Cybex 772A, 772AT Arc Trainer®
Service Manual

www.cybexintl.com

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www.cybexintl.com • •

FCC Compliance Information

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B 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 this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Safety

Safety Guidelines and Practices

Read the Owner's Manual carefully before assembling, servicing, or using the equipment. Owner must comply with all safety guidelines in this manual. It is also the owner's responsibility to instruct users on the safe and proper operation of the equipment and to properly display any and all warning labels and instructional placards. All users should read these labels and placards before using equipment.

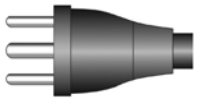
WARNING Serious injury or death could occur if the following safety precautions and instructions are not followed.

Power Cord Information

WARNING Shock and electrocution hazard.
- Connect unit to a grounded outlet.
- Do not use voltage adapter or extension cord.

NOTICE Cybex is not responsible for injuries or damages as a result of cord or plug modification.
- Verify voltage requirements of unit match local voltage requirements.
- Verify unit outlet is the same configuration as the plug.

Power cord configuration

		115 VAC	NEMA 5-15
		Euro Plug	CEE 7/7
		UK 230 VAC	BS 1363
		Japanese	JIS 8303
		Danish	107-2-D1

		Australia	AS/NZS 3112
		Chinese	GB 2099-1 and GB 1002-1
		Brazil	IEC-60320-C13

Important Safety Instructions

(Save These Instructions)

⚠WARNING

Shock and electrocution hazard.
- Unplug unit and let sit 10 minutes before cleaning or performing maintenance.
- Electrical charge can remain in unit after unplugging.
- Keep water and liquids away from electrical parts.

User Safety Precautions

Prior to use:

- Obtain a medical exam before beginning any exercise program.
- Obtain instruction before using.
- Read and understand warning labels.
- Keep foot plate surface clean and dry.
- Maximum user weight is 400 lbs. (180 kg).
- Inspect unit. If damaged, notify floor staff. DO NOT USE.
- Do not remove this label. Replace if damaged or illegible.

During use

- Do not use for stretching and do not attach straps or other devices.
- Do not allow children 12 or younger to be on or near machine.
- Stop exercise if feeling faint, dizzy, or have pain.
- Use the handrails for support and to maintain balance.
- Keep all body parts, clothing, and accessories, clear of moving parts.
- Wait until foot plates come to a complete stop before getting off.

Facility Safety Precautions

It is the sole responsibility of the user/owner or facility operator to ensure that regular maintenance is performed.

- Enforce all user and safety precautions.

- Read and understand the Owner's Manual completely before assembling, servicing or using unit.
- Verify all users are properly trained on using the equipment.
- Do not use unit outdoors.
- Verify that each unit is setup, leveled and operated on a solid level surface. Do not install equipment on an uneven surface.
- Verify there is enough room for safe access and operation of unit.
- Use Cybex AC power adapters only.
- Do not use the optional power adapter in damp or wet locations.
- Do not use the unit if: (1) the unit is plugged into an optional power adapter that has a damaged cord; (2) the unit is not working properly or (3) if the unit has been dropped or damaged. Seek service from a qualified technician.
- EQUIPMENT is not suitable for use in the presence of aerosol (spray), FLAMMABLE ANAESTHETIC MIXTURE WITH AIR or WITH OXYGEN or NITROUS OXIDE.
- Perform regular maintenance checks on unit. Performance level can be maintained only if examined regularly. Pay close attention to all areas most susceptible to wear, including (but not limited to) cables, pulleys, belts and grips.
- Replace any warning labels if damaged, worn, or illegible.
- Immediately replace worn or damaged components. If unable to immediately replace worn or damaged components, then remove unit from service until repair is made.
- Do not attempt electrical or mechanical repairs.
  Seek qualified repair personnel when servicing. If you live in the USA, contact Cybex Customer Service at 888-462-9239. If you live outside the USA, contact Cybex Customer Service at 508-533-4300.
- Use only Cybex supplied components to maintain/repair unit.
- Keep a repair log of all maintenance activities.
- Disconnect the optional power adapter before servicing unit.
- Do not use attachments unless recommended for the unit by Cybex.
- The unit may generate electromagnetic or other forms of interference, or it may be affected by interference from other equipment nearby. If this is suspected, take precautions by separating the equipment or otherwise shielding it to avoid such interference.

Warnings and Cautions

Warning labels indicate a potentially hazardous situation that could result in serious injury or death if the precautions are not observed.

Caution labels indicate a potentially hazardous situation that could result in serious injury or damage to machine if the precautions are not observed.

Contact *Customer Support Services* to replace any worn or damaged labels.

WARNING
Serious injury could occur if these precautions are not observed
Heart rate monitoring systems may be inaccurate. Over exercise may result in serious injury or death. If you feel faint, stop exercising immediately.
Prior to use:
• Obtain a medical exam before beginning any exercise program.
• Obtain instruction before using.
• Read and understand warning labels.
• Keep foot plate surface clean and dry.
• Maximum user weight is 400 lbs. (180 kg).
• Inspect unit. If damaged, notify floor staff. DO NOT USE.
• Do not remove this label. Replace if damaged or illegible.
WARNING

WARNING
Serious injury could occur if these precautions are not observed
During Use:
• Do not use for stretching and do not attach straps or other devices.
• Do not allow children 12 or younger to be on or near machine.
• Stop exercise if feeling faint, dizzy, or have pain.
• Use the handrails for support and to maintain balance.
• Keep all body parts, clothing, and accessories, clear of moving parts.
• Wait until foot plates come to a complete stop before getting off.
• Do not remove this label. Replace if damaged or illegible.
WARNING

Canadian

AVERTISSEMENT
Des blessures graves pourraient se produire si ces précautions ne sont pas respectées
Les systèmes de surveillance de la fréquence cardiaque peuvent être inexacts. Un exercice intensif peut entraîner des blessures graves ou la mort. Si vous ressentez une sensation de malaise, arrêter immédiatement l'exercice.
Conseils d'utilisation:
• Obtenir un examen médical avant de commencer tout programme d'exercice.
• Obtenir des instructions avant toute utilisation.
• Lire et comprendre les étiquettes d'avertissement.
• Garder la surface de la plaque de pied propre et sec.
• Le poids maximum de l'utilisateur ne doit pas dépasser 400 lb. (180 kg).
• Inspecter l'appareil. S'il est endommagé, en aviser le personnel. NE PAS UTILISER.
• Ne pas enlever cette étiquette. Remplacer si endommagé ou illisible.
Pendant l'utilisation:
• Ne pas utiliser pour les étirements et ne pas attacher des sangles ou autres dispositifs.
• Ne pas permettre aux enfants de 12 ans ou moins de rester près de la machine.
• Arrêter l'exercice si vous ressentez une faiblesse, un étourdissement ou une douleur.
• Utiliser des rampes de soutien pour maintenir l'équilibre.
• Garder votre corps, vos vêtements et vos accessoires éloignés des pièces mobiles.
• Attendre l'arrêt complet de la plaque pied avant de descendre.
• Ne pas enlever cette étiquette. Remplacer si endommagé ou illisible.
AVERTISSEMENT

WARNING
Serious injury could occur if these precautions are not observed
Heart rate monitoring systems may be inaccurate. Over exercise may result in serious injury or death. If you feel faint, stop exercising immediately.
Prior to use:
• Obtain a medical exam before beginning any exercise program.
• Obtain instruction before using.
• Read and understand warning labels.
• Keep foot plate surface clean and dry.
• Maximum user weight is 400 lbs. (180 kg).
• Inspect unit. If damaged, notify floor staff. DO NOT USE.
• Do not remove this label. Replace if damaged or illegible.
During Use:
• Do not use for stretching and do not attach straps or other devices.
• Do not allow children 12 or younger to be on or near machine.
• Stop exercise if feeling faint, dizzy, or have pain.
• Use the handrails for support and to maintain balance.
• Keep all body parts, clothing, and accessories, clear of moving parts.
• Wait until foot plates come to a complete stop before getting off.
• Do not remove this label. Replace if damaged or illegible.
WARNING

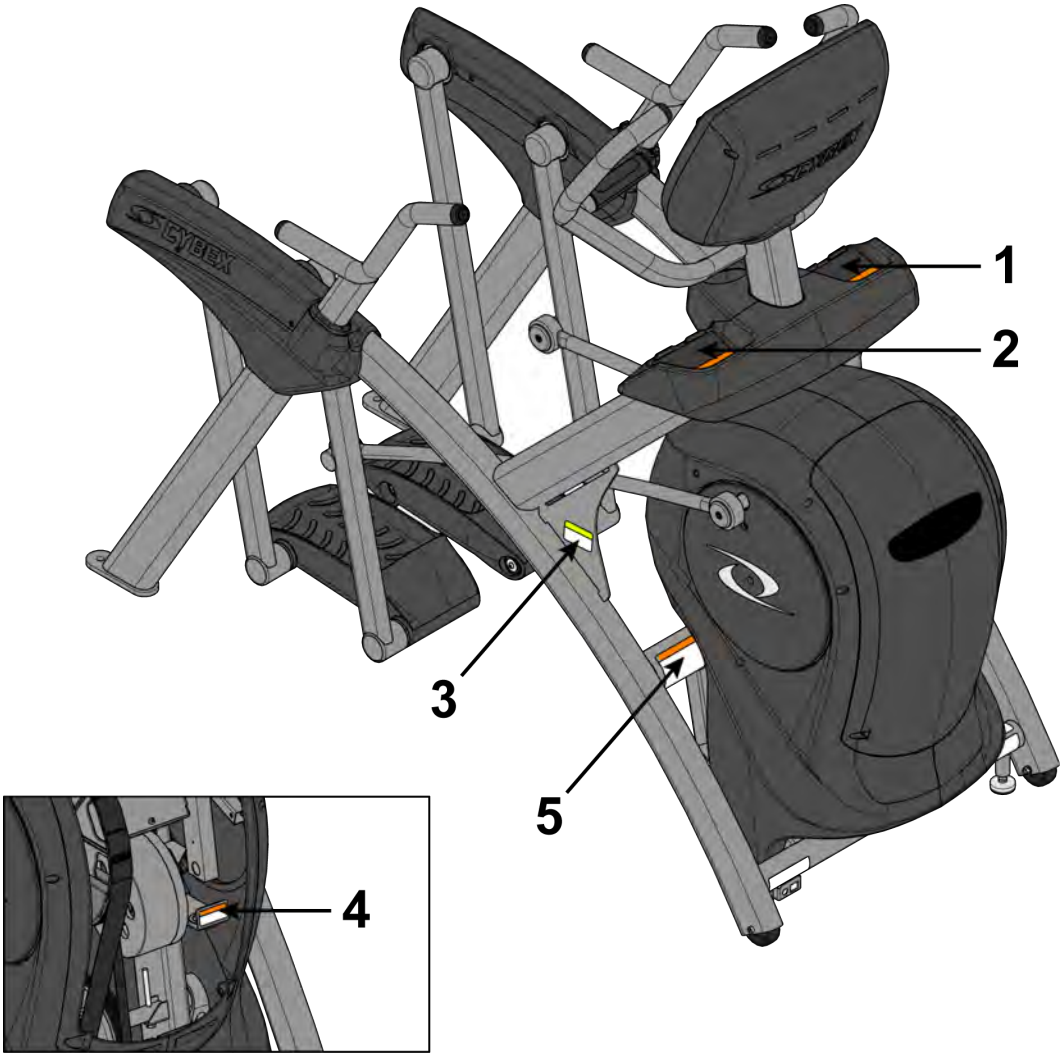
CAUTION
Moving parts hazard.
To avoid injury, keep hands and fingers away when in use.
DE000004-4

WARNING
Burn hazard.
Do not touch flywheel until cool.
DE-17155-4 C

WARNING
Shock and electrocution hazard.
Unplug unit and let sit 10 minutes before cleaning or performing maintenance.
Electrical charge can remain.
AVERTISSEMENT
Risque de choc et d'électrocution.
Débrancher l'appareil et laisser reposer 10 minutes avant de nettoyer ou d'effectuer tout entretien.
Possible présence de charge électrique résiduelle.
WARNUNG
Gefahr von Elektroschock und Stromschlag.
Gerät von der Stromzufuhr trennen und 10 Minuten stehen lassen, bevor Sie Wartungs- oder Reinigungsarbeiten durchführen.
Es kann elektrische Ladung verbleiben.
ADVERTENCIA
Peligro de descarga eléctrica y electrocución.
Desenchufe la unidad y deje reposar 10 minutos antes de limpiar o realizar el mantenimiento.
Puede permanecer carga eléctrica.
525AT-400 B

WARNING
Shock and electrocution hazard.
Unplug unit and let sit 10 minutes before cleaning or performing maintenance.
Electrical charge can remain.
警告
ショックと感電死の危険性。
本体のプラグを抜き、10 分間待ってから掃除や保守を実施してください。
充電はそのままでも結構です。
ВНИМАНИЕ
Опасность удара и поражения электрическим током.
Отключите устройство от электросети и подождите 10 минут, прежде чем приступать к очистке илиобслуживанию.
Возможен остаточный электрический заряд.
告警
电击危险。
拔掉设备电源并静止 10 分钟，
然后进行清洁或维护。
可能仍然有电荷。
525AT-401 C

Label Placement



1	770A-331-X	Label, Warning, Access tray, Left
1	770A-331-E	Label, Warning, Access tray, Left, Canadian
2	770A-332-X	Label, Warning, Access tray, Right
2	770A-332-E	Label, Warning, Access tray, Right, Canadian
3	DE000004-X	Decal, Caution moving parts

4	DE-17155-X	Label, Warning, Hot flywheel
5	525AT-400	Label, Warning, Disconnect Power
5	525AT-401	Label, Warning, Disconnect Power
5	525AT-402	Label, Warning, Disconnect Power
5	525AT-418	Label, Warning, Disconnect Power

Maintenance

All preventive maintenance activities must be performed on a regular basis. Performing routine preventive maintenance actions can aid in providing safe, trouble-free operation of all Cybex equipment.

Cybex is not responsible for performing regular inspection and maintenance actions for your machines. Instruct all personnel in equipment inspection and maintenance actions and also in accident reporting and recording. Cybex representatives are available to answer any questions that you may have.

Warnings

Read all warnings in this chapter.

WARNING

For maintenance, service and repair:
- Must be performed by trained service personnel only
- Use only Cybex replacement parts
- Unplug unit before working on it
- Keep water and liquids away from electrical parts.

DANGER

Electrocution hazard. To avoid death or serious injury unplug unit when not in use or when performing maintenance.

WARNING

Equipment hazard. To avoid serious injury or death replace worn or damaged components immediately and keep the equipment out of use until repair is completed.

Clean Unit

WARNING

Shock and electrocution hazard.
- Unplug unit and let sit 10 minutes before cleaning or performing maintenance.
- Electrical charge can remain in unit after unplugging.
- Keep water and liquids away from electrical parts.

Tools Required
- Cleaning solution
- Rubbing alcohol
- Clean cloth
- Vacuum

After Each Use
Wipe up any liquid spills immediately. After each workout, use a cloth to wipe up any remaining perspiration from the handrails and painted surfaces.

Be careful not to spill or get excessive moisture between the edge of the display panel and the console, as this might create an electrical hazard or cause failure of the electronics.

As Needed
Vacuum any dust or dirt that might accumulate under or around the unit. Cleaning this area should be done as often as indicated in the Service Schedule.

Clean Console

NOTICE Do not spray cleaning solution directly on the console. Direct spraying could cause damage to the electronics and may void the warranty.

- Spray a mild cleaning agent on a clean cloth.
- Clean the console, accessory tray, and cup holder with a damp cloth.

Clean Base
- Spray a mild cleaning agent on a clean cloth.
- Clean the base of the unit with a damp cloth.

Contact Heart Rate Grips
Clean the grips using a cloth dampened with a cleaning solution containing rubbing alcohol.

Contaminants, such as hand lotions, oils or body powder, may come off on the contact heart rate grips. These can reduce sensitivity and interfere with the heart rate signal. It is recommended that the user have clean hands when using the contact heart rate.

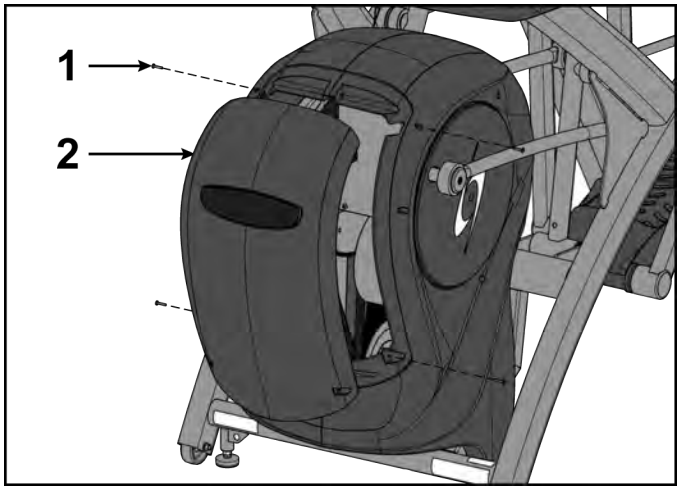
CardioTouch Screen
While in *Dormant Mode* press the **Cybex** logo icon to access the *Lock and Toolbox* options. Press the **Lock screen for cleaning** icon to lock the screen for 10 seconds. The CardioTouch screen will stay locked for 10 seconds to prevent any key presses from being processed.

- Clean with a dust free cloth. For further cleaning, use a soft cloth or paper towel dampened with water. To avoid damage to the surface of the monitor, do not use abrasive or chemical cleaning agents.
- Disinfecting: to avoid damage to the surface, test a small portion of the monitor’s cabinet with any disinfectant to verify that the disinfectant will not discolor or soften the enclosure.

Drive Belts

Remove front access cover

1. Remove screws securing front access cover using a Phillips screwdriver.



Item	Description	Qty.
1	Screw	4
2	Front access cover	1

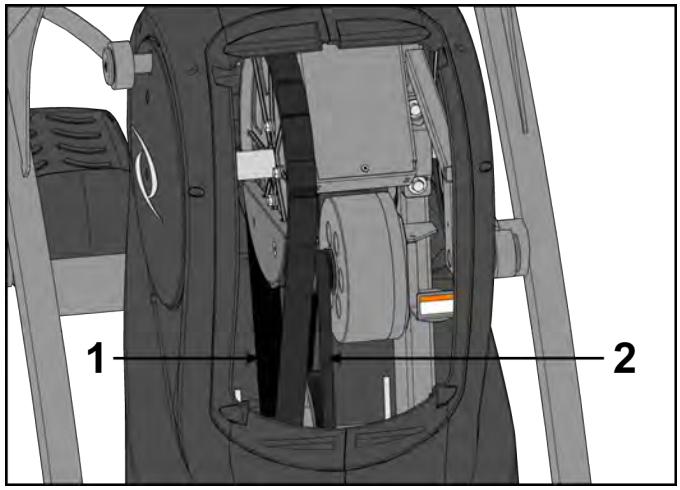
2. Remove access cover.

⚠WARNING Burn hazard. Do not touch flywheel until cool.

Inspect Drive Belts

There are two drive belts that may become loose, worn or cracked.

Unless the belts have been removed and not replaced properly, it is unlikely the belts will come loose or need to be re-tensioned.



Item	Description	Qty.
1	Primary Drive Belt	1
2	Secondary Drive Belt	1

If a belt has cracks or appears worn, it must be replaced immediately by a qualified service technician.

Primary Belt

The wider of the two belts. It has grooves that keep it aligned on the large upper pulley.

Secondary Belt
The narrower of the two belts. It has grooves that keep it aligned on the flywheel's drive pulley.

Install Access Cover
Do not over tighten screws.

1. Replace and tighten the two upper screws using a Phillips screwdriver.
2. Replace and tighten the two lower screws using a Phillips screwdriver.
3. Test unit for proper operation.

E3 View or Cybex GO Monitor

Cleaning
- Clean with a dust free cloth. For further cleaning, use a soft cloth or paper towel dampened with water. To avoid damage to the surface of the monitor, do not use abrasive or chemical cleaning agents.
- Disinfecting: to avoid damage to the surface, test a small portion of the monitor’s cabinet with any disinfectant to verify that the disinfectant will not discolor or soften the enclosure.

Storage or Long Non-Use Periods
When not using product for an extended period of time the product should be disconnected from the Power Supply, TV/Cable Signal Feed, and any Peripheral Devices.

Pixels
Very small red, blue, white or green spots may be visible or may appear on the screen. This is a characteristic of liquid crystal display panels and is not considered a defect for replacement. The liquid crystal panel is built with very high precision technology giving fine picture details. Occasionally, a few non-active pixels may appear on the screen as a fixed point. This does not affect the performance of monitor or merit a warranty claim.

Maintenance
- It is very important to have the unit regularly examined by a qualified technician to ensure the product is fit for use.
- If the unit malfunctions, please refer to a qualified technician for repair or replacement of defective parts immediately. Do not attempt to use the monitor until it has been inspected and repaired by a qualified technician.
- For inspection, installation and servicing, please consult qualified technician.
- Failure to use a manufacturer approved repair technician may void any warranty claims.

Service Schedule

All maintenance activities shall be performed by qualified personnel. Failure to do so could result in serious injury.

This is the minimum recommended service.

Determine distance

	CYBEX LOGO	Press and hold Cybex logo for 6 seconds to access **Screen Lock** and **Toolbox**.
	LANGUAGE ICON	Press and hold language logo for 6 seconds to access **Screen Lock** and **Toolbox**.

1. Tap the **Access Toolbox** icon to display the **Access to Toolbox** login screen.
2. Enter the sequence: .
3. Press the **Statistics** icon to access the **Recorded Statistics** screen.
4. Locate and tap the icon for **Arc Trainer Totals**.
5. Record Distance.
6. Exit Set Up Mode by tapping the **Toolbox** icon, then tap the **Home** icon . The screen will refresh.

First 500 Miles (800 KM)
Follow this procedure to ensure the belts are tensioned properly and in good condition.

1. Remove access cover. (See previous procedure ***Remove Access Cover***)
2. Pull down and roll each belt to examine the condition. If a belt has cracks or appears worn, it must be replaced immediately by a qualified service technician.
3. Attach access cover. (See previous procedure ***Attach Access Cover)***

Every 5000 Miles (8000 KM)
Check drive belts for tension and wear. (See procedure First 500 Miles)
Move unit and vacuum underneath. Lift the rear of unit and roll it back from its present position. Vacuum underneath and return unit to normal position.

Clean inside unit.

1. Remove access cover. (See previous procedure ***Remove Access Cover***)
2. Using a vacuum cleaner attachment or hand vacuum, clean the exposed components.
3. Remove dirt and debris from internal components.
4. Using a dry cloth, wipe all exposed areas.
5. Attach access cover. (See procedure ***Attach Access Cover***)

Every 20,000 Miles (32000 KM)
Contact qualified service technician to check elevation assembly, replace any worn parts and lubricate elevation bushings.

Statistics

The Statistics screen allows tracking of equipment usage.

	CYBEX LOGO	Press and hold Cybex logo for 6 seconds to access **Screen Lock** and **Toolbox**.
	LANGUAGE ICON	Press and hold language logo for 6 seconds to access **Screen Lock** and **Toolbox**.

1. Tap the **Access Toolbox** icon to display the **Access to Toolbox** login screen.
2. Enter the sequence: .
3. Press the **Statistics**icon to access the **Recorded Statistics**screen.
4. Locate and tap the icon for **Arc Trainer Totals**.

Statistics Menu	Display
Distance	Total accumulated miles or KM
Hours	Total time in active mode
Starts	Total number of workout sessions
Moves	Number of incline moves in 1% increments
On Time	Total number of hours the console has been on
On Battery	Total number of minutes the battery has been used
Days in svc	Number of days since install date

5. Exit Set Up Mode by tapping the **Toolbox** icon, then tap the **Home** icon . The screen will refresh.

Customer Service

Product Registration

To register product do the following:.

1. Visit *www.cybexintl.com*.
2. Locate Product Registration in the Support section.
3. Fill out form completely.
4. Click the **Submit** button to register product.

Contacting Service

Hours of phone service are Monday through Friday from 8:30 a.m. to 6:00 p.m. Eastern Standard Time.

For Cybex customers living in the USA, contact Cybex Customer Service at 1-888-462-9239.

For Cybex customers living outside the USA, contact Cybex Customer Service at 1-508-533-4300 or fax 1-508-533-5183. Email address *internationaltechhelp@cybexintl.com*

Find information on the web at *www.cybexintl.com*.

To contact us online go to *www.cybexintl.com*.

Ordering Parts

To order parts online go to *www.cybexintl.com*.

To speak with a customer service representative, call 800-351-3737 (for customers living within the USA) or 847-288-3700 (for customers outside the USA).

The following information located on the serial number decal will assist our Cybex representatives in serving you.

- Unit Serial Number, Product Name and Model Number
- Part Description and Part Number if you have it. All parts can be found on the web at *www.cybexintl.com*
- Shipping Address
- Contact Name
- Include a description of the problem.

In addition to your shipping address and contact name, your account number is helpful but not required. You may also fax orders to 800-216-8893.

Return Material Authorization (RMA)

The Return Material Authorization (RMA) system is used when returning material for placement, repair or credit. The system assures that returned materials are properly handled and analyzed. Follow the following procedures carefully.

Contact your authorized Cybex dealer on all warranty-related matters. Your local Cybex dealer will request a RMA from Cybex, if applicable. Under no circumstances will defective parts or equipment be accepted by Cybex without proper RMA and an Automated Return Service (ARS) label.

Please contact *Cybex Customer Service* for the return of any item that is defective.

Provide the technician with a detailed description of the problem you are having or the defect in the item you wish to return. Provide the model and serial number of your Cybex equipment.

At Cybex's discretion, the technician may request that you return the problem part(s) to Cybex for evaluation and repair or replacement. The technician will assign you a RMA number and will send you an ARS label. The ARS label and the RMA numbers must be clearly displayed on the outside of the package that contains the item(s) to be returned. Include the description of the problem, the serial number of the equipment and the name and address of the owner in the package along with the part(s).

Merchandise returned without an RMA number on the outside of the package or shipments sent COD will not be accepted by the Cybex receiving department.

Damaged Parts

Materials damaged in shipment should not be returned for credit. Shipping damages are the responsibility of the carrier (UPS, Federal Express, trucking companies, etc.)

Apparent Damage
Upon receipt of your shipment, check all items carefully. Any damage seen with a visual check must be noted on the freight bill and signed by the carrier's agent. Failure to do so will result in the carriers refusal to honor your damage claim. The carrier will provide you with the required forms for filing such claims.

Concealed Damage
Damage not seen with a visual check upon receipt of a shipment but notices later must be reported to the carrier as soon as possible. Upon discovery of the damage, a written or phone request to the carrier asking them to perform an inspection of the materials must be made within ten days of the delivery date. Keep all shipping containers and packing materials as they will be needed in the inspection process. The carrier will provide you with an inspection report and the necessary forms for filing a concealed damage claim. Concealed damage claim is the carrier's responsibility.

Service

Console Layout

Cybex GO Console and User Controls

Cybex GO Console

1	Data bar	Displays messages and workout data.
2	Video display area	Displays video, data, or blank.
3	Menu bar	Menu icons for Cybex GO options.
4	Heart rate indicator	Display heart rate and multi color indicator.

Data bar
Tap data icons to toggle the data displayed. TIME and BPM do not toggle. See *Heart rate indicator* for more information about BPM (Beats Per Minute).

DISTANCE	CALORIES	TIME	MET	Graph or message	BPM
CAL/HR	SPM		WATT		

Menu bar

Icon	Icon Name	Description
	Home	Main landing page with content tailored to each user.
	Display Mode	Tap Display Mode icon to toggle between 4 display modes: • **TV + Data**- Display video with data at top of screen • **TV Only**- Display video only, no data • **Data Only**- Display data only, no video • **Blank**- Screen is blank, video and data are not displayed

Icon	Icon Name	Description
	Browser	Select from available website links.
	TV	Select from available TV channels. Channels available are based on the local cable TV provider.
	Video on Demand	Watch videos on demand. Various content categories (TV Shows, Movie Trailers, Classic TV, etc) are grouped into channels.
	Music Videos	Watch available music videos. Playlists are organized by music genre. Create your own playlist.
	Virtual Active	The Virtual Active attraction features videos, shot from first person perspective, through beautiful landscapes, cityscapes and events from around the world.
	Log in/Sign up	Sign up as a new user or login with existing account.
	History	Review workout history if logged in.

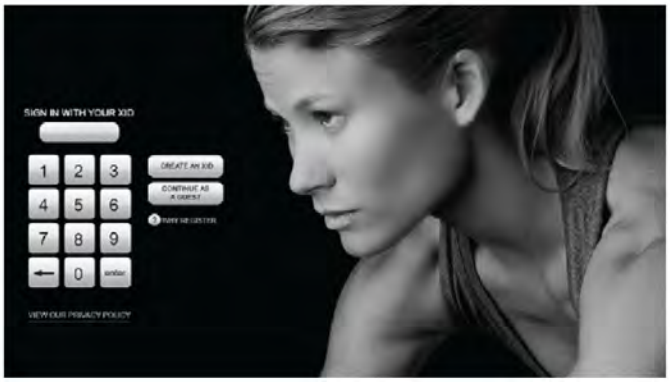
Cybex GO Console Log In or Sign Up

XID is a universal network that allows you to log into connected fitness equipment.

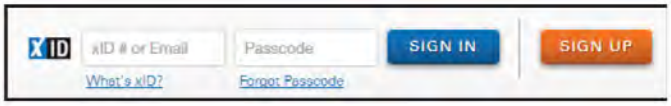
An XID account allows you to:
- Create playlists for your favorite audio and video tracks
- Track your workouts
- Join in group challenges

At the opening screen there are three options available.

Sign-in with XID	Enter an existing XID account number.
CREATE ACCOUNT	Create a new XID account.
CONTINUE AS GUEST	Skip the log in process. Some functions will be limited.



1. Visit *one.netpulse.com*.
2. To create an account, click **Sign Up**.
3. Select your club from the dropdown list.
4. To Sign In, enter your XID number and passcode.



5. If your club has their own custom URL, log into *ClubName*.netpulse.com.

User Control Symbols Used

Control	Control Name	Description
	INCLINE UP	Adjust **Incline** up.
	INCLINE DOWN	Adjust **Incline** down.
	RESISTANCE UP	Adjust **Resistance +**up.
	RESISTANCE DOWN	Adjust **Resistance -**down.
	VOLUME UP	Adjust **Volume** up.
	VOLUME DOWN	Adjust **Volume** down.

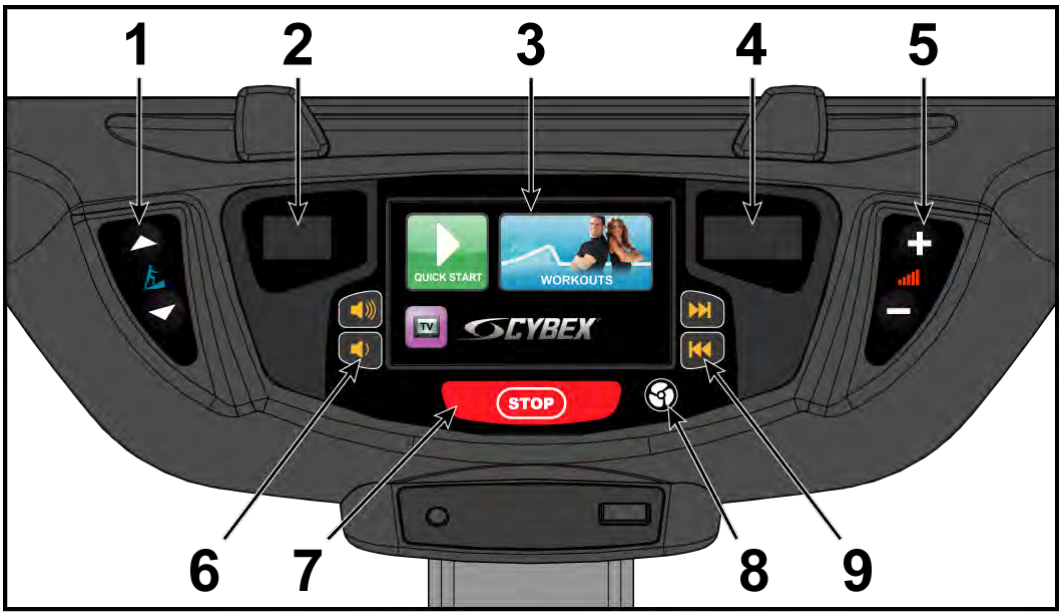
Control	Control Name	Description
	CHANNEL UP	A/V - Channel **UP**
	CHANNEL DOWN	A/V - Channel **DOWN**
	STOP	Press **STOP** once to end the workout session and start the *Workout Review*. Press **STOP** again to exit to *Dormant Mode*.
	FAN	Default speed is **OFF** during active mode. Press the **FAN** key to control fan speed. Choices are OFF, LOW and HI.

CardioTouch Symbols Used

Icon	Icon Name	Description
	Quick Start	**Quick Start** enters **Active Mode** at the default settings with time counting up from 0:00.
	WORKOUTS	Tap **Workouts** icon to enter workout group selection.
	HOME	Return to opening screen.
	START	Enter **Active Mode**.
	PAUSE	If pause feature is enabled, pause icon is shown. Press **Pause** icon once to enter pause mode.

Icon	Icon Name	Description
	STOP	If pause feature is disabled, stop icon is shown. Press **Stop** icon or **STOP** button once to enter **Workout review**.
	BACK	Return to previous or opening screen.
	UP LEVEL	Go up one level.
	SHIFT LEFT	Shift the screen left to view more options.
	SHIFT RIGHT	Shift the screen right to view more options.
	KEYPAD	Numeric keypad for entering data.
	ENTER	Accepts the value shown.
	CLEAR	Clear any values selected.
	INFO	Select to provide more information and details.
	SCALE	Displays current value in the minimum and maximum range.
	CYBEX LOGO	Press and hold Cybex logo for 6 seconds to access **Screen Lock** and **Toolbox**.
	LANGUAGE ICON	Press and hold language logo for 6 seconds to access **Screen Lock** and **Toolbox**.

CardioTouch Screen and User Controls



1	Incline Keys	6	Volume Keys
2	Incline Display	7	STOP Key
3	CardioTouch Screen	8	Fan Key
4	Resistance Display	9	Channel Key
5	Resistance Keys		

Displays Incline and Resistance are shown in the LED displays.

Keys User controls for Incline, Resistance, Volume, STOP, Fan and Channel.

CardioTouch screen Tap the icons to make selections.

Muscle Map and Incline Meter

Muscle Map An anatomical representation of the human body with primary muscle groups lit by multi-color LED's. The color of the LED displays which muscle groups are targeted and the relative intensity of the exercise.

The LED colors display intensity level.

LED	Color	Level
	Yellow	Low
	Amber	Medium
	Red	High
	Blinking Red	Very high

Muscle Map and Incline Meter	Glute Muscle	Quadricep Muscle	Hamstring Muscle	Calf Muscle

Incline Meter An LED meter displaying the incline setting. The meter increase or decreases as the incline changes.

Setup

Use the following instructions to setup the unit.

1. Plug the optional power cord or E3 View Monitor power cord (E3 View Monitor units only) into a power outlet from a grounded circuit.
   Coil up the remainder of the power cord and place it out of the way. The control panel will light up and be in the Dormant Mode.
2. Hold the handrails to steady self while stepping into the foot plates.
3. Begin striding.

Initial setup

Perform this procedure during the installation of the unit. Once complete, refer to Setup Options below.

CYBEX	**CYBEX LOGO**	Press and hold Cybex logo for 6 seconds to access **Screen Lock** and **Toolbox**.

	LANGUAGE ICON	Press and hold language logo for 6 seconds to access **Screen Lock** and **Toolbox**.

1. Tap the **Access Toolbox** icon to display the **Access to Toolbox** login screen.
2. Enter the sequence: .
3. Tap the **Setup** icon to display the **Setup menu**.
4. Tap the **Time** icon to advance to the **Set the Time** screen.
5. Adjust the time if needed, then tap the **ENTER** icon .
6. Tap the **Date** icon to advance to the **Set the Date** screen.
7. Adjust the date if needed, then tap the **ENTER** icon .
8. Tap the **Units** icon to select the **Set units preference** screen.
9. Select the unit preferences from the following options:

Distance Units	Weight Units
Miles	Lbs.
Km	Kg
	Stone

10. Exit Set Up Mode by tapping the **Toolbox** icon, then tap the **Home** icon . The screen will refresh.

Setup options - Cybex GO Monitor

Enter setup options.

	CYBEX LOGO	Press and hold Cybex logo for 6 seconds to access **Screen Lock** and **Toolbox**.
	LANGUAGE ICON	Press and hold language logo for 6 seconds to access **Screen Lock** and **Toolbox**.

1. Tap the **Access Toolbox** icon to display the **Access to Toolbox** login screen.
2. Enter the sequence: .
3. Tap the **Setup** icon to display the **Setup menu**.

Setup menu

Units	Select distance units. **Miles** or **Km** (Kilometers). Select weight units. **Lbs.** (Pounds), **Kg.** (Kilograms) or **Stone** (Stones).

A/V Config	Perform Touch Calibration, Network Setup, or Channel Setup. See *A/V Configuration*.
Workout times	Set Default and Max workout times. Default choices are 20, 30, or 60 minutes. Max choices are 20, 30, 60, or OFF.
Pause	Set Pause time. Choices are OFF, 0:30, 1:00, or 2:00 minutes.
Sound	Select console beeper settings. Choices are ON, Some, or OFF. Selecting Some enables beeper for safety related notifications, such as Entering Active, Exiting Active, and Cool Down.
Language	Select default language to display on CardioTouch screen. Toolbox is only available in English. Include Optional Languages. Select optional languages to display on CardioTouch screen. Choices are **Include** or **Off**.

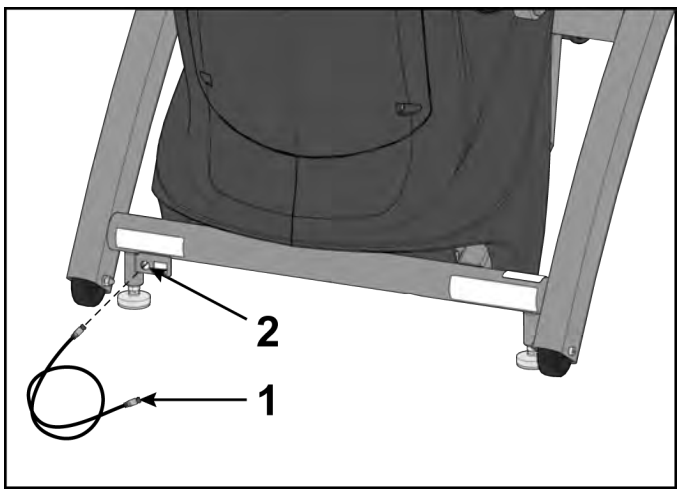
Exit Set Up Mode

Exit Set Up Mode by tapping the **Toolbox** icon, then tap the **Home** icon . The screen will refresh.

Cybex GO Setup

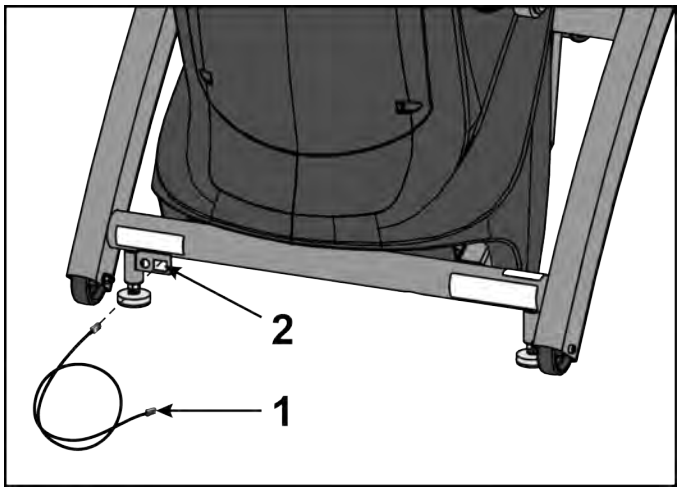
Prerequisites:
- Coax cable with TV signal
- Netpulse Gateway installed and running, providing the connection via:
  - **Wired (Ethernet) –** Ethernet cable is connected to the Cybex equipment through a network switch to the Gateway
  - **Wireless –** Gateway has been installed in the facility using a unique wireless access point. Cybex GO Monitor will not connect to any other routers in the area.
- Power to the Cybex Equipment.

1. Install 6' coax cable to the coax cable connector in base of unit.



	Description	Qty.
1	6’ Coax Cable	1
2	Coax Cable Connector	1

2. Install 7' ethernet cable to the ethernet coupler in base of unit.



	Description	Qty.
1	7’ Ethernet Cable	1
2	Ethernet coupler	1

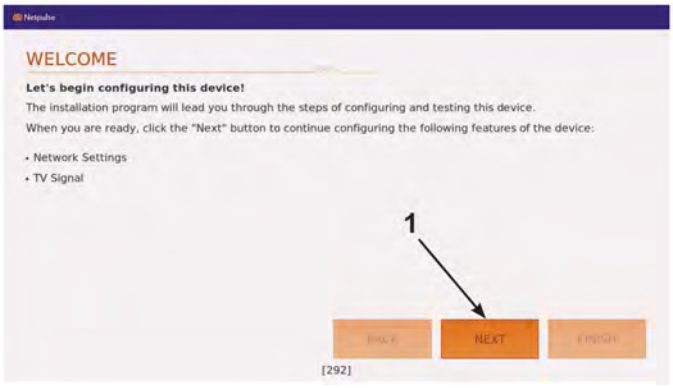
Turn power on

1. Plug the power cord into a power outlet from a grounded circuit, See Electrical Requirements. Coil up the remainder of the power cord and place it out of the way. The control panel will light up and be in the Dormant Mode.
2. Hold the handrails to steady self while stepping into the foot plates.
3. Begin striding. Verify lower heart rate cable is not rubbing on handle during operation.

Cybex GO installer

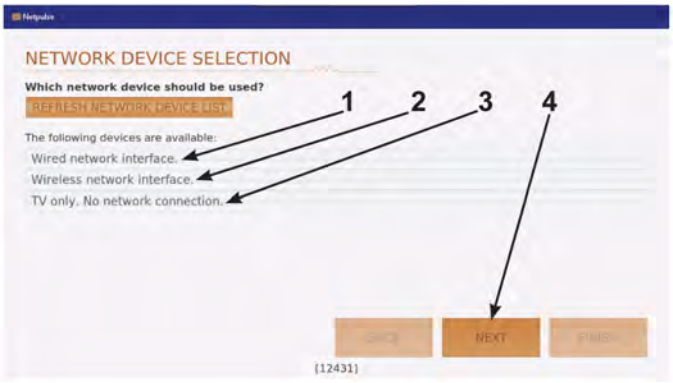
The Cybex GO installer only occurs during the initial installation of the unit. Once complete, refer to Initial setup.

1. Tap **NEXT** to begin configuration.



	Description
1	NEXT

2. Select one of the three network devices.
   - Wired network interface.
   - Wireless network interface.
   - TV only. No network connection.



	Description
1	Wired network interface
2	Wireless network interface
3	TV only. No network connection
4	NEXT

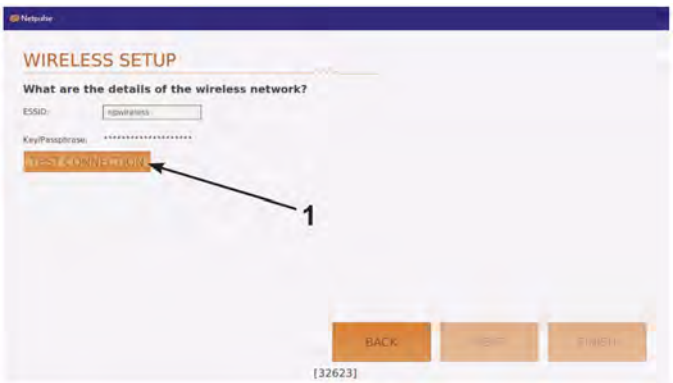
Follow the procedure for the network device selected.

Wired network interface

1. Tap **Wired network interface**.
2. Tap **NEXT** to confirm selection.
3. Go to *Test network*.

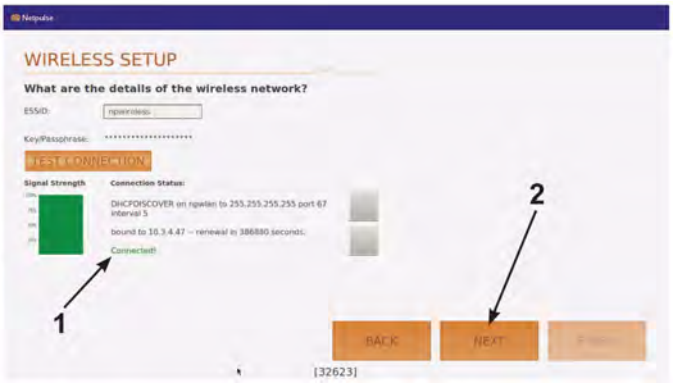
Wireless network interface

1. Tap **Wireless network interface**.
2. Tap **NEXT** to confirm selection.
3. Tap **TEST CONNECTION**.
   This may take up to five minutes to complete. If test fails, retry.



	Description
1	**TEST CONNECTION**

4. Tap **NEXT** after test passes and displays Connected!.



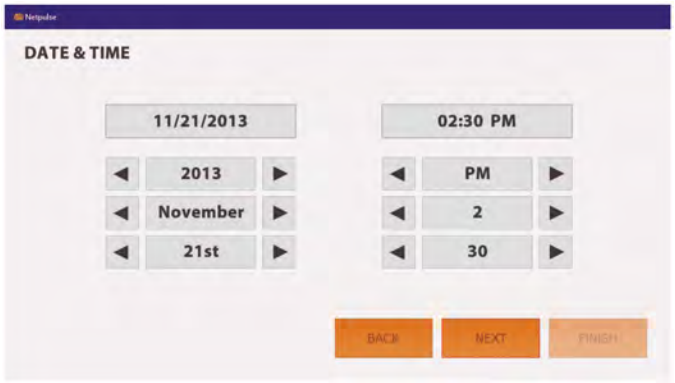
	Description
1	Connected!
2	NEXT

5. Tap **OK** after alert window displays Wireless network configured!.
6. Go to *Test network*.

TV only

1. Tap **TV only. No network connection**.
2. Select Default Country.

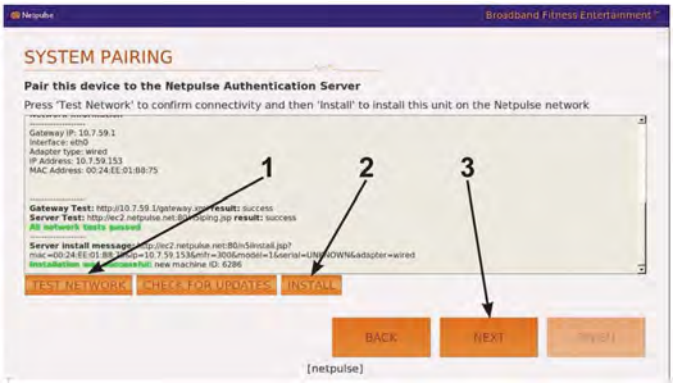
3. Tap **OK**
4. Set **Date** and **Time**.



5. Tap **NEXT**.
6. Go to *Channel configuration*.

Test network

1. Tap **TEST NETWORK**.



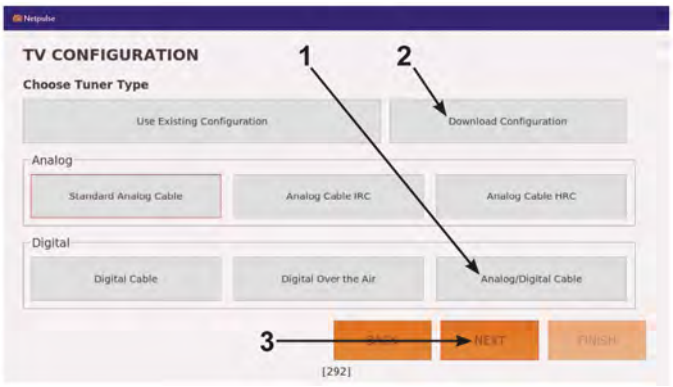
	Description
1	TEST NETWORK
2	INSTALL
3	NEXT

2. When network test passes, tap **INSTALL**.
   If network test fails, check the network connections and retry.
3. Tap **NEXT**.

TV configuration

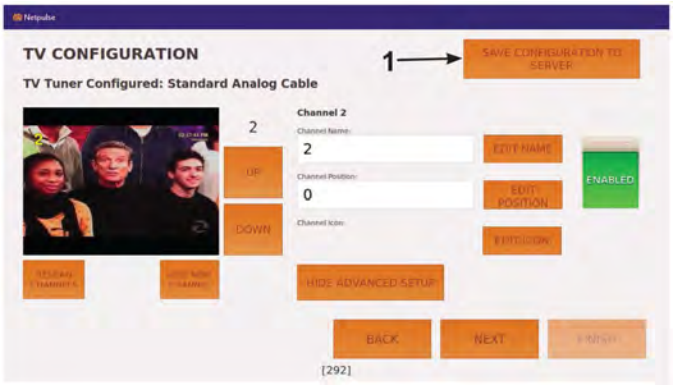
The TV configuration only needs to be performed on the first unit installed. Configure the first unit completely, save the configuration, then assemble and configure all other units.

1. Select **Analog/Digital Cable** and tap **NEXT**.
   This will scan for all available channels. The scan can take 20 minutes to complete.
   If scan was previously configured and stored, choose **Download Configuration** and tap **NEXT** to configure other units. Go to *Test Cybex GO Monitor*.



	Description
1	Analog/Digital Cable
2	Download Configuration
3	NEXT

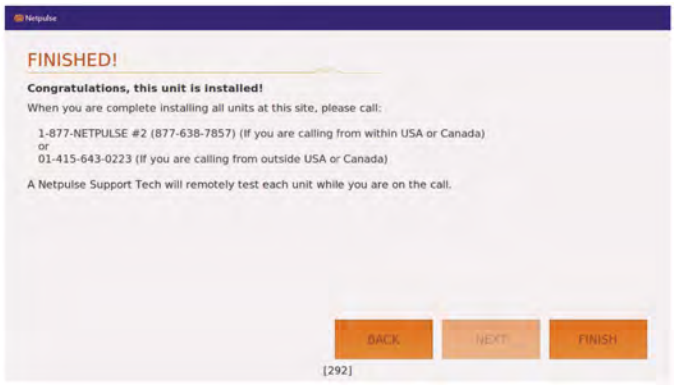
2. Tap **SAVE CONFIGURATION TO SERVER**.



	Description
1	**SAVE CONFIGURATION TO SERVER**

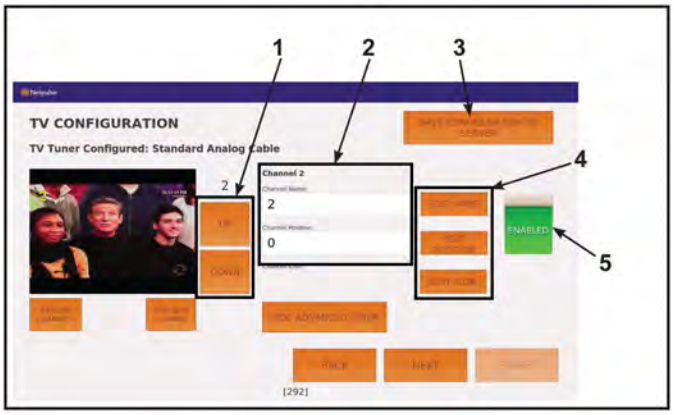
To configure each of the channels see *Channel configuration*.

3. Tap **FINISH** to complete installation.
Cybex GO monitor will reset. Do not call Netpulse.



Channel configuration

Each channels name, position, and icon can be edited. Channels not needed or channels with poor signals can be disabled.



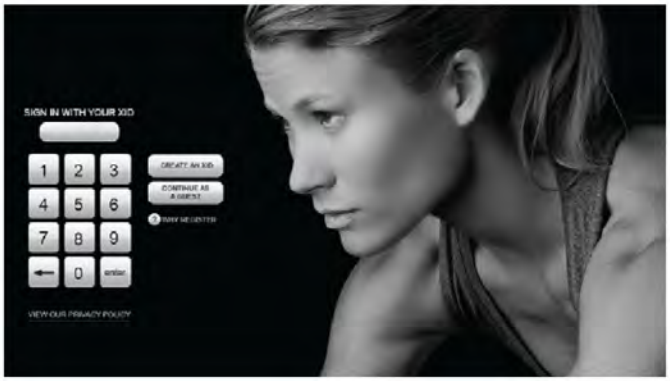
	Description
1	Channel **Up**/Channel **Down**
2	**Channel Name** and **Channel Position** number
3	**SAVE CONFIGURATION TO SERVER**
4	**EDIT NAME**, **EDIT POSITION**, and **EDIT ICON**
5	Channel **ENABLED** or **DISABLED**

1. Tap **SHOW ADVANCED SETUP**, if edit icons are not visable.
2. Tap the **Channel Up** or **Channel Down** icons to select channel to edit.
3. Tap **EDIT NAME**.
A keyboard is displayed to edit the channel name. Tap **SAVE** when done.

4. Tap **EDIT POSITION**.
   A keypad is displayed to edit the channel position. Tap **SAVE** when done.
5. Tap **EDIT ICON**.
   Icons are displayed to edit the channels icon. Tap **SAVE** when done.
6. Tap the **ENABLED** or **DISABLED** icon to toggle the viewing of each channel.
   The channel configuration only needs to be performed on the first unit installed. Configure the first unit completely, save the configuration, then assemble and configure all other units.

Test Cybex GO monitor

Test Cybex GO monitor by tapping **CONTINUE AS GUEST** at home screen. Select from **TV** or **Videos** to test Cybex GO monitor



Equipment Setup

Initial setup

Perform this procedure during the installation of the unit. Once complete, refer to Setup Options below.

CYBEX	**CYBEX LOGO**	Press and hold Cybex logo for 6 seconds to access **Screen Lock** and **Toolbox**.
ENGLISH	**LANGUAGE ICON**	Press and hold language logo for 6 seconds to access **Screen Lock** and **Toolbox**.

1. Tap the **Access Toolbox** icon to display the **Access to Toolbox** login screen.
2. Enter the sequence:

.
3. Tap the **Setup** icon to display the **Setup menu**.
4. Tap the **Time** icon to advance to the **Set the Time** screen.
5. Adjust the time if needed, then tap the **ENTER** icon .
6. Tap the **Date** icon to advance to the **Set the Date** screen.
7. Adjust the date if needed, then tap the **ENTER** icon .
8. Tap the **Units** icon to select the **Set units preference** screen.

9. Select the unit preferences from the following options:

Distance Units	Weight Units
Miles	Lbs.
Km	Kg
	Stone

10. Exit Set Up Mode by tapping the **Toolbox** icon, then tap the **Home** icon . The screen will refresh.

Setup options - Cybex GO Monitor

Enter setup options.

	CYBEX LOGO	Press and hold Cybex logo for 6 seconds to access **Screen Lock** and **Toolbox**.
	LANGUAGE ICON	Press and hold language logo for 6 seconds to access **Screen Lock** and **Toolbox**.

1. Tap the **Access Toolbox** icon to display the **Access to Toolbox** login screen.
2. Enter the sequence: .
3. Tap the **Setup** icon to display the **Setup menu**.

Setup menu

Units	Select distance units. **Miles** or **Km** (Kilometers). Select weight units. **Lbs.** (Pounds), **Kg.** (Kilograms) or **Stone** (Stones).
A/V Config	Perform Touch Calibration, Network Setup, or Channel Setup. See *A/V Configuration*.
Workout times	Set Default and Max workout times. Default choices are 20, 30, or 60 minutes. Max choices are 20, 30, 60, or OFF.
Pause	Set Pause time. Choices are OFF, 0:30, 1:00, or 2:00 minutes.
Sound	Select console beeper settings. Choices are ON, Some, or OFF. Selecting Some enables beeper for safety related notifications, such as Entering Active, Exiting Active, and Cool Down.
Language	Select default language to display on CardioTouch screen. Toolbox is only available in English. Include Optional Languages. Select optional languages to display on CardioTouch screen. Choices are **Include** or **Off**.

Exit Set Up Mode

Exit Set Up Mode by tapping the **Toolbox** icon, then tap the **Home** icon . The screen will refresh.

Diagnostics

Diagnostic menus display service information.

Access Diagnostic menus

	CYBEX LOGO	Press and hold Cybex logo for 6 seconds to access **Screen Lock** and **Toolbox**.
	LANGUAGE ICON	Press and hold language logo for 6 seconds to access **Screen Lock** and **Toolbox**.

1. Tap the **Access Toolbox** icon to display the **Access to Toolbox** login screen.
2. Enter the sequence: .

The three diagnostic screens available are:
- Setup
- Statistics
- OEM Diags (Diagnostics)

Setup options - LED, E3 View Monitor

Enter setup options.

	CYBEX LOGO	Press and hold Cybex logo for 6 seconds to access **Screen Lock** and **Toolbox**.
	LANGUAGE ICON	Press and hold language logo for 6 seconds to access **Screen Lock** and **Toolbox**.

1. Tap the **Access Toolbox** icon to display the **Access to Toolbox** login screen.
2. Enter the sequence: .
3. Tap the **Setup** icon to display the **Setup menu**.

Setup menu

Time	Select Time Display option to **On** or **Off**. Add or subtract an hour. Select time display as **AM**, **PM**, or **24 Hour** display. Enter time using keypad, press **Enter** to save.
Date	Select date style [MM] [DD] [YYYY], [DD] [MM] [YYYY], or [YYYY] [MM] [DD]. Y - Year, M - Month and D - Day. Enter date using keypad, press **Enter** to save.

Units	Select distance units. **Miles** or **Km** (Kilometers). Select weight units. **Lbs.** (Pounds), **Kg.** (Kilograms) or **Stone** (Stones).
TV Input (LED consoles)	Select **Device Installed**. Choices are: **No TV**, **Wireless TV**, or **C.A.B.** (Console Adapter Box for Broadcast Vision) or Connected TV. Contact qualified service technician for audio visual setup.
TV Source (E3 View Monitor)	Select **Device Installed**. Choices are: **Tuner**, **STB + Tuner**, or **STB + HDMI**. Contact qualified service technician for audio visual setup.
A/V Device (not shown for E3 View Monitor)	Select **No TV**, **Attached TV**, or **Wireless TV**. Contact qualified service technician for audio visual setup.
A/V Config (not shown for E3 View Monitor)	Active when A/V Device is set to **Wireless TV**. Contact qualified service technician for audio visual setup.
FM Radio Presets (not shown for E3 View Monitor)	Active when A/V Device is set to **Wireless TV**. Contact qualified service technician for audio visual setup.
PEM Setup	Active when A/V Device is set to **Embedded TV**. Contact qualified service technician for audio visual setup.
Workout times	Set Default and Max workout times. Default choices are 20, 30, or 60 minutes. Max choices are 20, 30, 60, or OFF.
Pause	Set Pause time. Choices are OFF, 0:30, 1:00, or 2:00 minutes.
Sound	Select console beeper settings. Console Beeper - **On** or Off. Headphone Beeper - **Off**, **Some**, or **All**. Default Volume - 1 to 30, default is 10.
Quick Start Mode	Choose Default Resistance Mode. Choices are: **Arc** (default resistance), **Constant Power** (default power), or **Adaptive Power** (default level). Set default resistance, power, or level.
Language	Select default language to display on CardioTouch screen. Toolbox is only available in English. Include Optional Languages. Select optional languages to display on CardioTouch screen. Choices are **Include** or **Off**.
Restore Factory Defaults	Restores all setup variables back to factory defaults. Does not affect Time or Date.

Setup options - Cybex GO Monitor
Enter setup options.

	CYBEX LOGO	Press and hold Cybex logo for 6 seconds to access **Screen Lock** and **Toolbox**.
	LANGUAGE ICON	Press and hold language logo for 6 seconds to access **Screen Lock** and **Toolbox**.

1. Tap the **Access Toolbox** icon to display the **Access to Toolbox** login screen.
2. Enter the sequence: .
3. Tap the **Setup** icon to display the **Setup menu**.

Setup menu

Units	Select distance units. **Miles** or **Km** (Kilometers). Select weight units. **Lbs.** (Pounds), **Kg.** (Kilograms) or **Stone** (Stones).
A/V Config	Perform Touch Calibration, Network Setup, or Channel Setup. See *A/V Configuration*.
Workout times	Set Default and Max workout times. Default choices are 20, 30, or 60 minutes. Max choices are 20, 30, 60, or OFF.
Pause	Set Pause time. Choices are OFF, 0:30, 1:00, or 2:00 minutes.
Sound	Select console beeper settings. Choices are ON, Some, or OFF. Selecting Some enables beeper for safety related notifications, such as Entering Active, Exiting Active, and Cool Down.
Language	Select default language to display on CardioTouch screen. Toolbox is only available in English. Include Optional Languages. Select optional languages to display on CardioTouch screen. Choices are **Include** or **Off**.

Statistics

1. Tap the **Statistics** icon to display the **Arc Trainer Totals** icon.
2. Tap the **Arc Trainer Totals** icon to display the **Total Unit Stats menu**.

