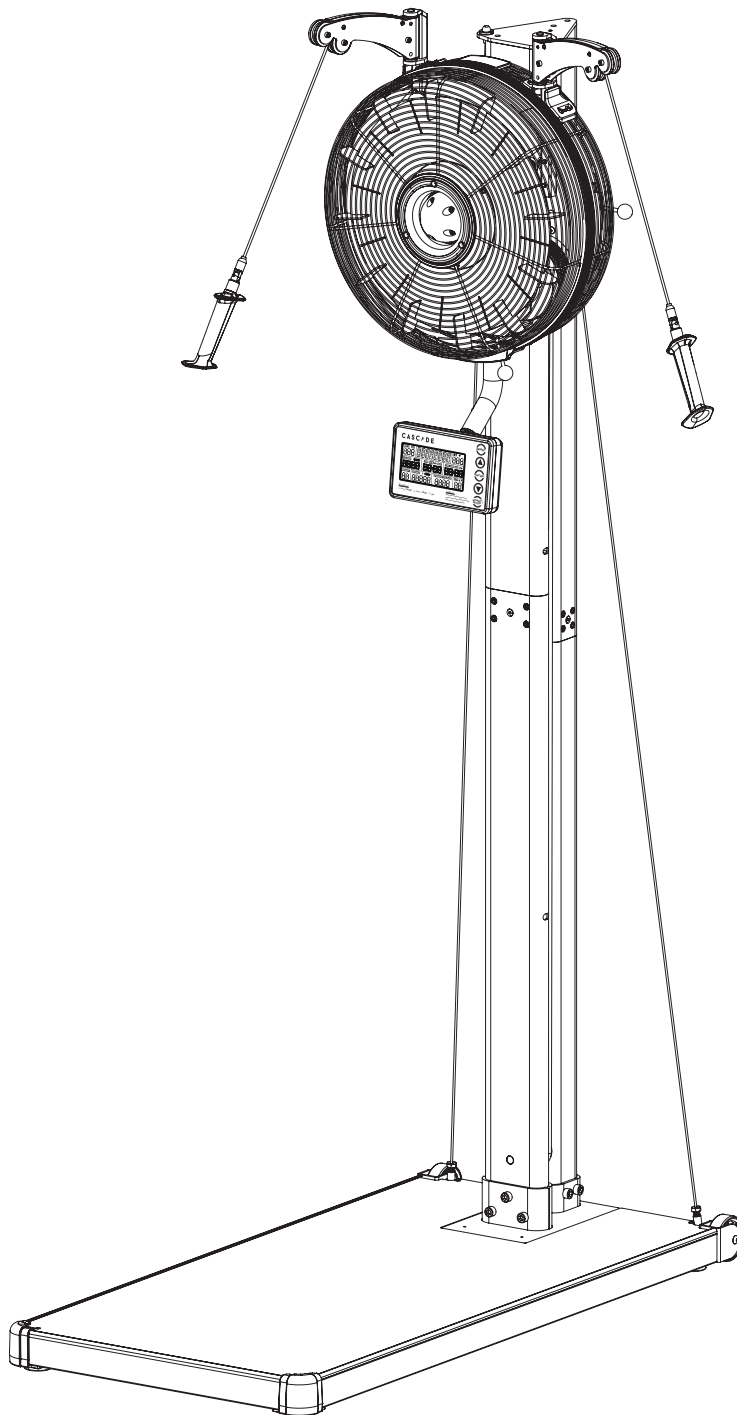


Cascade Raptor Functional Trainer



**PLEASE READ THIS INSTRUCTION MANUAL
BEFORE YOU BEGIN ASSEMBLY**

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Safety Information

PLEASE READ THIS INSTRUCTION MANUAL BEFORE YOU BEGIN ASSEMBLY. GREAT CARE HAS BEEN TAKEN TO DESIGN THESE INSTRUCTIONS AND FOLLOWING THEM WILL HELP YOU WITH QUICKER ASSEMBLY AND MINIMIZE THE RISK OF INJURY

YOU ARE RESPONSIBLE FOR YOUR OWN SAFETY - THIS LIST IS NOT EXHAUSTIVE.

- Always assemble and operate the product on a level surface, ensure that the product is stable before use.
- Try to ensure that your back is straight while exercising, especially for long periods
- The safety level of this equipment can only be maintained if it is regularly examined for wear and tear
- Keep hands away from moving parts.
- Replace defective components immediately, and/or keep the equipment out of use until it is repaired.
- Use only the adjustment settings as described in the instructions. Always use the correct adjustment pin/fixing.
- Special attention should be taken to inspect the components, such as pulleys, bearings, straps, rollers are always more susceptible to wear before use.
- Never leave any adjustment devices projecting from the product.
- Always wear suitable clothing and footwear e.g. tracksuit / shorts / training shoes
- Remove all personal jewellery before exercising.
- Ensure you warm-up well before using the equipment as this will help to prevent muscle strain.
- After eating, allow 1-2 hours before exercising as this will help to prevent muscle strain.
- Never overload the equipment – the maximum user weight of this product is 180kg / 400lbs.
- Don't rock this equipment from side to side
- Never use the equipment in any other manner other than the ways explained in these instructions and/or any wall-chart supplied.
- This product has an intergrated resistance system without a constant power mode that is governed by magnetic resistance.
- Losing grip or suddenly releasing the handle could result in an uncontrolled return, ensure there is free space around the product.
- You may want to store this product away to save space - be aware of moving mechanical parts which could cause injury.
- To prevent shock, keep all electrical components, such as the console, motor, cord and switch away from water.
- Do not use any accessories that aren't specifically recommended by the manufacturer, these might cause injuries or cause the unit to fail.
- Work within your recommended exercise level, do **NOT** work to exhaustion.
- If you feel any pain or abnormal symptoms, **STOP YOUR WORKOUT IMMEDIATELY**. Consult your physician immediately.
- Parents and others in charge of children should be aware of their responsibility, because the natural play instinct and the fondness of experimenting of children can lead to situations and behaviour for which the training equipment is not intended
- If children are allowed to use the equipment, their mental and physical development and above all their temperament should be taken into account. They should be controlled and instructed in the correct use of the equipment.
- The equipment is under no circumstances suitable as a children's toy.
- This appliance is not intended for use by persons (including children) 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 appliance by a person responsible for their safety.
- **The free area shall be not less than 2' greater than the training area in the directions from which the equipment is accessed.**

! Injuries to health may result from incorrect or excessive training.

! Heart Rate Monitoring System may be inaccurate, Over exercise may result in serious injury or death. If you feel faint stop exercising immediately !

! Be aware of the edges on the platform when in use or move it around.

! The safety maximum length of the pulling handle motion on this product is 79", please be aware to avoid any exercise that is over this motion range limit.

! The max. operating force allowed is 39 lbs.

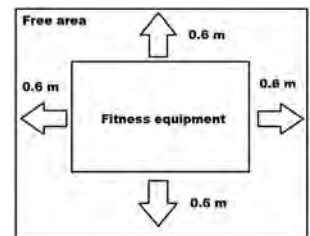
! It is your responsibility to contact us for further advice, when you found any damages which impact the original design and potential issue caused on the product after carton opened.

Safety Standards

This Cascade Raptor meets the requirements of the EN ISO 20957-1: 2013, Class SA

This product is not suitable for therapeutic purposes.

! It is important that you keep these instructions for future reference.



Care & Maintenance

- Always place the equipment in a dry environment.
- Use a warm, damp cloth to keep the product clean.
- Do not use liquids to clean the electrical components and make sure to unplug before any care/maintenance.
- The safety level of the equipment can be maintained only if it is regularly examined for damage and wear. This includes any straps, pulleys, nuts, bolts, moving parts, bushes, cords, wheels, bearings & connection points etc
- Ensure that you inspect the product regularly - at least once a week is recommended.
- Ensure that all fixings are tight before use.
- Always replace damaged / worn components with original parts from the manufacturer.

Protect the environment by not disposing of this product with household waste. Check your local authority for recycling advice and facilities (Europe only).



- This appliance is not intended for use by persons (including children) 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 appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.
- Non-rechargeable batteries are not to be recharged.
- Rechargeable batteries are to be removed from the appliance before being charged.
- Different types of batteries or new and used batteries are not to be mixed.
- Batteries are to be inserted with the correct polarity.
- Exhausted batteries are to be removed from the appliance and safely disposed of
- If the appliance is to be stored unused for a long period, the batteries should be removed.
- The supply terminals are not to be short-circuited.

Customer Support

Should you require any assistance regarding this product please gather the following information, and then contact us using the details below:

1. **Serial no.** - this can be found on the sticker below, located as indicated. For future reference, please write down your serial number in the space provided below.

Cascade Health and Fitness LLC
Model: Cascade Raptor Part#: 702022
www.cascadehealthandfitness.com MADE IN TAIWAN
Ser No. 70202221100001

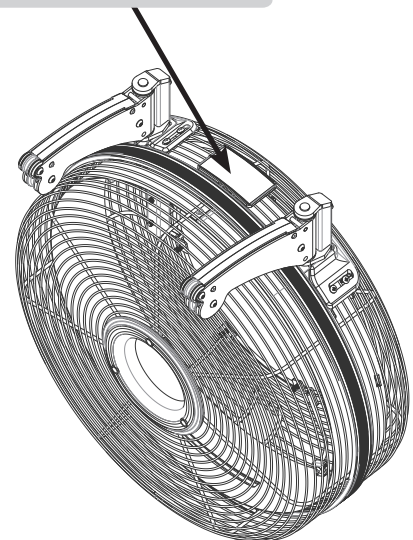


2. **Original purchase date**
3. **Place of purchase**
4. **Information about the place and conditions of use**
5. **Precise description of the issue/defect**

Your Serial No. is:

Contact Us

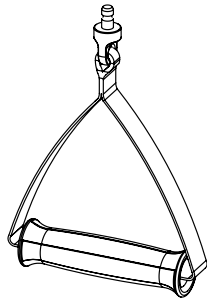
info@cascadehealthandfitness.com
p 425-402-4062



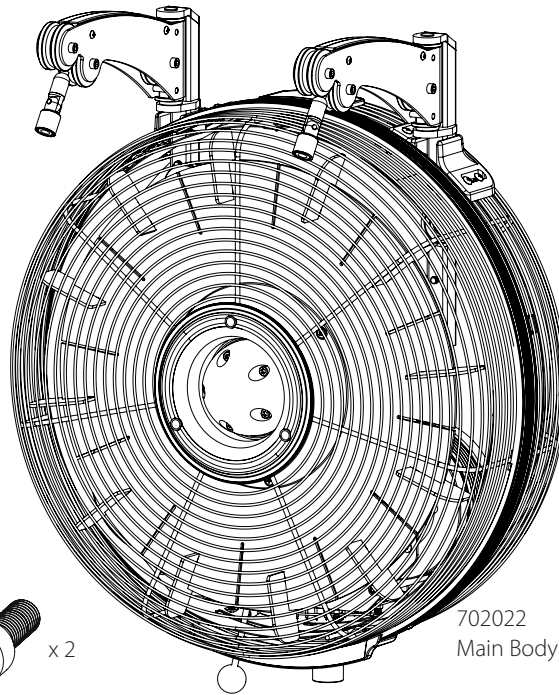
Assembly Instruction

Before you start

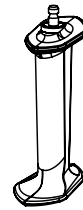
- 1. Prepare your work area -**
It is important for you to assemble the product at a clean and uncluttered space.
- 2. Work with a friend -**
we recommend you to have someone assisting you with the assembly as some of the components are quite heavy.
- 3. Open the carton -**
checking any warnings on the carton and make sure you have it the right way up.
- 4. Unpack the carton**
Make sure you have the following parts:



Part No. **M42**
Cross Grip Handle bar x 2



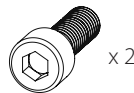
702022 Main Body



Part No. **M18**
Pulling Grip Handle Bar x 2

Part No. **Q8**

M6 x 10mm Allen Head Bolt x 2



(Pre-attached on console post)



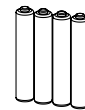
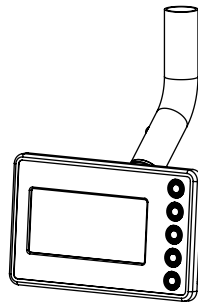
Part No. **M49**
Universal Adaptor x 1



Part No. **M50**
Carabiner x 1

Part No. **Q1**

Console x 1



AA Batteries x 4

Fixings

Part No. **S7**

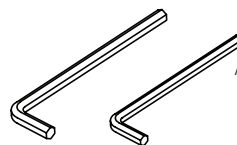
M8 x 25mm Hex Socket Head Bolt x 4



x 4

(For bracket attachment used)

Tools and Consumables



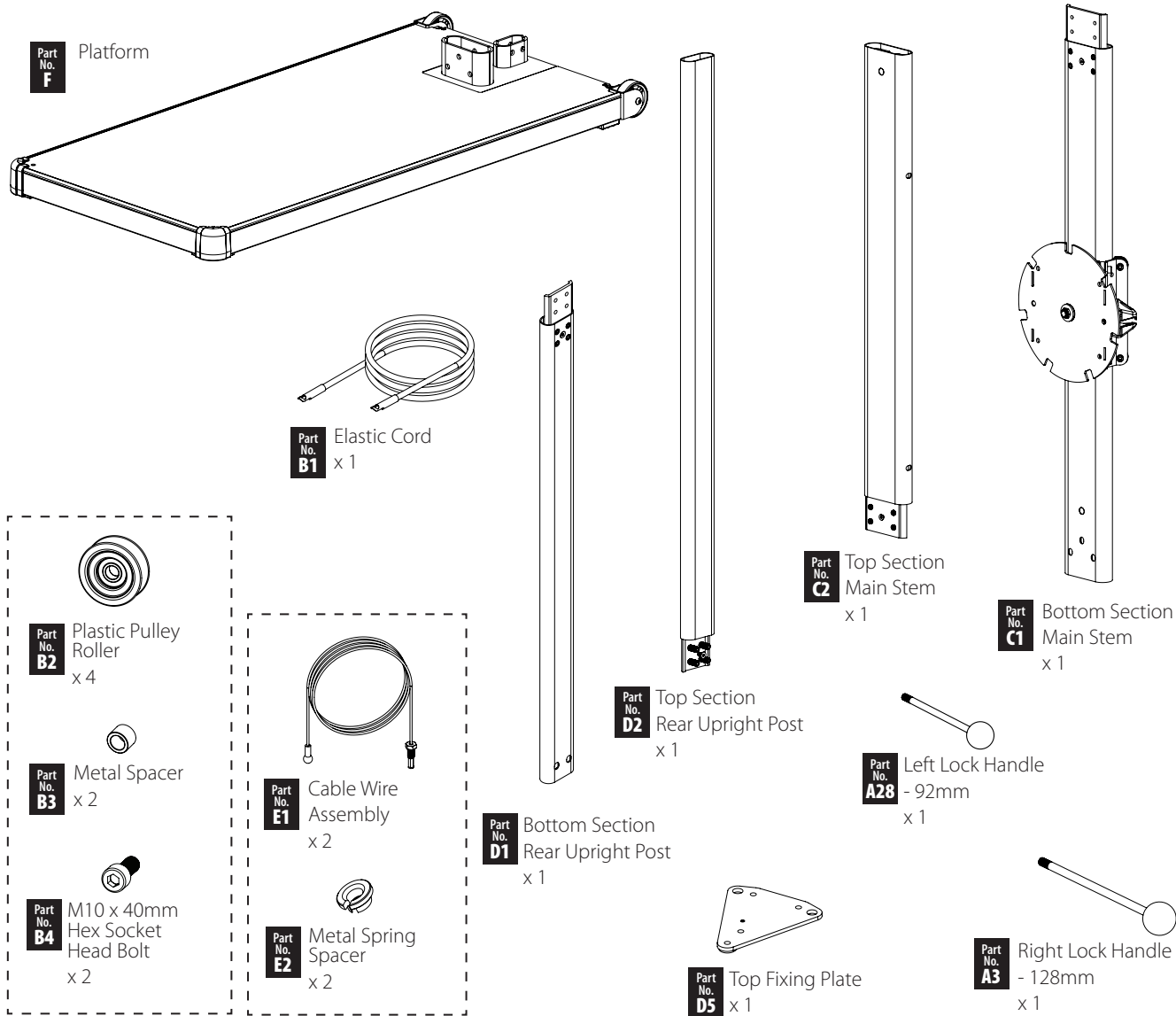
Allen Key (6mm and 5mm)



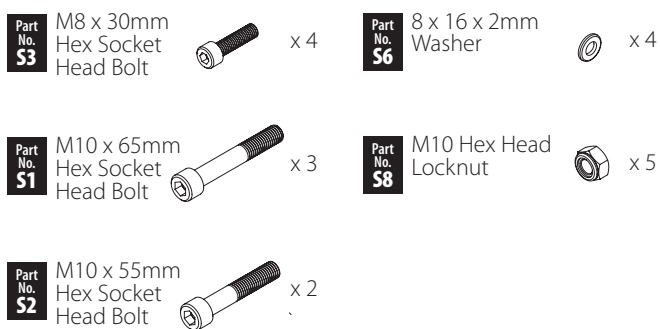
This Cascade Raptor takes up a floor space of 40" x 24" for use, and weighs 185 lbs.



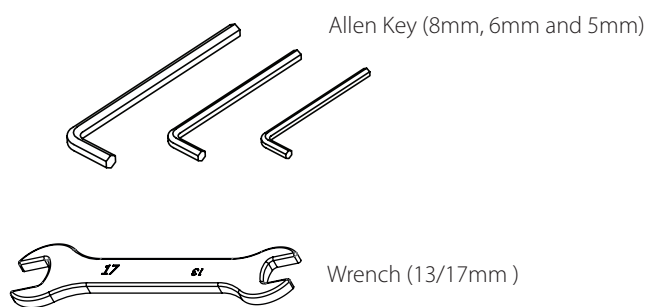
If you suspect you may have some parts missing, please contact us before going back to your retailer. Refer to the Customer Support section on page 4 for contact details.



