold down the **Start**, **Stop** and **Enter** keys keep holding the keys down for about 5 seconds and the **Message Window** will display "Engineering Mode". Press the **Enter** button to access the menu below. Press the **Level ▲/▼** keys to navigate the menu.

a. Key Test (Will allow you to test all the keys to make sure they are functioning).
b. LCD Test (Tests all the display functions).
c. Functions (Press Enter to access settings and Up arrow to scroll).
    i. Display Mode (Turn on to have the console power down automatically after 20 minutes of inactivity).
    ii. Pause Mode (Turn on allow 5 minutes of pause, turn off to have the console pause indefinitely).
    iii. ODO Reset (Resets the odometer).
    iv. UnitS(Press enter to select ENGLISH or METRIC).
    v. Beep (Turns off the speaker so no beeping sound is heard).
    vi. Motor Test (Press Enter to run the resistance motor up and down in a continuous loop. Display shows level setting and position sensor reading. Press Stop to end test).
    vii. Safety.
d. Security (Allows the keypad to be locked to prevent unauthorized use)

Troubleshooting procedure matrix

Condition	Reason	Solve
LCDs not bright, incomplete or imperfect.	1. LCD light is broken. 2. Power to console too low.	1. Replace with new LCD or console. 2. Check AC power is 110-120V. 3. Check power to console. 4.Replace lower controller.
LCD displays not bright, incomplete or imperfect.	1. LCD displays are broken.	1. Replace with new console.
Erratic pulse display.	1. Another chest belt in use around Bike. 2. Other magnetic field disturbance. 3. Receiver is broken.	1. Check for other chest belt use around Bike. 2. Change the position or direction of Bike. 3. Replace with new receiver.
Hand pulse lost its function. (No pulse displayed on monitor)	1. Hands not on the hand pulse sensors or only one hand on sensor. 2. The connector of HANDPULSE W/WIRE and Console not connected properly. 3. The wires got damaged when connecting the HANDPULSE W/WIRE and Console. 4. Hand pulse board is broken.	1. Two hands hold the hand pulse. 2. Connect the cable again. 3. Replace with new cable. 4. Replace console or Hand pulse board.
Wireless lost its function. (No pulse displayed on monitor)	1. Chest belt not worn properly. 2. Distance is too far and exceeds range of receiver. 3. Chest belt battery is weak or dead.	1. Check chest belt has proper contact with skin and is oriented correctly. 2. User chest belt in front of console within 3 feet. 3. Replace with new lithium battery type is CR2032.
Chest belt too close to the Bike.	Weak battery.	Replace with new lithium battery with type CR2032.

9. Troubleshooting

9-1 Console

1. Use Phillips head screw driver to release four M5×12mm Phillips Head Screws(58) and disconnect computer(29) and both hand pulse sensor cables to take console(34) apart.

2. Reverse above step to resume console (34)

9-2 Handle Bar and Console Mast(Take apart the console.)

1. Take apart the console(34)
2. Take off the Handgrip Cap and use 12 mm wrench to release 2pcs of 5/16" × 5/8"_Hex Head Bolts (51), 2pcs of 5/16" × 18mm × 1.5T_Flat Washers (72) and 2pcs of 5/16" × 1.5T_Split Washers (103), which secure the Handlebar Assembly (3), and remove Handlebar Assembly (3) .


3. Release four Ø3 × 10m/m_Tapping Screws(65) to remove Handgrip Side Caps (Top)and (Bottom) (42).(43), as shown in figure .

4. Use Phillips head screw driver to release four 20m/m_Tapping Screws (62) securing Handpulse W/Cable Assembly(26) and separate Handpulse W/Cable Assembly(26) from each other and remove , as shown in figure .

