



## **Model 679 NeoMate Infant Restraint System, Red**

**Part # 031-4111CF**

**Latex Free**

Publication Number: 00101V05-201712



*Read this Manual  
and Retain for  
Future Reference*

## Ferno Technical Support

Customer service and product support are important aspects of each Ferno product. Please have the product serial number available when calling, and include it in all written communications. For technical support questions:

Telephone (Toll-free)	1.800.733.3766 ext. 1010
Telephone	1.937.382.1451 ext. 1010
Email	quality.products@ferno.com

## Ferno Customer Relations

For ordering assistance or general information:

### CANADA AND THE U.S.A.

Telephone (Toll-free)	1.877.733.0911
Telephone	1.937.382.1451
Fax (Toll-free)	1.888.388.1349
Fax	1.937.382.1191
Internet	www.ferno.com

### ALL OTHER LOCATIONS

For assistance or information, please contact your Ferno distributor. If you do not have a Ferno distributor, please contact Ferno Customer Relations:

Ferno-Washington, Inc.

70 Weil Way

Wilmington, Ohio 45177-9371, U.S.A.

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## Disclaimer

This manual contains general instructions for the use, operation and care of this product. The instructions are not all-inclusive. Safe and proper use of this product is solely at the discretion of the user. Safety information is included as a service to the user. All other safety measures taken by the user should be within and under consideration of applicable regulations. It is recommended that training on the proper use of this product be provided before using this product in an actual situation.

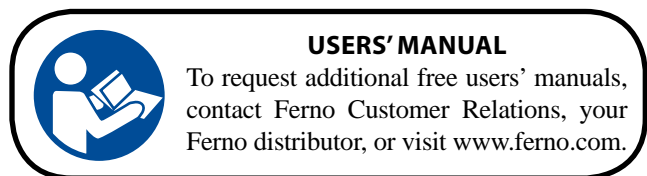
Retain this manual for future reference. Include it with the product in the event of transfer to new users. Additional free copies are available upon request from Customer Relations.

## Proprietary Notice

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## Limited Warranty Statement

The products sold by Ferno are covered by a limited warranty, which is printed on all Ferno invoices. The complete terms and conditions of the limited warranty, and the limitations of liability and disclaimers, are also available upon request by calling Ferno at 1.800.733.3766 or 1.937.382.1451.



## General Information

This product is to be used by trained medical staff only. The Neomate is designed for the emergency transport of infants weighing between 2.3 kg and 6.4 kg or 5 to 14 lbs who are deemed by the medical professional, too small to be transported by using the Pedimate. All care should be taken by the medical professional in determining if this product is correct for the safe securement of the infant during transport, and whether or not an alternative conveyance device (such as a commercially tested infant car seat) should be used instead.

The Neomate has been dynamically tested on a Ferno cot/trolley to meet CEN standards for crash retention. It should be firmly secured to the cot/trolley before the infant is secured within it. The top grey restraint should be looped around the cot/trolley backrest with the buckles correctly engaged and the slack webbing tightened by using the restraint adjuster. The two lower grey restraints should be looped around each main frame rails near the siderails. Both restraints should then be tightened by using the adjusters.

The Neomate should be positioned on the cot/trolley so that when the backrest is raised slightly, the infant is sitting in a semi-upright position and not laying supine.


Once the device is properly positioned and secured, the infant can be placed in the Neomate using the familiar five point harness system that comes over the child's shoulders and under the crotch region.

Additional horizontal restraints (with plastic buckles) are provided to "hug" the infant and provide lateral support and containment for the child. The EMT/Paramedic should determine if these horizontal restraints may cause issues (in instances of labored breathing or upper body injuries) and decide on their use.

## SAFETY INFORMATION

### Warning

Warning notices indicate a potentially hazardous situation which, if not avoided, could result in injury or death.

