

Wheelchair Model: C4S1



The Standard of Care[®] Owner's Manual

Martin Innovations

Enter Serial #:



DEALER:

This manual **MUST** be provided to the user of the wheelchair.

USER:

BEFORE using this wheelchair, read this manual and save it for future reference.

For more information regarding Martin Innovations products, parts & service please visit www.MartinInnovations.com.

Table of Contents

1	PRODUCT REGISTRATION FORM.....	5
2	SAFETY INFORMATION.....	6
2.1	UNDERSTANDING SAFETY TERMS.....	7
2.2	INDICATION FOR USE.....	7
3	OPERATING INFORMATION.....	8
3.1	EXTREME TEMPERATURE SAFETY PRECAUTIONS	9
3.2	STAIRWAYS	10
3.3	TRANSFERRING OCCUPANT TO & FROM OTHER SEATS	10
3.4	CHAIR-A-TABLE SYSTEM	11
4	SAFETY INSPECTIONS.....	12
4.1	WEEKLY INSPECTION CHECKLIST	12
4.2	MONTHLY INSPECTION CHECKLIST.....	12
5	FOOTREST – INSTALLING & REMOVING.....	14
5.1	INSTALLING FOOTREST	14
5.2	REMOVING FOOTREST.....	15
6	FOOTREST HEIGHT ADJUSTMENT	15
7	HEEL LOOP INSTALLATION/REMOVAL.....	16
8	WHEEL LOCKS	17
8.1	WHEEL LOCK REMOVAL.....	17
8.2	WHEEL LOCK INSTALLATION.....	17
8.3	USING WHEEL LOCKS.....	18
8.4	ADJUSTING WHEEL LOCKS	18
9	REPLACING THE FULL LENGTH ARMREST.....	20
9.1	REMOVING ARMREST ASSEMBLY	20
9.2	REPLACING THE ARMREST.....	20
10	REPLACING SEAT UPHOLSTERY.....	21
11	REPLACING BACK UPHOLSTERY.....	21
12	REMOVING & INSTALLING REAR WHEELS.....	22
13	FRONT CASTER WHEELS	23
13.1	INSTALLATION AND REMOVAL.....	23
14	TROUBLESHOOTING	24
15	LABEL LOCATION	25
16	PRODUCT DIMENSIONS & SPECIFICATIONS.....	26
17	LIMITED WARRANTY.....	27
18	RETURNED GOODS POLICY	ERROR! BOOKMARK NOT DEFINED.

Benefits of Product Registration

- 1) **Safeguard your investment**
- 2) **Ensure long term maintenance and servicing of your purchase.**
- 3) **Receive updates with product information and maintenance tips.**
- 4) **Receive any additional servicing that your product may require.**
- 5) **Enable Martin Innovations to improve future product designs.**



Register online! Visit www.MartinInnovations.com/prodreg or you may complete and mail the [Product Registration Form](#) on page 5.

NOTE: Any registration information that you supply to Martin Innovations will only be used by Martin Innovations and will be protected as required by applicable laws and regulations.

1 Product Registration Form

Register online at www.MartinInnovations.com/prodreg

Or

Complete this form and mail or fax to:

Martin Innovations
2555 Wendell Blvd
Wendell, North Carolina 27591

Fax Number: (919) 829-8045

Name: _____
Address: _____
City: _____ State: _____
Zip/Postal Code: _____
Email: _____ Phone: (____) ____ - ____

Martin Innovations Model # _____
Martin Innovations Serial # _____

(See page 28 for the location of these numbers.)

Purchased From: _____
Address: _____
City: _____ State: _____
Zip/Postal Code: _____
Date of purchase: ____/____/____
Product purchased for: Hospital Clinic Private Practice Home Use Other

I purchased this product because: (list important features)

Who referred you to Martin Innovations?

Doctor Therapist Friend Relative Dealer Other

Would you like to participate in Customer surveys from Martin Innovations? Yes No

Would you like additional information about products from Martin Innovations? Yes No

If yes, what particular medical condition(s) would you like assistance with? _____

What additional information would you like to see on the Martin Innovations web site?

2 Safety Information



WARNING

Wheelchair Users:

Do not service or operate this equipment without first reading and understanding this manual.

If you are unable to understand the warnings, cautions and instructions, contact Martin Innovations technical support before attempting to service or operate this equipment. Otherwise injury or damage may result.

Dealers & Qualified Technicians:

Do not service or operate this equipment without first reading and understanding this manual.

If you are unable to understand the warnings, cautions and instructions, contact Martin Innovations technical support before attempting to service or operate this equipment. Otherwise, injury or damage may result.



WARNING

Martin Innovations products are specifically designed for use with other Martin Innovations accessories. Accessories designed by other manufacturers have not been tested by Martin Innovations and are NOT recommended for use with Martin Innovations products.



WARNING

Weight limitation for standard wheelchair use is 600 lbs. maximum. Weight limitation for bariatric wheelchair use is 1,000 lbs. maximum.

