

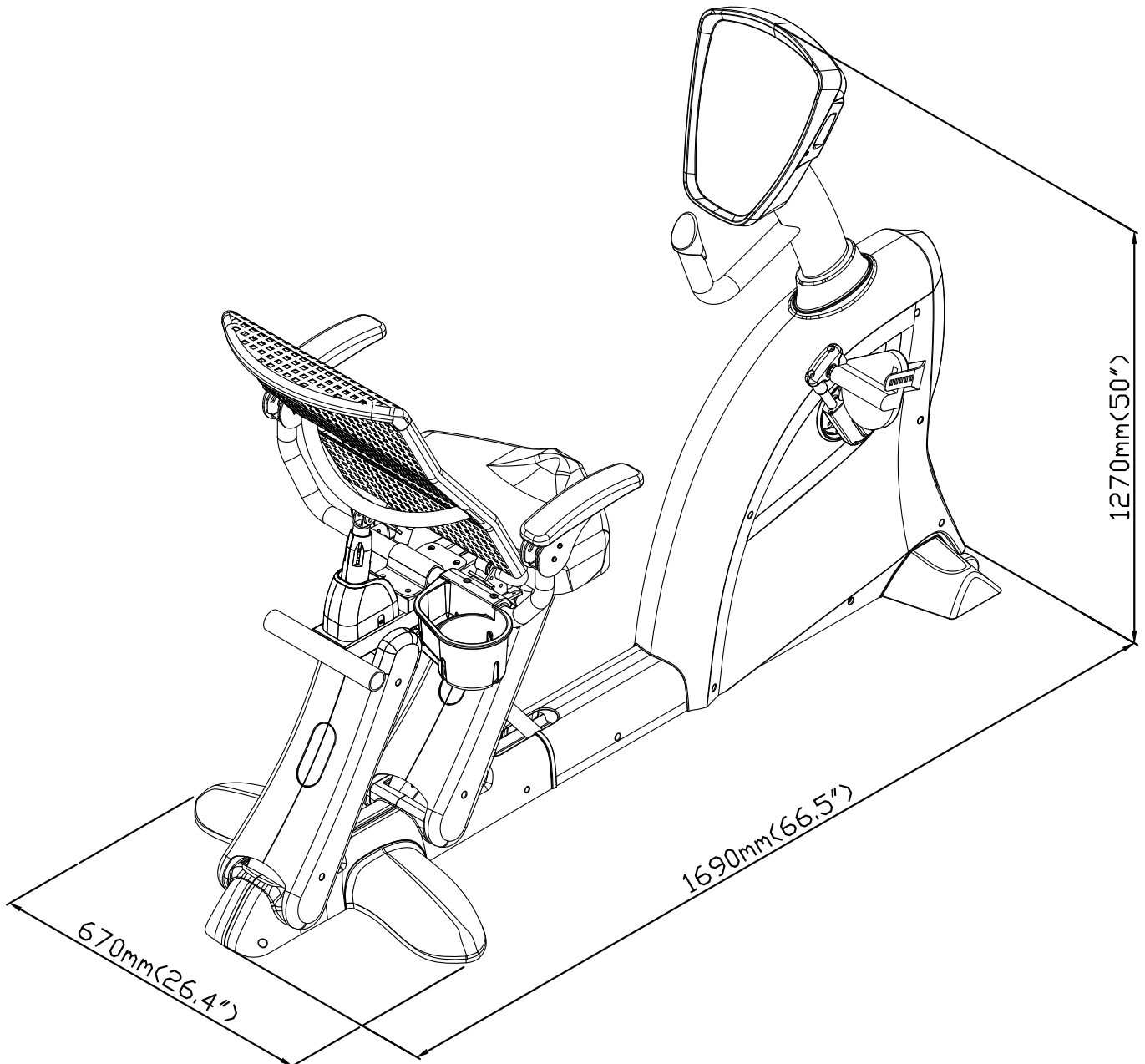
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# 1. INTRODUCTION

Congratulations on your purchase of a truly unique exercise cycle. The C521M was designed to help people in physical therapy and physical rehabilitation. Smooth, bidirectional rotation and resistance combine with ease-of-use features, including adjustable cranks, folding armrests, and an adjustable seat back, to make this bike ideal for physical therapy.

Before this product is assembled or operated, we recommend that you familiarize yourself with this manual. An understanding of the correct assembly and operation of this product will not only help ensure the safety of every exerciser, but it will also help them to derive maximum benefit from this product.



## 2. SAFETY PRECAUTIONS

Your SportsArt product was designed and built for optimum safety. However certain precautions apply whenever you use your elliptical trainer.

Please read the entire manual before assembly and operation. Also, please note the following safety precautions:

- Please read the instructions carefully and install the product as instructed.
- Assemble and operate the product on a solid, level surface. DO NOT use outdoors or near water.
- Check the product before every use. Make sure all parts are assembled, and all fasteners are tightened. DO NOT use the product if the unit is disassembled in any way.
- Keep your hands away from moving parts.
- Wear proper workout clothing; DO NOT wear loose clothing. DO NOT wear shoes with leather soles or high heels. Tie all long hair back. DO NOT go barefoot on this product.
- Be careful when mounting and dismounting the unit.
- The product may or may not stop immediately if an object becomes caught or impedes normal motion.
- Do not use accessories or parts that are not specifically recommended by the manufacturer (SportsArt). Such parts might cause injuries or cause the unit to fail and void the warranty. We are not responsible for any safety issue that arises due to the misuse of accessories or parts. At the same time, we will terminate the warranty terms of this equipment.
- Close supervision is necessary when this product is used by, on, or near children 14 or younger, invalids, or disabled persons.
- Use this product only for its intended use as described in this manual.
- Never operate this product if it has been damaged in any way. If it is not working properly, or has been dropped or damaged, contact your dealer.
- Keep all air ventilation areas free of blockage.
- Never drop or insert any object into any opening.
- DO NOT operate where aerosol (spray) products are being used or where oxygen is being administered.
- Please refer to the product specification table in the appendix for the user maximum weight.
- Contact your SportsArt representatives on all materials damaged in shipment. (Note: Shipping damages are the responsibility of the carrier.)
- Unpack and verify contents of boxes according to the list of parts to check if any parts are missing.
- This product is not equipped with a free wheel and therefore the moving parts cannot be stopped immediately.
- This product is not intended for use by persons (including children 14 or younger) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of this product by a person responsible for their safety.
- Children 14 or younger should be supervised to ensure that they do not play on or near the product.
- Maintenance and repair must be performed by trained service personnel only. Improper maintenance would not only damage the machine, but may also may present a danger to the exerciser.
- Warning that any of the adjustment devices that could interfere with the user's movement should not be left projecting.
- To reduce the risk of injury from moving parts of electric shock, unplug before cleaning or servicing.
- **WARNING** — This stationary training equipment is not suitable for high accuracy purposes.

## 2. SAFETY PRECAUTIONS (CONT.)

### Caution

If you feel any pain or abnormal sensation, STOP YOUR WORKOUT and consult your physician immediately. Work within your recommended exercise level. DO NOT work to exhaustion.

Before beginning any exercise program, you should consult with your doctor. It is recommended that you undergo a complete physical examination.

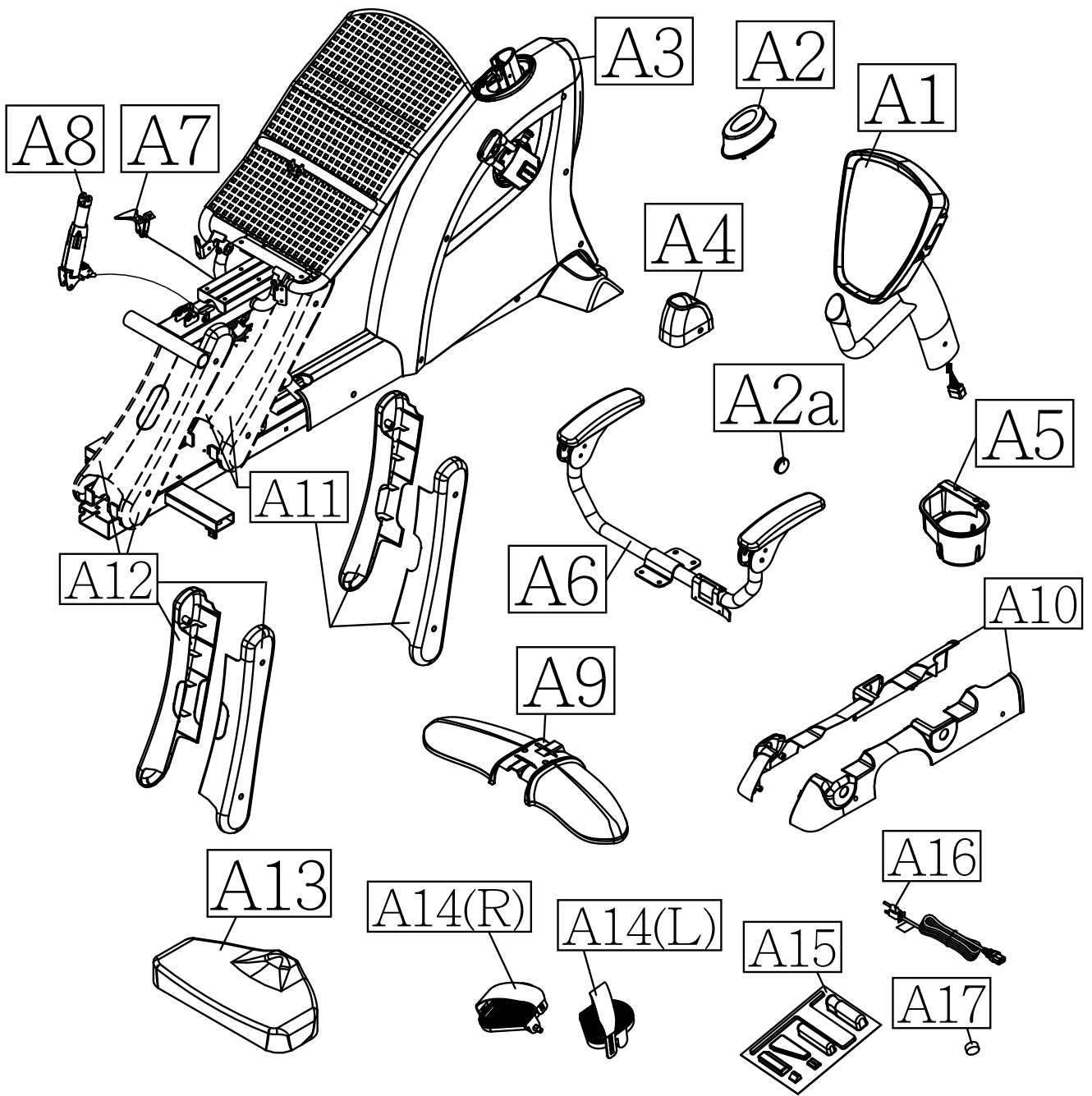
DO NOT step onto the highest footplate. While holding onto supports for stability, step onto the lowest footplate.

Note: This equipment has been tested and found to comply with the limits for a digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If the user desires to correct such interference, it is at the user's own expense.

### Warning

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

### 3. LIST OF PARTS



### 3. LIST OF PARTS (CONT.)

Assembly Parts					
No.	Name	Qty.	No.	Name	Qty.
A1	Pedestal and display	1	A9	Back food cover	1
A2	Pedestal collar	1	A10	Left/right horizontal cover	1
A2a	Cap	1	A11	Left/right seat support cover (front have cutaway for gas spring)	1
A3	Main frame and body	1	A12	Left/right seat support cover (rear have no cutaway)	1
A4	Spring cover	1	A13	Seat bottom	1
A5	Bottle holder	1	A14	Pedal set	1
A6	Handlebars	1	A15	Hardware kit	1
A7	Seat adjustment handle	2	A16	Power cord	1
A8	Gas spring (shock)	1			

Components in the Hardware Kit				
No.	Name	Qty.	Specification	Notes
21	Mushroom top Phillips screw	12	M4*L16	
22	Screw socket	8		
23	Mushroom top Phillips screw	2	M5*L12	
	Serrated washer	2	BW5 3/16	
	L-shaped Allen wrench	1	(M4)	
	L-shaped Allen wrench	1	(M5)	
	L-shaped Allen wrench	1	(M6)	
	Double open-end wrench	1	(13*15)	
	Screwdriver handle	1	green	
	Screwdriver shank	1	1A 6*30 (110V)	
	Fuse	1	0.5A 6*30 (220V)	
		1	Flat and Phillips	

### 3. LIST OF PARTS (CONT.)

Components on the Product			
No.	Name	Specification	Notes
51	Gas spring set pin		
	R-clip		
52	Inner hex screw	M5*P0.8*L10	
	Spring washer	M5*t1.0	
53	Inner hex screw	M8*L20	
	Cushion washer		
	Serrated washer	D18*d8.5*t2.0	
54	Mushroom top inner hex screw	M8*L20	
	Spring washer	M8*t2.0	
	Flat washer	D17*d8*t1.5	
55	Mushroom top Phillips screw	M5*0.8*L12	
56	Mushroom top Phillips screw	M4*L16	
57	Phillips screw	M4*L8	

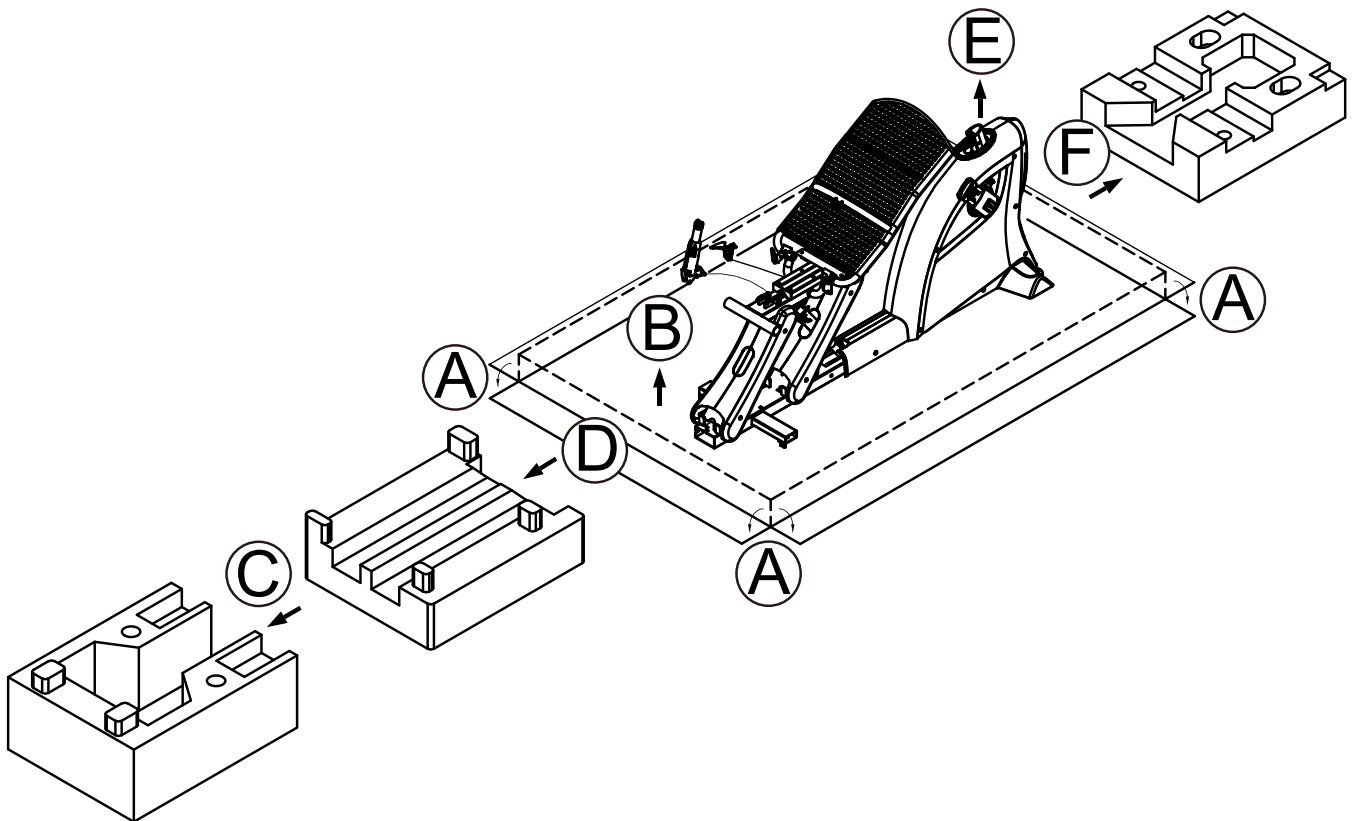
## 4. ASSEMBLE THE PRODUCT

Follow instructions below to assemble this product. Note that in this manual, the words “left” and “right” are used to refer to the product and its parts. As such, these designations correspond to the left and right sides of a person in position to exercise on this product. For brevity, the word “screws” is used where screws, washers, and other hardware may be involved.

### STEP 0 Separate product from the Package

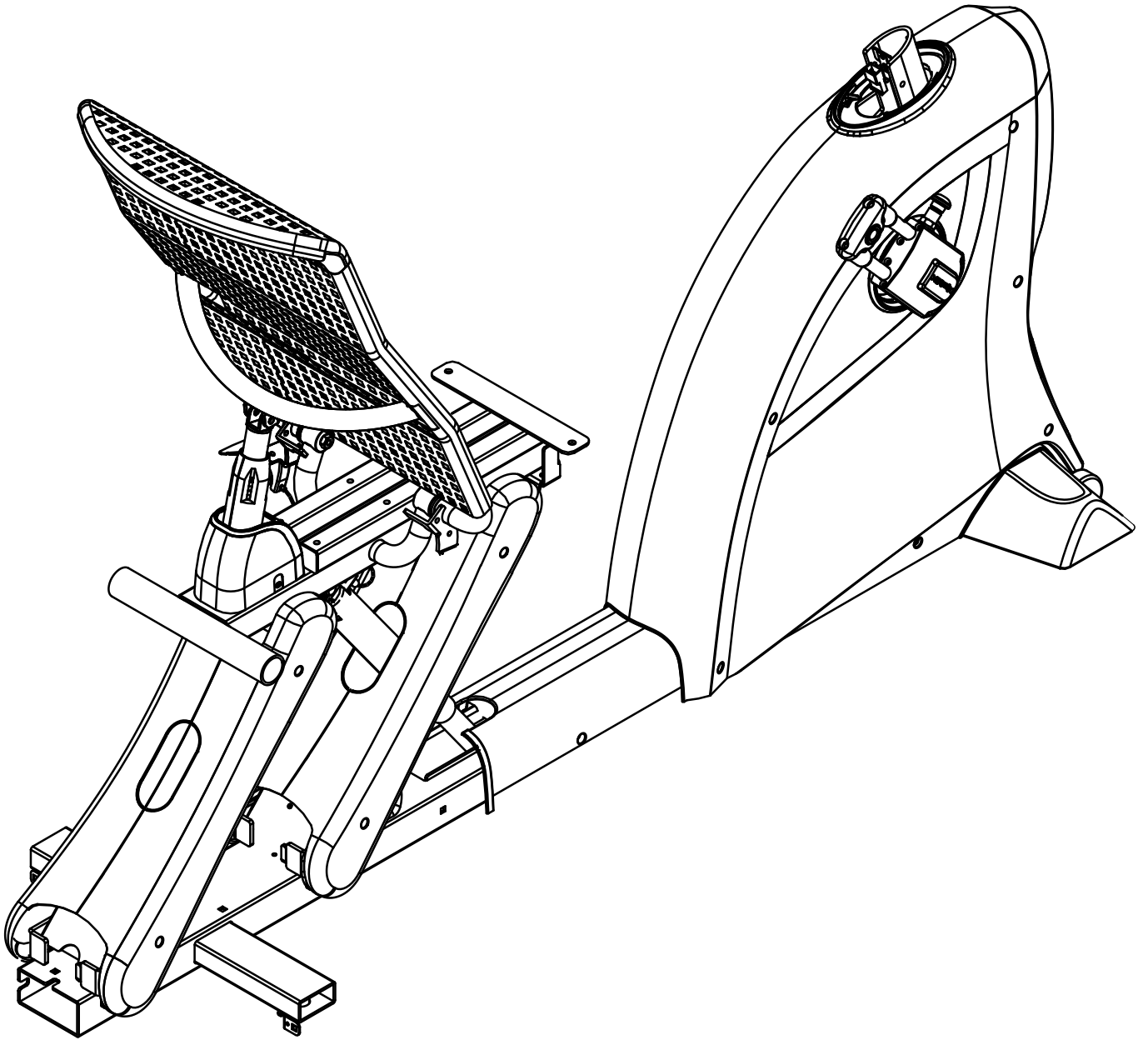
Follow steps A through F below to place the product on a flat sheet of cardboard in preparation for assembly.

- A. Remove the packaging material. Then cut the box flaps to lay them flat on the ground.
- B. Lift from the front of the bike.
- C. Remove packaging material from the front part of the bike.
- D. Lift the rear of the bike.
- E. Remove packaging material from the rear of the box.
- F. Remove packaging material from the center of the box.



