

APO391 Series 'Apollo' Bed Instruction and Safety Manual

Please read instructions before operating the bed



A 13 Graham Road | Clayton South Victoria 3169 P 1300 651 235 F (03) 9588 2255 E sales@jomor.com.au www.jomor.com.au

Safety and Warnings



Before using this product please read all safety and warning notes carefully. Follow all warning instructions marked on this product. The warning marks stand for the followings:

Electrical Safety

	WARNING
	Connect this product to a protective earth circuit. Never use an earthed adapter plug to connect the product to the electrical outlet that has no earth connection terminal. Improper connection of a grounding conductor may cause electric shock.
	Plug the power cord directly into a grounded electrical outlet. To prevent overheat and a fire accident, do not use an extension cord, a multi-plug adaptor or a multiple connector.
4	Never touch the power cord with wet hands. It may cause electric shock.
\bigcirc	Do not put objects on the power cord.
	Always keep the plug connection free of dust. The dusty and damp environment may bring about minute electric current in a connector. It may generate heat and eventually cause a fire accident.
Â	 To avoid the risk of electric shock and a fire accident, only use the power cord supplied with this product or the ones designated by Jomor. The power cord is exclusive use for this product. Do not use it for any other product. Do not damage or alter the power cord. Damage and alteration may generate heat and eventually cause electric shock or a fire accident. If the power cord is damaged or insulated wires are exposed, contact your local Jomor representative for its replacement. Do not use a damaged or uninsulated cord to avoid the risk of electric shock and a fire accident.
	When cleaning this product, always switch off and unplug it. Access to a live product may cause electric shock.
\bigcirc	Do not unplug or re-plug this product with the switch on. Plugging and unplugging a live connector may deform the plug and generate heat, and eventually cause a fire accident.
	Hold the plug not the cord when unplugging this product or it may damage the cord and cause electric shock or a fire accident.

Electrical Data

U Input:	100 V – 240 V ~ 50 / 60 Hz
I Input:	3.5 A -1.6 A
Output:	29V - 58W
Protection Class:	IPX4

Product Installation

	WARNING									
	Do not locate this product where people might step on or trip over the power cord. Friction or excessive pressure may generate heat and eventually cause electric shock or a fire accident.									
\bigcirc	Never locate this product in the following places: – Near radiators or any other heat sources – In the hot, humid, dusty or poorly ventilated environment – Near cookers or humidifiers									
	Locate this product on a level and sturdy surface.									

Operational Safety

	WARNING
	The operator's product maintenance procedures are described in the customer documentation supplied with this product. Do not carry out any other maintenance procedures not described in the documentation.
	 To avoid the risk of electric shock and a fire accident, switch off and unplug the product promptly in the following conditions, then contact your local Jomor representative. The product emits smoke or its surface is unusually hot. The product emits unusual noise or odour. The power cord is cracked or worn down. Any part of the product is damaged.
4	Ensure any handset and power cords have appropriate slack and are clear of moving parts during all bed operations. Special attention should be paid to lift arms and castors during motion.
\bigcirc	Please ensure no person is under the bed when power is on.
	Never leave handset unattended with power on unless patient is fully competent. Optional handset lockouts are available.
	This product comes with central locking as standard. Please ensure the appropriate central locking position (below) is engaged and maintained during operation. $\begin{tabular}{ c c c c c } \hline \hline \\ $

Specifications

Available Bed Size	Narrow Single	Single	Long Single*	Wide Single*	King Single*	Long Double	Double	Queen	Split Queen	King	Split King
Minimum Height (mm)	390	390	390	390	390	390	390	390	390	390	390
Maximum Height (mm)	760	760	760	760	760	770	770	770	770	770	770
Overall Length (mm)	2030	1990	2135	1990	2100	2130	1980	2130	2130	2130	2130
Overall Width (mm)	760	920	920	1070	1070	1380	1380	1530	1530	1830	1830
Mattress Length (mm)	1900	1900	2030	1900	2030	2030	1900	2030	1900*2	2030	1900*2
Mattress Width (mm)	760	900	900	1070	1070	1300	1370	1520	760*2	1820	900*2
Backrest Max Angle (°)	70	70	70	70	70	70	70	70	70	70	70
Knee Bend Max Angle (°)	35	35	35	35	35	35	35	35	35	35	35







