



Users' Manual



Model 23 Roll-In Style Mortuary Cot



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*Read this Manual
and Retain for
Future Reference*

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 the invoice you received when you purchased this product. Please refer to the warranty terms as printed on your invoice. 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.

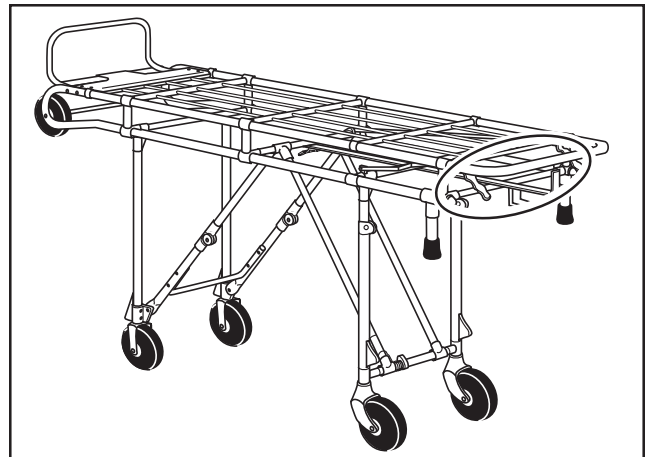
Ferno Customer Relations

Customer service and product support are important aspects of each Ferno product. For assistance or information, contact your Ferno distributor or Ferno Customer Relations.

Please have the serial number available when calling Ferno Customer Relations, and include it in all written communications.

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Serial Number _____
(Located on crosstube between control handles)




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1 - SAFETY INFORMATION

1.1 Warning

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

| |
|--|
|  WARNING |
| <p>Untrained operators can cause injury or be injured. Permit only trained personnel to operate the cot.</p> <hr/> <p>Improper operation can cause injury. Operate the cot only as described in this manual.</p> <hr/> <p>An unrestrained body can fall off the cot. Use restraints to secure the body on the cot.</p> <hr/> <p>Improper maintenance can cause injury. Maintain the cot only as described in this manual.</p> <hr/> <p>Improper parts and service can cause injury. Use only Ferno parts and Ferno-approved service on the cot.</p> <hr/> <p>Modifying the cot can cause injury and damage. Use the cot only as designed by Ferno.</p> <hr/> <p>Attaching improper items to the cot can cause injury. Use only Ferno-approved items on the cot.</p> |

1.2 Important

Important notices emphasize important usage or maintenance information.

| |
|------------------|
| Important |
|------------------|

1.3 Bloodborne Disease Notice

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

1.4 Symbol Glossary

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



General Warning of Potential Injury



Load Limit



Read the Users' Manual



Do Not Lubricate



Lubricate



Product meets European Union Standards



Unlocked



Locked

2 - OPERATOR SKILLS AND TRAINING

2.1 Skills

Operators using the cot need:

- a working knowledge of mortuary body-handling procedures.

2.2 Training

Trainees need to:

- read and understand this manual.
- be trained and tested on the use of the cot.
- practice with the cot before using it in service.
- record their training information. A sample training record sheet is provided on page 15.

| |
|--|
|  WARNING |
| Untrained operators can cause injury or be injured. Permit only trained personnel to operate the cot. |

3 - ABOUT THE COT

3.1 Cot Description

The Model 23 Roll-in Style One Man® Mortuary Cot (cot) is a mortuary transport device designed for use by one or more mortuary professionals to transport a body in a vehicle.

The cot is for professional use only. It is designed for use with Model 5 Ferno® cot fastener (not included).

COT FEATURES:

- 2 Height positions (raised/lowered)
- Loading range 24-26 in. (62-67 cm)
- Foot stop
- Leg lock
- Two 5-inch swivel transport wheels (operator end)
- Two 5-inch fixed transport wheels (loading end)
- Leg-protecting scuff blocks
- Sidearms (optional)

INCLUDED WITH PURCHASE

- 1 in. mattress
- 2 quick-release restraints
- Users' manual

3.2 General Specifications

| | |
|------------------------|------------------------|
| Height (Frame) | |
| Raised Position | 32 in./80 cm |
| Lowered Position | 10 in./24 cm |
| Length | 76 in./192 cm |
| Bed Width | 20 in./51 cm |
| Overall Width | 21 in./53 cm |
| Loading Height | 24 in.-26 in./62-67 cm |
| Weight | 44 lb/20 kg |
| Load Limit | 400 lb/182 kg |

General specifications are rounded to the nearest whole number. Metric conversions are calculated before rounding the Imperial measurements. For more information, contact Ferno Customer Relations (page 2) or your Ferno distributor.