**STEP 1** Install the Seat Back Gas Spring

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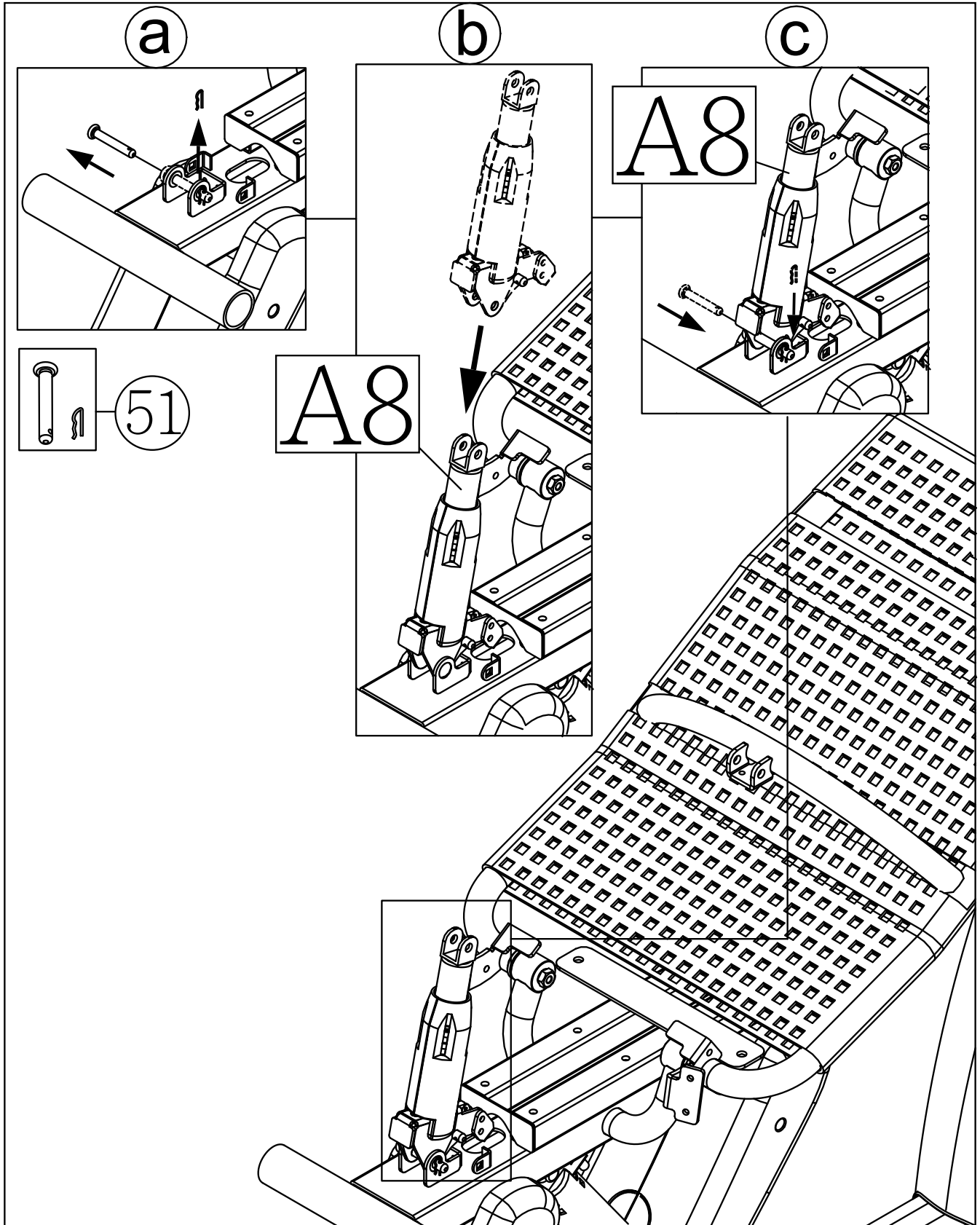
## STEP 1 Install the Seat Back Gas Spring (CONT.)

Follow steps (a) through (h) below to install the gas spring into place.

(a) First, remove the gas spring set pin (51) from the product frame.

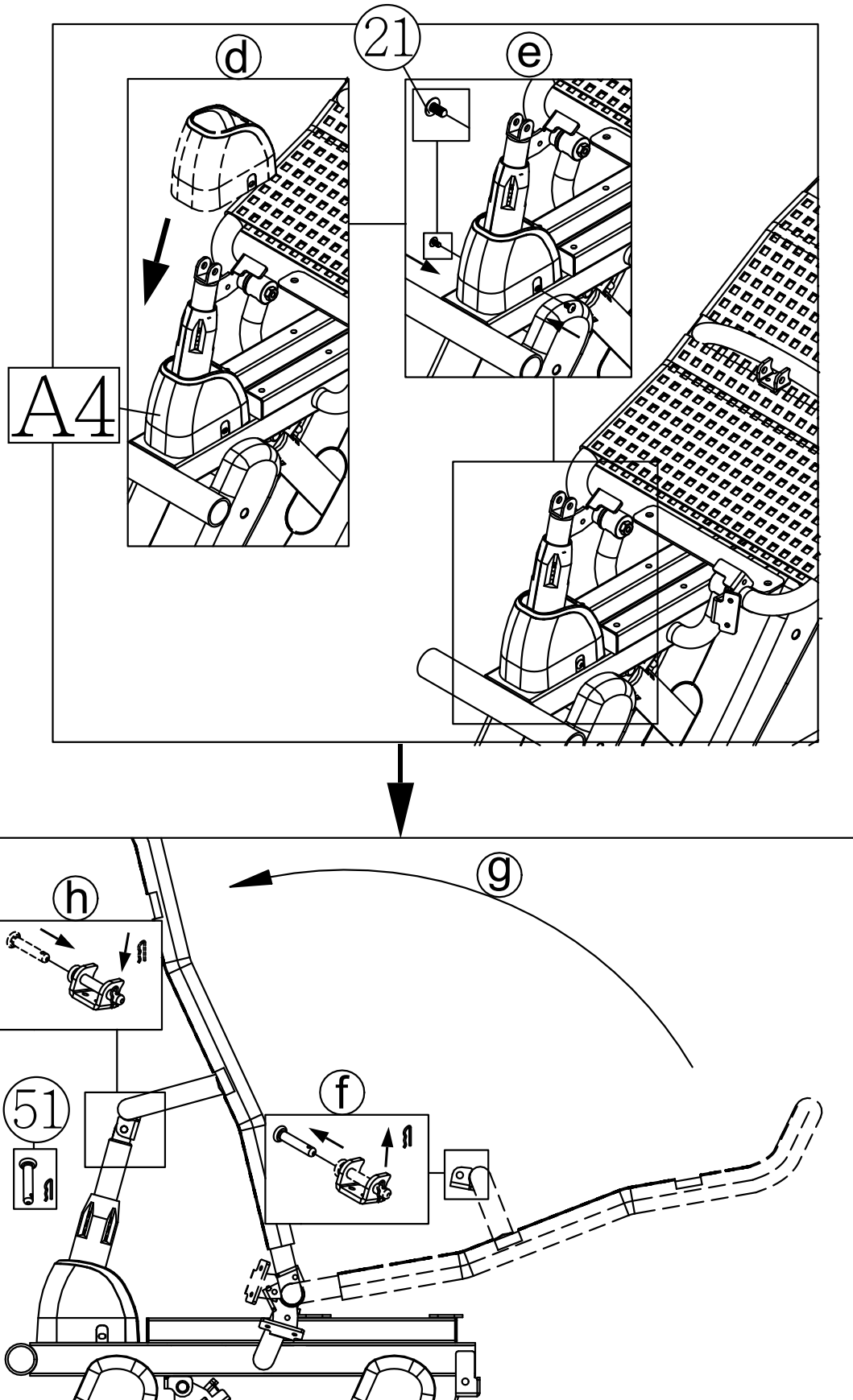
(b) Align the lower part of the gas spring (A8) with the pin hole in the frame.

(c) Insert the set pin (51) into place as shown, and insert the R-clip into the hole in the set pin.



## STEP 1 Install the Seat Back Gas Spring (CONT.)

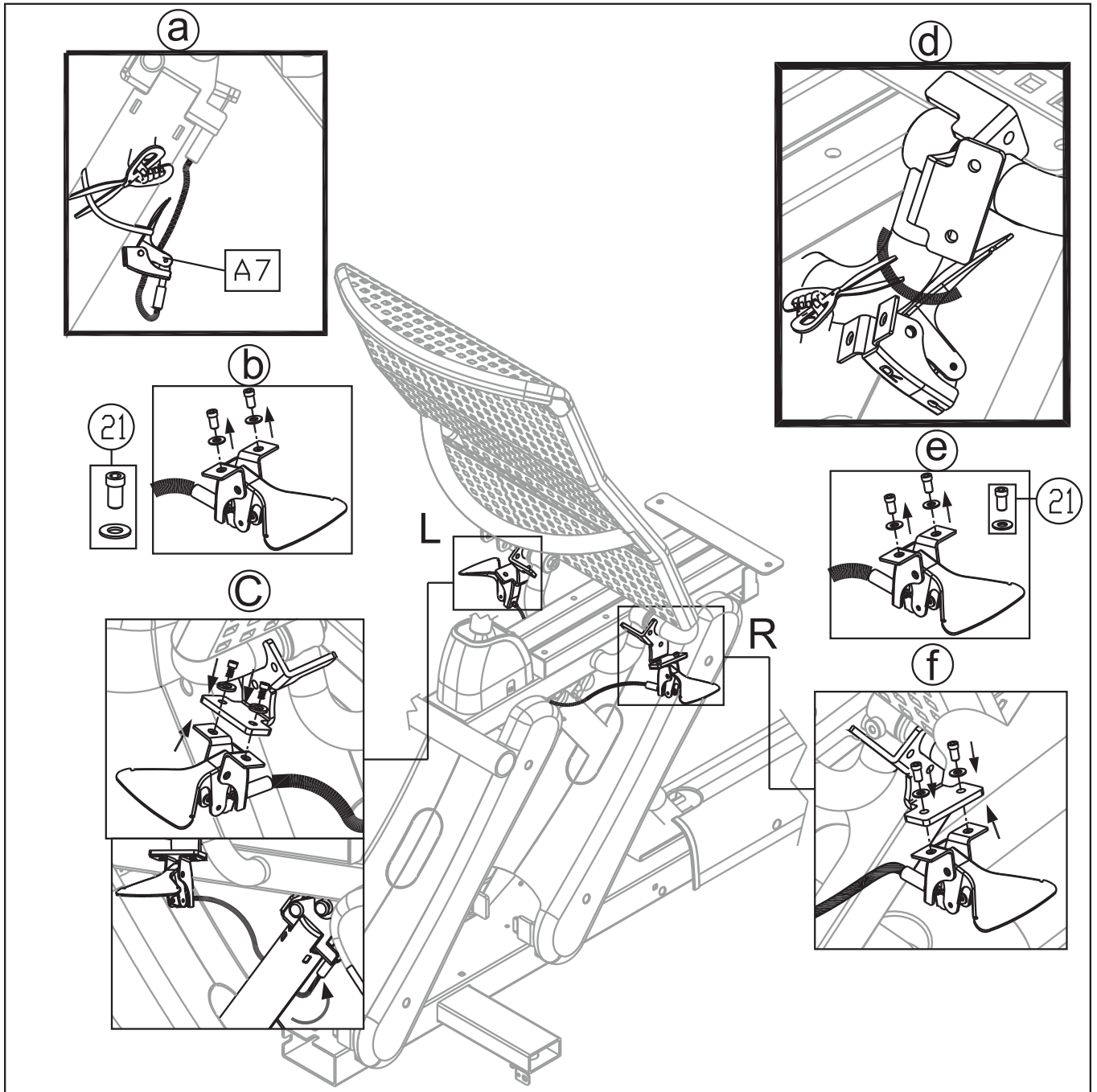
- (d) Insert the gas spring cover (A4) onto the gas spring.
- (e) Secure the cover screws (21).
- (f) Remove the R-clip on the upper set pin, and remove the upper set pin (51) from the product.
- (g) Align the seat back frame and the gas spring upper connector.
- (h) Insert the upper set pin (51) into place and secure it with the R-clip.



## STEP 2 Install the Seat Adjustment Handles

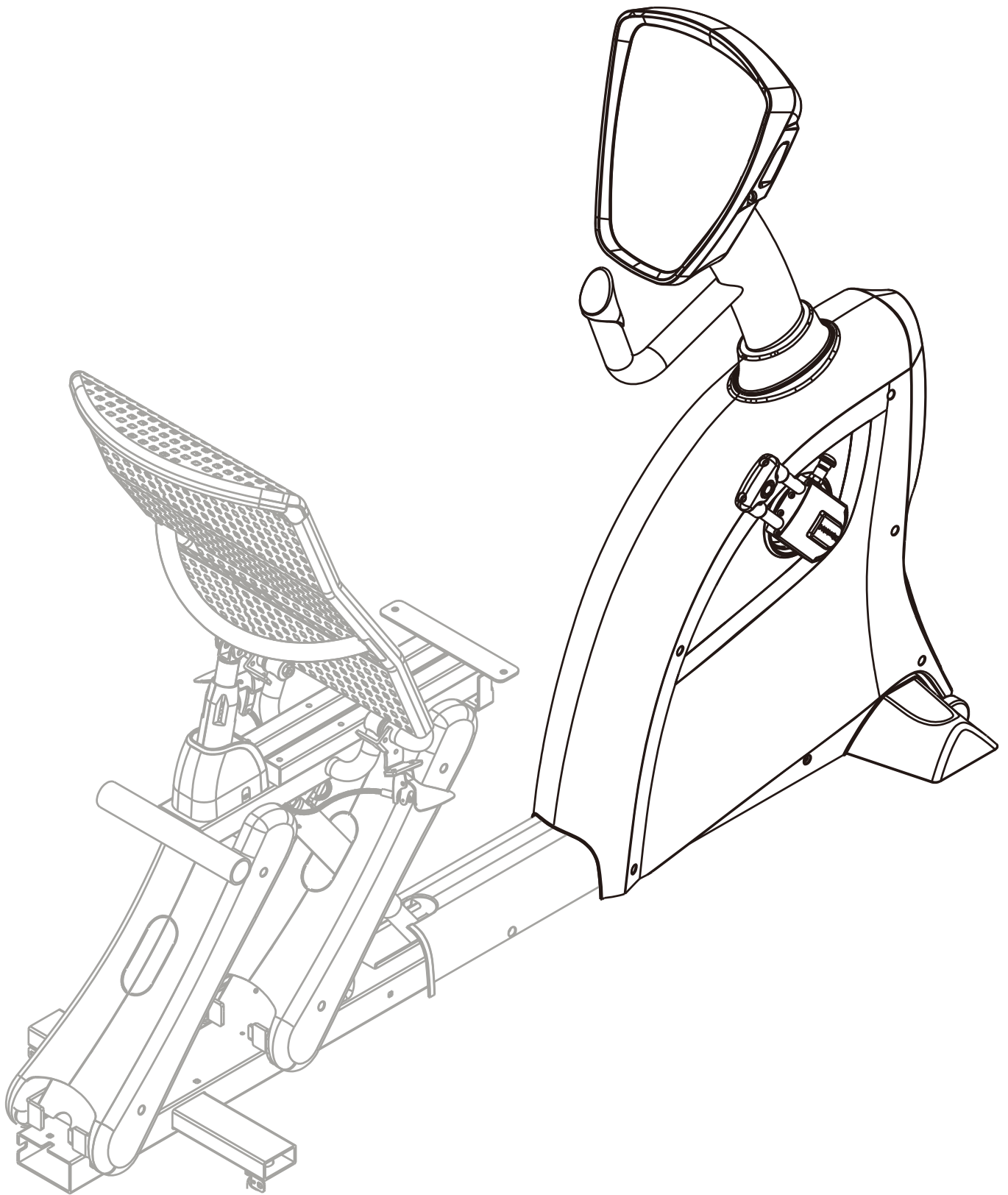
Follow steps (a) through (f) to install the seat adjustment handles.

- (a) Please cut the zip tie to detach the adjustment handle (A7) from the gas spring.
- (b) Remove screws (21) from the handle position on the bike frame.
- (c) Route the wire around the gas spring. Then use screws (21) to secure the handle (A7) over the "L" sticker on the handle mount area.
- (d) Cut the zip tie to detach the other handle (A7) from the tube.
- (e) Remove screws (21) from the handle mount area.
- (f) Use screws (21) to secure the handle (A7) over the "R" sticker in the handle mount



### **STEP 3** Install the Pedestal and Display

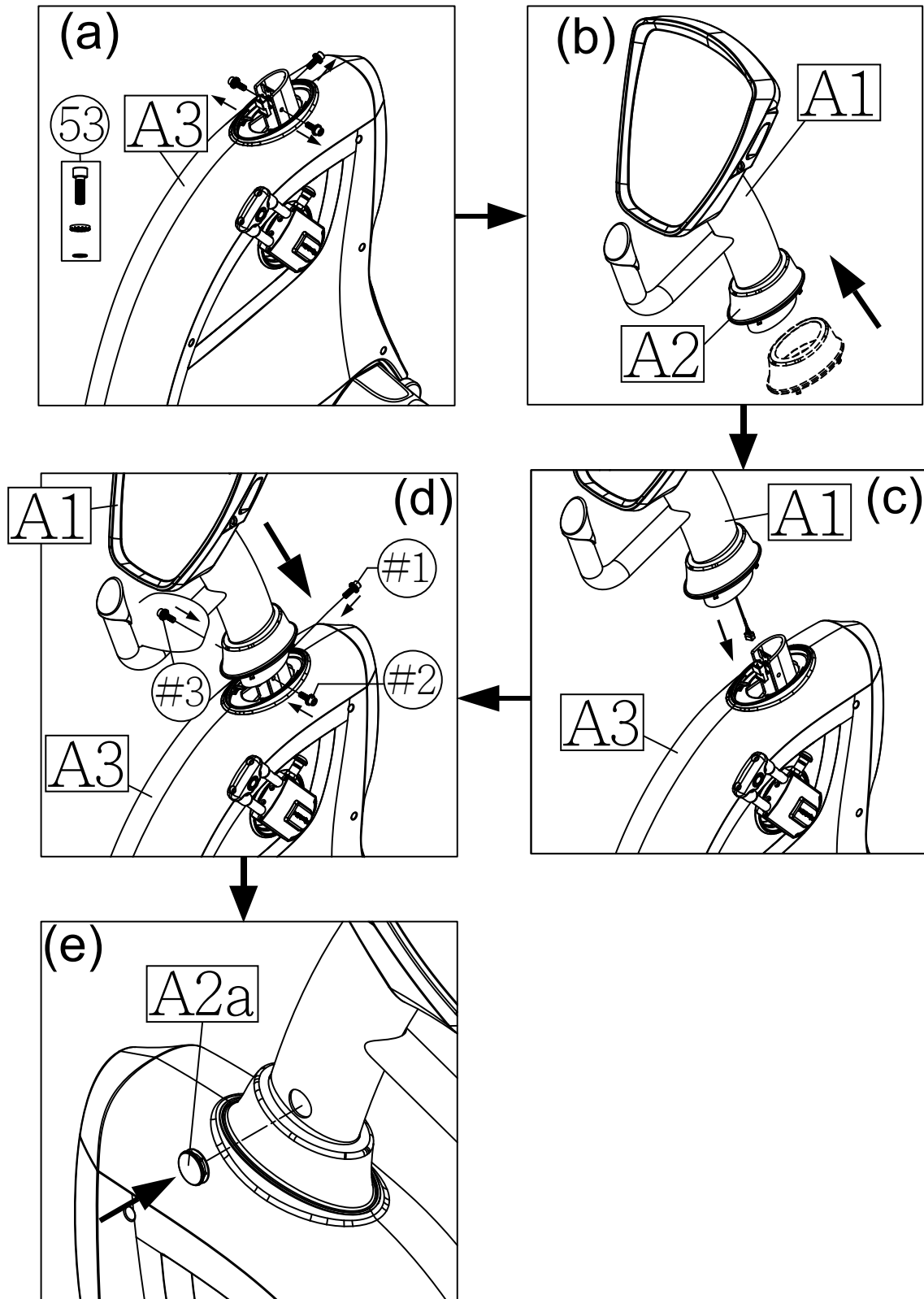
The illustration below provides an overview of this step.



### STEP 3 Install the Pedestal and Display (CONT.)

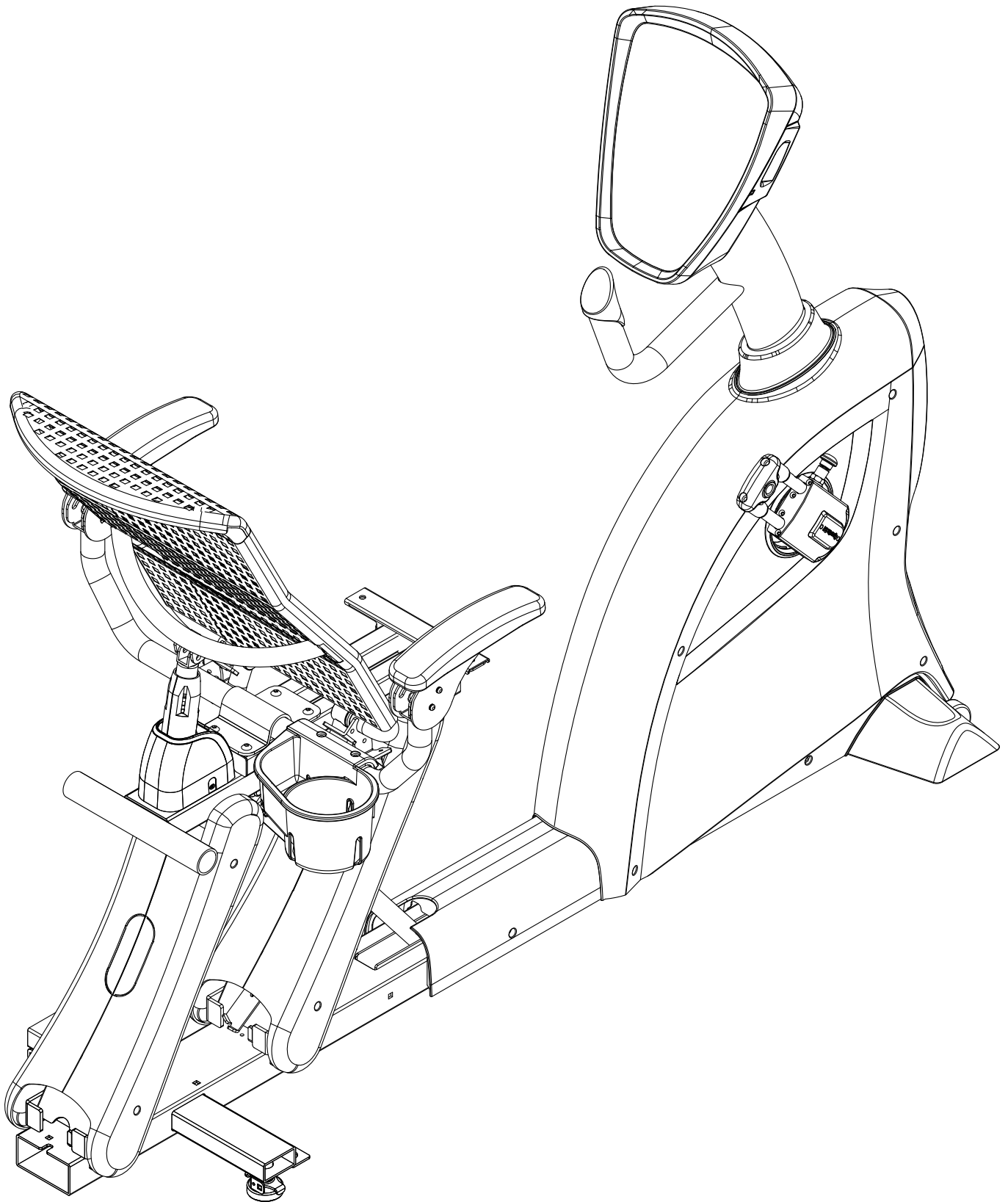
Follow steps (a) through (e) below to install the pedestal onto the bike.

