Electric and Manual Beds

Full Electric Bed
Semi-Electric Beds
Manual Beds
Bariatric Bed

DEALER: THIS MANUAL MUST BE GIVEN TO THE USER OF THE BED.

USER: BEFORE USING THIS BED, READ THIS MANUAL AND SAVE FOR FUTURE REFERENCE.
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 IF APPLICABLE BEFORE ATTEMPTING TO USE THIS EQUIPMENT - OTHERWISE INJURY OR DAMAGE MAY RESULT.

PROCEDURES OTHER THAN THOSE DESCRIBED IN THIS MANUAL MUST BE PERFORMED BY A QUALIFIED TECHNICIAN.

SPECIAL NOTES

NOTICE

THE INFORMATION CONTAINED IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE.

WARNINGS/CAUTION notices used in this manual apply to hazards or unsafe practices which could result in personal injury and/or property damage.

NOTICE

Allow a slight pause between adjustments and avoid pressing multiple buttons at the same time. If pendant buttons are depressed too rapidly or multiple buttons are depressed at the same time, the desired feature may not activate. Simply release the pendant button, permit a slight pause, and then activate the next operation.

SAVE THESE INSTRUCTIONS
TABLE OF CONTENTS

SPECIAL NOTES ........................................................................................................................................... 2
TABLE OF CONTENTS ...................................................................................................................................... 3
SAFETY SUMMARY ......................................................................................................................................... 4
SPECIFICATIONS ............................................................................................................................................... 7
GENERAL GUIDELINES ................................................................................................................................... 9
WARNIMG/CAUTION LABEL LOCATION - ALL BEDS EXCEPT THE BARIATRIC BED ........................................ 9
WARNIMG/CAUTION LABEL LOCATION - THE BARIATRIC BED ONLY .................................................... 10
PACKAGING HANDLING .................................................................................................................................. 11
PROCEDURE 1 - ASSEMBLY ...................................................................................................................... 12
CONNECTING THE HEAD/FOOT SECTIONS .................................................................................................. 12
CONNECTING THE SPRING FABRIC ............................................................................................................. 14
ADJUSTING AND RECONNECTING THE HEAD SPRING PULL TUBE ....................................................... 14
RAISING THE BED ENDS (FULL ELECTRIC BEDS ONLY) .......................................................................... 14
ASSEMBLING THE BED ENDS .................................................................................................................. 15
INSTALLING THE CASTERS ....................................................................................................................... 15
INSTALLING FRAME SUPPORT ASSEMBLIES (BARIATRIC BED ONLY) ............................................... 16
DRIVE SHAFT ASSEMBLY AND INSTALLATION ..................................................................................... 17
CONNECTING THE HEAD END MOTOR TO THE JUNCTION BOX (BARIATRIC BED ONLY) .................. 18
ACTIVATING THE BED FUNCTIONS (FULL/SEMI ELECTRIC BEDS ONLY) ............................................... 18
INSTALLING/REMOVING CONNECTORS INTO/FROM THE JUNCTION BOX ........................................... 19
PROCEDURE 2 - OPERATION/ADJUSTMENT .............................................................................................. 20
FULL ELECTRIC OPERATION ......................................................................................................................... 20
RAISING AND LOWERING THE ENTIRE BED .......................................................................................... 20
RAISING AND LOWERING THE HEAD AND FOOT SECTIONS .................................................................... 21
SEMI-ELECTRIC OPERATION ...................................................................................................................... 21
RAISING AND LOWERING THE ENTIRE BED .......................................................................................... 22
RAISING AND LOWERING THE HEAD AND FOOT SECTIONS .................................................................... 22
MANUAL BED OPERATION ........................................................................................................................... 23
RAISING AND LOWERING THE ENTIRE BED .......................................................................................... 23
RAISING AND LOWERING THE HEAD SECTION ....................................................................................... 24
RAISING AND LOWERING THE FOOT SECTION .......................................................................................... 24
OPTIONAL BED RAILS ................................................................................................................................... 25
MAINTENANCE ................................................................................................................................................ 27
OPERATIONAL BED CHECKOUT - HOME CARE BEDS ........................................................................... 27
WARRANTY .................................................................................................................................................... 30
<table>
<thead>
<tr>
<th>WARNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check all parts for shipping damage and test before using. In case of damage, DO NOT use. Contact a qualified technician for further instruction.</td>
</tr>
<tr>
<td>After ANY adjustments, repair or service and BEFORE use, make sure all attaching hardware is tightened securely.</td>
</tr>
<tr>
<td>The manual/electric bed is for home use ONLY. It is NOT for nursing home facility OR hospital use and was NOT designed to meet nursing home facility OR hospital standards.</td>
</tr>
<tr>
<td>Close supervision is necessary when the manual/electric bed is used by or near CHILDREN/PHYSICALLY CHALLENGED INDIVIDUALS.</td>
</tr>
<tr>
<td>DO NOT allow ANY individual under the manual/electric bed at ANY time.</td>
</tr>
<tr>
<td>DO NOT leave the electric bed unattended when it is plugged in.</td>
</tr>
<tr>
<td>When using liquids of ANY kind in or around the electric bed, care should be taken to ensure that they are NOT spilled. If a liquid is spilled in or around the electric bed, UNPLUG the electric bed IMMEDIATELY. Clean up the spill and allow the electric bed or the area around the electric bed to dry thoroughly BEFORE using the electric controls again.</td>
</tr>
<tr>
<td>The manual/electric bed is NOT designed to be used as a patient transport. When transporting a patient, use an approved patient transport. Otherwise, injury or damage may result.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OPERATING INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>When operating/moving manual/electric 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.</td>
</tr>
<tr>
<td>After the manual/electric bed has been assembled, ALWAYS test to make sure that all sections of the manual/electric bed are properly and securely in place BEFORE using.</td>
</tr>
<tr>
<td>Make sure head and foot springs/sections are securely locked to the head and foot boards BEFORE use.</td>
</tr>
<tr>
<td>The pendant cord MUST be routed and secured properly to ensure that cord does NOT become entangled and/or severed during operation of the electric bed.</td>
</tr>
<tr>
<td>Keep ALL moving parts, including the main frame, mattress deck (head and foot springs/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 manual/electric bed.</td>
</tr>
<tr>
<td>The manual/electric bed is equipped with wheel locks. When transferring into OR out of the manual/electric bed, ALWAYS engage the wheel locks. Inspect the wheel locks for correct locking action BEFORE actual use.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REPLACEMENT PARTS/ACCESSORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use masked or nasal type oxygen administering equipment in conjunction with the manual/electric bed ONLY. The use of ANY other type of oxygen administering equipment can result in a fire hazard.</td>
</tr>
<tr>
<td>When using nasal or masked type oxygen administering equipment, the oxygen or air tubing MUST be routed and secured properly to ensure that the tubing does NOT become entangled and/or severed during normal operation of manual/electric bed.</td>
</tr>
</tbody>
</table>
SAFETY SUMMARY (CONTINUED)

WARNING

ALWAYS test to make sure that the side rails are properly and securely in place BEFORE using the manual/electric bed.

Invacare recommends that the mattress be centered on the bed frame. Otherwise, individuals may become entangled between the bed rail and the bed frame.

Physically challenged individuals who CANNOT prevent themselves from rolling/climbing out of the manual/electric bed may require alternative safe means of restraint.

Side rails, when used with a manual/electric bed, DO NOT fall within any weight limitations. Side rails can be deformed or broken if excessive side pressure is exerted on the side rails. Side rails are for the purpose of preventing an individual from rolling/climbing out of the manual/electric bed. If necessary, a physician or a health care professional should be consulted for alternative means of safe restraint. The side rails are NOT intended to be used for restraint purposes.