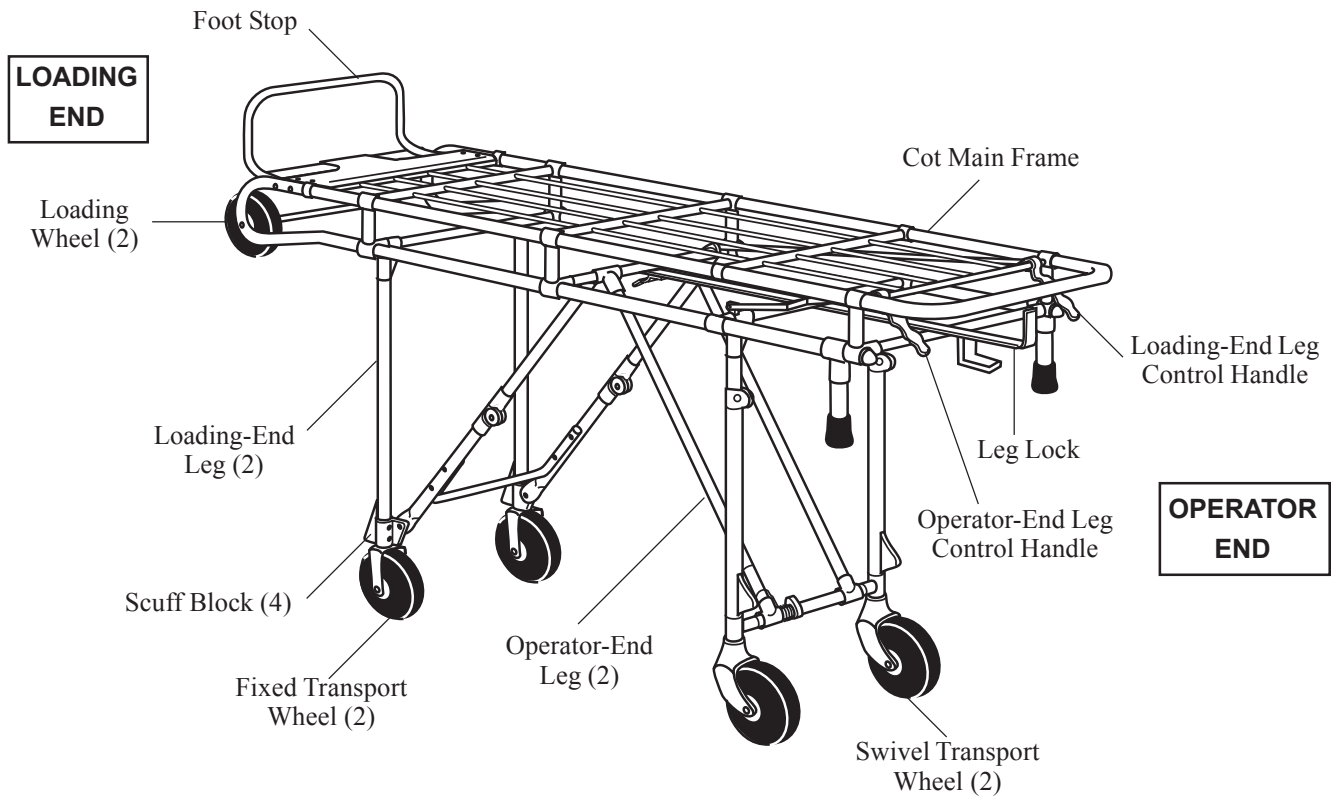
Ferno reserves the right to change specifications without notice.



LOAD LIMIT



3.3 Components



3.4 Swing-Down Sidearms (Optional)

The optional swing-down sidearms provide additional security by helping to keep the body from sliding on the cot. Keep the sidearms raised except when transferring a body onto or off from the cot.

To lower a sidearm, pull the release pin (Figure 1) and swing the sidearm down.

To raise a sidearm, rotate the sidearm upward until the pin locks into place.

Important

Sidearms are not designed for lifting. Use only the main frame to lift the cot.