- (a) Remove screws (53) from the pedestal mount area.
- (b) Insert the pedestal collar (A2) into place on the pedestal (A1) tube.
- (c) Connect the cables at the base of the pedestal.
- (d) Insert the pedestal into its mount on the bike. By hand, start threading screws (53) into place. After all screws (53) are in place, use a tool to fully secure them, first tightening screws in area 1, then in area 2, and finally in area 3.
- (e) Insert the cap (A2a) into place on the pedestal (A1).



## STEP 4 Install the Handlebars

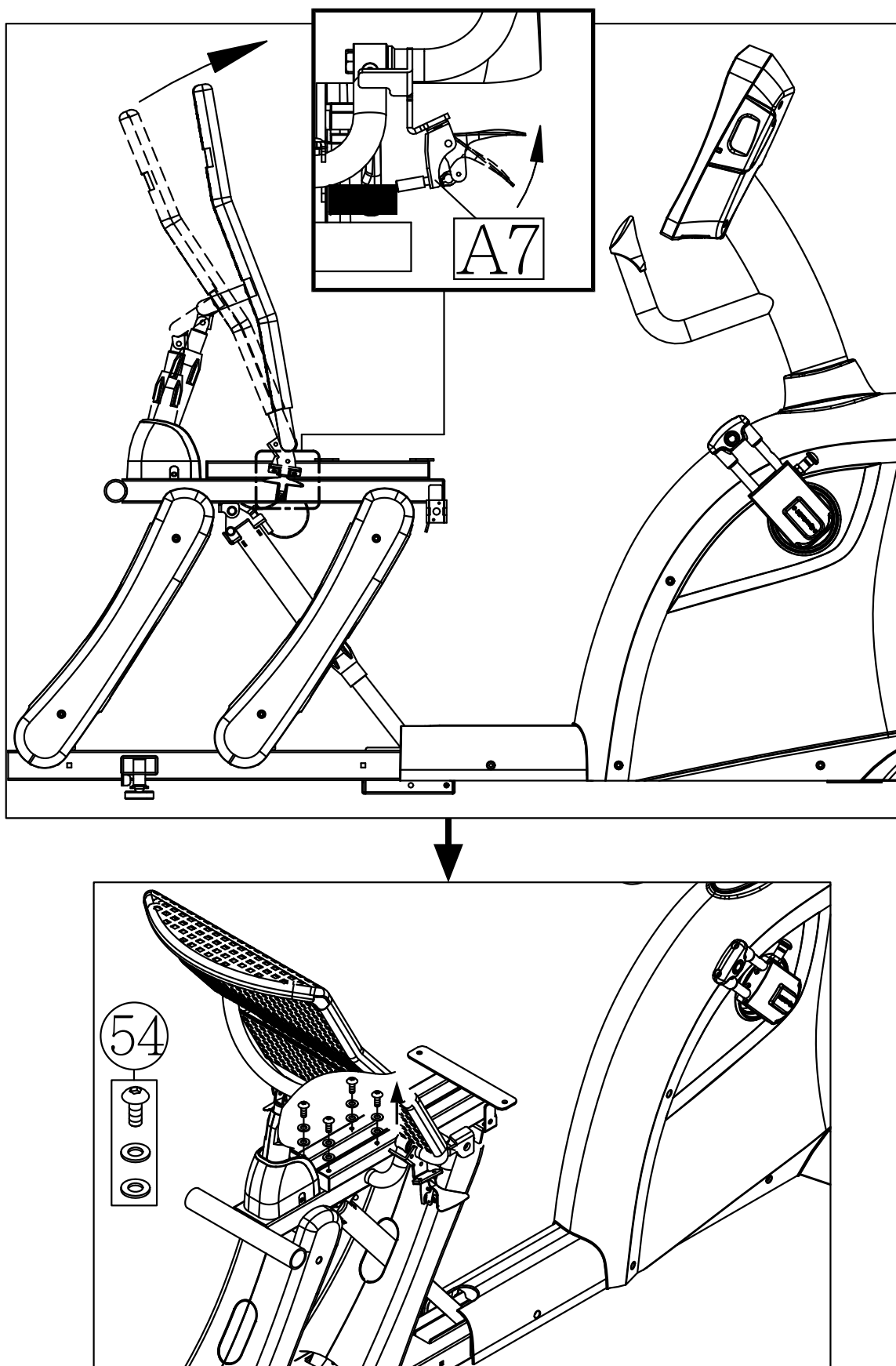
The illustration below provides an overview of this step.



## STEP 4 Install the Handlebars (CONT.)

Follow steps (a) through (d) to install handlebars onto the bike frame.

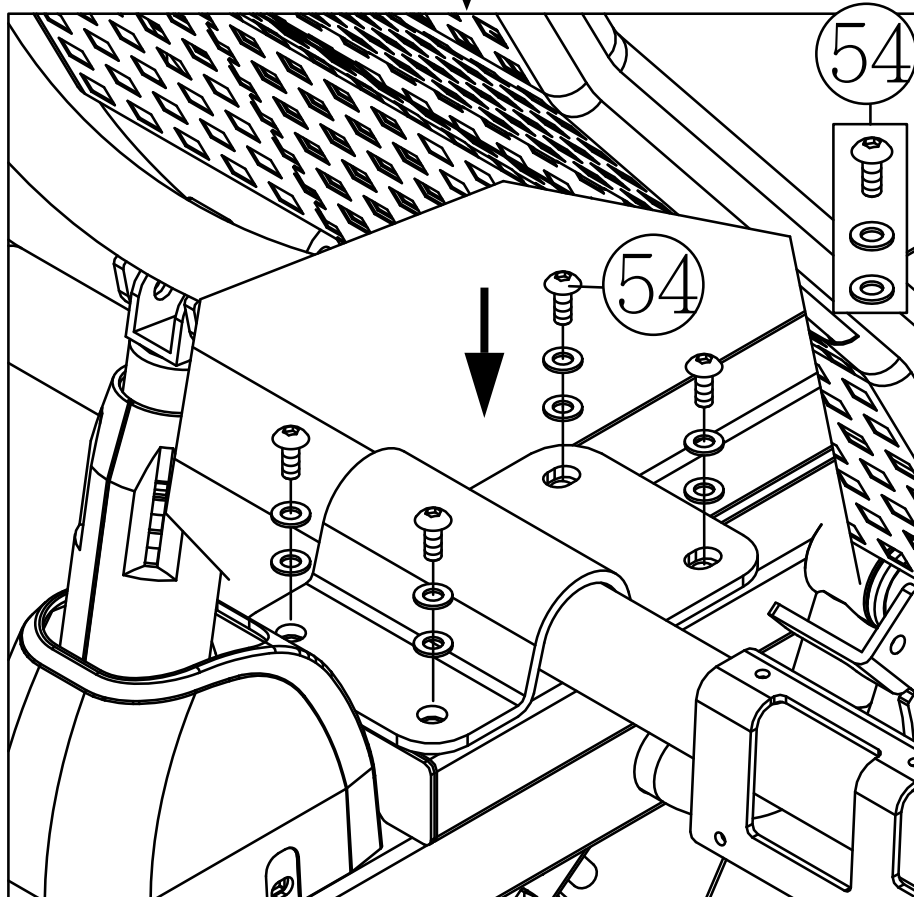
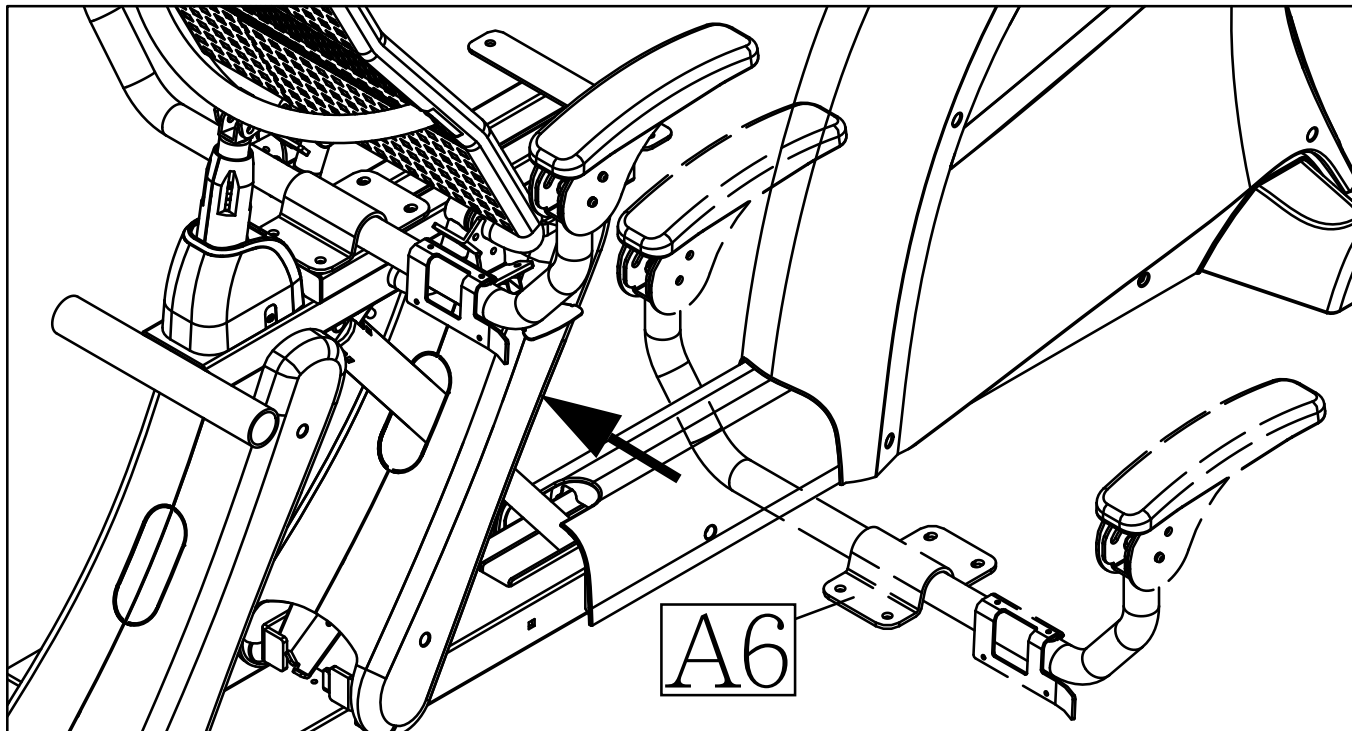
- (a) Pull up handle (A7) to make the seat back adjust to an upright position that will allow you to easily install the handlebars.
- (b) Remove screws (54) from the frame as shown.



## STEP 4 Install the Handlebars (CONT.)

(c) Insert the handlebars (A6) between the seat back and the gas spring.

(d) Use screws (54) to secure the handlebars into place.

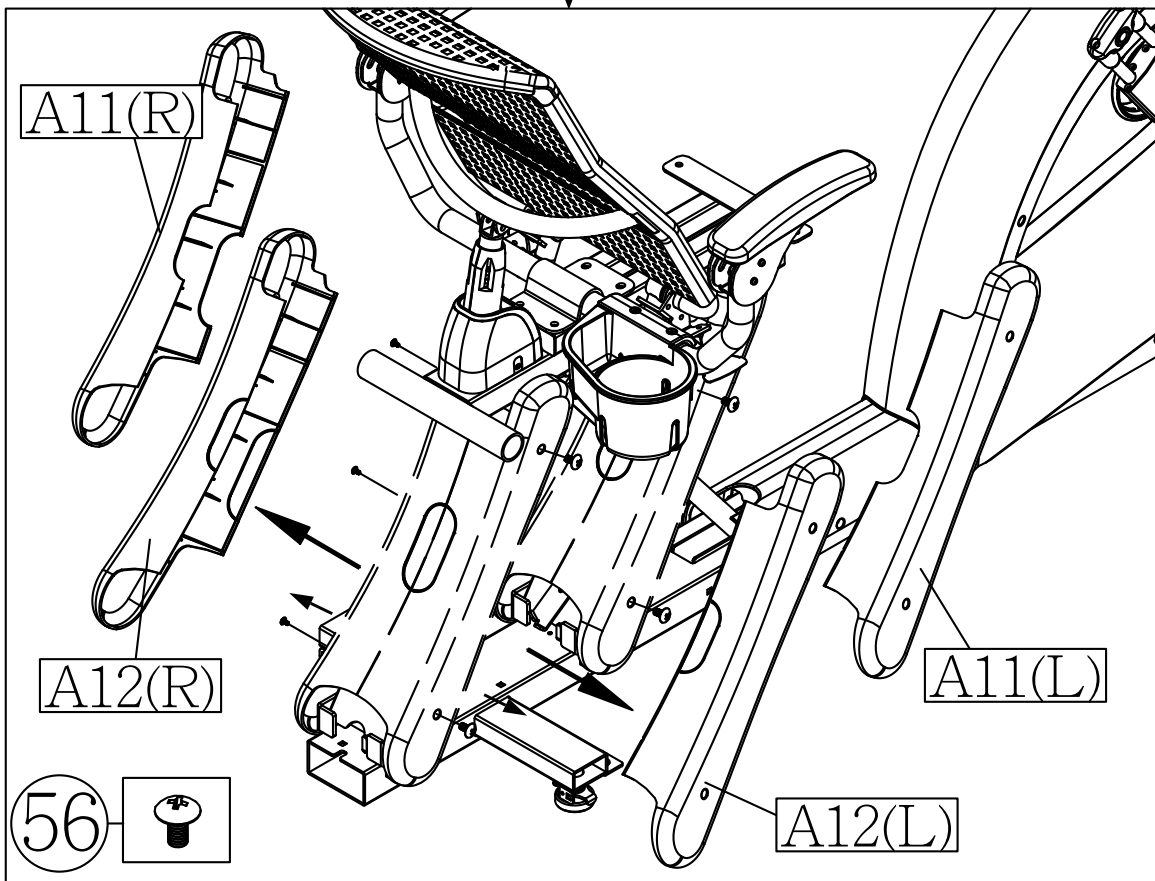
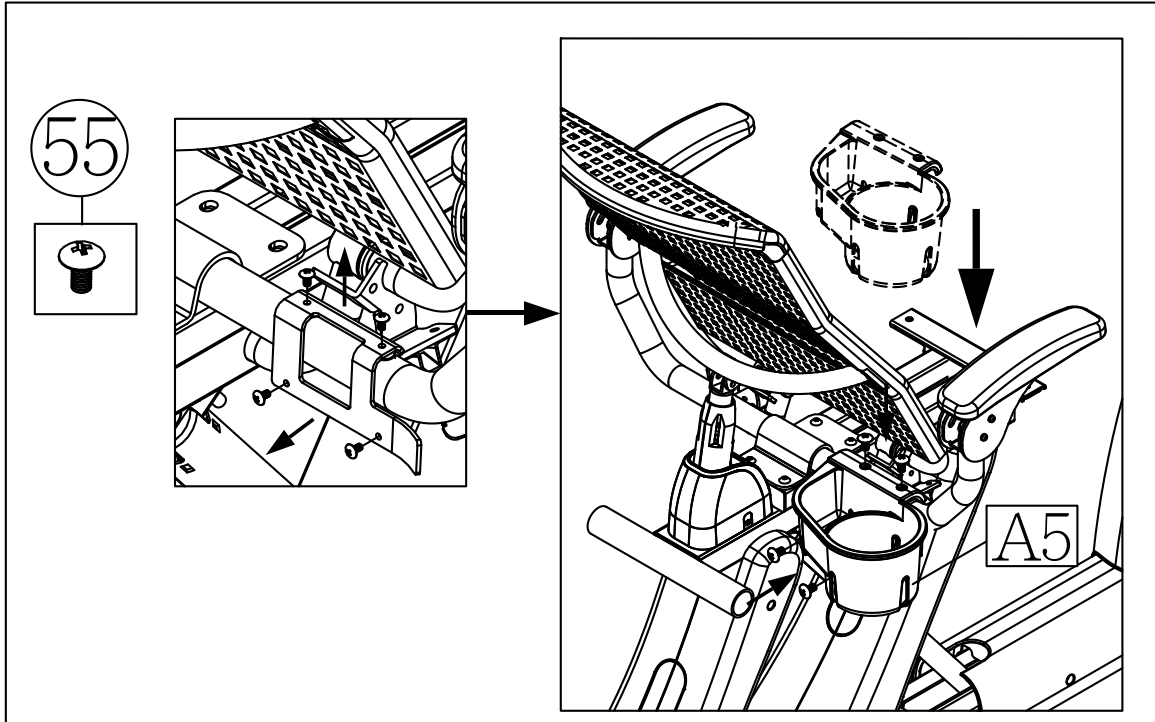


## STEP 5 Install the Bottle Holder

Follow step (a) to install the bottle holder onto the handlebars, then follow step (b) to prepare for cover installation.

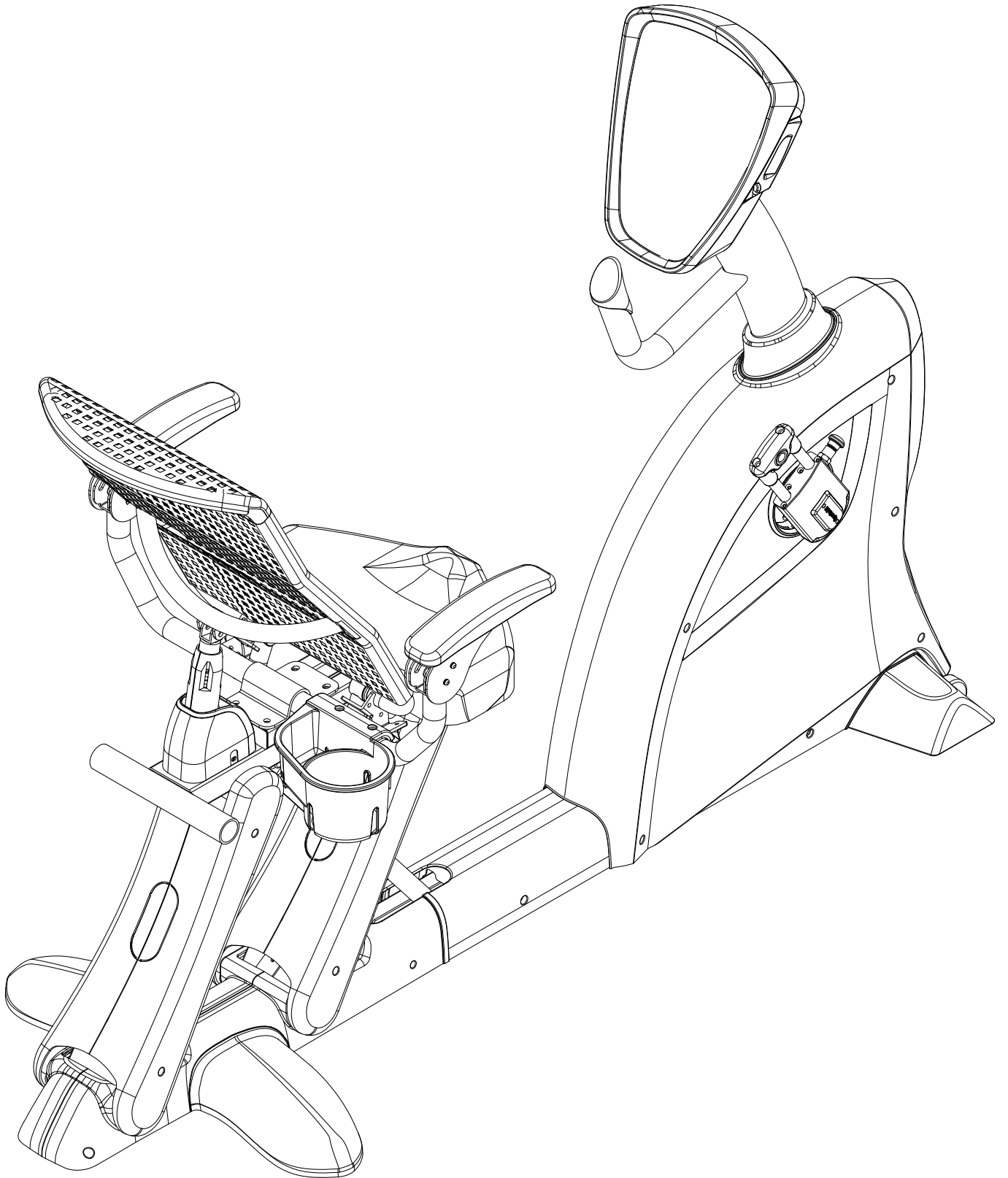
(a) First, remove screws (55) from the bottle mount on the handle. Hold the bottle holder (A5) into place, and secure its screws (55).

(b) In preparation to install other covers, remove screws (56) and remove seat support covers (A11R, A11L, A12R, A12L).



