VitalGo Systems Ltd.

Total-Lift™ Bariatric Bed

Elevating Patient Care to a New Level

ASSEMBLY, OPERATING AND MAINTENANCE MANUAL

Bed Model:
VG-TLBB- 1004

DEALER: This Manual MUST be given to the user of the product.
USER: BEFORE using this product, read this manual and save for future reference.

For more information regarding VitalGo products, parts, and services, please visit www.vitalgosys.com

FDA CE

⚠ WARNING

DO NOT OPERATE THIS EQUIPMENT WITHOUT FIRST READING AND UNDERSTANDING THIS MANUAL.
IF YOU ARE UNABLE TO UNDERSTAND THE WARNINGS, CAUTIONS, AND INSTRUCTIONS, CONTACT A HEALTHCARE PROFESSIONAL, DEALER OR TECHNICAL PERSONNEL BEFORE ATTEMPTING TO USE THIS EQUIPMENT - OTHERWISE INJURY OR DAMAGE MAY RESULT.
THE INITIAL SET UP OF THIS BED MUST BE PERFORMED BY A QUALIFIED TECHNICIAN.
PROCEDURES OTHER THAN THOSE DESCRIBED IN THIS MANUAL MUST BE PERFORMED BY A QUALIFIED TECHNICIAN.
FOR DEALERS ONLY - SET-UP AND ASSEMBLY INSTRUCTIONS ARE INCLUDED IN THIS MANUAL. THESE PROCEDURES MUST BE PERFORMED BY A QUALIFIED TECHNICIAN ONLY.

PLEASE NOTE: Updated versions of this manual are available on www.vitalgosys.com.

SPECIAL NOTES

Signal words are used in this manual and apply to hazards or unsafe practices which could result in personal injury or property damage. Refer to the text below for definitions of the signal words.

SIGNAL WORD MEANINGS:

DANGER - Danger indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
WARNING - Warning indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
CAUTION - Caution indicates a potentially hazardous situation which, if not avoided, may result in property damage.

NOTICE

THE INFORMATION CONTAINED IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE.
Vitalgo products are specifically designed and manufactured for use in conjunction with Vitalgo accessories. Accessories designed by other manufacturers have not been tested by Vitalgo and are not recommended for use with Vitalgo products.

⚠ WARNING / CAUTION SUMMARY

- KEEP HANDS AND FEET CLEAR OF ALL MOVING PARTS.
- DO NOT ALLOW SMALL CHILDREN ON OR NEAR BED DURING OPERATION.
- DO NOT ALLOW THIS DEVICE TO BE OPERATED BY SMALL CHILDREN.
- WHEN OPERATING THE HI-LO, KNEE, TILTING, LEG REST OR BACK FUNCTION OF THE BED, ALWAYS ENSURE THAT THE INDIVIDUAL CONFINED TO THE BED IS POSITIONED PROPERLY WITHIN THE CONFINES OF THE BED. DO NOT LET ANY EXTREMITIES PROTRUDE OVER THE SIDE OR BETWEEN THE BED RAILS WHEN PERFORMING ANY FUNCTIONS.
- DO NOT USE UNAUTHORIZED SIDE RAILS.
- WARNING/CAUTION LABELS APPLIED TO THE BED OUTLINE HAZARDS OR UNSAFE PRACTICES THAT COULD RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE.
- POWER AND WIRED HAND SET CORD MUST BE ROUTED AND SECURED PROPERLY TO ENSURE THAT THE CORD DOES

NOT BECOME ENTANGLED AND EVENTUALLY SEVERED DURING USE. MAKE SURE ELECTRIC CORDS DO NOT GET TANGLED AROUND THE BED, SIDE RAILS OR LEGS DURING NORMAL OPERATION OF THE BED.

- WHEN USING NASAL OR MASKED TYPE ADMINISTERING EQUIPMENT, OXYGEN OR AIR TUBING MUST BE REMOVED BEFORE AND DURING THE NORMAL OPERATION OF BED.
  THE USAGE OF SUCH EQUIPMENT IN CONJUNCTION WITH THE BED FUNCTIONS COULD RESULT IN PERSONAL INJURY AND/ OR PROPERTY DAMAGE

- KEEP ALL MOVING PARTS FREE OF OBSTRUCTIONS (I.E. BLANKETS/SHEETS, HEATING BLANKETS/ PADS, TUBING, WIRING, AND OTHER TYPES OF PRODUCTS)

Meaning of the Safety Symbols

In these instructions the following safety symbols are used:

Warning about injuries to persons
Dangerous voltage. Life Threatening.

General danger. Injury or life hazard.

Warning about property damages
Possibility of damage to motor, material or environment.

OTHER SYMBOLS

Useful tip. For easier operation or better understanding of the unit.

Company name and address

Manufacturing date

IPX4 Protected against splashing water

Consult instruction manual

The item meets all the essential requirements of the relevant European Directive(s).

This Symbol applies to European Union only as is defined as "Separate collection for electrical and electronic equipment waste per Directive 2002/96/EC in the European Union"

Type B device

Reference to the hazards in the instruction manual

Max Patient Weight

Safe Working Load - indicates maximum bed weight handling capacity

The safety symbols used does not replace the text of the safety notes.
Therefore read the safety instructions and follow them exactly!

Table Of Contents

WARNING 2
SPECIAL NOTES 2
NOTICE 2
WARNING /CAUTION SUMMERY 2
MEANING OF THE SAFETY SYMBOLS 3
PREFACE 6
ABOUT THE VITALGO TOTAL-LIFT™ BARIATRIC BED 7
UNPARALLELED SAFETY 7
GENERAL GUIDELINES & SAFETY INSTRUCTIONS 8
OPERATING INFORMATION 8
ENTRAPMENT WARNING 8
REPLACEMENT PARTS/ACCESSORIES GUIDELINES 8
ELECTRICAL GUIDELINES 9
REPAIR OR SERVICE INFORMATION 9
RADIO FREQUENCY INTERFERENCE 10
WEIGHT LIMITATIONS 10
BEFORE PUTTING THE BED INTO OPERATION FOR THE FIRST TIME 10
WARNINGS FOR USERS AND CAREGIVERS 10
DEFINITIONS OF INVOLVED PERSONS 11
SAFETY INSTRUCTIONS FOR TECHNICIANS 11
SAFETY INSTRUCTIONS FOR USERS AND CAREGIVERS 12
VG-TLBB- 1004 BED DESCRIPTION 13
PRODUCT DESCRIPTION 16
NORMAL OPERATING PROCEDURE 16
SPECIAL FEATURES 16
CLASSIFICATION 16
TECHNICAL SPECIFICATIONS 17
TOTAL-LIFT™ BARIATRIC BED SIDE RAILS 19
DESCRIPTION OF MATERIALS 19
LABEL LOCATIONS 20
OPERATION 21
WIRED HAND SET 21
SIDE RAIL CONTROL 21
CONTROL FUNCTIONS 22

MANUAL FUNCTIONS 22
ADJUSTMENT OF THE BACK REST 22
RAISING & LOWERING LEG-REST 22
RAISING & LOWERING THE BED HORIZONTALLY 23
WHEELS POSITION 23
SEATING WITH LEGS UP/ DOWN (WITH MEMORY FUNCTION) 23
CPR (SLEEPING) POSITION 23
MEMORY FUNCTION 24
NURSE FUNCTIONS 24
SIDE-RAIL CONTROL 24
INITIALIZATION OF THE BED 25
STRAPPING SYSTEMS(OPTIONAL) 25
NON AMBULATORY PATIENT STRAPPING SYSTEM 25
RETRACTABLE HEAD BOARD 26
TROUBLESHOOTING 27
MAINTENANCE 28
MAINTENANCE CHECKLIST 28
ELECTRICAL INSPECTION AND MAINTENANCE 28
RECHARGEABLE BATTERIES MAINTENANCE 28
CLEANING AND DISINFECTING 29
HOW TO EXTEND THE BED 30
CABLE ARRANGEMENT FOR TRANSFERRING BED 31
MATTRESS ATTACHMENT 32
TOTAL-LIFT™ BARIATRIC BED – WEIGHT BEARING CONTROL SYSTEM 33
TLB – BED SCALE PATIENT WEIGHT SYSTEM 35
FOOT-LIFTER SCALE (PRESSURE SENSOR) 36
LOW AIR LOSS MATTRESS SYSTEM 37
OPERATING INSTRUCTIONS 39
INCLINOMETER – ANGLE SENSOR 41
ITHE TOTAL DRIVE (TDR) 42
LIMITED WARRANTY 52
ABOUT VITALGO SYSTEMS LTD. 53
OUR MISSION 53
FLAGSHIP PRODUCT 53

Preface

Dear Customer,

Thank you for the confidence you have shown in VitalGo Systems products.

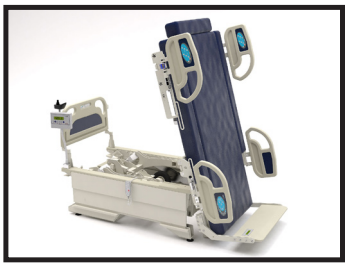
The Total-Lift™ Bariatric Bed has been factory checked for electrical safety. All functions have been checked and are operating perfectly.

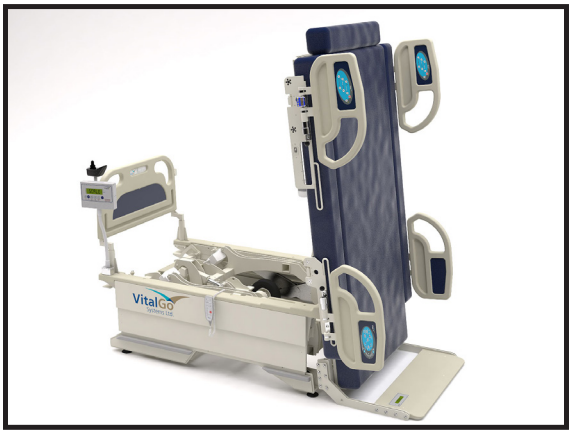
Please take your time to read this manual carefully before operating the bed. This manual applies normal use of the bed and maintenance. It is also a practical reference guide. Keep the instructions in a handy place. These instructions provide information for the operator and user regarding the convenient handling and safe operation of the bed.

We hope that the VitalGo Total-Lift™ Bariatric Bed alleviates any problems that you or your caregiver experience in getting in and out of bed.

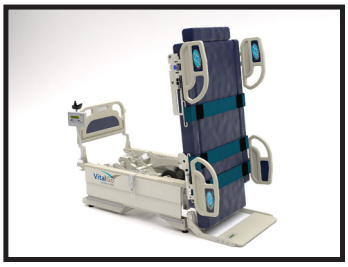
VitalGo Systems LTD.











About The Vitalgo Total-Lift™ Bariatric Bed

The Total-Lift™ Bariatric Bed sets new standards in patient and care givers treatment and comfort.
The Total-Lift™ Bariatric Bed is a Bed and so much more. Giving many advantages over conventional beds.
The revolutionary design allows the bed to raise the user to a fully standing position and all positions in between including chair positions.
Among all its clinical obvious benefits, the Total-Lift™ Bariatric Bed is the best solution for safe patient handling and safe lifting.
The Total-Lift™ Bariatric Bed is ideal for –

- Hospitals.
- Nursing Homes.
- Assisted Living Facilities.
- Long Terms Acute Care centers.
- Rehabilitation centers.
- Sports rehabilitation centers.
- Homecare – Aging in Place.

With just a press of a button you can bring the patient to any position desired.
The Patented technology of the Total-Lift™ Bariatric Bed, moves the Foot Lifter™ towards the feet of the patient / user, and only when making contact will start tilting, thus preventing any danger of sliding while tilted.
While the bed tilts, when in proper angle the Foot Lifter™ will gradually move down so when the bed is in fully standing position the Foot Lifter will be parallel to floor allowing to simply walk out of bed, with or without assistance.
The patient can also be just tilted, for treatment, in any desired angle, for as long as needed.
The Total-Lift™ Bariatric Bed has all possible bed and chair positions.
The Total-Lift™ Bariatric Bed can come with powered and non powered mattress in any grade.
Weight Bearing control – The Total-Lift™ Bariatric Bed is the only real true "Weight Bearing control device" . Knowing the exact amount of pressure placed on the lower extremities of the user, which can be increased or decreased by changing the beds angle.

UNPARALLELED SAFETY

Safety is the top priority of all Vitalgo products. The Total-Lift™ Bariatric Bed incorporates numerous safety features and mechanisms and meets or exceeds the highest standards for medical electric beds.
The Total-Lift™ Bariatric Bed is FDA and CE Registered and conform with EN\IEC 60601-1:1996, EN\IEC 60-601-2-38:1996 and UL 60601-1:2003.

The integrated safety features include:

- Exclusive self-adjusting Foot-Lifter™ – Automatically moves up to rest under the user's feet prior to the bed tilting into an upright position, preventing the user from sliding down in the bed. Embedded micro-switches ensure the user is properly positioned and that when the bed is in an upright position, the user's feet are at ground level.
- Vitalgo has adopted all FDA clinical guidance to reduce Entrapment.
- Electronic braking – Hidden casters are electronically lowered to allow mobility and raised to secure stability; they are automatically raised before the bed can be tilted or the sitting/reclining positioning adjusted.

⚠ General Guidelines & Safety Instructions

OPERATING INFORMATION

DO NOT use near explosive gases.

Keep the product a minimum of 12" away from any direct heat source.

Close supervision is necessary when this product is used by or near children or people with disabilities.

Check all parts for shipping damage and test before using. In case of damage, DO NOT use. Contact a qualified technician for further instruction.

After any adjustments, repair or service and before use, make sure all attaching hardware is tightened securely.

DO NOT let any individual underneath the bed or in between the raised bed frame components at anytime.

When bed is not to be used for an extended period, unplug electric bed from the wall outlet.

When operating the bed body weight should be evenly distributed over the surface of the bed. DO NOT lay, sit or lean in such a way that your entire body weight is placed only on raised head or foot sections of the bed. This includes when assisting the user in repositioning or transferring in or out of bed.
This Warning DOES NOT apply to the Foot Lifter™.

When operating/moving beds, always ensure that the individual utilizing the bed is positioned properly within the confines of the bed. DO NOT let any extremities protrude over the side or between the bed rails when performing these functions.

If the unit is not working properly, call a qualified technician to examine the unit and repair it.

Keep all moving parts, including the main frame, mattress deck (head and foot sections) and all drive shafts, free of obstruction (i.e. Blankets/sheets, heating blankets/pads, tubing, wiring, etc. and other types of products using electric cords which may get tangled around the bed, side rails or legs) during operation of the bed.

⚠ ENTRAPMENT WARNING

Proper patient assessment and monitoring, and proper maintenance and use of equipment is required to reduce the risk of entrapment. Variations in bed rail dimensions, and mattress thickness, size or density could increase the risk of entrapment. Visit the FDA web site at http://www.fda.gov to learn about the risks of entrapment.
After any adjustments, repair or service and before use, make sure all attaching hardware is tightened securely. Assist rails with dimensions different from the original equipment supplied or specified by the bed manufacturer may not be interchangeable and may result in entrapment or other injury. Mattress MUST fit bed frame and assist rails snugly to reduce the risk of entrapment.

⚠ REPLACEMENT PARTS/ACCESSORIES GUIDELINES

VitalGo products are specifically designed and manufactured for use in conjunction with VitalGo accessories. Accessories designed by other manufacturers have not been tested by VitalGo and are not recommended for use with VitalGo products.

Use ONLY VitalGo's Total-Lift™ Bariatric Bed supplied mattress and connect it to the bed frame according to the instructions in this manual (see page 37)

Bed rails can be deformed or broken if excessive side pressure is exerted on the bed rails. These bed rails are used for the purpose of preventing an individual from inadvertently rolling out of bed. The bed rails are NOT intended nor may be used for restraint purposes. If an individual is capable of injuring himself/herself, a physician or a healthcare professional should be consulted for alternative means of safe restraint.

DO NOT use the side rails as push handles for moving the bed.

Once patient assessment concludes that the patient's condition increases the chance of entrapment, the bed MUST be in the flat position when left unattended.

Trapeze units must not be used in conjunction with the bed's operation.
Trapeze units are to be used only for assisting the patient in repositioning or transferring into or out of bed and must be moved away from the bed as soon as the patient finished using them.

Replacement mattresses and bed side rails with dimensions different than the original equipment supplied or specified by the bed frame manufacturer are not interchangeable.

Variations in bed side rail design, width and thickness or firmness of the mattress could cause/contribute to entrapment. Use only authorized VitalGo replacement parts and/or accessories otherwise the warranty is void. VitalGo will not be responsible for any damage or injury that may result.

ELECTRICAL GUIDELINES


DANGER

Connect the bed directly to an electrical outlet. Do not use extension cords and/or multiple outlet extension cords.

Use of three prong adapters can result in improper grounding and present a shock hazard to the user.

NEVER operate if the unit has a damaged cord or plug. If it is not working properly, call a qualified technician for examination and repair.

Keep all electrical cords away from heated or hot surfaces.

Ensure all cables and cords are routed such that they will not become entangled or pinched. Otherwise damage or injury may result.

DO NOT unplug power cord from junction box.

The pendant and power cords must be routed and secured properly to ensure that the cords DO NOT become entangled, pinched and/or severed during operation of the electric bed.

Refer servicing to qualified personnel only. Grounding reliability depends upon a properly grounded wall outlet.

REPAIR OR SERVICE INFORMATION

DO NOT open assemblies such as the motors, pendant, junction boxes or gear boxes. No user serviceable parts are inside. Only qualified technicians are permitted to repair these parts. If unqualified individuals perform any work on these beds, the warranty is void.

Unplug the power cord from its power source before performing any maintenance on the bed.

DO NOT unplug the power cord from the junction box. Damage to cord will result.