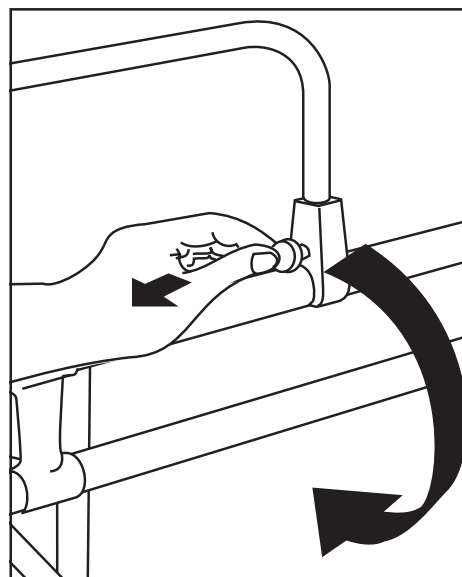


Figure 1 - Using the Swing-Down Sidearm

3.5 Restraints

A set of two restraints is supplied with the cot. Always use both restraints to secure the body to the cot. Attach and adjust restraints so they properly secure the body without damaging it.

Use additional restraints if needed.

Keep restraints fastened when not in use to prevent them from interfering with cot operation.

To fasten a restraint, insert the tang into the receiver (Figure 2). To unfasten a restraint, press the release button on the receiver. For complete instructions, see the restraint users' manual packaged with the restraints.

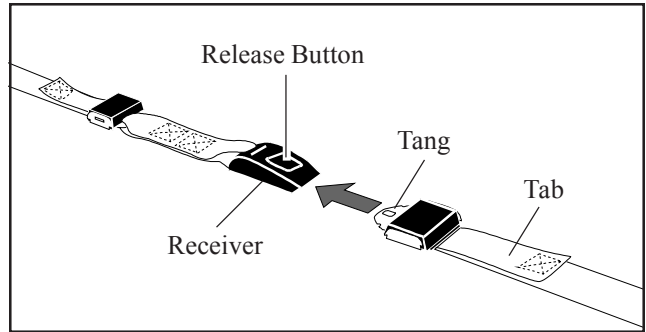


Figure 2 - Two-Piece Restraint

3.6 Leg-Control Handles

The cot has two leg-control handles that are used when lowering the cot or loading it into a vehicle.

Squeeze the handle on the operator right side to unlock the loading-end legs. Squeeze the handle on the operator left side (Figure 3) to unlock the operator-end legs.

The leg-control handles are not used when raising the cot.

For complete instructions on lowering and raising the cot, see *Changing Cot Positions*, pages 8 and 9. For loading and unloading instructions, see page 10.

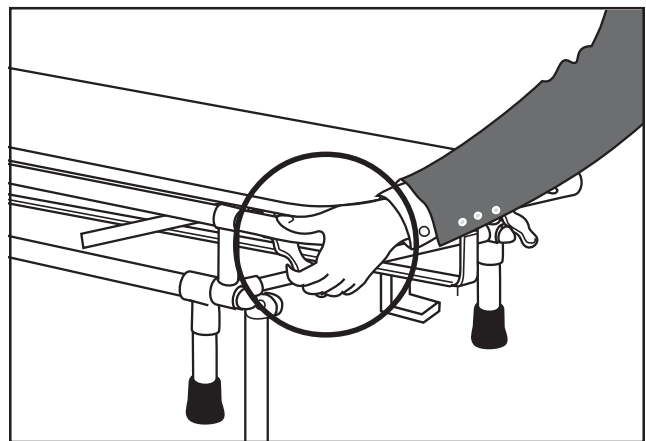


Figure 3 - Squeezing a Leg-Control Handle

3.7 Leg Lock

The leg lock secures the legs in the folded position. This allows the operator and helper(s) to lift and carry the cot like a stretcher.

- To engage the leg lock, place the cot in the folded position and pull the lock handle (Figure 4).
- To disengage the leg lock, push the handle toward the loading end of the cot.

Note: Leg locks on cots with serial numbers lower than L-728486 operate in the opposite direction. Pushing the handle engages the leg lock, and pulling the handle disengages it.

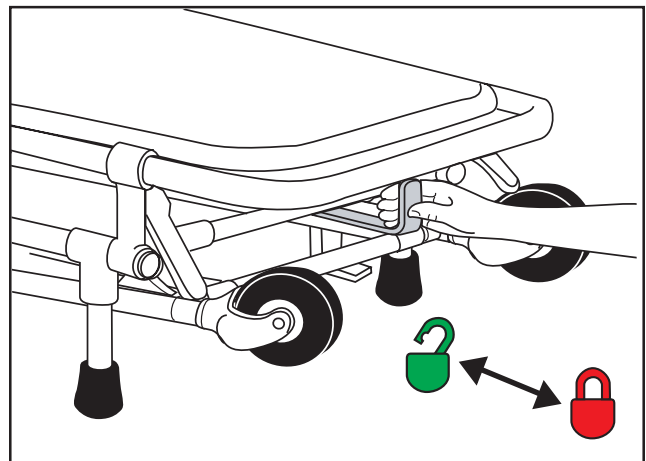


Figure 4 - Pull the Lock Handle to Engage the Leg Lock

Important

Do not engage the leg lock while the cot is loaded in a vehicle. Verify that the leg lock is disengaged before unloading the cot from the vehicle.