## STEP 6 Install Covers

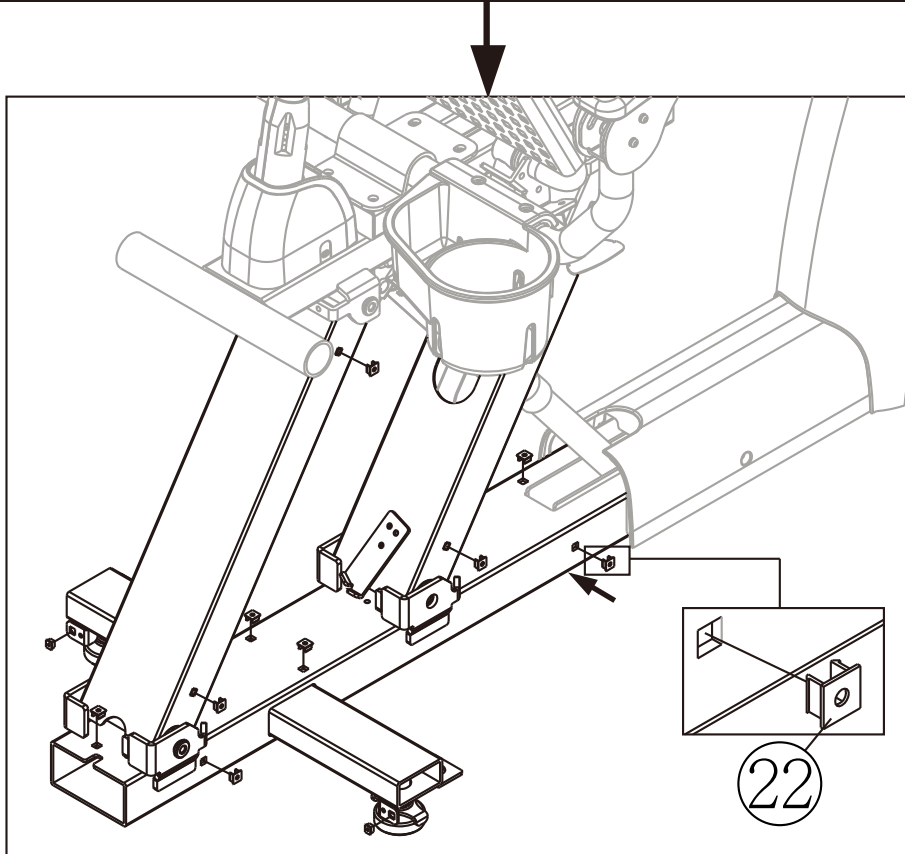
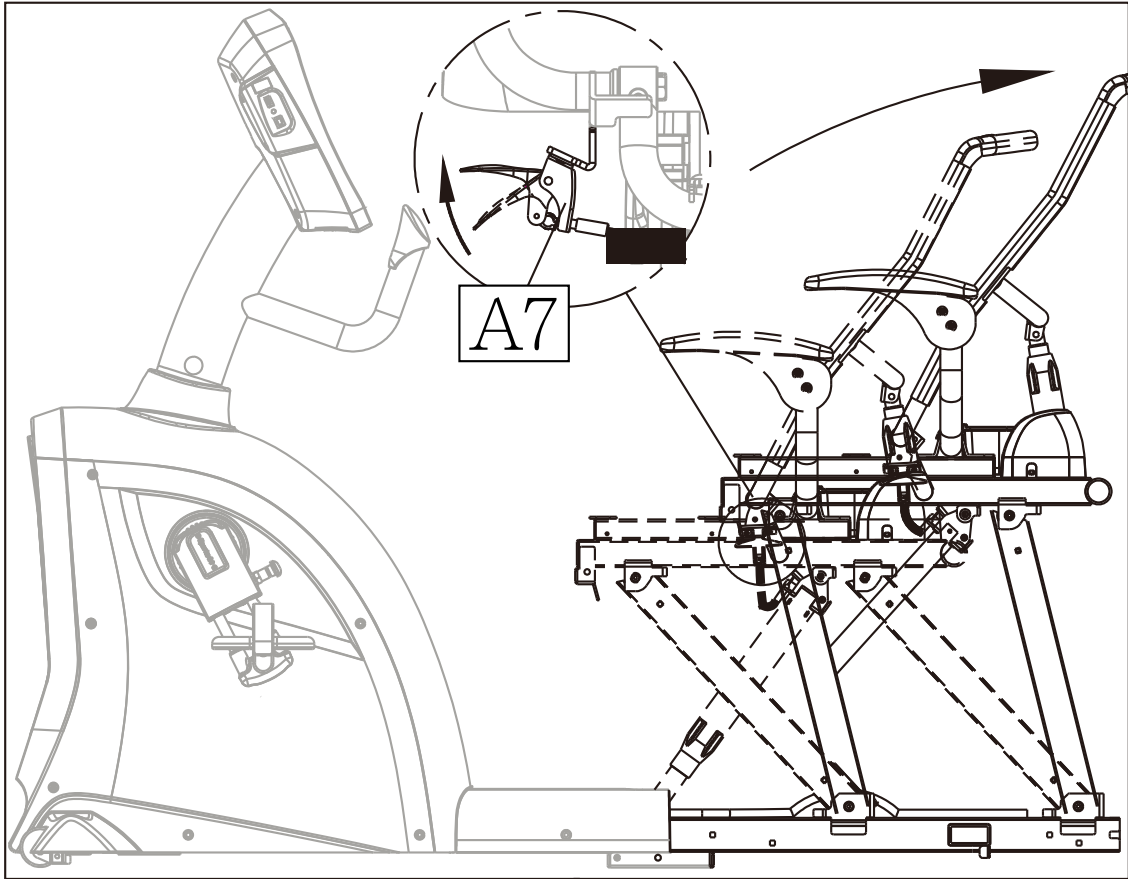
The illustration below provides an overview of this step.



## STEP 6 Install Covers (CONT.)

Prepare for cover installation by following steps (a) through (b).

- (a) Pull the seat adjustment handle (A7) upward to allow the seat to move to the upright position.
- (b) Insert screw sockets (22) into place on the bike frame. There are a total of eight places on each side in which to insert screw sockets.

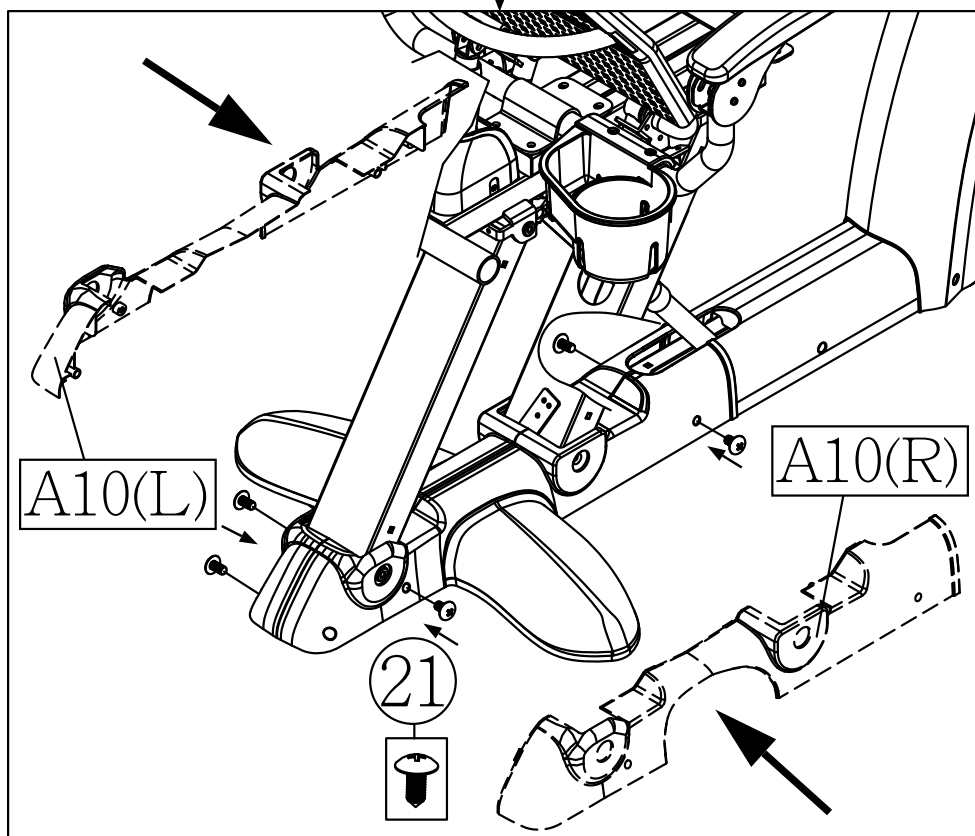
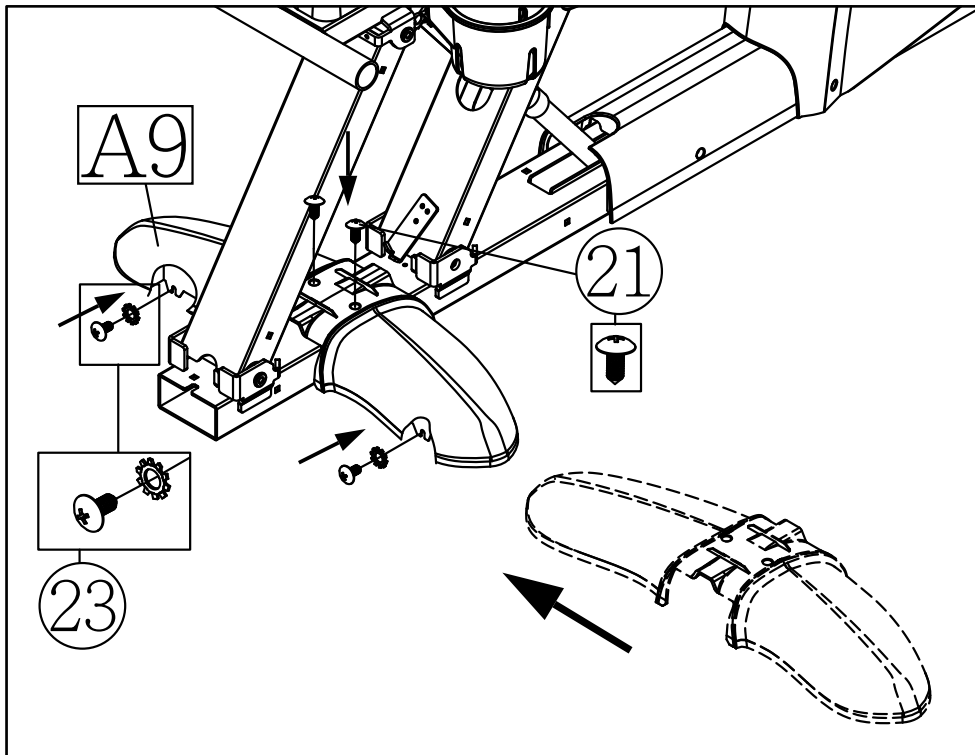


## STEP 6 Install Covers (CONT.)

Install the back foot cover (A9) and horizontal covers (A10R, A10L) as follows in steps (c) through (d).

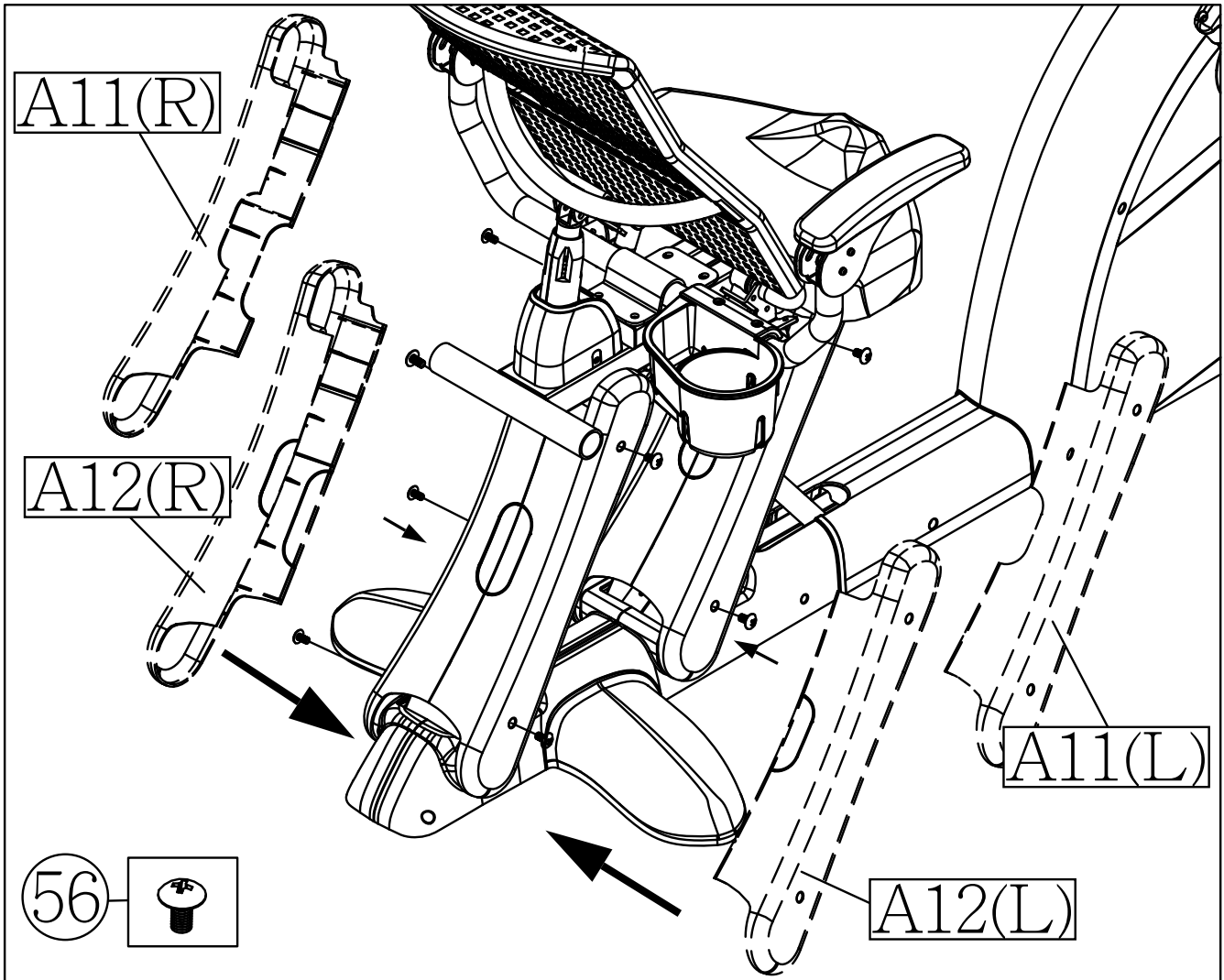
(c) Set the back foot cover (A9) onto the main frame. Use screws (21) in the top. Use screws (23) in the side.

(d) Set left and right horizontal covers (A10R, A10L) in place. Use screws (21) to loosely hold the covers in place. Secure the screws only after all the screws have been threaded into place.



## STEP 6 Install Covers (CONT.)

- (e) Install the seat support covers (A11R, A11L, A12R, A12L) as explained below. First, identify seat support covers (A11R, A11L, A12R, A12L). Front covers have a cutaway for the gas spring. Rear covers do not have such a hole. Hold the covers in place, and use screws to secure them temporarily. Once all screws are in place, fully secure all the screws (56).

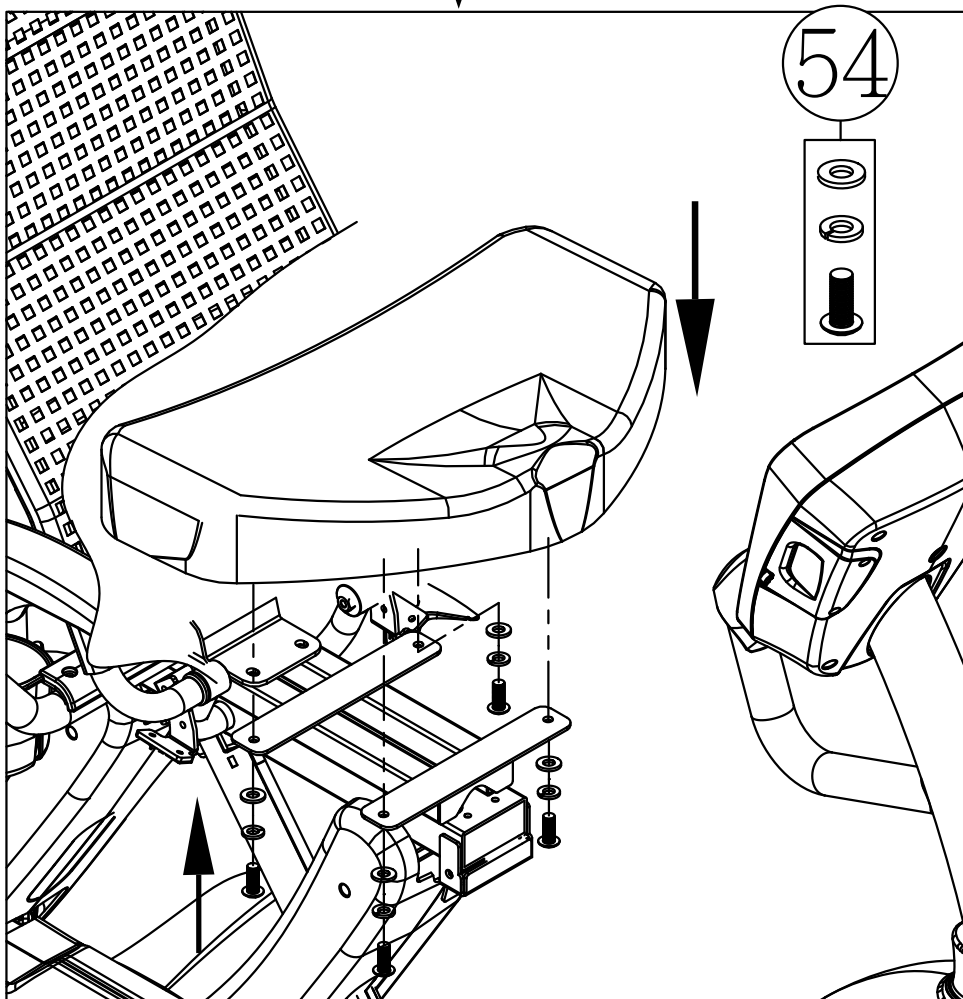
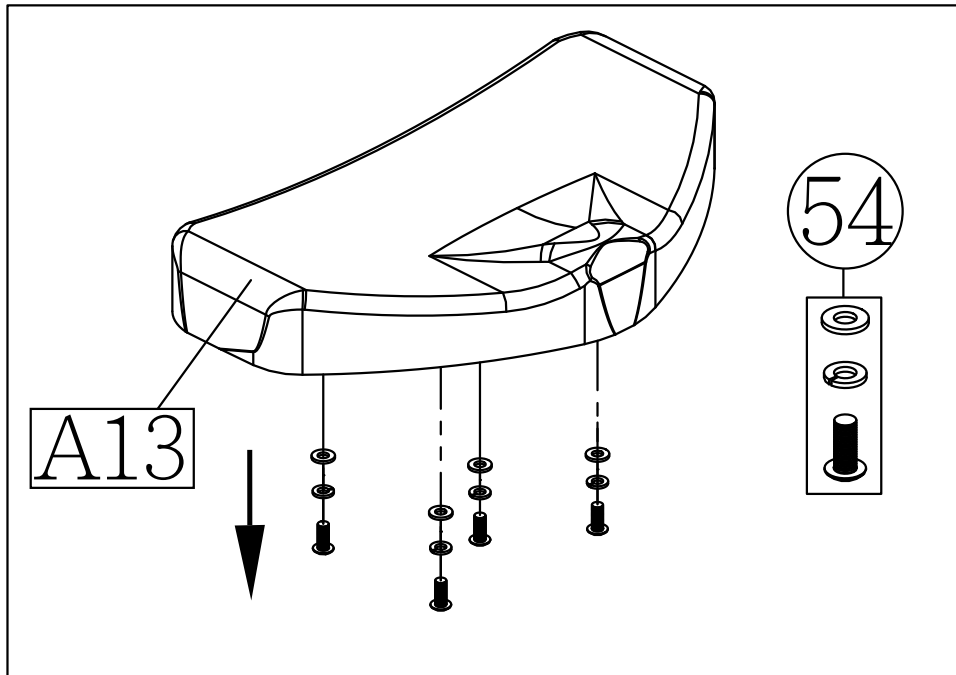


## STEP 7 Install the Seat Bottom

Follow steps (a) and (b) below to install the seat bottom.

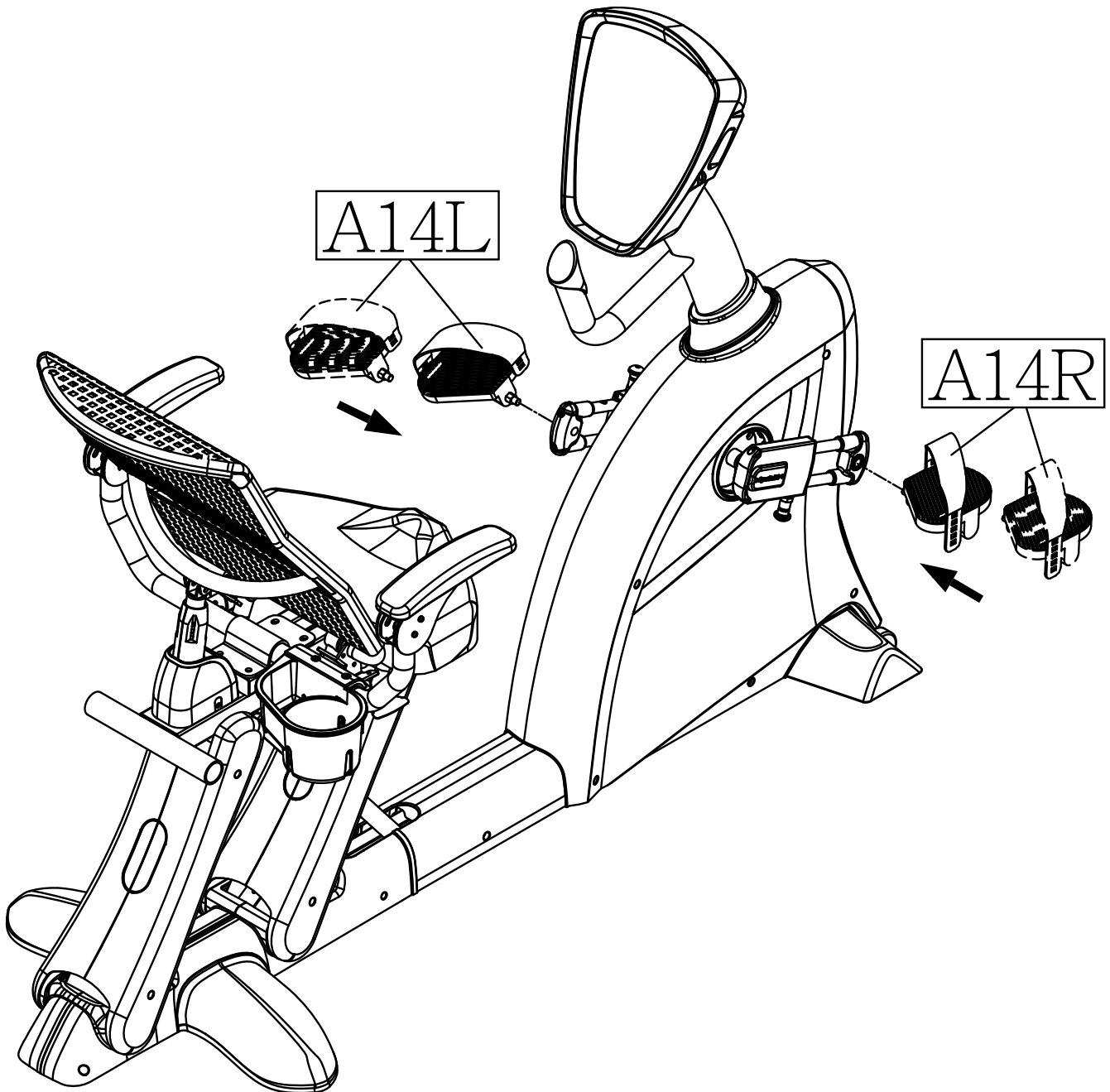
(a) Remove screws (54) from the seat bottom (A13).

(b) Align the seat bottom (A13) in place on the bike frame. Then secure it in place with screws (54).



