Hotronic®
ELECTRONIC HEATING SYSTEM

OPERATING INSTRUCTIONS
MODE D'EMPLOI
GEBRAUCHSANWEISUNG
ISTRUZIONI D'USO
BRUKSANVISNING
INSTRUCCIONES OPERADORAS

FootWarmer

e4 POWER PLUS

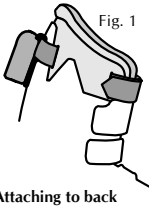
e3 POWER PLUS

11/12

ATTACHING BATTERY PACKS

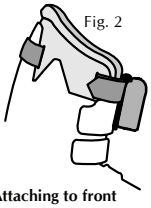
FIXATION DU BLOC-PILES
BEFESTIGUNG DES AKKU-PACKS
FISSAGGIO DELL'UNITÀ BATTERIE
MONTERING AV BATTERIPAKETET
SUJECIÓN DEL PAQUETE DE BATERÍAS

Fig. 1



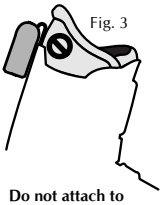
Attaching to back of Power Strap
Fixation à l'arrière de la courroie
Befestigung hinten am Halteriemen
Fissaggio posteriore sul nastro
Montering bak på Kardborrebandet
Sujeción a la parte posterior de la correa

Fig. 2



Attaching to front of Power Strap
Fixation à l'avant de la courroie
Befestigung vorne am Halteriemen
Fissaggio anteriore sul nastro
Montering fram på kardborrebandet
Sujeción a la parte delantera de la correa

Fig. 3

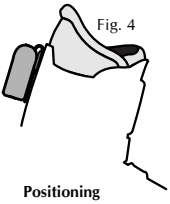


Do not attach to slippery surfaces
Ne pas fixer aux surfaces glissant
Nicht an rutschigen Oberflächen anbringen
Non attaccare su superfici lisce
Montera den inte på hala ytor
No sujetar en superficies deslizantes

POSITIONING BATTERY PACK

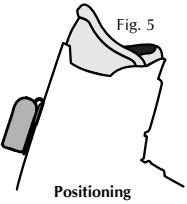
POSITIONNEMENT DU BLOC-PILES
POSITIONIERUNG DES AKKU-PACKS
POSIZIONE DELL'UNITÀ BATTERIE
BATTERIPAKETETS POSITION
COLOCACIÓN DEL PAQUETE DE BATERÍAS

Fig. 4



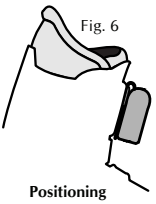
Positioning Battery Pack HIGH
Positionnement HAUT du bloc-piles
Positionierung des Akku-Packs HOCH
Posizione ALTA dell'unità batterie
Batteripaketets position är HÖG
Colocación ALTA del paquete de baterías

Fig. 5



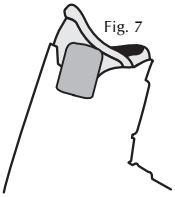
Positioning Battery Pack LOW
Positionnement BAS du bloc-piles
Positionierung des Akku-Packs TIEF
Posizione BASSA dell'unità batterie
Batteripaketets position är LÅG
Colocación BAJA del paquete de baterías

Fig. 6



Positioning Battery Pack FRONT
Positionnement À L'AVANT du bloc-piles
Positionierung des Akku-Packs VORNE
Posizione FRONTALE dell'unità batterie
Batteripaketets position är FRAMME
DELANTERA del paquete de baterías

Fig. 7

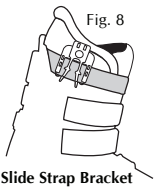


Positioning Battery Pack on LATERAL SIDE
Positionnement LATÉRAL du bloc-piles
Positionierung des Akku-Packs SEITLICH
Posizionamento LATERALE del blocco batteria
Batteripaketets position är på SIDAN
Colocación del paquete de baterías en el LATERAL

ADDITIONAL ATTACHMENT ACCESSORIES

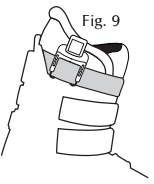
AUTRES ACCESSOIRES DE FIXATION
ZUSÄTZLICHES BEFESTIGUNGSZUBEHÖR
ACCESSORI SUPPLEMENTARI PER IL FISSAGGIO
YTTERLIGARE MONTERINGSTILLBEHÖR
OTROS ACCESORIOS DE FIJACIÓN

Fig. 8



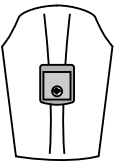
Slide Strap Bracket
Fixation de montage à la courroie en Velcro® (Slide Bracket)
Akku Pack-Halterung für Klettriemen (Slide Bracket)
Dispositivo di fisaggio sulla fascetta in Velcro® (Slide Bracket)
Förslutningsbands .klammer (Slide Bracket)
Soporte en el lateral de la correa (Slide Bracket)

Fig. 9



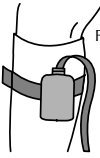
Strap Bracket
Fixation de montage à la courroie en Velcro®
Akku Pack-Halterung für Klettriemen
Dispositivo di fisaggio sulla fascetta in Velcro®
Förslutningsbands .klammer
Soporte de correa

Fig. 10



Mounting Bracket
Fixation de montage
Akku-Pack Halterung
Dispositivo di fissaggio
Monteringsklämmor
Soporte de montaje

Fig. 11



Velcro® Attachment Strap
Courroie en Velcro®
Klettverschlußriemen
Fascetta di fissaggio in Velcro®
Velcro® – remmar (Kardborrlås)
Correa de sujeción de Velcro®

Fig. 12



80 cm Extension Cord
Cordon prolongateur de 80 cm
80 cm Verlängerungskabel
Prolunga da 80 cm
80 cm förlängningssladd
Cable prolongador de 80 cm

Fig. 13



120 cm Extension Cord
Cordon prolongateur de 120 cm
120 cm Verlängerungskabel
Prolunga da 120 cm
120 cm förlängningssladd
Cable prolongador de 120 cm