RADIO FREQUENCY INTERFERENCE

Electronic equipment may be influenced by Radio Frequency Interference (RFI). Caution should be exercised with regard to the use of portable communications equipment in the area around such equipment. If RFI causes erratic behavior, unplug the electric bed IMMEDIATELY. Leave unplugged while transmission is in progress.

WEIGHT LIMITATIONS

The total weight limit of the VitalGo Total-Lift™ Bariatric Bed is 1000 pounds (454kg) patient weight.
DO NOT permit more than one person on the bed at any time.
When the bed is an operation body weight should be evenly distributed over the surface of the Total-Lift™ Bariatric Bed.

DO NOT lay, sit or lean in such a way that your entire body weight is placed only on raised head or foot sections of the bed. This includes when repositioning or transferring in or out of bed.
This Warning DOES NOT apply to the Foot Lifter™.

BEFORE PUTTING THE BED INTO OPERATION FOR THE FIRST TIME:

Read these instructions carefully in order to avoid damage or incorrect operation. Before using the Total-Lift™ Bariatric Bed, the user shall ensure that it is in Proper working order and free of defects, and be aware of the instruction manual. This applies also to the accessories.

The VitalGo Total-Lift™ Bariatric Bed complies with all requirements of the guidelines for medical products. It is classified as a Medical Equipment Electrical Operated Hospital Bed in accordance with standard IEC60601(US) and EN60601-2-38(EU).

The VitalGo Total-Lift™ Bariatric Bed was checked by an independent examining institute. As with all technical, electrical devices improper handling can lead to damage and/or injury.

Observe your obligations as operator in accordance with medical devices Operators guidelines for Medical Products in order to ensure a dependable and safe operation of this medical device without endangering patients, users and third parties.

This manual contains safety guidelines, which must be observed. All persons who work with the VitalGo Total-Lift™ Bariatric Bed must familiarize themselves with these instructions and follow the safety guidelines.

WARNINGS FOR USERS AND CAREGIVERS

Position the power cable in such a way that during normal operation of the bed the cable will not be stretched, driven over or interfere with moving parts of the bed.

Before any relocation of the bed it is imperative that the power cable is pulled from the wall socket and that the cable cannot fall or be dragged over the floor.

Check the power cord regularly for damage (abrasions, exposed wires, kinks, pressure marks, etc.) In particular:
- After every larger mechanical strain (e.g.: Rolling over the power cord with the bed or with an equipment cart.
- After a strong pulling or bending load caused by the bed rolling away with the power cord still attached to the wall outlet.
- After relocating/moving and before plugging in the power cable.
- During prolonged operating by the user.

Do not use the area under the Total-Lift™ Bariatric Bed as a “parking spot” for any utensils.

Lower the bed to sleeping positions (see Page 23) and lift side rails if present when leaving the patient unattended. This reduces the risk of injury to the patient getting in and out of the bed.

Keep the wired hand set safe from accidentally falling during non-use (Hang it on the its holder). Take care that the cable is not damaged by the moving parts of the bed.

To protect the patient and especially children from unintentionally adjusting the Wired hand set, place it beyond their reach.

Place the wired hand set out of the patient's reach when:
- The patient is not able to control the bed safely or he is unable to get out of dangerous positions without help.
- When bed has functioning problem.
- Unsupervised children are in the room with the Total-Lift™ Bariatric Bed.

Initialization/ assembly functions can only be performed by a properly trained personal When the Total-Lift™ Bariatric Bed is located in institutions (e.g.: Hospitals, nursing homes etc.).
When in home use the Total-Lift™ Bariatric Bed Initialization/ assembly functions should only be used by a qualified technician.

Definitions of involved persons

In this manual the following persons are involved:

TECHNICIAN
Technicians (e.g.: Medical Supply Houses, Dealers and representatives, health insurance companies) are natural persons or legal entities, who utilize the Total-Lift™ Bariatric Bed or authorize its use.
The technician is responsible for instructing the user in the proper use of the unit.

CARE GIVER
Caregivers are persons who as a result of training and experience are authorized to operate the Total-Lift™ Bariatric Bed. The care giver can recognize and avoid possible dangers, and judge the clinical condition of the patient.

USER
In this manual a the user is an infirm or injured or disabled person who uses the Total-Lift™ Bariatric Bed (or others who might find it useful).

SPECIALIST STAFF
Specialist staff are employees of the suppliers who are authorized as a result of their education and training to deliver, assemble, dismantle and transport the Total-Lift™ Bariatric Bed. Furthermore, they are familiar with the regulations for cleaning and disinfecting the unit.

Safety instructions for Technicians

Before first use, instruct every user in the safe operation of the Total-Lift™ Bariatric Bed in accordance with these safety instructions, which must be supplied along with the unit.

Call attention to the dangers of improper use of the unit, especially in regards to the electrical drives and side rails.
When the Total-Lift™ Bariatric Bed is located in institutions (e.g.: Hospitals, nursing homes etc.) The unit should only be operated by properly trained personnel.
When in home use the Total-Lift™ Bariatric Bed should only be used by users who read and understood thoroughly the operation manual.

Make sure that representatives are also familiar with the operation of the VitalGo Total-Lift™ Bariatric Bed.

During long term use it is recommended that the Total-Lift™ Bariatric Bed be inspected for function and visible damage at regular intervals (Recommendation: yearly) (see Maintenance Checklist - Page 28).

Connect the bed directly to an electrical outlet. Do not use extension cords and/or multiple outlet extension \cords.

When attaching other equipment (e.g. compressors for positioning systems) make sure that they are mounted and can function in a secure and safe manner.

Do not put multiple outlet electrical extensions under the bed. Leaking liquids can cause a fire hazard.

Pay special attention to: Securely locating of all wiring, cables, tubes, etc.

For further information please contact the manufacturer of the accessories or VitalGo Systems directly.

Make sure that your personnel follow the safety instructions.

Safety instructions for users and caregivers

Let the technician instruct you in the safe use of the bed.

Before each use make sure that the bed is in proper and faultless condition.

Take care that no obstacles, such as furniture or slanted ceilings interfere with the adjustment functions (See clearing page 17).

Important!
Patients under 5.5' (170cm) tall, should make sure their feet touch the Foot Lifter™ before entering tilting position.

Pay attention that when using additional electrical components, such as patient lifts, reading lights or compressors for positioning systems that their electrical cords do not get entangled or damaged by the moving parts of the bed.

Connect the bed directly to an electrical outlet. Do not use extension cords and/or multiple outlet extension cords.

Make sure that when attaching other appliances (e.g. Compressors for positioning systems) that a safe mounting and function is guaranteed.

Remove moveable items from the bed before starting the tilting operation.

Make sure you can see the hand control functions.

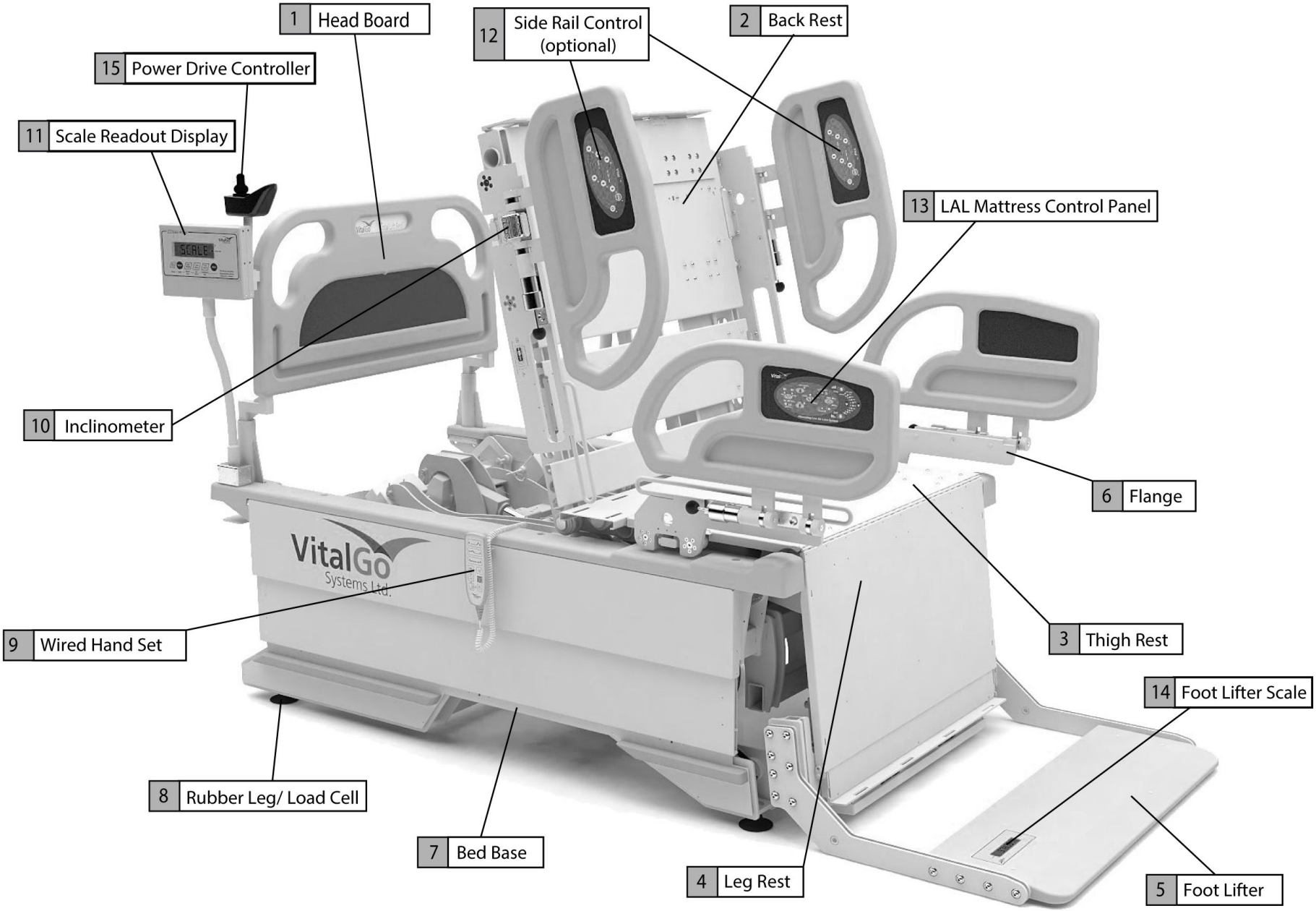
Do not put multiple electrical outlets under the nursing bed. Leaking liquids can be a fire hazard.

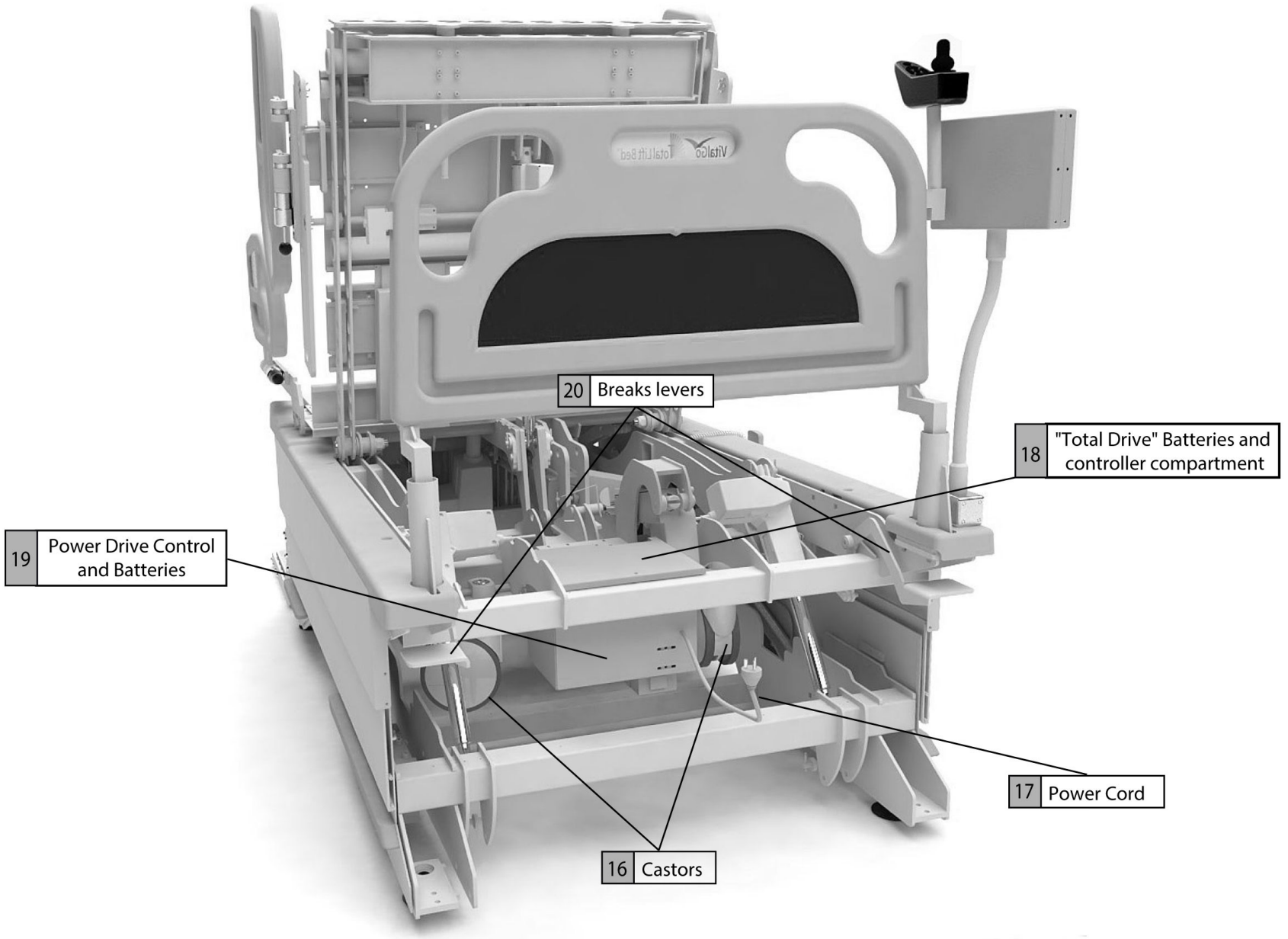
Pay special attention to securely locating all wiring, cables, tubes, etc.

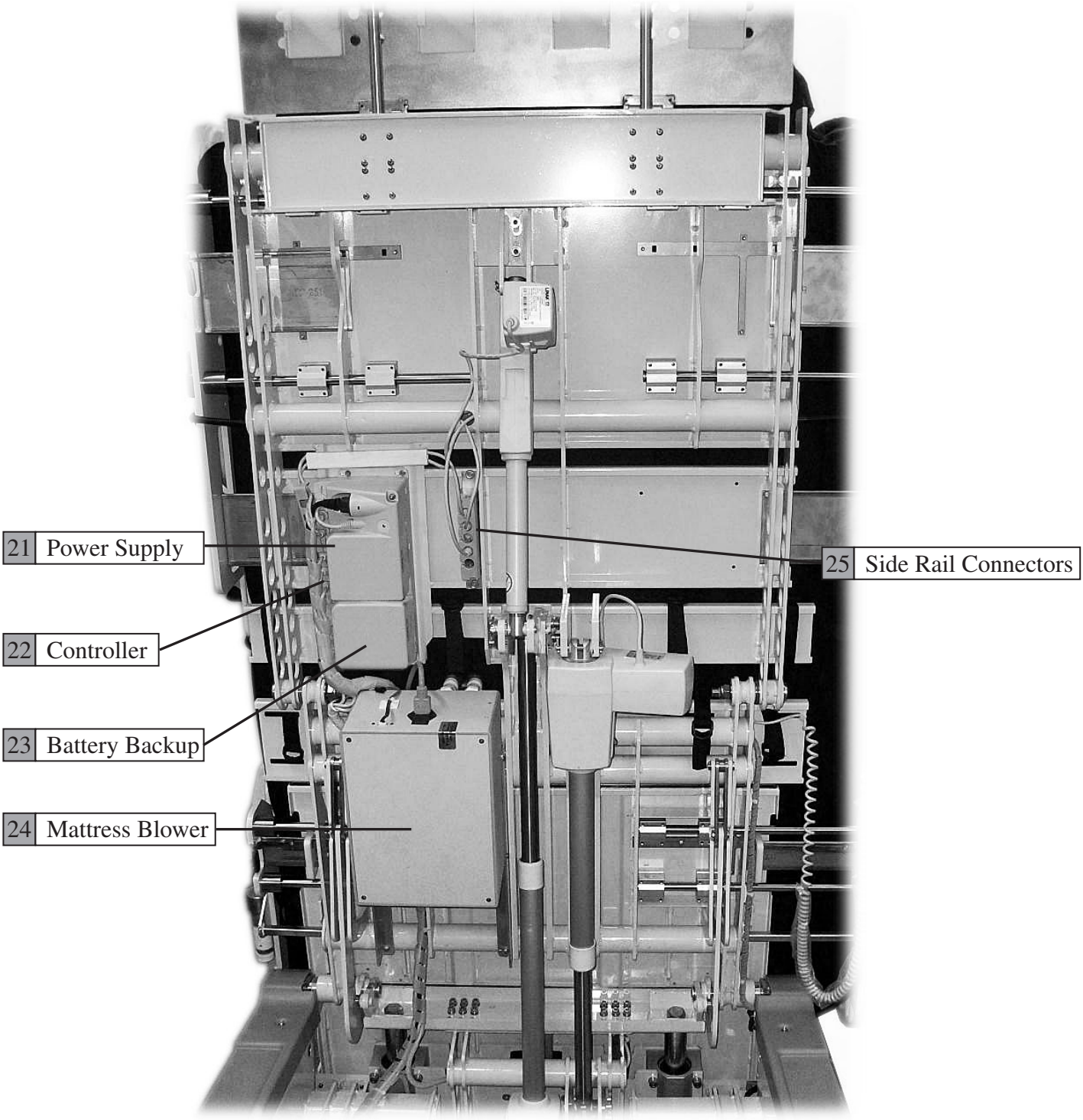
For further information please contact the dealer or person from which you purchased the bed or VitalGo Systems directly.

