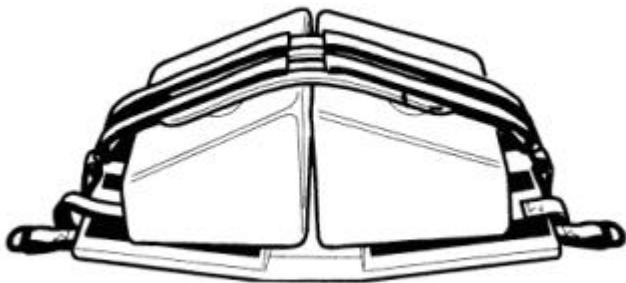




**FERNO**

# **Universal Head Immobiliser**

## **Operation and Maintenance Manual**



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**PREFACE**

This manual has been prepared to provide general instructions for proper usage and maintenance of the Universal Head Immobiliser.

Specific applications and operating techniques may vary from user to user. Ferno does not intend or recommend that this product be used for any purpose other than for which it is designed and outlined in this manual.

Any other use or application of this product becomes the complete responsibility of the owner/user.

Retain this manual for future reference and include it with the Universal Head Immobiliser in the event of transfer to new owners/users.

**PROPRIETARY NOTICE**

The information disclosed herein is the property of Ferno (UK) Limited, a division of Ferno-Washington Incorporated. Ferno reserves all patent rights, proprietary design rights, manufacturing rights, reproducing use rights and sales rights thereto and to any articles disclosed therein, except to the extent that rights are expressly granted to others. The foregoing does not apply to vendor proprietary parts.

Specifications are approximate and remain subject to change to allow the introduction of design improvements.

**1.1 INTRODUCTION****1.1.1 Precautions for Safety**

To ensure safety and satisfaction with your new Universal Head Immobiliser, all users should read these instructions completely, as well as the individual portions of recognised emergency care manuals, which relate to the application and use of rescue equipment.

The Universal Head Immobiliser, like other emergency equipment, should be included in the users formal training programme.

The users must be able to select, based on the circumstances of each individual situation, the combination of equipment and procedures that best ensure the casualty's safety and comfort.

**1.1.2 General Principles**

When moving casualties, always inform them of what you are going to do.

Always follow good lifting procedures.

Medical advice is beyond the parameters of this manual. It is the user's responsibility to ensure safe practices for the patient and themselves.

### 1.1.3 Safety Alerts

Safety alerts identify potential hazards to avoid. The following safety alerts appear in this manual:

#### WARNING

Improper use can cause injury. Use the Universal Head Immobiliser only as described in this manual.

Improper maintenance can cause injury. Maintain the Universal Head Immobiliser as described in this manual.

### Bloodborne Disease Notice

Regulations require employers to protect workers from workplace exposure to Bloodborne diseases such as HIV-1 and hepatitis. To reduce the risk of exposure when using the Universal Head Immobiliser, follow the maintenance instructions in this manual.

### 1.1.4 Limited Warranty

Ferno (UK) Limited, exclusive distributor for Ferno Washington Inc. ("Ferno"), warrants that it's products will be free from material or workmanship defects for one year except as follows:

- a) External finishes (gelcoat, decals, paint, etc.) are warranted for 90 days.
- b) Soft goods (webbing, vinyl, fabric, foam, etc.) are warranted for 90 days.
- c) Repairs and services are warranted for 90 days or until the end of the time period(s) above, whichever comes last.

This limited warranty applies only to products used under normal and proper conditions and is void for any product damaged from misuse, abuse, or neglect. All warranty periods shall commence from the date of shipment.

Any product claimed defective and caused by material or workmanship within the above periods will receive prompt investigation and a fair adjustment. Obligation is limited to replacement or repair of defective components.

We cannot assume responsibility for repairs made by anyone other than an authorised Ferno repair centre.

If a defect is found after the product has been placed in service, DO NOT return it to Ferno without contacting the Ferno Customer Service Department. On contacting Ferno you will be issued with a Customer Return Number, which will be used for identification purposes. Any product returned to Ferno without a Customer Return Number will not be accepted.

To make a limited warranty claim, please contact:

Customer Service Department  
Ferno (UK) Limited  
Ferno House  
Stubs Beck Lane  
Cleckheaton  
West Yorkshire  
BD19 4TZ  
Telephone .....+44 (0) 1274 851999  
Fax .....+44 (0) 1274 851111  
e-mail: service.uk@ferno.com

#### **1.1.5 Limitation of Liability**

The liability of Ferno (UK) under the limited warranty set forth above is limited to repair or replacement of the defective product or part, or, at the option of Ferno (UK), refund of the purchase price. Transportation charges for shipping allegedly defective products or parts to and from Ferno (UK) are not covered.