Fixings



Tools and Consumables



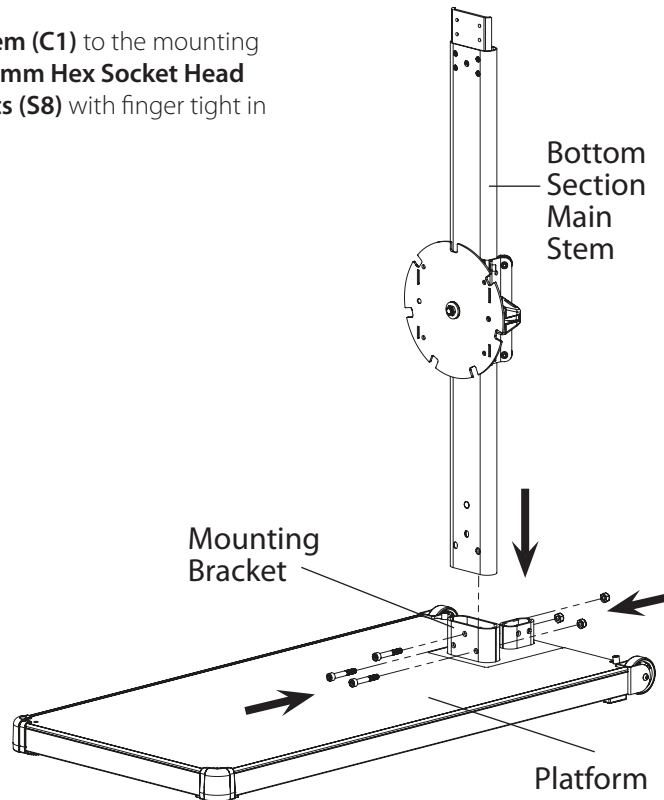
! This Cascade Raptor takes up a floor space of 40" x 24" for use, and weighs 185 lbs.

! If you suspect you may have some parts missing, please contact us before going back to your retailer. Refer to the Customer Support section on page 4 for contact details.

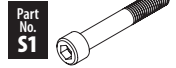
1. Attach the Main Stem Assembly

1-1 Attach the Bottom Section Main Stem

- Attach the **Bottom Section Main Stem (C1)** to the mounting bracket carefully with three **M10 x 65mm Hex Socket Head Bolts (S1)** & **M10 Hex Head Locknuts (S8)** with finger tight in position firstly.



FIXINGS:

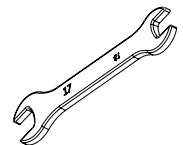
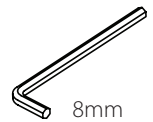


x 3



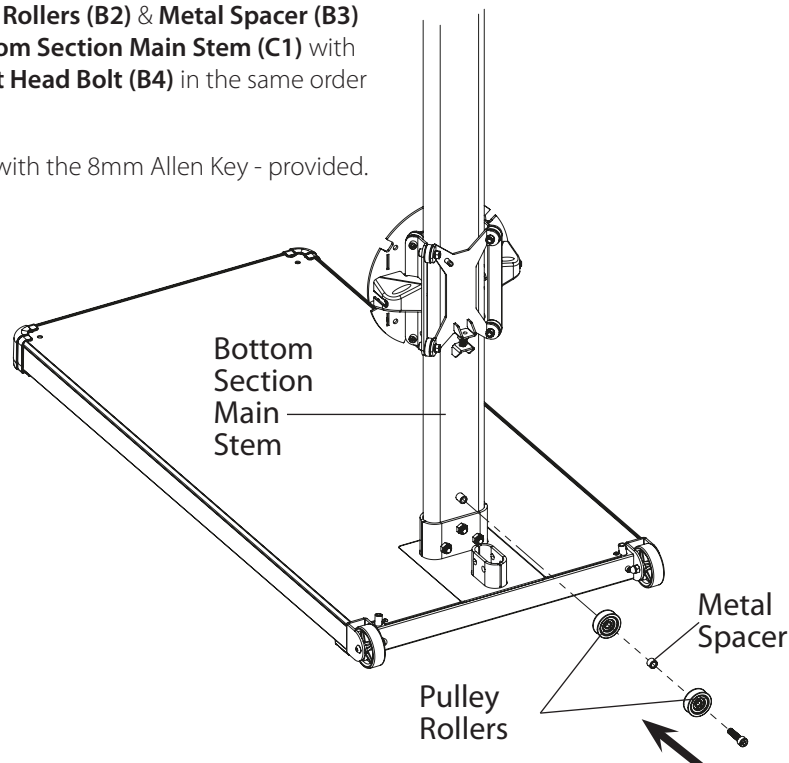
x 3

TOOLS:



1-2 Attach the bottom Pulley Rollers

- Attach two **Plastic Pulley Rollers (B2)** & **Metal Spacer (B3)** onto the back of the **Bottom Section Main Stem (C1)** with **M10 x 40mm Hex Socket Head Bolt (B4)** in the same order as the diagram shown.
- Tighten the bolt securely with the 8mm Allen Key - provided.



FIXINGS:



x 2

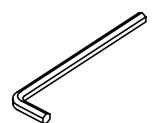


x 1



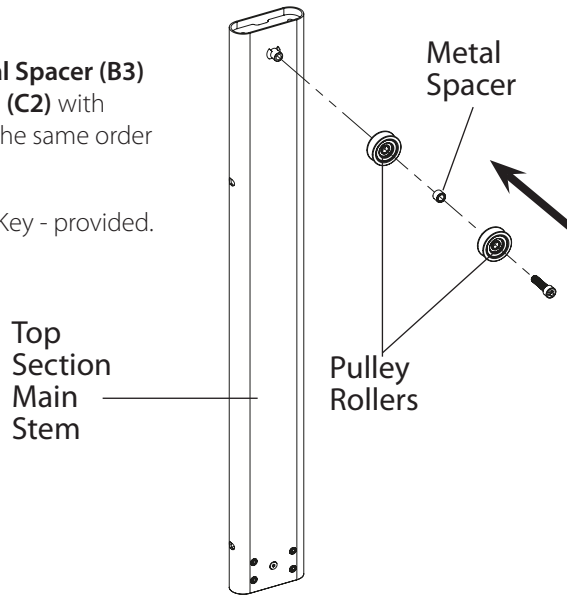
x 1

TOOLS:



1-3 Attach the top Pulley Rollers

- Attach two **Plastic Pulley Rollers (B2)** & **Metal Spacer (B3)** onto the **back of the Top Section Main Stem (C2)** with **M10 x 40mm Hex Socket Head Bolt (B4)** in the same order as the diagram shown.
- Tighten the bolt securely with the 8mm Allen Key - provided.

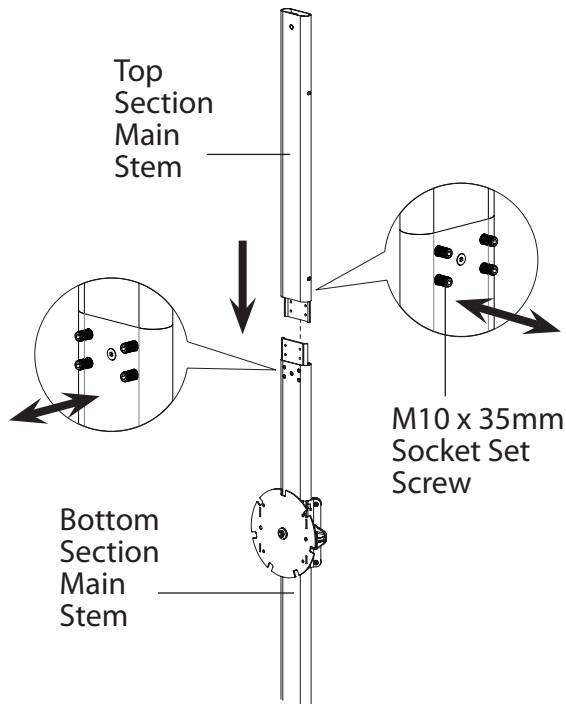


FIXINGS:

Part No. B2		x 2
Part No. B3		x 1
Part No. B4		x 1

1-4 Attach the Top Section Main Stem

- Loosen four **M10 x 35mm Socket Set Screws (C8)** attached on the **Bottom Section Main Stem** 3 ~ 4 threads with provided 5 mm Allen Key carefully.
- Loosen four **M10 x 35mm Socket Set Screws (C8)** attached on the **Top Section Main Stem** 3 ~ 4 threads with provided 5 mm Allen Key carefully.
- Attach the **Top Section Main Stem (C2)** to the **Bottom Section Main Stem (C1)** evenly and tighten the **M10 x 35mm Socket Set Screws (C8)** on both section main stems securely with the 5 mm Allen Key – provided.



TOOLS:

	8mm
--	-----

FIXINGS:

Part No. C8		x 8
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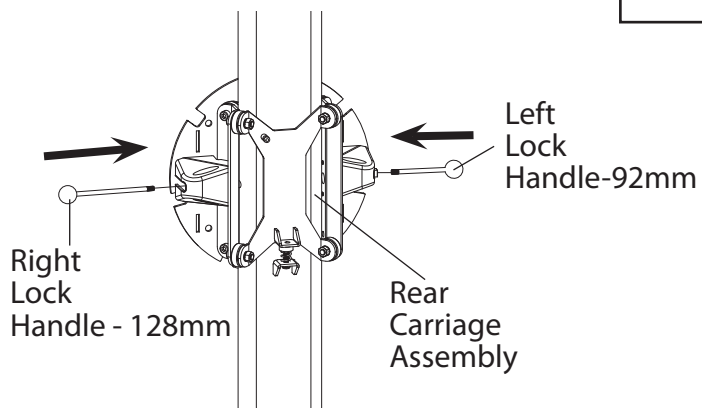
TOOLS:

	5mm
--	-----

! Make sure the bolts are fully tightened evenly with the allen key.

1-5 Attach the Lock Handles

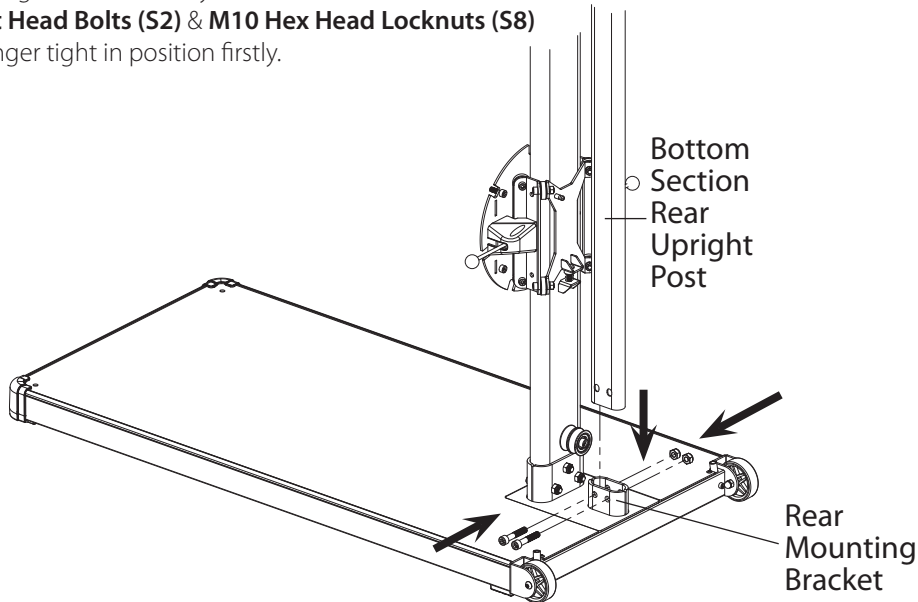
- Attach **Right Lock Handle (A3)** onto the **Rear Carriage Assembly** and secure by clockwise tighten as the diagram shown.
- Attach **Left Lock Handle (A28)** onto the **Rear Carriage Assembly** and secure by clockwise tighten as the diagram shown.



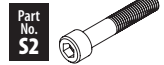
2. Attach the Rear Upright Post Assembly

2-1 Attach the Bottom Section Rear Upright Post.

- Attach the **Bottom Section Rear Upright Post (D1)** to the mounting bracket carefully with two **M10 x 55mm Hex Socket Head Bolts (S2)** & **M10 Hex Head Locknuts (S8)** with finger tight in position firstly.



FIXINGS:



x 2

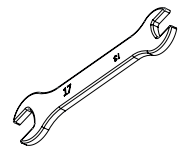


x 2

TOOLS:



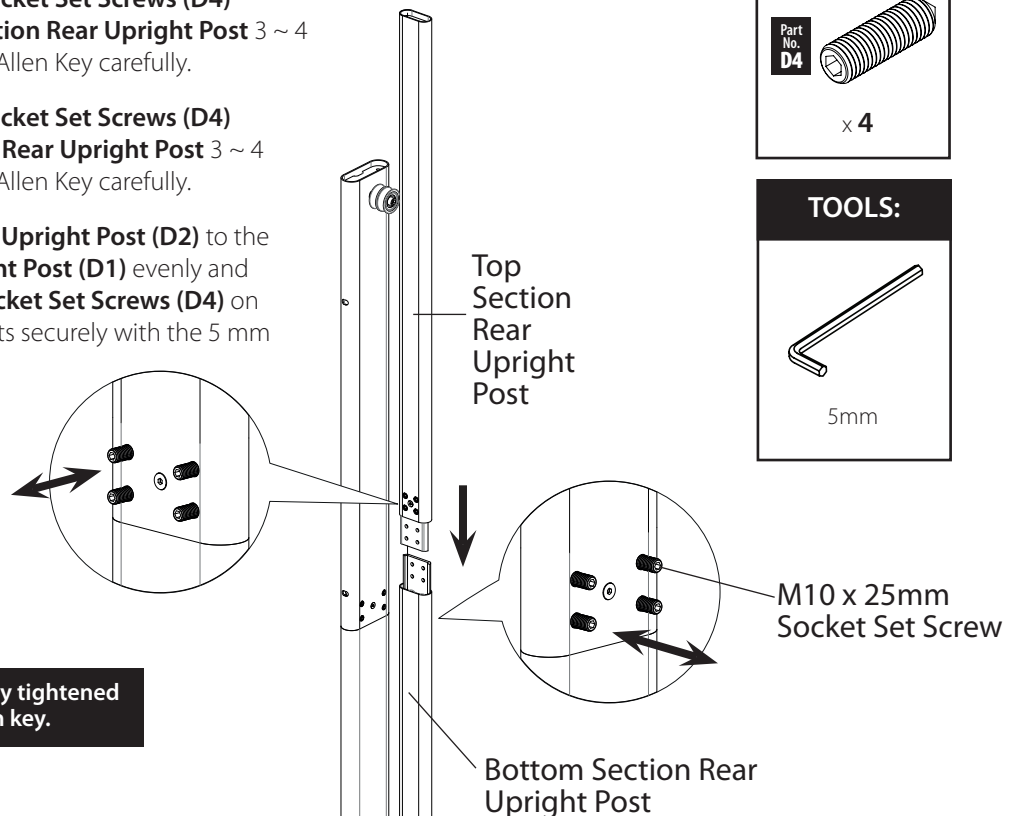
8mm



#13/17

2-2. Attach the Top Section Rear Upright Post

- Loosen four **M10 x 25mm Socket Set Screws (D4)** attached on the **Bottom Section Rear Upright Post** 3 ~ 4 threads with provided 5 mm Allen Key carefully.
- Loosen four **M10 x 25mm Socket Set Screws (D4)** attached on the **Top Section Rear Upright Post** 3 ~ 4 threads with provided 5 mm Allen Key carefully.
- Attach the **Top Section Rear Upright Post (D2)** to the **Bottom Section Rear Upright Post (D1)** evenly and tighten the **M10 x 25mm Socket Set Screws (D4)** on both section rear upright posts securely with the 5 mm Allen Key – provided.

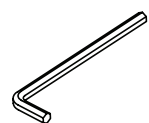


FIXINGS:



x 4

TOOLS:

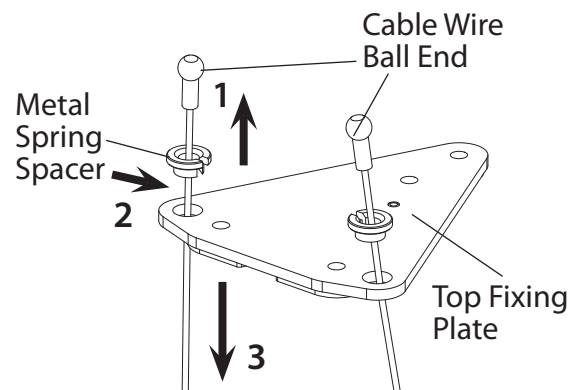


5mm

3. Attach the Side Cable Wires Assembly

3-1 Attach the Top Fixing Plate

- Slide the **Cable Wire Ball End (E1)** through the fixing hole on the **Top Fixing Plate (D5)** and insert the **Metal Spring Spacer (E2)** onto the cable wire and engage it into the fixing hole securely as diagram shown carefully.
- Pull the Cable Wire downward to locate the **Cable Ball End** with **Metal Spring Spacer** in position properly.
- Repeat the same procedures for the other Cable Wire attachment.
- Attach the **Top Fixing Plate (D5)** to the **Top Section Main Stem (C2)** and **Top Section Rear Upright Post (D2)** evenly with four **M8 x 30mm Hex Socket Head Bolts (S3)** and **8mm x 16mm x 2 mm Washers (S6)** in the same order as the diagram shown.
- Tighten the bolts securely with the 6mm Allen Key - provided.

