



A passion for human performance™

Cybex 600H Hiker Service Manual
Cardiovascular Systems



 **eCybex.com**



The 600H

Service Manual

*The 600H measures, monitors, and
motivates your fitness and health.*



PREFACE

Read all instructions before using. Save These Instructions.

! WARNING: SERIOUS INJURY COULD OCCUR IF THESE PRECAUTIONS ARE NOT OBSERVED

DO obtain a medical exam before beginning any exercise program.

DO keep children away from the Hiker. Teenagers and disabled persons must be supervised while using.

DO set up and operate the Hiker on a solid, level surface. DO NOT operate in recessed areas or on plush carpet.

DO provide adequate clearance to the side, front, and back of Hiker. This should be a few feet from walls and furniture and allow for safe access and passage around the machine.

DO NOT operate in damp or wet locations.

DO NOT use the Hiker outdoors.

DO NOT operate the Hiker around or where aerosol (spray) or where oxygen products are being used.

DO read the Owner's Manual completely before using the Hiker.

DO read all warnings posted on the Hiker.

DO inspect all belts and connections before each use. DO NOT use until worn or damaged parts are replaced.

DO NOT wear loose or dangling clothing while using the Hiker.

DO keep all body parts, towels, water bottles, and the like free and clear of moving parts.

DO use support devices at all times. These include the front, hand and side rails.

DO stop exercising if you feel faint, dizzy, or experience pain at any time while exercising and consult your physician.

DO maintain and replace parts regularly. Refer to the Owner's Manual for detail.

DO use Cybex factory parts when repairing the Hiker.

DO call Cybex for technical support before attempting to perform any procedure that you are unsure about.

DO follow instructions in Service Manual for disassembly and assembly, when required.

DO NOT modify the Hiker in any way.

DO NOT use attachments not recommended for the Hiker.

DO replace any warning label if damaged, worn or illegible.

DO report any malfunctions, damage or repairs to the facility. (Commercial Equip.Only)

DO NOT use the Hiker if you exceed 350 lbs. This is the maximum rated user weight.

DO NOT install in a commercial setting. For consumer use only. (Consumer Equip.Only)

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.

NOTE: 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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DISCLAIMER: Cybex International, Inc. makes no representations or warranties regarding the contents of this manual. We reserve the right to revise this document at any time or to make changes to the product described within it without notice or obligation to notify any person of such revisions or changes.

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Printed in United States of America.

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1 / INTRODUCING THE 600H HIKER BY CYBEX



600H Hiker™ by Cybex®

1 / INTRODUCING THE 600H HIKER BY CYBEX

The 600H Hiker by Cybex is a revolutionary new product which defines a new exercise category. It is designed to provide the commercial fitness facility and personal user with an effective tool for total body conditioning. It utilizes a natural movement and provides training variety with its intuitive display control and feedback. It is the first and only product of its kind.

Ergonomic Design

The 600H Hiker provides an upper and lower body workout in a natural pattern that moves the way the body does. It combines the advantages of a climber and an elliptical machine without any of the disadvantages. Unlike most climbers' pattern of movement which moves the leg backward before it goes down, the 600H Hiker's pattern of movement moves the leg down as it goes backward. The effect is to have a less acute angle at the knee during the exercise and subsequently less stress in the joint than seen in current climbers and steppers. In addition, unlike current climbers and elliptical pattern products, the 600H Hiker's pattern of movement works the gluteus muscles harder and through a more complete range.

Unlike elliptical machines which have a fixed stride length, the 600H Hiker has a user determined stride length. The user determines the stride length and speed, and selects a resistance level which can simulate the feel of an incline much like one would feel when hiking up a mountain. The user can vary their stepping pattern throughout the workout without having to make any adjustments to the machine. The width between the pedals puts the user's body in a position that is comfortable for the hips, and the foot plates are angled to create a natural hiking motion.

Users have the option of using the ergonomically designed handles, which are linked to the pedals. By having all four points- the two pedals and two handles-linked, little coordination is required to accomplish the total-body cardio workout.

The dual action 600H Hiker works the major muscles of both the upper and lower body for an effective cardiovascular and fat-burning workout. It spreads the workload over the body to help the user avoid premature fatigue and discomfort. Users can choose the stride length that fits as well as their relative upper and lower body involvement, and can change it at any time. By varying movement pattern and body position, users can tailor their workouts to emphasize particular muscle groups or concentrate on sports-specific training.

The 600H Hiker has a belt drive for smooth, quiet operation, and a cordless system with no power supply or plugs to worry about. The center handles have built-in, hand-held heart rate sensors. The 600H Hiker offers four motivational programs plus a manual mode.

Warranty

LIMITED WARRANTY TO NON-CONSUMER BUYERS: Seller warrants, to the original Buyer only, that any product manufactured by it, herein listed under "EXPIRATION OF LIMITED WARRANTIES FOR NON-CONSUMER BUYERS," will be free from defects in material and workmanship, under normal use and service according to the specified warranty duration listed, beginning from the date of installation. Seller's obligation under this warranty shall be strictly and exclusively limited to repairing or replacing parts and materials, free of charge,

*If you improve your **health**, you reduce the risk of certain chronic degenerative diseases.*

*If you improve your **fitness**, you can perform moderate to vigorous activity without undue fatigue.*

1 / INTRODUCING THE 600H HIKER BY CYBEX

600H features include:

- *Balanced total body involvement for a better cardiovascular workout.*
- *"Free-stride" motion lets users determine the most comfortable stride length.*
- *Contact heart-rate monitor lets users gauge the overall intensity of their workout.*
- *Natural path of motion provides balanced conditioning to the lower body.*
- *Fluid motion of handles helps upper body work efficiently.*
- *Self-powered unit can be placed anywhere with no wires to trip over.*
- *Large worldwide dealer, sales, and service network.*
- *Customer Service Hotline number:
Call 888-462-9239 in most areas.
Dial 508-533-4300 or
Fax 508-533-5183 in all other areas.*

F.O.B. origin, which, in Seller's judgment are defective. Seller cannot control the environment nor manner in which this is used, therefore this warranty does not cover corrosion of product during use, or deterioration caused by conditions of use, or that the application of finishes and/or cleaners are sufficient, or the finishes and/or cleaners applied are suitable for Buyer's environment. Seller does not warrant normal maintenance repairs such as identified within Seller's Owner's Manual. Seller assumes no responsibility for repair or replacement expenses incurred without its prior written authorization. Buyer shall be responsible for all labor costs incurred in connection with such repair or replacement at the installation site unless agreed upon by Seller or covered herein. All costs of removing, packing and shipping defective product and parts shall be paid by the Buyer unless otherwise stated by the Seller. Seller's authorized representative determines, in sole and final discretion that the nature of the defect precludes remedy by repair or replacement of parts, Seller reserves the right to satisfy its warranty obligation in full by refunding the full purchase price upon return of all products to it, freight prepaid. The products or services of other manufacturers which are furnished by Seller are covered only by such warranties as are given by sold manufacturer to Seller. In the regard, Seller agrees to certify to Buyer the identity of the supplier of items claimed to be defective so that the Buyer may pursue warranty claims against that party.

EXPIRATION OF LIMITED WARRANTIES FOR NON-CONSUMER BUYERS:

Cybex Cardiovascular Products: Seller will warrant labor and parts for three years. Refer to the "LIMITED WARRANTY FOR NON-CONSUMER BUYERS" paragraph above for transportation cost responsibility and further explanation of warranty coverage limitations and exclusions.

DISCLAIMER OF WARRANTIES AND LIMITATION OF REMEDIES:

SELLER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, WITH REGARD TO GOODS OR SERVICES PROVIDED BY SELLER OTHER THAN THOSE SET FORTH HEREIN. ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF BUYER WHICH EXCEEDS THE FOREGOING WARRANTY IS HEREBY DISCLAIMED BY SELLER. SELLER WILL NOT BE LIABLE FOR ANY DIRECT OR INDIRECT CONSEQUENTIAL OR INCIDENTAL DAMAGES, LOSSES, OR EXPENSES, INCLUDING, BUT NOT LIMITED TO COMMERCIAL LOSSES, BUSINESS INTERRUPTION, OR DAMAGES RESULTING TO PROPERTY OTHER THAN THAT WHICH IS THE SUBJECT OF THE SALES TRANSACTION.

ALTERNATIVE DISPUTE RESOLUTION FOR NON-CONSUMER BUYERS ONLY:

SELLER RESERVES THE RIGHT TO MANDATE INFORMAL DISPUTE RESOLUTION TO SETTLE ANY OR ALL CLAIMS RESULTING FROM THIS SALES TRANSACTION. ALTERNATIVE DISPUTE RESOLUTION PROCEEDINGS WILL BE CONDUCTED IN THE STATE OF MASSACHUSETTS ACCORDING TO THE COMMERCIAL RULES OF THE AMERICAN ARBITRATION ASSOCIATION.

It is understood between the parties that damage to product, ineffectiveness of product, or other unintended consequences may result because of many factors including the manner of use or application of the product, all of which are beyond the control of the Seller. All such risks shall be assumed by the Buyer.

PROCEDURE FOR OBTAINING WARRANTY PERFORMANCE:

To secure your warranty in event of a defect, contact the Cybex Customer Service Department with questions regarding your warranty by mail or telephone for instructions or a Return Authorization Number as provided below:

Cybex International, Inc., Attn: Customer Service Department
10 Trotter Drive
Medway, MA 02053 Tel: 1-888-462-9239



Fig. 2-1



Fig. 2-2



Fig. 2-3

Set up and Assembly

Setting up the 600H Hiker by Cybex is straightforward. Before you unpack the machine, however, be sure to select a suitable site.