Standard Features

- Anti-jam Backrest & Kneebend
- Teflon Coated Pivot Bushes
- Removable ABS Deck Panels over Deck Sections
- Removable Head & Foot Panels
- Central Locking 100 mm Twin Wheel Castors
- Hoist Clearance 150 mm
- Safe Working Load 400 kg



Functions

- 1. Electric Backrest
- 2. Electric Kneebend
- 3. Electric Contour
- 4. Hi-Low Operation
- 5. Electric Forward & Reverse Trendelenburg Tilt ±15°



Beware of pinch points when operating the bed

Accessories



ACC130 Safety Siderails



Extension 150 or 300mm

ACC202 Adjustable IV Pole

ACC301 Handy Help Pole



ACC201 Overhead Pole



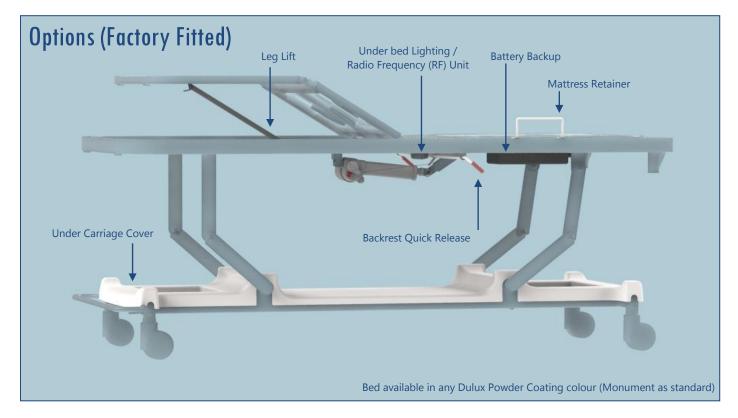
ACC319 Wall Buffer



Heavy Duty Siderails



Urinal Bottle Holder



Head & Footboard Range (Larger range of styles and colours available)