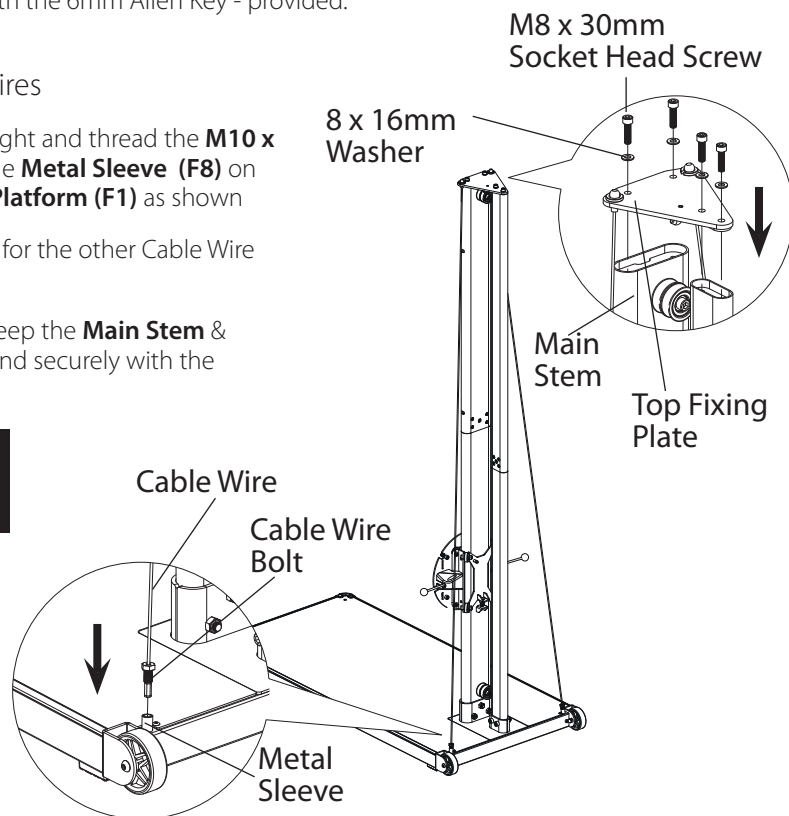


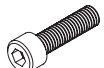

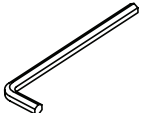
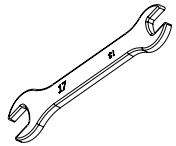
3-2 Attach the Side Cable Wires

- Pull the **Cable Wire (E1)** straight and thread the **M10 x 16mm Cable Wire Bolt** to the **Metal Sleeve (F8)** on the front edge of **Standing Platform (F1)** as shown
- Repeat the same procedures for the other Cable Wire Attachment.
- Tighten the bolts evenly to keep the **Main Stem & Rear Upright Post** straight and securely with the #13/17 Wrench – provided.

Try to feel the tension of two cable wires to ensure IF they are tightened.

Ensure that the threads are engaged to a depth of 4 / 5 Cable Wire Bolt threads at least.



FIXINGS:	
Part No. S3	
	x 4
Part No. S6	
	x 4
TOOLS:	
	
	8mm
	
	#13/17

3-3 Tighten all of the bolts & screws securely

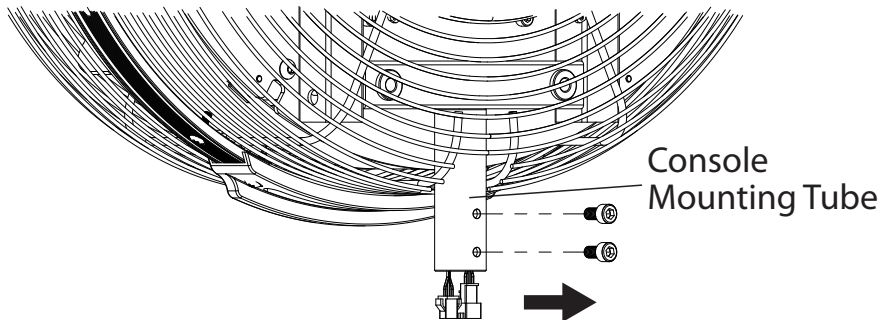
- Tighten three **M10 x 65mm Hex Socket Head Bolts (S1)** & **M10 Hex Head Locknuts (S8)** on the **Main Stem Mounting Bracket** securely with 8mm Allen Key & 13/ 17 Wrench.
- Tighten two **M10 x 55mm Hex Socket Head Bolts (S2)** & **M10 Hex Head Locknuts (S8)** on the **Rear Upright Post Mounting Bracket** securely with 8mm Allen Key & 13/ 17 Wrench.

Make sure the bolts are fully tightened with the allen key & wrench.

4. Attach the Console

4-1 Attach the Console Arm

- Remove the two **M6 x 10mm Allen Head Bolts (Q8)** from the Console Mounting Tube with the 4mm Allen Key provided as shown.



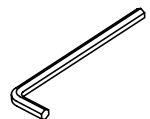
FIXINGS:

Part No. Q8



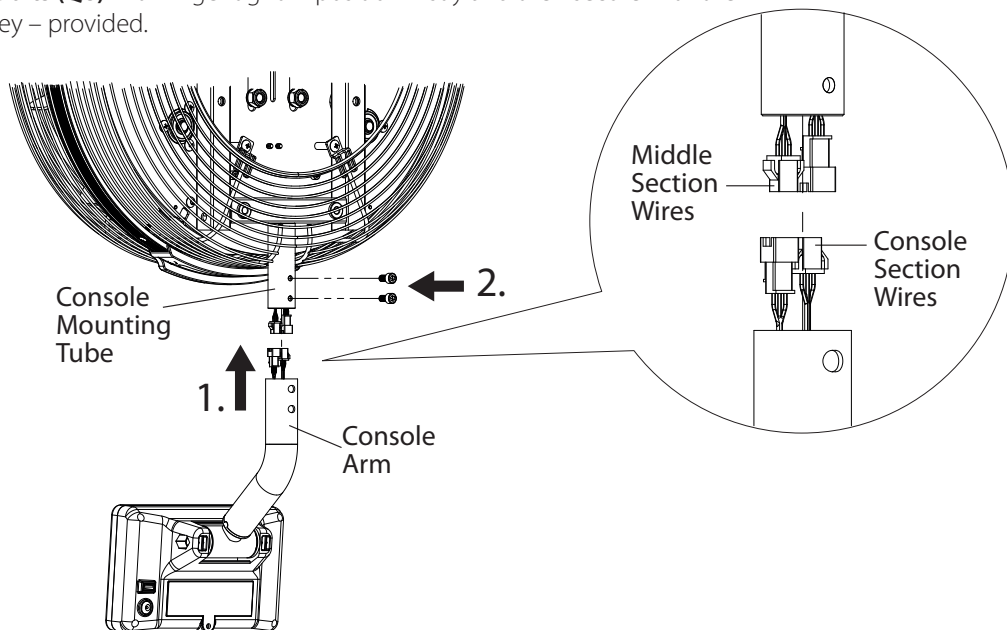
x 2

TOOLS:



5mm

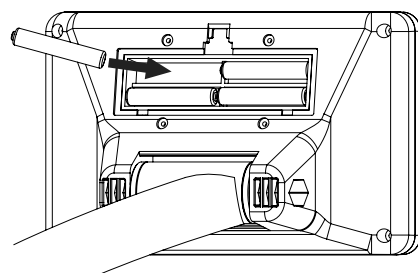
- Connect the **Console Section Wires** (3 pins plug & 3 pins socket) (**Q9**) and **Middle Section Wires** (3 pins socket & 3 pins plug) (**Q10**) & (**Q11**) together accordingly and then insert these two wires into the **Console Arm (Q6)** carefully.
- Attach the **Console Arm (Q6)** to the mounting tube carefully with two **M6x 10mm Allen Head Bolts (Q8)** with finger tight in position firstly and then secure with the 4mm Allen Key – provided.



All of the required bolts & washers had been pre-assembled to ensure its installation quality, remove the relative bolts & washers then fasten as instructions to complete your Cascade Raptor assembly.

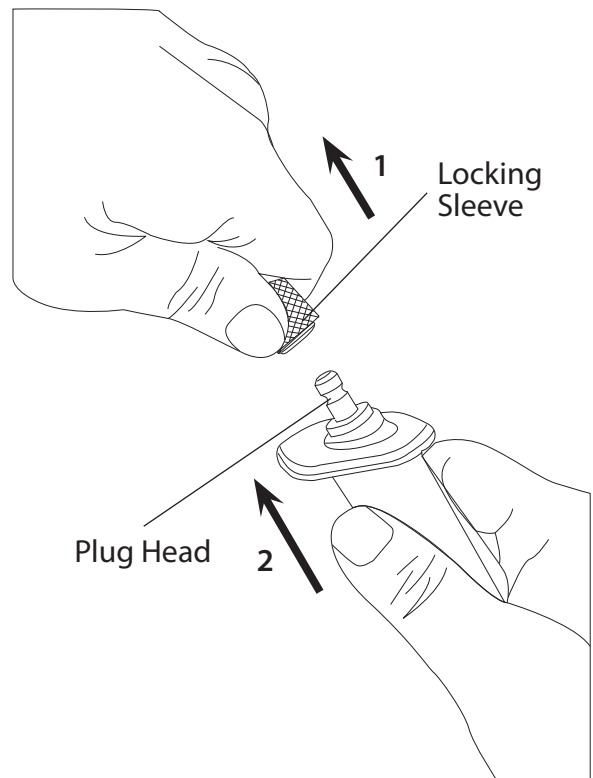
4-2 Power Up

- Install the AA battery x 4 provided into the compartment in the back of the console properly
- Attach the battery cover onto the console securely.



5. Attach the Grip Handles

- Use your thumb & index finger of one hand to grasp & pull the locking sleeve as shown.
- Attach the plug head of selected handle into the locking socket and release to secure the handle attachment properly.
- Repeat the other side handle with same procedures.

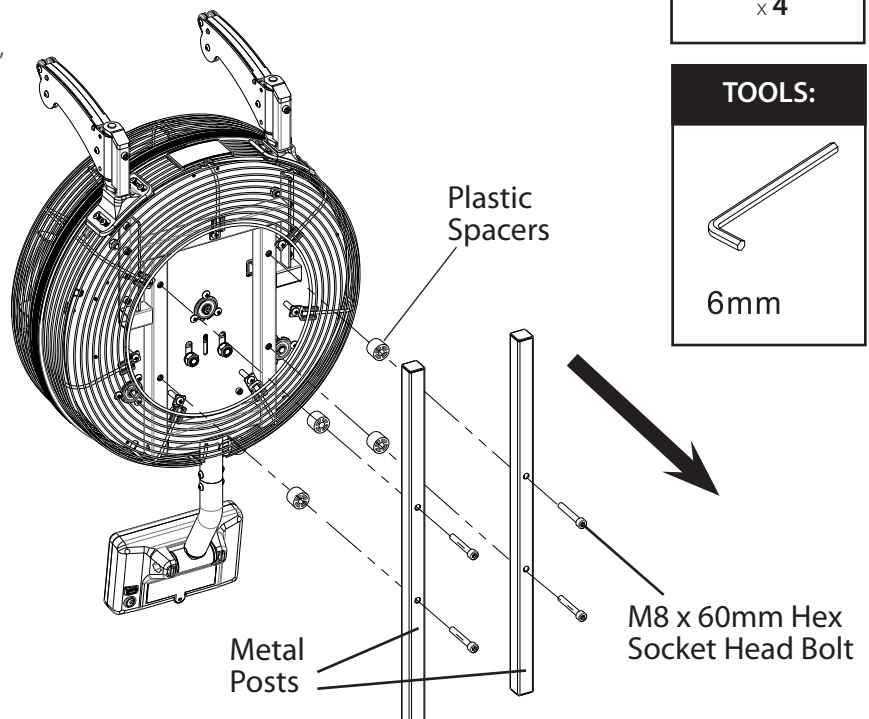


6. Attach the Main Body

6-1. Remove the metal posts from the back of the main body

- Loosen the four **M8 x 60mm Hex Socket Head Bolts** from the two metal posts as shown.

Note: The four Hex Socket Head Bolts, four Plastic Spacers and the two Metal Posts are used for packaging protection purpose, which won't be used again during the assembly.

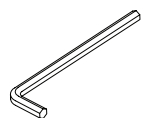


FIXINGS:



x 4

TOOLS:



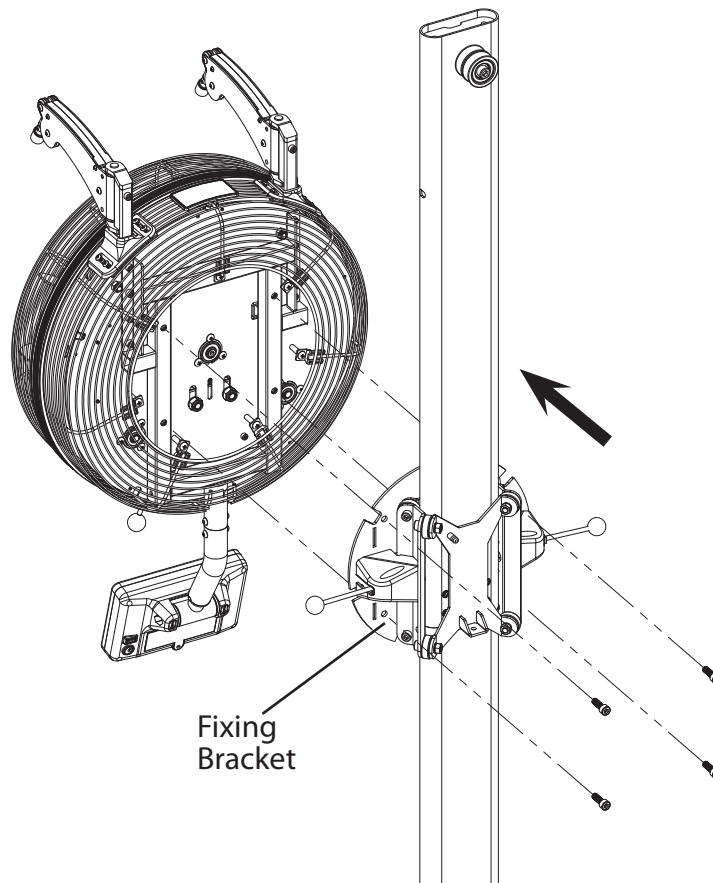
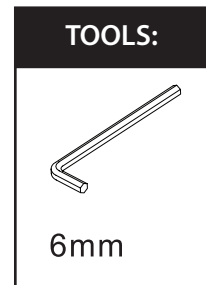
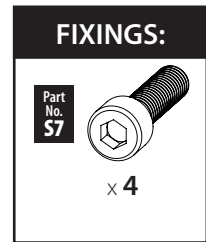
6mm

6-2. Attach the Main Body

- Have someone to assist you to hold the main body evenly and attach it to the **Fixing Bracket** of the selected attachment with four **M8 X 25mm Hex Head Socket Bolts (S7)** as shown.
- Tighten the bolts securely with the 6mm Allen Key - provided.

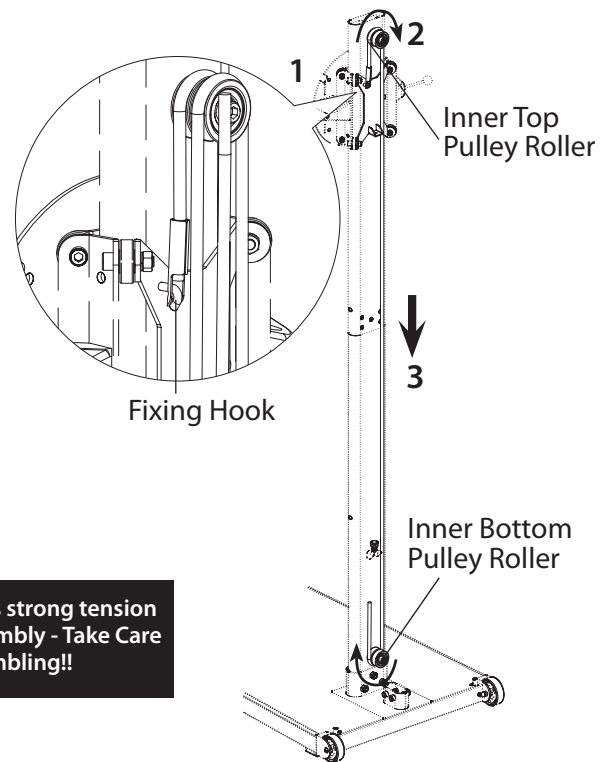
! Be sure to fit the parts in the same order as the diagrams shown.

! Make sure the bolts are fully tightened with the allen key.