Take the bed out of operation if damage or a malfunction is suspected: Immediately unplug the electrical plug from the wall outlet; Call a qualified technician. do not use the bed until a technician has inspected the bed and approved it for use.

VG-TLBB-1004 Bed Description




20 Breaks levers
18 "Total Drive" Batteries and controller compartment
19 Power Drive Control and Batteries
17 Power Cord
16 Castors


21 Power Supply
22 Controller
23 Battery Backup
24 Mattress Blower
25 Side Rail Connectors

Product description

NORMAL OPERATING PROCEDURE

The Total-Lift™ Bariatric Bed, Hereafter called bed, is a, one of its kind, lifting Bed which can take the user to a standing position, seating position with legs down and up and many other positions as described in this manual.
The Total-Lift™ Bariatric Bed has a state of the art preprogramed system, which allows many functions and possibilities, for the safety, comfort and independence of the user and Care giver.
The Total-Lift™ Bariatric Bed is the perfect bed to assist the recommendation of OSHA for minimal lift and caregiver injury prevention.
The Bed can be used by one Care Giver and by the user himself, if capable.
The Total-Lift™ Bariatric Bed is the perfect solution for Aging in Place allowing the users to age with comfort dignity and independence.
Total-Lift™ Bariatric Bed safe working load amounts to patient weight of max. 1000lb (454 kg).
For users under 5' (150cm), please use Tilting Function only up to 45 degrees, as the foot support may not support user, if not placed low enough on the support surface.
The Bed can be used with or without a strapping system (see page 25) according to the user's medical condition.

The Total-Lift™ Bariatric Bed may only be operated under the operating instructions laid out in this instruction manual. Any other use is deemed to be inappropriate.

SPECIAL FEATURES

HEIGHT ADJUSTMENT

Electrical height adjustment of the reclining surface from approx. 18"(46cm). to 26.5"(67cm).
Electrical movement of the Foot Lifter™ is from approx. 10"(25cm). into the bed (over the mattress) to about 2" (5cm) extending outside the bed.

LYING/SITTING POSITION

Electrical adjustment of the backrest from 0° to about 82°.
Electrical adjustment of the thigh rest from 0° to about 90° (legs down)
and from 0° to about 25° (legs up).
Electrical adjustment of the Leg rest from 180° to about 50°.

IN STANDING POSITION

The bed joints work in synchronization bringing the bed to around 82°.

The bed is driven with four castors which become functional only when bringing the bed to "WHEELS" position accessible through the hand set.
Side rails on both sides can be lowered.

CLASSIFICATION

EU - The unit is classified as Class I with B type of applied part, continuously operated, movable and without signal input output parts. Water resistance comply with IPX4 the device is not intended for use in presence of flammable mixtures.

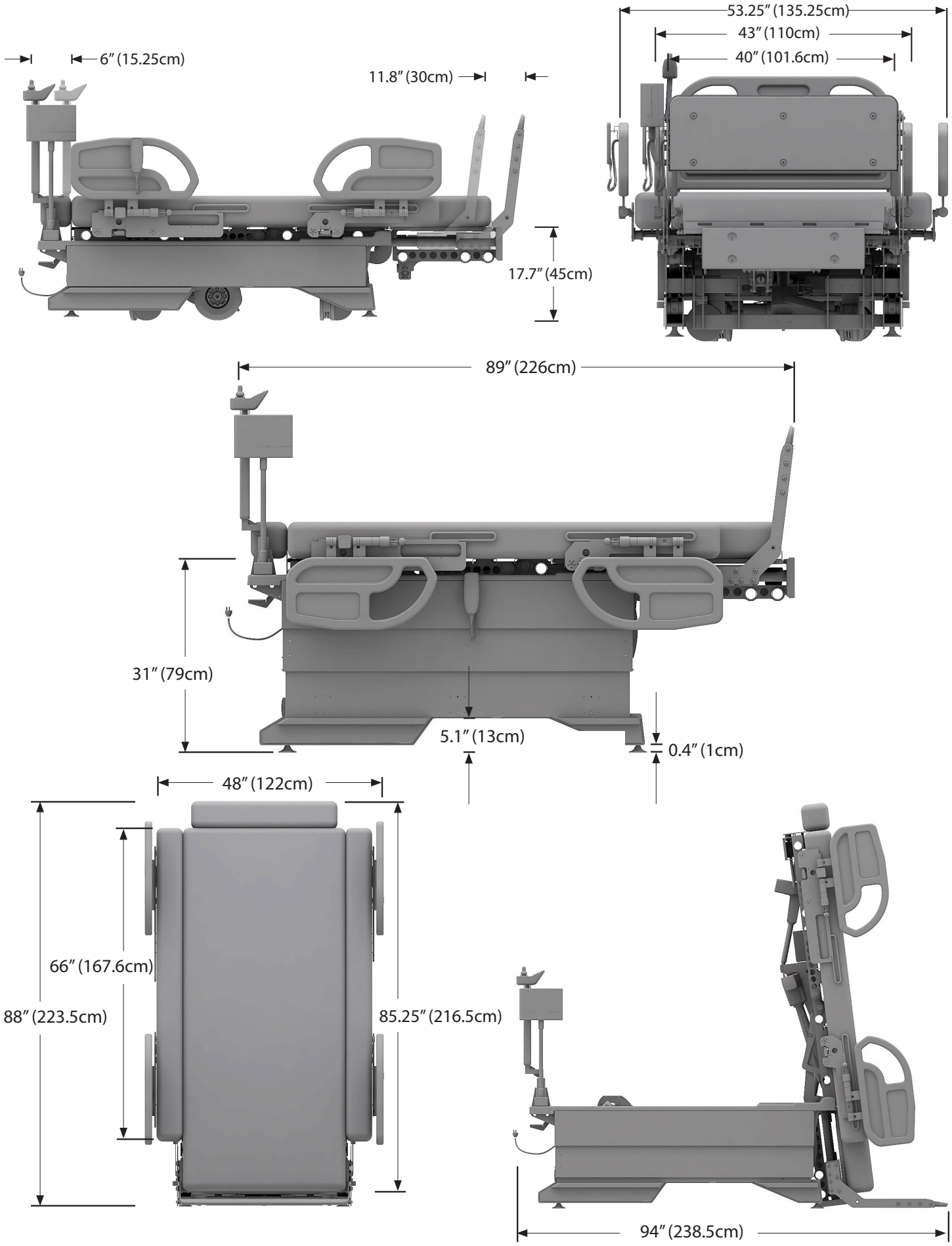
FDA - Device Class II, adjustable electric hospital bed, AC-powered regulation number 880.5100

The tested product satisfies the requirements of EN/IEC 60601-1:1990; UL 60601-1:2003, EN/IEC 60601-2-38:1996

Technical Specifications

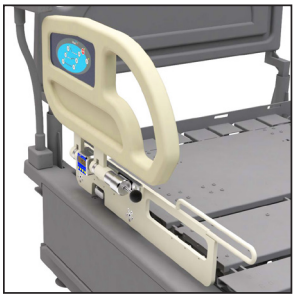
Bed Dimensions:

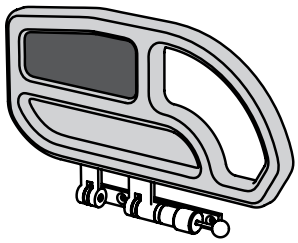
- Length:
  Overall Length (in regular position).....88" (223 cm)
  Overall Length –Extended Headboard ....94.5" (240cm)
- Width of Bed:
  The TLBB has 3 position of Side rails:
  Position 1 – (for transporting bed) Bed Width – 40" (101.6cm) External dimensions.
  Position 2 – (Regular use) – Bed width – 43" (110cm)
  Position 3 – (Extended Side-Rails) Bed width- 53.25" (135.25cm)
- Height:
  Low Position – deck to floor.....17.7" (45cm)
  High Position – deck to floor..... 26.5"(67cm)
- Clearance:
  From frame to floor (on Casters).....1.5" (3.8cm)
  In Standing Position:
  From top of Bed to floor Not extended -.....82" (208.0cm)
  Extended – 88" (223.5cm)
- Mattress Dimensions:
  Mattress can be extended with Bolsters (in Foam mattress) and with inflated cells (in Air Mattress).
  Basic Dimensions – Length -80" (203.2cm) Width – 36" (91.5cm).
  Extended Mattress – Length – 86" (218cm) Width – 48" (122cm).
  Height - 8" (20.3cm)
- Casters & Breaking System:
  Diameter.....6" (15.25cm)
  Smart BreakTM – Casters are lifted from floor when not in "Wheels" position during all positions.
- Break and directional lock – Break lever has three positions. Total Lock, Directional lock and neutral.
- The TLBB may come with a "Total Drive" a power drive system for moving the bed. In such case break lever must be in neutral position. (See Total Drive chapter page 42)
- Foot Lifter:
  Moves over Mattress 9.5" (24cm) towards Head Rest.
  Moves out of Bed – 2.3" (6cm).
- Positions and Angles :
  Sleeping – 180 degrees.
  Chair Position –
  Back rest – Up to 81 degrees .
  Leg rest – from 23 degrees up to 90 degrees down.
  Tilting positions up to Standing Position – 80 degrees.
- Control:
  Control by Smart pre-programmed Hand Set.
  Tilting function is locked for Nurse / Care giver use only.
  Automatic functions with memory.
  Hand Set works with constant press only.
  Additional control, for basic functions, on side-rail, for patient and care giver.
- Strapping System:
  One strap in Waist area.
  Two straps in lower extremities area
- Max Patient Weight – 1,000Lb (454Kg) 
- Max Safe working load - 1,200lb (540kg) 


6″ (15.25cm)
11.8″ (30cm)
17.7″ (45cm)
53.25″ (135.25cm)
43″ (110cm)
40″ (101.6cm)
89″ (226cm)
31″ (79cm)
5.1″ (13cm)
0.4″ (1cm)
48″ (122cm)
66″ (167.6cm)
88″ (223.5cm)
85.25″ (216.5cm)
94″ (238.5cm)

Total-Lift™ Bariatric Bed Side Rails

Two sides.
24.5" x 9.5" (616mm x 245mm)





Position 1 - Place the side rail this way for transportaing the bed and easy enterance through narrow doorway.

⚠ WARNING

NEVER USE BED WHEN SIDE RAIL ARE IN INNER POSITION POSITION 1 – THIS IS ONLY FOR TRANSFERRING THE TLBB THROUGH NARROW DOORWAYS. ONCE BED IS IN LOCATION OPEN SIDE RAILS TO POSITION 2 OR 3.

- Casters/ brakes: Electrically and manually controlled
- Caster Break leaver 3 positions – Break, Directional lock (foot side casters), Neutral.
- Electronic Wired hand set: Integrated 12 functions + caregiver function
- Electricity requirements: Voltage - 120V~ AC 230V~ AC
  Current - 5A Max
  Frequency - 60HZ 50HZ
  Power Consumption - Max. 90W
- Environmental conditions : Ambient Temperature in Operation : +10°C (50°F) to +40°C (104°F)
  Ambient Temperature in Transport : +5°C (41°F) to +50°C (122°F)
  Relative Humidity Range: 30% to 75%
  Atmospheric Pressure Range of 700 hPa to 1060 hPa.
- Battery backup: Optional
  Battery when fully charged is good for five cycles of the bed.

RECLINING SURFACE FRAME

The reclining surface frame has four sections: a movable backrest, a moveable thigh rest, a movable leg rest and a movable Foot Lifter™. All parts can be adjusted by electric motors. The horizontal height of the reclining surface can be adjusted and inclined. All adjustment functions are controlled by a wired hand set and basic controls are available through the side-rail controls, located on the side –rails.

The mattress base of the Total-Lift™ Bariatric Bed consists of washable Metal sheet;

ELECTRIC ADJUSTMENT SYSTEM

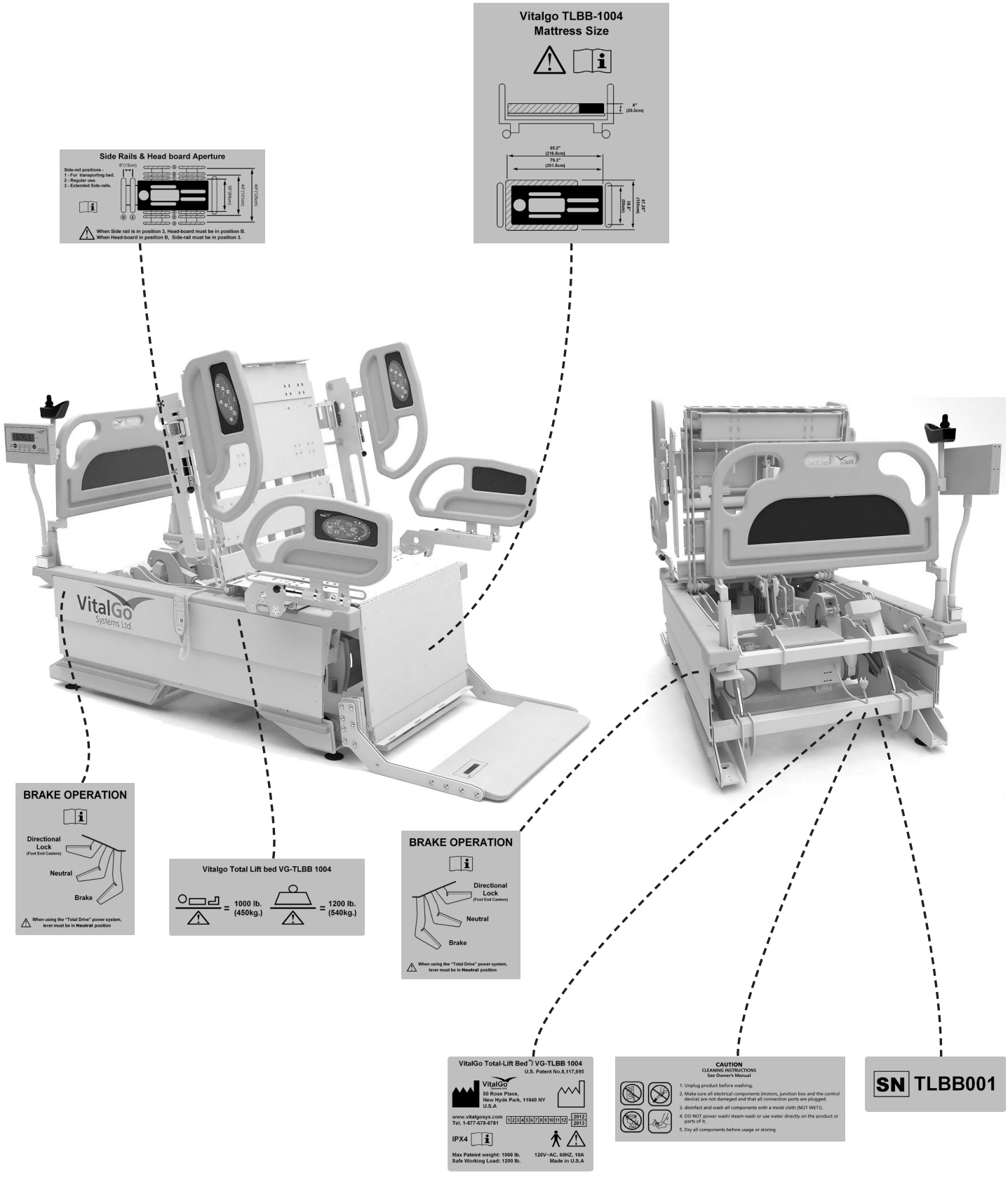
The electrical adjustment system of this bed is error protected, flame-retardant (V0) and consists of an external transformer unit which consists of a power cable, the transformer, and a low voltage connection cable.
The transformer creates a 24 volt low voltage, which is safe for patient and user. The transformer supplies all drive motors with the 24 volt safety low voltage. The connecting socket on the bed frame is moisture proof.

DESCRIPTION OF MATERIALS

The bed is mostly constructed out of steel sections, their surfaces are mostly powder coated and some are painted. Some steel parts have black oxide coating and chrome-nickel coating. There is also use of aluminum.

Side Rails and Headboard are ABS.
All surfaces are harmless to skin contact.

LABEL LOCATIONS



OPERATION

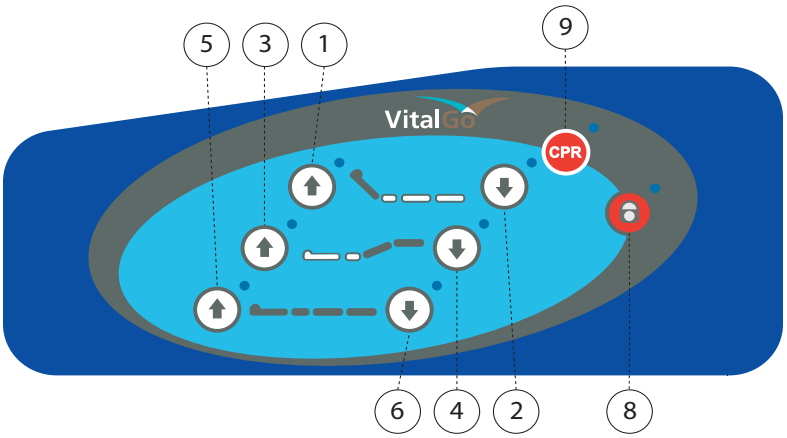
CAUTION

Allow a slight pause between adjustments and avoid pressing multiple buttons at the same time unless indicated. If wired hand set buttons are depressed too rapidly or wrong button combinations are pressed at the same time, the desired feature may not activate.
Simply release the wired hand set button, permit a slight pause and then activate the next operation.
Before placing the bed into use, test it by operating it through all phases of its operation.
If any problems arise during the test, recheck all electrical connections and mechanical hook ups.

