

# Operation & Maintenance Manual

## AC-400C



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# Intended Use

The AC-400C bed is intended for patients in all areas of the hospital and in free-standing surgical centers.

## Introduction

The AC-400C bed is intended for patients in the medical surgical units of hospitals.

The AC-400C features height adjustment, Trendelenburg and reverse Trendelenburg positions, a reclining back rest and regulating system for leg positioning, with a central locking system.

The motions of the AC-400C are achieved by independent DC electric motors through controls located on the siderails of the bed allowing positions to be changed. The motors are equipped with overheat protection.

The bed is also equipped with a backup battery to allow caregivers to adjust positions during patient transport and unexpected power outages.

This Manual provides instructions required for normal operation of the AC-400C bed from Amico Beds Corporation. Prior to operation of this bed, it is important that this manual is read and ensure that all safety aspects contained in this manual are strictly adhered to.

# Features



Item	Description
1	Foldable siderails
2	Headboard
3	5" (13 cm) urethane casters
4	Base cover
5	Brake
6	Corner bumpers
7	Footboard

# Warnings

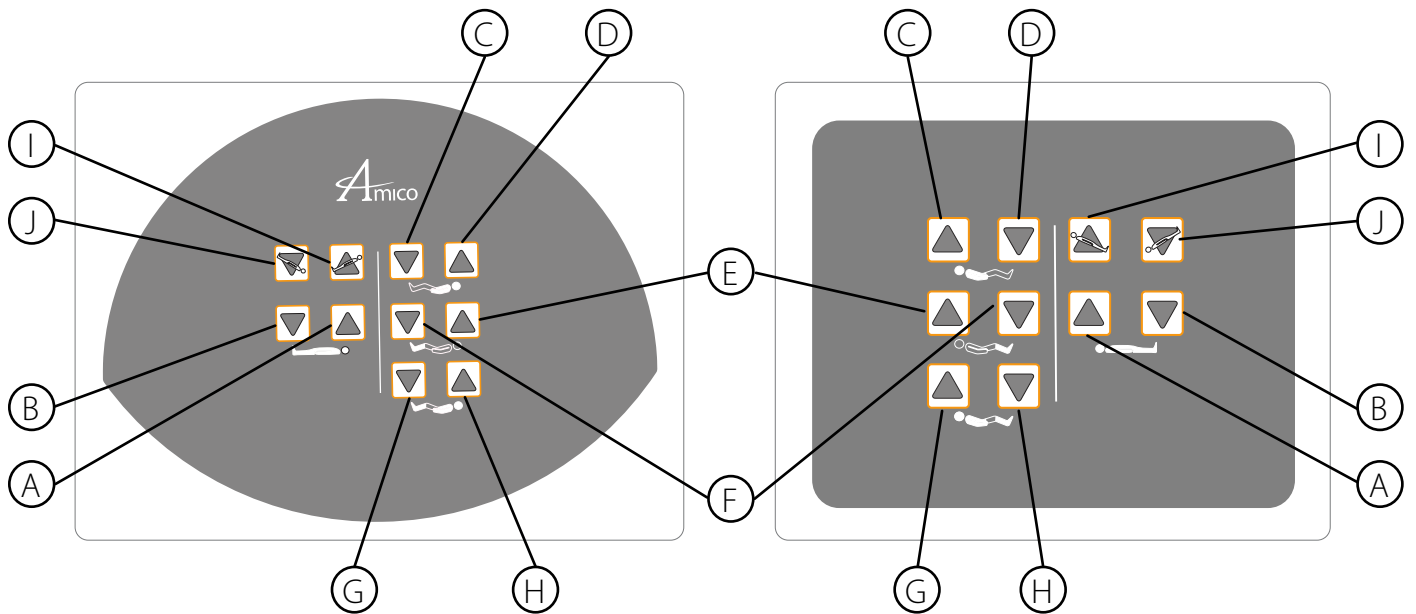


## WARNING:

- The bed has to be installed, cleaned and used as described within this manual
- The bed has to be operated by trained personnel only
- Maximum weight limit is 550 lbs (250 kg)
- Entering and exiting the bed has to be done at the side with the siderails lowered completely
- Avoid sitting at the extreme ends of the bed (back rest and knee gatch)
- It is recommended not to use water or silicone surfaces in order not to exceed the maximum weight limit of 550 lbs (250 kg)

# Siderail Controls

The bed height, head elevation and knee gatch are controlled through the siderail controls, to adjust a position press and hold down the appropriate button. Only one operation can be made at a time. (i.e. Do not adjust knee gatch and head elevation at the same time).