   Total Units Stats menu:

Distance	Total distance in Miles or Kilometers.
Hours	Total hours of motor usage.
Starts	Total number of motor starts.
Moves	Number of single % incline moves, up or down, of the incline motor.
On Time	Total hours of power to console.
Days in Service	Total days from install date to current day.
On Battery	Total number of minutes unit has run on battery and not generator or optional power supply.
Installed	Date of installation. Icon is inactive.

3. Tap the **Toolbox** icon to return to the **Toolbox** screen.

OEM Diags (Diagnostics)

1. Tap the **OEM Diags** icon to display the **OEM Diagnostics menu**.
   OEM Diagnostics menu:

Build Report	Displays software versions and component information. Base S/N, Console S/N, MCC Code Revision, GFX Code Revision, EPEM or LED Code Revision, Drive Revision, Install date, Date/Time, HR Device name/type, Errors (# of errors in the log), Brake Type
Error Log	Displays number of errors, up to 20. If no errors are stored [0] [Err] [Log] will be displayed. See *Error Codes*.
Power System	Display battery and charger system info. SPM, Charge State, Charge Current, Battery Voltage, Battery Level, Power Source, LCB uP Temp.
Touch Test	Test CardioTouch screen. Touch anywhere on screen to display cross hairs
Touch Cal	Touch four corners to calibrate CardioTouch screen.

2. Tap the **Toolbox** icon to return to the **Toolbox** screen.

Exit Diagnostics

Exit **Diagnostics** by tapping the **Toolbox** icon, then tap the **Home** icon . The screen will refresh.

Diagnostics when CardioTouch screen is not functioning

The incline motor and resistance can be tested if the CardioTouch Screen is not functioning.

1. Press and hold the **Fan** key for at least three seconds until the console beeps twice.
2. Release the **Fan** key and press the **Volume Down** key within two seconds.
   The Incline and Resistance LED's will blink indicating *Diagnostics Mode*.
   Press any one of the Incline or Resistance keys within the first ten seconds, otherwise Diagnostic Mode will exit.
3. The **Incline Up** , **Incline Down** , **Resistance Up** and **Resistance Down** keys are now active.
4. Press the **Stop** key to exit to *Dormant Mode*.

Cybex GO Monitor Diagnostics

Cybex GO monitor diagnostics allows access to system information, screen calibration, and other diagnostic functions. Access to the diagnostic functions are available through the CardioTouch screen or hidden menu.

CardioTouch screen access

Enter setup options.

	CYBEX LOGO	Press and hold Cybex logo for 6 seconds to access **Screen Lock** and **Toolbox**.
	LANGUAGE ICON	Press and hold language logo for 6 seconds to access **Screen Lock** and **Toolbox**.

1. Tap the **Access Toolbox** icon to display the **Access to Toolbox** login screen.
2. Enter the sequence: .
3. Tap the **Setup** icon to display the **Setup menu**.
4. Tap the **A/V Config** icon to display the A/V configuration options.

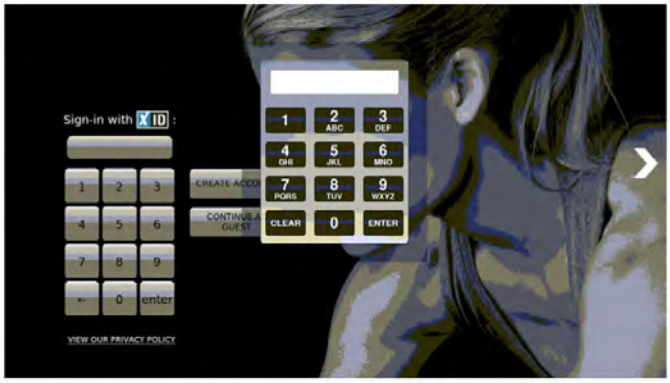
Touch Calibration	Tap Cybex GO monitor in nine locations to calibrate screen.
Network Setup	See *Cybex GO installer*, step 2 NETWORK DEVICE SELECTION .
Channel Setup	See *TV configuration*.

Exit **Diagnostics** by tapping the **Toolbox** icon, then tap the **Home** icon . The screen will refresh.

Hidden menu access

1. At the main dormant screen perform the following sequence.
   a) Tap the upper left portion of the screen once.
   b) Tap the upper right portion of the screen twice.
   c) Tap the upper left portion of the screen once.

This will display the diagnostic keypad.



2. Enter a code on the keypad to access diagnostic functions.

Most Used Functions

Numeric Code	Alpha Code	Explanation and Usage
911		Displays the IP address, MID and other data of the Cybex GO monitor. There may be instances where help desk staff want to communicate with the device for troubleshooting purposes.
7226	SCAN	Brings up the TV Channel scanning configuration screen. This option is used if the Cybex GO monitor has lost its TV configuration.
86824	TOUCH	Brings up the touch screen calibration screen. This is used recalibrate the touch screen in the event it loses its touch screen sensitivity.
77333	SPEED	Runs the Speakeasy speed test. This test is used if there is a jittery picture on the VOD. It shows the upload and download speeds.
27233	CSAFE	Allows you to test the CSAFE function.

Least Used Functions

Numeric Code	Alpha Code	Explanation and Usage
2582	CLUB	Resets the Cybex GO monitor to re-install at a club. Do not use this option unless the help desk instructs you to use it.
78425	STICK	Allows you to plug in a USB drive stick with updates and run those updates on your Cybex GO monitor. In some rare cases, a technician may have to install updates via a USB drive.
4638	INET	Runs the network device selection configuration screen.
3366	DEMO	Runs the Cybex GO monitor in Demo mode for tradeshows or events. This option is only used for demos.
3696	DOWN	Shuts down the Cybex GO monitor. Don’t use this unless instructed to by the help desk.

Error Codes 772 Arc Trainer

Error codes notify user of a problem condition and are displayed on the console. Error codes can also help to indicate the part of the unit most likely to be causing the problem.

Access error log

	CYBEX LOGO	Press and hold Cybex logo for 6 seconds to access **Screen Lock** and **Toolbox**.

	LANGUAGE ICON	Press and hold language logo for 6 seconds to access **Screen Lock** and **Toolbox**.

1. Tap the **Access Toolbox** icon to display the **Access to Toolbox** login screen.
2. Enter the sequence: .
3. At the main **Toolbox** screen, tap the **OEM Diags** icon, then the **Error Log** icon.

Error code list

Error Code	Description
Error 2	GFX Communications issue
Error 4	Upper Display Communications issue
Error 6	Membrane Fault (stuck key)
Error 8	Approaching Over-Temperature
Error 9	MCC Watchdog Triggered
Error 12	Graphics Board Watchdog Triggered
Error 13	Upper Display watchdog Triggered
Error 14	Drive Error Unknown
Error 15	Embedded A/V Device Failure
Error 16	Membrane Fault (No Membrane)
Error 17	Lower Control Board ignored shut-down
Error 22	Power Supply Irregularity - Generator power with no speed signal
Error 23	Power Supply Irregularity - Speed signal with no generator power
Error 24	Incline moving too slowly
Error 25	Incline movement feedback stopped
Error 26	Incline disabled
Error 28	Over-Temperature
Error 29	Controller Watchdog Triggered
Error 35	Lower Control Board latched on / can’t shut down
Error 37	Incline Out of Range
Error 38	Incline Timeout
Error 45	AC Incline timeout - Up
Error 46	AC Incline timeout - Down

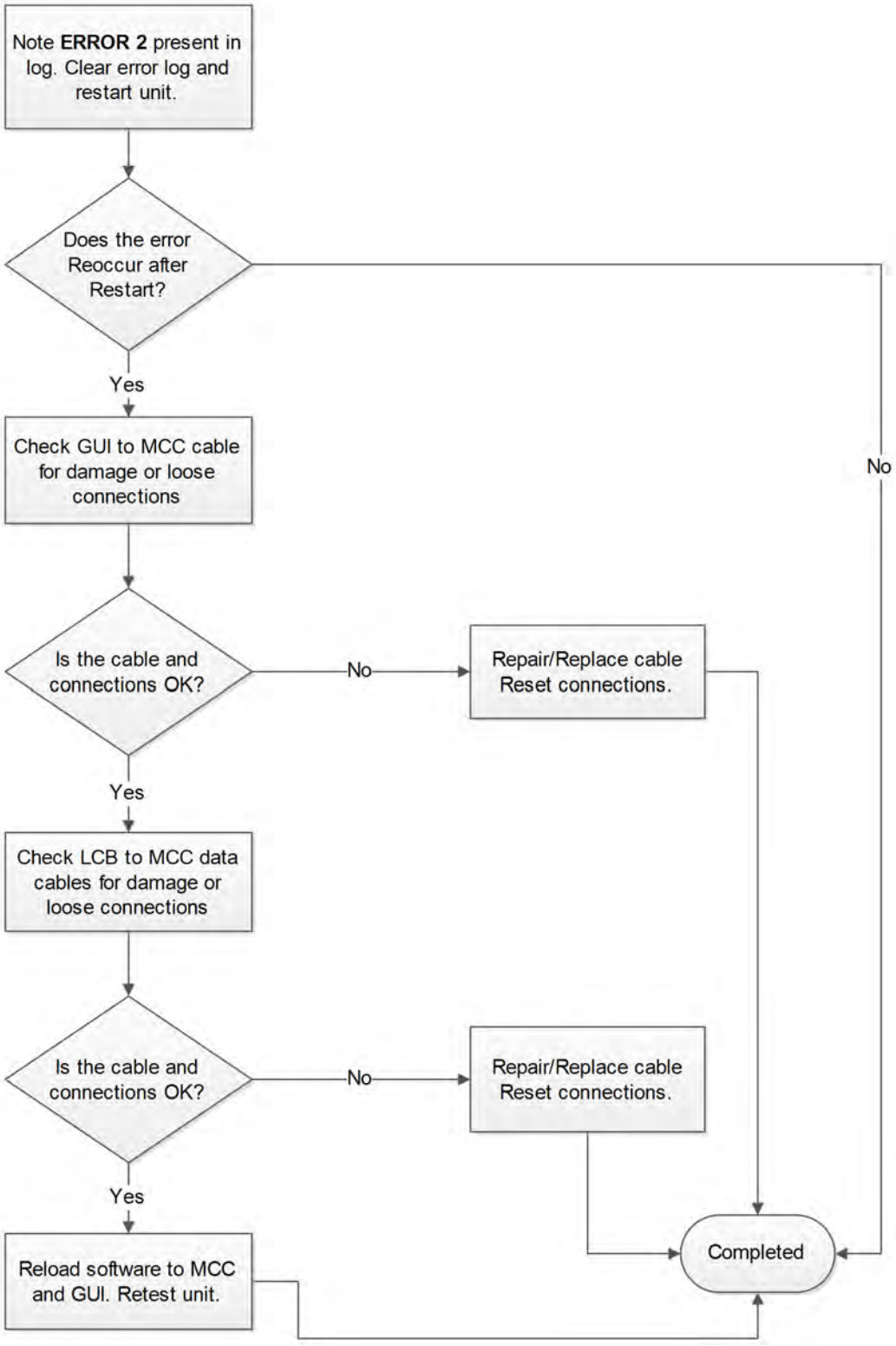
Error 2 - GFX communications issue

Cause:
MCC is receiving incomplete, erroneous, or no information from the Graphics Board that occurred even after three re-tries.

Service:
If this occurs in Dormant, the cause is likely a software defect or power fluctuation. If this occurs mostly in active mode, it could be due to static discharge or increased data traffic.

- Check internal cabling at the handset to ensure grip leads are not routed close to the back of the GFX assembly.
- Check the cable connections at the embedded power supply in the base. (optional)
- Check the cable connections at the 30-pin cable connecting the GFX to the MCC.
- Verify the console cable isn't damaged or pinched anywhere.
- Ensure the GFX ground lead is screwed tightly to the GFX case and connected to the MCC's quick connect tab.

Flowchart: Error 2



Error 4: Upper Display Communications issue

Cause:
Main computer board is receiving incomplete, erroneous, or no information from the upper display that occurred even after three re-tries. The upper display is not required for the treadmill to function safely, so this is a stored error only. If and when the product is in Dormant, the main computer board will attempt to cycle power or reset the Upper Display system.

Service: LED Console
If this occurs in Dormant, the cause is likely a software defect or power fluctuation. If this occurs mostly in active mode, it could be due to ESD events or increased data traffic.

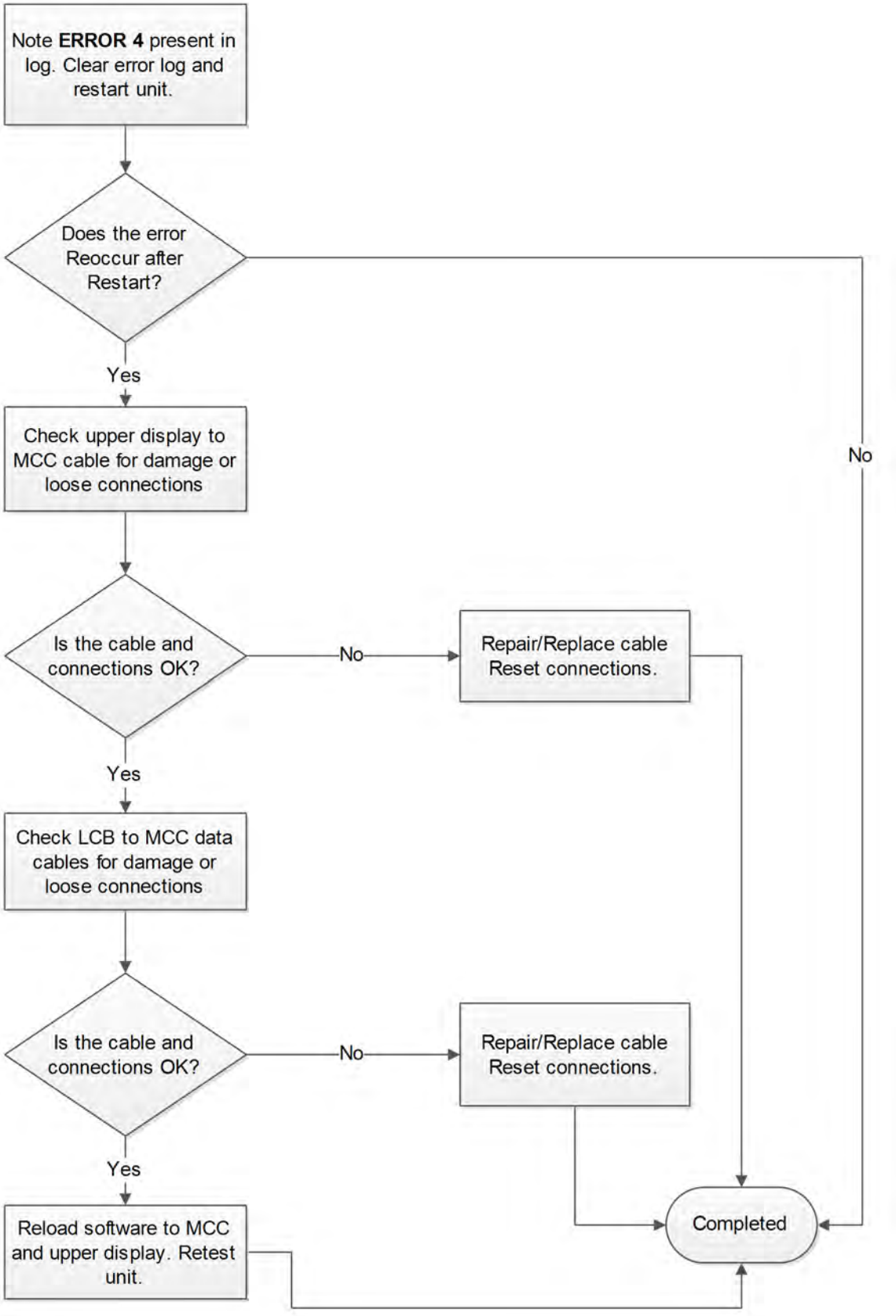
- Check internal cabling between the MCC and Display board.
- Ensure there are no cracks or openings in the upper display's console decal or membranes
- Verify no moisture intrusion has compromised the MCC, display or cabling.

Service: EPEM (Embedded PEM or E3) Consoles
If this occurs in Dormant, the cause is likely a software defect or power fluctuation. If this occurs mostly in active mode, it could be due to ESD events or increased data traffic.

- Check internal cabling between the MCC and EPEM.
- Ensure there are no cracks or openings in the upper display's console decal or membranes
- Verify no moisture intrusion has compromised the MCC, EPEM or cabling.

Service: NTS (CybexGO or Embedded Netpulse) Consoles
- NTS computers can reset and not recover, requiring a second reset or power cycle. Always attempt this first to remedy the situation.
- NTS and MCC could potentially be out of sync, requiring a full-system power cycle. If this recurs, the NTS firmware may need to be updated.
  - Call Cybex and have a technician verify the firmware and update it if necessary.
  - Attempt the **Check for Updates** button in the Toolbox/Setup/AV Display/Network Setup.
- Verify the code versions in Toolbox/OEM Diags/Display Module match known production code combinations for:
  - npcybex: Netpulse software related to the N5i product line with Cybex modifications
  - plcybex: This is the code responsible for the Cybex look and feel on-screen
  - npcomm: This is the interpreter between the MCC and NTS
- Update the software in the MCC, and then update the firmware in the NTS as a last resort.
- If this occurs mostly when active, it could be due to ESD events or increased data traffic.
- Check internal cabling between the MCC and the NTS.
- Ensure there are no cracks or openings in the membranes.
- Verify no moisture intrusion has compromised the MCC, NTS or internal board s and cabling.
- If touches on the NTS screen are heard as clicks, the NTS communications to the MCC is working. If touches on the NTS do not bring the MCC out of dormant, MCC to NTS communications is lost. Contact Cybex if this ever occurs in the field:
  - CSAFE may have been enabled on this NTS console (need to disable it)
  - SBC RS232 may be faulty
  - Internal cabling may be faulty

Flowchart: Error 4



Error 6 - Membrane Fault (Stuck Key)

Cause:
Membrane is showing a key constantly activated (noticed at power-up.)

Service:
- Check the membrane and thumb controls for signs of fatigue, cracking, or possible moisture intrusion.
- Ensure the membrane connector is fully seated.
- Inspect the membrane cable for cuts, pinches, and all leads are fully inserted in their connectors.
- Replace the membrane and/or the thumb control switches.

Key list

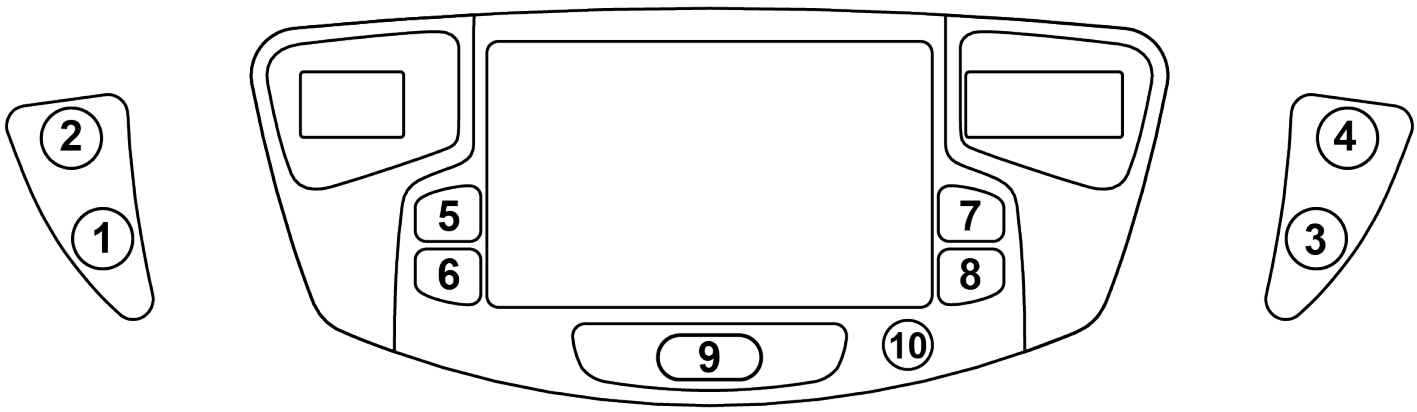
Left and Right controls

Key	Description
1	**Incline Down**
2	**Incline Up**
3	**Resistance Down**
4	**Resistance Up**

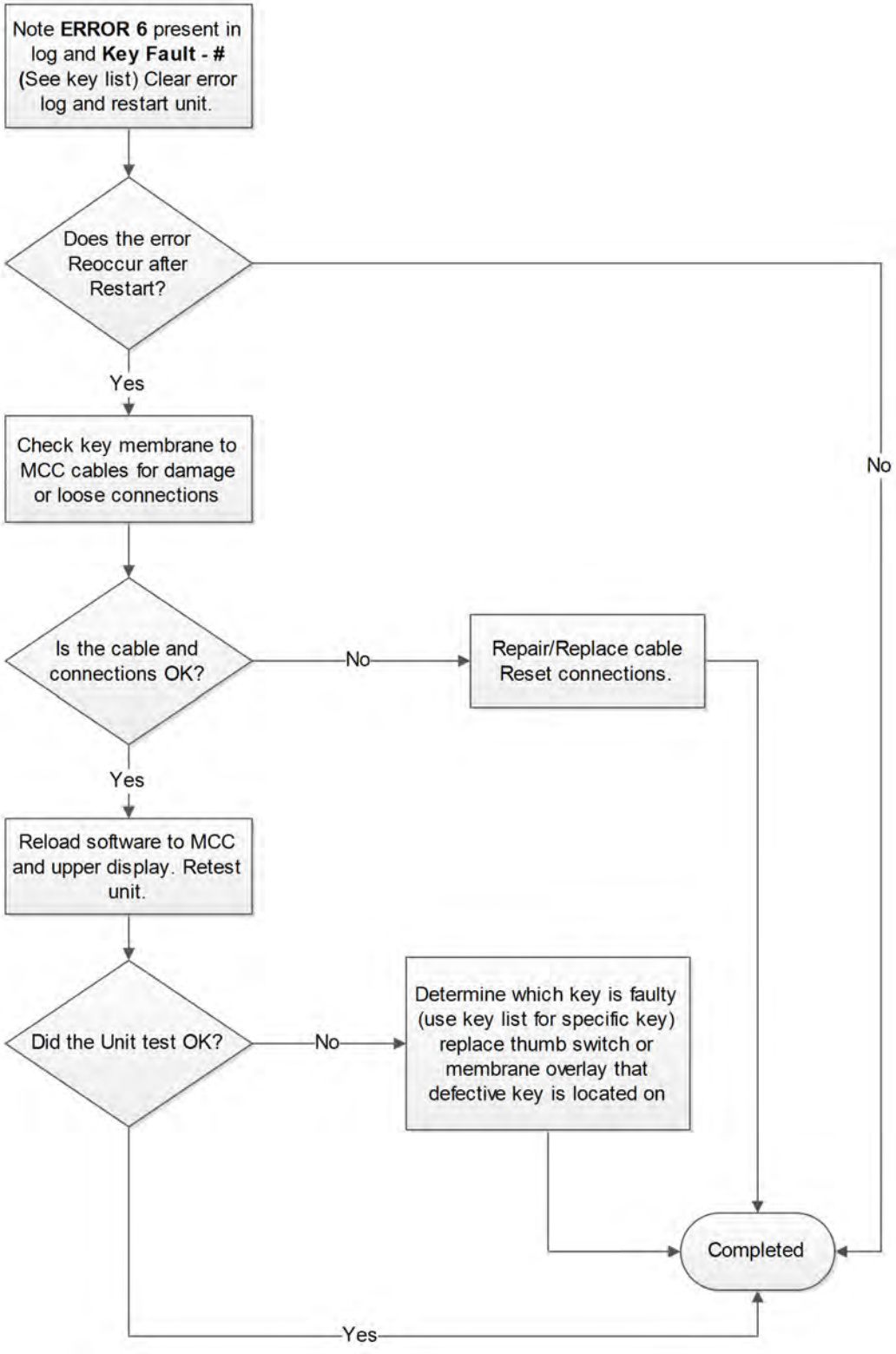
Main controls

Key	Description
5	**Volume Up**
6	**Volume Down**
7	**Channel Up** or **Next**
8	**Channel Down** or **Previous**
9	**STOP**
10	**Fan**

700 series membrane



Flowchart: Error 6

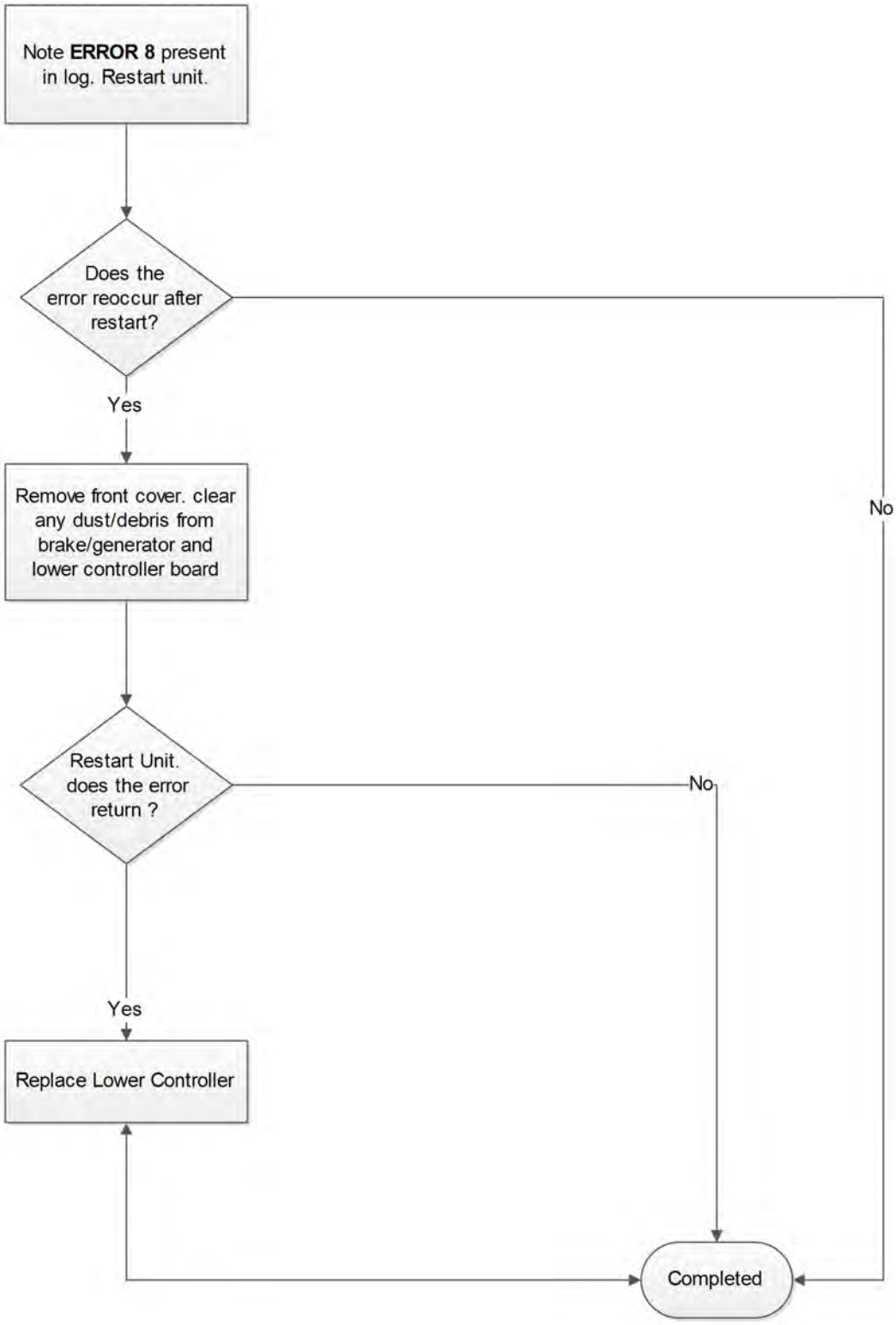


Error 8: Approaching Over-Temperature

Cause:
Drive is reporting a temperature of 100+°C

Service:
- If Error 8 is alone in the log, or with other Error 8's, then the product may be getting warm simply from excessive high-powered use.
- Verify there are no shorts in the console cable from the LCB up to the display itself.
- Verify the brake and LCB are free from debris and accumulated dust.
- Vacuum the inside of the unit and ensure all ventilation is clear.
- Test the brake coil for potentially shorted windings.
- Replace the LCB first if the brake tests out normal and use looks normal.
- Replace the brake.

Flowchart: Error 8



Error 8: Approaching Over-Temperature

Cause:
Drive is reporting a temperature of 100+°C

Service:
- Open controller and vacuum or blow out accumulated debris.
- Verify the drive's fan is functional, unclogged, and the heat sink vanes are clear of debris.
- Verify controller is secured to the mounting plate tightly.
- Inquire on conditions in which the unit generated the error condition (user weight, speed, incline, etc.).

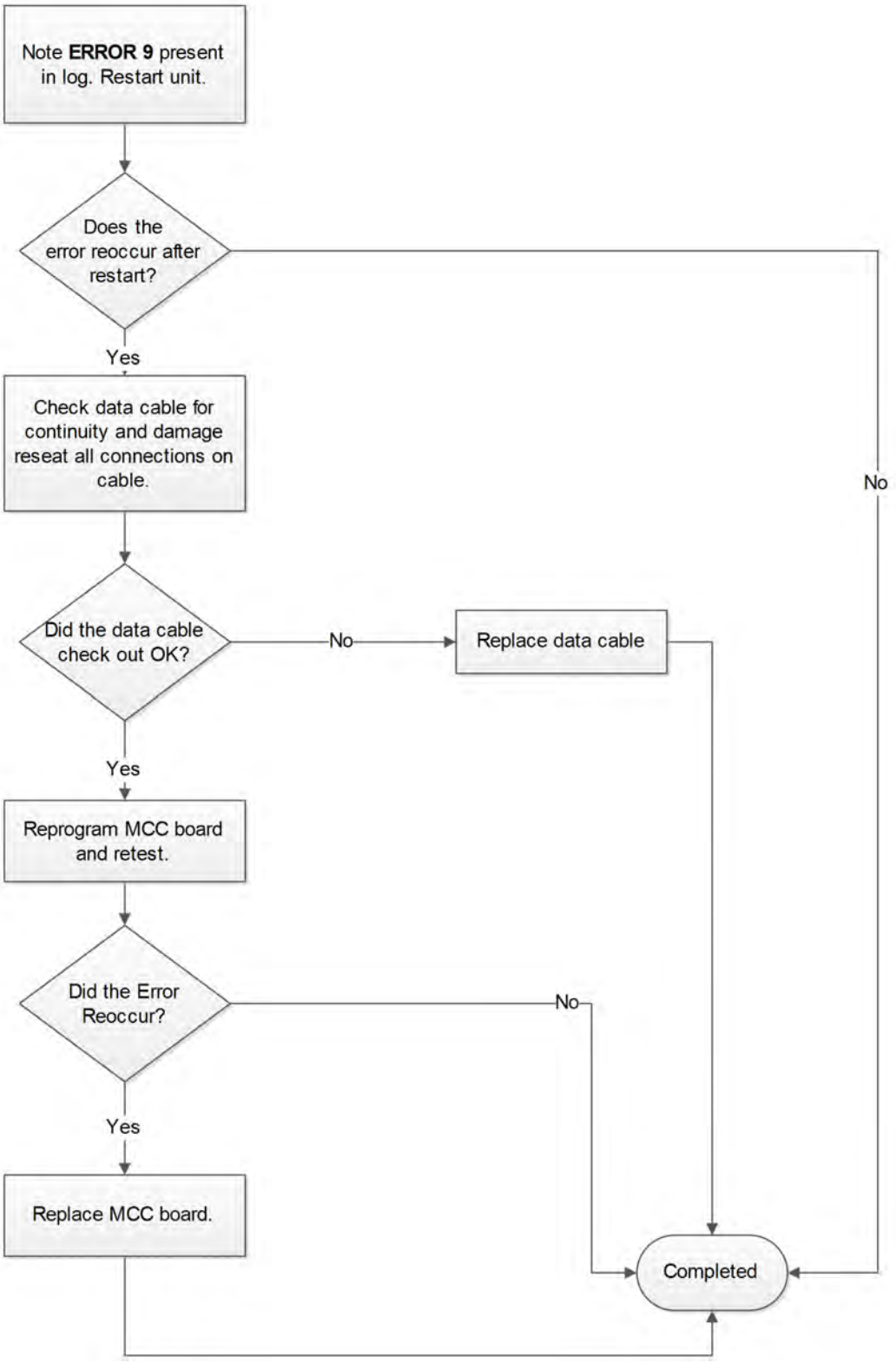
Error 9: MCC Watchdog triggered

Cause:
A software task has failed, causing a delay in the routine running of the code. If the delay is long enough, a hardware timer in the processor will re-boot the processor. When the processor comes up, it will communicate what caused the reset (watchdog vs. normal power reset.) Watchdog resets are logged as Error 9. Power resets are not logged.

Service:
Possible causes of this watchdog error include ESD (Static Electricity) or hardware failures in the display and/or handset board.

- Software issue, update software
- ESD event (inquire on the user as to what caused the issue)
- Check the console cable for damage
- Reprogram or replace the MCC if the problem persists

Flowchart: Error 9



Error 12: Graphics Board Watchdog triggered

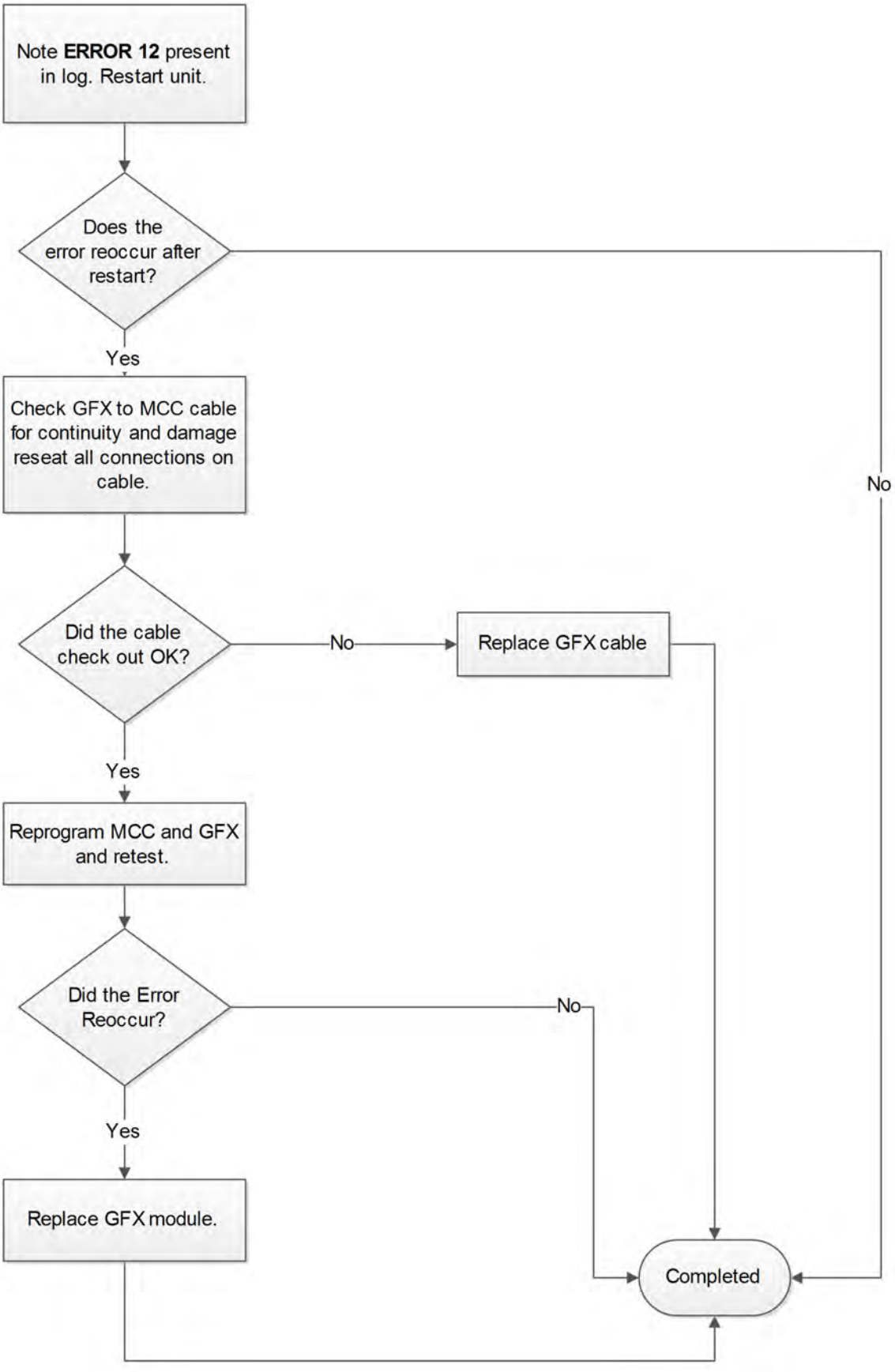
Cause:
A software task has failed, causing a delay in the routine running of the code on the Graphics Board. If the delay is long enough, a hardware timer in the processor will re-boot the processor. When the processor comes up, it will communicate what caused the reset (watchdog vs. normal power reset.) Watchdog resets are logged as Error 12. Power resets are not logged.

Service:
The only theory on what could cause a watchdog to kick on the GFX is an ESD event, software or hardware failure

- Check the CHR grips for conductivity and ensure they aren't shorted to the frame or pinched, and that they don't lie against or near the back of the GFX board.
- Verify the membranes and decals are not fatigued, cracked or show signs of moisture intrusion.
- Ensure the GFX ground lead is secured correctly, and all screws holding the MCC are tight.
- Check the MCC grounding cable for a tight fit.

If the error occurs often, replace the GFX assembly.

Flowchart: Error 12



Error 13: Upper Display watchdog triggered

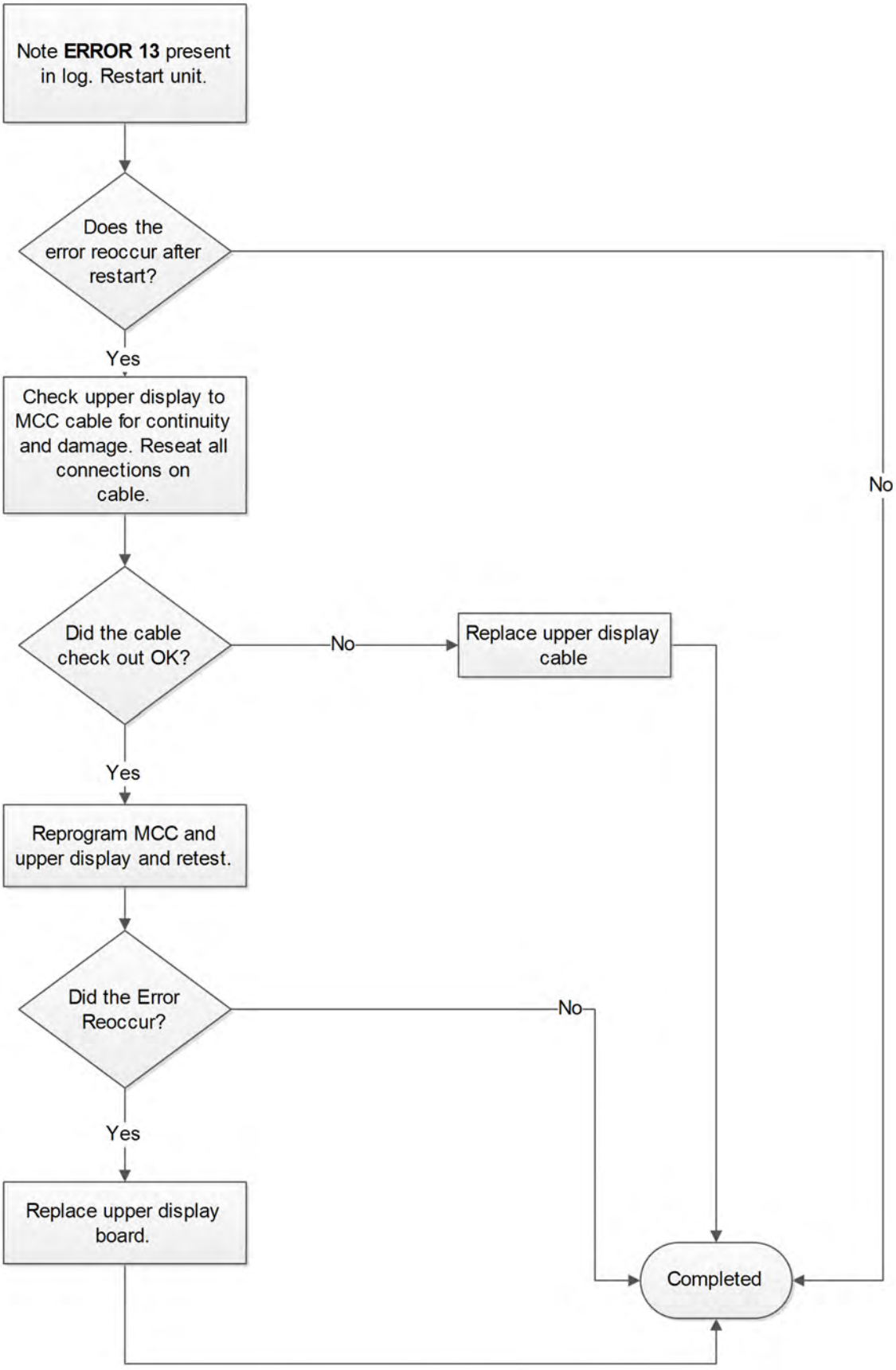
Cause:
A software task has failed, causing a delay in the routine running of the code on the upper display. If the delay is long enough, a hardware timer in the processor will re-boot the processor. When the processor comes up, it will communicate what caused the reset (watchdog vs. normal power reset.) Watchdog resets are logged as Error 13. Power resets are not logged.

Service:
The only theory on what could cause a watchdog to kick on the display is an ESD event, software or hardware failure.

- Check the CHR grips for conductivity and ensure they aren't shorted to the frame or pinched, and that they don't lie against or near the back of the GFX board.
- Verify the membranes and decals are not fatigued, cracked or show signs of moisture intrusion.
- Ensure the GFX ground lead is secured correctly, and all screws holding the MCC are tight.
- Check the MCC grounding cable for a tight fit.

If the error occurs often, replace the GFX assembly.

Flowchart: Error 13

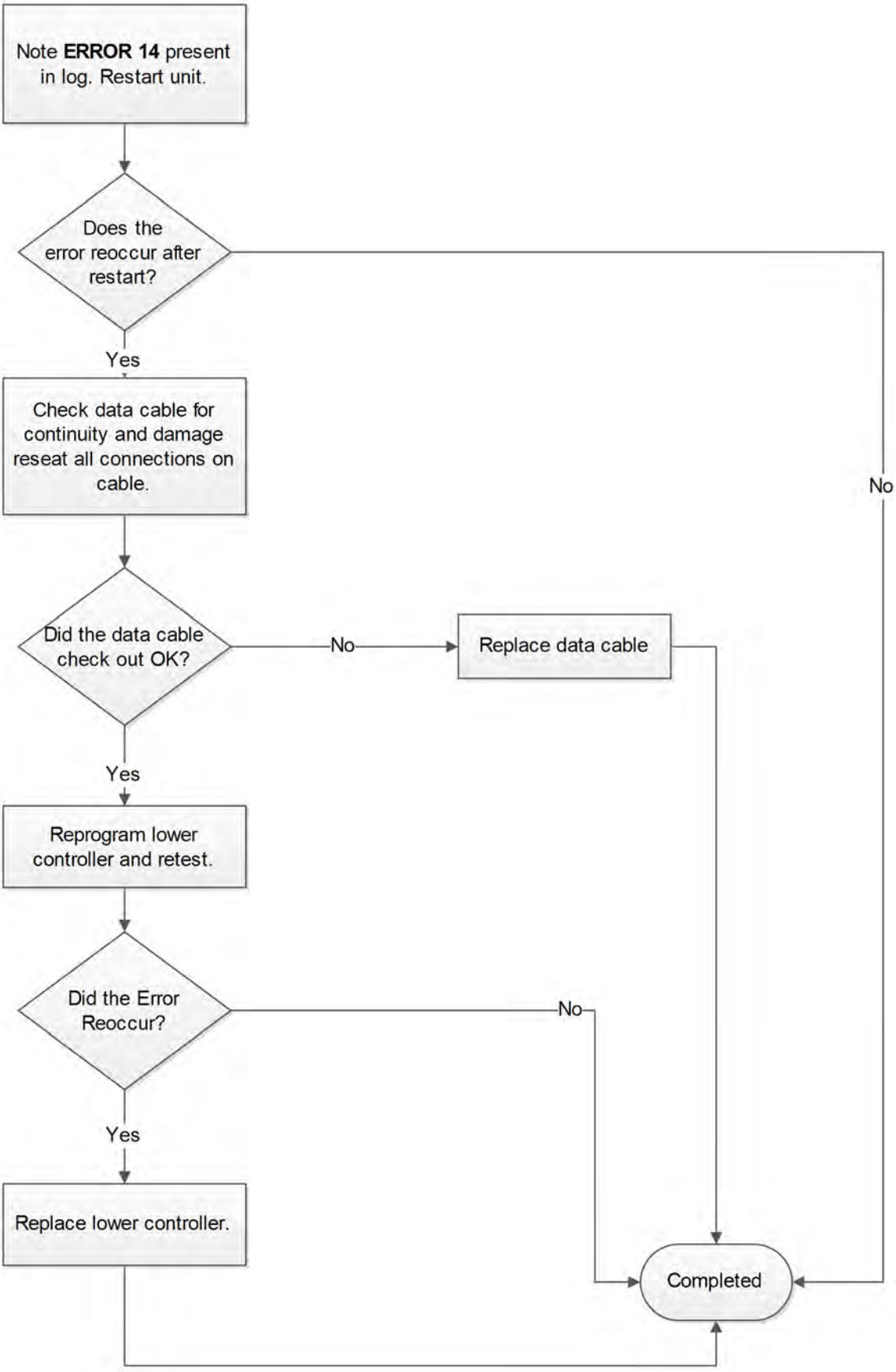


Error 14: Drive Error Unknown

Cause:
The drive provided an error in a packet that was corrupt, or encountered an otherwise unrecognizable error to the console. This is a ‘catch all’ for any errors that are not known or recognized.

Service:
- Check the console cable for tears or shorts, and verify all connections are clicked-in and solid.
- Check for terminal corrosion.
- Ensure all grounds are in place and connected to un-painted and un-corroded surfaces.
- Check drive and display communications with the Cybex test protocol software on a laptop.
- Reprogram or replace the drive and replace the console cable.
- Consider moving the equipment to a different location as it can be receiving interference from something nearby.

Flowchart: Error 14



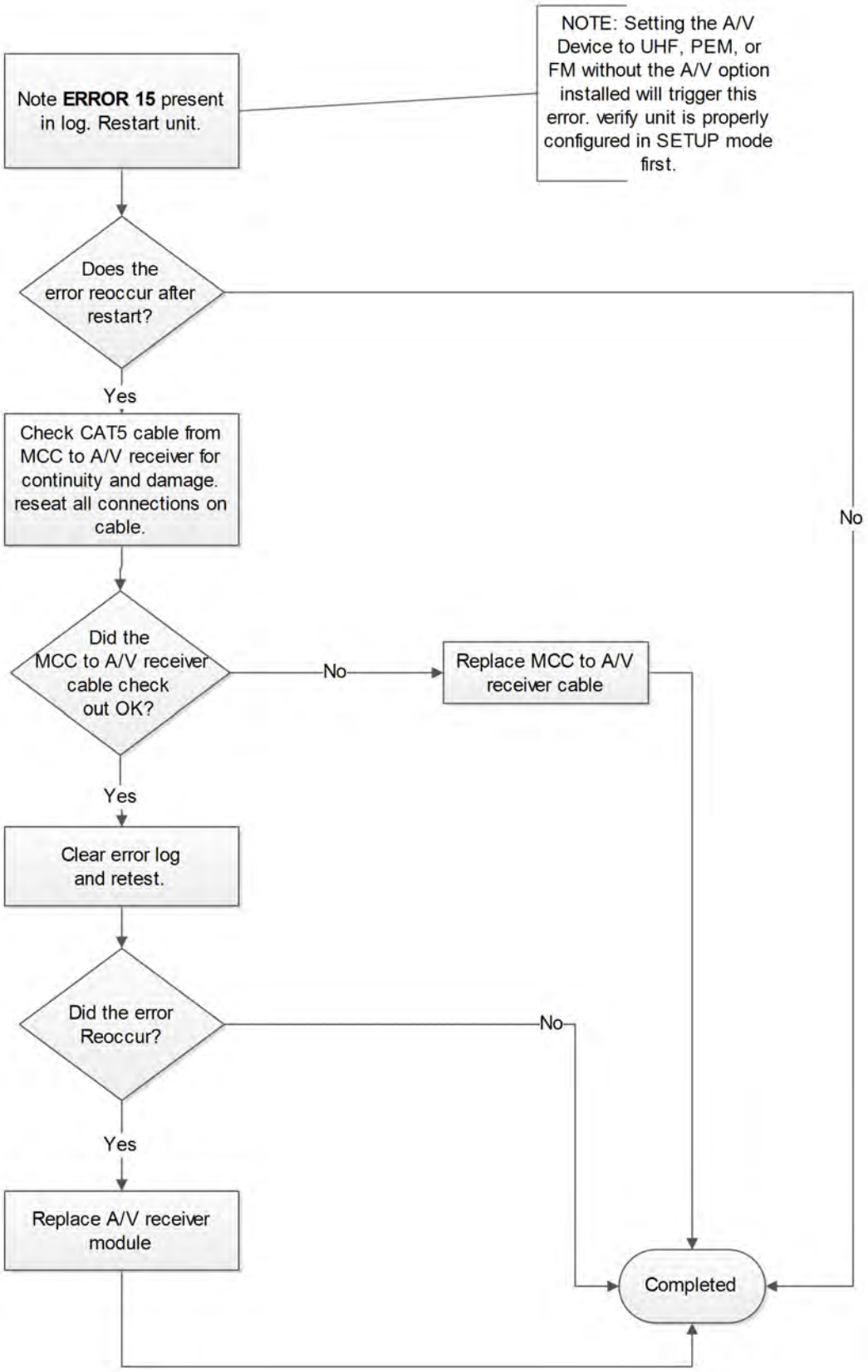
Error 15: Embedded A/V Device Failure

Cause:
A software task has failed, causing a delay in the routine running of the code on the Graphics Board. If the delay is long enough, a hardware timer in the processor will re-boot the processor. When the processor comes up, it will communicate what caused the reset (watchdog vs. normal power reset.) Watchdog resets are logged as Error 12. Power resets are not logged.

Service:
Check the cables and connections required between the MCC and the A/V device. If cabling appears normal:

- For an embedded wireless receiver, replace the receiver and all cabling.
- For an embedded PEM, verifiy the EPEM works with the remote control and/or swap the EPEM with a known working PEM or on to another unit to see where the problem lies.

Flowchart: Error 15

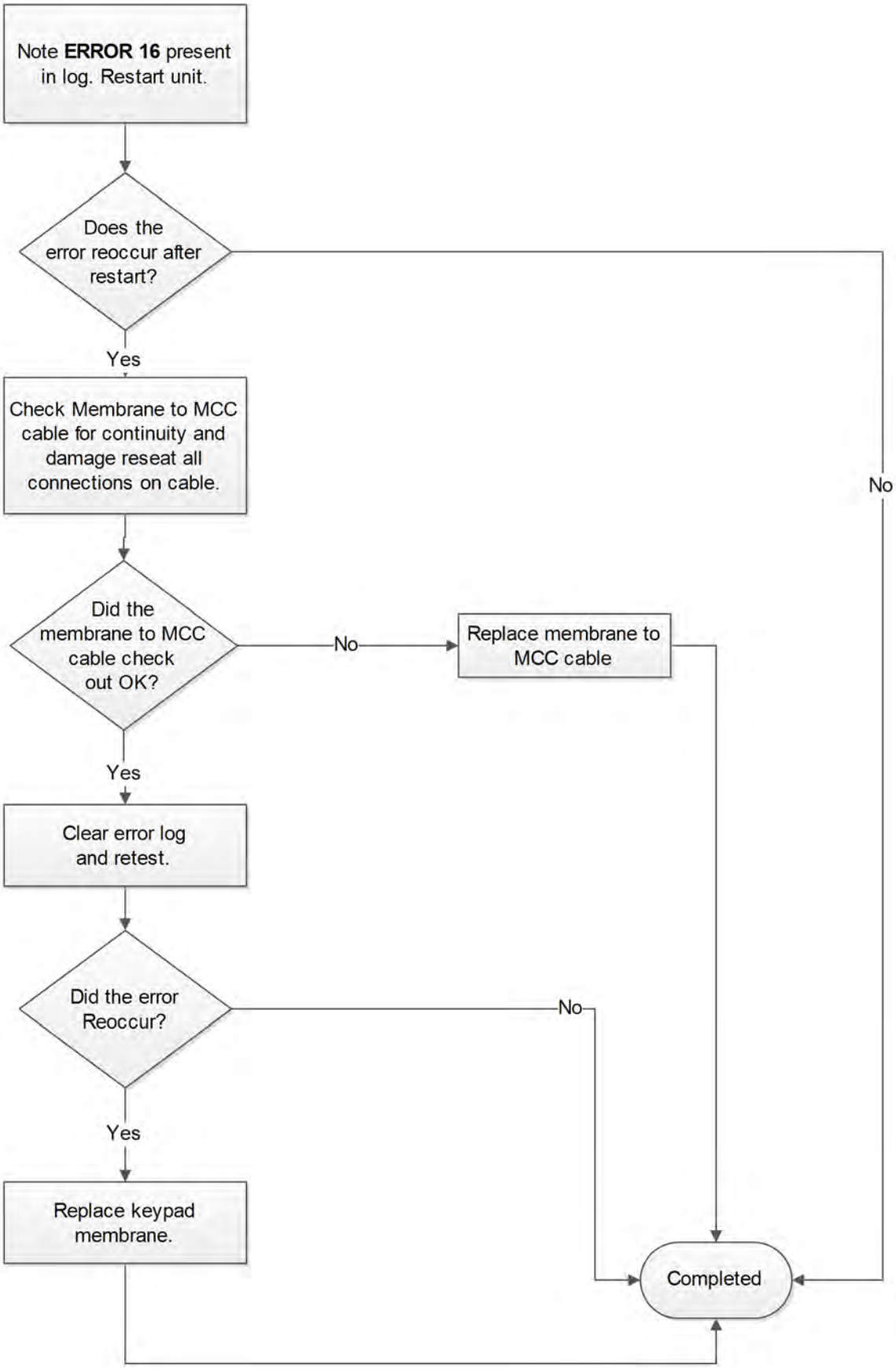


Error 16: Membrane Fault (No Membrane)

Cause:
Membrane is showing a general fault of communications such as registers can’t be set, corrupt responses, or no responses (such as the membrane being unplugged.)

Service:
- Ensure the membrane is plugged in.
- Inspect the membrane cable for cuts, pinches, and all leads are fully inserted in their connectors.
- Replace the membrane and/or the thumb control switches.

Flowchart: Error 16

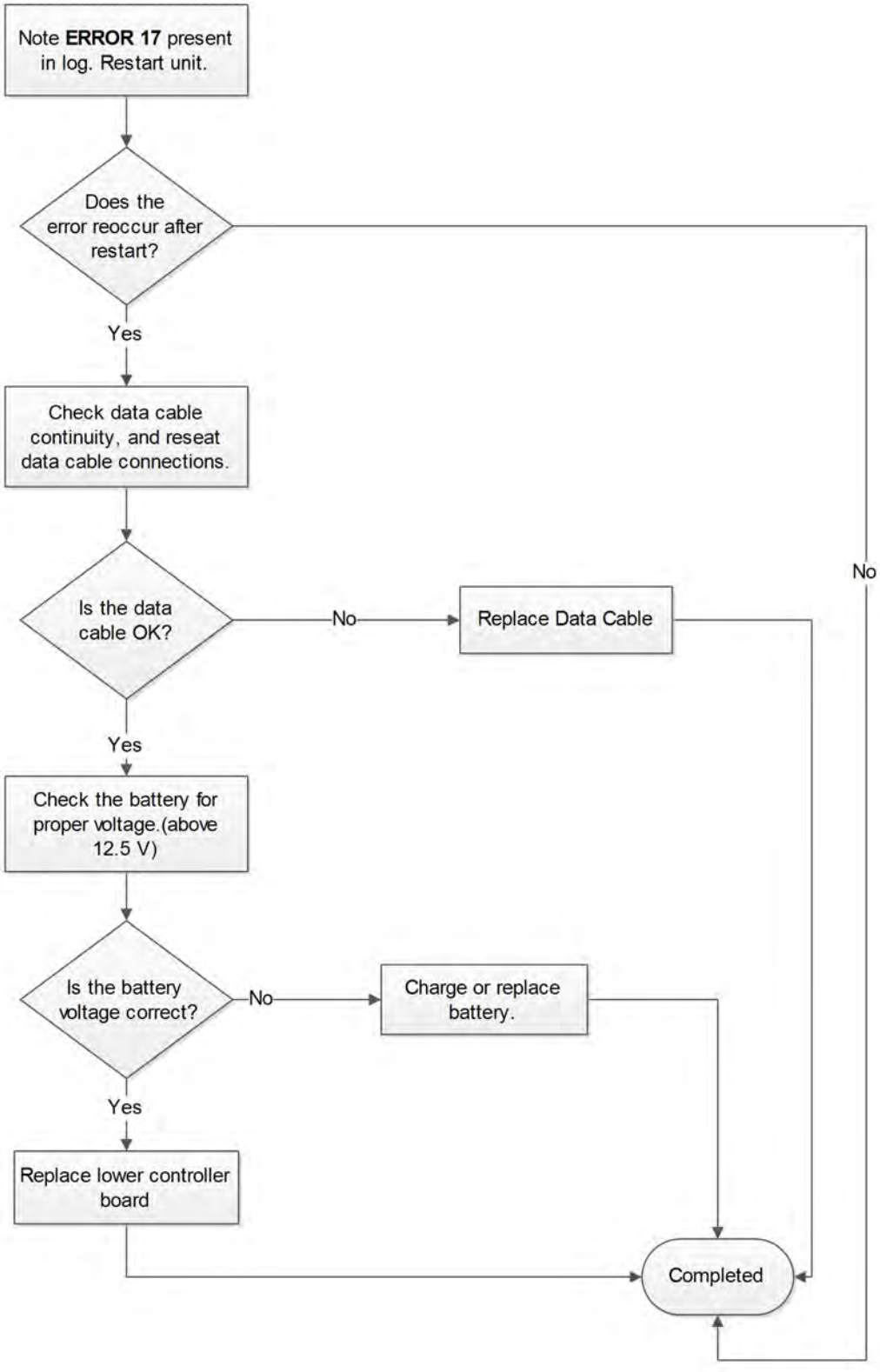


Error 17 - LCB ignored shut-down, Console pulled hardware reset

Cause:
LCB is locked up, or a loss of valid communication, or a hardware failure on the LCB. Console requested a shut down and saw the LCB remained on battery w/o a speed signal for more than 120 seconds.

Service:
If preceded by an *Error 5*, this is a communications issue – check the console cable from end to end. If not preceded by an Error 5, the LCB is likely compromised and requires replacing.

Flowchart: Error 17

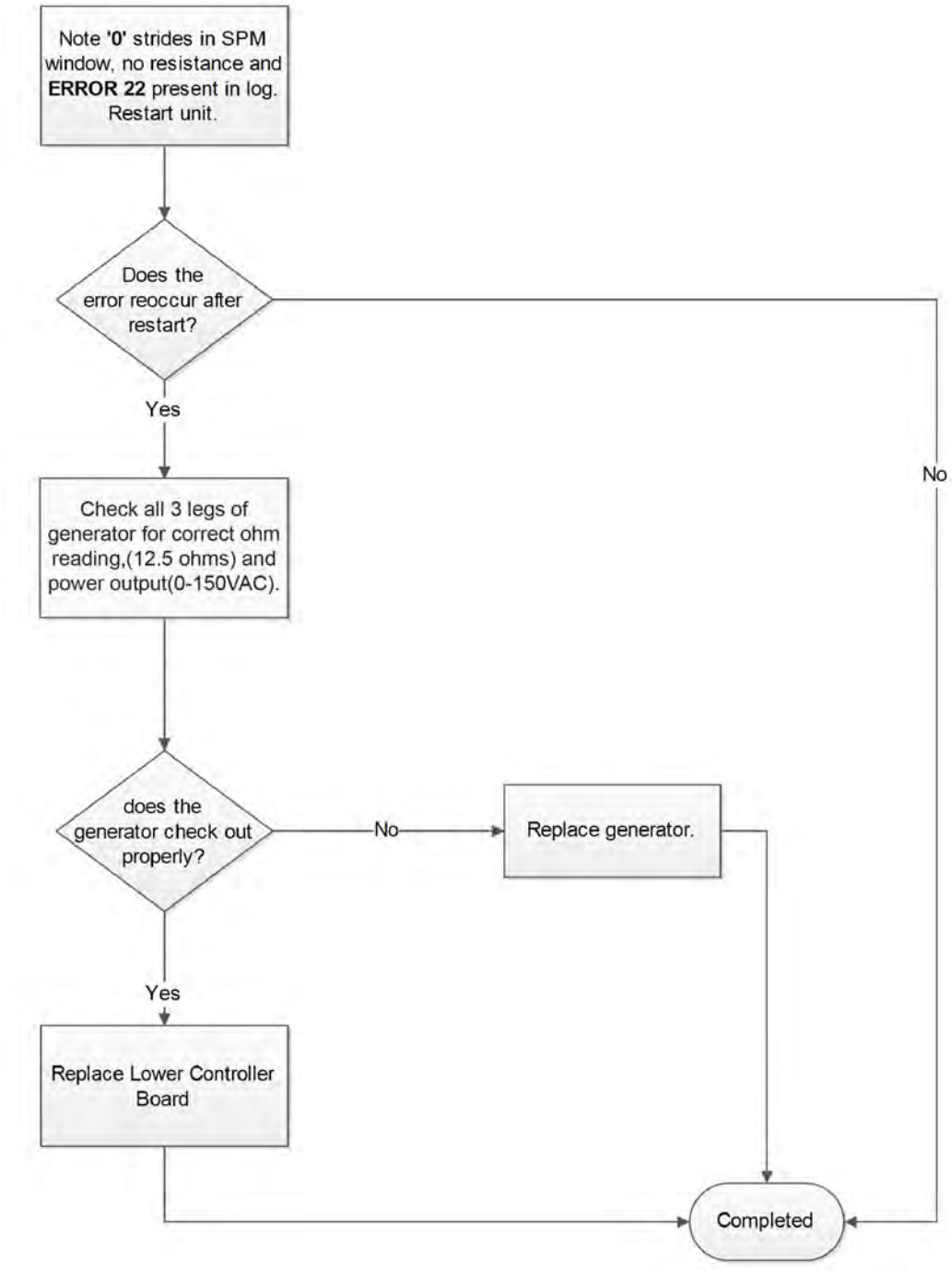


Error 22 - Power Supply Irregularity / Generator Power but no Speed Signal

Cause:
The LCB power supply is being powered sufficiently by the generator, yet the LCB recognizes no speed signal. It is indicative of a LCB failure or one phase of the generator is open.