 <b>WARNING</b>
<p><b>Untrained operators can cause injury or be injured. Permit only trained personnel to operate the Neomate.</b></p> <p><b>Improper use of the Neomate can cause injury. Use the Neomate only for the purpose described in this manual.</b></p> <p><b>Improper application can cause injury. Apply the Neomate only as described in this manual.</b></p> <p><b>An unattended patient can be injured. Stay with the patient at all times.</b></p> <p><b>Secure and snug all straps. Unsecured or loose straps may allow movement and result in injury or death of the patient.</b></p> <p><b>Improper maintenance can cause injury. Maintain the Neomate only as described in this manual.</b></p>

### Important

Important notices emphasize important usage or maintenance information.

<p><b>Important</b></p>
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### Bloodborne Disease Notice

To reduce the risk of exposure to bloodborne diseases such as HIV-1 and hepatitis when using the Neomate, follow the disinfecting and cleaning instructions in this manual.

### Symbol Glossary

The symbols defined below are used on the Neomate and/or in this users' manual. Ferno uses symbols recognized by the International Standards Organization (ISO), American National Standards Institute (ANSI) and the emergency medical services industry.



General Warning of Potential Injury



Read the Users' Manual



Load Limit



Operation Requires One Trained Operator



## OPERATOR SKILLS AND TRAINING

### Skills

Operators using the Neomate need:

- a working knowledge of emergency patient-handling procedures.
- the ability to assist the patient.

### Training

Operator need to:

- read and understand this manual.
- be trained on the use of the Neomate.
- practice with the Neomate before using it with a patient.
- record their training information. A sample training record sheet is provided on page 13.



### WARNING

**Untrained operators can cause injury or be injured. Permit only trained personnel to operate the Neomate.**

## ABOUT THE NEOMATE

### Description

The Neomate is designed to secure infants and toddlers from 5 to 14 lbs (2.3 to 6.4 kg) on a Ferno cot.

#### USE

The Neomate is designed for use only in an emergency setting and only by suitably trained personnel. Where child restraint is needed outside of this setting, the transport vehicle should be fitted with restraints in accordance with applicable local standards and regulations, including but not limited to, the United States Federal Motor Vehicle Safety Standards and Regulations.

The Neomate is for professional use by one or more trained operators.

The Neomate is not designed as an immobilization device and should not be used to immobilize the patient, or as part of an immobilization system.

#### FEATURES

The Neomate blanket is soft, lightweight vinyl. One-piece webbing straps with quick-release buckles attach it to Ferno cot frames at three points.

The five-point patient harness consists of two continuous-loop shoulder/torso straps and a crotch strap. All secure in a central, fast-release buckle and all are fully adjustable.

#### COMPATIBLE COTS

The Neomate is designed for use with the following Ferno cot models:

26 Series	Mondial® RS2 Stretcher
28-Z PROFlexx®	Mondial® RS3 Stretcher
29-M	Mondial® RS4 Stretcher
30-SC	EFX 1 Stretcher Chair
35-A Series	EFX 2 Stretcher
35-A+Series	EFX 3 Stretcher
35-P PROFlexx® Series	EFX MonoBloc
35-X PROFlexx® Series	4140 Series Stretchers
93-ES Series	Falcon Range
93-EX Series	Hawk Range
93-P PROFlexx® Series	Pegasus Range
93-H PROFlexx® Series	CCT Range
POWERFlexx®	Megasus

**Note:** The Neomate is compatible with the iN]X™ Patient Transport System when used with iN]X™ adapter bracket (sold separately, Part # MANU 000140). Not compatible with Models 28 or 2033 chair cots.

### WARNING

**Improper use of the Neomate can cause injury. Use the Neomate only for the purpose described in this manual.**

### LOAD LIMIT



If the load limit has been exceeded (see *Inspecting the Neomate*, page 12).