***Except for the limited warranty above, Ferno makes no other warranties, either expressed or implied. Ferno makes no implied warranties of merchantability and fitness for a particular purpose. In no event will Ferno be liable for any indirect or consequential damages sustained in connection with the delivery, use, or performance of its products.***

The remedies of repair, replacement of defective products, or refund of the purchase price are exclusive and in lieu of all damages. Under no circumstances shall the liability of Ferno (UK), whether under contract, tort, breach of warranty, or otherwise, exceed the selling price of the products proven to be defective.

Any legal action for breach of the limited warranty set forth above must be filed within one year of the date the breach of warranty is or should have been discovered.

#### **1.1.6 Customer Service**

If you have any questions or need assistance with your Universal Head Immobiliser, contact our Internal Sales Department:

Ferno (UK) Ltd  
Stubs Beck Lane  
Cleckheaton  
West Yorkshire  
BD19 4TZ  
Telephone .....+44 (0) 1274 851999  
Fax .....+44 (0) 1274 851111  
e-mail: service.uk@ferno.com

#### **1.1.7 Product Description**

The Universal Head Immobiliser is designed to help maintain a patient's position and minimise further injury to the head and neck.

The Universal Head Immobiliser features a base plate, two support pads and two head straps. The base plate and straps have hook and loop fastening strips. The head immobiliser is a closed cell foam and waterproof product.

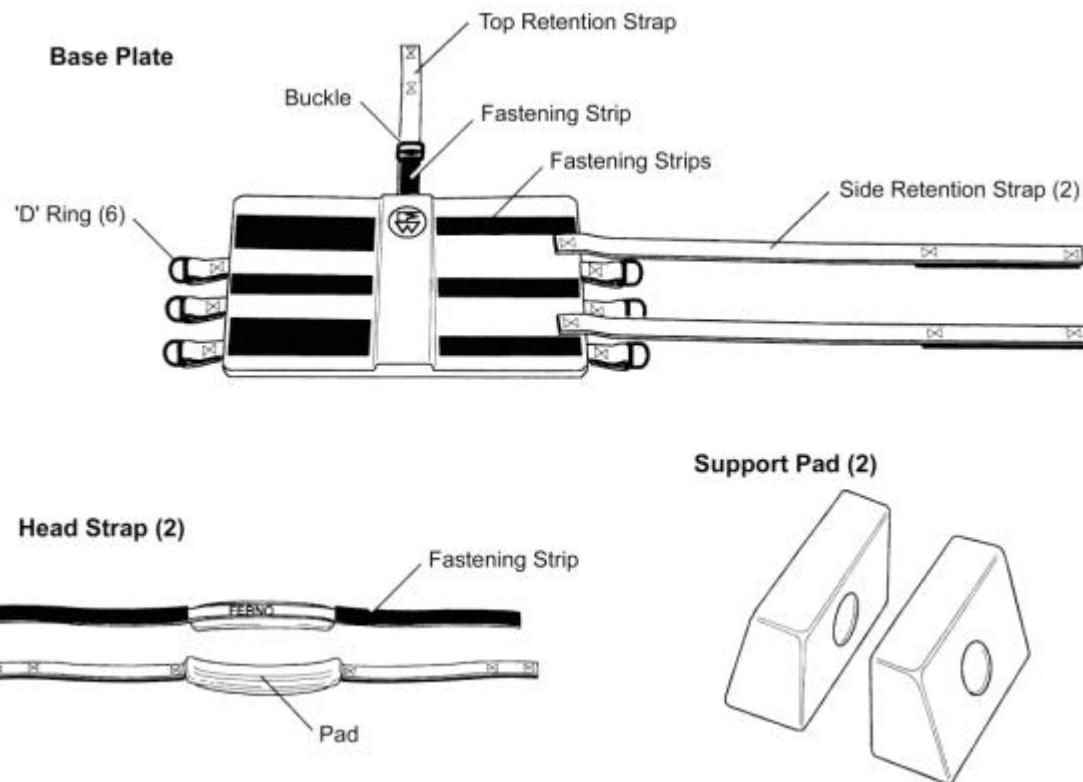
### 1.1.8 Technical Specifications\*

|                                   | Length | Width | Weight |
|-----------------------------------|--------|-------|--------|
| <b>Universal Head Immobiliser</b> | 250mm  | 390mm | 1.0 kg |

\* All dimensions are approximate. Ferno reserves the right to change specifications without notice.

For detailed specifications contact Ferno (UK) Limited Internal Sales Department.

