



Cybex Arc Trainer® 630A
Service Manual
Cardiovascular Systems
Part Number 630A-901 B



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About This Manual

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- fax orders to 508-533-5183
- contact Cybex Customer Service at 888-462-9239
- or contact Cybex Customer Service at 508-533-4300

To contact Cybex with comments about this manual you may send email to techpubs@cybexintl.com.

FCC Compliance Information

! WARNING: 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.

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1 - Safety

IMPORTANT: Read all instructions and warnings before using the unit.

Important Voltage Information

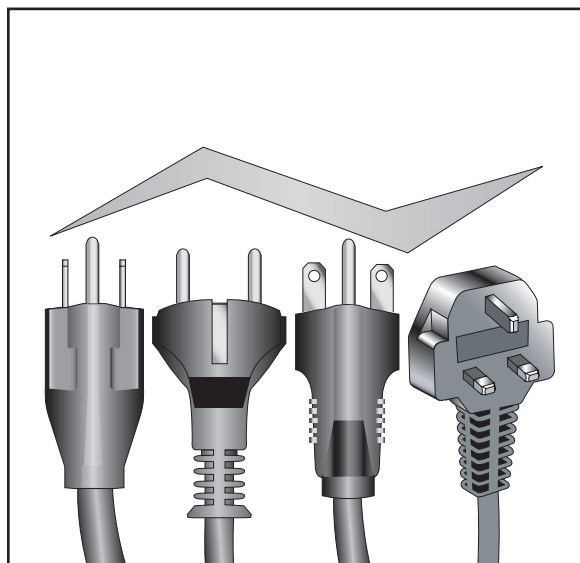
NOTE: The power cord is available with the optional AC power kit.

! WARNING: Do not plug unit into wall outlet without an approved medical power cord.

Before plugging the power cord into an electrical outlet, verify that the voltage requirements for your area match the voltage of the unit that you have received.

Grounding Instructions

This unit must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This product is equipped with a cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.



AW-19522	EW600005	AW-19587	AW-19521
115 VAC	220 VAC	100 VAC	230 VAC

! DANGER: Improper connection of the equipment grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service provider if you are in doubt as to whether the unit is properly grounded. Seek a qualified electrician to perform any modifications to the cord or plug. Cybex is not responsible for injuries or damages as a result of cord or plug modification.

Make sure that the unit is connected to an outlet having the same configuration as the plug. Do not use a ground plug adapter to adapt the power cord to a non-grounded outlet.

Important Safety Instructions

(Save These Instructions)

! DANGER: To reduce the risk of electric shock, always unplug this unit from the electrical outlet immediately after using it and before cleaning it.

! WARNING: Serious injury could occur if these precautions are not observed. To reduce the risk of burns, fires, electric shock, or injury:

User Safety Precautions

- Keep children away. Teenagers and disabled must be supervised. Tenez les enfants éloignés. Les adolescents et les handicapés doivent être surveillés.
- Obtain instruction before using. Lisez les instructions avant l'utilisation.
- Wait until foot plates come to a complete stop before dismounting. Attendre l'arrêt complet des reposés pieds avant de descendre.
- Obtain a medical exam before beginning any exercise program.
- Stop exercising if you feel faint, dizzy, or experience pain.
- Read and understand the Owner's Manual and all warnings posted on the unit before using.
- DO NOT wear loose or dangling clothing while using.
- Keep all body parts, towels, and the like free and clear of moving parts.
- Use the handrails for support and to maintain balance.
- DO NOT use the unit if you exceed 400 lbs. (180 kg). This is the rated maximum user weight.
- Replace any warning labels if damaged, worn or illegible.
- Report any malfunctions, damage or repairs to the facility.
- Wait until foot plates come to a complete stop before dismounting.
- All maintenance activities shall be performed by qualified personnel. Failure to do so could result in serious injury.
- DISCONNECT POWER BEFORE SERVICING.
- Moving parts. Keep hands away when in use.
- For connection to a Medical Grade outlet only to ensure proper grounding. Rated 100-240 VAC~ 50/60 Hz 0.75 A.

Facility Safety Precautions

- Make sure all user and safety precautions are observed.
- Read and understand the Owner's Manual completely before using the unit.
- Make sure all users are properly trained on how to use the equipment.
- Make sure that each machine is setup and operated on a solid level surface. Do not install equipment on an uneven surface.
- Make sure there is enough room for safe access and operation of the equipment.
- Perform regular maintenance checks on the equipment. Also pay close attention to all areas most susceptible to wear, including (but not limited to) cables, pulleys, belts and grips.
- Immediately replace worn or damaged components. If unable to immediately replace worn or damaged components then remove from service until the repair is made.
- Do not attempt repairs, electrical or mechanical. 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.
- Disconnect the optional power adapter before servicing the unit.
- Keep a repair log of all maintenance activities.
- Use only Cybex supplied components to maintain/repair the equipment.
- Do not use attachments unless recommended for the unit by Cybex.
- 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.
- Do not use the optional power adapter in damp or wet locations.
- EQUIPMENT not suitable for use in the presence of a FLAMMABLE ANAESTHETIC MIXTURE WITH AIR or WITH OXYGEN OR NITROUS OXIDE.
- Do not use the unit outdoors.
- The 630A 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.

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

Arc Trainers containing the A/V options

- Devices connected to Cybex equipment must comply with appropriate safety standards. This includes but not limited to: (UL-60601, IEC/EN 60601-1) for medical equipment.
- There must be adequate mechanical mounting of the device in all combinations (configurations).

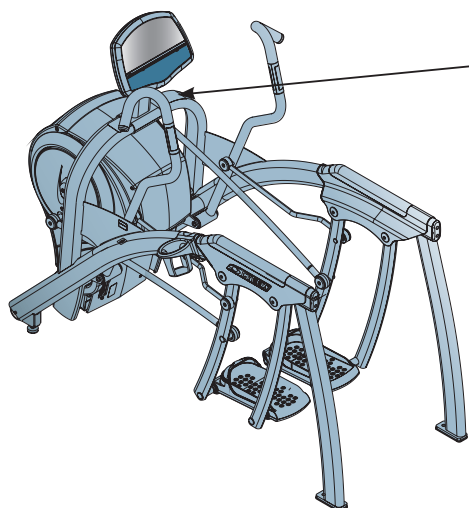
- The device must be stable on the unit in all configurations.
- Risk and leakage current of the final combinations must comply with IEC/EN 60601-1-1 and is the responsibility of the end user to ensure compliance.
- Electromagnetic emissions and immunity of all configurations must conform to IEC/EN 60601-1-2.
- All added devices must have a compatible interface.
- All devices must be used for their intended purpose.
- Signal or mains isolation devices and additional protective earth may be needed to assure compliance with IEC/EN 60601-1-1.
- Do not power the entire system from a single outlet or power strip. If the unit is used with the optional power supply, ensure that this power supply is plugged in to a separate outlet than any connected device, to prevent exceeding the allowable leakage current of the system.
- End user of a system shall ensure that interruption and restoration of the power supply to any equipment or non-medical equipment of the system shall not result in a safety hazard other than interruption or cessation of its intended function.

Warning Decals

Carefully read and understand the following before using the unit:

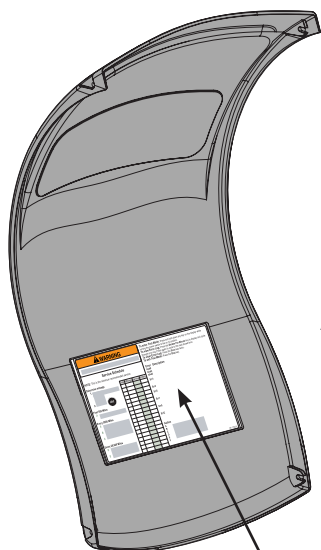
NOTE: To replace any worn or damaged decals, fax orders to 508-533-5183 or contact Cybex Customer Service at 888-462-9239. If you live outside of the USA, call 508-533-4300.

Warning decals indicate a potentially hazardous situation, which, if not avoided, could result in death or serious injury. The warning decals are shown below.



Warning decal part number
610A-349-4

! WARNING	Keep children away. Teenagers and disabled must be supervised. <i>Tenez les enfants éloignés. Les adolescents et les handicapés doivent être surveillés.</i>	Read and understand the Owner's Manual and all warnings posted on the unit before using. 
SERIOUS INJURY COULD OCCUR IF THESE PRECAUTIONS ARE NOT OBSERVED	Obtain instruction before using. <i>Lisez les instructions avant l'utilisation.</i>	DO NOT wear loose or dangling clothing while using.
	Wait until foot plates come to a complete stop before dismounting. <i>Attendre l'arrêt complet des repose pieds avant de descendre.</i>	Keep all body parts, towels, and the like free and clear of moving parts.
	Obtain a medical exam before beginning any exercise program.	Use the handrails for support and to maintain balance.
	Stop exercising if feeling faint, dizzy, or experiencing pain.	DO NOT use unit if user exceeds 400 lbs. (180 kg). This is the rated maximum user weight.
	Keep foot plate surface clean and dry.	Replace any warning labels if damaged, worn or illegible.
		Report any malfunctions, damage or repairs to the facility. 610A-349-4 A



Underneath
Access Cover

WARNING

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

Warning decal part number - DE-19592-4

WARNING

**SERIOUS INJURY COULD OCCUR
IF THESE PRECAUTIONS
ARE NOT OBSERVED**

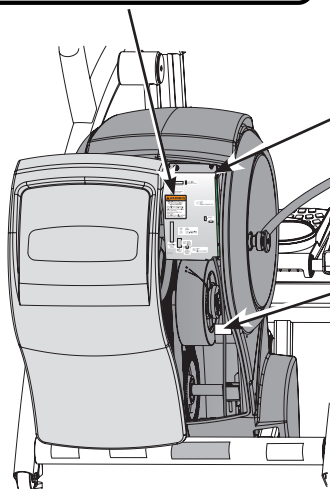
High voltage is present under this shield. This shield should only be removed by a qualified service technician.
Keep wet items away from inside parts.
High voltage may still be present even if the unit is unplugged.

Shield part number
630A-316



Warning battery
DE-19586
Located on
battery bracket

Warning decal part number
DE-17155-4



Arc Trainer 620A/629A Kits

Covers:

Crank Cover	600AK023
Front Access Cover	600AK024
Pivot Cover, Left Hand	610AK004
Pivot Cover, Right Hand	610AK005
Shroud, Left	600AK025
Shroud, Right	600AK027

Front End:

Elevation Motor Tube	600AK004
Lower Pulley	600AK014
Primary Drive 16 Rib Belt	600AK020
Pulley and Crank Shaft	600AK002

Foot Plate:

Foot Plate Arm, Left Rear	610AK010
Foot Plate Arm, Right Rear	610AK011
Foot Plate, Right	610AK002
Foot Plate, Left	610AK003
Foot Plate Wave Washer	610AK020

Frame:

Main Frame Assembly	610AK019-4
Linkage Rod, Left	600AK006
Linkage Rod, Right	600AK007
Linkage Cap	600AK012
Hardware Pack	610AK017
Heart Rate Grip w/o Drill Bit	620AK002
Heart Rate Grip with Drill Bit	620AK007

Accessories:

Handle Bar	620AK005
Personal Entertainment	620AK044
110V/60Hz Voltage Assembly	630AK031
220V/50Hz Voltage Assembly	630AK033
250V/3A Voltage Assembly	630AK034
110V/50Hz Voltage Assembly	630AK035

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Arc Trainer® Crank Cover

Kit No. 600AK023

Installation Instructions

NOTE: This instruction sheet describes how to replace the crank cover on the Arc 600A, 610A, 619A, 620A, 629A, 630A, 639A.

TOOLS REQUIRED

- Phillips screwdriver
- 3/16 Allen wrench

1. Read and understand all instructions thoroughly before installing this kit.

2. Verify kit contents. See Figure 1

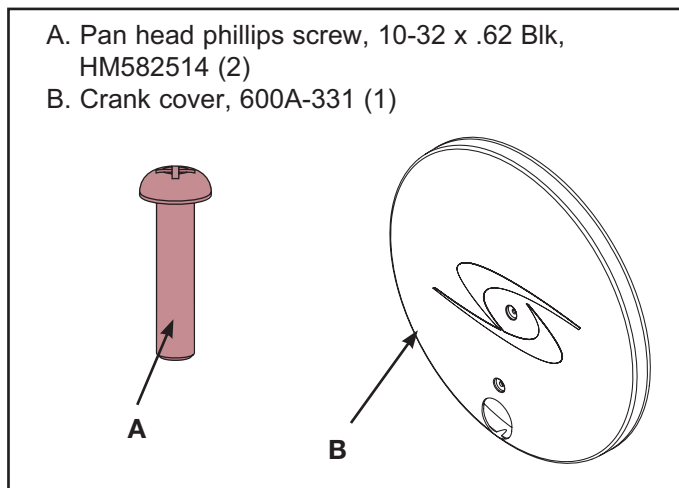


Figure 1

3. Detach the linkage arm.

A. Using a 3/16" Allen wrench, remove the SHCS, flat washer, cap and spacer securing the linkage arm. See Figure 2.

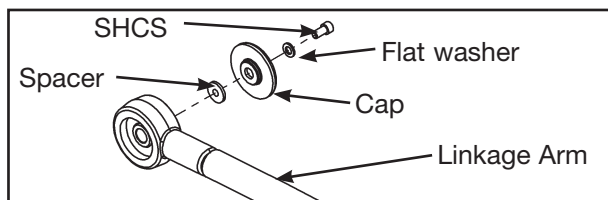


Figure 2

B. Lay the linkage arm down on the frame.

NOTE: Place a cloth in between the linkage arm and the frame to prevent scratches.

4. Remove the crank cover.

A. Using a Phillips screwdriver, remove the two screws securing the crank cover and remove the crank cover.

NOTE: If unit has three screws, then remove crank cover mounting bracket and discard as this is no longer required.

5. Attach the new crank cover.

A. Place new crank cover (B) in position.

B. Using a Phillips screwdriver, attach the two screws (A) securing the crank cover in place. See Figure 3.

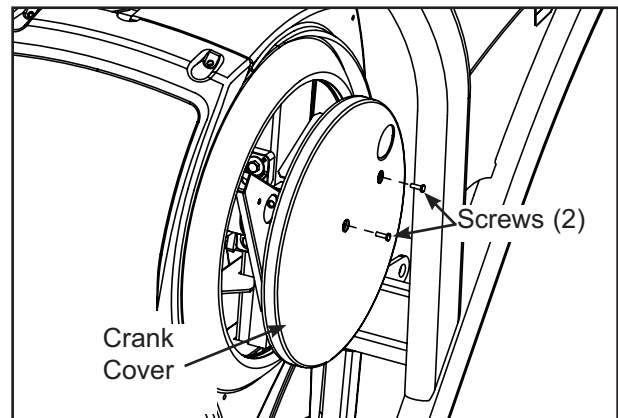


Figure 3

6. Secure the linkage arm.

A. Reinstall SHCS, flat washer, cap and spacer that was removed in step 3A. See Figure 2. **NOTE:** SHCS must be tightened to a minimum of 100 inch-pounds.

7. Test unit for proper operation.



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Arc Trainer® 600A/610A Front Access Cover

Kit No. 600AK024

Installation Instructions

NOTE: This instruction sheet describes how to replace the front access cover on the Arc Trainer 600A/610A.

TOOLS REQUIRED

- Phillips screwdriver

1. Read and understand all instructions thoroughly before installing this kit.

2. Verify kit contents. See Figure 1.

- A. Front Access Cover Assembly
 - A1. Front Access Cover, (1), 600A-335
 - A2. Front Logo Decal, (1), DE-17317
 - A3. Service Schedule and Error Decal, (1), DE-17322-X
- B. Nylon Grommet, HF540200 (4) - not shown
- C. Self-tapping Phillips Screw 8-16 X .75, HT552515 (4) - not shown

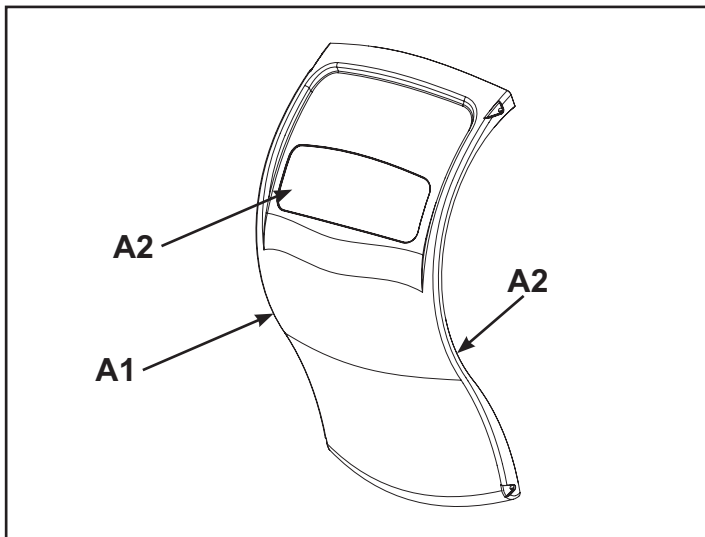


Figure 1

3. Remove the existing access cover.

- A. Using a Phillips screwdriver, remove the two lower screws securing the access cover.
- B. Remove the two upper screws securing the access cover. See Figure 2
- C. Remove the access cover.

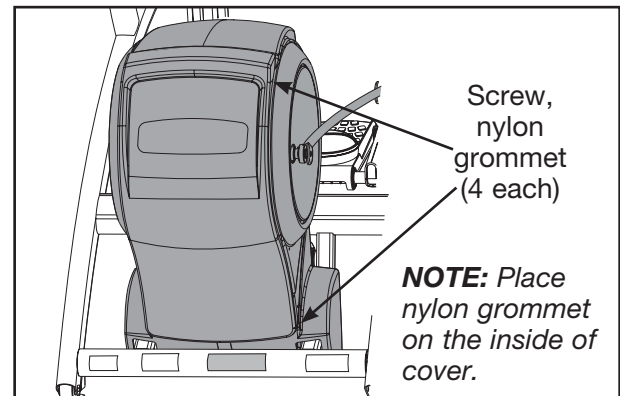


Figure 2

4. Attach the new access cover.

- A. Install the four grommets and screws. **NOTE:** Place grommets on the inside of the front cover. Install upper two grommets/screws first then the two lower grommets washers.
- B. Tighten the four screws, using a Phillips screwdriver. **NOTE:** Do not over tighten screws. See Figure 2.

5. Test unit for proper operation.



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Arc Trainer® Pivot Cover

Kit No. 610AK004 (Left Hand Pivot Cover)
610AK005 (Right Hand Pivot Cover)

Installation Instructions

NOTE: This instruction sheet describes how to replace the pivot cover in the Arc Trainer 610A.

Tools Required

- 7/32" Allen wrench (2)

1. Read and understand all instructions thoroughly before installing this kit.

2. Verify you received the following (see Figure 1):

- A. Pivot Cover (see appropriate kit number listed above).
- B. Loctite #242, YA000201 (not shown)

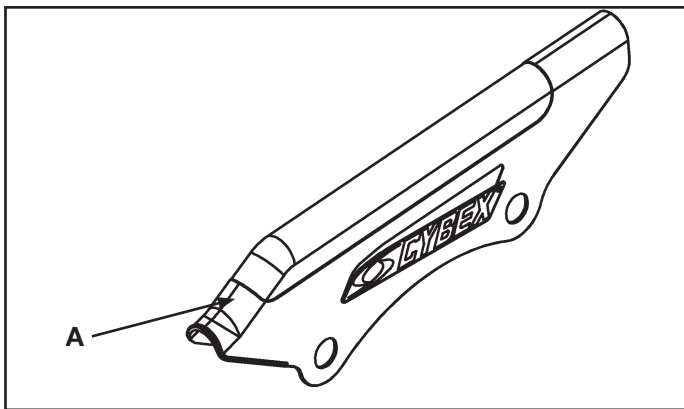


Figure 1

3. Replace the pivot cover.

- A. Turn the main power switch above the power inlet to the off (O) position.
- B. Using two 7/32" Allen wrenches, remove the four BHSCS and pivot shaft retainers securing the pivot cover. **NOTE:** Once one of the two screws is removed (two in front and two in back), carefully wedge an Allen wrench into the shaft in order to remove the other screw from the shaft. See Figure 2.