4 - USING THE COT

4.1 Before Placing the Cot in Service

- ❑ Personnel who will work with the cot need to read this manual.
- ❑ Set up the cot, following the instructions in *Cot Setup*, page 14.
- ❑ Confirm that the cot operates properly. See *Inspecting the Cot* (page 12).
- ❑ The vehicle transporting the cot must have a Ferno cot fastener system installed.

4.2 General Guidelines for Use

- The cot can be operated and maneuvered by one person, but operates and maneuvers more easily when controlled by two operators.
- Operators may need help when working with heavy loads. Use additional help as needed.
- Operator(s) and helpers must work together. Communicate with one another and operate the cot using coordinated movements.
- Follow standard mortuary-service procedures when operating the cot.
- Stay with the cot at all times.
- Always use restraints.
- Read the cot fastener users' manual for instructions on using the cot fastener.

4.3 Changing Cot Positions

To lower the cot with one operator:

1. Raise the operator end of the cot until the loading wheels are on the ground (Figure 5).
2. Squeeze the right leg-control handle to unlock the loading-end legs, and begin lowering the cot (Figure 6, page 9). Release the leg-control handle.
3. Squeeze the left leg-control handle to unlock the operator-end legs, and lower the cot to the ground or floor. Release the leg-control handle.
4. Engage the leg lock if the cot will be carried or rolled while tilted onto its loading wheels.

WARNING

Improper operation can cause injury. Operate the cot only as described in this manual.



Read Users' Manual
for Operating and
Safety Information



Cot May be Operated
by One Trained Operator

WARNING

An unrestrained body can fall off the cot. Use restraints to secure the body on the cot.

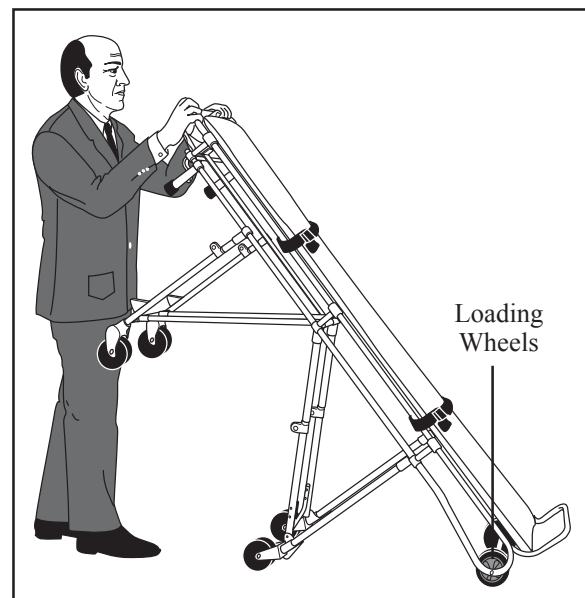


Figure 5 - Preparing to Lower the Cot

The leg-control handles are not used when raising the cot.

To raise the cot with one operator:

1. If the leg lock is engaged, disengage it.
2. Grasp the main frame at the operator end of the cot. Lift the cot until the operator-end legs fully unfold and lock into place.
3. Do one of the following.
 - **If a body is on the cot:** move to the loading end of the cot and lift the cot until the loading-end legs fully unfold and lock into place.
 - **If the cot is empty:** remain standing at the operator-end of the cot and continue lifting upward until both sets of legs have completely unfolded and locked into place.

If two operators are present, the operators stand at opposite ends of the cot and work together to lift the cot at the same time. Lift the cot until the transport wheels are off the ground and both sets of legs have fully unfolded and locked into place. Then, set the cot onto its transport wheels.

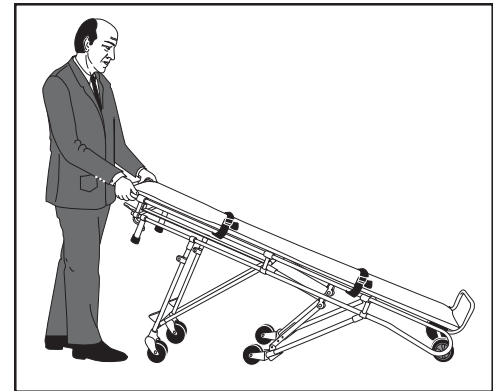


Figure 6 - Folding the Loading-End Legs

4.4 Transferring the Body Onto the Cot

Ferno recommends that you position the body with the head at the operator end of the cot, if possible. This orientation will place the body in a “heads up” position if you need to tilt the cot in a confined area.