After raising/lowering the head/foot end of the manual/electric bed, check the distance between the bottom of the bed rail and the mattress. If there is excessive distance between the bottom of the bed rail and the mattress in which individuals may become entangled, adjust the height of the bed rail (if applicable), OR provide alternative means of patient protection.

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

Because of the heavier weight limitations associated with the Bariatric Bed, two (2) brown colored side adjustment clamps are shipped with the 6640 half bed rail. These side adjustment clamps are designed to support heavier weight limitations and MUST be used when installing half length bed rails onto the Bariatric Bed. DO NOT use the chrome colored side adjustment clamps supplied with the half length bed rail kits, as these will NOT support heavier weight limitations and injury or damage may result.

Trapeze units MUST be positioned on either side of the drive shaft (head/foot); as near as possible to the center point of the manual/electric bed. The trapeze is to be used ONLY in ASSISTING the patient in repositioning or transferring in or out of the manual/electric bed.

Traction units MUST be securely fastened to head/foot ends of the manual/electric bed. These units are to be used ONLY for immobilizing a patient in various traction setups or ASSISTING the patient in repositioning or transferring in or out of the manual/electric bed.

NEVER allow patients to use trapeze or traction units as a total individual weight support.

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 Invacare replacement parts and/or accessories.

ELECTRICAL - Grounding Instructions:

Electric beds are equipped with three-prong (grounding) plugs for protection against possible shock hazards. Where a two-prong wall receptacle is encountered, it is the personal responsibility and obligation of the customer to contact a qualified electrician and have the two-prong receptacle replaced with a properly grounded three-prong wall receptacle in accordance with the National Electrical Code. If you must use an extension cord, use ONLY a three-wire extension cord having the same or higher electrical rating as the device being connected. DO NOT, under any circumstances, cut or remove the round grounding prong from any plug used with or for Invacare products. In addition, Invacare has placed red WARNING tags on some equipment. DO NOT remove these tags.
**SAFETY SUMMARY (CONTINUED)**

**WARNING**

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.

For proper grounding, junction box MUST be securely connected to the bed with metal screws and spacer provided or electrical shock could occur.

**REPAIR OR SERVICE INFORMATION**

DO NOT open assemblies such as the motors, hand control unit, junction boxes or electrical control boxes. ONLY qualified technicians are permitted to repair these parts. If unqualified individuals perform any work on these beds, the warranty is voided.

DO NOT use ANY parts or accessories other than those authorized by Invacare.

UNPLUG the power cord when performing any maintenance on the manual/electric bed.

Before installing the connector into the junction box, be sure the side with the locking tab is facing DOWNWARD - otherwise, injury or damage may occur.

DO NOT force the connector into the junction box, otherwise - injury or damage may occur.

**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 LIMITATION**

The TOTAL weight limit of the Invacare 36-inch (91.4 cm) wide Manual/Electric bed (including accessories, mattress, occupant and ANY other person/object positioned on the bed) is 450 pounds (204 kg.).

The weight limit of the occupant of the Bariatric Bed CANNOT exceed 600 pounds (273 kg.). The TOTAL weight limit of the Bariatric Bed (including accessories, mattress, occupant and ANY other person/object positioned on the bed) CANNOT exceed 700 pounds (318 kg.).

NEVER permit more than one (1) person on/in the manual/electric bed at any time.

Body weight should be evenly distributed over the surface of the manual/electric 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.

**BARIATRIC BED**

The frame support assemblies MUST be securely fastened to the bed frame BEFORE use. Otherwise, injury or damage may result.

The head motor connection cord MUST be properly positioned in the four (4) head motor connection cord supports on the underside of the bed frame BEFORE use. Otherwise, injury or damage may result.
# SPECIFICATIONS

## ELECTRIC SPLIT SPRING BED SYSTEM

<table>
<thead>
<tr>
<th>BED NO.</th>
<th>DESCRIPTION</th>
<th>SHIPPING WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>5410</td>
<td>Full Electric</td>
<td>Lbs. 233 Kg. 105</td>
</tr>
<tr>
<td>5310</td>
<td>Semi Electric - Single Crank Hi/Lo</td>
<td>223 101.2</td>
</tr>
<tr>
<td>5210</td>
<td>Semi Electric - Two Crank Hi/Lo</td>
<td>206 93.4</td>
</tr>
<tr>
<td>5110</td>
<td>Semi Electric - Two Crank Hi/Lo</td>
<td>190 86.2</td>
</tr>
</tbody>
</table>

## MANUAL SPLIT SPRING SYSTEM

<table>
<thead>
<tr>
<th>BED NO.</th>
<th>DESCRIPTION</th>
<th>SHIPPING WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>5307</td>
<td>Single Crank - Hi/Lo</td>
<td>Lbs. 201 Kg. 91.2</td>
</tr>
<tr>
<td>5207</td>
<td>Two Crank - Hi/Lo</td>
<td>184 83.5</td>
</tr>
<tr>
<td>5107</td>
<td>Fixed Height</td>
<td>168 76.2</td>
</tr>
</tbody>
</table>

## BARIATRIC BED

<table>
<thead>
<tr>
<th>BED NO.</th>
<th>DESCRIPTION</th>
<th>SHIPPING WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAR600</td>
<td>Full Electric</td>
<td>Lbs. 301 Kg. 136.7</td>
</tr>
</tbody>
</table>

## ADJUSTMENT RANGE - FULL ELECTRIC BED

<table>
<thead>
<tr>
<th>Bed No.</th>
<th>Head End</th>
<th>Foot End</th>
<th>Fabric Height*</th>
<th>Overall</th>
<th>Bed Width</th>
<th>To Ends</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum</td>
<td>Maximum</td>
<td>Minimum</td>
<td>Minimum</td>
<td>Maximum</td>
<td>Length</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Width</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Head</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Foot</td>
</tr>
<tr>
<td>5410</td>
<td>28 7/8 in.</td>
<td>36 3/8 in.</td>
<td>26 1/4 in.</td>
<td>15 in.</td>
<td>23 in.</td>
<td>88 in.</td>
</tr>
<tr>
<td></td>
<td>73.3 cm</td>
<td>92.4 cm</td>
<td>66.7 cm</td>
<td>38 cm</td>
<td>58.3 cm</td>
<td>223.5 cm</td>
</tr>
<tr>
<td>5210</td>
<td>28 7/8 in.</td>
<td>37 1/2 in.</td>
<td>26 1/4 in.</td>
<td>15 in.</td>
<td>23 in.</td>
<td>88 in.</td>
</tr>
<tr>
<td></td>
<td>73.3 cm</td>
<td>95.3 cm</td>
<td>66.7 cm</td>
<td>38 cm</td>
<td>58.3 cm</td>
<td>223.5 cm</td>
</tr>
<tr>
<td>5110</td>
<td>28 3/4 in.</td>
<td>37 5/8 in.</td>
<td>26 1/4 in.</td>
<td>15 in.</td>
<td>23 in.</td>
<td>88 in.</td>
</tr>
<tr>
<td></td>
<td>73.0 cm</td>
<td>95.6 cm</td>
<td>66.7 cm</td>
<td>38 cm</td>
<td>58.3 cm</td>
<td>223.5 cm</td>
</tr>
</tbody>
</table>

*   Height from floor to bottom of mattress.
A  denotes single spring bed system.
Electric homecare beds are U.L. and C.S.A. listed.

