

# ROMA MEDICAL



# Alcora

## S740 USER MANUAL

Please ensure that this manual is read and understood before using the scooter.



Intended Use   3   3   3   3   3   3   3   3   3	Contents	Page	
Technical Specification         3           Feature Guide         4           Safety Advice         5           Adjustments         • Tiller angle	Introduction	3	
Feature Guide       4         Safety Advice       5         Adjustments	Intended Use	3	
Safety Advice       5         Adjustments       6         • Folding the tiller (for transportation)       6         • Seat removal       7         • Seat height       7         • Arm width adjustment       7         Tiller Controls       8         Brake Release / Freewheel Operation         9       Starting to Drive         • Getting Started       10         • Moving Off       10         • Steering       10         • Reversing       10         • Ramps / Slopes       10         • Surfaces       11         • Transferring       11         Transferring         11       Transport and Storage       11         Batteries and Battery Charger       11 & 12         Maintenance       13         • Circuit Breaker       13         • Fuses       13         • Check List       13	Technical Specification	3	
Adjustments  Tiller angle Folding the tiller (for transportation) Seat removal Seat removal To Seat height Arm width adjustment  Tiller Controls  Brake Release / Freewheel Operation  Starting to Drive Getting Started Moving Off Steering Reversing Reversing Ramps / Slopes Surfaces Transferring  Transport and Storage  Batteries and Battery Charger  Toubleshooting Check List Check List  Check List  Cransport and Storage  Toubleshooting Check List  Check List  Cransport and Storage Calculate Associated Calculate Associated Calculate Associated Calculate Associated Calculated Associated Calcu	Feature Guide	4	
<ul> <li>Tiller angle</li> <li>Folding the tiller (for transportation)</li> <li>Seat removal</li> <li>Seat height</li> <li>Arm width adjustment</li> <li>Arm width adjustment</li> <li>Tiller Controls</li> <li>Brake Release / Freewheel Operation</li> <li>Getting Started</li> <li>Moving Off</li> <li>Steering</li> <li>Reversing</li> <li>Ramps / Slopes</li> <li>Surfaces</li> <li>Transferring</li> <li>Transferring</li> <li>Batteries and Battery Charger</li> <li>Troubleshooting</li> <li>Circuit Breaker</li> <li>Fuses</li> <li>Check List</li> </ul>	Safety Advice	5	
Brake Release / Freewheel Operation       9         Starting to Drive       10         • Getting Started       10         • Moving Off       10         • Steering       10         • Reversing       10         • Ramps / Slopes       10         • Surfaces       11         • Transferring       11         Transport and Storage       11         Batteries and Battery Charger       11 & 12         Maintenance       13         • Circuit Breaker       13         • Fuses       13         • Check List       13	<ul><li>Folding the tiller (for transportation)</li><li>Seat removal</li><li>Seat height</li></ul>	6 7 7	
Starting to Drive  Getting Started Moving Off Steering Reversing Reversing Ramps / Slopes Surfaces Transferring  Batteries and Battery Charger  Troubleshooting Circuit Breaker Fuses Check List  To Moving Off To Detail Details and Storage  10 10 10 10 10 10 11 11 11 11 11 11 11	Tiller Controls	8	
<ul> <li>Getting Started</li> <li>Moving Off</li> <li>Steering</li> <li>Reversing</li> <li>Ramps / Slopes</li> <li>Surfaces</li> <li>Transferring</li> <li>Transport and Storage</li> <li>Batteries and Battery Charger</li> <li>Maintenance</li> <li>Circuit Breaker</li> <li>Fuses</li> <li>Check List</li> <li>10</li> <li>10</li> <li>10</li> <li>10</li> <li>10</li> <li>10</li> <li>10</li> <li>11</li> <li>11</li> <li>12</li> <li>13</li> <li>13</li> <li>13</li> </ul>	Brake Release / Freewheel Operation	9	
Batteries and Battery Charger 11 & 12  Maintenance 13  Troubleshooting	<ul> <li>Getting Started</li> <li>Moving Off</li> <li>Steering</li> <li>Reversing</li> <li>Ramps / Slopes</li> <li>Surfaces</li> </ul>	10 10 10 10 11	
Maintenance 13  Troubleshooting	Transport and Storage	11	
Troubleshooting	Batteries and Battery Charger	11 & 12	
<ul> <li>Circuit Breaker</li> <li>Fuses</li> <li>Check List</li> <li>13</li> <li>13</li> <li>13</li> </ul>	Maintenance	13	
	• Fuses	13 13	

## Warranty

## Introduction

Congratulations on your purchase of the ROMA *Alcora* scooter. This scooter incorporates the latest innovative designs. The ROMA *Alcora* can be used in confined spaces both indoors and out. Direct drive rear transaxles and electromagnetic brakes give a safe and efficient ride. The scooter can be easily disassembled without tools and will fit into the boot of most vehicles for easy transport. The detachable battery pack allows convenient charging wherever necessary.