1. Roll the cot as close as possible to the body. If possible, place the operator-end of the cot nearest the head. Lower the cot to access a body that is on the floor or ground.
2. Unfasten the restraints.
3. Place the body in a body pouch or use an accessory such as a transfer board to ease transferring the body onto the cot. Use additional help as needed to move the body.
4. Fasten the restraints. Cover the body with a body cover if desired.

Important

Position the body with the head at the operator end of the cot if possible. This places the head nearest the operator and the feet against the cot’s foot-stop if the cot must be rolled on its loading wheels.

4.5 Rolling and Maneuvering the Cot

Before rolling the cot, use the restraints to secure the body on the cot.

1. Raise the cot if needed before rolling it.
2. Stand at the cot operator end, grasp the main frame and push the cot forward. Use additional help as needed to steer the cot.

When working in confined area or on stairs:

1. Fold the cot and engage the leg lock.
2. Lift the operator end of the cot and roll the cot on its loading wheels. (Figure 7).

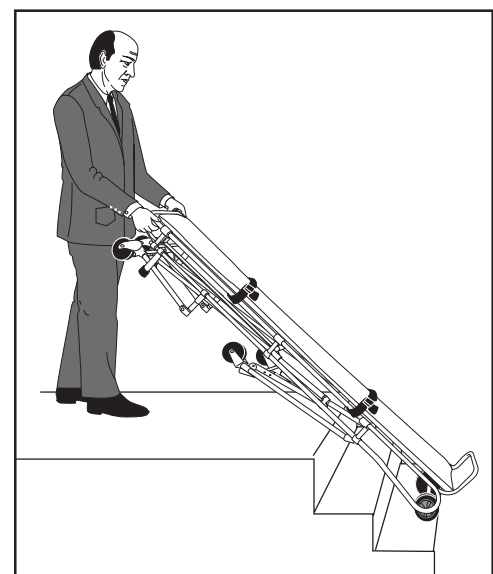


Figure 7 - Maneuvering the Cot On Stairs

4.6 Loading the Cot Into a Vehicle

Use additional help as needed to load the cot when it is carrying a heavy load. To load the cot into a vehicle:

1. Push the cot into the vehicle until both loading wheels are on the floor of the compartment (Figure 8).
2. Squeeze the loading-end (right) leg control handle and begin pushing the cot into the vehicle. When the loading-end legs have folded, release the control handle.
3. Lift the weight of the cot and squeeze the operator-end (left) leg control handle. Push the cot completely into the vehicle (the operator-end legs will fold).
4. When the cot is completely inside the vehicle, release the control handle and set the cot on its loading posts.
5. Secure the cot in the vehicle with an approved Ferno cot fastener.

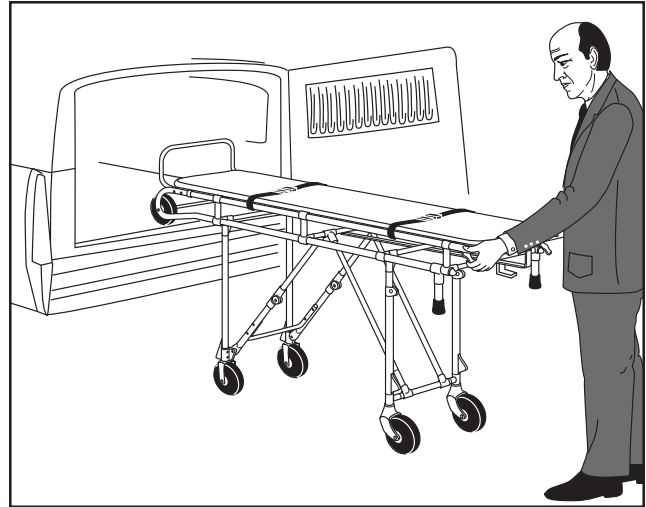


Figure 8 - Loading and Unloading the Cot

4.7 Unloading the Cot From a Vehicle

Use additional help as needed to unload a cot when it is carrying a heavy load. To unload the cot from the vehicle, do not use the control handles. Do the following:

1. Disengage the cot from the cot fastener.
2. Verify that the leg lock is disengaged.
3. Grasp the operator end of the cot and begin pulling the cot out of the vehicle. Keep the loading wheels on the vehicle floor and raise the operator-end of the cot high enough for both sets of legs to completely unfold and lock into place.
4. To verify that the legs are locked, pick up the cot so that all four transport wheels are off the ground, then set the cot on the ground.
5. Roll the cot out of the vehicle.