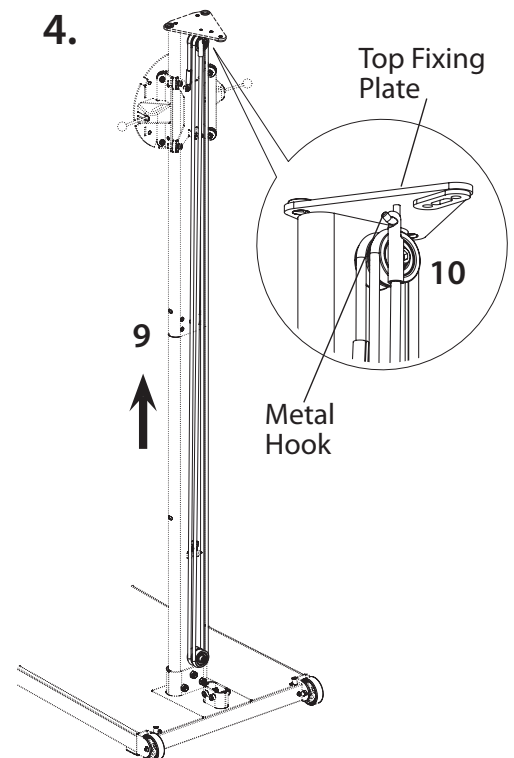
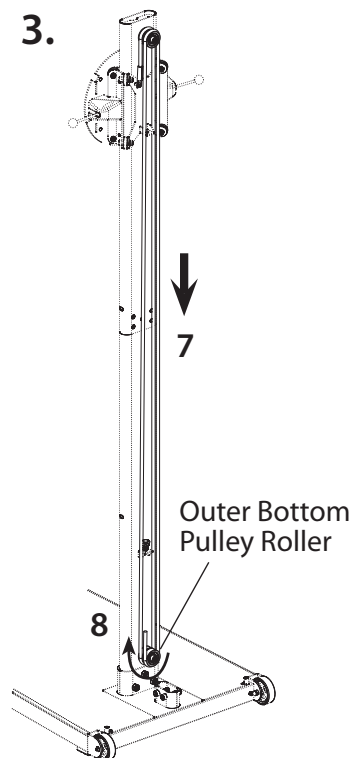
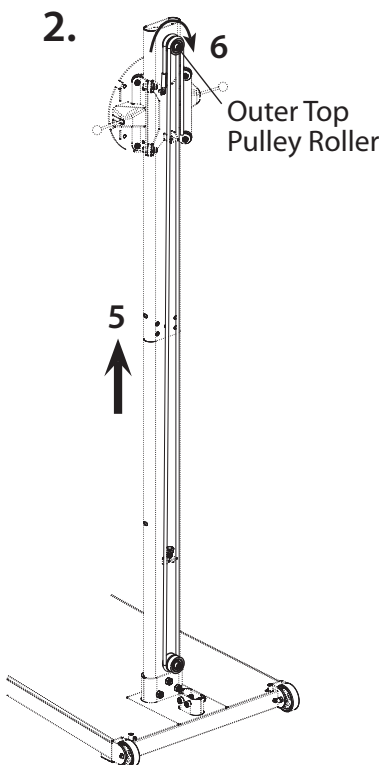
7. Attach the Elastic Cord Assembly

1. Attach one **End Metal Hook** of the **Elastic Cord (B1)** to the **Fixing Hook** welded on the **Rear Carriage Assembly** properly.
2. Wrap the **Elastic Cord** over the **inner Top Pulley Roller** and route the **Elastic Cord** as diagrams shown.
3. Wrap the **Elastic Cord** over the **inner Bottom Pulley Roller** and route the **Elastic Cord** as diagrams shown.
4. Wrap the **Elastic Cord** over the **outer Top Pulley Roller** and route the **Elastic Cord** as diagrams shown.
5. Wrap the **Elastic Cord** over the **outer Bottom Pulley Roller** and route the **Elastic Cord** as diagrams shown.
6. Attach the **End Metal Hook** of the **Elastic Cord** to the **Fixing Hook** welded on the **Top Fixing Plate (D5)** properly as shown.



Use one hand (left) to stretch and hold the Elastic Cord firstly and use the other hand to pull the rest Elastic Cord to reach the hook on the Top Fixing Plate.

The Elastic Cord has strong tension after complete assembly - Take Care while assembling!!



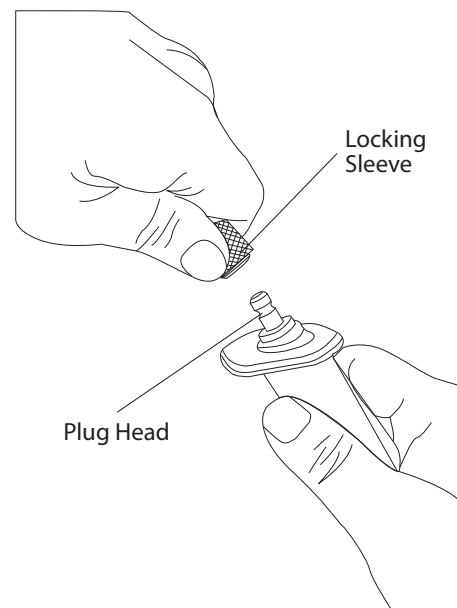
Final Checks

Your Cascade Raptor is now assembled. Please make the following checks before you use it for the first time.

- Make sure all screws, bolts & nuts are tightened securely.
- Make sure you have positioned it on flat & level surface.

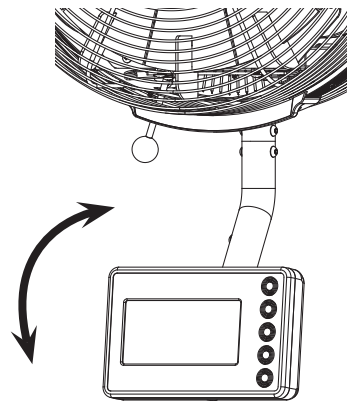
Exchanging the Grip Handle

1. Use your thumb & index finger of one hand to grasp & pull the locking sleeve as shown.
2. Attach the plug head of selected handle into the locking socket and release to secure the handle attachment properly.
3. Repeat the other side handle with same procedures



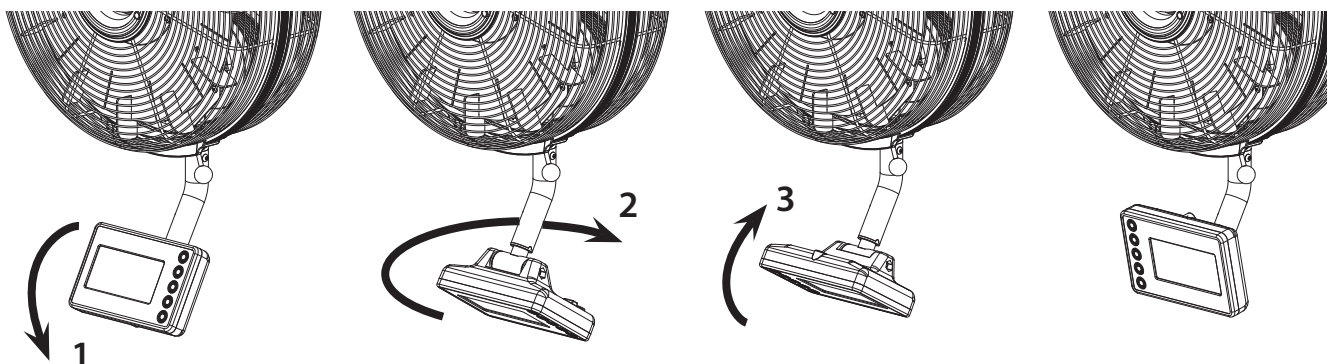
Adjusting the Console

1. Adjust the console display to suitable angle for easy viewing by rotating the console itself with both hands evenly as shown.



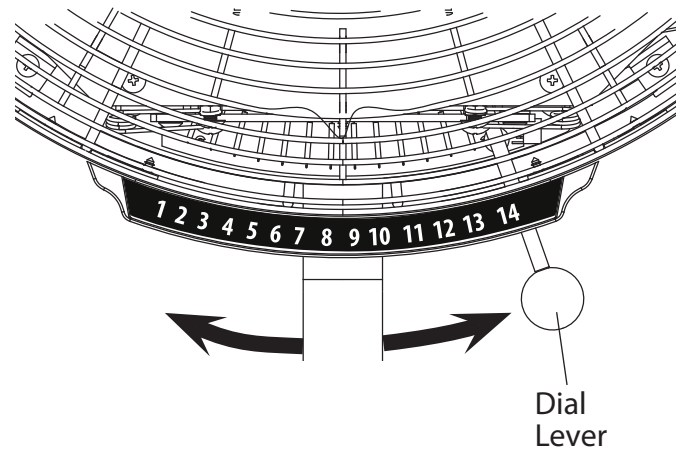
2. You can also change the console up side down for easy viewing when needed by rotating the console with both hands evenly as shown .

- Fold down or upward the displayed screen slowly.
- Rotate the console clockwise (or counter-clockwise) carefully.
- Fold up or downward the displayed screen slowly as required.



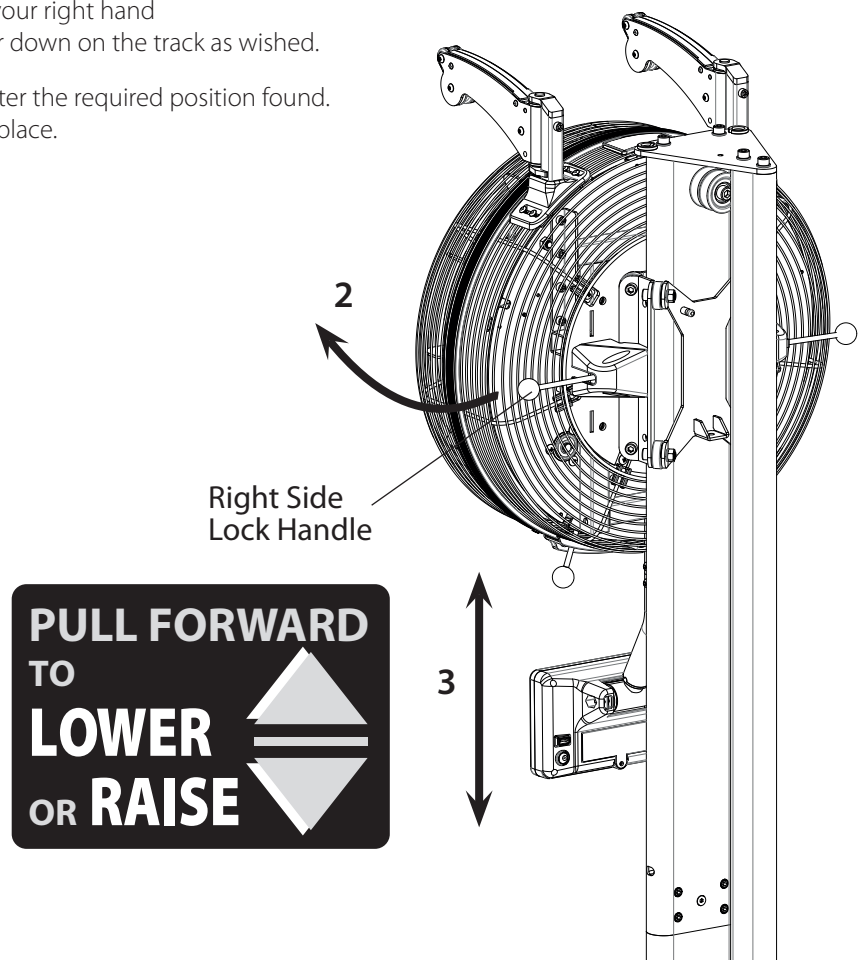
Adjusting the Resistance

1. This Cascade Raptor features a speed independent (14 levels adjustable) system.
2. The harder you pull, the more resistance you will feel. As you put more efforts into your pulling, you will go faster, produce more watts and burn more calories.
3. The resistance is controlled by a magnet mechanism, which is moved closer or further away from the air fan wheel assembly – the closer the magnet is to the fan wheel the harder the resistance.
4. The magnet is controlled manually, by moving the dial lever.
5. The resistance levels goes from 1 = easy to 14 = hard.



Adjusting the Locations

1. Push to lift the Cascade Raptor slightly with both hands to remove the lock pin in position
2. Pull the right side lock handle with your right hand and adjust the Cascade Raptor up or down on the track as wished.
3. Release the right side lock handle after the required position found. Make sure unit is securely locked in place.



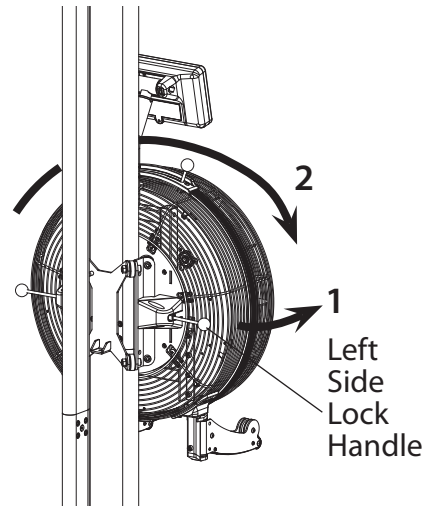
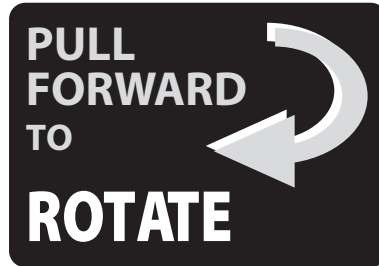
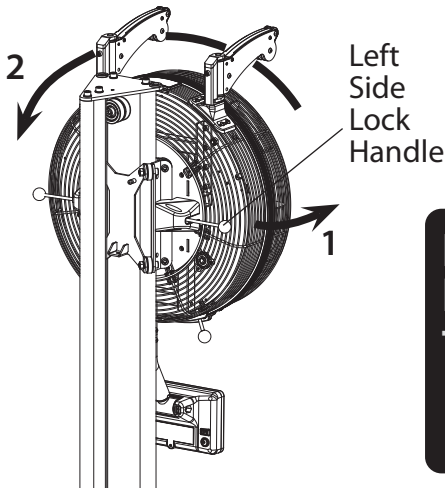
Rotating the Cascade Raptor (702022 models)

1. Upside down –

- Pull the left side lock handle with your left hand and rotate the Cascade Raptor clockwise carefully until the stop pin engaged in position securely.

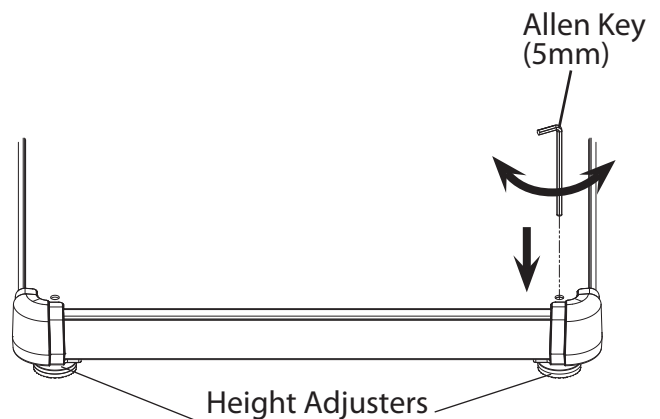
2. Back to Standard –

- Pull the left side lock handle with your left hand and rotate the Cascade Raptor counter-clockwise carefully until the stop pin engaged in position securely.



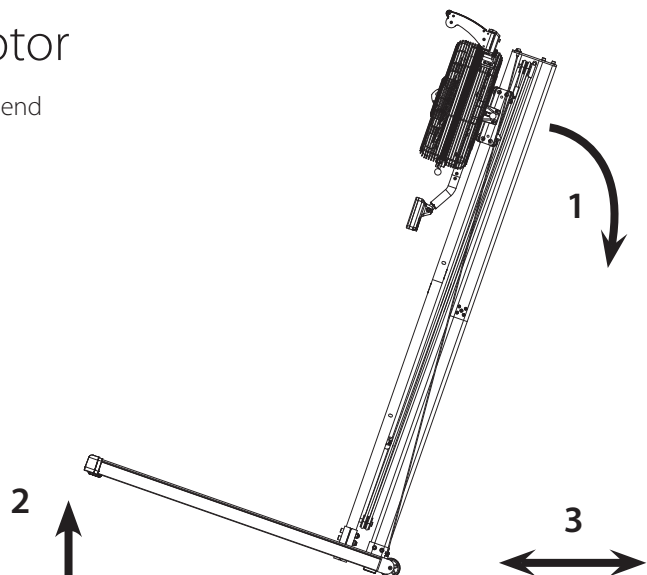
Levelling your Cascade Raptor

1. To help you level the Cascade Raptor on uneven surface, there are two height adjusters attached on the rear corners of the platform.
2. Simply turn the adjustable bolt with 5mm Allen Key – provided to adjust the height of your Cascade Raptor as required.



Transporting your Cascade Raptor

1. Your Cascade Raptor has 2 transport wheels on the front end of the platform.
2. Stand yourself behind the Cascade Raptor comfortably and hold the rear upright post with hands firmly.
3. Use your foot to stop the front end of platform while pulling down the rear upright post to raise the platform and then push to move it around.



Computer Instructions

Quick Start

Use this mode if you just want a quick workout session and are not interested in setting up any personal data.

- Pull for a few seconds to power the console on.
- Press the " **START** " button.
- The values of **WATTS, CALORIES, TIME, TIME/ 500M, DISTANCE, STROKES, S/M, HEART RATE** (if heart rate signal is detected) will start displaying.
- The values of **WATTS, CALORIES, TIME, DISTANCE, STROKES** will start counting upwards.

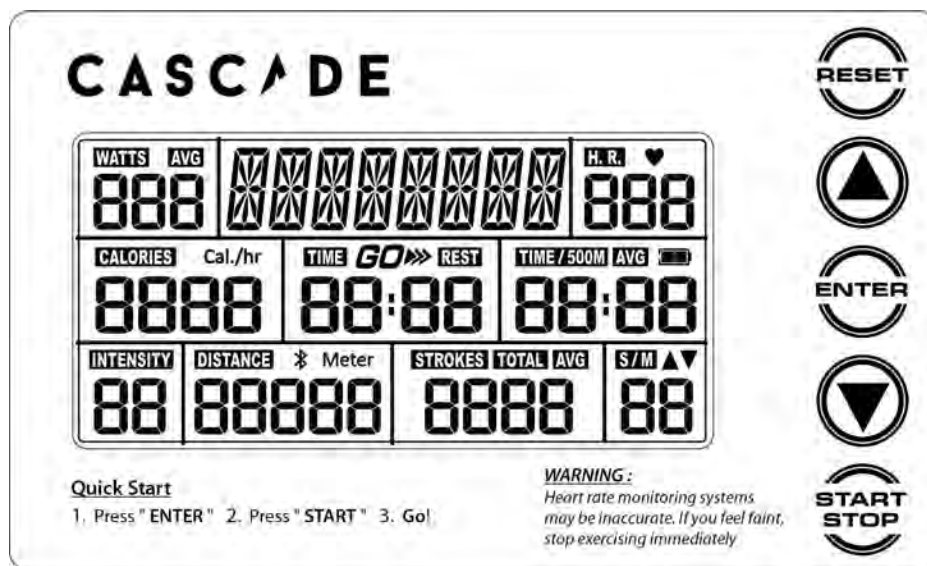
"You can change the resistance at any point during the workout by dial lever as wished."