## STEP 8 Install Pedals

Pedals are marked either “L” for left or “R” for right. Side designations correspond to the left and right sides of a person in position to exercise on the bike. Each pedal (A14) must be installed on the appropriate side of the bike. The stem of the right pedal screws in clockwise. The stem of the left pedal screws in counterclockwise. Start securing pedals by hand to ensure proper threading. Then use the wrench to fully secure them into place.

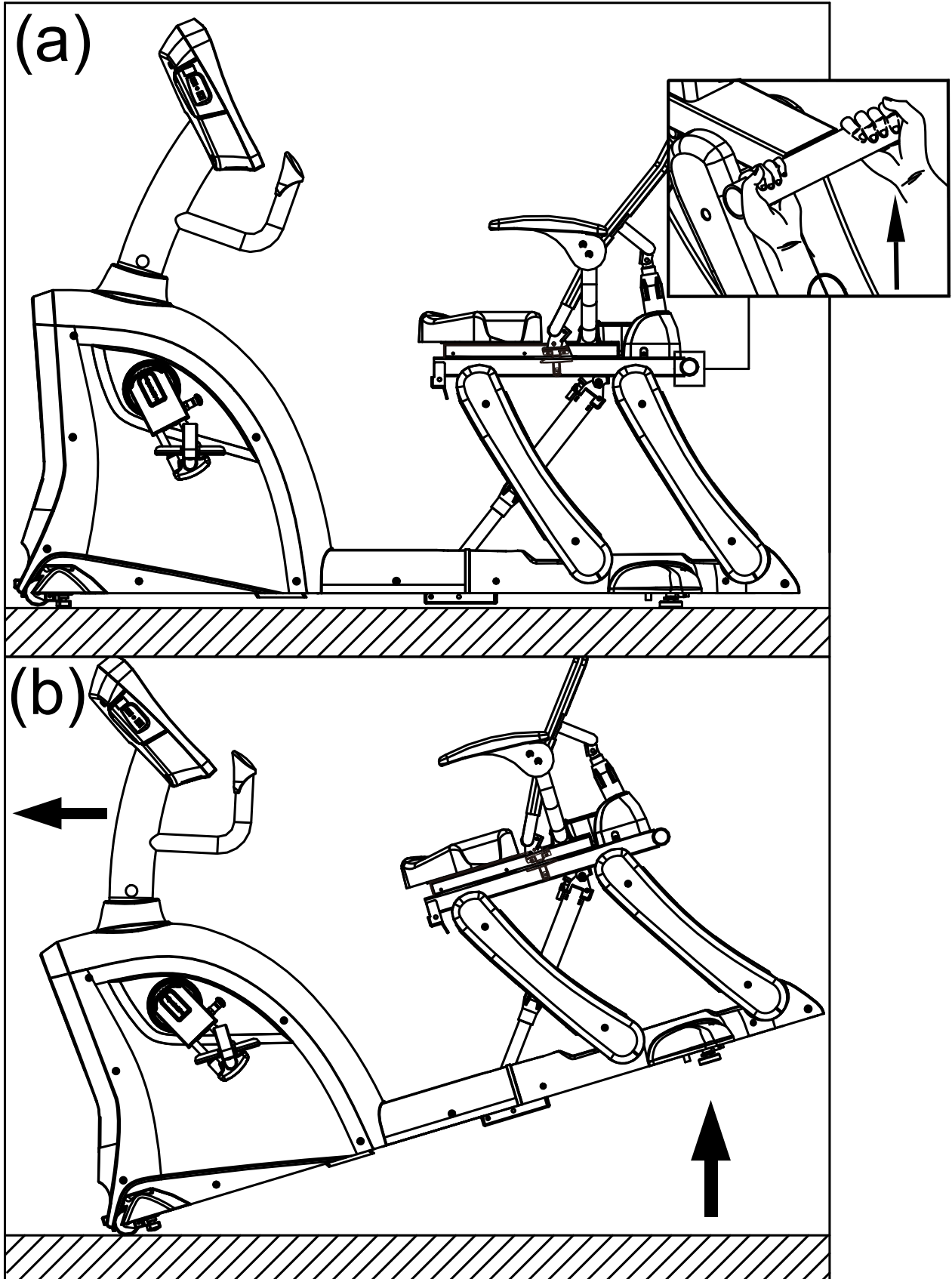


## STEP 9 Move the Product

Follow steps (a) through (b) to roll the bike into place for use.

(a) Stand at the rear of the bike. Grasp the handle with both hands and lift.

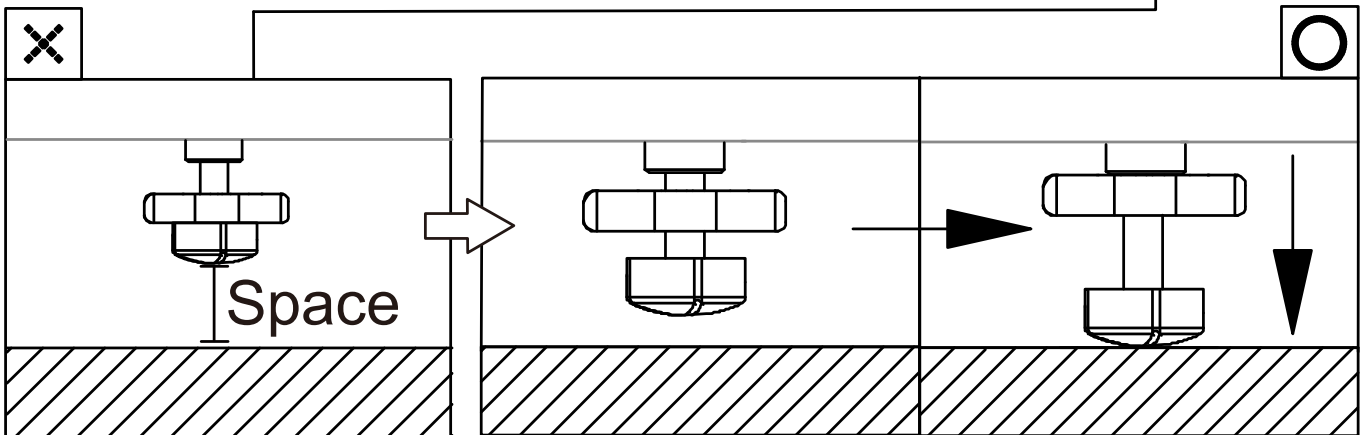
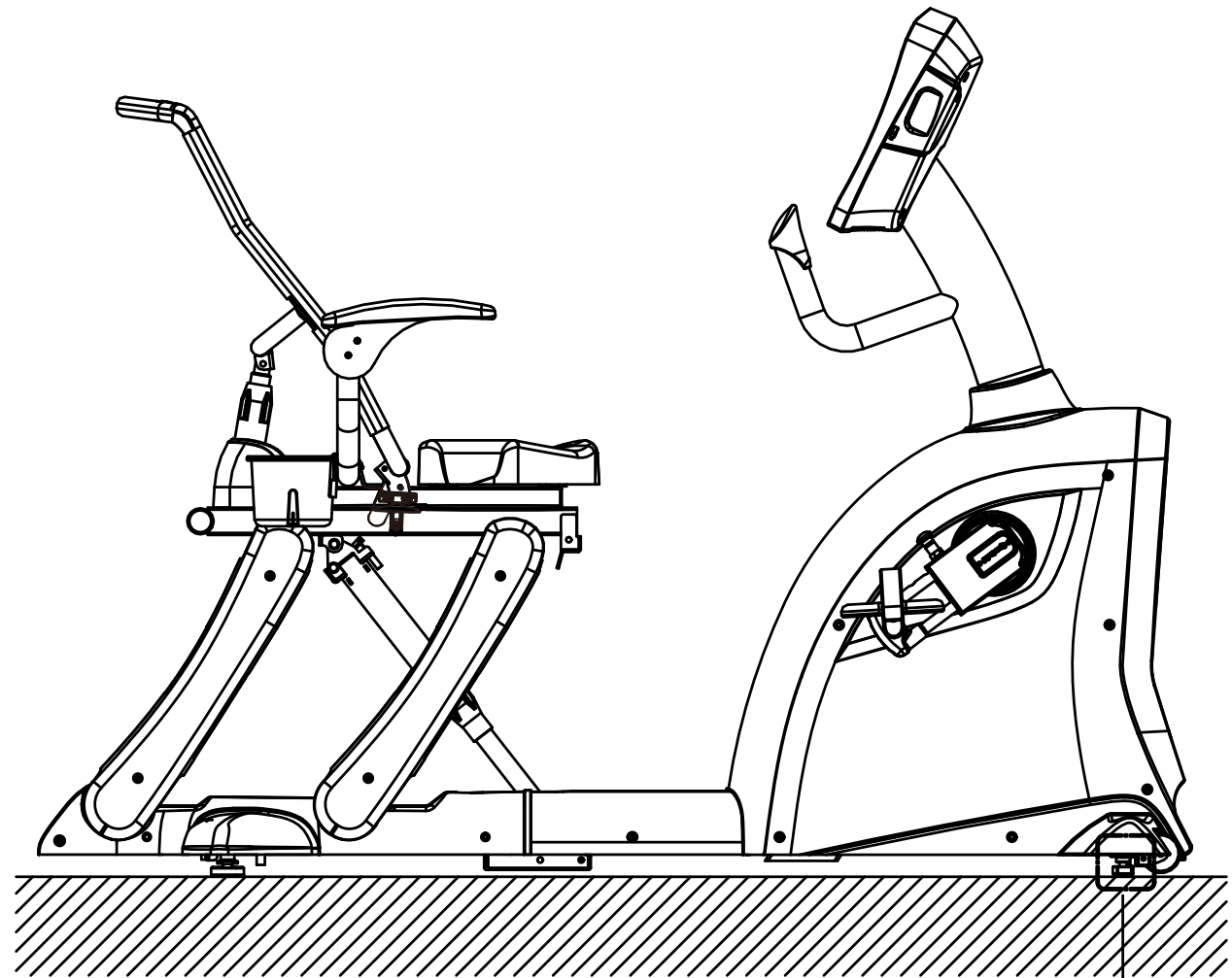
(b) With the bike at a slant, Move to a specific location.



## STEP 10 Level the Bike

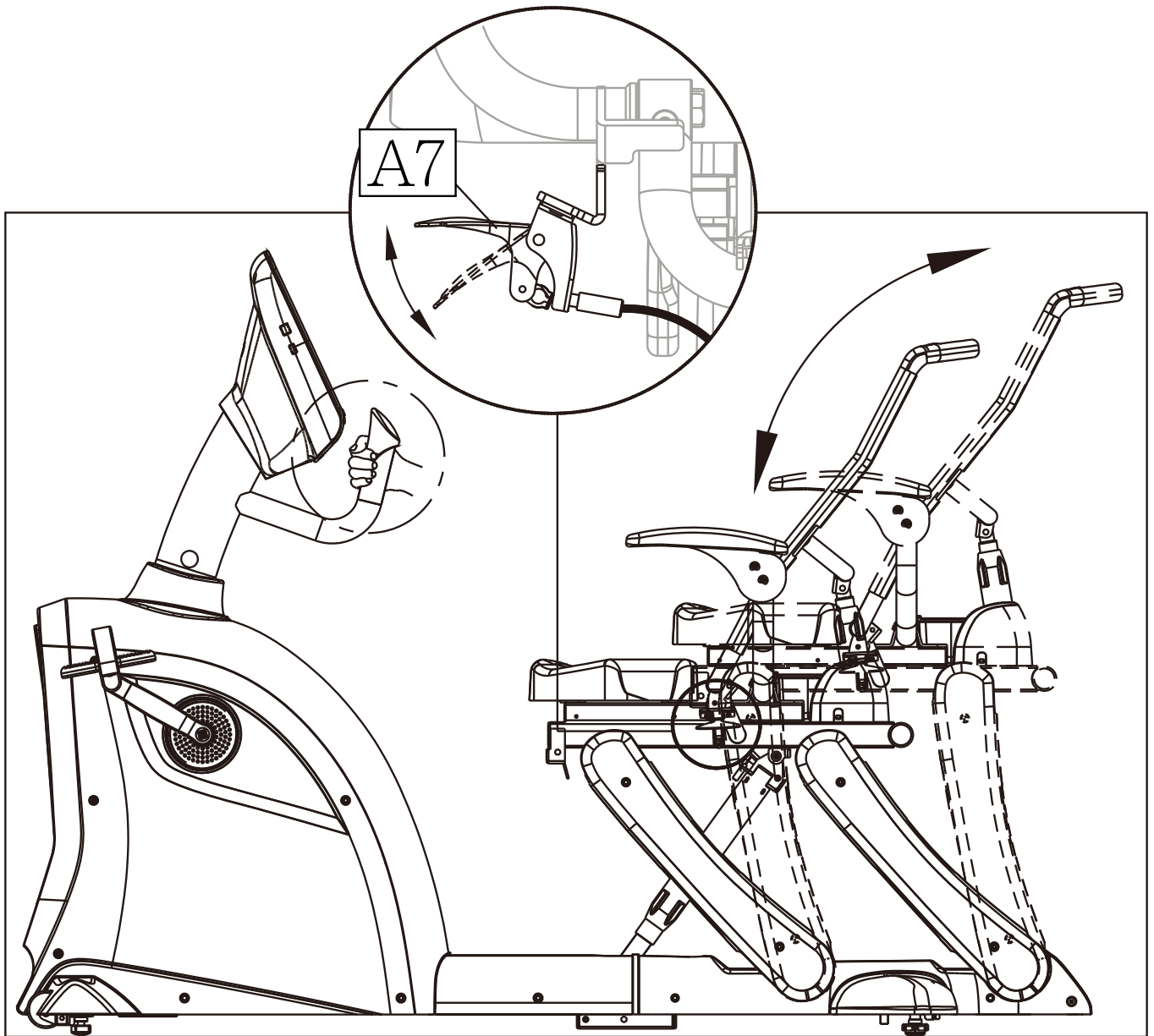
To function properly, the bike must be level. Level the bike as follows:

- Loosen the leveler nut.
- Rotate the foot downward until it touches the floor.
- Rotate the leveler nut upward, against the product frame, to secure this position.



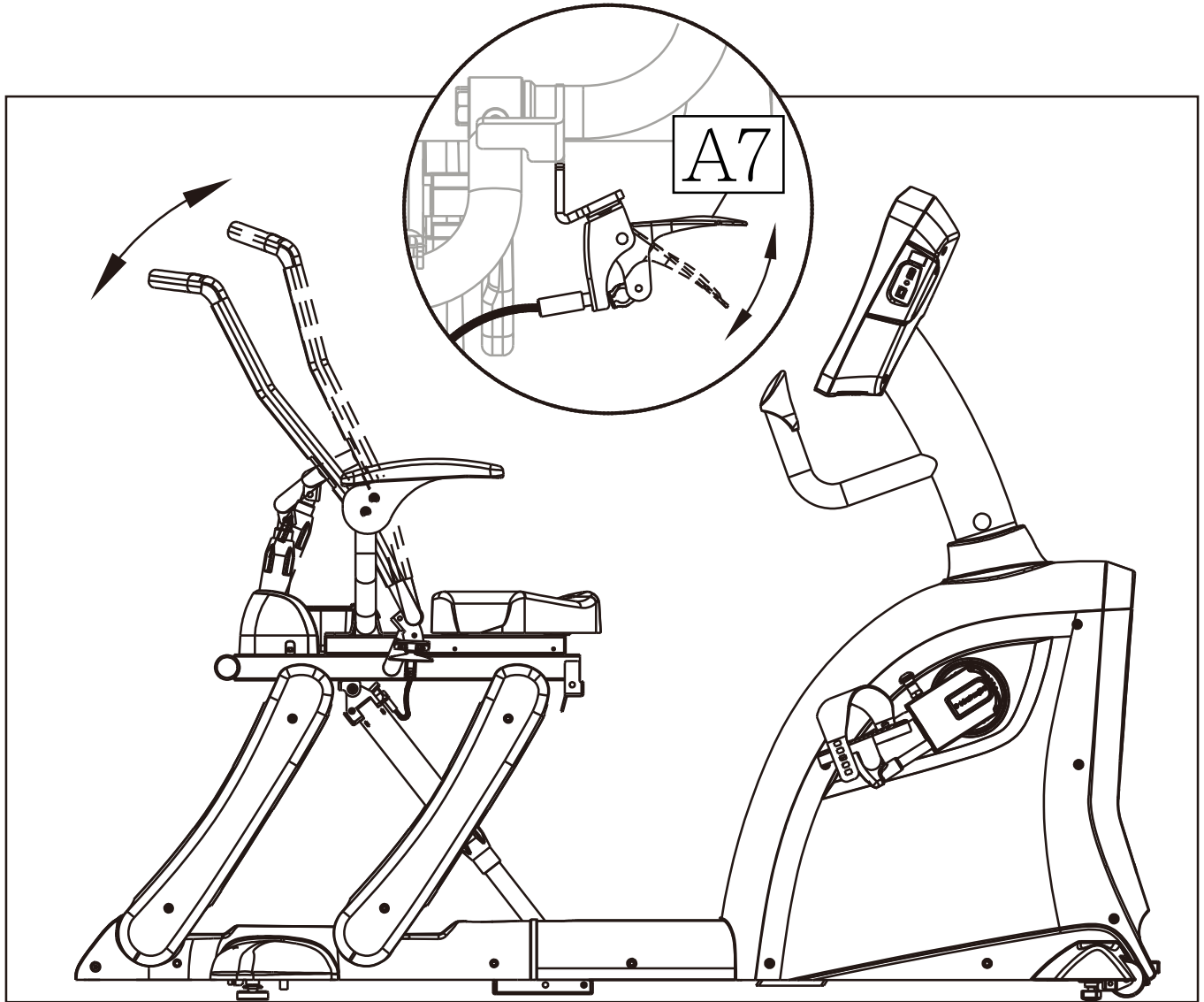
## STEP 11 Common Adjustments to Suit Different Exercisers

The following three pages explain how to make adjustments to suit different exercisers. Follow instructions on this page to adjust the seat position forward or backward. Sit on the seat. Pull the adjustment handle (A7) on the left side upward. This allows the seat to move. Grasp the central handle to either push backward or pull forward. Or press against the pedals or the floor. When the seat arrives at the desired position, release the adjustment handle. The seat will stop moving.



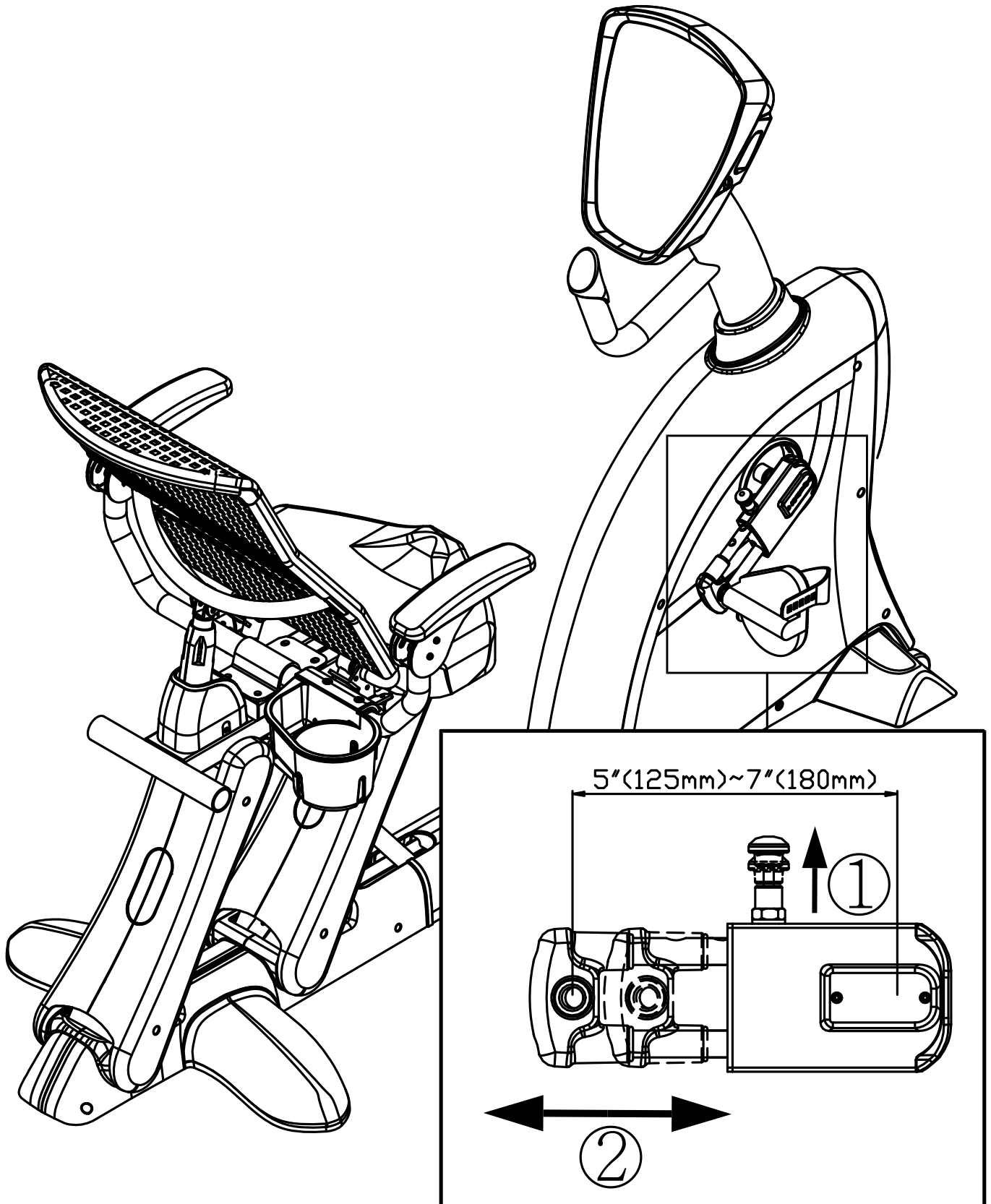
## STEP 11 Common Adjustments to Suit Different Exercisers (CONT.)

Follow instructions on this page to adjust the angle of the seat back. Sit on the seat. Lift the adjustment handle (A7) on the right side upward. Adjust the seat backward or forward. When the seat back arrives at the desired position, release the adjustment handle. The seat back will stop moving.



