

# ICON™ BACK SYSTEMS Installation Instructions



This manual explains how to install VARILITE back support equipment, how to operate it, and how to maintain it.

If you do not understand this instruction manual or if you have any questions, please contact *VARILITE* Customer Service at (800) 827-4548.



Table of Contents	
ICON™ Back System Styles	Page 3
WARNINGS	Pages 4-7
Cane and Shell Hardware Components	Page 8
Cushion and Shell Components	Page 9
Assembly and Mounting Steps	Page 10
Adjustment Steps	Page 11
Operating Instructions	Page 12
Back Cushion Instructions	Page 13
Thoracic Support Instructions	Page 13
Troubleshooting Instructions	Page 14
Warranty	Page 15
Care and Maintenance Instructions	Page 16
Contact Information	Page 16

## ICON™ Back System Styles

These instructions are applicable to the following Icon Back System Styles

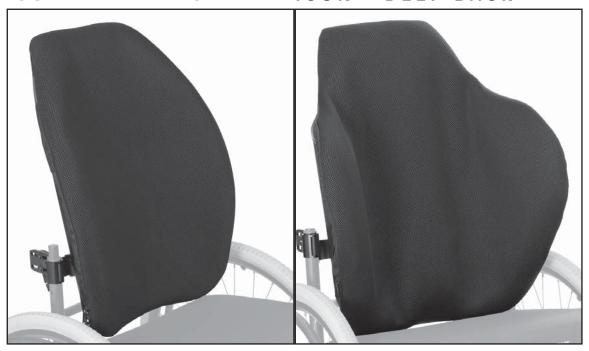
ICON TM LOW BACK

ICON™ MID BACK



ICON™ TALL BACK

ICON™ DEEP BACK



Page 3

TO AVOID INJURY, read, understand and follow all instructions and warnings in this manual before using your *VARILITE* back support.

There are hazards associated with the use of wheelchairs and adaptive equipment. If you misuse your wheelchair or your back support you can be seriously injured.

# **WARNING**

Installation and adjustment of your *VARILITE* back support should be performed only by an authorized dealer or qualified therapist.

Failure to use the appropriate equipment for restraint in a vehicle can result in serious injury or death.

- Never use your VARILITE back support if any hardware is missing, malfunctioning, or broken. Seek qualified assistance with any repairs or adjustments.
- Never exceed the weight capacity of the back support.
   The maximum user weight for systems less than 22 in. (55 cm) wide is 300 lbs (136 kg). The maximum user weight for systems 22 in. (55 cm) or greater is 400 lbs (181 kg).
- Never exceed the weight capacity of the wheelchair as specified by the wheelchair manufacturer.
- Never perform weight training that causes you to exceed the weight capacity of the wheelchair.
- Do not exceed the weight capacity of the wheelchair during other activities of daily living.
- Never lift the wheelchair by the back support.
- Never use the back support without its cover. The cover is made with flame retardant materials. Using the back support without its cover increases the risk of flammability.
- Never modify your VARILITE back support or use it in a way not described by these instructions.

# Use in a Motor Vehicle

#### For ICON™ Tall Back and ICON™ Deep Back



This seating system has been dynamically tested and meets requirements of ANSI WC20/Vol 4 and conforms to ISO 16840-4 for the safe use of seating devices for use in motor vehicles when used with a wheelchair base that complies with performance requirements of ANSI WC19 or ISO 7176-19.

A surrogate wheelchair base and Hybrid III Midsize Male ATD were used in the frontal impact test.

Any postural support devices and belts that have not been successfully tested in accordance with ANSI/RESNA WC18 or WC19 should not be relied upon as an occupant restraint in a vehicle.

Failure to use the appropriate equipment for restraint in a vehicle can result in serious injury or death.

For additional information regarding the use of seating systems in motor vehicles, refer to *Safe Use in a Motor Vehicle* provided with this system and at www.varilite.com

#### For ICON™ Low Back and ICON™ Mid Back



This seating system does not meet requirements of ANSI WC20/Vol 4 or conform to ISO 16840-4 for the safe use of seating devices for use in motor vehicles.

To avoid serious injury or death, do not use this seating system in a motor vehicle.