### 1.1.9 Unit Identification

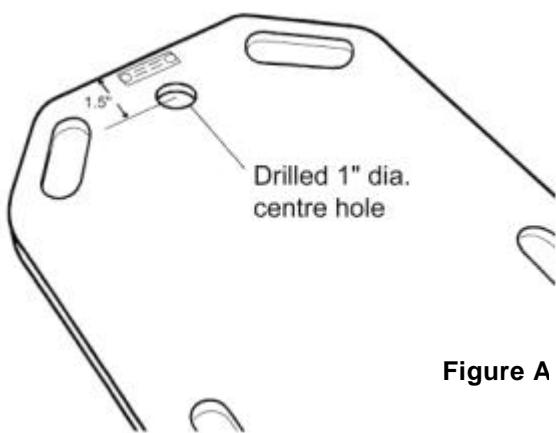


### 1.1.10 Backboard Requirements

To use the Universal Head Immobiliser on a backboard, the backboard must have either a centre hole or cervical device slots at the head end.

If the backboard does not have a centre hole or cervical device slots, follow the instructions below.

- Drill 1" diameter hole, 1½" from the head end and central to the backboard. (Figure A.)
- **Note:** Drilling can affect the board's integrity. Contact the manufacturer of the backboard for information before drilling.



**Figure A**

## Section 2

## Using the Universal Head Immobiliser

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### 2.1 USING THE UNIVERSAL HEAD IMMOBILISER

#### 2.1.1 Operator Skills and Training

- Operators require a working knowledge of emergency patient-handling procedures.
- Operators need the ability to assist the casualty.
- Operators need a complete understanding of the procedures described in this manual.
- Trainees should follow a training plan approved by the EMS training officer or medical advisor.
- Trainees should read this manual as part of the training programme.
- Operators should practice using the Universal Head Immobiliser before using with a casualty.

#### 2.1.2 Guidelines for Use

- The Universal Head Immobiliser is for professional use only.
- Use the Universal Head Immobiliser as described in this manual.
- Only use the Universal Head Immobiliser when it is in good condition.

#### WARNING

Improper use can cause injury. Use the Universal Head Immobiliser only as described in this manual.

Qualified EMS personnel should assess the patient's condition and determine the proper procedures and equipment to use.

Use a minimum of two operators to apply the head immobiliser. One operator supports the patient's head and neck while the other operator applies the head immobiliser.

The head immobiliser can be used on a backboard or a Scoop™ stretcher.

### 2.1.3 Attaching the Universal Head Immobiliser to a Backboard

Separate the head immobiliser components. Position the base plate (fastening strips facing up) at the head end of the backboard (below the centre hole).

If the backboard has slots for cervical devices, thread the side retention straps through the slots (Figure B).

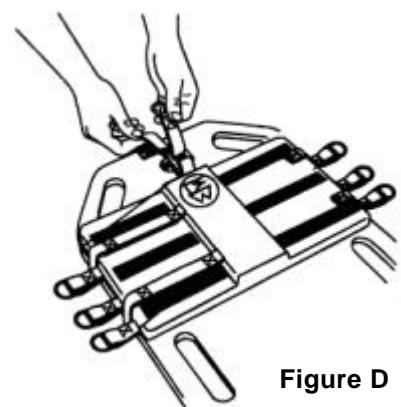
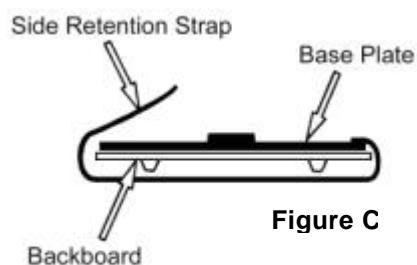
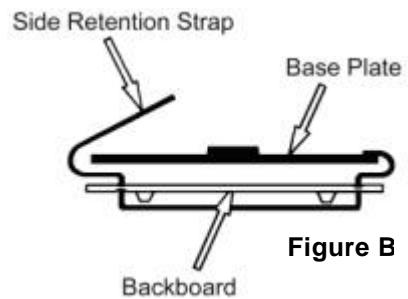
If the backboard does not have slots for a cervical device, wrap the side retention straps under the backboard (Figure C).

Secure the side retention straps to the fastening strips on the base plate.

If the backboard has a centre hole, insert the top retention strap through the centre hole and loop it over the top of the backboard. Thread the top retention strap through the buckle and secure it to its fastening strap (Figure D).

Be sure the base plate is securely fastened to the backboard and there is no movement.

Transfer the patient onto the backboard using approved EMS transfer procedures.



#### IMPORTANT

In order for the head immobiliser to work effectively, the base plate should not be able to move on the backboard. To stop the movement of the base plate on the backboard:

- Tighten the retention straps.
- Add a centre hole (if only cervical device slots).

If the base plate continues to move, use a different backboard.

### 2.1.4 Attaching the Universal Head Immobiliser to a Scoop

Separate the head immobiliser components, and unfasten the retention straps.

Transfer the patient onto the Scoop using approved EMS transfer procedures.

