



**ENIGMA STEEL**  
**WHEELCHAIR RANGE**  
**OWNER'S MANUAL** **CE**

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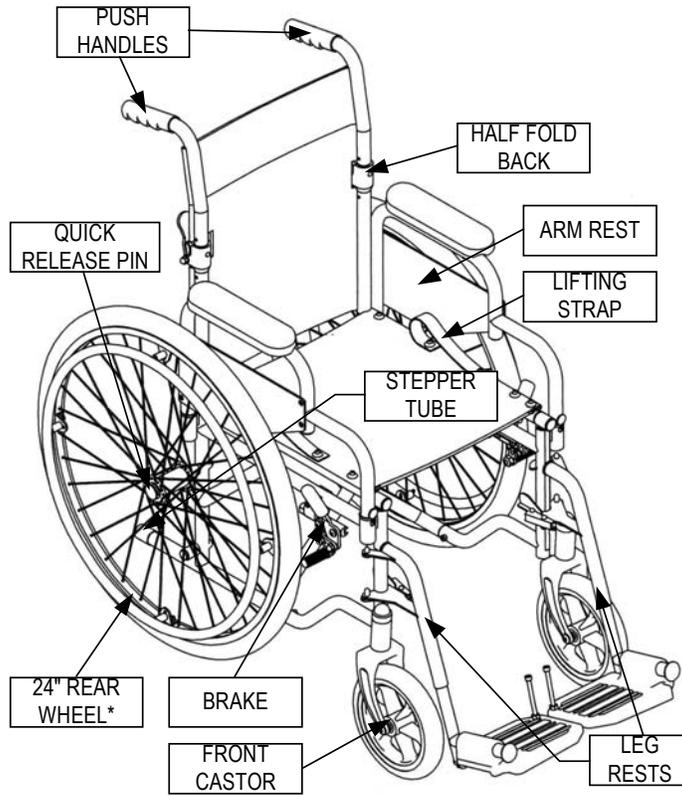
## 2. INTRODUCTION

The Enigma lightweight steel wheelchair is designed for use indoors, and outdoors in some circumstances. The wheelchair is designed for a single user of up to 115kg (18 stones). The frame can accommodate either 24" self propel wheels or 12½" transit wheels.

The wheelchair can be moved in all directions, and is manually propelled by the wheelchair user and/or a carer, depending upon the model of wheelchair in use.

All Enigma wheelchairs are manufactured to the highest quality and are CE compliant. Medicare Technology is an ISO 9001 and ISO 13845 certified medical device manufacturer.

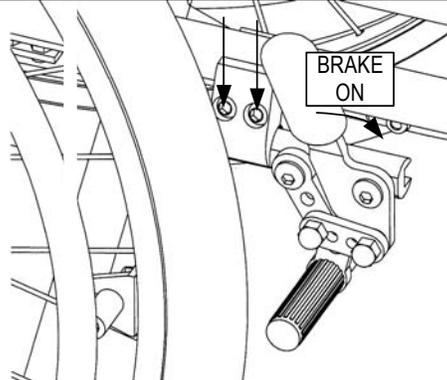
### 3. PARTS DESCRIPTION



\* steel wheelchairs come with either 24" rear wheels (for a user to self-propel) or 12½" rear transit wheels (for an attendant to propel). The 24" rear wheels are shown in the diagram.

Please note that not all of these features are available on all models of steel wheelchair. Also depending on model, some parts may not look like those depicted in the diagram. For more information please consult your Medicare Technology dealer.

#### 4. BRAKE OPERATION AND ADJUSTMENT

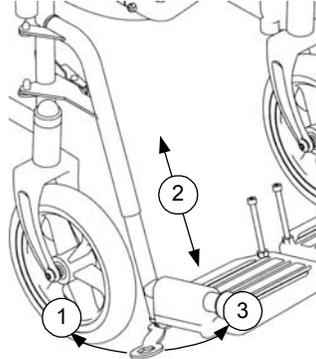


*Do not adjust any screws other than the two shown above.*

Adjustment is made to the brake by loosening the Allen key bolt heads (arrowed) using the Allen key supplied, and then by sliding the brake unit along the frame. The brakes will have to be readjusted if the rear wheel position has been altered.