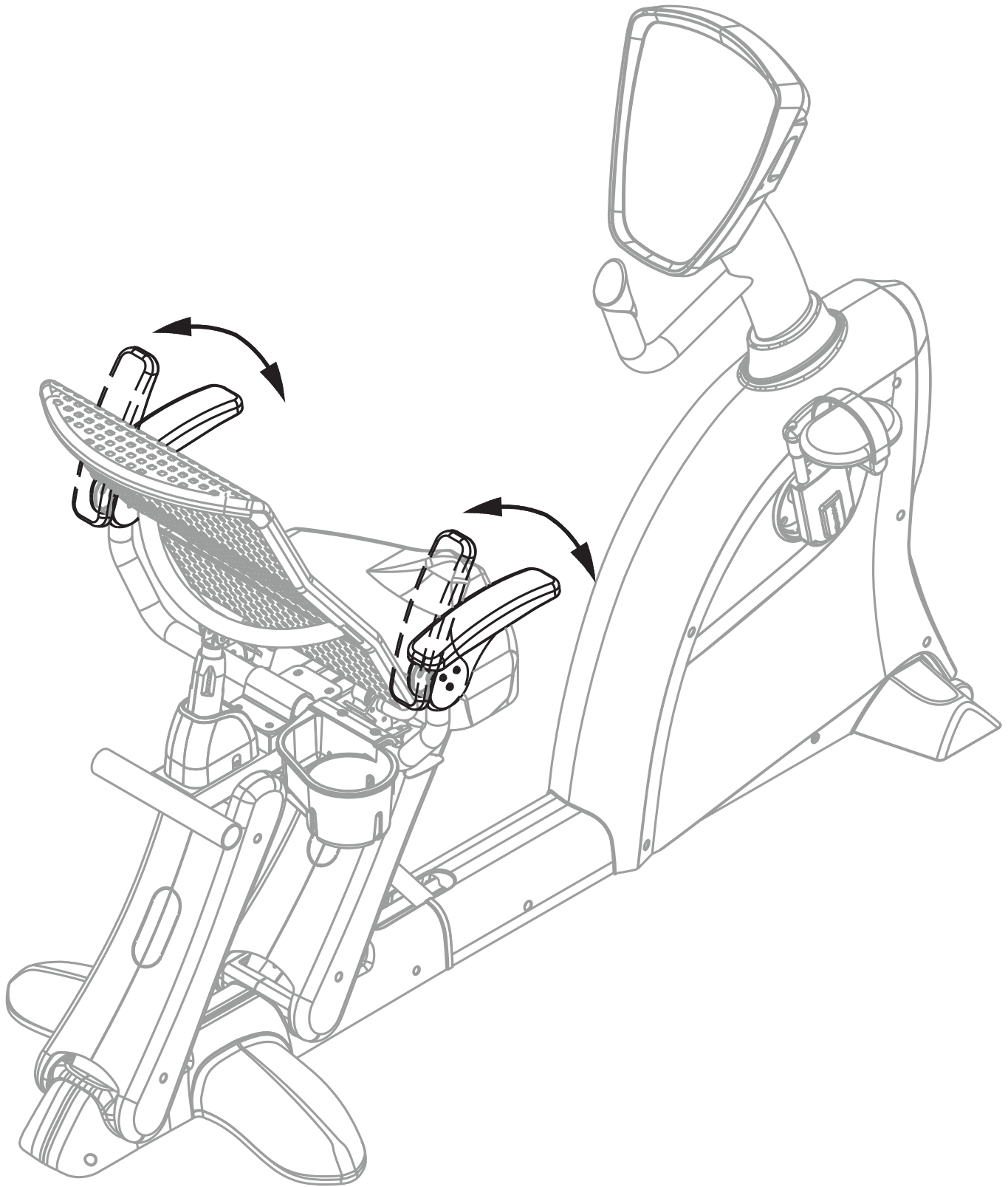
## STEP 11 Common Adjustments to Suit Different Exercisers (CONT.)

Follow instructions on this page to adjust the crank position. Pull the knob. Then slide the crank to the desired position. There are three positions: five inches (125mm), six inches (152mm), and seven inches (180mm).



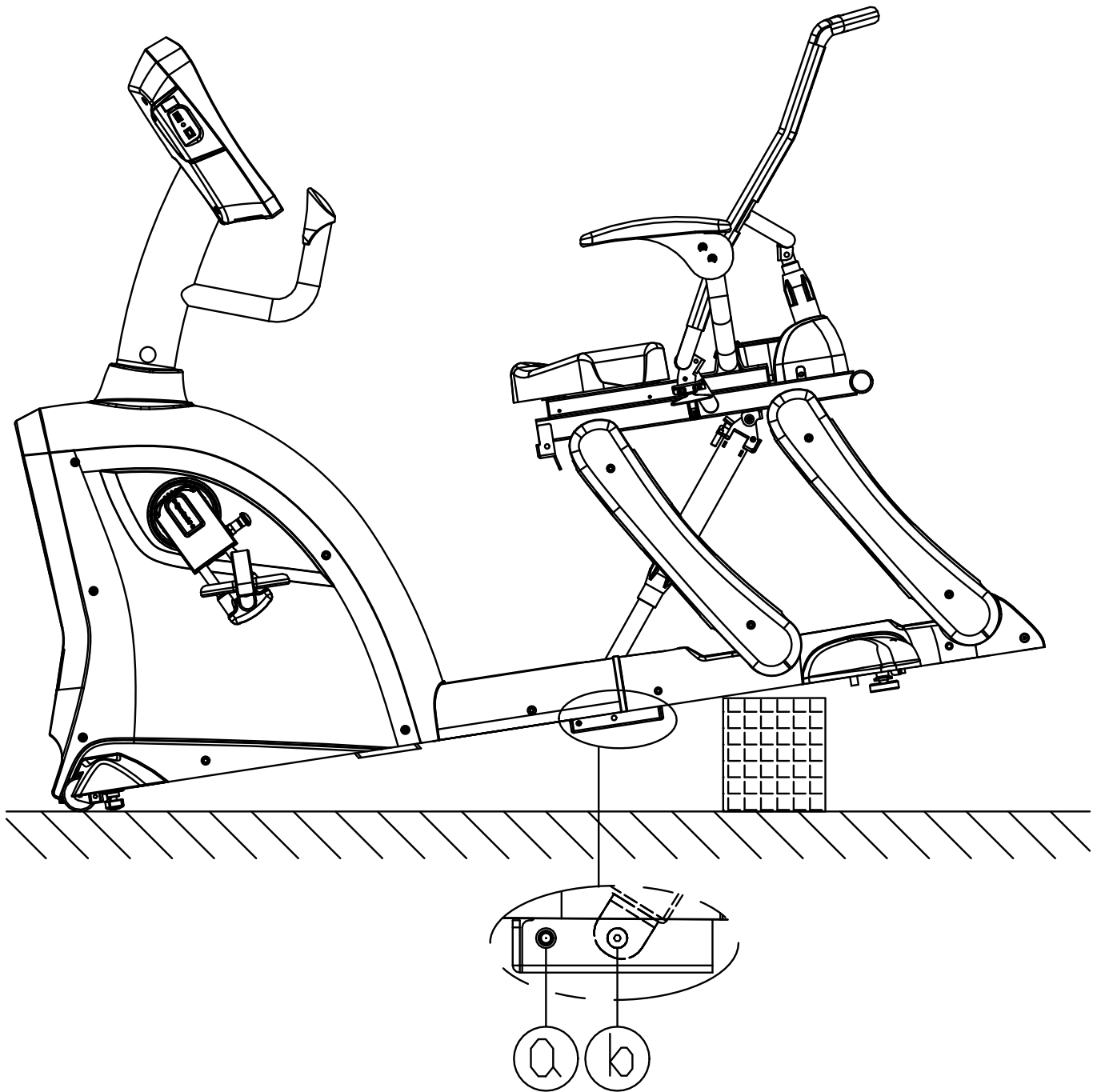
## **STEP 11** Common Adjustments to Suit Different Exercisers(CONT.)

To move armrests, simply lift them up or set them down, as desired.



## STEP 12 Connection Point Adjustment

The connection point of the gas spring on the main frame can be adjusted. The standard position (set at the factory) is position (b). Moving the connection to position (a) would make the seat closer and lower in relation to the pedals. Doing so is optional. Follow steps on the following page to change the position of the gas spring connection from one set of holes to the other. First, support the bike by placing an object (8-12 inches or 20-30 cm) under the frame as shown.



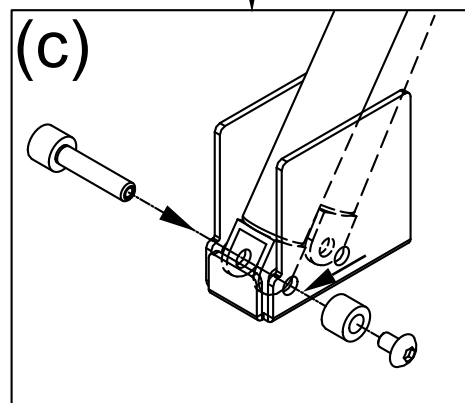
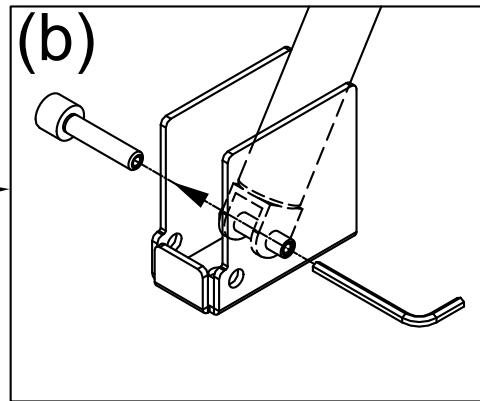
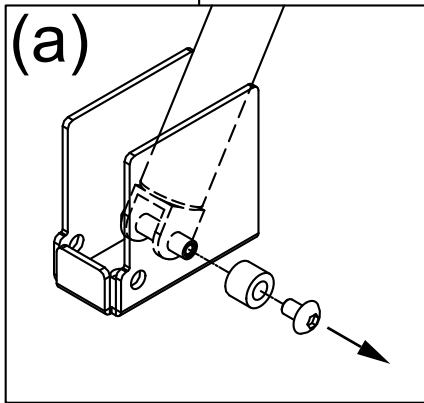
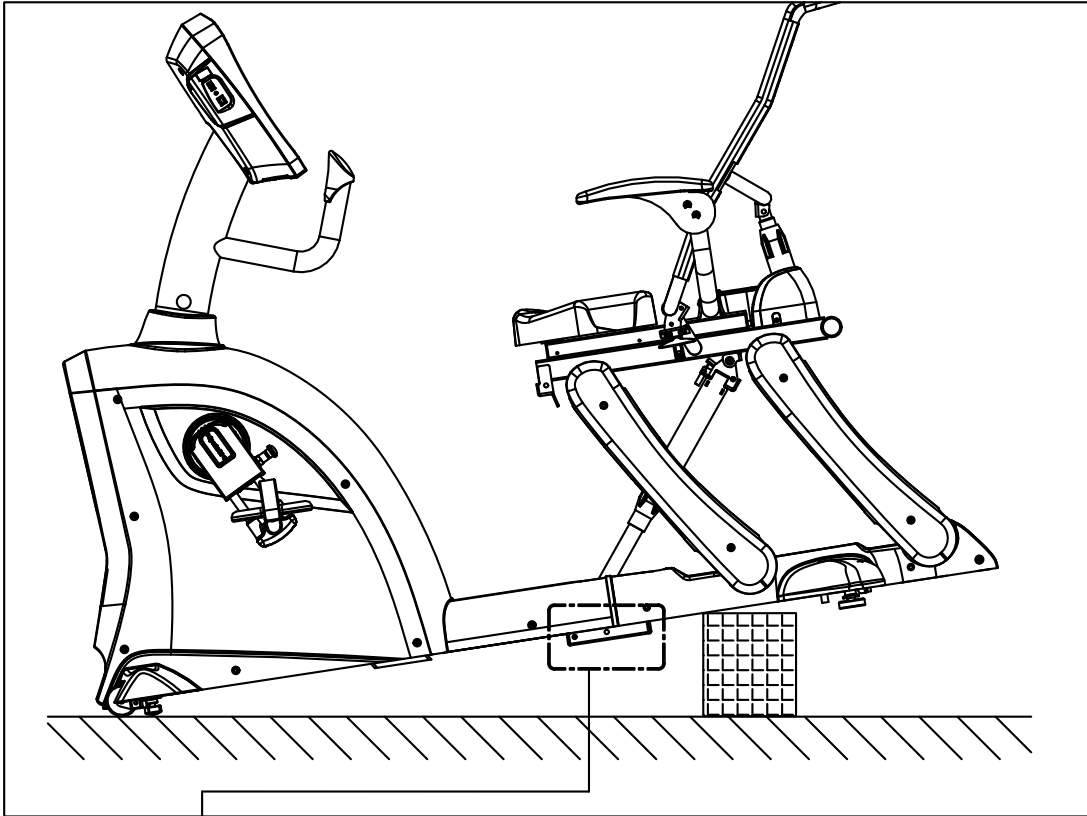
## STEP 12 Connection Point Adjustment (CONT.)

To carry out this optional adjustment, follow steps (a) through (c).

(a) Remove the screw and bushing.

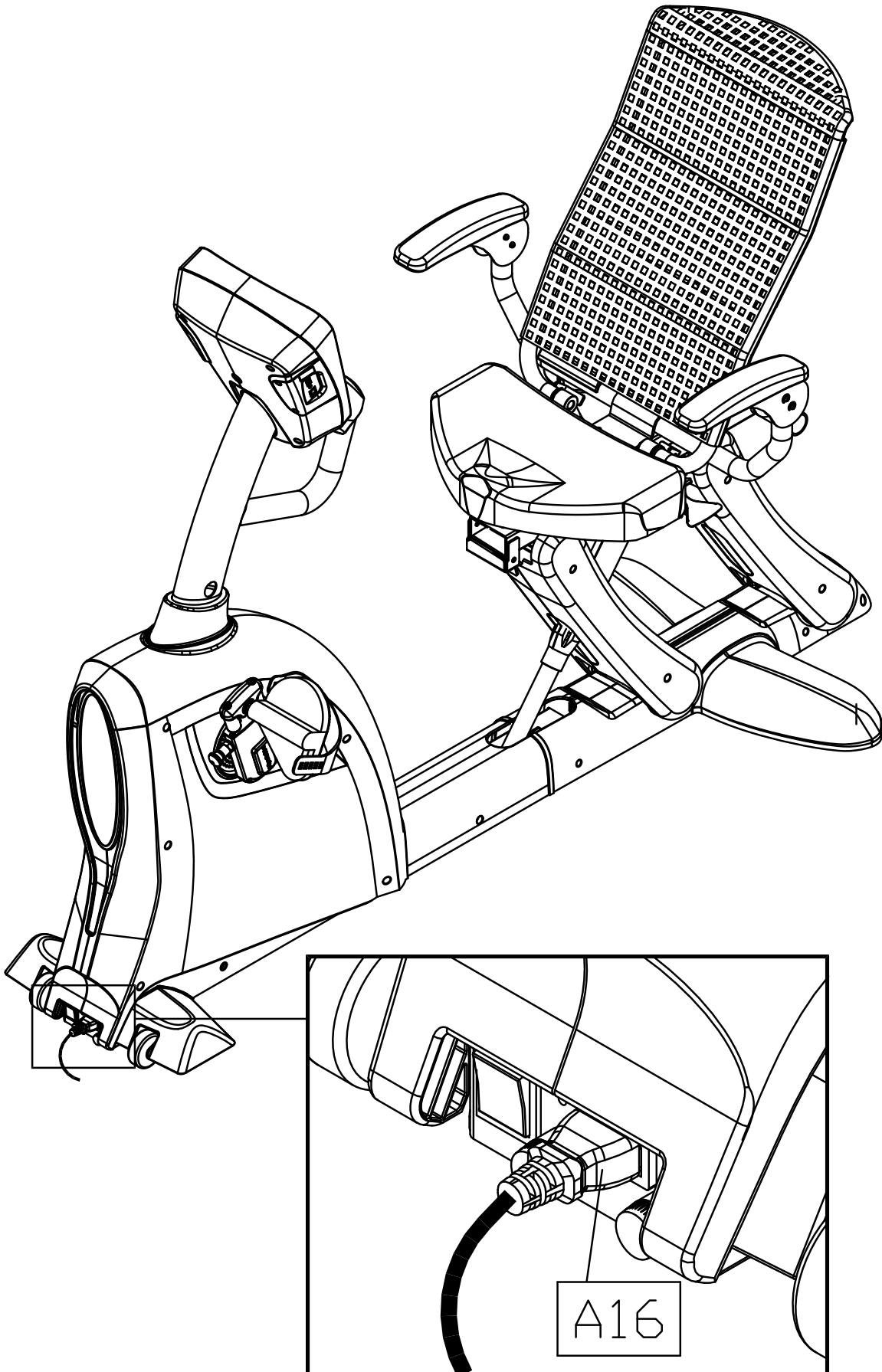
(b) Tap out the set pin.

(c) Move the bottom of the gas spring to align its hole with the other set of holes in the frame. Then, insert the set pin and bushing. Secure them in place with the screw.



## STEP 13 Install the Power Cord

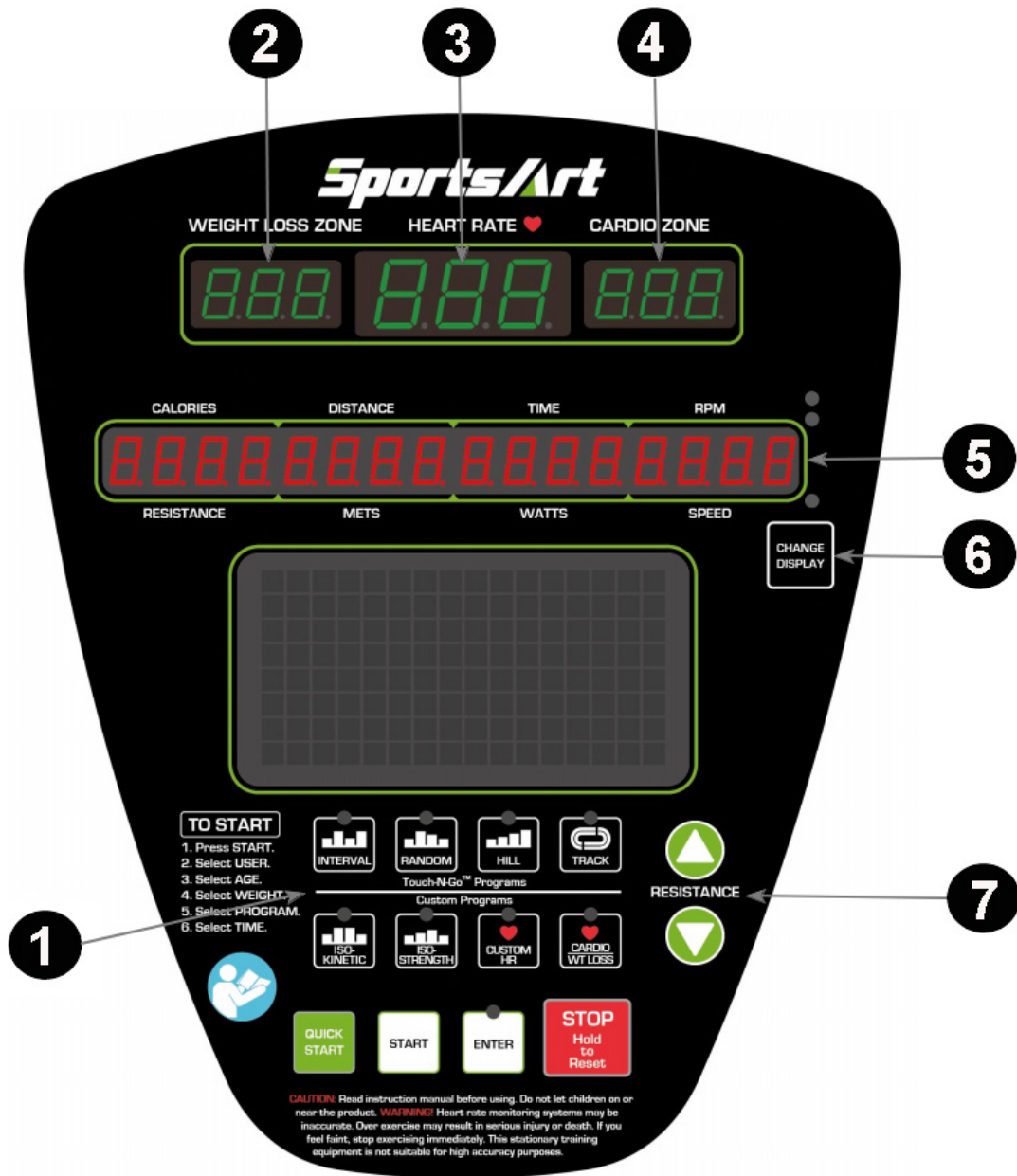
Plug the power cord (A16) into the product. Then plug the other side into a power outlet with the correct voltage and grounding. The power switch has two sides, one marked with a line, the other marked with a circle. To activate the unit, press the line side of the power switch.



# 5. UNDERSTAND THE C521M DISPLAY

## DISPLAY Overview

The C521M display was designed specifically to meet the needs of people in physical therapy and physical rehabilitation. The following explains display key and window functions. Please read this manual, understand display functions, and thereby get optimum benefit from this product.



No.	Description	No.	Description
1	Workout program keys	5	Exercise feedback window
2	Weight loss target heart rate	6	Scan/lock control key
3	Actual heart rate	7	Setting level keys
4	Cardio target heart rate		

## **DISPLAY Specifications**

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- Workout level (resistance level): 1.0 to 20.0.
- Time: 00 to 99:59; setting range: 5:00 to 99:00
- Distance: 0.01 to 9999 km or mile
- Calories: 0 to 9999 kcal
- RPM: 0 to 200
- METS (Metabolic Equivalent of Task): 0.0 to 99.0
- Speed: 0 to 55.9 miles per hour or 0 to 90 kilometers per hour
- Watts: 0 to 9999
- Heart Rate: 40 to 250 beats per minute
- Programs: interval, random, hill, track, iso-kinetic, iso-strength, custom heart rate, cardio conditioning heart rate control, weight loss conditioning heart rate control
- User settings: four, with 11 alphanumeric ID settings
- Age: 10 to 99
- Weight: 66 to 450 lb. or 30 to 205 kg

## **DISPLAY Windows**

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- WT LOSS 65% window shows the target heart rate for weight loss.
- HEART RATE window shows actual heart rate.
- CARDIO 80% window shows the target heart rate for cardio conditioning.
- DOT MATRIX window shows workout illustrations and message prompts.
- EXERCISE FEEDBACK window shows workout status in two rows.  
Top row: calories, distance, time, RPM. Bottom row: workout level, METs, watts, speed.
- SCAN/CHANGE DISPLAY LEDs light to indicate active view modes:  
scan, top row, bottom row.
- PULSE LED flashes to represent the exerciser's heart rate.