Choosing and Preparing a Site

The area that you select for your 600H Hiker should be well-lit and well-ventilated. Locate the 600H Hiker on a structurally sound and level surface (do not place in recessed areas or on plush carpet) a few feet from walls and other equipment. Allow for safe access and passage during use of the machine. If the 600H Hiker is located above the first floor, place it near or above major support beams. If the area has a heavy plush carpet, the airflow around the base of the unit may be restricted or the carpeting may interfere with the moving parts. To protect the carpeting and the machinery, you can place a 3/4" (1.9 cm) thick wood or rigid plastic base under the 600H Hiker.

Do not install the 600H Hiker in an area of high humidity, such as the vicinity of a steam room, sauna, or indoor pool. Exposure to intensive water vapor and/or chlorine could adversely affect the electronics, as well as other parts of the machine.

Disassembly of the 600H Hiker can be unsafe if you don't follow directions. The following disassembly steps are listed in sequential order. In some cases, you can ignore some steps. In those cases we have listed the steps you must follow before further disassembly.

WARNING: *It is very important to recognize that with few exceptions the tension from the linkage system must be released before continuation of disassembly. Safety glasses should be worn while assembling or disassembling the linkage system.*

STEP 1-Removing the Shrouds

(Tools required—One Phillips head screwdriver.)

1. Locate and remove all 15 metal screws and washers.
2. Locate and remove two 10-32 x .50" long screws, one on each side of the unit.
3. Locate and remove one 10-32 x .75" long screw, on the front of the unit.
4. Slide the right side shroud up and over the handle.
5. Slide the left side shroud up and over the handle.
6. Push one pedal to the bottom of the stroke. Remove the center shroud.
7. The Hiker should now look like figure 2-1.

STEP 2-Releasing Tension from the Linkage System

(Tools required—One 5/16" Allen wrench, safety glasses.)

1. Position yourself straddling the side tube as shown in figure 2-2.
2. Grasp the long tie rod assembly with one hand and try to rotate. You should feel resistance.

2 / DISASSEMBLY

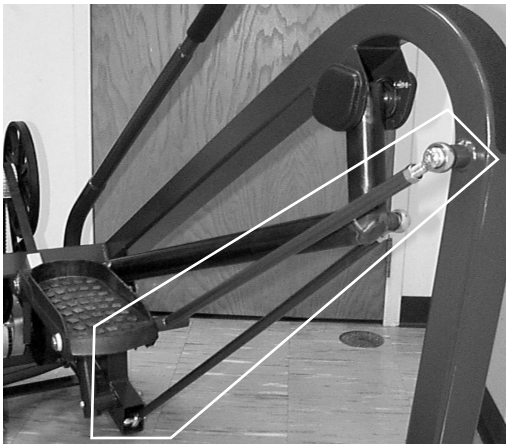


Fig. 2-4

3. Push the foot pedal backward with your foot (see figure 2-3) until you can rotate the long tie rod assembly freely with your hand.
4. Hold the foot pedal in this position and remove the 1/2-13 x 1.50" long screw. (See figure 2-2.)
5. Lay the long tie rod on the assembly floor.
6. Slowly and carefully, let the foot pedal come forward until there is no force on the pedal.

STEP 3—Removing the Linkage System

Must complete at least Step 2-Disassembly.

(Tools required—Two 3/4" wrenches, one 5/16" Allen wrench, one flat head screwdriver and safety glasses.)



Fig. 2-5

1. Remove the 1/2-13 x 2.00" long bolt and 1/2-13 lock nut on the lower end of the long tie rod assembly.
2. Remove the 1/2-13 x 1.75" long bolts and two 1/2-13 lock nuts on the short tie rod assembly.
3. Remove the 1/2-13 x 1.5" long screw on the foot plate tie rod assembly.
4. Remove the retaining ring attaching the foot plate tie rod assembly.
5. Remove the foot plate tie rod assembly.

WARNING: Be sure that tension from the linkage system has been released prior or further disassembly.

STEP 4-Disassembling the Tie Rod Assemblies

Must complete at least Steps 1,2,3-Disassembly.

(Tools required—One 3/4" wrench, one 5/8" wrench.)

NOTE: The rod ends and check nuts on the front ends of the tie rod assemblies are all left hand thread while the rod ends and check nuts on the back ends are right hand thread.

1. While holding the tie rod, loosened the 1/2-28 check nut.
2. Screw out the rod end.

CAUTION

Do not use any lubricant on tie rod ends. Using lubricant on tie rod ends can destroy bearings and will void warranty.

CAUTION

Use only Cybex replacement parts when servicing. Failure to do so could result in personal injury. Cybex will void warranty if non-Cybex replacement parts are used or when unauthorized modifications are made.

2 / DISASSEMBLY

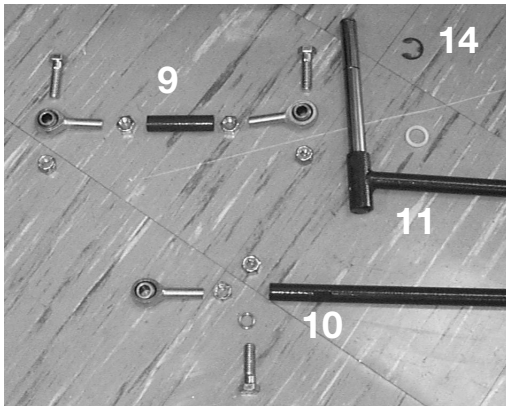


Fig. 2-6

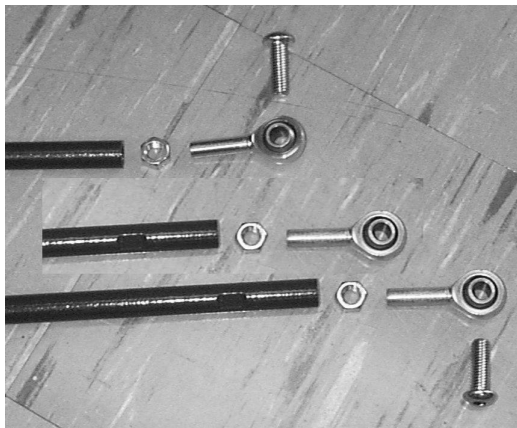


Fig. 2-7

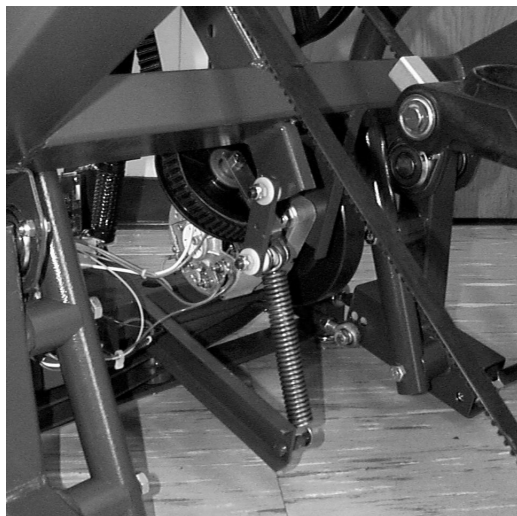


Fig. 2-8

Component Parts of the Linkage System

1. 1/2-13 x 1.75" long hex head bolt
2. 1/2-13 x 2.00" long hex head screw
3. 1/2-13 x 1.50" long BHC screw
4. 1/2-13 lock nut
5. 1/2-28 nut, left hand thread
6. 1/2-28 nut, right hand thread
7. 1/2" rod end with 1/2-28 left hand thread
8. 1/2" rod end with 1/2-28 right hand thread
9. Short tie rod
10. Long tie rod
11. Foot plate tie rod
12. 1/2" flat washer
13. 1/2" ID spacer
14. 3/4" ID wear washer x 7
15. Retaining ring, foot plate tie rod



Fig. 2-9

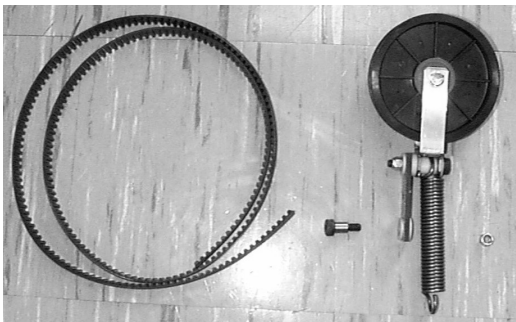


Fig. 2-10



Fig. 2-11



Fig. 2-12

WARNING: Be sure that tension from the linkage system has been released prior to further disassembly.

STEP 6-Removing the Pulley Assembly and Drive Belt

Must complete at least Steps 1,2-Disassembly.

(Tools required–One 1/8" Allen wrench, one 1/4" Allen wrench, one 9/16" wrench.)

1. Grasp the tension spring and pull down. (See figures 2-8 and 2-9.) Then slip the loop off of the spring shaft.
2. Remove two 1/4" set screws from each of the belt retainers at foot plate.
3. Slide the drive belt out through the pulley assembly.
4. Remove the 1/2 x .625" long shoulder screw.
5. Remove the pulley assembly. (See figure 10.)

WARNING: Be sure that tension from the linkage system has been released prior to further disassembly.

STEP 7-Removing the Foot Plate

Must complete at least Step 2-Disassembly.

(Tools required–One flat head screwdriver, one rubber hammer.)

