

STAR TRAC 4100 STEP

OWNER'S MANUAL



SC4100
SC4110
SC4120
SC4130

STAR
TRAC
going the extra mile.

STAR TRAC 4100 STEP OWNER'S MANUAL

Star Trac's Service Hotline, 6 a.m. to 6 p.m. Pacific Standard Time

(800)-503-1221, or call

International Product Support in U.S.A.

(714)-669-1660

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TABLE OF CONTENTS

Introduction	1
Chapter 1: Safety Instructions	3
Chapter 2: Assembly and Setup	13
Assembly Instructions	14
Chapter 3: Operating Instructions	17
Display Control Panel Features	18
Hints and Tips for Getting Started	21
Manual Program	22
Varied Program	22
Hill Program	23
Interval Program	24
Heart Rate Monitoring	25
Contact Heart Rate Monitoring	25
Polar Heart Rate Monitoring	26
Dynamic Heart Rate Control	26
Chapter 4: Training Information	29
The Importance of Cardio Exercise	29
Climbing Up the Conditioning Ladder	30
The Conditioning Programs	31
Target Heart Rate Charts	31
Chapter 5: Preventive Maintenance	35
Weekly Maintenance	35
Monthly Maintenance	35
Chapter 6: Settings	35
Chapter 7: Tests	41
Warranty Card	Inside Back Cover

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INTRODUCTION

Welcome to the world of **STAR TRAC**. In your hands is the owner's manual that will acquaint you with the cordless, self-powered **STAR TRAC 4100 STEP**.

We highly recommend that you read this owner's manual prior to setting up and using your stepper. The information on the following pages will enable you to begin easily, quickly and safely.

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SAFETY INSTRUCTIONS

CHAPTER

1

- Dutch
- English
- French
- German
- Italian
- Portuguese
- Spanish
- Swedish

VEILIGHEIDSINSTRUCTIES

Deze veiligheidsinstructies zijn aan u gericht als de eigenaar van de **STAR TRAC FIETS**. Train uw leden en fitness-personeel om dezelfde veiligheidsinstructies te volgen.

DOE DIT WEL

Moedig uw leden aan om hun gezondheids- of fitness programma met een geneeskundige te bespreken, vooral als ze jarenlang niet getraind hebben, ouder dan 35 zijn of te zwaar zijn.

Stop met de fiets als u zich duizelig voelt of het gevoel heeft dat u flauwvalt.

Verricht regelmatig preventief onderhoud.

Begin langzaam totdat u een comfortabel en veilig niveau heeft bereikt.

Gebruik het apparaat alleen voor het doel waarvoor het bestemd is en zoals in dit handboek beschreven.

DOE DIT NIET

Laat kinderen niet zonder toezicht de fiets bedienen.

Plaats uw voeten niet onder uw fiets.

Gebruik de fiets niet zonder sportschoenen.

Niet buiten in regenachtig weer gebruiken of in een omgeving met een overdekt zwembad.

Laat nooit objecten in het apparaat vallen en steek geen objecten, handen of voeten in welke opening dan ook of onder het apparaat.

Verwijder nooit afschermingen en verander het apparaat niet.

WAARSCHUWING

Uw **STAR TRAC FIETS** is ontworpen voor aerobics in een commerciële of consumentenomgeving.

Vraag advies aan uw arts voordat u met een fitnessprogramma begint.

Vraag niet teveel van uzelf. Stop als u het gevoel heeft dat u flauw gaat vallen, als u duizelig bent of uitgeput. Gebruik uw gezonde verstand bij het stappen.

Lees de gebruikshandleiding helemaal door voordat u uw fiets gebruikt.

(800)-503-1221

**Star Trac's service hotline, van 6:00 tot 18:00 uur
Pacific Standard Time of bel onze internationale
productondersteuning in de V.S. op +1 714-669-1660.**

SAFETY INSTRUCTIONS

These safety notes are directed to you as the owner of the **STAR TRAC STEP**. Please train all your members and fitness staff to follow the same safety instructions.

DO

Do encourage your members to discuss their health program or fitness regimen with a healthcare professional, especially if they have not exercised for several years, are over 35, or are overweight.

Do stop operating your stepper if you feel dizzy or faint.

Do perform regular preventive maintenance.

Do exercise slowly until you reach a level of comfort and security.

Do use this equipment only for its intended use, as described in this manual.

DO NOT

Do not let unsupervised children operate the stepper.

Do not position your feet under your stepper.

Do not allow stepping without athletic shoes.

Do not use in rainy weather outdoors or in an enclosed pool environment.

Do not ever drop or insert any object, hands, or feet into any opening, or underneath this equipment.

Do not remove any shrouds or modify this equipment.

WARNING

Your **STAR TRAC STEP** is designed for aerobic exercise in a commercial or consumer environment.

Please check with your physician prior to beginning any exercise program.

Do not push yourself to excess. Stop if you are feeling faint, dizzy, or exhausted. Use common sense when stepping. Please read the owner's manual in its entirety before operating your stepper.

(800)-503-1221

Star Trac 24-hour Service Hotline

CONSIGNES DE SÉCURITÉ

Ces consignes de sécurité sont destinées au propriétaire du **Marchepied d'exercice Star Trac**. Veuillez enseigner ces consignes à tous vos membres et employés.

À FAIRE

Encouragez vos membres à discuter de leur programme de santé ou d'exercice avec un médecin, particulièrement s'ils n'ont pas fait d'exercice depuis plusieurs années, s'ils sont âgés de plus de 35 ans ou s'ils ont un excès de poids.

Arrêtez tout exercice sur le marchepied si vous éprouvez un étourdissement ou une défaillance.

Effectuez régulièrement un entretien préventif.

Exercez-vous lentement jusqu'à ce que vous vous sentiez à l'aise et en sécurité.

N'utilisez cet appareil que dans le but pour lequel il est conçu.

À NE PAS FAIRE

Ne laissez pas des enfants utiliser le marchepied sans surveillance.

Ne placez pas vos pieds sous le marchepied.

Ne permettez à personne de s'exercer sans chaussures athlétiques.

N'utilisez pas l'appareil à l'extérieur par temps pluvieux ou à proximité d'une piscine.

N'insérez jamais la main, le pied ou un objet dans les ouvertures de l'appareil, ni sous l'appareil.

Ne modifiez jamais cet appareil et ne retirez aucun de ses éléments protecteurs.

MISE EN GARDE

Votre **Marchepied Star Trac** est conçu pour l'exercice d'aérobic dans un contexte commercial ou à la maison.

Veuillez consulter votre médecin avant d'entreprendre tout programme d'exercice.

Évitez tout exercice excessif. Arrêtez si vous éprouvez un étourdissement, une défaillance ou de la fatigue. Fiez-vous à votre bon sens. Lisez attentivement la notice d'utilisation dans son intégralité avant d'utiliser votre marchepied.

(800)-503-1221

**Appelez la ligne d'Assistance Star Trac, de 6 h à 18 h (H.N.P.)
ou téléphonez au Service international des produits aux
États-Unis au (1) 714-669-1660.**

SICHERHEITSVORSCHRIFTEN

Diese Sicherheitshinweise sind an Sie, den Besitzer des **STEP-TRAINERS** von **STAR TRAC** gerichtet. Bitte weisen Sie Ihre Mitglieder und Mitarbeiter an, sich an die folgenden Sicherheitsvorschriften zu halten:

SIE SOLLTEN

Ihren Mitgliedern nahelegen, ihr Gesundheitsprogramm oder Fitneß-Training mit einem Arzt zu besprechen, vor allem, wenn Sie seit mehreren Jahren nicht mehr trainiert haben, über 35 Jahre alt oder übergewichtig sind.

Die Benutzung des Step-Trainers beenden, wenn Benommenheit oder Schwindel auftritt.