## ADJUSTMENT RANGE - BARIATRIC BED (FULL ELECTRIC)

<table>
<thead>
<tr>
<th>Bed No.</th>
<th>Head End</th>
<th>Foot End</th>
<th>Fabric Height*</th>
<th>Overall</th>
<th>Bed Width</th>
<th>To Ends</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum</td>
<td>Maximum</td>
<td>Minimum</td>
<td>Minimum</td>
<td>Maximum</td>
<td>Length</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Width</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Head</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Foot</td>
</tr>
<tr>
<td>BAR600</td>
<td>31.5 in.</td>
<td>39.5 in.</td>
<td>29.0 in.</td>
<td>18 1/4 in.</td>
<td>26 1/4 in.</td>
<td>88.0 in.</td>
</tr>
<tr>
<td></td>
<td>80.0 cm</td>
<td>100.3 cm</td>
<td>73.7 cm</td>
<td>46.3 cm</td>
<td>66.6 cm</td>
<td>223.5 cm</td>
</tr>
</tbody>
</table>

## ADJUSTMENT RANGE - SEMI ELECTRIC BED

<table>
<thead>
<tr>
<th>Bed No.</th>
<th>Head End</th>
<th>Foot End</th>
<th>Fabric Height*</th>
<th>Overall</th>
<th>Spring Bed Width</th>
<th>To Ends</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum</td>
<td>Maximum</td>
<td>Minimum</td>
<td>Minimum</td>
<td>Maximum</td>
<td>Length</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Width</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Head</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Foot</td>
</tr>
<tr>
<td>5310</td>
<td>28 7/8 in.</td>
<td>37 5/8 in.</td>
<td>26 1/4 in.</td>
<td>15 in.</td>
<td>38 cm</td>
<td>88 in.</td>
</tr>
<tr>
<td></td>
<td>73.3 cm</td>
<td>95.6 cm</td>
<td>66.7 cm</td>
<td>38 cm</td>
<td>58.3 cm</td>
<td>223.5 cm</td>
</tr>
<tr>
<td>5210</td>
<td>28 7/8 in.</td>
<td>37 1/2 in.</td>
<td>26 1/4 in.</td>
<td>15 in.</td>
<td>38 cm</td>
<td>88 in.</td>
</tr>
<tr>
<td></td>
<td>73.3 cm</td>
<td>95.3 cm</td>
<td>66.7 cm</td>
<td>38 cm</td>
<td>58.3 cm</td>
<td>223.5 cm</td>
</tr>
<tr>
<td>5110</td>
<td>28 3/4 in.</td>
<td>24 3/4 in.</td>
<td>15 in.</td>
<td>88 in.</td>
<td>36 in.</td>
<td>43 in.</td>
</tr>
<tr>
<td></td>
<td>73.0 cm</td>
<td>62.9 cm</td>
<td>38 cm</td>
<td>223.5 cm</td>
<td>91.4 cm</td>
<td>109.2 cm</td>
</tr>
</tbody>
</table>

*   Height from floor to bottom of mattress.
A  denotes single spring bed system.
Homecare beds are U.L. and C.S.A. listed.
### SPECIFICATIONS (CONTINUED)

**ADJUSTMENT RANGE - MANUAL BED**

<table>
<thead>
<tr>
<th>Bed No.</th>
<th>Head End Minimum</th>
<th>Head End Maximum</th>
<th>Foot End Minimum</th>
<th>Foot End Maximum</th>
<th>Fabric Height Minimum</th>
<th>Fabric Height Maximum</th>
<th>80 in. Spring (203.2 cm) Overall Length</th>
<th>Bed Width to Ends</th>
<th>Split Springs to Ends</th>
</tr>
</thead>
<tbody>
<tr>
<td>5307</td>
<td>28 7/8 in.</td>
<td>37 1/4 in.</td>
<td>26 1/4 in.</td>
<td>34 7/8 in.</td>
<td>15 in.</td>
<td>23 in.</td>
<td>88 in.</td>
<td>36 in.</td>
<td>43 in.</td>
</tr>
<tr>
<td></td>
<td>73.3 cm</td>
<td>94.6 cm</td>
<td>66.7 cm</td>
<td>88.3 cm</td>
<td>38 cm</td>
<td>58.3 cm</td>
<td>223.5 cm</td>
<td>91.4 cm</td>
<td>109.2 cm</td>
</tr>
<tr>
<td>5207</td>
<td>28 7/8 in.</td>
<td>37 1/2 in.</td>
<td>26 1/4 in.</td>
<td>35 in.</td>
<td>15 in.</td>
<td>23 in.</td>
<td>88 in.</td>
<td>36 in.</td>
<td>43 in.</td>
</tr>
<tr>
<td></td>
<td>73.3 cm</td>
<td>95.3 cm</td>
<td>66.7 cm</td>
<td>88.9 cm</td>
<td>38 cm</td>
<td>58.3 cm</td>
<td>223.5 cm</td>
<td>91.4 cm</td>
<td>109.2 cm</td>
</tr>
<tr>
<td>5107</td>
<td>28 1/2 in.</td>
<td>24 5/8 in.</td>
<td>15 in.</td>
<td>38 cm</td>
<td>88 in.</td>
<td>45 in.</td>
<td>223.5 cm</td>
<td>91.4 cm</td>
<td>109.2 cm</td>
</tr>
<tr>
<td></td>
<td>72.4 cm</td>
<td>62.5 cm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Height from floor to bottom of mattress.

A denotes single spring bed system.

Homecare beds are U.L. and C.S.A. listed.

The following list comprises each bed and components associated with it. An "X" will denote the components required for a complete bed assembly.

<table>
<thead>
<tr>
<th>BED NO.</th>
<th>5410</th>
<th>5411 CANADA</th>
<th>5310</th>
<th>5311 CANADA</th>
<th>5210</th>
<th>5211 CANADA</th>
<th>5110</th>
<th>5111 CANADA</th>
<th>5307</th>
<th>5207</th>
<th>5107</th>
<th>BAR600</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEAD SPRING (5000)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FULL ELECTRIC ENDS (5401)</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SINGLE CRANK HI/LO ENDS (5301)</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TWO CRANK HI/LO ENDS (5200)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIXED HEIGHT ENDS (5100)</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOOT SPRING THREE MOTORS (5490)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOOT SPRING THREE MOTORS CANADA (5491)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOOT SPRING TWO MOTORS (5890)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOOT SPRING TWO MOTORS CANADA (5891)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOOT SPRING TWO CRANK (5770)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BARIATRIC BED HEAD END SECTION (BAR5000)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BARIATRIC BED FOOT END SECTION THREE MOTORS (BAR5490)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BARIATRIC BED FULL ELECTRICAL ENDS (BAR5401)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
WARNING/CAUTION LABEL LOCATION - ALL BEDS EXCEPT THE BARIATRIC BED

NOTE: Underside of bed shown

---

**WARNING**

Grounding reliability can ONLY be achieved when the equipment is connected to a receptacle marked "Hospital Only" or "Hospital Grade".

---

**WARNING**

For proper grounding, junction box MUST be securely connected to the bed with metal screws and spacer provided or electrical shock could occur.

---

**WARNING**

ELECTRICAL GROUNDING INSTRUCTIONS

This device is equipped with a three-prong (grounding) plug for your protection against possible shock hazards. Where a two prong wall receptacle is encountered, it is the personal responsibility and obligation of the customer to contact a qualified electrician and have it replaced with a properly grounded three-prong wall receptacle in accordance with the national electrical code. If you must use an extension cord, use only a three-wire extension cord having the same or higher electrical rating as the device being connected. Do not under any circumstance cut or remove the round grounding prong from this plug.