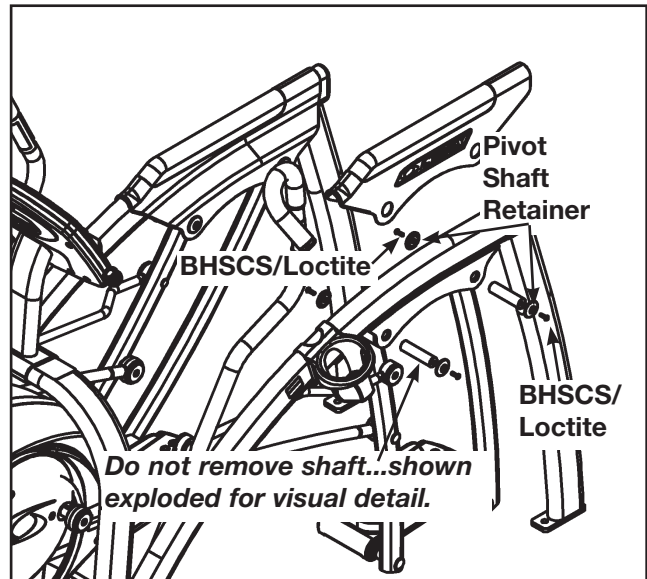


Figure 2

- C. Remove existing pivot cover.
- D. Insert the new pivot cover in place ("Cybex" faces out).
- E. Locate two of the BHSCS/pivot shaft retainers removed from step 3B.
- F. Place a drop of loctite (B) on both of the BHSCS. Place another drop of loctite in the shaft (where each SHCS will be tightened into).
- G. Tighten both screws securely.
- H. Repeat steps 3E through 3G to install the other screws/washers.
- I. Turn the main power switch to the on (I) position.
- J. Test the unit to verify proper operation.



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Arc Trainer® Shroud

Kit No. 600AK025 - Left Shroud Kit
600AK027 - Right Shroud Kit

Installation Instructions

NOTE: This instruction sheet describes how to replace the shrouds in the Arc Trainer 600A/610A.

TOOLS REQUIRED

- Cloth or rag
- 6" Phillips screwdriver
- 3/16" Allen wrench

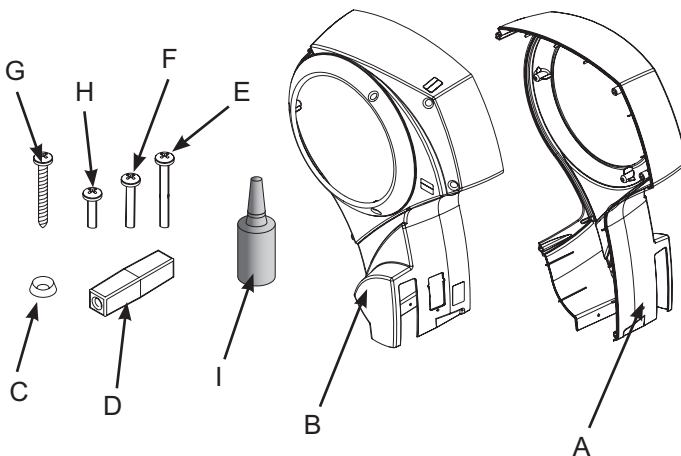
1. Read and understand all instructions thoroughly before installing this kit.

2. Verify you received the appropriate kit.

- A. 600AK025 Left shroud
- B. 600AK027 Right shroud

3. Verify kit contents. See Figure 1.

- A. Right shroud (1), 600A-333 (600AK027)
- B. Left shroud (1), 600A-334 (600AK025)
- C. Nylon countersunk washer (2), HS100000
- D. Cover insert (5), 600A-336
- E. Screw 10-24 x 1.00 (1, 600AK025 only), HT572517
- F. Screw 8-16 x .75 (7), HT552515
- G. Screw #8 x .875 (1), HT552516
- H. Screw 10-24 x .50, HT512512
- NOTE:** Qty for 600AK025 = 3
Qty for 600AK027 = 4
- I. Loctite #242 (1), YA000201



NOTE: You will receive either A or B.

Figure 1

4. Elevate the unit and disconnect the power source.

A. Elevate the unit to a minimum of level 7 incline.

B. While the unit is elevated, turn the main power switch to the off (0) position and unplug the power cord from the power outlet.

! WARNING: Disconnect the power cord before continuing this procedure. Keep wet items away from inside parts of the unit. Electrical shock could occur even if the unit is unplugged.

5. Remove the access cover.

A. Using a Phillips screwdriver, remove the two lower screws (one screw on each side), securing the access cover. See Figure 2.

B. Remove the two upper screws (one screw on each side), securing the access cover.

C. Remove the Access cover.

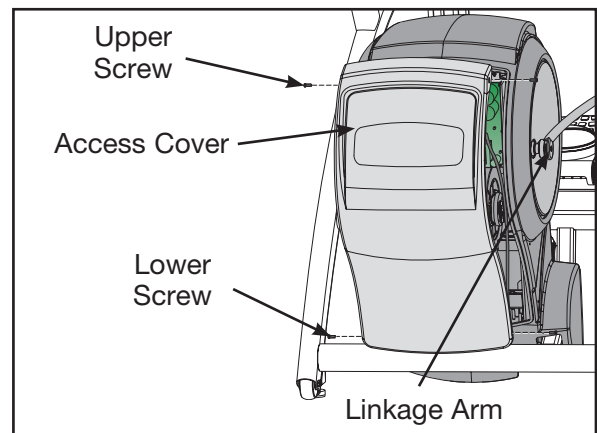


Figure 2

6. Remove the linkage arm (front end).

A. Using a 3/16" Allen wrench, remove the SHCS, flat washer, cap and spacer securing the linkage arm. See figure 3.



- B.** Lay the linkage arm down on the frame.
NOTE: Place a cloth or rag in between the linkage arm and the frame to prevent scratches.

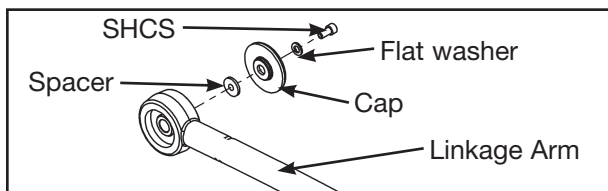


Figure 3

7. Remove the left shroud (600AK025).

- A.** Remove the ten screws and two washers securing side cover in place.

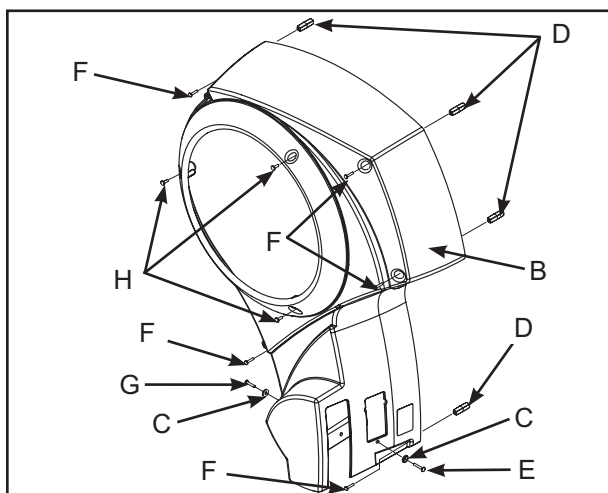


Figure 4

8. Remove the right shroud (600AK027).

- A.** Remove the ten screws and two washers securing side cover in place.

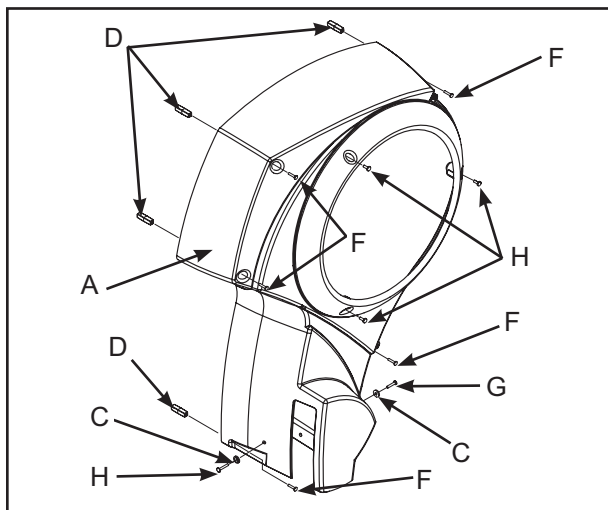


Figure 5

9. Replace cover inserts (if applicable).

- A.** Using a Phillips head screwdriver, remove the screw securing cover insert (item D) to shroud and remove cover insert.
B. Install new cover insert.
C. Using a Phillips head screwdriver, install screw removed in step A and tighten securely.

10. Install left shroud (600AK025).

- A.** Place left shroud in position on the cover inserts.
B. Using a Phillips head screwdriver, install the ten screws and two washers securing the side cover. See Figure 4
C. Securely tighten all screws.

11. Install right shroud (600AK027).

- A.** Place right shroud in position on the cover inserts.
B. Using a Phillips head screwdriver, install the ten screws and two washers securing the side cover. See Figure 5.
C. Securely tighten all screws.

12. Reinstall linkage arm.

- A.** Place a small amount of loctite (item I) to threads of SHCS removed in step 6A and place another drop of loctite into the shaft (where the SHCS will be tightened into).
B. Using a 3/16" Allen wrench, reinstall the parts removed in step 6A. See Figure 3.
C. Torque to 100 in. lbs.

13. Reinstall access cover.

- A.** While being sure not to pinch any cables, hold the access cover in place. See Figure 2.
B. Using a Phillips head screwdriver, install and tighten the two upper screws first (removed in step 5B). **NOTE:** Do not over tighten screws.
C. Install and tighten the two lower screws (removed in step 5A). **NOTE:** Do not over tighten screws.

14. Test unit for proper operation.

Arc Trainer® Elevation Motor Tube Replacement

Kit No. 600AK004

Installation Instructions

TOOLS REQUIRED

- Phillips head screwdriver
- 9/16" Open end wrench
- Tape measure

NOTE: This instruction sheet was written to replace the acme tube on the elevation motor without removing all of the shrouds. Only the elevation motor cover needs to be removed.

1. Read and understand all instructions thoroughly before installing this kit.

NOTE: Be sure to read step 5B. Do not remove the tube without counting the number of turns required to install the new tube properly.

2. Verify that you received the acme tube for the elevation motor.

! WARNING: Disconnect the power cord before beginning this procedure. Keep wet items away from inside parts of the unit. Electrical shock could occur even if the unit is unplugged.

3. Elevate the unit and disconnect the power source.

- A. Turn the main power switch above the power inlet to the on (1) position.
- B. Press Quick Start.
- C. Elevate the unit to level 3.
- D. Turn the main power switch to the off (0) position and unplug the power cord from the power outlet. **NOTE:** Do not press stop.

4. Remove the center (elevation motor) cover.

- A. Using a Phillips head screwdriver, remove the two screws securing the center cover in place.
- B. Remove the center cover

! WARNING: Do not touch components on the lower board. A charge can remain after unplugging the power cord and turning off the unit.

5. Replace the acme tube

- A. Using two 9/16" open end wrenches, remove the bottom bolt and nut securing the actuator. See Figure 2. **NOTE:** Do not lose the spacer between the bolt and the nut.

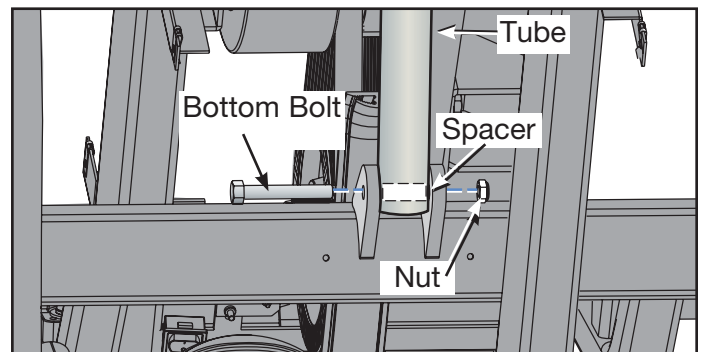


Figure 1

- B. Counting the number of turns, turn the tube counter clockwise until the acme nut disengages from the acme shaft. **NOTE:** You will need to know the exact number of turns when installing the new tube in the next step.
- C. Install the new acme tube by turning the tube clockwise the same number of turns that it took to remove the old tube in step 5B.
- D. Reconnect the actuator with the bolt, spacer and nut removed from step 6A. Tighten securely.
- E. Locate the crosstube just below the shrouds (shrouds with the yellow caution decal).
- F. Measure from the top of the crosstube straight up to the bottom of the shroud. On level 3, this measurement should be approximately 2". **NOTE:** This step verifies that the elevation motor is calibrated correctly.



6. Secure the center (elevation motor) cover.

- A.** Place the center cover in position.
- B.** Using a Phillips head screwdriver, attach the two screws removed in step 5A.

7. Test the unit for proper operation.

- A.** Connect the power cord into the power inlet and the power outlet.
- B.** Turn the main power switch to the on (I) position.
- C.** Operate the unit at all levels to verify proper operation.
- D.** Turn main power switch off to verify it is wired properly.

Arc Trainer® 600A/610A Lower Pulley

Kit No. 600AK014

Installation Instructions

NOTE: This instruction sheet describes how to replace the lower pulley on the Arc Trainer 600A/610A.

TOOLS REQUIRED

- 7/16" Socket wrench
- 3" Socket wrench extension

1. Read and understand all instructions thoroughly before installing this kit.
2. Verify kit contents. See Figure 1.

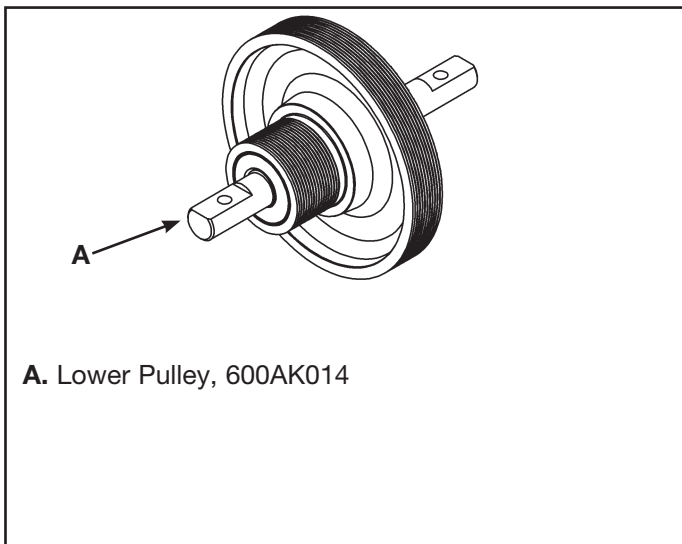


Figure 1

3. Disconnect the power source.

- A. Turn the main power switch to the off (0) position and unplug the power cord from the power outlet

! WARNING: Disconnect the power cord before continuing this procedure. Keep wet items away from inside parts of the unit. Electrical shock could occur even if the unit is unplugged.

4. Remove the access cover.

- A. Using a Phillips head screwdriver, remove the four screws and four washers securing the access cover. See Figure 2.
- B. Remove the access cover.

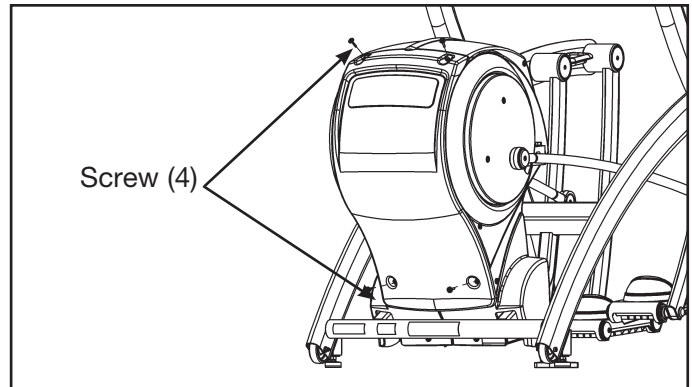


Figure 2

5. Remove the lower pivot assembly.

- A. Using a 7/16" socket wrench, remove the two screws, two lock washers and two flat washers from the lower pivot shaft.
- B. Remove the lower pivot assembly out of the secondary belt and from the frame. See Figure 3.

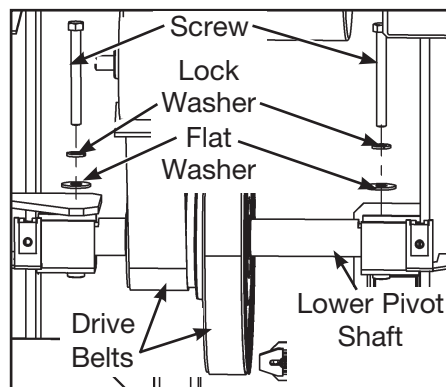


Figure 3



6. Installing the new lower pivot assembly.

- A. Slide the lower pivot assembly through both drive belts and into place on the frame.
- B. Confirm that both drive belts are straight and centered in place.
- C. Verify if the two spacers are present.
- D. If spacers are present then confirm that they are still in place under the lower pivot shaft.
NOTE: If spacers are not present then go to step 6E.
- E. Using a 7/16" socket wrench, tighten the two screws, two lock washers and two flat washers securing the lower pivot assembly in place.
- F. Using a straight edge, verify that both pulleys are aligned properly. See Figure 4. **NOTE:** The straight edge must be no more than 1/16" from pulley edge.

7. Attach the access cover.

- A. While being sure not to pinch any cables, hold the access cover in place. See Figure 2.
- B. Using a Phillips head screwdriver, tighten the four screws and four washers securing the access cover. See Figure 2.

8. Test for proper operation.

- A. Connect the power cord into the power outlet.
- B. Turn the main power switch above the power inlet to the on (I) position.
- C. Operate the unit at all levels to verify proper operation.

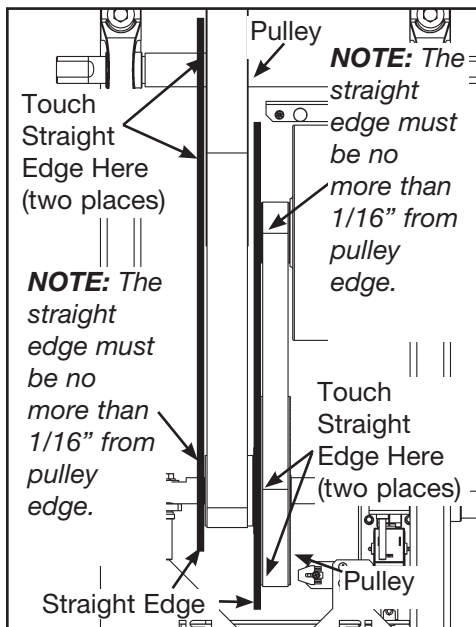


Figure 4

Arc Trainer® 600A/610A Primary Drive 16 Rib Belt

Kit No. 600AK020

Installation Instructions

NOTE: This instruction sheet describes how to replace the primary drive 16 rib belt on the Arc Trainer 600A/610A.

! WARNING: Disconnect the power cord before continuing this procedure. Keep wet items away from inside parts of the unit. Electrical shock could occur even if the unit is unplugged.

TOOLS REQUIRED

- Cloth or rag (2)
- 1/2" Socket wrench
- Phillips screwdriver
- 1/2" Open end wrench
- 3/16" Allen wrench
- 9/16" Socket wrench
- 7/16" Socket wrench
- 9/16" Open end wrench
- 3" Socket wrench extension
- 600AK012 (not supplied with this kit)

1. Read and understand all instructions thoroughly before installing this kit.

2. Verify kit contents. See Figure 1.

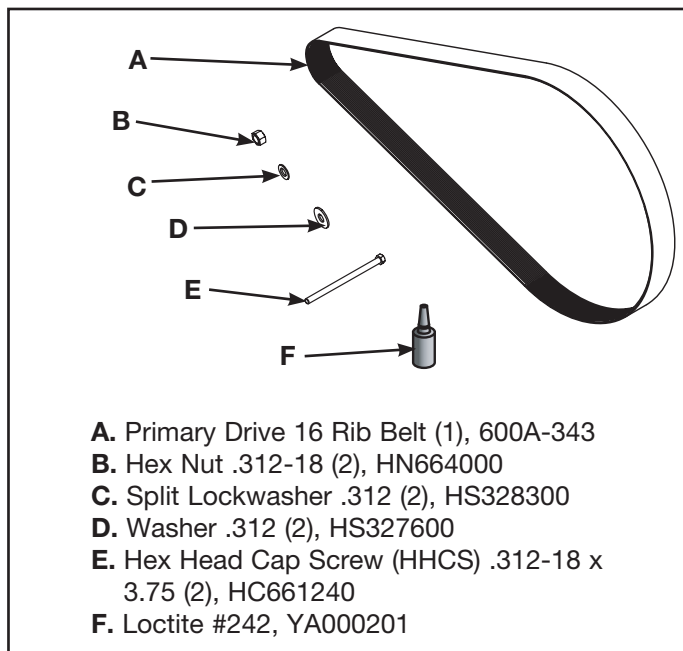


Figure 1

3. Disconnect the power source.

- A. Turn the main power switch to the off (0) position and unplug the power cord from the power outlet.