1. Remove the two retaining rings on the foot plate which attach the foot plate to the rear pivot arm assembly. (See figure 2-11.)
2. Remove the retainer from the foot plate tie rod found in rear of pedal.
3. Slide the seven wear washers (not shown in figure), foot plate and the belt attachment assembly off. This may require a tapping with a rubber hammer.

2 / DISASSEMBLY



Fig. 2-13

STEP 8-Removing the Rear Pivot Arm Assembly

Must complete at least Steps 2 and 7-Disassembly

(Tools required—One flat head screwdriver, two 1/2" wrenches.)

1. Remove both protective plastic caps.
2. Remove four 5/16 x .75" long screws and four 5/16 x .75" lock nuts.
3. Slide off plastic cap brackets.
4. Slide off both bearing sets.
5. Rotate pivot arm assembly to remove.

WARNING: *Be sure that tension from the linkage system has been released prior to further disassembly.*



Fig. 2-14

STEP 9-Removing the Front Pivot Arm Assembly

Must complete Steps 1,2,3,4-Disassembly.

(Tools required—Two 1/2" wrenches.)

1. Remove four 5/16-18 x .75" long screws and four 5/16-18 lock nuts. (See figure 2-15.)
2. Slide off both of the bearing sets.
3. Rotate the pivot arm assembly to remove. Keep turning and rotating until it slides out.



Fig. 2-15

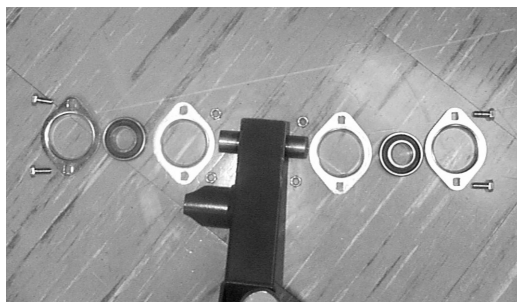


Fig. 2-16

2 / DISASSEMBLY

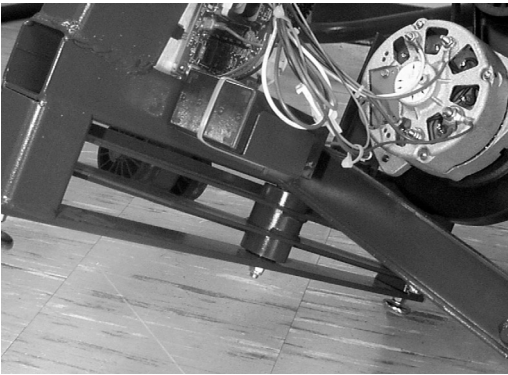


Fig. 2-17



Fig. 2-18

STEP 10-Removing the Front Linkage Assembly

Must complete Steps 1,2,3,4-Disassembly.

(Tools required-One 9/16 deep socket, one 9/16 wrench.)

1. Remove one 3/8-16 x 3.75" long bolt and one 3/8-16 lock nut. (See figure 2-17.)
2. Slide out the front linkage assembly. (See figure 2-18.)

NOTE: *It is sometimes easier to see if you stand machine on its rear legs.*

WARNING: *Be sure that tension from the linkage system has been released prior to further disassembly.*

3 / INSTALLATION

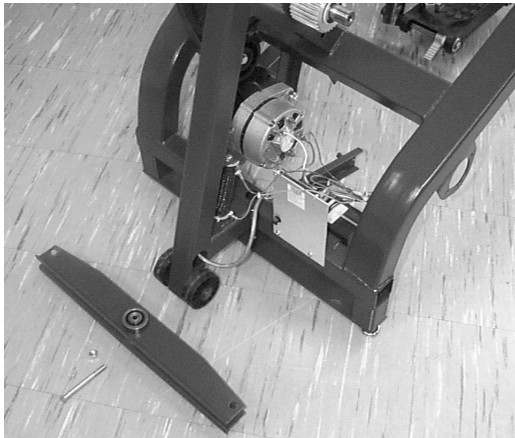


Fig. 3-1

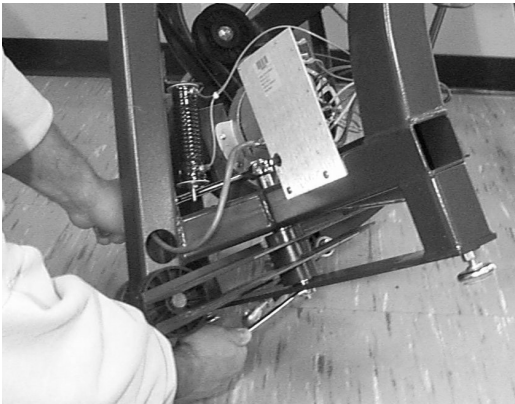


Fig. 3-2



Fig. 3-3



Fig. 3-4

Installation of the 600H Hiker by Cybex can be unsafe if you don't follow directions. The following installation steps are listed in sequential order assuming that the Hiker has been completely disassembled.

NOTE: Safety glasses should be worn while assembling or disassembling the Linkage System.

STEP 1-Installing the Front Linkage Assembly

(Tools required–One 9/16" deep socket, on 9/16" wrench, safety glasses.)

1. Select one front linkage assembly: One 3/8-16 x 3.75" long bolt, one 3/8-16 lock nut.
2. Orient the front linkage in relationship to the unit as shown in figure 3-1.
3. Align the holes in the bearing with the mounting holes in the unit.
4. Slide one 3/8-16 x 3.75" bolt in from the top. Make sure the wide spacing of the linkage assembly is on the bottom. (See figure 3-2.)
5. Attach on 3/8-16 lock nut and tighten to 22 ft-lb minimum.

STEP 2-Installing the Front Pivot Arm Assembly

(Tools required–Two 1/2" wrenches.)

1. Select the front pivot arm assembly. This is comprised of four 5/16-18 x .75" long screws, four 5/16-18 lock nuts, four flangettes, and two 1" ID bearings. (See figure 3-3.)
2. To rotate the pivot arm assembly into position, keep turning until it slides in. Put one pivot shaft of pivot arm through one pivot bracket, then twist and rotate the shaft until it fits into the other pivot bracket. Make sure the bumper attachment is towards the front of the unit.
3. A bearing set contains two flangettes and one 1" ID bearing. Slide both bearing sets onto the pivot shaft with the extended race towards the inside. (See figure 3-4.)

3 / INSTALLATION



Fig. 3-5

4. Slide the four 5/16-18 x .75" long screws through the holes in the flange and mounting bracket.
5. Attach the four 5/16-18 lock nuts and tighten them snugly. (See figure 3-5.)
6. Adjust the position of the front pivot arm assembly by positioning the bumper against the flat of the 2 x 2" tube while making sure that the pivot arm assembly is perpendicular to the front tube. (See figure 3-6.)
7. Tighten the four 5/16-18 lock nuts to 15 ft-lb minimum. (See figure 3-5.)

STEP 3-Assembling the Short Linkage Rod Assembly

(Tools required—Two 3/4" wrenches.)

1. Select one short tie rod with one 1/2-28 check nut (left hand thread), one 1/2" rod end with 1/2-28 left hand thread, one 1/2-28 check nut (right hand thread), and one 1/2" rod end with 1/2-28 right hand thread. (See figure 3-7.)
2. Screw the 1/2-28 check nut (left hand thread) onto the 1/2-28 rod end with 1/2-28 left hand thread.
3. Screw the rod end with nut into the 1/2-28 left hand threaded end of the short tie rod.
4. Repeat steps 2 and 3 for the right hand rod end and nut.
5. Adjust the rod ends so that the dimension of the 1/2" holes is 6.95" from outside edge of the hole in the rod end. (See figure 3-8.)
6. Tighten the 1/2-28 check nut (left hand thread) to 50 ft-lb minimum.
7. The 1/2" rod end with 1/2-28 right hand thread should then be rotated one quarter turn in, at 90 degree. (See figure 3-9.)
8. Tighten the 1/2-28 check nut (right hand thread) to 50 ft-lb minimum.



Fig. 3-6

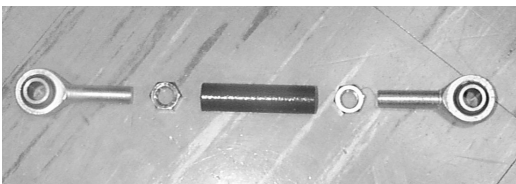


Fig. 3-7

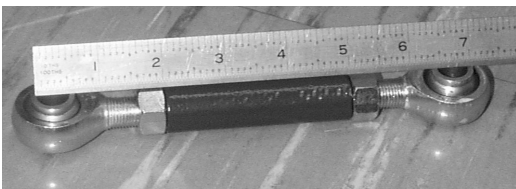


Fig. 3-8



Fig. 3-9

3 / INSTALLATION

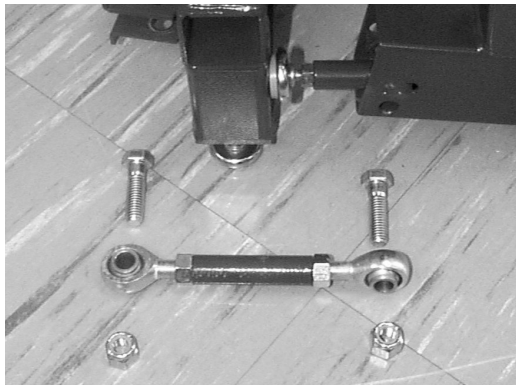


Fig. 3-10

STEP 4-Installing the Short Linkage Rod Assembly

(Tools required—Two 3/4" wrenches.)