APPLYING FOOTWARMER CUSTOM TO CUSTOM INSOLES

APPLICATION DU CHAUFFE-PIEDS FOOTWARMER CUSTOM AUX SEMELLES SUR MESURE
ANBRINGEN DES FOOTWARMER CUSTOM AUF MASSEINLAGEN
APPLICAZIONE DELLO SCALDAPIEDI FOOTWARMER CUSTOM SU PLANTARI ORTOPEDICI
MONTERING AV FOOTWARMER CUSTOM PÅ DEN INDIVIDUELLA INLÄGGSULANINLÄGGSULAN
APLICACIÓN DEL CALIENTAPIÉS A LA SUELA INTERIOR

Fig. 14



Correct heating position
Position de chauffage appropriée
Korrekte Heizungsposition
Posizionamento corretto di riscaldamento
Korrekt värmeposition
Posición correcta para calentamiento

Fig. 15



Too far forward
Trop à l'avant
zu weit vorne
Troppo avanti
för långt framme
Demasiado hacia delante

Fig. 16



Too far back
Trop à l'arrière
zu weit hinten
Troppo indietro
för långt bak
Demasiado hacia atrás

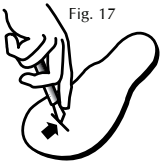


Fig. 17

Make a narrow slit
Faire une fente étroite
Schmalen Schlitz schneiden
Fare un intaglio stretto
Klipp en smal springa
Haga una pequeña hendidura

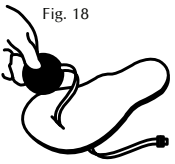


Fig. 18

Run Power Cord through slit
Passer le cordon électrique dans la fente
Anschlußkabel durch Schlitz führen
Inserire il cordone elettrico nel taglio
Led strömsladden genom springan
Pase el cable eléctrico a través de la hendidura

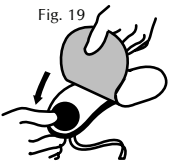


Fig. 19

Apply Cambrelle® cover
Appliquer une ban de Cambrelle®
Cambrelle®- Stoffüberzug auflegen
Applicare il rivestimento Cambrelle®
Lägg på Cambrelle® – beklädnaden
Aplique una funda de Cambrelle®



Fig. 20

Trim excess Cambrelle®
Découper l'excédent de bande Cambrelle®
Überschüssiges Cambrelle® Wegschneiden
Tagliare la parte eccedente del rivestimento Cambrelle ®
Klipp bort överflödigt Cambrelle®
Corte el exceso de Cambrelle®

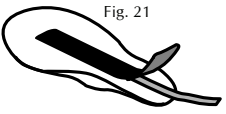


Fig. 21

Apply Cambrelle® strip
Appliquer la bande Cambrelle®
Cambrelle®-Streifen anbringen
Applicare il nastro Cambrelle®
Sätt på Cambrelle® – remsan
Aplique una tira de Cambrelle®

APPLYING FOOTWARMER CUSTOM TO HOTRONIC'S HEAT READY INSOLES

INSTALLATION DU FOOTWARMER CUSTOM SUR SEMELLES HOTRONIC – HEAT READY
ANBRINGEN DES FOOTWARMERS CUSTOM AUF HOTRONIC'S HEIZFERTIGE SCHUHEINLAGEN
APPLICAZIONE DEL FOOTWARMER CUSTOM SULLE SOLETTE HOTRONIC – HEAT READY
MONTERING AV FOOTWARMER CUSTOM PÅ HOTRONICS HEAT READY – INLÄGGSSULOR
APLICACIÓN DEL CALIENTAPIÉS A LAS PLANTILLAS HOTRONIC – HEAT READY

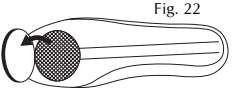


Fig. 22

Open Heating Element door
Ouvrir l'ouverture pour l'élément chauffant
Öffnen der Heizelement Öffnung
Aprire l'apertura per l'elemento riscaldante
Öppna öppningen för värmeelementet
Abra la apertura para el elemento calentador

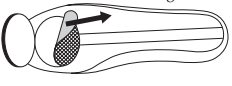


Fig. 23

Remove adhesive-separating-layer
Ôter la pellicule de séparation autocollante en papier
Entfernen der selbstklebenden Papiertrennschicht
Rimuovere lo strato adesivo divisorio di carta
Ta bort det självhäftande papperskiktet
Retire la película de separación del adhesivo

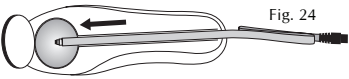


Fig. 24

Insert Heating Element with Power Cord facing up and aligned with channel
Introduire l'élément chauffant avec le câble vers le haut, suivre le sillon prévu pour l'installation du câble
Einführen des Heizelementes mit Kabel und Chip nach oben und in der Flucht der Kabelvertiefung
Inserire l'elemento riscaldante con il cavetto d'alimentazione rivolto verso l'alto ed allineato con la scanalatura
För in värmeelementet med sladden uppåt och i linje med fördjupningen för sladden
Inserción del elemento calentador con el cable eléctrico cara arriba y alineado con el canal

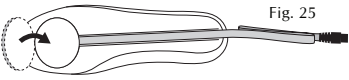


Fig. 25

Close door pressing firmly on both sides of insole
Fermer l'ouverture pour l'élément chauffant en pressant fortement sur les deux côtés de la semelle
Schliessen der Heizelement Öffnung durch kräftiges Andrücken auf beiden Seiten der Einlage
Chiudere l'apertura per l'elemento riscaldante, premendo con forza su ambo i lati della soletta
Stäng öppningen för värmeelementet genom att kraftigt trycka på båda sidorna av inlägget
Cierre la apertura presionando firmemente en ambos lados de la plantilla

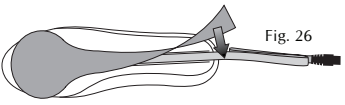


Fig. 26

Apply Cambrelle© strip
Introduire la bande autocollante Cambrelle©
Anbringen des selbstklebenden Cambrelle© Streifens
Applicare il nastro autoaderente in tessuto Cambrelle
Sätt på det självhäftande Cambrelle skicktet
Aplique la tira Cambrelle©

Trim to size

Couper la semelle à la pointure désirée
Auf richtige Grösse zuschneiden
Tagliare la soletta alla misura giusta
Klipp till riktig storlek
Corte al tamaño deseado