Service:
- Check the three phase connections at the generator connector and that connector’s solid mating to the controller.
- Inspect the generator windings and magnets.
- Lower Control Board is suspect. Surface mount fuse on generator input could be blown.

Flowchart: Error 22

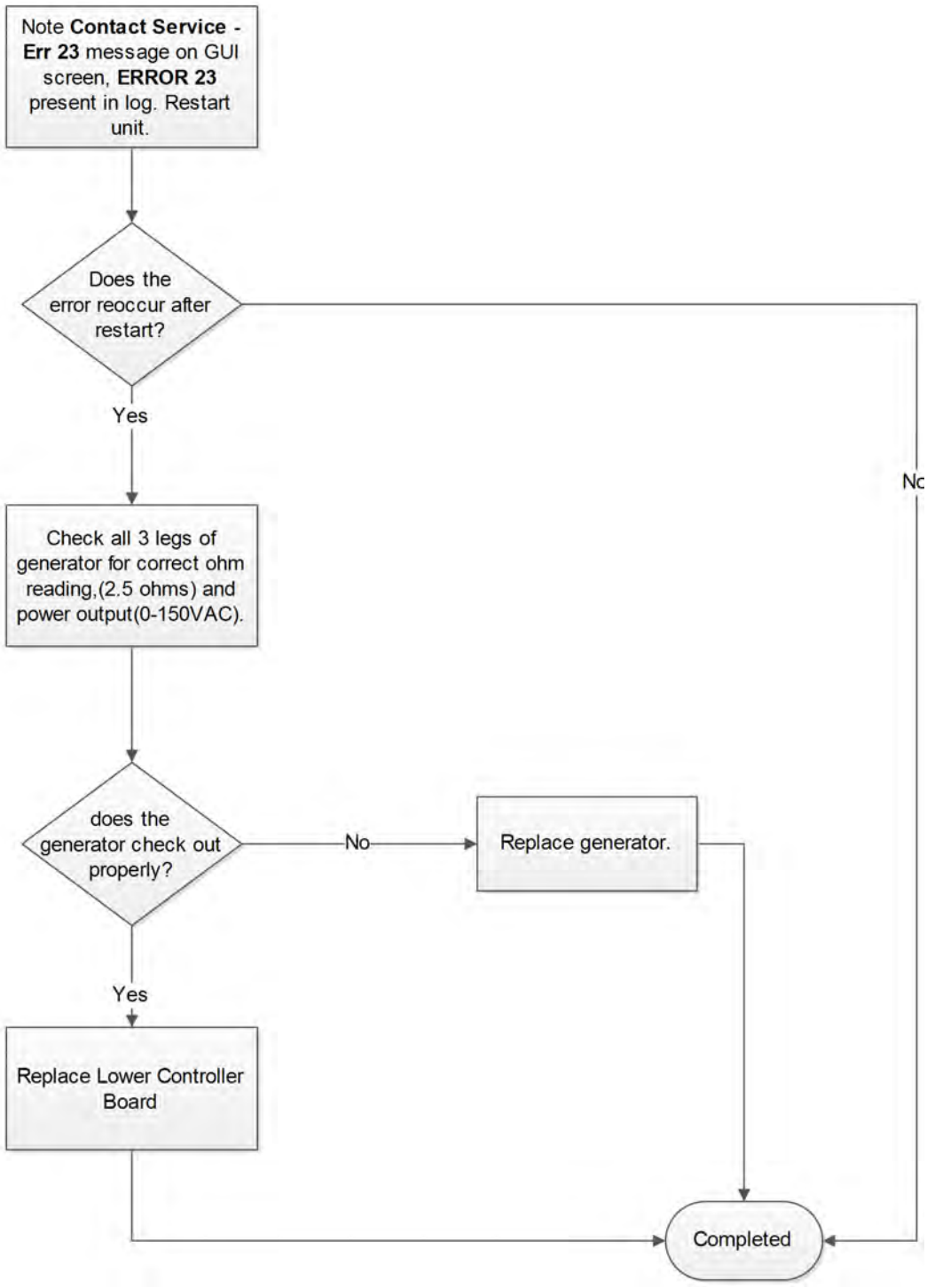


Error 23 - Power Supply Irregularity / Speed Signal but no Generator Power - Fatal

Cause:
The LCB recognizes a valid speed signal from the generator, yet does not have sufficient power from it. Indicative of a LCB power supply failure.

Service:
- The most likely suspect is the LCB. Check the LEDs on the board to verify lack of generator power. Replace controller.
- Check the three phase connections at the generator connector and that connector’s solid mating to the controller.

Flowchart: Error 23

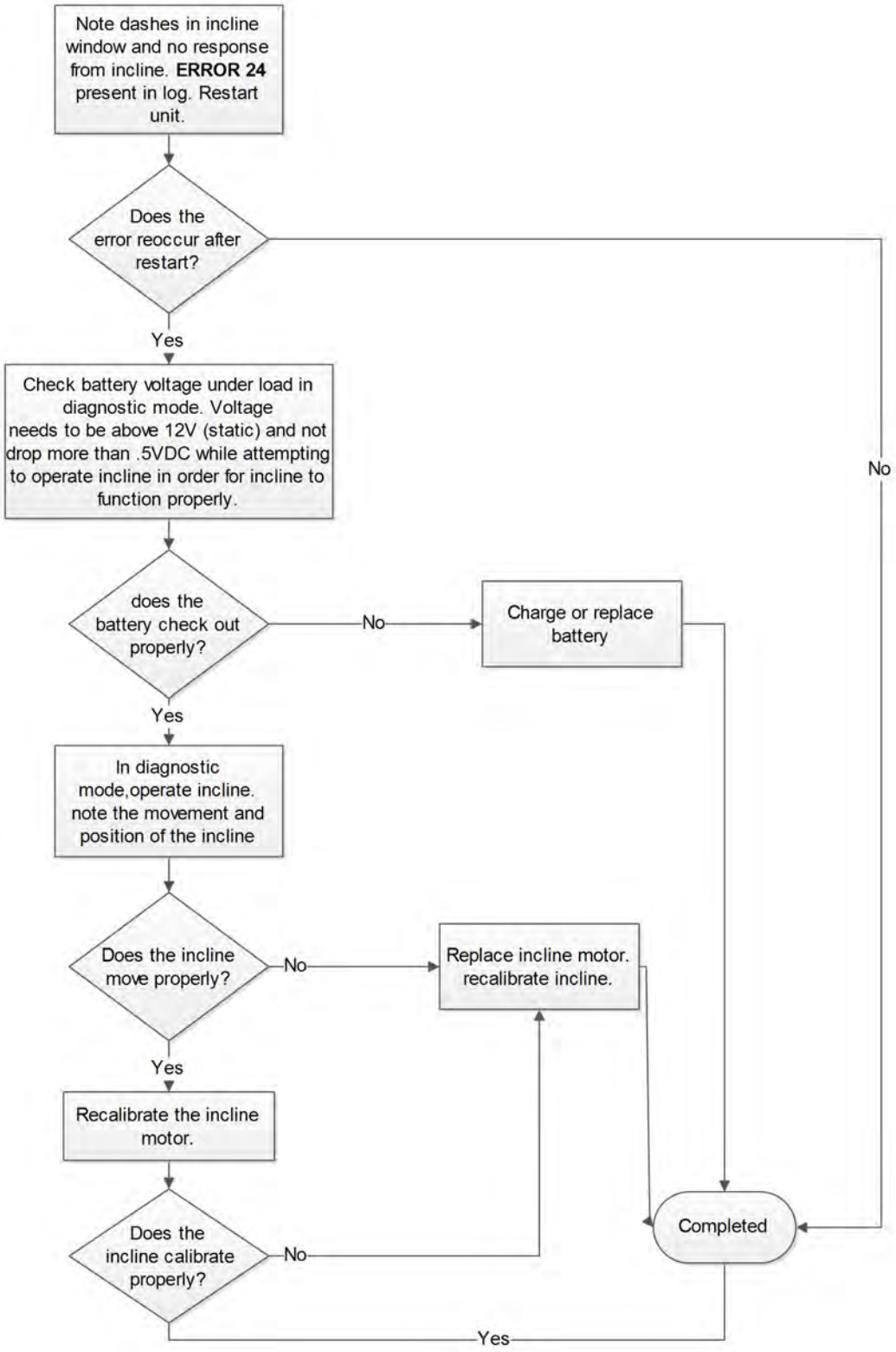


Error 24 - Incline moving too slowly

Cause:
Incline is commanded to move yet the change in feedback is slower than the minimum allowed.

Service:
- Bad or low battery, poor battery connection
- Incline motor lead screw requires lubrication
- Incline is binding
- Incline motor is de-magnetized
- Incline motor brushes are worn, hanging up, damaged
- Potentiometer is damaged or the gear drive to it is worn or spinning on the shaft

Flowchart: Error 24

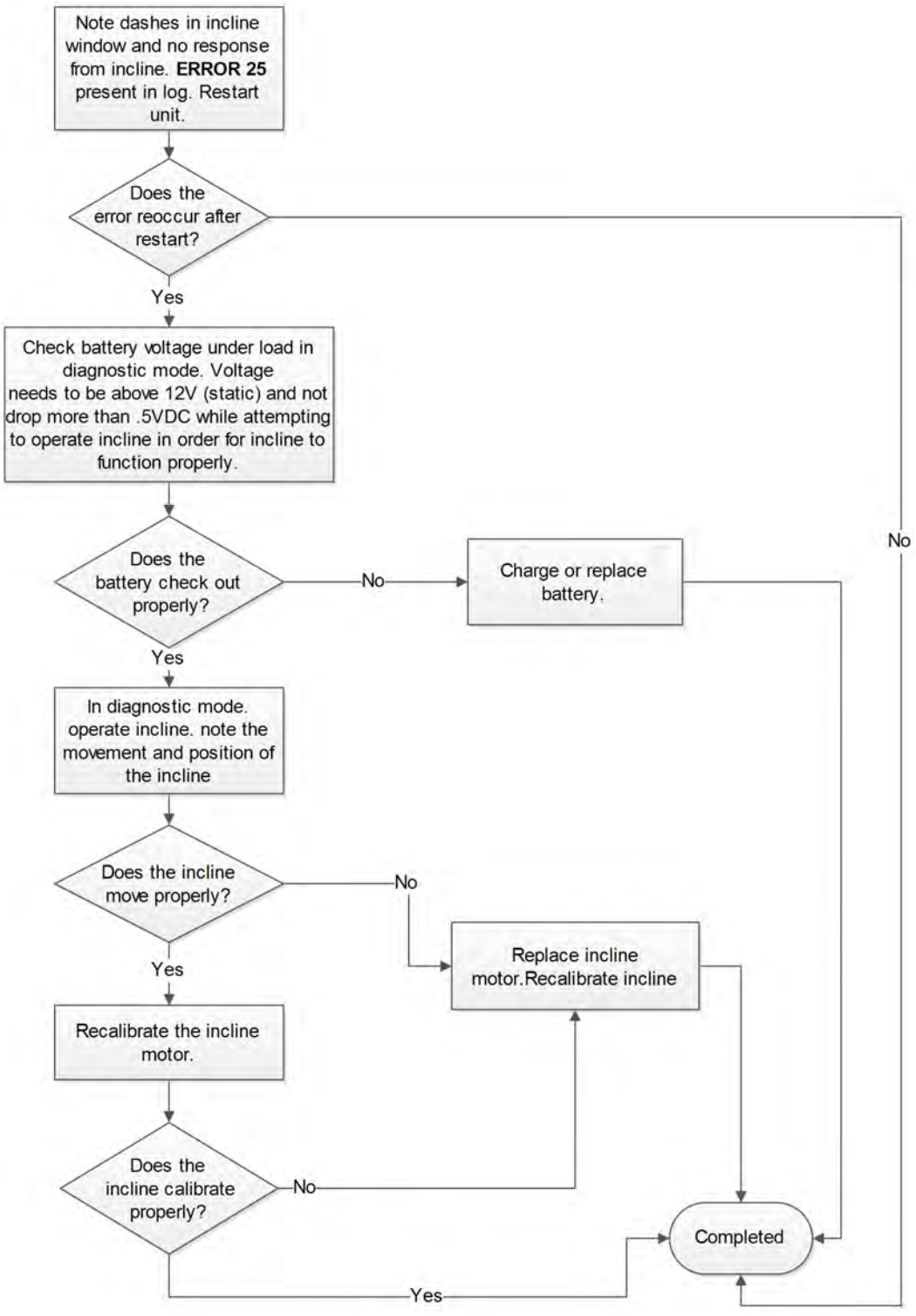


Error 25 - Incline movement feedback stopped

Cause:
Incline is commanded to move yet the feedback indicates the value is not changing or ceases to change as expected

Service:
- Bad or low battery, poor battery connection
- Incline motor’s lead screw requires lubrication
- Incline is binding
- Incline is hitting the low limit (the motor case) or the high limit (the weld washer), caused by the calibration to be off or corrupted
- Incline is de-magnetized
- Incline motor brushes are worn, hanging up, damaged
- Potentiometer is damaged or the gear drive to it is worn or spinning on the shaft
- Fuse blown on controller

Flowchart: Error 25

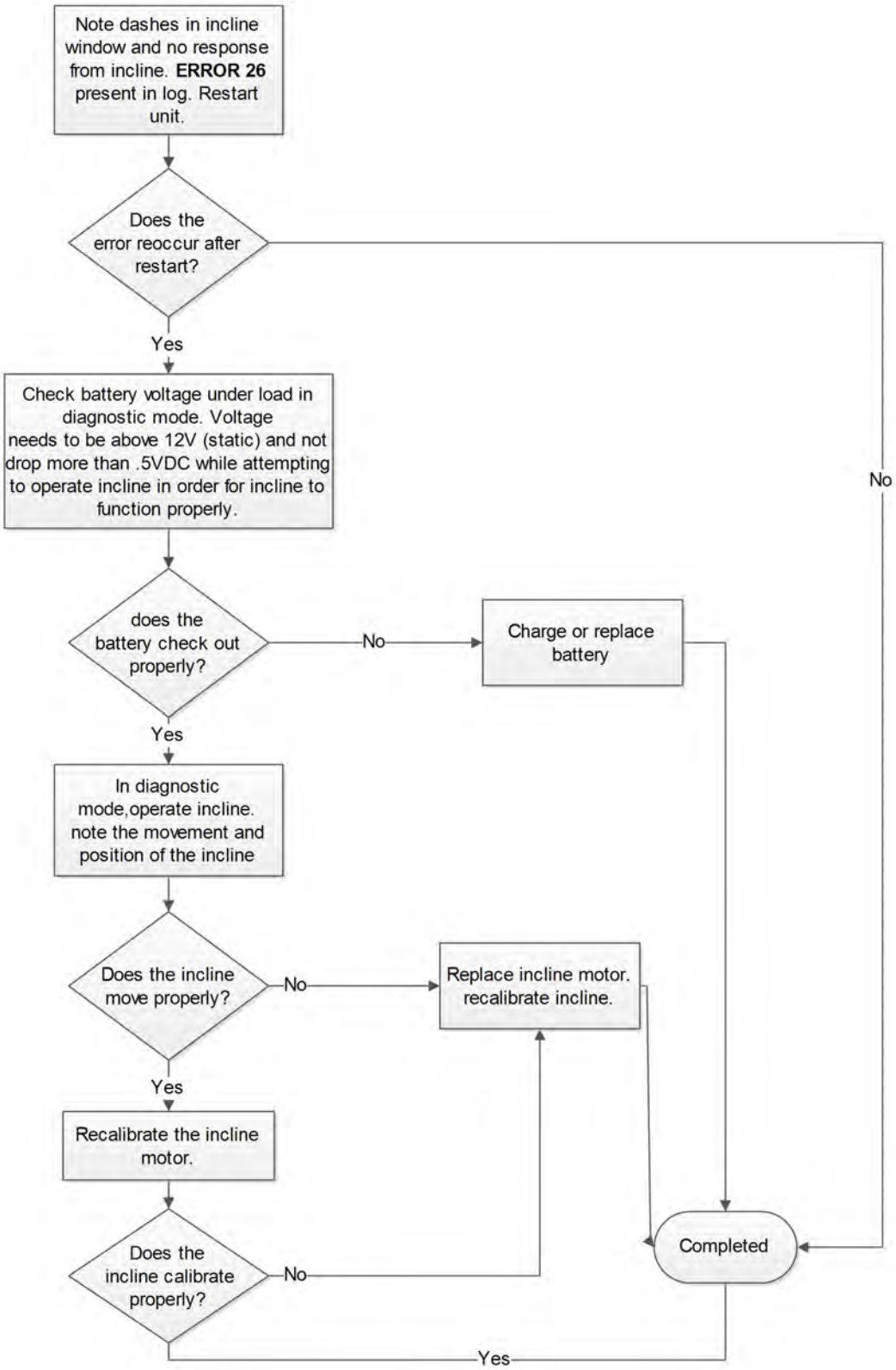


Error 26 - Incline disabled

Cause:
Incline feedback problems could not be remedied by re-calibrating after an Error 25.

Service:
- Bad or low battery, poor battery connection
- Incline motor lead screw requires lubrication
- Incline is binding
- Incline is hitting the low limit (the motor case) or the high limit (the weld washer), caused by the calibration to be off or corrupted
- Incline motor is de-magnetized
- Incline motor brushes are worn, hanging up, damaged
- Potentiometer is damaged or the gear drive to it is worn or spinning on the shaft
- Fuse blown on controller
- Incline is unplugged or the cable is defective

Flowchart: Error 26



Related Links

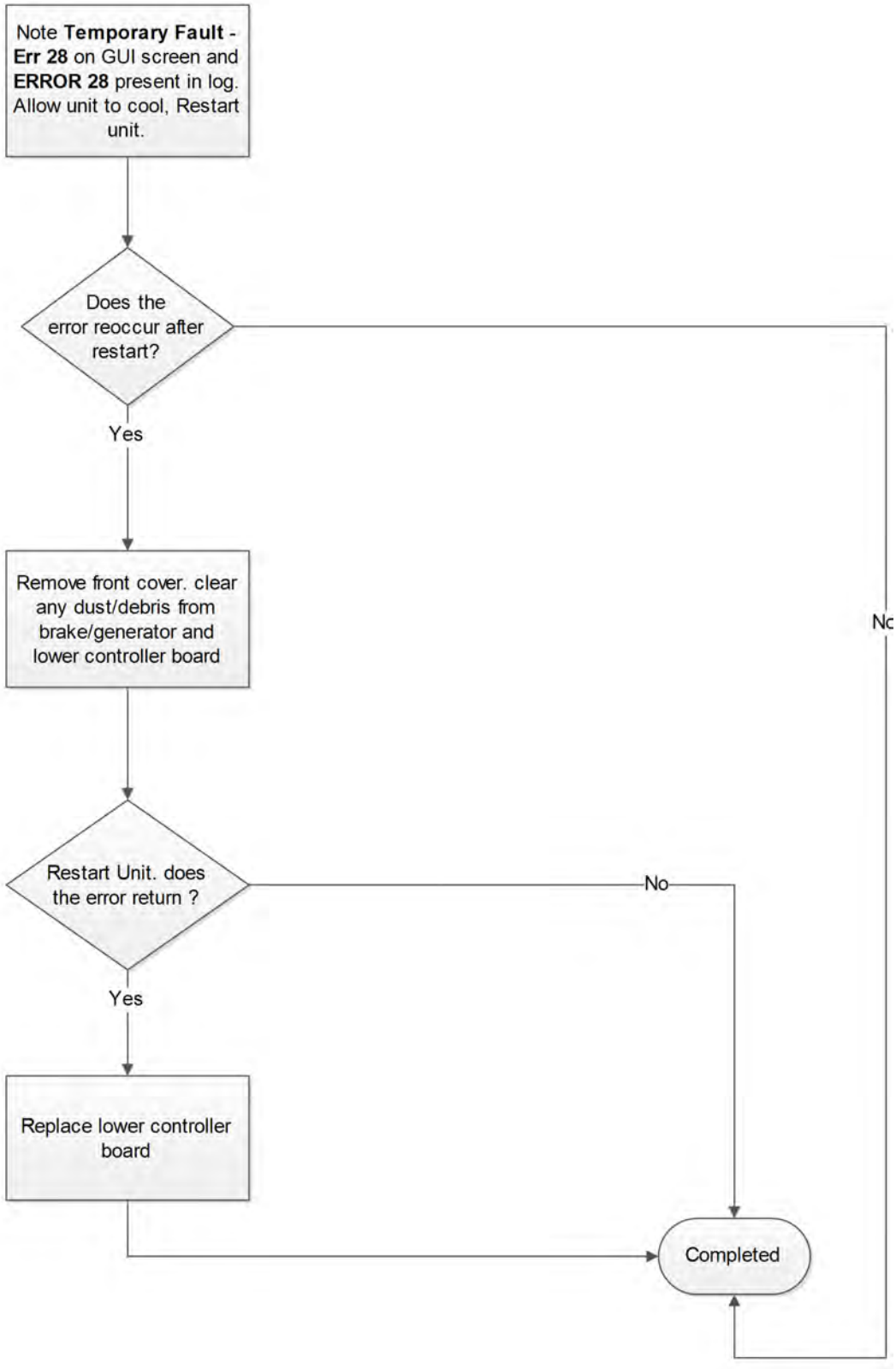
Error 25 - Incline movement feedback stopped

Error 28: Over-Temperature

Cause:
The system is exceeding the maximum allowed temperature, either due to extreme use or a short in the generator windings. Over-temperature can damage the battery or cause the battery charge and LCB processor not to function properly.

Service:
- If this is accompanied by an Error 8 within 10 seconds of the 28 in the log, the problem is not likely to be over-temp, but an issue with the LCB. Replace the LCB if the problem persists.
- If the error log has an 8 and then one to sixty minutes later stored a 28, the over-temperature situation is likely real. Look in to why the unit is over-heating.
- Verify the brake/generator is free from debris and accumulated dust.
- Vacuum the inside of the unit and ensure all ventilation is clear.
- Check for shorted windings on the generator.
- Replace the brake/generator if problem persists.

Flowchart: Error 28

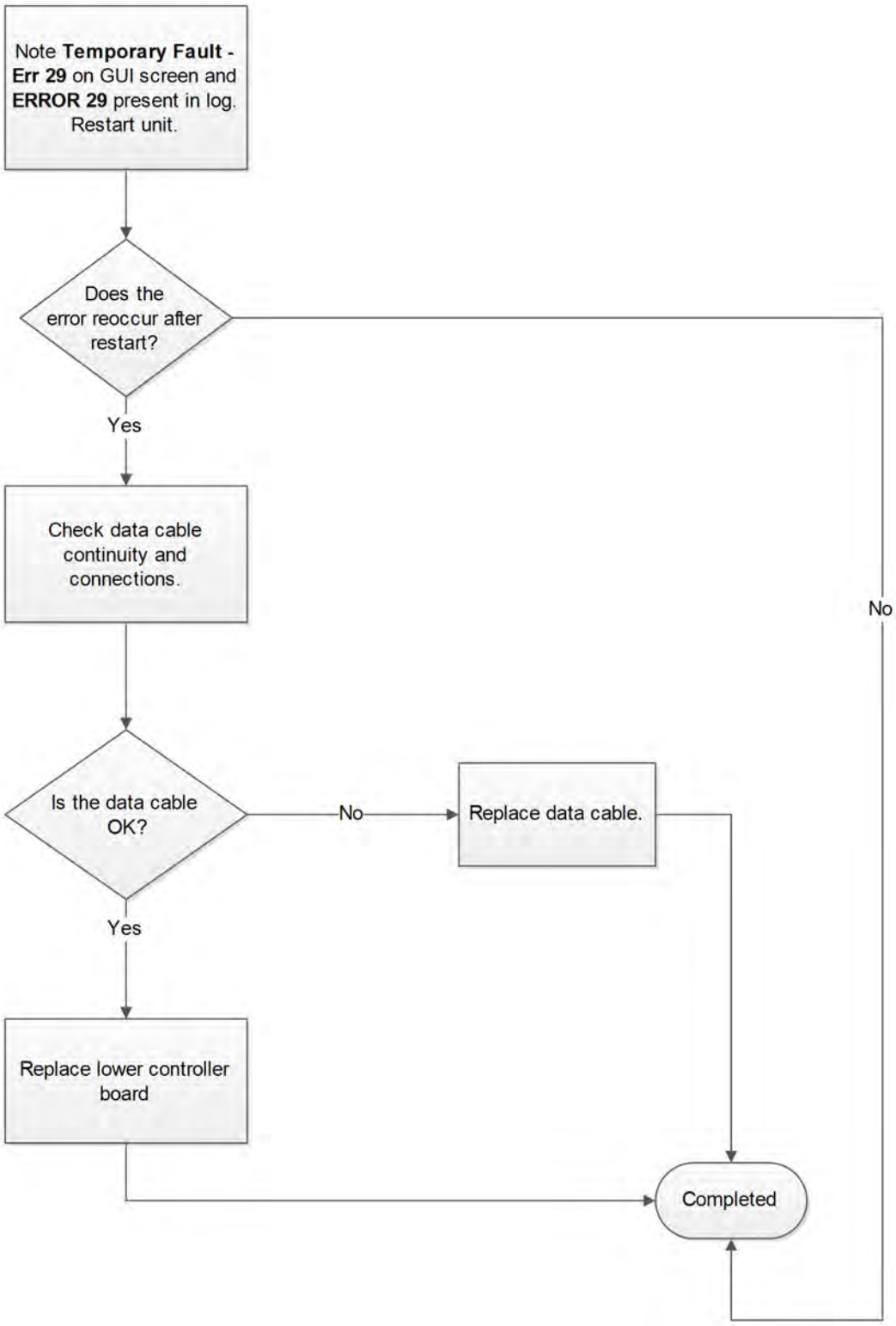


Error 29: Controller watchdog triggered

Cause:
A software task has failed to reset the Watchdog in the lower controller or a memory fault was detected there.

Service:
Lower Board needs servicing or replacement.

Flowchart: Error 29

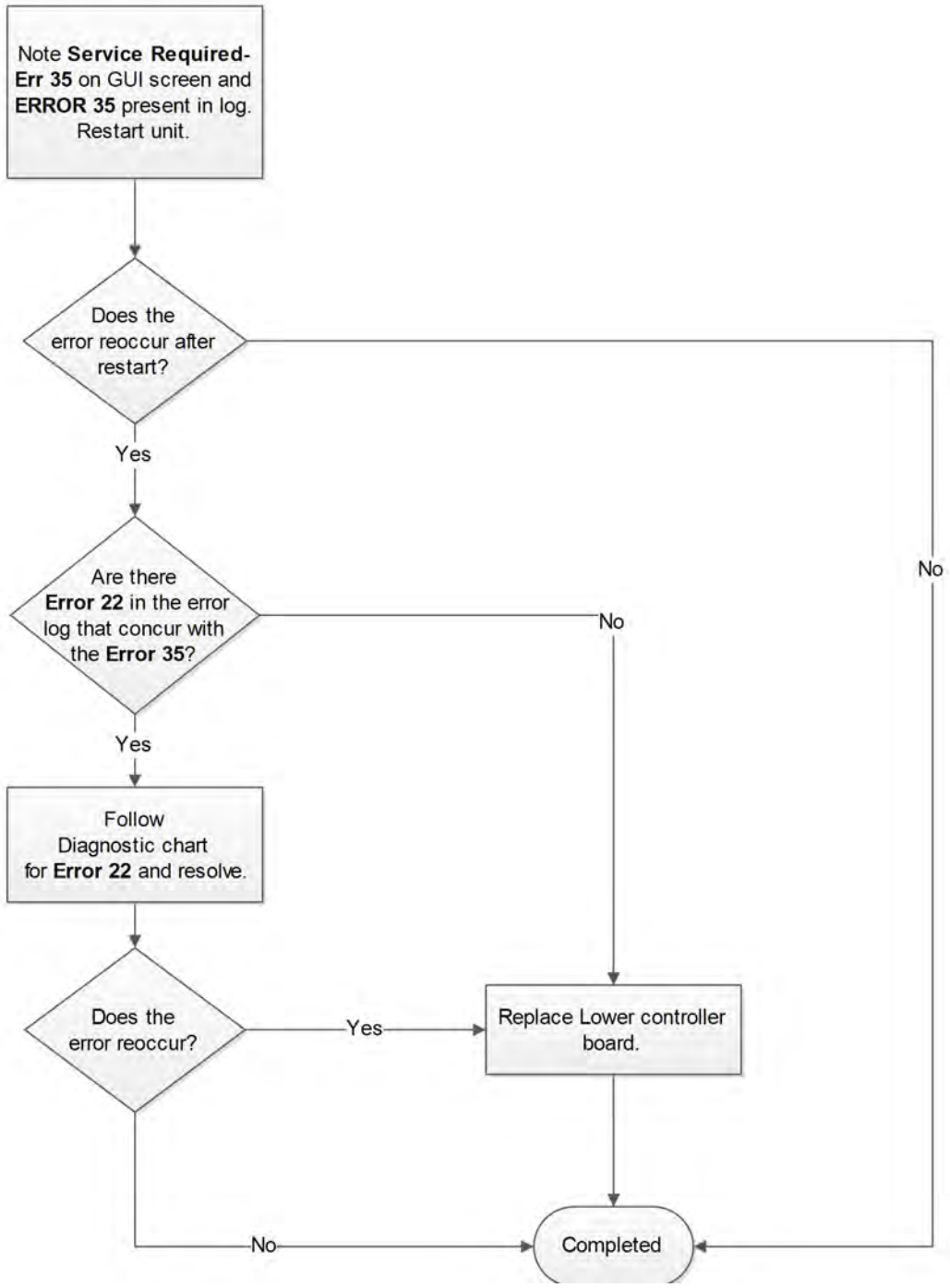


Error 35: LCB Latched On / Can’t shut down

Cause:
The drive is powered off of the generator yet it senses it is on battery, or some other internal LCB power management has failed.

Service:
Lower Board needs servicing, re-programming, or replacement.

Flowchart: Error 35

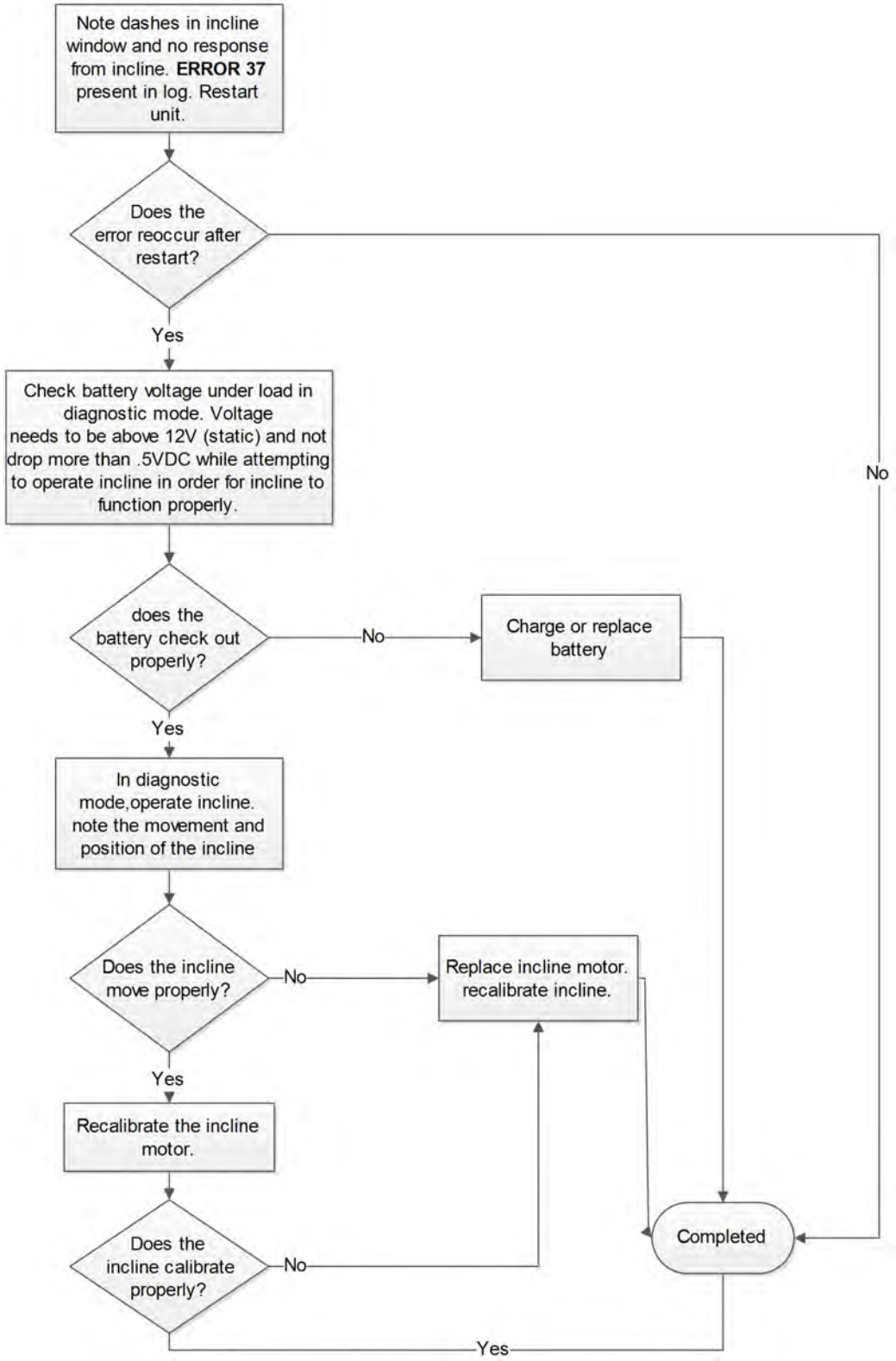


Error 37: Incline Out of Range

Cause:
Incline is commanded to move yet the feedback indicates the value is outside of the expected range.

Service:
- Incline motor’s potentiometer is physically rotated out of position
- Potentiometer is damaged or the gear drive to it is worn or spinning on the shaft
- Incline is hitting the low limit (the motor case) or the high limit (the weld washer), caused by the calibration to be off or corrupted
- Fuse blown on controller or other controller hardware failure
- Check wiring from incline motor to LCB for nicks, shorts, opens

Flowchart: Error 37

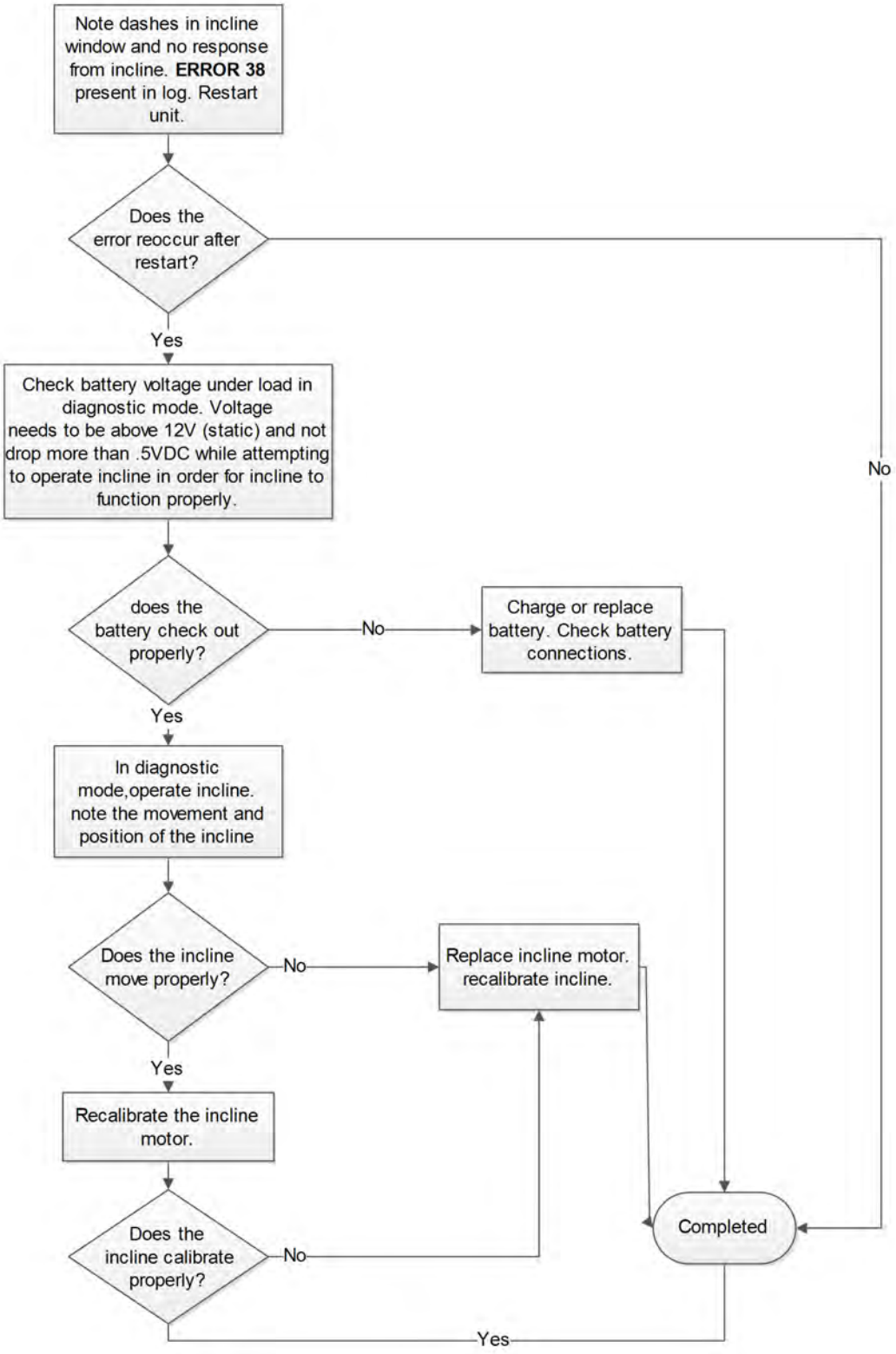


Error 38: Incline Timeout

Cause:
Incline is commanded to move yet the feedback indicates it has not reached the target within the allotted timeframe.

Service:
- Incline motor’s potentiometer is physically rotated out of position
- Potentiometer is damaged or the gear drive to it is worn or spinning on the shaft
- Incline is hitting the low limit (the motor case) or the high limit (the weld washer), caused by the calibration to be off or corrupted
- Fuse blown on controller or other controller hardware failure
- Check wiring from incline motor to LCB for nicks, shorts, opens

Flowchart: Error 38



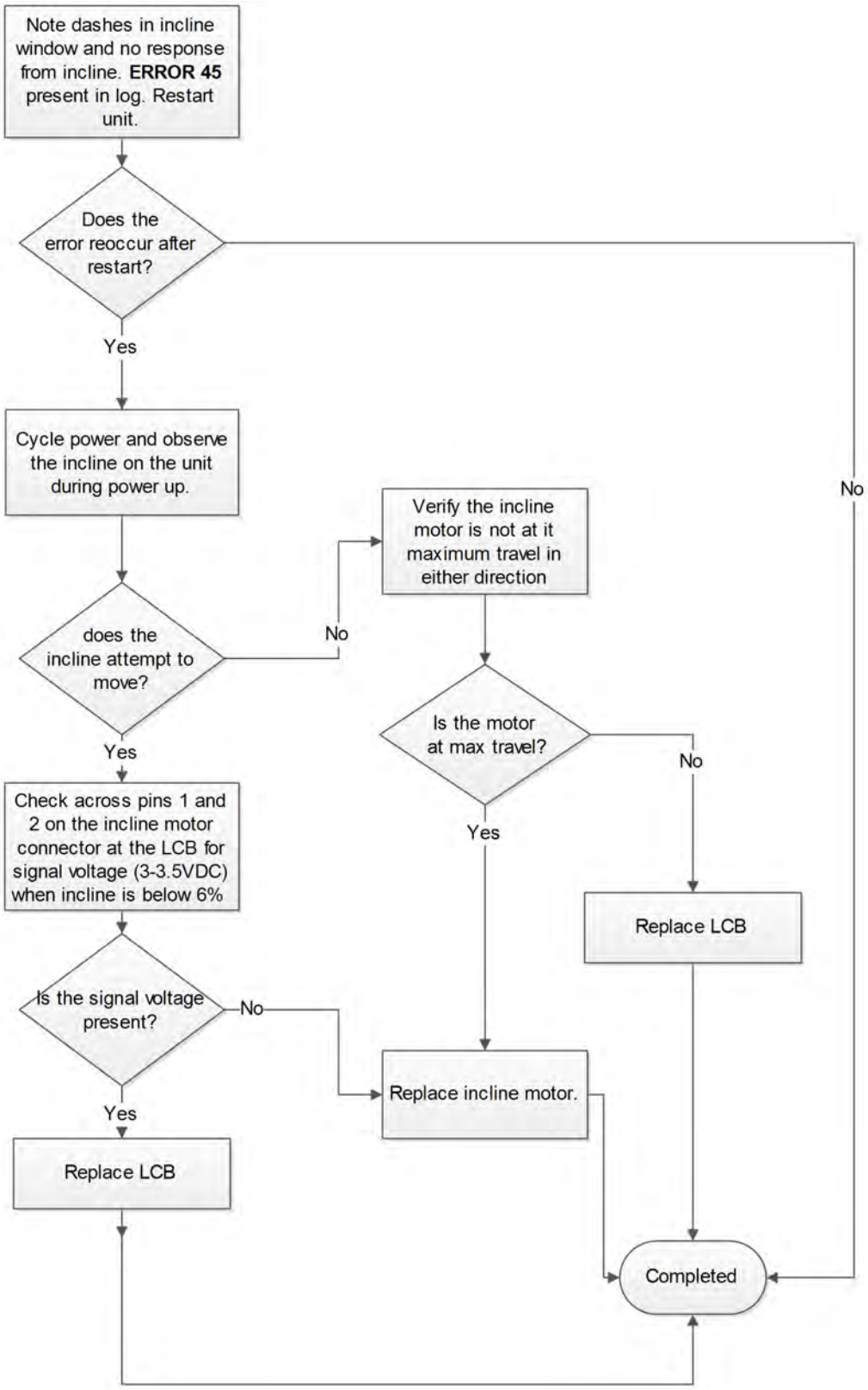
Error 45: AC Incline Timeout UP
Switch not encountered within time limits going UP.

Cause:
Incline is commanded to move up to the home switch, but does not encounter the switch within expected time limit.

Service:
Most likely problem is the internal thermal switch of the incline motor opened due to over-use. This will cool in about 20 minutes and allow full use again, so if the product ‘fixes itself,’ this is not a permanent failure that needs addressing. If the problem persists, inspect the LED indicators on the LCB to ensure the LCB is getting the commands to move the incline. Listen for the relay click. Inspect the incline motor to see if it is jammed. Ensure the lead screw is clean of debris and dust and is properly lubricated.

- Incline motor’s home switch is out of position
- Incline motor’s home switch is broken
- Incline lead screw encountered the gearbox body, jamming it
- The gear drive is worn or spinning on the shaft
- Fuse blown on LCB
- Relay bad on the LCB
- Incline motor is unplugged or the cable is damaged
- Incline motor lead screw requires lubrication

Flowchart: Error 45



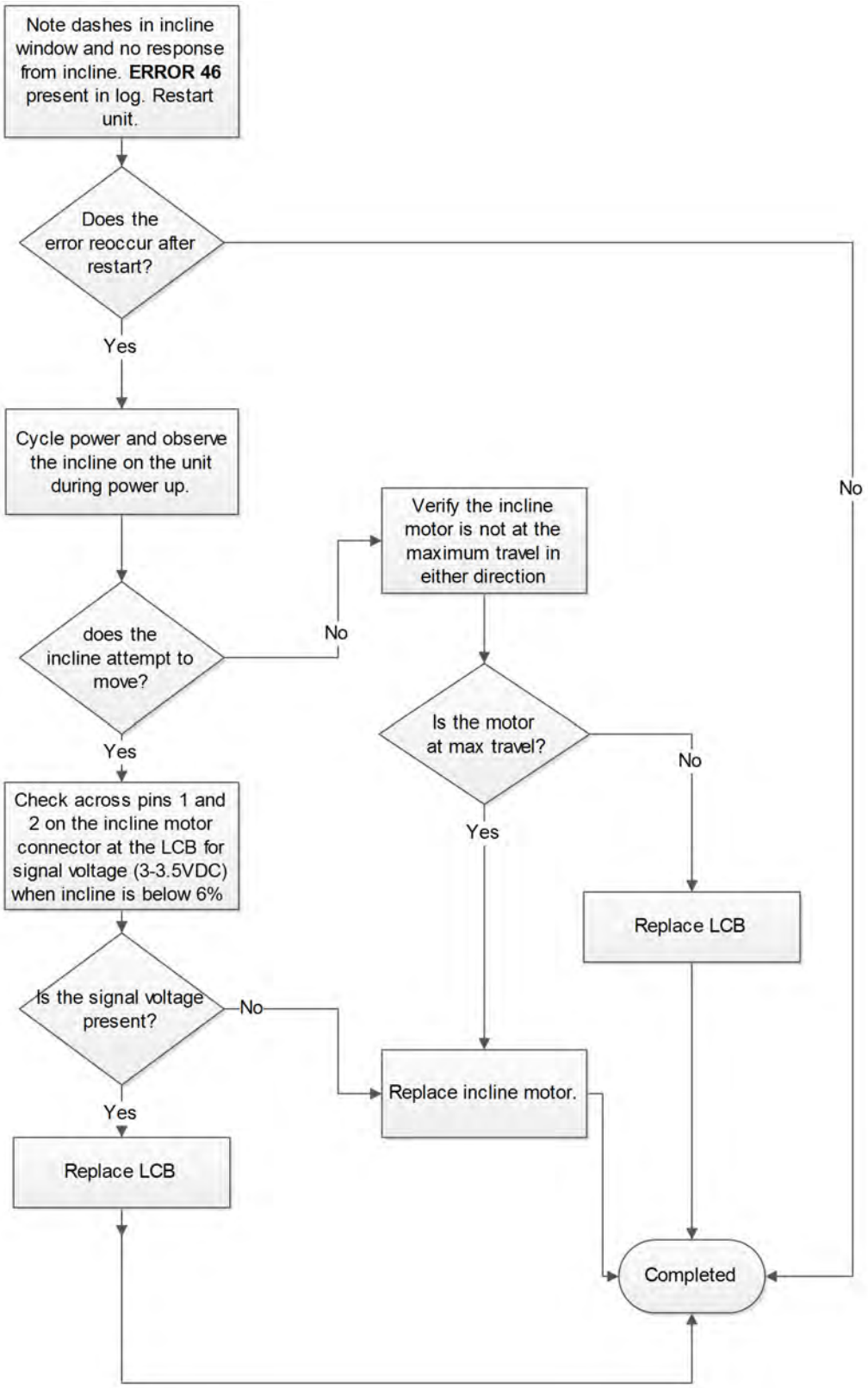
Error 46: AC Incline Timeout DOWN
Switch not encountered within time limits going DOWN.

Cause:
Incline is commanded to move down to the home switch, but does not encounter the switch within expected time limit.

Service:
Most likely problem is the internal thermal switch of the incline motor opened due to over-use. This will cool in about 20 minutes and allow full use again, so if the product ‘fixes itself,’ this is not a permanent failure that needs addressing. If the problem persists, inspect the LED indicators on the LCB to ensure the LCB is getting the commands to move the incline. Listen for the relay click. Inspect the incline motor to see if it is jammed. Ensure the lead screw is clean of debris and dust and is properly lubricated. Ensure the tube nut is still threaded on to the lead screw and isn’t separated, run off at the top

- Incline motor’s home switch is out of position
- Incline motor’s home switch is broken
- The gear drive is worn or spinning on the shaft
- Fuse blown on LCB
- Relay bad on the LCB
- Incline motor is unplugged or the cable is damaged
- Incline motor lead screw requires lubrication

Flowchart: Error 46



Exit error log

Exit Set Up Mode by tapping the **Toolbox** icon, then tap the **Home** icon . The screen will refresh.

Software Update 772A

Software can ONLY be installed on the model it is designed for. Do NOT install this software on other Arc Trainers, Bikes, or Treadmills.

Tools Required
- USB stick (CP-23199)
- Phillips screwdriver

NOTICE

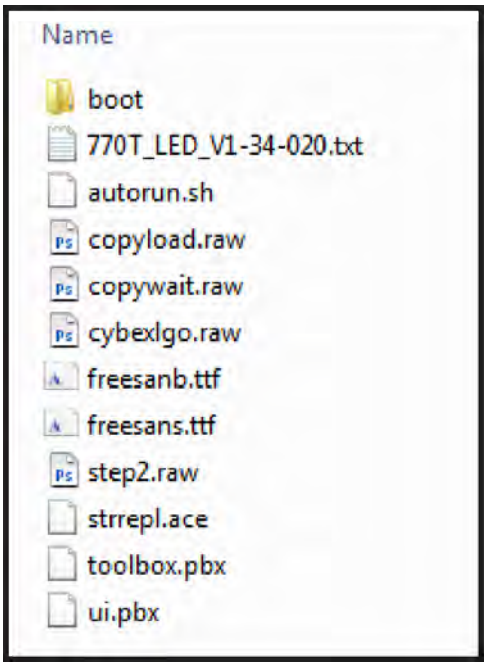
Repairs and Service
- DO NOT load zip files onto USB stick
- Load un-zipped files onto USB stick
- DO NOT remove USB stick during upload procedure
- Power must remain on during upload procedure
- DO NOT press any keys on console during upload procedure

Prepare USB stick

1. Plug USB stick into PC.
2. Delete any files on USB stick.
   Verify USB stick is blank.
3. Go to the *LF World* service product pages for the latest software files or contact Cybex Customer Service at 508-533-4300 to receive via email.

4. Unzip file to a folder on PC.
   Zip file contains the following files:
   - Folder labeled “boot”
   - Empty text file with model name of product
   - Other single files

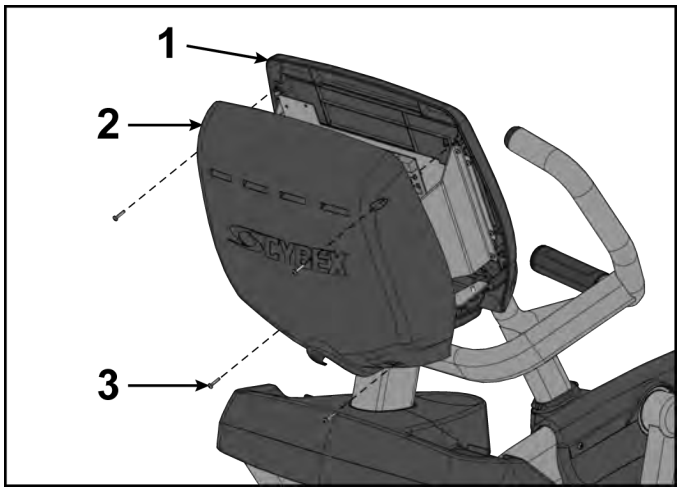
Example of folder contents



5. Copy the “boot” folder and other files to USB stick.
   DO NOT copy zip file to USB stick.
6. Perform both procedures for internal and external USB ports.

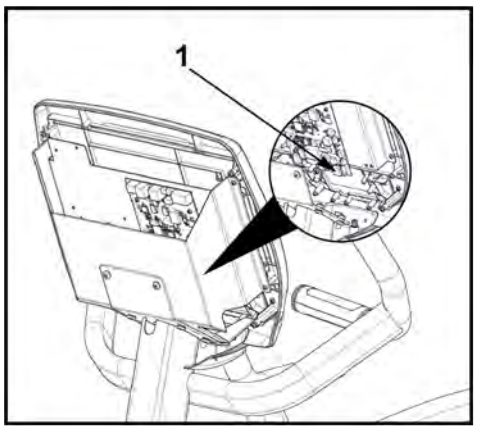
Install software through internal USB port

1. Unplug power cord from the power outlet.
2. Remove the four screws securing the back cover to the console assembly using a Phillips screwdriver.



Item	Description	Qty.
1	Console assembly	1
2	Back cover	1
3	Screws	4

3. Insert USB stick into the internal USB port.
   Do NOT insert USB stick into optional E3 View Monitor.



Item	Description	Qty.
1	Internal USB port, MCC board	1

4. Plug the power cord into the power outlet.

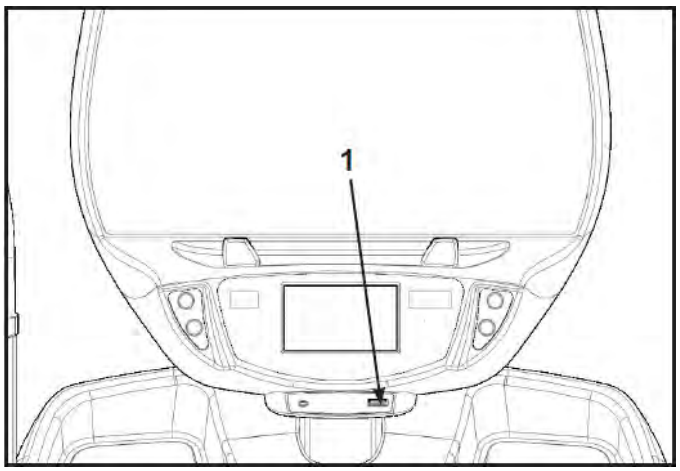
NOTICE Console damage may occur.Do NOT turn the power off, press any keys, or remove the USB stick during this procedure.

The software will load into the console. This procedure will take approximately 3 minutes. During this time there will be beeping noises from the console. When the upload is complete, the display will show [re][bot].

5. Unplug power cord from the power outlet.
6. Remove USB stick from internal USB port.

Install software through external USB port

1. Insert USB stick into the external USB port.



Item	Description	Qty.
1	External USB port	1

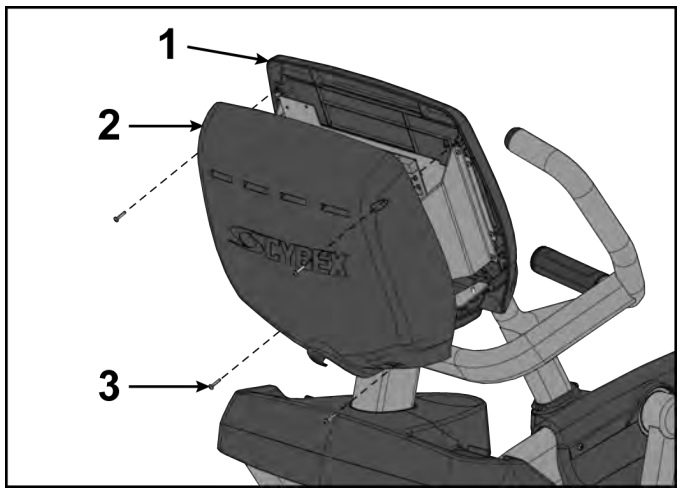
2. Plug the power cord into the power outlet.
   The software will load into the console. This procedure may take up to 4 minutes. During the first two minutes the screen will be blank and not show any progress. Do NOT turn the power off, press any keys, or remove the USB stick. [re][bot].

   After the initial period, the screen will display Loading and Please wait. This procedure may take up to 2 minutes. When the upload is complete, the display will return to the home screen.

3. Unplug power cord from the power outlet.
4. Remove USB stick from internal USB port.

Install back cover

Install the four screws securing the back cover to the console assembly using a Phillips screwdriver.



Item	Description	Qty.
1	Console assembly	1
2	Back cover	1
3	Screws	4

Complete update

1. Plug the power cord into the power outlet.
2. Operate unit at all levels to verify proper operation.

Calibration

Calibrate CardioTouch screen

1. Tap the **Access Toolbox** icon to display the **Access to Toolbox** login screen.
2. Enter the sequence:

.
3. Tap the **OEM Diags** icon, then the **Touch Test** icon.
4. Touch the CardioTouch screen to display cross hairs. If the CardioTouch screen is not calibrated, the cross hairs will not line up where the touch is made.
5. Tap the icon to return to the **Diagnostics** screen.
6. Tap the **Touch Cal** icon.

7. Tap the targets in each of the four corners of the CardioTouch screen as indicated.
8. Exit Set Up Mode by tapping the **Toolbox** icon, then tap the **Home** icon . The screen will refresh.

Calibrate Incline motor 770A

1. Hold the handrails to steady self while stepping into the foot plates.
2. Begin striding.

	CYBEX LOGO	Press and hold Cybex logo for 6 seconds to access **Screen Lock** and **Toolbox**.
	LANGUAGE ICON	Press and hold language logo for 6 seconds to access **Screen Lock** and **Toolbox**.

3. Tap the **Access Toolbox** icon to display the **Access to Toolbox** login screen.
4. Enter the sequence: .
5. At the main **Toolbox** screen, tap the **OEM Diags** icon, then the **Incline Calibration** icon.
6. Stop striding. Wait until foot plates come to a complete stop before dismounting unit. Hold handrails to steady self while stepping off unit.
7. Press the **Calibrate** icon. The console will display Stay off of the pedals.
8. Press the **Calibrate** button to perform calibration. The console will display Calibrating... and the incline motor will incline to it's maximum extension and then return slightly.
   When calibration is complete it will return to the **Incline Calibration** screen and display the calibration numbers for 0 and 20%.
9. Exit **Diagnostics** by tapping the **Toolbox** icon, then tap the **Home** icon . The screen will refresh.
10. Tap **QUICK START** on the CardioTouch screen.
11. Press the **Incline** ▲ or ▼ keys once to lower the incline to a low starting position.
12. Press **STOP** key to return to Dormant Mode.