DO NOT REMOVE THIS TAG

---

**NOTE:** Underside of bed shown
WARNING/CAUTION LABEL LOCATION - BARIATRIC BED

**WARNING**
The frame support assemblies MUST be securely fastened to the bed frame BEFORE use. Otherwise, injury or damage may result.

Rev. A (1)-05/00  P/N 1098344

**WARNING**
The weight limit of the occupant of the Invacare Bariatric Bed CANNOT exceed 600 pounds. The TOTAL weight limit of the Invacare Bariatric Bed (including accessories, mattress, occupant and ANY other person/object positioned on the bed) cannot exceed 700 pounds.

Rev. A (1)-05/00  P/N 1098343

**WARNING**
The Invacare Bariatric Bed is NOT designed to be used as a patient transport. When transporting a patient, use an approved patient transport. Otherwise, injury or damage may result.

Rev. A (1)-05/00  P/N 1098347

**WARNING**
The head motor connection cord MUST be properly positioned in the four (4) head motor connection cord supports on the underside of the bed frame BEFORE use. Otherwise, injury or damage may result.

Rev. A (1)-05/00  P/N 1098345

**WARNING**
Grounding reliability can ONLY be achieved when the equipment is connected to a receptacle marked “Hospital Only” or “Hospital Grade”.

Rev. D (1)-02/00  P/N 034059

---

NOTE: Underside of bed shown

NOTE: Warning Label 034059 goes on the power cord. The power cord is NOT shown.
PACKAGING/HANDLING

UNPACKING
1. Check bed components for any obvious damage to the carton or its contents. If damage is evident, contact your local INVACARE dealer.
2. Remove any loose packing from the cartons.
3. Carefully remove all components from the cartons.

CAUTION
DO NOT attempt to operate bed controls prior to completion of assembly as damage to bed components may occur.

The three cartons and contents are as follows;

1. BED END carton:
   - One (1) HEADBOARD.
   - One (1) FOOTBOARD (crank assembled on Bed Nos. 5211, 5307, 5310 and 5311).
   - One (1) Drive Shaft Assembly, two-piece.
   - Four (4) Casters (two (2) locking and two (2) non-locking casters).
   - Two (2) Side Adjustment Clamps (for use with half length bed rails - model number 6640) (Bariatric Bed ONLY).

   NOTE: Set the Drive Shaft Assembly aside for bed Nos. 5307, 5310, 5312, 5313, and 5410 ends only.

2. FOOT SPRING carton:
   - One (1) FOOT SPRING (electric beds include pendant, junction box and cord).
   - One (1) Emergency crank handle (electric beds ONLY).
   - Two (2) Frame Support Assemblies (Bariatric Bed ONLY).

3. HEAD SPRING carton:
   - One (1) HEAD SPRING.

INSPECTION
1. Examine each item carefully for scratches, nicks, dents or any other apparent damage.

   NOTE: For semi-electric and full electric beds:

2. Inspect the power supply cord for cuts or damage to the cord and/or plug.
3. Inspect the junction box for any damage to the connectors.
4. Ensure that the motor plugs are in good working order and fit properly into the junction box.

STORAGE
1. If bed is not to be assembled immediately, retain the cartons and packaging for storage until assembly is to be performed.
2. Store the repackaged Invacare homecare bed in a dry area.
3. DO NOT place other objects on top of the repackaged cartons.

NOT Shown:
Junction Box w/ Cord Pendant Emergency Crank Handle
This Procedure Includes the following:

Connecting the Head/Foot Sections
Connecting the Spring Fabric
Adjusting and Reconnecting the Head Spring Pull Tube
Raising the Bed Ends (Full Electric Bed Only)
Assembling the Bed Ends
Installing the Casters
Installing Frame Support Assemblies (Bariatric Bed Only)
Drive Shaft Assembly and Installation
Connecting the Head End Motor to the Junction Box (Bariatric Bed Only)
Activating the Bed Functions (Full/SemiElectric Beds Only)

CAUTION
DO NOT attempt to operate bed controls prior to completion of assembly as damage to bed components or personal injury may occur.

CONNECTING THE HEAD/FOOT SECTIONS

ALL BEDS

All Semi/Full Electric and Manual Beds EXCEPT the Bariatric Bed (FIGURE 1)

NOTE: The following procedure applies to all full electric beds EXCEPT the Bariatric Bed.

1. Remove the head spring (MODEL 5000) of the bed from the packaged container and place it on its side to your LEFT with the center mounting latches to your RIGHT.

2. Remove the foot spring of the bed from the packaged container and place it on its side to your RIGHT with the head spring pull tube at the top of the assembly and the center mounting rivets facing to the LEFT.

3. For semi-electric (5890 AND 5891) and full-electric (5490 AND 5491) foot spring, the motors should be to your RIGHT and for manual foot spring (5770), the crank handles will be to your RIGHT.

4. The head and foot spring should now be on their side at approximately a 90° angle to one another.

FIGURE 1 - CONNECTING THE HEAD/FOOT SECTIONS - ALL SEMI/FULL ELECTRIC AND MANUAL BEDS EXCEPT THE BARIATRIC BED
5. Hook the BOTTOM head spring center mounting latches to the BOTTOM foot spring center mounting rivets.

6. Hook the TOP head spring center mounting latches to the TOP foot spring center mounting rivets.

NOTE: It may be necessary to lift slightly on the head spring or foot spring to secure the mounting latches and rivets.

7. After head and foot springs are connected, push the springs into a horizontal (straight) position while still on their sides.

**Bariatric Bed ONLY (FIGURE 2)**

NOTE: The following procedure applies to the Bariatric Bed ONLY.

NOTE: Invacare recommends that two (2) people perform this procedure.

1. Remove the head end section of the bed from the packaged container and place it on its side to your RIGHT with the center mounting latches to your LEFT.

2. Remove the foot end section of the bed from the packaged container and place it on its side to your LEFT with the center mounting rivets facing to your RIGHT.

3. The bed end section with two (2) motor assemblies (FOOT end section) should be to your LEFT and the bed end section with one (1) motor assembly (HEAD end section) should be to your RIGHT.

4. The head and foot end sections of the bed should now be on their side at a 130° angle to one another.

NOTE: Before connecting the head and foot end sections, make sure the pull tube on the foot end section is positioned on the underside of the pan deck on the head end section.

5. Hook the TOP center mounting latch on the HEAD end section of the bed with the TOP center mounting rivet on the FOOT end section of the bed.

6. With one (1) person holding the TOP of the bed together, have the other person hook the BOTTOM center mounting latch on the HEAD end section of the bed with the BOTTOM center mounting rivet on the FOOT end section of the bed.

NOTE: It may be necessary to grasp the center support of the foot end section of the bed so that the BOTTOM center rivet can be maneuvered into the BOTTOM center mounting latch.

NOTE: It may be necessary to slightly lift the head OR foot end sections of the bed to secure the center rivets into the center mounting latches.

7. After the head and foot end sections of the bed are connected, push the ends into a horizontal (straight) position while still on their sides.

---

**FIGURE 2 - CONNECTING THE HEAD/FOOT SECTIONS - BARIATRIC BED ONLY**
**PROCEDURE 1**

**ASSEMBLY**

**CONNECTING THE SPRING FABRIC (FIGURE 3)**

**ALL BEDS EXCEPT THE BARIATRIC BED**

*NOTE: The following procedure applies to ALL beds EXCEPT the Bariatric Bed.*

1. Lift the head spring upward to give slack to the fabric, and connect the spring fabric together with the links provided.