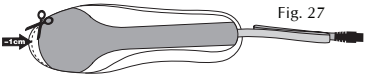


Fig. 27

Semi Custom – Heat Ready Insoles
Semelles Semi Custom – Heat Ready
Semi Custom – Heizfertige Schuheinlage
Plantare Semi Custom – Heat Ready
Semi Custom – Heat Ready Insoles
Plantillas Semi Custom – Heat Ready

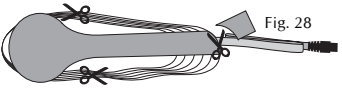


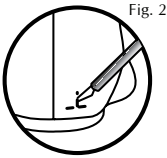
Fig. 28

One Size Fits All – Heat Ready Insoles
Semelles – Heat Ready – One Size
Zuschneidbare, heizfertige Schuheinlage
Plantare – Heat Ready – One Size
One Size Fits All – Heat Ready Insoles
Plantillas Heat Ready en tamaño único

INSTALLATION OF INSOLES

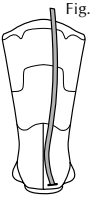
INSTALLATION DES SEMELLES
INSTALLATION DER HEIZSOHLEN
INSTALLAZIONE DELLE SOLETTE
MONTERING AV INLÄGGSSULAN
INSTALACIÓN DE LAS PLANTILLAS

Fig. 29



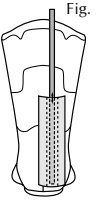
Position and cut T-slit
Placer et découper la fente en T
In der korrekten Position T-Schlitz schneiden
Effettuare l'intaglio a T nella corretta posizione
Klipp en T – formad springa i den rätta positionen
Coloque y corte una hendidura en T

Fig. 30



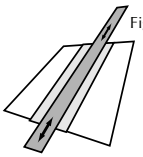
Run Power Cord through T-slit
Passer le cordon électrique dans la fente T
Anschlußkabel durch T-Schlitz führen
Inserire il cordone elettrico nell'intaglio a T
Led strömsladden genom T – springan
Pase el cable eléctrico por la hendidura en T

Fig. 31



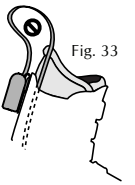
Free floating channel
Canal flottant libre
Freilaufkanal
Canalina per il cordone elettrico
Fritt löpande kanal
Canal flotante libre

Fig. 32



Free floating channel
Canal flottant libre
Freilaufkanal
Canalina per il cordone elettrico
Fritt löpande kanal
Canal flotante libre

Fig. 33



Excessive Power Cord exposed
Trop de cordon électrique exposé
Zu viel Anschlußkabel freiliegend
Cordone elettrico eccessivamente esposto
För mycket kabel ligger fritt
Excesivo cable eléctrico expuesto

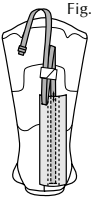
Fig. 34



Folded & splayed Power Cord
Cordon électrique replié et aplati
Zusammengelegtes und gespreiztes Kabel
Cordone elettrico piegato e divaricato
Ihoprullad kabel
Cable eléctrico plegado y separado

Folded & splayed Power Cord
Cordon électrique replié et aplati
Zusammengelegtes und gespreiztes Kabel
Cordone elettrico piegato e divaricato
Ihoprullad kabel
Cable eléctrico plegado y separado

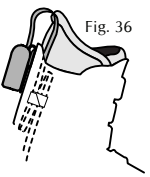
Fig. 35



Free floating channel
Canal flottant libre
Freilaufkanal
Canalina per il cordone elettrico
Fritt löpande kanal
Canal flotante libre

Adequate Power Cord exposed
Suffisamment de cordon électrique exposé
Genug (aber nicht zu viel) Anschlußkabel freiliegend
Cordone elettrico adeguatamente esposto
Lagom (men inte för mycket) kabel ligger fri
Suficiente cable eléctrico expuesto

Fig. 36



Placing folded Power Cord
Passer le cordon électrique replié
Einlegen des zusammengelegten Anschlußkabels
Posizionamento del cordone elettrico piegato
Iläggning av den ihoprullade kabeln
Colocación del cable eléctrico plegado

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- CAUTIONS
- HOTRONIC LIMITED WARRANTY

CONTENTS IN BOX

FootWarmer CUSTOM Power Plus e4 and Power Plus e3 both contain:

- 2 Battery Packs with Integrated Heat Regulator
- 1 Pair of Heating Elements with Self-Adhesive Fabric Covers and Strips
- 1 Recharger (global input 100-240VAC, 50/60Hz) with North American and European Plug Adapters
- Operating Instructions & Limited Warranty Card

OVERVIEW

The Hotronic FootWarmer is dedicated to your foot wherever it goes and easily transfers from one type of footwear to another. Based on computer technology, Battery Pack's micro-controller permits four (4) temperature-duration settings. High quality, rechargeable NiMH batteries are selected for cold temperature performance. Heating Elements locate directly under toes. Recharger globally accepts input ranging from 100-240VAC, 50/60Hz. Following temperatures and durations are approximations only as ratings are affected by recharging process and various tolerances of batteries and electronics. Durations are determined when Battery Packs are used in ambient temperature of -4°F (-20°C).

TEMPERATURE & DURATION CHART				
	Approx. Avg. Temp. Range		Duration Range	
Set.	°C	°F	Power Plus e4	Power Plus e3
1	29°-35°	84°-95°	16.5-19.5 hrs	14.5-17.75 hrs
2	42°-48°	107°-118°	7-9.25 hrs	5.5-7 hrs
3	50°-56°	122°-132°	5-6.5 hrs	3.5-5.5 hrs
4	70°-76°	158°-168°	2.5-4 hrs	2-3.5 hrs
Based on Battery Pack in ambient temperatures of -22° to -15° C (-9° to +4° F) Based on Heating Element in ambient temperatures of 20° to 26° C (68° to 79° F)				

OPERATING BATTERY PACK SETTINGS

1. **To turn on or off**, press-and-hold ON or OFF until LED light is ON or OFF (~2.0 seconds).
2. **To change setting**, press-and-hold ◄ or ► until setting LED light changes (~0.5 seconds).
3. **Once selected, setting 4 auto-resets to setting 3 after 3 minutes** ("timed setting 4"). ("Timed setting 4" LED lights are ON continuously and do NOT blink.)
4. **To use "continuous setting 4"**, start at "timed setting 4", then press and hold ► until all LED lights blink (~5.0 seconds). ("Continuous setting 4" LED lights BLINK continuously until setting is changed.)
5. **DO NOT USE "TIMED SETTING 4" or "CONTINUOUS SETTING 4"** for more than three minutes at a time as it may become too hot and may result in burns. **SEE CAUTIONS REGARDING BURNS**.