To finish this quick workout session and view your workout summary –

- Stop pulling.
- Press " **STOP** " button.
- The values of **WATTS, CALORIES, TIME, TIME/ 500M, DISTANCE, STROKES, S/M, HEART RATE** (if heart rate signal is detected) will be displayed.

" If you stop pulling without pressing the " **STOP** " button, after 5 seconds the program will automatically pause. You can resume the program by pulling again. After 1 minute of inactivity the program will end. "

Button Functions



RESET

- Press the " **RESET** " button, during the program setting mode, to return to " **START** " mode on display.
- Press the " **RESET** " button, in " **STOP** " / " **PAUSE** " mode , to reset all of the values on display to zero and return to " **START** " mode.

- ▲ To select the pre-set programs of **TIME, DISTANCE, CALORIES, STROKES, S/M, INT 20 /10, INT 20/30 & INT CUST** in the " **START** " mode.
- To increase values when setting the target of the program. Press and hold for rapid value change.

ENTER

- To confirm the target settings / program selection.

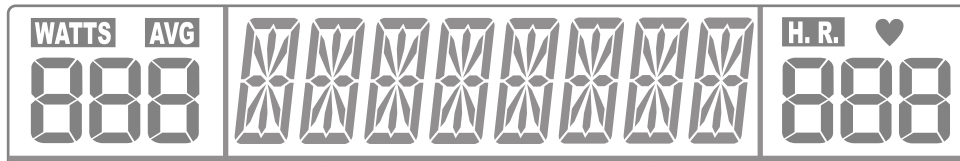


- To select the pre-set programs of **INT CUST, INT 20/30, INT 20 /10, S/M, STROKES, CALORIES, DISTANCE & TIME** in the " **START** " mode.
- To decrease values when setting the target of the program. Press and hold for rapid value change.

START/STOP

- To begin a workout or restart a paused program
- To finish or pause a workout.

Console Display and Feedback



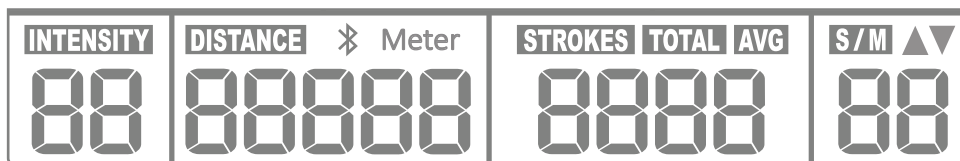
- Indicates the current energy (power) generated this session, (for comparison only, not to be used for medical purpose) default counts up from zero to 999.
- Indicates the current program text message for reference.
- Indicates the current heart rate in beats per minute (bpm), which are detected by a wireless heart rate chest strap, displayed 30 ~ 220 bpm.

NOTE: To get your pulse reading throughout the exercise, which it gets from you by a 5.4 kHz Polar Telemetry Chest Strap.

! Heart Rate monitoring system may be inaccurate, Over exercise may result in serious injury or death. If you feel faint stop exercising immediately !



- Indicates the approximate calories burned this session, (for comparison only, not to be used for medical purpose) default counts up from zero to 9999 cal, but counts down if a target had been set (10 ~ 990).
- Indicates the time exercised this session, default counts up from 00:00 to 99:59, but counts down if a target had been set (05:00 ~ 99:00).
- Indicates the time that is needed to achieve 500 meters distance travelled, which is automatically calculated, default counts up from 00:00 to 9:59.



- Indicates the resistance level loaded this session, 1= easy and 14= hard.
- Indicates the distance travelled this session, default counts up from 0 to 99999 meter, but counts down if a target had been set (100 ~ 9900).
- Indicates the cycles exercised this session, default counts up from 0 to 9999, but counts down if a target had been set (10 ~ 990).
- Indicates the current Stroke Per Minute you are pulling at, default counts up from 0 to 99, but counts down if a target had been set (10 ~ 99).
- This S / M readout is automatically calculated and displayed when your pull is in use and should be used as a guide to pace in workout.

Using Workout Programs

TARGET Programs

This console features 5 target programs : **Target TIME**, **Target DISTANCE**, **Target CALORIES**, **Target STROKES** & **Target S/M**.

When you reach your target the console will sound a short alarm and end the workout by coming a stop.

Please input your **Personal Data** before any **TARGET Programs** selected.

1. Pull the handle for a few seconds or press any buttons to activate the console.
2. Use the "▼/▲" buttons to input user's weight.
3. Press "ENTER" to confirm your setting.
4. Use the "▼/▲" buttons to input user's gender.
5. Press "ENTER" to confirm your setting.
6. Use the "▼/▲" buttons to input user's age.
7. Press "ENTER" to confirm your setting.

WATTS	0	TIME		H.R.	♥	P
CALORIES	0	TIME	20:00	TIME/500M	00:00	🔋
INTENSITY	0	DISTANCE	Meter	0	STROKES	TOTAL
				0	AVG	S/M
				0		0

Target TIME

1. Make sure the console is switched on.
"SELECT PROGRAM OR QUICK START" scrolled on the top segment display.
2. Use the "▼/▲" buttons to select the program mode you want.
"TIME" flashed on the top segment display.
3. Press "ENTER" to confirm your selection.
4. The default value of "20:00" is flashed in the **TIME** window.
5. Use the "▼/▲" buttons to set your workout time (5:00 ~ 99:00 minutes).
6. Press "ENTER" to confirm your setting.
"START" is shown on the top segment display.
7. Press "START" to begin the workout and then start pulling.
The program will not start until you begin pulling.
NOTE: You can press "STOP" button to end the program at any time.
The workout summary will displayed on the screen.
NOTE: You can change the resistance level (1~14) at any point during the workout by dial lever as wished and relatively readouts on display will be adjusted accordingly.

WATTS	0	METERS		H.R.	♥	P
CALORIES	0	TIME	00:00	TIME/500M	00:00	🔋
INTENSITY	0	DISTANCE	Meter	1000	STROKES	TOTAL
				0	AVG	S/M
				0		0

Target DISTANCE

1. Make sure the console is switched on.
"SELECT PROGRAM OR QUICK START" scrolled on the top segment display.
2. Use the "▼/▲" buttons to select the program mode you want.
"METERS" flashed on the top segment display.
3. Press "ENTER" to confirm your selection.
4. The default value of "1000" is flashed in the **DISTANCE** window.
5. Use the "▼/▲" buttons to set your target distance (100 ~ 9900 meters).
6. Press "ENTER" to confirm your setting.
"START" is shown on the top segment display.

- Press "**START**" to begin the workout and then start pulling.
The program will not start until you begin pulling.

NOTE: You can press "**STOP**" button to end the program at any time.
The workout summary will displayed on the screen.

NOTE: You can change the resistance level (1~ 14) at any point during the workout by dial lever as wished and relatively readouts on display will be adjusted accordingly.

WATTS	0 CALORIE		H.R.	♥	P
CALORIES	150	TIME	00:00	TIME/500M	00:00
INTENSITY	DISTANCE	Meter	STROKES	TOTAL	S/M
0		0	0	0	0

Target CALORIES

- Make sure the console is switched on.
"**SELECT PROGRAM OR QUICK START**" scrolled on the top segment display.
- Use the "**▼/▲**" buttons to select the program mode you want.
"**CALORIE**" flashed on the top segment display.
- Press "**ENTER**" to confirm your selection.
- The default value of "**150**" is flashed in the **CALORIES** window.
- Use the "**▼/▲**" buttons to set your target calories (10 ~ 990 calories).
- Press "**ENTER**" to confirm your setting.
"**START**" is shown on the top segment display.
- Press "**START**" to begin the workout and then start pulling.
The program will not start until you begin pulling.
NOTE: You can press "**STOP**" button to end the program at any time.
The workout summary will displayed on the screen.
NOTE: You can change the resistance level (1~ 14) at any point during the workout by dial lever as wished and relatively readouts on display will be adjusted accordingly.

WATTS	0 STROKES		H.R.	♥	P
CALORIES	0	TIME	00:00	TIME/500M	00:00
INTENSITY	DISTANCE	Meter	STROKES	TOTAL	S/M
0		0	300	0	0

Target STROKES

- Make sure the console is switched on.
"**SELECT PROGRAM OR QUICK START**" scrolled on the top segment display.
- Use the "**▼/▲**" buttons to select the program mode you want.
"**STROKES**" flashed on the top segment display.
- Press "**ENTER**" to confirm your selection.
- The default value of "**300**" is flashed in the **STROKES** window.
- Use the "**▼/▲**" buttons to set your target stroke (10 ~ 990).
- Press "**ENTER**" to confirm your setting.
"**START**" is shown on the top segment display.
- Press "**START**" to begin the workout and then start pulling.
The program will not start until you begin pulling.
NOTE: You can press "**STOP**" button to end the program at any time.
The workout summary will displayed on the screen.
NOTE: You can change the resistance level (1~ 14) at any point during the workout by dial lever as wished and relatively readouts on display will be adjusted accordingly.

WATTS	0	S/M	H.R.	P
CALORIES	0	TIME	00:00	TIME/500M
INTENSITY	0	DISTANCE	Meter	0
		STROKES	TOTAL	S/M
		0	0	0

WATTS	3	SLOWER	H.R.	123
CALORIES	132	TIME	1:03	TIME/500M
INTENSITY	1	DISTANCE	Meter	128
		STROKES	TOTAL	S/M
		42		38

WATTS	1	FASTER	H.R.	99
CALORIES	87	TIME	1:03	TIME/500M
INTENSITY	1	DISTANCE	Meter	56
		STROKES	TOTAL	S/M
		19		28

WATTS	2	GREAT	H.R.	108
CALORIES	102	TIME	1:03	TIME/500M
INTENSITY	1	DISTANCE	Meter	72
		STROKES	TOTAL	S/M
		25		30

Target S / M (Stroke Per Minute)

1. Make sure the console is switched on.
"SELECT PROGRAM OR QUICK START" scrolled on the top segment display.
2. Use the "▼ / ▲" buttons to select the program mode you want.
"S / M" flashed on the top segment display.
3. Press "ENTER" to confirm your selection.
4. The default value of "30" is flashed in the S / M window.
5. Use the "▼ / ▲" buttons to set your target PACE (10 ~ 99).
6. Press "ENTER" to confirm your setting.
"START" is shown on the top segment display.
7. Press "START" to begin the workout and then start pulling.

The program will not start until you begin pulling.

NOTE : There will be a "▼" arrow flashed on the S/M window to indicate your current S/M is faster than setting.
"SLOWER" will be scrolled on the top segment display.
There will be a "▲" arrow flashed on the S/M window to indicate your current S/M is slow than setting.
"FASTER" will be scrolled on the top segment display.
"GREAT" will be scrolled on the top segment display when you reach the same S/M as setting.

NOTE : You can press "STOP" button to end the program at any time. The workout summary will displayed on the screen.

NOTE : You can change the resistance level (1~ 14) at any point during the workout by dial lever as wished and relatively readouts on display will be adjusted accordingly

INTERVAL Programs

This console features 3 interval programs : **INTERVAL 20/10**, **INTERVAL 20/30** & **INTERVAL CUSTOM**.

The **INTERVAL 20/10** & **INTERVAL 20/30** programs offer users a series of high-intensity workout intervals with preset time segments.

These High Intensity Interval Training (H.I.I.T) programs will automatically indicate the start of each **GO** & **REST** interval.

When you reach the last "REST" segment the console will send a short alarm and end the workout by coming to a stop.

Please input your **Personal Data** before any **INTERVAL Programs** selected.

1. Pull the handle for a few seconds or press any buttons to activate the console.
2. Use the "▼ / ▲" buttons to input user's weight.
3. Press "ENTER" to confirm your setting.
4. Use the "▼ / ▲" buttons to input user's gender.
5. Press "ENTER" to confirm your setting.
6. Use the "▼ / ▲" buttons to input user's age.
7. Press "ENTER" to confirm your setting.

WATTS	0 INT20/10		H.R.	♥ P
CALORIES	0	TIME	00:00	TIME / 500M
			00:00	
INTENSITY	DISTANCE	Meter	STROKES TOTAL	S/M
1		0	0	0

WATTS	0 CYCLE 10		H.R.	♥ P
CALORIES	0	TIME	00:00	TIME / 500M
			00:00	
INTENSITY	DISTANCE	Meter	STROKES TOTAL	S/M
1		0	0	0

INTERVAL 20 /10

1. Make sure the console is switched on.
"SELECT PROGRAM OR QUICK START" scrolled on the top segment display.
2. Use the "▼/▲" buttons to select the program mode you want.
"INT 20 /10" flashed on the top segment display.
3. Press "ENTER" to confirm your selection.
4. The default interval number "CYCLE 10" flashed on the top segment display.
5. Use the "▼/▲" buttons to set the total interval numbers (1 ~ 99).
6. Press "ENTER" to confirm your setting.
7. Use the "▼/▲" buttons to set your target distance (100 ~ 9900 meters).
8. Press "ENTER" to confirm your setting.
"START" is shown on the top segment display.
9. Press "START" to begin the workout and then start pulling.

The program will not start until you begin pulling.

NOTE: You can press "STOP" button to end the program at any time.

The workout summary will displayed on the screen.

NOTE: You can change the resistance level (1~ 14) at any point during the workout by dial lever as wished and relatively readouts on display will be adjusted accordingly.

WATTS	0 INT20/30		H.R.	♥ P
CALORIES	0	TIME	00:00	TIME / 500M
			00:00	
INTENSITY	DISTANCE	Meter	STROKES TOTAL	S/M
1		0	0	0

WATTS	0 CYCLE 10		H.R.	♥ P
CALORIES	0	TIME	00:00	TIME / 500M
			00:00	
INTENSITY	DISTANCE	Meter	STROKES TOTAL	S/M
1		0	0	0

INTERVAL 20 /30

1. Make sure the console is switched on.
"SELECT PROGRAM OR QUICK START" scrolled on the top segment display.
2. Use the "▼/▲" buttons to select the program mode you want.
"INT 20 /30" flashed on the top segment display.
3. Press "ENTER" to confirm your selection.
4. The default interval number "CYCLE 10" flashed on the top segment display.
5. Use the "▼/▲" buttons to set the total interval numbers (1 ~ 99).
6. Press "ENTER" to confirm your setting.
7. Use the "▼/▲" buttons to set your target distance (100 ~ 9900 meters).
8. Press "ENTER" to confirm your setting.
"START" is shown on the top segment display.
9. Press "START" to begin the workout and then start pulling.

The program will not start until you begin pulling.

NOTE: You can press "STOP" button to end the program at any time.

The workout summary will displayed on the screen.

NOTE: You can change the resistance level (1~ 14) at any point during the workout by dial lever as wished and relatively readouts on display will be adjusted accordingly.

WATTS	0 INT CUST		H.R.	P
CALORIES	0	TIME	00:00	TIME / 500M
INTENSITY	DISTANCE	Meter	STROKES	TOTAL
1	0	0	0	S/M
			0	0

WATTS	0 WORK 20		H.R.	P
CALORIES	0	TIME	00:00	TIME / 500M
INTENSITY	DISTANCE	Meter	STROKES	TOTAL
1	0	0	0	S/M
			0	0

WATTS	0 REST 10		H.R.	P
CALORIES	0	TIME	00:00	TIME / 500M
INTENSITY	DISTANCE	Meter	STROKES	TOTAL
1	0	0	0	S/M
			0	0

WATTS	0 CYCLE 10		H.R.	P
CALORIES	0	TIME	00:00	TIME / 500M
INTENSITY	DISTANCE	Meter	STROKES	TOTAL
1	0	0	0	S/M
			0	0

INTERVAL CUSTOM

1. Make sure the console is switched on.
"SELECT PROGRAM OR QUICK START" scrolled on the top segment display.
2. Use the "▼/▲" buttons to select the program mode you want.
"INT CUST" flashed on the top segment display.
3. Press "ENTER" to confirm your selection.
4. The default work segment time "WORK 20" flashed on the top segment display.
5. Use the "▼/▲" buttons to set the work segment time (5 ~ 599 sec.).
6. Press "ENTER" to confirm your setting.
7. The default rest segment time "REST 10" flashed on the top segment display.
8. Use the "▼/▲" buttons to set the rest segment time (5 ~ 599 sec.).
9. Press "ENTER" to confirm your setting.
10. The default interval number "CYCLE 10" flashed on the top segment display.
11. Use the "▼/▲" buttons to set the total interval numbers (1 ~ 99).
12. Press "ENTER" to confirm your setting.
13. Use the "▼/▲" buttons to set your target distance (100 ~ 9900 meters).
14. Press "ENTER" to confirm your setting.
"START" is shown on the top segment display.
15. Press "START" to begin the workout and then start pulling.

The program will not start until you begin pulling.

NOTE: You can press "STOP" button to end the program at any time.

The workout summary will displayed on the screen.

NOTE: You can change the resistance level (1~ 14) at any point during the workout by dial lever as wished and relatively readouts on display will be adjusted accordingly.

Storage

Keep the equipment in a dry place with as little temperature variation as possible. Try to protect from dust and always unplug when not in use (if applicable).

Cleaning & Maintenance

Your Cascade Raptor is designed for indoor use only and should not be used or stored in damp area. Ensure you regularly check components for wear and make sure all the nuts & bolts are tightened before each exercise session.

Pulling Cords – Clean daily before use.

- Check for nicks or cuts and fraying that may weaken the pulling cords' integrity even though it is made of superior quality Tetoron webbing fabric to make it extremely strong.
- Also check the bushing at the handle end is intact. Use a warm, damp cloth to clean the whole surface of the pulling cords after every exercise if possible.

Check and Replace the Console AA Battery – Approximately every 200 hours if equipped.

Check for loose Console Arm – Approximately every month.

Clean for Dusts on Fan Wheel Assembly – Approximately every month.

Rear Carriage Rollers – Clean daily before use.