5. Reverse above step to resume.

9-3 Main Frame and Console Mast Cover

1. Take apart the Computer Cable(29) and Handle Bar(3)
2. Slightly press the Console Mast Cover to separate it from left and right Chain covers. Then use 12 wrench to release 7pcs of 5/16" × 5/8"_Hex Head Bolt (51), 6pcs of 5/16" × 18mm × 1.5T_Flat Washer(72) and 1pcs of 5/16" × 19 × 1.5T_Curved Washer (99) and the Handle Bar (3) can be released as shown in figures.◦

3. To resume Console Mast (38), guide the Computer Cable (29) through Console Mast (2) and out of the console mounting plate, then insert the Console Mast (2) onto the Mainframe (1). Use 12 mm wrench to tighten 7pcs of 5/16" × 5/8"_Hex Head Bolts (51), 6pcs of 5/16" × 18mm × 1.5T_Flat Washers (72) and 1pc of 5/16" × 19 × 1.5T_Curved Washer (99) then return Console Mast (38) and Chain Covers (36, 37) respectively
4. Finally, install Console Assembly (34) and Handle Bar (3).

9-4 The Seat and Sliding Seat Mount

1. Use 14 mm wrench to loosen both hex head bolts to remove Seat(19) , as shown in figure .

2. Turn to take Brake Tension Knob(86) apart from Fix Plate(8) and remove Sliding Seat Mount (7) , as shown in figure .

3. To resume, install Sliding Seat Mount(7) on Seat Slider(6) then put Fix Plate(8) on it. Install Brake Tension Knob (86) from bottom upward to Fix Plate (8) and tighten with 3/8"x7T Nut (78). At last, insert Seat(19) into the sliding tube and tighten both hex head bolts with 14 mm wrench.

9-5 Inner Slide

1. Remove Locking Knob(106) , as shown in figure .

2. Separate seat post cover (39) and chain cover (R/L) (36.37), and pull seat slider (6) and seat post cover (39) up. Take Center spatial wrap (107) apart from Main Frame (1) with a rubber hammer (refer to photo 2), and then use Phillips Head Screw Driver (93) to release 2 pcs of 4 × 12m/m_Sheet Metal Screws (68), then remove Slide Spacer (114) with rubber hammer to take Seat Slider(6) and Center spatial wrap(107) apart, as shown in figures 3,4 .

3. To resume, return Center spatial wrap(107) back to Seat Slider (6) then return Slide Spacer(114) in Seat Slider (6) and tighten with two pcs of 4 × 12m/m_Sheet Metal Screws (68) and insert into the Mainframe (1). Use rubber hammer to return Center spatial wrap(107) and resume Locking Knob(106).

9-6 Crank Arm and Pedal

1. Use 13/15mm open end wrench to take apart pedals by turning left pedal(45) clockwise and right pedal(46) counterclockwise, as shown in figure.

2. To resume pedals, turn pedals with reversed directions respectively.
3. Take Crank Arm End Cap(96) apart and use plug wrench to release the nut(83), as shown in figures 1 and 2.

4. Apply crank tool on the crank to fix and use Allen wrench to release the crank, as shown in figure.

5. To resume the crank (16L,16R), use air crank tool or rubber hammer to fix the crank (16L,16R) on the axle (11) and tighten the nut on the crank axle and plug in the Crank Arm End Cap (96).

9-7 Chain Cover (L)(R)

1. Take apart pedals and crank arm. Separate both Console Mast Cover and Saddle Cover from left and right Shrouds and use Phillips head screw driver to release seven Ø3.5 × 16m/m_Sheet Metal Screw(63) and three 5 × 16m/m_Tapping Screw(61), which secure left shroud, to take left shroud apart, as shown in figures 1 and 2)

2. Remove 3 pcs of 5 × 16m/m_Tapping Screw to take Chain Cover apart

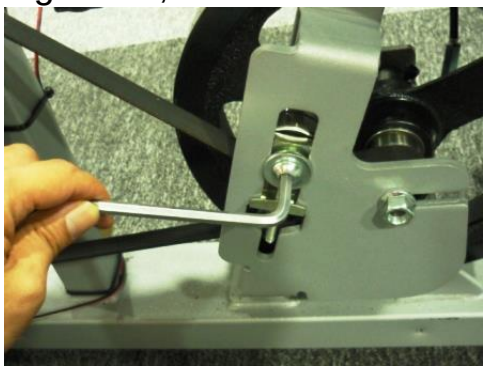
3. To resume, install Right Side Case (37) on the Main Frame by using Align the center of the Wheel with the center of the Axle and secure with 3pcs of 5x16mm Tapping Screws (61) by using Phillips Head Screw Driver then add one more 4x19mmSelf Tapping Screw (64) with5x15x1.5T Flat Washer (57) to secure further. Match Left Side Case (36) with Right Side Case (37) and secure with 7pcs of 3.5x12mm Self Tapping Screws (63), 3pcs of 5x16mm Tapping Screws (61). Follow step 4.3 to resume Cranks and Pedals.