BATTERY PACK LED LIGHTS (LEDs)

1. Battery Pack LEDs **indicate power is on or off and setting selected**. LEDs do not indicate charge level.
2. **LEDs will not light** when batteries are fully discharged, are below minimum voltage cutoff level, or do not have enough power to heat Element.

EXCESS HEAT ON ANY SETTING, INCLUDING OFF

1. **WHEN BATTERY PACK LED stays ON and CANNOT BE TURNED OFF**, water may be around electrical contacts, may cause Heating Element to become hot at any setting, and **MAY RESULT IN BURNS**. **See CAUTIONS REGARDING BURNS.**
2. **WHEN BATTERY PACK IS ON ANY SETTING, INCLUDING OFF,** and you feel your foot getting hot, you think you might be getting a burn, or you experience any early warning sensations of a burn, **IMMEDIATELY UNPLUG** Heating Element from Battery Pack and **IMMEDIATELY REMOVE** your foot from FootWarmer. **See CAUTIONS REGARDING BURNS.**

USING HEAT SETTINGS

1. Use FootWarmer to **maintain comfort and warmth**. (**Note:** Prevent feet from getting cold. Warming cold feet requires more energy, is less effective, and is not intended use of FootWarmer.)
2. Before going into cold, **set at 1, 2, or 3 to maintain comfort and warmth.**
3. **For additional burst of heat, set to "timed setting 4".** "Timed setting 4" auto-resets to setting 3 after 3 minutes.
4. **DO NOT USE "TIMED SETTING 4" or "CONTINUOUS SETTING 4"** for more than three minutes at a time as it may become too hot and may result in burns. **SEE CAUTIONS REGARDING BURNS**.
5. **Heat does not thermostatically cycle on and off**. Settings 1 and 2 maintain warmth AND save energy.

WHAT TO EXPECT OF HEAT SETTINGS

1. **Expect imperceptible heat** to maintain comfort and warmth.
2. **Do not expect "**fireplace toes".
3. Learn **what personally works best** over time.

4. Think of your FootWarmer as **Thermo Active Insulation** (TM). As cold penetrates through insole, it draws heat off Element rather than toes. **Balanced heat** is imperceptible yet maintains comfort and warmth. **Too much heat** and feet feel excess heat. **Too little heat** and feet feel cold penetrating through.
5. **If feet are comfortable yet feel excess heat**, turn to lower setting to minimize perspiration and maximize battery duration.
6. **If feet begin to feel cool**, turn setting up to maintain comfort and warmth.
7. **If you think FootWarmer is not working**, try turning left Battery Pack off. If left foot becomes colder, FootWarmer is working.
8. **Ability to feel heat and maintain comfort and warmth depends upon:** proper installation; type, fit, and dryness of footwear, sock, and insole; foot callus size; activity levels; weather conditions; and other factors.
9. **Expect bottom of toes to feel heat less** than fingers and hands.

COMFORT AND WARMTH RANGES

When first learning use of FootWarmer, following chart may help in setting selection. Chart represents approximate ranges for comfort and warmth maintenance. First determine outside temperature then select setting based on personal sensitivity to cold. More sensitive select left of range. Less sensitive select right.

COMFORT AND WARMTH RANGES										
OUTSIDE TEMPERATURES										
°	C	>0	0	-4	-7	-10	-12	-15	-18	-21
Setting	F	>32	32	25	20	15	10	5	0	-5
1		•	•	•	•	•				
2			•	•	•	•	•	•		
3					•	•	•	•	•	•

TIPS ON USING FOOTWARMER

1. **Extremely poor circulation or extremely cold conditions** may require setting 2 or 3 for comfort and warmth. Extra Battery Packs extend all day comfort and warmth.
2. **Do not allow chair lift to hit you!** Damage may result to you and your FootWarmer.
3. **Be careful walking down stairs!** Battery Packs may catch stair edge when mounted on back of boots.
4. **Place heated insole** (fabric surface up) directly underneath socked foot**. Do not place another insole** over heated insole.
5. **Proper fitting boots** help maintain comfort and warmth. **Tight boots and improper fit** restrict blood flow and compromise comfort and warmth.

DRY BOOTS! DRY SOCKS!

1. **If boots and socks are wet**, expect cold feet.
2. **Wet conductive heat loss is 23 times greater than dry heat loss.** (W. L. Gore & Associates, 1994)
3. **Feet perspire more** than any other part of your body except your head and hands. Each foot perspires about 1/4 cup of water a day at rest and one full cup when active. (W. L. Gore & Associates, 1994)
4. **Maintain dry boots!** Dry after each use! Each additional day of moisture buildup makes warm feet more difficult. Consider boot dryer (i.e., Hotronic's Snapdry Boot & Glove Dryer).
5. **Remove inner boots** to dry between liner and boot shell.
6. **Maintain dry, clean socks!** Change midday for afternoon comfort and warmth.
7. **Use single pair of medium weight socks.** Select wool blend, polypropylene®, or thermax® type socks to wick moisture away and keep feet dry and warm.
8. **Do not use** thick socks, neoprene socks, or reflective sock liners as these keep heat from toes.

9. **Do not use** cotton or other moisture absorbing socks.