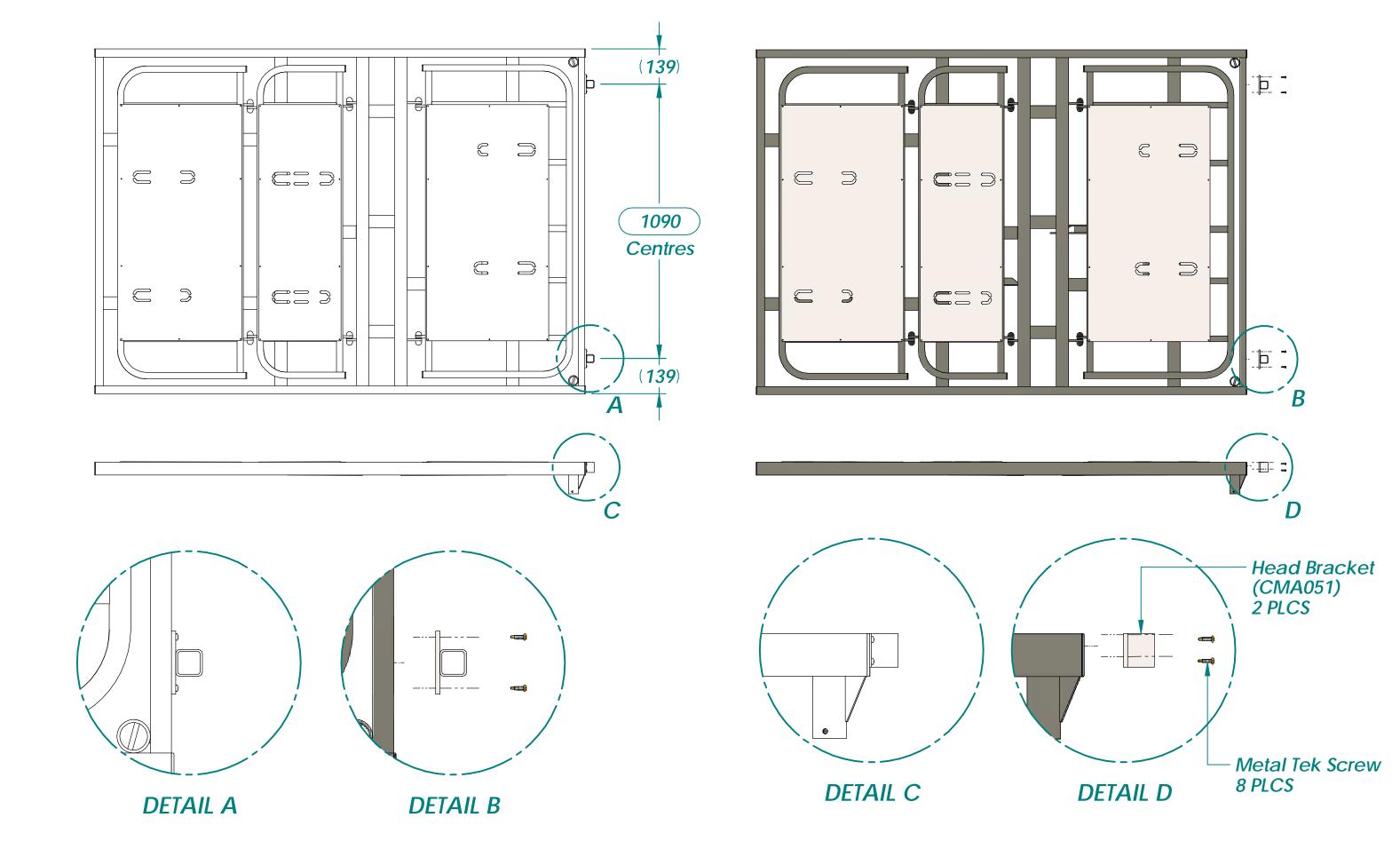




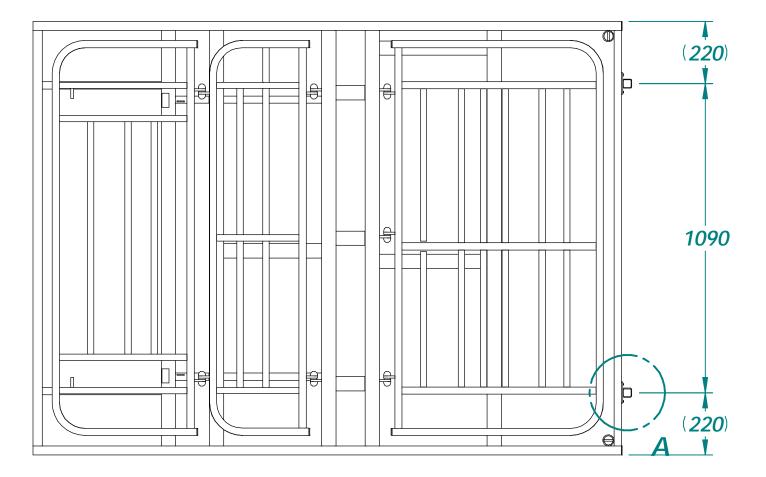
Antique Cream

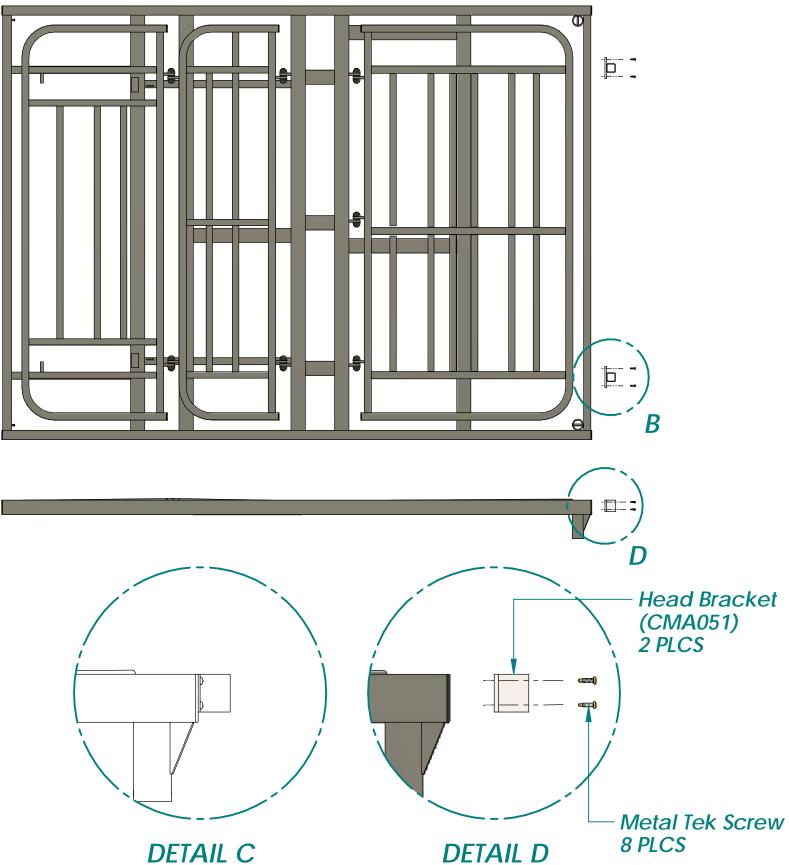