## **DISPLAY Keys**

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Display key functions are introduced briefly below.

**CHANGE DISPLAY** – This key controls the exercise feedback screen, which shows workout status in two rows. Corresponding LEDs light to indicate the active row of exercise feedback. Top row: calories, distance, time, RPM. Bottom row: workout level, METs, watts, speed. When the scan indicator is lit, one row of exercise feedback appears for six seconds, then the other row appears for six seconds. Press the CHANGE DISPLAY key to toggle between scan and lock modes, and to view top and bottom rows of workout feedback.

**QUICK START** – Press this key to start exercising without first entering user information including age and weight.

**START** – Press this key to start exercising after first entering user information including age and weight.

## **DISPLAY** Keys (CONT.)

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**WORKOUT PROGRAM KEYS** – When associated LEDs flash, or during a workout, press a workout program key to activate the corresponding workout program. The workout program LED will light to indicate workout activation.

**ENTER** – After making a selection, press this key to confirm your choice.

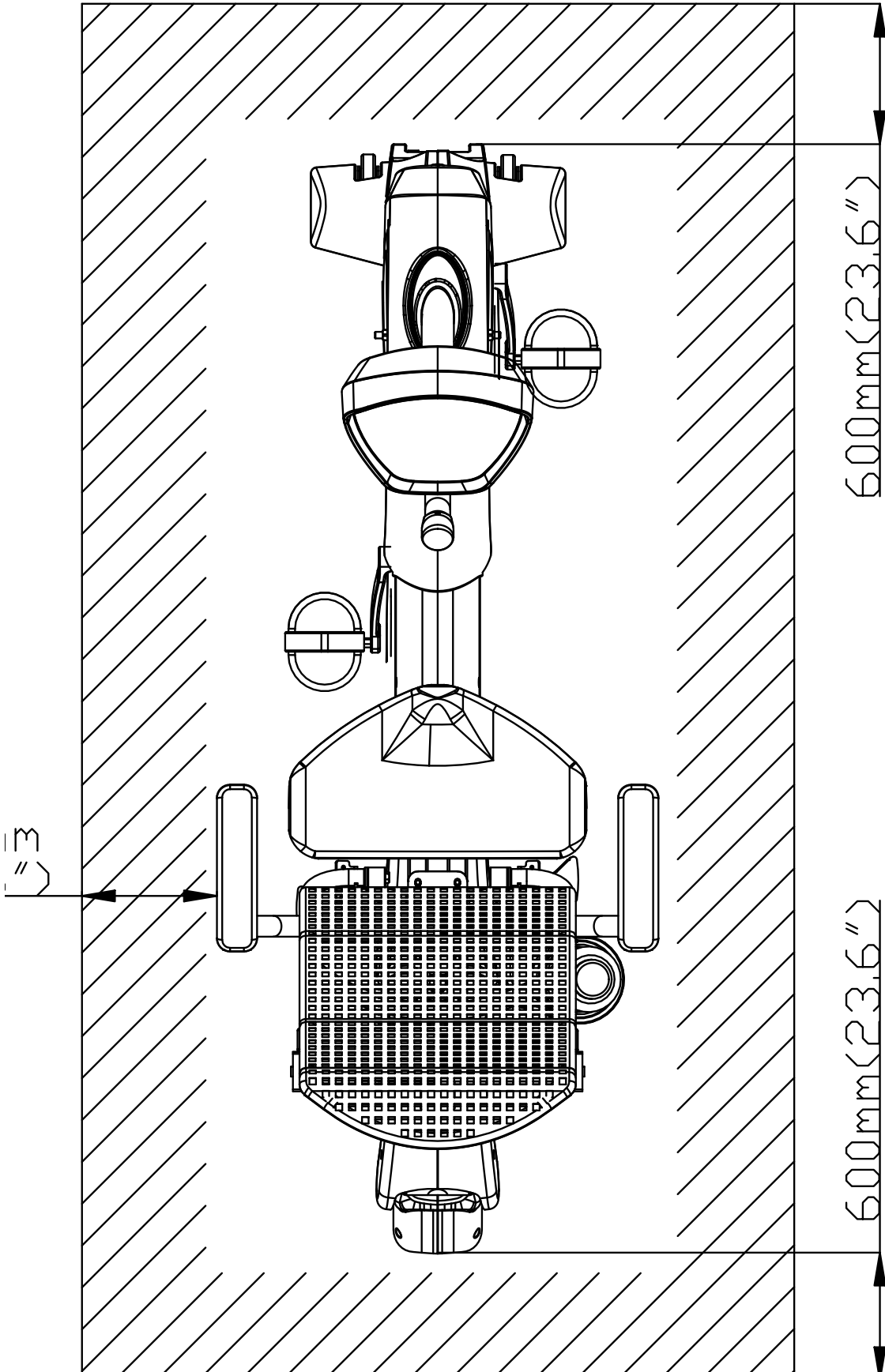
**RESISTANCE▲/▼** – Press these keys to adjust resistance settings. Hold these keys to adjust resistance settings more quickly.

**STOP/HOLD TO RESET** – Press this key to pause. The display will show “ACCU DATA” workout information. Then one of the following messages will appear. If you pressed the QUICK START key to begin your workout, the display will show the startup banner screen, “SPORTSART - C521M”. If you pressed the START key to begin your workout, the display will show the “SELECT PROGRAM” prompt. Under any circumstance, hold this key for three seconds to return to the startup banner screen.

## 6. OPERATE THE PRODUCT

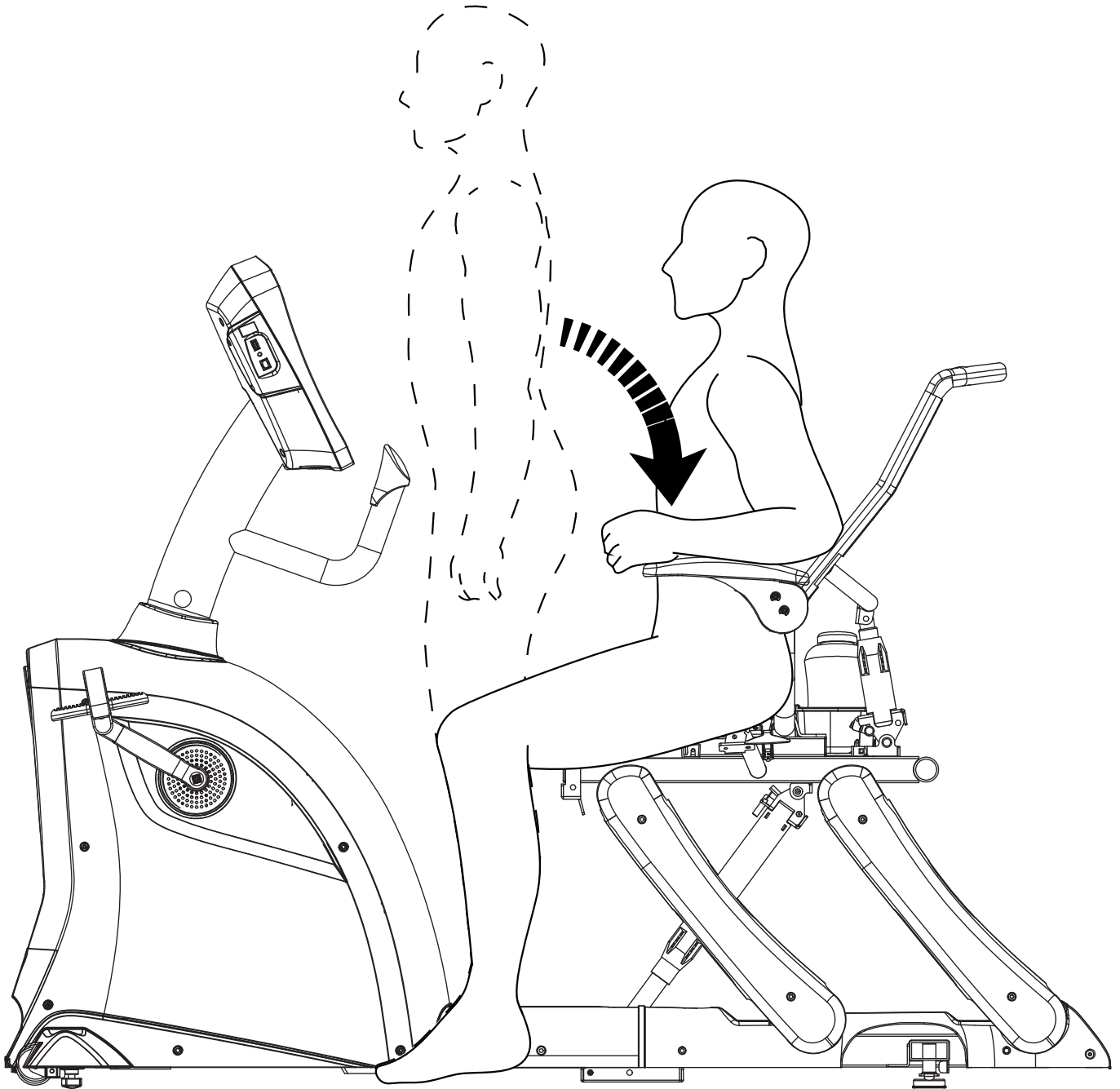
### OPERATION Safety Operating Area

- (a) Safety clearance required as shown below. Do not allow people to be near this area when operating.
- (b) Noise emission under load is higher than without load



## **OPERATION** Safety Get On/Off

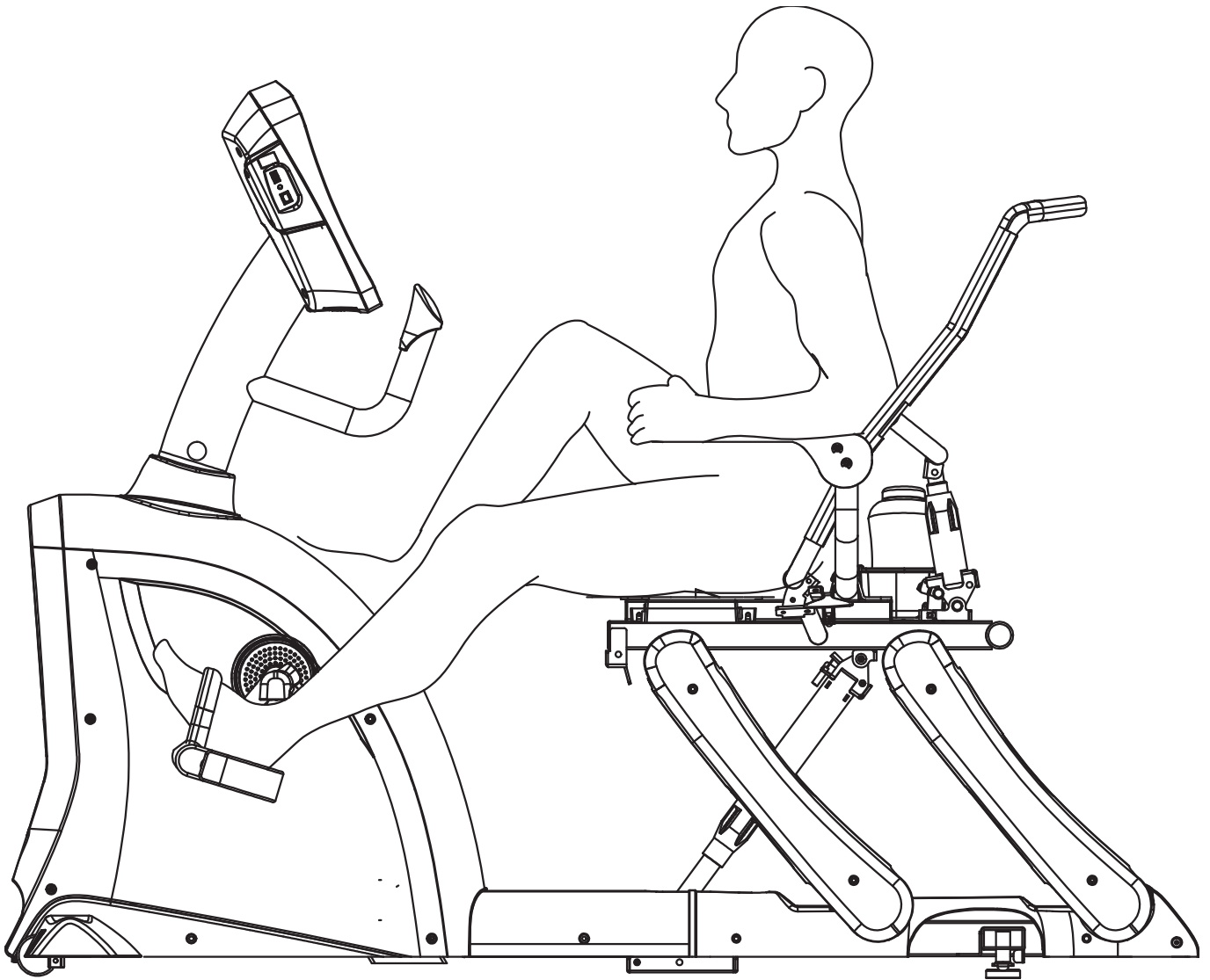
- (a) User proper workout position as shown below.
- (b) Wait until pedals come to a complete stop and then carefully stepping off the cycle.



## **OPERATION** Proper Workout Position

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- (a) User proper workout position as below shown.
- (b) Over exercise or improper workout position may result in serious injury.
- (c) User can hold onto handles for stability when getting on or getting off from the right/left side of the product.
- (d) This product is intended for exercise legs.



## **OPERATION Quick Start**

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There are two ways to start operating the C521M upper body ergometer: Either press the QUICK START key to begin exercising immediately, or press the START key to begin exercising after inputting user information.

At the startup banner screen, press the QUICK START key to start exercising immediately. The default user weight of 165 lb. or 75 kg and default age of 35 years will be the basis for calorie and target heart rate calculations. Time will count up. Resistance will start at level 1 and can be modified at any time. In this mode of operation, workout programs, except for iso-kinetic and iso-strength, can be activated at any time. Time will count up. Resistance can be modified at any time.

If no one rotates the handles, the display will show “PEDAL TO START” once every four seconds. If no one rotates the handles for more than two minutes, the display will show the startup banner screen, “SPORTSART – C521M”.

## **OPERATION Start**

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At the startup banner screen, press the START key to begin a workout after first creating a user ID and inputting user information. This operation mode offers two main advantages:

User IDs make workout tracking easy. Accumulated workout time, distance, and calorie expenditure information for a particular exerciser appears before and after each workout. User age and weight provide the basis for calorie and target heart rate calculations. By inputting the exerciser’s actual age and weight, target heart rates and calorie expenditure values may be more appropriate to the user. Follow instructions below to establish a user ID and input user age and weight information.

### **USER ID**

At the startup banner screen, press the START key. The last user ID to be activated will appear, along with that user’s accumulated workout statistics. One of the following four screens will appear every six seconds:

<b>USER-1</b>
<b>TIMES-25:05</b>
<b>DIST-15.8</b>
<b>CALS-1020</b>

If desired, press ▲/▼ keys to select a different user ID. Then press the ENTER key to confirm your choice.

Once a user number (for instance, USER-1) is selected, an alphanumeric user name can be established. To make an alphanumeric user name, while the user number appears, hold the CHANGE key for three seconds. The following prompt will appear:

<b>ENTER-ID</b>
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## **OPERATION** Start (CONT.)

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Press ▲/▼ keys to select an alphanumeric character. When the character of your choice appears on screen, press the ENTER key. Repeat this process to add more characters to the user name. When the name is complete, hold the ENTER key for three seconds. The display will show the user name.

To delete a user name, select the user name and press the CHANGE key for three seconds. To modify a user name, first delete the user name (as above) and begin the naming process again.

To delete accumulated information for a particular user, simultaneously press the STOP and START keys. Accumulated exercise time, rotations, and distance for that particular user will be erased to zero.

After establishing a user ID number or name, input user age and weight as follows.

**AGE** - The age range is from 10 to 99, with a default age of 35. Age is used to calculate target heart rates. Press ▲/▼ keys to select your age, then press the ENTER key to confirm your age selection.

**WEIGHT** - The weight range is from 66 to 450 lb. or 30 to 205 kg, with a default weight of 165 lb. or 75 kg. Weight is used to calculate calorie expenditure values. Press ▲/▼ keys to select your weight, then press the ENTER key to confirm your weight selection.

Once user age and weight values have been established, select a workout program to begin a workout.

## **OPERATION** Workout Program.

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To select a workout program, press a workout program key. The associated workout program LED will light. Press the ENTER key to confirm your selection and proceed to set the workout duration. Press ▲/▼ keys to select a workout time. Then press the ENTER key to confirm your choice.

General notes about workout programs follow:

- Resistance and time settings can be changed during workouts. Workout time values accrue from the start. The active segment of the workout is represented by the flashing LED.
- While in one workout, another workout program can be activated. Time continues to accrue. Other exercise feedback, such as distance, accrues as the exerciser turns the cranks.
- In time countdown mode, a different workout program can be selected. Exercise feedback, such as distance, accrues as the exerciser pedals. Specific information about workout programs follows.

### **TRACK**

This workout could as well be called manual. Simply press resistance keys to set resistance. This program simulates a quarter mile (400 meter) track.

### **HILL**

Press the HILL key to toggle between three hill workout options, HILL-1, HILL-2, HILL-3.

### **RANDOM**

This program produces a near infinite number of randomly generated workouts. Simply press the RANDOM key to view a different workout.

## OPERATION Workout Programs (CONT.)

### INTERVAL

Interval workouts include one rest and one work segment. The resistance and duration of each segment is determined before the workout begins. The resistance range is 1.0 to 20.0. Time range is from one to four minutes.

Follow prompts to input segment settings. Press the CHANGE key to toggle between level and time settings. Press the RESISTANCE ▲/▼ keys to change setting values. Press the ENTER key to confirm your settings and proceed to the next segment.

Segment settings can also be changed after the workout begins. To do so, simply press resistance keys during an interval segment. The new resistance setting will apply to this segment thereafter.

### WT LOSS & CARDIO

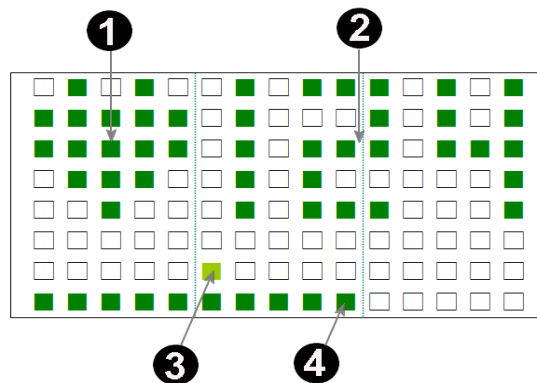
In these heart rate control programs, the resistance level and recommended rotations per minute (RPM) will automatically change to keep the exerciser's pulse at the optimum rate for achieving his or her exercise goals. Target heart rates are calculated as follows:

$$\text{WT LOSS } 65\% = (220 - \text{age}) \times 65\%$$

$$\text{CARDIO } 80\% = (220 - \text{age}) \times 80\%$$

This program requires that the exerciser wear a telemetry heart rate transmitter. If the display does not receive a heart rate signal, the message "NO HEART RATE READING, PLEASE CHECK TRANSMITTER" will appear. At this point, resistance can only be adjusted manually.

Upon the activation of a heart rate control program, the display will appear as shown in the following example:



No.	Description	No.	Description
1	Heart illustration	3	Suggested RPM
2	Heart rate value	4	Actual RPM

Resistance will begin at LEVEL 1.0. Suggested rotations per minute will be 50 RPM. Heart rate values change according to actual heart rate.

When the exercise time expires, a cool down period will begin automatically. See OPERATION Cool Down for more information.

## **OPERATION** Workout Programs (CONT.)

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### **CUSTOM HR**

In this heart rate control program, the exerciser determines target heart rate.

Follow prompts to input your target heart rate. Target heart rate range is 84 to 199, with a default setting of 120.

### **ISO-KINETIC**

In this program, the target RPM is fixed; resistance automatically changes to maintain the target RPM. The target RPM range is 15 to 180, with a default value of 50. During the workout, the target RPM value can be set by pressing RESISTANCE ▲/▼ keys. Resistance will change automatically to maintain the target RPM setting.

### **ISO-STRENGTH**

In this program, the target wattage is fixed; resistance automatically changes to maintain the target wattage. The target wattage range is 10 to 800, with a default value of 10. During the workout, the target wattage value can be set by pressing RESISTANCE ▲/▼ keys. Resistance will change automatically to maintain the target wattage setting.

## **OPERATION** Cool Down

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Once a workout goal is obtained, the display will show "ACCU DATA". Accumulated workout data, including time, distance, calorie expenditure, and average heart rate, will appear on the display, and a two-minute cool down period will begin. "COOL DOWN" will appear, and time will count down from 2:00 to 0:00.

Once the cool down period ends, workout program LEDs will flash, and the exercise feedback window will show "SELECT PROGRAM". At this point, another workout can be activated after pressing the START or QUICK START key.

## **OPERATION** User Preferences and Part Versions

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This product allows the user to determine whether feedback appears in metric or imperial units of measure and whether user IDs can be activated. Usage information, including time and distance, and display and drive board program versions, can also be made available. To access these features, while the startup banner screen, "SPORTSART – C521M", appears, hold the CHANGE key for three seconds.

### **UNITS**

The exercise feedback screen will show one of the following messages:

**UNIT - L B**

**UNIT - K G**

Press ▲/▼ keys to toggle between imperial and metric unit settings. While your preference appears, press the ENTER key to confirm the unit setting.

## **OPERATION** User Preferences and Part Versions (CONT.)

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### **TIME**

The exercise feedback screen will show the product's total time in use.

**T I M E - X X X X X X H O U R**

### **DISTANCE**

Press the ENTER key to proceed and view the product's total distance.

**D I S T - X X X X X X X X K M**

Press the ENTER key to proceed and enter USER ID activation mode.

### **USER**

The following message will scroll across the screen.

**P R E S S U P / D N T O A C T I V A T E O R D E A C T I V A T E 4 U S E R S E T T I N G**

Press ▲/▼ keys to toggle between the following views:

**U S E R I D - O N**

**U S E R I D - O F F**

While your preference appears, press the enter key to confirm your choice.

On the exercise feedback screen, the display board program version will appear as CTL XXXXX – XX, for example, CTL C521M - 1A.

Press the ENTER key to proceed and view the drive board program version. On the exercise feedback screen, the drive board program version will appear as DRV XXXXX – XX, for example, DRV C521M - 1A.