ATTACHING BATTERY PACKS (Fig. 1-3, 8-13)

1. Slide Battery Pack Wire Clip **SECURELY** over boot top (see point 2 below), boot or shoe laces, or attach to strap such as Velcro® power strap on ski or snowboard boot. (Fig. 1-2)
2. **NOTE: DO NOT SLIDE BATTERY PACK OVER SLIPPERY MATERIAL SUCH AS SKI BOOT PLASTIC AS THE EASIER IT SLIDES ON, THE EASIER IT WILL SLIDE OFF. SECURELY ATTACH BATTERY PACK AT ALL TIMES.** (Fig. 3)
3. **Mounting Bracket Accessory** (optional). For simple, secure, quick attachment of Battery Packs to ski or hard shell snowboard boots. (Fig. 10)
4. **Strap Bracket Accessory** (optional). For simple, secure, quick attachment of Battery Packs to ski or snowboard boot power straps. (Fig. 9)
5. **Slide Strap Bracket Accessory** (optional). For Battery Pack Power Plus e / m Series (e4, e3, m4, m3) only. Provides simple, secure, quick attachment of Battery Packs to ski or snowboard boot power straps. (Fig. 8)
6. **Velcro® Attachment Strap Accessory** (optional). Strap around leg at or above calf or around boot top. Battery Pack clips over Strap. (Fig. 11)
7. **Extension Cord Accessory** (optional). Run Cord underneath pant leg and plug into Battery Pack at waist height (80 cm Cord) or chest height (120 cm Cord). (Fig. 12-13)

POSITIONING BATTERY PACKS (SKI & SNOWBOARD BOOTS) (Fig. 4-7)

1. Positioning Battery Pack **HIGH on back** of boot permits pant leg to cover Battery Pack but increases potential **chair lift damage**. (Fig. 4)
2. Positioning Battery Pack **LOW on back** of boot reduces potential chair lift damage but increases potential damage while walking down stairs. (Fig. 5)
3. Positioning Battery Pack on **TOP FRONT** of boot permits pant leg to cover Battery Pack, eliminates potential chair lift and stair damage, and is convenient when adjusting setting. (Fig. 6)
4. Positioning Battery Pack on **TOP LATERAL SIDE** of boot (see Strap Bracket and Slide Strap Bracket drawings) permits pant leg to cover Battery Pack, eliminates potential chair lift and stair damage, and is convenient when adjusting setting. (Fig. 7)

RECHARGING BATTERY PACKS

- **CAUTION - WARRANTY:** Use Hotronic's White Plug Recharger ONLY for Power Plus e / m Series Battery Packs (e4, e3, m4, m3). Using other than Hotronic's White Plug Recharger voids Warranty.
- **CONDITIONING CHARGE:** When Battery Pack is new or has not been used for 2 months or more, it is recommended to charge Battery Pack for 24 to 72 hours uninterrupted. Conditioning Charge brings new, unused, or unconditioned Battery Pack to full duration and temperature potential.
- **RECOMMENDED OVERNIGHT RECHARGING PROMPTLY AFTER EACH USE: Hotronic's Recommended Process of Overnight Recharging Promptly After Each Use** helps maintain properly conditioned Battery Pack throughout season and during long periods of non-use. To further optimize charge levels after a week or more of non-use, repeat Overnight Recharging Process the night before next use.
- **FULLY CHARGED IN APPROXIMATELY 3 HOURS OR LESS:** Hotronic's White Plug Recharger detects when one or more batteries within Battery Pack are fully charged and automatically switches to trickle current recharging (Recharger LED is green) after approximately 3 hours or less of full current recharging. Fully charged, properly conditioned Battery Pack reaches full duration and

temperature potential. Fully charged, unconditioned Battery Pack does NOT reach full duration and temperature potential. (See Conditioning Charge.)

- **SUMMER AND LONG TERM STORAGE:** Recharge Battery Pack as per instructions for Recommended Overnight Recharging Process, turn Battery Pack off, and store without Recharger or Heating Element plugged in. **Recommended Best Storage Temperatures** range from 5°-25°C (40°-80°F).
- **ELECTRIC INPUT:** Recharger accepts electric input ranging from 100-240VAC, 50-60Hz.
- **OCCASIONAL FULL DISCHARGE:** While not required of NiMH batteries, Hotronic recommends an occasional full discharge before fully recharging to help maintain optimal strength. Plug Heating Element into Battery Pack and use "continuous setting 4" for quickest discharge. Battery Pack is fully discharged when Heating Element is no longer warm and all LEDs are off.

RECHARGE WHEN BATTERY PACK IS OFF: Hotronic recommends recharging when Battery Pack is off. (Battery Pack is off when all LEDs are off.) However, Battery Pack MAY be recharged at any setting. If recharging while on setting 1, 2, 3, or 4, DO NOT CHANGE SETTING DURING RECHARGING as this may cause recharging process to stop.

1. **Plug Recharger into wall outlet** using correct plug adapter (North American, European, or other).
   a. **Recharger performs short self-test** with brief red LED followed by brief green LED and then LED off.
2. **Attach each Battery Pack** to Recharger.
3. **Recharger LED is continuous red** when detecting Battery Pack status and during initial current and full current recharging.
   a. **If Battery Pack status is not okay or is not compatible, Recharger LED will blink red** within 20 minutes of continuous red.
   b. **Maximum duration for continuous red is approximately 3 hours** at which time Recharger LED becomes green.
4. **Recharger LED is green** once one or more batteries within Battery Pack are fully charged and indicates trickle current recharging. (See Conditioning Charge.)
   a. One Battery Pack may reach full charge before other.
5. **Battery Pack may be removed at any time** during recharging process **and may be re-attached** to Recharger at any time.
6. **Once Recharging Process is complete:**
   a. Unplug Battery Pack from Recharger.
   b. Unplug Recharger from wall outlet.
7. **To maintain maximum charge after recharging,** turn Battery Pack off and store without Recharger or Heating Element plugged in.

WHAT TO EXPECT OF BATTERY PACKS

1. **Expect all battery types to lose strength over time.**
2. **Expect optimal performance** of newer Battery Packs.
3. **Expect optimal performance** with use shortly after recharging.
4. **Expect less than optimal performance after recharging** as each week or month passes before use.
5. **Expect shorter durations and lower temperatures** of unconditioned Battery Packs. Unconditioned Battery Packs are the result of being new or unused for 2 months or more. (See Conditioning Charge.)
6. **Unconditioned Battery Packs** can be used without harm to batteries.
7. **Battery self-discharge rates** may range from 2 to 5 percent per month when stored at ambient temperature of ~20°C (~68°F).
8. **When Battery Packs are unplugged and left on settings 1, 2, 3, or 4**, a significant increase in discharge results.
9. **When unplugging Recharger from wall outlet, also unplug Battery Packs from Recharger.** When not unplugged, damage may occur to Recharger and a significant increase in Battery Pack discharge may occur regardless of setting.