Parts Replacement

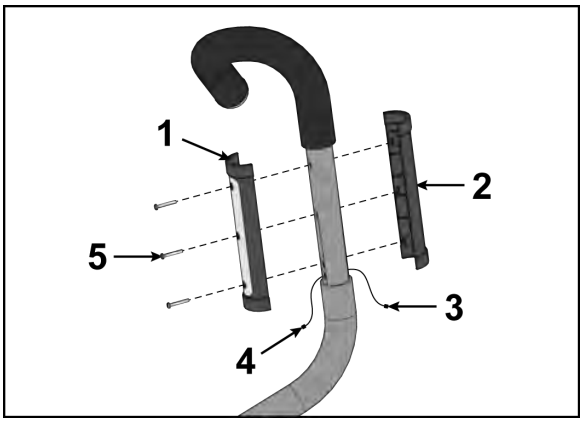
Base Assembly

Contact Heart Rate Grips

Tools Required:
- Phillips screwdriver
- Rubber mallet
- Side cutter
- Tape
- Strain relief pliers

Remove heart rate grips

1. Remove the three screws securing back grip to front grip using a Phillips screwdriver.

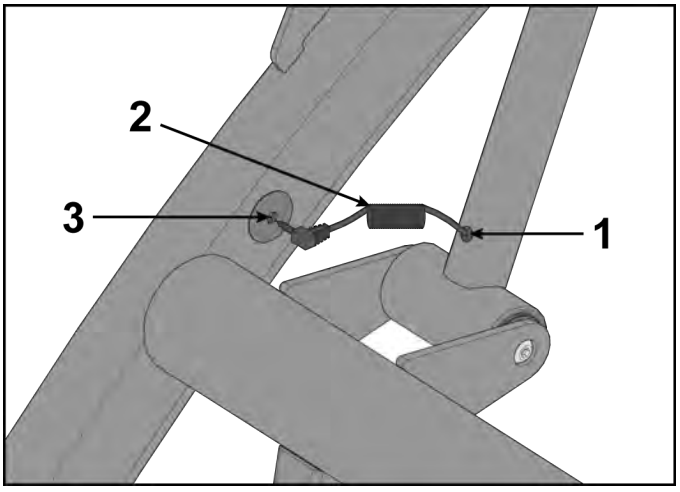


Item	Description	Qty.
1	Back grip	1
2	Front grip	1
3	White (or red) heart rate wire must be on inside (palm side)	1
4	Black heart rate wire (shield wire) must be on outside (finger side)	1
5	Screws	3

2. Disconnect the heart rate wire from each grip.

Replace heart rate cable

1. Unplug heart rate cable jack (located near bottom end of arm).

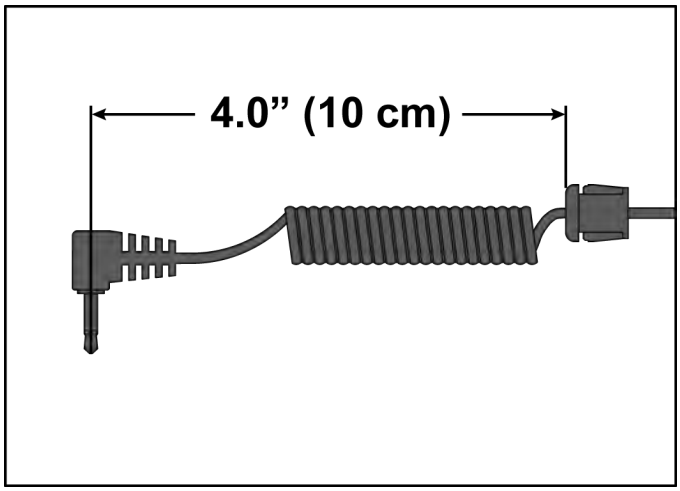


Item	Description	Qty.
1	Remove strain relief	1
2	Heart rate cable	1
3	Unplug heart rate cable jack	1

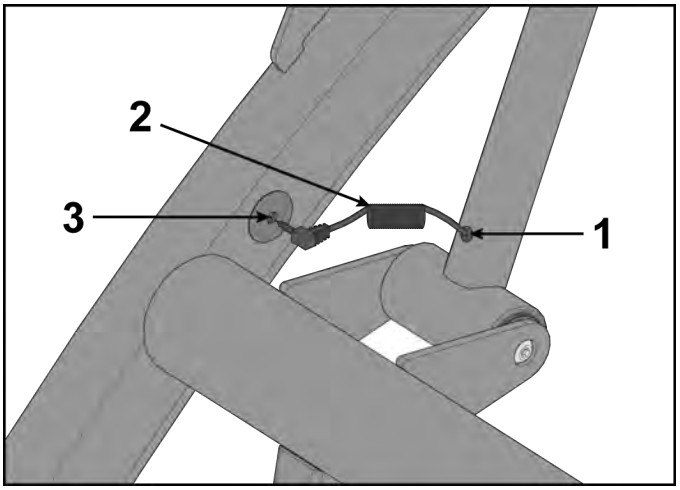
2. Cut off cable jack using side cutters.
3. Remove strain relief using strain relief pliers.
4. Tape the heart rate cable connectors of the new cable to the cut end of the old cable. Verify connection is secure.
5. Pull the old cable through bottom of handle until end of the new cable is up to the top of handle opening.

6. Position the strain relief plug on heart rate cable 4” (10 cm) from connector.

All coils must be contained within this area.



7. Install the strain relief plug into hole on handle using a strain relief plier and a rubber mallet. Do not to damage the heart rate wire. Verify strain relief plug is secure.

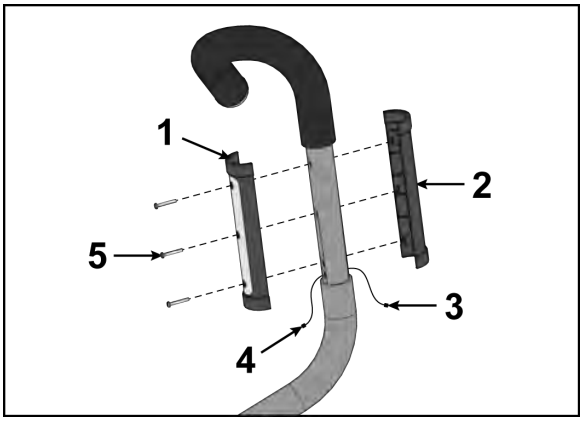


Item	Description	Qty.
1	Secure strain relief plug into handle	1
2	Heart rate cable	1
3	Plug in heart rate cable jack	1

8. Plug in the heart rate cable jack.

Install heart rate grips

1. Pull the black heart rate wire through the lowest back hole.



Item	Description	Qty.
1	Back grip	1
2	Front grip	1
3	White (or red) heart rate wire must be on inside (palm side)	1
4	Black heart rate wire (shield wire) must be on outside (finger side)	1
5	Screws	3

2. Pull the white (or red) heart rate wire through the lowest front hole.
3. Connect the white (or red) heart rate wire to the tab on the front grip.
4. Connect the black heart rate wire to the tab on the back grip.
   Do not pinch heart wires or allow contacts to touch each other when installing grips.
5. Install the three screws securing back grip to front grip using a Phillips screwdriver.
   Do not over tighten grips.

Complete Installation

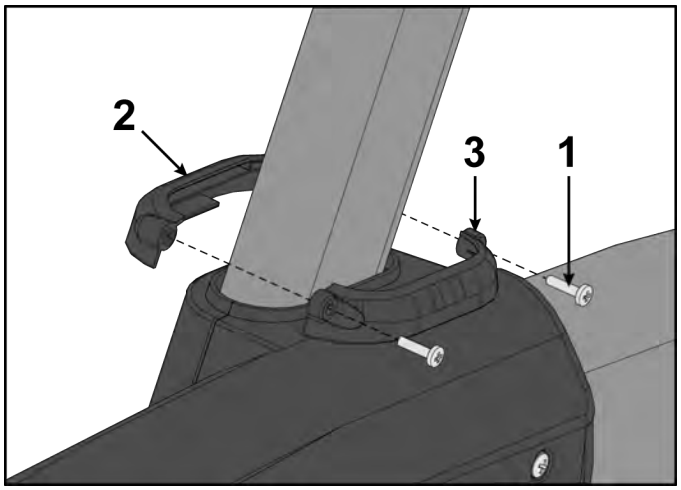
1. Operate the unit at all levels to verify proper operation.
2. Verify proper operation of contact heart rate grips.

Pivot Covers

Tools Required:
- Phillips screwdriver

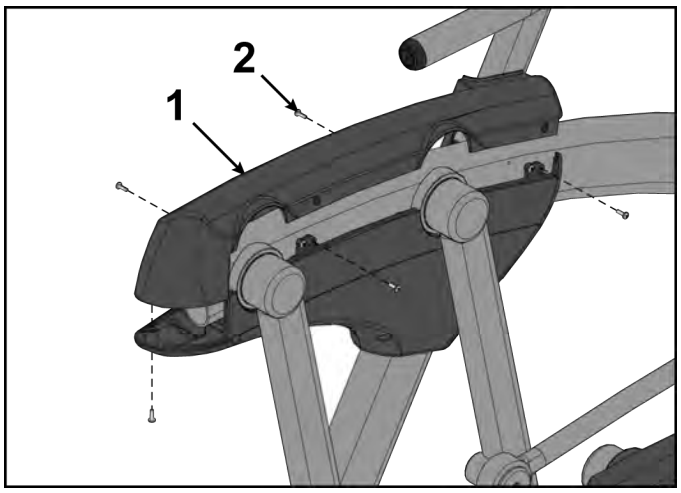
Remove pivot covers

1. Remove the left inner and outer collars and two screws using a Phillips screwdriver.



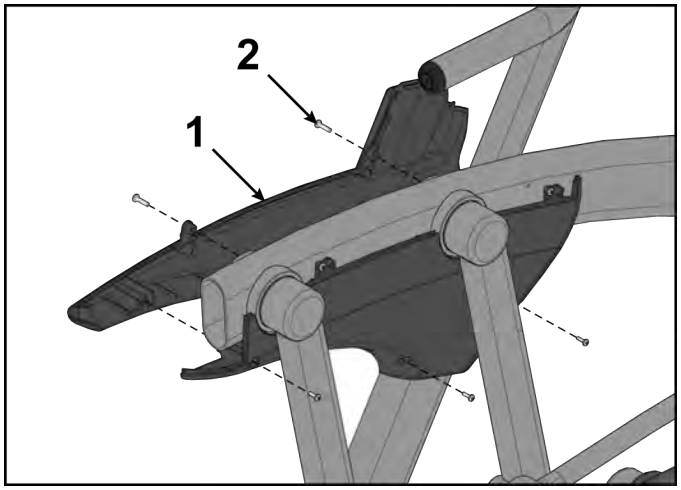
Item	Description	Qty.
1	Screw	2
2	Left outer collar	1
3	Left inner collar	1

2. Remove the left top rear cover and five screws using a Phillips screwdriver.



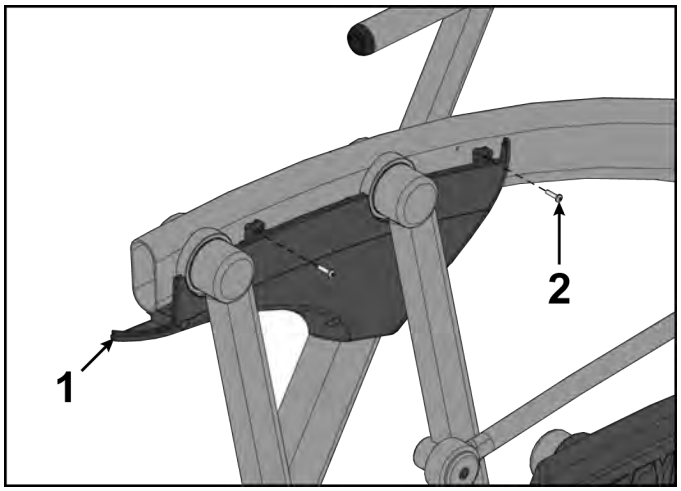
Item	Description	Qty
1	Left top rear cover	1
2	Screws	5

3. Remove the left outer rear cover and five screws using a Phillips screwdriver.



Item	Description	Qty
1	Left outer rear cover	1
2	Screws	5

4. Remove the left inner rear cover and two screws using a Phillips screwdriver.

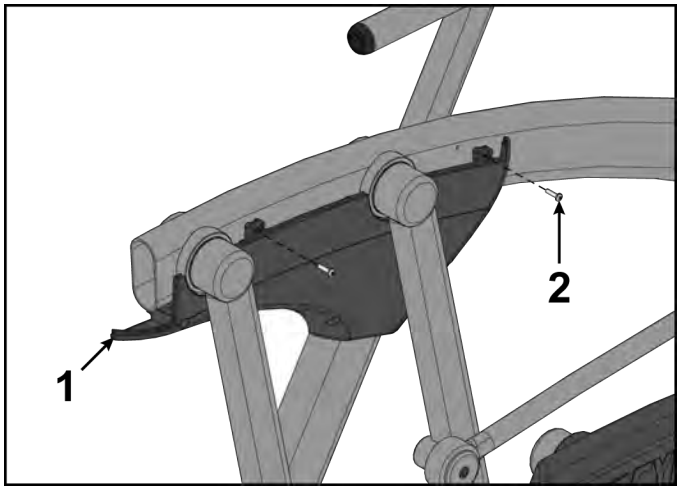


Item	Description	Qty
1	Left inner rear cover	1
2	Screws	2

5. Repeat steps 1 through 4 for the right side.

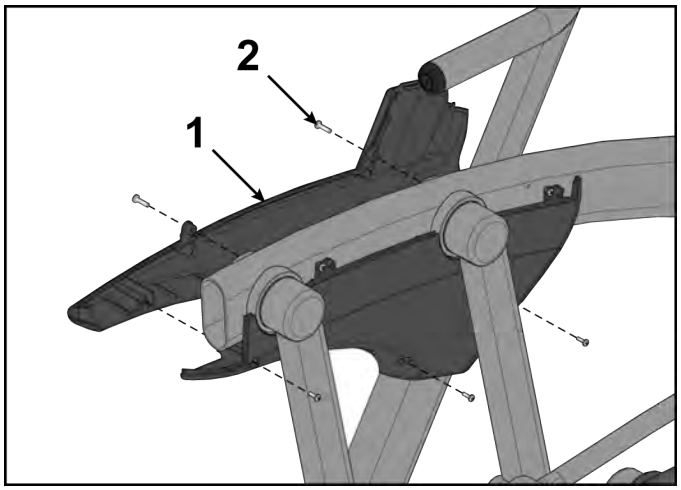
Install pivot covers

1. Install the left inner rear cover with two screws using a Phillips screwdriver.



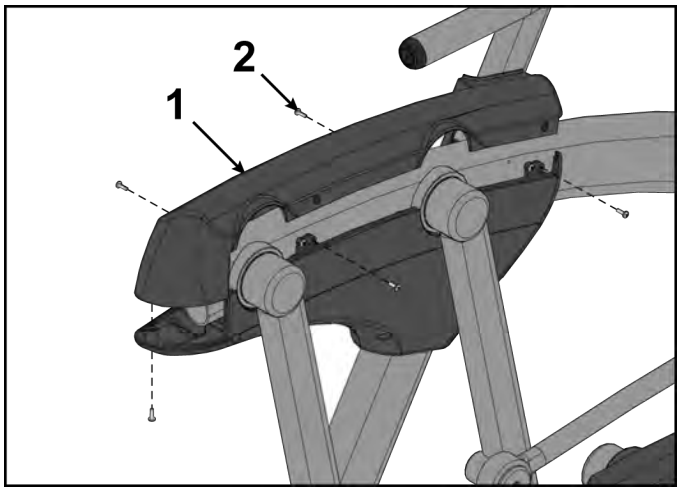
Item	Description	Qty
1	Left inner rear cover	1
2	Screws	2

2. Install the left outer rear cover with five screws using a Phillips screwdriver.



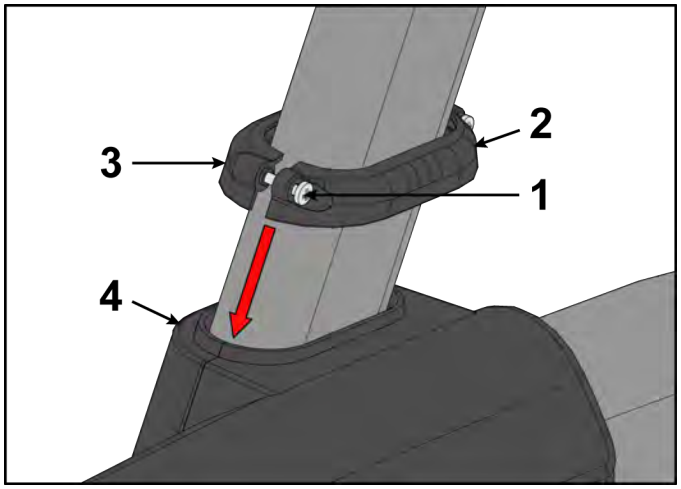
Item	Description	Qty
1	Left outer rear cover	1
2	Screws	5

3. Install the left top rear cover with five screws using a Phillips screwdriver.



Item	Description	Qty
1	Left top rear cover	1
2	Screws	5

4. Loosen the two screws in the left inner and outer collars using a Phillips screwdriver.



Item	Description	Qty
1	Screws	2
2	Inner collar	1
3	Outer collar	1
4	Cover	1

5. Slide the inner and outer collars onto the left cover.
6. Insert tabs of the collars into the slots of the cover.
7. Tighten the two screws using a Phillips screwdriver.
8. Repeat steps 1 through 7 for the right side.

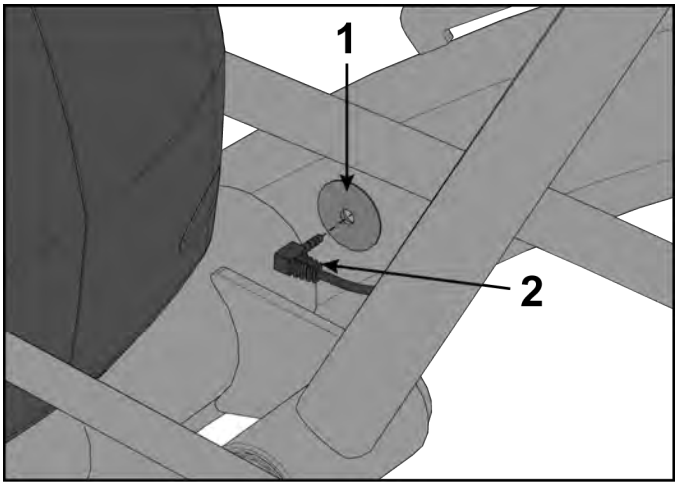
Complete Installation
Operate the unit at all levels to verify proper operation.

Arm Handle

Tools Required:
- 3/16” Allen wrench
- 7/32” Allen wrench (2)
- Torque wrench, with 3/16" Allen wrench
- Loctite® #242

Remove heart rate cable

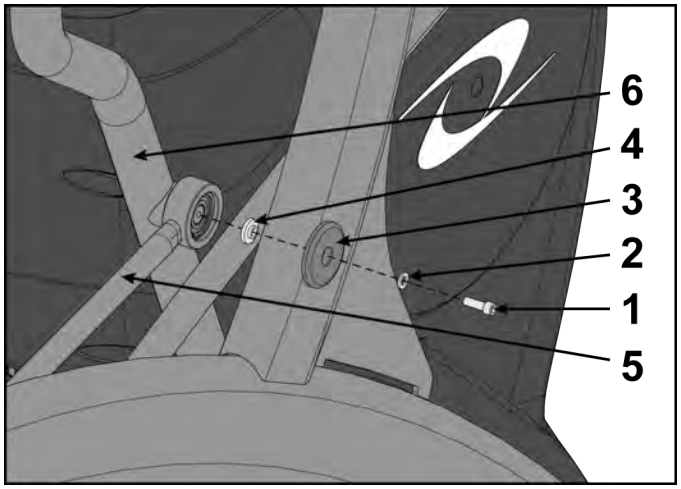
Unplug heart rate cable from socket in frame.



Item	Description	Qty.
1	Socket in frame	1
2	Heart rate cable	1

Remove front arm handle linkage

1. Remove screw, flat washer, cap, and spacer securing arm handle linkage using a 3/16” Allen wrench.

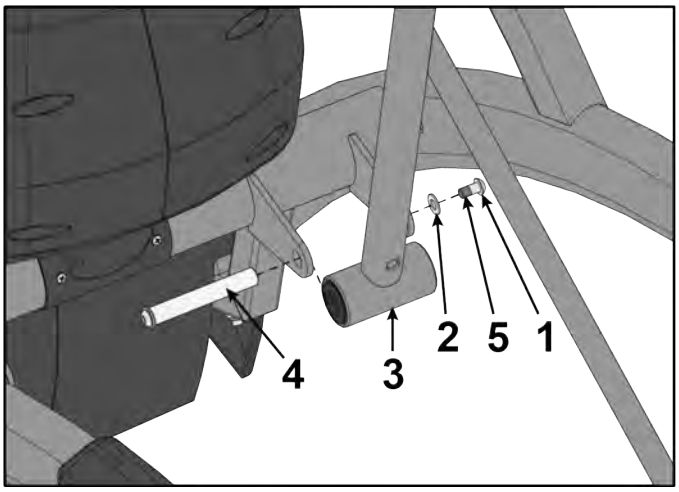


Item	Description	Qty.
1	Screw	1
2	Flat washer	1
3	Cap	1
4	Spacer	1
5	Arm handle linkage	1
6	Handle	1

2. Remove arm handle linkage from handle.

Remove arm handle

1. Remove screw, washer, and pivot pin securing arm handle using two 7/32” Allen wrenches. The screw and washer from only one side needs to be removed.

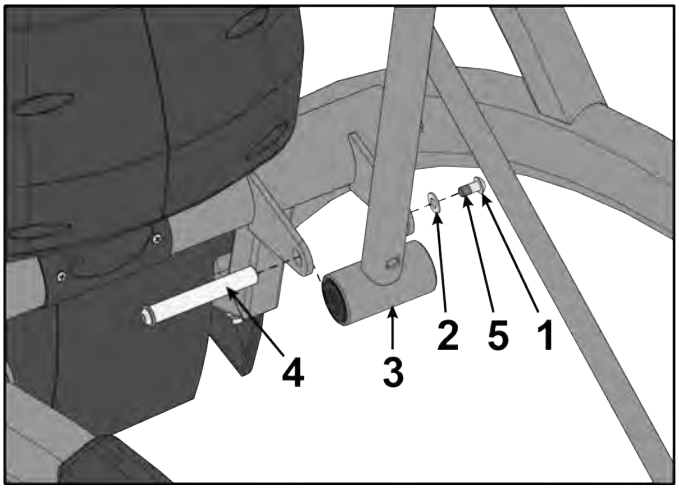


Item	Description	Qty.
1	Washer	1
2	Screw	1
3	Arm handle	1
4	Pivot pin assembly	1

2. Remove arm handle.

Install arm handle

1. Place new arm handle in position and slide pivot pin back in place.

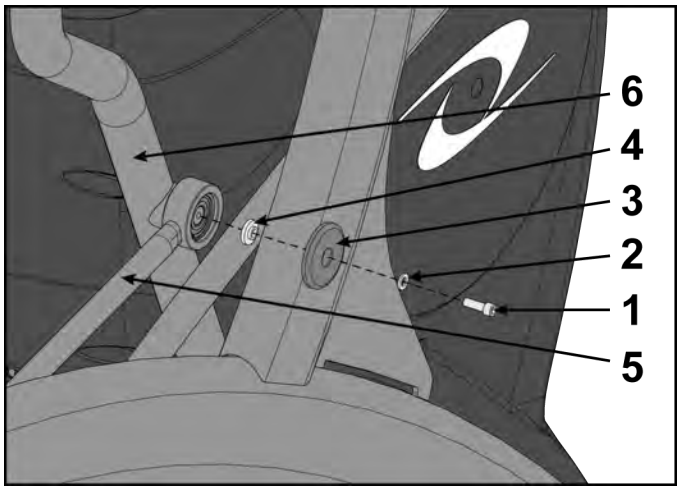


Item	Description	Qty.
1	Washer	1
2	Screw	1
3	Arm handle	1
4	Pivot pin assembly	1

2. Apply loctite to threads of screw and inside the pivot pin (where screw will be tightened into).
3. Install screw and washer to pivot pin.
4. Tighten screw using two 7/32” Allen wrenches securely.
   When tightened properly, frame tabs are pulled tight to the bearing.

Install front arm handle linkage

1. Install arm handle linkage to handle.



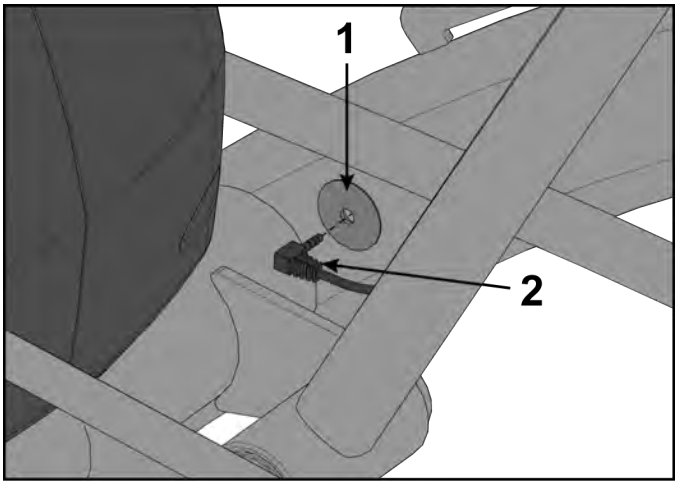
Item	Description	Qty.
1	Screw	1
2	Flat washer	1
3	Cap	1
4	Spacer	1
5	Arm handle linkage	1
6	Handle	1

2. Place a drop of loctite on threads of screw.
3. Place another drop of loctite into the threads of the shaft.
4. Install screw, flat washer, cap, and spacer securing the arm handle linkage using a 3/16” Allen wrench.

   NOTE: Screw must be tightened to a minimum of 90 lbs-in.

Install heart rate cable

Plug heart rate cable into connector in frame.



Item	Description	Qty.
1	Socket in frame	1
2	Heart rate cable	1

Complete Installation

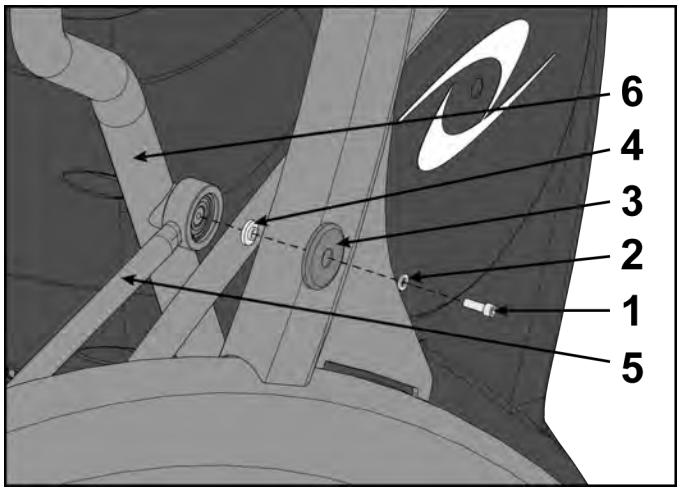
1. Operate the unit at all levels to verify proper operation.
2. Verify proper operation of contact heart rate grips.

Arm Handle Linkage

Tools Required:
- 3/16” Allen wrench
- Loctite® #242
- Torque wrench, with 3/16" Allen wrench

Remove front arm handle linkage

1. Remove screw, flat washer, cap, and spacer securing arm handle linkage using a 3/16” Allen wrench.

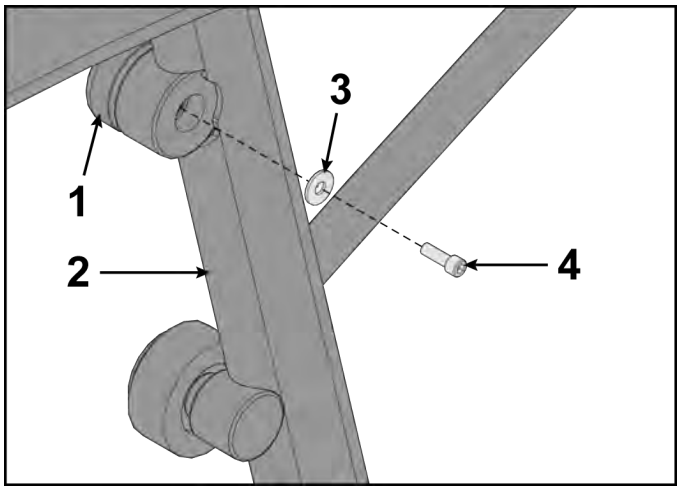


Item	Description	Qty.
1	Screw	1
2	Flat washer	1
3	Cap	1
4	Spacer	1
5	Arm handle linkage	1
6	Handle	1

2. Remove arm handle linkage from handle.

Remove rear arm handle linkage

1. Remove screw and flat washer from arm handle linkage and front foot plate arm using a 3/16” Allen wrench.

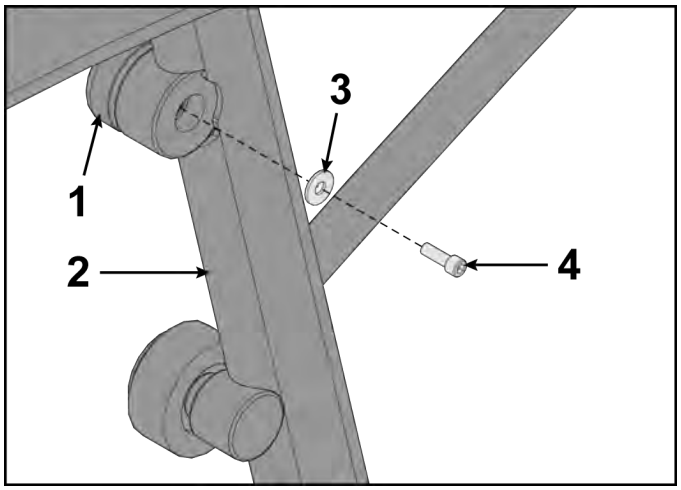


Item	Description	Qty.
1	Arm handle linkage	1
2	Front foot plate arm	1
3	Flat washer	1
4	Screw	1

2. Remove arm handle linkage from front foot plate arm.

Install rear arm handle linkage

1. Install arm handle linkage to front foot plate arm.

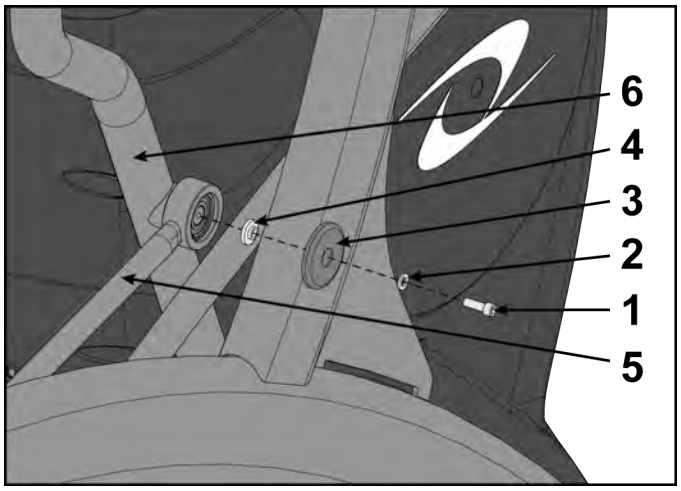


Item	Description	Qty.
1	Arm handle linkage	1
2	Front foot plate arm	1
3	Flat washer	1
4	Screw	1

2. Place a drop of loctite on threads of screw. Place another drop of loctite into the threads of the shaft.
3. Install screw and flat washer to arm handle linkage and front foot plate arm using a 3/16” Allen wrench.

Install front arm handle linkage

1. Install arm handle linkage to handle.



Item	Description	Qty.
1	Screw	1
2	Flat washer	1
3	Cap	1
4	Spacer	1
5	Arm handle linkage	1
6	Handle	1

2. Place a drop of loctite on threads of screw.
3. Place another drop of loctite into the threads of the shaft.
4. Install screw, flat washer, cap, and spacer securing the arm handle linkage using a 3/16” Allen wrench.

   NOTE: Screw must be tightened to a minimum of 90 lbs-in.

Complete Installation

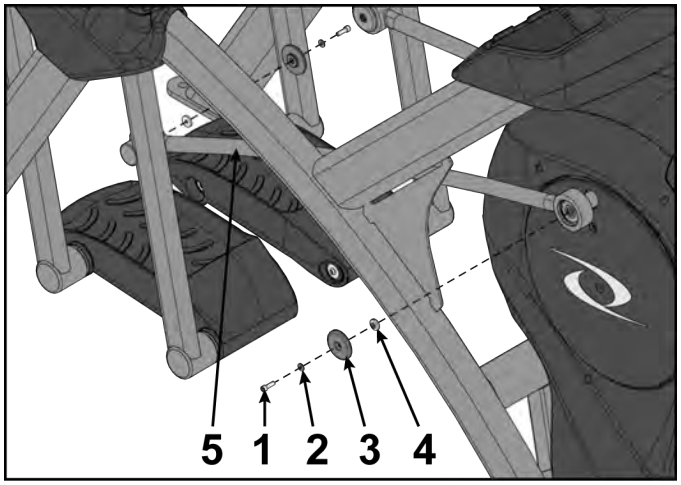
Operate the unit at all levels to verify proper operation.

Linkage Rod

Tools Required:
- 3/16” Allen wrench
- Loctite® #242
- Torque wrench, with 3/16" Allen wrench

Remove linkage rod
Procedure shows right side.

1. Remove Socket Head Cap Screw (SHCS), flat washer, cap and spacer from both ends of linkage rod using a 3/16” Allen wrench.

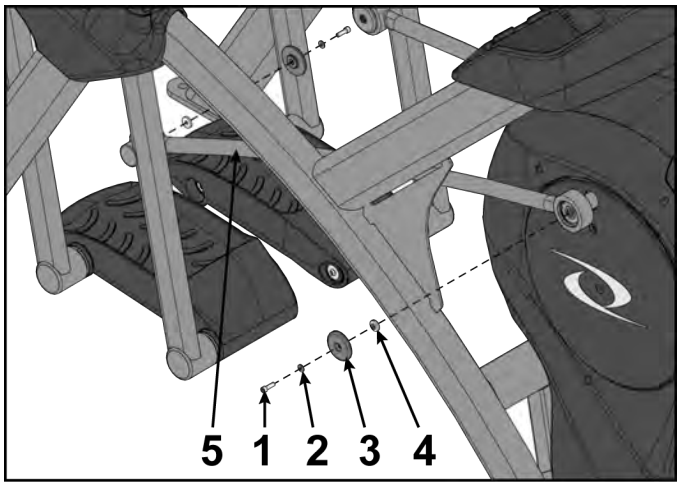


Item	Description	Qty.
1	SHCS, .250-20	2
2	Flat washer	2
3	Cap	2
4	Spacer	2
5	Linkage rod	1

2. Remove linkage rod.

Install linkage rod

1. Place linkage in correct position. Retaining ring faces away front crank arm.



Item	Description	Qty.
1	SHCS	2
2	Flat washer	2
3	Cap	2
4	Spacer	2
5	Linkage rod	1
6	Loctite® #242	1

2. Place a drop of loctite on SHCS and place another drop of loctite into shaft (where the SHCS will be tightened into).
3. Install spacers, caps, flat washers, SHCS using a 3/16" Allen wrench.

   NOTE: SHCS must be tightened to a minimum of 90 lbs-in.

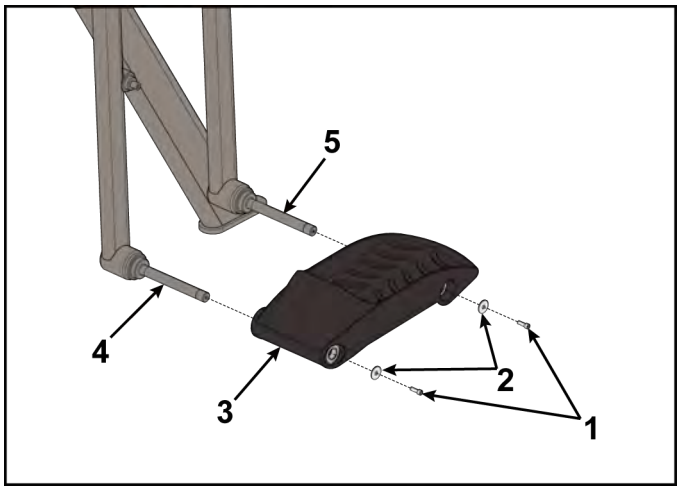
Complete Installation
Operate the unit at all levels to verify proper operation.

Foot Plate Assembly

Tools Required:
- 5/32” Allen wrench
- Loctite® #242

Remove foot plate assembly

1. Remove both SHCS and washers securing foot plate using a 5/32” Allen wrench.

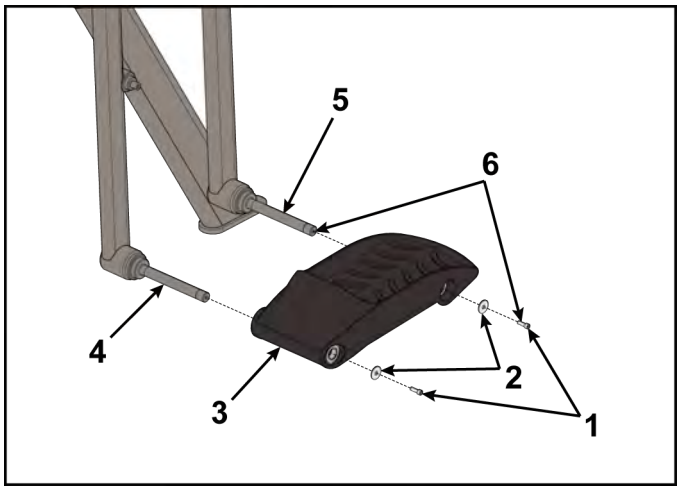


Item	Description	Qty.
1	SHCS	2
2	Washer	2
3	Foot plate	1
4	Front foot plate shaft	1
5	Rear foot plate shaft	1

2. Remove foot plate from front and rear foot plate shafts.

Install foot plate assembly

1. Slide foot plate onto the foot plate shafts.



Item	Description	Qty.
1	SHCS	2
2	Washer	2
3	Foot plate	1
4	Front foot plate shaft	1
5	Rear foot plate shaft	1
6	Loctite® #242	1

2. Place a drop of loctite on each SHCS.
Place another drop of loctite in each shaft (where the SHCS will be tightened into).

3. Install both washers and both SHCS using a 5/32” Allen wrench.

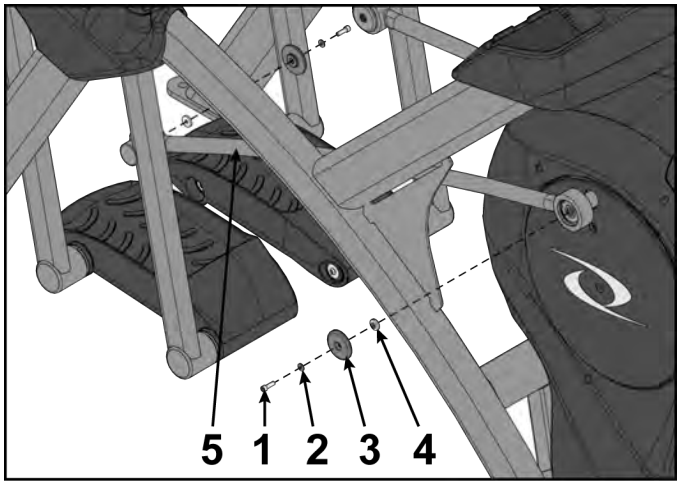
Complete Installation
Operate the unit at all levels to verify proper operation.

Foot Plate Arms

Tools Required:
- 3/16” Allen wrench
- 5/32” Allen wrench
- 7/32” Allen wrench
- Phillips screwdriver
- Rubber mallet
- Torque wrench, with 7/32" Allen wrench
- Loctite® #242

Remove linkage rod
Procedure shows right side.

1. Remove Socket Head Cap Screw (SHCS), flat washer, cap and spacer from both ends of linkage rod using a 3/16” Allen wrench.

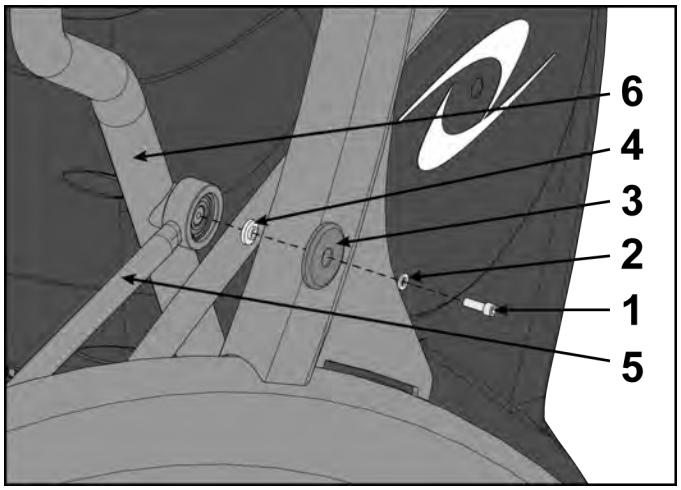


Item	Description	Qty.
1	SHCS, .250-20	2
2	Flat washer	2
3	Cap	2
4	Spacer	2
5	Linkage rod	1

2. Remove linkage rod.

Remove front arm handle linkage

1. Remove screw, flat washer, cap, and spacer securing arm handle linkage using a 3/16” Allen wrench.

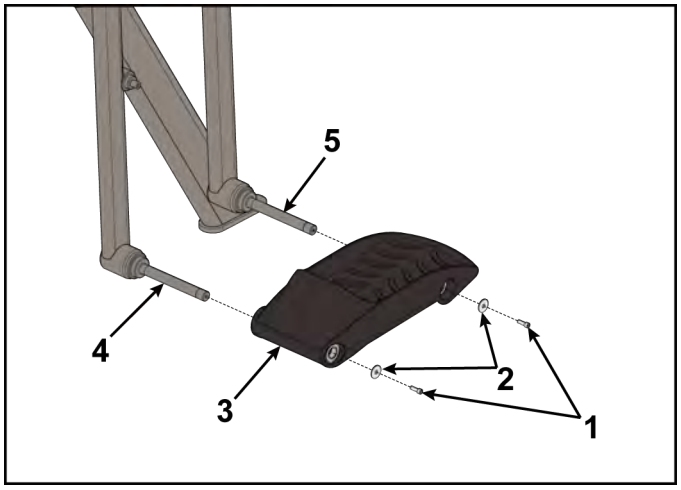


Item	Description	Qty.
1	Screw	1
2	Flat washer	1
3	Cap	1
4	Spacer	1
5	Arm handle linkage	1
6	Handle	1

2. Remove arm handle linkage from handle.

Remove foot plate assembly

1. Remove both SHCS and washers securing foot plate using a 5/32” Allen wrench.

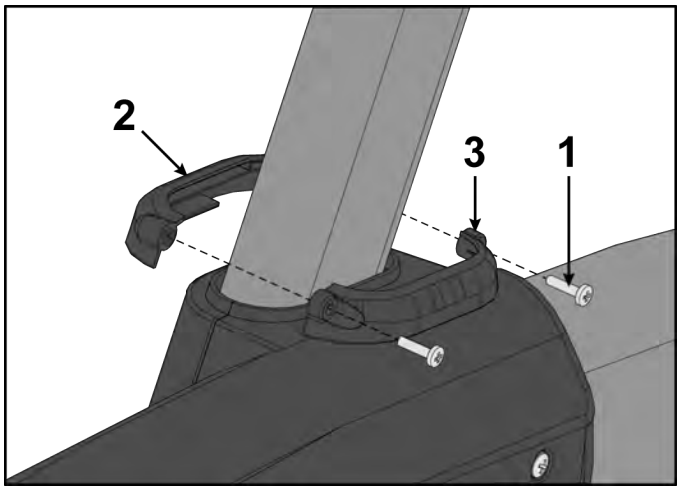


Item	Description	Qty.
1	SHCS	2
2	Washer	2
3	Foot plate	1
4	Front foot plate shaft	1
5	Rear foot plate shaft	1

2. Remove foot plate from front and rear foot plate shafts.

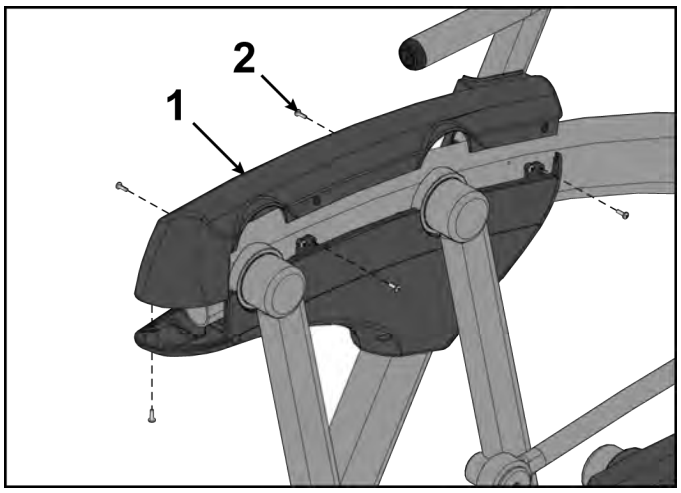
Remove pivot covers

1. Remove the left inner and outer collars and two screws using a Phillips screwdriver.



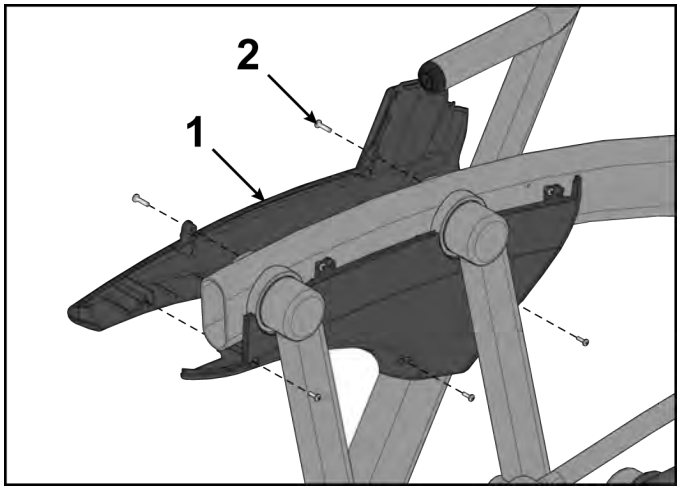
Item	Description	Qty.
1	Screw	2
2	Left outer collar	1
3	Left inner collar	1

2. Remove the left top rear cover and five screws using a Phillips screwdriver.



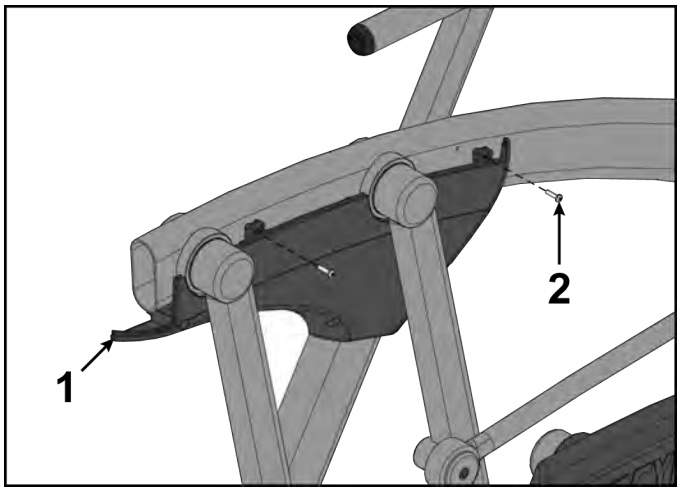
Item	Description	Qty
1	Left top rear cover	1
2	Screws	5

3. Remove the left outer rear cover and five screws using a Phillips screwdriver.



Item	Description	Qty
1	Left outer rear cover	1
2	Screws	5

4. Remove the left inner rear cover and two screws using a Phillips screwdriver.

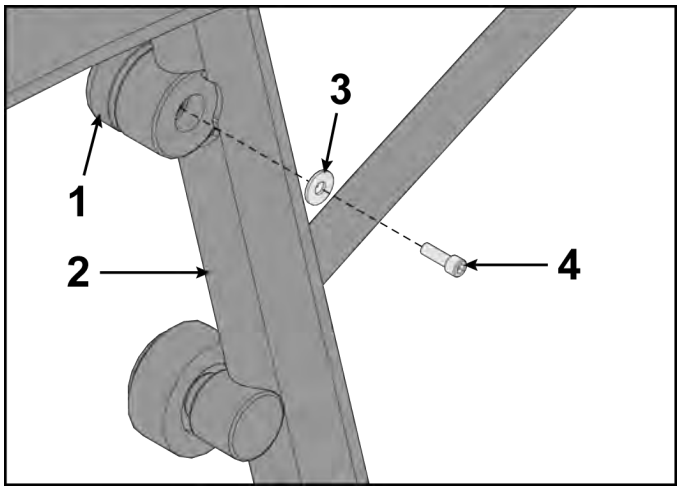


Item	Description	Qty
1	Left inner rear cover	1
2	Screws	2

5. Repeat steps 1 through 4 for the right side.

Remove rear arm handle linkage

1. Remove screw and flat washer from arm handle linkage and front foot plate arm using a 3/16” Allen wrench.

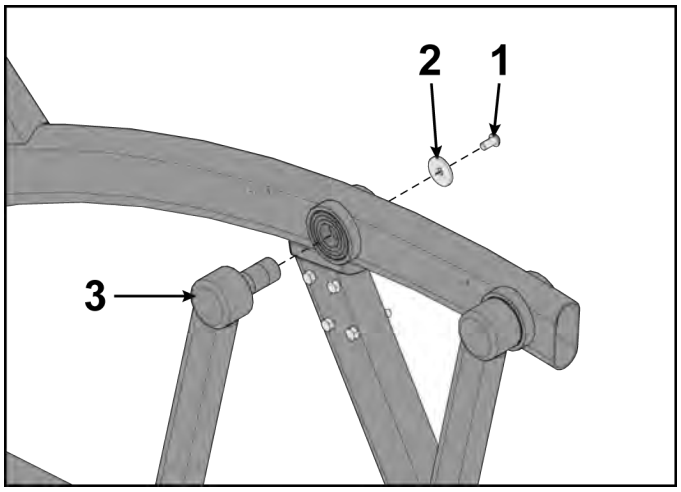


Item	Description	Qty.
1	Arm handle linkage	1
2	Front foot plate arm	1
3	Flat washer	1
4	Screw	1

2. Remove arm handle linkage from front foot plate arm.

Remove front foot plate arm

1. Remove Button Head Socket Cap Screw (BHSCS) and washer securing front foot plate arm using a 7/32” Allen wrench.

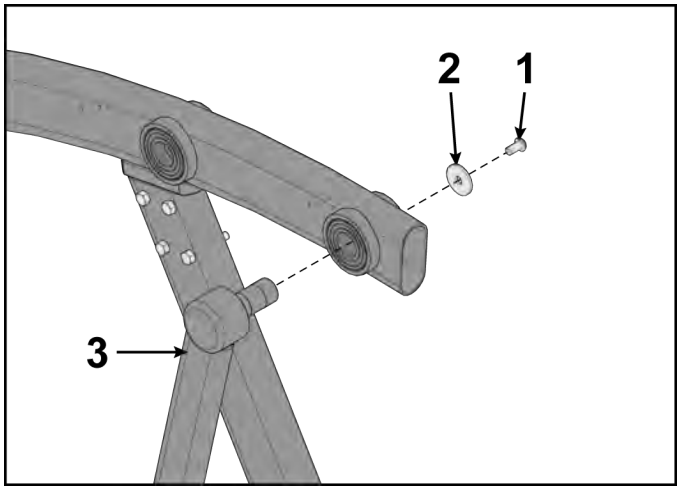


Item	Description	Qty.
1	BHSCS	1
2	Washer	1
3	Front foot plate arm	1

2. Remove front foot plate arm using a rubber mallet.

Remove rear foot plate arm

1. Remove BHSCS and washer securing rear foot plate arm using a 7/32” Allen wrench.

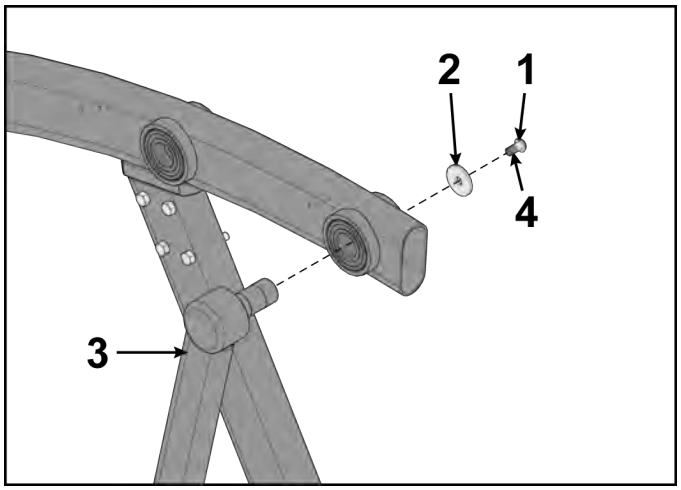


Item	Description	Qty.
1	BHSCS	1
2	Washer	1
3	Rear foot plate arm	1

2. Remove rear foot plate arm using a rubber mallet.

Install rear foot plate arm

1. Position rear foot plate arm in place.

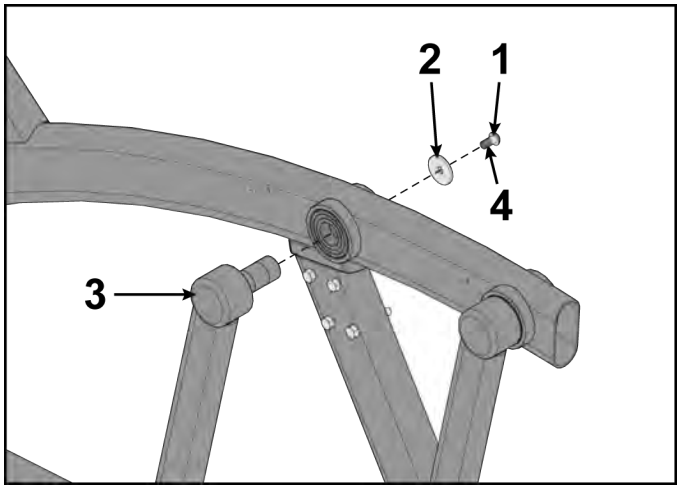


Item	Description	Qty.
1	BHSCS	1
2	Washer	1
3	Rear foot plate arm	1
4	Loctite® #242	1

2. Place a drop of Loctite on the BHSCS and another drop inside the shaft into where the BHSCS will be tightened.
3. Install BHSCS and washer to rear foot plate arm using a 7/32” Allen wrench.
   NOTE: BHSCS must be tightened to a minimum of 250 lbs-in.

Install front foot plate arm

1. Position front foot plate arm in place.

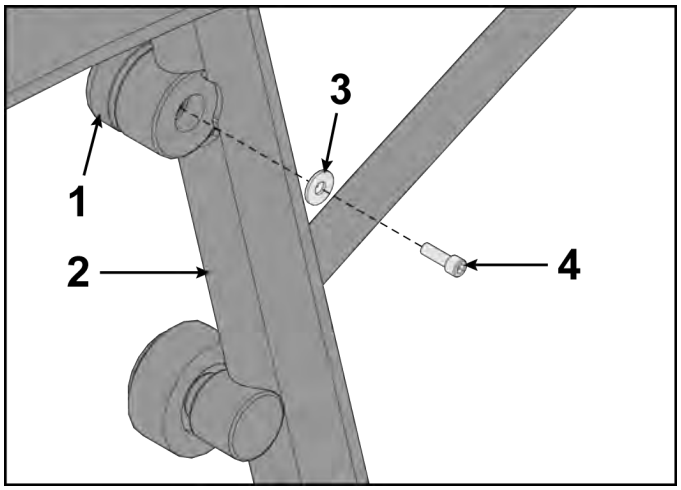


Item	Description	Qty.
1	BHSCS	1
2	Washer	1
3	Front foot plate arm	1
4	Loctite® #242	1

2. Place a drop of Loctite on the BHSCS and another drop inside the shaft into where the BHSCS will be tightened.
3. Install BHSCS and washer to front foot plate arm using a 7/32” Allen wrench.
   BHSCS must be tightened to a minimum of 250 lbs-in.

Install rear arm handle linkage

1. Install arm handle linkage to front foot plate arm.

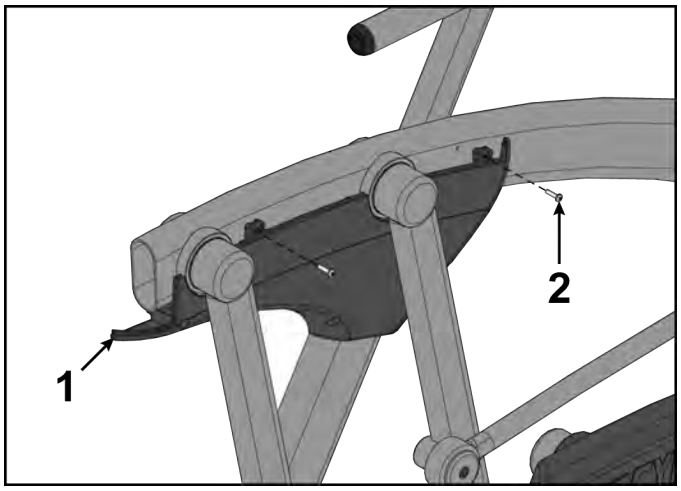


Item	Description	Qty.
1	Arm handle linkage	1
2	Front foot plate arm	1
3	Flat washer	1
4	Screw	1

2. Place a drop of loctite on threads of screw. Place another drop of loctite into the threads of the shaft.
3. Install screw and flat washer to arm handle linkage and front foot plate arm using a 3/16” Allen wrench.

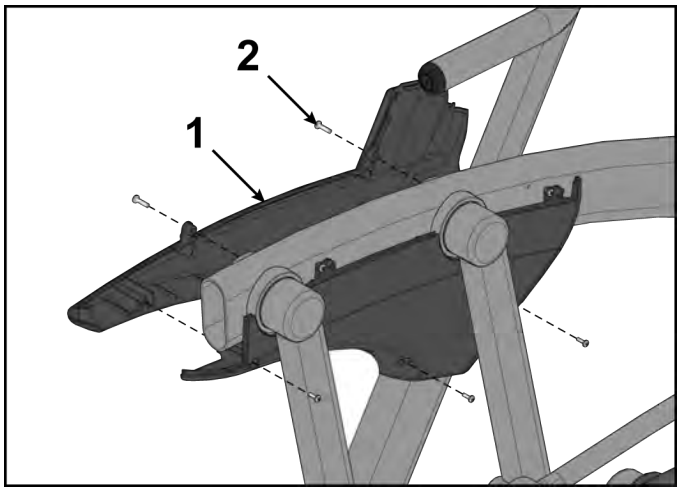
Install pivot covers

1. Install the left inner rear cover with two screws using a Phillips screwdriver.



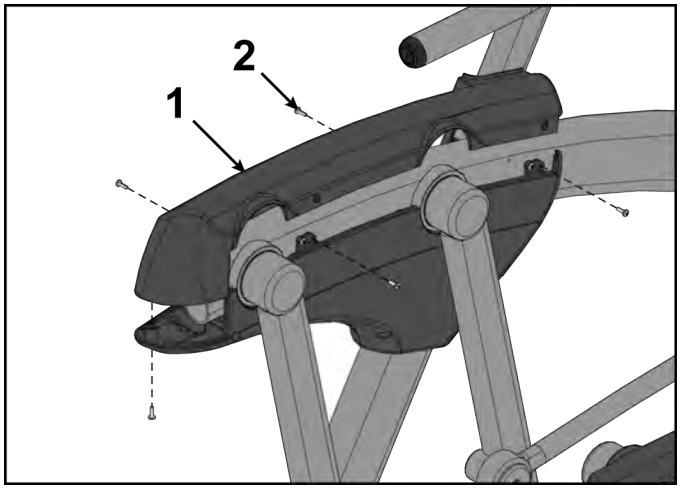
Item	Description	Qty
1	Left inner rear cover	1
2	Screws	2

2. Install the left outer rear cover with five screws using a Phillips screwdriver.



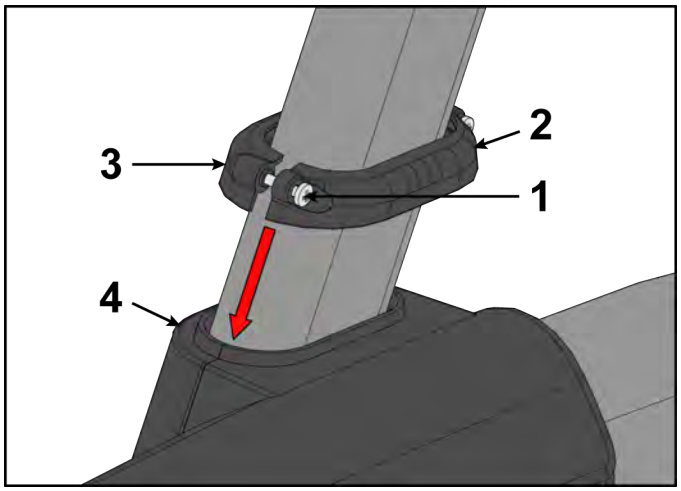
Item	Description	Qty
1	Left outer rear cover	1
2	Screws	5

3. Install the left top rear cover with five screws using a Phillips screwdriver.



Item	Description	Qty
1	Left top rear cover	1
2	Screws	5

4. Loosen the two screws in the left inner and outer collars using a Phillips screwdriver.



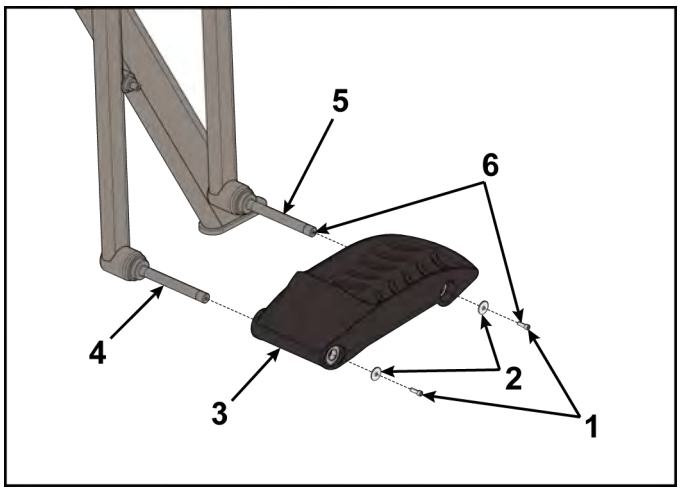
Item	Description	Qty
1	Screws	2
2	Inner collar	1
3	Outer collar	1
4	Cover	1

5. Slide the inner and outer collars onto the left cover.
6. Insert tabs of the collars into the slots of the cover.
7. Tighten the two screws using a Phillips screwdriver.