## **Intended Use**

The ROMA *Alcora* is carefully designed for indoor or outdoor use in pedestrian areas by a single individual with limited mobility up to a maximum weight of 100kg (16st). The acute manoeuvrability prohibits the use by persons who are severely physically impaired or those who have balance difficulties. Your assessor/healthcare professional will determine the suitability of the scooter for each individuals intended use.

Note: Persons with lower body amputations should not use this device unless evaluated with artificial limbs fitted, as stability may be compromised due to an irregular centre of gravity.

## **Technical Specification**

# Class 1 Medical Device Class 2 Indoor/Outdoor Vehicle

Overall Size		Seat	
		Dimensions	
Length	955mm	Width	410mm
Width	545mm	Depth	340mm
Height	920mm	Seat to floor	430-480mm
		pan	
Battery	2 x 10Ah	Backrest height	320mm
Height (Folded)	425mm	Range	10km 6(m)*
Maximum user	100kg / 16st	Seat to floor	550-600mm
weight			
Safe working	6°	Battery charger	1.8 Amp
slope		(off board)	
Weight with	44kg	Battery Pack	7.5kg
batteries		Weight	_
Max. Speed	6km/h (4mph)		

<sup>\*</sup>Passenger weight, rough ground conditions, low temperatures and battery condition can affect maximum range.



- 1. Tiller control head
- 2. Detachable padded seat with fold down back
- 3. Detachable basket
- 4. Detachable battery pack
- 5. Tiller angle adjustment knob
- 6. Front lift handle
- 7. Anti-tip wheels
- 8. Puncture proof non-marking wheels

## **Safety Advice**



## DO:

- Read this manual carefully before using your scooter
- Turn the power off when transferring to and from the scooter
- Select a slow speed when going down gradients (max 6°) or over uneven ground
- Keep your feet on the scooter whilst driving
- Ensure the seat is in a fixed position facing forwards before driving
- Ensure the tiller is secure
- Ensure the batteries are fully charged before your journey
- Avoid rough or soft terrain and long grass wherever possible
- Be aware of other road users and pedestrians
- Turn the power off when not in use
- Follow the maintenance guide to ensure safe operation of the scooter
- Always remove the keys if leaving the scooter unattended. Unauthorised persons/children may use the scooter resulting in injury.



## DO NOT:

- Carry passengers
- Exceed inclines over 6°
- Traverse inclines
- Attempt inclines if the surface is slippery
- Turn sharply at full speed
- Exit or enter the scooter unless the power is switched off
- Switch off the power whilst driving this will cause the scooter to stop abruptly (see emergency procedures – page 15)
- Use the scooter where you cannot safely or legally walk
- Attempt to climb kerbs except drop down kerbs
- Use the scooter if under the influence of alcohol or any medication
- Use a mobile phone whilst driving
- Attempt to negotiate steps or escalators
- Sit on the scooter if being transported in a vehicle
- Attempt to tow any other devices
- Exceed the stated weight limit
- Connect any other devices to the batteries as this could cause permanent damage and void your warranty
- Use any other batteries/charger other than those supplied by ROMA
- Travel through water or over soft terrain (mud, sand etc.) Avoid cobbles.
- Travel on the road except when crossing between pavements
- Lift the scooter by the shroud assembly or any plastic part
- · Sharply shift your centre of gravity as this could make the scooter unstable

Every care has been taken to ensure that your scooter will give you safe, reliable service provided you adhere to the advice given above.

## **Adjustments**

## **Tiller Angle Adjustment**

At the base of the tiller is a handknob. Rotate the handknob anti-clockwise to open the joint (DO NOT FULLY UNDO THE HANDKNOB). Select the desired tiller angle and re-tighten the handknob. Ensure the tiller is fully secure before using the scooter.