TIPS ON RECHARGING

1. **When Recharger green LED is on** (trickle current recharging), Battery Pack may remain on Recharger indefinitely.
2. **However, as further protection against possible battery damage, Hotronic DOES NOT recommend leaving Battery Pack on Recharger for extended periods of time** such as 24 hours or more (except during Conditioning Charge). Damage may result from power outage, surge, or brownout.
3. **To confirm wall outlet is NOT controlled by switch**, plug in Recharger, attach Battery Pack, and confirm continuous red LED status. Recharger's red LED is on continuously when outlet current is active and goes off within seconds when outlet is turned off by switch.
4. **One or two Battery Packs may be recharged on one Recharger** per above instructions.
5. **Any combination of Power Plus e / m Series Battery Packs (e4, e3, m4, m3) may be recharged simultaneously on same Recharger**.
6. **Hotel room razor outlets** (and other Ground Fault Current Interrupter outlets) are not recommended.

TIPS ON SUMMER & LONG TERM STORAGE

1. **For summer and long term storage**, recharge Battery Pack as per Recommended Overnight Recharging Process instructions, turn Battery Pack off, and store without Recharger or Heating Element plugged in.
2. **Prior to use after summer and long term storage**, perform Battery Pack Conditioning Charge for 24 to 72 hours uninterrupted.
3. **Do not store (or keep overnight) Battery Pack at temperatures above 105°F (40°C)** as this will harm batteries.
4. **Do not store (or keep overnight) Battery Pack at temperatures at or below freezing (32°F) (0°C)** as it may harm batteries.
5. **Do not store (or keep overnight) Recharger at temperatures below -4°F (-20°C) or above 149°F (65°C)** as this may harm Recharger.

INSTALLING HEATING ELEMENTS IN HOTRONIC'S HEAT READY INSOLES (Fig. 22-28)

Installing Heating Elements in Hotronic's HEAT READY INSOLES (models ONE SIZE FITS ALL INSOLES and SEMI-CUSTOM INSOLES)

1. Open Heating Element door found on bottom of Insole. (Fig. 22)
2. Remove adhesive separating layer. (Fig. 23)
3. Insert Heating Element with Power Cord facing up and aligned with channel. (Fig. 24)
4. Remove adhesive cover layer on Heating Element.
5. Close door pressing firmly on each side of Insole to set adhesive. (Fig. 25)
6. Apply self-adhesive fabric strip over Heating Element door and Power Cord channel. (Fig. 26)
7. Trim Insole to size. (Fig. 27-28)

CAUTION:

1. DO NOT CUT Power Cord.
2. DO NOT CUT Heating Element located inside Heating Element door.
3. Place red fabric, heated side of Insole up when installing in footwear.

If using Hotronic's ONE SIZE FITS ALL INSOLES in footwear with removable insoles:

1. Align tips of both insoles.
2. Trace removable insole on backside of Hotronic Insole around sides and heel.
3. Trim Hotronic Insole to size of removable insole.
4. Hotronic Insole may be placed on top of removable insole or in place of.

If using Hotronic's ONE SIZE FITS ALL INSOLES in footwear without removable insoles:

1. Trace outline of foot on backside of Insole with TOES aligned over top of Heating Element.
2. Cut Insole along sides and heel. (Fig. 28)
3. Select slightly larger sizing line at first.
4. Further trim Insole where necessary.

If using Hotronic's SEMI CUSTOM INSOLES:

1. First select best size SEMI CUSTOM Insole and install Heating Element.
2. Place Insole inside footwear.
3. If Insole fits well inside footwear, no further trimming is necessary.
4. If Insole needs trimming, use trim-to-size lines on bottom side of Insole toe area. (Fig. 27)
5. Trim Insole as needed.

INSTALLING HEATING ELEMENTS ON CUSTOM INSOLES (Fig. 14-21)

1. With foot on custom insole, **position Heating Element under toes** placing Power Cord toward heel. (Fig. 14-16)
2. Remove foot, carefully lift Heating Element slightly, and **mark position on insole where Power Cord descends from Element**.
3. Use razor knife or grinding device to **make slit or narrow opening at marked position**. Hard insole material may require wider opening for Plug. Use heat gun to soften hard material for narrowest opening. (Fig. 17)
4. **Run Power Cord through slit or opening** until Element lies flat and in correct position. (Fig. 18)
5. **Remove adhesive cover layer on bottom of Element and adhere Element in correct position**. If Element is without self-adhesive layer, use spray or brush-on adhesive between insole and Element.
6. **Apply self-adhesive fabric cover** over top of insole. Trim excess with scissors AFTER applying. If needed, use additional adhesive between insole and fabric. (Fig. 19-20)
7. **Apply self-adhesive fabric strip** over Power Cord on bottom of insole to hold in place. (Fig. 21)
8. **If foot is sensitive to Power Cord**, create shallow channel where needed under insole using razor knife or grinding device. Reapply fabric strip.

INSTALLING INSOLES IN GENERAL FOOTWEAR (Fig. 14-28)

1. Place insole in footwear with Power Cord flat underneath.
2. Run Power Cord up back or side of leg.
3. Securely fasten Battery Pack as per instructions.
4. Plug Power Cord into Battery Pack.