1. Select one short rod end assembly along with two 1/2-13 x 1.75" long bolts, and two 1/2-13 lock nuts. (See figure 3-10.)
2. Orient the linkage rod assembly so that the left hand threaded parts are facing the front end of the unit. (See figure 3-10.)
3. Slide the short linkage rod assembly into the front linkage assembly. (See figure 3-11.)
4. Slide from the top one 1/2-13 x 1.75" long bolt through the assembly.
5. Attach on 1/2-13 lock nut and tighten to 50 ft-lb minimum. (See figure 3-11.)
6. Position the short linkage rod assembly against the inside surface of the front pivot and in line with lower 1/2" diameter hole. (See figure 3-12.)
7. From the inside of the unit slide one 1/2-13 x 1.75" long bolt through the assembly. (See figure 3-12.)
8. Attach one 1/2-13 lock nut, positioned inside the tube, and tighten to 50 ft-lb minimum. (See figure 3-12.)

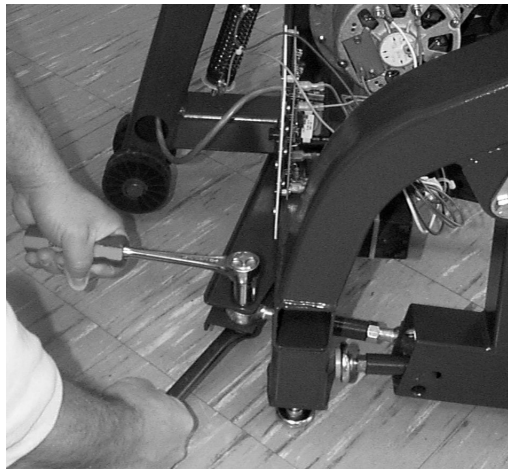


Fig. 3-11



Fig. 3-12



Fig. 3-13



Fig. 3-14



Fig. 3-15



Fig. 3-16

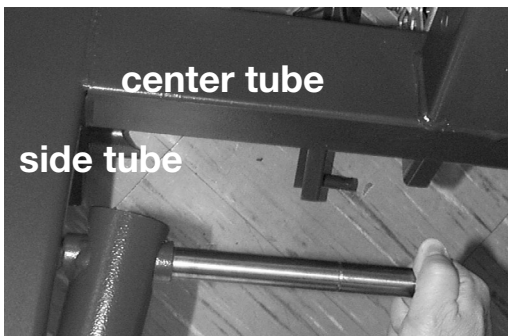


Fig. 3-17

STEP 5-Installing the Rear Pivot Arm Assembly

(Tools required—Two 1/2" wrenches.)

1. Select one rear pivot arm along with four 1/16-18 x .75" long screws, four 5/16-18 lock nuts, two plastic cap brackets, four flangettes, and two 1" ID bearings. (See figure 3-13.)
2. Rotate the pivot arm assembly into position. To do so, put one pivot shaft of pivot arm through on pivot bracket, then twist and rotate the shaft until it fits into the other pivot bracket. Make sure the bumper attachment is towards the front of the unit. (See figure 3-14.)
3. Each bearing set includes one 1" ID bearing and two flangettes. Slide both bearing sets onto the pivot shaft with the extended race facing toward the inside. (See figure 3-15.)
4. Slide both plastic cap brackets. (See figure 3-16.)
5. Slide the four 5/16-18 x .75" long screws through the holes in the plastic bracket, flangette, and mounting bracket. (See figure 3-16.)
6. Attach the four 5/16-18 lock nuts and leave loose.
7. Adjust the position of the rear pivot arm assembly by first positioning the 1" diameter protrusion at the end of the arm against the inside edge of the side tube and then rotating the pivot shaft to be parallel with the center tube. (See figure 3-17.)
8. Tighten the four 5/16-18 lock nuts to 15 ft-lb minimum. (See figure 3-18.)

3 / INSTALLATION



Fig. 3-18



Fig. 3-19

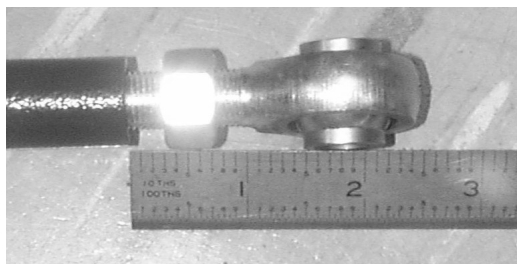


Fig. 3-20

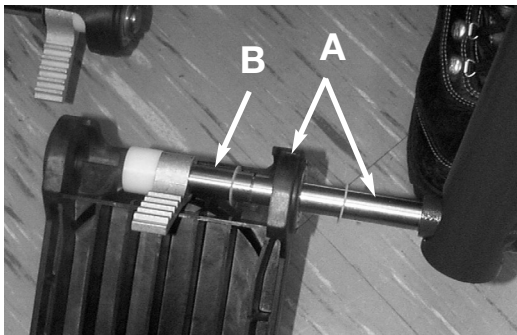


Fig. 3-21

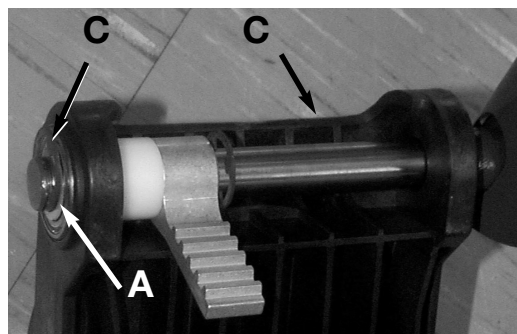


Fig. 3-22

STEP 6-Assembling the Foot Plate Linkage Rod

(No tools required.)

1. Select one foot plate linkage along with one 1/2-28 check nut (right hand thread) and one 1/2" rod end with 1/2-28 right hand thread. (See figure 3-19).
2. Screw the 1/2-28 lock nut into the foot plate linkage rod.
3. Screw the rod end with nut into the foot plate linkage rod.
4. Adjust the rod end with nut into the foot plate linkage rod.
5. Rotate the lock nut up to the tie rod end, but do not tighten.

STEP 7-Attaching a Foot plate to the Front Pivot Arm Assembly

(Tools required–One flat head screwdriver.)

1. Select a foot plate along with three 3/4" ID wear washers, one belt attachment assembly and two retaining rings.
2. Slide one 3/4" ID wear washer (A) onto the pivot shaft. (See figure 3-21.)
3. Slide one foot plate halfway onto the pivot shaft. (See figure 3-21.)
4. Slide one 3/4" ID wear washer onto the pivot shaft. (See figure 3-21.)
5. Slide one belt attachment assembly (B) onto the pivot shaft. (See figure 3-21.)
6. Slide the foot plate the rest of the way onto the pivot shaft. (See figure 3-22.)
7. Slide one 3/4" ID wear washer (A) onto the pivot shaft. (See figure 3-22.)
8. Attach the two retaining rings (C). (See figure 3-22).

3 / INSTALLATION

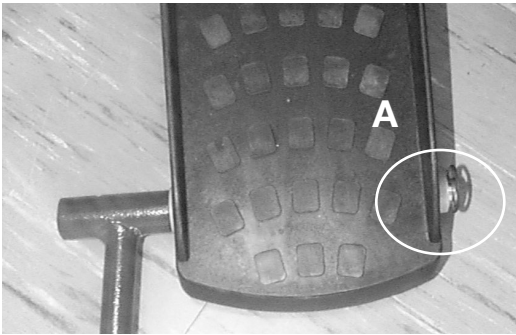


Fig. 3-23

STEP 8-Installing the Foot Plate Linkage Rod Assembly

(Tools required—One flat head screwdriver, one 3/4" wrench and one 5/16" Allen wrench.)

1. Select one foot plate linkage rod assembly along with 1/2-13 x 1.50" long bolt, five 3/4" ID wear washers (A), and one retainer. (See figure 3-23.)
2. Slide the pivot shaft of the foot plate linkage rod assembly through the foot plate from the outside of the unit. (See figure 3-23.)
3. Slide the five 3/4" ID wear washers onto the shaft. (See figure 3-23.)
4. Attach the retainer. (See figure 3-23.)
5. Rotate the tie rod into position and install the 1/2-13 x 1.50" bolt. (See figure 3-24.)
6. Tighten the 1/2-13 x 1.50" long bolt to a 50 ft-lb minimum. (See figure 3-25.)
7. Orient the rod end parallel to the side tube and tighten the check nut to a 50 ft-lb minimum. (See figure 3-26.)



Fig. 3-24



Fig. 3-25

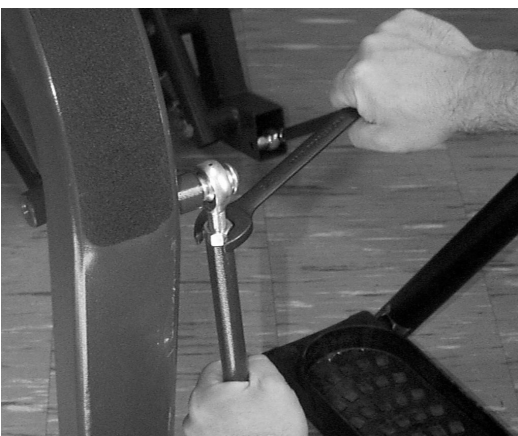


Fig. 3-26

3 / INSTALLATION

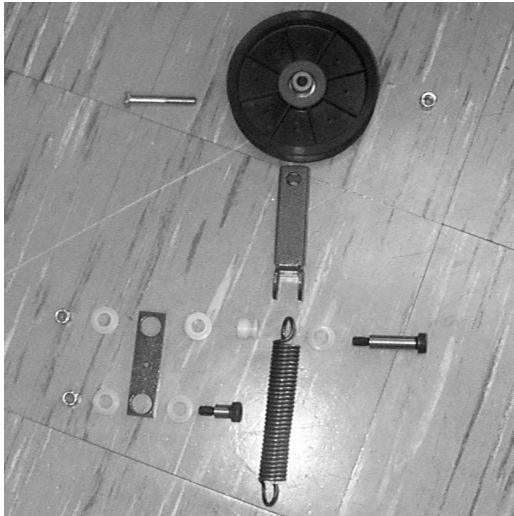


Fig. 3-27



Fig. 3-28

STEP 9-Assembling the Pulley Assembly

(Tools required—Two 9/16" wrenches and one 1/4" Allen wrench.)