Das Gerät regelmäßig warten.

Langsam trainieren, bis Sie sicher mit dem Gerät umgehen können.

Dieses Gerät nur für den vorgesehenen Zweck gemäß der Beschreibung in diesem Handbuch verwenden.

SIE SOLLTEN NIEMALS

Kinder den Step-Trainer unbeaufsichtigt benutzen lassen.

Die Füße unter den Step-Trainer stellen.

Die Benutzung des Step-Trainers ohne die passenden Sportschuhe zulassen.

Das Gerät bei Regenwetter im Freien oder in einem Hallen- bzw. überdachten Schwimmbad verwenden.

Gegenstände in eine Öffnung des Geräts stecken oder darunter fallen lassen oder Hände bzw. Füße unter das Gerät halten.

Abdeckungen abnehmen oder das Gerät ändern.

WARNUNG

Der **STEP-TRAINER** von **STAR TRAC** ist für das Aerobik-Training in einem kommerziellen oder Verbraucherumfeld vorgesehen.

Bitte konsultieren Sie Ihren Arzt, bevor Sie mit einem Trainingsprogramm beginnen.

Überanstrengen Sie sich nicht. Hören Sie auf, wenn Schwindel, Benommenheit oder Erschöpfung eintreten. Gehen Sie beim Training vernünftig vor. Lesen Sie bitte das Benutzerhandbuch vor Verwendung des Step-Trainers vollständig durch.

(800)-503-1221

**Die Service-Hotline von Star Trac,
6.00 bis 18.00 Uhr, pazifische Standardzeit,
oder rufen Sie den internationalen Kundendienst
in den USA an: +1-714-669-1660.**

Benutzerhandbuch für den STEP-TRAINER von STAR TRAC 4100 7

ISTRUZIONI DI SICUREZZA

Queste indicazioni sono indirizzate ai proprietari dello **STAR TRAC STEP**. Chiedete a tutti i membri della vostra palestra e al vostro staff di seguire queste istruzioni di sicurezza.

DA FARE

Incoraggiate i membri della vostra palestra a discutere il loro programma o regime di allenamento con uno specialista medico, soprattutto se non si sono allenati da qualche anno, se hanno più di 35 anni o se sono in sovrappeso.

Fermate lo stepper se avete dei capogiri o vi sentite svenire.

Eseguite la manutenzione regolarmente.

Esercitatevi lentamente fino a quando raggiungete un livello confortevole e sicuro.

Usate questo attrezzo solo per l'uso inteso, come descritto in questo manuale.

DA NON FARE

Non permettete a bambini di usare lo stepper senza sorveglianza.

Non inserite i piedi sotto lo stepper.

Non usate lo stepper se non calzate scarpe da ginnastica.

Non usatelo all'aperto quando piove o vicino ad una piscina coperta.

Non lasciate cadere oggetti e non inserite mani o piedi nelle aperture o al di sotto di questo attrezzo.

Non rimuovete nessun coperchio o modificate questo attrezzo.

ATTENZIONE

Lo **STAR TRAC STEP** è stato progettato per l'esercizio aerobico in un ambiente commerciale o domestico.

Consultatevi con il vostro medico di famiglia prima di intraprendere un programma di esercizi.

Siate coscienti dei vostri limiti. Fermatevi se avete dei capogiri, vi sentite svenire o siete esausti. Usate il vostro buon senso quando usate lo stepper.

Leggete tutto il manuale delle istruzioni prima di usare lo stepper.

(800)-503-1221

Linea di assistenza della Star Trac, dalle 6 alle 18 fuso orario della zona del Pacifico degli Stati Uniti

o chiamate l'Assistenza internazionale per i prodotti negli Stati Uniti allo +1-714-669-1660.

INSTRUÇÕES DE SEGURANÇA

Estas observações de segurança destinam-se à você, proprietário da **“STEP” STAR TRAC**. Treine todos os membros e funcionários que utilizarão o equipamento para que sigam estas instruções de segurança.

FAÇA

Estimule seus usuários para que discutam seus programas de saúde ou de exercícios com um profissional de saúde, principalmente se eles não tiverem feito exercícios por vários anos, possuírem mais de 35 anos ou forem obesos.

Pare de usar a **“STEP”** se você se sentir fraco ou com tontura.

Faça manutenção preventiva regularmente.

Faça o exercício lentamente até que você alcance um nível de conforto e segurança.

Utilize este equipamento única e exclusivamente para o seu devido fim, conforme descrito neste manual.

NÃO FAÇA

Não permita que crianças operem a **“step”** sem supervisão de um adulto.

Não coloque seus pés embaixo da **“step”**.

Não utilize a **“step”** sem calçar tênis.

Não use este equipamento ao ar livre, em dias chuvosos ou em um ambiente de piscina interna.

Nunca deixe cair ou introduza nenhum objeto, as mãos ou pés em nenhuma abertura do equipamento ou debaixo deste.

Não remova nenhum protetor ou modifique este equipamento.

ADVERTÊNCIA

A sua **“STEP” STAR TRAC** foi projetada para exercício aeróbico em um ambiente comercial ou residencial.

Faça um exame físico com seu médico antes de iniciar qualquer programa de exercícios.

Não abuse. Pare se estiver sentindo tontura, fraqueza ou exaustão. Use bom senso quando se exercitar. Leia o manual do proprietário por completo antes de operar a sua **“step”**.

(800)-503-1221

**Ligação gratuita para a Star Trac, das 6:00h. as 18:00hs;
horário do Pacífico, ou ligue para o departamento
de Assistência Técnica Internacional nos EUA em
(1) 714-669-1660.**

INSTRUCCIONES DE SEGURIDAD

Estas notas de seguridad van dirigidas a Vd. como propietario del **ESCALÓN STAR TRAC**. Haga que todos los usuarios y preparadores físicos cumplan estas instrucciones de seguridad.

QUÉ HACER

Anime a sus miembros a que discutan su programa de salud o régimen de ejercicio con un profesional de la salud, especialmente si no han hecho ejercicio por varios años, tienen más de 35 años de edad o pesan demasiado.

Detenga el escalón si se nota desfallecido o mareado.

Realice un mantenimiento preventivo de manera regular.

Haga ejercicio despacio hasta alcanzar un nivel de comodidad y seguridad.

Utilice este producto sólo para los usos indicados, tal como se describe en este manual.

QUÉ NO HACER

No permita que los niños utilicen el escalón sin supervisión.

No ponga los pies debajo del escalón.

No permita su uso sin calzado deportivo.

No lo utilice en el exterior con tiempo lluvioso o en un recinto cerrado con piscina.

No deje caer ni introduzca ningún objeto, manos o pies en ninguna abertura del aparato o debajo del mismo.

No quite ninguna cubierta ni modifique este equipo.

ADVERTENCIA

Su **ESCALÓN STAR TRAC** está diseñado para realizar ejercicio aeróbico en un entorno comercial o en forma individual.

Consulte a su médico antes de empezar cualquier programa de ejercicio.

No se exceda. Interrumpa el ejercicio si se nota desfallecido, mareado o agotado.

Utilice el sentido común al usar este aparato.

Lea el manual del propietario en su totalidad antes de poner en marcha el escalón.

(800)-503-1221

**Línea directa de servicio de Star Trac para usuarios.,
6 a.m. a 6 p.m. P.S.T (Horario del Pacífico).**

**Desde fuera de los EE.UU., póngase en contacto con el
servicio técnico internacional llamando al +1-714-669-1660.**

SÄKERHETSINSTRUKTIONER

Dessa säkerhetsföreskrifter är riktade till dig som ägare av **STAR TRAC STEP**. Se till att du lär dina medlemmar och anställda att följa säkerhetsinstruktionerna.