![Figure 3 - Connecting the Spring Fabric](image)

**FIGURE 3 - CONNECTING THE SPRING FABRIC**

**ADJUSTING AND RECONNECTING THE HEAD SPRING PULL TUBE (FIGURE 4)**

**ALL BEDS EXCEPT THE BARIATRIC BED**

*NOTE: The following procedure applies to ALL beds EXCEPT the Bariatric Bed.*

1. To provide up/down movement of the head section, disconnect the head pull-tube assembly from the side frame of the foot spring by removing the hitch pin, grommet and washer from the clevis pin.
2. Extend the inner pull tube shaft manually until the spring button "clicks" into the adjustment hole of the outer pull tube.
3. The spring button should protrude through the adjustment hole of the now extended pull tube arm will line up with the lift arm slot.
4. Connect the pull tube end assembly to the lift arm of the head spring by inserting the clevis pin into the lift arm slot; reconnect the grommet and washer. Secure with hitch pin.

![Figure 4 - Adjusting and Reconnecting the Head Spring Pull Tube](image)

**FIGURE 4 - ADJUSTING AND RECONNECTING THE HEAD SPRING PULL TUBE**

**RAISING THE BED ENDS (FIGURE 5)**

**ALL FULL ELECTRIC BEDS**

*NOTE: The following procedure applies to ALL full electric beds ONLY.*

1. The bed legs must now be raised 1/4-inch (.6 cm). This can be accomplished by inserting the manual crank into the foot end gear box receptacle and turning clockwise until the bed end is at the correct height.
2. Insert the crank into the head end receptacle and raise the head end to the correct height.

![Figure 5 - Raising the Bed Ends](image)

**FIGURE 5 - RAISING THE BED ENDS**
ASSEMBLING THE BED ENDS (FIGURE 6)

NOTE: The following procedure applies to ALL beds.

NOTE: Invacare recommends that two (2) people perform this procedure for the Bariatric Bed.

NOTE: When connecting the bed ends (headboard and footboard), remember that the headboard is the taller of the two.

1. Stand the headboard as close to the head spring as possible.
2. With one hand, grasp the head spring frame and raise it until the rivets on the corner plates of the spring are at the correct height to fit into the corner locks on the headboard.
3. Tilt the headboard backward slightly and the rivets should slide into the corner locks more easily.
4. When the headboard is returned to its full upright position, the headboard will lock into place.
5. Repeat the same procedure for the footboard.

INSTALLING THE CASTERS (FIGURE 7)

NOTE: The following procedure applies to ALL beds.

WARNING

The proper casters are provided with the Bariatric Bed. DO NOT use any other casters with the Bariatric Bed. Otherwise, injury or damage may result.

NOTE: Invacare recommends that two (2) people perform this procedure for the Bariatric Bed.

NOTE: Position the two (2) locking casters diagonally opposite from one another.

NOTE: If two (2) locking casters are NOT included with the bed, contact a qualified dealer.

1. Install casters by carefully lifting the bed ends approximately 5-inches (12.7 cm) from the floor and insert the shaft of caster assembly into the caster socket.
2. To prevent excess movement of the bed, lock each of the two (2) locking casters by pushing DOWN on the side of the caster lock that is labeled ON.
3. To unlock each of the two (2) locking casters, push DOWN on the side of the caster lock that is labeled OFF.
INSTALLING FRAME SUPPORT ASSEMBLIES (FIGURE 8)

BARIATRIC BED ONLY

NOTE: The following procedure applies to the Bariatric Bed ONLY.

WARNING

The frame support assemblies MUST be securely fastened to the bed frame BEFORE use. Otherwise, injury or damage may result.

NOTE: Two (2) people are required when performing this procedure.

1. Unfold one (1) frame support assembly so that the center mounting bracket is in the middle and the two (2) side support mounting brackets are on either side (DETAIL "A").

2. Position the LARGE mounting hole on one (1) side of the support mounting bracket over the rivet near the HEAD end section of the bed.

3. Pull the frame support assembly toward the FOOT end section of the bed until the rivet near the HEAD end section of the bed slides into the SMALL mounting hole in the side support bracket.

4. While performing STEP 3, position the LARGE mounting hole in the opposite frame support bracket over the rivet near the FOOT end section of the bed.

5. Allow the frame support assembly to hang from the two (2) rivets.

NOTE: Make sure the two (2) rivets on either side of the bed are positioned in the two (2) SMALL mounting holes in the frame support assemblies.

6. Rotate the center mounting bracket until the mounting hole aligns with the mounting hole in the side of the bed frame.

NOTE: It may be necessary to lift up on the side of the bed frame so that the mounting holes in the center mounting bracket align with the mounting holes in the bed frame assembly.

7. Install the bolt through the mounting hole in the center mounting bracket and through the mounting hole in the bed frame assembly. Securely tighten with the bolt.

8. Repeat STEPS 1-7 for the opposite frame support assembly.

DETAIL "A"

Frame Support Assembly

Center Mounting Bracket

Side Support Mounting Bracket

Bed Frame

Rivet

Large Mounting Hole

Small Mounting Hole

Rotate Up

Foot End

Head End

FIGURE 8 - INSTALLING THE FRAME SUPPORT ASSEMBLIES (BARIATRIC BED ONLY)
**DRIVE SHAFT ASSEMBLY AND INSTALLATION (FIGURE 9)**

**ALL BEDS**

*NOTE: The following procedure applies to ALL beds.*

The drive shaft is composed of two (2) sections. The inner shaft which has a positioning spring button, and the outer shaft, which has two (2) positioning holes and one (1) storage position hole. Together they make the telescoping drive shaft used on all manual and electric Hi/Lo model beds.

1. Remove the plastic caps from each end of the drive rod.
2. Depress spring button on the inner shaft and insert the inner shaft into the outer shaft.
3. Slide the inner shaft to the desired position for the type of bed being used and engage the spring button into the proper positioning hole.
4. For semi-electric and manual beds, engage the spring button into the furthestmost positioning hole in outer shaft.
5. For full-electric models, engage the spring button into the positioning hole in the outer shaft located next to the semi-electric/manual positioning hole.

6. Connect the drive shaft to the bed by attaching either end of the drive shaft to the head end gear box.
7. Connect the other end to the Hi/Lo motor output shaft and then connect the foot end gearbox output shaft to the Hi/Lo motor output shaft spring-loaded coupler.
8. Release the drive shaft spring-loaded coupler by pushing in against the spring-loaded coupler and turn it clockwise.
9. Locate the Hi/Lo motor output shaft spring-loaded coupler.
10. Release the Hi/Lo motor output shaft spring-loaded coupler to properly connect with the foot end gear box output shaft by pushing in against the Hi/Lo motor output shaft spring-loaded coupler and turning it clockwise.
11. The coupling will release and engage the foot end output shaft.
12. Ensure that all components are securely installed.

*NOTE: Since there is no Hi/Lo motor for semi-electric Single Crank, Two Crank and manual beds with Hi/Lo functions, the drive shaft will mount directly into the foot end gearbox output shaft.*

---

**FIGURE 9 - DRIVE SHAFT ASSEMBLY AND INSTALLATION**
CONNECTING THE HEAD END MOTOR TO THE JUNCTION BOX (FIGURE 10)

BARIATRIC BED ONLY

NOTE: The following procedure applies to the Bariatric Bed ONLY.

WARNING

The head motor connection cord MUST be properly positioned in the four (4) head motor connection cord supports on the underside of the bed frame BEFORE use. Otherwise, injury or damage may result.