9-8 **Handgrip End Cap**

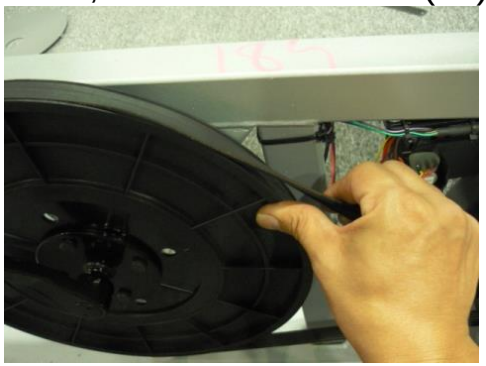
1. Put Handgrip End Cap (41) on the button of front and Rear Stabilizer.
2. Use rubber hammer when assembling.

9-9 The Belt and Drive Pulley

1. Remove Chain Cover (L)(R) (36)(37). Use 11 mm open end wrench to release 1/4" × 8T_Nyloc Nut(130) to the end and use 6 mm Allen wrench to remove to remove M10 × P1.25 × 15L_Button Head Socket Bolt(127) and take Bearing Housing(10) apart as shown in figures 1,2.

2. Then, take down the belt (14) from Drive Pulley(15) (refer to photo 3)



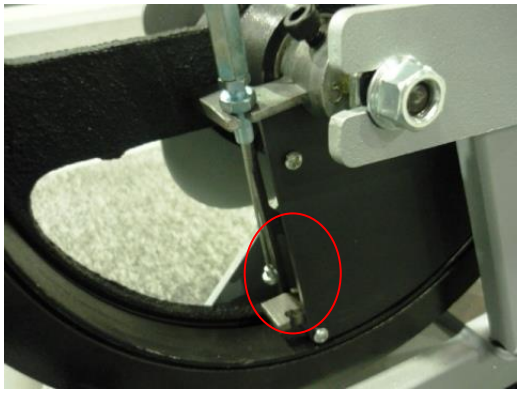
3. Use C Ring tweezers to remove Ø20 C Ring(67) on Crank Arbor(11) as shown in figure to take down Crank Arbor (11) and Drive Pulley(15) which can be knocked by rubber hammer.

4. Use two 11 mm open end wrenches to remove four 1/4" × 3/4"_Hex Head Bolts (54) together with four 1/4" × 8T_Nyloc Nuts (79) on Crank Arbor(11) and Drive Pulley(15) to take Drive Pulley(15) apart as shown in figure.

5. Reverse above step to resume, but notice to check if the belt (14) is in groove and in a straight line after assemble the groove of belt on the Drive Pulley (15) and Flywheel (20). And need to adjust the elastic of belt which can be measured by Sonic Tension Meter and set data on 180±10HZ.

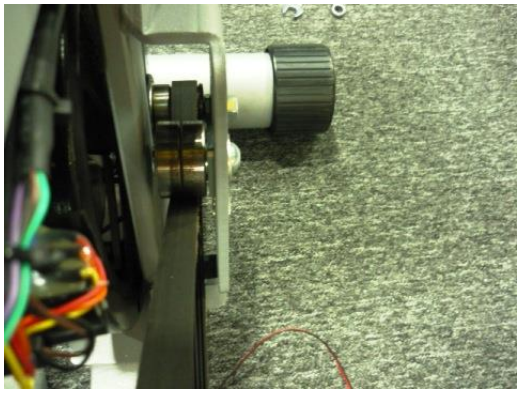
9-10 Flywheel, Drive Belt and Bearing Housing