## General Specifications

### Open, Flat

Width	10.5 in
Length	21 in

### Folded

Length	13 in
Width	10.5 in
Height	3.5 in

<b>Weight</b>	2.6 lb
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### Load Limit

Minimum	5 lb (2.3 kg)
Maximum	14 lb (6.4 kg)

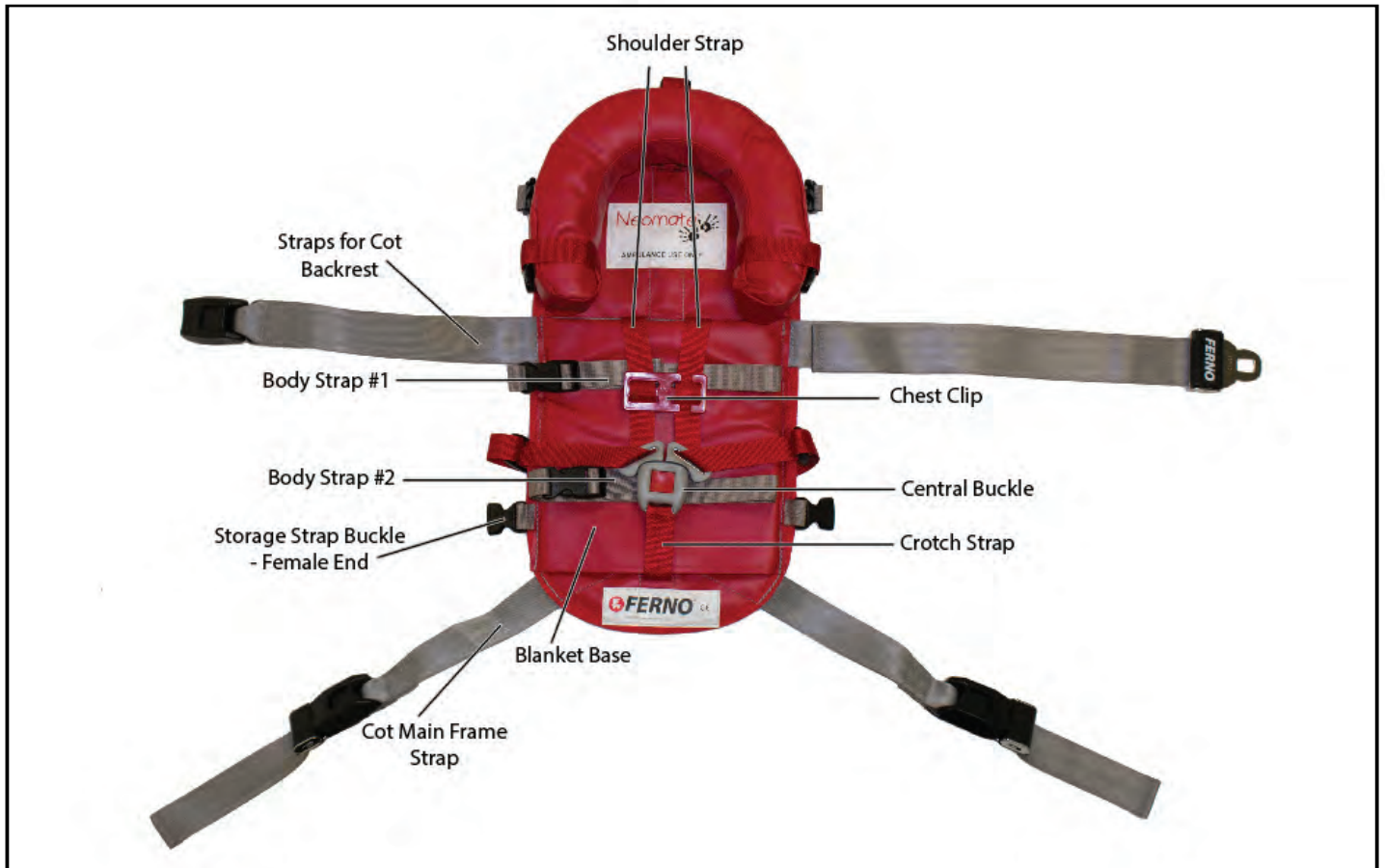
<b>Webbing Rating</b>	3500 lb (1.6 mt)
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Most general specifications are rounded to the nearest whole number. Metric conversions are calculated before rounding the Imperial measurements.