# Folding the Tiller Assembly (For transport purposes)

Release the adjustment mechanism as above and fold the tiller down fully until it reaches the position shown below and re-tighten the handknob to secure the tiller in this position. The battery can also be easily lifted out of the chassis for transportation.

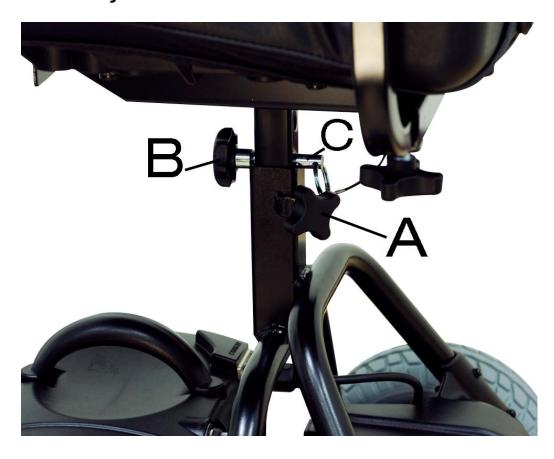
Do not carry the scooter by the tiller stem in the area indicated below.



## **Seat Removal**

To remove the seat, fold down the back of the seat. Slacken knob 'A' - the seat can then be lifted clear of the scooter. Simply re-insert the seat post into the receiver and tighten 'A' to re-fit.

Do not hang baggage or other objects on the back of the seat as this may affect stability.



## **Seat Height Adjustment**

Remove the seat as previously described. Fully undo knob 'B' and pull pin 'C' from the seat post. Adjust to the desired height and re-insert the pin and retighten knob 'B'. Re-fit the seat as above.

The higher the seat is adjusted; stability may be affected due to the higher centre of gravity.

## **Arm Adjustments**

On each side of the seat towards the back there are two hand knobs (Just above the letter 'A' in the image above). These are to adjust the width of the armrests or to remove then for transport.

Turn the knobs anti-clockwise to loosen. Once the knobs are loose you will be able to adjust the armrests in or out to the desired width. Re-tighten when a comfortable width has been achieved or remove the armrests completely for transport.

If removing the armrests for transport, ensure that the knobs are retightened to avoid them rattling loose and falling out.

Do not apply full body weight to the armrests for transferring. Lift the arm up out of the way to transfer to another seat.



## **Finger Lever Controls**

The finger lever controls the reverse and forward motion of the scooter. Pulling the right lever will drive the scooter forward, pulling the left lever will reverse the scooter. The amount of pressure applied to the levers will determine the speed the scooter travels up to the maximum speed selected. More pressure = more speed. Release the finger lever and the scooter will automatically come to a safe stop as the electromagnetic brake is applied.

### **Horn Button**

The red button operates the scooters horn. This should only be used to warn others of your presence and not as a rebuke of any form.

## **Battery Level Indicator Gauge**

This gauge gives you a guide to the amount of charge left in the scooters batteries. This will give the truest reading when the scooter is in motion. Always fully charge the batteries before driving your scooter and never let the batteries become completely drained, as this may cause permanent damage to the batteries.

## On/Off Key

Insert the key plug supplied with the scooter. The battery gauge needle will move. There may be a slight delay before the thumb levers operate as the controller checks the scooters circuits. **Never leave the key in the switch unattended to prevent unauthorised use.** Do not switch the power off to stop the scooter unless it is an emergency. The scooter will stop very abruptly if stopped in this way.

## **Speed Control Dial**

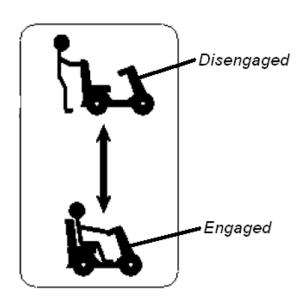
The speed control enables you to set the maximum speed of the scooter. Turn clockwise to increase the maximum speed and anti-clockwise to decrease. Always start at a slow speed until accustomed with the characteristics of your scooter. Do not put excessive pressure on the dial. Only turn as far as the stops.

## **Brake Release / Freewheel Operation**

The brake release lever is situated at the right rear of the scooter. This lever allows you to disengage the drive mechanism and push the scooter in 'freewheel' mode. To disengage the drive, pull the lever upward to the 'disengaged' position. The scooter can now be pushed.