- These rollers (bearings) smooth moving will be affected by dust & dirt, so should be check and clean regularly before use if possible.
- Use a warm, damp cloth to clean the roller contact area with mild detergent if required.
- Please lubricate the roller contact surface by applying a small amount of "multi-purpose grease" if necessary.

Upright Post – Clean & check daily after use.

- Use a warm, damp cloth or non-abrasive pad to clean the surface with mild detergent if required.
- Make sure the tension cables are tight and not frayed.
- Pay special attention on the both outside areas – remove any spots or dirt on it.
- Please lubricate the rollers' contact surface by applying a small amount of "multi-purpose grease" if necessary.



Never remove the protective casing.



Discontinue use immediately and contact your dealer for replacement if any of the symptoms are found.

Troubleshooting



If you have a problem with your equipment, before you do anything else please check that all the cables have been connected correctly. Loose cables are very common and many problems can be solved by making sure the cables are properly connected

If you are having problems with your heart rate reading please note that some fibres used in clothes e.g., polyester, create static electricity that may prevent a reliable heart rate reading. Mobile phones, TV's, microwaves and other electrical appliances that generate an electromagnetic field may also interfere with heart rate measurement.

If you are still having problems with your equipment, please get in touch using the details found in the Customer Support section on page 4.

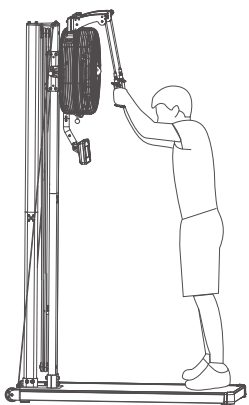
Exercising with Your Cascade Raptor

Before Exercising Check:

- You have to find an adequate space ie. at least 2ft (60cm) clearance on each side.
- Check all bolts and locking pins are secured and protruding. In particular check all the bolts and pins for wear, replace doubtful parts before using the equipment.
- Always use your Cascade Raptor on a flat level solid surface.
- Always work within your exercise level, do not work to exhaustion.
- If you feel pain or unwell **STOP YOUR WORKOUT IMMEDIATELY.**
- Injuries may result from incorrect or excessive training.
- Please make sure you have read the safety guideline.
- Consult your physician to be sure it is not dangerous for you to undertake a strenuous exercise program.
- Do not twist or cross cords, and avoid pulling cords all the way out to the point at which they stop.
- Always pull with both handles at the same time. But you can also pull with one handle for alternating arms.
- Do not release handles when they are in the pulled out position. Bring handles back to the top position before releasing them.

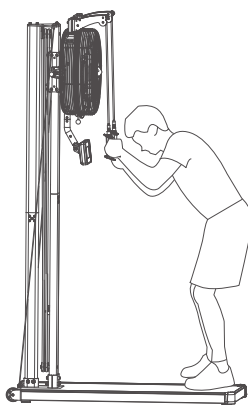
Start Your First Raptor Workout:

1. Begin with a minute or two of easy pulling to learn the technique.
2. Follow the technique steps and keep the stroke rate between 25 and 30 spm.(or slower if you prefer).
3. Pull steadily and easily for 3 minutes at a stroke rate between 30 and 35 spm. Continue to practice good technique while also settling into a comfortable rhythm. Watch the console, which will show you how hard you are pulling on each stroke, how many meters (or watts or calories) you have pulled, how long you have been pulling, your cadence, and your heart rate if you are connected via a HR monitor.
4. Rest for several minutes and review the console instructions, walk or stretch.
5. Pull easily again for 3-5 minutes. Depending on your comfort, your cadence may be anywhere between 30 and 45 spm.
6. Rest again for 1-2 minutes.
7. Repeat Step 5 for two or three times.



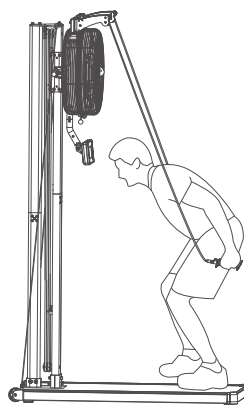
START

Begin with your hands and shoulder-width apart slightly above your head. Your arms should be bent. Your feet should be shoulder-width apart.



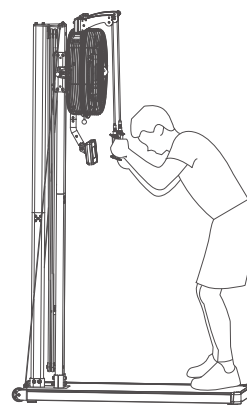
PULLING

Drive the handles downward by engaging your core abdominal muscles and bending your knees. Maintain the bend in your arms to keep the handles fairly close to your face.



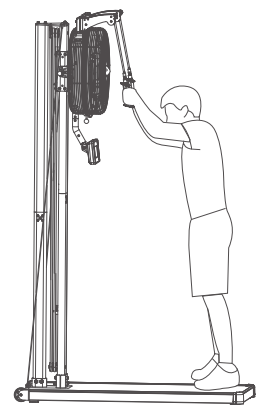
FINISH

Finish the drive with knees slightly bent, and arms extended down alongside your thighs.



RETURN

Bring your arms back up and straighten your legs.



REPEAT

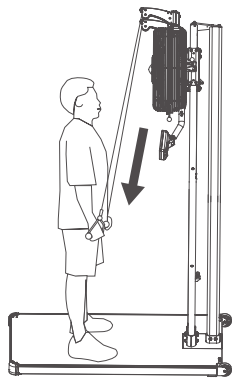
Extend your arms upward and straighten your body to return to the start position.

NOTE:

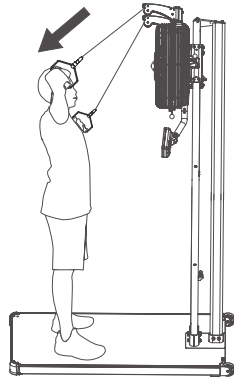
- Include some stretching in your exercise routine. A variety of aches and pains can be eased or prevented by investing a little time in stretching without bouncing gently.
- Gradually increase your pulling time and intensity over the first two weeks.
- Do not pull at full power until you are comfortable with the technique and have pulled for at least a week. If you have not pulled in over a week, take it easy for your first pull.
- Like any physical activity, if you increase the volume and intensity too rapidly, fail to warm up properly, or use poor technique, you will increase the risk of injury.
- Don't expect to be able to jump right on where you left off and don't try to do intense interval work. Start with a steady pull at a comfortable pace and try building the intensity gradually through several interval of 3-5 minutes in length from next pull.
- Pulling with the intensity setting too high can be detrimental to your training program by reducing your output and increasing your risk of injury.
- The lower intensity setting requires you to be a little faster in applying your power which, in the end, gives you a better workout.
- Aim for a stroke rate / SPM of between 30-40 spm for general fitness.
- Your SPM can probably be lower for long steady workouts, and higher for short intense work intervals. You may vary your SPM to match your poling tempo for the range of conditions that occur on snow.
- Allow a little extra time for warm-up and start very easily.
- It is important to give your body a rest every so often, even though pulling makes you feel great and you want to do it every day. We recommend taking at least one day off per week from pulling and it will make you more eager and have a better workout next day.
- These positions should be blended together to make a smooth and continuous stroke with no stopping at any points in the stroke.
- Your handle grip should be grasped and comfortable and your wrist should be free during the pulling.

This Cascade Raptor is designed for a variety of functional workouts while positioning it in one of three positions. Below are some of the exercises that can be performed.

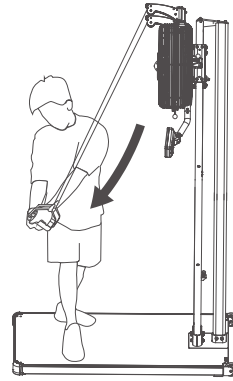
High Position Located w/ Cross Grip Handles



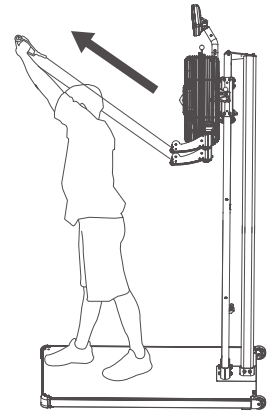
Standing Lat Pushdown



Reverse Crossover

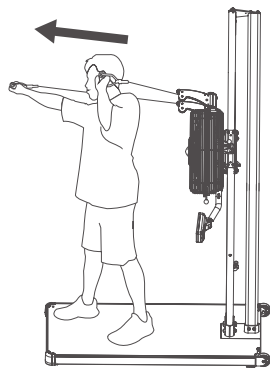


Wood Chop

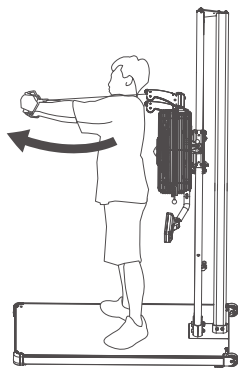


Tricep Extension (Overhead)

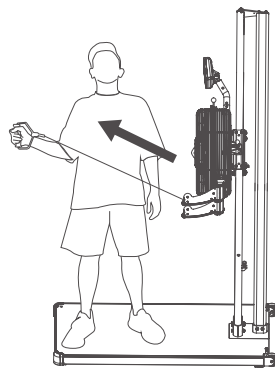
Middle Position Located w/ Cross Grip Handles



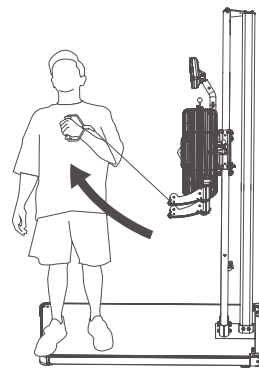
Boxing Cardio



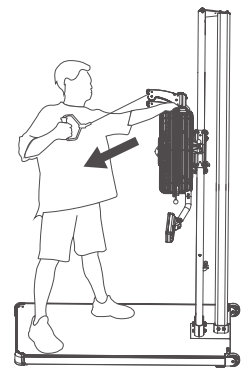
Cable Crossover



External Rotation

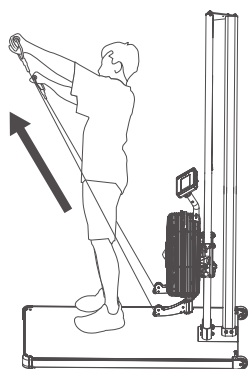


Internal Rotation

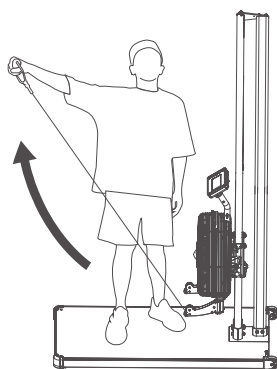


Cable Row

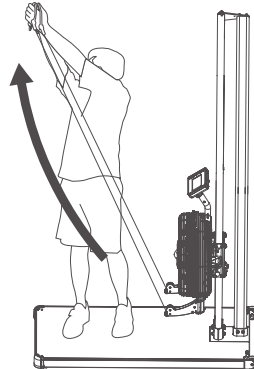
Low Position Located w/ Cross Grip Handles



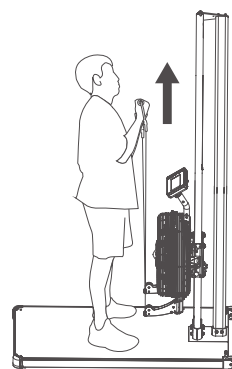
Front Delt Raise



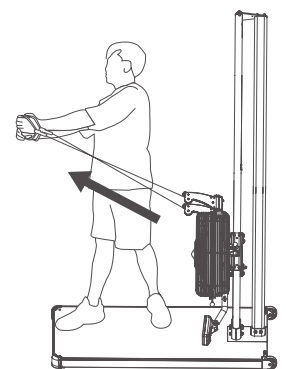
Mid Delt Raise



Reverse Wood Chop



Bicep Curl



Torso Twist

Fitness

Many things contribute to fitness and well being but the most important factor is the condition of your heart and lungs and how efficient they are in delivering oxygen via your blood to your muscles. Your muscle use this oxygen to provide enough energy for daily activity. This is called aerobic activity (with oxygen).

When you are fit your heart and lungs work well and efficiently.

This means your heart will not have to work so hard. It will pump a lot fewer times per minute so reducing the wear and tear on your heart.

This in turn reduces the chances of your suffering heart disease.

Fitness also helps you control your weight and reduces the effects of aging and stress.

You come across the need for fitness continually in everyday life.

When you are fit you can walk briskly up hills and stairs without being too out of breath once at the top you recover quickly.

As you can see there are great advantages in being fit.

How to improve your fitness

Like any muscle in your body your heart can be strengthened by systematic physical exercise which requires an increased blood flow and heart rate.

You can measure your heart rate by taking a pulse reading.

Your heart of pulse rate corresponds directly to your exertion level and exercise efficiency.

To improve your fitness in a safe and effective way you need to exercise at a high enough level to improve your aerobic fitness.

The area between these 2 levels is called the **target zone**.

It is important to exercise at the right intensity to stay within this zone.

For the best results you should exercise within the target zone and gradually increase the duration.

Ideally you should aim to exercise (within zone) for at least 15-20 minute continuously, 3-4 times per week.

Caution

Do not try to do too much to quickly start gradually and build up.

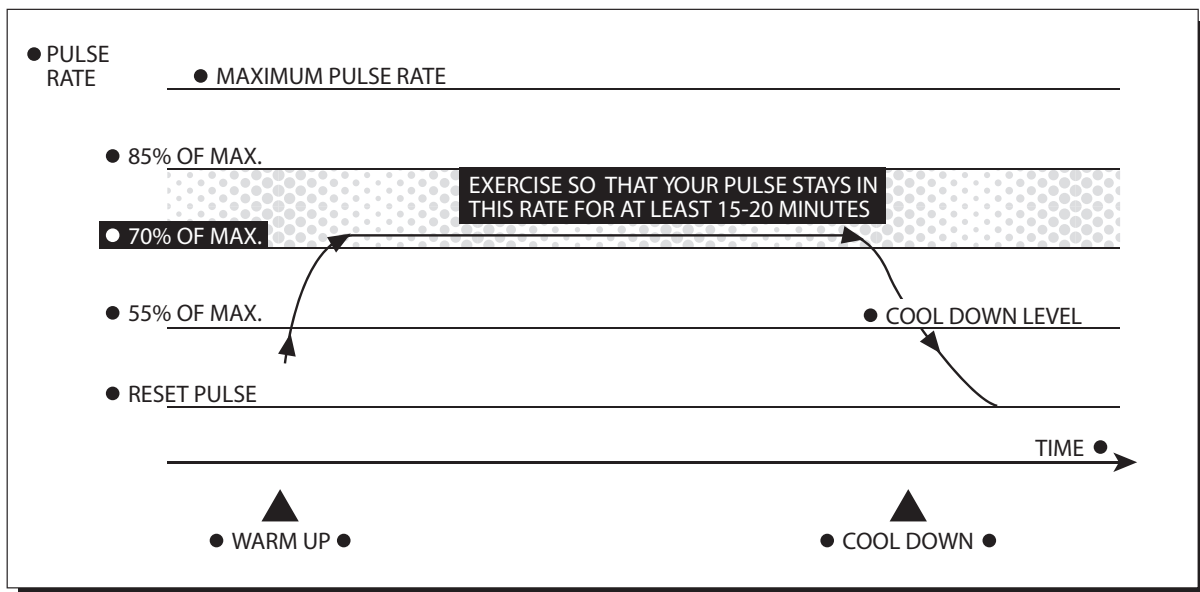
If you become ill, if you are under doctor care, or over 35-40 and not currently taking regular exercise then we would advise you not to start to exercise without consulting your doctor.

Class A test parameters

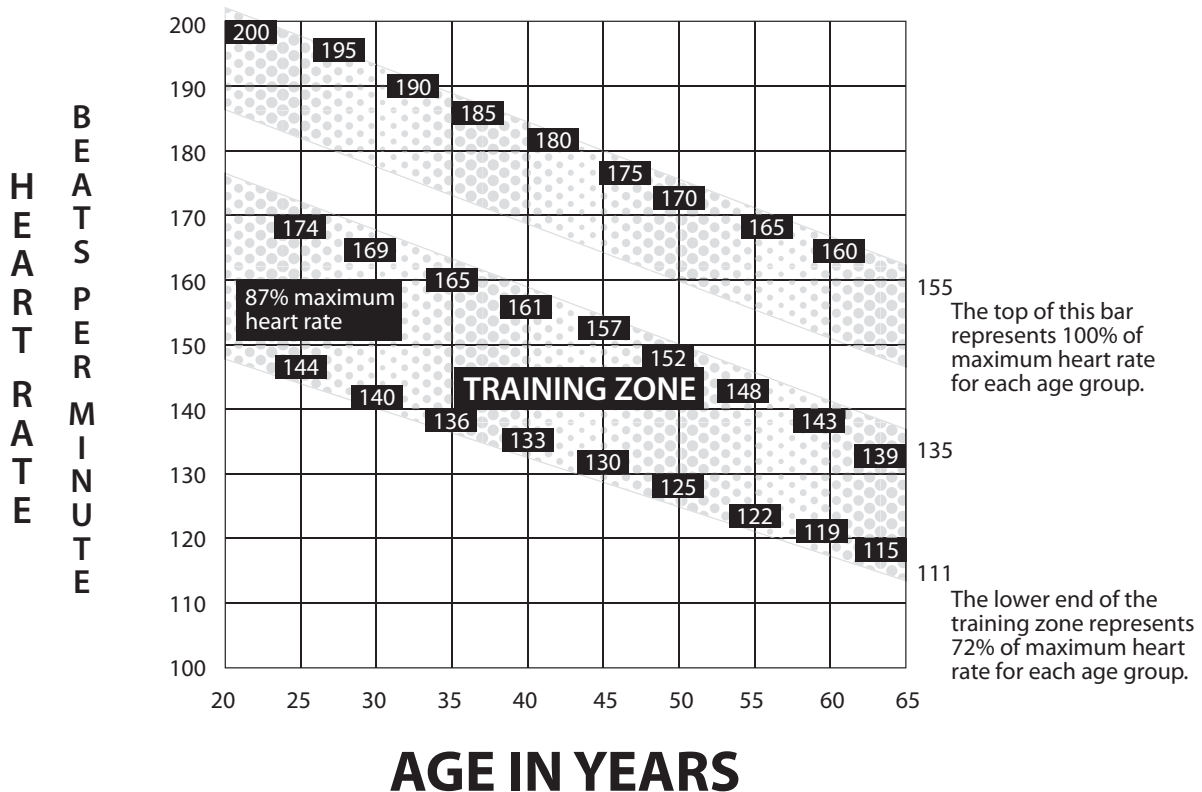
Spm	Level	Watt
25	1	24
25	7	25
25	8	26
25	14	36
35	14	68

Stroke=0.8m

Target Zone



THIS IS HOW YOUR PULSE SHOULD BEHAVE DURING GENERAL FITNESS EXERCISE. REMEMBER TO WARM UP AND COOL DOWN FOR A FEW MINUTES.