4. Remove the access cover.

- A. Using a Phillips head screwdriver, remove the four screws and four washers securing the access cover. See Figure 2.

- B. Remove the access cover.

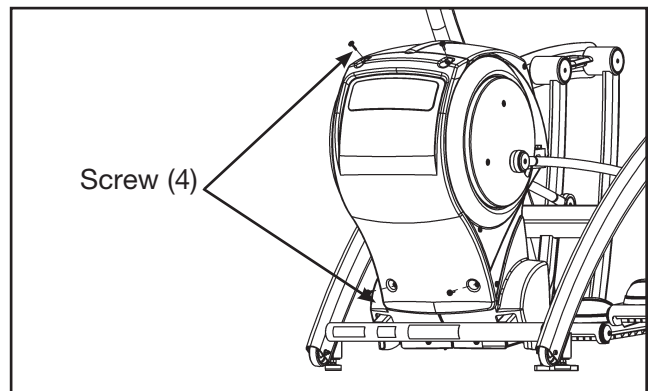


Figure 2

5. Detach the linkage arms.

- A. Using a 3/16" Allen wrench, remove the SHCS, washer, cap and spacer securing the linkage arm. See Figure 3. **NOTE:** Figure 3 shows the contents of the linkage cap kit that will be installed in step 19A.

- B. Lay the linkage arm down on the frame.
NOTE: Place a cloth in between the linkage arm and the frame to prevent scratches.

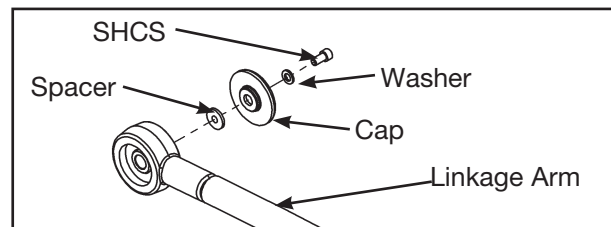


Figure 3



6. Remove the side covers.

- A. Remove the six screws and six washers securing each side cover in place. See Figure 4.

- B. Remove both side covers.
NOTE: The gasket will come off with one of the side covers.

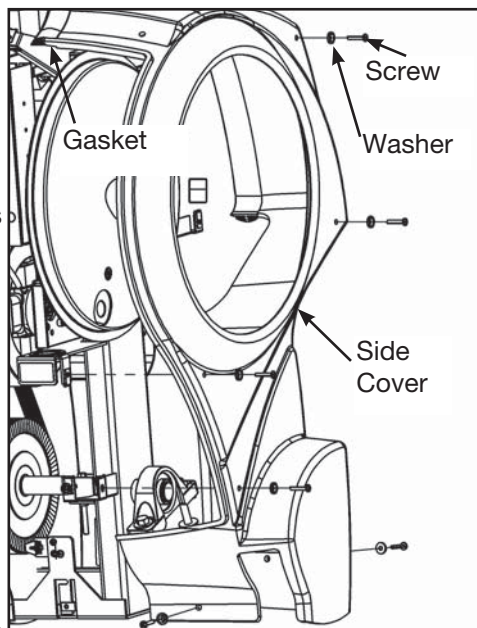


Figure 4

7. Remove the crank covers and the crank arm disk supports.

- A. Using a Phillips screwdriver, remove the three screws securing each crank cover (and remove the crank covers). See Figure 5.
- B. Using a Phillips screwdriver, remove the screw securing each crank arm disk support. See Figure 6.

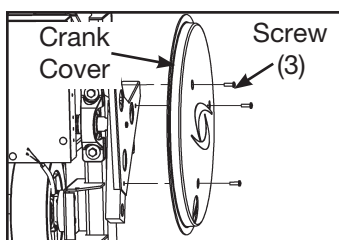


Figure 5

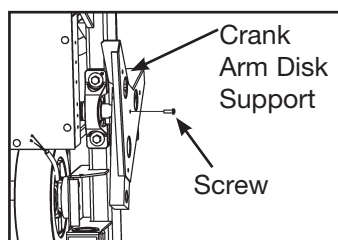


Figure 6

8. Remove the Idler Pulley.

- A. Using a 9/16" socket wrench, remove the two bolts and washers from the idler pulley.
- B. Remove the idler pulley from frame. See Figure 7. **NOTE:** Idler pulley is not needed with self-tensioning belt.

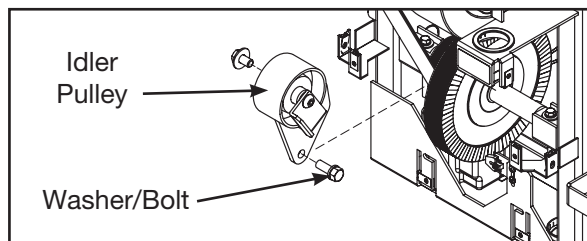


Figure 7

9. Remove HHCS on lower pulley.

- A. Using a 7/16" socket wrench with a 3" extension, remove the two HHCS, two lock washers and two flat washers from the lower pivot shaft. See Figure 8.

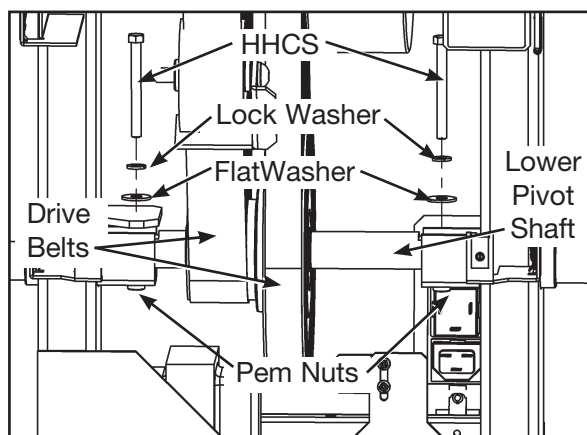


Figure 8

10. Remove the lower pivot shaft.

- A. Remove the lower pivot shaft and spacers. Set them aside, they will be reinstalled in step 15B.
- B. Reinstall the HHCS that was removed in step 9 and turn in at least 5 turns.
- C. Strike the HHCS head with a metal hammer to brake the pem nut free from the bracket and discard. See Figure 8.

11. Crank shaft assembly pillow block bolts.

- A. Using a 9/16" socket wrench and a 9/16" open wrench remove the two bolts, four washers and two nuts from the left pillow block. See Figure 9.

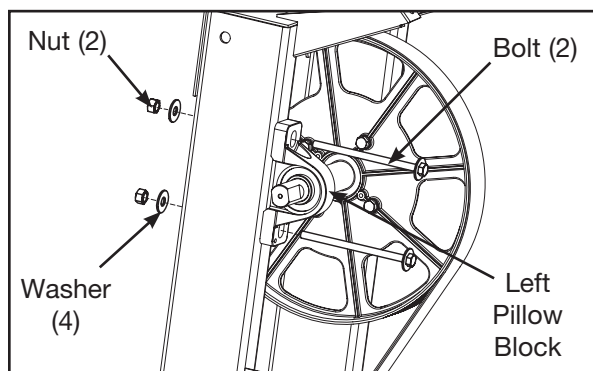


Figure 9

- B. Loosen the two bolts on the right pillow block. **NOTE:** Do not remove bolts.

12. Remove old primary drive belt.

- A. While pulling back on the left side of the crank shaft assembly, slide the belt past the pillow block.

13. Installing new primary drive belt.

- A. Install new primary drive belt by pulling back on the left side of crank shaft assembly and at the same time slide the belt past the pillow block.

14. Attach the crank shaft pillow block bolts.

- A. Slide alignment pin on pillow block into hole on frame
- B. Using a 9/16" socket wrench and a 9/16" open wrench, secure the two bolts, four washers and two nuts (removed in step 10A) to the left pillow block. See Figure 9.
- C. Secure bolts on the right pillow block that were loosened in step 11B.

15. Attach the lower pivot assembly.

- A. Place the two belts on the lower pivot shaft.
- B. Reinstall the two spacers that go under the lower pivot shaft (removed in step 10A).
- C. Attach the two new HHCS, two lockwashers, two washers and two hex nuts.

- D. Turn each HHCS in a couple of turns by hand.

- E. Place secondary drive belt on the (secondary pulley and then on the lower pulley.

- F. Place primary drive belt on the lower pulley and then stretch onto crank shaft pulley.

- G. Using a 1/2" socket wrench with a 3" extension tighten one of the HHCS a few turns then tighten the other HHCS a few turns. Alternate until both HHCS are secure.

- H. Using a straight edge, verify that both pulleys are aligned properly. See Figure 10. **NOTE:** The straight edge must be no more than 1/16" from pulley edge.

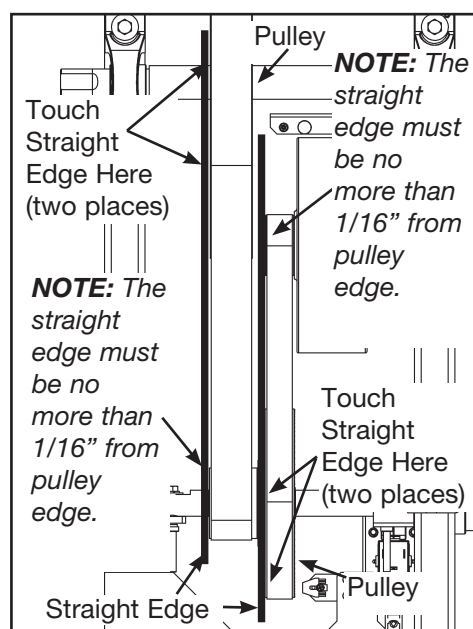


Figure 10

16. Attach the crank arm disk supports.

- A. Using a Phillips head screwdriver, attach the screw securing each crank arm disk support in place. See Figure 6.

17. Attach the crank covers.

- A. Place each crank cover in position.
- B. Using a Phillips head screwdriver, attach the three screws securing each crank cover in place. See Figure 5.

18. Attach the side covers.

- A. Place each side cover in position in the rubber gasket.

- B. Using a Phillips head screwdriver, tighten the six screws and six washers securing each side cover. See Figure 4.

19. Secure the linkage arms.

- A. Attach each linkage arm to each crank (removed in step 5). **NOTE:** *If you need a new linkage cap then order kit number 600AK012.*
- B. Place a drop of loctite (F) to threads on SHCS and into the shaft where the SHCS will be tightened into.
- C. Using a 3/16" Allen wrench, reinstall the SHCS, washer, cap and spacer (removed in step 5A). See Figure 3

20. Attach the access cover.

- A. While being sure not to pinch any cables, hold the access cover in place. See Figure 2.
- B. Using a Phillips head screwdriver, tighten the four screws and washers securing the access cover. See Figure 2.

21. Test unit for proper operation.

Arc Trainer® Pulley and Crank Shaft

Kit No. 600AK002

Installation Instructions

NOTE: This instruction sheet describes how to replace the crank shaft in the 600A/610A Arc Trainer.

TOOLS REQUIRED

- Cloth or rag (2)
- 3/8" Nut driver or socket wrench
- Phillips screwdriver
- 7/16" Socket wrench
- 1/8" Allen wrench
- 9/16" Socket wrench
- 3/16" Allen wrench
- 9/16" Open end wrench
- Loctite #242
- Torque wrench

NOTE: A cordless drill with a Phillips bit is recommended but not required.

If tension belt needs to be reset:

- 1/2" Socket wrench
- 1/2" Open end wrench
- 3/8" Square hole torque wrench

1. Read and understand all instructions thoroughly before installing this kit.

2. Verify kit contents.

- A.** Remove all packing and shipping supports.
- B.** Verify kit contents. See Figure 1.
- C.** Carefully inspect the pulley and crank shaft assembly for damage.

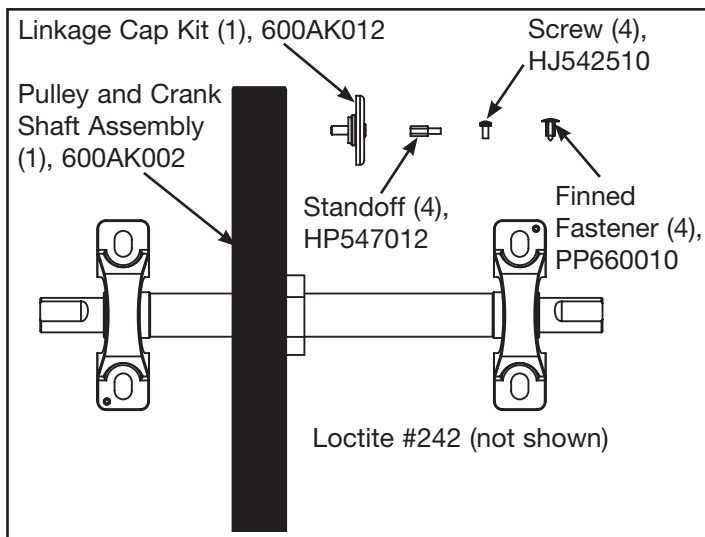


Figure 1

3. Elevate the unit and disconnect the power source.

- A.** Elevate the unit to a minimum of level 7 incline.
- B.** While the unit is elevated, turn the main power switch to the off (0) position and unplug the power cord from the power outlet.

! WARNING: Disconnect the power cord before continuing this procedure. Keep wet items away from inside parts of the unit. Electrical shock could occur even if the unit is unplugged.

4. Remove the access cover.

- A.** Using a Phillips screwdriver, remove the four screws and four washers securing the access cover. See Figure 2.

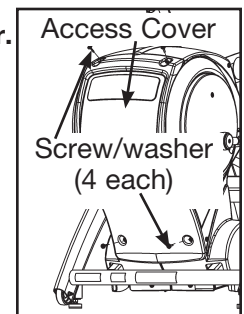


Figure 2

- B.** Remove the access cover.

! WARNING: Flywheel may be hot. Wait until it cools before servicing.

5. Detach the connecting rods.

- A.** Using a 3/16" Allen wrench, remove the SHCS and spacer securing the linkage arm. See figure 3. **NOTE:** Figure 3 shows the contents of the linkage cap kit that will be installed in step 23A.
- B.** Lay the linkage bar down on the frame. **NOTE:** Place a cloth in between the linkage arm and the frame to prevent scratches.

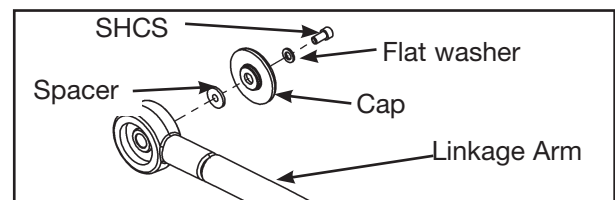


Figure 3



6. Remove the side covers.

- A. Remove the six screws and six washers securing each side cover in place. See Figure 4.

- B. Remove both side covers.
NOTE: The gasket will come off with one of the side covers.

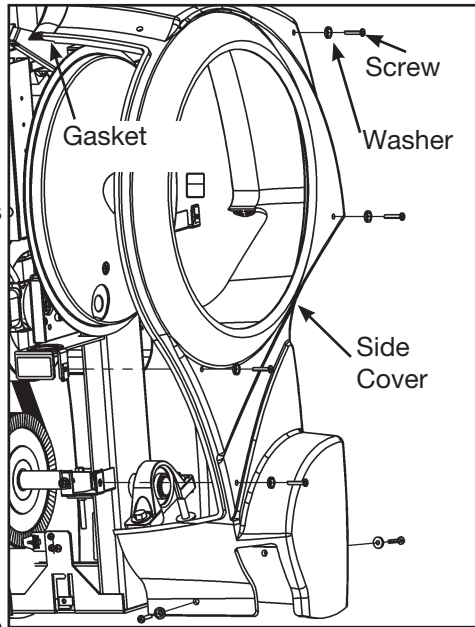


Figure 4

7. Remove the crank covers and the crank arm disk supports.

- A. Using a Phillips screwdriver, remove the three screws securing each crank cover (and remove the crank covers). See Figure 5.
- B. Using a Phillips screwdriver, remove the screw securing each crank arm disk support. See Figure 6.

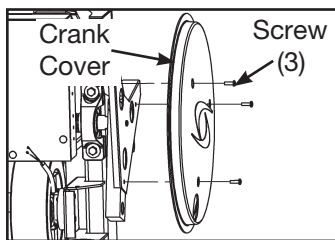


Figure 5

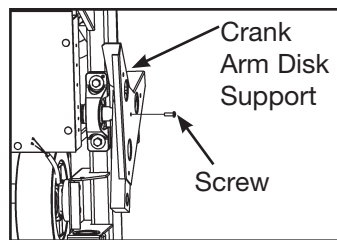


Figure 6

! WARNING: Failure to release the drive belt tension may cause potential injury and may damage the unit.

8. Release the drive belt tension.

- A. Using a 7/16" socket wrench, remove the two screws, two lock washers and two flat washers from the lower pivot shaft. See Figure 7.

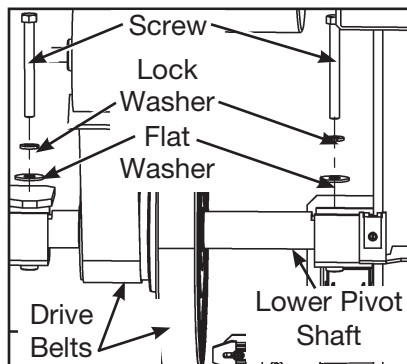


Figure 7

NOTE: Tension is now released. Leave lower pivot assembly in place.

! WARNING: Do not touch components on the lower board. A charge can remain after unplugging the power cord and turning off the unit.

9. Remove the lower board assembly.

- A. Pull out on the lower board shield (it will snap out). See Figure 8.
- B. Disconnect the elevation motor cable from the lower board. See Figure 9.
- C. Using a Phillips screwdriver, loosen or remove the top two screws from the lower board assembly and loosen the bottom two screws. See Figure 10.

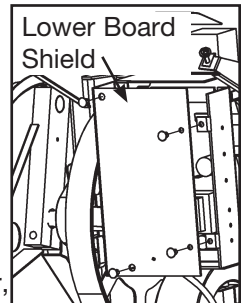


Figure 8

- D. Slide the lower board assembly to the left and off the two screws, then gently suspend it by the cables.

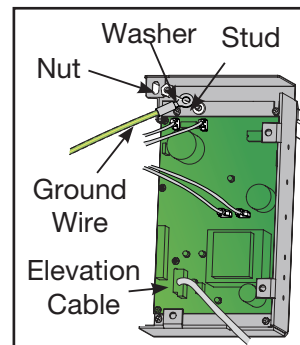


Figure 9

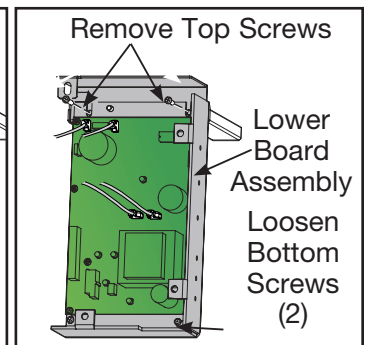


Figure 10

10. Remove the crank arms.

- A. Using a 9/16" socket wrench, loosen but do not remove the screw on each crank arm.
- B. Remove the crank arms.

11. Remove the crank shaft assembly.

- A. Using a 9/16" socket wrench and a 9/16" open end wrench, remove the two bolts, four flat washers and two nuts from each of the pillow blocks.
- B. Remove the crank shaft assembly along with the pillow blocks out of the unit.

12. Attach the crank shaft assembly.

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

- A. Place the assembly into the primary belt and slide the pins into the holes on the frame. See Figure 11. **NOTE:** You may need to tap the pins in so they are flush with the top of the pillow blocks.
- B. Using a 9/16" socket wrench and a 9/16" open end wrench, secure the two bolts, four flat washers and two nuts (removed in step 11B) to each pillow block. See Figure 11.

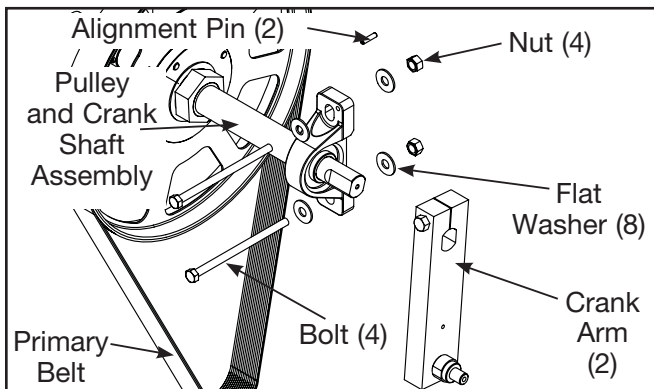


Figure 11

13. Secure the lower shaft assembly.

- A. Confirm that both drive belts are straight and centered in place.
- B. Confirm that the two spacers are still in place under the lower pulley shaft.
- C. Using a 7/16" socket wrench, tighten the two screws, two lock washers and two flat washers securing the lower pivot assembly in place.