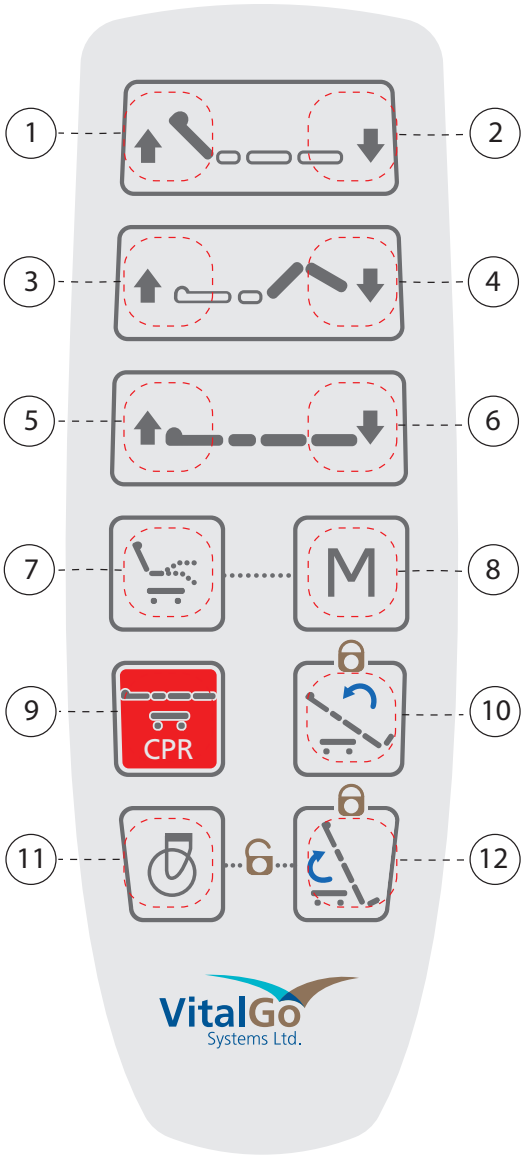
WARNING

DO NOT place wired hand set under or between objects. This may unintentionally press the buttons and may cause injury or damage.

Side rail control



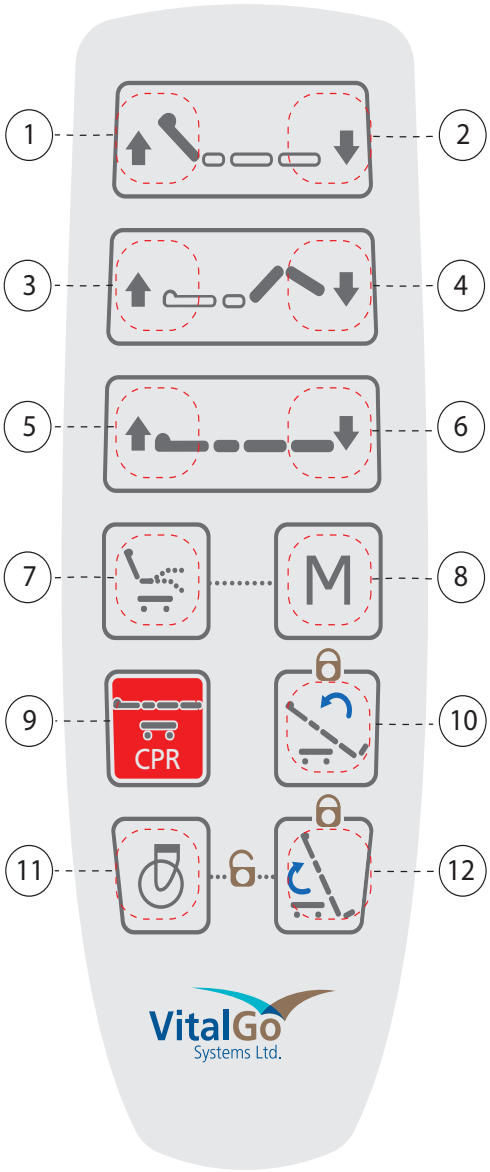
Wired hand set



Control Functions

Please Note: At the end of the movement of each function (unless stated differently) two beeps will be heard. All Functions should be pressed continuously.

The Total-Lift™ Bariatric Bed has a state of the art program system which is controlling 6 actuators in perfect synchronization in order to achieve safe and comfortable movements and positions.
When pressing one function it may make a movement of another part of the bed, this is normal and designed this way.



MANUAL FUNCTIONS

- ADJUSTMENT OF THE BACK REST – (1+2)
  Pressing on Button (1) will raise the Back Rest;
  Pressing on Button (2) will lower the back rest.

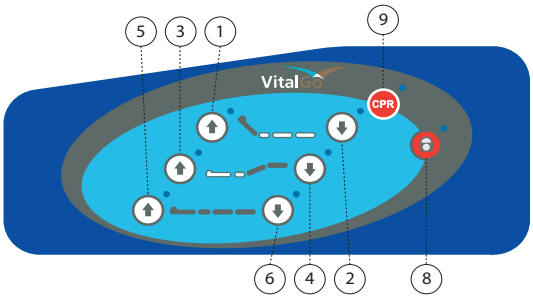
- AUTOMATIC MOVEMENTS
  using the functions –

  A. When raising the Back Rest (1) first, the Foot Lifter™ will move out, in order to avoid pressure on feet.
  B. When lowering the Back Rest (2) the Foot –Lifter will not close back.
  C. In order to close the Foot Lifter™ to its center position use function (9) – CPR.
  D. In case that the Leg-rest is above its center position and the Backrest is raised to an Upright position, it might be that the Leg-rest will move down, in order to avoid pressure on the back and pelvis.
  E. When reaching the end position of the function, two beeps will be heard as a confirmation.

- RAISING & LOWERING LEG-REST :

Pressing Button (3) will raise the Leg-rest; Pressing Button (4) will lower the Leg-rest.

Important Remark – The Total Lift Bariatric Bed has a unique "Cardiac Position". This is a position where the foot board is parallel to the floor and the bed is in a seating position.
The position is achieved by pressing button 4 until two beeps are heard. (the backrest should be adjusted separately



- AUTOMATIC MOVEMENTS
  using the functions –

  A. When Raising the Leg-rest, the Foot Lifter™ will move out, in order to avoid pressure on the feet and legs.
  B. When Lowering the Leg-rest, the bed will raise itself to the level which will enable the Leg-rest to get as low as possible.
  C. In case that the Backrest is in Upright position and the Leg-rest is raised in a way it might create pressure on the back and Pelvis, the Backrest will move down automatically. The user can adjust the optimum position by

using the buttons (1)-(2) & (3)-(4).

D. When reaching the end position of the function, two beeps will be heard as a confirmation.

- RAISING & LOWERING THE BED HORIZONTALLY:

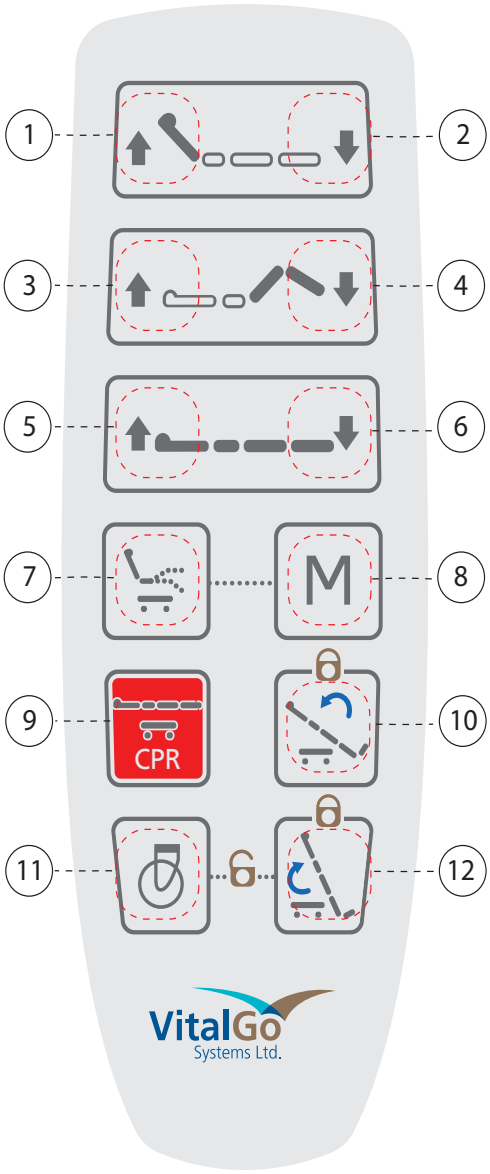
Pressing Button (5) will raise the Bed horizontally.
Pressing Button (6) will lower the bed Horizontally.

- AUTOMATIC MOVEMENTS
  using the functions –

  If the Leg-rest is lower then the horizontal position of the bed and the Bed will be lowered, the Leg-rest will automatically be raised to the horizontal position.

- WHEELS POSITION:

Pressing Button (11) will lower the Bed and activate the Wheels.



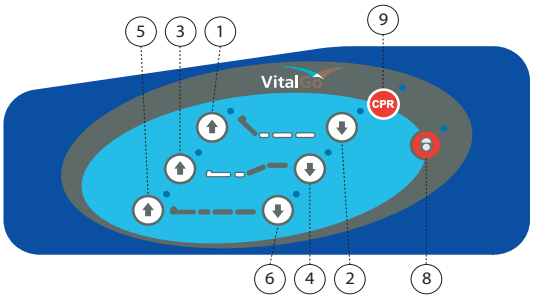
AUTOMATIC FUNCTIONS

- SEATING WITH LEGS DOWN/ UP (WITH MEMORY FUNCTION):

Pressing Button (7) will bring the Bed to a pre-programmed seating with Legs Down or Up position.
The Bed will come with a preprogrammed default position of seating with legs down.
After reaching this position the user can adjust the position of the Backrest and the position of the Leg-Rest, according to his comfort. The adjusted position can be stored with the Memory Function (see Memory Function). After making a new memory, the next time this function will be used the Bed will come to the new memory position.

Special Automatic Movements –

A. After the Leg rest will reach its lowest position the Foot-Lifter™ will move towards the feet giving a comfort support to the feet.
B. If the Horizontal height of the bed is too low, the Bed will first be raised to the proper height to enable movement of the Leg-Rest down to the lowest possible position.
C. When reaching the end position of the function, two beeps will be heard as a confirmation.
D. For Seating with legs up, bring the backrest and largest to the desired posiotn using buttons 1 to 4 and then memorize the position, so next time you press button 7, the bed will go this this last position.
E. Always press the button and wait until two beeps are heard to confirm the function had reached its end position.



- CPR – (SLEEPING POSITION) – BUTTON 9:

The CPR brings the bed to a flat position with casters up. Pressing this function will bring the the Foot-LifterTM to its center position or until the feet touches the foot lifter.

When reaching the end position of the function, two beeps will be heard as a confirmation.

- MEMORY FUNCTION: BUTTON 7:

The Bed is able to save a memory positions. The Memory position can be any position. Flat, Seating legs down /up, backrest up/down.
The Bed default memory position is seating with legs down.
In order to save a new position, use the manual functions 1 to 4. After reaching the desired position, press but¬tons (8) -(M) and within 3 seconds followed by button 7 until a beep is heard (3 seconds). The beep will confirm a new position was programed. The next time the programed key (7) will be pressed, the bed will come to the stored position.

IMPORTANT NOTE
If the Bed is in an angle of above 20 degrees, the handset function will not operate except for moving to standing or sleeping position with the special Nurse Key.

NURSE FUNCTIONS: TILTING TO STANDING & TILTING TO FLAT POSITION

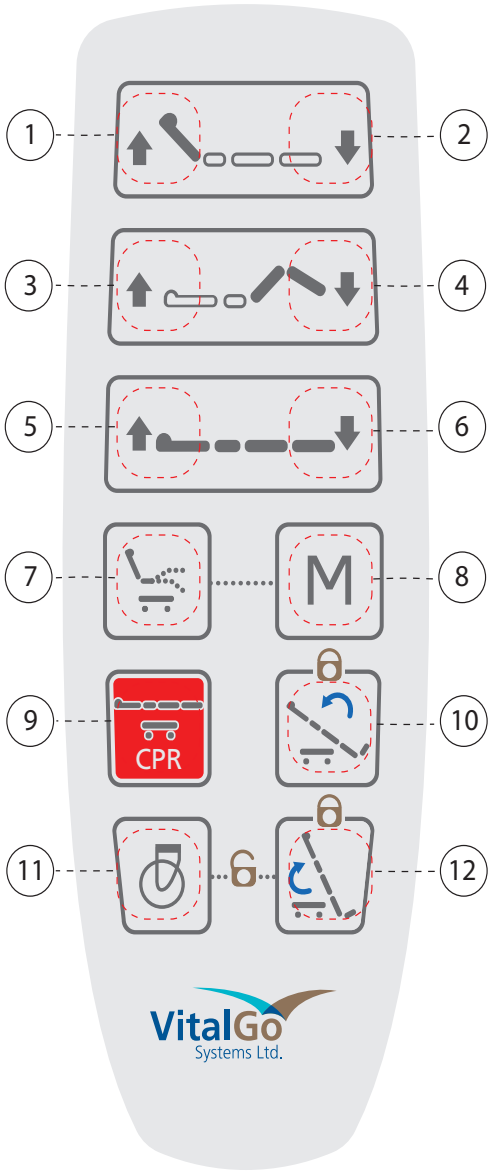
WARNING - The Tilting functions should be used when the "Total Drive" is not engaged with the floor and is fully raised.

The Tilting function should be used by the caregiver therefore those functions are locked.

In order to unlock the functions (10 &12) press Button 11 and 12 Together for 3 seconds until a beep is heard.

The unlock will hold for 90 seconds after last press on one of the buttons 10 or 12.
After
unlocking, press button 12 for tilting up and button 10 to tilt.

Whan tilting the bed, a few parts of the bed will start moving, this is normal and the way it should work. The Foot-lifter will move towards the feet of the patient until it makes contact with the feet and only them the tilting will start. This avoides the patient from sliding down on the bed



SIDE RAIL CONTROL PANEL OPERATION

Side Rail control panels are located on both sides of the two upper side rails. The panels include all basic functions, but do not include the Tilting and the Memory automatic functions.

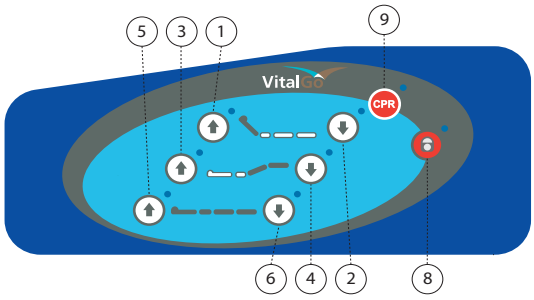
Locking the Panel - The panel facing the care-giver, includes a Lock button (button 8) – pressing this button for 3 seconds will lock all side rails operation (will not affect the wired handset). When locked the symbol will illuminate in red.

Unlocking Panel – Press the Lock button (button 8) for 3 seconds, until the blue LED's on all operation buttons will illuminate.

When the panel is locked and any button is pressed, the lock symbol will illuminate in red, indicating that the panel is locked.

When panel is un-locked and one of the function buttons is pressed, all buttons will illuminate in blue.

Turning of Blue illumination - If buttons are not touched for 10 minutes, the illumination will shot off.



Initialization of the Bed (Only by Technician)

Before first use of the Bed, or in case a functioning problem, the Bed must be initialized.

To Initialize (When initializing no one should be on the bed!):

Step 1 - Press Buttons (3) & (4) together – Continues beeps will be heard. Continue pressing until the beeps stop.

Step 2 – Press Buttons (1) & (2) together. The bed will bring itself to the Initialization position step by step. Continue pressing until Two beeps are heard. To ensure the Bed has reached its initialization position, press again and verify the two beeps are heard.

Important remark: In Initialization, the first movement of the bed should be horizontally up. If the bed does not move to its highest position something is wrong. Check all connections and redo steps 1 and 2. if the bed still does not work consult with VitalGo's authorized technician.

At the end of the initialization procedure all motors should be in end of stroke position (in or out).

Step 3 – Bring the Bed to the CPR position with Button (9).

- CLEARING ERRORS

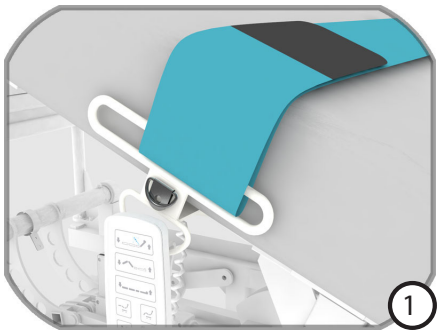
The Total Lift Bed is operated with an advanced controller system.
It may happen that the controller will lose position of actuator and because of that, in order to avoid mechanical breakage, it will freeze.
In order to clear such error, technician should press button 3+4.
A short series of beeps will be heard. Wait until beeping stops. Try to operate bed.
If bed does not operate make full initialization as described above.

Strapping Systems(Optional)

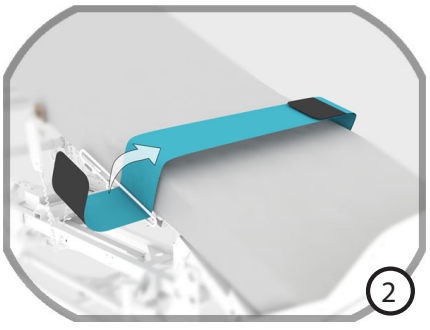
The Strapping System is modular and should be used according to the patient's condition and instructions given by the proper medical authority.
The configurations described below are VitalGo's recommendations for Non-Ambulatory patient who can hardly walk and is in danger of getting his knees buckled.
In any case the user should consult his doctor or the proper medical authority before deciding which strapping system configuration to use.