Important

Do not engage the leg lock while the cot is in a vehicle. Verify that the leg lock is disengaged before unloading the cot from the vehicle.

5 - MAINTENANCE

5.1 Maintenance Schedule

The cot requires regular maintenance. Set up and follow a maintenance schedule. The table at right represents minimum intervals for maintenance.

Keep maintenance records. A sample maintenance record sheet is provided on page 15.

When using maintenance products, follow the manufacturers' directions and read the manufacturers' material safety data sheets. You can purchase a recommended disinfectant from your Ferno distributor or Ferno Customer Relations (page 2).

5.2 Disinfecting and Cleaning the Restraints

Remove the restraints from the cot. Disinfect and clean only as directed in the restraint users' manuals provided with the restraints. Additional, free users' manuals can be obtained from Ferno Customer Relations (page 2).

5.3 Disinfecting and Cleaning the Mattress

1. Remove the mattress from the cot.
2. Wipe the mattress with disinfectant, following the disinfectant manufacturer's instructions.
3. Wash the mattress with warm, soapy water and a soft cloth.
4. Rinse the mattress with clear water.
5. Hang the mattress to dry or dry it with a towel.

5.4 Disinfecting the Cot

Wipe all surfaces with disinfectant. Follow the disinfectant manufacturer's instructions. Ferno recommends you inspect the cot for damage as you disinfect it.

5.5 Cleaning the Cot

1. Remove the restraints, mattress and any accessories.
2. Hand clean all surfaces of the cot with warm water and a mild detergent.
3. Use a brush with stiff bristles to remove stains. Do not use a metal wire brush.
4. Rinse with warm, clear water. Dry the cot with a towel or allow it to air-dry.

 **WARNING**

Improper maintenance can cause injury. Maintain the cot only as described in this manual.

| Minimum Maintenance Intervals | Each Use | As Needed | Each Month |
|---------------------------------|----------|-----------|------------|
| Disinfecting (this page) | • | | |
| Cleaning (this page) | | • | |
| Inspecting (page 12) | | • | • |
| Waxing (page 12) | | • | |
| Lubricating (page 12) | | • | |

Important

Disinfectants and cleaners containing bleach, phenolics, or iodines can cause damage. Disinfect and clean only with products that do not contain these chemicals.

Important

Water under high pressure, or steam, can penetrate joints, flush away lubricant, and cause corrosion. Use caution when cleaning moving parts such as joints and hinges.

Important

Using abrasive cleaning compounds or applicators on the cot can cause damage. Do not use abrasive materials to clean the cot.

5.6 Inspecting the Cot

Have your service’s equipment maintenance personnel inspect the cot regularly. Follow the checklist at right and operate the cot through all its functions as described in this manual.

If inspection shows damage or excessive wear, remove the cot from service until repair is made. For repair parts, see *Parts and Service*, page 13.

5.7 Waxing the Cot

Disinfect and clean the cot before applying wax. Use an automotive wax as directed by the wax manufacturer.

5.8 Lubricating the Cot

Disinfect and clean the cot before applying lubricant. Use the lubricants designated below. Do not lubricate points marked with the “do not lubricate” symbol.



Do Not Lubricate



Lubricate

LUBRICATION POINTS

Use a small amount of lubricant and lubricate identical points on each side of the cot. Use a synthetic or light oil lubricant such as WRL-191S, E-Z-1 or a drop of SAE 30-weight oil.

- 1 Leg hinge 4 in all
- 2 Leg control mechanism pivot points 4 in all
- 3 Leg lock bar 2 slots

LUBRICATION-FREE ITEMS

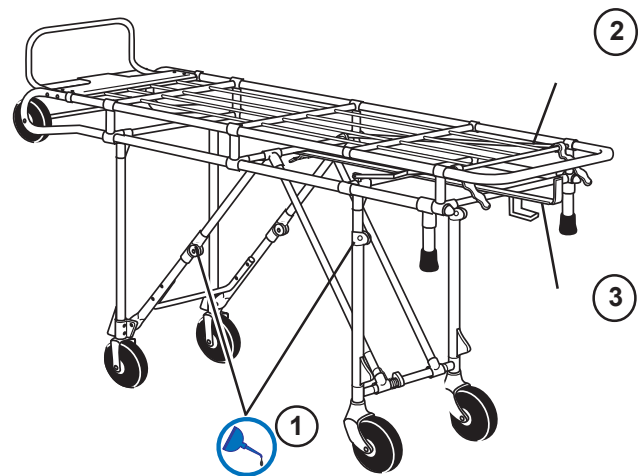
- Leg tees (plastic bushings) Do not lubricate
- Loading wheel bearings Do not lubricate
- Transport wheels (sealed bearings) Do not lubricate

INSPECTION CHECKLIST

- Are all components present?
- Are the restraints properly installed?
- Does the leg lock secure the undercarriage legs in the folded position?
- Does the cot load and unload properly?
- Do the wheels have tread?
- Are all screws, nuts, roll pins securely in place?
- Do all moving parts move freely?
- Do installed accessories work properly without interfering with cot operation?
- Is the vehicle properly prepared for the cot, with an approved fastener, mortuary cups, and/or roller system installed?