Simply push the lever back down to re-engage the drive mechanism (the scooter can now be driven). The scooter will not operate when the lever is in the disengaged position. The scooter must be turned off and on by the key switch to reset the circuits before it will resume normal operation. The status led will flash continually if the brake is disengaged when it is switched on.







Caution! Never leave the scooter unattended whilst in freewheel mode as it will roll away down an incline. 'Freewheel' mode should only be used in an emergency to move the scooter due to power failure. NEVER move the scooter in this mode whilst it is occupied.

When in freewheel mode the scooter may be pushed on level ground at a walking pace. The scooter will 'auto-brake' if this speed is exceeded.

## **Getting Started**



Note: You must fully charge the batteries prior to first use (see 'Batteries and Charging')

Select an area with plenty of space.

Mount the scooter by lifting the arm and sliding onto the seat. **Ensure the seat** is securely locked in the forward facing position before driving. Adjust the tiller and seat if necessary (see 'Adjustments'). **DO NOT use the tiller to** fully support you during transfers.

## **Moving Off**

Push the key fully into to the tiller head to turn on the power.

Initially set the speed control to a low setting. Pull your right finger lever and the scooter will move forward slowly. The further you pull the lever the faster the scooter will travel, but only to the maximum speed that has been selected. Release the lever and the scooter will come to a smooth controlled stop.



Caution! DO NOT switch off the power to stop the scooter as this will cause the transmission to lock and the scooter will come to a sharp stop, which could possibly cause injury. This procedure should only be used in an emergency.

## **Steering**

Steering the scooter is light and easy. Ensure you give obstacles a wide clearance to avoid the rear wheels catching. When steering through limited spaces, turn the tiller in the direction that you wish to go and apply power gently. The scooter can turn very tightly with complete stability at slow speeds.



Caution! NEVER turn sharply at high speeds as it can make the scooter unstable. The maximum speed should be set at 50%.

## Reversing

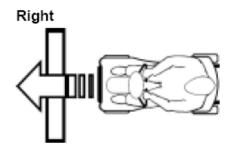
Before reversing ensure the area behind the scooter is free from any obstacles or hazards. Adjust the speed setting to low before you reverse. Pull the left thumb lever, and steer wide of all corners and obstacles.

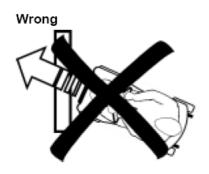


Caution! Do not reverse onto a main thoroughfare.

## Ramps / Slopes

The stability of your scooter depends on several factors such as seat height, angle of gradient and the users height and weight. When approaching an incline, do so directly and not at an angle and avoid making turns where possible.





### Surfaces

Your scooter will perform well over many surfaces. However, avoid long grass, loose gravel, sand, mud and ice.

## **Transferring**

Lift up the armpad from the side you wish to leave or sit on the scooter. Use an aid for balance if required. DO NOT use the tiller or armrests to support the full weight during transfers.

## **Transport and Storage**

The ROMA *Alcora* is designed to be quickly and easily disassembled without tools into sections for transportation and storage:

## **Guidelines for Disassembly**

Follow the following for the easy disassembly of your scooter: (Ensure the scooter is switched off before disassembling)

- 1. Lift the basket up and off the bracket.
- 2. Remove the seat as described earlier.
- 3. Remove the battery pack by lifting the handle.
- 4. Loosen the tiller adjustment knob and lower the tiller and re-tighten the knob. Do not carry the chassis by the tiller stem as shown previously.

Assembly is the reverse of the above procedure.

The ROMA *Alcora* is now separated into four components for easy transportation or storage.

If the scooter is not to be used for periods of more than a few weeks, fully charge the batteries but leave the battery pack disconnected from the scooter.

## **Batteries and Battery Chargers**

## **Batteries**

## Charge the batteries completely (8-12 hours) prior to first use.

The ROMA *Alcora* is supplied with a closed battery pack which contains two 10Amp, 12 Volt sealed lead acid batteries. The battery pack is situated under the front of the seat and can be removed by lifting it away from the chassis.

Low temperatures, rough terrain and the weight of the user can affect battery performance. Your battery gauge is a guide only to the level of charge remaining in your batteries and will give its best indication while the scooter is moving.

Note: Batteries recommended by ROMA MUST be used if they need to be replaced. An authorised ROMA dealer must carry out battery replacement.