Non Ambulatory Patient Strapping System

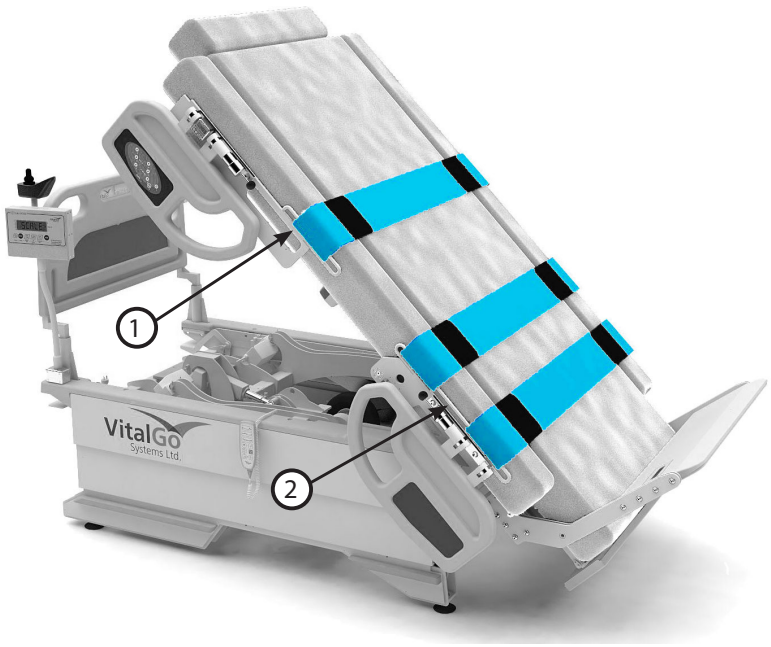
This patient is a patient who's lower extremities are weak, it is recommended to use the strapping system with the supervision of a caregiver, in order to avoid any risk of rolling out of bed, knee buckling and falling when in upright position.
The non-ambulatory patient should be supervised by a caregiver when using the bed functions and especially the standing position.



Chest Strap Flange

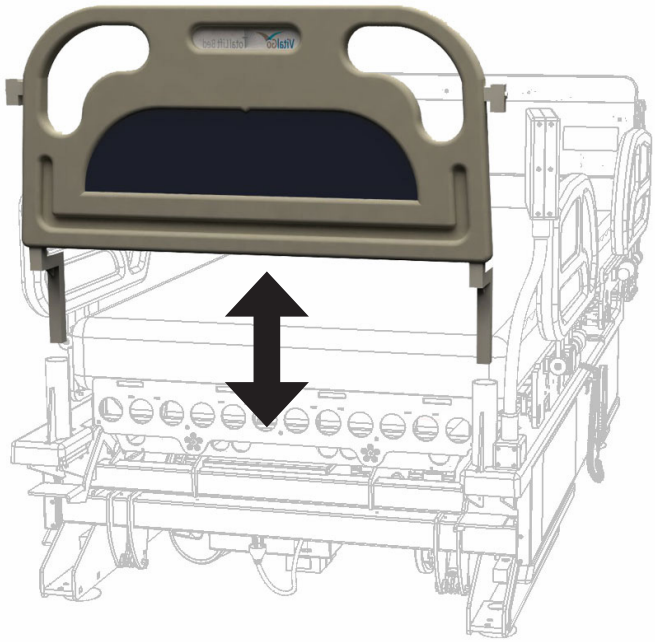


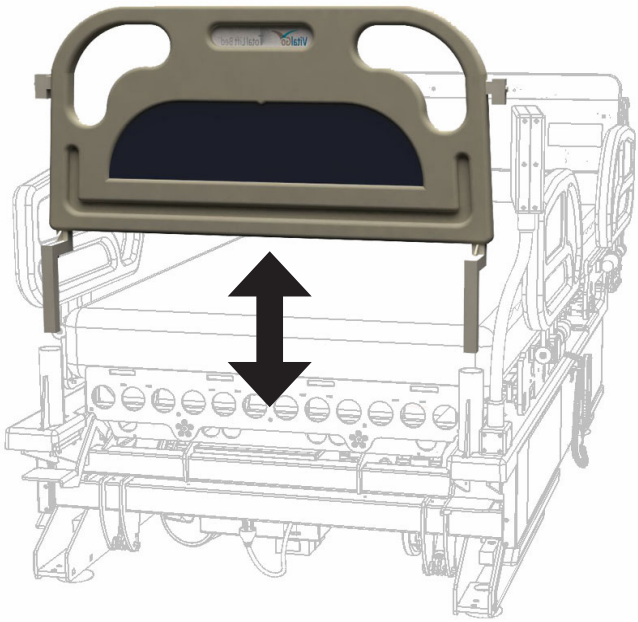
Thigh strap assembly



Retractable Head Board

The Head Board can be removed quickly by simply pulling it. It is especially designed for removal during CPR operations.





Troubleshooting

Problem	Possible Cause	Solution
Bed does not function at all	Power Cord not connected to Socket or to Controller	Check connection of both sides of Power cable. Check if Socket has electric power
	Actuator plugs are not connected to controller	Check that all Actuator plugs are connected well in the controller socket.
	Handset is not connected	Check handset connection to the controller.
	Power supply	Check cable integrity Change power supply (Technician)
Hand set not functioning	Lose connection to Controller	Check connection of Handset wire to controller
	Program Failure	Call Technician
Bed movement is faulty	Program failure	Initialize Bed (Technician Only)
	Plugs of Actuators are connected in the wrong socket of thecontroller.	Call Technician Do Not operate bed.
Bed movement does not stop	Continues pressing on Hand Set	Let go of switches
Bed is producing unusual sounds, burning odors or movement deviations observed in motors, bed parts or limits of hand switch/wired hand set functions	Electric or Mechanical Problem	Call Technician - don't move bed
Pressing a function hand set results in motion other then intended	Program failure	Check all connections Initialize Bed (Technician Only)
	Plugs of Actuators are connected in the wrong socket of the controller	Call Technician and do not operate bed
Leg rest does not move	End of position	
Foot Lifter™ does not stops moving in reaction to resistance	Micro-Switch Failure	Call Technician - don't move bed
Seating With Legs Down / Up function Does not work	Wrong Memory Set	Bring Manually to the preferred position and memorize (See instruction Page 23)
Bed does not move on wheels	Wheels down and the bed does not move	Press wheel function till hearing two beeps check that break lever is not in "break" position. If TDR is down - raise to the upper position - see page 42

IMPORTANT - **Bed should operate for 2 minutes and rest for 18 minutes.**	**If not power suuply will overheated In such case bed will move slow and strange.**	**Stop operation for 30 minutes and reset the bed (Technition).**
Nurse Control failures: For standing position Bed does not move	The program was not unlocked	Check unlocking - see Nurse instructions

Maintenance

WARNING!

All repair and maintenance work should be performed only by a qualified technician. VitalGo will accept liability for the bed safety and functional efficiency only when:

- Delivery maintenance and repair were carried out by VitalGo's authorized personal.
- The bed is used in accordance to instructions given in the users manual.

The Total-Lift™ Bariatric Bed uses maintenance-free motors, electric systems and electronics, as such they require very little maintenance. All moving parts and lifting gear are permanently lubricated during manufacture.

As these parts do not need to be re-lubricated in normal use, the bed has no lubrication points.

MAINTENANCE CHECKLIST

Vitalgo recommends the following maintenance and cleaning procedures be conducted between users and at least once every year.

- Inspect all bed components for damage or excessive wear.
- Visually examine all welds for cracks.
- Inspect the head and thigh and leg sections for bending, warping or damage.
- Check drive shaft and drive shaft connections for bending, damage or excessive wear.
- Inspect pull tubes and mounting hardware for bending, damage or excessive wear.
- Inspect all bolts and rivets to ensure that they are securely tightened and functioning properly.
- Check sleep surfaces to ensure all links are intact
- Check casters if they roll properly.

ELECTRICAL INSPECTION AND MAINTENANCE

- Inspect all electrical bed components for damage or excessive wear (i.e. Cracked or broken housings, or worn components).
- Check pendant, power and motor cords for chafing, cuts or excessive wear.
- Make sure all plugs are fully attached and free of damage.
- Make sure cable lock on junction box is properly positioned and locked
- Check all functions:

A. Ensure head raises and lowers properly.
B. Ensure foot raises and lowers properly.
C. Ensure bed ends raise and lower properly.

If any of the inspection criteria Above mentioned failed, stop using the bed immediately, Tag the bed or component with a complete description of the failure(s) and have the bed serviced

RECHARGEABLE BATTERIES MAINTENANCE:

BA20 is the battery module in the CB20 system. The cabinet is ultrasonic welded and easily exchangeable without the use of tools.

Precautions:

Battery running:
- If battery capacity is under 50% a "beep" sound is given for 2 seconds, when a handset key is pressed.

- If the system is activated and the mains plug is pulled out, the system will stop. In the opposite case, if the system is running using battery power and the mains plug is then plugged in, the system will continue running.
- The charging indicator can blink if the system operates with a high load causing the voltage to drop and because of this the batteries will start to charge.
- The CB20 with battery back-up only commences battery charging when it is connected to the mains.
- A control box with battery should be charged at least every six months. However the longest life is obtained when the battery is fully charged.
- A battery must be charged for at least 12 hours before use

Cleaning and Disinfecting

FOR REGULAR USE AND REAPPLICATION

Use of Bed by same user:

Cleaning the bed is important for Chemical Disinfection.
In case the same person is using the bed, a routine cleaning of the Bed is hygienically sufficient.
Disinfection of the Bed is necessary in case of contamination with infectious or potentially infectious material, as blood, stool, pus or presence of infectious disease under the direction of a physician.

In Case of a Patient change (Reapplication):

If a patient is changed on the bed, the Bed must be first cleaned washed and disinfected.

Before cleaning please note –
- All electric plugs and covers connected to the controller must be plugged in.
- Power cable must be unplugged from wall socket and protected from liquid.

Cleaning:

Remove mattress from Bed, raise back support and legs sections, so all parts are accessible.
The metal parts of the Bed are covered with a powder coating. Clean all coated parts with mild detergent and warm water.
The plastic parts may be cleaned with a fresh wet cloth with warm water and household cleaners.

Disinfecting:

The disinfectant material used should be an approved material by DGHM (German Association for Hygiene and Microbiology).
The Thinning ratio recommended in the respective instructions must be applied.
Follow the manufacturer guidelines for exact dosage and way of use.

Do not use:

- Solvents (Including organic solvents)
- Abrasive or scrubbing sponges, which might scratch the Beds surface and materials.

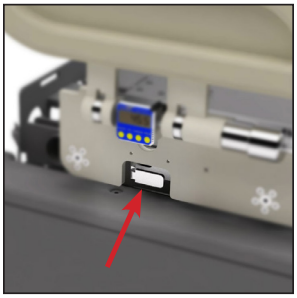
If unsuitable washing powder or disinfectants are used in incorrect mixing ratio, or in case of insufficient maintenance, there might occur damage to surface of coating of bed, for which the company will not be responsible for.

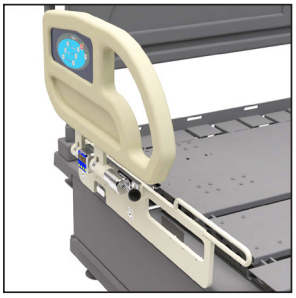
When using disinfectants, always:

- Wear gloves.
- Avoid skin contact.
- Use closeable bottles with dosage pumps.

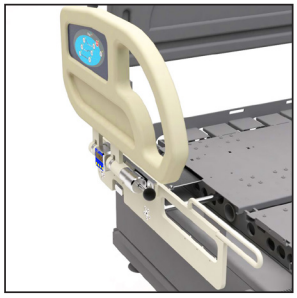
HOW TO EXTEND THE BED

1. Remove power drive Joystick pole.
2. Take out head board and rotate position to extend.
3. Remove mattress straps.
4. Extend the frame.





Position 2- For use without extending the bed frame

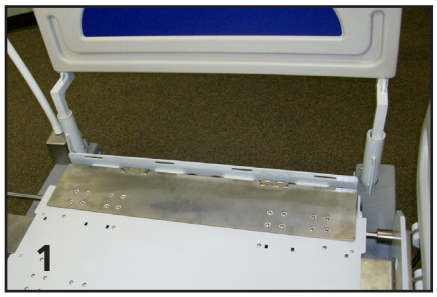


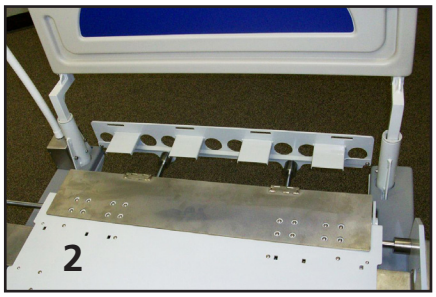
Position 3 - Extended Frame

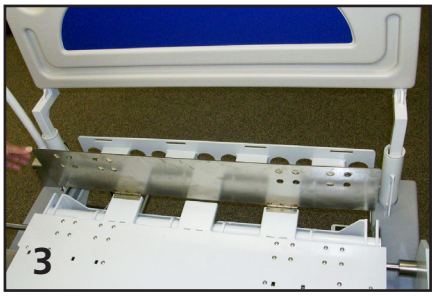
⚠ ENTRAPMENT WARNING

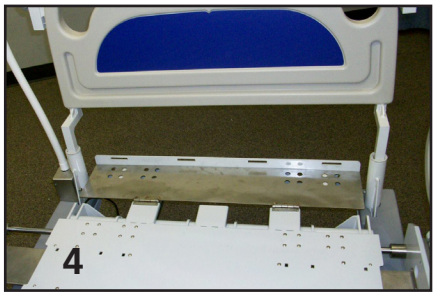
WHEN SIDE RAIL IS IN POSITION 3 HEADBOARD MUST BE IN POSITION 2.
WHEN HEADBOARD IS IN POSITION 2 – SIDE-RAIL MUST BE IN POSITION 3

Pull the back frame and flip the metal panel to lock it in place

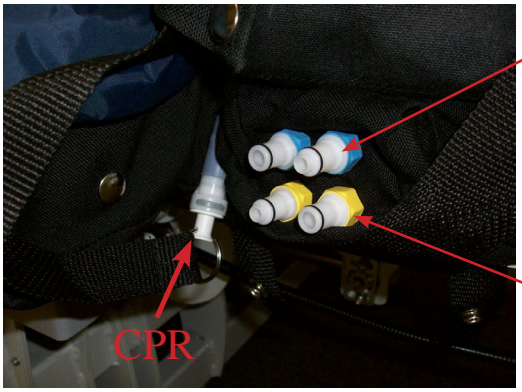






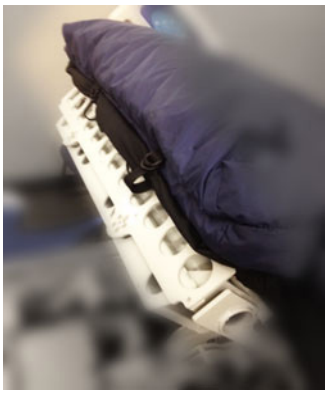


5. Inflate mattress bolster (in case of LAL mattress) or connect the bolster of a foam mattress.



Blue connections -
to side inflating bolsters

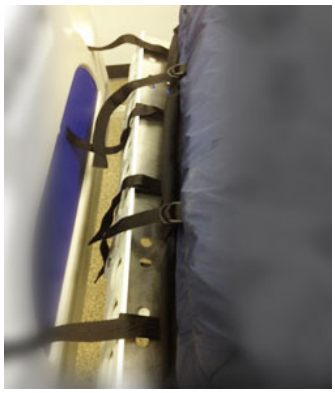
Yellow connections -
to head inflating bolsters

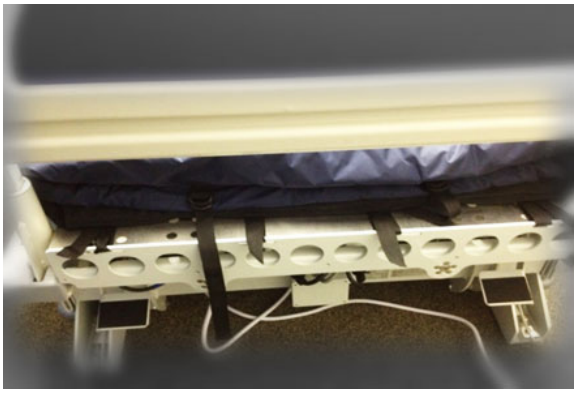


Connection of mattress to headboard side

Extended position of mattress

6. Connect the Total Drive Joystick pole and secure.

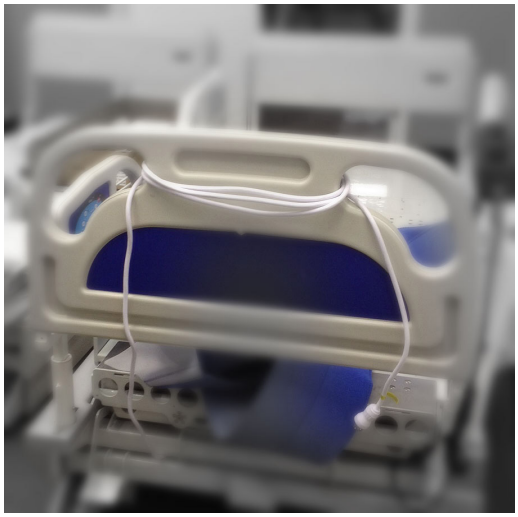




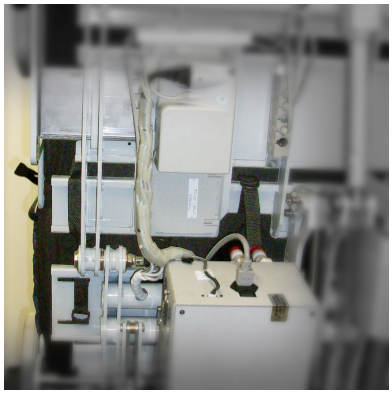
Folded Mattress position -
Bolsters are folded and straped

When bolsters are folded, tie with straps
and disconnect the Blue hose connection

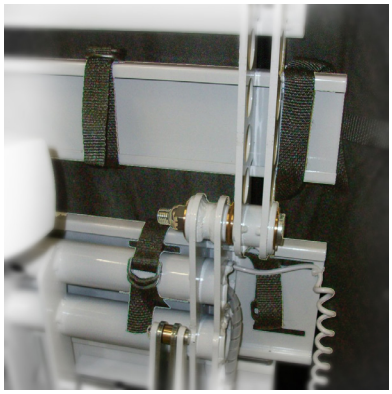
CABLE ARRANGEMENT FOR TRANSFERRING BED



MATTRESS ATTACHMENT



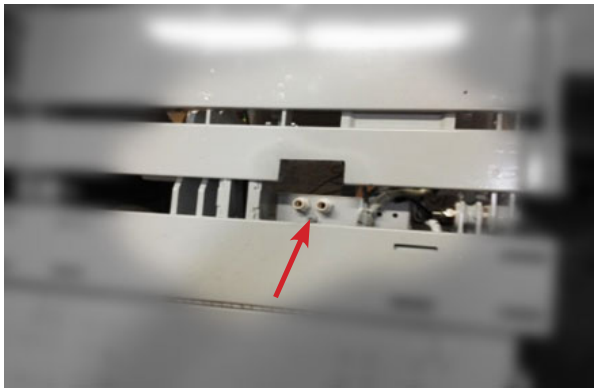
Back-I



Back-II

Rear

Front



Blower connection to Mattress

Total-Lift™ Bariatric Bed – Weight Bearing Control System

Vitalgo's Total-Lift™ Bariatric Bed brings the first and only true "Weight Bearing Control" ever.