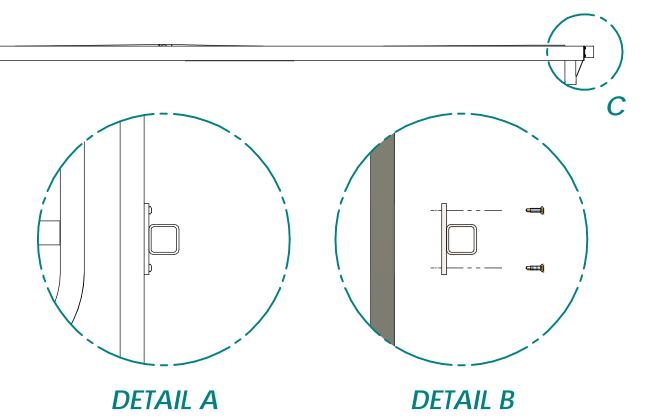
Walnut

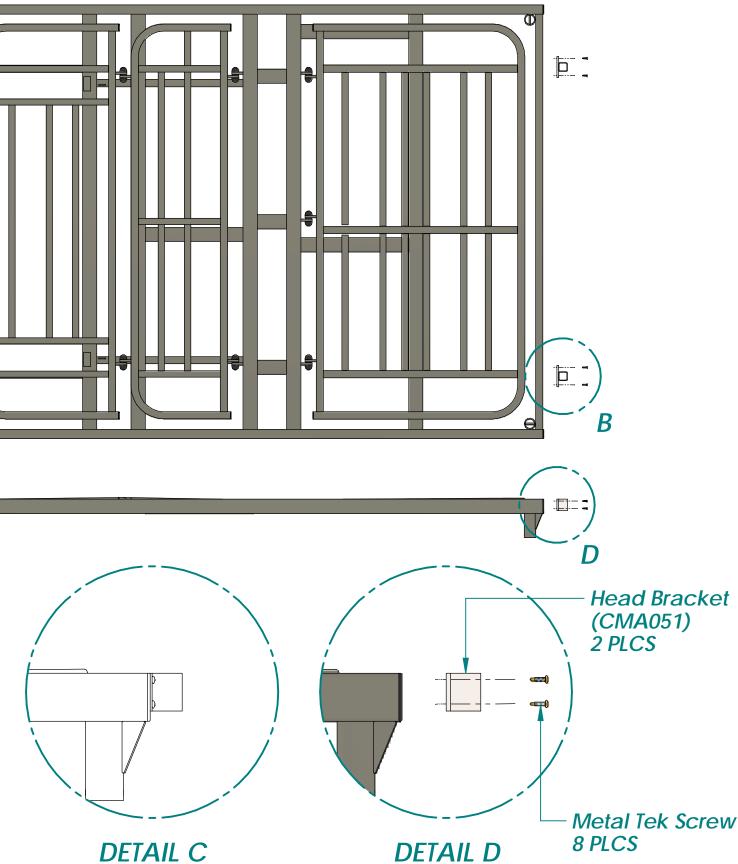


Double Headboard Bracket Assembly (Attached to bed platform, head end)