## **Battery Charger**

The battery charger is a 1.8-amp switch type off board. The battery charging port is located on the battery pack. This special feature allows the batteries to be charged independently of the main scooter.

Before using your scooter for the first time be sure to fully charge the batteries, this may take up to 12 hours.

To charge the batteries connect the 3-pin male charger plug into the charging socket on the battery pack. Plug the 3-pin mains plug into a wall socket and switch on. A constant red light will show when the battery charger is connected and charging is underway (this will flash if there is a break in the connection). The red light indicates that the batteries are receiving charge, this will change to solid green when the charging cycle is complete. Always turn off mains power to the charger before disconnecting the plug from the battery box.



Caution! Do not charge the batteries for longer than 12 hours. Always charge the batteries in a well-ventilated indoor area. You must still maintain charging the batteries even if the scooter is not to be used for a prolonged period of time (2 to 3 weeks). Failure to do so could result in permanent damage and render the batteries unusable. Wherever possible do not interrupt the charge cycle until the batteries are fully charged. Continual interruption can permanently damage the batteries. If the charging lead should get damaged discontinue use immediately and seek a replacement from your dealer. ONLY USE THE CHARGER SUPPLIED WITH YOUR SCOOTER. Do not leave the charger plugged into to the charger port after the charge is complete. ALWAYS remove the keys from the scooter when charging.



## Disposing and recycling of used batteries

Batteries must always be recycled correctly. Do not dispose of them with your domestic refuge.



For further information regarding your nearest recycling facility please contact your local authority.



## Maintenance

## **Product Life Expectancy**

Your scooter has been designed to provide the user with a long, reliable life provided it is correctly maintained and regularly serviced by an authorised dealer. However, due to inevitable wear and tear and technological improvements it is recommended that the average useable life of this scooter is five years.

## Cleaning

The shrouds and seat of the scooter should be cleaned using a damp cloth and gentle detergent. Do not use abrasive cleaners or solvents, as this will damage the plastic components. Do not spray water (*hose or pressure washer*) onto the scooter as this may cause damage to the electronics.

#### **Routine Maintenance**

We suggest that your scooter should undergo a full service at least once a year by an authorised ROMA dealer.

Please check the following on a weekly basis:

- Tyres are in good condition
- Wheels spin freely
- Moving parts, pivots and frame fixings are not damaged or worn
- All hand knobs and levers are secure

## **Troubleshooting**

#### **Circuit Breaker**

Your scooter is fitted with the latest in electronic controls that are programmed to protect the electrical system from abnormal overloads. Fitted for extra protection is a circuit breaker, which is located on the battery pack. Should there be a situation where your scooter stops for no apparent reason please check that the circuit breaker has not tripped. Simply press the button to reset the circuit breaker.



Note: Should the circuit breaker continue to trip turn off the scooter immediately and consult your dealer.

## **Fuses**

There are two 40 amp blade type fuses inside the battery pack to give protection against possible overload on the wiring.



Caution! Do not attempt to open the battery pack to replace the fuses. Please take the battery pack to an authorised ROMA dealer to replace any blown fuses.

## **Check List**

If your scooter fails to operate, please check the following:

- The unit is switched on.
- All plugs and connections are firmly fixed.
- Battery level shows full charge.
- Freewheeling device is in the drive position.
- Circuit breaker has not tripped.

If the freewheel device has been operated with the scooter switched on, the scooter will not operate until the key switch has been turned off and on again.

Should a fault occur, the status led on the tiller head will indicate a flash sequence which relates to the fault in the table below.

(NUMBER OF FLASHES)	MEANING	SCOOTER CONDITION	REMARKS
1	Charge battery	DRIVING POSSIBLE	BATTERY VOLTAGE LOWERED TO LESS
			THAN 23.3V,CHARGE BATTERIES SOON
2	Battery voltage too low	DRIVING NOT POSSIBLE	BATTERY VOLTAGE LOWERED TO LESS
			THAN 16.5V,CHARGE BATTERIES IMMEDIATELY
3	Battery voltage too high	DRIVING NOT POSSIBLE	BATTERY VOLTAGE INCREASED TO
			HIGHER THAN 32V,PROBABLY DEFECT CHARFER
4	Current time limit our	DRIVING NOT POSSIBLE	DETECTOR DETECTED SHORTCUT IN THE
			MOTOR_WARN DEALER
5	brake fault	DRIVING NOT POSSIBLE	CHECK IF FREEWHEEL IS DISCONNECTED
6	Not in neutral at power up	DRIVING NOT POSSIBLE	CONTACT DEALER
7	Speed pot error	DRIVING NOT POSSIBLE	CONTACT DEALER
8	Motor volts error	DRIVING NOT POSSIBLE	CONTACT DEALER
9	Other internal error	DRIVING NOT POSSIBLE	CONTACT DEALER



Note: Should your scooter fail to operate after checking these possible problems, consult your local ROMA dealer immediately.