8. Repeat steps 1 through 7 for the right side.

Install foot plate assembly

1. Slide foot plate onto the foot plate shafts.



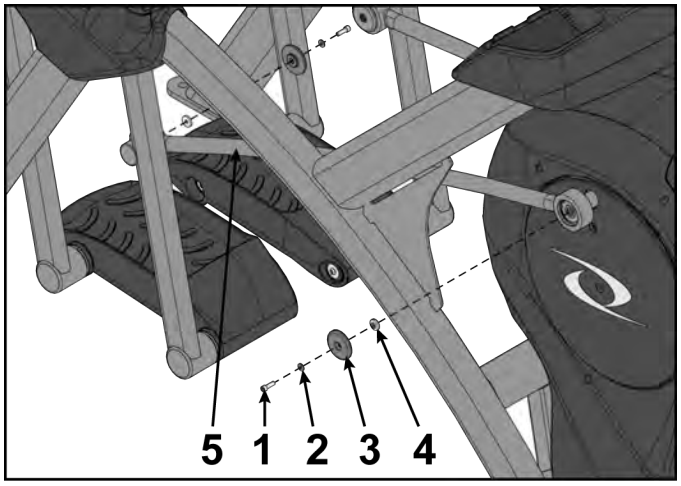
Item	Description	Qty.
1	SHCS	2
2	Washer	2
3	Foot plate	1
4	Front foot plate shaft	1
5	Rear foot plate shaft	1
6	Loctite® #242	1

2. Place a drop of loctite on each SHCS.
Place another drop of loctite in each shaft (where the SHCS will be tightened into).

3. Install both washers and both SHCS using a 5/32” Allen wrench.

Install linkage rod

1. Place linkage in correct position. Retaining ring faces away front crank arm.



Item	Description	Qty.
1	SHCS	2
2	Flat washer	2
3	Cap	2
4	Spacer	2
5	Linkage rod	1
6	Loctite® #242	1

2. Place a drop of loctite on SHCS and place another drop of loctite into shaft (where the SHCS will be tightened into).

3. Install spacers, caps, flat washers, SHCS using a 3/16" Allen wrench.

👉 **NOTE:** SHCS must be tightened to a minimum of 90 lbs-in.

Complete Installation

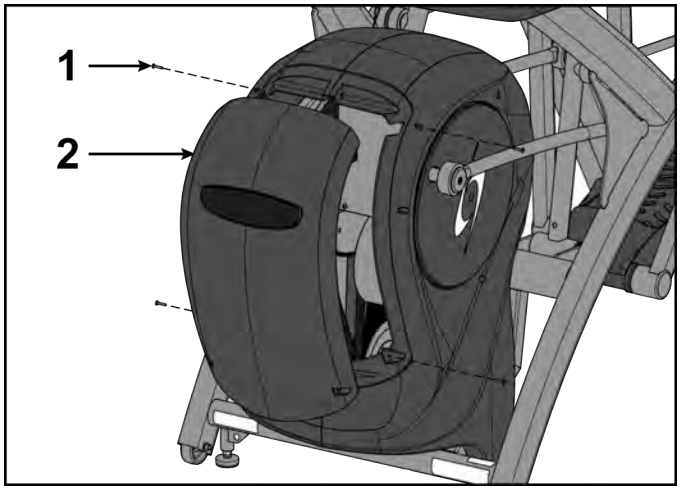
Operate the unit at all levels to verify proper operation.

Front Access Cover

Tools Required:
- Phillips screwdriver

Remove front access cover

1. Remove screws securing front access cover using a Phillips screwdriver.



Item	Description	Qty.
1	Screw	4
2	Front access cover	1

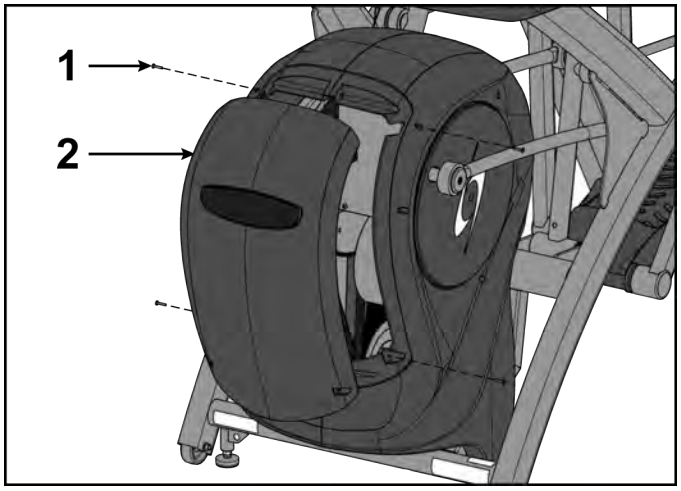
2. Remove access cover.

⚠WARNING Burn hazard. Do not touch flywheel until cool.

Install front access cover

Do not over tighten screws.

1. Place front access cover in place.



Item	Description	Qty.
1	Screw	4
2	Front access cover	1

2. Install screws using a Phillips screwdriver.

Complete Installation

Operate the unit at all levels to verify proper operation.

Crank Covers and Shrouds

Tools Required:
- 3/16” Allen wrench
- Phillips screwdriver
- Long Phillips screwdriver
- 9/16” Socket wrench
- Torque wrench, with 3/16" Allen wrench
- Loctite® #242
- Clean cloth (2)

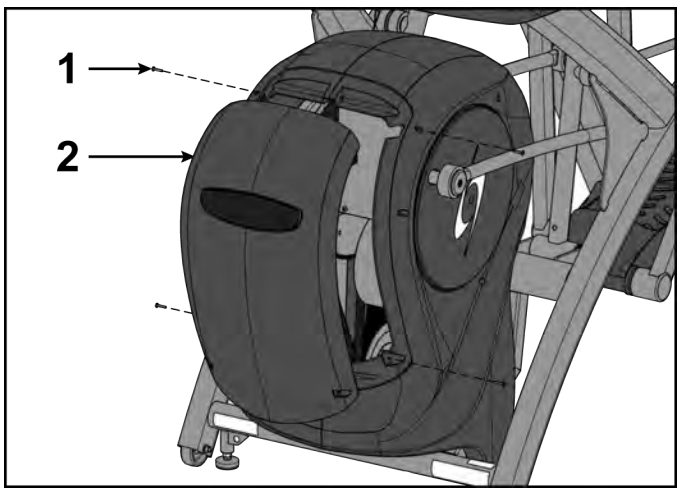
Disconnect power source

Unplug the power cord from the power outlet.

⚠WARNING Shock and electrocution hazard.
- Unplug unit and let sit 10 minutes before cleaning or performing maintenance.
- Electrical charge can remain in unit after unplugging.
- Keep water and liquids away from electrical parts.

Remove front access cover

1. Remove screws securing front access cover using a Phillips screwdriver.



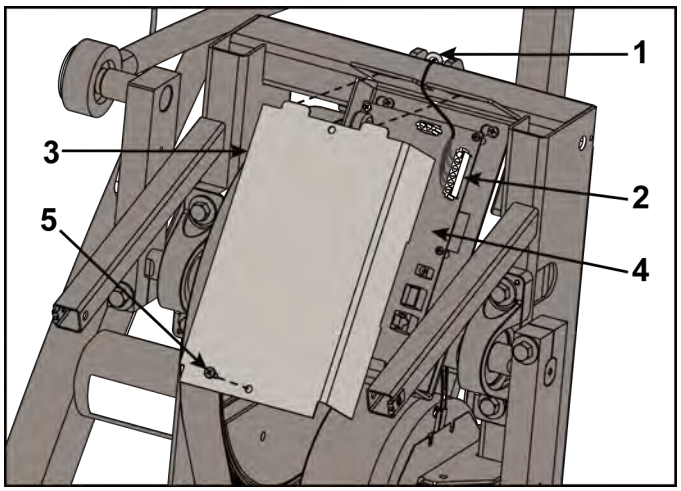
Item	Description	Qty.
1	Screw	4
2	Front access cover	1

2. Remove access cover.

⚠WARNING Burn hazard. Do not touch flywheel until cool.

Remove controller cover and incline unit

1. Remove screw securing controller cover using a Phillips screwdriver.

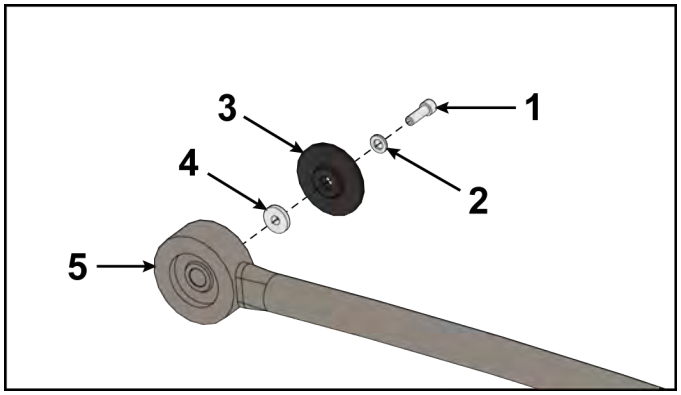


Item	Description	Qty.
1	Cable tie	1
2	Incline motor cable	1
3	Controller cover	1
4	Control board	1
5	Screw	1

2. Remove controller cover.
3. Plug power cord into power outlet.
4. Begin striding.
5. Press the **Quick Start** and stop striding.
6. Press the **Incline** + key to incline to level 20.
7. Unplug the incline motor cable from the control board.
8. Unplug power cord from power outlet.

Remove linkage rods

1. Remove socket head cap screw (SHCS), flat washer, cap and spacer securing linkage rod using a 3/16” Allen wrench.

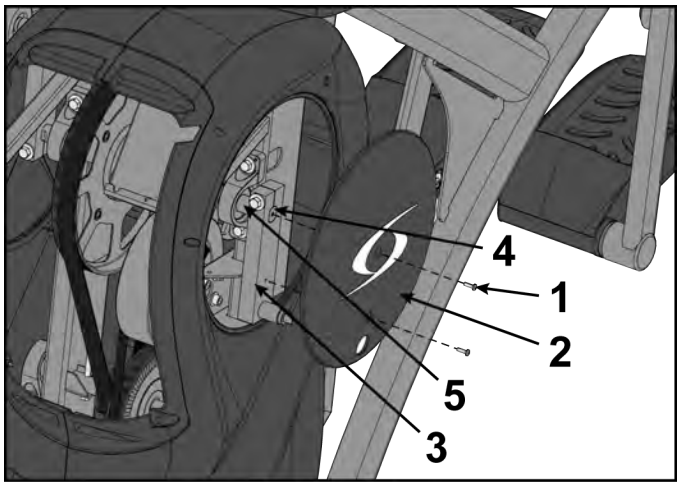


Item	Description	Qty.
1	Screw, SHCS .250-20 x .75	1
2	Flat washer	1
3	Cap	1
4	Spacer	1
5	Linkage rod	1

2. Lay linkage rod down on frame. Place a clean cloth in between linkage rod and frame to prevent scratches.
3. Repeat steps 1 and 2 for other linkage rod.

Remove crank covers

1. Remove both screws securing crank cover using a Phillips screwdriver.

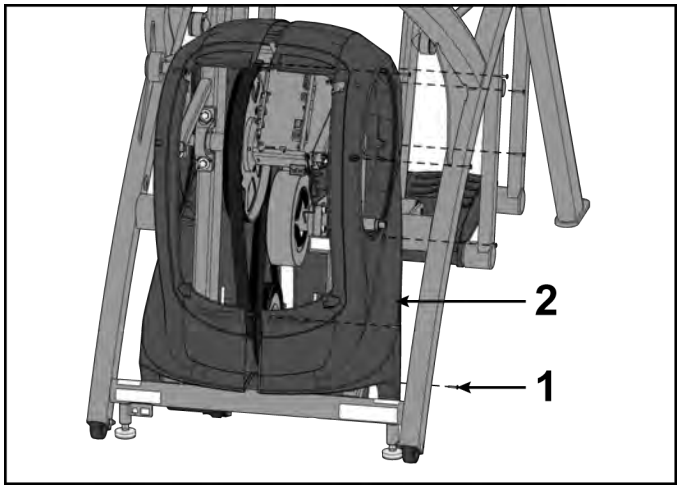


Item	Description	Qty.
1	Screw	2
2	Crank cover	1
3	Crank arm	1
4	Flush mount	1
5	Crank shaft	1

2. Remove crank cover.
3. Repeat steps for other crank cover.

Remove shrouds

1. Remove seven screws securing left shroud in place using a long Phillips screwdriver.

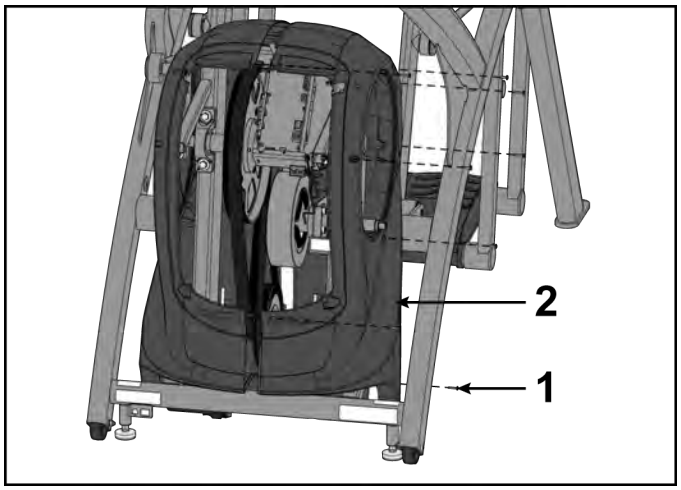


Item	Description	Qty.
1	Screw	7
2	Left shroud	1

2. Remove three screws securing right shroud in place using a long Phillips screwdriver.
3. Remove both shrouds.

Install shrouds

1. Place both shrouds in position.



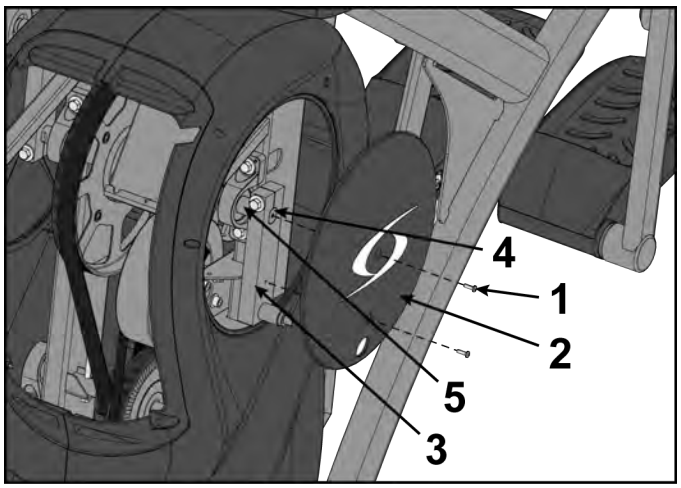
Item	Description	Qty.
1	Screw	7
2	Left shroud	1

2. Install screws securing each side cover using a long Phillips screwdriver.

Install crank covers

1. Inspect crank arm mounting. Crank arm should be flush with crank shaft. Adjust with 9/16” socket wrench if needed.

   NOTE: Crank shaft bolt must be tightened to 30 lbs-ft.

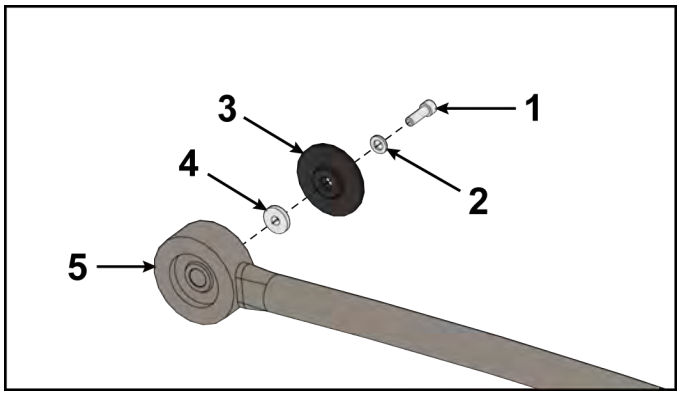


Item	Description	Qty.
1	Screw	2
2	Crank cover	1
3	Crank arm	1
4	Flush mount	1
5	Crank shaft	1

2. Place each crank cover in position.
3. Place Loctite® #242 on screws securing crank covers.
4. Install screws securing each crank cover in place using a Phillips screwdriver.

Install linkage rods

1. Install linkage rod on crank arm.

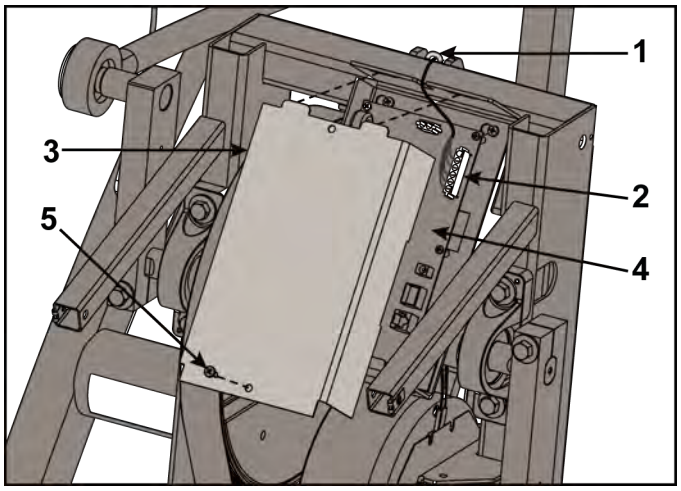


Item	Description	Qty.
1	Screw, SHCS .250-20 x .75	1
2	Flat washer	1
3	Cap	1
4	Spacer	1
5	Linkage rod	1

2. Place a drop of Loctite® #242 on SHCS and place another drop of Loctite® #242 into the threads of the shaft.
3. Install SHCS, flat washer, cap and spacer using a 3/16" Allen wrench.
   NOTE: SHCS must be tightened to a minimum of 90 lbs-in.
4. Repeat steps for other linkage rod.

Install controller cover

1. Plug incline motor cable into control board.

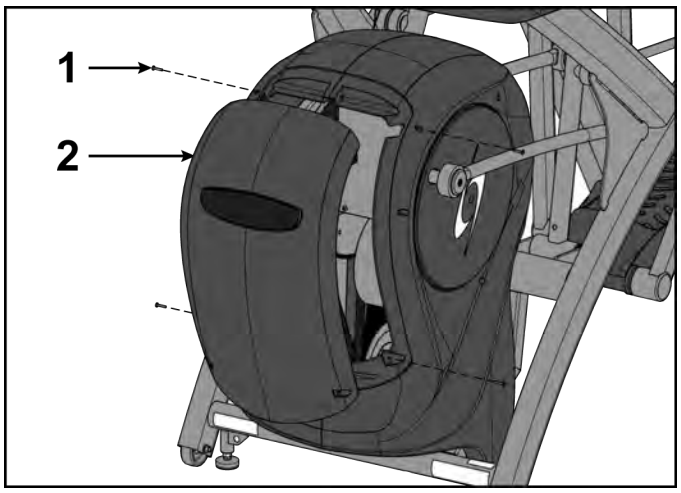


Item	Description	Qty.
1	Cable tie	1
2	Incline motor cable	1
3	Controller cover	1
4	Control board	1
5	Screw	1

2. Place the controller cover into position.
3. Install screw securing the cover in place using a Phillips screwdriver.

Install front access cover
Do not over tighten screws.

1. Place front access cover in place.



Item	Description	Qty.
1	Screw	4
2	Front access cover	1

2. Install screws using a Phillips screwdriver.

Complete Installation
Operate the unit at all levels to verify proper operation.

Control Board Assembly

Tools Required:
- Phillips screwdriver

Disconnect power source

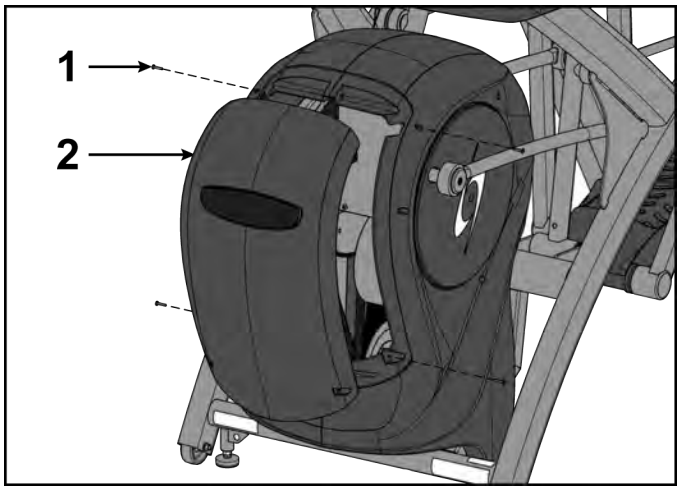
Unplug the power cord from the power outlet.

WARNING

Shock and electrocution hazard.
- Unplug unit and let sit 10 minutes before cleaning or performing maintenance.
- Electrical charge can remain in unit after unplugging.
- Keep water and liquids away from electrical parts.

Remove front access cover

1. Remove screws securing front access cover using a Phillips screwdriver.



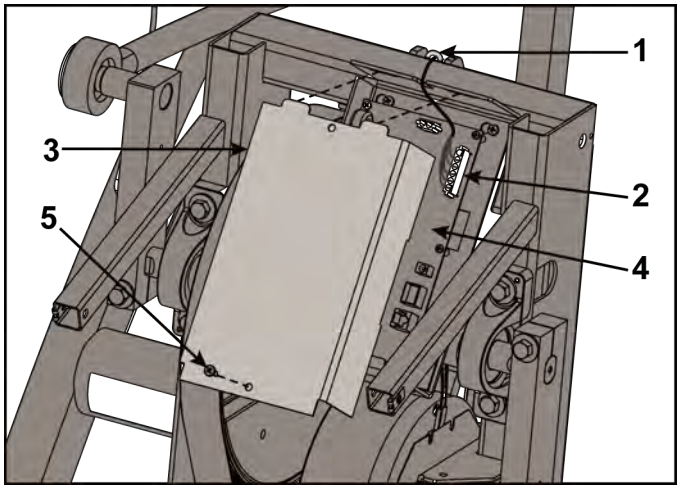
Item	Description	Qty.
1	Screw	4
2	Front access cover	1

2. Remove access cover.

WARNING Burn hazard. Do not touch flywheel until cool.

Remove control board assembly

1. Remove controller cover using a Phillips screwdriver.



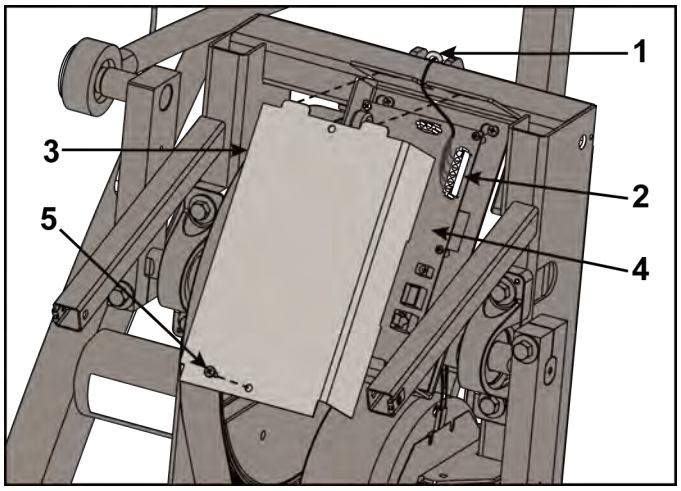
Item	Description	Qty.
1	Cable tie	1
2	Incline motor cable	1
3	Controller cover	1
4	Control board	1
5	Screw	1

2. Disconnect all cables from control board.
3. Remove screws securing control board in place using a Phillips screwdriver.

Install control board assembly

1. Place control board assembly in position on frame.
2. Install the screws securing the control board assembly in place using a Phillips screwdriver.

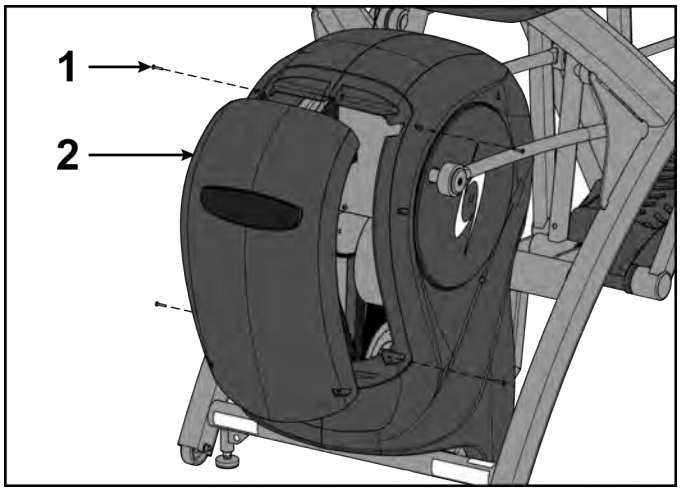
3. Plug all cables into control board.



Item	Description	Qty.
1	Cable tie	1
2	Incline motor cable	1
3	Controller cover	1
4	Control board	1
5	Screw	1

Install front access cover
Do not over tighten screws.

1. Place front access cover in place.



Item	Description	Qty.
1	Screw	4
2	Front access cover	1

2. Install screws using a Phillips screwdriver.

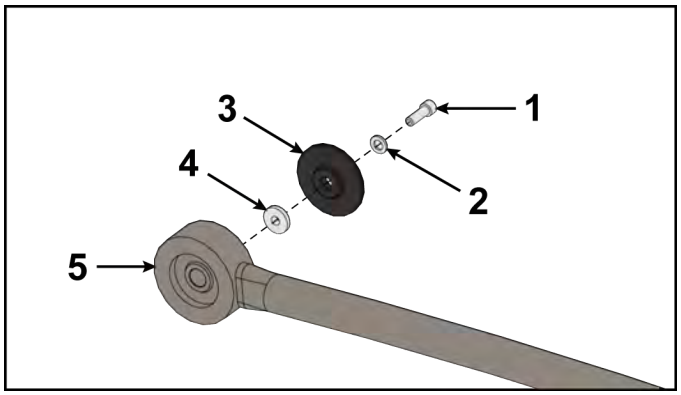
Complete Installation
Operate the unit at all levels to verify proper operation.

Crank Arms

Tools Required:
- 3/16” Allen wrench
- Phillips screwdriver
- 9/16” Socket wrench
- Torque wrench, with 3/16" Allen wrench
- Loctite® #242
- Clean cloth (2)

Remove linkage rods

1. Remove socket head cap screw (SHCS), flat washer, cap and spacer securing linkage rod using a 3/16” Allen wrench.

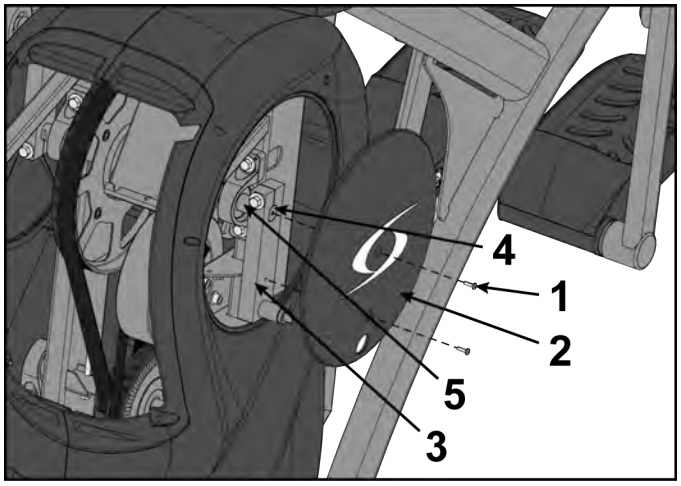


Item	Description	Qty.
1	Screw, SHCS .250-20 x .75	1
2	Flat washer	1
3	Cap	1
4	Spacer	1
5	Linkage rod	1

2. Lay linkage rod down on frame. Place a clean cloth in between linkage rod and frame to prevent scratches.
3. Repeat steps 1 and 2 for other linkage rod.

Remove crank covers

1. Remove both screws securing crank cover using a Phillips screwdriver.

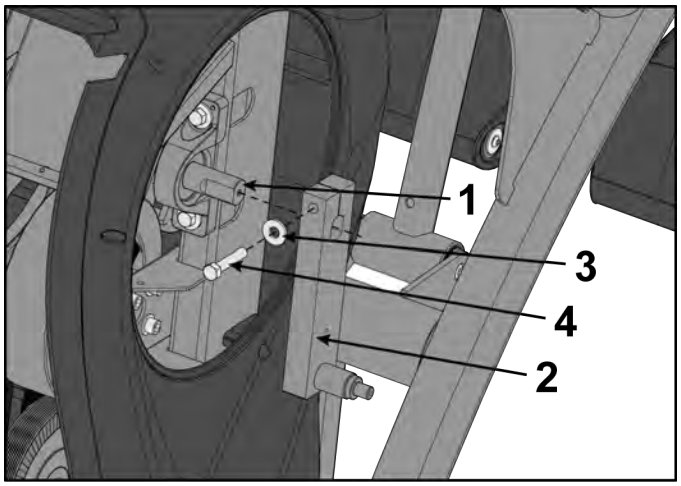


Item	Description	Qty.
1	Screw	2
2	Crank cover	1
3	Crank arm	1
4	Flush mount	1
5	Crank shaft	1

2. Remove crank cover.
3. Repeat steps for other crank cover.

Remove crank arms

1. Loosen but do not remove HHCS on each crank arm using a 9/16” socket wrench.

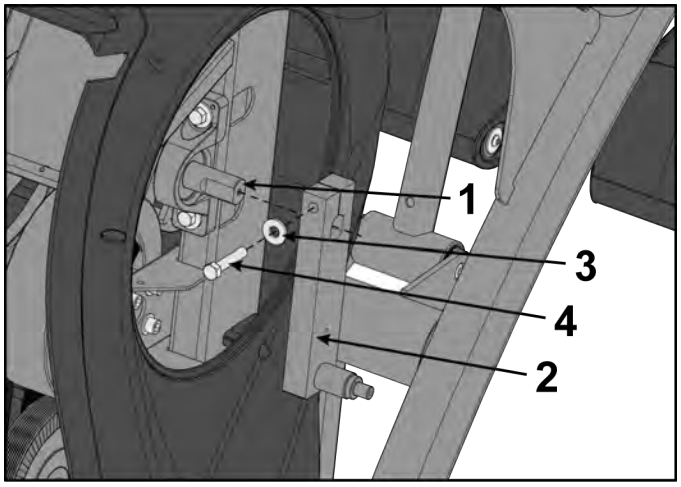


Item	Description	Qty.
1	Crank arm shaft	1
2	Crank arm	2
3	Washer	2
4	HHCS	2

2. Remove crank arms from crank arm shaft.

Install crank arms

1. Slide each crank arm in place.



Item	Description	Qty.
1	Crank arm shaft	1
2	Crank arm	2
3	Washer	2
4	HHCS	2

The face of each crank arm should be flush with the end of each shaft.

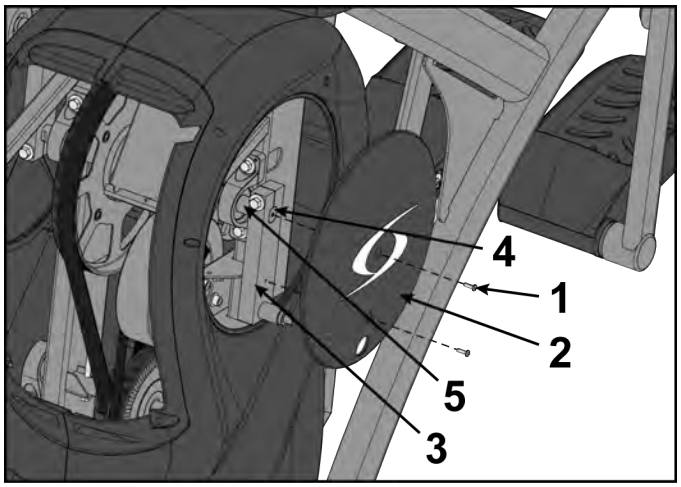
2. Tighten HHCS on each crank arm using a torque wrench with 9/16” socket.

👉 **NOTE:** HHCS must be tightened to a minimum of 30 lbs-ft.

If HHCS is not tightened properly, there may be to much movement of crank arms or foot plates during operation.

Install crank covers

1. Inspect crank arm mounting. Crank arm should be flush with crank shaft. Adjust with 9/16” socket wrench if needed.
   👉 **NOTE:** Crank shaft bolt must be tightened to 30 lbs-ft.

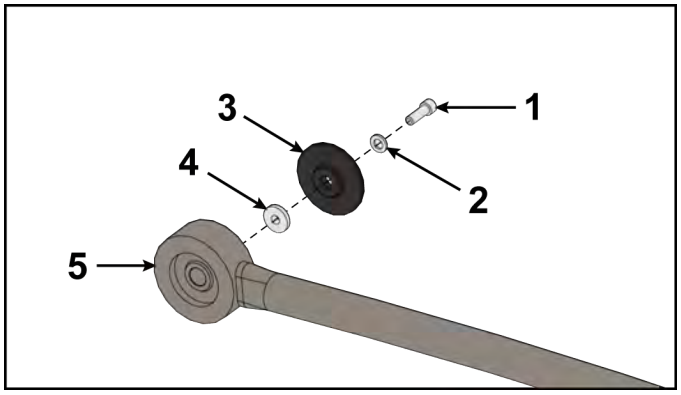


Item	Description	Qty.
1	Screw	2
2	Crank cover	1
3	Crank arm	1
4	Flush mount	1
5	Crank shaft	1

2. Place each crank cover in position.
3. Place Loctite® #242 on screws securing crank covers.
4. Install screws securing each crank cover in place using a Phillips screwdriver.

Install linkage rods

1. Install linkage rod on crank arm.



Item	Description	Qty.
1	Screw, SHCS .250-20 x .75	1
2	Flat washer	1
3	Cap	1
4	Spacer	1
5	Linkage rod	1

2. Place a drop of Loctite® #242 on SHCS and place another drop of Loctite® #242 into the threads of the shaft.
3. Install SHCS, flat washer, cap and spacer using a 3/16" Allen wrench.
   👉 **NOTE:** SHCS must be tightened to a minimum of 90 lbs-in.
4. Repeat steps for other linkage rod.

Complete Installation

Operate the unit at all levels to verify proper operation.

Crank Shaft Assembly

Tools Required:
- 3/16” Allen wrench
- 7/32” Allen wrench
- Phillips screwdriver
- Long Phillips screwdriver
- 9/16” Open end wrench
- 7/16” Socket wrench
- 1/2” Socket wrench
- 9/16” Socket wrench
- Torque wrench, with 9/16" Socket and 3/16" Allen wrench
- Loctite® #242
- Straight edge
- Clean cloth (2)

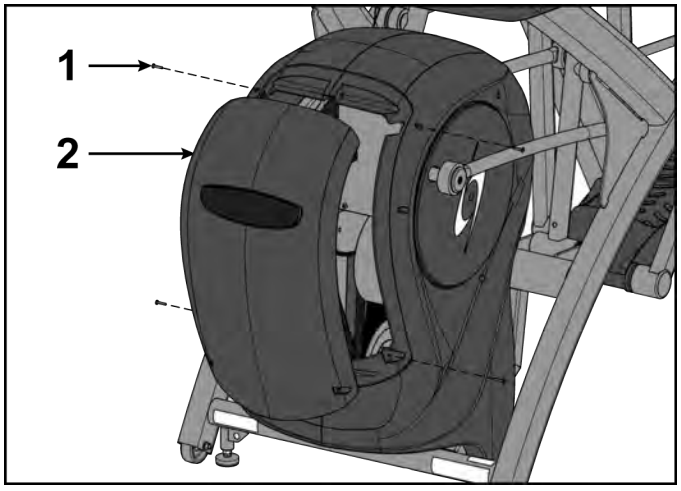
Disconnect power source

Unplug the power cord from the power outlet.

⚠WARNING Shock and electrocution hazard.
- Unplug unit and let sit 10 minutes before cleaning or performing maintenance.
- Electrical charge can remain in unit after unplugging.
- Keep water and liquids away from electrical parts.

Remove front access cover

1. Remove screws securing front access cover using a Phillips screwdriver.



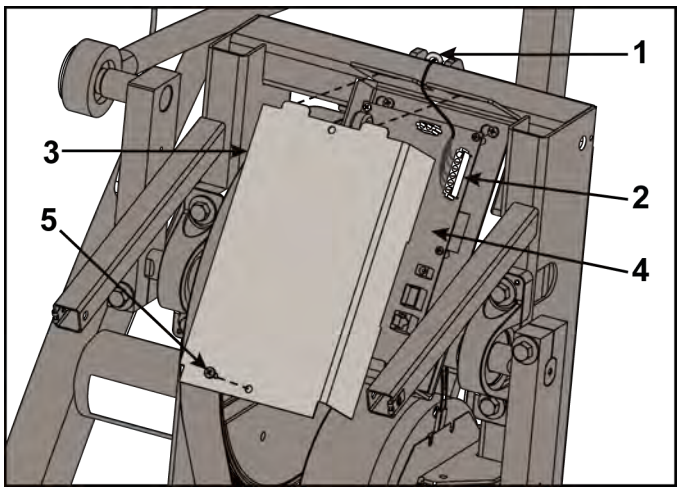
Item	Description	Qty.
1	Screw	4
2	Front access cover	1

2. Remove access cover.

⚠WARNING Burn hazard. Do not touch flywheel until cool.

Remove controller cover and incline unit

1. Remove screw securing controller cover using a Phillips screwdriver.

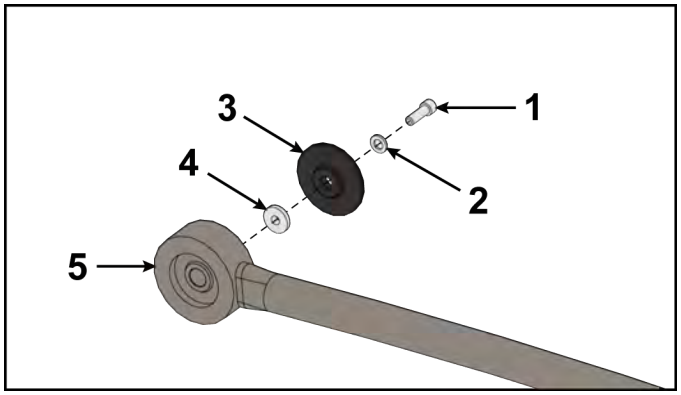


Item	Description	Qty.
1	Cable tie	1
2	Incline motor cable	1
3	Controller cover	1
4	Control board	1
5	Screw	1

2. Remove controller cover.
3. Plug power cord into power outlet.
4. Begin striding.
5. Press the **Quick Start** and stop striding.
6. Press the **Incline** + key to incline to level 20.
7. Unplug the incline motor cable from the control board.
8. Unplug power cord from power outlet.

Remove linkage rods

1. Remove socket head cap screw (SHCS), flat washer, cap and spacer securing linkage rod using a 3/16” Allen wrench.

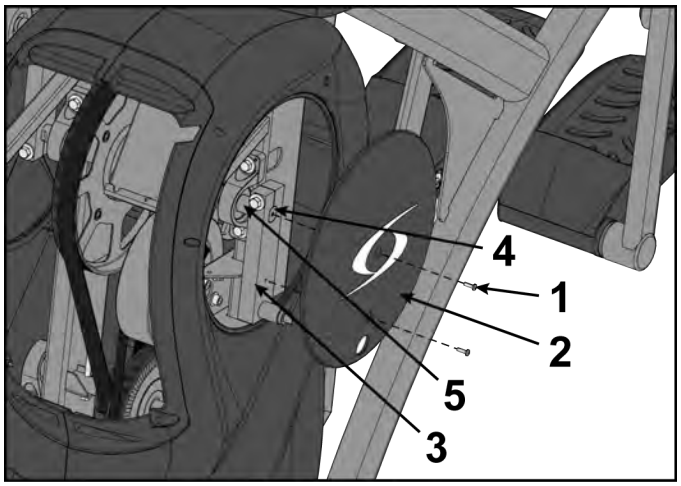


Item	Description	Qty.
1	Screw, SHCS .250-20 x .75	1
2	Flat washer	1
3	Cap	1
4	Spacer	1
5	Linkage rod	1

2. Lay linkage rod down on frame. Place a clean cloth in between linkage rod and frame to prevent scratches.
3. Repeat steps 1 and 2 for other linkage rod.

Remove crank covers

1. Remove both screws securing crank cover using a Phillips screwdriver.

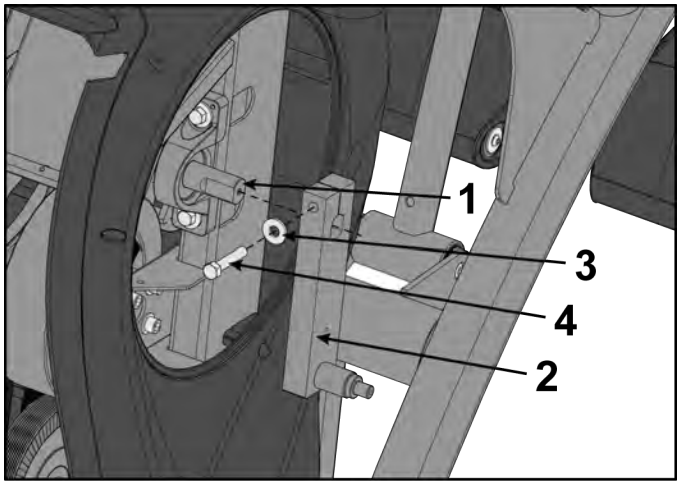


Item	Description	Qty.
1	Screw	2
2	Crank cover	1
3	Crank arm	1
4	Flush mount	1
5	Crank shaft	1

2. Remove crank cover.
3. Repeat steps for other crank cover.

Remove crank arms

1. Loosen but do not remove HHCS on each crank arm using a 9/16” socket wrench.

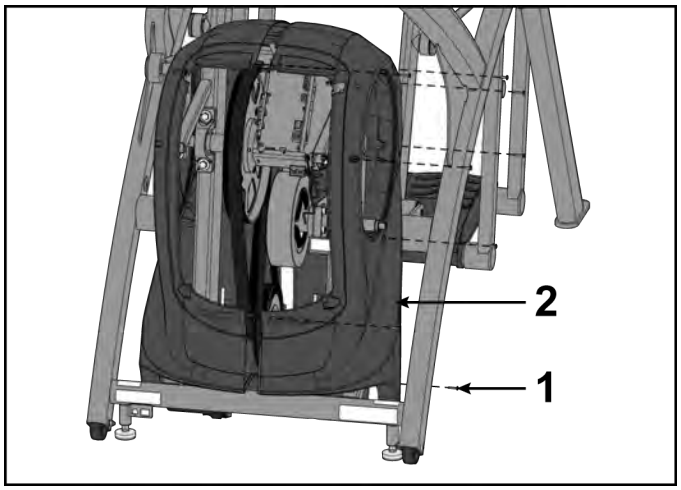


Item	Description	Qty.
1	Crank arm shaft	1
2	Crank arm	2
3	Washer	2
4	HHCS	2

2. Remove crank arms from crank arm shaft.

Remove shrouds

1. Remove seven screws securing left shroud in place using a long Phillips screwdriver.

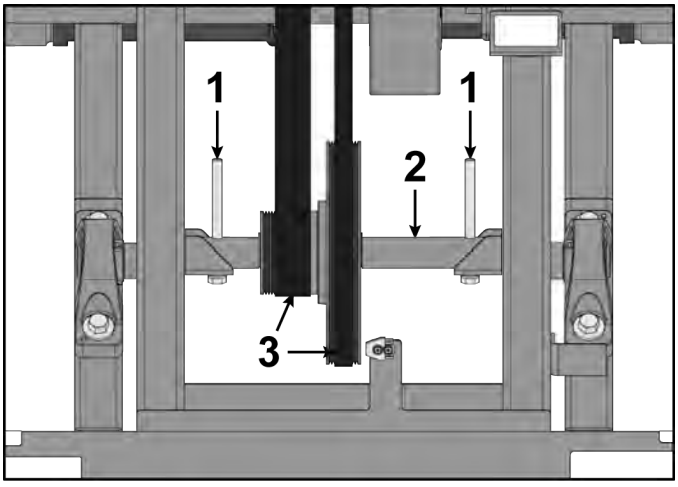


Item	Description	Qty.
1	Screw	7
2	Left shroud	1

2. Remove three screws securing right shroud in place using a long Phillips screwdriver.
3. Remove both shrouds.

Release drive belt tension

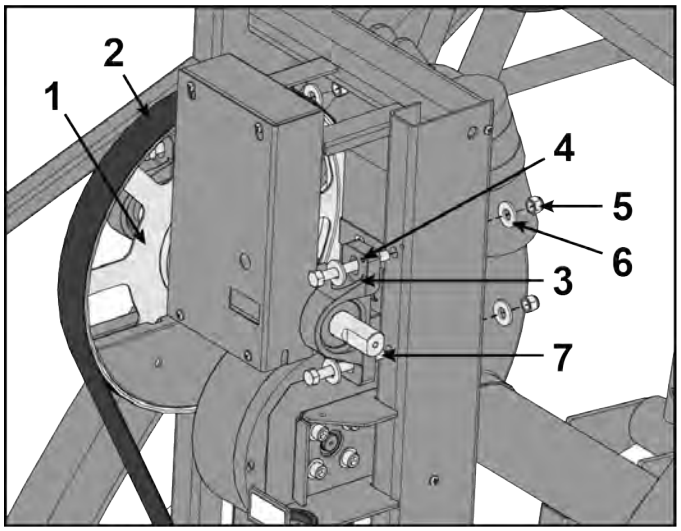
Loosen the two Hex Head Cap Screws (HHCS) using a 7/16" or 1/2” socket wrench. Alternate a few turns to each HHCS until they bottom out (DO NOT REMOVE).



Item	Description	Qty.
1	HHCS	2
2	Lower pivot shaft	1
3	Drive belt	2

Remove crank shaft assembly

1. Remove the four bolts, eight flat washers and four nuts securing crank shaft assembly to frame using a 9/16” socket wrench and a 9/16” open end wrench.



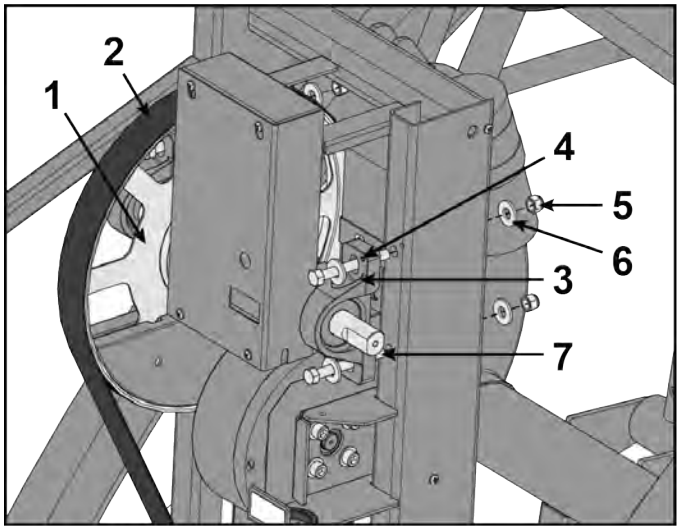
Item	Description	Qty.
1	Crank shaft assembly	1
2	Primary belt	1
3	Pillow block	2
4	Alignment pin	1
5	Nut	4
6	Flat washer	8
7	Bolt	4

2. Remove primary belt from crank shaft assembly.
3. Remove crank shaft assembly.

Install crank shaft assembly

The new bearings have been pre-assembled on the new crank shaft assembly and are not adjustable.

1. Place assembly into primary belt and slide alignment pins into holes on the frame.
   You may need to tap the pins in with a hammer so they are flush with the top of pillow blocks.



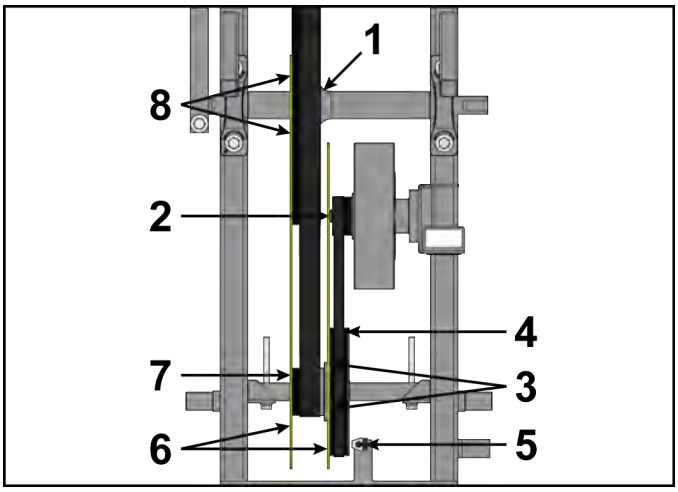
Item	Description	Qty.
1	Crank shaft assembly	1
2	Primary belt	1
3	Pillow block	2
4	Alignment pin	1
5	Nut	4
6	Flat washer	8
7	Bolt	4

2. Secure two bolts, four flat washers, and two nuts to each pillow block using a 9/16” socket wrench and a 9/16” open end wrench.

Tension drive belt

Tighten one HHCS a few turns then tighten the other HHCS a few turns using a 7/16” or 1/2” socket wrench. Alternate until both HHCS are secure.

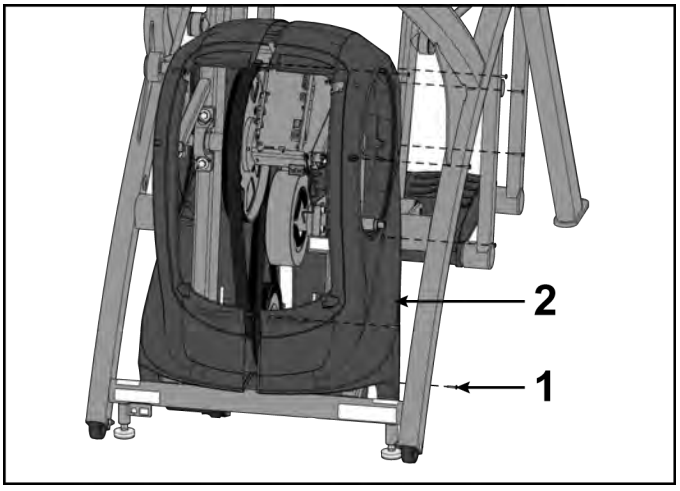
NOTE: Verify that both pulleys are aligned properly using a straight edge. The straight edge must be no more than 1/16” from pulley edge.



Item	Description	Qty.
1	Pulley	1
2	The straight edge must be no more than 1/16” from pulley edge	1
3	Touch straight edge here (two places)	2
4	Pulley	1
5	Speed sensor	1
6	Straight edge	2
7	The straight edge must be no more than 1/16” from pulley edge	1
8	Touch straight edge here	2

Install shrouds

1. Place both shrouds in position.

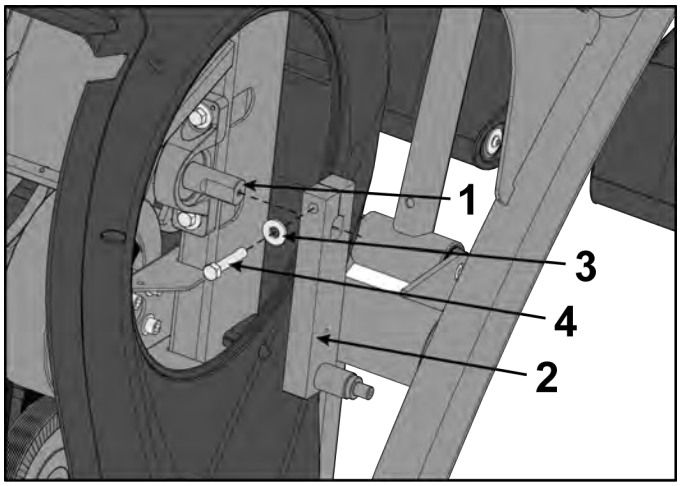


Item	Description	Qty.
1	Screw	7
2	Left shroud	1

2. Install screws securing each side cover using a long Phillips screwdriver.

Install crank arms

1. Slide each crank arm in place.



Item	Description	Qty.
1	Crank arm shaft	1
2	Crank arm	2
3	Washer	2
4	HHCS	2

The face of each crank arm should be flush with the end of each shaft.

2. Tighten HHCS on each crank arm using a torque wrench with 9/16” socket.

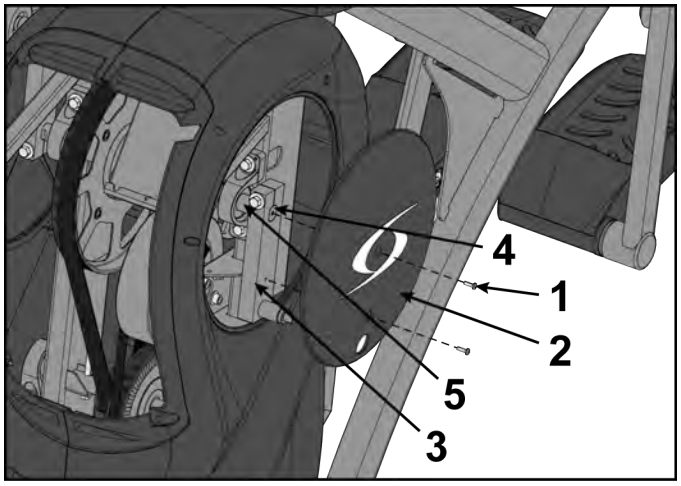
NOTE: HHCS must be tightened to a minimum of 30 lbs-ft.

If HHCS is not tightened properly, there may be to much movement of crank arms or foot plates during operation.

Install crank covers

1. Inspect crank arm mounting. Crank arm should be flush with crank shaft. Adjust with 9/16” socket wrench if needed.

NOTE: Crank shaft bolt must be tightened to 30 lbs-ft.

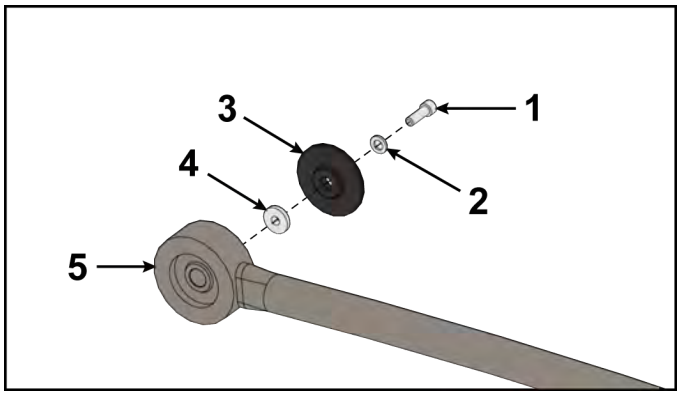


Item	Description	Qty.
1	Screw	2
2	Crank cover	1
3	Crank arm	1
4	Flush mount	1
5	Crank shaft	1

2. Place each crank cover in position.
3. Place Loctite® #242 on screws securing crank covers.
4. Install screws securing each crank cover in place using a Phillips screwdriver.

Install linkage rods

1. Install linkage rod on crank arm.

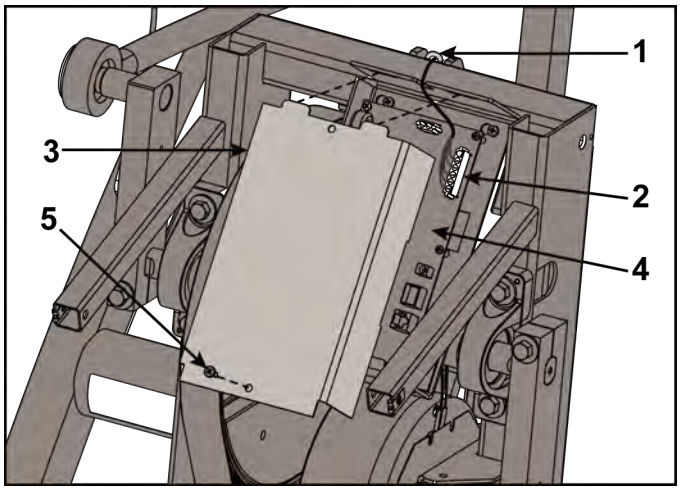


Item	Description	Qty.
1	Screw, SHCS .250-20 x .75	1
2	Flat washer	1
3	Cap	1
4	Spacer	1
5	Linkage rod	1

2. Place a drop of Loctite® #242 on SHCS and place another drop of Loctite® #242 into the threads of the shaft.
3. Install SHCS, flat washer, cap and spacer using a 3/16" Allen wrench.
   NOTE: SHCS must be tightened to a minimum of 90 lbs-in.
4. Repeat steps for other linkage rod.

Install controller cover

1. Plug incline motor cable into control board.

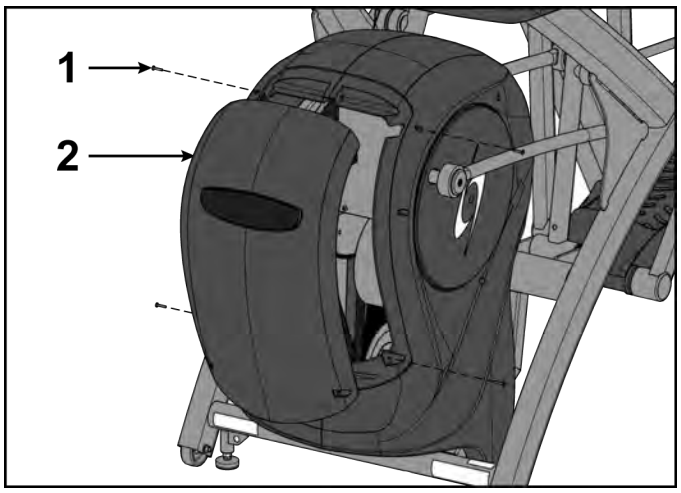


Item	Description	Qty.
1	Cable tie	1
2	Incline motor cable	1
3	Controller cover	1
4	Control board	1
5	Screw	1

2. Place the controller cover into position.
3. Install screw securing the cover in place using a Phillips screwdriver.

Install front access cover
Do not over tighten screws.

1. Place front access cover in place.



Item	Description	Qty.
1	Screw	4
2	Front access cover	1

2. Install screws using a Phillips screwdriver.

Complete Installation
Operate the unit at all levels to verify proper operation.

Lower Pulley Assembly

Tools Required:
- 3/16” Allen wrench
- Phillips screwdriver
- Long Phillips screwdriver
- 1/2” Socket wrench
- 9/16” Socket wrench
- Loctite® #242
- Straight edge
- Torque wrench, with 9/16" socket and 3/16" Allen wrench
- Clean cloth (2)

Disconnect power source

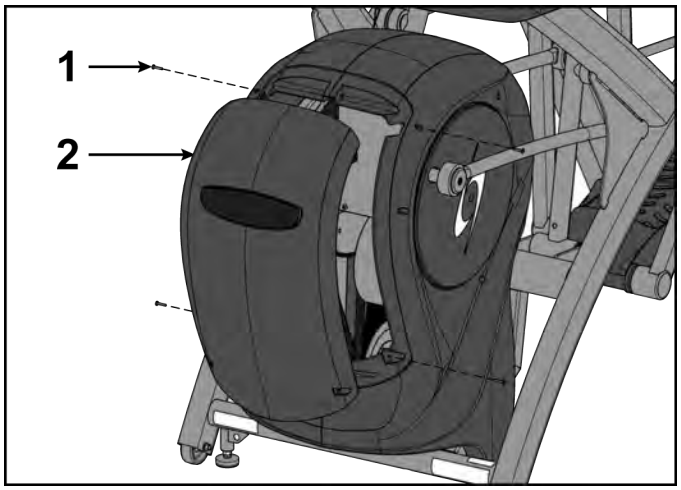
Unplug the power cord from the power outlet.

⚠WARNING

Shock and electrocution hazard.
- Unplug unit and let sit 10 minutes before cleaning or performing maintenance.
- Electrical charge can remain in unit after unplugging.
- Keep water and liquids away from electrical parts.

Remove front access cover

1. Remove screws securing front access cover using a Phillips screwdriver.



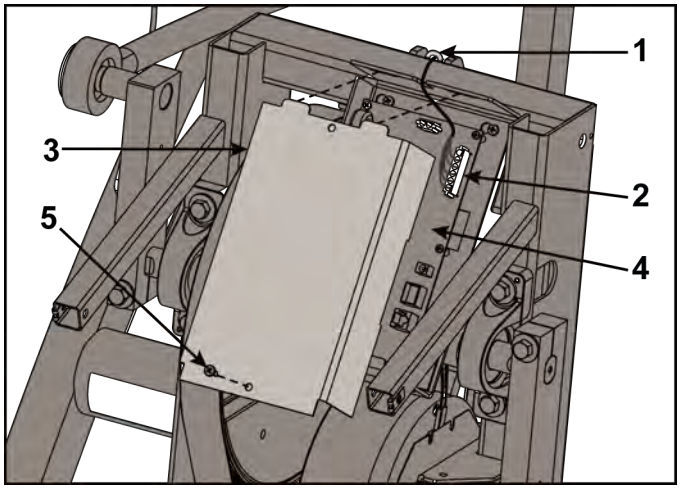
Item	Description	Qty.
1	Screw	4
2	Front access cover	1

2. Remove access cover.

WARNING Burn hazard. Do not touch flywheel until cool.