For more information about the Neomate contact Ferno Customer Relations (page 2) or your Ferno distributor.

Ferno reserves the right to change specifications without notice.

## Components



## Not Shown

Plastic buckle storage straps on reverse surface of Neomate are not visible in this view.

## USING THE NEOMATE

### Before Placing the Neomate in Service

- Personnel who will work with the Neomate need to read this manual and practice using the Neomate.
- Confirm that the Neomate operates properly. Follow instructions in *Inspecting the Neomate, page 12*.

### General Guidelines for Use

- Medical advice is beyond the parameters of this manual.
- It is the Neomate users' responsibility to ensure safe practices for the patient and themselves.
- It is the responsibility of the qualified Emergency Medical Service personnel to assess the patient's condition and determine the proper equipment and procedures to use.
- Follow standard emergency patient-handling procedures when using the Neomate.
- Stay with the patient at all times.
- Always use the patient harness.
- Use the Neomate only when all elements are in good working order.
- Use the Neomate only with the approved cot models listed on page 6.
- Never use the Neomate in a captain's chair or front seat of an ambulance.
- Never use the Neomate as an immobilization device or as part of an immobilization system.
- If the Neomate is in use at the time of a vehicular accident, remove the Neomate from service and replace it.

 **WARNING**

**Improper application can cause injury. Apply the Neomate only as described in this manual.**

 **WARNING**

**An unattended patient can be injured. Stay with the patient at all times.**

 **WARNING**

**Secure and snug all straps. Unsecured or loose straps may allow movement and result in injury or death of the patient.**



## Positioning the Neomate

1. Remove any restraints attached to the cot.
2. Raise the cot backrest and lock into place at an angle between 15 - 45 degrees. This will keep the patient's shoulders higher than the pelvis and maintain proper center of gravity.
3. Unroll the Neomate and spread it flat on the cot mattress with all straps extended.
4. Center the blanket left to right on the mattress.
5. Position the blanket with the grey backrest strap at the point where you expect the patient's shoulders to rest (Figure 1).
6. Run the ends of the backrest strap around the cot until they meet in the back, then fasten the buckle (Figure 2). Leave some slack in the strap for final adjustment.



Figure 1 - Neomate Positioned on a Cot

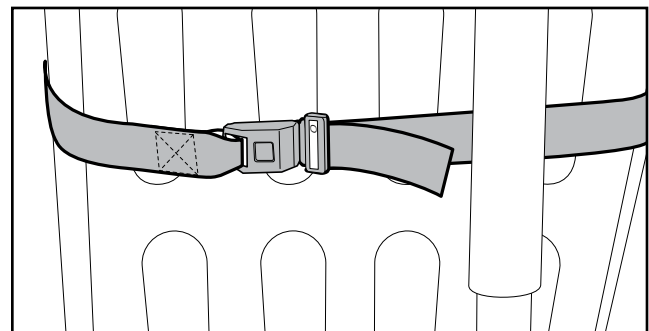


Figure 2 - Attach the Neomate Backrest Strap

## Securing the Neomate

1. Place the patient on the Neomate. If the grey backrest strap is not at the patient's shoulder level, adjust the blanket position.
2. With the blanket properly positioned, tighten the backrest strap by pulling very firmly on the free end of the strap until the mattress is compressed.
3. Fasten a main frame strap by threading the free end downward between the cot main frame and the mattress next to the head-end sidearm casting.
4. Wrap the strap up around the cot main frame and fasten the buckle (Figure 3). Leave a little slack in the strap for final adjustment.
5. Repeat with the other main-frame strap.
6. Tighten each main frame strap by holding onto the buckle with one hand and pulling firmly on the free end of the strap.