GÖR SÅ HÄR

Uppmana dina medlemmar att diskutera sina hälsoprogram eller motionsprogram med läkare, i synnerhet om de inte har motionerat regelbundet under de senaste åren, är över 35 år gamla, eller är överviktiga.

Sluta upp att använda din Step om du känner dig matt eller yr.

Se över cykeln regelbundet i förebyggande syfte.

Motionera långsamt tills du når en konditionsnivå som känns bra och säker.

Använd denna produkt endast för det den är avsedd för, enligt denna bruksanvisning.

GÖR INTE DETTA

Tillåt inte barn att köra Step utan tillsyn.

Placera inte fötterna under din Step.

Ha alltid på dig skor när du använder din Step.

Använd inte enheten utomhus när det regnar eller i en simbassängsmiljö.

Du får aldrig tappa eller sticka in något föremål eller dina händer eller fötter i någon öppning, eller under denna utrustning.

Ta inte bort några höljen. Modifiera inte utrustningen på något sätt.

VARNING

Din **STAR TRAC STEP** är konstruerad för aerobisk träning i en kommersiell miljö eller hemma.

Rådfråga din läkare innan du startar ett motionsprogram.

Överansträng dig INTE. Sluta genast om du känner dig matt, yr eller utmattad.

Använd sunt förnuft när du kör din Step.

Läs hela bruksanvisningen innan du kör din Step.

(800)-503-1221

**Star Tracs kundservice: Klockan 06.00 till 18.00
Pacific Standard Time. Eller ring Internationellt produktstöd i
USA +1 714 669 1660**

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ASSEMBLY AND SETUP

CHAPTER

2

This chapter details how to assemble and set up your **STAR TRAC STEP**. Please begin by verifying that the following parts were included in your shipment:

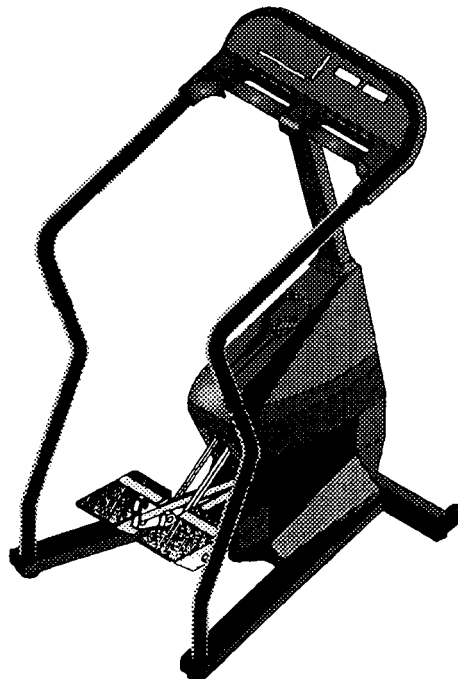
- **STAR TRAC STEP** Frame Assembly with Shroud
- Display Control Panel Assembly with Handrails
- Owner's Manual with Warranty Registration Card
- **STAR TRAC STEP** Tool Kit, consisting of:

Description	Qty.
Screw, $\frac{3}{8}$ -16x2"	2
Combo Wrench, $\frac{9}{16}$ x $\frac{7}{8}$ "	1
Hex key, $\frac{1}{8}$ ", T-handle	1
Hex key, $\frac{5}{32}$ "	1
Hex key, $\frac{5}{16}$ "	1

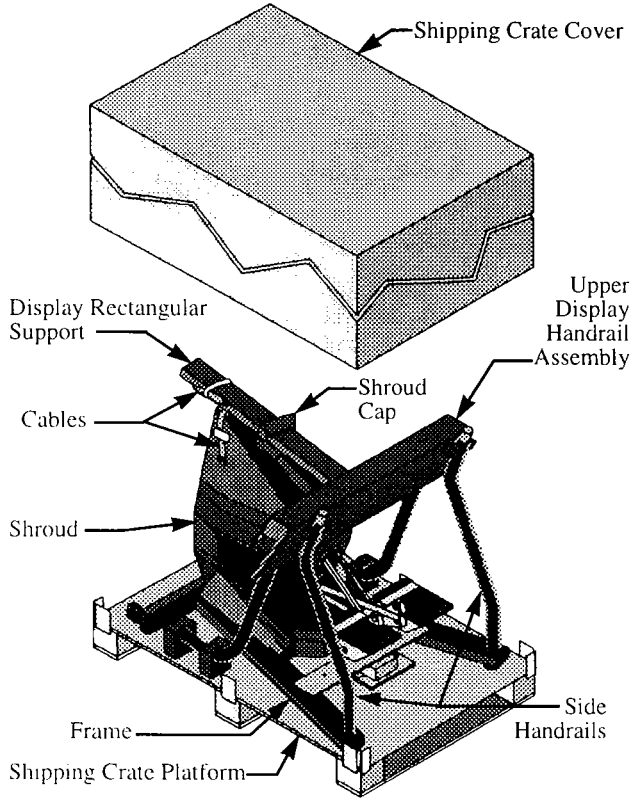
Take the time now to enter your **STAR TRAC STEP** serial number and model number below. Should any component not be present or if you have any operational questions, refer to these numbers when you call Star Trac's Service Hotline at (800) 503-1221.

Serial No. _____

Model No. _____



To assemble your **STAR TRAC STEP**, just follow these steps:

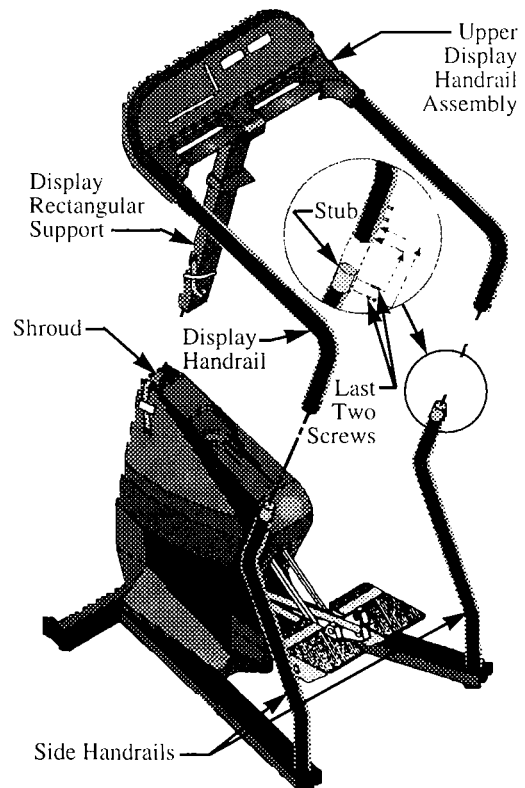


1

Remove the shipping crate cover and packaging material to expose your stepper in its shipping position. Remove the upper display handrail assembly and place it to the side. With a helper, lift your stepper's frame from the shipping crate platform and place it in the location in which it will be used. Do not remove the retainers that hold the cables to the shroud and to the display rectangular support. Do not remove the retainer that holds the shroud cap to the display rectangular support.