Remove controller cover and incline unit

1. Remove screw securing controller cover using a Phillips screwdriver.

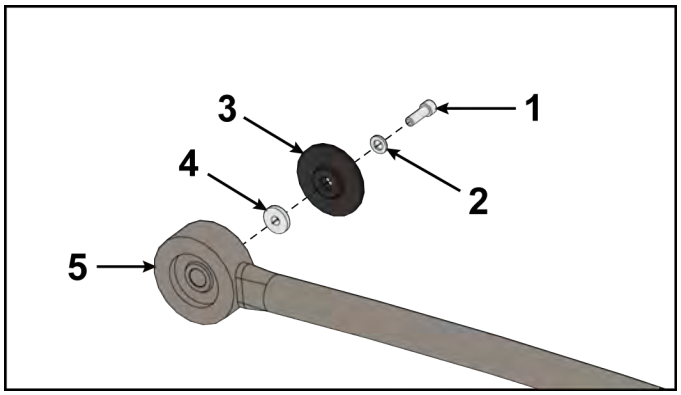


Item	Description	Qty.
1	Cable tie	1
2	Incline motor cable	1
3	Controller cover	1
4	Control board	1
5	Screw	1

2. Remove controller cover.
3. Plug power cord into power outlet.
4. Begin striding.
5. Press the **Quick Start** and stop striding.
6. Press the **Incline** + key to incline to level 20.
7. Unplug the incline motor cable from the control board.
8. Unplug power cord from power outlet.

Remove linkage rods

1. Remove socket head cap screw (SHCS), flat washer, cap and spacer securing linkage rod using a 3/16” Allen wrench.

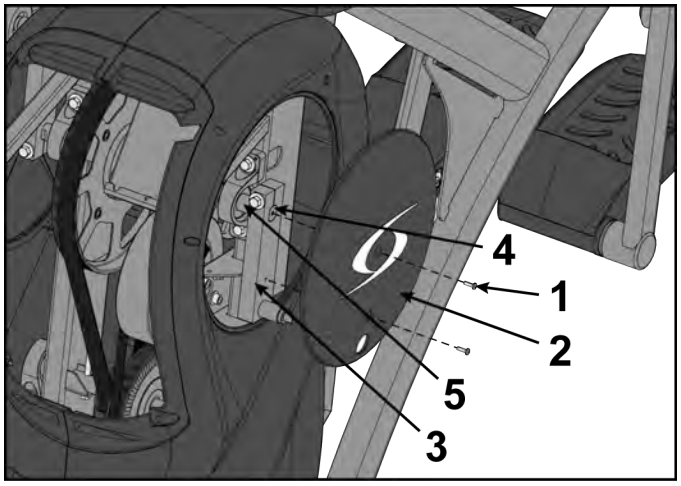


Item	Description	Qty.
1	Screw, SHCS .250-20 x .75	1
2	Flat washer	1
3	Cap	1
4	Spacer	1
5	Linkage rod	1

2. Lay linkage rod down on frame. Place a clean cloth in between linkage rod and frame to prevent scratches.
3. Repeat steps 1 and 2 for other linkage rod.

Remove crank covers

1. Remove both screws securing crank cover using a Phillips screwdriver.

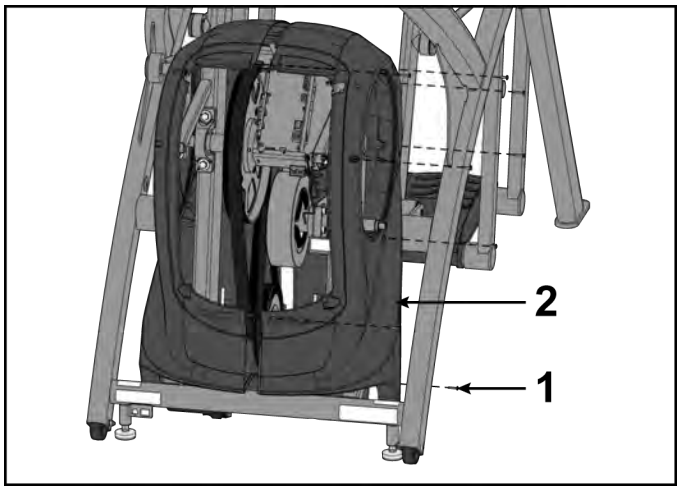


Item	Description	Qty.
1	Screw	2
2	Crank cover	1
3	Crank arm	1
4	Flush mount	1
5	Crank shaft	1

2. Remove crank cover.
3. Repeat steps for other crank cover.

Remove shrouds

1. Remove seven screws securing left shroud in place using a long Phillips screwdriver.

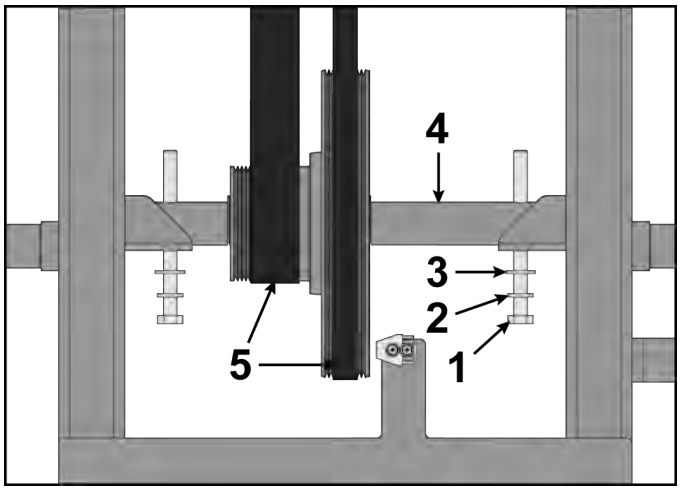


Item	Description	Qty.
1	Screw	7
2	Left shroud	1

2. Remove three screws securing right shroud in place using a long Phillips screwdriver.
3. Remove both shrouds.

Remove lower pulley assembly

1. Remove the two Hex Head Cap Screws (HHCS), two lock washers and two flat washers from the lower pulley shaft using a 7/16" or 1/2” socket wrench.



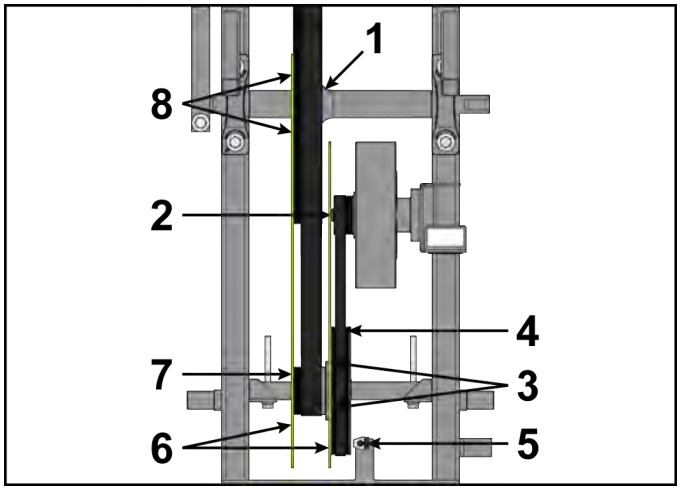
Item	Description	Qty.
1	HHCS	2
2	Lock washer	2
3	Flat washer	2
4	Lower pulley shaft	1
5	Drive belt	2

2. Remove the lower pulley assembly out of the drive belts and from the frame.

Install lower pulley assembly

1. Slide the lower pulley assembly through both drive belts and into place on the frame. Confirm that both drive belts are straight and centered in place.

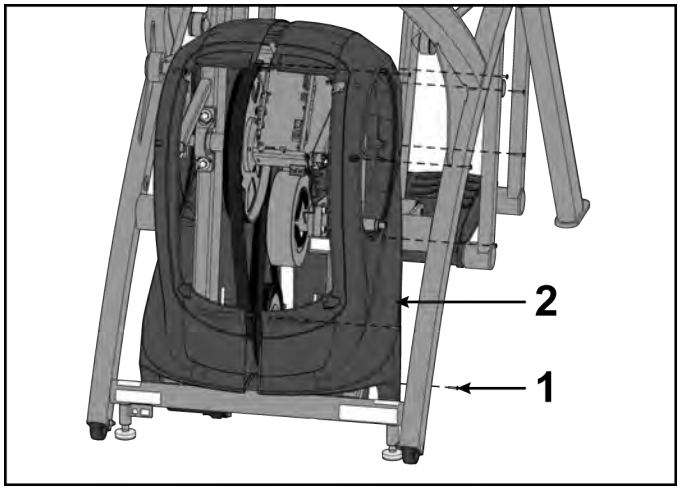
2. Tighten one HHCS a few turns then tighten the other HHCS a few turns using a 1/2” socket wrench. Alternate until both HHCS are secure. Verify that both pulleys are aligned properly using a straight edge. The straight edge must be no more than 1/16” from pulley edge.



Item	Description	Qty.
1	Pulley	1
2	The straight edge must be no more than 1/16” from pulley edge	1
3	Touch straight edge here (two places)	2
4	Pulley	1
5	Speed sensor	1
6	Straight edge	2
7	The straight edge must be no more than 1/16” from pulley edge	1
8	Touch straight edge here	2

Install shrouds

1. Place both shrouds in position.

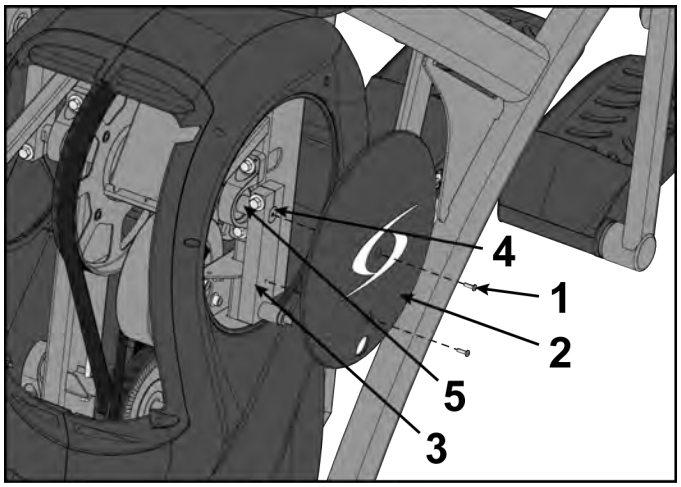


Item	Description	Qty.
1	Screw	7
2	Left shroud	1

2. Install screws securing each side cover using a long Phillips screwdriver.

Install crank covers

1. Inspect crank arm mounting. Crank arm should be flush with crank shaft. Adjust with 9/16” socket wrench if needed.
   - **NOTE:** Crank shaft bolt must be tightened to 30 lbs-ft.

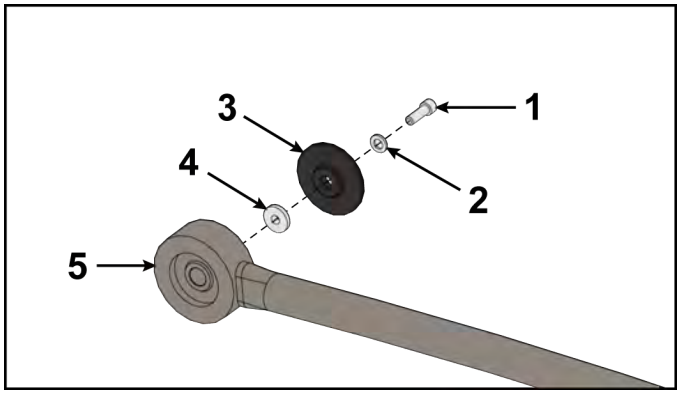


Item	Description	Qty.
1	Screw	2
2	Crank cover	1
3	Crank arm	1
4	Flush mount	1
5	Crank shaft	1

2. Place each crank cover in position.
3. Place Loctite® #242 on screws securing crank covers.
4. Install screws securing each crank cover in place using a Phillips screwdriver.

Install linkage rods

1. Install linkage rod on crank arm.

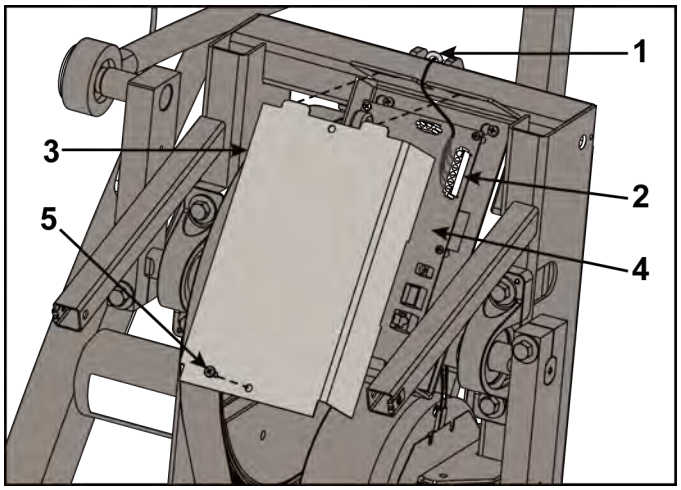


Item	Description	Qty.
1	Screw, SHCS .250-20 x .75	1
2	Flat washer	1
3	Cap	1
4	Spacer	1
5	Linkage rod	1

2. Place a drop of Loctite® #242 on SHCS and place another drop of Loctite® #242 into the threads of the shaft.
3. Install SHCS, flat washer, cap and spacer using a 3/16" Allen wrench.
   - **NOTE:** SHCS must be tightened to a minimum of 90 lbs-in.
4. Repeat steps for other linkage rod.

Install controller cover

1. Plug incline motor cable into control board.



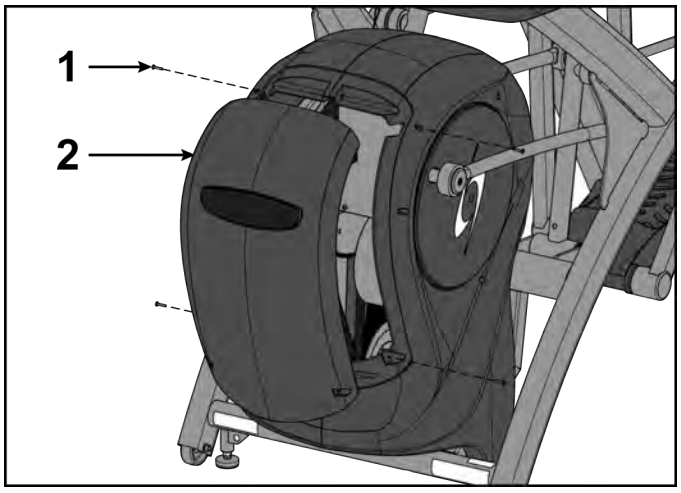
Item	Description	Qty.
1	Cable tie	1
2	Incline motor cable	1
3	Controller cover	1
4	Control board	1
5	Screw	1

2. Place the controller cover into position.
3. Install screw securing the cover in place using a Phillips screwdriver.

Install front access cover

Do not over tighten screws.

1. Place front access cover in place.



Item	Description	Qty.
1	Screw	4
2	Front access cover	1

2. Install screws using a Phillips screwdriver.

Complete Installation

Operate the unit at all levels to verify proper operation.

Incline Motor

Tools Required:

- Side cutter
- Phillips screwdriver
- Long Phillips screwdriver

- Retaining ring pliers
- 3/16” Allen wrench
- Torque wrench, with 3/16" Allen wrench
- Loctite® #242
- Clean cloth (2)

Disconnect power source

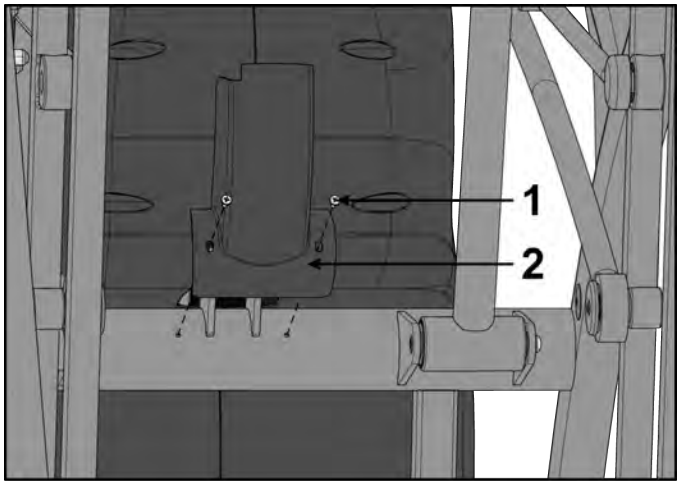
Unplug the power cord from the power outlet.

⚠WARNING

Shock and electrocution hazard.
- Unplug unit and let sit 10 minutes before cleaning or performing maintenance.
- Electrical charge can remain in unit after unplugging.
- Keep water and liquids away from electrical parts.

Remove incline motor cover

1. Remove both screws securing incline motor cover using a Phillips screwdriver.

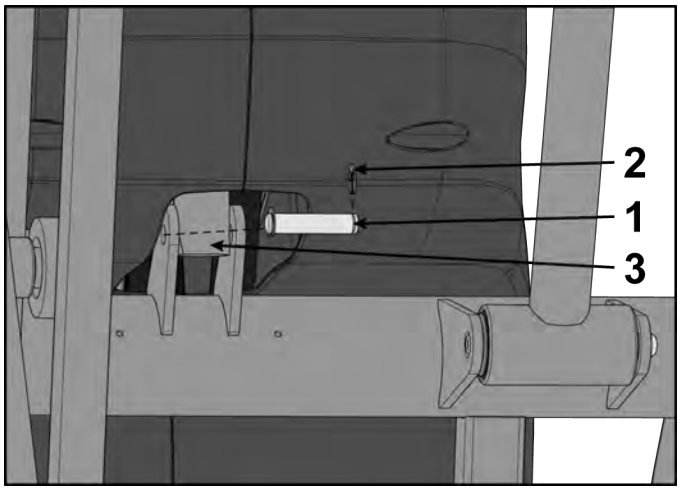


Item	Description	Qty.
1	Screw	2
2	Incline motor cover	1

2. Remove incline motor cover.

Remove lower motor mount shaft

1. Remove retaining ring from motor mount shaft using retaining ring pliers.

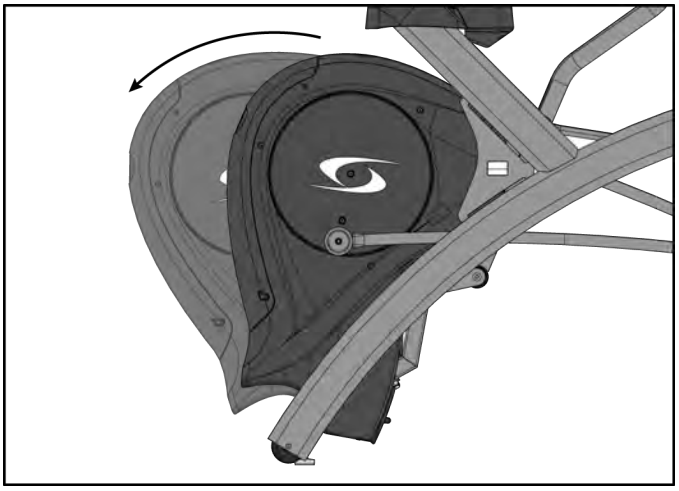


Item	Description	Qty.
1	Motor mount shaft	1
2	Retaining ring	1
3	Incline motor	1

2. Remove motor mount shaft securing incline motor to main frame.

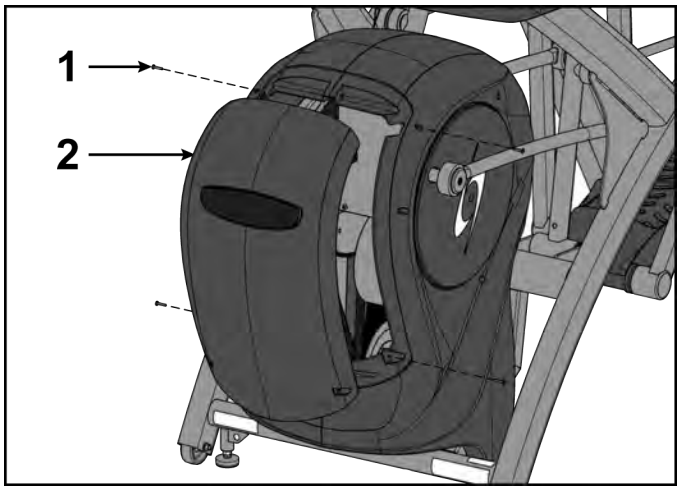
Tilt front end assembly forward

Tilt front end assembly forward carefully until it stops.



Remove front access cover

1. Remove screws securing front access cover using a Phillips screwdriver.



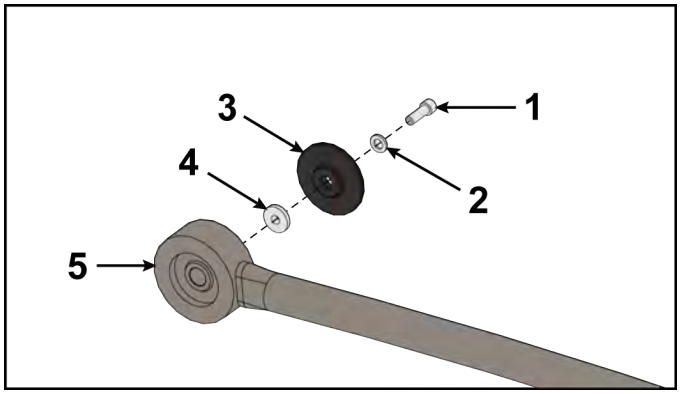
Item	Description	Qty.
1	Screw	4
2	Front access cover	1

2. Remove access cover.

WARNING Burn hazard. Do not touch flywheel until cool.

Remove left linkage rod

1. Remove socket head cap screw (SHCS), flat washer, cap and spacer securing linkage rod using a 3/16” Allen wrench.

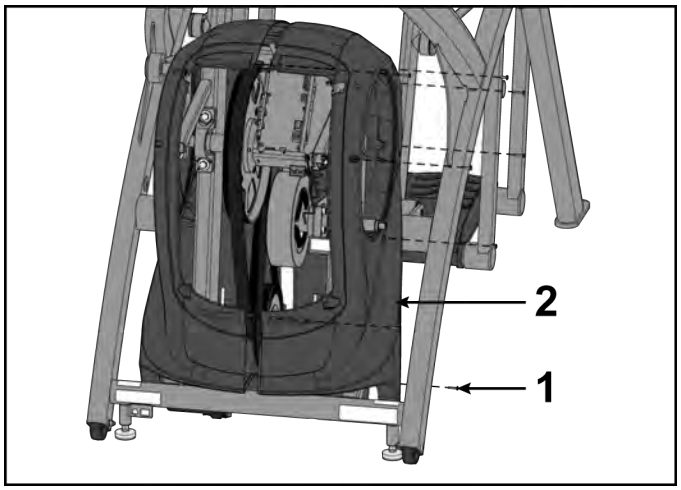


Item	Description	Qty.
1	Screw, SHCS .250-20 x .75	1
2	Flat washer	1
3	Cap	1
4	Spacer	1
5	Linkage rod	1

2. Lay linkage rod down on frame. Place a clean cloth in between linkage rod and frame to prevent scratches.

Remove left shroud

1. Remove eight screws securing left shroud using a long Phillips screwdriver.

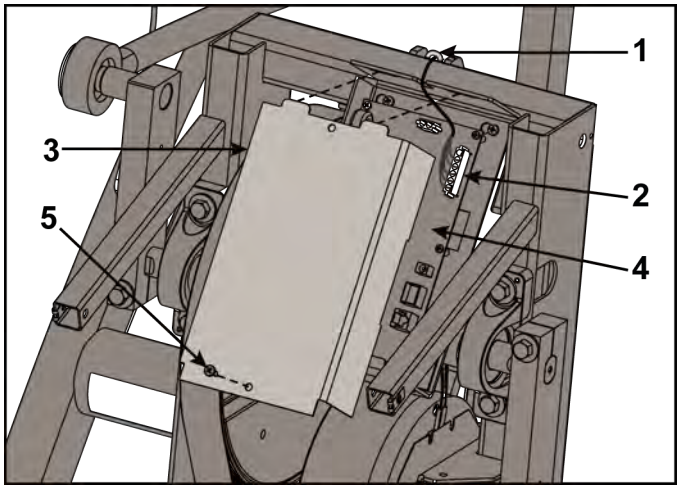


Item	Description	Qty.
1	Screw	7
2	Left shroud	1

2. Remove left shroud.

Remove incline motor cable

1. Remove controller cover using a Phillips screwdriver.

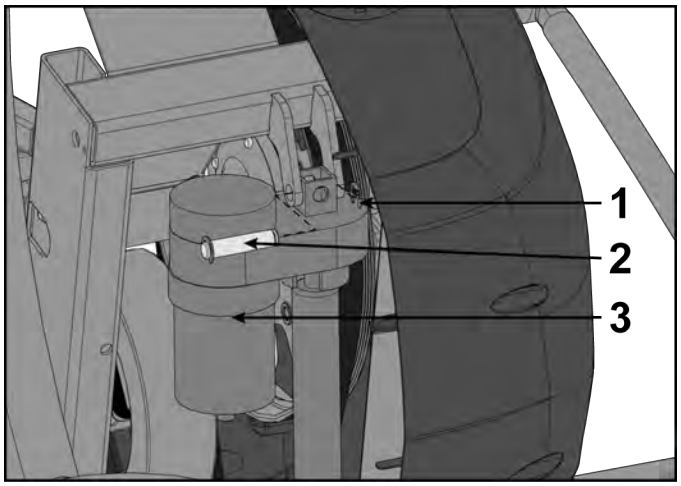


Item	Description	Qty.
1	Cable tie	1
2	Incline motor cable	1
3	Controller cover	1
4	Control board	1
5	Screw	1

2. Remove controller cover.
3. Unplug incline motor cable from control board.
4. Cut cable tie using side cutters.

Remove incline motor

1. Remove retaining ring from motor mount shaft using retaining ring pliers.

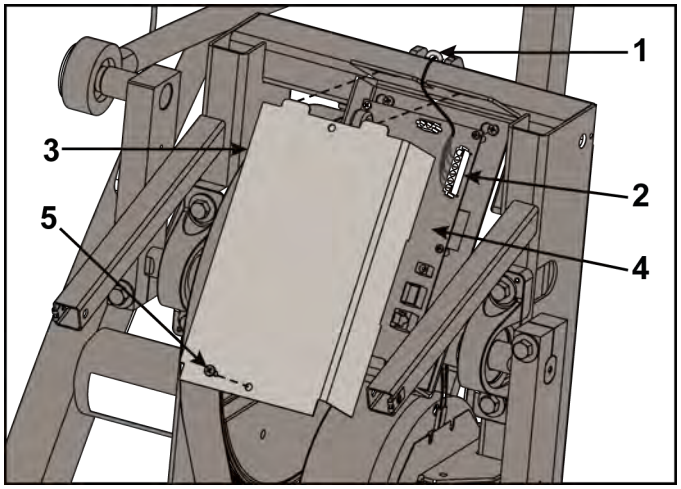


Item	Description	Qty.
1	Retaining ring	1
2	Motor mount shaft	1
3	Incline motor	1

2. Remove motor mount shaft securing incline motor to main frame.
3. Remove incline motor.

Install incline motor

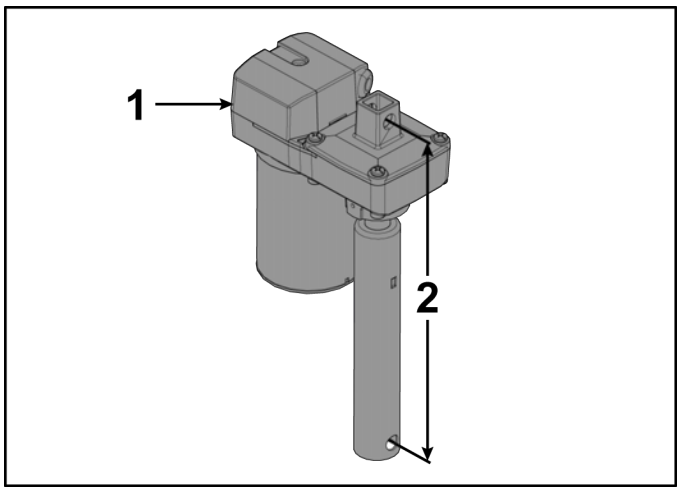
1. Place incline motor in position.
2. Plug the incline motor cable into control board.



Item	Description	Qty.
1	Cable tie	1
2	Incline motor cable	1
3	Controller cover	1
4	Control board	1
5	Screw	1

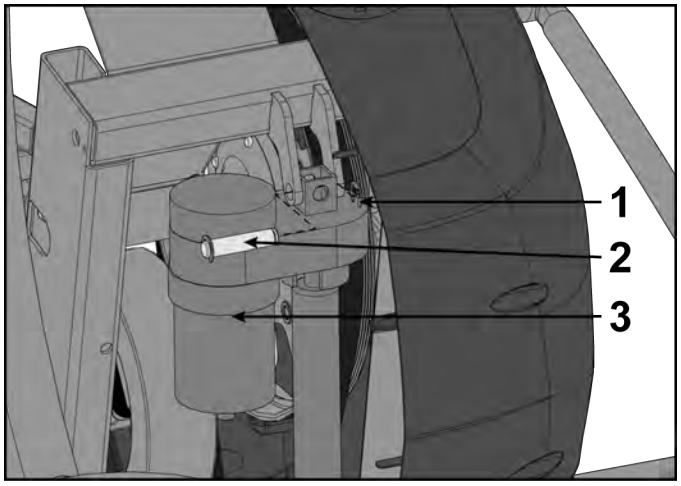
3. Plug power cord into power inlet.
4. Turn the power switch on.
5. Wait for shaft on incline motor to stop turning.
6. Unplug power cord from power inlet.

7. Turn the tube nut with your fingers until it measures the correct center to center length. This length is measured from the center of the top hole to the center of the bottom hole.



Item	Description	Qty.
1	Tube nut	1
2	Center to center length	11.50" (29 cm)

8. Install a retaining ring to one side of motor mount shaft using retaining ring pliers.



Item	Description	Qty.
1	Retaining ring	1
2	Motor mount shaft	1
3	Incline motor	1

9. Install motor mount shaft securing the incline motor to drive frame assembly.

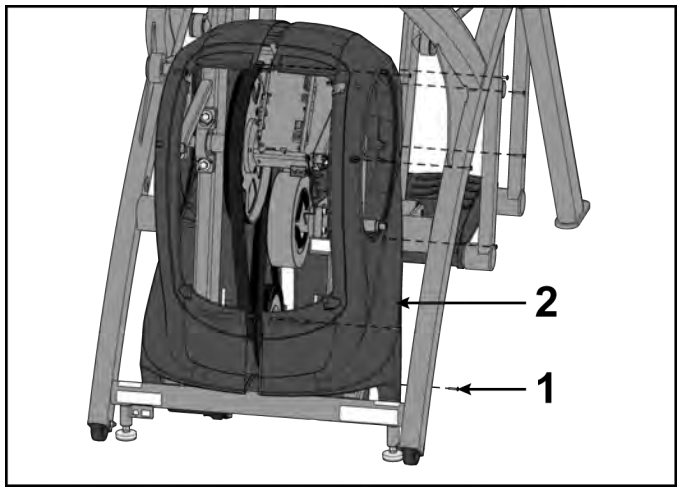
10. Install a retaining ring to other side of motor mount shaft using retaining ring pliers.

11. Install cable tie securing incline motor cable.
Remove excess cable tie with side cutters.

12. Install controller cover and screw using a Phillips screwdriver.

Install left shroud

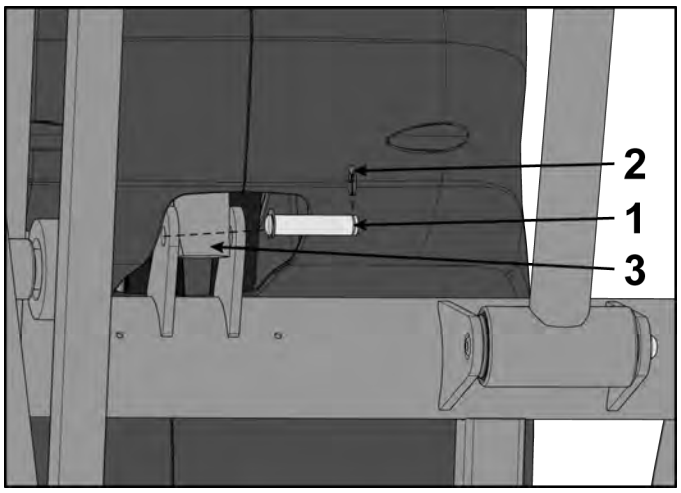
Install eight screws securing left shroud in place using a long Phillips screwdriver.



Item	Description	Qty.
1	Screw	7
2	Left shroud	1

Install lower motor mount shaft

1. Tilt front end assembly backward carefully until holes in incline motor align with the holes in the support bracket on main frame.
2. Attach a retaining ring to one side of motor mount shaft using retaining ring pliers.

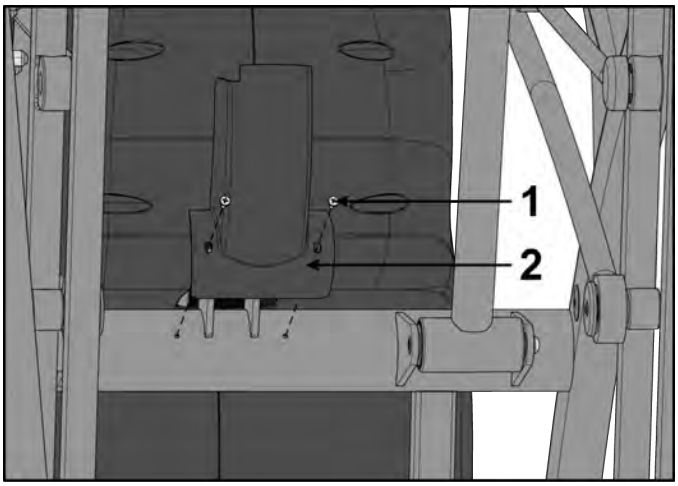


Item	Description	Qty.
1	Motor mount shaft	1
2	Retaining ring	1
3	Incline motor	1

3. Install the motor mount shaft securing the incline motor to the main frame assembly.
4. Attach a retaining ring to the other side of motor mount shaft using retaining ring pliers.

Install incline motor cover

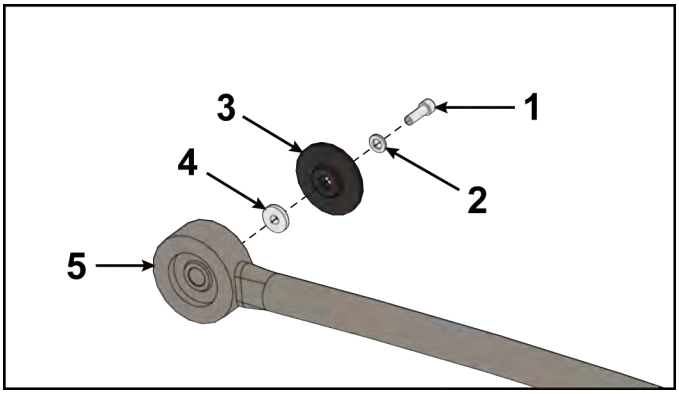
Install incline motor cover to main frame with two screws using a Phillips screwdriver.



Item	Description	Qty.
1	Screw	2
2	Incline motor cover	1

Install linkage rod

1. Install linkage rod on crank arm.



Item	Description	Qty.
1	Screw, SHCS .250-20 x .75	1
2	Flat washer	1
3	Cap	1
4	Spacer	1
5	Linkage rod	1

2. Place a drop of Loctite® #242 on SHCS and place another drop of Loctite® #242 into the threads of the shaft.
3. Install SHCS, flat washer, cap and spacer using a 3/16" Allen wrench.

   NOTE: SHCS must be tightened to a minimum of 90 lbs-in.

Plug in power cord

Plug power cord into power outlet.

Calibrate Incline motor 770A

1. Hold the handrails to steady self while stepping into the foot plates.
2. Begin striding.

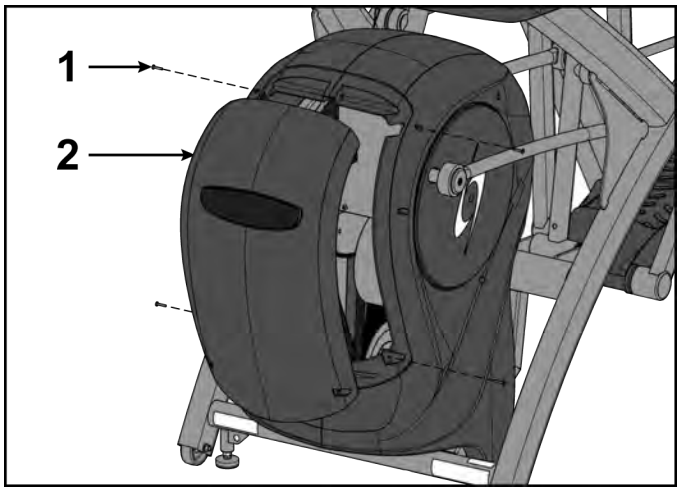
CYBEX	**CYBEX LOGO**	Press and hold Cybex logo for 6 seconds to access **Screen Lock** and **Toolbox**.
ENGLISH	**LANGUAGE ICON**	Press and hold language logo for 6 seconds to access **Screen Lock** and **Toolbox**.

3. Tap the **Access Toolbox** icon to display the **Access to Toolbox** login screen.

4. Enter the sequence: .
5. At the main **Toolbox** screen, tap the **OEM Diags** icon, then the **Incline Calibration** icon.
6. Stop striding. Wait until foot plates come to a complete stop before dismounting unit. Hold handrails to steady self while stepping off unit.
7. Press the **Calibrate** icon. The console will display Stay off of the pedals.
8. Press the **Calibrate** button to perform calibration. The console will display Calibrating... and the incline motor will incline to it's maximum extension and then return slightly.
   When calibration is complete it will return to the **Incline Calibration** screen and display the calibration numbers for 0 and 20%.
9. Exit **Diagnostics** by tapping the **Toolbox** icon, then tap the **Home** icon . The screen will refresh.
10. Tap **QUICK START** on the CardioTouch screen.
11. Press the **Incline** ▲ or ▼ keys once to lower the incline to a low starting position.
12. Press **STOP** key to return to Dormant Mode.

Install front access cover
Do not over tighten screws.

1. Place front access cover in place.



Item	Description	Qty.
1	Screw	4
2	Front access cover	1

2. Install screws using a Phillips screwdriver.

Complete Installation
Operate the unit at all levels to verify proper operation.

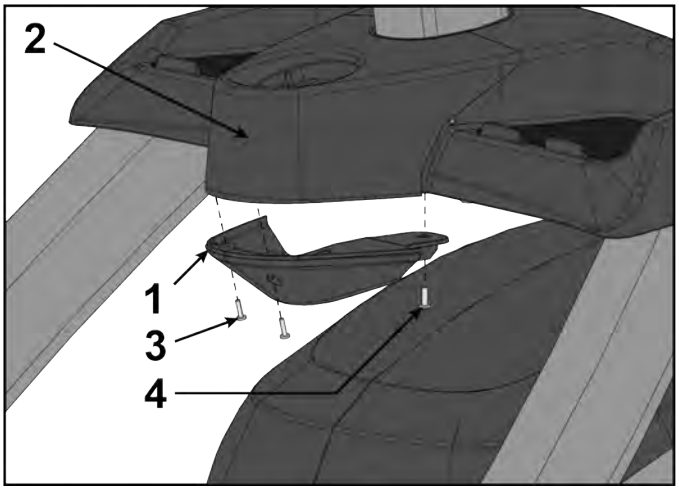
Console Assembly

Accessory Tray

Tools Required:
- Phillips screwdriver
- Stubby Phillips screwdriver

Remove Accessory Tray Bottom

1. Remove the three screws securing the accessory tray bottom to the accessory tray base using a Phillips screwdriver.

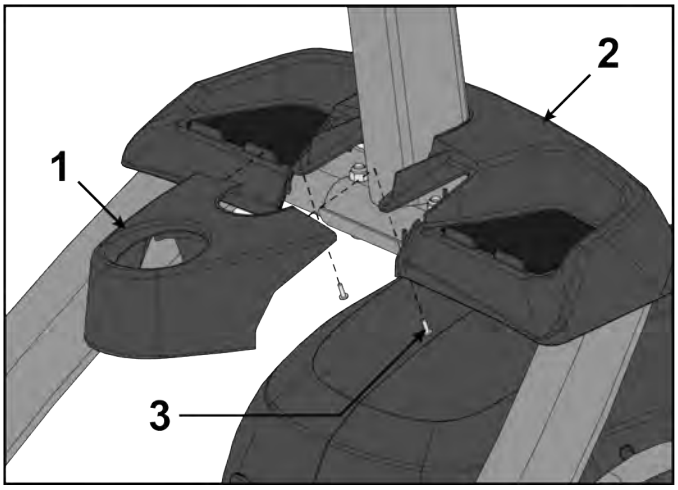


Item	Description	Qty.
1	Accessory Tray Bottom	1
2	Accessory Tray Top	1
3	Screw, Pan Head Phillips, 6 x .50"	2
4	Screw, Pan Head Phillips, 8-16 x .50"	1

2. Remove the accessory tray bottom

Remove Accessory Tray Top

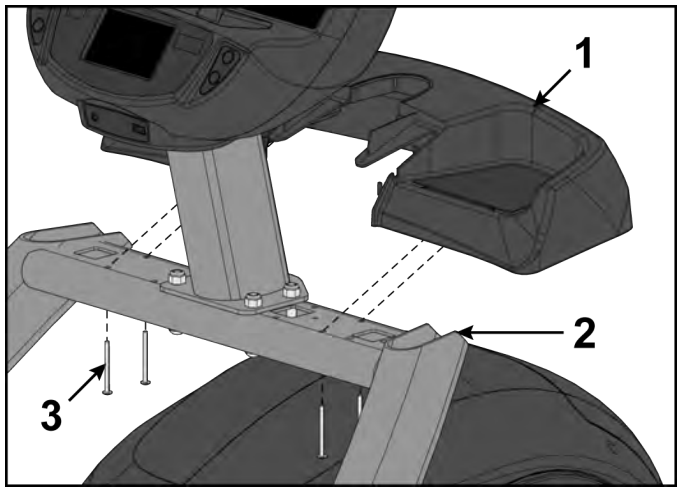
Remove the two screws securing the accessory tray top to the accessory tray base using a stubby Phillips screwdriver.



Item	Description	Qty.
1	Accessory Tray Top	1
2	Accessory Tray Base	1
3	Screw, Pan Head Phillips, 8-16 x .50"	2

Remove Accessory Tray Base

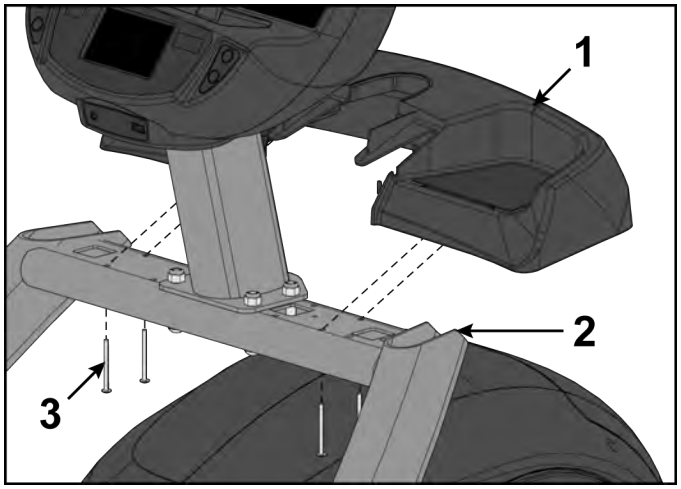
Remove the four screws securing the accessory tray base to the frame using a stubby Phillips screwdriver.



Item	Description	Qty
1	Accessory tray base	1
2	Frame	1
3	Screws	4

Install Accessory Tray Base

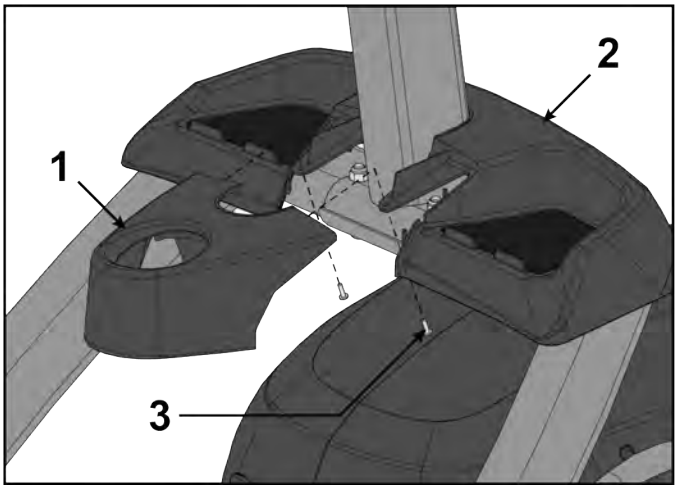
Install the four screws securing accessory tray base to frame using a Phillips screwdriver.



Item	Description	Qty
1	Accessory tray base	1
2	Frame	1
3	Screws	4

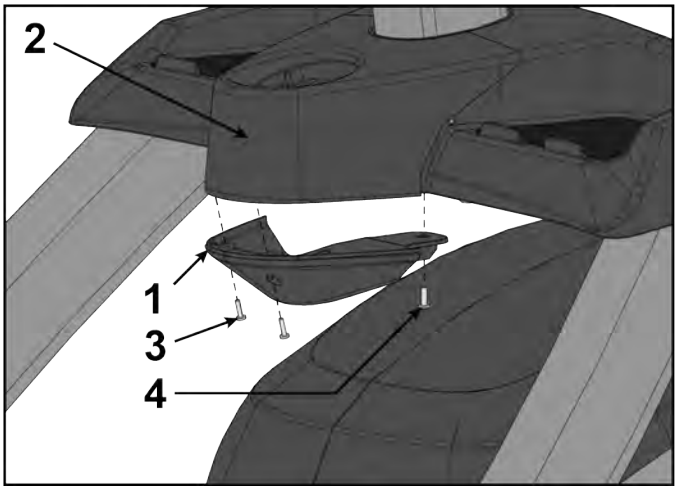
Install Accessory Tray Top

Install screws securing accessory tray top to accessory tray base using a stubby Phillips screwdriver.



Item	Description	Qty.
1	Accessory Tray Top	1
2	Accessory Tray Base	1
3	Screw, Pan Head Phillips, 8-16 x .50"	2

Install accessory tray bottom
Install the accessory tray bottom to the accessory tray base with three screws using a Phillips screwdriver.



Item	Description	Qty.
1	Accessory Tray Bottom	1
2	Accessory Tray Top	1
3	Screw, Pan Head Phillips, 6 x .50"	2
4	Screw, Pan Head Phillips, 8-16 x .50"	1

Complete Installation
Operate the unit at all levels to verify proper operation.

Fan

Tools Required:
- Phillips screwdriver
- ESD (Electrostatic Discharge) grounding strap
- USB stick (CP-23199)

Disconnect Power Source

Unplug the power cord from the power outlet.

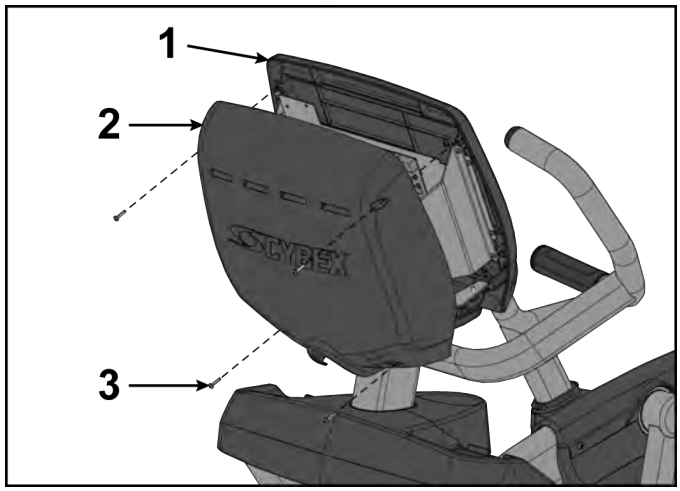
⚠WARNING

Shock and electrocution hazard.
- Unplug unit and let sit 10 minutes before cleaning or performing maintenance.
- Electrical charge can remain in unit after unplugging.
- Keep water and liquids away from electrical parts.

NOTICE

Component damage.Wear an ESD grounding strap during this procedure. Connect ESD grounding strap to frame bolts or unpainted metal of frame. If ESD grounding strap is not available, touch frame bolts or unpainted metal of frame before handling any electronics.

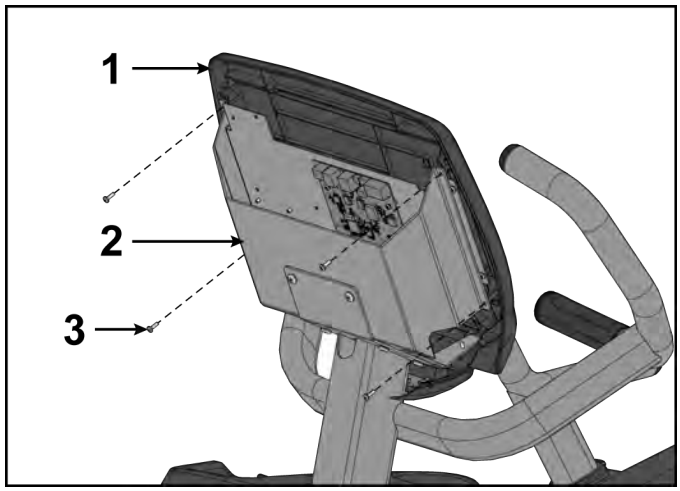
Remove back cover
Remove the four screws securing the back cover to the console assembly using a Phillips screwdriver.



Item	Description	Qty.
1	Console assembly	1
2	Back cover	1
3	Screws	4

Remove console assembly

Remove the six screws securing the console assembly to the console support using a Phillips screwdriver.

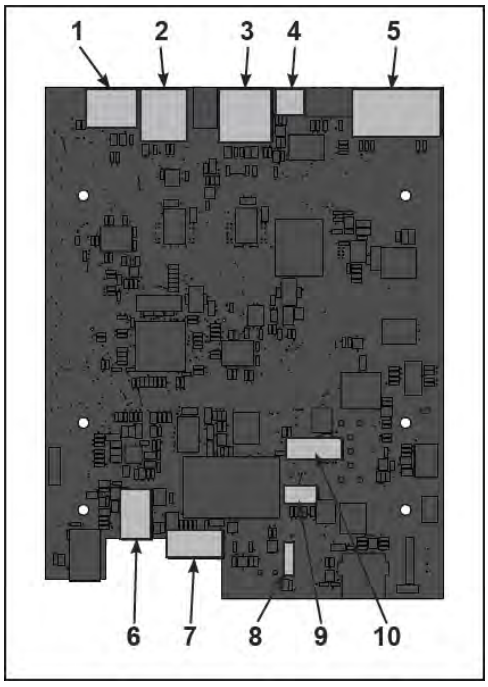


Item	Description	Qty.
1	Console assembly	1
2	Console support	1
3	Screws	6

Disconnect console cables

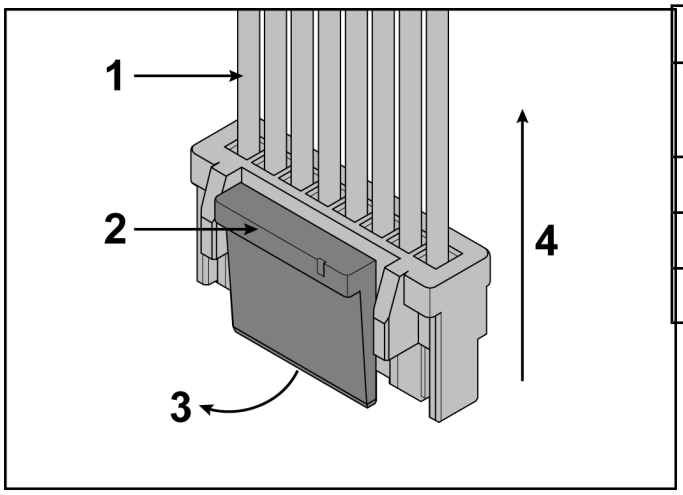
1. Disconnect console cables from MCC board.

MCC board cables



Item	Description	Qty.
1	MYE/BV, Gray	1
2	CSAFE, Red	1
3	Console cable	1
4	Fan	1
5	Upper display	1
6	Headphone jack	1
7	iPod (optional)	1
8	Heart rate	1
9	Handset membrane	1
10	iPod board assembly (optional)	1

2. Unplug cables from MCC board by un-latching connectors with the following procedure:
   a) Press in the top of the cable connector.

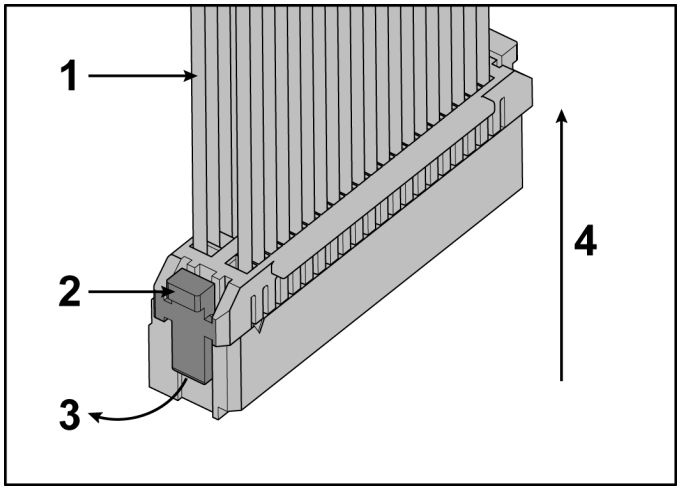


Item	Description	Qty.
1	DO NOT PULL CONNECTOR OUT BY THE WIRES!	1
2	Step a, Latch	1
3	Step b	1
4	Step c	1

   b) Ensure latch disengages the connector.
   c) Unplug cable by holding down latch and pulling straight out from connector. Do not pull on wires, remove by connector.

3. Unplug optional iPod cable.
The iPod cable is held in place by a notch in the access cover.

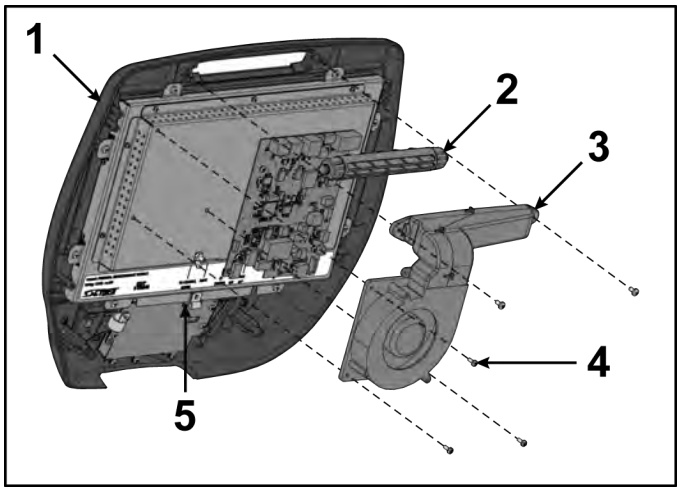
a) Press in both side latches of cable connector.



b) Ensure latches disengage from the connector.
c) Unplug cable by holding down latches on both sides and pulling straight out from connector. Do not pull on wires, remove by connector.

Remove fan

1. Unplug CardioTouch cable from CardioTouch board.

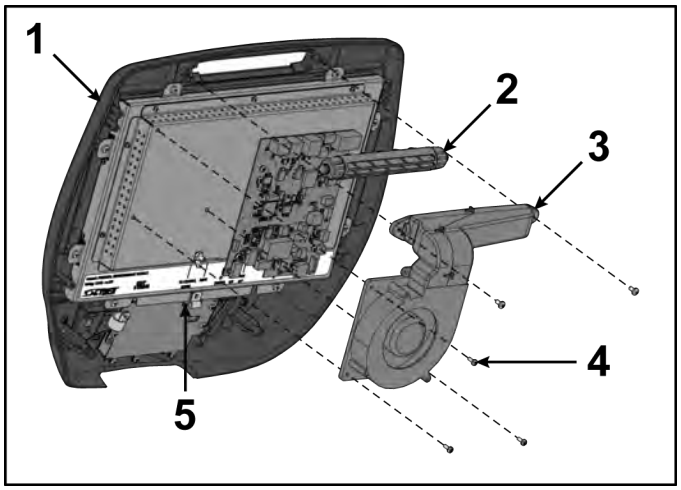


Item	Description	Qty.
1	Console assembly	1
2	Louver	1
3	Fan	1
4	Screw	5
5	CardioTouch cable	1

2. Unplug the fan cable from the MCC board.
3. Remove screws securing the fan and louver to the console assembly using a Phillips screwdriver.

Install fan

1. Install screws securing fan and louver to console assembly using a Phillips screwdriver.



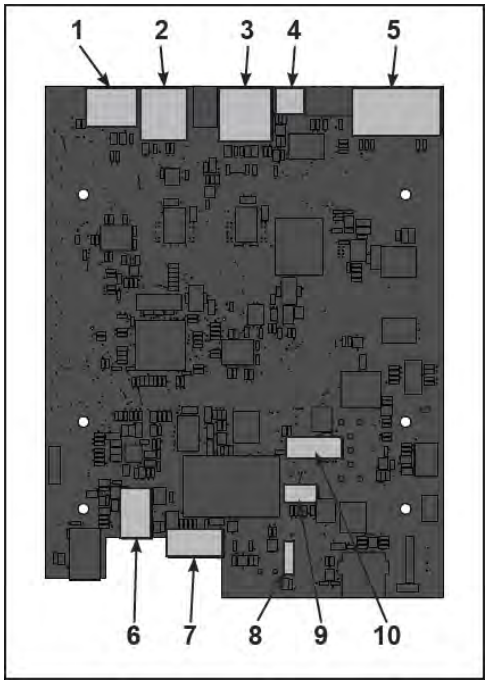
Item	Description	Qty.
1	Console assembly	1
2	Louver	1
3	Fan	1
4	Screw	5
5	CardioTouch cable	1

2. Plug fan cable into MCC board.

Connect console cables

1. Install console cables to MCC board.

MCC board cables

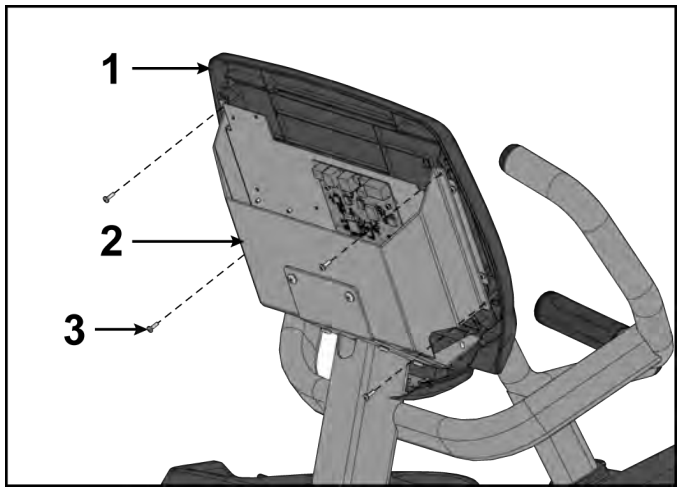


Item	Description	Qty.
1	MYE/BV, Gray	1
2	CSAFE, Red	1
3	Console cable	1
4	Fan	1
5	Upper display	1
6	Headphone jack	1
7	iPod (optional)	1
8	Heart rate	1
9	Handset membrane	1
10	iPod board assembly (optional)	1

2. Plug optional wireless audio antenna into controller if installed.

Install console assembly

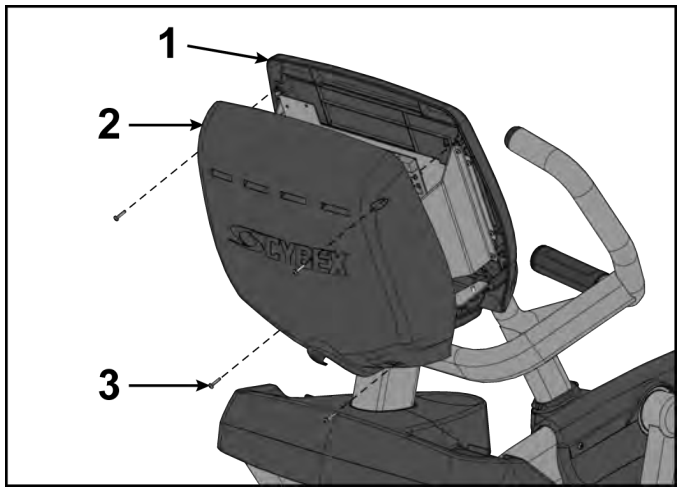
Install the six screws securing the console assembly to the console support using a Phillips screwdriver.



Item	Description	Qty.
1	Console assembly	1
2	Console support	1
3	Screws	6

Install back cover

Install the four screws securing the back cover to the console assembly using a Phillips screwdriver.



Item	Description	Qty.
1	Console assembly	1
2	Back cover	1
3	Screws	4

Complete installation

1. Plug the optional power cord into the power outlet.
2. Operate the unit at all levels to verify proper operation.

Display Board

Tools Required:

- Phillips screwdriver
- ESD (Electrostatic Discharge) grounding strap
- USB stick (CP-23199)

Disconnect Power Source

Unplug the power cord from the power outlet.

⚠WARNING

Shock and electrocution hazard.