Slide the base plate under the patient's head and onto the head panels (Figure E). Wrap the side retention straps under the head panels and secure them to the fastening strips on the base plate.

Loop the top retention strap around the main frame tube. Thread the top retention strap through the buckle and secure it to its fastening strip.



### 2.1.5 Securing the Patient in the Universal Head Immobiliser

Position the patient on the backboard or Scoop so his/her head is in the middle of the base plate.

Use the backboard or Scoop restraints to secure the patient on the backboard or Scoop.

If the patient is on a backboard, place the straight side of the support pads against each side of the patient's head (Figure F & G).

If the patient is on a Scoop, place the angled side of the support pads against the patient's head (Figure H).

When possible, align the holes in the support pads with the patient's ears. This helps the patient hear the operator and allows the operator to check the patient's ears.

Place a head strap over the patient's forehead (fastening strips up). Centre the strap pad on the patient's forehead.

Thread each end of the strap through a 'D'-ring (one on each side) (Figure I). Secure the ends to a fastening strip on the head strap.

EMS personnel should decide on the use and placement of the second head strap.

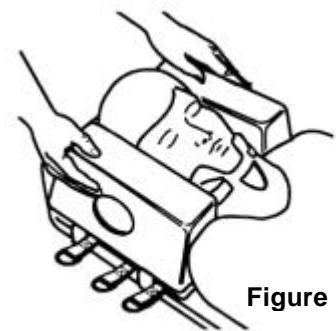


Figure F

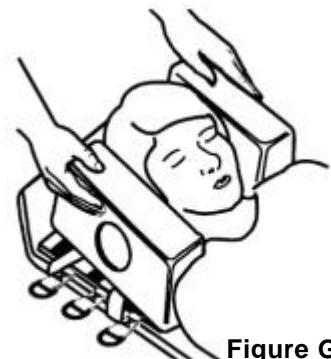


Figure G



Figure H

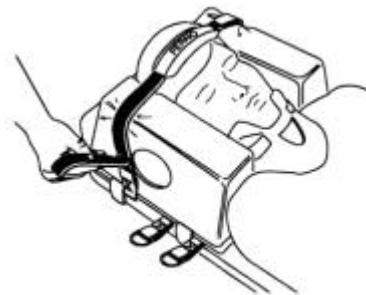


Figure I

### 2.1.6 Storing the Universal Head Immobiliser

Clean the head immobiliser before reassembling the components.

To reassemble the components, loop the retention straps under the base plate and secure them to the fastening strips. Place the support pads on the base plate. Place the head straps on the support pads and secure the ends in the 'D'-rings (Figure J).

**Note:** The head immobiliser can also be stored attached to the backboard.



Figure J

## Section 3

## Maintenance

### 3.1 MAINTENANCE SCHEDULE

The Universal Head Immobiliser requires regular maintenance. Set up and follow a maintenance schedule.

Follow the maintenance schedule below as a minimum.

| WARNING  |  |  |
|--|--|--|
| Improper maintenance can cause injury. Maintain the Universal Head Immobiliser only as described in this manual. |  |  |

| Maintenance  | Each Use | As needed |  |
|--|----------|-----------|--|
| <b>Clean</b> the head immobiliser                            |          | ●         | When using a maintenance product, follow the manufacturer's directions and read the manufacturer's material safety data sheet. |
| <b>Disinfect</b> the head immobiliser                        | ●        |           | Contact Ferno to order Ferno cleaners and disinfectants.   |
| <b>Inspect</b> the head immobiliser                          |          | ●         |  |
| Keep maintenance records. A form is provided in section 3.3. |          |           |  |

#### 3.1.1 Cleaning

- Clean all surfaces of the head immobiliser with warm water and a mild detergent.
- Rinse it with warm water.
- Towel dry the head immobiliser or allow it to air dry.

#### 3.1.2 Disinfecting

- Disinfect all surfaces of the head immobiliser.
- As you disinfect the head immobiliser, check for damage and wear.
- Follow the disinfectant manufacturer's directions for use.

#### 3.1.3 Inspection

Follow all the instructions in the previous section, and ensure:

- All components are present
- All the components are in good condition (free from punctures, fraying, tears)
- The base plate does not slip when secured to the backboard

If the inspection indicates a need to service the head immobiliser, contact Ferno (UK) Limited Internal Sales Department.

### **3.2 TRAINING RECORD**

### 3.3 MAINTENANCE RECORD

**Ferno (UK) Ltd**

Ferno House, Stubs Beck Lane, Cleckheaton, West Yorkshire, England, BD19 4TZ  
Tel: + 44 (0) 1274 851999 Fax: + 44 (0) 1274 851111  
e-mail: [service.uk@ferno.com](mailto:service.uk@ferno.com)

Stock Code: 2003-0036