NOTE: To disconnect the head end motor from the junction box, reverse the following steps.

1. Locate the head motor connection cord that connects the junction box to the head end motor.

NOTE: The Bariatric Bed is shipped with the head motor connection cord positioned in the head motor connection cord supports on the foot end section of the bed.

2. Locate the two (2) head motor connection cord supports on the head end section of the bed.

3. Feed the head motor connection cord through the two (2) head motor connection cord supports.

4. Connect the WHITE connector of the head motor connection cord to the WHITE connector of the head end motor.

ACTIVATING THE BED FUNCTIONS (FIGURE 11)

ALL FULL/SEMI ELECTRIC BEDS

NOTE: The following procedure applies to ALL full/semi electric beds ONLY.

1. Recheck all electrical connections on junction box at foot end ensuring that all motors are plugged into the correct locations.

2. Plug the junction box cord into a properly grounded 110-volt, 60 cycle outlet.
INSTALLING/ REMOVING CONNECTORS INTO/ FROM THE JUNCTION BOX (FIGURE 12)

NOTE: The following procedure to ALL full/semi electric beds ONLY.

Installing

**WARNING**
Before installing the connector into the junction box, be sure the locking tab is facing DOWNWARD - otherwise, injury or damage may occur.

1. Grasp the connector and position it so the locking tab is facing DOWNWARD (FIGURE 1).

**WARNING**
DO NOT force the connector into the junction box, otherwise - injury or damage may occur.

2. Gently, push the connector into the appropriate slot on the junction box until it locks into place and an audible "click" is heard (FIGURE 1).

NOTE: The junction box may include two (2) slots (a slot for head end motor and a slot for the foot end motor) OR three (3) slots (a slot for head end motor, a slot for the foot end motor and a slot for the bed motor [raising lowering the entire bed]) depending on model type.

3. If the connector DOES NOT slide easily into the slot on the junction box, check to make sure the locking tab is facing DOWNWARD and repeat STEP 2.

Removing

1. Push down on the end of the locking tab on the connector (FIGURE 1).

2. While performing STEP 1, pull the connector away from the junction box.

NOTE: Full Electric Bed Shown.
This Procedure Includes the following:

Full Electric Operation
Semi-Electric Operation
Manual Bed Operation
Optional Bed Rails

FULL-ELECTRIC AND BARIATRIC BED OPERATION (FIGURE 1)

1. The accompanying pictures detail the full-electric beds and will acquaint the user with the bed functions and controls.
2. Operate the bed through all phases of its operation.
3. If any problems arise during test, recheck all electrical connections and mechanical hook ups.
4. Full-Electric beds use a six (6) function pendant for all bed operation.
5. All Full-Electric beds come with an emergency crank to allow continued operation in the event of a power outage.

TO RAISE ENTIRE BED - FULL ELECTRIC BEDS

Depress button “BED” “UP” as shown on pendant control. This will raise the entire height of the bed.

TO LOWER ENTIRE BED - FULL ELECTRIC BEDS

Depress button “BED” “DOWN” as shown on pendant control. This will lower the entire height of the bed.

FIGURE 1 - FULL-ELECTRIC BED - 5410

NOTE: Bariatric Bed NOT SHOWN. Follow steps for Full Electric Beds.
Raising and Lowering the Head and Foot Sections (Full-Electric and Bariatric Beds [FIGURE 3])

TO RAISE THE HEAD SPRING SECTION
FULL ELECTRIC BEDS

Depress button “HEAD UP” as shown on pendant control. This will raise the head portion of the bed ONLY.

TO LOWER THE HEAD SPRING SECTION
FULL ELECTRIC BEDS

Depress button “HEAD DOWN” as shown on pendant control. This will lower the head portion of the bed ONLY.

TO RAISE THE FOOT SPRING SECTION
FULL ELECTRIC BEDS

Depress button “FOOT UP” as shown on pendant control. This will raise the foot portion of the bed ONLY.

TO LOWER THE FOOT SPRING SECTION
FULL ELECTRIC BEDS

Depress button “FOOT DOWN” as shown on pendant control. This will lower the foot portion of the bed ONLY.

FIGURE 3 - RAISING AND LOWERING THE HEAD AND FOOT SECTIONS (FULL-ELECTRIC AND BARIATRIC BEDS)

NOTE: Bariatric Bed NOT SHOWN. Follow steps for Full Electric Beds.

SEMI-ELECTRIC OPERATION

SEMI-ELECTRIC OPERATION (FIGURE 4)

1. The accompanying pictures detail the semi-electric beds with the hi/lo and foot crank locations where applicable.

2. The semi-electric Single Crank beds with Hi/Lo operation (model 5310) and Two Crank beds with Hi/Lo operation (model 53210) use a four (4) function pendant for head and footspring functions and a hand crank for hi/lo bed operation.

3. The semi-electric fixed height beds (model 5310) will feature head and foot section operation but the overall bed height is fixed and cannot be altered.

4. Determine your particular semi-electric bed to assist in the operation of the features of the bed.

5. Operate the bed through all phases of its operation.

6. If any problems arise during test, recheck all electrical connections and mechanical hook ups.

7. All semi-electric beds come with an emergency crank to allow continued operation in the event of a power outage.

NOTE: Crank “D” is used at head and foot end to raise the ends individually.

FIGURE 4 - SEMI-ELECTRIC OPERATION

SEMI-ELECTRIC - 5310
Crank “B”
Single Crank Hi/Lo

Crank “D”

SEMI-ELECTRIC - 5210
SEMI-ELECTRIC - 5110
Two Crank Hi/Lo Fixed Height
Raising and Lowering the Entire Bed (Semi-Electric Beds [FIGURE 5])

**TO RAISE ENTIRE BED - SEMI-ELECTRIC BEDS**

Semi-electric single crank - Hi/Lo:
Turn crank "B" clockwise. This will raise the entire height of the bed.

Crank "D"   Crank "B"

Semi-electric two crank - Hi/Lo:
Insert crank "D" into head and foot end. Turn crank clockwise. This will raise the entire height of the bed ends one at a time.

**TO LOWER ENTIRE BED - SEMI-ELECTRIC BEDS**

Semi-electric single crank - Hi/Lo:
Turn crank "B" counter clockwise. This will lower the entire height of the bed.

Crank "D"   Crank "B"

Semi-electric two crank - Hi/Lo:
Insert crank "D" into head and foot end. Turn crank counterclockwise. This will lower the entire height of the bed ends one at a time.

**FIGURE 5 - RAISING AND LOWERING THE ENTIRE BED (SEMI-ELECTRIC BEDS)**

Raising and Lowering the Head and Foot Sections (Semi-Electric Beds [FIGURE 6])

**TO RAISE HEAD SPRING SECTION - SEMI-ELECTRIC BEDS**

Semi-electric single crank - Hi/Lo:
Semi-electric two crank - Hi/Lo:
Semi-electric fixed height:
Depress button "HEAD UP" as shown on pendant control. This will raise the head portion of the bed ONLY.

**TO LOWER HEAD SPRING SECTION - SEMI-ELECTRIC BEDS**

Semi-electric single crank - Hi/Lo:
Semi-electric two crank - Hi/Lo:
Semi-electric fixed height:
Depress button "HEAD DOWN" as shown on pendant control. This will lower the head portion of the bed ONLY.

**TO RAISE FOOT SPRING SECTION - SEMI-ELECTRIC BEDS**

Semi-electric single crank - Hi/Lo:
Semi-electric two crank - Hi/Lo:
Semi-electric fixed height:
Depress button "FOOT UP" as shown on pendant control. This will raise the foot portion of the bed ONLY.