Important

Lubricating parts that should not be lubricated allows dirt and foreign particles to collect on those parts, resulting in damage. Lubricate **only** the numbered reference points shown.



6 - PARTS AND SERVICE

6.1 U.S.A. and Canada

In the United States and Canada, to order parts or for professional repair, contact EMSAR® - the only agent authorized by Ferno to manage, service, and repair Ferno products.

Telephone (Toll-free) 1.800.73.EMSAR
 Telephone 1.937.383.1052
 Fax 1.937.383.1051
 Internet www.EMSAR.com

6.2 Worldwide

To order Ferno parts and for professional repair, contact your Ferno distributor. Your distributor is the only agent authorized by Ferno to manage, service, and repair Ferno products.

6.3 Parts List

| Ref. | Part # | Description | Qty. |
|------|----------|---|------|
| 1* | 090-3446 | 5" Wheel fork w/bearing (no shank pin) .. | 1 |
| 2* | 090-0060 | Wheel (w/bearings/axle bolt/nut) .. | 1 |
| 3 | 090-0180 | Axle bolt and nut .. | 1 |
| 4 | 090-5522 | Wheel conversion kit Ultra-Glide (no tread) wheel, complete .. | 1 |
| 5 | 090-0560 | Post tip .. | 2 |
| 6 | 090-2810 | U-brace w/hardware .. | 1 |
| 7 | 090-5780 | Leg lock assembly (complete) .. | 1 |
| 8 | 090-0960 | 5" Loading wheel .. | 1 |

⚠ WARNING

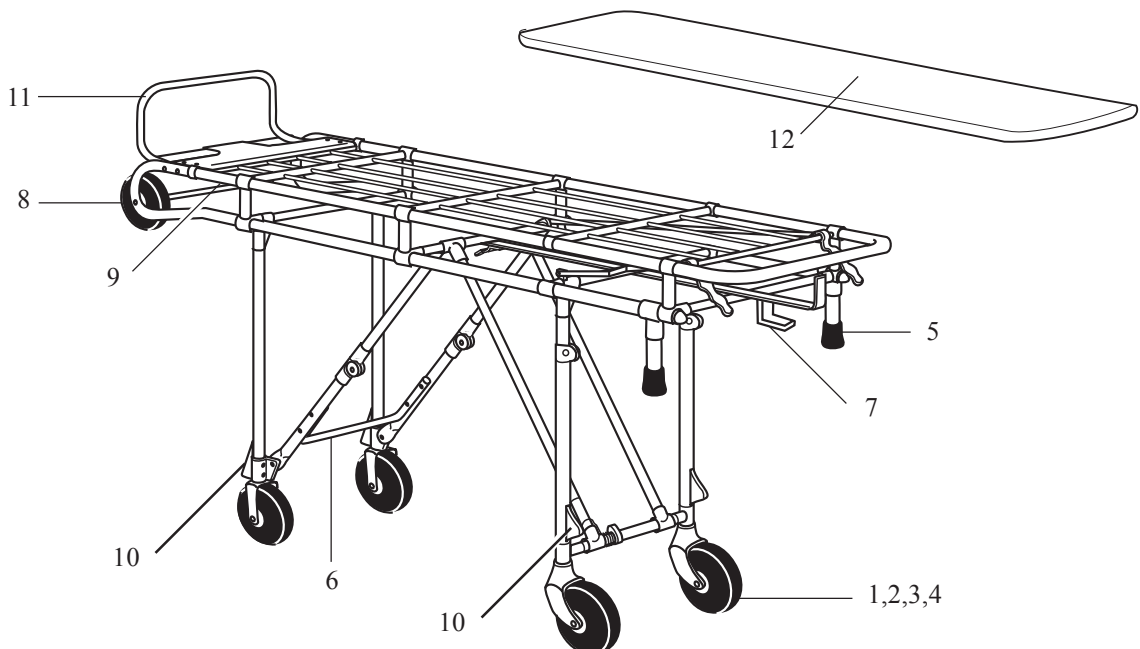
Improper parts and service can cause injury. Use only Ferno parts and Ferno-approved service on the cot.