1. Select one pulley along with one pulley bracket, one extension spring, one 3/8-16 x 2.5" long bolt, two 3/8-16 lock nuts, two spring bracket bushings, one stepped spring bracket bushing, one pivot bushing, one spring alignment plate, and one 1/2 x 1.750" long shoulder bolt. (See figure 3-27.)
2. Slide the pulley into the pulley bracket.
3. Slide one 3/8-16 x 2.5" long bolt through the hole in the pulley and bracket it from the side corresponding to the offset space on the bottom of the pulley bracket. (See figure 3-28.)
4. Tighten the nut and bolt to a 22 ft-lb minimum.
5. Slide the pivot bushing into the loop of the extension spring.
6. Using one 1/2 x 1.750" long shoulder bolt and one 3/8-16 lock nut, assemble into the spring bracket two spring bracket bushings, one stepped spring bracket bushing, one spring alignment plate, and one extension spring with pivot bushing. (See figure 3-28.)
7. Tighten the nut and bolt to a 22 ft-lb minimum.

3 / INSTALLATION

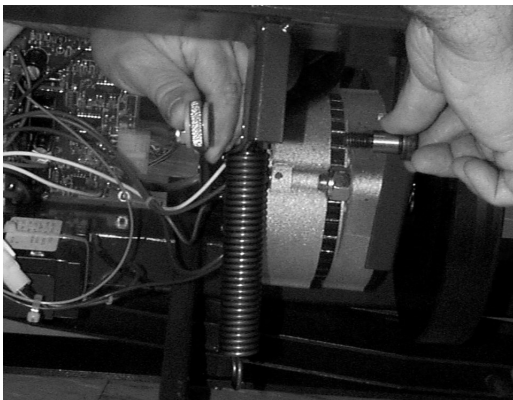


Fig. 3-29

STEP 10-Installing the Pulley Assembly

(Tools required—One 1/4" Allen wrench and one 9/16" wrench.)

1. Select one pulley assembly along with one 3/8-16 lock nut, two spring bracket bushings, and one 1/2 x .625" long shoulder bolt.
2. Slide two spring bracket bushings into the spring alignment bracket on the pulley assembly. (See figure 3-29.)
3. Position the pulley assembly against the mounting bracket onto the frame. Orient it in such a way that the head of the 3/8-16 x 2.50" long bolt heads towards the center tube on the frame and the offset on the lower part of the pulley bracket heads away from the center tube on the frame. (See figure 3-29.)
4. Slide the 1/2 x .625" long shoulder bolt through the mounting bracket and the two spring bracket bushings. (See figure 3-30.)
5. Attach the 3/8-16 lock nut and tighten to a 22 ft-lb minimum.



Fig. 3-30

STEP 11-Attaching the Drive Belt to the Foot Plate

(Tools required—One 1/8" Allen wrench.)

1. Select one drive belt along with one belt retainer and two 1/4 x 5/16" long set screws into the belt retainer.
2. Insert the two 1/4 x 5/16" long set screws into the belt retainer.
3. Slide the belt retainer with the set screws on to the belt. Make sure that the belt position is such that the teeth are towards the floor and the belt retainer position is such that the set screws are towards the floor. (See figure 3-31.)
4. Position the belt onto the belt attachment assembly making sure that all of the teeth on the belt attachment are engaged. (See figure 3-32.)
5. Slide the belt retainer over the belt attachment assembly until the two ends are flush. (See figure 3-32.)
6. Tighten both set screws securely. (Before tightening, place a dab of grease on each screw.)



Fig. 3-31



Fig. 3-32

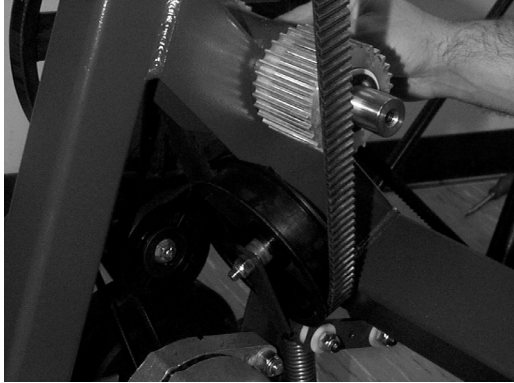


Fig. 3-33



Fig. 3-34



Fig. 3-35

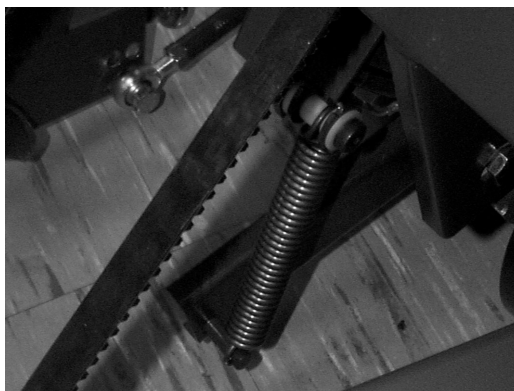


Fig. 3-36

STEP 12-Installing the Belt Drive

(Tools required–One 1/8" Allen wrench.)

1. Select one belt retainer and two 1/4 x 5/16" long set screws.
2. Route the drive belt over the drive pulley to its corresponding side.
3. Twist the drive belt 90 degrees so that the flat surface of the belt will engage the surface of the idler pulley. (See figure 3-33.)
4. Route the drive belt around the pulley. (See figure 3-33.)
5. Twist the drive belt 90 degrees so that the teeth surface of the drive belt will engage the drive pulley.
6. Route the drive belt over the drive pulley. (See figure 3-34.)
7. Attach the drive belt to the other foot plate following the instruction in Step 11-Installation, "Attaching the Drive Belt to the Foot Plate".

STEP 13-Attaching the Extension Spring to the Spring Shaft

(No tools required.)

1. Grasp the tension spring and pull and hold down. (See figure 3-35.)
2. Slip the loop onto the spring shaft. (See figure 3-36.)

3 / INSTALLATION



Fig. 3-37

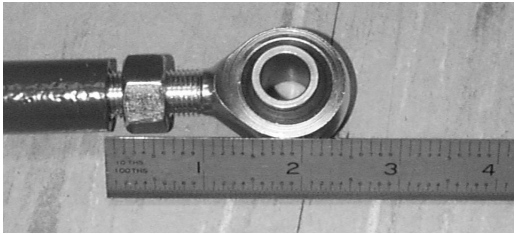


Fig. 3-38

STEP 14-Assembling the Long Linkage Rod Assembly

(Tools required—One 5/8" wrench and one 3/4" wrench.)

1. Select: one long tie rod along with one 1/2-28 check nut (left hand thread), one 1/2" rod end with 1/2-28 left hand thread, one 1/2-28 check nut (right hand thread, and one 1/2" rod end with 1/2-28 right hand thread. (See figure 3-37.)
2. Screw the 1/2-28 check nut (left hand thread) onto the 1/2-28 rod end with 1/2-28 left hand thread.
3. Screw the rod end with nut into the 1/2-28 left hand threaded end of the long tie rod.
4. Repeat steps 2 and 3 for the right hand rod end and nut.
5. Adjust each rod end so that it is .95" from the end of the tie rod to the shoulder onto the rod end. (See figure 3-38.)
6. Position the two rod ends to be in line. (See figure 3-39.)



Fig. 3-39



Fig. 3-40

3 / INSTALLATION



Fig. 3-41



Fig. 3-42



Fig. 3-43



Fig. 3-44

STEP 15-Installing the Long Linkage Rod Assembly

(Tools required—Two 3/4" wrenches and one 9/16" Allen wrench.)

1. Select one long linkage rod assembly along with one 1/2-13 x 2.00" long bolt, one 1/2-13 x 1.50" long bolt, two 1/2-13 lock nuts, and one 1/2" ID spacer. (See figure 3-39.)
2. Orient the linkage rod assembly so the the left hand threaded parts are facing toward the front of the unit. (See figure 3-40.)
3. Slide the rod end assembly into the tube of the front pivot assembly. (See figure 3-41.)
4. From the outside, slide the 1/2-13 x 1.50" long bolt through one wall of the tube. (See figure 3-41.)
5. Slide the 1/2" ID spacer onto the 1/2-13 x 2.00" long bolt. (See figure 3-41.)
6. Slide the rod end onto the 1/2-13 x 2.00" long bolt. (See figure 3-41.)
7. Attach one 1/2-13 lock nut and tighten to a 50 ft-lb minimum. (See figure 3-42.)
8. Position yourself straddling the side tube as shown in figure 3-43.
9. Grasp the long tie rod assembly with one hand and lift it up.
10. With your foot push the foot pedal backwards until you can line up the rod end with the attachment point on the rear pivot arm assembly.
11. Slide the 1/2-13 x 1.50" long bolt through the hole in the rod end and attach it to the rear pivot arm assembly.
12. Tighten the bolt to a 50 ft-lb minimum. (See figure 3-44.)
13. Slowly move the pedals and verify that the drive belt is tracking properly in the idler pulley.