14. Secure the crank arms.

- A. Slide each crank arm in place. See Figure 11. **NOTE:** The face of each crank arm should be flush with the end of each shaft.
- B. Using a 9/16" socket wrench, tighten the screw on each crank arm.

15. Attach the lower board assembly.

- A. Attach the four standoffs as shown in Figure 12.
- B. Slide the lower board assembly over the two bottom screws and to the right.

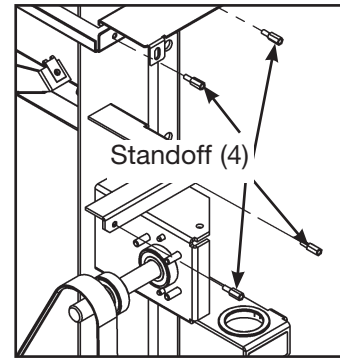


Figure 12

- C. Using a Phillips head screwdriver, attach the top two screws and tighten the two bottom screws securing the lower board assembly in place.
- D. Connect the elevation motor cable into the lower board. See Figure 9.
- E. Place the shield into position and secure using the four new finned fasteners supplied with this kit (the shield will snap in). See Figure 8.

16. Check the tension of the primary drive belt.

- A. Check to see if idler pulley is present. See Figure 13. **NOTE:** If idler pulley is present then perform steps 16B - 18B. If idler pulley is not present then skip steps 16B - 18B.
- B. Press on the primary belt with your hand. You should not feel any "give" in the primary belt. If the belt "gives", follow step 18 through 19. Otherwise, skip to step 20. **NOTE:** The secondary belt is self-tensioning.

17. Release the tension of the primary drive belt (if applicable).

- A. Using a 1/2" socket wrench, loosen the bottom screw on the idler pulley. See Figure 13.
- B. Using a 1/2" socket wrench, loosen the top screw on the idler pulley. See Figure 13.

18. Torque the primary belt (if applicable).

- A. Using a 3/8" square-hole torque wrench, pull up until the idler wheel rocks against the brake and is torqued to 75 ft-lbs. **NOTE:** Continue holding the torque wrench at 75 ft-lbs during the next step.
- B. While holding the torque wrench at 75 ft-lbs, use a 1/2" socket wrench to tighten the top screw on the idler pulley. See Figure 13.

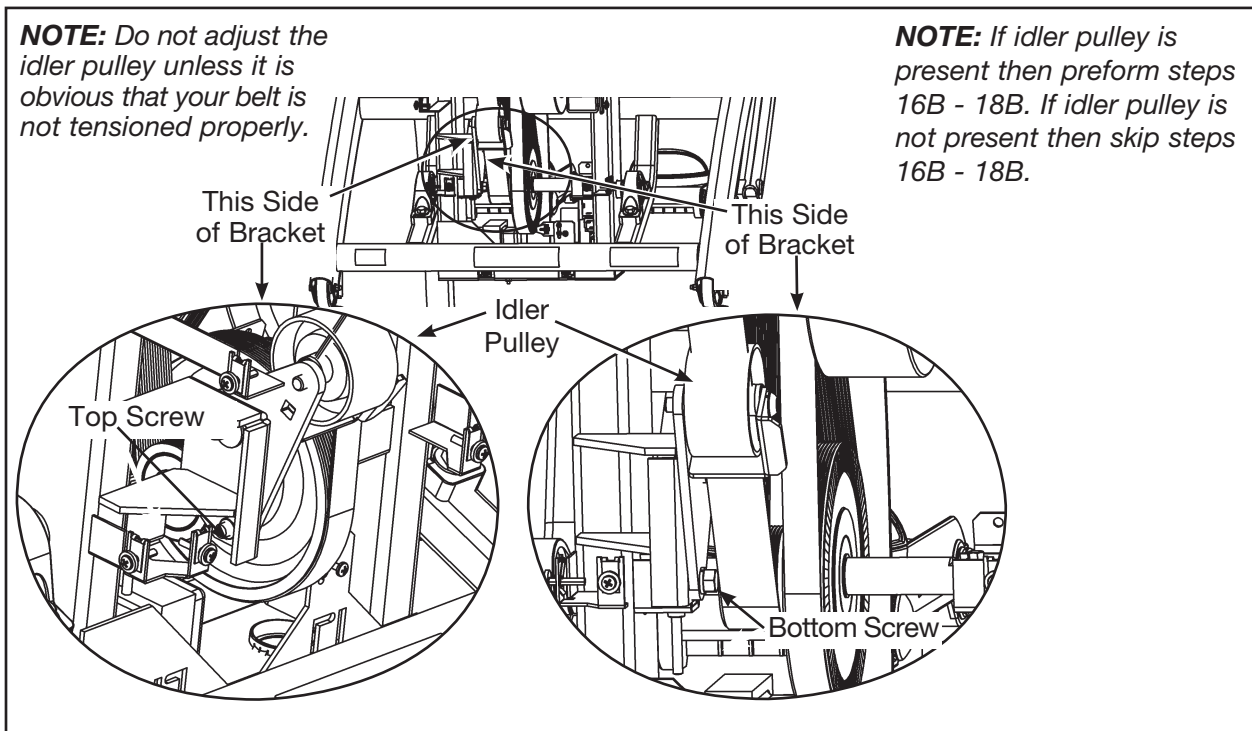


Figure 13

19. Attach the crank arm disk supports.

- A. Place #242 loctite on the screws securing crank arm.
- B. Using a Phillips head screwdriver, attach the screw securing each crank arm disk support in place. See Figure 6.

20. Attach the crank covers.

- A. Place each crank cover in position.
- B. Place #242 loctite on the screws securing crank arm.
- C. Using a Phillips head screwdriver, attach the three screws securing each crank cover in place. See Figure 5.

21. Attach the side covers.

- A. Place each side cover in position in the rubber gasket.
- B. Using a Phillips head screwdriver, tighten the six screws and six washers securing each side cover. See Figure 5.

22. Secure the connecting rods.

- A. Attach each connecting rod to each crank using the 600AK012 Linkage Cap kit. Follow the instructions in the kit.

23. Attach the access cover.

- A. While being sure not to pinch any cables, hold the access cover in place. See Figure 2
- B. Using a Phillips head screwdriver, tighten the four screws and washers securing the access cover. See Figure 2.

24. Test unit for proper operation.

Arc Trainer® Rear Foot Plate Arms

Kit No. 610AK010 - Left Rear Foot Plate Arm Kit
610AK011 - Right Rear Foot Plate Arm Kit

Installation Instructions

NOTE: This instruction sheet describes how to replace the front foot plate arms in the Arc Trainer 610A.

Tools Required

- 3/16" Allen wrench
- 7/32" Allen wrench

1. Read and understand all instructions thoroughly before installing this kit.

2. Verify kit contents. See Figure 1.

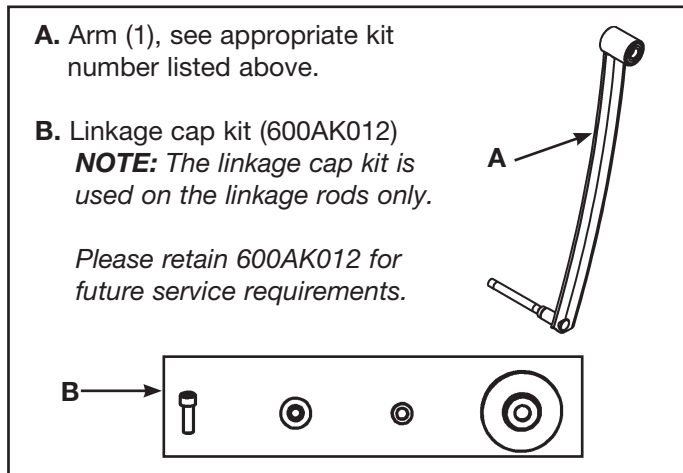


Figure 1

3. Remove the proper foot plate arm.

- Turn the main power switch above the power inlet to the off (0) position.
- Confirm you have the proper replacement foot plate arm. **NOTE:** The four foot plate arms are not interchangeable for proper operation.
- Using a 3/16" Allen wrench, remove the SHCS securing the rear foot plate arm (that you are replacing) to the foot plate.
- Using two 7/32" Allen wrenches, remove the two BHSCS and pivot shaft retainers securing Foot Plate Arm to the Pivot Cover and remove the arm from the frame. See Figure 2.

4. Install the new foot plate arm

- With an assistant, slide spacer and foot plate (removed in step 3C) onto the lower part of the new foot plate arm. Align the holes in the upper part of the arm with the holes in the frame/pivot cover.
- Secure the upper part of the arm by first. Place a drop of locite on both of the BHSCS (removed in step 3D). Place another drop of locite inside the shaft (where each BHSCS will be tightened into).
- Insert the shaft, pivot shaft retainers and BHSCS/locite that will secure the arm to the frame/pivot cover.
- Using two 7/32" Allen wrenches, tighten both screws securely. See Figure 2.
- Secure the foot plate by first placing a drop of locite on the SHCS (removed in step 3C) and in the shaft where the SHCS is tightened into).
- Secure the foot plate (using the SHCS and washer removed in step 3C) to the new foot plate arm.

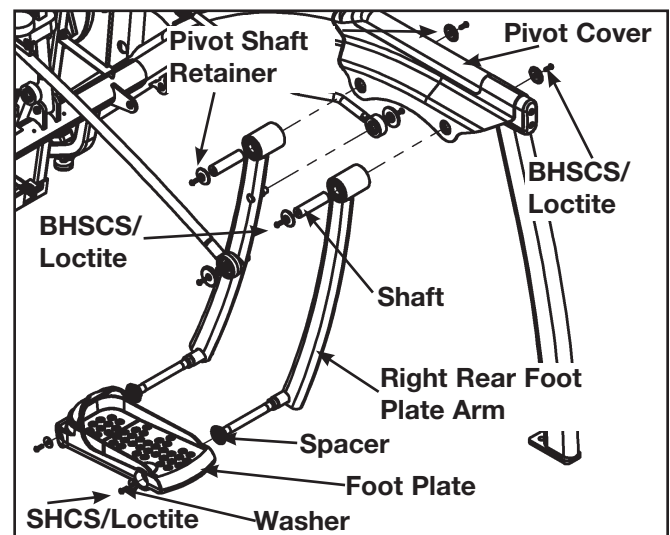


Figure 2

NOTE: Front arm is shown exploded in Figure 2 but is not removed for this kit.



5. Connect Power and test for proper operation.

- A.** Turn the main power switch to the on (I) position.
- B.** Test the unit to verify proper operation.

Arc Trainer® Right Foot Plate

Kit No. 610AK002

Installation Instructions

NOTE: This instruction sheet describes how to replace the foot plate on the Arc Trainer 600A/610A.

Tools Required

- 3/16" Allen wrench

1. Read and understand all instructions thoroughly before installing this kit.

2. Verify you received the following (see Figure 1):

- A. Right foot plate assembly (1), 610AK002 (this kit)
- B. Flat washer (4), HS307602
- C. SHCS .250-20 x .75 (2), HX622815
- D. Spacer (2), PL-17279
- E. Loctite (not shown), YA000201
- F. Wave washer (2), HS427100

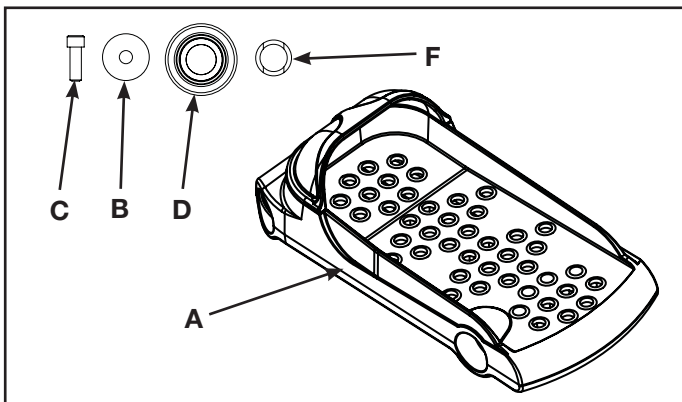


Figure 1 (right foot assembly)

3. Remove (right) foot plate assembly.

- A. Turn the main power switch above the power inlet to the off (O) position.
- B. Using a 3/16" Allen wrench, remove the two SHCS securing the (right) foot plate. **NOTE:** The right and left foot plates are not interchangeable.
- C. Remove all hardware securing the old foot plate.

4. Install new (right) foot plate assembly.

- A. Install the new spacers (D) and wave washers (F) onto the foot plate shaft as shown in Figure 2.
- B. Slide the new foot plate (A) onto the foot plate shaft.
- C. Place a drop of loctite (E) on one of the SHCS (C). Place another drop of loctite in the shaft (where the SHCS will be tightened into).
- D. Install two flat washers (B) and SHCS (C) and securely tighten.
- E. Repeat steps 4C and 4D for the other washers (B) and SHCS (C).

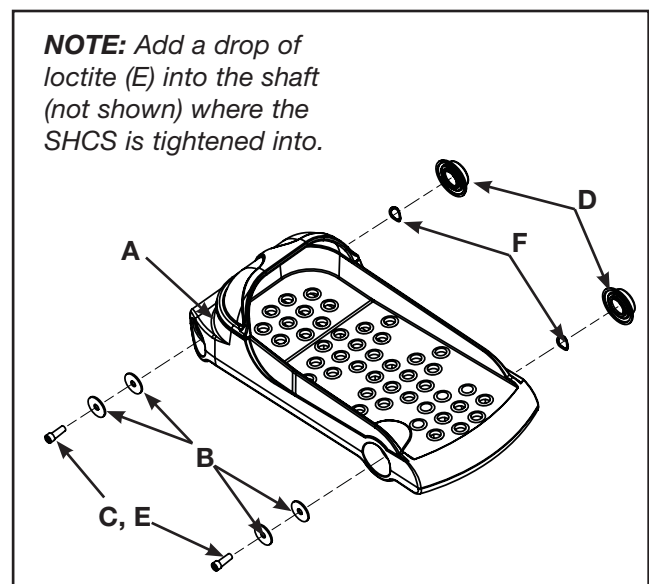


Figure 2 (right foot assembly)

- F. Turn the main power switch to the on (I) position.
- G. Test the unit to verify proper operation.



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Arc Trainer® 600A/610A Left Foot Plate

Kit No. 610AK003

Installation Instructions

NOTE: This instruction sheet describes how to replace the foot plate on the Arc Trainer 600A/610A.

Tools Required

- 3/16" Allen wrench

1. Read and understand all instructions thoroughly before installing this kit.

2. Verify you received the following (see Figure 1):

- A. Left foot plate assembly (1), 610AK003 (this kit)
- B. Flat washer (4), HS307602
- C. SHCS .250-20 x .75 (2), HX622815
- D. Spacer (2), PL-17279
- E. Loctite (not shown), YA000201
- F. Wave washer (2), HS427100

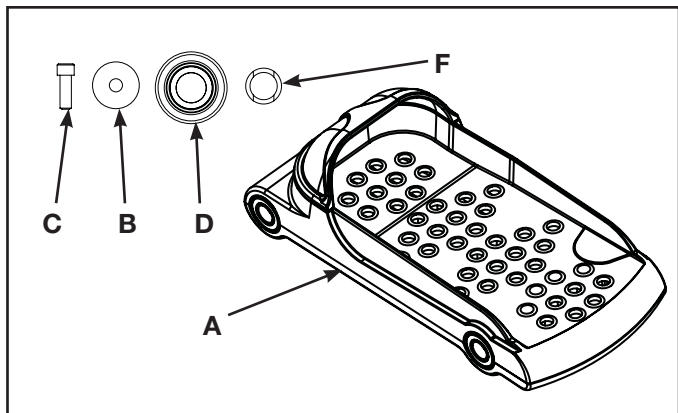


Figure 1 (left foot assembly)

3. Remove (left) foot plate assembly.

- A. Turn the main power switch above the power inlet to the off (O) position.
- B. Using a 3/16" Allen wrench, remove the two SHCS securing the (left) foot plate. **NOTE:** The right and left foot plates are not interchangeable.
- C. Remove all hardware securing the old foot plate.

4. Install new (left) foot plate assembly.

- A. Install the new spacers (D) and wave washers (F) onto the foot plate shaft as shown in Figure 2.
- B. Slide the new foot plate (A) onto the foot plate shaft.
- C. Place a drop of loctite (E) on one of the SHCS (C). Place another drop of loctite in the shaft (where the SHCS will be tightened into).
- D. Install two flat washers (B) and SHCS (C) and securely tighten.
- E. Repeat steps 4C and 4D for the other washers (B) and SHCS (C).

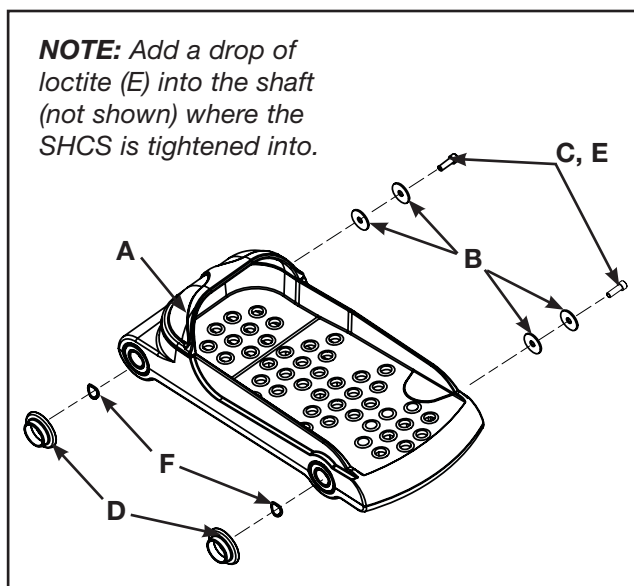


Figure 2 (left foot assembly)

- F. Turn the main power switch to the on (I) position.
- G. Test the unit to verify proper operation.



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Arc Trainer® Foot Plate Wave Washer

Kit No. 610AK020

Installation Instructions

NOTE: This instruction sheet describes how to install the foot plate wave washers on the Arc Trainer 600A/610A.

Tools Required

- 3/16" Allen wrench

1. Read and understand all instructions thoroughly before installing this kit.

2. Verify you received the following:

- A. Wave washer (4), HS427100
- B. Loctite YA000201

3. Remove (right) foot plate assembly.

A. Turn the main power switch above the power inlet to the off (O) position.

B. Using a 3/16" Allen wrench, remove the two SHCS securing the (right) foot plate.

C. Remove flat washers and foot plate.
NOTE: Do not remove spacer.

D. Repeat steps 3B-3C for left foot plate

4. Install (right) foot plate assembly.

A. Install one wave washer (A) onto each foot plate shaft as shown in Figure 1.

B. Slide the foot plate onto the foot plate shaft.

C. Place a drop of loctite (B) on one of the SHCS. Place another drop of loctite in the shaft (where the SHCS will be tightened into).

D. Install flat washers and SHSC (removed in steps 3B and 3C) and securely tighten.

E. Repeat steps 4C and 4D for installing the other flat washer and SHCS.

F. Repeat steps 4A-4E for left foot plate.

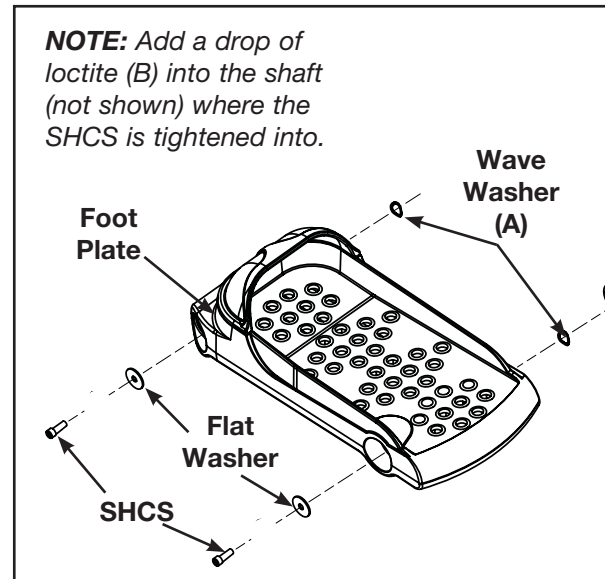


Figure 1 (right foot assembly)

G. Turn the main power switch to the on (I) position.

H. Test the unit to verify proper operation.



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Arc Trainer® Main Frame Assembly

Kit No. 610AK019-4
Kit No. 630AK019-4

Installation Instructions

NOTE: This instruction sheet describes how to replace the main frame assembly in the Arc Trainer 610A.