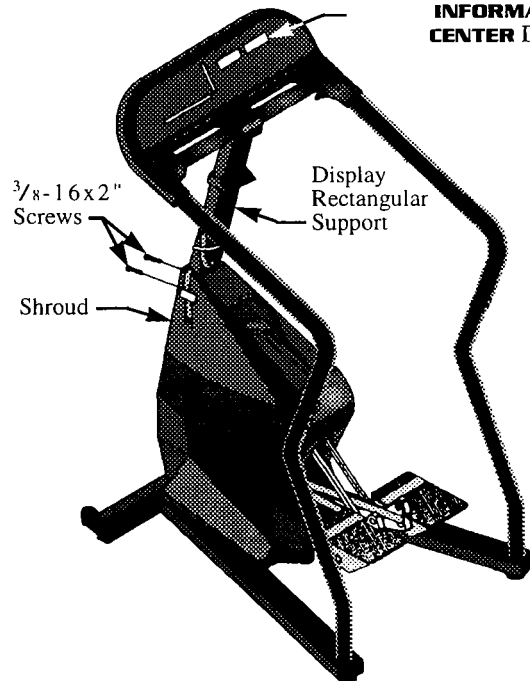
2

Separate the upper display handrail assembly from the rest of the stepper. Remove the last two screws that are on each of the stubs sticking out of the upper ends of the two side handrails. Insert the display rectangular support into the rectangular cutout in the shroud. Slip the ends of the display handrail over the stubs on the side handrails, replace the screws, and tighten. *Note:* If the holes do not line up, loosen the lower pairs of screws and rotate the stubs in the handrails until they do line up.

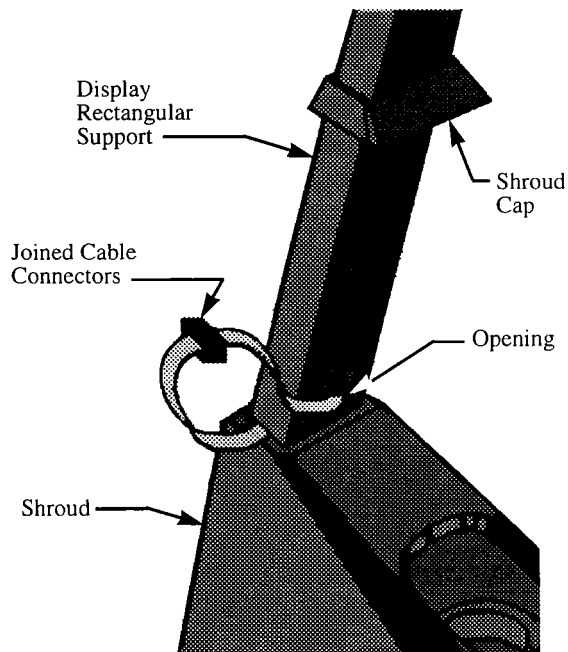


3

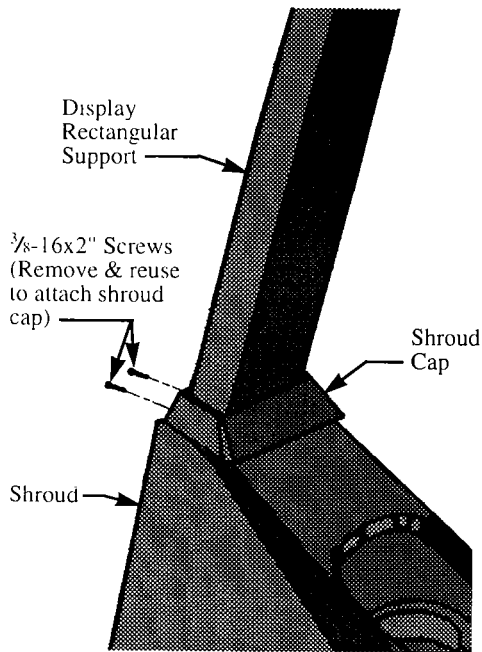
Insert the two $\frac{3}{8}$ -16x2" screws through the shroud and the display rectangular support, and hand tighten.



4



Remove the retainers that hold the cables to the shroud and display rectangular support, respectively. Join the cable connectors. The connectors may be joined only one way. Lower the joined connectors and slack cable into the shroud through the opening in the display rectangular support.

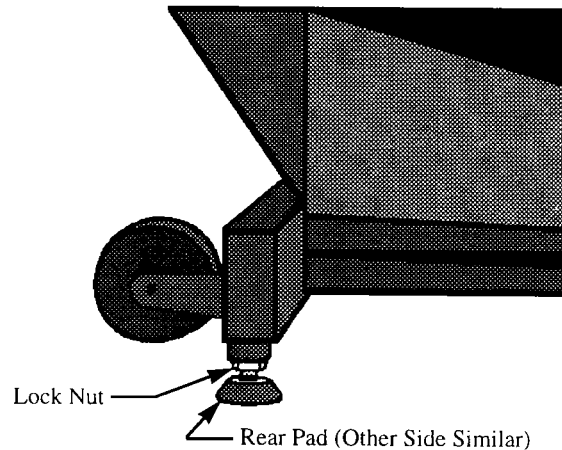


5

Remove the retainer that holds the shroud cap to the display rectangular support. Slide the shroud cap toward the shroud. Grasp the display rectangular support, remove the two hand-tightened $\frac{3}{8}$ -16x2" screws from the shroud, and lower the shroud cap fully against the shroud. Re-insert the screws through the cap and shroud, and tighten.

6

If your **STAR TRAC STEP** wobbles because of floor unevenness, loosen the lock nut of one or both rear pads with the open end of the combo wrench. Raise or lower the pads to the height necessary to level the stepper, and retighten the lock nut.



7

Start stepping on the pedals. Read SPEED on the **INFORMATION CENTER** display to verify operation. You have now completed the assembly of your **STAR TRAC STEP**.

OPERATING INSTRUCTIONS

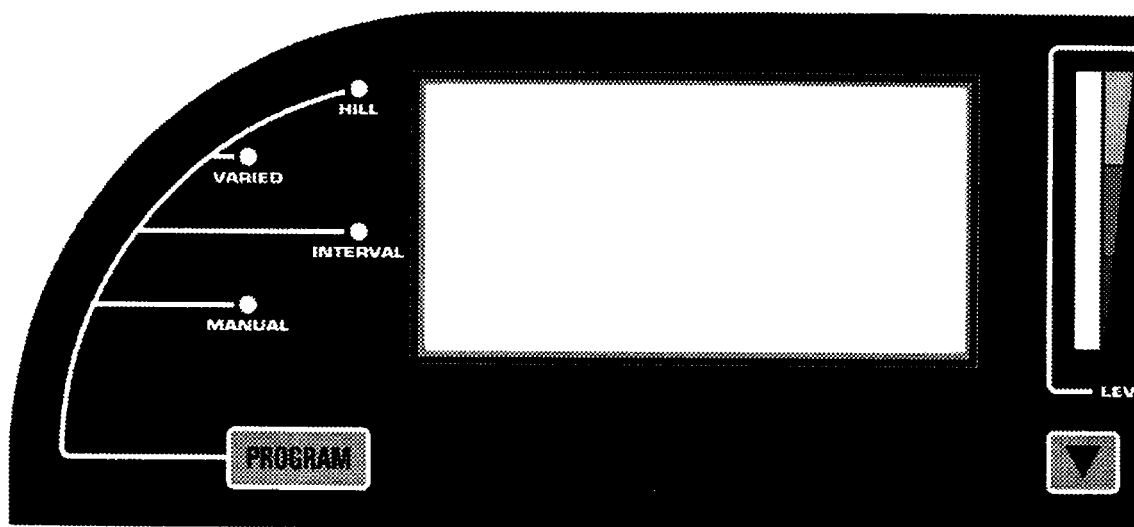
CHAPTER

3

Operating the ***STAR TRAC 4100 STEP*** is very easy. Simply step onto the pedals and begin stepping naturally, at an even rate, just as you would on any stairway.

Learning the features and incorporating the ***STAR TRAC 4100 STEP*** into your members' fitness programs is just as easy. In this chapter, you will learn the display functions and how to get the most out of every ***STAR TRAC 4100 STEP*** workout.