**TO LOWER FOOT SPRING SECTION - SEMI-ELECTRIC BEDS**

Semi-electric single crank - Hi/Lo:
Semi-electric two crank - Hi/Lo:
Semi-electric fixed height:
Depress button "FOOT DOWN" as shown on pendant control. This will lower the foot portion of the bed ONLY.

**FIGURE 6 - RAISING AND LOWERING THE HEAD AND FOOT SECTIONS (SEMI-ELECTRIC SINGLE AND TWO CRANK HI/LO BEDS)**

NOTE: Remember that in the event a full or semi-electric bed should malfunction, it is possible to manually crank the bed using the emergency crank supplied.
MANUAL BED OPERATION
(FIGURE 7)

1. The accompanying pictures detail the manual bed models and the hi/lo crank locations where applicable.
2. The manual fixed height beds will feature head and foot section operation but the overall bed height is fixed and cannot be altered.
3. Determine your particular manual bed to assist in the operation of the features of the bed.
4. Operate the bed through all phases of its operation.
5. If any problems arise during test, recheck all mechanical hook ups.

Raising and Lowering the Entire Bed
(Manual Beds [FIGURE 8])

TO RAISE ENTIRE BED - MANUAL BEDS

MANUAL SINGLE CRANK -
HI/LO: Turn crank "B" clockwise. This will raise the entire height of the bed.

Crank "D"  "Crank "B"

MANUAL TWO CRANK -
HI/LO: Insert crank "D" into head and foot end. Turn crank clockwise. This will raise the entire height of the bed ends one at a time.

MANUAL SINGLE CRANK -
HI/LO: Turn crank "B" counter-clockwise. This will lower the entire height of the bed.

Crank "D"  "Crank "B"

MANUAL TWO CRANK -
HI/LO: Insert crank "D" into head and foot end. Turn crank counter-clockwise. This will lower the entire height of the bed ends one at a time.

TO LOWER ENTIRE BED - MANUAL BEDS

FIGURE 7 - MANUAL BED OPERATION

FIGURE 8 - RAISING AND LOWERING THE ENTIRE BED (MANUAL BEDS)
Raising and Lowering the Head Section
(FIGURE 9 A)

TO RAISE HEAD SPRING SECTION - MANUAL BEDS

MANUAL SINGLE CRANK - HI/LO:
*MANUAL FIXED HEIGHT:
Turn crank "A" clockwise. 
This will raise the head
portion of the bed ONLY.

MANUAL TWO CRANK - HI/LO:
Turn crank "A" clockwise. 
This will raise the head
portion of the bed ONLY.

TO LOWER HEAD SPRING SECTION - MANUAL BEDS

MANUAL SINGLE CRANK - HI/LO:
*MANUAL FIXED HEIGHT:
Turn crank "A" counter-
clockwise. This will lower 
the head portion of the bed
ONLY.

MANUAL TWO CRANK - HI/LO:
Turn crank "A" counter-
clockwise. This will lower 
the head portion of the bed
ONLY.

Raising and Lowering the Foot Section
(FIGURE 9 B)

TO RAISE FOOT SPRING SECTION - MANUAL BEDS

MANUAL SINGLE CRANK - HI/LO:
*MANUAL FIXED HEIGHT:
Turn crank "C" clockwise. 
This will raise the foot
portion of the bed ONLY.

MANUAL TWO CRANK - HI/LO:
Turn crank "C" clockwise. 
This will raise the foot
portion of the bed ONLY.

TO LOWER FOOT SPRING SECTION - MANUAL BEDS

MANUAL SINGLE CRANK - HI/LO:
*MANUAL FIXED HEIGHT:
Turn crank "C" counter-
clockwise. This will lower 
the foot portion of the bed
ONLY.

MANUAL TWO CRANK - HI/LO:
Turn crank "C" counter-
clockwise. This will lower 
the foot portion of the bed
ONLY.

FIGURE 9A - RAISING AND LOWERING THE HEAD SECTION

FIGURE 9B - RAISING AND LOWERING THE FOOT SECTION

OPTIONAL BED RAILS

All Models EXCEPT The Bariatric Bed (FIGURE 10)

NOTE: The following procedure applies to ALL beds EXCEPT the Bariatric Bed.

1. HALF LENGTH BED RAILS MODEL 6640 ONLY:
   Preform one of the following.
   A. Remove hardware kit labeled HOME CARE BED HARDWARE KIT located in the 6640 bed rail box and set aside for use in installing the crossbraces.
   B. Remove hardware kit labeled BARIATRIC BED HARDWARE KIT BAR600 located in the 6640 bed rail box and discard.

2. If applicable, place the crossbraces of the ordered bed rail in the notches between the SECOND AND THIRD springs at both the HEAD AND FOOT ENDS of the bed frame as shown in FIGURE 10.

NOTE: The notches in the bed frame DO NOT apply to half length bed rails (model number 6640).

3. Refer to the SPECIFIC INSTRUCTION SHEET for the proper installation procedure of the ordered bed rail.

NOTE: The notches provided in the bed frame, when applicable, indicate the proper position for full bed rails ONLY.

---

FIGURE 10 - OPTIONAL BED RAILS - ALL MODELS EXCEPT THE BARIATRIC BED

Bariatric Bed ONLY (FIGURE 11)

NOTE: The following procedure applies to the Bariatric Bed ONLY.

NOTE: The Bariatric Bed uses half length bed rails (model number 6640) ONLY.

WARNING

Because of the heavier weight limitations associated with the Bariatric Bed, it is shipped with two (2) brown colored side adjustment clamps. These side adjustment clamps are designed to support heavier weight limitations and MUST be used when installing half length bed rails onto the Bariatric Bed. DO NOT use the chrome colored side adjustment clamps supplied with the half length bed rail kits, as these will NOT support heavier weight limitations and injury or damage may result.

NOTE: If the brown colored side adjustment clamps supplied with the Bariatric Bed are misplaced, a Bariatric Bed Side Rail Bracket Kit (part number 52000M371) may be ordered. To order, call customer service at the number listed on the back of the manual.

NOTE: The bed rails can be mounted on either the head AND/OR foot ends of the bed.

1. Remove the mattress from the bed.
2. Raise the HEAD END of the bed.
3. Remove hardware kit labeled BARIATRIC BED HARDWARE KIT BAR600 located in the 6640 bed rail box and set aside for use in installing the crossbraces.
4. Remove hardware kit labeled HOME CARE BED HARDWARE KIT located in the 6640 bed rail box and discard.
5. Locate the two (2) mounting holes on the TOP of the pan deck by counting eight (8) rows of holes from the head end of the bed AND two (2) holes in from each side of the bed.

6. Locate the two (2) mounting holes in each of the two (2) bed rail mounting brackets on the sides of the bed frame.

7. Align one (1) mounting hole on the TOP of one (1) side adjustment clamp with one (1) of the mounting holes in STEP 3 (DETAIL “A”).

8. Secure the side adjustment clamp to the TOP of the pan deck using one (1) LONG bolt and one (1) lock nut. Hand tighten ONLY (DETAIL “A”).

9. Align the two (2) mounting holes on the side of the side adjustment clamp with two (2) of the mounting holes of the bed rail mounting bracket (DETAIL “B”).

10. Secure the side adjustment clamp to the bed rail mounting bracket using two (2) SHORT bolts, spacers and locknut (DETAIL “B”). Hand tighten ONLY.