The combination weighing systems comprises a Bed Scale and Foot-Lifter Scale.

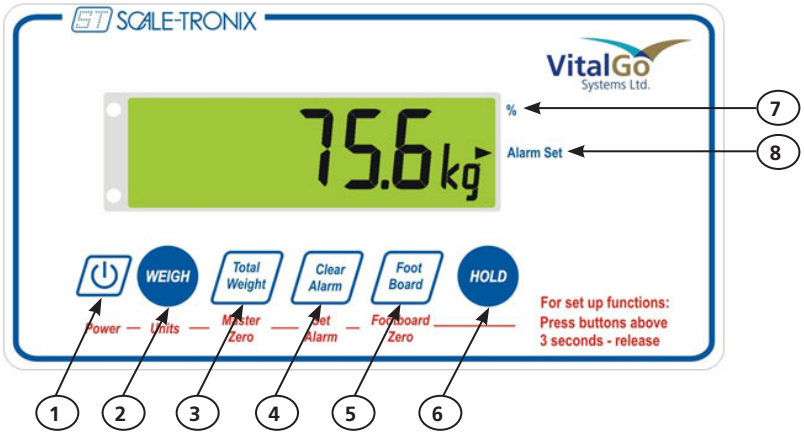
The display connected to the gooseneck is displaying three measurements –

1. The Patient weight.
2. The pressure applied on the Foot-Lifter.
3. The percentage of the Pressure on the foot –lifter as a ratio to the Patient weight.

As the patient is tilted or taken down, due to gravity the amount of pressure the patient is bearing becomes greater or lesser. This is showed by the percentage indicator.

OPERATION –

IMPORTANT – Scale must be on when bed is in operation, otehrwise bed will not function well.



a. For patient weight –

1. Place bed on its legs (load Cells) and be sure the bed is not on casters.
2. If display is not on, press button "1" to start scale operation.
3. Bring Bed to horizontal position, Check that required bedding is on the bed, but patient is not on the bed.
4. Master Zero – Press and hold button "3" for 4 seconds and release after hearing two beeps.
   Important Note – Do Not activate master Zero – button '3" when patient is in bed.
5. Scale will read 0.0 (Zero) – patient can enter bed.
6. The weight of the patient will be displayed after a few seconds.
7. After scale is not active for 10 minutes it will display "SCALE". To show weight again, press "Weigh" Button "2" or "Hold" button "6".
8. Kg/ LB – to switch between Kg/LB press button "2""weigh" for 3 seconds.

B. Adding / Removing bedding / items to Bed –

1. Press "HOLD" button "6".
2. Add items to bed.
3. Press "WEIGH" button 2 and the weighing feature will resume, not changing the patient weight reading.
4. To remove items from Bed, follow same procedure.

C. Foot Lifter Scale –

Foot-Lifter scale reading can be seen in two displays, the display on the Foot-lifter and the main display.
The Foot-lifter Display will always show the amount of pressure placed on the Foot-Lifter.

For the main display –

1. Press "Foot Board" button "5". The pressure on the Foot-Lifter will be displayed.
2. Press second time for the Percentage between the pressure on the foot-lifter and the patient weight. The arrow on % ("7" on the display) will show.
3. For "ZERO" the Foot-Lifter scale –
   - Press "Foot Board" button "5".
   - Press Button "5" again for 4 seconds.

IMPORTANT – Always "ZERO" when bed is in horizontal position.

NOTES –
- The Foot-Lifter scale is not for measuring the patient weight.
- There is an increase of 16-18 Lb (7-8 kg) to the reading of the scale between Horizontal position and Standing position. This is due to the gravity of the Footboard itself.
- The Foot-Lifter scale is operating with other functions of the bed, so should always be "On".

D. Weigh Bearing -

WEIGH BEARING IS THE PERCENTAGE BETWEEN THE PRESSURE APPLIED BY THE PATIENT FEET ON THE FOOT-LIFTER AND HIS WEIGHT.

1. When the display is showing the patient weight, press "foot-Board" button "5" – the main display will show the amount of pressure on the foot-board.
2. Press again button "Foot-Board" button "5" – the display will show the percentage between the pressure on the Foot-Board and the patient weight. The arrow on the % on the top right side of the display will show "7".
3. For going back to patient weight press "Total weigh" (short press) Button "3".

E. Alarm Feature –

1. Hold Button "4" Clear / Set Alarm for 3 seconds until two beeps are heard.
2. The arrow "Alarm Set "8" will show. Alarm is now armed.
3. If patient exits bed (or items removed from bed) the Buzzer will go on.

NOTE – If scale is in "HOLD" mode too long (see "B" above), the Buzzer will go on as well and the display will be flashing "HOLD".

TO SHUT ALARM – press "Clear Alarm" Button "4" (quick press) or "WEIGH" button "2" if in the "HOLD" mode

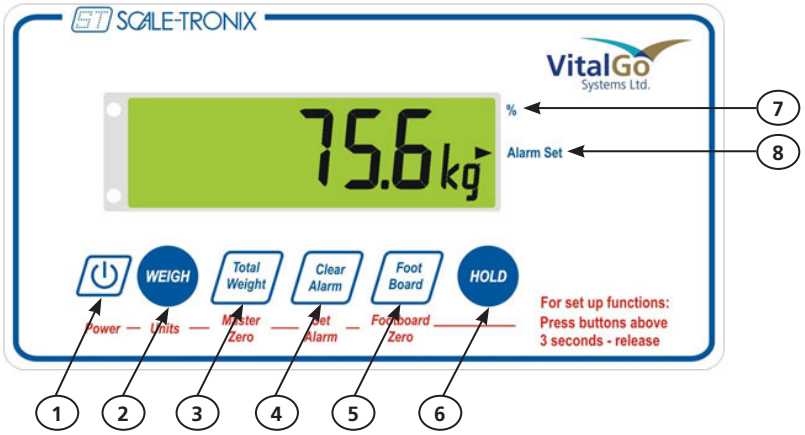
F. Unit Change –

Press button "2" "WEIGH" for 3 seconds – Units will change between Lb/Kg in both displays, main and Foot-Board display.

Use of the "Weight Bearing Control" system is used for many important applications in which it is important to now the amount of pressure the patient can bear on his feet.

The system is also important for –
- Prevention and therapy of Pressure ulcers.
- Early Mobility.
- Progressive Mobility/
- Physical Therapy.
- Burn units.

TLB – Bed Scale
Patient weight system



OPERATION –

A. Patient Weigh -

1. Place bed on its legs (load Cells) and be sure the bed is not on casters.
2. If scale is off, press button "1" –On/ Off .
3. Check that required bedding is on the bed, but patient is not on the bed.
4. Master Zero – Press and hold button "3" for 4 seconds and release after hearing two beeps.
   Important Note – Do Not activate master Zero – button '3" when patient is in bed.
5. Scale will read 0.0 (Zero) – patient can enter bed.
6. The weight of the patient will be displayed after a few seconds.
7. After scale is not active for 10 minutes it will display "SCALE". To show weight again, press "Weigh" Button "2" or "Hold" button "6".
8. Kg/ LB – to switch between Kg/LB press button "2""weigh" for 3 seconds.

B. Adding / Removing bedding / items to Bed –

1. Press "Hold" button "6".
2. Add items to bed.
3. Press "Weigh" button 2 and the weighing feature will resume, not changing the patient weight reading.
4. To remove items from Bed, follow same procedure.

C. Alarm Feature –

1. Hold Button "4" Clear / Set Alarm for 3 seconds until two beeps are heard.
2. The arrow "Alarm Set "8" will show. Alarm is now armed.
3. If patient exits bed (or items removed from bed) the Buzzer will go on.
   Note – If "Hold" button "6" is pressed to long (see "B" above), the Buzzer will go on as well.
4. To Shut Alarm – press "Clear Alarm" Button "4" (quick press).

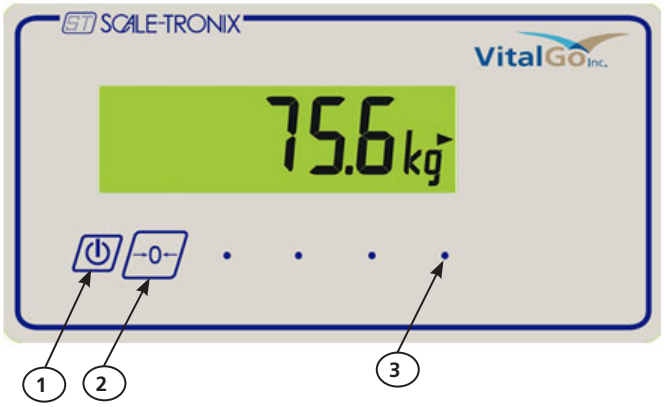
D. Weight Change – (optional).

Weight change is used for checking the change of patient weight.

1. Press "Weight Change" Button "5" (quick press) .
2. The arrow on "7""Weight Change" will show.
3. Press "Patient Zero" Button "5" for 4 seconds until hearing 2 beeps.
4. Display will show 0.0.
5. From now, patient weight change will show in absolute numbers, plus or minus.
6. For reading the patient weight – Press (quick) "Total weight" button "3"

Note – If arrow of "weight change" "7" is On – weight will not show.
Press "Total Weight" Button "3" for returning to weight feature and check that arrow
Of weight change is Off.

Foot-Lifter Scale (Pressure Sensor)– (Optional)



IMPORTANT – WHEN THE TOTAL-LIFT™ BARIATRIC BED IS IN OPERATION THE FOOT-LIFTER TM SCALE MUST BE ON, AS OTHERWISE THE BED WILL NOT WORK PROPERLY.

OPERATION –

1. If Display is not On – Press Button "1".
2. When Bed is in Horizontal position and feet are not touching the Foot-Lifter – Press Button '2" for Zero the scale.
3. Display will show 0.0.
4. Once pressure from feet (or anything) is applied on the Foot-Lifter the display will show the amount of pressure applied on the Foot-lifter board.
5. Lb/Kg switch – Press button "3" to switch between Lb to Kg.

USE OF THE FOOT LIFTER-SCALE -

The Foot-Lifter-Scale (patent pending) is one of its kind measuring device, for showing the amount of pressure the patient is putting, with his feet, on the Footboard.

- The more the bed is tilted the more pressure and weight the patient is transferring to the footboard.

This is very important to know, as it will be able to track and tell the amount of pressure the patient can bear, while he is tilted.
The Foot-Lifter scale can help collecting data of the improvement of the patient condition, and thus help with early mobility, progressive mobility and in Physical Therapy.
Foot Lifter scale is important for the following applications –

- Weight bearing control.
- Prevention and therapy of Pressure ulcers.
- Early Mobility.
- Progressive Mobility.
- Physical Therapy.
- Burn units.

NOTES –

- The Foot-Lifter scale is not for measuring the patient weight.
- There is an increase of 16-18 Lb (7-8 kg) to the reading of the scale between Horizontal position and Standing position. This is due to the gravity of the Footboard itself.
- The Foot-Lifter scale is operating with other functions of the bed, so should always be "On".

Low Air Loss Mattress System – (Optional)

NOTE - A FULL INSTRUCTION MANUAL OF THE VITALGO LAL SYSTEM MATTRESS IS GIVEN SEPARATELY. BELOW IS ONLY THE MAIN INSTRUCTION OF USE FOR THE MATTRESS AND DOES NOT REPLACE THE FULL INSTRUCTION MANUAL AS FOR INSTALLATION, MAINTENANCE, CLEANING, WARNINGS AND TROUBLESHOOTING. FOR ALL THE ABOVE PLEASE REFER TO THE FULL INSTRUCTION MANUAL OF THE VG-TLB-LALM4.

The Vitalgo TLB-LALM4 is a alternating pressure and true low air loss mattress system.

The TLB –LALM4 comes with one of a kind built-In pump.

The VG-TLB-LALM4 System is a 5-zone ALTERNATING PRESSURE & TRUE LOW AIR LOSS control unit with a mattress. The unit is used to inflate a mattress overlay or a mattress replacement system. The control unit is designed to provide continuous ALTERNATING PRESSURE & TRUE LOW AIR LOSS pressure at required patient comfort levels. The ABS/PVC blended enclosure houses a high capacity output air blower, a quick disconnect coupling connector, 14 foot detachable hospital grade power cord, display panel, and a CPR label.

An overlay system is comprised of a durable zippered Cordura base and top sheet which houses a urethane coated nylon durable 5" inflated air pad in the form of 10 ~ 20 fixed air cushions with hose assembly.

The mattress replacement system (B) is comprised of a durable Cordura base (C) with a safety 2" convoluted foam or air base, 5" or 8" (inflated) detachable air cushions (T), and covered with a vapor permeable, water proof, low friction and low shear nylon quilted top sheet (E) with zipper or straps to fasten the top sheet to the mattress base. The complete mattress system has 6~10 straps (F) in several areas so it can be easily fastened to any size hospital bed.

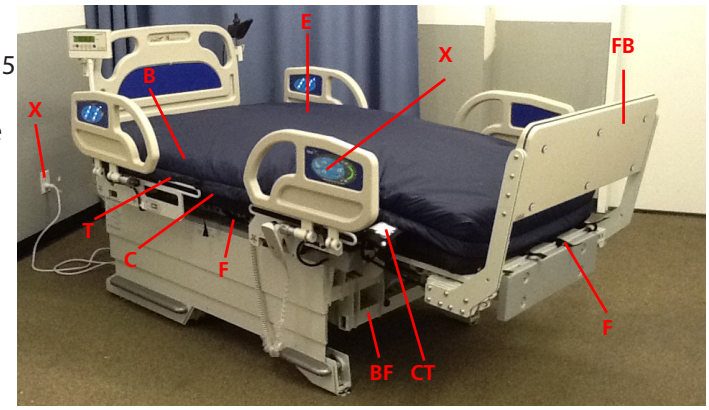
EXPLANATION OF SYMBOLS USED ON THIS DEVICE

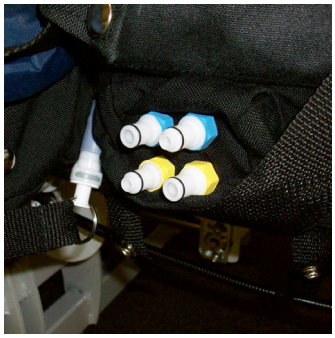
SYMBOL	EXPLANATION
POWER	Turns unit On / Off
SOFT FIRM	Up or Down key adjusts patient comfort pressures levels
MODE	Selects appropriate patient therapy mode
MAX FLOW	Inflates mattress rapidly (15 minute timer)
FOWLER/ TILTING	Boosts 15~25 % more air pressures in the mattress during fowler/Tilting position to avoid patient bottoming out
LOCK	Locks out all control unit functions to prevent patient settings tampering
POWER FAIL LOW PRESSURE	In the event of power failure or if the hose is disconnected an audio/visual alarm will sound
ALARM SILENCE	Mutes audio alarm

	Indicates the point of attachment of the equipment to earth (Grounding Point).
	Attention: Instructs end user / care giver / operator to refer to the manual.
	Indicates that the degree of protection against electrical shock is TYPE BF
	Not for use in presence of flammable anesthetics.
	Risk of electrical shock, do not remove back cover.

MAIN FEATURES OF THE VG-TLB-LALM4 :

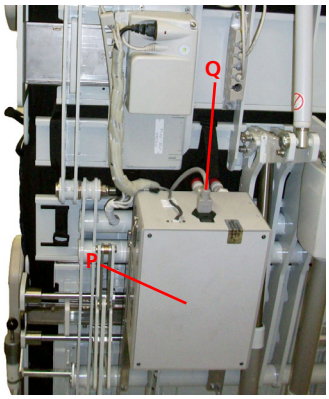
- High capacity air output, 45 CFM (1275 LPM), and quiet operating control unit. Max flow mode (W) inflates mattress in 30~60 seconds depending on the size of the mattress. Has 15 minute Max Flow timer.
- State of the art micro-controller technology unit for accurate patient comfort pressure values and A/P time.
- Front panel (G) has power switch (PS), and desired comfort pressure level.
- Comfort control keys (K) to set comfort levels, according to weight of the user.
- Therapy (Static) mode LED (MD).
- A/P (alternating Pressure) mode (LED) (N).
- Lock Switch (LO) to lock out all control functions.
- 10~14' (305~427 cm) long detachable 16~18
- AWG hospital grade power cord.
  Durable and attractive dual 3/4" and one 1/4" flow couplings (R) for quick connection and disconnection (CPR deflation).
- Control unit has short circuit / over voltage protection with single/dual fuse (FP) not shown in the picture.
- Power Fail (PF) LED flashes to indicate power outage.
- Low Pressure (LP) LED flashes to indicate low pressure.
- Molded ABS enclosure.