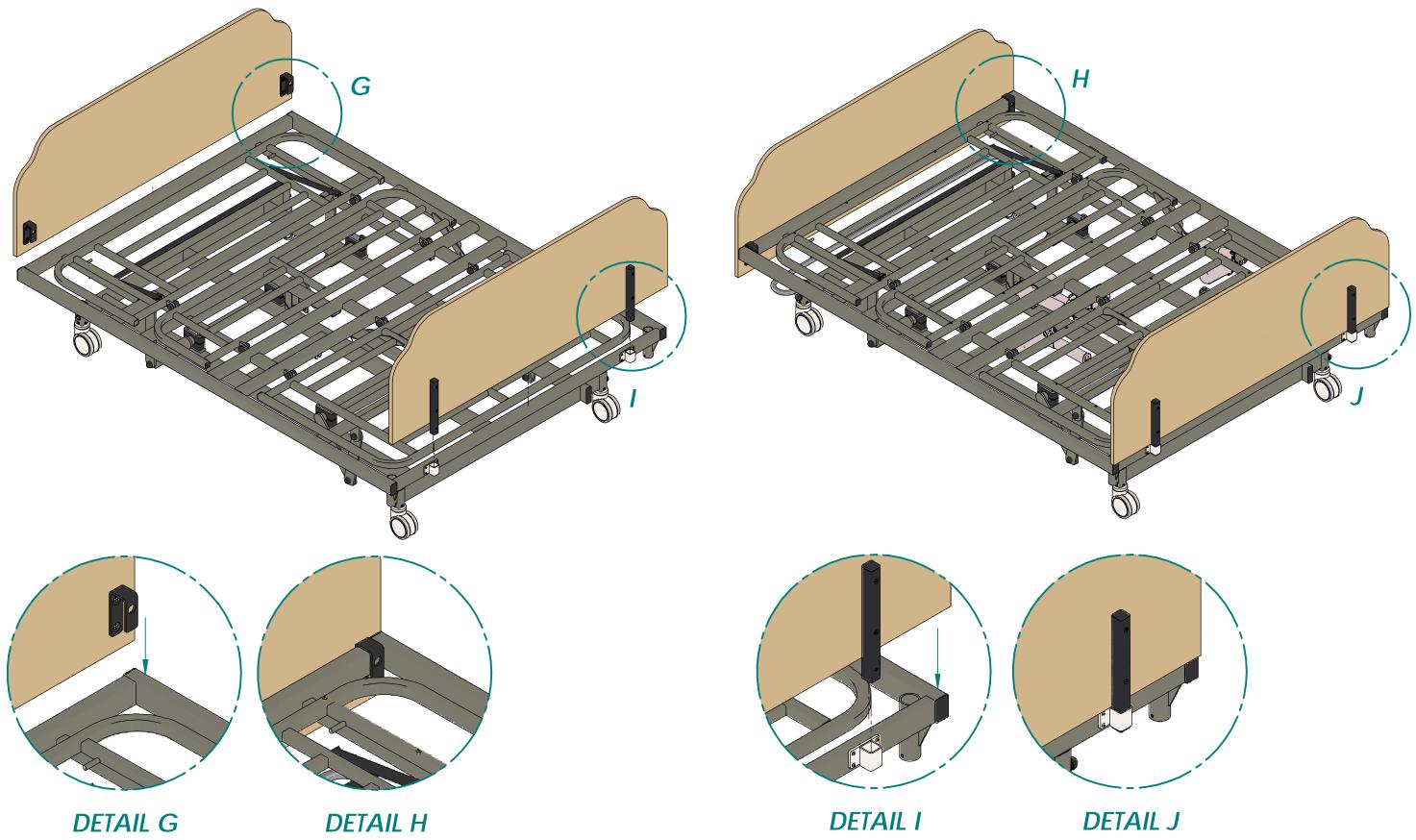






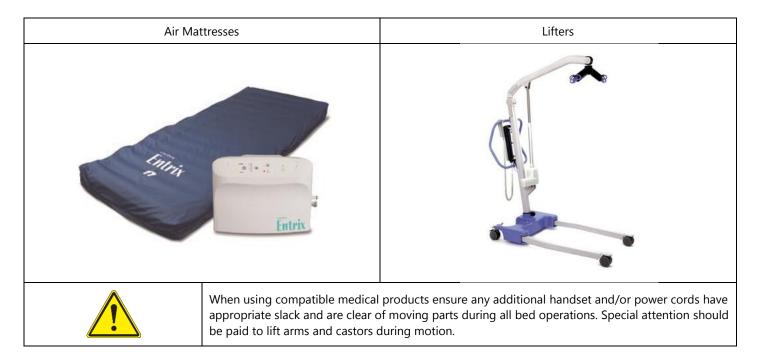


Queen Headboard Bracket Assembly (Attached to bed platform, head end)





Compatible Medical Devices



Cleaning

Jomor beds are designed and manufactured to meet industry standard requirements in regards to cleaning and the minimal spread of potential infections and outbreaks.

All core steel frames are made with smooth edges. Their surfaces are pre-treated with a phosphate solution before receiving 80 micrometers (minimum) of durable powder coating. This ensures easy cleaning of any moisture or spill that comes into contact with the frames and allows the use of any domestic detergents. Furthermore the phosphate pre-treatment ensures high corrosion resistance for cases when the powder coat is penetrated.

All pivoting joints are manufactured with our proprietary "Steri-Hinge" solution. This solution provides a carefree, smooth rotation throughout the lifetime of the product while minimizing the possibility of liquid entrapment and contamination.

The plastic deck-section covers are designed to guide and contain small quantities of liquid within surface recesses. The wide open cut-outs ensure quick drainage of any large spills. This allows both easy cleaning and ensures minimal contamination. The covers can be easily removed for thorough cleaning if necessary.

All bed's electrical components are water resistance rated at (IP) 55. Once bed is being disconnected from mains it can be rinsed under water but not washed with high pressure pumps.

The twin wheel castors are manufactured with a high density polymer. They are impact resistant and easy to clean. Their design ensures minimal capture of build up and any other source of contamination.

Recommended cleaning techniques;

- Clean any dirty parts as soon as possible. Do not allow dirt to build-up or sit for extended periods of time.
- Wipe all dirty areas with a cloth or sponge soaked in hot or warm soapy water or diluted general cleaning chemicals.
- If harder chemicals are required, apply small amounts isopropyl alcohol to the affected area.
- Do not use acids, alkaline or any chemical solvents.