Press the ENTER key to return to the startup banner screen. If no one presses the ENTER key for four seconds, the following reminder will appear:

**P R E S S E N T E R**

Once the ENTER key is pressed, the unit exits this user preference mode.

The startup banner screen will appear, and a workout can begin.

## 7. ABOUT HEART RATE DETECTION

Heart rate detection functions are selected at the time of purchase. Not every product has every type of heart rate detection. The following explains factors that influence the performance of two of the most common types of heart rate detection devices.

### HEART RATE Telemetry

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The words “telemetry heart rate” refer to the detection of heart rate via a device worn on the exerciser and transmitted over the air to a circuit board built into the product. Telemetry heart rate devices are commonly worn on the exerciser’s chest, where the pulse is strongest and relatively easy to detect.

The following explains conditions that affect the performance of the telemetry heart rate function in all products.

- The telemetry heart rate transmitter emits a wireless 5 kHz signal that is harmless to the human body. Inside the transmitter is a 3 V battery (CR2032). If the battery voltage is too low, either the reception distance shortens or there will be no reception whatsoever.
- Secure the telemetry heart rate transmitter on your chest so that it stays in place without making you feel uncomfortable. Moisten the skin for better contact.
- Because the telemetry heart rate signal varies in strength from 20 Hz to 20 KHz, environmental interference can block signal reception. Physical vibration and electronic devices, including stereos, TVs, and even fluorescent lights, can interfere with signal reception. For best results, install the product in an area free from such interference.
- Space the product apart by at least 39 inches (100 cm) to avoid having the heart rate value from one exerciser appear on a neighboring product.

### HEART RATE Contact

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The words “contact heart rate” refer to the detection of the heart rate via sensors on the product. By holding the sensors, the exerciser can view his or her heart rate on the product display. Like telemetry heart rate, contact heart rate can be influenced by several factors. The following list includes some of these factors.

- A weak pulse makes it difficult to detect heart rate.
- Low systolic blood pressure makes it difficult to detect heart rate.
- Dry, course palms impede heart rate detection. For best results, moisten your palms. But do not apply hand lotion immediately prior to your workout, because hand lotion can gum up the contact pads.

Heart rate devices built into this product are not medical devices. Heart rate values are for reference only. Do not use them for medical diagnostic or treatment work.

**CAUTION:** Heart rate detection and transmission devices have been known to interfere with the operation of pacemakers, possibly endangering human life. If you have a pacemaker, exercise under your doctor’s supervision; take a test to ensure your safety during the simultaneous use of the pacemaker and heart rate detection devices. The use of such devices must be undertaken at your own risk.

Note that in dry areas in particular, static electricity can interfere with unit operation and shock people. To discharge static electricity from your body, touch something else before touching metal on the product.

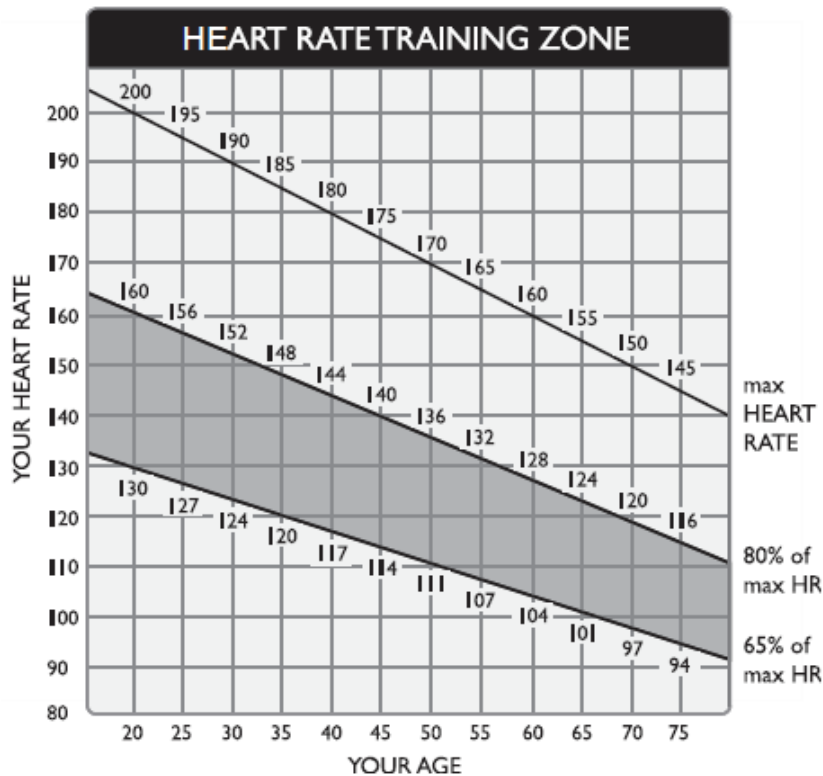
## 8. GUIDELINES FOR EXERCISE

### HOW HARD SHOULD I EXERCISE?

Studies show that to benefit from aerobic exercise, people need to maintain a certain heart rate during their workouts. Your heart rate training zone depends on your age and fitness level.

The darkened area in the chart to the right represents the recommended heart rate training zone for people of various ages. It was calculated by taking 220 minus age in years, multiplied by 65% and 80%. The area between those values is the heart rate training zone.

**CAUTION:** Heart rate training zones are generalizations and may not suit every person. Always check with your physician to understand what heart rate goal would be appropriate for you.



### HOW LONG SHOULD I EXERCISE?

The duration of your workout must depend on your fitness level. In general, it is recommended that you maintain a heart rate within your training zone for at least 15 to 20 minutes to experience the benefits of aerobic exercise. Beginners should always start out slowly and gradually increase the duration and intensity of their workouts. As your fitness level improves, you will be able to maintain a heart rate within the training zone for longer periods of time.

When you begin your workout, use the first several minutes to warm up. Then slowly increase the intensity of your workout to bring your heart rate into your training zone. At the end of your workout, gradually decrease your workload. Then exercise lightly to cool down.

### HOW OFTEN SHOULD I EXERCISE?

Research indicates that to achieve the greatest benefit, people should exercise three to five times per week. It is important to allow sufficient time, at least 24 hours, for your body to recover after exercise.

## 9. MAINTENANCE

This section covers maintenance topics, including instructions on replacing a fuse and lubricating the walk belt, along with the presentation of a maintenance schedule, maintenance task list, one-year maintenance log, and electronics block diagram.

### MAINTENANCE Safety Precautions

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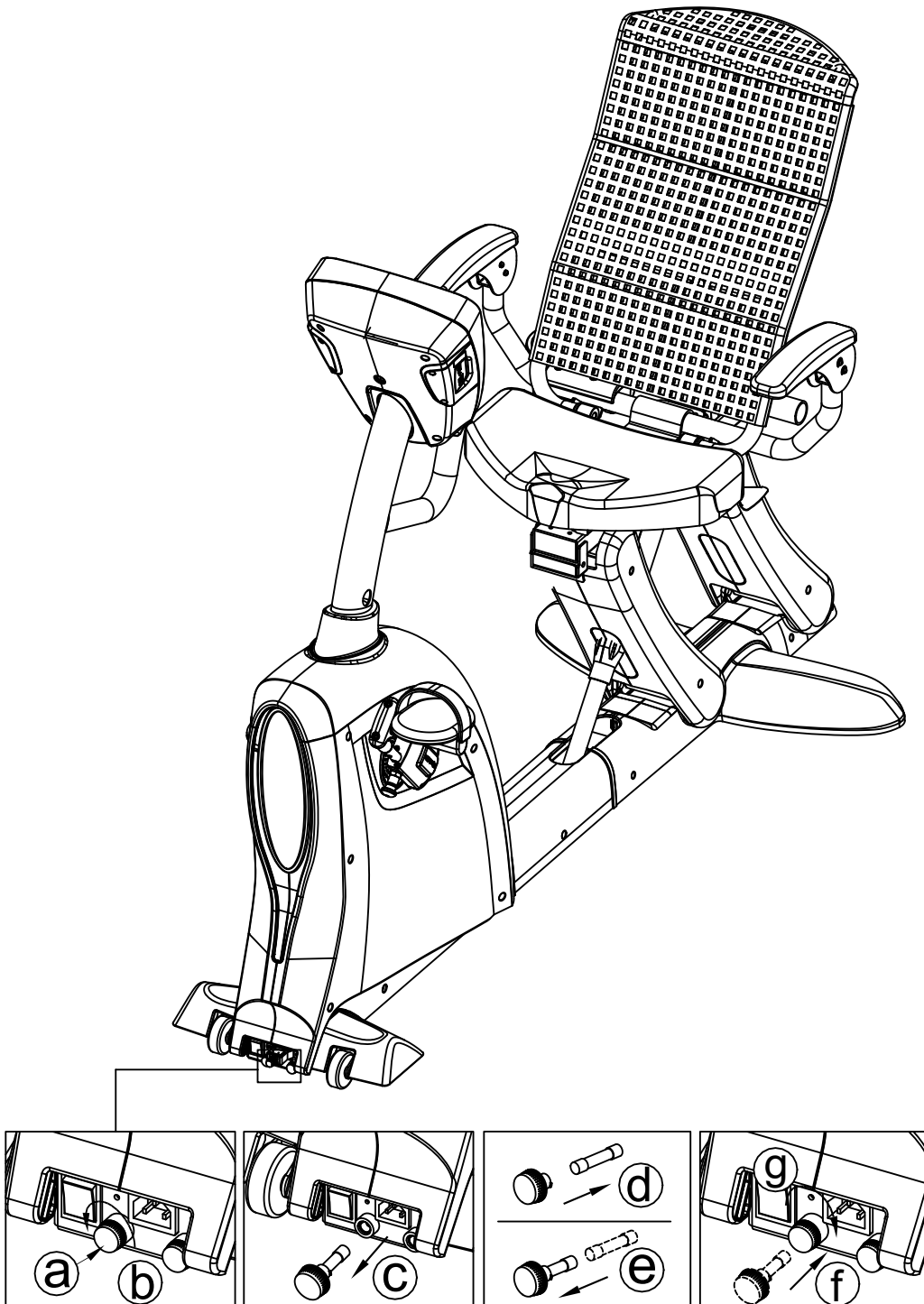
- Please follow standard safety precautions when servicing this product.
- Electronic components can carry an electrical charge even after the product has been turned off. For safety, turn off unit power. Wait five minutes to allow capacitors to discharge. Then disconnect the power cord from the wall socket (if applicable.) Only after such steps have been completed should covers be removed and electronic components accessed.
- Do NOT use a water damp towel to clean the product and do perform the following maintenances.
- Do NOT use cleaners with alcohol, ammonia, or other damaging chemicals. The use of such chemicals can damage the product and void the warranty. Never spray or pour any liquid directly onto the product. Doing so can damage electronic components and void the warranty.
- Use a clean, lint-free towel, dampened with a mixture of Simple Green® all-purpose cleaner, to thoroughly clean the handlebar and the console.
- This product has moving parts that can be hazardous. Exercise caution when maintaining, operating, or moving this product.
- Do not use accessories or parts that are not specifically recommended by the manufacturer (SportsArt) . Such parts might cause injuries or cause the unit to fail and void the warranty. We are not responsible for any safety issue that arises due to the misuse of accessories or parts. At the same time, we will terminate the warranty terms of this equipment.
- The cycle should be disconnected from its power source during service and when replacing parts.
- Maintenance and repair must be performed by trained service personnel only. Improper maintenance would not only damage the machine, but may also present a danger to the exerciser.
- Keep this product out of use until maintenance is completed.
- If you need to remove any cover for repair or maintenance, please contact your service technician or dealer, do not attempt repairs on your own.

## MAINTENANCE Replacing the Fuse

If the electrical current becomes excessive, the fuse will break to protect the product. To replace the fuse, follow steps (a) through (f) below.

- (a) Press in on the fuse cap.
- (b) Turn it counterclockwise.
- (c) The cap and fuse will pop out.
- (d) Remove the burnt out fuse from the cap.
- (e) Insert a new fuse of the appropriate specifications into the cap.
- (f) Inset the new fuse into the fuse holder.
- (g) Turn the fuse cap clockwise to secure the fuse into place.

Fuse: (110V) 1A 6\*30mm; (220V) 0.5A 6\*30mm



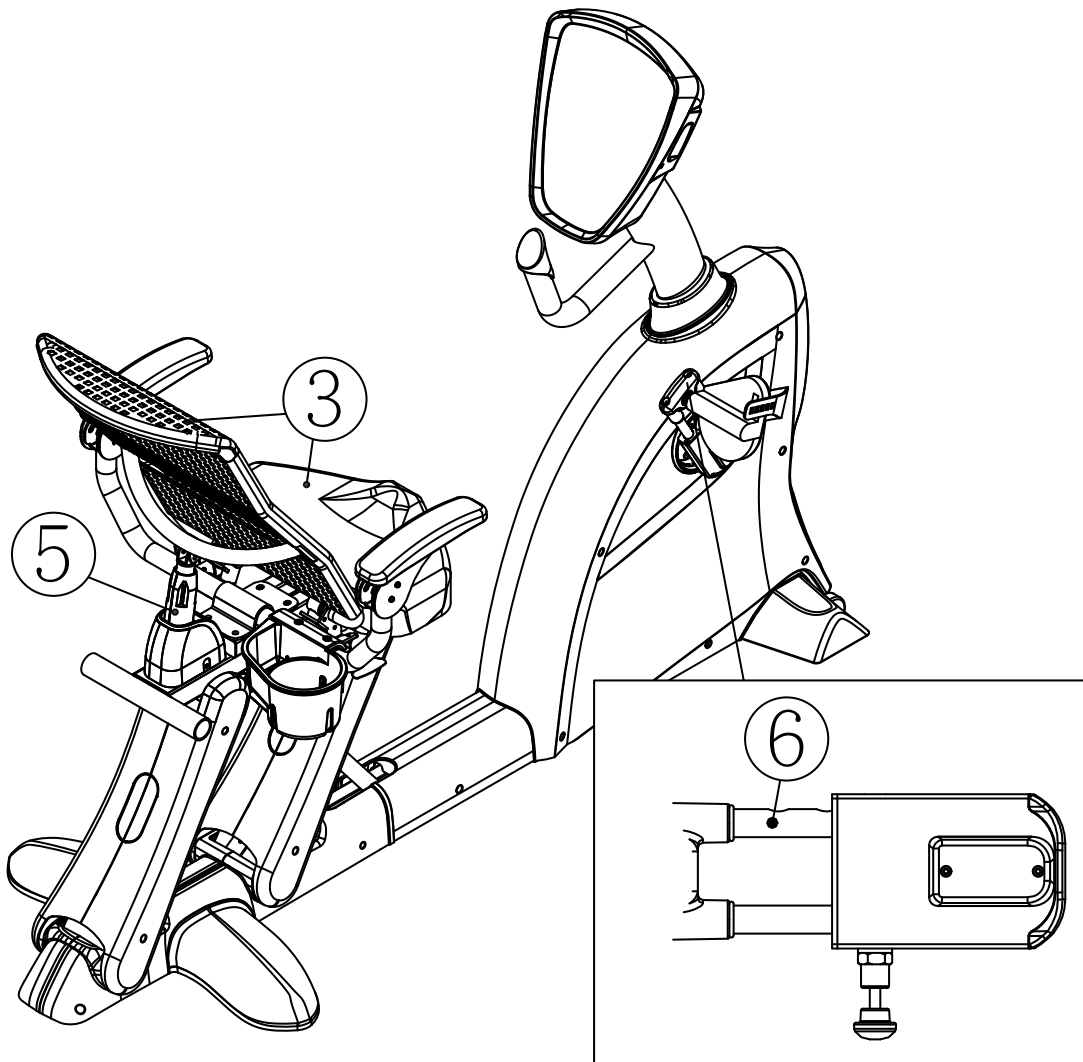
## MAINTENANCE Schedule

If there is a need for maintenance of components, please visit the SportsArt website.

The disinfectant has to be in compliance with Medical Device Directive 93/42/EEC (MDD) and Biocidal Products Directive 98/8/EC (BPD).

It is suited for sensitive synthetic surfaces such as synthetic leather, polycarbonate (PC), acrylic glass and polysulfone, and for the keyboards and control panels.

	Area	Day	Week	Month	Quarter	Year	Notes
1	Unit exterior	●					Clean
2	Screws	●					Inspect for looseness.
3	Seat back and bottom	●					Wipe clean with a damp cloth.
4	Crank screws	●					Inspect for looseness. Tighten if needed.
5	Shock		●				Inspect for normal operation.
6	Adjustable crank		●				Apply original 66A lubricant.



## **MAINTENANCE** Task List

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Like cars, fitness products require maintenance. Regular maintenance extends product life, and failure to maintain products can void the manufacturer's warranty. Copy the maintenance log sheet, and record maintenance work for each fitness product.

### **DAILY TASKS**

1. Use a clean, lint-free towel, dampened with a mixture of Simple Green® all-purpose cleaner and water, to thoroughly clean the product exterior.
2. Inspect parts for looseness, and secure all loose screws. Make sure that the product is safe for operation. If safety issues arise, place an "Out of Order" sign on the product, and call for service.
3. Use a clean, lint-free towel, dampened with a mixture of Simple Green® allpurpose cleaner and water, to clean the seat bottom and back (if applicable).
4. Inspect pedals and secure them if necessary.

### **WEEKLY TASKS**

1. Inspect the shock for normal operation.
2. Apply SportsArt 66A Lubricant to the adjustable crank.

Please follow standard safety precautions when working on this product.

- Electronic components can carry an electrical charge even after the product has been turned off. For safety, turn off unit power. Wait five minutes to allow capacitors to discharge. Then disconnect the power cord from the wall socket (if applicable). Only after such steps have been completed should covers be removed and electronic components accessed.
- Do NOT use cleaners with alcohol, ammonia, or other damaging chemicals. The use of such chemicals can damage the product and void the warranty. Never spray or pour any liquid directly onto the product. Doing so can damage electronic components and void the warranty.
- This product has moving parts that can be hazardous. Exercise caution when maintaining, operating, or moving this product.

# MAINTENANCE One-Year Maintenance Log

Facility: \_\_\_\_\_

Supervisor: \_\_\_\_\_

Product model number: \_\_\_\_\_

Serial number: \_\_\_\_\_

Start date: \_\_\_\_\_

End date: \_\_\_\_\_

Daily Tasks	Week 1-7							Week 8-14							Week 15-21							Week 22-28									
Completed																															

Daily Tasks	Week 29-35							Week 36-42							Week 43-49							Week 50-52									
Completed																															

Weekly Tasks	Week 1-7							Week 8-14							Week 15-21							Week 22-28									
Completed																															

Weekly Tasks	Week 29-35							Week 36-42							Week 43-49							Week 50-52									
Completed																															

Monthly Tasks	1	2	3	4	5	6	7	8	9	10	11	12
Completed												

Quarterly Tasks	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Completed				

Yearly Tasks	Year 1
Completed	

Notes: \_\_\_\_\_

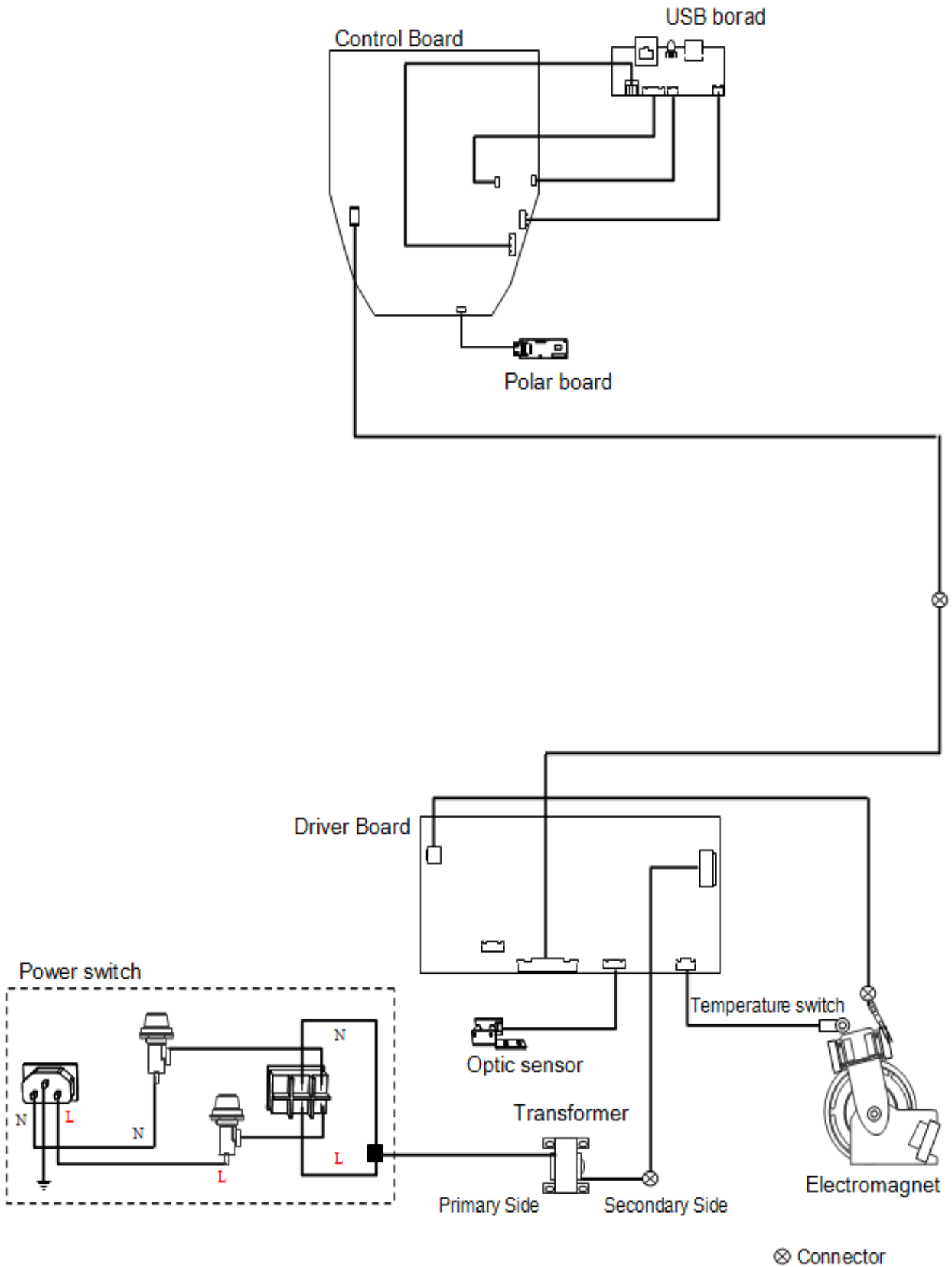
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# 10. APPENDIXES

## APPENDIXES Exploded Diagrams



Your Authorized Distributor