INSTALLING INSOLES IN BOOTS WITH REMOVABLE LINERS (Ski & Snowboard Boots...) (Fig. 29-36)

1. **Pay complete attention** during installation to prevent chafing, abrading, cutting, over tension, and tearing of Power Cord. **These types of damages are NOT covered under Manufacturer's Limited Warranty**.
2. **To place Power Cord between inner boot (removable liner) and shell**, Hotronic recommends following:
   a. Remove inner boot from shell and existing insole from inner boot.
   b. With insole removed, use fingertips along bottom inside and outside edges of inner boot heel pocket to **locate position where Power Cord will exit**.
   c. **Mark 3/4 inch (2cm) horizontal line** on inner boot exterior at position for cut. **DO NOT POSITION CUT** over inner boot seam. (Fig. 29)
   d. With razor knife, **cut cleanly through inner boot** along 3/4 inch (2cm) line. Then cut 3/8 inch (1cm) up from center of line to **create T-slit**. (Fig. 29)

e. Insert insole partially into inner boot, align Power Cord, and **push Plug through T-slit**. (Fig. 30)
f. Verify Power Cord is laying flat in inner boot, then **fully insert insole**.

3. **Taping Power Cord** to inner boot may protect it from undue wear and tear. However, reduce possible over tension and severing of Cord in forward flexing with "**free floating channel**" in tape. Adhere half-width strip of duct tape lengthwise up center of full width piece with sticky sides together. With full width adhered to inner boot, half-width strip serves as "free floating channel". (Fig. 31-32)
4. **Reduce excess length of Power Cord** by gently folding into ribbon, splaying to reduce thickness, and taping in center. Place between inner boot and shell. DO NOT BEND REPEATEDLY in previously folded area as it may cause Cord to fail. (Fig. 34-36)
5. **Leave adequate length of Power Cord** looped up and outside boot. This reduces chances of tearing and damaging Power Cord. **Too short** becomes inconvenient. **Too long** exposes unnecessary lengths to damage from zippers, chair lifts, metal edges (when stepping out of bindings), and other objects. (Fig. 33, 35, 36)

TIPS ON INSTALLATION

1. **For specific footwear or activities**, contact your Hotronic Dealer regarding installation recommendations.
2. **For longer reach of Power Cord**, bring out from under insole in front of outside anklebone then up along side of leg. (For Equestrian Dressage or Field boots.)
3. **Reduce excess length of Power Cord** for liner-less footwear by gently folding into ribbon and taping in center. Position folds closely outside top of footwear. DO NOT BEND REPEATEDLY in previously folded area as it may cause Cord to fail.

OTHER MISCELLANEOUS TIPS

1. **All Hotronic FootWarmers within a given model essentially have same total energy output.** Tolerances in micro-controllers, micro-processors, micro-chips, and batteries result in any setting being slightly warmer while not lasting as long and vice versa.
2. **Battery Packs are water resistant**. Should water get inside, hold, shake, and place upside down until dry. **See CAUTIONS REGARDING BURNS**.
3. **Heating Elements and Insoles are water resistant**. If wet, drying completely prolongs life.
4. **Replacement parts and accessories** are available at your Hotronic Dealer.
5. **Sending in Warranty Card** helps insure proper coverage.

CAUTIONS REGARDING BURNS

Use of Hotronic FootWarmer may result in burns. The higher the temperature setting, the higher the risk of burns.

- **IT IS USER'S RESPONSIBILITY TO:**
  - Properly use Hotronic FootWarmer according to Instructions.
  - Understand his or her own individual sensitivity to heat and susceptibility to burns.
  - Understand his or her own individual early warning sensations of a burn.
  - Remove his or her feet from source of heat before a burn may occur.
- **SOME EARLY WARNING SENSATIONS OF A BURN are:**
  - When any area of your feet becomes hot.
  - When any area of your feet feels like you are standing on a small pebble or pointed object and may or may not feel hot.
  - The colder one's feet are, the sharper the sensation may feel.
  - Early warning sensations of a burn may differ from person to person.

- **IMMEDIATELY UNPLUG** Heating Element from Battery Pack and **IMMEDIATELY REMOVE** your foot from FootWarmer if you feel your foot getting hot, if you think you might be getting a burn, or if you experience any early warning sensations of a burn. Do not reuse FootWarmer until you are certain your foot is no longer at risk of being burned. **SEE A PHYSICIAN IMMEDIATELY** if you think you have a burn.
- **DO NOT USE heat setting 4** for more than three minutes at a time. It may become too hot for continuous use and may result in burns.
- **CONSULT WITH YOUR PHYSICIAN** prior to using FootWarmer if you might have any physiological condition or are using any medication or drug which increases skin sensitivity or reduces skin sensation to heat. Such physiological condition or medication increases risk of burns. Some physiological conditions or medications which increase skin sensitivity or reduce skin sensation to heat are calluses on feet, diabetes, cardiovascular problems, nervous system disorders, Raynaud's syndrome, and tetracycline. Other physiological conditions or medications which increase skin sensitivity or reduce skin sensation to heat may exist.
- **DO NOT WAIT** until your feet are cold to turn temperature setting up because cold feet reduce skin's sensation to heat and increase risk of burns.
- **DO NOT USE** damp or wet socks because presence of moisture increases heat transfer and may increase risk of burns.
- **DO NOT USE** Hotronic Heating Element (1) without fabric covering Heating Element or (2) with Heating Element directly exposed on surface of insole.
- **NOT RECOMMENDED FOR USE** by infants, toddlers, children, or individuals incapable of knowing, understanding, or acting upon early warning sensations of a burn.
- **DO NOT USE** while consuming drugs or alcohol because these may increase skin sensitivity, reduce skin sensation to heat, or reduce one's ability to detect early warning sensations of a burn. Such drugs or alcohol may increase risk of burns.
- **DO NOT USE** while sleeping.
- **WATER AROUND ELECTRICAL CONTACTS** may cause Heating Element to become hot at any setting and **MAY RESULT IN BURNS**.
- **WHEN BATTERY PACK LED stays ON and CANNOT BE TURNED OFF**, water may be around electrical contacts, may cause Heating Element to become hot at any setting, and **MAY RESULT IN BURNS**. If you feel your foot getting hot, think you might be getting a burn, or experience any early warning sensations of a burn, **IMMEDIATELY UNPLUG** Heating Element from Battery Pack and **IMMEDIATELY REMOVE** your foot from FootWarmer. Dry out Battery Pack, plug area, and Heating Element plug. Do not use again until Battery Pack LED CAN BE TURNED OFF. Consider Battery Pack LED a water presence indicator. **MAINTAIN CAUTION REGARDING BURNS at all times.**

CAUTION: USE HOTRONIC BRAND COMPONENTS ONLY

- **DO NOT USE** any non-Hotronic branded, look-alike components with the Hotronic FootWarmer as it **MAY BE UNSAFE** and **MAY RESULT IN BURNS.**
- Connecting any Hotronic battery pack or heating element with a non-Hotronic battery pack or heating element **MAY RESULT IN BURNS** at any setting including "0" (off).
- Connecting any Hotronic battery pack or recharger with a non-Hotronic battery pack or recharger **MAY BE UNSAFE.**
- Contact Hotronic directly if you have any questions regarding this.