Tools Required

- 3/16" Allen wrench
- 7/32" Allen wrench (2)
- 9/16" Socket
- 9/16" Open end wrench
- 6" Phillips screwdriver
- Rubber mallet
- Side cutter
- Punch
- Torque wrench

NOTE: Two people is recommended for this procedure.

1. Read and understand all instructions thoroughly before installing this kit.

2. Verify kit contents.

- A. Main Frame Assembly (1)
- B. Foot Pad (2), 11090-405
- C. CE Decal (1), CM000242
- D. Loctite 242 (2), YA000201

3. Elevate the unit and disconnect the power source.

- A. Elevate the unit to a minimum of level 7 incline.

- B. While the unit is elevated, turn the main power switch to the off (0) position and unplug the power cord from the power outlet.

4. Remove console

- A. Using a 7/32" Allen wrench, remove the four .375-16 x 1.50 BHCS (Button Head Cap Screw) and four washers. See Figure 1.
- B. Unplug upper display cable from lower display cable.
- C. Set console aside. **NOTE:** Console will be attached to the new frame later.

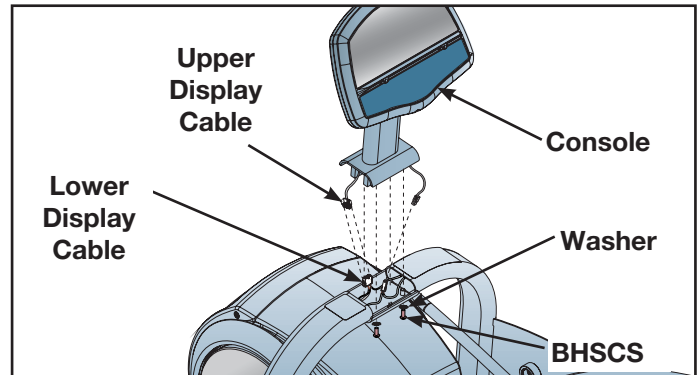


Figure 1

5. Remove lower left linkage rod.

- A. Using a 3/16" Allen wrench, remove each SHCS (Socket Head Cap Screw), spacer, cap and washer securing both ends of the lower linkage rod. See Figure 2
- B. Remove lower linkage rod and set aside along with hardware removed in step 5A. **NOTE:** These will be attached to the new frame later.
- C. Repeat steps 5A and 5B to remove other linkage rod.

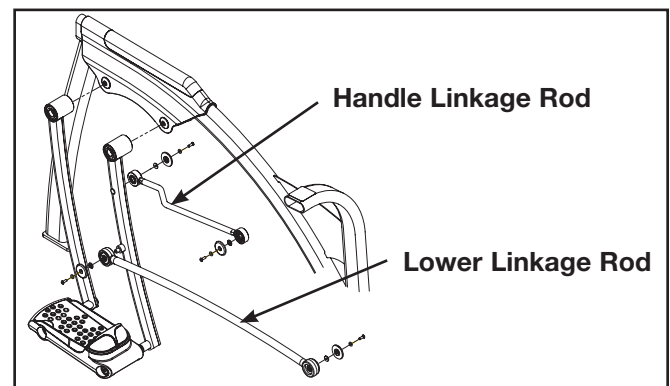


Figure 2

6. Remove handle linkage rod and arm handle.

- A. Using a 3/16" Allen wrench, remove each SHCS, spacer, cap and washer securing both ends of the linkage rod. See Figure 2.



- B. Remove handle linkage rod and set aside along with hardware removed in step 6A. **NOTE:** These will be attached to the new frame later.
- C. Unplug the heart rate cable. See Figure 3.

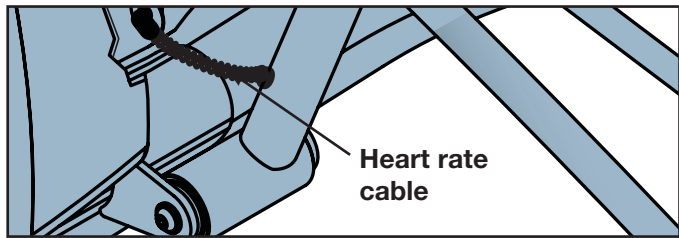


Figure 3

- D. Using two 7/32" Allen wrenches, remove the two BHSCS, washers and pivot pin securing the arm handle onto the frame. **NOTE:** You may need a rubber mallet and punch to remove the pivot pin. See Figure 4
- E. Carefully remove the arm and set aside along with hardware removed in step 4A. **NOTE:** These will be attached to the new frame later.

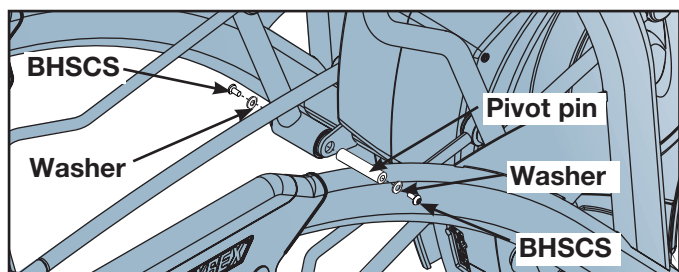


Figure 4

- F. Repeat steps 6A-6E to remove other handle linkage rod and arm handle.

7. Remove left front foot plate arm.

- A. Using two 7/32" Allen wrenches, remove the inside BHSCS and retainer. While holding the left front foot plate arm remove the pivot pin. **NOTE:** You may need a rubber mallet and punch to remove the pivot pin.
- B. Carefully remove the left front foot plate arm and tilt forward to lay on the floor. See Figure 5.

8. Remove left rear foot plate arm.

- A. Using two 7/32" Allen wrenches, remove the inside BHSCS and retainer. While holding the left rear foot plate arm remove the pivot pin. **NOTE:** You may need a rubber mallet and punch to remove the pivot pin.

- B. Carefully remove the left foot plate arm assembly and set aside. See Figure 5.

9. Remove left pivot cover.

- A. Remove left pivot cover and set aside. See Figure 5.

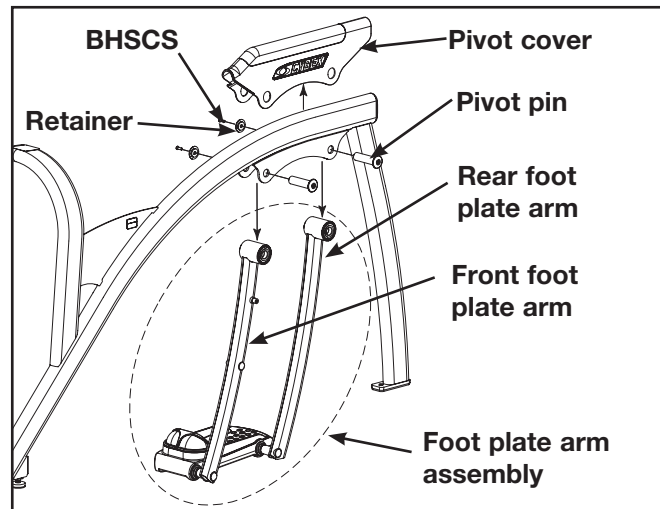


Figure 5

10. Install left pivot cover.

- A. Place pivot cover on frame. See Figure 5

11. Install left foot plate arm assembly.

- A. Place foot plate arm assembly on floor and raise rear foot plate arm so that the holes align with holes in frame and pivot cover.
- B. Insert pivot pin (removed in step 8A). See Figure 5.
- C. Place a drop of loctite #242 on the BHSCS (removed in 8A). Place another drop of loctite #242 inside the shaft (where the BHSCS will be tightened into).
- D. Install BHSCS and retainer (removed in step 8A) and tighten using two 7/32" Allen wrenches. See Figure 5.
- E. Raise front footplate arm so that the holes align with holes in frame and pivot cover.
- F. Insert pivot pin (removed in step 7A). See Figure 5.
- G. Repeat steps 11C-11D.

12. Remove right foot plate arm assembly and right pivot cover.

A. Repeat steps 7-9. See Figure 5.

13. Install right foot plate arm assembly and right pivot cover.

A. Repeat steps 10 and 11. See Figure 5.

14. Remove the access cover.

A. Using a Phillips screwdriver, remove the two lower screws (one screw on each side), securing the access cover. See Figure 6.

B. Remove the two upper screws (one screw on each side), securing the access cover.

C. Remove the Access cover.

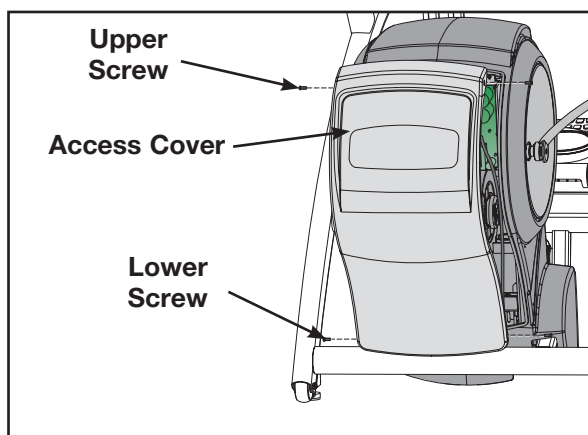


Figure 6

15. Remove the left and right crank covers.

A. Using a Phillips screwdriver, remove the screws securing the crank covers and remove. See Figure 7.

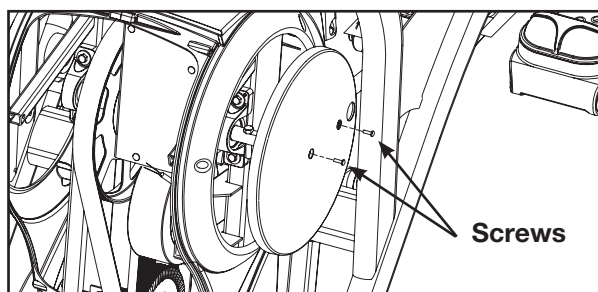


Figure 7

16. Remove the left shroud.

A. Using a long phillips head screwdriver remove the ten screws and two washers securing left shroud cover in place. See Figure 8.

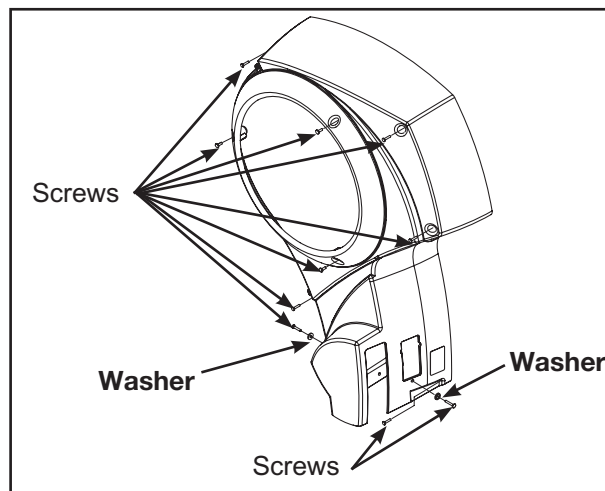


Figure 8

17. Remove the right shroud.

A. Using a long phillips screwdriver remove five screws and two washers securing right shroud cover in place. See Figure 9.

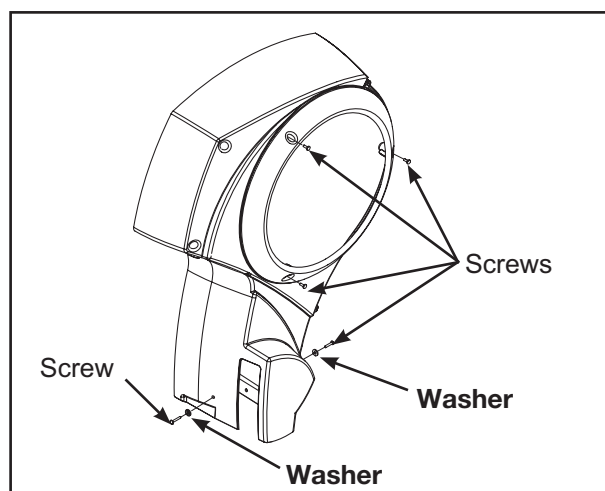


Figure 9

18. Remove controller cover.

A. Pull out on the controller cover (it will snap out). See Figure 10.

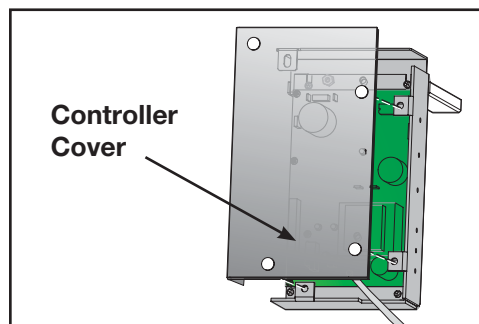


Figure 10

19. Unplug and remove the display cable.

- A. Unplug the display cable from the control board and remove cable from drive frame assembly. See Figure 11.

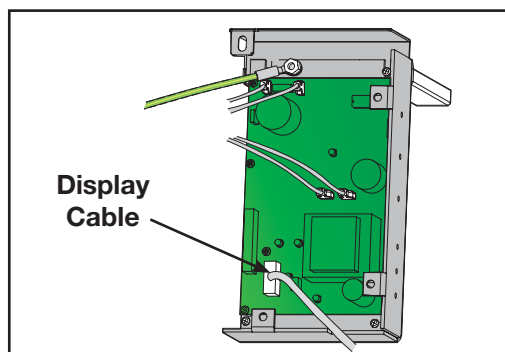


Figure 11

20. Remove drive frame assembly.

- A. Using a 9/16" socket and open end wrench, remove HHCS (Hex Head Cap Screw), sleeve and locknut securing the elevation motor to frame. See Figure 12.
- B. Using a 9/16" socket and open end wrench, remove four washers and nuts from HHCS holding the two pillow blocks of the drive frame assembly to the main frame. See Figure 12
- C. Carefully lift drive frame assembly off main frame. See Figure 12. **NOTE:** Two persons is strongly recommended to do this procedure.

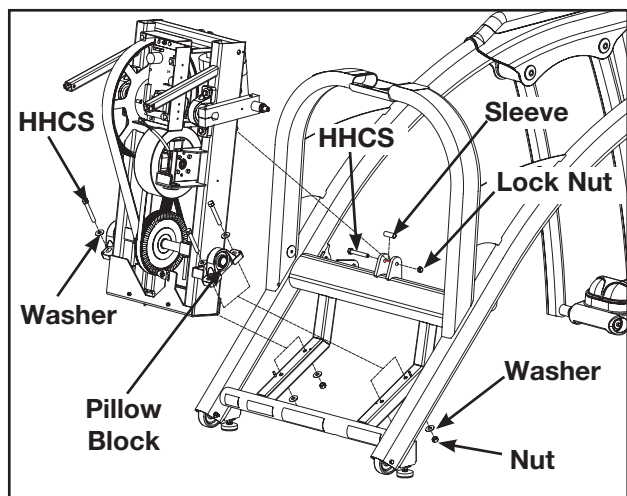


Figure 12

21. Attach drive frame assembly.

- A. With two assistants lifting drive frame assembly align pin in pillow blocks with holes in frame and set in place.

- B. Using a 9/16" socket and open end wrench, attach four washers and nuts (removed in step 20B) to HHCS and tighten securing two drive frame assembly pillow blocks to main frame. See Figure 12.

- C. Using a 9/16" socket and open end wrench, attach HHCS, sleeve and locknut (removed in step 20A) and tighten securing elevation motor to frame. See Figure 12.

22. Attach display cable to control board.

- A. Route display cable through holes in drive frame assembly following existing wires to control board.
- B. Plug display cable in to display jack on control board. See Figure 11.

23. Attach controller cover.

- A. Place cover in position and secure by pushing the finned fasteners in place. See Figure 10.

24. Install right shroud cover.

- A. Using a Phillips head screwdriver install the five screws and two washers (removed in step 17A) securing right shroud cover in place. See Figure 9.

25. Install left shroud cover.

- A. Using a long Phillips head screwdriver install the ten screws and two washers (removed in step 16A) securing left shroud cover in place. See Figure 8.

26. Install the left and right crank covers.

- A. Using a Phillips screwdriver, install the screws (removed in step 15A) securing the crank covers. See figure 7.

27. Install access cover.

- A. While being sure not to pinch any cables, hold the access cover in place. See Figure 6.
- B. Using a Phillips head screwdriver, install and tighten the two upper screws first (removed in step 14B). **NOTE:** Do not over tighten screws.
- C. Install and tighten the two lower screws (removed in step 14A). **NOTE:** Do not over tighten screws.

28. Reinstall Left arm handle.

- A. Place Left arm handle in position and align with holes on frame.
- B. Insert pivot pin (removed in step 6D). See Figure 4. **NOTE:** You may need a rubber mallet to install the pivot pin.
- C. Place a drop of loctite #242 on the BHSCS (removed in step 6D). Place another drop of loctite #242 inside pivot pin shaft (where the BHSCS will be tightened into).
- D. Using two 7/32" Allen wrenches, install the two BHSCS and washers (removed in Step 6D). See Figure 4.
- E. Repeat steps 28A-28D for right arm handle.

29. Reinstall left handle linkage rod.

- A. Properly position the left handle linkage rod in place.
- B. Place a drop of loctite #242 on the SHCS that will secure the left handle linkage rod and place another drop of loctite into the shaft (where the SHCS will be tightened into).
- C. Using a 3/16" Allen wrench, install SHCS, spacer, cap and washer (removed in steps 6A-6B). See Figure 13. **NOTE:** SHCS must be tightened to a minimum of 90 inch-pounds.
- D. Repeat steps 29A-29C for right handle linkage rod.

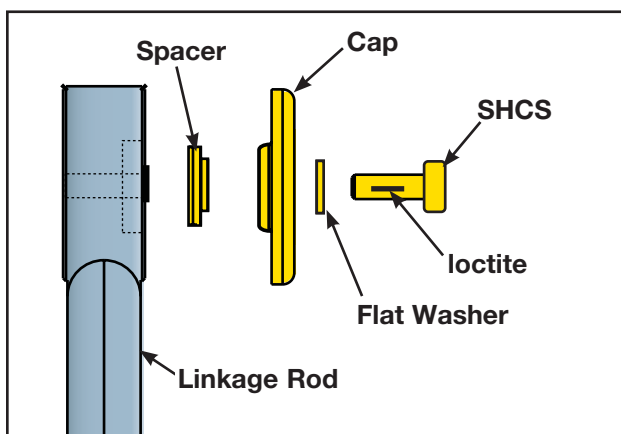


Figure 13

30. Reinstall lower left linkage rod.

- A. Properly position the lower left linkage rod in place.
- B. Place a drop of loctite #242 on the SHCS that will secure the lower left linkage rod and place another drop of loctite into the shaft (where the SHCS will be tightened into).
- C. Using a 3/16" Allen wrench, install SHCS, spacer, cap and washer (removed in steps 5A-5B). See Figure 13. **NOTE:** SHCS must be tightened to a minimum of 90 inch-pounds.
- D. Repeat steps 30A-30C for lower right linkage rod.

31. Attach Console.

- A. Plug upper display cable into lower display cable. See Figure 1. **NOTE:** Ensure cable connectors are securely fastened.
- B. Place the console in the correct position on the main frame assembly and hand thread each of the four BHSCS and washers. See Figure 1. **NOTE:** Confirm that no cables are pinched lowering the console.
- C. Using a 7/32" Allen washer securely fasten the four BHSCS.

32. Connect power and test for proper operation.

- A. Turn the main power switch to the on (I) position.
- B. Test the unit to verify proper operation.



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Arc Trainer® Linkage Rod

Kit No. 600AK006 - Left Linkage Rod Kit
600AK007 - Right Linkage Rod Kit

Installation Instructions

NOTE: This instruction sheet describes how to replace the linkage rod in the Arc Trainer 600A/610A.