FIND YOUR OWN EXERCISE PULSE RATE RANGE BY MOVING UP THE VERTICAL LINE FOR YOUR AGE.

Example: Age 40, the vertical line meets the 70% level at about 128 and the 85% level at about 154, pulse rate should remain between these values. Use this graph to determine your personal target zone.



Always consult your doctor before undertaking a new exercise regime

If you experience nausea, dizziness or other abnormal symptoms during exercise, stop at once and consult your doctor

Starting and finishing your workout

Begin and end each workout with a Warm Up / Cool Down session – a few minutes of stretching to help prevent strains, pulls and cramps

How long should I exercise for?

That really depends on your current level of fitness. If you're just starting out on a new exercise program, you should start gradually and build up – do not try to do too much too quickly. 30 minutes, 3 times a week should be enough.

Don't push yourself too hard - you should never feel exhausted during or following exercise.

Heart Rate Training

To get the most out of your new piece of fitness equipment and see the best results from your training you should exercise at the right level of effort, and that means listening to your heart! Working out to a target heart rate means you can direct your workout to achieve different goals:

Good health - For those wishing to improve quality of life and general well being. Your sessions will need to be done at an intensity of between 50-60% of your estimated maximum heart rate, should last about 30 minutes and can be done on most days of the week.

Weight loss – To see a significant reduction in body fat, your sessions must be a little more intense - between 60 and 70% of your estimated maximum heart rate. These sessions can also be performed on most days of the week for up to 30 minutes.

Improving Fitness levels –These sessions should be performed at 70-80% of your estimated maximum heart rate and can also involve bouts of interval training that would have your heart rate peaking for short times near your maximum heart rate level. These are intense sessions and will require at least a 48 hour rest between sessions.

Calculating your target heart rate

First, you need to find your estimated maximum heart rate using the formula '220 minus your age in years'. So, if you are 35 years old your estimated maximum heart rate is:

$$220 - 35 = 185 \text{ beats per minute (bpm)}$$

Next, to calculate your target heart rate, simply multiply your estimated maximum heart rate (185 bpm) by the applicable percentage. So, if your goal is better health:

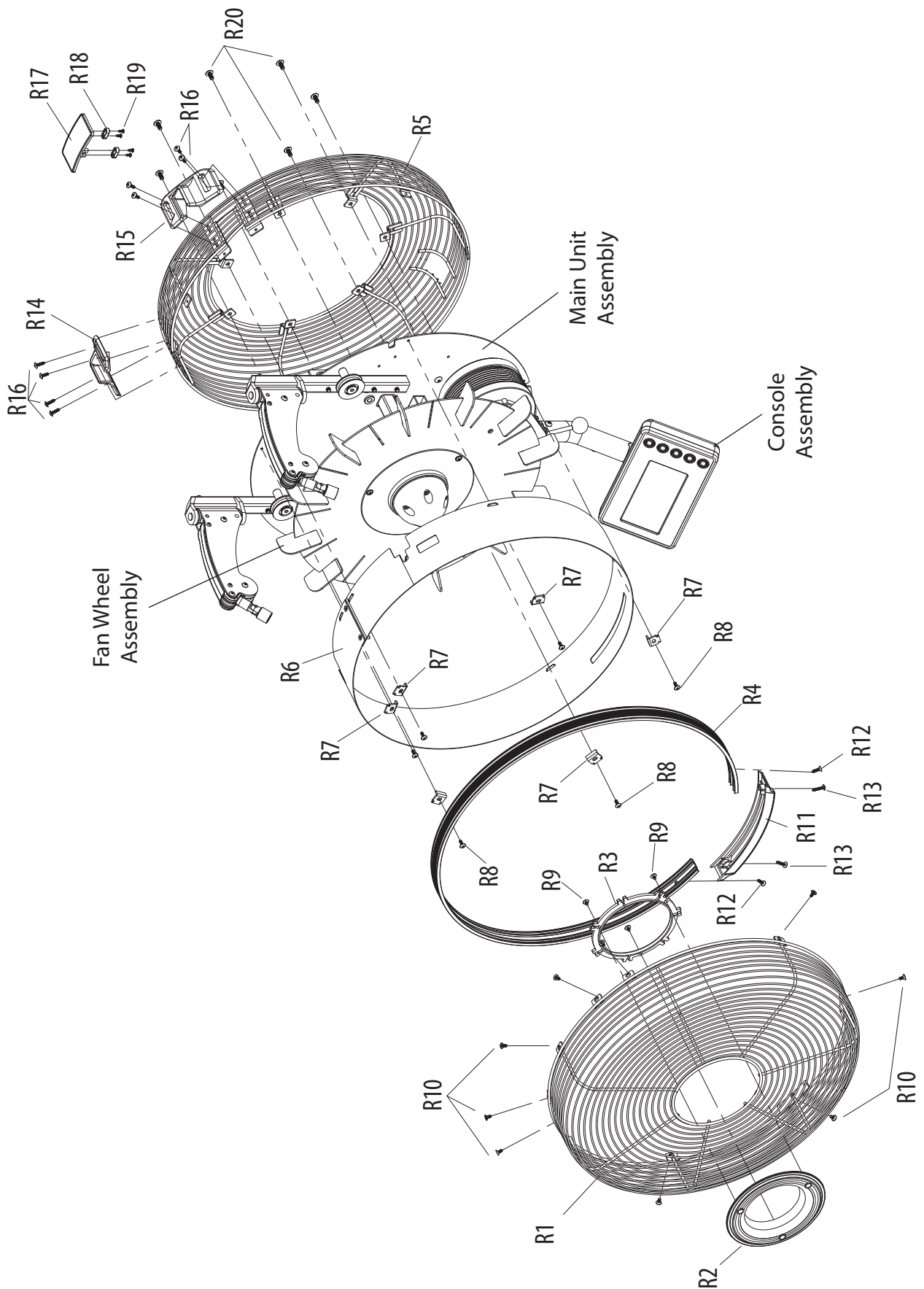
$$185 \times 60\% = 111 \text{ bpm}$$

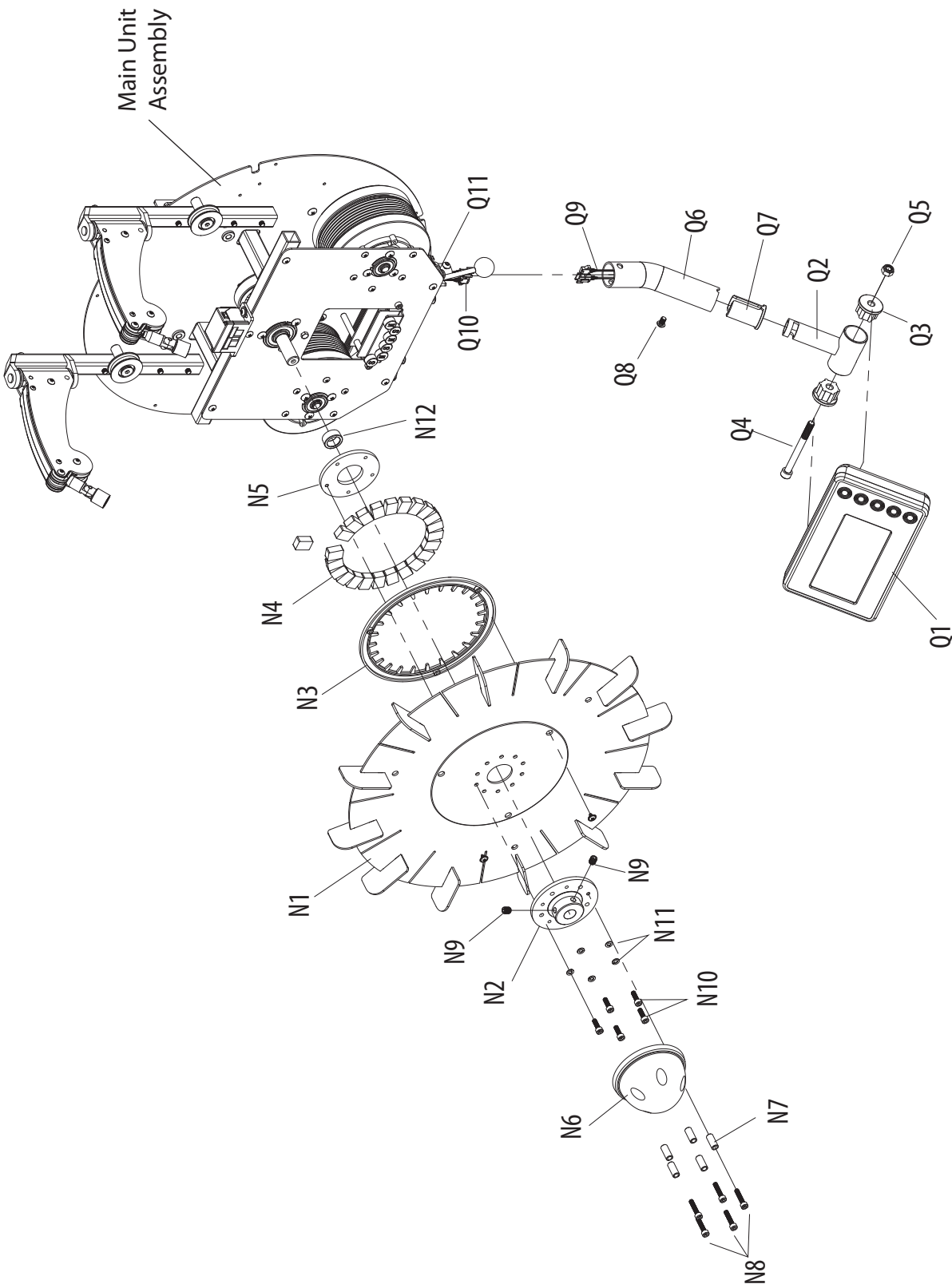


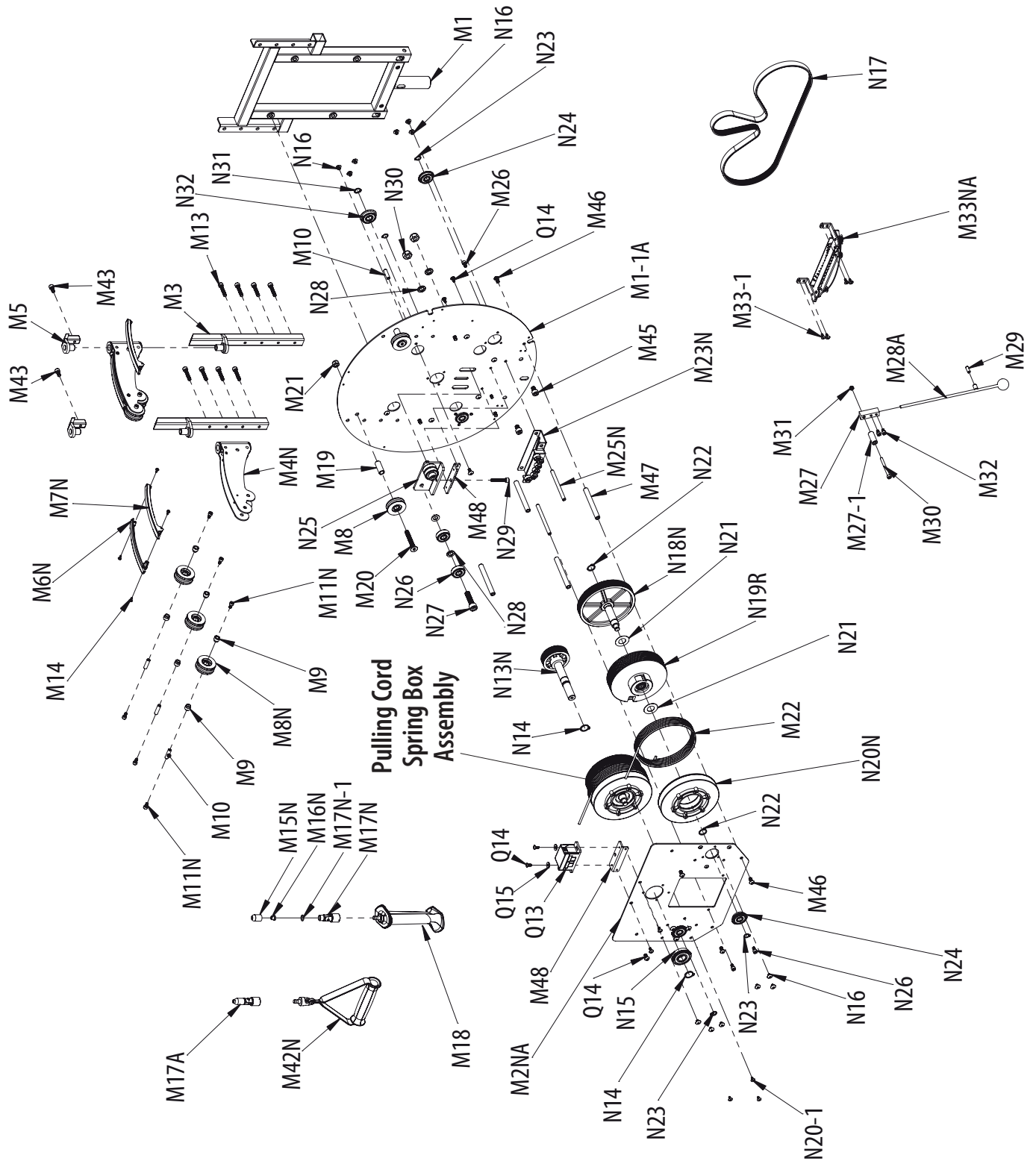
NOTE: The important issue to remember with all estimated calculations is that they are just estimates – if you don't feel comfortable exercising at your target then reduce it to a level you are comfortable with.

Note: Heart rate training requires you to monitor your heart rate throughout the workout. For this we recommend using a chest strap (if your machine has a wireless receiver) or a heart rate monitor.