DISPLAY CONTROL PANEL FEATURES

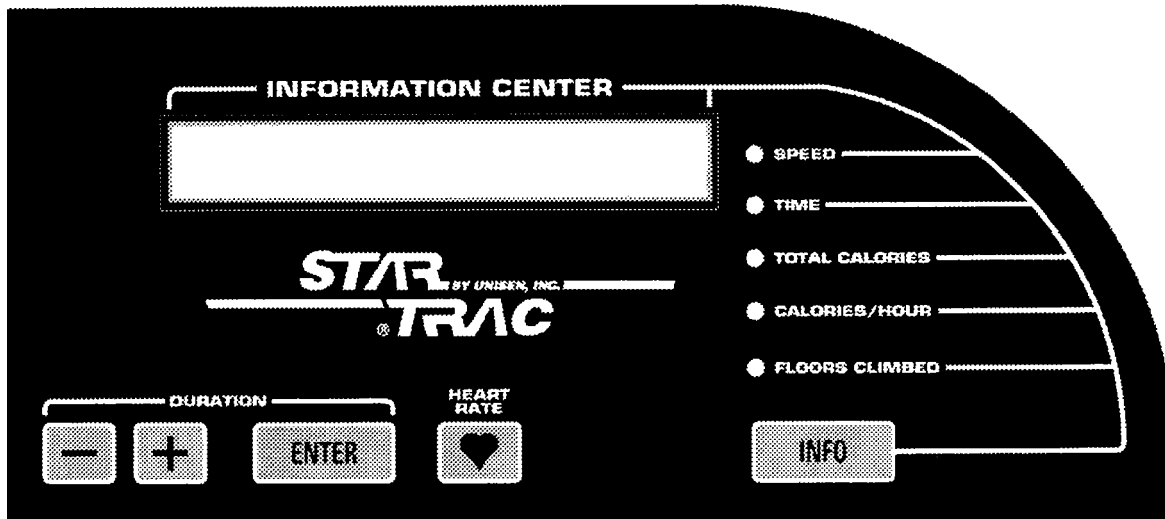


Your **STAR TRAC STEP** is equipped to provide you and your users unlimited exercise opportunities. Experiment with its features to find the right combination for your fitness regimen.

PROGRAM **Program Key:** Selects manual incline steepness variation or one of three increasingly challenging programs of automatic, preselected incline contours simply by pressing this one key. **You may press** **PROGRAM** **anytime during your workout.** The four available programs are:

- **Manual:** Controls the incline as you work out. It is automatically in effect as you begin stepping. To increase or decrease the incline, press the **WORK LEVEL** ▼ or ▲ keys as you desire. The ▼ and ▲ keys repeat if you hold them depressed.
- **Varied:** Selects one of over 250 hill and valley incline contours that were developed according to American College of Sports Medicine (ACSM) standards.
- **Hill:** Selects an incline contour that increases resistance as your workout progresses, maximizing your caloric expenditure.
- **Interval:** Selects an incline contour that particularly increases cardiovascular strength and endurance because of its progressively more frequent and steeper hills.

POSITION IN PROGRAM Display: Traces your progress through each of the programs and allows you to anticipate the hills and valleys. Display elements that illuminate from left to right and bottom to top as you step through the course and over the hills.



WORK LEVEL Display: Shows the level (steepness) to which you are exercising, from 1 (easiest) to 30 (most difficult).



WORK LEVEL Keys: Select from among the above 30 progressive steepnesses in any program. These keys repeat as you hold them depressed.



DURATION Keys: Set the length of your workout in minutes. To decrease or increase the duration, press the **-** or **+** keys, respectively, until the desired number of minutes appears in the **INFORMATION CENTER** display, then press **ENTER**. The duration cannot be longer than the MAX TIME value in Settings Mode. (MAX TIME is factory set to 99 minutes.) If you do not press **ENTER** within 15 seconds, the previous duration will return. These keys repeat if you hold them depressed.

INFORMATION CENTER: Shows information on your workout in a sequence of five items:

- **Speed:** Your speed, in feet per minute (FPM) of ascent
- **Time:** The duration of your workout thus far in minutes and seconds
- **Total Calories:** The cumulative number of calories that you have expended thus far in your workout, based on **Time** and **Calories per Hour**
- **Calories per Hour:** The energy that you are expending at the present moment, based on **Speed** and **WORK LEVEL**
- **Floors Climbed:** The total number of 10-ft. building floors you have climbed thus far, based on **Speed** and **Time**.



Lighted indicators to the right of the **INFORMATION CENTER** display identify the information item being displayed. The display also shows heart rate information (see *Heart Rate Monitoring* in this chapter), a warning that your caloric expenditure is too low (see *Hints and Tips for Getting Started* in this chapter), notification that your workout is done, and scrolling data after the workout.


 **Key:** Stops automatic display alternation and selects one information item for steady display. Press  again to advance to the next item. To restore automatic alternation, check your heart rate. See *Heart Rate Monitoring* in this chapter.

 **HEART RATE Key:** Checks your heart rate anytime during your workout.  works differently in each step model; see *Heart Rate Monitoring* and/or *Dynamic Heart Rate Control* in this chapter.

HINTS AND TIPS FOR GETTING STARTED

The following hints and tips will assist in training your users to maximize the fitness benefits of your **STAR TRAC STEP**.

- **Step at a rate that feels comfortable and most natural, yet is sufficiently vigorous to achieve a desirable cardio workout.** Your typical stepping speed will be in the range of 15 to 175 feet per minute (FPM). The appearance of STEP IT in the **INFORMATION CENTER** display means that your speed has fallen below the minimum user's speed (e.g. 20 FPM at Level 1) during the previous 5 seconds. You have 5 additional seconds to step faster or, if you choose, you may increase your work level by pressing . If you take neither action, your stepper will reset and begin a new program. You may use your stepper at lower FPM by equipping it with an AC power adapter that you may order from Star Trac. The adapter is desirable for rehabilitative, elderly, or deconditioned users. You may change the minimum user's speeds in Settings Mode; see Chapter 6.
- **Do not let the pedals touch the floor.** Step fast enough to keep the pedals in their middle range, with step heights from 2 to 16 inches. If the pedals sink to the floor, step faster or decrease your work level by pressing .
- **Try different stepping rhythms.** Adjust your pace from short, fast steps to long, deep steps, then back again. As you become more comfortable with your stepper, you might try stepping at higher work levels, thus increasing effort and, therefore, caloric expenditure.
- **Follow the INFORMATION CENTER display to anticipate incline changes.** The display shows steeper and flatter inclines as tall or short columns. It also notifies you of incline changes with series of beeps and a new flashing display column.

NOTE: Unlike a real incline that is climbed more quickly or slowly depending on stepping rate, your effective incline is always climbed in the time of your **DURATION** selection. So, when you step faster, you make your effective incline taller because you take more steps in the same time period. This taller incline increases your caloric expenditure, as does increasing the steepness with the  key.

MANUAL PROGRAM

The **Manual** Program allows you to control your incline with a touch of your finger. Just follow these steps:

1. Begin stepping. The **Manual** indicator at the left of your Display Control Panel will light.
2. Watch DURATION 20 appear in the **INFORMATION CENTER** display to tell you that the factory-set workout duration will be exactly 20 minutes. Change this value by pressing **[-]** or **[+]** and then **[ENTER]**, or leave the 20 minutes in effect.
3. Adjust your steepness using the **WORK LEVEL** **[▼]** or **[▲]** key. The steepness ranges from Level 1 (easiest) to Level 30 (most difficult). Feel free to change your work level anytime during your workout.
4. As you work out, watch your speed, effort, time, and distance information appear in the **INFORMATION CENTER** display as you press **[INFO]**.
5. When you finish your workout, read WORK DONE in the **INFORMATION CENTER** display and watch your accumulated workout data scroll past.