CAUTIONS REGARDING RECHARGING

- Recharger is **FOR INDOOR USE ONLY**.
- Recharger is **INTENDED FOR CORRECT ORIENTATION AND CONNECTION** to power outlet at all times.

- Recharger is intended **FOR USE ONLY WITH Hotronic's rechargeable Nickel-metal-hydride (NiMH) e/m Series Battery Packs (e4, e3, m4, m3) as specified in Operating Instructions**.
- **DO NOT ATTEMPT TO RECHARGE** other types of rechargeable or non-rechargeable batteries with this Recharger (other than NiMH as specified in Operating Instructions) as this may cause personal injury and damage to Recharger.
- **KEEP DRY. TO PREVENT FIRE OR ELECTRICAL SHOCK**, do not expose this unit to rain or moisture.
- **DO NOT OPERATE THIS RECHARGER** with damaged plug.
- **DO NOT REPAIR OR ATTEMPT TO REPAIR** Recharger, Battery Pack, or any other Hotronic branded electrical unit, component part, or accessory in any situation.
- **NOT INTENDED FOR USE** by young children or infirm persons without supervision.
- **SUPERVISE YOUNG CHILDREN** to ensure they do not play with Recharger and / or any component part or accessory of FootWarmer.
- **WHEN THERE IS AN EMERGENCY CASE**, immediately unplug all Battery Packs from Recharger and unplug Recharger from power outlet. Contact Hotronic distributor or dealer.
- **SOME EMERGENCY CASES** are smoke coming from Recharger, shape change, liquid or material leakage, and unit dropped and broken. Other emergency cases may exist.

CAUTIONS

- **ATTACH BATTERY PACK SECURELY** at all times as loss of Battery Pack is **NOT** covered under Manufacturer's Limited Warranty.
- **SETTING 4 HAS INCREASED IN TEMPERATURE** (as of 7/95) and **MAY RESULT IN BURNS**.
- **USE OF FOOTWARMER DOES NOT ASSURE** that freezing or frostbite of foot will not occur. As always, use caution and good judgment when you are in cold temperatures.
- **DO NOT CAUSE ELECTRICAL LEADS** in plug area of Battery Pack to touch as there is **DANGER OF A SHORT CIRCUIT**.
- **DO NOT USE FOOTWARMER IF ANY BATTERY PACK ELECTRICAL LEADS ARE BENT** such that any two leads may contact upon further use. Such contact may cause an increase in temperature output of Heating Element and **MAY RESULT IN BURNS** or such contact may result in a **SHORT CIRCUIT**.
- **DO NOT DAMAGE** Battery Pack by use of undue external force.
- **DO NOT DISPOSE** of Battery Pack by throwing in a fire as there is **DANGER OF EXPLOSION**.
- **DO NOT PUT ANY METAL OBJECTS** into plug area of Battery Pack as there is **DANGER OF A SHORT CIRCUIT**.
- **DO NOT CAUSE UNDUE OR EXCESSIVE WEAR, TEAR, OR ABRASION** to Power Cord as there is **DANGER OF A SHORT CIRCUIT**.
- **INSPECT ALL RECHARGER AND HEATING ELEMENT POWER CORDS** for exposed wires prior to plugging into Battery Packs or electrical outlet as exposed wires may result in a **SHORT CIRCUIT**.
- **DO NOT WRAP RECHARGER OR HEATING ELEMENT POWER CORDS AROUND BATTERY PACKS** while plugged into Battery Packs as this may result in a **SHORT CIRCUIT**.
- **DO NOT PLUG RECHARGER PLUG INTO BATTERY PACK BACKWARDS** as there is **DANGER OF A SHORT CIRCUIT**.
- **DO NOT CUT** Power Cord or Heating Element.
- **DO NOT KINK** Power Cord or Heating Element.
- **BATTERY PACK MAY CONTAIN HAZARDOUS MATERIALS** and may require specific disposal. Contact Hotronic distributor or dealer or local recycling agency for proper disposal method.

HOTRONIC LIMITED WARRANTY

The Hotronic® FootWarmer Power Plus e Series carries a limited warranty for two (2) years from the date of purchase. This limited warranty extends only to the original consumer who purchased the new Hotronic® FootWarmer Power Plus e Series from an authorized Hotronic® dealer. Dated Proof of Purchase is required. Hotronic® will replace or repair only that component of the Hotronic® FootWarmer Power Plus e Series found to be defective as to workmanship or material. This limited warranty does not extend to damage resulting from misuse, neglect, abuse, or any use inconsistent with the operating instructions; normal wear and tear; changes in exterior appearance or color; breakage (except breakage resulting from manufacturing defects); improper dealer service; improper dealer or consumer modifications to product; loss of product due to improper attachment; any normal variations in the temperature per setting or the duration per charge per setting which results from the method of recharging the batteries, the conditions in which the FootWarmer Power Plus e Series is used, and the tolerances of the batteries, micro-controller, micro-processor, or micro-chip.

This Limited Warranty is the only warranty offered.

There are no other warranties, expressed or implied. Neither Hotronic International Limited nor the Distributor is liable for any incidental or consequential damages resulting from the use or possession of the Hotronic® FootWarmer Power Plus e Series.

If a defect arises in the FootWarmer Power Plus e Series within the limited warranty period, the user should promptly return the product to an authorized Hotronic® dealer. Dated Proof of Purchase is required. If the FootWarmer Power Plus e Series or any other component is replaced or repaired, the replacement or repair is covered only for the remainder of the original Limited Warranty period dating from the purchase of the original FootWarmer Power Plus e Series.

Contact nearest Hotronic distributor if yellow warranty card is not enclosed.