For additional information regarding the use of seating systems in motor vehicles, refer to *Safe Use in a Motor Vehicle* at www.varilite.com.

## Wheelchair Compatibility

# **WARNING**

*VARILITE* back systems are designed to be compatible with most wheelchairs, noting the following exceptions:

The system can be used only with wheelchairs with cane diameters equal to 1 in. (25 mm) or less.

The system can be used only with wheelchairs with round canes.

Wheelchairs are not required to have stabilizer bars, provided the canes can maintain their position.

Only use wheelchairs with round canes equal to 1 in. (25mm) or less in diameter.

Failure to use compatible equipment can result in equipment breakage and serious injury.



# **VARILITE** Installation Instructions

#### Wheelchair Compatibility



Failure to install and use Cane Bracket Shims as instructed can result in equipment breakage and serious injury.

Cane Brackets are sized for 1 in. (25 mm) diameter wheelchair canes. Shims are provided for wheelchair canes that are less than 1 in. (25 mm) in diameter.

Fit shim onto cane at appropriate height. The Cane Bracket then attaches over shim. Use "Fitting Cane Bracket Shims" chart below to properly fit your wheelchair cane diameter.

#### **Fitting Cane Bracket Shims**

Cane Size Shim Size Included with Hardware?

1/8 in. (3 mm) 7/8 in. (22 mm) Yes 3/4 in. (19 mm) 1/4 in. (6 mm) Yes



Thoroughly clean canes before installing shims.

Grease, oil or other residue on the canes may result in shim slippage.

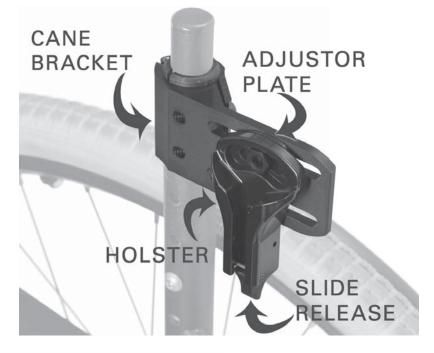
Shim slippage may result in equipment breakage and serious injury.

### ICON Back System Components

Please familiarize yourself with the parts of the back system before installation, adjustment or use.

# **Cane Hardware Components**

- 1. Cane Bracket
- 2. Holster
- 3. Adjustor Plate
- 4. Slide Release





#### **Shell Components**

- 1. Shell Bracket
- 2. Slide Bracket
- 3. Handle

# ICON Back System Components

**Self-Inflating Cushion** and Valve





**Shell Interior** 

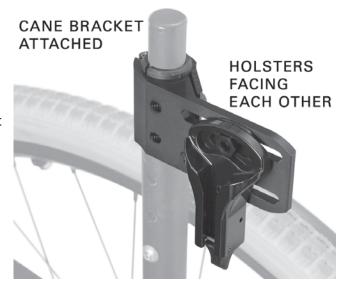
Handle Flap and Handle Patch

### Assembly and Mounting Steps

Adjustment may be necessary to complete the installation and accommodate the width of the wheelchair, or for desired seat depth, angle and height.

#### The following steps must be done before the client is in the wheelchair:

- 1. Determine optimal height of back on wheelchair.
- 2. Attach Cane Brackets to each wheelchair cane, with the Holsters facing each other.
- 3. Align the two Cane Brackets so they are parallel and level with each other. Tighten Cane Bracket screws enough to hold the Cane Brackets lightly in place.
- 4. Loosen the Slide Bracket screws.
- 5. Insert the back so that the Slide Brackets lock into the Holsters.
- 6. Tighten the screws on the Cane Brackets and Slide Brackets.





### Adjustment Steps

The following steps can be done with or without someone in the wheelchair:

#### **Depth and Angle Adjustments**

- Loosen the adjustment screws on the Cane Bracket and adjust for desired level of depth and angle. Only loosen adjustment screws 3/4 of a turn to slide. Do not disconnect from the attached nut.
- 2. Use reference marks on the top of the Holster to make incremental adjustments.
- 3. Adjust the hardware on both canes before fully tightening the adjustment screws.
- 3. Tighten the two adjustment screws on both Cane Brackets to maintain the adjustment.