SUPPORT SURFACE (MATTRESS / OVERLAY)

- Self contained mattress replacement system / mattress overlay system (B) with easily detachable components for cleaning.
- Detachable urethane coated, 70 Denier nylon taffeta, flame retardant / water repellent, mildew resistant, low friction and low shear, 5" or 8" high (inflated) detachable lateral tubular air cushions (T) (16 to 20), overlay pad has 10~20 fixed or removable air cushions.
- Detachable zippered or strapped highly breathable urethane coated, 70 Denier nylon, flame retardant / water repellent, highly vapor permeable, anti-microbial, low friction and low shear quilted reusable top sheet (E).
- 2" convoluted safety foam (only on Mattress replacement system) enclosed in the base (C) to support the patient in the event of loss of air pressure in the mattress.
- The mattress has hose assembly (V) with two easy to use quick connect and disconnect connectors (R).



OPERATING INSTRUCTIONS

Make sure the CPR Tag (CT) {if present} insert connector is securely connected into the mattress manifold body connector on the side of the mattress.

INITIAL POWER UP

During initial power up (when power cord (Q) is plugged into the power source), the control unit (A) will be in "STAND BY" with the amber LED on.
If the unit is in standby mode with amber LED is on, press the power key and the green LED will turn on.
Press MAX FLOW (W) the pump will turn on at maximum flow.
If the power comes on after a power outage, the control unit will go through its system initialization routine for few seconds and then resume the desired function.

MAX FLOW (W)

1. Press MAX FLOW (W) key, the green LED will turn on. This mode is used to rapidly inflate the mattress. During this mode a series of beeps will sound every 3 minutes as a reminder that MAX FLOW mode has been activated.

MAX FLOW mode will deactivate after 15 minutes. The LED will turn off and the unit will default to previous memory setting. During this mode the entire mattress will be pressurized to 35±6 mmHg.

2. The mattress (B) will inflate to its normal size in 30 ≈ 60 seconds. (Inflation time depends on the size of the mattress).

THERAPY (STATIC) (M)

1. To set STATIC mode (M) press (MD) key to "STATIC" position, green LED (M) lights up.
2. In STATIC mode all the air cushions in the mattress will be maintained at a constant pressure.

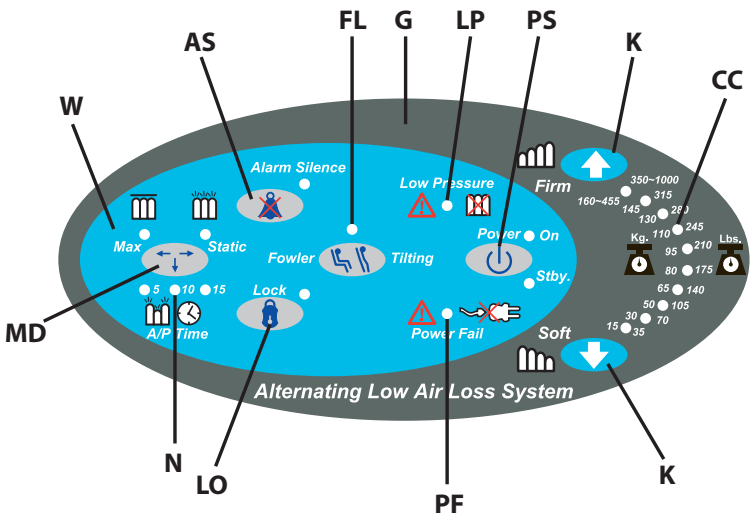
DYNAMIC (A/P) ALTERNATING PRESSURE (N)

To set DYNAMIC (ALTERNATING) {N} mode, press the mode (MD) key and choose the appropriate A/P time. The green LED (N) lights up. The A/P cycle times are 5, 10, 15, 20 minutes (custom cycle time can be programmed at the factory).

In the A/P (DYNAMIC) mode the odd numbered air cushions in the mattress ill be maintain at a constant desired patient comfort pressure, and the even umbered air cushions will deflate from desired atient comfort pressure to below 10~60% of set pressure in the first half of the DYNAMIC cycle and visa versa for the second half of the cycle, and continue back and forth.

PATIENT COMFORT CONTROL LEVEL (K)

1. The VG-TLB-LALM4 system is designed for patients weighting between 50 ≈ 1000 lbs. (22Kg. ≈ 455Kg.). Pressing the comfort control SOFT key (K) towards the SOFT (1) position reduces the pressure setting, pressing FIRM key (K) towards the FIRM (9) position increases the pressure. The patient comfort pressure ranges from SOFT (1) 6±4 mmHg to FIRM 32 ± 6 mmHg. Depending on the desired patient comfort level the micro-controller / sensors will set appropriate air pressure in the mattress, and maintain the desired pressure in the mattress.
2. Once the mattress is inflated to its normal size with the patient lying on it, set the COMFORT CONTROL KEY to the desired patient comfort level. Wait 5 minutes for the mattress pressure to stabilize, verify the appropriate pressure required to support the patient by performing a simple "four finger check".



Make sure that the patient is lying flat on his or her back in the middle of the mattress. Place four fingers between the air cushions directly underneath the sacral region of the patient's body. There should be a minimum of 3 to 4 finger width clearance between the bottom of the patient and the safety foam base, (on an overlay there is no safety foam base). Repeat this procedure until the desired patient comfort pressure is achieved.

UPRIGHT (U)

When upright (fowler) mode is chosen, the pressures in the entire mattress will be increased to max comfort setting (Optional: approximately 15 ~ 25 % higher than the set comfort pressure level or max 9 level). This enables the patient to be supported without bottoming out.

LOCK OUT (LO)

Control unit functions (including power) can be completely locked out from being tampered with, by simply pressing and holding the lock key until the light comes on (approximately 3 seconds).

ALARM SILEANCE (AS)

An audio-visual alarm is sounded in the event of power failure or when the hose is disconnected from the unit. Audio alarm can be muted by pressing alarm silence key.

FAILURE MODES

P0WER FAIL (PF)

In the event of power outage the microprocessor will activate an audiovisual signal to alert the caregiver by flashing the amber "POWER FAIL" LED and turning on the buzzer. Once the power is restored to the control unit the audiovisual signal will cease and unit resumes operating its set mode.

LOW PRESSURE (LP)

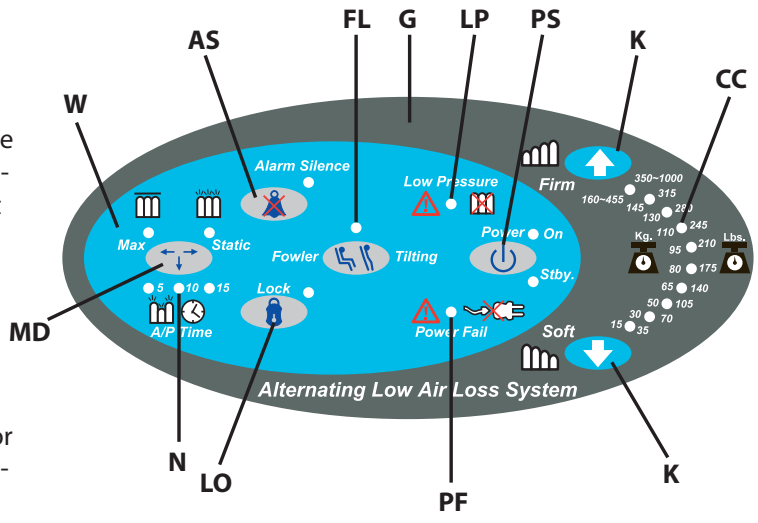
In the event of hose disconnection the microprocessor will activate an audiovisual signal to alert the caregiver by flashing the amber "LOW PRESSURE" LED and turning on the buzzer. Once the low pressure problem is fixed the audiovisual signal will cease and the unit resumes operating its set mode.

RECOMMENDED PRESSURE SETTINGS

a. For rapid inflation of the mattress press (W) "MAX FLOW" key until green LED turns on.
b. For extra firm support during Patient ingress / egress, or Patient wound care, or Patient turning, or Patient cleaning it is recommended to set the mattress pressure to MAX by pressing (W) "MAX FLOW" key.
c. During patient Fowler positioning, or in case of a patient who's weight to height ratio is above average, it is recommended to set the comfort control to 10% more than the set pressure level.

CPR FUNCTION

1. To deflate the mattress / overlay pad or for a CPR procedure, press the quick release buttons on both the coupling bodies (R), and simultaneously pull the hose (V) from the control unit flange connector.
2. If OPTIONAL red CPR tag is present on the mattress / pad, disconnect the red CPR tab (CT) connectors located on the side of the mattress.
3. In case of CPR emergency, for quick deflation of the mattress unzip the top sheet from the foot to the head by pulling the zipper located by the patient right foot, near the exit location of the hose assembly, or on some mattresses by unfastening the top sheet straps from the side of the mattress. Disconnect a few air cushions, which are directly below the patient's chest from the mattress by pressing the quick release button on the connector with one hand and pulling the air cushion connector with the other.



Inclinometer – Angle Sensor

The Inclinometer (angle Sensor) is used to show the angle between the floor and the fowler position, which can be the angle of the Backrest or the Tilting of the bed.

OPERATION –

Press On/Off – Button "1" and the angle will be displayed.

The reading shots off automatically after a while to save battery.

NOTE – the Inclinometer is calibrated and there is no need to use all other buttons which are for checking comparative angles.

USE OF INCLINOMETER –

The Inclinometer is very important for collecting data concerning the patient position in the bed and for the treatment he is getting in order to check the change of the patient condition and to follow the protocol of treatment.

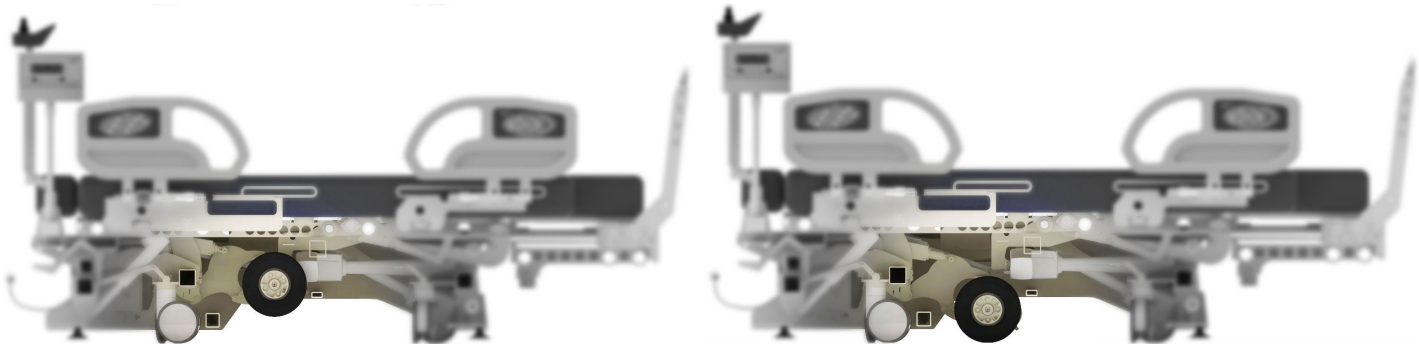
The Total Drive (TDR)

DEVICE OVERVIEW

The Total Lift Bariatric Bed is design to treat up to 1,000lb (454kg) patients and as the bed can be heavy to move/ transport, Vitalgo has developed and integrated a Total-Drive ™ .

The unique Total Drive systems allows a friendly, easy and safe movement of the TLBB to all direction, front , back side and a very sharp turn of 180 degrees.

The Total Drive can move up or down towards the floor, enabling clearance under the bed.
The below instructions are very important and should be carefully read, as wrong use of the Total Drive, can affect the use of the other functions of the TLBB.



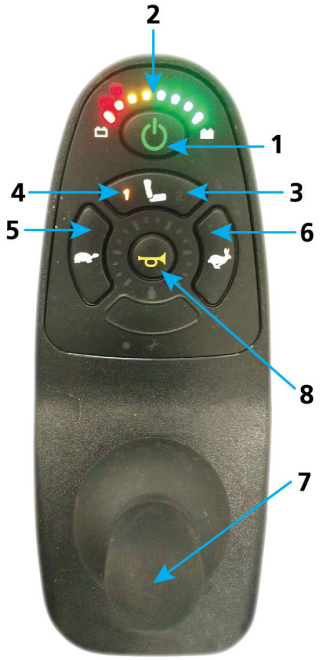
OPERATION OF THE TOTAL DRIVE (TDR)

The total Drive is connected to Hi/ Low lifting/lowering system. In order for the TDR to work, it must be lowered all the way down to the floor "Position B".

When the TDR is not in use, it should be raised all the way up to "Position A".

Any position in between is not recommended and should not be used. It is important either to take the TDR all the way down, for operation and All the way up, when not in use.

All of the TDR functions are done by the TDR –Joy-Stick. (JS).



THE JS BUTTONS AND FUNCTION.

1. **Power Button**
   When pressing the Power button the TDR will go "On" or "Off". When going "On" from "Off" position, all light indications will briefly go on.
   The Power should be turn "On" only when the JS is untouched and in natural position. Otherwise a fault will be displayed.
   This is a safety feature for prevention of sudden move.

2. **Charge indicator**

- Any green Led's lit, indicates well-charged Batteries.
- If only Amber or Red Led's lit, indicates batteries are moderately charged. It Is recommended Batteries will be charged before a trip.
- If only Red Led's are lit, Batteries must be charged before use.
-

3. **TDR drive**
   when pressing the right side of the 3-4 button, the movement of the JS will start the operation of the wheels and the bed will start moving according to the direction of the JS movement. (See page 45)

4. When pressing the left side of the button 3-4 , the movement of the JS forward will move the TDR system down towards the floor. When reaching the end position the wheels will be in contact with the floor and the TDR is ready for movement with the Drive system.

5. Pressing the "Turtle" button, will make the bed move slower, when moving the Joy-Stick to any direction.

6. Pressing the "Rabbit" button, will make the Bed move faster, when moving the Joy-Stick to any direction.

7. Joy-Stick lever – the JS is used for achieving two functions.
   a. After pressing the left side of button 4, movement of the JS lever forward will move the TDR system towards the floor.
   b. After pressing the right side of button 4, movement of the JS lever forward (if TDR System is touching the floor) will move the bed forward, movement backwards will move the bed in reverse and any movement of the JS lever in between to any direction will move the bed accordingly. See page 45.
   The more you move the JS forward or backwards or to any direction, the faster the bed will move.
   When releasing the lever it will stop power to the motor and will activate the break until the bed is in complete stop. When moving fast, moving the JS lever to the opposite direction, will make a faster stop of the bed.

PLEASE NOTE

Should the joystick / brake control system not stop the unit, turning the power switch off will engage all brakes and stop the unit abruptly. This backup system should only be used in the unlikely event that the primary brake control is disabled.

8. Pressing button 8 will activate the horn.

To Set TDR Lockout

While the power is ON, press and hold the Power button for 2 seconds. The horn will sound a short beep and all LED's will flash briefly. The drive control will then turn off.

The drive system should always be locked when not being used by a health care professional.

TO UNLOCK DRIVE LOCKOUT

While the TDR is locked, press the Power button to turn the TDR on. All LED's will flash briefly. The LED's will then perform a right-to-left "chase". Press the Horn button twice before the timer completes its pass (approximately 6 seconds). The current state-of-charge will then be displayed and TDR may be operated normally.

Note: *If the health professional does not press the Horn button twice within the time limit, the Horn will sound a short beep and TDR will turn itself off. The unlock sequence must be completed successfully before the TDR will drive again normally.*

THE TDR BRAKING SYSTEMS

The TDR brake systems allow for smooth start up and safe braking without undue jerking. There are three (3) separate modes to the braking system: Regenerative, Dy- namic, and Posi-Lock Electric Braking. All braking occurs automatically during the drive operation. Each type of braking is described in the following.

Regenerative Braking is activated while driving the bed down an incline. When the bed picks up speed going down the incline, the motor generates electricity. This electricity is channeled back through the *TDR System's* electronic control circuits to recharge the batteries. This action keeps the bed from picking up excess speed and provides for smooth speed control.

1. Dynamic Braking is activated WITHOUT delay when all power is stopped to the motor. This is done by bringing the control knob back to the center position, as when coming to a complete stop. This braking works until the Posi-Lock Electric brake is activated.

2. The Posi-Lock Electric Brake is activated with delay when all power is stopped to the motor. This electric brake has a short delay and ultimately holds the bed at a complete stop. The bed cannot be moved when this brake is activated. Dynamic Braking works in conjunction with Posi-Lock Electric Braking to bring you to a gradual and complete stop.

MOTOR/BRAKE DISENGAGE

Under normal conditions the motor/brake should not have to be disengaged. In the event the batteries run low, or there is a malfunction with the drive system the TDR should be charged by connecting it to power socket.

TRANSPORTING THE BED & PATIENT

To transport a patient on the Vitalgo TLBB bed with the Total Drive System:

1. Adjust head and leg support elevation to the desired position for patient comfort.

⚠ WARNING: Maximum patient weight in bed for transport is 1000 lbs (454 kg). Transporting a patient above 1000lbs can damage the bed and injure persons.

2. Unplug the bed AC power cord, wrap the AC power cord around the headboard. Automatic battery backup power will temporarily allow the use of all bed functions until AC power is restored.