- Once clean, dry off all wet areas
- Do not flood any parts of the bed with water
- Do not spray with pressurized water
- Clean mattress using same methods as described above



Medical Bed Maintenance Checklist

This Maintenance manual is provided a guide to servicing and maintenance recommendations on your Jomor bed. The bed has been designed to require minimal maintenance. Time and general use will still have an effect on the performance of the bed. We have outlined key points of care to unsure that your bed fulfils its optimum capabilities.

Regular inspections of the bed helps prevent deterioration or damage and identifies any components requiring attention. It is recommended that this preventative maintenance checklist be implemented on a regular basis, e.g. 3 to 6 monthly.

These services can be carried out by your in house maintenance department; alternatively you can arrange to have Jomor factory trained staff carry out this procedure for you.

Please contact Jomor if you require any additional copies of the Maintenance Checklist.

Jomor Maintenance Check List

If you wish to record your maintenance history, please photocopy this page and the following page for each bed.

This checklist should take approximately 15-20 mins per bed.

Serial No						
Date						
Location /Room			<u>Tick box</u>	when inspe	ected OK *	
	Description of Check	Failure	Fair	Good	Very Good	Excellent
Electronic Operation	Backrest fully raise and fully lower					
	Kneebend fully raise and fully lower					
	Height fully raise and fully lower					
	Backrest and Kneebend simultaneous fully raise and fully lower					
	Check all cables for damage to insulation or exposed wires					
<u>Backrest</u>	Check the pivot bolts attaching the back rest to the main frame – tighten if necessary					
	Check sheet metal, ensure that there are no sharp edges exposed					
<u>Kneebend</u>	Check the pivot bolts attaching the kneebend to the main frame – tighten if necessary					
	Check the pivot bolts joining the two kneebend sections – tighten if necessary					
	Check sheet metal, ensure that there are no sharp edges exposed					