Button	Name	Function
A	Bed Height Up	Press on this button to raise height of bed to desired position
B	Bed Height Down	Press on this button to lower height of bed to desired position
C	Fowler Up	Press on this button to raise fowler section of the bed to desired angle
D	Fowler Down	Press on this button to lower fowler section of the bed to desired angle
E	Knee Gatch Up	Press on this button to lower knee gatch section to the desired angle
F	Knee Gatch Down	Press on this button to raise knee gatch section to the desired angle
G	Auto-Contour Up	Press on this button to lower the fowler and knee gatch section to the desired position
H	Auto-Contour Down	Press on this button to raise the fowler and knee gatch section to the desired position
I	Trendelenburg	Press on this button to place the bed in the desired reverse Trendelenburg position
J	Reverse Trendelenburg	Press on this button to place the bed in the desired Trendelenburg position

# Installation and Removal of the Head/Foot Board

## INSTALLING THE HEAD/FOOT BOARD

To install the head/foot board, align the latch on the head/foot board with the latch pins. Then tip the head/foot board slightly back, place head/foot board on the latch pins and gently push forward. The head/foot board will snap into place. When latched into place push down the locking mechanism to secure it.



## REMOVING THE HEAD/FOOT BOARD

To remove the head/foot board, pull the locking mechanism back towards the headboard or footboard. Once both of the mechanisms are up, they will hold in place. Grab the sides of the head / foot board with both hands, tilt outwards and pull up.



## Siderails

### LOWERING THE SIDERAILS

To lower the siderails, place hand under the plastic latch and pull forward. Once latch is released, the siderail will slowly lower.



### RAISING THE SIDERAILS

To raise the siderails, place both hands on the rail and gently pull up. Once rail reaches the top it will lock in place. Ensure that the siderail is properly locked in place before using the bed or leaving the patient to avoid patient injury.

**NOTE:** Patients should be monitored intermittently to ensure correct patient positioning on the bed and proper usage of siderails.



# Central Locking System

## LOCKING THE BED

To place the bed into a locked position, push down with your foot on the brake pedal (located at the bottom front of the bed - underneath the foot board).



## UNLOCKING THE BED

To unlock the bed, place your foot underneath the brake pedal and lift.



## USING THE CPR RELEASE LEVER

To use the CPR Release Lever pull the lever in with one hand and slowly push the bed down with the other hand, when the bed is in required position let go of the lever.

It's recommended that the fowler section is completely lowered to a flat position when the CPR handle is used.



# Electrical

The AC-400C is comprised of four 24V DC LINAK actuator to enable the following motions to be achieved:

- Head Up
- Head Down
- Knee Up
- Knee Down
- Bed Up
- Bed Down
- Trendelenburg
- Reverse Trendelenburg

This product also comes with a battery backup system which is made up of two sealed lead-acid 12V battery located in the control unit box.

The AC-400C features two exterior siderail controls and two interior siderail controls.

# Standard Features



# Troubleshooting

Item No.	Problems Descriptions	Troubleshooting Steps
1	No motion when controls are pressed	<p>Connect bed back to wall and try again. If motion can be achieved, this means that the battery level was low. Leave bed connected to wall until full charge is completed.</p> <p>If step 1 does not correct issue, proceed to check all electrical terminals. If any loose connection is detected, proceed to reinforce electrical terminal. Verify electrical connections between siderails to the control box and vice versa.</p> <p>Verify electrical connections from the siderails to the control box vice versa.</p> <p>Verify electrical connections from the foot board to the control box vice versa.</p> <p>Measure voltage level of batteries. Battery voltage is measured, correct bed back to wall for 24 hours, The charging period is completed, disconnect bed from wall and verify if bed retains functionally. Measure voltage level and drops too quickly if so, proceed to have batteries replaced.</p> <p>If the above troubleshooting step are not working, contact your Amico Sales Executive for support.</p>
2	Siderail controls stop working upon replacement of main control board	<p>Verify compatibility of the revision of the electronic boards and wiring in the product. If there are incompatibility issues, please proceed to contact your Amico Sales Executive for board and wiring replacement.</p>



# Preventive Maintenance



## **WARNING:**

Only facility-authorized personnel should service the AC-400C bed. Servicing performed by unauthorized personnel could result in personal injury or equipment damage.