**Note:** To loosen a main-frame strap, unfasten it, then grasp the buckle tang, and pull outward. Refasten the buckle.

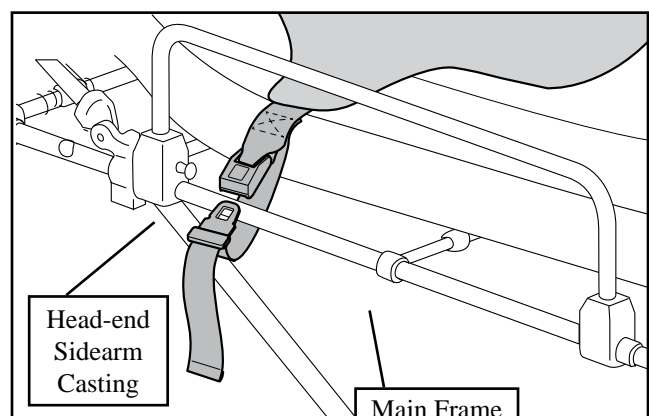


Figure 3 - Attach a Strap to the Cot Main Frame

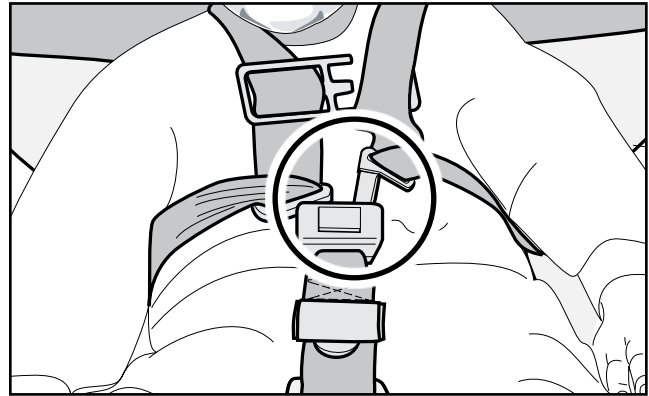


## Securing the Patient

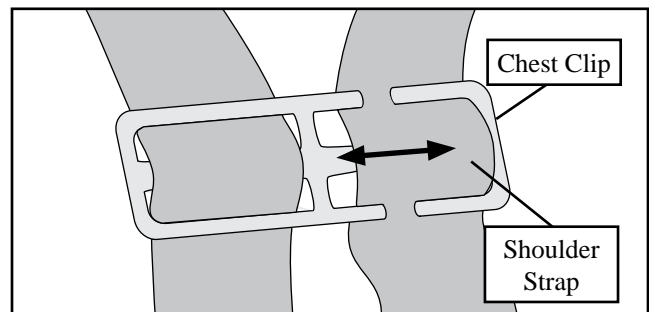
### WARNING

**Secure and snug all straps. Unsecured or loose straps may allow movement and result in injury or death of the patient.**