11. Securely tighten all hardware.

12. Repeat STEPS 5-11 for the opposite side of the bed.

NOTE: When positioning half length bed rails at the foot end of the bed, begin counting from the FOOT end of the bed.

13. When placing half length bed rails on the FOOT END of the bed, raise the FOOT END of the bed and repeat STEPS 5-12.

14. Position the bed in the flat position and place the mattress on the bed frame.

15. Install the half length bed rails. Refer to INSTALLING/RAISING/LOWERING THE SIDE RAILS in the half length bed rail instruction sheet, part number 1082514.

NOTE: To adjust the half length bed rails, refer to INSTALLING/RAISING/LOWERING THE SIDE RAILS in the half length bed rail instruction sheet, part number 1082514.
MAINTENANCE AND CLEANING

Maintenance and cleaning procedures should be conducted between users or at least once every three years. This form may be copied and used as a procedural guide and documentation.

Date _______________  Bed Model #__________________  Bed Serial # _______________

MECHANICAL INSPECTION AND MAINTENANCE

☐ 1. Inspect all bed components for damage or excessive wear.
☐ 2. Visually examine all welds for cracks.
☐ 3. Inspect the head and foot springs for bend, warping or damage.
☐ 4. Check drive shaft and drive shaft connections for bending, damage or excessive wear.
☐ 5. Inspect pull tubes and mounting hardware for bending, damage or excessive wear.
☐ 6. Inspect all bolts and rivets to ensure that they are securely tightened and functioning properly.
☐ 7. Check sleep surfaces to ensure all links are intact.
☐ 8. Inspect head and foot ends for proper operation.
   a. Adjust bed ends to the lowest position.
   b. Remove bed trim.
   c. Remove both the head and foot end panel boards.
   d. Inspect cables for wear.
   e. Inspect Acme screws for lubrication. Apply a light silicon based grease if necessary.
   f. Reinstall the panel boards and trim.
☐ 9. Check casters to ensure they lock, if applicable, and roll properly.

ELECTRICAL INSPECTION AND MAINTENANCE

☐ 1. Check pendant, power and motor cords for chafing, cuts or excessive wear.
☐ 2. Make sure all plugs are fully attached and free of damage.
☐ 3. Check all functions:
   a. Head raises and lowers properly.
   b. Foot raises and lowers properly.
   c. Head/Foot Ends raise and lower properly.

CLEANING AND DISINFECTING THE BED

☐ 1. Unplug the power cord of electric beds before performing maintenance.
☐ 2. Wipe down with disinfectant. Allow to dry completely.

PASS / FAIL

☐ PASS    Bed and all components have passed all of the above inspection criteria and is ready for placement into a client's home.

☐ FAIL    Bed or any component has failed ANY of the above inspection criteria. Tag the bed or component with a complete description of the failure(s) and have the bed serviced.
LIMITED WARRANTY - HOMECARE BEDS

PLEASE NOTE: THE WARRANTY BELOW HAS BEEN DRAFTED TO COMPLY WITH FEDERAL LAW APPLICABLE TO PRODUCTS MANUFACTURED AFTER JULY 4, 1975.

This warranty is extended only to the original purchaser/user of our products.

This warranty gives you specific legal rights and you may also have other legal rights which vary from state to state.

Invacare warrants its product to be free from defects in materials and workmanship for a period of two (2) years from date of purchase for mechanical components and two (2) years from date of purchase for electrical components. All welds shall be warranted for the lifetime of the original purchaser or beds manufactured after 11/89. If within such warranty period any such product shall be proven to be defective, such product shall be repaired or replaced, at Invacare's option. This warranty does not include any labor or shipping charges incurred in replacement part installation or repair of any such product. Invacare's sole obligation and your exclusive remedy under this warranty shall be limited to such repair and/or replacement.

For warranty service, please contact the dealer from whom you purchased your Invacare product. In the event you do not receive satisfactory warranty service, please write directly to Invacare at the address on the back cover; provide dealer's name, address, and the date of purchase, indicate nature of the defect and, if the product is serialized, indicate the serial number. Do not return products to our factory without our prior consent.

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, COMMERCIAL OR INSTITUTIONAL USE, PRODUCTS MODIFIED WITHOUT INVACARE'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 INVACARE, OR TO A PRODUCT DAMAGED BY CIRCUMSTANCES BEYOND INVACARE'S CONTROL, AND SUCH EVALUATION WILL BE SOLELY DETERMINED BY INVACARE. THE WARRANTY SHALL NOT APPLY TO PROBLEMS ARISING FROM NORMAL WEAR OR FAILURE TO ADHERE TO THE FOLLOWING INSTRUCTIONS.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS WARRANTIES. IMPLIED WARRANTIES, IF ANY, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL NOT EXTEND BEYOND THE DURATION OF THE EXPRESSED WARRANTY PROVIDED HEREIN AND THE REMEDY FOR VIOLATIONS OF ANY IMPLIED WARRANTY SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT PURSUANT TO THE TERMS CONTAINED HEREIN. INVACARE SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES WHATSOEVER.

THIS WARRANTY SHALL BE EXTENDED TO COMPLY WITH STATE/PROVINCIAL LAWS AND REQUIREMENTS.
LIMITED WARRANTY - BARIATRIC BEDS

PLEASE NOTE: THE WARRANTY BELOW HAS BEEN DRAFTED TO COMPLY WITH FEDERAL LAW APPLICABLE TO PRODUCTS MANUFACTURED AFTER JULY 4, 1975.

This warranty is extended only to the original purchaser/user of our products.

This warranty gives you specific legal rights and you may also have other legal rights which vary from state to state.

Invacare warrants its product to be free from defects in materials and workmanship for a period of one (1) year from the date of purchase for mechanical components and one (1) year from the date of purchase for electrical components. The non-articulating frame structure is warranted for five (5) years from the date of purchase. All welds shall be warranted for the lifetime of the original purchaser for beds manufactured after 11/89. If within such warranty period any such product shall be proven to be defective, such product shall be repaired or replaced, at Invacare's option. This warranty does not include any labor or shipping charges incurred in replacement part installation or repair of any such product. Invacare's sole obligation and your exclusive remedy under this warranty shall be limited to such repair and/or replacement.

For warranty service, please contact the dealer from whom you purchased your Invacare product. In the event you do not receive satisfactory warranty service, please write directly to Invacare at the address on the back cover, provide dealer's name, address, and the date of purchase, indicate nature of the defect and, if the product is serialized, indicate the serial number. Do not return products to our factory without our prior consent.

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, COMMERCIAL OR INSTITUTIONAL USE, PRODUCTS MODIFIED WITHOUT INVACARE'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 INVACARE, OR TO A PRODUCT DAMAGED BY CIRCUMSTANCES BEYOND INVACARE'S CONTROL, AND SUCH EVALUATION WILL BE SOLELY DETERMINED BY INVACARE. THE WARRANTY SHALL NOT APPLY TO PROBLEMS ARISING FROM NORMAL WEAR OR FAILURE TO ADHERE TO THE FOLLOWING INSTRUCTIONS.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS WARRANTIES. IMPLIED WARRANTIES, IF ANY, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL NOT EXTEND BEYOND THE DURATION OF THE EXPRESSED WARRANTY PROVIDED HEREIN AND THE REMEDY FOR VIOLATIONS OF ANY IMPLIED WARRANTY SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT PURSUANT TO THE TERMS CONTAINED HEREIN. INVACARE SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES WHATSOEVER. THIS WARRANTY SHALL BE EXTENDED TO COMPLY WITH STATE/PROVINCIAL LAWS AND REQUIREMENTS.