3 / INSTALLATION

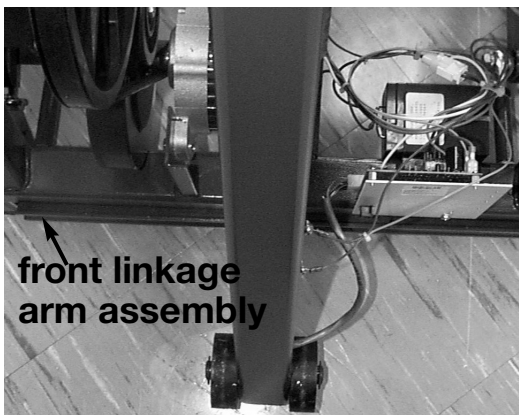


Fig. 3-45



Fig. 3-46

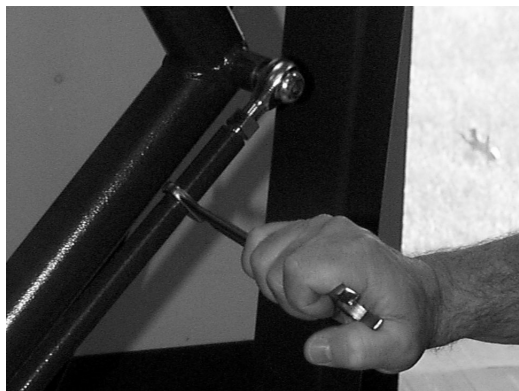


Fig. 3-47



Fig. 3-48

STEP 16-Adjusting the Linkage System

(Tools required—One tape measure or scale, one 3/4" wrench one 5/8" wrench and a torque wrench.)

1. Align the front linkage assembly (as shown in figure 2-18) parallel to the frame. (See figure 3-45.)
2. With the front linkage assembly parallel to the frame, verify that the foot plates are level with one another and are between 7.50" and 7.75" to the center line of the pivot shaft of the foot pedal from the floor. (See figure 3-46.)
- 3a. If the foot plates are not level or between 7.50" and 7.75" from the floor go to step 4.
- 3b. If the foot plate are level and between 7.50" and 7.75" from the floor go to step 5.
4. To adjust the position of the foot plate rotate the long tie rod. (See figure 3-47.) Note that one full revolution (360 degrees) of the tie rod is equal to approximately 1" of movement at the foot plate.
5. Verify that the idler pulley does not make contact with either the frame or the alternator during operation. If the idler makes contact with either one, the unit is not properly adjusted. Repeat steps 1 through 4.
6. Once the linkage system is properly adjusted the two 1/2-28 check nuts must be tightened to a 50 ft-lb minimum using a torque wrench. (See figure 3-45.)

3 / INSTALLATION

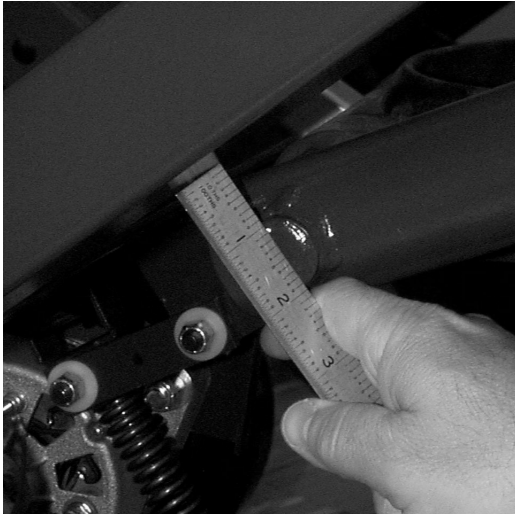


Fig. 3-49

STEP 17-Adjusting the End of the Stroke

(Tools required—One tape measure and one 9/16" wrench.)

1. Rotate the rear pivot arm upward until the 1" diameter protrusion is 1.25" from making contact with the frame. (See figure 3-49.)
2. While holding the rear pivot arm in this position, adjust the stop so that it touches the 2 x 2" tube. (See figure 3-50.)
3. Tighten the check nut to a 22 ft-lb minimum.
4. Position the foot plates at full stroke and measure the distance from the end of the foot plate to the end of the foot plate. (See figure 3-51.)
5. This dimension should be between 23" and 25". If it is not then the unit is not properly adjusted and the adjustment for the linkage system and the adjustment for the end of the stroke must be repeated.

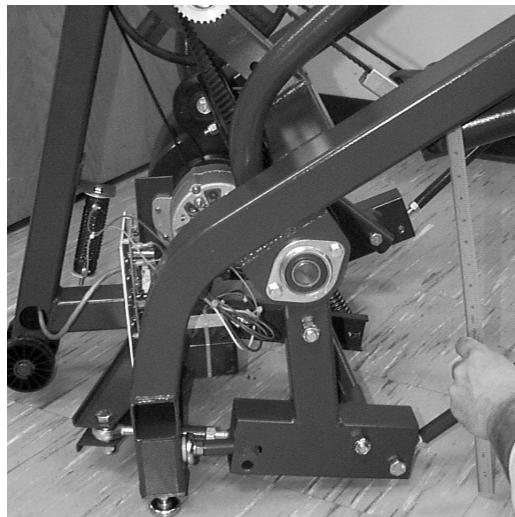


Fig. 3-50



Fig. 3-51

3 / INSTALLATION



Fig. 3-52



Fig. 3-53

STEP 18-Attaching the Shrouds

(Tools required–One Phillips head screwdriver.)

1. Select two 10-32 x .50" long screws, one left side shroud, one right side shroud, and one center shroud.
2. Push one foot plate to the bottom of the stroke.
3. Slide the center shroud into position.
4. Slide the left shroud down over the left handle and into position.
5. Slide the right shroud down over the right handle and into position.
6. Attach all 15 metal screws and washers to the shrouds and tighten.
7. Attach the left side shroud to the frame using one 1-32 x .50" long screw.
8. Attach the right side shroud to the frame using one 10-32 x .50" long screw.
9. Attach the shrouds to the front of the frame using the 10-32 x .75" long screw.

600H Hiker Retro-Kit (LT-15103) Installation Instructions

(Tools required—1/8" Allen wrench, 5/32" Allen wrench, 9/16" socket/wrench, 9/16" open/box wrench.)

Extract Calibration Settings

Before changing the console board, extract calibration settings as follows:

NOTE: *If Hiker cannot be started due to a dead battery, this problem must first be resolved before continuing on.*

1. Start stepping and press START.
2. Press the + and - keys in the INTENSITY window (at the same time).
3. Press CARDIO 1 and record the number in the right window.
4. Press START and record the new number that appears in the right window.
5. Press START and "SAVE" will appear in the right window.
6. Press the + and - keys in the INTENSITY window to exit the diagnostic mode.

Display Panel Replacement

1. Using a Phillips head screw driver, loosen and remove the two screws that fasten the plastic wire cover to the console bracket.
2. Loosen and remove the 6 Phillips head screws that fasten the console together. Set the screws aside.
3. While holding both the display console front, with display board attached, and the plastic wire cover, lift them both slowly until the plastic wire cover can be removed to expose the console wiring.
4. Unplug the console cable and the heart rate cable from the display console circuit board. Loosen and remove the two Phillips head screws that fasten the board to the console front. Disconnect the two ribbon cables that connect the overlays to the board.
5. Connect the two ribbon cables to the new board. Using the same two screws, install the new display board to the console front, supplied with the kit.
6. The new board has a different connector type for the Biosig device. There is a jumper adapter included in the kit. Use this adapter to make this connection.
7. Plug both the console cable and the heart rate cable into the new circuit board.
8. While holding both the display console front, with and the new plastic wire cover supplied in the kit, position the wire cover so it will slide back into place as both items are set back down onto the console bracket.
9. Install the console and wire cover hardware and tighten.

4 / RETRO-KIT INSTALLATION

NOTE: When starting a test stepping may help prevent battery drainage. You can enter the tests without stepping first. However, do not step while entering Static Diagnostic Check.

Error 3

After installing this kit an initialization sequence is required. This will be noted by ERR 3 appearing on the display when START is first pressed. Follow the steps below to enter an initialization sequence.

1. Start stepping and press START.
2. Note ERR 3.
3. Press the + and - buttons in the DURATION window and hold until repeated beep is heard.
4. Press the + and - keys in the INTENSITY window to exit the diagnostic mode.
5. Wait for countdown to complete.

Replace Calibration Settings

After installing the new board, replace calibration settings with the recorded values.

1. Start stepping and press START.
2. Press the + and - keys in the INTENSITY window (at the same time).
3. Press CARDIO 1 and use the right + or - key to adjust the first (smaller) number recorded earlier.
4. Press START and use the right + or - key to adjust the second (larger) number recorded earlier.
5. Press START and "SAVE" will appear in the right window.
6. Press the + and - keys in the INTENSITY window to exit the diagnostic mode.

Pulley Replacement

NOTE: It is not necessary to remove the shroud.

NOTE: Wear safety glasses during this procedure.

To release tension from linkage system:

1. Position yourself straddling the side frame tube as shown in See figure 5-1. Using your foot push the foot pedal backwards until you can rotate the long tie rod assembly freely with your hand.
2. Hold the foot pedal in this position and remove the 1/2-13 x 1.50" screw using a 5/16" Allen wrench.
3. Lower the long tie rod assembly to the floor.
4. Slowly and carefully let the foot pedal come forward until



Fig. 5-1



CAUTION

Do not use any lubricant on tie rod ends. Using lubricant on tie rod ends can destroy bearings and will void warranty.