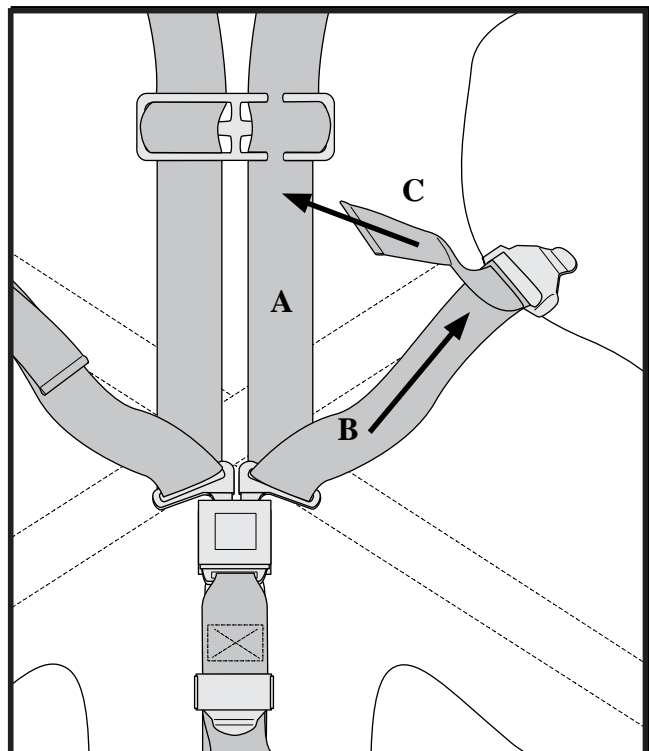
1. Wrap Body Strap #1 around the patient's chest and fasten the plastic buckle.
2. Wrap Body Strap #2 around the patient's waist and fasten the plastic buckle.
3. Pull tab on Body Strap #1 to tighten. Repeat this step on Body Strap #2.
4. Pull the crotch strap buckle up between the patient's legs and lay the strap on the patient's abdomen.
5. Lift a shoulder strap over one of the patient's shoulders. Place patient's arm through the strap, then lock into the central buckle (Figure 4).
6. Repeat with the other shoulder strap.
7. Thread the shoulder strap on the patient's left side through the chest clip (Figure 5) and slide the chest clip to armpit level. To snug the shoulder/torso straps, refer to Figure 6 and use the following procedure:
  - Snug the shoulder strap (A) against the shoulder and chest by pulling section B of the strap with one hand while steadying the central buckle with the other hand.
  - Repeat with the other shoulder strap.
  - Snug the torso strap (B) by pulling on section C with one hand while steadying the central buckle with the other hand.
  - Repeat with the other torso strap.
8. Ensure the crotch strap is fastened, crotch strap is of fixed length and not adjustable.



**Figure 4 - Fastening a Shoulder Strap**



**Figure 5 - Fastening a Shoulder Strap**



**Figure 6 - Fastening a Shoulder Strap**

### LOOSENING THE HARNESS STRAPS

To loosen the straps, refer to Figures 7 and 8 and use the following procedures:

1. Grasp the adjustment tab (Figure 7) with one hand and pull the torso strap (B) back through the tab with your other hand.
2. Steady the central buckle with one hand and loosen the shoulder strap (A) by pulling it upward with the other hand.
3. Repeat with the other shoulder/torso strap.

### Releasing the Patient from the Neomate Harness

1. Loosen the crotch strap.
2. Slide the chest clip down toward the central buckle and unthread the shoulder strap on the patient's left side from the clip.
3. Press the red release button in the central buckle and pull the buckle slightly downward to release the shoulder straps from the buckle.
4. Loosen the shoulder straps and slide them away from the patient's body.
5. Lift the patient from the Neomate according to local protocols.

### Storing the Neomate

1. Detach the Neomate from the cot and spread it flat on the cot mattress.
2. Attach the shoulder straps to the central buckle and adjust all straps to lay smoothly against the blanket.
3. Fold the backrest straps across the blanket.
4. Fold the crotch panel up toward the center of the blanket.
5. Fold the cot main-frame straps and the lower blanket panels across the center of the Neomate.
6. Beginning at the crotch panel, fold the Neomate upward. Secure the roll with the hook-and-loop straps.