To apply the parking brakes, push the plastic brake handle towards the front of the wheelchair. Push the handle back to release the brakes. The S18EB model has additional cable brakes, which an attendant may use to apply the brakes to reduce speed whilst in motion. On this model, only the parking brakes should be used when the wheelchair is stationary.

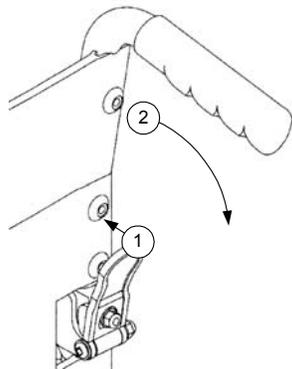
## 5. LEG REST ADJUSTMENT



*Note: Always ensure the bolt is sufficiently tightened after adjustment.*

For optimum comfort it is important to attain the correct leg position. The footrests have been designed so that they can be extended into a number of fixed positions. To do this, release the bolt using the spanner (see diagram) and turning clockwise (1). Then adjust the footplate to lengthen or shorten the legrest (2). Finally, tighten the bolt by using the spanner and turning anticlockwise (3).

## 6. FOLDING BACK MECHANISM



On certain models the backrest has an in-built half folding back. This is designed so that the wheelchair will fit into small spaces by reducing the push handle height. To operate the half-fold mechanism see the

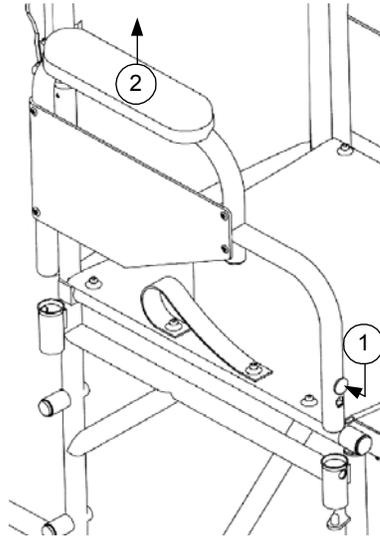
diagram left & description below:

Push the black paddle (1) towards the back post with your thumb whilst pulling the handle (2) down. Repeat this operation for the other handle.

To put the backrest back into position, lift both handles together and the folding mechanism will lock back automatically. Do not push down on the handles to raise the front of the wheelchair, as this could result in damage to the wheelchair. Use the stepper tube as described in part 8.

## 7. QUICK RELEASE COMPONENTS

The wheelchair comes with a number of components which can be easily removed without tools for storage or carrying. For all parts in this section see the relevant description and diagram:



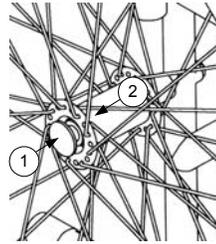
### A. Armrests (all models)

Remove the armrest by pushing in the button on armrest (1) tubing whilst lifting the armrest up (2).

Due to the detachable nature of the armrests, do not lift the wheelchair by the armrests.

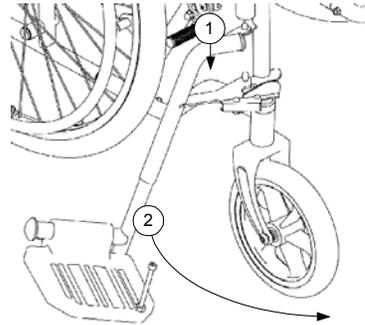
**B. Rear wheels** (certain models only)

With one hand holding up the wheelchair frame, the other hand should grip the centre of the wheel, push the centre pin inwards (1) & in the same movement pull the wheel hub away from the wheel (2).



To put the wheels back the procedure should be reversed.

Check that the wheel is securely fastened before use by pulling the wheel and ensuring there is no sideways movement.



*Ensure that the leg rest is securely locked in position before use.*

**C. Leg Rests** (all models)

To remove the leg rest, press the chrome lever on the leg rest whilst swinging the leg rest out. This will now allow the leg rest to be lifted up and removed. To attach the leg rest, place the leg rest on the two receiver posts on the wheelchair frame (1). Then swing the leg rest inwards until it locks in position (2).