Exploded Diagram







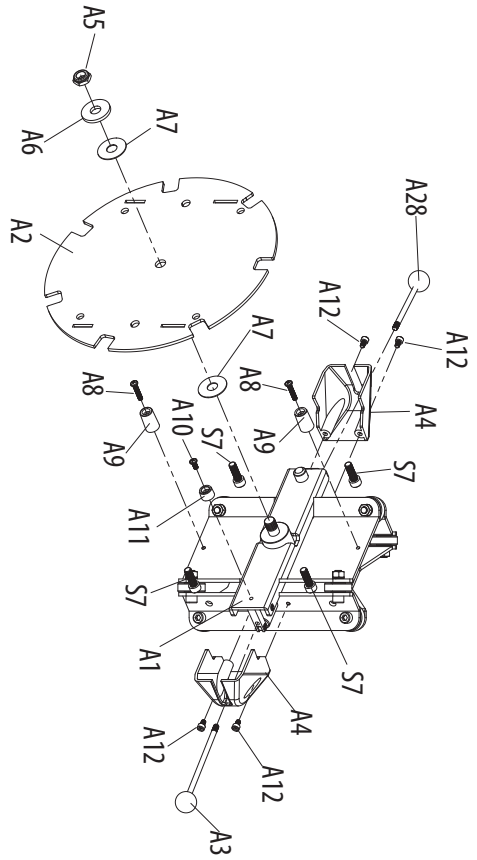
Parts List

P / N	DESCRIPTION	Q"TY	P / N	DESCRIPTION	Q"TY
702022-M1N	Main Frame Weldment	1	702022-N13N	Main Axle w/ Ribbed Belt Pulley Inserted	1
702022-M1-1A	Main Frame Plate Assembly	1	702022-N14	Metal C-Clip - S17	2
702022-M2NA	Front Support Plate Assembly	1	702022-N15	6203ZZ Ball Bearing W/Fixing Groove	1
702022-M3	Pulling Cord Upright Support	2	702022-N16	M5 x 6mm Phillip Head Machine Screw	18
702022-M4N	Pulling Cord Arm	2	702022-N17	Ribbed Belt - 460 J6 - 1143mm	1
702022-M5	Pulling Cord Pivot End - Metal	2	702022-N18N	Ribbed Belt Pulley Wheel Assembly	2
702022-M6N	Pulling Cord Arm Top Cover - Left	2	702022-N19R	Pulling Cord Pulley Wheel Assembly	2
702022-M6NA	Pulling Cord Arm Top Cover - Left & Right w/screw	2	702022-N19RA	Pulling Cord Pulley Wheel Assembly / Incl Pulling Cord	2
702022-M7N	Pulling Cord Arm Top Cover - Right	2	702022-N20N	Recoiled Spring Box Assembly	2
702022-M8	OD42mm Pulling Cord Pulley Wheel w/ Bearing Inserted	2	702022-N21	OD31.2 x ID16 x 0.5mm Steel Washer	4
702022-M8N	OD42mm Pulling Cord Pulley Wheel w/ Bearing Inserted	6	702022-N22	Metal C-Clip - S15	4
702022-M8NA	OD42mm Pulling Cord Pulley Wheel Set	6	702022-N23	Metal C-Clip - S10	4
702022-M9	OD12 x ID7 x 9.5mm Bearing Spacer - Plastic	8	702022-N24	6200ZZ Ball Bearing w/ Fixing Groove	4
702022-M10	OD7 x ID4.2 x 25mm Pivot Shaft	12	702022-N25	L Shape Idle Wheels Bracket	1
702022-M11N	M5 x 10mm Hex Socket Head Bolt	12	702022-N26	6200ZZ Ball Bearing - Idle Wheel	4
702022-M13	M6 x 30mm Hex Socket Head Bolt	8	702022-N27	M10 x 40mm Hex Socket Head Bolt	2
702022-M14	M3 x 10mm Phillip Head Self Tapping Screw	8	702022-N28	OD18 x ID12 x 2mm Flat Washer	6
702022-M15N	Pulling Cord Metal End	2	702022-N29	M6 x 35mm Hex Socket Bolt - Idle Wheel Adjustment	1
702022-M16N	Pulling Cord End Insert - Polyethylene (PE)	2	702022-N30	M10 Hex Head Locknut	2
702022-M17N	Grip Handle Socket End	2	702022-N31	Metal C-Clip - S12	1
702022-M17-1N	O-Ring (10X13.5X2T P10)	2	702022-N32	6201ZZ Ball Bearing W/Fixing Groove	1
702022-M17NA	Grip Handle Socket End Assembly	2	702022-Q1	Console Assembly	1
702022-M18	Vertical Pulling GIP Handle	2	702022-Q2	Console Pivot Post	1
702022-M19	OD12 x ID 8.1 X 31mm Metal Sleeve - Pulley Wheel	2	702022-Q3	Plastic Pivot Bushing	2
702022-M20	M8 X 55mm Hex Flat Head Countersunk Screw	2	702022-Q4	M8 x 85mm Hex Socket Head Bolt	1
702022-M21	M8 Hex Head Locknut	2	702022-Q5	M8 Hex Head Locknut	1
702022-M22	Pulling Cord - OD4 x 2500mm	2	702022-Q6N	Console Middle Post	1
702022-M23N	Magnet Holder Bracket	1	702022-Q6NA	Console Middle Post Assembly	1
702022-M25N	OD7 x 89mm Metal Sleeve	2	702022-Q7	Plastic Insert Bushing	1
702022-M26	M5 x 10mm Hex Socket Head Bolt	4	702022-Q8	M6 x 10mm Allen Head Bolt	5
702022-M27	Intensity Adjustable Pivot Bracket	1	702022-Q9	3 Pin / 3 Socket Console Wire - 250mm	1
702022-M27-1N	Intensity Adjustable Pivot Plastic Bushing -12X5.1X29.75	1	702022-Q10	3 Pin Intensity Sensor Middle Wire - 200mm	1
702022-M28A	Intensity Adjustable Handle Assembly	1	702022-Q12	3 Socket Chock Connected Wire - 850mm	1
702022-M29	OD3 x 15mm Magnet	1	702022-Q13	Chock	1
702022-M30	M5 x 45mm Hex Head Bolt	1	702022-Q14	M4 x 10mm Phillip Head Machine Screw	6
702022-M31	M5 Hex Head Locknut	1	702022-Q15	OD13x ID5 x 1.5mm Flat Washer	2
702022-M32	M5 x 8mm Hex Socket Head Bolt	2	702022-Q16	M6 x 12mm Hex Socket Head Bolt	2
702022-M33NA	Intensity Adjustable Bracket Base	1	702022-R1	Metal Fan Wheel Cover - Front	1
702022-M33-1	M4 x 12mm Phillip Head Self Tapping Screw	4	702022-R1A	Metal Fan Wheel Cover - Front (Assembly)	1
702022-M42N	Cross Grip Pulling Handle	2	702022-R2	Front Fan Wheel Cover - End Cap	1
702022-M43	M6 x 12mm Hex Socket Head Bolt	2	702022-R3	Front End Cap Insert	1
702022-M45	M8 x 12mm Hex Socket Head Bolt	2	702022-R4	Aluminum Fan Wheel Cover Ring	1
702022-M46	M6 x 12mm Allen Head bolt	8	702022-R5	Metal Fan Wheel Cover - Rear	1
702022-M47	Front Support Plate Stabilizer	4	702022-R5A	Metal Fan Wheel Cover - Rear (Assembly)	1
702022-M48	L Shape Chock Fixing Bracket	2	702022-R6R	Metal Fan Wheel Barrier	1
702022-M49	Universal Adaptor	1	702022-R7	L Shape Fixing Bracket	6
702022-M50	Carabiner	1	702022-R8	M4 x 12mm Phillip Head Self Tapping Screw	6
702022-N1A	Metal Fan Wheel Assembly	1	702022-R9	M4 x 8mm Phillip Head Machine Screw	3
702022-N2N	Front Fan Wheel Bushing - Metal	1	702022-R10	M4 x 10mm Flat Cross Head Countersunk Screw	9
702022-N3	Plastic Magnets Spacer	1	702022-R11	Intensity Adjustment Plastic Cover	1
702022-N4	20mm x 15mm x 9mm Magnet	24	702022-R12	M4 x 15mm Flat Cross Head Countersunk Screw	2
702022-N5	Rear Fan Wheel Fixing Plate	1	702022-R13	M4 x 19mm Phillip Head Self Tapping Screw	2
702022-N6	Front Fan Wheel Cap - Plastic	1	702022-R14	Pulling Cord Post Cover - Left Side	1
702022-N6A	Front Fan Wheel Cap Set (Incl Cover / Bushing / Bolt)	1	702022-R15	Pulling Cord Post Cover - Right Side	1
702022-N7	OD 8.5 x ID5.5 x 20mm Insert Sleeve - Plastic	5	702022-R16	M4 x 15mm Phillip Head Self Tapping Screw	8
702022-N8	M5 x 25mm Hex Socket Head Bolt	5	702022-R17	Serial Number Panel - Plastic	1
702022-N9	M8 x 10mm Hex Socket Set Screw	2	702022-R18	Plastic Fixing Bush	2
702022-N10	M5 x 16mm Hex Socket Head Bolt	5	702022-R19	M3 x 8mm Round Cross Head Self Tapping Screw	4
702022-N11	M5 Spring Washer - Metal	5	702022-R20	M5 x 12mm Phillip Head Machine Screw	7
702022-N12	OD24 x ID17 X 10.5mm Spacer - Plastic	1			

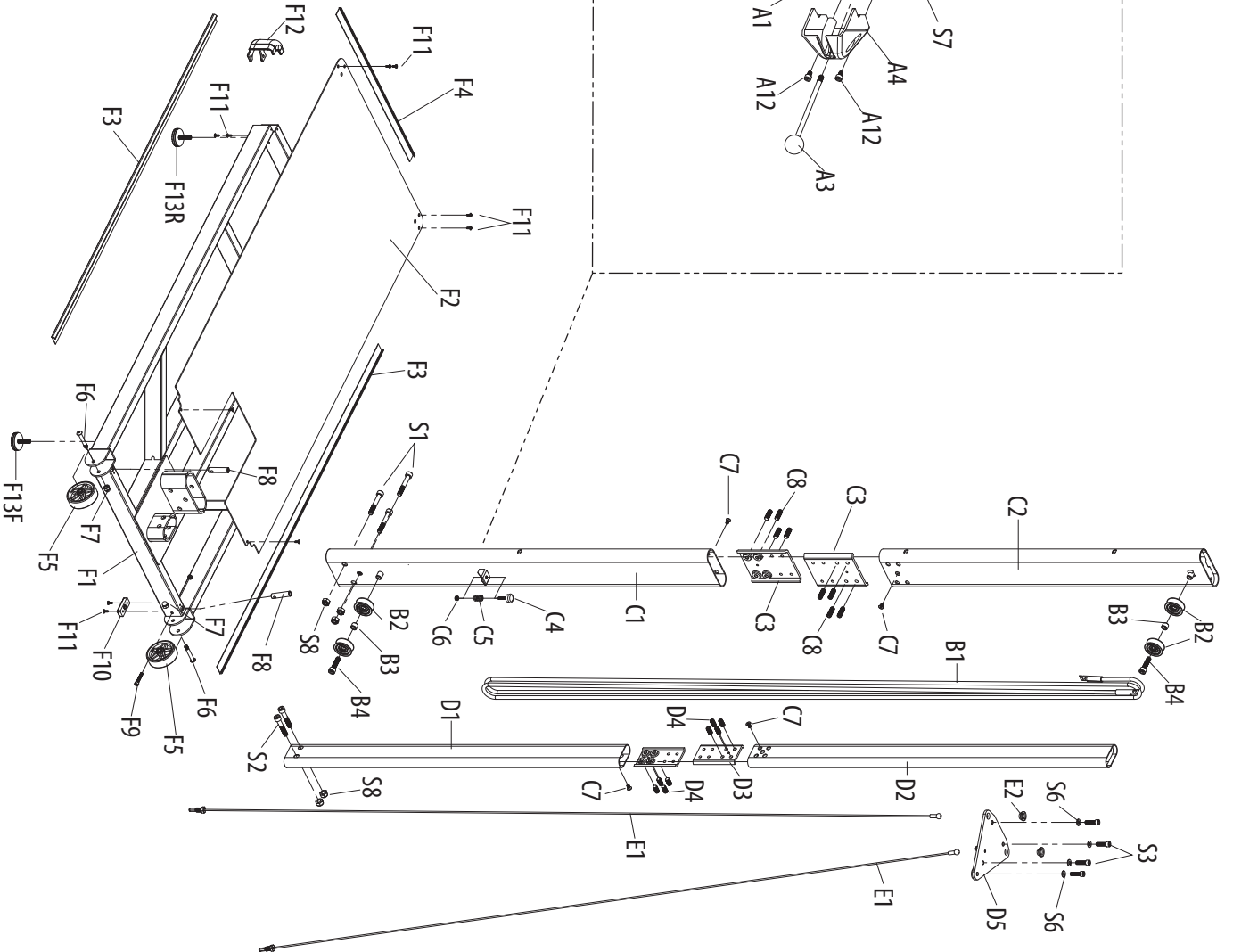
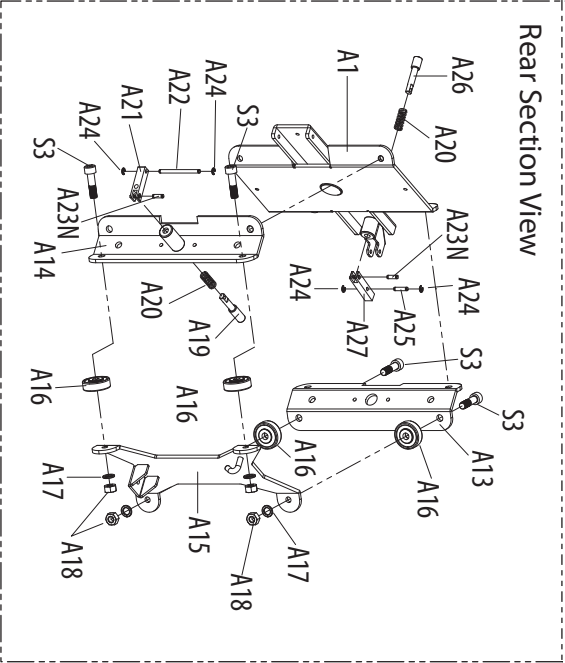
Exploded Diagram

Rear Carriage Assembly

Front Section View



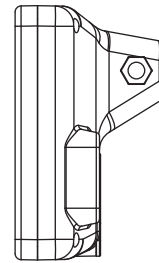
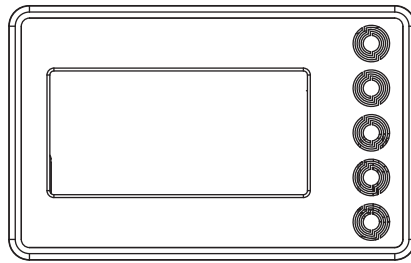
Rear Section View



P / N	DESCRIPTION	Q"TY
702022-A1	Rear Carriage Weldment	1
702022-A2	Fixing Bracket Plate	1
702022-A3	Right Lock Handle - OD6 x 128mm	1
702022-A4	Lock Handle Cover	2
702022-A5	1/ 2 " x 8t Hex Head Locknut	1
702022-A6	OD35 x ID13 x 4mm Metal Washer	1
702022-A7	OD35 x ID12.8 x 1mm Steel Washer	2
702022-A8	M5 x 25mm Phillip Head Machine Screw	2
702022-A9	Plastic Spacer - OD15 x ID5 x 26mm	2
702022-A10	M5 x 10mm Phillip Head Machine Screw	1
702022-A11	Plastic Spacer - OD16 x ID6 x 10.8mm	1
702022-A12	M5 x 8mm Hex Socket Head Bolt	4
702022-A13	Left Side Carriage Stamping Plate	1
702022-A14	Right Side Carriage Stamping Plate	1
702022-A15	Rear Side Carriage Stamping Plate	1
702022-A16	Metal Carriage Roller Assembly	8
702022-A17	M8 Spring Washer	8
702022-A18	M8 Hex Head Locknut	8
702022-A19	OD10 x 54mm Stop Pin	1
702022-A20	OD7.5 x 9.5mm x 1mm Metal Spring	2
702022-A21	Right side SQ Metal Block- SQ9.5 x 40.5mm	1
702022-A22	OD4 x 54mm Metal Shaft	1
702022-A23N	OD4 x 13.4mm Metal Shaft	2
702022-A24	E- Clip (E3)	4
702022-A25	OD4 x 17.4mm Metal Shaft	1
702022-A26	OD10 x 47mm Stop Pin	1
702022-A27	Left Side SQ Metal Block - SQ 9.5 x 46 mm	1
702022-A28	Left Lock Handle - OD6 x 92mm	1
702022-B1	Elastic Cord w / End Hooks attached	1
702022-B2	Plastic Pulley Roller	4
702022-B3	Metal Spacer - OD15 x ID10 x 2mm	2
702022-B4	M10 x 40mm Hex Socket Head Bolt	2
702022-C1	Bottom Section Main Stem	1
702022-C2	Top Section Main Stem	1
702022-C3	Metal Connected Plate	2
702022-C4	Rubber End Stop	1
702022-C5	Metal Spring - OD14.5 x 20mm x 2mm	1
702022-C6	M6 Hex Head Locknut	1
702022-C7	M6 x 12mm Countersunk Head Socket Screw	4
702022-C8	M10 x 35mm Socket Set Screw	8
702022-D1	Bottom Section Rear Upright Post	1
702022-D2	Top Section Rear Upright Post	1
702022-D3	Metal Connected Plate	2
702022-D4	M10 x 25mm Socket Set Screw	8
702022-D5	Top Fixing Plate	1
702022-E1	Side Cable Wire w/ End Ball & Bolt	2
702022-E2	Metal Spring Spacer	2
702022-F1	Platform main frame	1
702022-F2	Platform Standing Plate	1
702022-F3	Plastic Panel - side - 1150mm	2
702022-F4	Plastic Panel - front - 524mm	1
702022-F5	Moving Wheel	2
702022-F6	M8 x 50mm Allen Head Bolt	2
702022-F7	M8 Cap Locknut	2
702022-F8	Metal Sleeve - OD12.7 x 52mm	2
702022-F9	M6 x 35mm Hex Socket Head Bolt	2
702022-F12	Plastic Corner Cover	2
702022-F13F	Height Adjuster Front	2
702022-F13R	Height Adjuster Rear	2
702022-S1	M10 x 65mm Hex Socket Head Bolt	3
702022-S2	M10 x 55mm Hex Socket Head Bolt	2
702022-S3	M8 x 30mm Hex Socket Head Bolt	12
702022-S6	8mm x 16mm x 2mm Washer	4
702022-S7	M8 x 25mm Hex Socket Head Bolt	4
702022-S8	M10 Hex Head Locknut	5

Console Assembly

Q1 / Console Assembly



6 PIN



6 PIN

Q9 / 3 Pin / 3 Socket Console Wire - 250mm

3 PIN

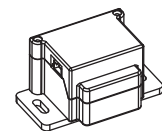
3 PIN

3 PIN



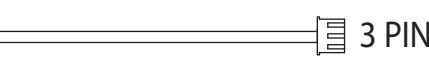
3 PIN

Q12 / 3 Pin / 3 Socket Chock Connected Wire - 850mm



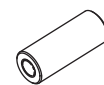
Q13 / Chock

3 PIN



3 PIN

Q10 / 3 Pin Intensity Sensor Middle Wire - 200mm



M29 / Magnet

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HEALTH & FITNESS®

PARTS		LABOR
FRAME	LIFETIME	1 YEAR FOLLOWING CUSTOMER INSTALLATION
NON-WEARABLE PARTS	5 YEARS	
WEARABLE PARTS	2 YEARS	
ELECTRONICS	2 YEARS	
NEED ASSISTANCE? Customer Service: (425) 402-4062		
<p>Prior to contacting our Customer Service Department, please have the following information:</p> <ul style="list-style-type: none"> ▪ Your name, Customer Number, Shipping Address & Telephone Number ▪ Serial Number(s) of the inoperable product(s) ▪ Date(s) of Purchase for the inoperable product(s) ▪ Your Billing Address <p>The above information will ensure that you are the only one ordering parts under your warranty protection. If warranty replacement parts are shipped to you, you may be required to return the inoperable part(s). To facilitate this process, the following policy has been established:</p> <ul style="list-style-type: none"> ▪ Contact our Customer Service Department to receive a Return Authorization # prior to shipment ▪ Cascade will incur all UPS Ground freight charges for Warranty Parts ordered for a machine that is less than 90 days old. You are responsible for freight charges on warranty parts for machines that are more than 90 days old. You will not be responsible for freight charges for any returned inoperable parts. ▪ If an inoperable warranty part(s) must be returned to our Customer Service Department, we will pay the shipping cost and provide detailed return shipping instructions. These instructions will be sent along with your warranty replacement part(s) 		

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