VARIED PROGRAM

The **Varied** Program takes you through an incline contour selected from over 250 contours based on ACSM standards. Just follow these steps:

1. Begin stepping. Press **[PROGRAM]** twice to light the **Varied** indicator at the left of your Display Control Panel.
2. Watch DURATION 20 appear in the **INFORMATION CENTER** display to tell you that the factory-set workout duration will be exactly 20 minutes. Change this value by pressing **[-]** or **[+]** and then **[ENTER]**, or leave the 20 minutes in effect. See the note on p. 13 regarding the correlation between duration and the height of the equivalent incline.
3. Adjust your steepness using the **WORK LEVEL** **[▼]** or **[▲]** key. The steepness ranges from Level 1 (easiest) to Level 30 (most difficult). Feel free to change your work level during your workout.
4. As you work out, watch your speed, effort, time, and distance information appear in the **INFORMATION CENTER** display as you press **[INFO]**.
5. When you finish your workout, read WORK DONE in the **INFORMATION CENTER** display and watch your accumulated workout data scroll past.

HILL PROGRAM

The **Hill** Program takes you through an incline contour that increases steepness as your workout progresses. This program is based on **ACSM** standards. Just follow these steps:

1. Begin stepping. Press **PROGRAM** three times to light the **Hill** indicator at the left of your Display Control Panel.
2. Watch **DURATION 20** appear in the **INFORMATION CENTER** display to tell you that the factory-set workout duration will be exactly 20 minutes. Change this value by pressing **-** or **+** and then **ENTER**, or leave the 20 minutes in effect. See the note on p. 13 regarding the correlation between duration and the length of the equivalent geographical course.
3. Adjust your steepness using the **WORK LEVEL** **▼** or **▲** keys. The steepness ranges from Level 1 (easiest) to Level 30 (most difficult). Feel free to change your work level during your workout.
4. As you work out, watch your speed, effort, time, and distance information appear in the **INFORMATION CENTER** display as you press **INFO**.
5. When you finish your workout, read **WORK DONE** in the **INFORMATION CENTER** display and watch your accumulated workout data scroll past.

NOTE: For optimum fat loss, you should exercise between 65 and 75 percent of your maximum heart rate. For additional information, see *Heart Rate Monitoring* or *Dynamic Heart Rate Control* in this chapter.

INTERVAL PROGRAM

The **Interval** Program takes you through incline contours of varying intensities throughout your workout. This program is based on **ACSM** standards. Just follow these steps:

1. Begin stepping. Press **PROGRAM** to light the **Interval** indicator at the left of your Display Control Panel.
2. Watch **DURATION 20** appear in the **INFORMATION CENTER** display to tell you that the factory-set workout duration will be exactly 20 minutes. Change this value by pressing **-** or **+** and then **ENTER**, or leave the 20 minutes in effect. See the note on p. 13 regarding the correlation between duration and the length of the equivalent geographical course.
3. Adjust your steepness using the **WORK LEVEL** **▼** or **▲** key. The steepness ranges from Level 1 (easiest) to Level 30 (most difficult). Feel free to change your work level during your workout.
4. As you work out, watch your speed, effort, time, and distance information appear in the **INFORMATION CENTER** display as you press **INFO**.
5. When you finish your workout, read **WORK DONE** in the **INFORMATION CENTER** display and watch your accumulated workout data scroll past.


NOTE: For optimum cardiovascular strength, you should exercise between 60 and 85 percent of your maximum heart rate. For additional information, see *Heart Rate Monitoring* or *Dynamic Heart Rate Control* in this chapter.





HEART RATE MONITORING

Heart rate monitoring allows you to determine if your step workout is too challenging or not challenging enough. Monitoring heart rate is easy with the **STAR TRAC STEP**. Depending on the model you are using, you may monitor your heart rate by grasping the contact rings or by wearing a Polar wireless heart rate chest strap. Your goal will be to keep your exercise heart rate between 60 and 85 percent of the theoretical maximum for your age as listed on the Target Heart Rate Chart and graph on p. 31.

NOTE: The Heart Rate monitor is not a medical test, nor is it designed as a medical test. It is simply a guide to target heart rate training. Please consult with your physician prior to engaging in any strenuous physical activity.

CONTACT HEART RATE MONITORING

If your Step is Model SC4110 or SC4130, your step is equipped with this heart rate feature. This is evident by the (4) silver contact rings located on the handlebars. To use, just press the  key and follow the prompts.




1. First press the  key. The **INFORMATION CENTER** will prompt press "+ or -". Press  for HR Monitor.
2. Hold the silver rings, covering both of the rings evenly with each hand. Hint: do not squeeze handles or move your upper body excessively, as this will reduce the readability of your heart rate signal.
3. The display will read "**SEEKING HR**" when you have properly grasped both handles.
4. Within 15 seconds, your heart rate will show on the display as "**PULSE ### BPM**". BPM is an abbreviation for **Beats Per Minute**.
5. If you no longer desire to observe your heart rate, you may release the grips, press the  key again or press the  key.

NOTE: You may press  or  with  at any time to change your workout length.

NOTE: It has been found that repeated electrostatic discharge or transient voltages inflicted upon the contact rings may cause the stepper to reset. You may minimize such occurrences by momentarily grasping the handrails with both hands to neutralize electrostatic charges before you first grasp the contact rings.

POLAR HEART RATE MONITORING

If your stepper is Model SC4120 or SC4130, you may automatically check your heart rate by wearing a Polar wireless heart rate chest strap. Just follow these steps:

1. Moisten the back of the chest strap transmitter; then strap it snugly around your chest directly over your sternum.
2. First press the  key. The **INFORMATION CENTER** will prompt press "+ or -". Press  for HR Monitor.
3. Press  again to return to the previous **INFORMATION CENTER** display item.

NOTE: The chest strap performance may be affected by body types, body oils, metal in clothing, and outside electrical interference. Always be sure that the transmitter and skin are in good contact. Avoid operating other electrical equipment near your stepper.

DYNAMIC HEART RATE CONTROL ***(Polar Telemetry recommended)***

Program Definition


This heart rate feature is designed to gradually elevate your heart rate to the upper end of your selected training range, then gradually decrease your heart rate to the lower end of your selected training range using the workout level. During the workout, this stair climber will repeat several times, creating an interval training effect that is customized to the user's desired heart rate training range.

Benefits of Heart Rate Intervals

By including interval exercise in your regular aerobic program, greater effects are noticed. Your heart and muscles will adapt to the increases in demand by utilizing stored calories for energy more effectively. Dynamic Heart Rate Control may potentially result in more calories expended. It will strengthen the heart, provide stress relief and variety to a workout.

How to Use Dynamic Heart Rate Control

Note: For best results, use a heart rate chest strap. If the user is wearing a chest strap, the machine will automatically use the Polar data.

To use the heart rate features on your stair climber, press the  key at any time.

You will have a choice of:

Press “ – ” = HR Monitor.

Use this option if you are interested only in monitoring your heart rate.

OR

Press “ + ” = HR Control.

Use this option to activate the heart rate control feature. The message center display will then read **Grip Handles**. Grasp both sensors, making sure your hands come into contact with both metal rings on each grip. The machine will then display your heart rate. The display will prompt you to enter your age. Using the “ + ” or “ – ” keys, enter your age, then press the ENTER key.

Once you have entered your age, the stair climber will automatically calculate your training range based on your age. The Dynamic Heart Rate Control™ feature automatically defaults to a training range of approximately 60-75% of your theoretical maximum heart rate.

The message center will display “**High Heart Rate = XXX**,” which indicates the high end of your training range. To accept this value, press the ENTER key. If you wish to change this value, enter a new value using the “ + ” or “ – ” keys, and then press the ENTER key. (see FIGURE 1)

The message center will then display “**Low Heart Rate =XXX**,” which indicates the low end of your training range. To accept this value, press the ENTER key. If you wish to change this value, enter a new value using the “ + ” or “ – ” keys, and then press the ENTER key. (Note: the Dynamic Heart Rate Control™ feature requires at least 18 BPM range between low and high heart rates.)