- 1. Loosen the two Slide Bracket screws on each Shell Bracket.
- 2. Make lateral shell adjustments.
- 3. Retighten the screws.

# Vertical Shell Bracket Adjustment

- 1. Loosen the two screws on each Shell Bracket.
- 2. Make vertical shell adjustments.
- 3. Retighten the screws.



CANE BRACKET

**ADJUSTMENT** 

SCREWS

### **Operating Instructions**

#### **Removing the Back Support**

- 1. Move the Slide Release toward the cane on each Holster to open the Slide Release. The Slide Releases will stay open.
- 2. Lift the Shell straight up so the Slide Bars clear the Holster. The Slide Release will close. Back can be removed with one hand.



#### **Inserting the Back Support**

- 1. Hold the Shell so the Slide Bars are positioned to go down into the Holsters.
- 2. Push the Shell downward so the Slide Bars are inserted into the Holsters until the Slide Bars lock. The Shell can be inserted with one hand.

#### **Back Cushion Instructions**

#### **Inflating Cushion**

- 1. To inflate cushion, remove load from cushion.
- 2. Open air valve by turning valve counterclockwise.
- 3. When cushion is fully inflated, close air valve by turning valve clockwise.

#### **Adjusting Cushion**

- 1. To adjust the air level of the *VARILITE* back support, begin with the cushion fully inflated and the valve closed.
- 2. Position wheelchair user securely in wheelchair.
- 3. Turn the valve counterclockwise to open the valve and release air.
- 4. Close the valve when the air level that provides the support needed for the user's comfort and functionality is reached.

#### **Removing Cushion**

- 1. Pull the cushion up to detach the cover from the shell.
- 2. Detach the Handle Flap from the Handle Patch on the inside of the Shell and pull the Handle Flap through the slot in the Shell.
- 3. Remove the back cushion from the attached flap on the inside of the cover.

**Note:** Reverse the steps above to reattach the cushion.

#### **Thoracic Supports Instructions**

Follow installation instructions provided with the Thoracic Support.

If you choose to mount an optional *VARILITE* PAL<sup>™</sup> Swing-Away Lateral or Fixed thoracic support, you may use the existing slots or drill holes in the Shell.

**Note:** Although the VARILITE Icon Back warranty permits drilling the Shell for attachment of thoracic, head or other ancillary supports, these should be installed only by qualified persons.



#### **Troubleshooting**

The Icon Back System should operate smoothly. The back support should remove and insert without binding. If the back support binds or seems "sticky" during removal and insertion, quick and easy adjustments will correct the situation.

- 1. Check Cane Brackets. Make sure that Cane Brackets are installed at the same height and are parallel with each other.
- 2. Allow the Slide Brackets to self center. Loosen the Slide Bracet screws. Move the Slide Bracket hardware until it fits loosely in the Holsters, then retighten the screws to maintain that position.



3. Ensure the angle adjustment is the same on both Holsters. Loosen the top adjustment screw on the Cane Brackets, 3/4 of one turn, then press the backrest backwards. While the backrest is held backward tighten the adjustment screw on the Cane Bracket connected to each Holster. Repeat Slide Bracket self centering as described above.

Only loosen the Slide Bracket screw 3/4 of one turn when making angle or depth adjustments.

Do not over loosen the screw or it will disconnect from the nut inside the Holster.



#### Warranty

# LIMITED WARRANTY/LIMITATIONS OF REMEDIES AND LIABILITY U.S.A. and Canada

Limited Warranty. VARILITE, a division of Cascade Designs, Inc., to the original owner ("Owner"), under intended use and maintenance, warrants the enclosed product ("Product") to be free from defects in materials and workmanship for two years from date of purchase of the Product. No warranty against defects in materials and workmanship will apply if Product is: (i) altered in any way, except as specifically provided for in product instructions; (ii) used for purposes inconsistent with Product's intended purpose or design; or (iii) improperly maintained. Warranty will furthermore be voided where user: (i) failed to follow Product instructions or warnings; or (ii) subjected Product to misuse, abuse, or neglect.

During the warranty period, original Product parts determined by *VARILITE* to be defective in materials or workmanship will be repaired or replaced as Owner's sole remedy. *VARILITE* reserves the right to replace any discontinued product with a new product of comparable value and function. A returned product deemed

irreparable becomes the property of VARILITE, and will not be returned.