4 / RETRO-KIT INSTALLATION

there is no tension on the pedal.

5. Flip the hiker up onto the rear legs so the front of the unit is facing up to gain access to the underside of the shroud.
6. Remove the tension spring by grasping the tension spring and pulling downward until the Spring can be removed from the spring shaft. See figure 5-1.
7. Using a 9/16" wrench and socket, loosen and remove the nut and bolt that fasten the pulley to the bracket. Remove the pulley from the bracket.
8. Orient the new pulley so that the raised text on the pulley hub is facing upward (in the current position of the machine). Install the pulley hardware and tighten.
9. Using the TFL spray lube supplied with the kit, spray the toothed pulleys (2) being sure to cover the entire toothed area all the way around the pulley.
10. Grasp the tension spring and stretch and connect the loose end over the shaft it was removed from.
11. Return the Hiker to its normal operating position.
12. Slowly push the unconnected step toward the rear of the machine. Grasp the linkage arm and push the pedal to meet the linkage arm end. Insert the bolt and tighten to 50 ft-lb.
13. Before operating the unit, make sure the belt has maintained its position on the pulley. The hiker is now ready for use.

Enter Diagnostic Mode

To enter diagnostic mode, get on the Hiker and begin stepping. Press the START button and the display will light up. On the window labeled INTENSITY press the + and - keys at the same time. The display will briefly show the EPROM revision level and then go to Display LED testing mode.

Display LED Test

Press FAT BURN 1 to enter this test mode. Watch for any missing segments and verify that all digits and lights have uniform brightness. This is also the default test mode when entering diagnostics.

Battery Test

Press FAT BURN 2 to enter this test mode. The display will show "bat" "6.5". This is the current voltage (DC) of the internal battery. Please note "6.5" is an example, the actual voltage will vary on each machine. The battery needs to be a minimum of 5.5 volts DC for the Hiker to operate properly.

Production Calibration Test

Press CARDIO 1 to enter this test mode.

NOTE: *The Hiker cannot execute this calibration manually, the calibration numbers need to be entered from current data. Refer to the calibration procedure outlined in the Hiker Retro Kit section 4.*

To get back to the Display LED testing mode press FAT BURN 1. To exit the Calibration testing mode press the + and - key in the window labeled DURATION.

DVM Test

This test is to check the charging of the battery. If the battery is low it is likely because the Hiker is not being used for long periods of time. If that is the case, more frequent use of the Hiker will keep the battery charged. Or you could charge the battery using an external charger.

(Tools required—A digital voltmeter (DVM) clipped to the battery connections.)

1. Connect a DVM between the positive battery terminal (red wire) and negative terminal (black wire). (If the black wire is difficult to connect, the chassis of the alternator may also be used for the negative terminal.)
2. Start and run the Hiker normally (Level 1, 50 to 60 RPM usage is fine) and monitor the DVM voltage. The voltage may

drop during startup, but within 15 seconds of start it should begin rising.

3. If the charger is working properly, a slow but steady rise of voltage will still be observed from 30 seconds to 1 minute, and usually beyond.

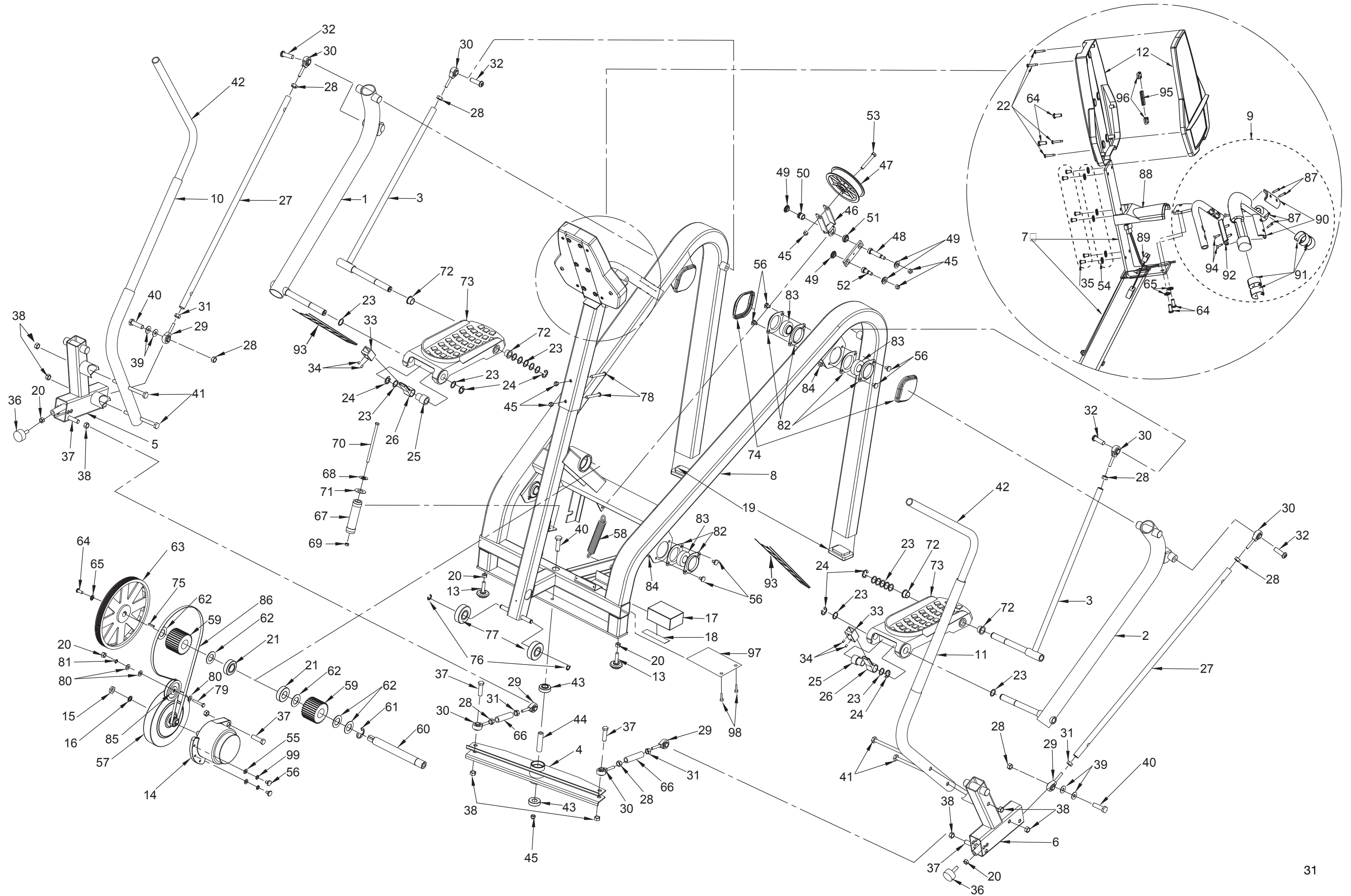
Static Diagnostic Check

This test employs the internal battery voltage measurement. It takes a little more time on the machine because the battery must be discharged some before measuring voltage, and then recharged through normal use for several minutes to get an accurate result.