Tool Required

- 3/16" Allen wrench
- Phillips screwdriver

1. Read and understand all instructions thoroughly before installing this kit.
2. Verify kit contents. See Figure 1.

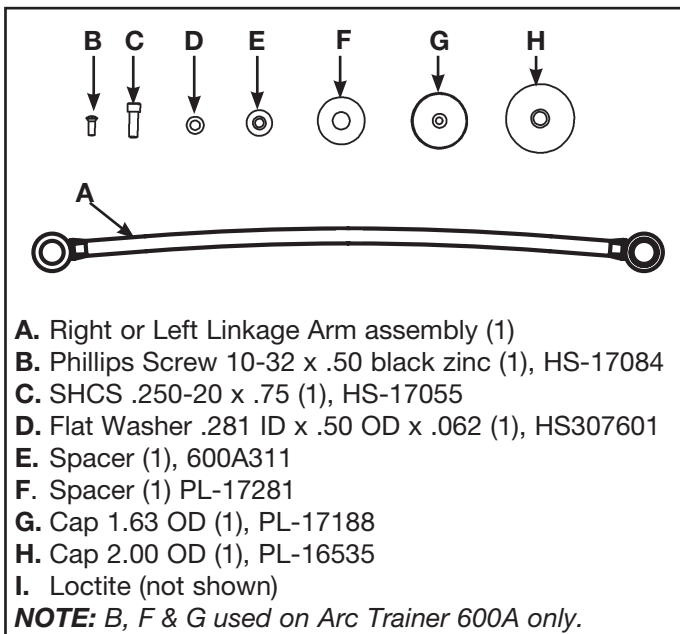


Figure 1

3. Replace the appropriate linkage rod assembly.

- A. Turn the main power switch above the power inlet to the off (O) position.
- B. Confirm you have the proper replacement linkage rod. **NOTE:** The right and left linkage rods are not interchangeable for proper operation.
- C. Remove both screws securing linkage rod.

- D. Properly position the new linkage rod.
- E. Place a drop of loctite (I) on the SHCS (C) and place another drop of loctite (I) into the shaft (where the SHCS will be tightened into).
- F. Install the spacer (E), cap (H), flat washer (D) and SHCS (C, I) as shown in Figure 2. Tighten securely.
- G. Place a drop of loctite (I) on the Phillips screw (B) and place another drop of loctite (I) on the shaft (where the Phillips screw will be tightened into).
- H. Install the Phillips screw (B, I), spacer (G) and the other spacer (F - between linkage rod arm and foot plate arm) as shown in Figure 2.
- I. Tighten all screws securely. **NOTE:** SHCS must be tightened to a minimum of 100 inch-pounds.

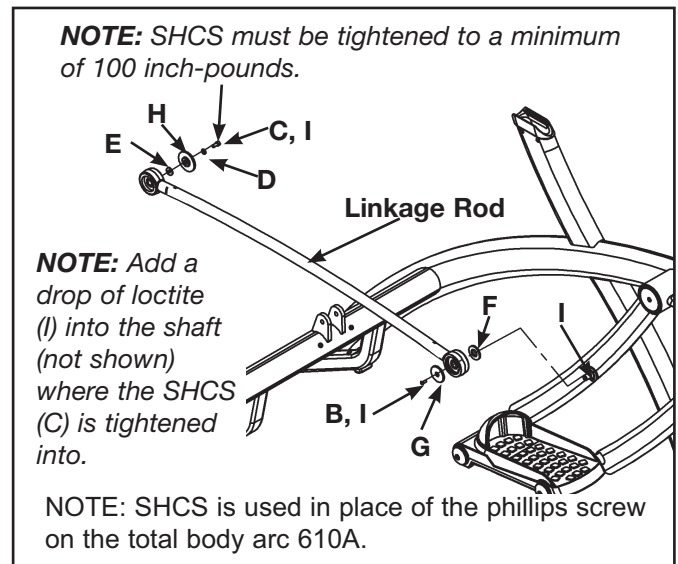


Figure 2 (Right Linkage Rod - User Position)

4. Connect Power and test for proper operation.

- A. Turn the main power switch to the on (I) position.
- B. Test the unit to verify proper operation.



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Arc Trainer® Linkage Cap

Kit No. 600AK012

Installation Instructions

NOTE: This instruction sheet describes how to replace the linkage cap in the Arc Trainer 600A/610A.

TOOLS REQUIRED

- 3/16" Allen wrench

1. Read and understand all instructions thoroughly before installing this kit.
2. Verify kit contents. See Figure 1.

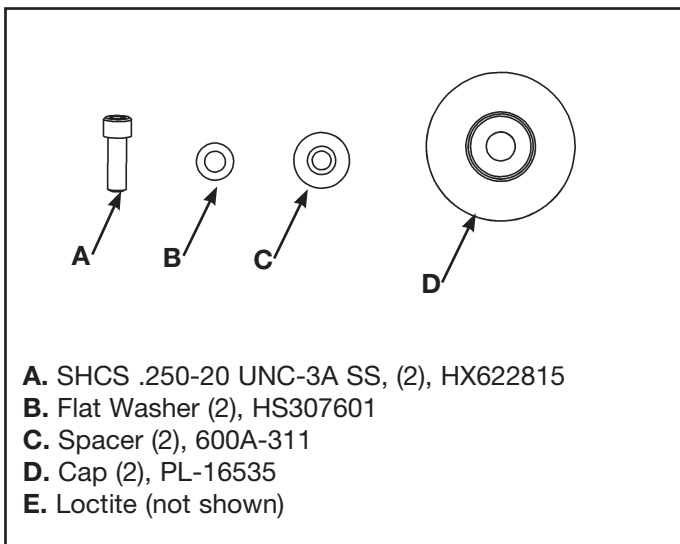


Figure 1

3. Replace the linkage caps.

- A. Turn the main power switch above the power inlet to the off (0) position.
- B. Using a 3/16" Allen wrench, remove the SHCS and spacer securing the linkage arm.
- C. Place a drop of loctite (E) on the new SHCS (A) and place another drop of loctite (E) into the shaft (where the SHCS will be tightened into).

- D. Install the new spacer (C), cap (D), flat washer (B) and SHCS (A, E) as shown in Figure 2.

NOTE: SHCS must be tightened to a minimum of 90 inch-pounds.

- E. Repeat steps 3B - 3D for the other side.

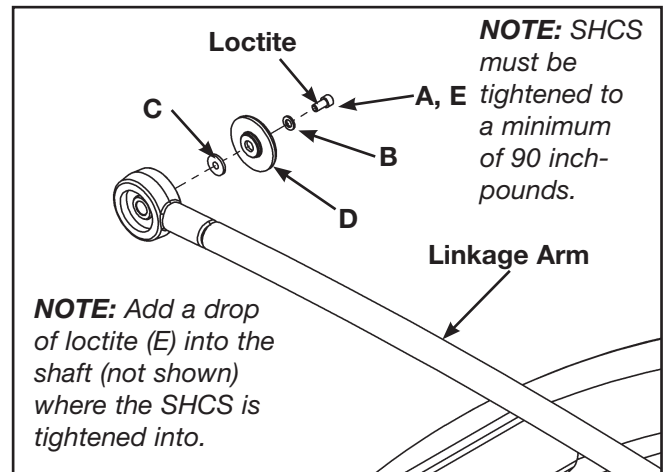


Figure 2

4. Connect Power and test for proper operation.

- A. Turn the main power switch to the on (I) position.
- B. Test the unit to verify proper operation.



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Arc Trainer® Hardware Pack

Kit No. 610AK017

Instruction Sheet

Tools Required

- Phillips head screwdriver
- 7/32" Hex key (supplied with kit)
- 3/16" Hex key (supplied with kit)

1. Read and understand all instructions thoroughly before installing this kit.

2. Verify kit contents. See Figure 1.

3. Install the hardware pack.

- A. Install the hardware as shown in Figure 2. Refer to Chapter 5 of the Arc Trainer 610A Owner's Manual part number 5610A-4 for detailed instructions. **NOTE:** Place a drop of loctite (10) on the SHCSC (7) and place another drop of loctite into the shaft where the SHCSC (10) will be tightened into).

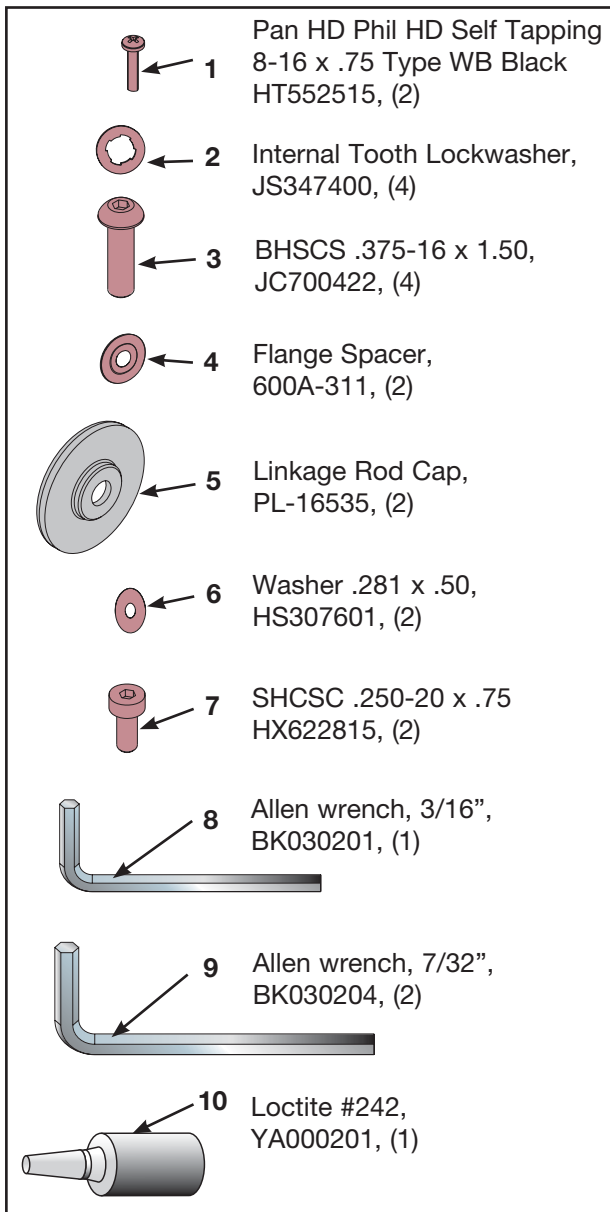


Figure 1

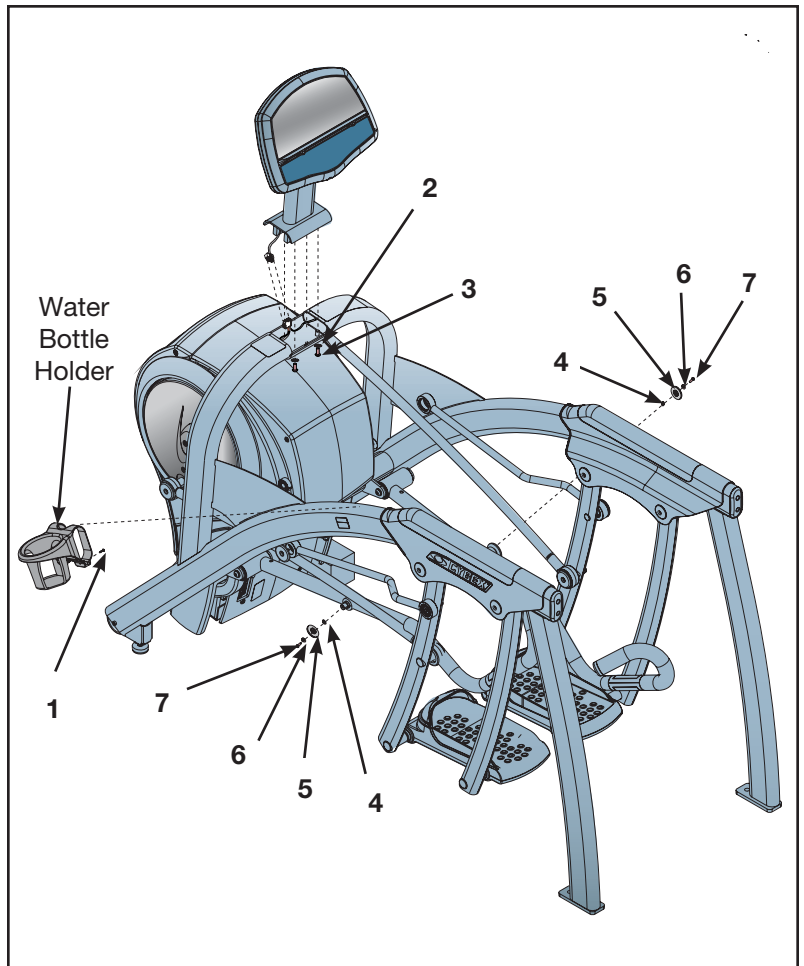


Figure 2



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Arc Trainer® Heart Rate Grip

Kit No. 620AK002 without drill bit
620AK007 with drill bit

Installation Instructions

NOTE: This instruction sheet describes how to install the heart rate grips on the 620A and 629A Arc Trainers.

Tools Required

- Flat head screwdriver
- Phillips screwdriver
- Rubber hammer
- Drill and 15/32" bit (Optional)
- Tape
- Wire cutters
- 7/32" Allen wrench
- Safety Glasses

1. Read and understand all instructions thoroughly before installing this kit.

2. Verify kit contents. See Figure 1.

- A. Top plastic sensor grip, (2), 610A-407
- B. Bottom plastic sensor grip, (2), 610A-408
- C. Heart rate cable, (1), AW-19870
- D. Self tapping screw #6 x 1.00, (4), HT532517
- E. 15/32" drill bit, (1), TE000008

NOTE: Drill bit comes in kit #620AK007 only.

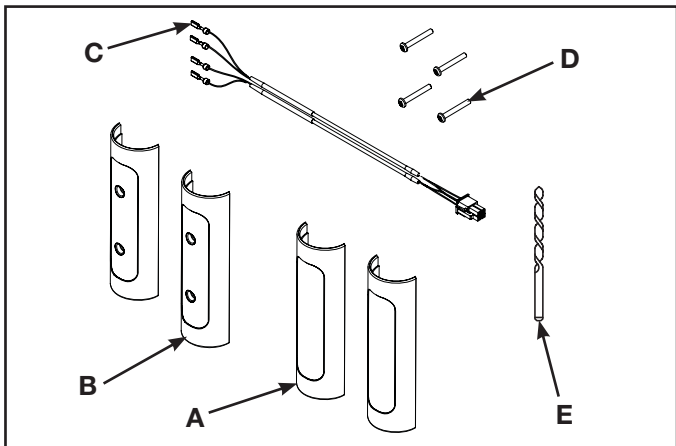


Figure 1

3. Identify the style of grips you have.

- A. Old style grips do not contain any screws that are visible.
- B. New style grips contain two screws that are visible on the finger side.

4. Remove old style grips and sensor.

A. With a flat head screwdriver, carefully pry off each metal sensor plate from grip and disconnect both heart rate wires. See Figure 2.

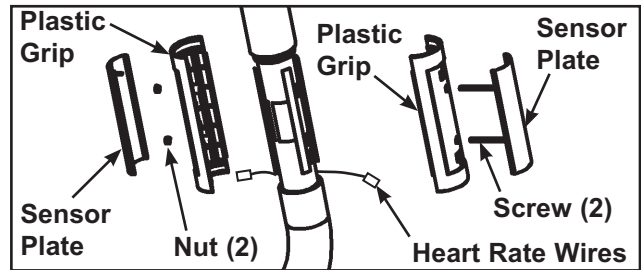


Figure 2

B. Using a Phillips screwdriver, remove the two screws and two nuts securing the grip in place. See Figure 2.

5. Remove new style grips.

A. Using a Phillips screwdriver, remove the two screws securing the grips in place. See Figure 3.

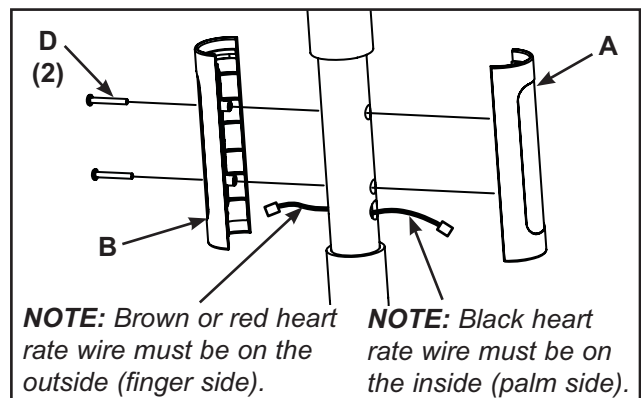


Figure 3

B. Disconnect the heart rate wire from each grip. See Figure 3.

6. Disconnect heart rate cables.

A. Using a 7/32" Allen wrench, remove the four BHSCS (Button Head Socket Cap Screw) and four washers securing the console assembly to the frame. See Figure 4.



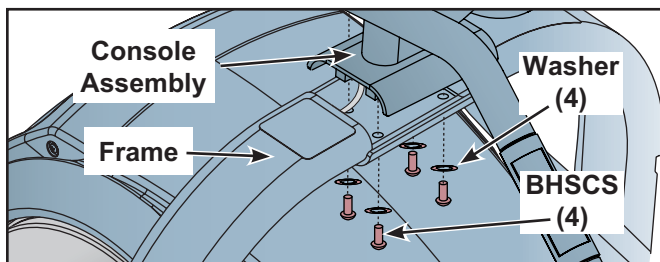


Figure 4

- B. Using a flat head screwdriver, pry off the plastic insert from the hand assembly. See Figure 5.

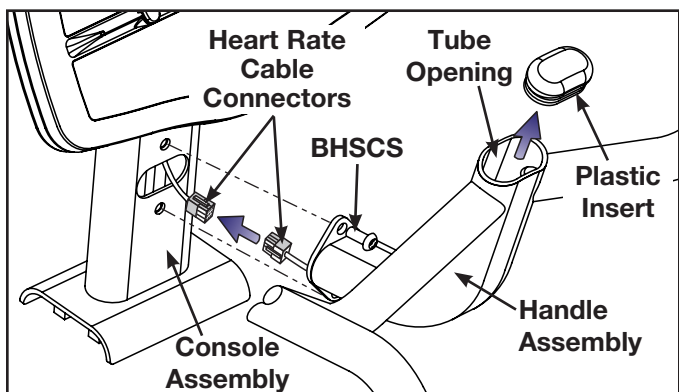


Figure 5

- C. Using a 7/32" Allen wrench, remove the two BHSCS securing the hand assembly to the console assembly. See Figure 5.
- D. Unplug the heart rate cable connectors. See Figure 5.
- E. Pull the hand assembly heart rate cable up through the tube opening. See Figure 5.

7. Removing old cable and installing new cable.

NOTE: The cable on the clip side of the connector will be labeled left and needs to go to the left handle.

- A. Using a wire cutter, cut off the connector from the old cable.
- B. Using tape (not supplied with this kit), tape the new cable to the old cable ensuring a secure connection. **NOTE:** Verify the wire labeled left goes to the left handle.
- C. Pull the old cable through handle until end of the new cable is through the handle opening.

8. Connect heart rate cables.

- A. Route the heart rate cable connector down through the tube exiting the bottom. See Figure 5.
- B. Plug the two heart rate cable connectors together. See Figure 5.
- C. Using a 7/32" Allen wrench, attach the two BHSCS removed in step 6C securing the hand assembly to the console assembly. See Figure 5.
- D. Using a 7/32" Allen wrench, attach the four BHSCS and four washers removed in step 6A securing the console assembly to the frame. See Figure 4.
- E. Reattach the plastic insert removed in step 6B. See Figure 5.

9. Installing the grips and metal sensors.

- A. Verify that the holes in the handle are 15/32". If not, use a 15/32" drill bit to enlarge the holes.
- B. Remove tape securing the old cable and new cable.
- C. Slide the brown or red wire through the large (upper) outside or finger side hole. Slide the black wire through the inside or palm side hole. See Figure 3.
- D. Connect the black wire to the tab on the top plastic sensor grip (A). See Figure 3.
- E. Connect the brown or red wire to the tab on the bottom plastic sensor grip (B). See Figure 3.

NOTE: Make sure that the contacts do not touch and no wires are pinched while attaching grips.

- F. Using a Phillips screwdriver, attach the two screws (D) securing the grips A and B in place. See Figure 3. **NOTE:** Do not over tighten grips.

- G. Test unit for proper operation.

NOTE: If no heart rate reading is showing, verify that the black and the brown or red wire location is correct and that the cable labeled left is on the left side.

Arc Trainer® Handle Bar

Kit No. 620AK005

Installation Instructions

NOTE: This instruction sheet describes how to replace the handle bar in the Arc Trainer 620A.