3. Press button 11 on the Bed Handset (Caster position). Press until two short beeps are heard.

4. Press left side of button 4 on the TDR Joy Stick control., so a signal light is on.

5. Make sure the TLBB Break lever is in NEUTRAL position as indicated on the label next to it on the back side panel of the TLBB.

6. Push the Joy Stick lever forward. A long beep will be heard. Keep holding the lever until the beeping stops. Stop of beeping is the indication that the TDR system is engaged with the floor and ready for use.

7. press the right side of button 4. Now a movement of the Joy-Stick Lever will start moving the bed with the Total Drive System.

8. Ensure side rails are locked in an upright position.

⚠ WARNING: Side rails must be in the highest position to prevent patient from falling out of bed.

9. Use an IV pole to mount solutions.

⚠CAUTION: Check the bed width and side rail adjustment for doorway clearance to prevent dam- age to the bed and door frames.

⚠CAUTION: Keep hands and feet clear of wheels during bed movement. Move the bed only at a slow walk.

⚠WARNING: Moving bed down inclines or excursion off a ledge (such as moving into an elevator or across a threshold) can result in damage to the bed and injury to persons. The maximum threshold climbing capacity of the bed and drive system is 2" (with run-up).

⚠WARNING: The drive system is intended to move the TLBB on flat level surfaces. If necessary the drive system can transition and climb up to a 5 degree incline with a patient. Extra care should be taken when transitioning at the bottom and top of ramps. Loss of traction at the drive wheels may cause damage to the bed and injury to persons.

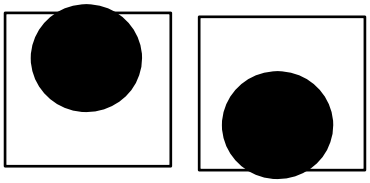
NOTE: *Remember to plug the Power cord bed into the wall outlet once transport of the bed is complete.*

After Transport is completed

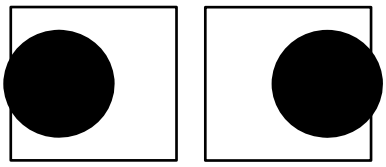
1. Press left side of button 4. See that the indication light goes On.
2. Move the Joy Stick Lever backwards. A beep will be heard. Keep holding until beep stops. The stop of "beeping" indicates that the TDR has reached its upright position.
3. Press CPR to bring caster into non-moving position. Or press the Caster lock lever to its locking position.

METHODS FOR CONTROLLING THE DIRECTION OF THE TLBB using the TDR Power systems.

Pushing the Control Knob straight forward will cause the bed to move in a forward direction. Your speed is determined by how far forward you push the control knob and by the speed control setting (# 2). Pulling back on the knob causes the bed to move in the reverse direction.

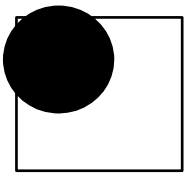


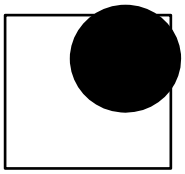
Moving the knob directly to the left (while stationary or moving) will cause the bed to turn to the left. Conversely, moving to the right will cause it to turn right. If you are stationary, the bed will tend to rotate where it sits. You may use this to position the bed in a room, or to prepare to travel in a different direction.



The difficult part of controlling the drive system is all of those moves in between the four main directions. Shown here are different directions for turning the bed as you operate it. Remember these moves may be anywhere in between, it depends on the direction of travel required at the time. The important thing to remember is that in the forward positions, the joystick is like a pointer, point and that is the direction you will go. In reverse, the pointer is indicating the direction the foot of the bed will go, not the head. The best thing to do is learn to operate the power drive in a large flat open space, and practice making the bed move in the direction you desire.

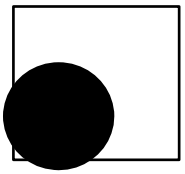
FULL SPEED LEFT TURN

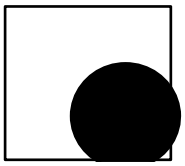




FULL SPEED RIGHT TURN

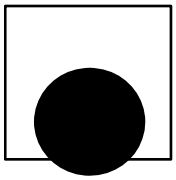
GRADUALLY BACK TOWARD THE RIGHT





GRADUALLY BACK TOWARD THE LEFT

In an emergency or a "Quick-Stop" situation, you may pull straight back on the control knob momentarily to cause the motors to apply reverse current and stop quickly. Use extreme caution, as this may cause the patient to pitch forward in the bed.



WARNING

The *Impulse Drive Syste*m is designed for high maneuverability but use caution when encountering obstacles. Failure to drive cautiously can result in collisions which may cause physical harm. When approaching an obstacle, keep your speed at a minimum and maintain a safe distance from that object. Avoid all small objects on the ground. The bed's ground clearance may be less than the size of the object. Running over an object or into a depression could cause damage to the bed. ***NEVER*** drive the bed near platforms, stairs, ledges, curbs or in any other potentially dangerous situation as severe injury can occur.

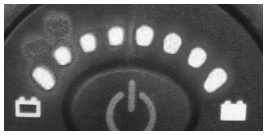
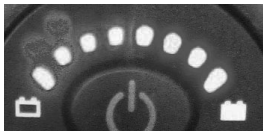
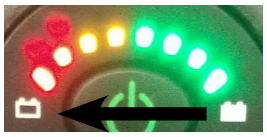
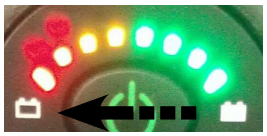
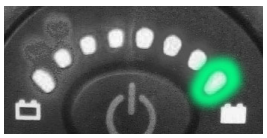
TDR Information Gauge

THE TDR INFORMATION GAUGE

The TDR Information Gauge (located on the joystick console) is the primary source of user feedback. It displays every possible status that TDR may have.

- TDR Power ON
- True state-of-battery-charge, including notification of when the battery desperately requires charging.
- **Any green** LED's lit indicates **well-charged** batteries.
- **If only amber and red** LED's are lit, the batteries are **moderately charged**. Recharge before undertaking a long trip.
- If **only red** LED's are lit the batteries are running out of charge. **Recharge** as soon as possible.
- TDR Lock Mode countdown.
- Program, inhibit or charge modes.
- Fault indication (Flash Codes)

The table on the following page indicates what the gauge will display for any given state.

DISPLAY	DESCRIPTION	This means...	Notes
	All LED's OFF	Power is OFF or may be locked	
	All LED's ON Steady	Power is ON	Less LED's imply a reduced battery charge
	Left RED LED is flashing	Battery charge is low	The batteries should be charged as soon as possible
	Right to Left 'chase'	TDR is being brought out of Lock mode	To unlock TDR, press the horn button twice before the LED's finish counting down
	Right to Left 'chase' alternating with steady display	TDR is in program- ming, inhibit and/or charging mode	The steady LED's indicate the current state of battery charge
	Right GREEN LED is flashing	TDR is in SPEED LIMIT mode	The current state of battery charge will be displayed at the same time
	All LED's flashing slowly	TDR has detected an Out Of Neutral At Power Up (OONAPU) condition	Release the joystick back to neutral
	All LED's flashing quickly	TDR has detected a fault	TDR uses Flash Codes to indicate faults. Refer to the Diagnostics section for further information about fault diagnostics

CHARGING THE DRIVE SYSTEM BATTERIES

Charging the batteries is the most important part of operating and maintaining the Drive System. Be sure to do it properly!

WARNING

Only AGM or gel cell sealed lead-acid deep cycle discharge type batteries should be used. Never use regular car starter batteries. To avoid risk of serious chemical burns and damage of the equipment do not use flooded cell lead-acid batteries. AGM and gel cell batteries do not require water and they have no danger of spillage.

NOTICE

The battery charger provided is specially designed for use with Vitalgo TLBB equipment. In the unlikely event of failure it should be replaced only with a Vitalgo approved charger to assure proper performance of the charger and Drive System.

INTRODUCTION TO FEATURES OF THE CHARGER

The Charger works with line voltage from 100 to 240 VAC, 50/60 HZ. It is fully automatic and has a 24-volt/ 2 -ampere constant current output. This creates a constant charging output until the batteries are fully charged. It also provides true float to maintain full charge.
The charger is recommended for use with AGM or gel sealed lead acid batteries. It can be left "on charge" indefinitely without causing harm to the batteries.

1. When the AC is connected to the charger and the charger is connected to the batteries, the AMBER LED will light until the batteries reach full charge.
2. At full battery charge the AMBER LED turns GREEN, and the charger enters float mode (charging at a lower rate than the 2-amperes) and continues to monitor the batteries. The LED will periodically flash as it maintains full charge.

Basic Safety Instructions:

1. Do not expose the charger to rain, snow or other moisture sources (i.e., sprinkler, car wash, etc.). When storing bed, keep inside a building.
2. Use of the charger in a manner not recommended by the manufacturer may result in the risk of fire, electrical shock or personal injury.
3. To reduce the possibility of damage to the AC cord or the connector, disconnect the AC line cord by grasping the plug and not the cord, when disconnecting from the wall or receptacle.
4. Locate cord so that it will not be stepped on, tripped over or subjected to the possibility of damage.
5. An extension cord is not recommended for use with this equipment. Use of an improperly rated extension cord could result in risk of fire or electrical shock. Should it be required to use an extension cord, make certain that it is of 3-wire construction and has a wire size of 16-gauge, and the cord must be in good electrical condition.
6. Do not operate this charger with damaged AC cord or receptacle. If they are damaged, replace them immediately.

⚠Important Safety Information

Before Charging:
Verify that battery terminals are clean and that all charger connections are secure and in good condition.

Grounding and AC Power Connection:
The charger must be plugged into a grounded electrical outlet. The unit is provided with an electrical cord which contains a conductor for grounding. The charger cord must be plugged into an AC outlet that is properly installed, and is grounded in accordance with the National Electrical Code and all local electrical codes and ordinances.

⚠WARNING
Failure to plug the charger into a grounded receptacle could cause a condition allowing an electrical shock hazard to be present while charging.

⚠WARNING
Improper connection of the equipment grounding conductor can result in a risk of electrical shock.

⚠CAUTION
Never alter the AC cord or plug provided with this equipment. If it does not fit the outlet, have a properly grounded outlet installed by a qualified electrician.

MECHANICAL

Battery Size	2 x 12V 20 amp hour sealed lead acid deep cycle
Speed: Adjustable	2.5 mph / 4.02 kph
Range:	5-7 miles / 8-11.27 km (Varies with weight)
Turning Radius:	50" / 127 cm (Approximate)
Ground Clearance:	1.5" / 3.8cm
Maximum Obstacle Climbing Height:	1.5" / 3.8cm (With Run-Up)
Maximum Incline Climbing Slope:	5 Degrees upward or downward Tires: Flat-free Foam Filled
Maximum weight capacity:	1000 lbs. (454 Kg.)

ELECTRICAL

Input voltage:	100 - 240 VAC, 50/60 HZ	Current: 1.0 Amps
Charger Output voltage:	24 VDC / 1.5Amps	
Classification:	Class B 1P-54	

Manufactured by Burke, Inc. 1800 Merriam Lane Kansas City, Kansas

IMPORTANT

To maximize life and performance you must use batteries with the words "FAA Approved" or "DOT Approved" or "IATA Approved" or "NON-SPILL- ABLE" printed on the battery label. Such batteries have been tested for leakage, vibration, and case cracking resistance and they have met the specified criteria. These batteries are safe to be operated in any position without any problems caused by either liquid or vapor leakage.

NOTICE

AGM-type sealed lead acid deep cycle discharge batteries are recommended for maximum time between charges and maximum battery life in this application. Gel-

type batteries may be used but be aware that some import gel batteries have been shown to liquefy when subjected to vibration or to form gas bubbles near the plates causing significant reduction in battery life.

IMPORTANT

Only "Non-Spillable" sealed AGM-type lead acid deep cycle dis- charge batteries are recommended for use with this Power Drive System. DO NOT use regular car starter batteries. The electrolyte in the AGM-type batteries will never evaporate and they do not require water. They have no danger of hazardous gas or liquid leakage or spillage. These batteries do not have any orientation restrictions. They will operate with full capacity and battery life when mounted in any position.

DIAGNOSTICS & FAULTS

Flash codes indicate the nature of an abnormal condition directly from the TDR Information Gauge. Without the use of any servicing tools, the condition can be simply diagnosed.

CODE	DESCRIPTION	CORRECTION
1	User Fault	Possible stall time-out or user error. Release the joystick to neutral and try again.
2	Battery Fault	Check the batteries and cabling. Try charging the batteries. Batteries may require replacing.
3	Left Motor Fault	Check the left motor, connections and cabling.
4	Right Motor Fault	Check the right motor, connections and cabling.
5	Left Park Brake Fault	Check the left park brake, connections and cabling.
6	Right Park Brake Fault	Check the right park brake, connections and cabling.
7	Joystick Console Fault	1. Check the Communications Bus connections and wiring 2. Replace the Joystick Console.
8	Power Module Fault	1. Check console connections and wiring 2. Replace the Power Module.
9	Communications Fault	1. Check console connections and wiring 2. Replace the Bus cable.
10	Unknown Fault	Check all connections and wiring.

If the light continues to flash after following the procedures in the LED Diagnostic Code chart, do not drive the bed. Notify your dealer for repair

CLEANING

Clean the mattress provided with the bed by wiping down with a cloth or sponge using mild soap and water only.

The hand pendant, scale display (optional), side rails, and bed frame can also be cleaned with a damp cloth or sponge and warm, soapy water.

Do not use any scouring or abrasive cleaners on the bed.

⚠CAUTION

Do not hose down, high pressure spray, or place the bed in a shower as this may cause damage to the electronics system and void the warranty.

If any bed electrical components should become wet, disconnect the bed from the wall outlet until the device is thoroughly dry.

STORAGE OF THE BED

This equipment is provided with a battery back up. To insure the longevity of the battery back up we recommend that the bed be plugged into an appropriate wall outlet to keep battery charged when not in use for extended periods of time. Failure to do so could render the battery backup system inoper- able.

⚠CAUTION

Store in a clean dry area. Dampness may affect electronic components and cause rust.

LIMITED WARRANTY

This warranty is extended only to the original purchaser who purchases this product when new and unused from Vitalgo or a dealer. This warranty is not extended to any other person or entity and is not transferable or assignable to any subsequent purchaser or owner.

Coverage -

The coverage under this warranty will end upon any such subsequent sale or other transfer of title to any other person.
Vitalgo warrants the mechanical and electrical components of this product when purchased new and unused to be free from defects in materials and workmanship for a period of one year from date of purchase from Vitalgo or a dealer, with a copy of the seller's invoice required for coverage under this warranty.
If within such warranty periods any such product shall be proven to be defective, such product shall be repaired or replaced, at Vitalgo's option.
For warranty service, please contact the dealer from whom you purchased your Vitalgo Product.

LIMITATIONS AND EXCLUSIONS:

THE FOREGOING WARRANTY SHALL NOT APPLY TO SERIAL NUMBERED PRODUCTS IF THE SERIAL NUMBER HAS BEEN REMOVED OR DEFACED, PRODUCTS SUBJECTED TO NEGLIGENCE, ACCIDENT, IMPROPER OPERATION, MAINTENANCE OR STORAGE, PRODUCTS MODIFIED WITHOUT VITALGO'S EXPRESS WRITTEN CONSENT (INCLUDING, BUT NOT LIMITED TO MODIFICATION THROUGH THE USE OF UNAUTHORIZED PARTS OR ATTACHMENTS); PRODUCTS DAMAGED BY REASON OF REPAIRS MADE TO ANY COMPONENT WITHOUT THE SPECIFIC CONSENT OF VITALGO, OR TO A PRODUCT DAMAGED BY CIRCUMSTANCES BEYOND VITALGO'S CONTROL, AND SUCH EVALUATION WILL BE SOLELY DETERMINED BY VITALGO .
THE WARRANTY SHALL NOT APPLY TO NORMAL WEAR AND TEAR OR FAILURE TO ADHERE TO THE PRODUCT INSTRUCTIONS.
THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES WHATSOEVER, WHETHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND THE SOLE REMEDY FOR VIOLATIONS OF ANY WARRANTY WHATSOEVER, SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT PURSUANT TO THE TERMS CONTAINED HEREIN. THE APPLICATION OF ANY IMPLIED WARRANTY WHATSOEVER SHALL NOT EXTEND BEYOND THE DURATION OF THE EXPRESS WARRANTY PROVIDED HEREIN.
VITALGO SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES WHATSOEVER.

THIS WARRANTY SHALL NOT APPLY IF ANY CHANGE HAS BEEN MADE TO THE BED IN ANY WAY AND THE BED WAS NOT USED ACCORDING TO THIS INSTRUCTION MANUAL

ABOUT VITALGO SYSTEMS LTD.

VitalGo is comprised of both engineers and business executives who believe that functionality must come hand in hand with quality. All designs and final products are judged against the highest manufacturing standards, ensuring that every VitalGo product delivers the maximum levels of safety, comfort, functionality and reliability. At VitalGo, we are convinced that working to the highest standards is the only way; and every member of our team is proud to stand behind every one of our products.

OUR MISSION

Vitalgo's mission is to develope and produce advanced medical equipment, for giving better patient treatment, safety, reduce injuries of the patient and care givers, while giving a better medical treatment possibilities.

FLAGSHIP PRODUCT

VitalGo's flagship product, the innovative Total-Lift™ line of beds, which sets a new standard patient care in user and caregiver safety for use in hospitals, nursing homes, rehabilitation facilities and in private homes, the Total-Lift™ Bed is the only bed that can raise the user from a lying position to a full standing position and all inbetween positions.

NORTH-AMERICA OFFICE
3520 NW 56th St.
Fort Lauderdale,
FL 33309
U.S.A.
Tel: 1-516-280-2801.
Toll-free (877) 678-6781

sales@vitalgosys.com
www.vitalgosys.com