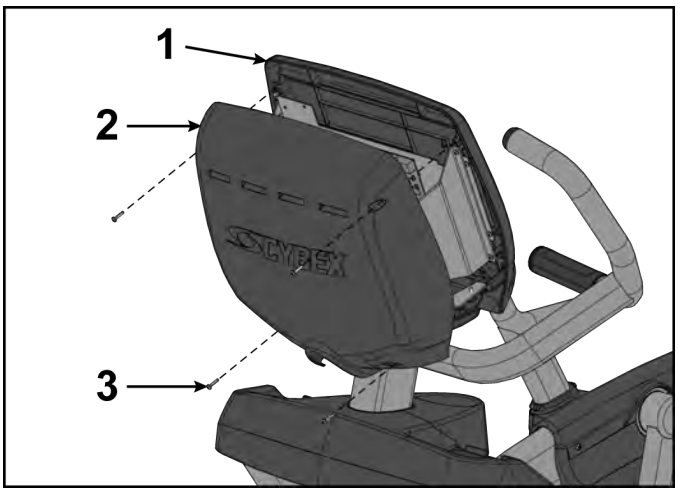
- Unplug unit and let sit 10 minutes before cleaning or performing maintenance.
- Electrical charge can remain in unit after unplugging.
- Keep water and liquids away from electrical parts.

NOTICE

Component damage.Wear an ESD grounding strap during this procedure. Connect ESD grounding strap to frame bolts or unpainted metal of frame. If ESD grounding strap is not available, touch frame bolts or unpainted metal of frame before handling any electronics.

Remove back cover

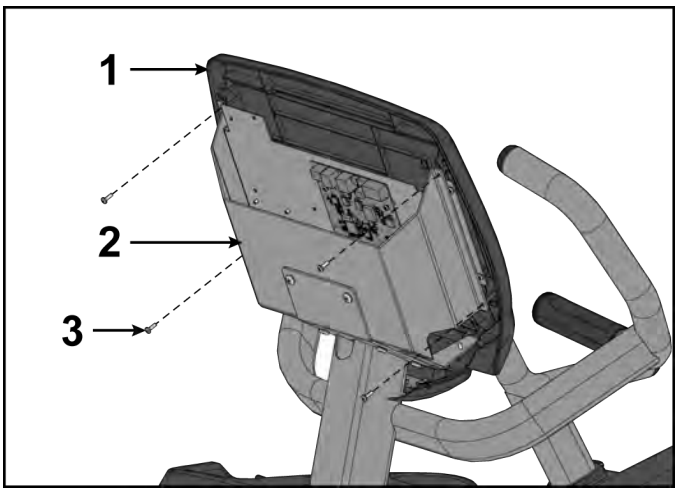
Remove the four screws securing the back cover to the console assembly using a Phillips screwdriver.



Item	Description	Qty.
1	Console assembly	1
2	Back cover	1
3	Screws	4

Remove console assembly

Remove the six screws securing the console assembly to the console support using a Phillips screwdriver.

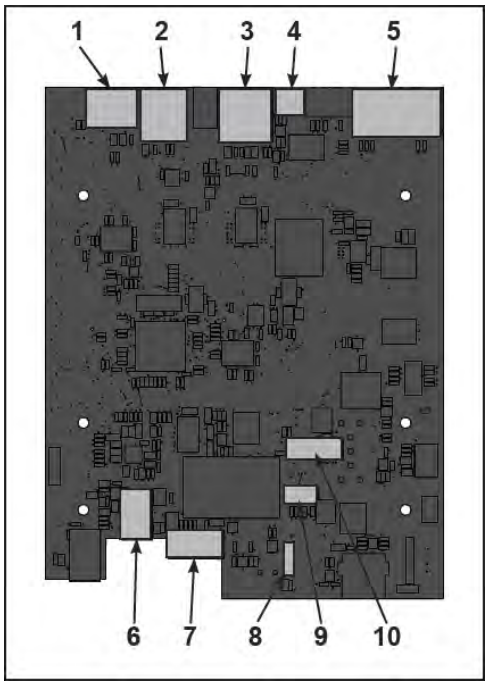


Item	Description	Qty.
1	Console assembly	1
2	Console support	1
3	Screws	6

Disconnect console cables

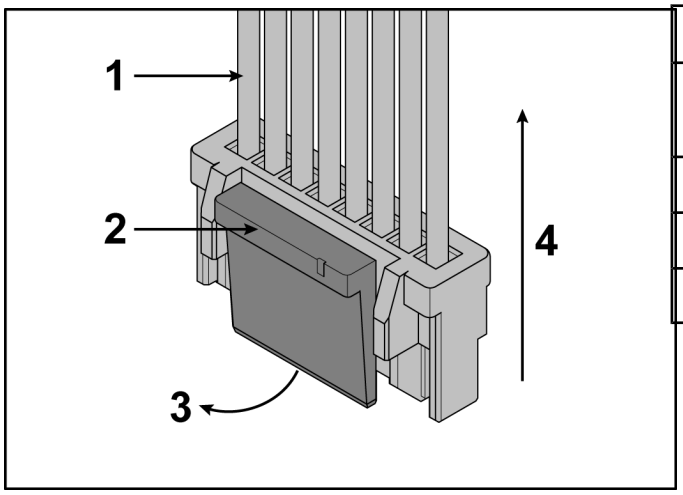
1. Disconnect console cables from MCC board.

MCC board cables



Item	Description	Qty.
1	MYE/BV, Gray	1
2	CSAFE, Red	1
3	Console cable	1
4	Fan	1
5	Upper display	1
6	Headphone jack	1
7	iPod (optional)	1
8	Heart rate	1
9	Handset membrane	1
10	iPod board assembly (optional)	1

2. Unplug cables from MCC board by un-latching connectors with the following procedure:
   a) Press in the top of the cable connector.

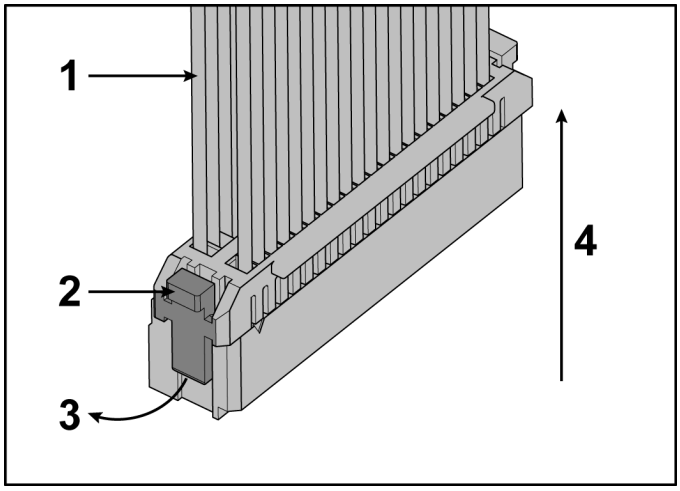


Item	Description	Qty.
1	DO NOT PULL CONNECTOR OUT BY THE WIRES!	1
2	Step a, Latch	1
3	Step b	1
4	Step c	1

   b) Ensure latch disengages the connector.
   c) Unplug cable by holding down latch and pulling straight out from connector. Do not pull on wires, remove by connector.

3. Unplug optional iPod cable.
The iPod cable is held in place by a notch in the access cover.

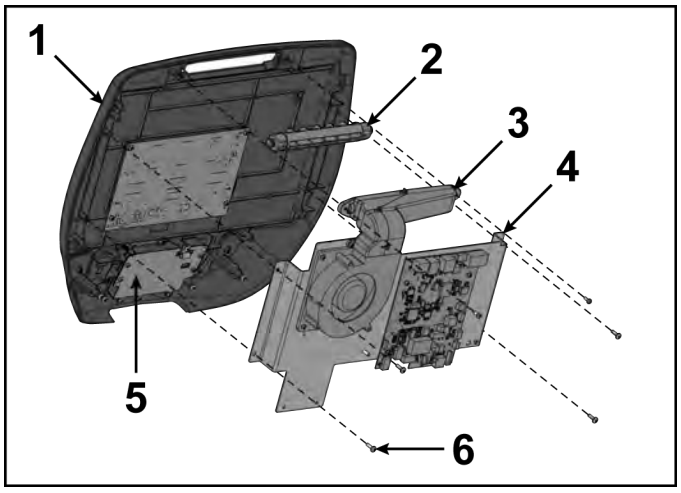
a) Press in both side latches of cable connector.



b) Ensure latches disengage from the connector.
c) Unplug cable by holding down latches on both sides and pulling straight out from connector. Do not pull on wires, remove by connector.

Remove display board

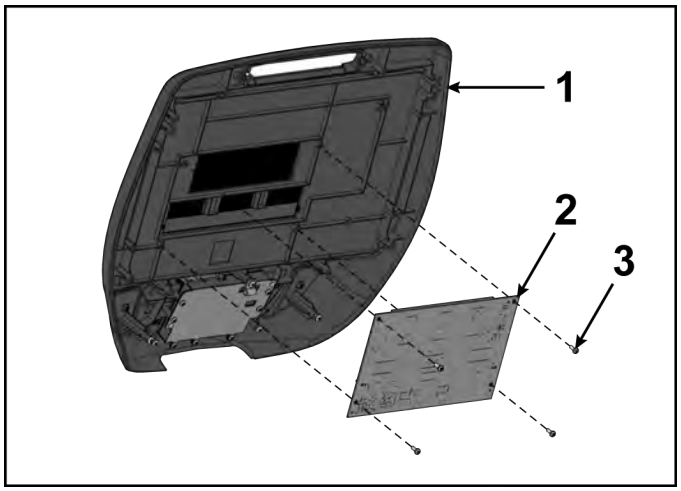
1. Unplug CardioTouch cable from CardioTouch board.



Item	Description	Qty.
1	Console assembly	1
2	Louver	1
3	Fan	1
4	Mounting plate	1
5	CardioTouch cable	1
6	Screw	6

2. Remove the six screws securing the fan and louver to the console assembly using a Phillips screwdriver.

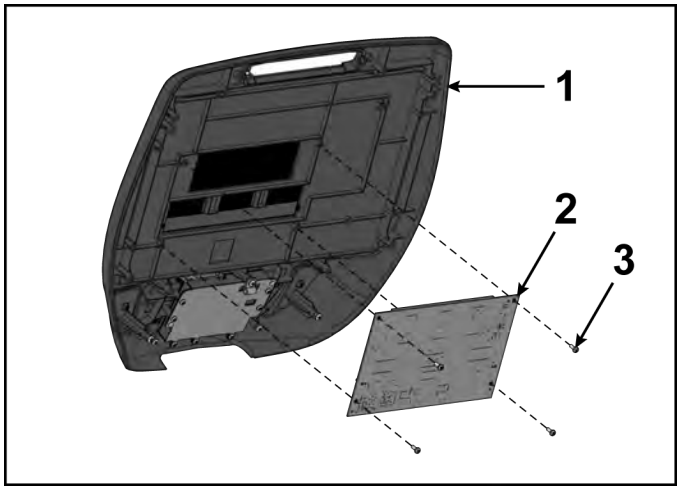
3. Remove the four screws securing the PCA display board to the bezel using a Phillips screwdriver.



Item	Description	Qty.
1	Bezel	1
2	PCA display board	1
3	Screw	4

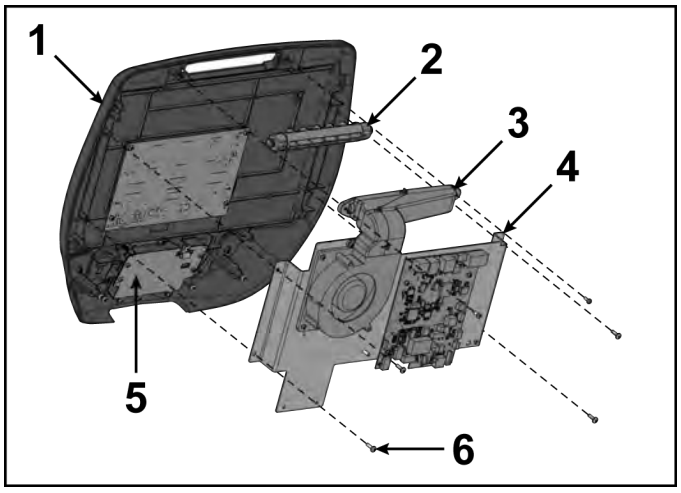
Install display board

1. Install the four screws securing the PCA display board to the bezel using a Phillips screwdriver.



Item	Description	Qty.
1	Bezel	1
2	PCA display board	1
3	Screw	4

2. Install the six screws securing the mounting plate to the console assembly using a Phillips screwdriver.

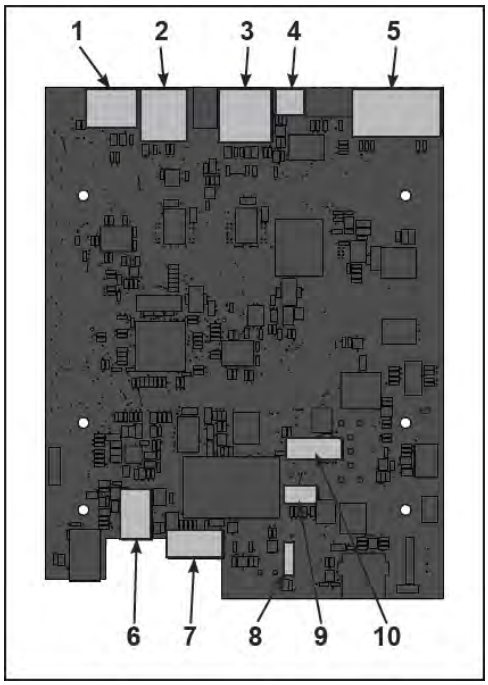


Item	Description	Qty.
1	Console assembly	1
2	Louver	1
3	Fan	1
4	Mounting plate	1
5	CardioTouch cable	1
6	Screw	6

Connect console cables

1. Install console cables to MCC board.

   MCC board cables

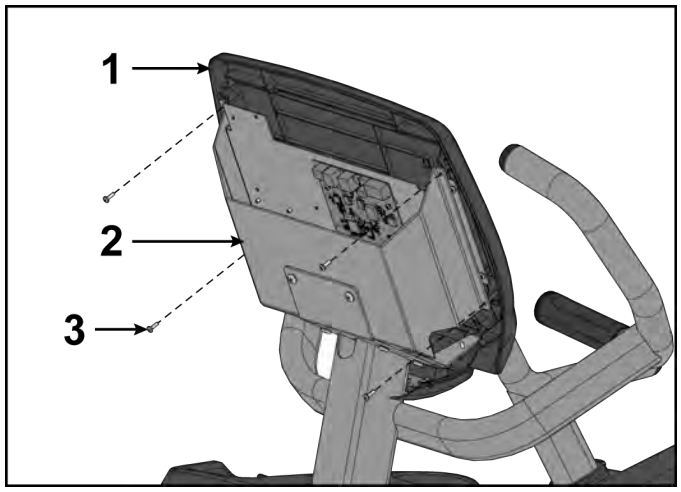


Item	Description	Qty.
1	MYE/BV, Gray	1
2	CSAFE, Red	1
3	Console cable	1
4	Fan	1
5	Upper display	1
6	Headphone jack	1
7	iPod (optional)	1
8	Heart rate	1
9	Handset membrane	1
10	iPod board assembly (optional)	1

2. Plug optional wireless audio antenna into controller if installed.

Install console assembly

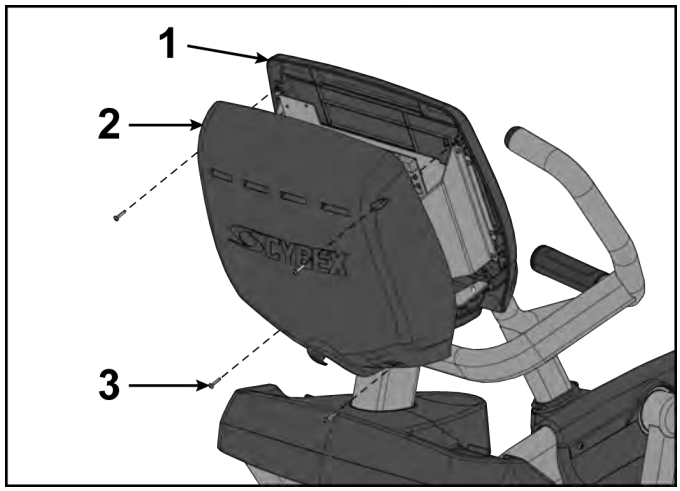
Install the six screws securing the console assembly to the console support using a Phillips screwdriver.



Item	Description	Qty.
1	Console assembly	1
2	Console support	1
3	Screws	6

Install back cover

Install the four screws securing the back cover to the console assembly using a Phillips screwdriver.



Item	Description	Qty.
1	Console assembly	1
2	Back cover	1
3	Screws	4

Update software

Update software using the following *procedure*.

Complete installation

1. Plug the optional power cord into the power outlet.
2. Operate the unit at all levels to verify proper operation.

MCC Board

Tools Required:
- Phillips screwdriver
- ESD (Electrostatic Discharge) grounding strap
- USB stick (CP-23199)

Disconnect Power Source

Unplug the power cord from the power outlet.

⚠WARNING

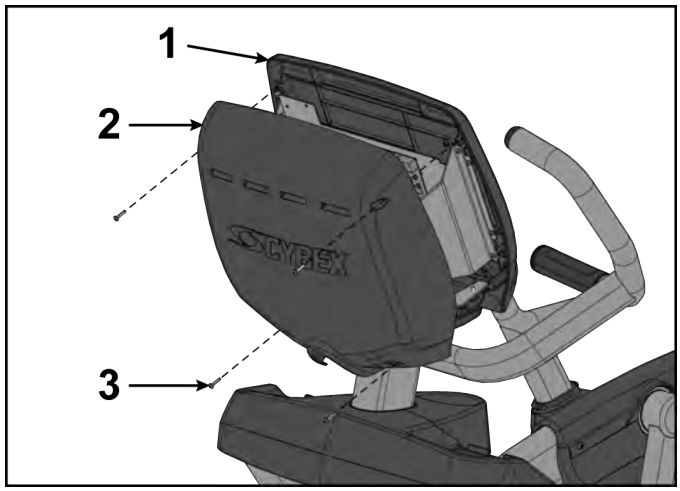
Shock and electrocution hazard.
- Unplug unit and let sit 10 minutes before cleaning or performing maintenance.
- Electrical charge can remain in unit after unplugging.
- Keep water and liquids away from electrical parts.

NOTICE

Component damage.Wear an ESD grounding strap during this procedure. Connect ESD grounding strap to frame bolts or unpainted metal of frame. If ESD grounding strap is not available, touch frame bolts or unpainted metal of frame before handling any electronics.

Remove back cover

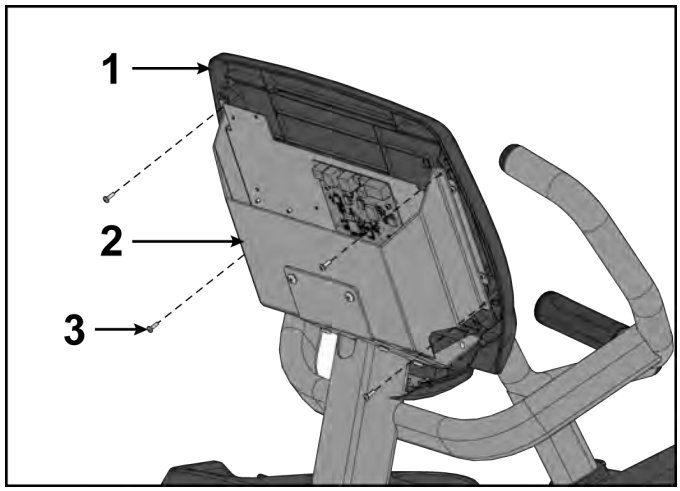
Remove the four screws securing the back cover to the console assembly using a Phillips screwdriver.



Item	Description	Qty.
1	Console assembly	1
2	Back cover	1
3	Screws	4

Remove console assembly

Remove the six screws securing the console assembly to the console support using a Phillips screwdriver.

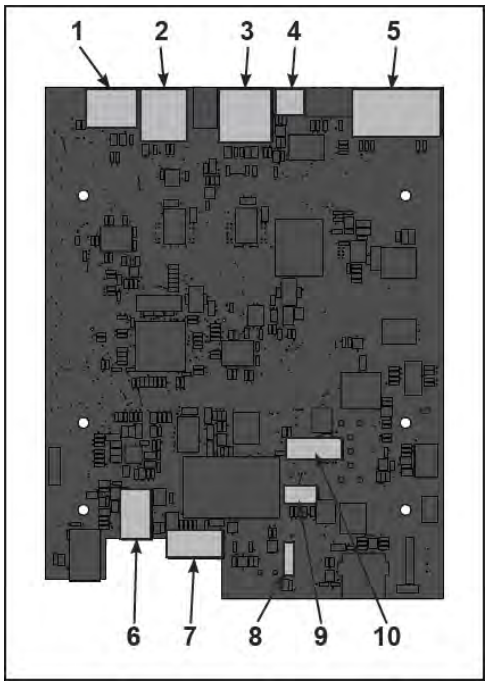


Item	Description	Qty.
1	Console assembly	1
2	Console support	1
3	Screws	6

Disconnect console cables

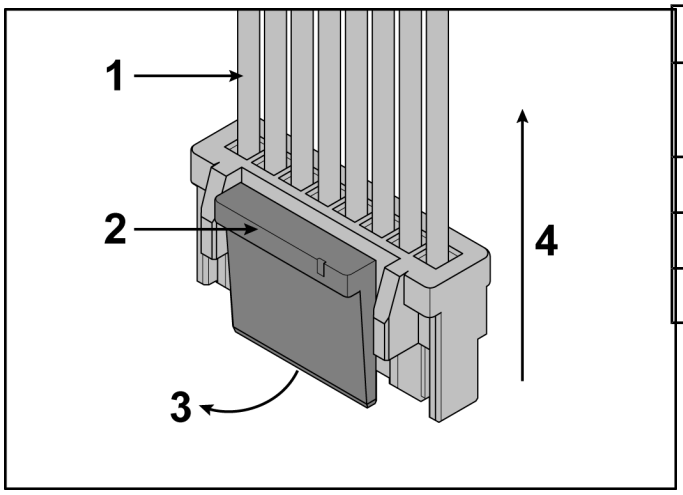
1. Disconnect console cables from MCC board.

   MCC board cables



Item	Description	Qty.
1	MYE/BV, Gray	1
2	CSAFE, Red	1
3	Console cable	1
4	Fan	1
5	Upper display	1
6	Headphone jack	1
7	iPod (optional)	1
8	Heart rate	1
9	Handset membrane	1
10	iPod board assembly (optional)	1

2. Unplug cables from MCC board by un-latching connectors with the following procedure:
   a) Press in the top of the cable connector.

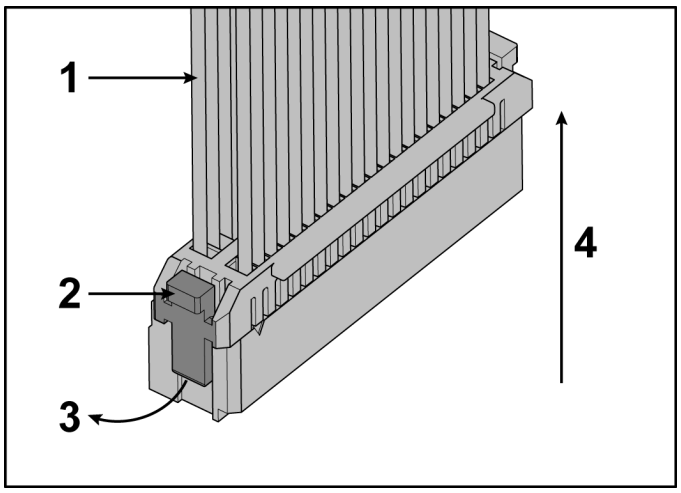


Item	Description	Qty.
1	DO NOT PULL CONNECTOR OUT BY THE WIRES!	1
2	Step a, Latch	1
3	Step b	1
4	Step c	1

   b) Ensure latch disengages the connector.
   c) Unplug cable by holding down latch and pulling straight out from connector. Do not pull on wires, remove by connector.

3. Unplug optional iPod cable.
The iPod cable is held in place by a notch in the access cover.

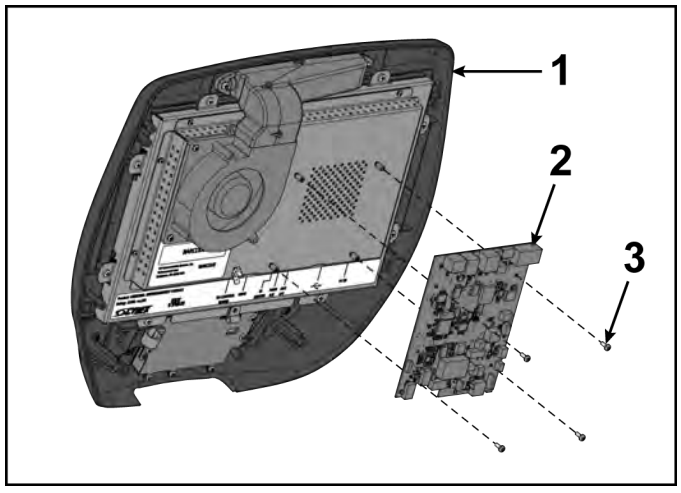
a) Press in both side latches of cable connector.



b) Ensure latches disengage from the connector.
c) Unplug cable by holding down latches on both sides and pulling straight out from connector. Do not pull on wires, remove by connector.

Remove MCC board

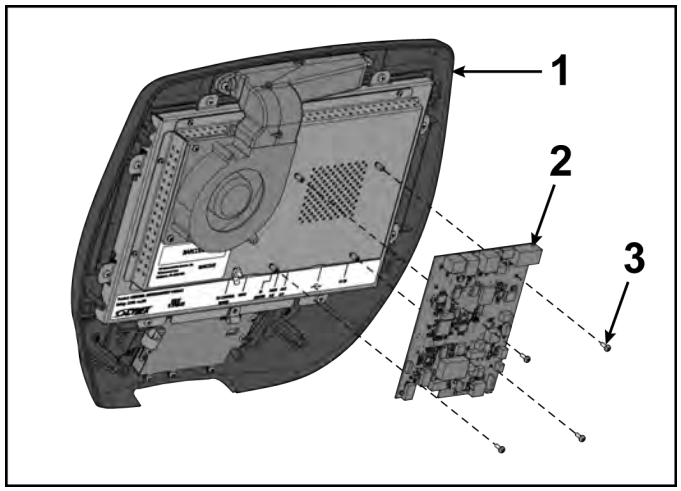
Remove four screws securing MCC board to console assembly using a Phillips screwdriver.



Item	Description	Qty.
1	Console assembly	1
2	MCC board	1
3	Screw	4

Install MCC board

Install the four screws securing the MCC Board to the console assembly using a Phillips screwdriver.

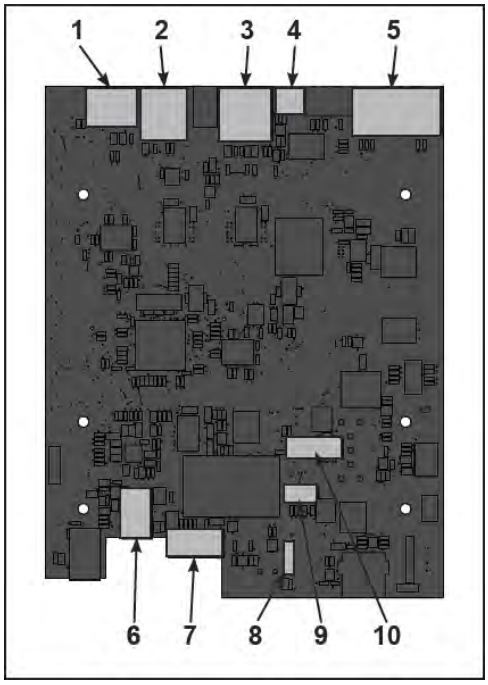


Item	Description	Qty.
1	Console assembly	1
2	MCC board	1
3	Screw	4

Connect console cables

1. Install console cables to MCC board.

MCC board cables

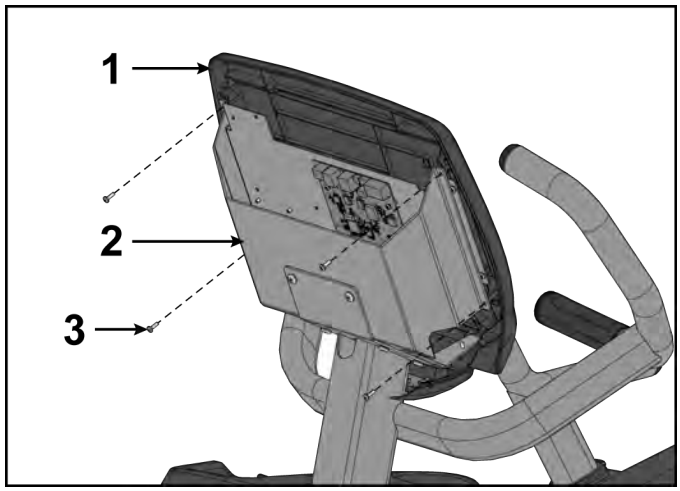


Item	Description	Qty.
1	MYE/BV, Gray	1
2	CSAFE, Red	1
3	Console cable	1
4	Fan	1
5	Upper display	1
6	Headphone jack	1
7	iPod (optional)	1
8	Heart rate	1
9	Handset membrane	1
10	iPod board assembly (optional)	1

2. Plug optional wireless audio antenna into controller if installed.

Install console assembly

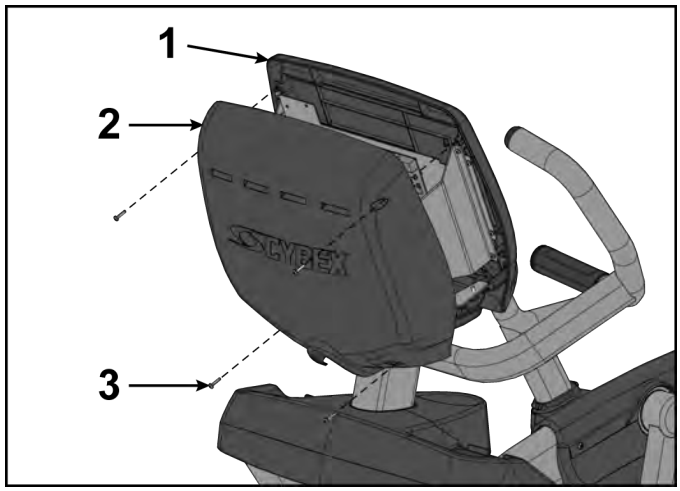
Install the six screws securing the console assembly to the console support using a Phillips screwdriver.



Item	Description	Qty.
1	Console assembly	1
2	Console support	1
3	Screws	6

Install back cover

Install the four screws securing the back cover to the console assembly using a Phillips screwdriver.



Item	Description	Qty.
1	Console assembly	1
2	Back cover	1
3	Screws	4

Software Update

Perform the *Software Update* for proper operation.

Complete installation

1. Plug the optional power cord into the power outlet.
2. Operate the unit at all levels to verify proper operation.

CardioTouch Screen

Tools Required:

- Phillips screwdriver
- Torque screwdriver
- Clean cloth
- Rubbing alcohol
- ESD (Electrostatic Discharge) grounding strap

Disconnect Power Source

Unplug the power cord from the power outlet.

WARNING

Shock and electrocution hazard.

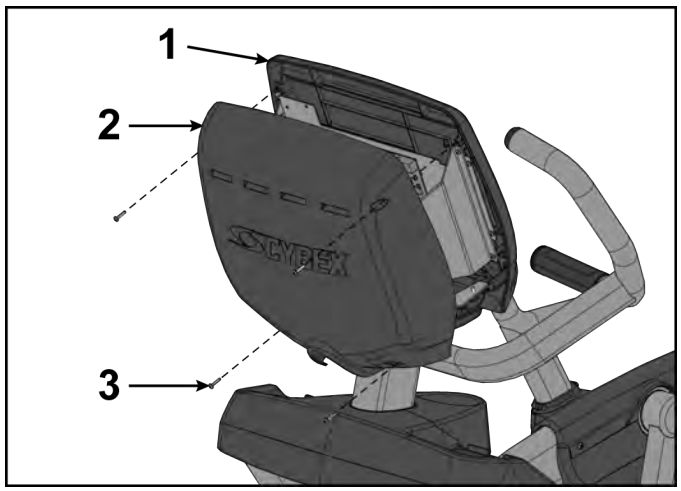
- Unplug unit and let sit 10 minutes before cleaning or performing maintenance.
- Electrical charge can remain in unit after unplugging.
- Keep water and liquids away from electrical parts.

NOTICE

Component damage.Wear an ESD grounding strap during this procedure. Connect ESD grounding strap to frame bolts or unpainted metal of frame. If ESD grounding strap is not available, touch frame bolts or unpainted metal of frame before handling any electronics.

Remove back cover

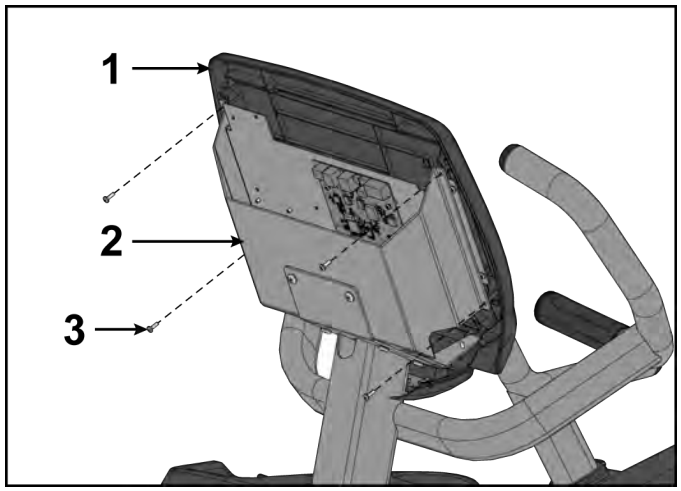
Remove the four screws securing the back cover to the console assembly using a Phillips screwdriver.



Item	Description	Qty.
1	Console assembly	1
2	Back cover	1
3	Screws	4

Remove console assembly

Remove the six screws securing the console assembly to the console support using a Phillips screwdriver.

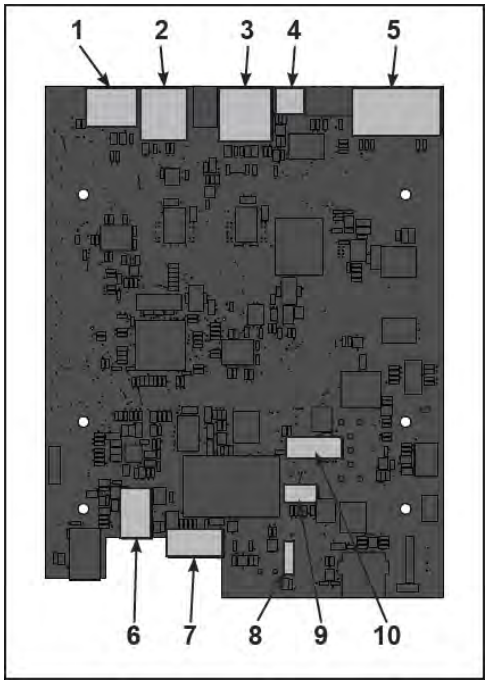


Item	Description	Qty.
1	Console assembly	1
2	Console support	1
3	Screws	6

Disconnect console cables

1. Disconnect console cables from MCC board.

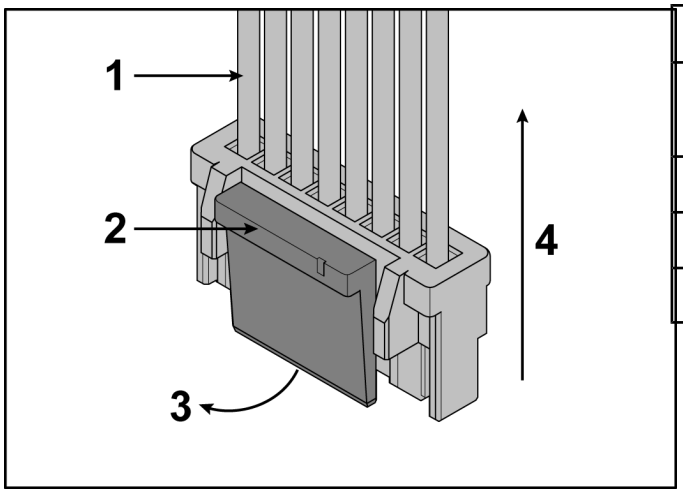
MCC board cables



Item	Description	Qty.
1	MYE/BV, Gray	1
2	CSAFE, Red	1
3	Console cable	1
4	Fan	1
5	Upper display	1
6	Headphone jack	1
7	iPod (optional)	1
8	Heart rate	1
9	Handset membrane	1
10	iPod board assembly (optional)	1

2. Unplug cables from MCC board by un-latching connectors with the following procedure:

a) Press in the top of the cable connector.



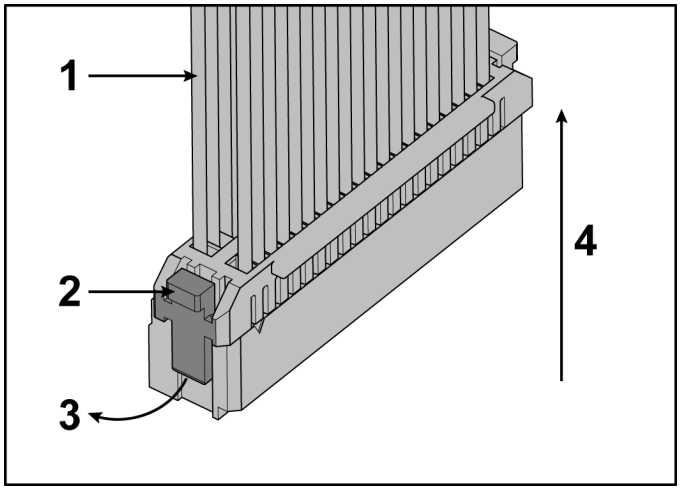
Item	Description	Qty.
1	DO NOT PULL CONNECTOR OUT BY THE WIRES!	1
2	Step a, Latch	1
3	Step b	1
4	Step c	1

b) Ensure latch disengages the connector.

c) Unplug cable by holding down latch and pulling straight out from connector. Do not pull on wires, remove by connector.

3. Unplug optional iPod cable.
The iPod cable is held in place by a notch in the access cover.

a) Press in both side latches of cable connector.

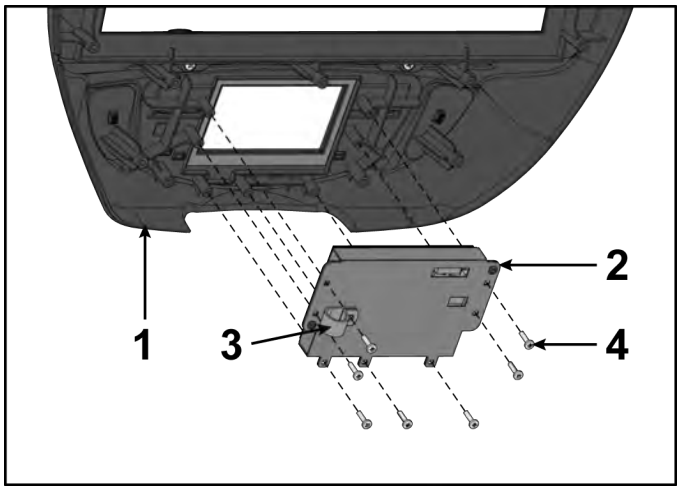


b) Ensure latches disengage from the connector.

c) Unplug cable by holding down latches on both sides and pulling straight out from connector. Do not pull on wires, remove by connector.

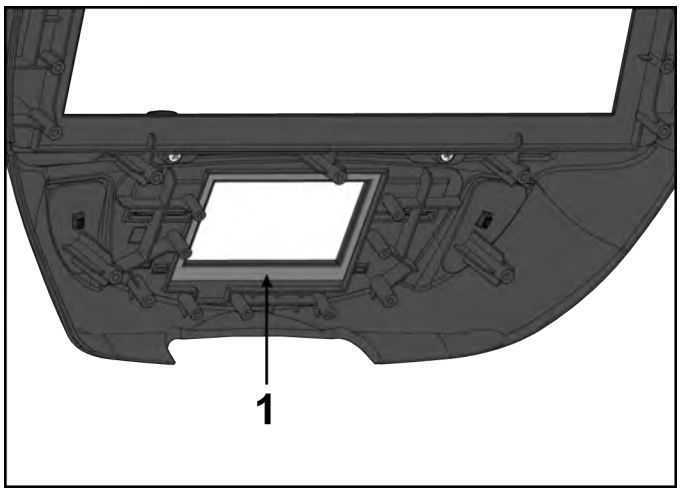
Remove CardioTouch screen

1. Remove the seven screws and clip from the bezel using a Phillips screwdriver.



Item	Description	Qty.
1	Bezel	1
2	CardioTouch screen	1
3	Clip	1
4	Screw	7

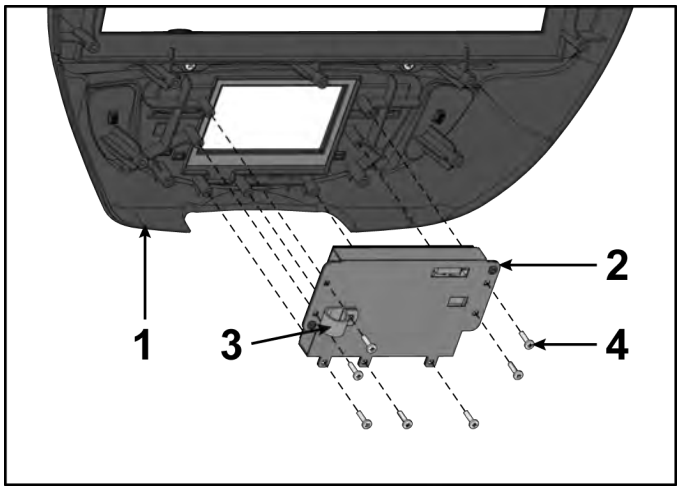
2. Remove the CardioTouch screen and clean the area of the bezel with a clean cloth and rubbing alcohol.



Item	Description	Qty.
1	Clean this area	1

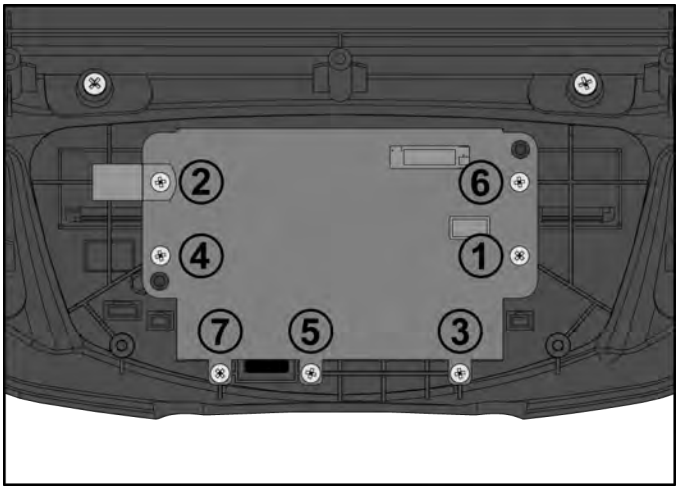
Install CardioTouch screen

1. Place the new CardioTouch screen in place in the bezel.



Item	Description	Qty.
1	Bezel	1
2	CardioTouch screen	1
3	Clip	1
4	Screw	7

2. Install seven screws and clip, tighten by hand.
3. Tighten the seven screws in the order shown to 4 in-lbs (0.45 Nm) using a torque screwdriver.

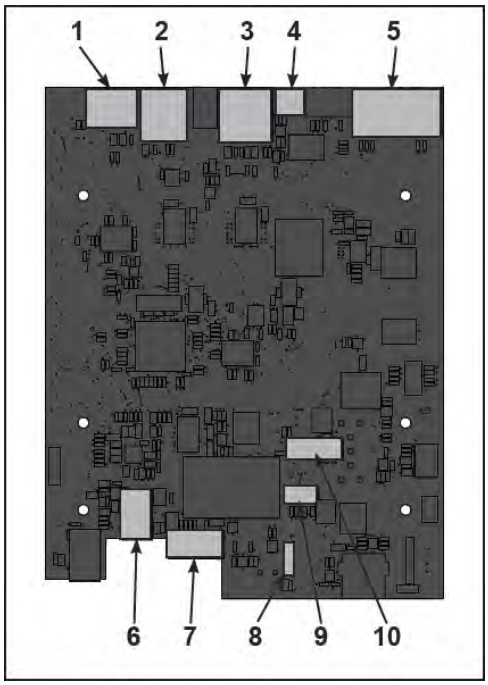


4. Connect the ground cable connector to the tab on fan mounting plate or optional E3 View Monitor if installed.
5. Screw the coax cable to the optional E3 View Monitor if installed.

Connect console cables

1. Install console cables to MCC board.

   MCC board cables

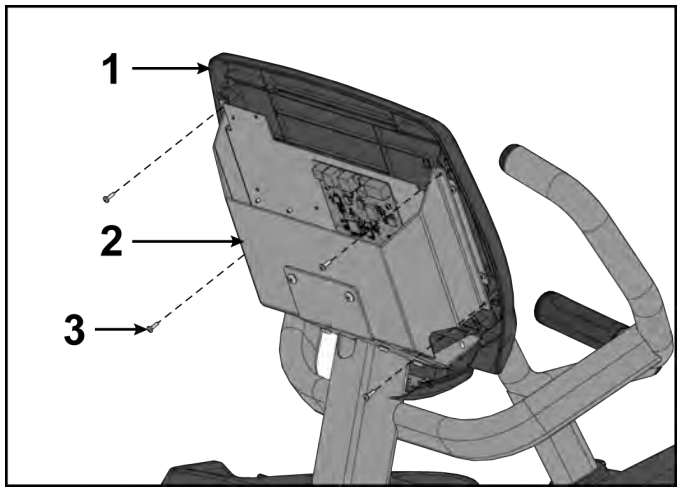


Item	Description	Qty.
1	MYE/BV, Gray	1
2	CSAFE, Red	1
3	Console cable	1
4	Fan	1
5	Upper display	1
6	Headphone jack	1
7	iPod (optional)	1
8	Heart rate	1
9	Handset membrane	1
10	iPod board assembly (optional)	1

2. Plug optional wireless audio antenna into controller if installed.

Install console assembly

Install the six screws securing the console assembly to the console support using a Phillips screwdriver.



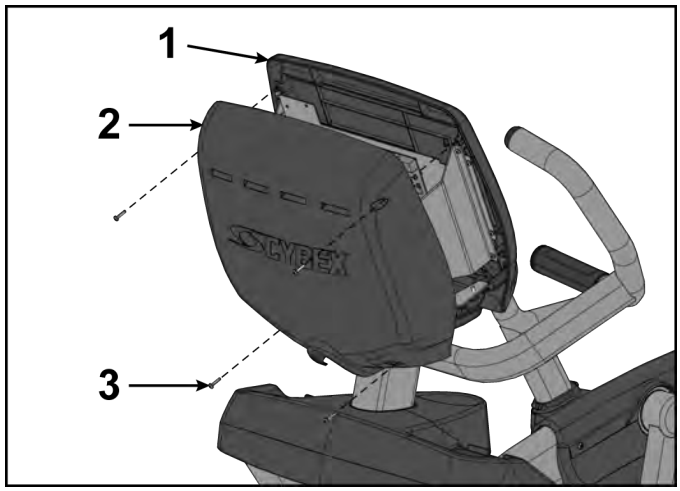
Item	Description	Qty.
1	Console assembly	1
2	Console support	1
3	Screws	6

Software Update

Perform the *Software Update* for proper operation.

Install back cover

Install the four screws securing the back cover to the console assembly using a Phillips screwdriver.



Item	Description	Qty.
1	Console assembly	1
2	Back cover	1
3	Screws	4

Calibrate CardioTouch screen

1. Tap the **Access Toolbox** icon to display the **Access to Toolbox** login screen.
2. Enter the sequence: .
3. Tap the **OEM Diags** icon, then the **Touch Test** icon.
4. Touch the CardioTouch screen to display cross hairs. If the CardioTouch screen is not calibrated, the cross hairs will not line up where the touch is made.
5. Tap the icon to return to the **Diagnostics** screen.
6. Tap the **Touch Cal** icon.
7. Tap the targets in each of the four corners of the CardioTouch screen as indicated.
8. Exit Set Up Mode by tapping the **Toolbox** icon, then tap the **Home** icon . The screen will refresh.

Complete installation

1. Plug the optional power cord into the power outlet.
2. Operate the unit at all levels to verify proper operation.

E3 View Bezel

Tools Required:

- Phillips screwdriver
- Torque screwdriver
- Clean cloth
- Rubbing alcohol
- ESD (Electrostatic Discharge) grounding strap

Disconnect Power Source

Unplug the power cord from the power outlet.

WARNING

Shock and electrocution hazard.

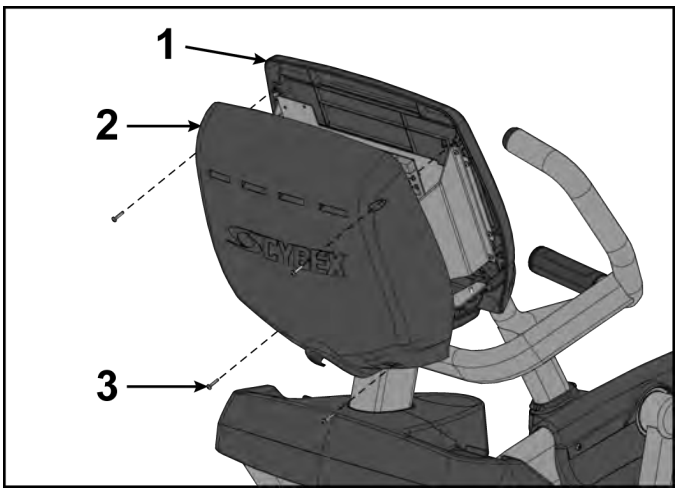
- Unplug unit and let sit 10 minutes before cleaning or performing maintenance.
- Electrical charge can remain in unit after unplugging.
- Keep water and liquids away from electrical parts.

NOTICE

Component damage.Wear an ESD grounding strap during this procedure. Connect ESD grounding strap to frame bolts or unpainted metal of frame. If ESD grounding strap is not available, touch frame bolts or unpainted metal of frame before handling any electronics.

Remove back cover

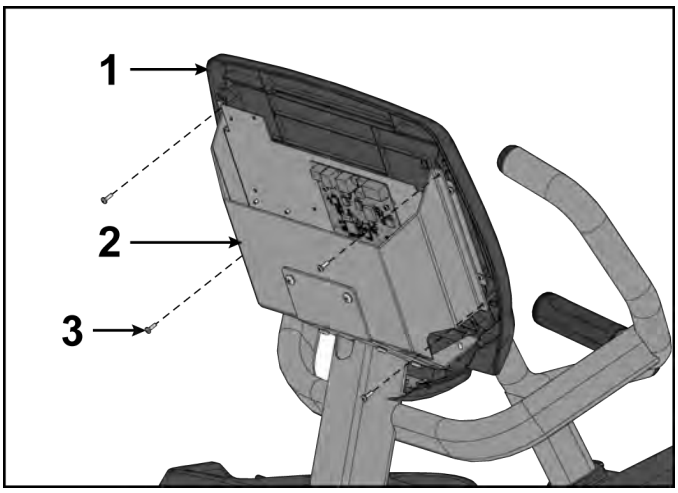
Remove the four screws securing the back cover to the console assembly using a Phillips screwdriver.



Item	Description	Qty.
1	Console assembly	1
2	Back cover	1
3	Screws	4

Remove console assembly

Remove the six screws securing the console assembly to the console support using a Phillips screwdriver.

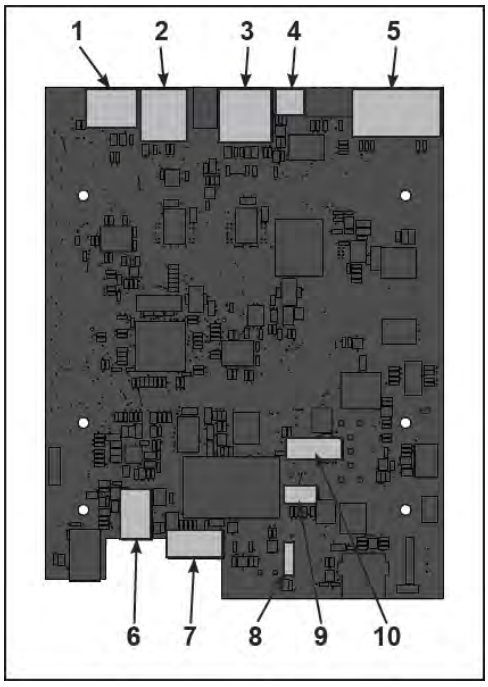


Item	Description	Qty.
1	Console assembly	1
2	Console support	1
3	Screws	6

Disconnect console cables

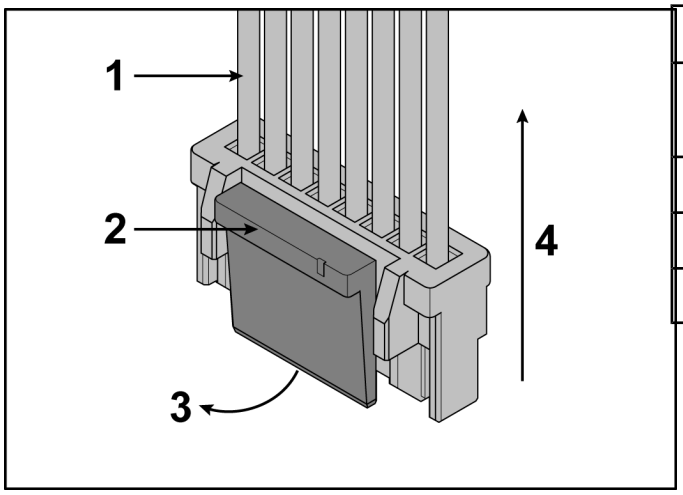
1. Disconnect console cables from MCC board.

   MCC board cables



Item	Description	Qty.
1	MYE/BV, Gray	1
2	CSAFE, Red	1
3	Console cable	1
4	Fan	1
5	Upper display	1
6	Headphone jack	1
7	iPod (optional)	1
8	Heart rate	1
9	Handset membrane	1
10	iPod board assembly (optional)	1

2. Unplug cables from MCC board by un-latching connectors with the following procedure:
   a) Press in the top of the cable connector.

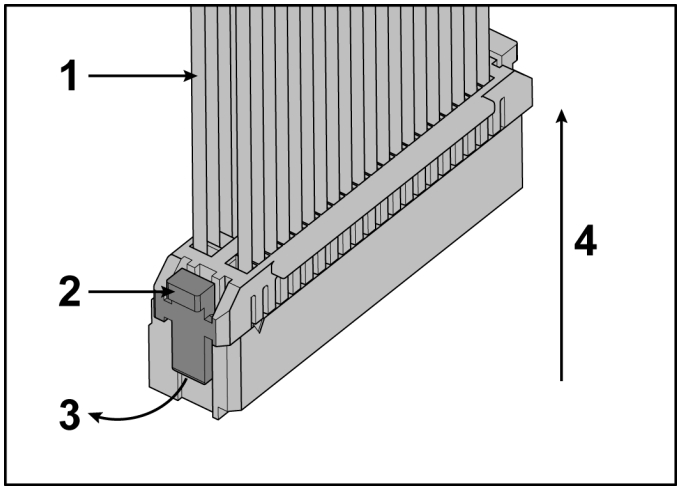


Item	Description	Qty.
1	DO NOT PULL CONNECTOR OUT BY THE WIRES!	1
2	Step a, Latch	1
3	Step b	1
4	Step c	1

   b) Ensure latch disengages the connector.
   c) Unplug cable by holding down latch and pulling straight out from connector. Do not pull on wires, remove by connector.

3. Unplug optional iPod cable.
The iPod cable is held in place by a notch in the access cover.

a) Press in both side latches of cable connector.



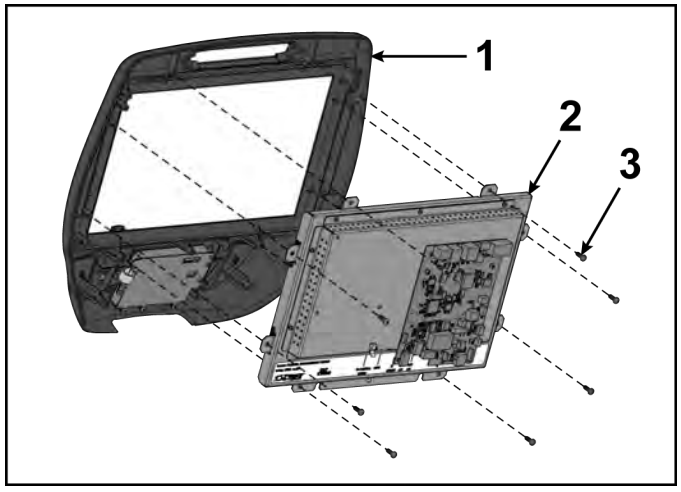
b) Ensure latches disengage from the connector.

c) Unplug cable by holding down latches on both sides and pulling straight out from connector. Do not pull on wires, remove by connector.

Remove E3 View monitor

NOTICE Component damage. Do not touch front of E3 View Monitor. Oil from fingertips will mark screen.

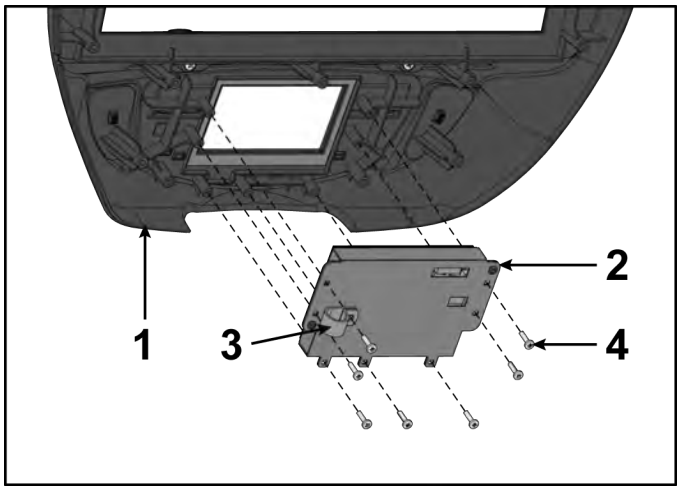
Remove eight screws securing E3 View Monitor to bezel using a Phillips screwdriver.



Item	Description	Qty.
1	Bezel	1
2	E3 view monitor	1
3	Screw	8

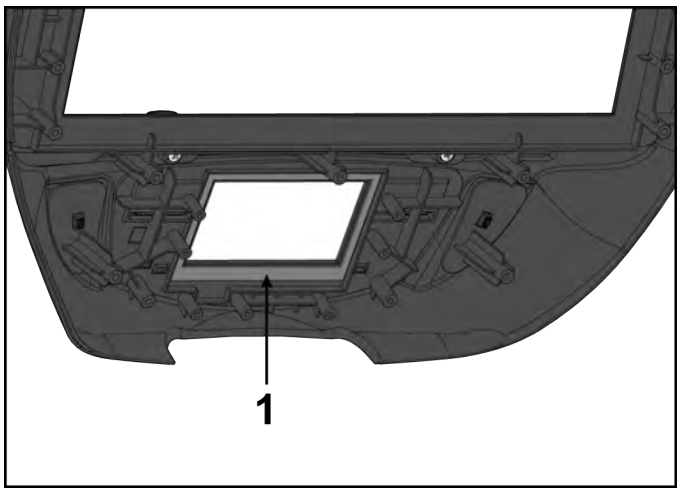
Remove CardioTouch screen

1. Remove the seven screws and clip from the bezel using a Phillips screwdriver.



Item	Description	Qty.
1	Bezel	1
2	CardioTouch screen	1
3	Clip	1
4	Screw	7

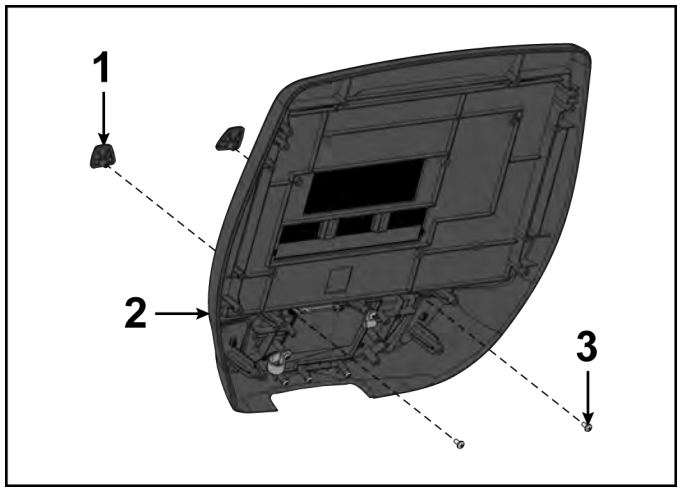
2. Remove the CardioTouch screen and clean the area of the bezel with a clean cloth and rubbing alcohol.