Tools Required

- 7/32" Allen wrench

1. Read and understand all instructions thoroughly before installing this kit.
2. Verify kit contents. See Figure 1.

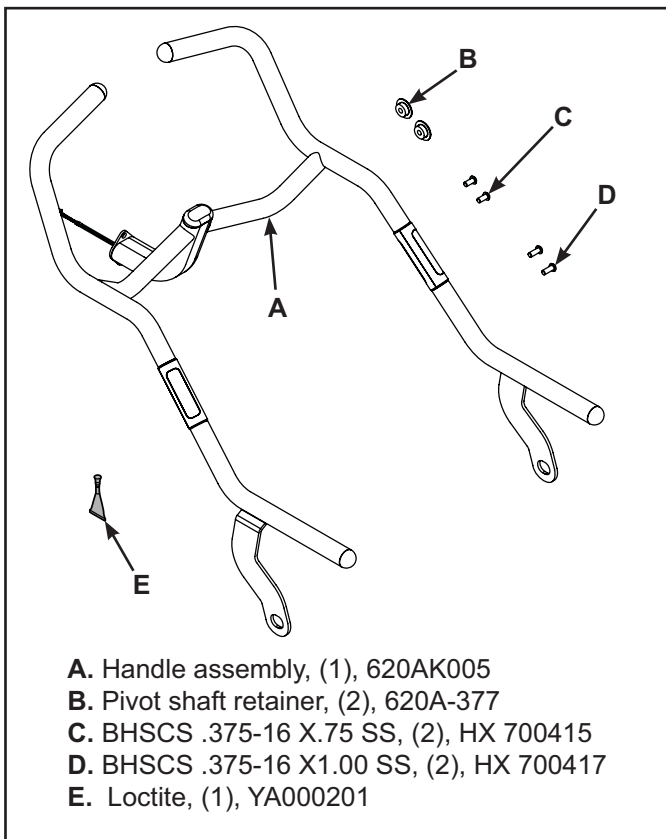


Figure 1

3. Remove handle assembly.

- A. Using a 7/32" Allen wrench, remove the Button Head Socket Cap Screw (BHSCS) (D) and pivot shaft retainer (B) from each side of the handle assembly. See Figure 2.

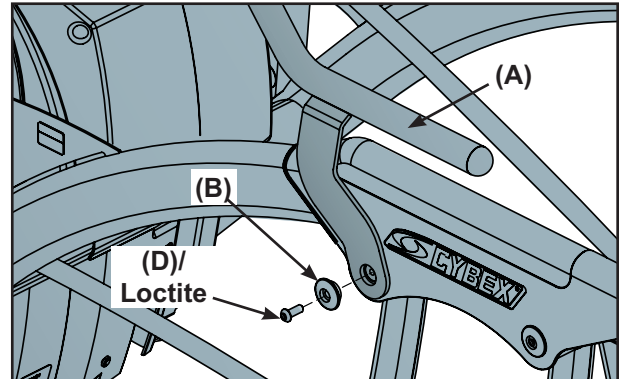


Figure 2

- B. Using a 7/32" Allen wrench, remove the two BHSCS (C) securing the handle assembly (A) to the console assembly. See Figure 3.

- C. Unplug the heart rate cable connectors. See Figure 3.

- D. Remove handle assembly

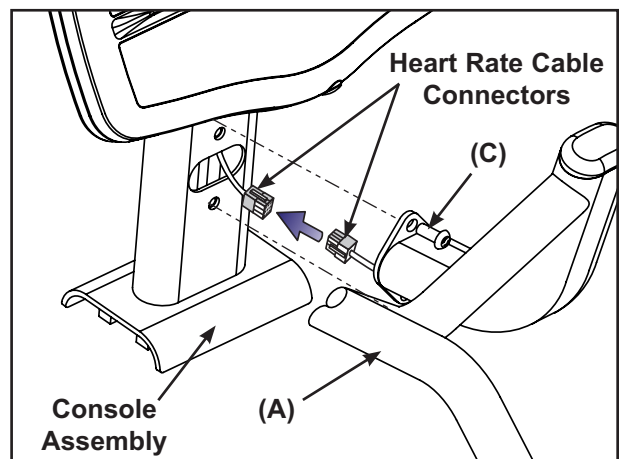


Figure 3

4. Attach handle bar assembly.

- A. Plug the heart rate cable connectors together. See Figure 3.



- B.** Using a 7/32" Allen wrench, attach the two BHSCS (C) securing the handle assembly (A) to the console assembly. See Figure 3.
- C.** Place a drop of loctite (E) on the BHSCS (D) and another drop inside the shaft into where the BHSCS will be tightened.
- D.** Using a 7/32" Allen wrench, attach the BHSCS/loctite (D) and pivot shaft retainer to each side of the handle assembly. See Figure 2.

5. Test the unit for proper operation.

Arc Trainer® 620A/629A A/V

Kit No. 620AK044

Installation Instructions

NOTE: This instruction sheet describes how to install the Cybex Personal Entertainment Monitor on the Arc Trainer 620A/629A .

Tools Required

- 3 mm Allen wrench (supplied with kit)
- 5/32" Allen wrench
- 7/16" Open end wrench
- Phillips screwdriver
- Utility knife
- 7/32" Allen wrench
- Tape (step 6B)
- Block (step 5A)
- Tape measure (step 6C)

1. Read and understand all instructions thoroughly before installing this kit.

2. Verify kit contents.

- A. Console monitor mount (1), 620A-220
- B. Audio cable 1/4" to 3.5 mm 18" (1), 630A-102
- C. RJ-45 round cable (1), 630A-103
- D. Headphone adapter clamp (1), 630A-330
- E. Headphone jack mount bracket (1), 630A-331
- F. Coax and power cable I/O W/2.1 mm (1), 630A-104
- G. Allen wrench 3 mm (1), BK030210
- H. Adapter, 1/4 plug to 1/8 stereo jack (1), ES000001
- I. Self tapping screw 8-16 x .31 (2), HT552509
- J. Self tapping screw 8-16 x .75 (2), HT552515
- K. Strain relief bushing (1), PP740000
- L. A/V bottom membrane (1), SW-19295-4 (**NOTE:** for English Console only)
- M. Cybex monitor kit (1), EE000005 or EE000007
- N. Poster (1), 620A-387 (not shown)
- O. Warranty sheet (1), LT-20219 (not shown)
- P. Cable Tie (2), EW000028

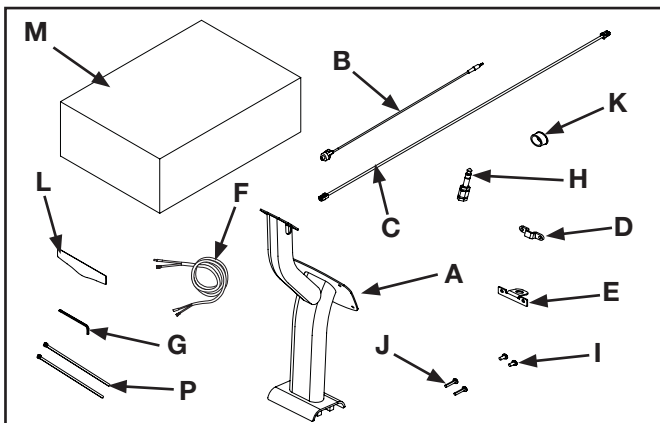


Figure 1

3. Verify monitor kit contents shown in Figure 2.

- Q. Monitor (1), EE000005 or EE000007
- R. Remote control (1), EM000000
- S. Batteries, remote control, AAA size (2), N/A
- T. Screws, mounting, M4 x 0.7 x 10 mm (4), HC692860
- U. Washers, external lock, (4), HS047300
- V. Washers, flat, M4 (4), HS097600
- W. AC/DC adapter (1), ET300038
- X. Power cord, 115 VAC 60 Hz, (Country specific cords supplied with product), (1), EW600000
- Y. Personal Entertainment Monitor Manual (1), LT-20191

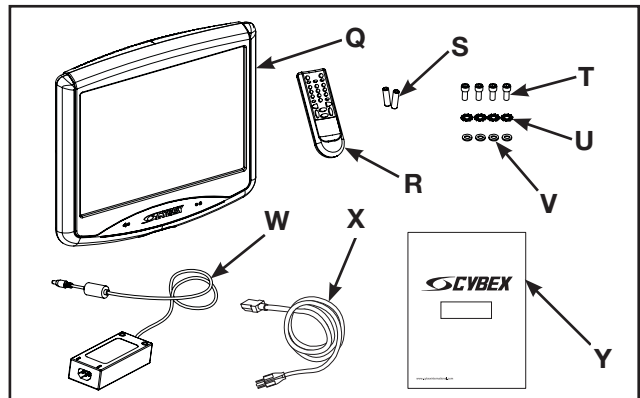


Figure 2

NOTE: The Power Cable of (F) has a male and female connector at either end. Make sure the female end goes to the Monitor (Q) and the male end is at the base. See Figure 3.

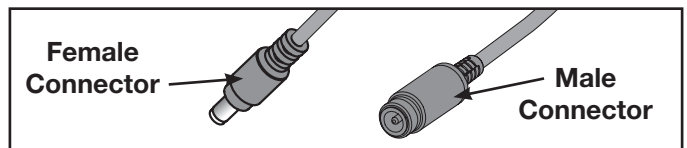


Figure 3

4. Remove console assembly.

- A. Using a 7/32" Allen wrench, remove the four Button Head Socket Cap Screws (BHSCS) and lock washers securing the console assembly. See Figure 4.



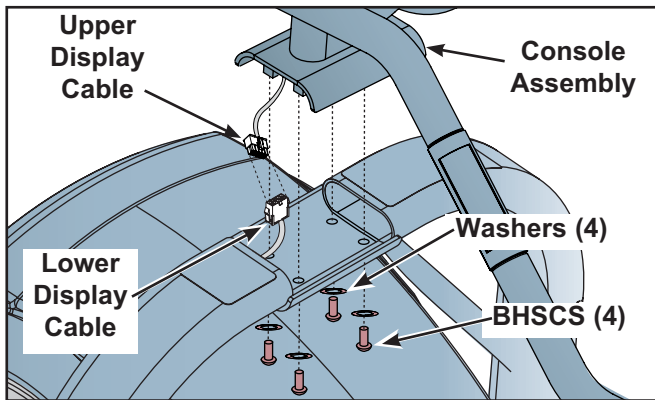


Figure 4

- B. Using a 7/32" Allen wrench, remove the two BHSCS securing the handle assembly to the console assembly. See Figure 5.

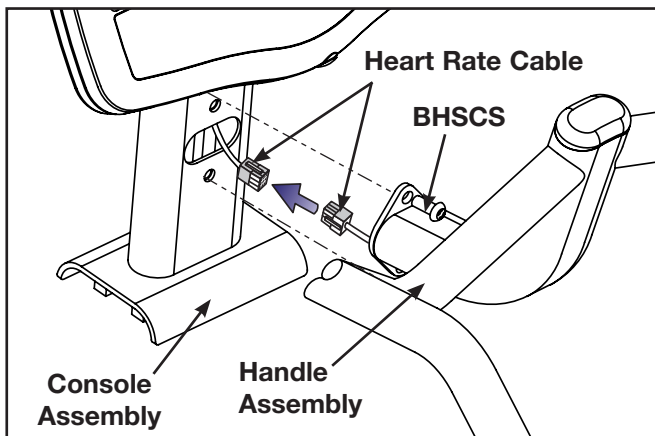


Figure 5

- C. Carefully unplug the heart rate cable connector. See Figure 5.
- D. Carefully unplug the display connector. See Figure 4.
- E. Using a 5/32 Allen wrench, remove the four BHSCS screws securing the console to the console mount. **NOTE:** The console will be reinstalled onto the new console mount in step 12C. See Figure 6.

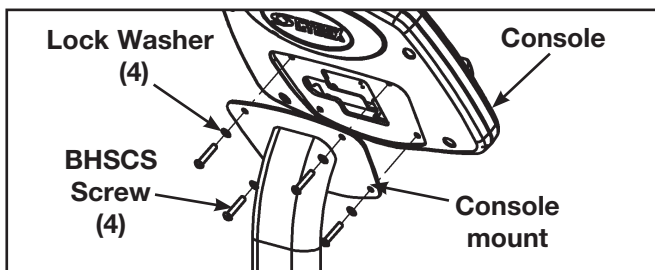


Figure 6

5. Remove left wheel.

- A. Place a block under the unit as shown in Figure 7.
- B. Using a 7/16" wrench and a 5/32" Allen wrench, remove the bolt and nut securing the left wheel in place and remove the wheel. See Figure 7.

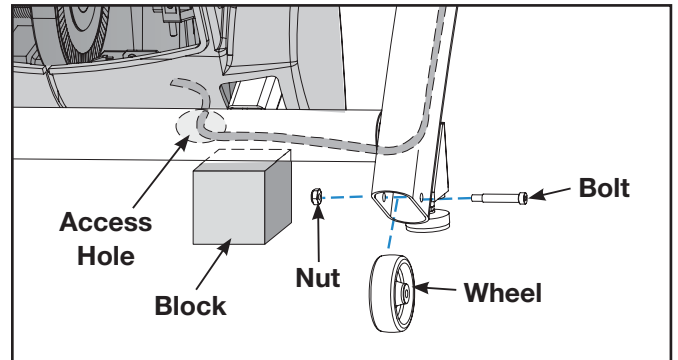


Figure 7

6. Route coax and power cable.

- A. Locate the coax and power cable (F).
- B. Tape the ends of the coax and power cable together (making it easier to guide the cables down the frame).
- C. Measure out 30" of cable and then tape cable to frame as shown in Figure 8.
- D. Route the cable inside top of frame as shown in Figure 8.

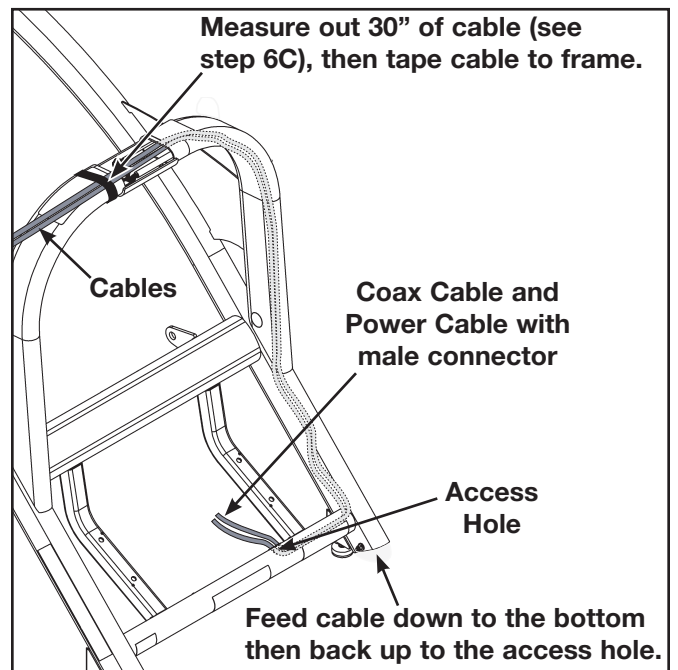


Figure 8

- E. Feed cable through to the bottom where wheel was removed.
- F. Route cable back up through the hole and out through the access hole. See Figure 8.
- G. Pull rest of cable through the access hole. See Figure 8.

7. Remove covers from console.

- A. Using a Phillips screwdriver, remove the one screw securing the console battery door cover, then remove the four screws securing the rear console cover to the front console cover. See Figure 9.

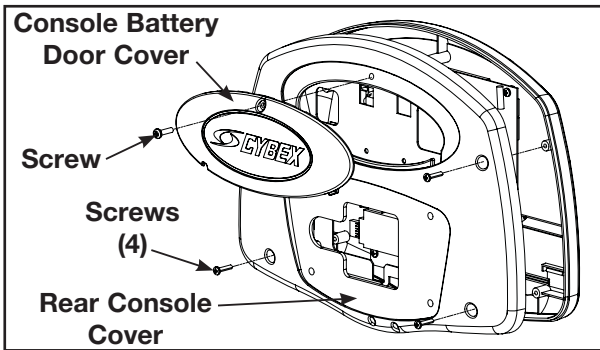


Figure 9

NOTE: Step 8 is for English units only, all other languages skip to step 9.

8. Replace bottom membrane with A/V membrane.

- A. Unplug the grounding wire from the main display PC board and set the back console cover aside. See Figure 10.

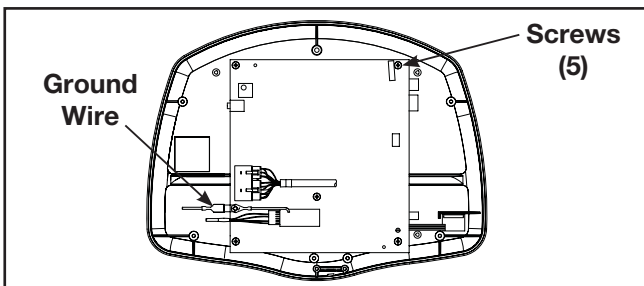


Figure 10

- B. Using a Phillips screwdriver, remove the five screws securing the main display PC board to the front console cover. See Figure 10.
- C. Unplug the bottom membrane ribbon cable from the the main display PC board. See Figure 11.

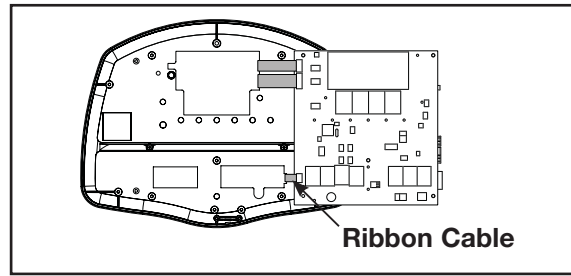


Figure 11

- D. Using a utility knife, pry off bottom membrane from the front console cover. See Figure 12.

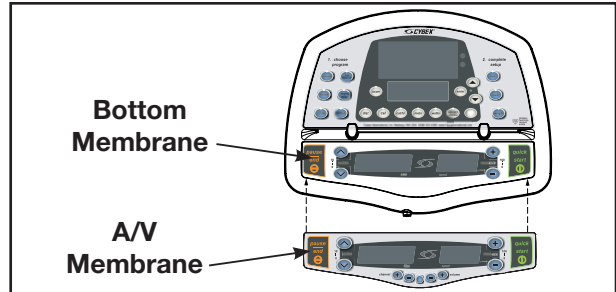


Figure 12

- E. Peel off backing from new A/V membrane and place on the front console cover. See Figure 12.

- F. Plug the A/V membrane ribbon cable into the main display PC board. See Figure 11.

- G. Using a Phillips screwdriver, reattach the five screws securing the main display PC board to the front console cover. See Figure 10.

- H. Plug the grounding wire to the main display PC board that was unplugged in step 8A. See Figure 10.

9. Install audio cable, bracket, clamp and adapter to front cover.

- A. Using a Phillips screwdriver, attach the two screws (I) securing the headphone jack mount bracket (E). See Figure 13.
- B. Attach the audio cable (B) to the headphone jack mount bracket (E) securing it with the flat washer and nut (attached to cable). See Figure 13.
- C. Attach the adapter (H) securing it in place with the headphone adapter clamp (D) and two screws (J). See Figure 13.

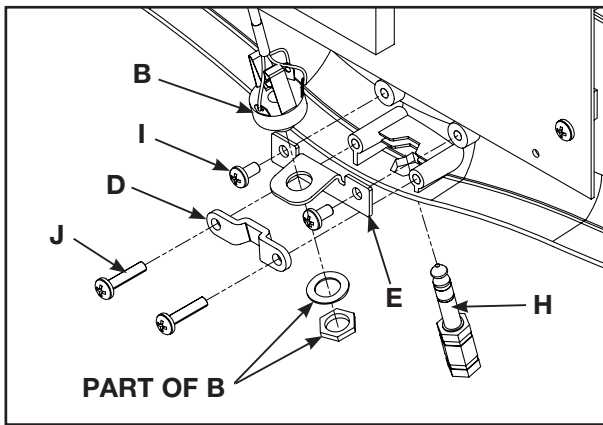


Figure 13

10. Attach the RJ-45 and audio cables.

- A. Attach the RJ-45 (C) and audio cables (B) to the main display pc board. See Figure 14.

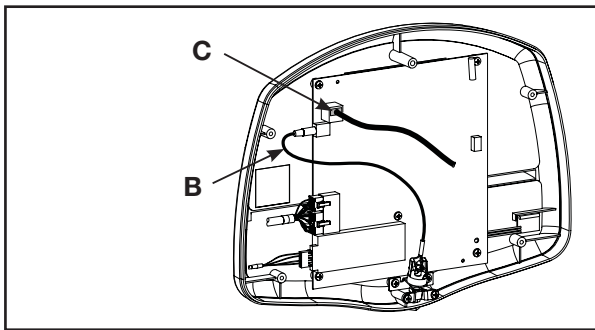


Figure 14

- B. Remove NOT FOR MEDICAL USE label from the console mounting plate on the rear console cover. See Figure 15.

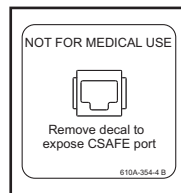


Figure 15

- C. Insert RJ-45 cable through opening that was covered by the NOT FOR MEDICAL USE label and then down through the lower rear console cover opening.

11. Reattach covers to console.

- A. Using a Phillips screwdriver, reattach the four screws securing the rear console cover to the front console cover. Reattach the one screw securing the console battery door cover. See Figure 9.