## 8. USING THE STEPPER TUBE

Use the stepper tube to raise the front castors (when mounting a kerb for example). To use, push down on the stepper tube with a foot. Do not raise the front castors by pushing down on the push handles as this could result in damage to the wheelchair.

**To mount a kerb.** Approach the kerb head on. Then the attendant uses the stepper tube to raise the front castors, and lowers the front castors on the raised kerb. Finally the attendant should push the wheelchair forward, lifting it up slightly to mount the kerb if required.

**To go down a kerb.** Line up the front castors with the edge of the kerb. The attendant uses the stepper tube to raise the front castors and tip the user slightly back. Keeping the castors raised, slowly lower the wheelchair down the kerb.

*Warning: When going down a kerb, the front castors must be raised to prevent the user from falling out. The above are only recommendations and may not be suitable for all events.*

## **9. DISASSEMBLY AND FOLDING**

Before folding, remove any quick release components if required. The Enigma wheelchair has been designed with an easy fold mechanism. To fold the wheelchair, ensure that the leg rests are removed, or in the forward position with plastic footplates flipped up. Holding the front and rear edge of the seat sling, pull the seat in an upward motion. The wheelchair will naturally fold up. Alternatively pull up on the two lift up straps on the seat canvas. Use the folding back mechanism if required.

We recommend that the wheelchair is carried by the two lift up straps. Please note though that the wheelchair may be too heavy for some users to lift. Also be sure to adopt the latest health and safety recommendations when lifting the wheelchair.

## **10. USING THE WHEELCHAIR IN A VEHICLE**

The Enigma Steel wheelchair has been tested to Wheelchair Crash Test standard ISO 7176/19 using restraints from Koller Engineering.

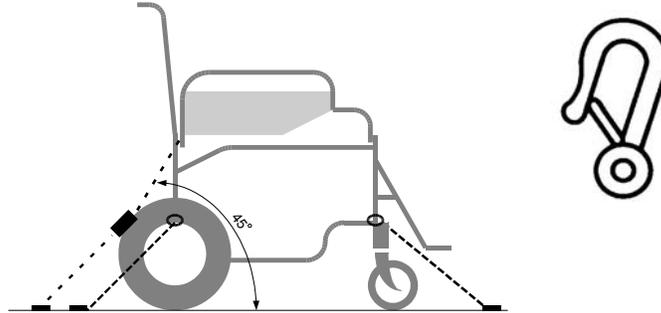
Wherever possible the wheelchair user should use the vehicle's fitted seats and the wheelchair should be folded away and placed safely in the luggage compartment of the vehicle or restrained.

If it is not feasible to transfer to the vehicle's seat then the Enigma steel wheelchair may be used as a chair whilst the vehicle is moving with the necessary restraints and with the wheelchair facing the front of the vehicle. Medicare Technology recommends that the following types of restraints be used:

- a) **Koller Engineering buckle and tongue restraints for the front of the wheelchair,**
- b) **Koller Engineering karabiner rear restraints for the rear of the wheelchair,**
- c) **Koller Engineering 3-point harness for the user restraint.**

The lap belt should be worn across the front of the pelvis, with the webbing fed between the back posts and armrest.

The upper torso belt should be worn over the shoulder. The belt should be worn as firm as possible without being uncomfortable. Ensure the webbing is not twisted. For more information on restraints please contact Medicare Technology. Below is a diagram illustrating the recommended positions for the restraints. The securement points for the restraints are marked on the wheelchair using the symbol (below right).



**LEGEND**

- Wheelchair Restraints
- - - - - Occupant Restraints

## **11. TYRE PRESSURE AND INFLATION**

This Enigma wheelchair comes complete with pneumatic tyres. The tyres should be inflated with a manually operated pump and use a standard car tyre air valve (Schrader valve). Note that under no circumstances should a powered or compressed air pump be used. The tyre pressure should be tailored for optimum user comfort and wheelchair ease of use. We recommend a tyre pressure of 35psi (2.5bar) for comfort. However, do not exceed the maximum pressure stated on the side wall of the tyre. This may differ slightly between tyres, but is typically:

- 65psi (4.5bar) for 24" self propel wheels
- 40psi (2.8bar) for 12½" transit wheels

### **Always refer to the maximum pressure stated on the tyre**

The Enigma wheelchair range is also available with solid tyres and mag wheels. The SSP18ST and STS18ST models come with solid tyres already fitted. For more details see your Medicare Technology dealer.