Item	Description	Qty.
1	Clean this area	1

Remove book tabs

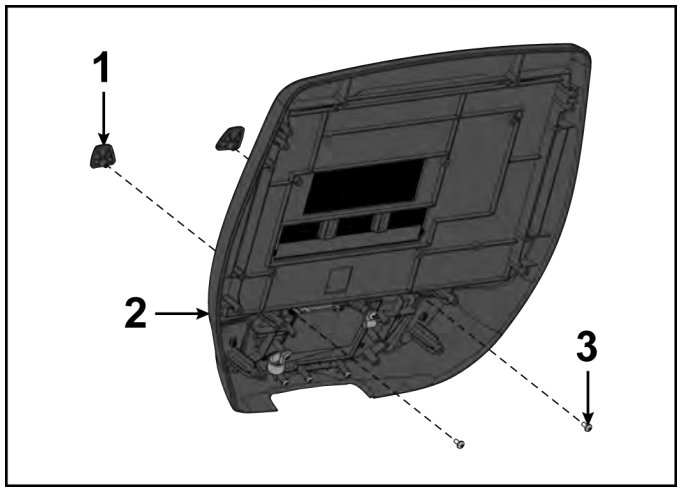
Remove the two screws securing the book tabs to the bezel using a Phillips screwdriver.



Item	Description	Qty.
1	Book Tabs	1
2	Bezel	1
3	Screw	2

Install book tabs

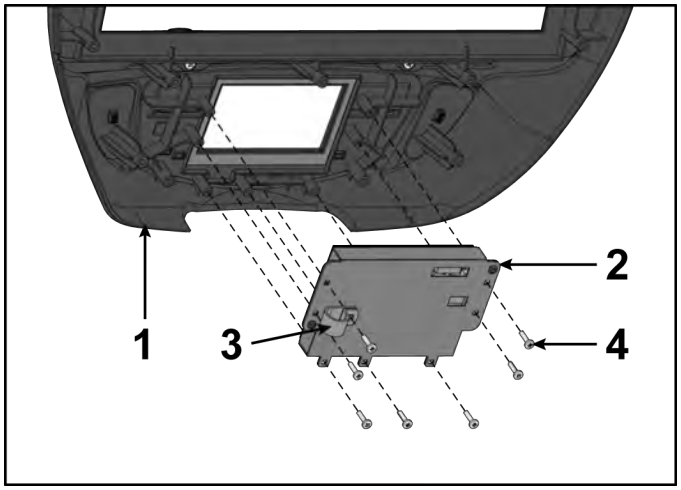
Install the two screws securing the book tabs to the new bezel using a Phillips screwdriver.



Item	Description	Qty.
1	Book Tabs	1
2	Bezel	1
3	Screw	2

Install CardioTouch screen

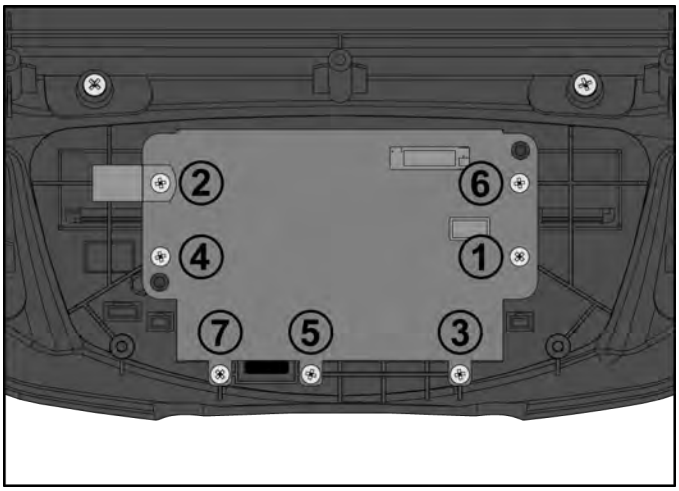
1. Place the new CardioTouch screen in place in the bezel.



Item	Description	Qty.
1	Bezel	1
2	CardioTouch screen	1
3	Clip	1
4	Screw	7

2. Install seven screws and clip, tighten by hand.

3. Tighten the seven screws in the order shown to 4 in-lbs (0.45 Nm) using a torque screwdriver.

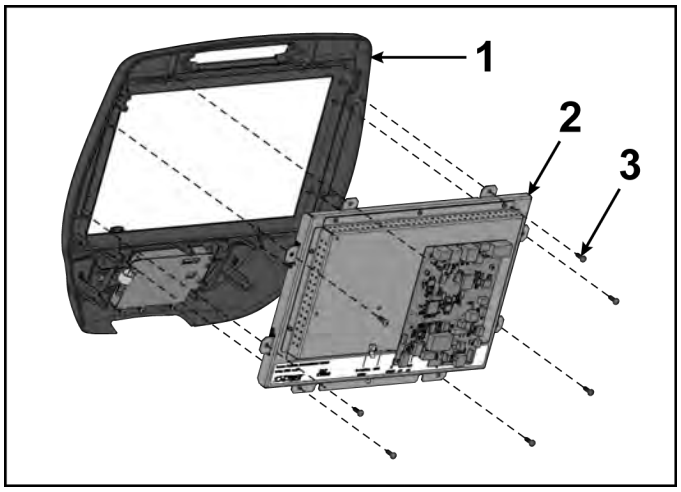


4. Connect the ground cable connector to the tab on fan mounting plate or optional E3 View Monitor if installed.
5. Screw the coax cable to the optional E3 View Monitor if installed.

Install E3 View monitor

1. **NOTICE** Component damage. Do not touch front of E3 View Monitor. Oil from fingertips will mark screen.

   Remove protective cover from new E3 View monitor screen and place on old E3 View monitor.
2. Install eight screws securing the E3 View Monitor to bezel using a Phillips screwdriver.

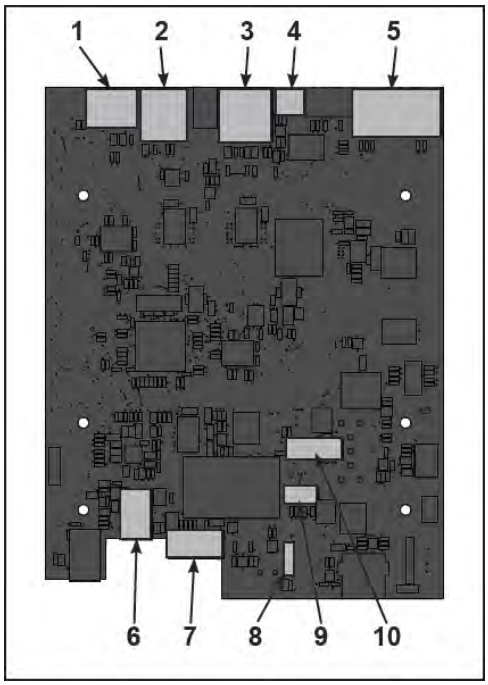


Item	Description	Qty.
1	Bezel	1
2	E3 view monitor	1
3	Screw	8

Connect console cables

1. Install console cables to MCC board.

   MCC board cables

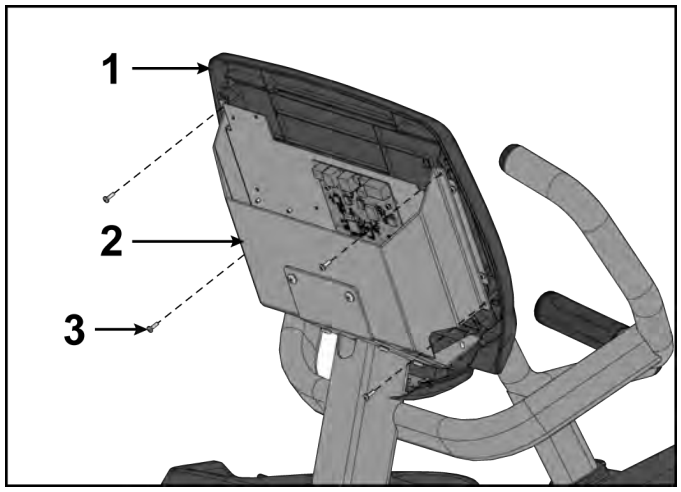


Item	Description	Qty.
1	MYE/BV, Gray	1
2	CSAFE, Red	1
3	Console cable	1
4	Fan	1
5	Upper display	1
6	Headphone jack	1
7	iPod (optional)	1
8	Heart rate	1
9	Handset membrane	1
10	iPod board assembly (optional)	1

2. Plug optional wireless audio antenna into controller if installed.

Install console assembly

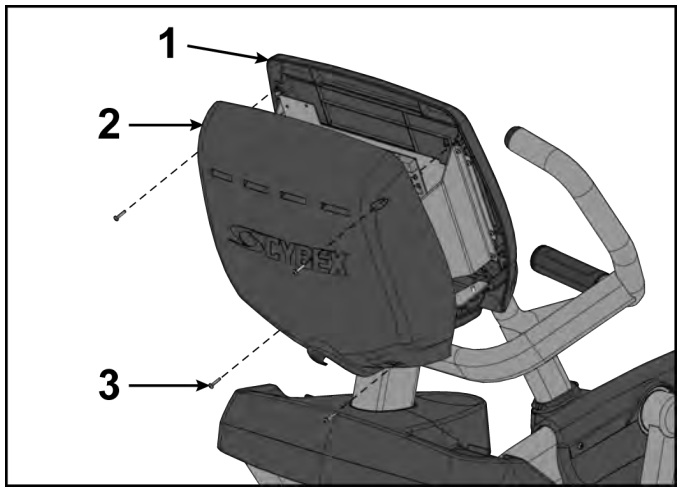
Install the six screws securing the console assembly to the console support using a Phillips screwdriver.



Item	Description	Qty.
1	Console assembly	1
2	Console support	1
3	Screws	6

Install back cover

Install the four screws securing the back cover to the console assembly using a Phillips screwdriver.



Item	Description	Qty.
1	Console assembly	1
2	Back cover	1
3	Screws	4

Complete installation

1. Plug the optional power cord into the power outlet.
2. Operate the unit at all levels to verify proper operation.

E3 View Monitor and Bezel

Tools Required:

- Phillips screwdriver
- Torque screwdriver
- Clean cloth
- Rubbing alcohol
- ESD (Electrostatic Discharge) grounding strap

Disconnect Power Source

Unplug the power cord from the power outlet.

⚠WARNING

Shock and electrocution hazard.

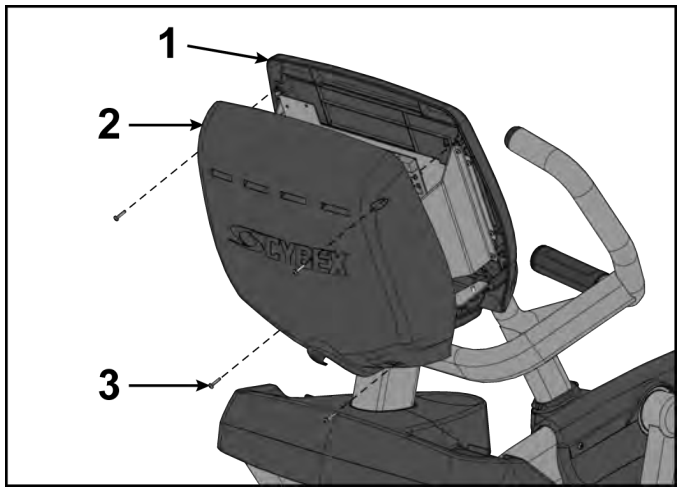
- Unplug unit and let sit 10 minutes before cleaning or performing maintenance.
- Electrical charge can remain in unit after unplugging.
- Keep water and liquids away from electrical parts.

NOTICE

Component damage.Wear an ESD grounding strap during this procedure. Connect ESD grounding strap to frame bolts or unpainted metal of frame. If ESD grounding strap is not available, touch frame bolts or unpainted metal of frame before handling any electronics.

Remove back cover

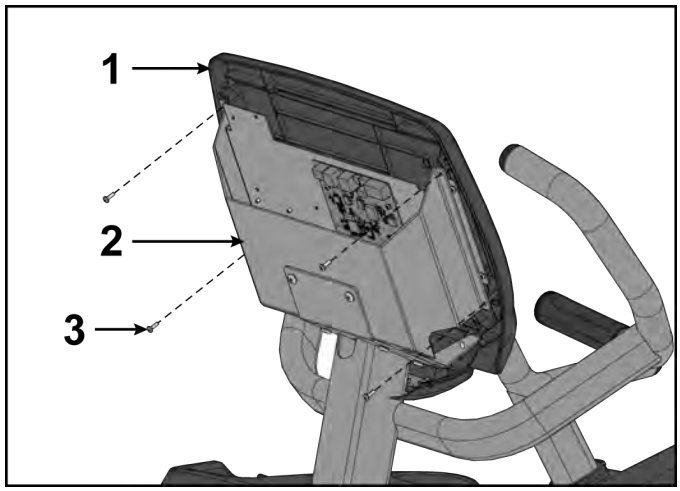
Remove the four screws securing the back cover to the console assembly using a Phillips screwdriver.



Item	Description	Qty.
1	Console assembly	1
2	Back cover	1
3	Screws	4

Remove console assembly

Remove the six screws securing the console assembly to the console support using a Phillips screwdriver.

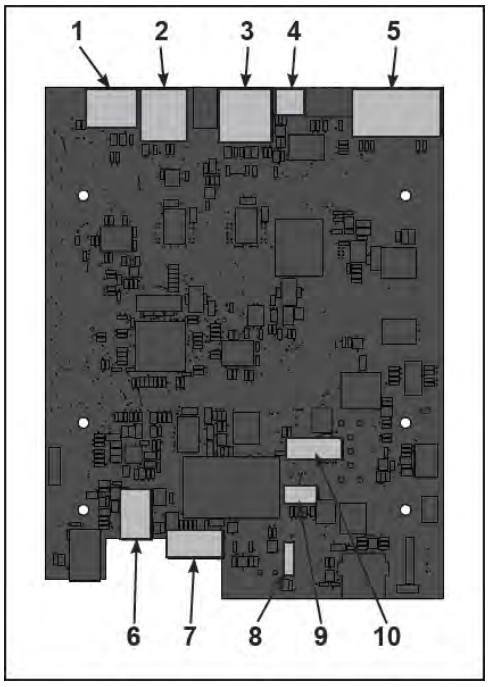


Item	Description	Qty.
1	Console assembly	1
2	Console support	1
3	Screws	6

Disconnect console cables

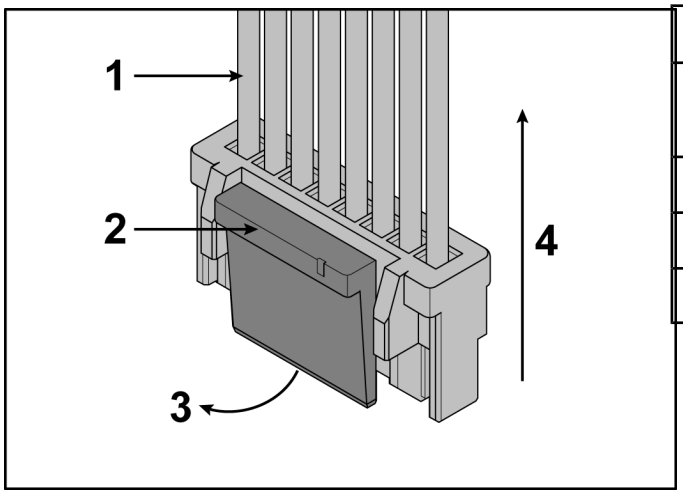
1. Disconnect console cables from MCC board.

MCC board cables



Item	Description	Qty.
1	MYE/BV, Gray	1
2	CSAFE, Red	1
3	Console cable	1
4	Fan	1
5	Upper display	1
6	Headphone jack	1
7	iPod (optional)	1
8	Heart rate	1
9	Handset membrane	1
10	iPod board assembly (optional)	1

2. Unplug cables from MCC board by un-latching connectors with the following procedure:
   a) Press in the top of the cable connector.

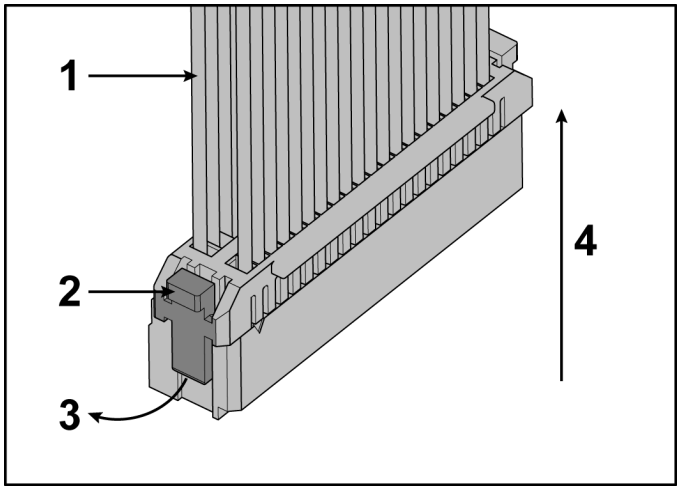


Item	Description	Qty.
1	DO NOT PULL CONNECTOR OUT BY THE WIRES!	1
2	Step a, Latch	1
3	Step b	1
4	Step c	1

   b) Ensure latch disengages the connector.
   c) Unplug cable by holding down latch and pulling straight out from connector. Do not pull on wires, remove by connector.

3. Unplug optional iPod cable.
The iPod cable is held in place by a notch in the access cover.

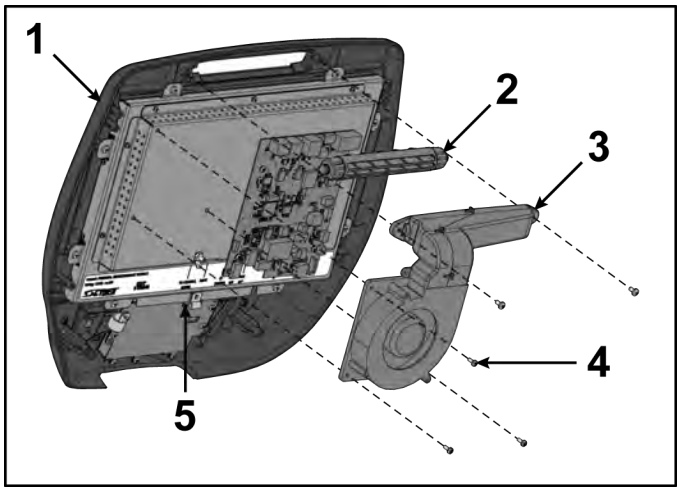
a) Press in both side latches of cable connector.



b) Ensure latches disengage from the connector.
c) Unplug cable by holding down latches on both sides and pulling straight out from connector. Do not pull on wires, remove by connector.

Remove fan

1. Unplug CardioTouch cable from CardioTouch board.

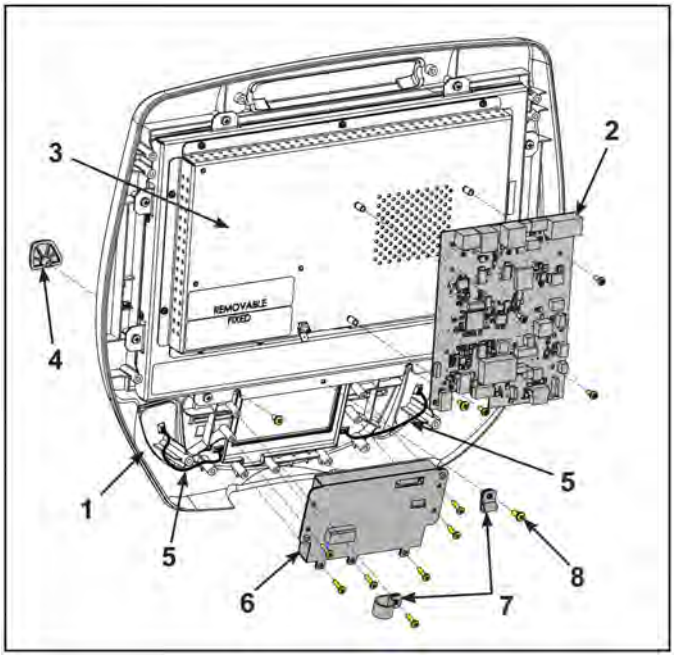


Item	Description	Qty.
1	Console assembly	1
2	Louver	1
3	Fan	1
4	Screw	5
5	CardioTouch cable	1

2. Unplug the fan cable from the MCC board.
3. Remove screws securing the fan and louver to the console assembly using a Phillips screwdriver.

Remove components from bezel

1. Remove the five screws securing the MCC board and cable clamp to the monitor using a Phillips screwdriver.

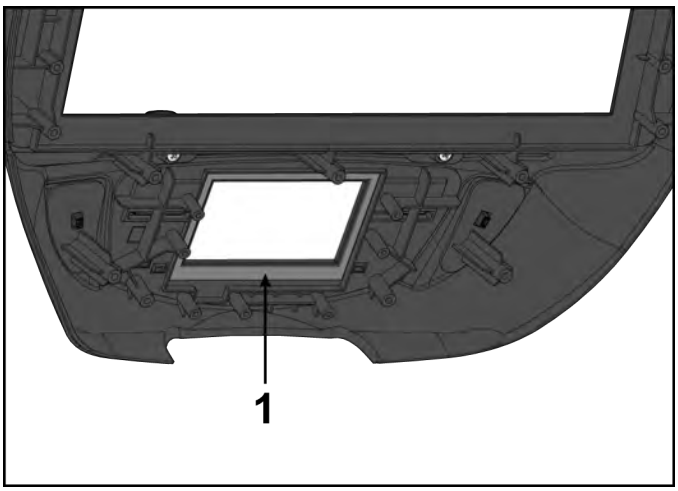


Item	Description	Qty.
1	Bezel	1
2	MCC board	1
3	Monitor	1
4	Book tab	2
5	Thumb control cable	1
6	CardioTouch board	1
7	Cable clamp	2
8	Screw	14

2. Remove the seven screws securing the CardioTouch board and cable clamp to the monitor using a Phillips screwdriver.
3. Unplug thumb control cables from the bezel.
4. Remove the two screws securing the book tabs to the bezel using a Phillips screwdriver.

Clean area of bezel

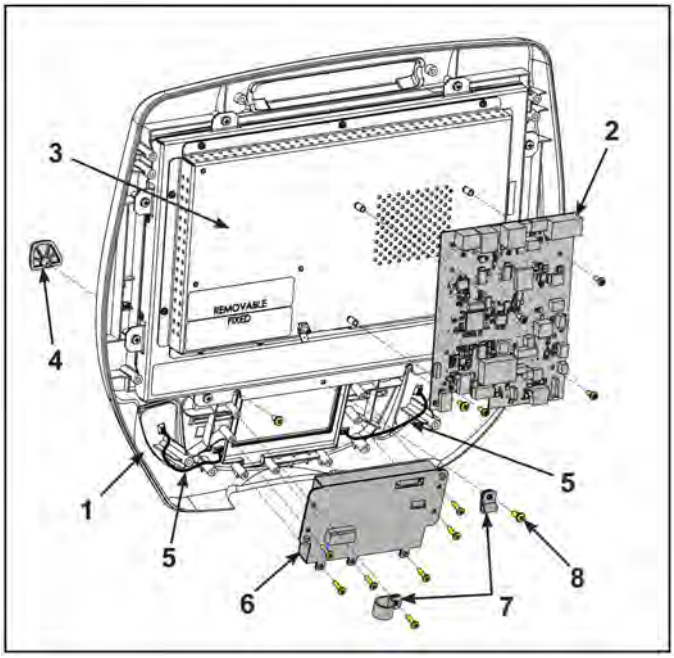
Clean the area of the new bezel with a clean cloth and rubbing alcohol.



Item	Description	Qty.
1	Clean this area	1

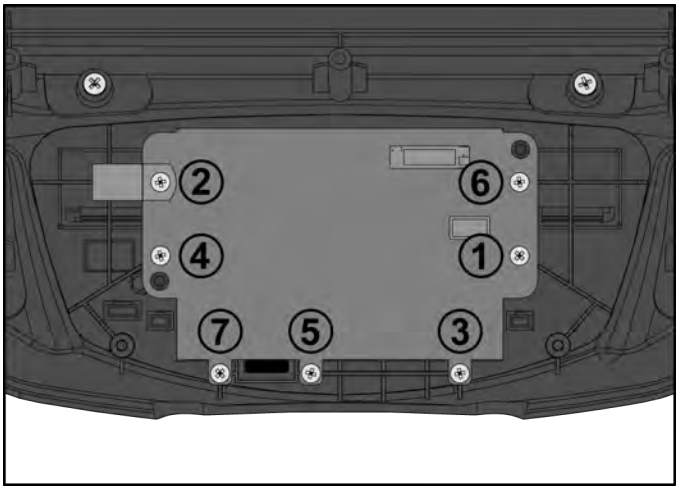
Install components on bezel

1. Install the two screws securing the book tabs to the new bezel using a Phillips screwdriver.



Item	Description	Qty.
1	Bezel	1
2	MCC board	1
3	Monitor	1
4	Book tab	2
5	Thumb control cable	1
6	CardioTouch board	1
7	Cable clamp	2
8	Screw	14

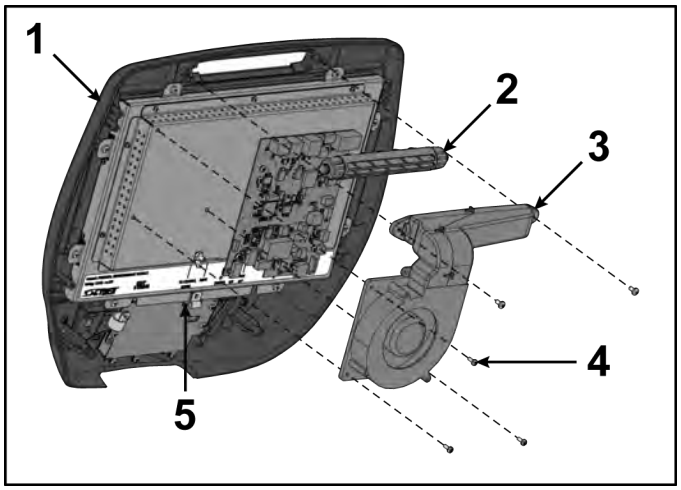
2. Plug thumb control cables into the new bezel.
3. Install the seven screws and cable clamp to the CardioTouch board, tighten by hand.
4. Tighten the seven screws in the order shown to 4 in-lbs (0.45 Nm) using a torque screwdriver.



5. Install the four screws securing the MCC board to the monitor using a Phillips screwdriver.
6. Install the cable clamp to the monitor using a Phillips screwdriver.

Install fan

1. Install screws securing fan and louver to console assembly using a Phillips screwdriver.



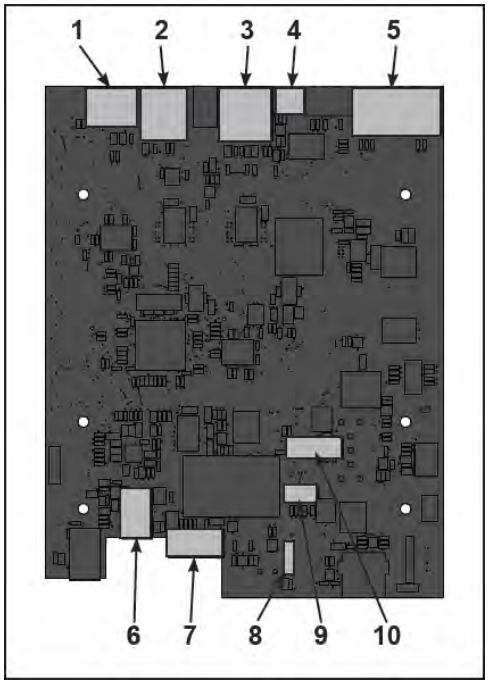
Item	Description	Qty.
1	Console assembly	1
2	Louver	1
3	Fan	1
4	Screw	5
5	CardioTouch cable	1

2. Plug fan cable into MCC board.

Connect console cables

1. Install console cables to MCC board.

MCC board cables

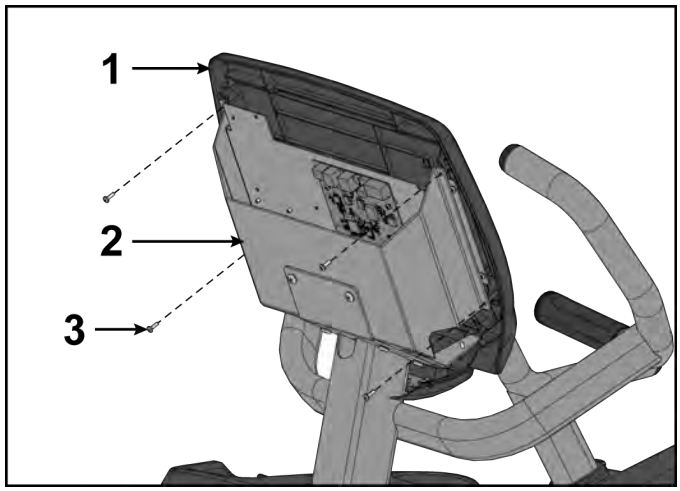


Item	Description	Qty.
1	MYE/BV, Gray	1
2	CSAFE, Red	1
3	Console cable	1
4	Fan	1
5	Upper display	1
6	Headphone jack	1
7	iPod (optional)	1
8	Heart rate	1
9	Handset membrane	1
10	iPod board assembly (optional)	1

2. Plug optional wireless audio antenna into controller if installed.

Install console assembly

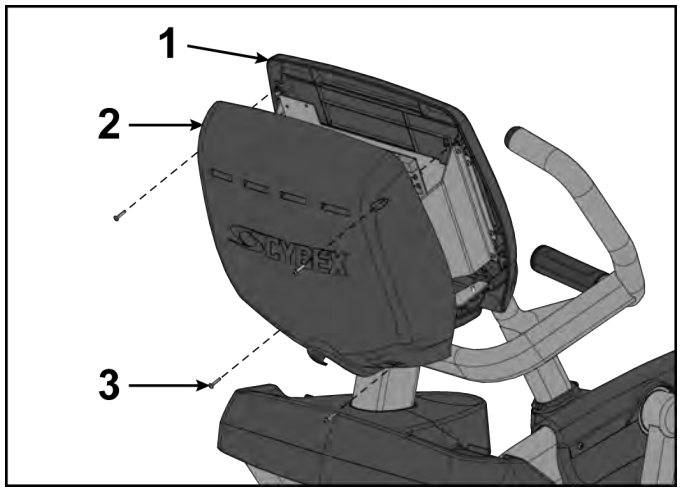
Install the six screws securing the console assembly to the console support using a Phillips screwdriver.



Item	Description	Qty.
1	Console assembly	1
2	Console support	1
3	Screws	6

Install back cover

Install the four screws securing the back cover to the console assembly using a Phillips screwdriver.



Item	Description	Qty.
1	Console assembly	1
2	Back cover	1
3	Screws	4

Complete installation

1. Plug the optional power cord into the power outlet.
2. Operate the unit at all levels to verify proper operation.

Cybex GO Monitor

Tools Required:

- Phillips screwdriver
- Torque screwdriver
- Clean cloth
- Rubbing alcohol
- ESD (Electrostatic Discharge) grounding strap

Disconnect Power Source

Unplug the power cord from the power outlet.

⚠WARNING

Shock and electrocution hazard.

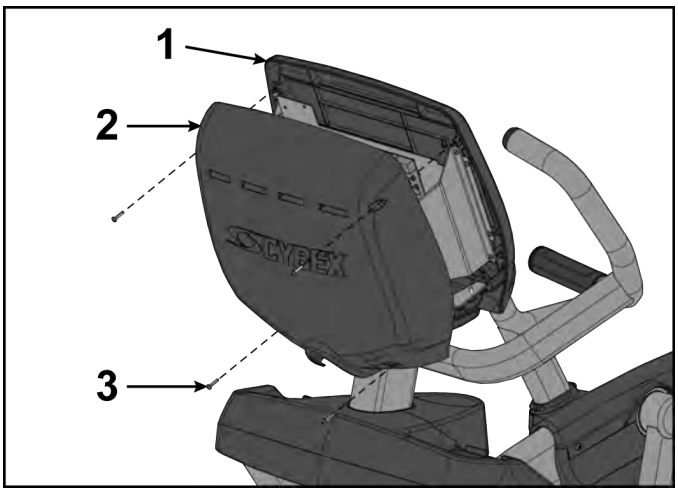
- Unplug unit and let sit 10 minutes before cleaning or performing maintenance.
- Electrical charge can remain in unit after unplugging.
- Keep water and liquids away from electrical parts.

NOTICE

Component damage.Wear an ESD grounding strap during this procedure. Connect ESD grounding strap to frame bolts or unpainted metal of frame. If ESD grounding strap is not available, touch frame bolts or unpainted metal of frame before handling any electronics.

Remove back cover

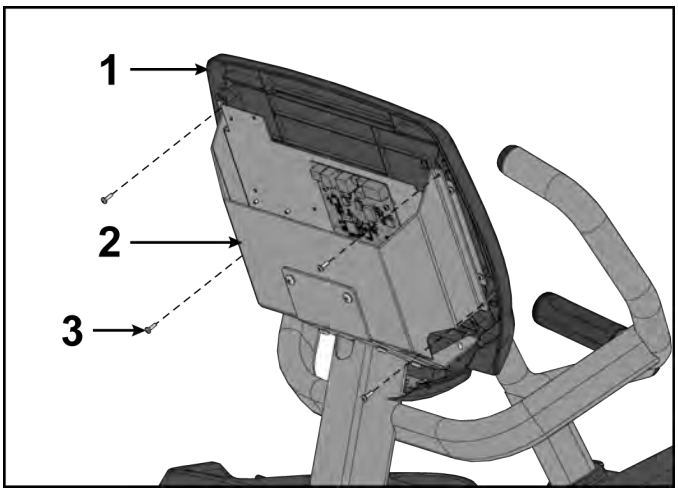
Remove the four screws securing the back cover to the console assembly using a Phillips screwdriver.



Item	Description	Qty.
1	Console assembly	1
2	Back cover	1
3	Screws	4

Remove console assembly

Remove the six screws securing the console assembly to the console support using a Phillips screwdriver.

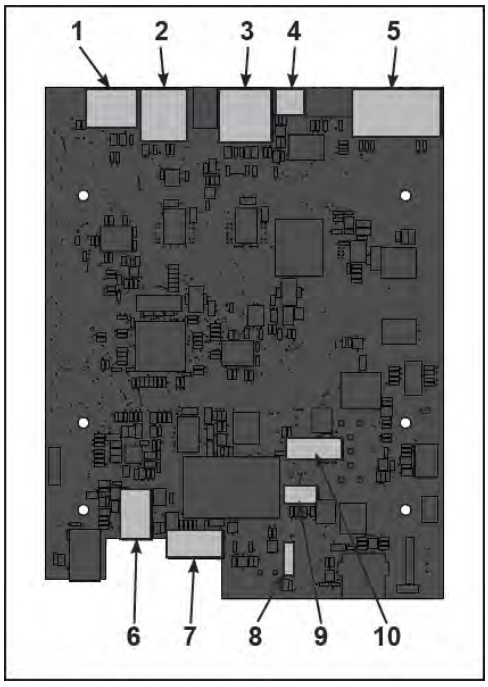


Item	Description	Qty.
1	Console assembly	1
2	Console support	1
3	Screws	6

Disconnect console cables

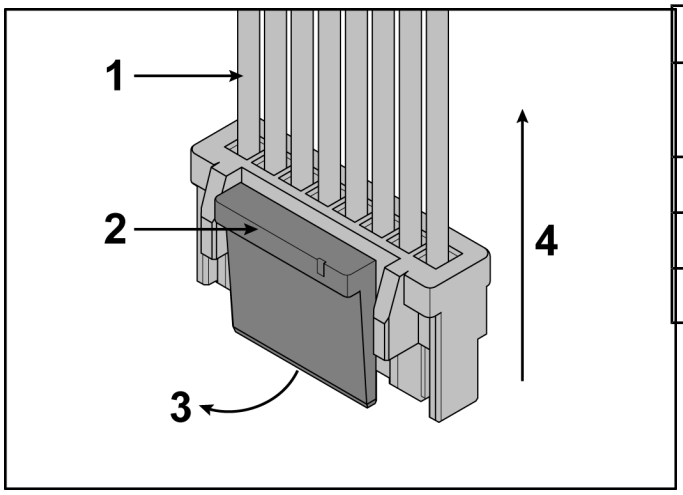
1. Disconnect console cables from MCC board.

MCC board cables



Item	Description	Qty.
1	MYE/BV, Gray	1
2	CSAFE, Red	1
3	Console cable	1
4	Fan	1
5	Upper display	1
6	Headphone jack	1
7	iPod (optional)	1
8	Heart rate	1
9	Handset membrane	1
10	iPod board assembly (optional)	1

2. Unplug cables from MCC board by un-latching connectors with the following procedure:
   a) Press in the top of the cable connector.

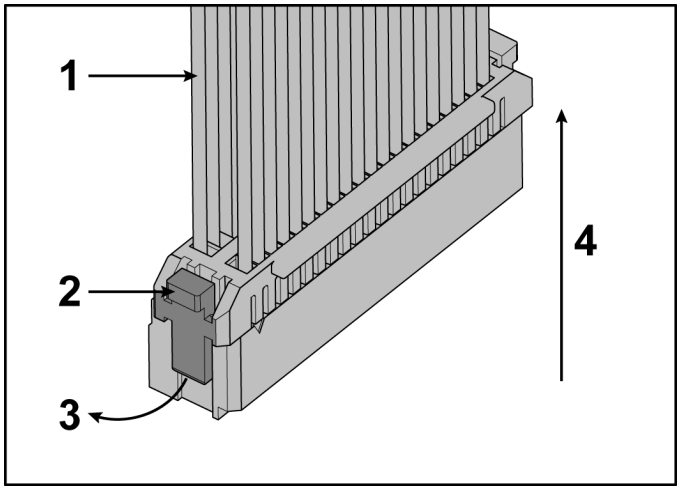


Item	Description	Qty.
1	DO NOT PULL CONNECTOR OUT BY THE WIRES!	1
2	Step a, Latch	1
3	Step b	1
4	Step c	1

   b) Ensure latch disengages the connector.
   c) Unplug cable by holding down latch and pulling straight out from connector. Do not pull on wires, remove by connector.

3. Unplug optional iPod cable.
The iPod cable is held in place by a notch in the access cover.

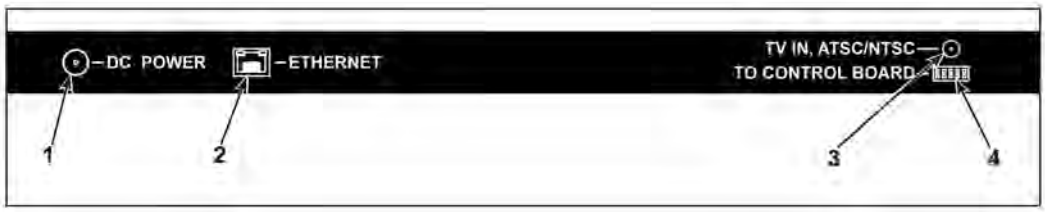
a) Press in both side latches of cable connector.



b) Ensure latches disengage from the connector.
c) Unplug cable by holding down latches on both sides and pulling straight out from connector. Do not pull on wires, remove by connector.

Remove Cybex GO monitor cables

1. Unplug the power, ethernet cable, and control board cable from the Cybex GO monitor.

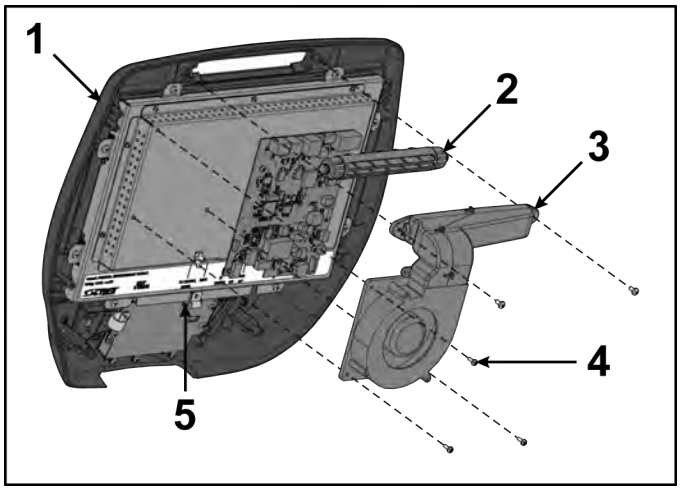


Item	Description	Qty.
1	Power cable	1
2	Cat6 ethernet cable	1
3	Coax cable	1
4	Control board cable	1

2. Unscrew the coax cable from the Cybex GO monitor.
3. Remove the ground cable from the Cybex GO monitor using an 11/32” nut driver.

Remove fan

1. Unplug CardioTouch cable from CardioTouch board.

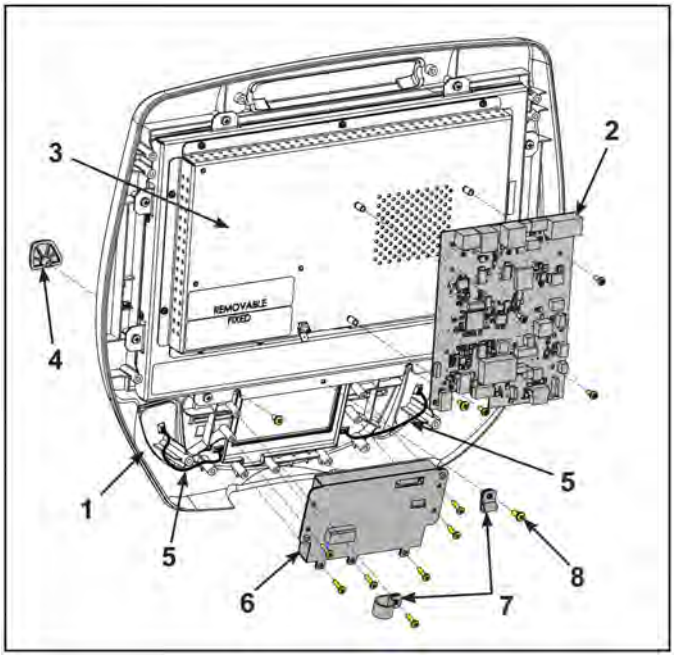


Item	Description	Qty.
1	Console assembly	1
2	Louver	1
3	Fan	1
4	Screw	5
5	CardioTouch cable	1

2. Unplug the fan cable from the MCC board.
3. Remove screws securing the fan and louver to the console assembly using a Phillips screwdriver.

Remove components from bezel

1. Remove the five screws securing the MCC board and cable clamp to the monitor using a Phillips screwdriver.

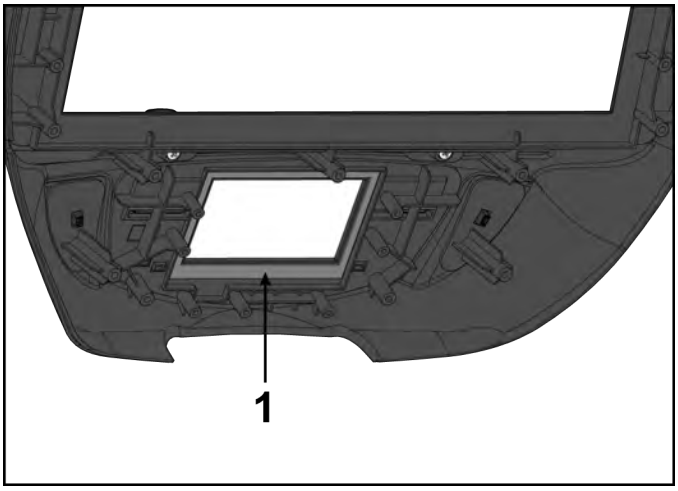


Item	Description	Qty.
1	Bezel	1
2	MCC board	1
3	Monitor	1
4	Book tab	2
5	Thumb control cable	1
6	CardioTouch board	1
7	Cable clamp	2
8	Screw	14

2. Remove the seven screws securing the CardioTouch board and cable clamp to the monitor using a Phillips screwdriver.
3. Unplug thumb control cables from the bezel.
4. Remove the two screws securing the book tabs to the bezel using a Phillips screwdriver.

Clean area of bezel

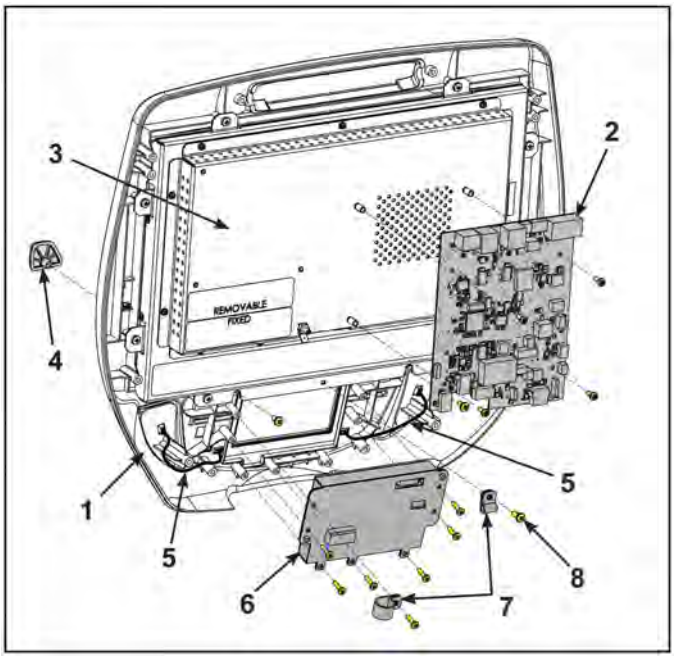
Clean the area of the new bezel with a clean cloth and rubbing alcohol.



Item	Description	Qty.
1	Clean this area	1

Install components on bezel

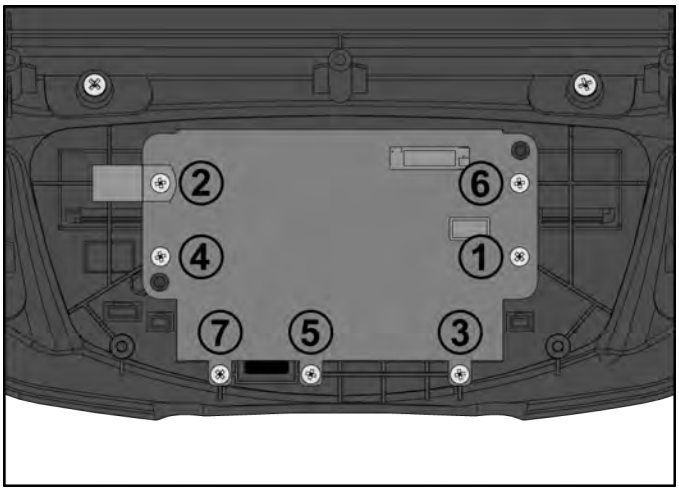
1. Install the two screws securing the book tabs to the new bezel using a Phillips screwdriver.



Item	Description	Qty.
1	Bezel	1
2	MCC board	1
3	Monitor	1
4	Book tab	2
5	Thumb control cable	1
6	CardioTouch board	1
7	Cable clamp	2
8	Screw	14

2. Plug thumb control cables into the new bezel.
3. Install the seven screws and cable clamp to the CardioTouch board, tighten by hand.

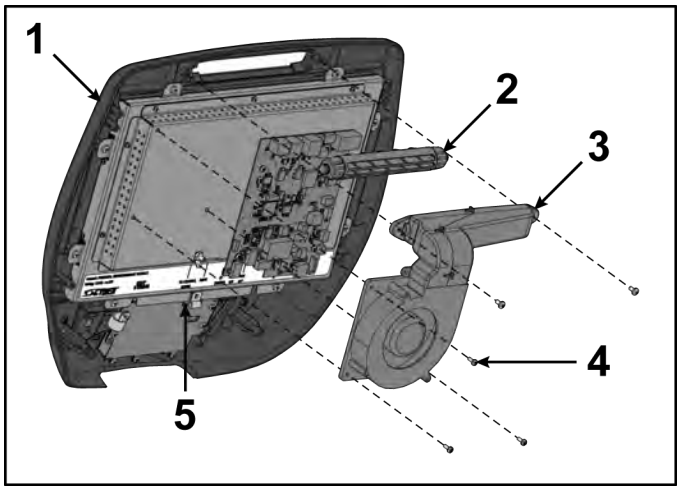
4. Tighten the seven screws in the order shown to 4 in-lbs (0.45 Nm) using a torque screwdriver.



5. Install the four screws securing the MCC board to the monitor using a Phillips screwdriver.
6. Install the cable clamp to the monitor using a Phillips screwdriver.

Install fan

1. Install screws securing fan and louver to console assembly using a Phillips screwdriver.

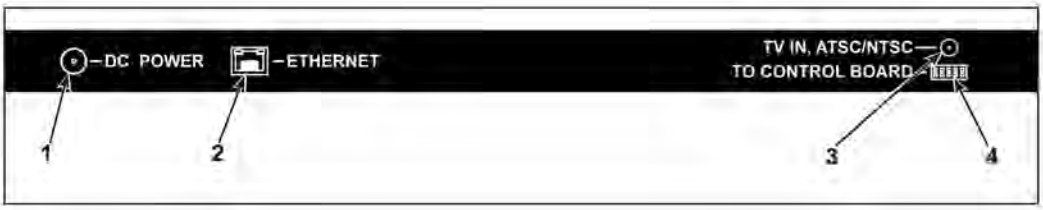


Item	Description	Qty.
1	Console assembly	1
2	Louver	1
3	Fan	1
4	Screw	5
5	CardioTouch cable	1

2. Plug fan cable into MCC board.

Install Cybex GO monitor cables

1. Plug the power, ethernet cable, and control board cable into the Cybex GO monitor.



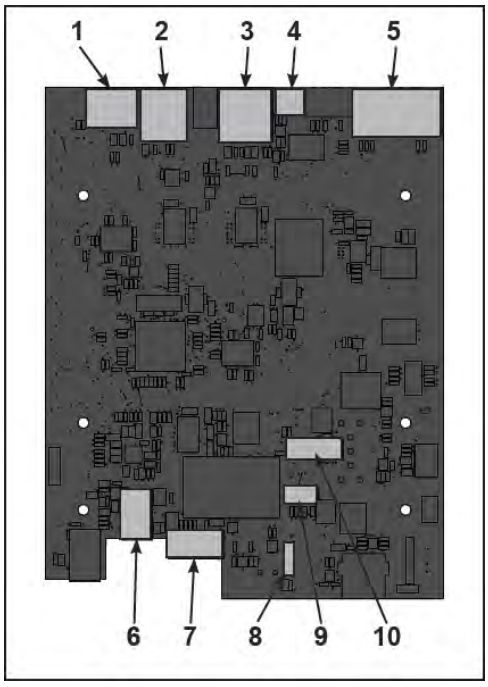
Item	Description	Qty.
1	Power cable	1
2	Cat6 ethernet cable	1
3	Coax cable	1
4	Control board cable	1

2. Screw the coax cable into the Cybex GO monitor.
3. Install the ground cable to the Cybex GO monitor using a 11/32” nut driver.

Connect console cables

1. Install console cables to MCC board.

MCC board cables

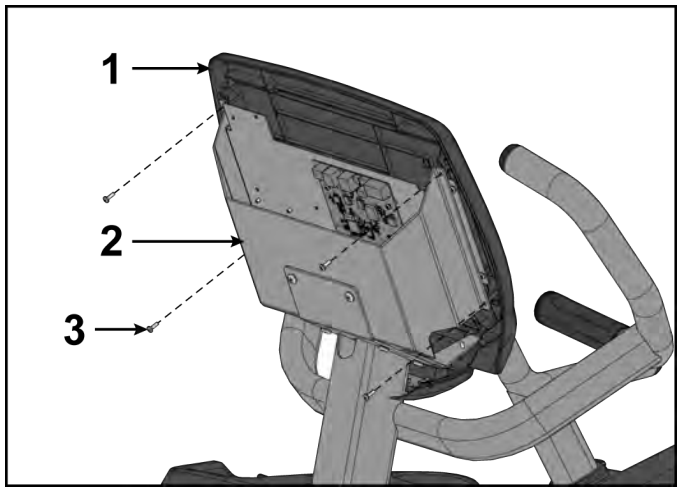


Item	Description	Qty.
1	MYE/BV, Gray	1
2	CSAFE, Red	1
3	Console cable	1
4	Fan	1
5	Upper display	1
6	Headphone jack	1
7	iPod (optional)	1
8	Heart rate	1
9	Handset membrane	1
10	iPod board assembly (optional)	1

2. Plug optional wireless audio antenna into controller if installed.

Install console assembly

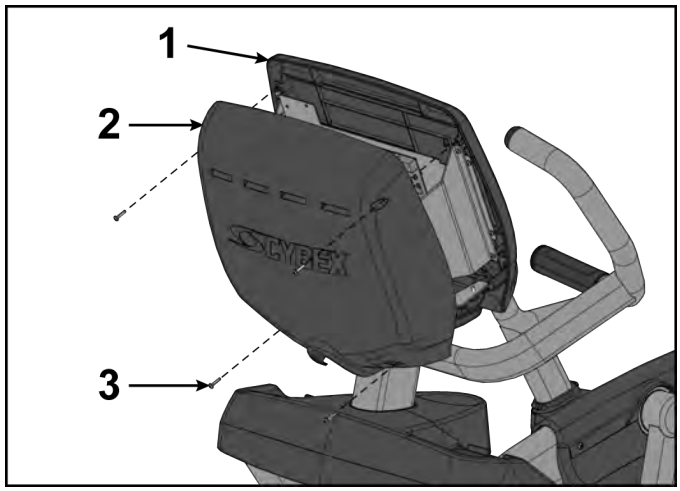
Install the six screws securing the console assembly to the console support using a Phillips screwdriver.



Item	Description	Qty.
1	Console assembly	1
2	Console support	1
3	Screws	6

Install back cover

Install the four screws securing the back cover to the console assembly using a Phillips screwdriver.



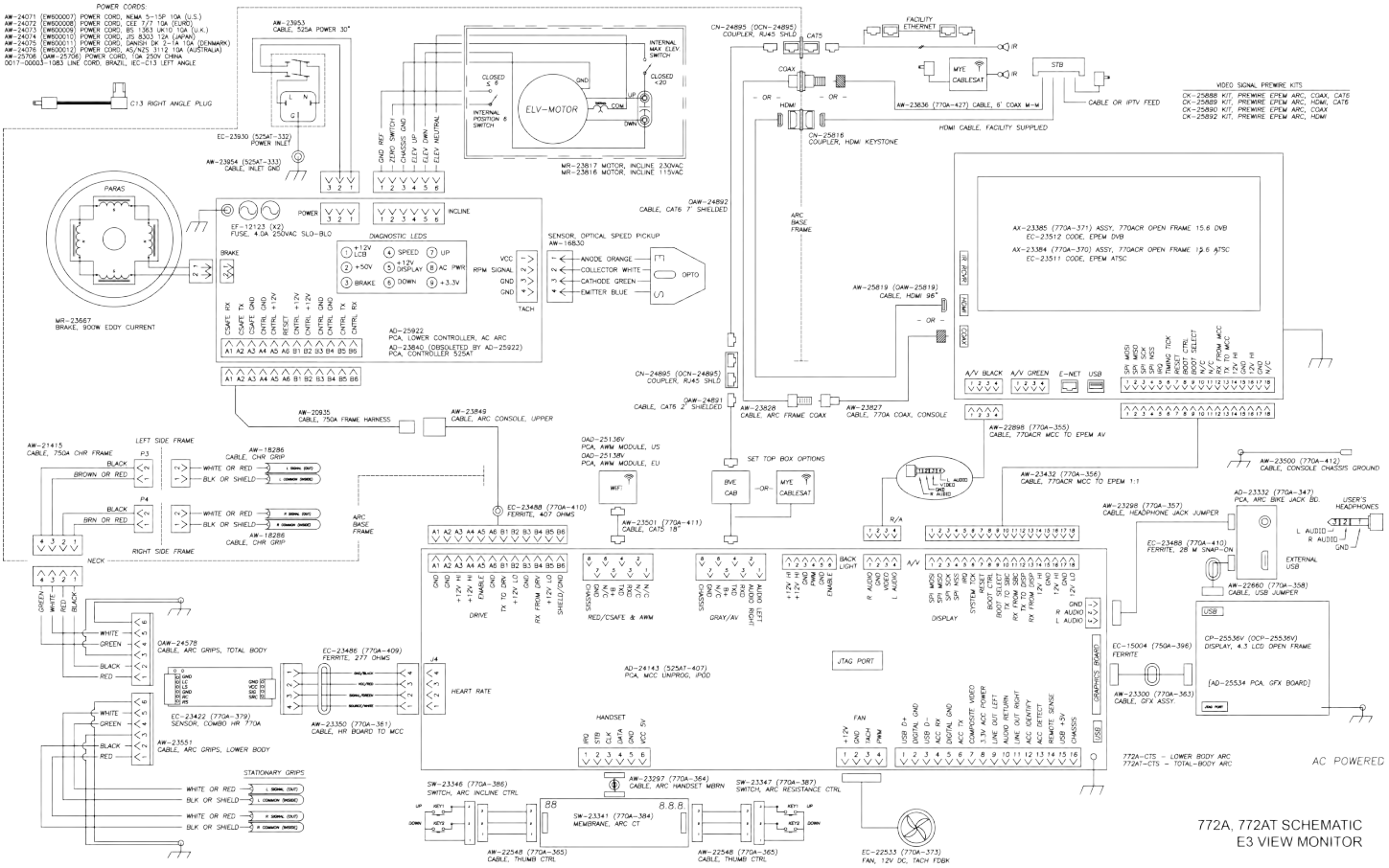
Item	Description	Qty.
1	Console assembly	1
2	Back cover	1
3	Screws	4

Complete installation

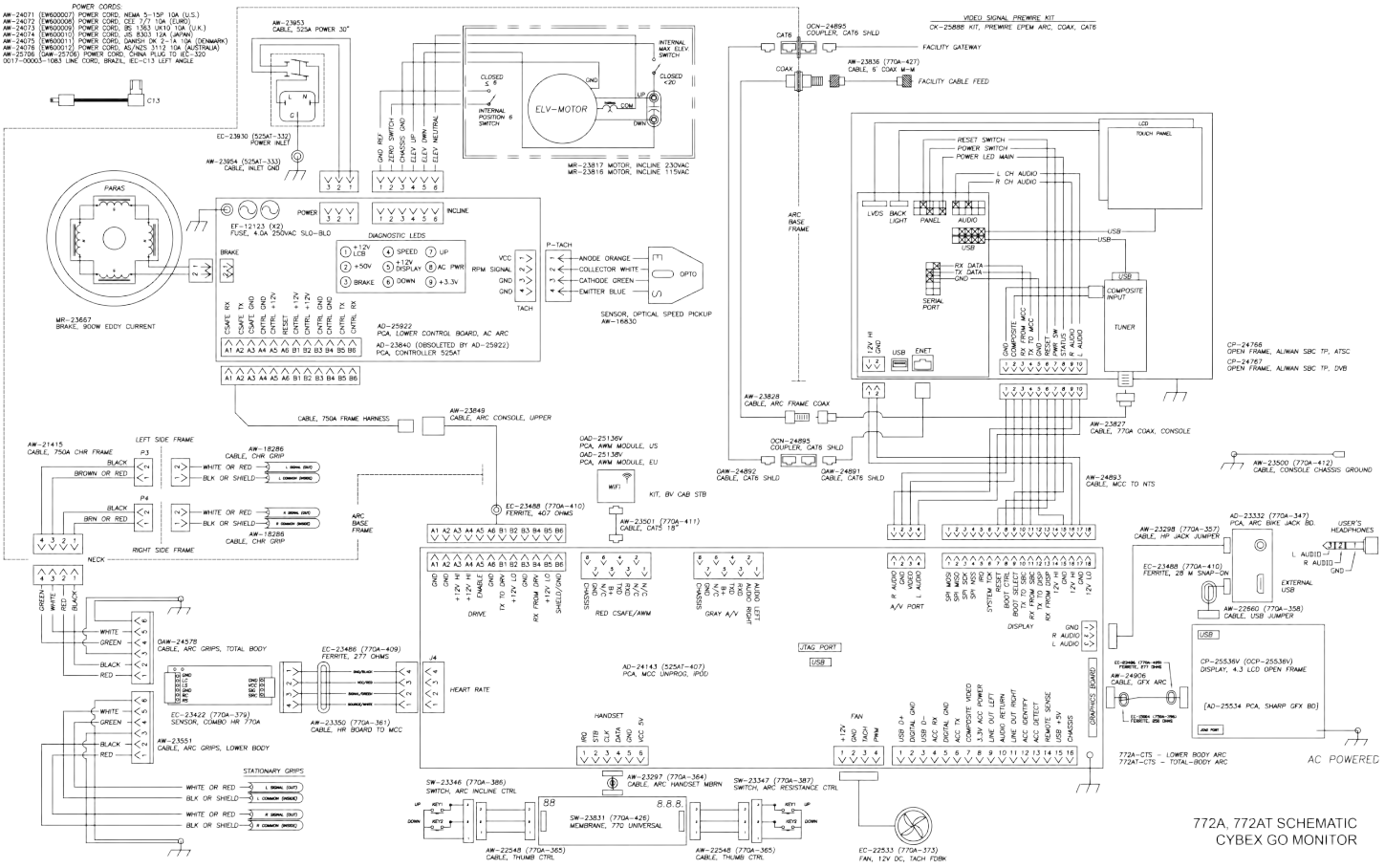
1. Plug the optional power cord into the power outlet.
2. Operate the unit at all levels to verify proper operation.

Schematics

Schematic 772A/772AT E3 View Monitor



Schematic 772A/772AT Cybex GO



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