12. Attach display console to new console mount.

- A. Insert the display console cable down through the console mount and exit the bottom. See Figure 17

- B. Insert the RJ-45 cable up through the monitor mount and exit the top. See Figure 17.

- C. Using a 5/32" Allen wrench, reattach the four BHSCS and four lock washers securing the console to the new console mount. See Figure 6.

13. Installing coax and power cables in console mount.

- A. Lay the console mount on the Arc Trainer as shown in Figure 16. **NOTE:** This will allow easier access to route the cable assembly.

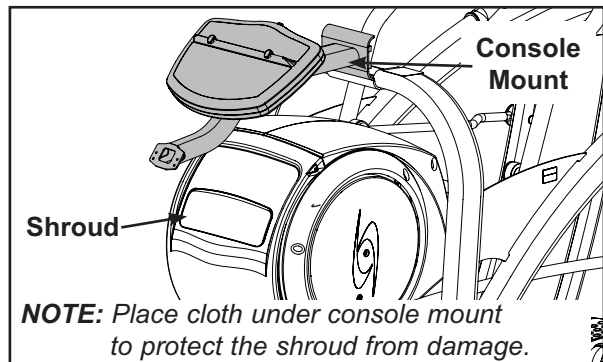


Figure 16

- B. Locate the coax and power cables exiting the top of the Arc frame.

- C. Insert the coax and power cables into the bottom of the console mount until 8" (20 cm) of cable exits the top. See Figure 17.

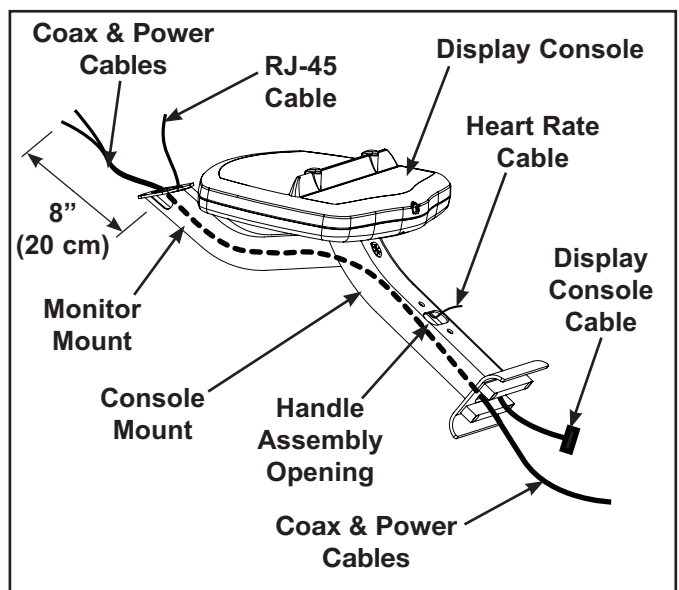


Figure 17

14. Attach Console Assembly.

- A. Plug the upper display cable into the lower display cable in the main frame assembly. See Figure 18.

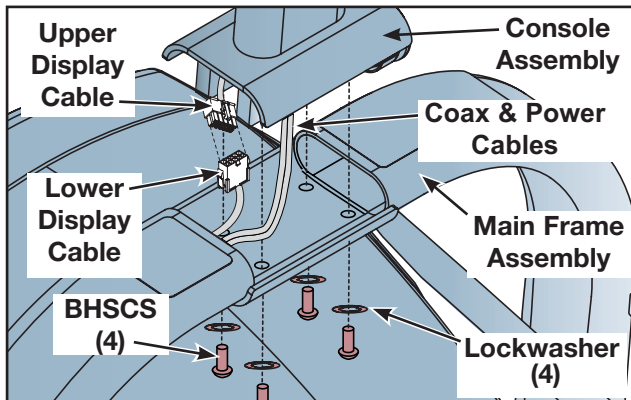


Figure 18

- B. Plug the heart rate cable connector from the console assembly to the heart rate connector from the handle assembly. See Figure 5.

NOTE: Ensure cable connectors are securely fastened.

- C. With 8" of coax and power cables exiting the top of the console assembly, pull the extra coax and power cables out of the bottom of the main frame.

NOTE: Exactly 8" (20 cm) of cable must exit the top of the monitor mount.

- D. Using a 7/32" Allen wrench, attach the two BHSCS securing the handle assembly to the console assembly. See Figure 5.

- E. Attach the console assembly to the main frame assembly and hand thread each of the four BHSCS and four lockwashers removed in step 4A. See Figure 4.

NOTE: Confirm that no cables are pinched lowering the console.

- F. Securely fasten the four BHSCS using a 7/32" Allen wrench.

15. Install monitor

- A. Locate monitor (Q), four mounting screws (T), four lock washers (U) and four mounting washers (V).

- B. Remove the back cover from monitor (Q) by pressing the bottom tabs of the cover in and rotating out. See Figure 19.

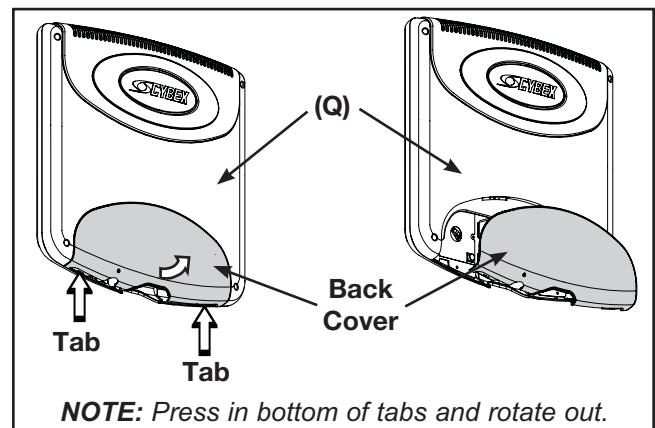


Figure 19

- C. Insert the power cable end of (F) through hole on left side of monitor mount. See Figure 20.

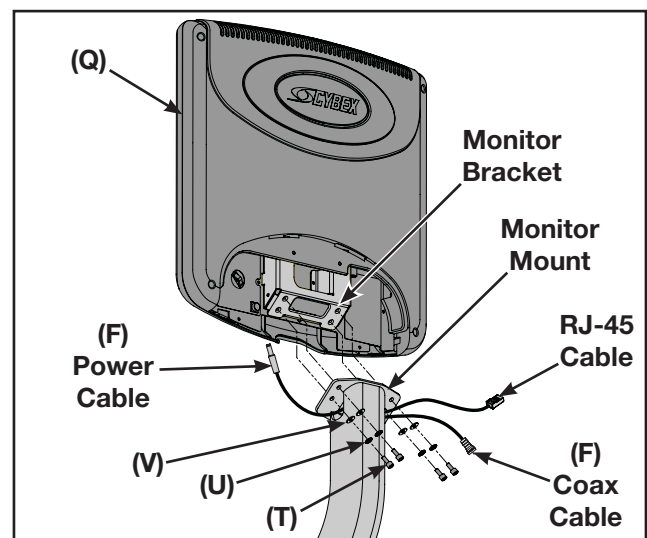


Figure 20

- D. Insert RJ-45 cable and the coax end of (F) through hole on right side of monitor mount. See Figure 20.

- E. Using a 3 mm Allen wrench, secure the monitor bracket to the monitor mount using the four mounting screws (T), four lock washers (U) and four flat washers (V). See Figure 20.

- F. Insert the power cable, coax cable and RJ-45 cable into the monitor as shown in Figure 21. **NOTE:** Use of the CSAFE port is optional and requires a CSAFE cable and device.

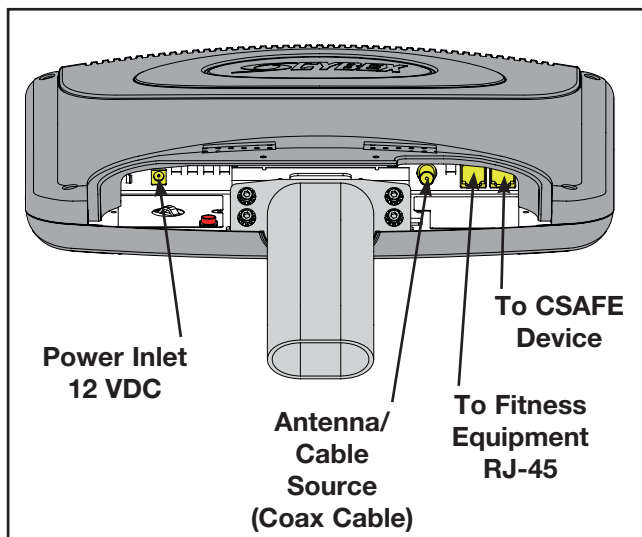


Figure 21

- G. Secure the power cable to the monitor plate using the cable tie (P). See Figure 22.

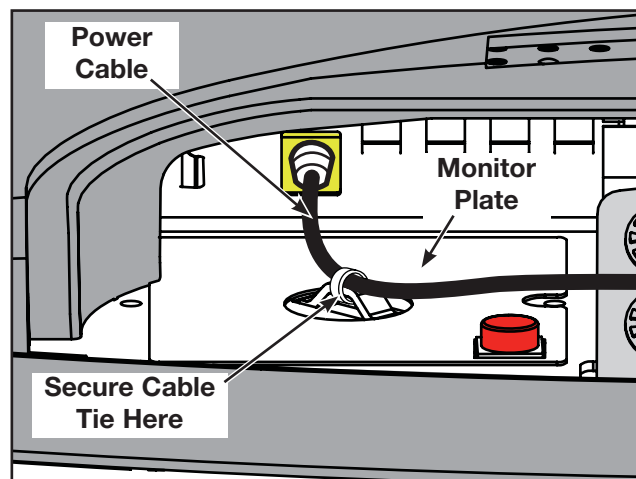


Figure 22

- H. Install back cover to the monitor (Q). See Figure 23.

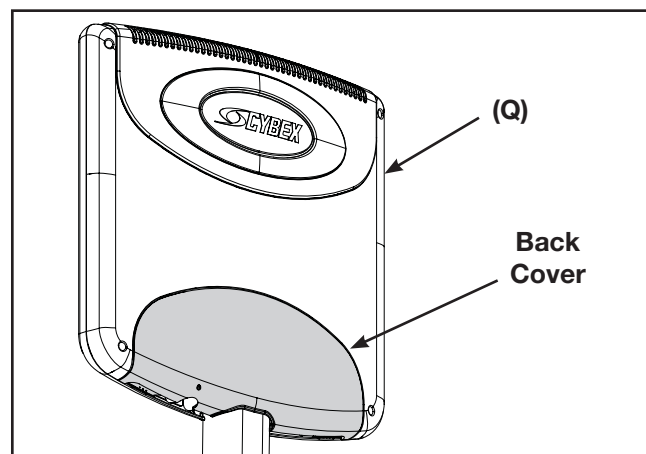


Figure 23

16. Plug in AC/DC Adapter, coax and power cables.

- Locate the AC/DC adapter (W) supplied with the monitor and plug into the power cable exiting the base of the Arc.
- Plug the power cord (X) into the AC/DC adapter (W). **NOTE:** Power cord (X) varies by country.
- Thread the antenna/cable source cable (supplied at the site location) into the coax cable exiting the base of the Arc.

17. Set up monitor for first time use.

- Locate the Personal Entertainment Monitor Manual (LT-20191) and follow the set up procedure in Chapter 5.
- Plug the power cord (X) into a wall outlet.
- Plug headphones (not supplied) into headphone jack located at base of console.
- Refer to Chapter 3 of the Personal Entertainment Monitor Manual (LT-20191) regarding use of the channel and volume keys located on the lower center of the Arc console. See Figure 24.

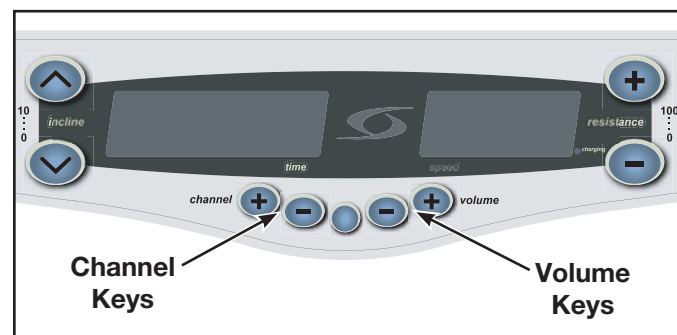


Figure 24

Arc Trainer® Voltage Assembly

Kit No. 630AK031 - 110V/60Hz Voltage Assembly Kit
630AK033 - 220V/50Hz Voltage Assembly Kit
630AK034 - 250V/3A Voltage Assembly Kit
630AK035 - 110V/50Hz Voltage Assembly Kit

Installation Instructions

NOTE: This instruction sheet describes how to install the voltage assembly kit in the Arc 630A.

TOOLS REQUIRED

- 6" Phillips screwdriver

1. Read and understand all instructions thoroughly before installing this kit.

2. Verify you received the appropriate kit.

- A. 630AK031 - 110V/60Hz Voltage
- B. 630AK033 - 220V/50Hz Voltage
- C. 630AK034 - 250V/3A Voltage
- D. 630AK035 - 110V/50Hz Voltage

3. Verify kit contents. See Figure 1.

- A. Voltage Assembly Kit (1), 630AK0XX
- B. Cable Tie (1), EW000028
- C. Disconnect Power 7 Languages Decal (1), CM000240
- D. Medical Inlet Decal (1), DE-19547-4
- E. Power Cord (1), 250V/3A, AW-19521
110V/60Hz, AW-19522
110V/50Hz, AW-19587
220V/50Hz, EW600005

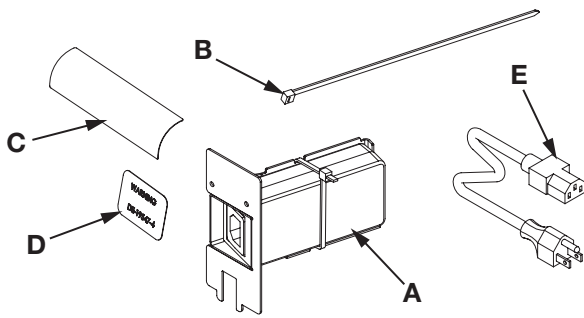


Figure 1

4. Place unit in test mode and elevate.

- A. While operating unit press and hold the Pause/end key for five seconds to enable test mode.
- B. Elevate the unit to a minimum of level 7 incline.

5. Remove the access cover.

- A. Using a Phillips screwdriver, remove the two lower screws (one screw on each side), securing the access cover. See Figure 2.
- B. Remove the two upper screws (one screw on each side), securing the access cover.
- C. Remove the Access cover.

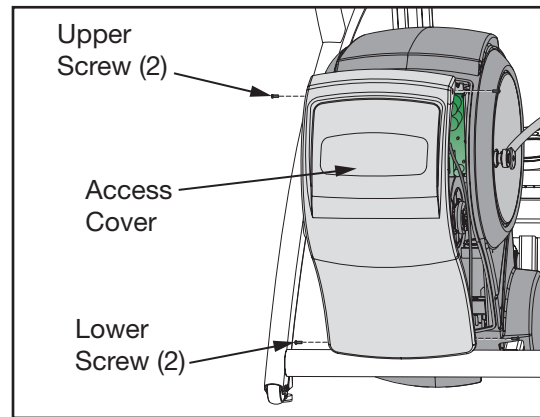


Figure 2

6. Remove left shroud.

- A. Remove the ten screws and two washers securing left shroud in place. See Figure 3.
- B. Lean shroud against the linkage arm.

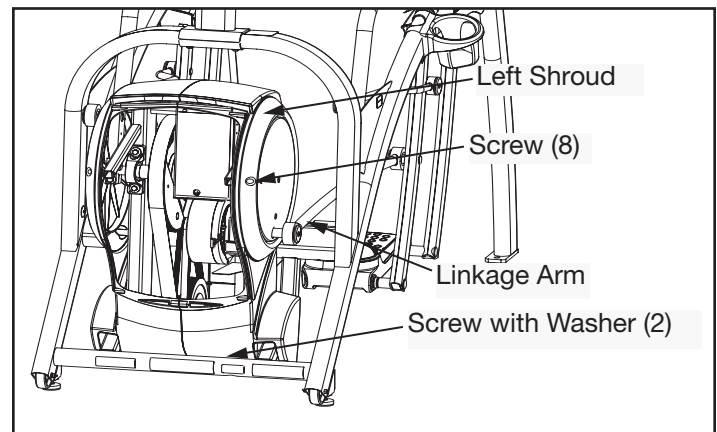


Figure 3



7. Remove the blank plate.

- A. Using a Phillips head screwdriver, remove the two screws securing the blank plate in place. See Figure 4.
- B. Remove blank plate.

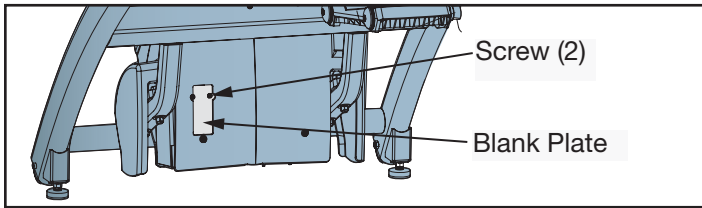


Figure 4

8. Install power supply.

- A. Install power supply in place of blank plate that was removed in step 7B.
- B. Using a Phillips head screwdriver, install the two screws (removed in step 7A) securing the power supply. See Figure 4.
- C. Route power supply cable (follow existing cables) up through frame to control board.

9. Connect power supply cable to controller board.

- A. Using a Phillips Screwdriver, remove the two screws securing the controller cover. See Figure 5.
- B. Remove cover.
- C. Push power supply cable through hole in controller cover.
- D. Firmly press power supply cable jack into the connector on the controller board.

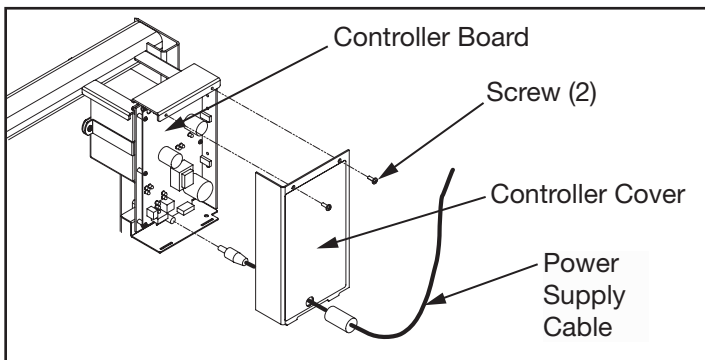


Figure 5

- E. Reinstall controller cover.

- F. Using a Phillips screwdriver, install and tighten the two screws removed in step 9A.

- G. Secure power supply cable to the other cables using the cable tie.

10. Reinstall left shroud.

- A. Place left shroud in place.
- B. Using a Phillips screwdriver, install the ten screws and two washers securing the shroud removed in step 6A.
- C. Securely tighten all screws.

11. Reinstall access cover.

- A. While being sure not pinch any cables, hold the access cover in place. See Figure 2.
- B. Using a Phillips screwdriver, install and tighten the two upper screws first (removed in step 5B). **NOTE:** Do not over tighten screws.
- C. Install and tighten the two lower screws (removed in step 5A). **NOTE:** Do not over tighten screws.

12. Install warning decals.

- A. Peel off backing and install the two warning decals as shown in Figures 6 & 7. **NOTE:** The "Disconnect Power" decal must be installed in location shown in Figure 6. The "Medical Inlet" decal must be installed in location shown in Figure 7.

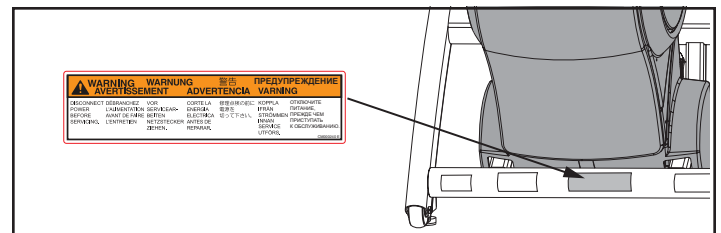


Figure 6

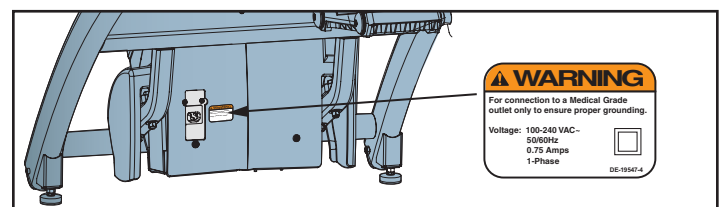
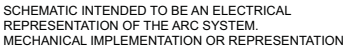


Figure 7

13. Test unit for proper operation.





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