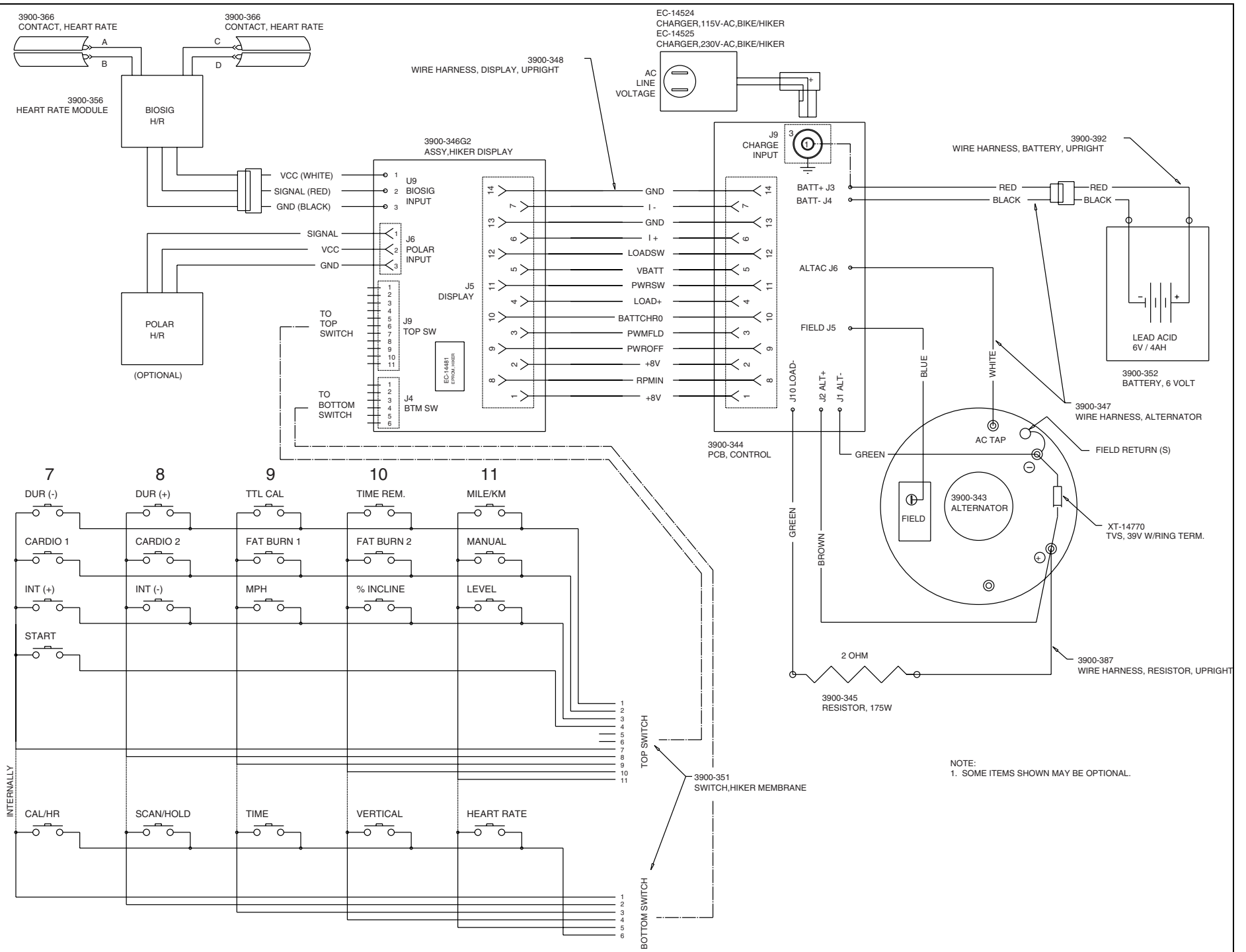
1. Without stepping, press START. Press and hold the + and - keys of the INTENSITY section (left side of display). LED test will start. When LED test has most LEDs lit (number 8s, and dot display all lit) press the Fat Burn 2 Program button to measure display (if necessary, toggle back to LED test by pressing Fat Burn 1 Program button).
2. If left display does not show "bat" press left + switch until it does. (This voltage typically reads about 0.2 volts lower than a meter directly on the battery.)
3. Leave this display active for at least 2 minutes; voltage may drop slightly during this time. Read and record the final voltage displayed.
4. Exit diagnostics by again pressing the INTENSITY (left) + and - switches. The Hiker may then be started normally.
5. Run the Hiker in normally (Level 1, at 50 to 60 RPM is fine) for at least 5 minutes to charge the battery.
6. Stop pedaling and enter diagnostics as described in a and b above. Make sure that the battery voltage is measured with most LEDs lit as described above. This voltage should be at least 0.1 volts higher than the previously recorded value. If so, the charger is working properly.

6 / PARTS LIST

ITEM	QTY.	PART NO.	DESCRIPTION	ITEM	QTY.	PART NO.	DESCRIPTION
1	1	AF-14767	Front, pivot arm linkage, (right)	60	1	FM-14527	Shaft, clutch
2	1	AF-14766	Front, pivot arm linkage, (left)	61	1	HX-14731	Retaining ring, 1" shaft external
3	1	AF-14734	Back pivot arm	62	5	HB-12136	Bearing thrust 1.0 x 1.75"
4	1	AF-14681	Weldment, front pivot (wing)	63	1	3900-307	Sprocket driver (secondary)
5	1	AF-14678	Weldment, handle bar mount, (right)	64	5	HC700415	Button head socket .375-16 x .75"
6	1	AF-14677	Weldment, handle bar mount, (left)	65	11	HW-00361	Lock washer, lock, ex, 3/8, zinc
7	1	AF-14676	Weldment, console mount	66	2	FM-14661	Linkage rod, lower, coated
8	1	AF-14675	Main frame	67	1	3900-345	Resistor, 175 watt
9	1	AX-14795	Handle bar assy, center w/heartrate	68	1	3900-369	Washer, centering, 1.10 OD
10	1	AF-14736	Handle bar, (right arm)	69	1	HN624100	Hex nut .250-20
11	1	AF-14735	Handle bar, (left arm)	70	1	HC621254	Hex head cap screw .250-20 x 5.50"
12	1	AX-14811	Keypad kit, front & rear covers	71	1	3900-370	Washer, mica .375 1.50 .03 thick
13	2	HG-700022	Leveling glide 3/8-16	72	4	FM-14826	Bushing, flange, foot plate
14	1	MR-15060	Alternator (comes with nut and washer)	73	2	3980-310	Foot pad
15	1	MR-15060	Alternator nut (see above)	74	4	PL-14737	Cover, pivot bearing
16	1	MR-15060	Alternator washer (see above)	75	1	3900-368	Key, 3/16 square x .920 long
17	1	3900-352	Battery, 6 volt	76	2	HX-14926	Retaining ring 1/2"
18	1	HX-14692	Doublesided tape	77	2	CW-00238	Wheel 3.0" x 1.0"
19	2	3980-350	Foot, rubber, rear	78	2	HS-14743	Screw, 3/8-16 x 2.75 button
20	5	HN704000	Hex nut .375-16	79	1	HC701224	Hex head cap screw .375-16 x 1.75"
21	2	HB-14586	Bearing, clutch shaft 1.00 OD	80	3	HS347600	Washer SAE .375
22	4	HT082521	Screw, tap no. 8 x 1.375"	81	1	HS347300	Lock washer, external tooth .375
23	16	3900-361	Washer, plastic	82	16	HB-14721	Flange, 2 bolt 52mm
24	6	HX-14730	Retaining ring, 3/4" shaft external	83	8	HB-14588	Bearing, flanged pivot 1.00 ID
25	2	FM-14498	Bushing, pulley belt attachment	84	16	HN-10002	Nut, lock, 5/16-18, ring, nylon
26	2	FM-13331	Retainer climber, belt	85	1	3900-335	Pulley, primary tension
27	2	FM-14496	Linkage rod, upper, coated	86	1	3950-336	Belt alternator micro V 480J
28	8	HN-14741	Nut 1/2-20 unf hex zinc, (right trunion)	87	4	HT062514	Screw, tap no. 6 x .625
29	4	HB-14697	Rod end bearing left (gold)	88	1	PL-14583	Center Handle bar, plastic cover
30	6	HB-14665	Rod end bearing right (silver)	89	1	AW-14840	Display jumper, biosig to polar
31	4	HN-14742	Nut 1/2-20 unf. left hex, (left trunion)	90	2	3900-362	Contact heartrate housing (top)
32	4	HS-14745	Screw, 1/2-13 x 1.50" button	91	4	3900-366	Contact heartrate pickups
33	2	FM-13330	Clamp, belt retainer	92	2	3900-363	Contact heartrate housing (bottom)
34	4	HS-00940	Set screw 1/4-20 x 5/16"	93	1	BD-14787	Belt, timing, main drive, 6.31'
35	6	JC620412	Screw	94	4	HT062312	Screw, tap no. 6 x .50
36	2	HX-14961	Vibration mount 1 1/2" x 3/4"	95	2	EC-15005	Ferrite, clamp on
37	5	HS-14739	Screw, 1/2-13 x 1.75" hex cap, grade 5	96	2	EH-15006	Ferrite clip
38	8	HN784900	Lock nut .500-13 nylon	97	1	3900-344	Lower Board
39	4	HW-10028	Washer B 1/2" narrow zinc	98	2	HT102214	Screw
40	3	HS-14744	Screw, 3/8-16 x 3.75" hex cap, grade 5	99	2	HW-00165	Lock washer split
41	4	HS-00261	Bolt, hex head 1/2-13 x 5 1/2"	NS	1	AW-15100	Wire harness, alternator
42	2	HX-14577	Foam handle bar grip	NS	1	3900-392	Wire harness, battery
43	2	HB-14585	Bearing, lower linkage .75 ID	NS	1	AW-14938	Wire harness, display
44	1	FM-14510	Shaft, pivot lower linkage	NS	1	3900-387	Wire harness, resistor
45	6	HN-10003	Nut, lock, 3/8-16, ring, nylon	NS	16	HS-15032	Fastener, plastic screw type
46	1	FS-14518	Bracket, pulley	NS	1	3980-374	Shroud, (left)
47	1	PW-15058	Pulley, 5" smart step w/bearing	NS	1	3980-376	Shroud, (middle)
48	1	HS-14824	Screw, shoulder, 1/2-13 x 1-3/4, socket head	NS	1	3980-375	Shroud, (right)
49	4	FM-14568	Bushing, pulley alignment	NS	2	DE-14574	Decal, non-skid traction
50	1	FM-14822	Bushing, spring pivot	NS	2	DE-15382	Label, Cybex Hiker
51	1	FM-14823	Bushing, stepper spring bracket	NS	1	3900-356	Heart rate module
52	1	HS-14825	Screw, shoulder, 1/2-13 x 5/8, socket head	NS	1	3900-346G2	Display PCB, w/e-prom, Biosig H/R only
53	1	HS-12075	Bolt, 3/8-16 x 2.50" hex head, grade 5	NS	1	AD-14647G2	Display PCB, w/e-prom, Polar/Biosig/CE
54	8	HS320300	Lock washer split .312	NS	1	EC14481	E-prom, V1.13, Hiker
55	2	HS327600	Washer SAE .312	NS	1	EC15104	Microprocessor
56	18	HS-00266	Bolt, Hex head .5/16-18 x 3/4"	NS	1	HT-15150	Tool for microprocessor
57	1	FW-15061	Flywheel	NS	1	PL-15417	Shield, PCB control
58	1	HX-14597	Extension spring	NS	1	EC-14524	Battery charger, 115V input, 6V output
59	2	PW-11644	Pulley, clutch, timing, aluminum	*NS=Not Shown			



Schematic of the 600H Hiker





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