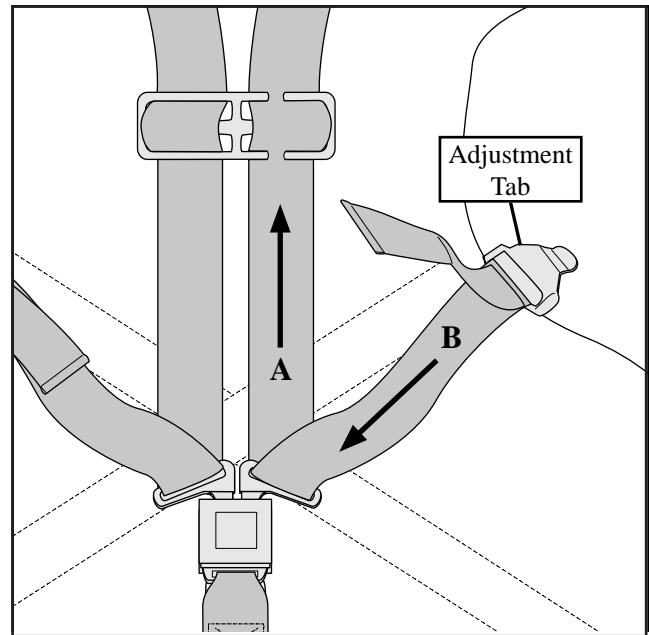


Figure 7 - Loosening the Strap

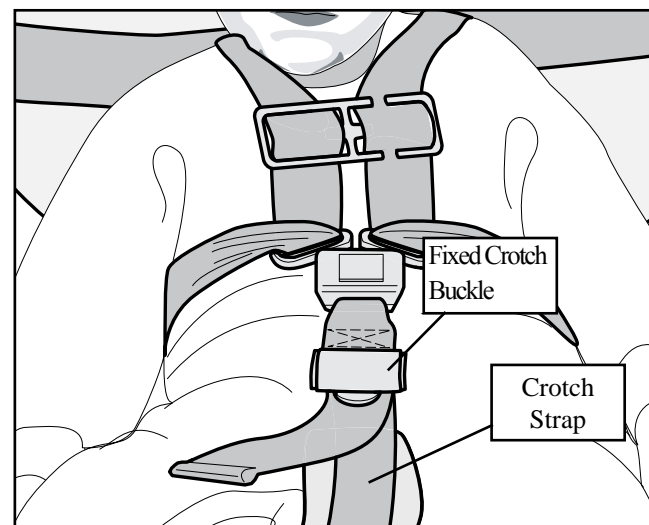


Figure 8 - Loosening the Crotch Strap

## 5 - MAINTENANCE

### Maintenance Schedule

The Neomate requires regular maintenance. Set up and follow a maintenance schedule (see maintenance record sheet on page 14). The table at right represents minimum intervals for maintenance.

When using maintenance products, follow the manufacturers' directions and read the manufacturers' material safety data sheets.

### Disinfecting the Neomate

Wipe or spray disinfectant on all Neomate and surfaces and straps. Follow the disinfectant manufacturer's directions for application and contact time.

### Cleaning the Neomate

Hand wash the Neomate blanket and straps with warm, soapy water and a clean cloth or soft brush. Rinse with clear water. Dry the blanket with a towel and allow the straps to air dry.

Do not immerse the buckles in water.

### Inspecting the Neomate

Have your services equipment maintenance personnel inspect the Neomate regularly. Follow the inspection checklist.

If the inspection shows damage or excessive wear, remove the Neomate from service. Ferno recommends that in addition to scheduled maintenance, operators perform a visual inspection each time the Neomate is used. If damage is noted, remove the Neomate from service immediately and replace it.

#### INSPECTION CHECKLIST

- Are all components present?
- Is the Neomate free of excessive wear?
- Is all stitching secure?
- Do the central buckle and adjustment tabs operate properly and smoothly?
- Are there cuts or tears in the blanket or straps?

 <b>WARNING</b>
<b>Improper maintenance can cause injury. Maintain the Neomate only as described in this manual.</b>

Minimum Maintenance Intervals	Each Use	As Needed	Each Month
<b>Disinfecting</b> (this page)	•		
<b>Cleaning</b> (this page)		•	
<b>Inspecting</b> (this page)		•	•

<b>Important</b>
Disinfectants and cleaners containing bleach, phenolics, or iodines can damage the Neomate. Do not use products containing these chemicals.

<b>Important</b>
If the Neomate is in use at the time of a vehicular accident, remove the Neomate from service and replace it.

#### U.S.A. NOTICE

The cot is for use with ambulances that meet the requirements of the "Star of Life" certification via Federal Ambulance Specification KKK-A-1822. For information, contact:

Federal Supply Services, Specifications Section  
 Suite 8100  
 470 E. L'Enfant Plaza, SW  
 Washington, DC 204