r		r	1	1	1	1
<u>Motors</u>	Check all clevis pins and bolts and					
	ensure that they are safely secured					
	Inspect casing and shaft of all					
	actuators for contact damage					
Castors	With bed loaded, lock the castors					
	and push in any direction. Ensure					
	no movement of the bed.					
	Check tightness of castor pintle					
	bolt. The bolt head can be					
	accessed between the wheel and					
	carriage.					
	Unlock the castors and check that					
	the castors move freely.					
Lubrication	Spray any squeaky points with					
	RP7, graphite or equivalent.					
	Pivot bolts should not be overly					
	tight. Using a spanner, check that					
	they can be twisted without much					
	effort (no load is to be on the					
	bed).					
Head and foot	Check the panel mounting screws,					
<u>panels</u>	tighten if necessary					
Consul						
<u>General</u>	Look within and around bed and					
	ensure that nothing hinders any					
	movements of the bed eg cables					
	and furniture					
	Note and rectify any aspects that					
	you think MAY pose a risk to					
	resident and staff					
				1		

Spare Parts

For spare parts, please contact you local Jomor Representative or Jomor direct.



Risk Analysis of Bed

Ref	Characteristics	Hazard	Control Method	Cause and Probability Occurrence of Harm	Prob	Effect (Severity of Harm)	Sev	Risk Level	Acceptability	Final Y/N	Other Risks
1	Electrical,	Power cord cut off	User manual, Maintenance check list, Tagging Electrical devise	Improper use of the device itself and/or with conjunction with another devices	2	Electrical shock/ dead	4		Not acceptable, Device to be powered off and quarantined immediately for further repair	N	N
2	Electrical,	Power cord trip hazard	User manual	Improper use	2	Risk of falling on the floor. Possibility of fractured bones.	2		Acceptable	Y	N
3	Mechanical,	Fingers entrapment during transportation	Bed build to comply with AS/NZS 3200.2.38:2007. Ref to internal QA procedure - packaging	As push only Backrest and Knee bed actuators allowed to deck sections to pivot around their hinge point. In upright position deck sections can open a gap between itself and bed platform with possible finger(s) entrapment.	2	Broken finger(s)	3		Acceptable, ref to packaging method and internal QA	у	N
4	Mechanical,	Steel construction, Bad welding	All welders are trained to inspect their welding and remove any potential hazards. Additional batch stress test of lifting fabrications is part of internal QA procedure.	Bed can collapse	1	Stress, bruises	2		Acceptable	Y	N
5	Mechanical,	Steel construction, Rust	Steel is washed, phosphate coated and baked dry before powder coating to eliminate any moisture build-up and impurities. This process helps to reduce the possibility of rusting	Bed can collapse	1	Stress, bruises	2		Acceptable	Y	N

6	Mechanical,	Steel construction, Bad finish	All welders are trained to inspect their welding and remove any potential hazards. Sharp edges, welding splatter	Sharp or Jagged edges	2	Cuts	2	Acceptable	Y	N
7	Mechanical	Powder coated finish	Chips with sharp edges with possible rust	Sharp or Jagged edges	2	Cuts	2	Acceptable, ref to maintenance checks	Y	N
8	Mechanical	Plastic covers with sharp edges	Controlling suppliers by robust QA procedure. ISO 9001:2008 compliance. Internal Quality Procedure	Sharp edges	2	Cuts	2	Acceptable. Ref o internal QA procedure	Y	N
9	Mechanical,	Stability. Excessive load on side of the bed without counter leverage	Bed build to complies with AS/NZS 3200.2.38:2007	Improper use	2	Stress, bruises, broken hips	3	Acceptable, ref to user manual	Y	N
		Finger, wrist, arm	Bed build to comply with	Obstruction of the Backrest or Knee bend sections when driven down. Effect - motor spindle is driven down without physical retraction of actuators rams. If obstruction removed, free fall of deck section to the current position of the motor		Broken fingers, Wrist,		Acceptable, ref to		
10	Mechanical	entrapment	AS/NZS 3200.2.38:2007	spindle i.e. fully retracted	2	Arms	3	user manual	Y	N