⚠ WARNING

Modifying the cot can cause injury and damage. Use the cot only as designed by Ferno.

| Ref. | Part # | Description | Qty. |
|------|----------|---------------------------------------|------|
| 9 | 090-2812 | Loading axle w/cover .. | 1 |
| 10 | 090-0850 | Scuff blocks (front and rear) .. | 4 |
| 11 | 090-3214 | Foot stop assembly .. | 1 |
| 12 | 031-1360 | 372 Mattress, 1", burgundy .. | 1 |
| n/s | 031-3890 | 430 Restraint, 2-pc. 5' burgundy** .. | 1 |
| n/s | 031-3913 | 430 Restraint, 2-pc. 7' burgundy** .. | 1 |
| n/s | 031-3306 | 430 Restraint, 2-pc. 9' burgundy** .. | 1 |

* Order both items for a complete swivel caster.
 ** Other restraint colors (orange, black) are available.
 n/s = Not Shown



7 - COT SETUP

7.1 Restraints, Mattress, and Accessories

Before placing the cot in service, assign appropriate personnel to install the mattress, restraints, and any accessories shipped with the cot.

Keep restraint and accessory users' manuals with this manual for future reference. For additional, free manuals, contact Ferno Customer Relations (page 2).

7.2 Vehicle Considerations

The cot is designed for vehicles having:

- a 24" to 26" floor height.
- a smooth edge on the floor at the rear door.
- a level floor large enough for the folded cot.
- an approved fastener (not supplied).

If necessary, modify the vehicle to fit the cot. Do not modify the cot or its operating procedures.

7.3 Attaching the Foot Stop

The foot stop is shipped loose. To attach the foot stop, follow the instructions in this section.

ITEMS SUPPLIED:

| | |
|------------|-------------------------------|
| 1 ea. | Foot Stop |
| 4 ea. | 1/4-20 x 2-1/4" Carriage Bolt |
| 4 ea. | 1/4-20 Lock Nut |

TOOLS REQUIRED:

| | |
|------------|------------------|
| 1 ea. | 7/16" Wrench |
| 1 ea. | Mallet or Hammer |

Four holes have been predrilled into the foot stop and the main frame. Position the foot stop inside the main frame at the loading end of the cot and align the predrilled holes as shown in Figure 9.

Insert one of the four carriage bolts (supplied) through the main frame and foot stop.

Use a mallet or hammer to gently tap a bolt until the head is firmly against the main frame. Use a 7/16" wrench to thread a lock nut (provided) onto the carriage bolt and tighten. Do not overtighten the lock nut.

Repeat with the other carriage bolts and lock nuts.

WARNING

Attaching improper items to the cot can cause injury. Use only Ferno-approved items on the cot.

WARNING

Modifying the cot can cause injury and damage. Use the cot only as designed by Ferno.

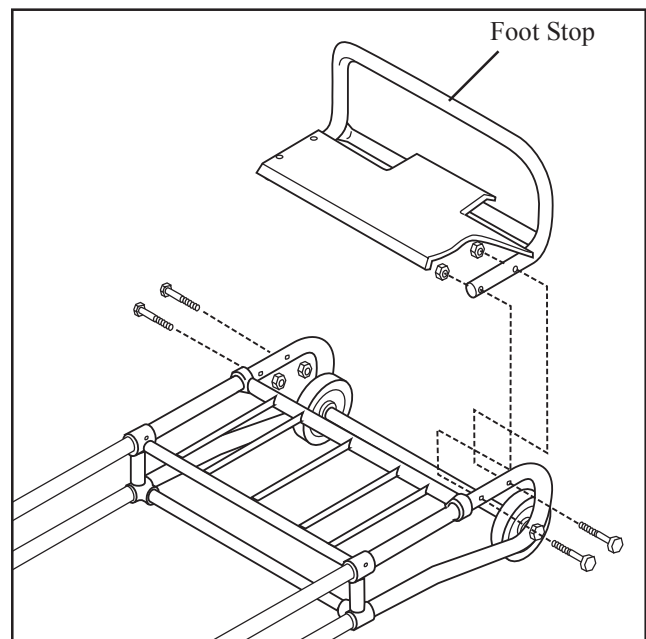


Figure 9 - Attaching the Foot Stop

TRAINING RECORD

| Date | Name | Training Method |
|------|------|-----------------|
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MAINTENANCE RECORD

| Date | Maintenance Performed | By |
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