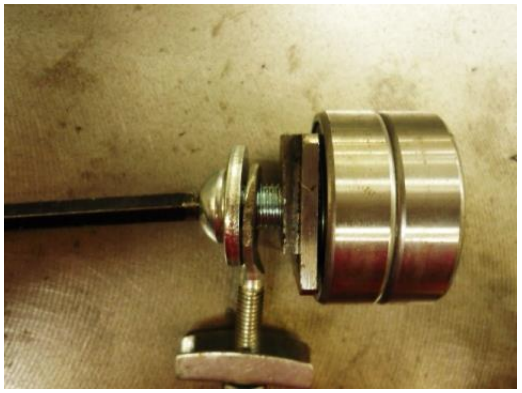
1. Take apart left and right shrouds and the belt.
2. Use 11 mm open end wrench to release 1/4" × 8T_Nyloc Nut(130) to the end and use 6 mm Allen wrench to remove to remove M10 × P1.25 × 15L_Button Head Socket Bolt(127) and take Bearing Housing(10) apart as shown in figures 1,2
3. Use C Ring tweezers to remove Ø 17 C Ring (66)of Bearing Housing(9) and take Axle for Idler Wheel 6203(18) and Bearing Housing(9) apart.
4. Take down steel cable (98) on Flywheel (20), and take notice of handling with care on Aluminum sheet of steel cable (as remarked) when disassembling because it's an Aluminum sheet with spring. If it doesn't handle with care, it will become distorted and cause noise when rubbing. This is a very important point (as photo 1).



5. Use 14/15mm Wrench (75) to loosen 2pcs x 3/8"-UNF26_Nut of Flywheel (20) (refer to photo 2)

6. Use 15mm & 14 mm open end wrench to release two nuts which secure the flywheel by turning counterclockwise and take apart the flywheel.
7. Reverse above step to resume, but notice to follow step 7 to adjust the elastic and position of belt (14); besides, notice the direction of Bearing Housing(9) and Nut Stopper (128) when assemble Bearing Housing(9) on main frame (1) (refer to photos 3.4)





9-11 Console and Error Messages

1. When there is no display, check as below:
2. Make sure the console(34) and computer Cables(29) are connected properly, as shown in figure .

3. If all are connected properly, take measurements of power outputs to find out the problem.

Q: No heart rate is displayed:

A:

1. The Console is displaying but without speed showing. This should open Chain Cover(36) to check if Computer Cable(29) and Reed Switch(23) are properly installed, as shown in figure.
2. If assembling process is correct, it comes with problem on most magnetization malfunction of 400m/m_Sensor W/Cable (23) or magnetic force decline of Magnet (22) that causes not sensory. In the meanwhile, use another Magnet (22) to test if magnetization is malfunction. If these problems happen, please replace it.

Q: No heart rate is displayed:

A:

1. The console is displaying but there is no HR shown. Check if handpulse sensor cable is properly connected to the console(34), as shown in figure 1 and if handpulse assemblies cables are properly connected with sensor wires.

Remark: The console and related parts were all inspected prior to shipping and the probably of defective is low.

9-12 Noises

Q: Noises

A:大 The causes of noises are mostly loose screws. Sometimes it is because of parts being deformed or shifting causing rubbing or unsmooth moving. Most causes are as follows:

1. Noises coming from left and right pedals. This is mostly pedals wear causing noises and not moving smoothly. The worn out pedals(45)(46) must be replaced, as shown in figure.

2. Left and right crank. Sometimes crank gets loose causing noises and not moving smoothly. Tightening the crank fixes the problem, as shown in figure.

3. Noises caused by Chain covers　Most cases are caused by Chain Covers (36.37)deforms so that crank arms (16L.R) scratch Chain Covers. The deform is because of the requirement by safety regulations of minimum gaps. The solution for deformation is to replace Chain covers (36.37). In some cases, there is noises caused by the deformed Drive Pulley (15) that rubs the right Chain Cover (37). The solution is to replace the Drive Pulley (15).。
4. If there are still noises without left and right shrouds, identify the location of the noise and replace parts if necessary.