The message center will then display “**Hi Level = X**.” This is the maximum speed your stair-climber will reach during your workout. To accept this workout level, press the ENTER key. To change it, enter your desired speed using the “ + ” or “ – ” keys, then press the ENTER key. If you are not familiar with the concept of using your heart rate as a measure of your workout intensity, the following information will help to familiarize yourself with some basics.

CALCULATING YOUR HEART RATE TRAINING RANGE:

Note: The stair climber's Dynamic Heart Rate Control™ system automatically calculates your theoretical maximum heart rate, and suggests a target training range for you of approximately 60-75% of your theoretical maximum. This section is simply to illustrate how the program works.

1. Calculate your theoretical maximum heart rate. Calculating your theoretical maximum heart rate is the first step in determining your training range. The following simple calculation will help you estimate your theoretical maximum heart rate:

220 - your age = your theoretical maximum heart rate.

Note: You should never workout at or above your theoretical maximum heart rate. Your theoretical maximum heart rate is used only to calculate your target training range.

2. Calculate your target heart rate training zone. Aerobic and weight-loss benefits are achieved when you work out between 50-85% of your theoretical maximum heart rate. Generally, exercise that keeps you below 50% of your theoretical maximum heart rate will feel too easy, and as you approach 85% of your theoretical maximum heart rate your exercise may feel too strenuous. If you are beginning an exercise program, it's best to start out at the lower end of your training range and work your way up to higher intensities as you become comfortable with your exercise. Star Trac recommends exercising between approximately 60-75% of your theoretical maximum heart rate. This is a suggested training range.

FIGURE 1
Heart Rate Training Range Upper Level
$\frac{\text{Your Theoretical Max}}{\text{Your Theoretical Max}} \times 0.75 = \frac{\text{Training Range Upper Limit}}{\text{Training Range Upper Limit}}$
Heart Rate Training Range Lower Level
$\frac{\text{Your Theoretical Max}}{\text{Your Theoretical Max}} \times 0.60 = \frac{\text{Training Range Lower Limit}}{\text{Training Range Lower Limit}}$

To assist you in your training program, this chapter provides you hints of how to stay motivated, climb up the conditioning ladder, and use training logs to chart your progress.

THE IMPORTANCE OF CARDIO EXERCISE

“Regular physical activity is essential to the performance, safety, and health issues faced by every American. It is never too late to be physically active, to exercise, and to enjoy the benefits of being physically fit.”

-Arnold Schwarzenegger, Chairman
President’s Council on Physical Fitness and Sports

With your **STAR TRAC STEP**, you’ve taken an important first step to achieving your fitness goal. But, you’ve got to stay motivated and stay with it. About half of all people who start an exercise program quit within 6 to 12 months. The key to success for the other half? Motivation.

If you stick with a consistent workout program for 30 minutes, three times a week, for 3 months, you’ll be on your way to a long-term fitness program. Your investment will pay off in feeling and looking better, while improving overall health and fitness.

To stay motivated during those 3 months, here are a few suggestions:

Make a Decision. Are the benefits of exercise genuinely important to you? According to cardiologist, author, and fitness expert George Sheehan, M.D., “It has to be important to you. You have to feel that your life in some way depends on your exercise...that if you stop, you’re going to be diminished in some way.”

Set Goals and Reward Yourself: Determine precisely what you want to achieve. By setting challenging, specific goals, you are setting yourself up to achieve them. And, when you achieve those goals, reward yourself. “It’s crucial (to reward yourself),” according to Lauve

Metcalfe, director of program development at the Campbell Institute for Health and Fitness in Camden, New Jersey. "Who quits a program because he's having too much fun?"

Example of tangible rewards: A new jogging outfit with accessories if you add an effective ten floors to the fixed-time course in the **Hill Program**.

Schedule Your Workout: Get into the habit of working out at the same time each day. And, write that time on your calendar. Make keeping your workout schedule as important as eating or sleeping.

Plan a Walking Vacation: If you know you're going on a walking tour of Paris or a hike up Pike's Peak next summer, you'll look forward to getting into shape for it.

Remember; "An unused engine rusts. A still stream stagnates. An untended garden tangles. Much of what we pass as age is disuse." (Source: Walter M. Borts, M.D., author of *We Live Too Short and Die Too Young*)

CLIMBING UP THE CONDITIONING LADDER

The programs outlined on the following pages were developed by the director of fitness services at the Lutheran General Hospital in Illinois. They were developed to help maintain or improve your level of fitness, depending upon your current level. Follow the programs, in order, for each one's full 6 week length; testing yourself after each program for your ability to maintain the stated parameters. At the end of the Red (last) Program, congratulate yourself on your deserved success. Be sure to maintain your conditioning at the Red Program level by continued use of your **STAR TRAC STEP**. Of course, always check with your physician prior to beginning any exercise program.

THE CONDITIONING PROGRAMS

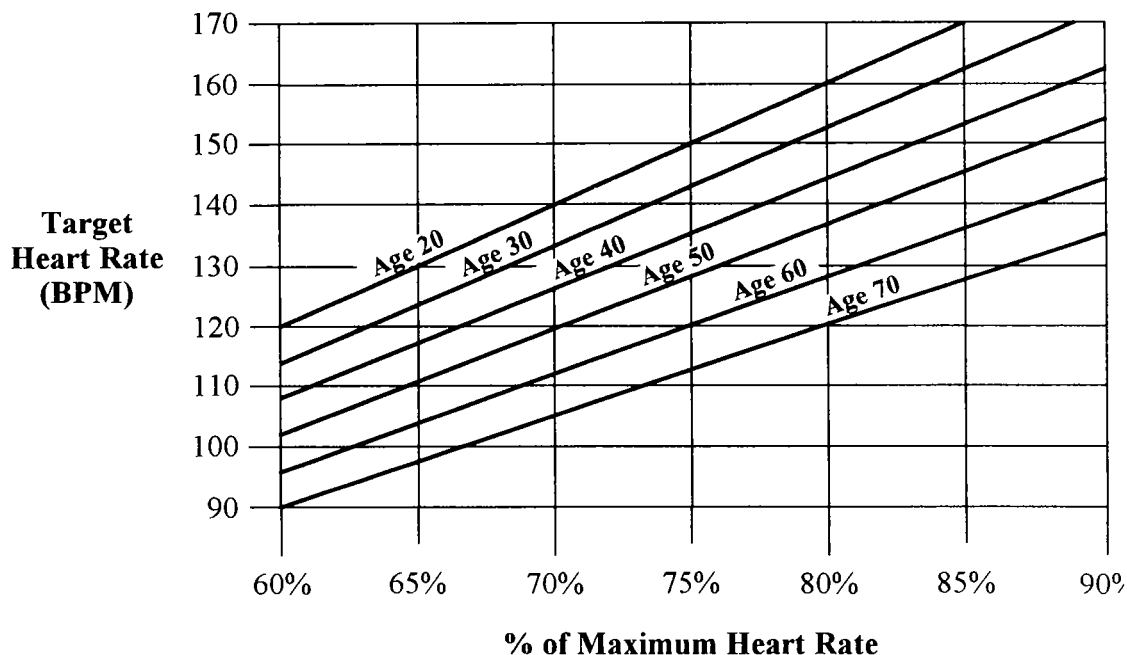
Green Program:			
Week	Heart Rate (%)	Duration (minutes)	Workouts per Week
1,2	60 to 65	15	3
3,4	60 to 65	15	3
5,6	60 to 65	15	3
Blue Program:			
Week	Heart Rate (%)	Duration (minutes)	Workouts per Week
1,2	65 to 70	20	3
3,4	65 to 70	20	3
5,6	65 to 70	20	3
Yellow Program:			
Week	Heart Rate (%)	Duration (minutes)	Workouts per Week
1,2	70 to 75	20	4
3,4	70 to 75	25	4
5,6	70 to 75	25	4
Orange Program:			
Week	Heart Rate (%)	Duration (minutes)	Workouts per Week
1,2	75 to 80	25	4
3,4	75 to 80	25	4
5,6	75 to 80	30	4
Red Program:			
Week	Heart Rate (%)	Duration (minutes)	Workouts per Week
1,2	80 to 85	30	4
3,4	80 to 85	35	4
5,6	80 to 85	35	4