The AC-400C bed requires an effective maintenance program. We recommend that you perform annual preventive maintenance (PM) and testing for Joint Commission on Accreditation of Health Care Organizations (JCAHO). PM and testing not only meet JCAHO requirements but will help ensure of a long, operative life for the AC-400C bed.

Preventive maintenance will minimize downtime due to excessive wear.

Perform annual preventive maintenance procedures to make sure all AC-400C bed components are functioning as originally designed. Pay particular attention to safety features, including but not limited to the following:

- Siderail latching mechanisms
- Caster braking systems
- Integrity of sleep surface ticking
- Integrity of warning/cautions labels
- Integrity of the various DC actuators

## Cleaning

### **BLEACH CLEANING INSTRUCTIONS**

If none of the approved cleaning products provide the disinfectant level required then use a solution of 5.25% Sodium Hypochlorite diluted to 1 part bleach to 50 parts water (1,000 ppm), (volume to volume).

Bleach products are corrosive and degrading in nature and may cause damage to your product. If bleach is used, measures must be taken to ensure the product is rinsed thoroughly with clean water and thoroughly dried. Failure to rinse and dry the product will leave a corrosive residue on the surface possibly causing corrosion.

Failure to follow the above directions may void the product's warranty.

# Cleaning

- Do not immerse the product in water.
- Do not attempt to clean or degrease the steel shafts of the actuators.
- Use only approved cleaning products. If bleach is being applied to the product, strictly adhere to the BLEACH CLEANING instructions.
- For electrical equipment, please do not unplug the handset or actuators from the control box for cleaning.
- Do not use a water temperature of more than 50° C or 122° F.

## **MATTRESS CLEANING INSTRUCTIONS**

### **To Wash**

Wipe with a sponge or soft cloth wetted with warm water containing soap or mild detergent

### **To Rinse**

After washing, rinse cover with warm water to remove residue

### **To Dry**

Thoroughly wipe with a dry sponge or soft cloth

### **To Disinfect**

- Wash the surface with one of the approved cleaners or refer to the Bleach cleaning instructions if bleach needs to be used
- Wipe off residue with water using a soft cloth or sponge
- Thoroughly dry

### **Before Cleaning**

Disconnect or unplug the power cord from the mains supply (If Electric)

Set the bed on brake by pressing on the brake pedals to the Brake position

### **During Cleaning**

- Do not use abrasive cleaning products
- Do not use oil based products
- Do not use a steam cleaner, washing tunnel, high-pressure spray or hose

# Technical Specification

## Model Number

Model Number AC-400C

## Overall Dimensions

Overall Length 88" (224 cm)  
Overall Width 42" (107 cm)  
Patient Surface 35" x 77" (89 x 196 cm)

Height Range (to the surface of the litter)

High 29" (74 cm)  
Low 18" (46 cm)

## Litter Positioning

Trend./Reverse Trend.  $\pm 12^\circ$   
Backrest  $0^\circ - 65^\circ$   
Knee Gatch  $0^\circ - 30^\circ$

## Weight Capacity & Caster Diameter

Weight Capacity 550 lbs (250 kg)  
Caster Dimension 5" (13 cm)

## Electrical

Battery back-up (max number of high-low cycles) 25

Voltage 110 V @ 60 Hz or 220 V @ 50 Hz

## Optional Features & Accessories

Chart holder 6" (15 cm) foam mattress  
Foot board BodyZone mattress

## Warranty Policy - Beds and Stretchers

Amico Beds Corporation warrants its Patient Equipment to be free from defects in material and workmanship for a period of twelve (12) months from the date of shipment. Within this period Amico Beds Corporation will provide the parts for repair or replacement of defective parts at Amico Beds Corporation cost.

Shipping and Installation costs after the first twelve (12) months will be borne by the Customer.

This warranty is valid only when the product has been properly installed according to Amico Beds Corporation specifications, used in a normal manner and serviced according to factory recommendations. It does not cover failures due to damage which occurs in shipments or failures which result from accidents, misuse, abuse, neglect, mishandling, alteration, misapplication or damage that may be attributable to acts of God.

Amico Beds Corporation shall not be liable for incidental or consequential damages resulting from the use of the equipment.

[www.amico.com](http://www.amico.com)

Amico Beds Corporation | 85 Fulton Way, Richmond Hill, ON L4B 2N4, Canada  
Toll Free Tel: 1.877.462.6426 | Tel: 905.764.0800 | Fax: 905.764.0862  
Email: [info@amico.com](mailto:info@amico.com) | [www.amico.com](http://www.amico.com)