## **Further Information**



## Safety Information Regarding Electromagnetic Interference (EMI)

Scooters and powerchairs are designed to operate under certain conditions. However, radio waves or electromagnetic fields may affect the operation of the scooter. The source of EMI could be radio or television transmitters or portable devices such as mobile phones, portable CB radios etc.

Should any unintentional movement occur turn the scooter off as soon as safely possible.

## **Solar Energy**

During periods of sunny weather, it is possible that surfaces of your scooter may reach high temperatures (as with motor vehicles). Please take precautions if leaving the scooter in direct sunlight for any period of time. Seek shade or cover the seat and hand controls to keep any temperature increases to a minimum.

#### **Health Factors**

Suitability for this product has been assessed on the user's current state of health. It is essential that the user regularly monitor their ability to use the scooter safely.

### **General Use**

Take heed of the information given in this manual regarding safety and the maintenance of your scooter. If adhered to, your scooter should give you years of reliable mobility.

## **Storage and General Care**

We recommend that the scooter is always stored in a dry environment such as a garage or shed to protect the chassis and other components from corrosion. Do not leave the scooter outside during rainstorms. If the scooter is wet, wipe with a dry cloth to ensure there is no ingress of water into the internal components of the scooter.

During everyday use, do not use in rain showers or travel through puddles. Avoid use in areas where the scooter could become contaminated with sand or abrasive materials.

## **Emergency Procedures**

Should your scooter behave erratically or become unresponsive whilst driving, release the wig-wag lever so it may return to it's neutral position and switch off the power at the key / switch. These procedures will stop the scooter and activate the braking system, preventing any further uncontrolled manoeuvres.

Note: Switching the power off at the key / switch can cause the scooter to stop abruptly and should only be used to stop the scooter during an emergency as this can damage the drive unit.

## **Product Stability**

Scooters and powered wheelchairs are designed to allow the user flexibility of movement in restricted areas. Driving at maximum speed and attempting sharp turns can create a situation where the product becomes unstable. Therefore it is essential that the user pay attention to the guidance set out in this manual.

For maximum stability the speed setting should be set up to 50% of the maximum available (halfway between the tortoise and the hare or just entering the red sector on the speed indicator depending on the model.)

The main factors affecting stability are:

- · Maximum speed setting
- Seat height
- User movement
- User's manoeuvres
- Gradients or slopes

Please keep your speed to a level where you can safely stop without having to make any erratic turns.

Do not load bags etc. on the back of the seat as this will affect the centre of gravity and could increase instability.

Do not lean outside of the 'footprint' of the product, especially whilst moving. Avoid making turns on gradients or slopes.

## Notes

## **Notes**

## Notes

## **Warranty Terms and Conditions**

This is to certify that your Roma Medical product is warranted for a period of 12 months from the date of original purchase. This warranty is not transferable.

Should a defect or operating fault arise within this period the Dealer from where the product was originally purchased should be notified immediately. Failure to register the fault may invalidate the warranty. The Dealer from where the product was purchased is responsible for any warranty repairs.

Roma Medical warrants that if a fault occurs within this period due to faulty workmanship or materials that the product will be repaired (or replaced at the Companys discretion) free of charge.

Any unauthorised modifications will invalidate the warranty.

Parts which are subjected to normal wear and tear, accidental damage, neglect or misuse are excluded from this warranty. Normal wear and tear includes tyres, chassis covers, bulbs, seat coverings etc.

Component parts replaced outside this period carry a six-month warranty. (Standard terms and conditions apply for this period).

Model:		
Serial No:		
Purchase Date:		
Dealer Stamp		

Roma Medical Aids Ltd York Road, Bridgend Industrial Estate, Bridgend CF31 3TB

Tel: 01656 674488 Fax: 01656 674499
Email: sales@romamedical.co.uk
www.romamedical.co.uk
Roma Medical reserve the right to change specifications without prior notice