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TARGET HEART RATE CHARTS

Use the following table or graph to find your ideal exercise heart rate. For optimum fat loss, you should exercise between 60 and 75 percent of your maximum heart rate. For optimum cardiovascular strength, you should exercise between 75 and 85 percent of your maximum heart rate. The table and equivalent graph below interpret these percents into target beats per minute (BPM) that you may read on the **INFORMATION CENTER** display.

Age	Target Heart Rate (BPM)		
	60%	70%	85%
20	120	140	170
30	114	133	162
40	108	126	153
50	102	119	145
60	96	112	136
70	90	105	128



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PREVENTIVE MAINTENANCE

CHAPTER

5

Star Trac strongly recommends that you perform regular preventive maintenance on your **STAR TRAC STEP**. Without regularly scheduled maintenance, normal wear and tear may cause cumulative effects, such as early need for parts replacement.

NOTE: If any problems occur, please call Star Trac's Service Hotline at (800) 503-1221.

WEEKLY MAINTENANCE

Each week, or when needed, you should remove dust, dirt, and other substances from the Display Control Panel, handrails, pedals, and covers using a cloth and diluted all-purpose cleaner. Spray cleaner onto cloth, then wipe surfaces. Do not spray cleaner onto your stepper!

MONTHLY MAINTENANCE

Each month, or when needed, you should check that the handrails, pedals, and shroud are secure.

- **Handrails:** You may tighten the handrails by tightening the screws that attach their upper and lower parts to the internal stubs.
- **Pedals:** You may tighten the pedals to their lever arms with the combo wrench that came with your stepper.
- **Shroud:** You may tighten the shroud by turning its screws with the hex key that came with your stepper.

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SETTINGS

CHAPTER

6

After having used your **STAR TRAC STEP** for many workouts, you may wish to change some of its default settings. You may also wish to check accumulated data about your stepper's past usage. For these reasons, your stepper is equipped with a Settings Mode.

To enter Settings Mode, hold down **ENTER** and **♥** for about 3 seconds while you begin stepping with your stepper "off" (Display Control Panel not illuminated). You will hear two beeps and the **INFORMATION CENTER** display will show **SETTINGS**. Once in Settings Mode, you may use the following keys:

[-] [+] **DURATION Keys:** Display the previous and next data items, respectively, in the list below.

[▼] [▲] **WORK LEVEL Keys:** Change the value of the displayed data item up and down, respectively, in increments of 1 unit or 0.01 unit, as appropriate for the data item.

PROGRAM **Program Key:** Saves changes to data items and exits Settings Mode.

The data items that you may display and change with the above keys are:

Data Item	Lowest Value	Default Value	Highest Value	Meaning
LANGUAGES	LANG ENGLISH	LANG ENGLISH	SPRAK SWED	Language of INFORMATION CENTER displays. LANG ENGLISH - English TAAL NEDERL - Dutch LANG FRANCE - French SPRACHDEUTSC - German IDIOM PORTGS - Portuguese LENG ESPANOL - Spanish SPRAK SWED - Swedish

(Continued on p. 38)

Data Item	Lowest Value	Default Value	Highest Value	Meaning
UNITS	0	1	1	1=English units of lb., miles, hours, minutes; 0=metric units of kg, km, hours, minutes.
HRT SENSE	0	1	2	0=Heart rate disabled 1=Polar heart rate enabled 2=Contact heart rate enabled.
DEF TIME	1	20	99	Default duration in minutes.
MAX TIME	6	90	99	Maximum allowable duration in minutes.
MIN TIME	1	5	89	Minimum allowable duration in minutes.
DEFLT LVL	1	5	30	Default work level.
FPM/LVL	1	3	8	Increase (or decrease) in minimum user's speed for each increase (or decrease) in work level, in FPM per level.
FPM/LVL1	20	20	225	Minimum user's speed for (Work) Level 1 , in FPM.
DBLT	0	0	65,535	Number of thousands of feet drive belt has been in use.*
ABLT	0	0	65,535	Number of thousands of feet alternator belt has been in use.*
TIME	0	0	65,535	Number of hours stepper has been in use.†
DIST	0	0	65,535	Number of thousands of feet stepper has been in use.†
S\N	0	0	65,535	Stepper serial number.†

*Updates during regular exercise after 3 minutes of stepping.
†Not alterable by user.

(Continued on p. 40)

Data Item	Lowest Value	Default Value	Highest Value	Meaning
HRT CON	—	OFF	—	OFF=HR control disabled. ON=HR control enabled. ON for 20,30 series OFF for 00,10 series
MFG	1.00	3.95	12.99	Stepper date of manufacture.†
TIME OUT	0	1	1	0=Stepper doesn't shut off until current program is completed; 1=Stepper shuts off if idle for 20 seconds‡
†Not alterable by user. ‡Set to 1 to enable stepper to shut off when not in use and prevent battery from draining.				

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Star Trac recommends that you refer your questions about your **STAR TRAC STEP** operation and suspected malfunctions to the Star Trac Service Hotline at (800) 503-1221. However, if you are responsible for the maintenance of your organization's exercise equipment, you may wish to specially diagnose the performance of your stepper's electronic systems. For this reason, your stepper is equipped with a Test Mode.

To enter Test Mode, hold down **INFO** and **♥** for about 3 seconds while you begin stepping with your stepper "off" (Display Control Panel not illuminated). You will hear two beeps and the **INFORMATION CENTER** display will show two numbers separated by "V" (e.g. 12345 V6.7). These numbers should match the label on the erasable programmable read-only memory (EPROM) on the Display Control Board beneath the Display Control Panel. Once in Test Mode, you may use the following keys:


- **+** **ENTER** **DURATION** Keys: **-** and **+** display the names of the previous and next tests, respectively, in the list below. **ENTER** starts the test.

The tests that you may run with the above keys are:

Test Name	Required Action	Observed Result(s)
DISPLAY TEST	Watch Display Control Panel.	All light-emitting diodes (LEDs) on the Display Control Panel light in sequence.
KEY TEST	Press ENTER promptly* after all LEDs light; press keys as necessary.	All LEDs light; thereafter LEDs associated with pressed keys light.

*If the LEDs remain lit for an excessive time, the battery could become drained.

(Continued on p. 42)

Test Name	Required Action	Observed Result(s)
WRAP TEST	Connect terminals J1 and J3 on the Display Control Board together; watch INFORMATION CENTER display, press  at end of test.	Display checks itself internally.
WD TEST	Watch Display Control Panel.	Watchdog timer is activated; processor resets; stepper returns to Operating (normal) Mode. Displays WD FAIL in INFORMATION CENTER display if watchdog timer fails.
A/D TEST	Watch INFORMATION CENTER display.	See voltage measured by the analog-to-digital (A/D) converter in the alternator.
FPM TEST	Watch INFORMATION CENTER display.	See average FPM measured by the microprocessor.
HR TEST	Watch INFORMATION CENTER display.	See average heart rate from the Polar wireless heart rate chest strap.