9-13 Slipping Belt and Belt falling Off

Q: Belt falling Off

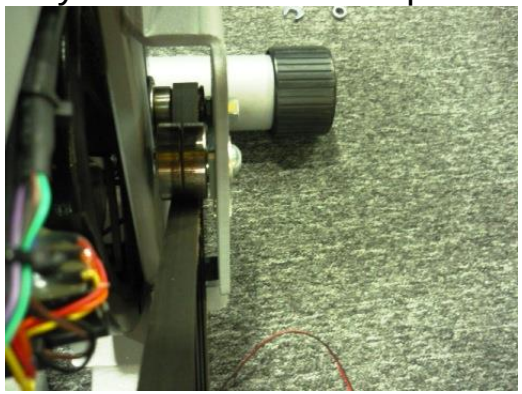
A:

1. 拆開左右鏈蓋(36).(37)後重新將皮帶(14)組裝上去既可，但建議先把皮帶(14)組裝好並調整好之後暫不組裝左右鏈蓋(36).(37)，先行測試是否還會脫落，同時也可以觀察並重新調整皮帶位置跟鬆緊度，確認沒有問題之後再組裝左右鏈蓋(36).(37)。Take down chain cover (R/L) (36.37) and reassemble belt (14).　Suggest not assemble chain cover(R/L) (36.37) before belt (14) is adjusted and assembled well and test it if it would come off or not.　In the meanwhile, observe and adjust the position and elastic of belt.　Then, make sure it's no problem to assemble chain cover (R/L) (36.37).

Q: Slipping Belt

A:

1. Take apart both right shrouds and Crank Arm right. Use 11 mm open end wrench to tighten M6 Nyloc Nut (130) until sound wave tension gauge reads 450N. Since this model is driven by Drive Belt (14), the user weight or the way of use may cause the belt to slip. Generally, the belt won't slip under normal usage, as shown in figure



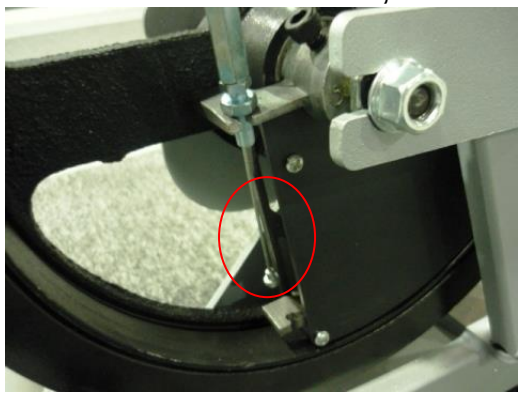
Since the driving belt itself is with malleability and is expendable, it is normal to get loose as time lasts.

9-14 Flywheel, steel cable and gear motor.

Q: Resistance can't be adjusted:

A:

1. Please take chain cover (L) (36) down to see if steel cable comes off. If yes, please reassemble it. As steel cable is fastened on both sides, this situation will happen rarely.



2. If steel cable is no problem, check gear motor (21) is workable. If not, it needs to be measured by surveying instrument to check malfunction happens on gear motor (21) or console (34).

Q: The noise on Flywheel:

A:

1. Flywheel (20) is no problem itself, but it will make some noise after using a long time. The main reason that rubbing sounds occur from some wastage of bearing housing. But it will not affect its function.
2. A few reasons that noise occurs is an improper way to maintain machine which makes distortion of Aluminum sheet on Flywheel (20).

9-15 Other

1. Noises coming from left and right pedals. This is mostly pedals wear causing noises and not moving smoothly. The worn out pedals(45)(46) must be replaced, as shown in figure.
2. Left and right crank. Sometimes crank gets loose causing noises and not moving smoothly. Tightening the crank fixes the problem, as shown in figure.

3. The sway on seat post results from insufficient tightening of Seat Up/Down Adjustment Knob (106) or Brake Tension Knob (86). Please fasten it.

4. If sway happens on Console Mast (2) or Handle Bar (3), it almost results from unlocked screw. Please fasten it.