EXCLUDING THE LIMITED WARRANTY PROVIDED ABOVE, *VARILITE*, ITS
AFFILIATES AND THEIR SUPPLIERS, TO THE MAXIMUM EXTENT PERMITTED BY LAW, MAKE
NO WARRANTIES, EXPRESSED OR IMPLIED, AND DISCLAIM ALL WARRANTIES, DUTIES AND
CONDITIONS, WHETHER EXPRESSED, IMPLIED, OR STATUTORY, WITH RESPECT TO THE PRODUCT,
INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, AGAINST
LATENT DEFECTS, FITNESS FOR A PARTICULAR PURPOSE, OR CORRESPONDENCE TO
DESCRIPTION.

Warranty Service To obtain service under this warranty, the warranty-eligible Product must be presented to a VARILITE authorized dealer. In the United States and Canada, warranty service may also be obtained by calling (800) 827-4548, Monday through Friday 7:00 AM to 4:30 PM Pacific StandardTime. Owner is

responsible for all costs associated with returning Product to *VARILITE* for service. Where at its sole discretion *VARILITE* deems Product eligible for warranty repair or replacement, *VARILITE* will pay the shipping and handling associated with returning repaired or replaced Product to Owner. In instances where *VARILITE* deems a returned product ineligible for warranty service, *VARILITE* will, if possible, repair product for a reasonable charge that includes return shipping and handling.

<u>Limitation of Remedies</u> Should a court of competent jurisdiction find the limited warranty set forth above breached, *VARILITE*'s only obligation will be to, at its

option, either repair or replace Product. Should the aforementioned remedy fail of its essential purpose, *VARILITE* will, in exchange for return of Product, refund to Owner Product's original purchase price. THE FOREGOING REMEDY ISTHE SOLE AND EXCLUSIVE REMEDY OFTHE PURCHASER AGAINST *VARILITE*, ITS AFFILIATES AND THEIR SUPPLIERS, REGARDLESS OF LEGAL THEORY.

<u>Limitation of Liability</u> VARILITE's, its affiliates' and their suppliers' maximum liability is limited to incidental damages not to exceed the original purchase price of the Product. VARILITE, ITS AFFILIATES AND THEIR SUPPLIERS HEREBY DISCLAIM AND EXCLUDE ANY LIABILITY FOR ANY CONSEQUENTIAL OR OTHER DAMAGES RESULTING FROM ANY REASON WHATSOEVER. THIS EXCLUSION AND LIMITATION APPLIES TO ALL LEGAL THEORIES UNDER WHICH DAMAGES MAY BE SOUGHT, AND WILL APPLY EVEN IF ANY REMEDY FAILS OF ITS ESSENTIAL PURPOSE.

This limited warranty gives you specific legal rights; you may have additional rights which vary state to state.

Always completely follow: safety, use, operation, and maintenance instructions for this or any other *VARILITE* product.

European Union customer statutory rights are not affected.



#### Care and Maintenance

- The aluminum shell can be cleaned with soap and warm water. Do not saturate. Avoid getting water under the edge trim.
- The self-inflating cushion can be wiped with a damp cloth.
- The cushion cover can be removed and washed. Machine wash at 140° F (60° C). Air dry.
- Never store your back support in conditions of extreme heat or exposure to direct sunlight for long periods of time.
- Never store sharp or heavy objects on top of your back cushion.
- Once a week, leave valve open overnight, allowing cushion to fully inflate in an unloaded state.

#### **Contact Information**

VARILITE 4000 1st Ave. S Seattle, WA 98134

Phone: (206) 505-9500 Toll Free: (800) 827-4548 Fax: (206) 343-5795 Toll Free Fax: (800) 363-7739

Email: info@varilite.com Website: www.varilite.com

**Customer Service Hours:** 

Monday through Friday from 7:00 AM to 4:30 PM Pacific Standard Time (PST)



4000 1st Ave. S Seattle, WA 98134 Phone: (800) 827-4548 Fax: (206) 343-5795 www.varilite.com Authorized EU Representative: Cascade Designs, Limited Dwyer Road, Midleton, Co. Cork Republic of Ireland

P/N 33-210