## **12. AMPUTEE PAD & ELEVATING LEG REST**

This section covers the elevating leg rests and amputee pads which are available as an option for the Enigma steel wheelchair.

The insertion and removal procedure for these options are the same as for the standard leg rests (described previously in this manual).

**To use the steel elevating leg rest:**

- To raise the angle of the leg rest, pull the footplate up and then release to secure in position.
- To reduce the angle of the leg rest, pull the lever on the leg rest, and let the footplate drop. To prevent the risk of injury, only do this when the user is not using the leg rest.
- The calf pad is also adjustable.
- Clean the leg rest if necessary, using water and soap or mild detergent
- **WARNING.** Altering the leg rest will affect the stability of the wheelchair. Always ensure that the wheelchair and user are stable before use. Never stand on the footplates as this could result in injury.

**To use the steel amputee pad:**

- The support pad is length adjustable.
- Clean the leg rest when necessary, using water and detergent / soap, or disinfectant if there is a risk of infection.
- **WARNING.** A wheelchair with amputee leg rest will have different stability characteristics to a wheelchair with standard leg rests. Please consider this when using the wheelchair.

### 13. POWERPACK II STALLATION



This wheelchair is suitable for some retrofit powerpacks, such as the Wheeltech PowerStroll (pictured left)

The suggested mounting points for the PowerStroll bracketry are shown on the wheelchair by the symbol (left). Note this is a suggestion, and the mounting position will need adapting to be suitable for the user and the powerpack used. For more information about the PowerStroll contact your Medicare dealer or visit [www.medicaretechnology.com](http://www.medicaretechnology.com)



### 14. SPECIFICATION

As a minimum, all Enigma steel wheelchairs have the following features:

- Tubular steel folding frame.
- 200mm (8") solid front castor wheels
- Quick release and height adjustable leg rests
- Stepper tube, toolkit and user manual

The additional features of each wheelchair are shown overleaf.

	STS18E	SSP18E	STS18FIXED	SSP18FIXED	STS18FW	SSP18FW	STS16	SSP16	STS18	SSP18	SUTS18	SUSP18	STS18EB	STS18ST	SSP18ST
Gloss black paint															
Metallic paint															
Vinyl upholstery															
Jemima' upholstery															
Economy steel brake															
Adjustable alu. brake															
Attendant cable brakes															
Economy armrest															
Desk-style armrest															
Quick release rear wheels															
Folding back mechanism															
12½" transit rear wheels															
24" economy self propel rear wheels															
24" standard self propel rear wheels															
Pneumatic grey tyres															
Solid grey tyres															

Note: Superior steel wheelchairs (SUSP18 and SUTS18) come in a range of metallic colours.

Code	SSP18E	SSP18 FIXED	SSP18FW	SSP16	SSP18	SSP18ST	SUSP18
Length (cm/in)	104 / 41"	104 / 41"	104 / 41"	104 / 41"	104 / 41"	104 / 41"	104 / 41"
Width	69 / 27"	66 / 26"	66 / 26"	61 / 24"	66 / 26"	66 / 26"	66 / 26"
Height	95 / 37"	95 / 37"	95 / 37"	95 / 37"	95 / 37"	95 / 37"	95 / 37"
Width folded	32 / 13"	32 / 13"	22 / 8"	32 / 13"	32 / 13"	32 / 13"	32 / 13"
Seat width	45 / 18"	45 / 18"	45 / 18"	40 / 16"	45 / 18"	45 / 18"	45 / 18"
Seat depth	40 / 16"	40 / 16"	40 / 16"	40 / 16"	40 / 16"	40 / 16"	40 / 16"
Seat height	51 / 20"	51 / 20"	51 / 20"	51 / 20"	51 / 20"	51 / 20"	51 / 20"
Weight 1 (kg / lb)	19kg / 41.8lb	18kg / 39.6kg	18.3kg / 40.2lb	17.8kg / 39.1lb	18.3kg / 40.2lb	18.6kg / 40.9lb	18.3kg / 40.2lb
Weight 2 (kg / lb)	15kg / 33lb	10.2kg / 22.4lb	14.8kg / 32.6lb	10.2kg / 22.4lb	10.5kg / 23.1lb	10.5kg / 23.1lb	10.5kg / 23.1lb

Code	STS18E	STS18 FIXED	STS18FW	STS16	STS18 STS18EB	STS18ST	SUTS18
Length (cm/in)	97 / 38"	97 / 38"	97 / 38"	97 / 38"	97 / 38"	97 / 38"	97 / 38"
Width	63 / 25"	63 / 25"	63 / 25"	58 / 23"	63 / 25"	63 / 25"	63 / 25"
Height	95 / 37"	95 / 37"	95 / 37"	95 / 37"	95 / 37"	95 / 37"	95 / 37"
Width folded	32 / 13"	32 / 13"	32 / 13"	32 / 13"	32 / 13"	32 / 13"	32 / 13"
Seat width	45 / 18"	45 / 18"	45 / 18"	40 / 16"	45 / 18"	45 / 18"	45 / 18"
Seat depth	40 / 16"	40 / 16"	40 / 16"	40 / 16"	40 / 16"	40 / 16"	40 / 16"
Seat height	51 / 20"	51 / 20"	51 / 20"	51 / 20"	51 / 20"	51 / 20"	51 / 20"
Weight 1 (kg / lb)	17kg / 37.4kg	15.3kg / 33.7lb	15.6kg / 34.3lb	15.1kg / 33.2lb	15.6kg / 34.3lb	16.1kg / 35.4lb	15.1kg / 33.2lb
Weight 2 (kg / lb)	13kg / 33lb	10.2kg / 22.4lb	12.5kg / 27.5lb	10kg / 22lb	10.5kg / 22lb	10.5kg / 22lb	10.5kg / 22lb

Note:

'Weight 1' is the total wheelchair weight.

'Weight 2' is the weight without quick release components

## 15. WARRANTY AND MAINTENANCE

To improve the safety and lifespan of your Enigma wheelchair, it is recommended that you have it serviced on a regular basis. Recommended Service Schedules for Enigma wheelchairs are available to service agents.

There is a comprehensive twelve-month warranty from the date on which your new wheelchair is delivered. The warranty covers the wheelchair for repairs or replacement during this period. For more detail, please see the warranty conditions overleaf:

1. Any work or replacement part installation must be carried out by an authorised Medicare Technology dealer / service agent.
2. To apply the warranty should your wheelchair require attention please contact the outlet from which you purchased the wheelchair.
3. Should any part of the wheelchair require repair or full or part replacement, as a result of a manufacturing or material defect within the warranty period, parts will be supplied free of charge.  
Note: The guarantee is not transferable.
4. Any repaired or replaced parts will be covered by the balance of the warranty period on the wheelchair.
5. Parts replaced after the original warranty has expired will be covered by a three-month warranty.

6. Consumable items supplied will not generally be covered during the normal warranty period unless such items require repair or replacement clearly as a direct result of a manufacturing or material defect. Such items include (among others): upholstery and tyres.
7. The above warranty conditions apply to brand new wheelchairs. Second-hand wheelchairs supplied directly by Medicare Technology carry a six-month warranty period. If you are unsure whether your wheelchair is covered contact your dealer.
8. Under normal circumstances, no responsibility will be accepted where the wheelchair has required assistance as a direct result of:
  - a. the wheelchair part not having been maintained in accordance with the manufacturer's recommendations
  - b. failure to use the manufacturer's specified parts
  - c. the wheelchair or part having been damaged due to neglect, accident or improper use
  - d. the wheelchair or part having been altered from the manufacturer's specification or repairs having been attempted before the dealer is notified

In the event of your wheelchair requiring attention, please contact your service agent / dealer and give all relevant details so they can act quickly.

The manufacturer reserves the right to alter without notice any weights, measurements or other technical data shown in this manual. All figures, measurements and capacities shown in this manual are approximate and do not constitute specifications.

Other Products in the Medicare Technology Range include:



Please contact your local Medicare Technology Dealer for a catalogue.

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