2.1 Understanding Safety Terms

TERM	MEANING
Warning	Warning indicates a hazardous situation that could result in injury or death
Caution	Caution is a hazardous situation that could result in property damage

NOTICE

The information contained in this document is subject to change without notice. Please see our web page for the most current document.

www.MartinInnovations.com

2.2 Indication For Use

The Martin Chair is intended to provide mobility to persons limited to a sitting position. It is specifically intended to transfer a patient to and from the wheelchair.

3 Operating Information

Many activities require the wheelchair user to reach, bend or transfer out of the wheelchair. Sometimes movements will cause a change in weight distribution resulting in a change in the center of gravity.

To determine and establish your particular safety limits, practice bending, reaching and transferring activities in several combinations under the supervision of a qualified health professional before attempting active use of the wheelchair.

DO NOT lean forward out of the chair beyond the length of the armrests. When leaning forward, make sure the wheels are pointed forward. This can be achieved by advancing the wheelchair forward then reversing it in a straight line.

IMPORTANT Proper positioning of the occupant is essential for their safety.

DO NOT attempt to reach objects if you have to move forward in the seat.

DO NOT attempt to reach objects if you have to pick them up from the floor by reaching down between your knees.

DO NOT lean over the top of the back upholstery to reach objects behind you as this will cause the wheelchair to tip over.

DO NOT shift your weight or sitting position while reaching as this will cause the wheelchair to tip over.

DO NOT tilt the wheelchair when occupied to traverse curbs or other obstructions. **ALWAYS** use the curb cuts.

DO NOT use an escalator or moving sidewalk while in a wheelchair. Serious injury could occur.

DO NOT attempt to stop a moving wheelchair with the wheel locks. Wheel locks are not brakes.

ALWAYS keep hands and fingers clear of moving parts to avoid injury.

DO NOT operate wheelchair on open roads or streets as this could result in injury or death.

DO NOT allow children to operate or play with the wheelchair.

DO NOT allow more than one person to occupy the wheelchair at one time.

DO NOT operate the wheelchair on soft surfaces such as sand, gravel or grass.

DO NOT attempt to stop the wheelchair while on a sloped surface.

DO NOT attempt to traverse slopes of more than 4 degrees.

DO NOT attempt to traverse any slope or incline with water, ice, oil or any other film on it.

ALWAYS check the handgrips for looseness before using the wheelchair. If loose or worn replace immediately.

DO NOT attempt to lift the wheelchair by any removable parts. Lifting by any removable parts of the wheelchair may result in serious injury to the user or damage to the wheelchair.

DO NOT stand on the frame of the wheelchair.

DO NOT stand on the footplates. When getting in or out of the wheelchair, the footplates must be in either the up position or swing the footplates to the outside.

ALWAYS use good body mechanics when assisting the wheelchair user. Keep your back straight and bend your knees whenever tilting or lifting the wheelchair. When attempting a new assistance technique, have an experienced health care professional instruct you with the proper procedure.

3.1 Extreme Temperature Safety Precautions

If the wheelchair is exposed to extreme temperature (above 100 degrees Fahrenheit or below 32 degrees), high humidity or becomes wet prior to use, ensure that the handgrips do not twist on the handle. Otherwise damage or injury may occur.

DO NOT use the wheelchair for athletic training or weight lifting. If the wheelchair is used for athletic training or weight lifting, Martin Innovations is not liable for injury and the warranty will be voided.

3.2 STAIRWAYS



WARNING –

DO NOT attempt to transport wheelchair on stairs of any kind while the occupant is seated in wheelchair.

Stairway procedure:

- 1) Remove the occupant from wheelchair.
- 2) When lifting the chair bend your knees and keep your back straight.



WARNING

Do not lift wheelchair by armrests.

- 3) Use NON-MOVABLE parts of the wheelchair to lift or move up or down stairs.
- 4) The wheelchair foot rests should not be lowered until the last step has been safely negotiated and the wheelchair has been moved from the stairway.

3.3 TRANSFERRING OCCUPANT TO & FROM OTHER SEATS



WARNING –

BEFORE transferring the occupant from one seat to another:

ALWAYS make sure the pathway is clear and free from obstacles, otherwise, serious injury may occur. This procedure is best with the help of an assistant.



ALWAYS make sure the wheel locks are engaged. Make sure the front casters are pointed straight ahead and parallel.



ALWAYS reduce the gap to a minimal distance between the seats.

NOTE: The footrests must be tilted back and away from the front of the wheelchair. The wheel locks must be fully engaged.



DO NOT reach or lean over the top of the back upholstery to reach objects. This may cause serious injury. For this procedure position the wheelchair as close as possible to the desired object that you wish to reach, point the casters forward to create the longest possible wheelbase, and reach back only as far as your arm will extend without changing your seating position.

3.4 CHAIR-A-TABLE SYSTEM

The Martin Innovations Chair-A-Table system is a patient transfer method from a wheelchair to an exam table. With the aid of an attendant, the Martin Chair is an accessory that docks with the Martin Exam Table without the patient ever leaving the seat of the wheelchair.

NOTE: This is a reference for the attendant or patient to use as a checklist to ensure proper procedures are taken as the Martin Chair docks with the Martin Exam Table.

- 1) Ensure the patient positioning strap (optional) is securely fastened.
- 2) Ensure the attendant locks the wheel locks after chair is rolled over table.
- 3) Before docking, ensure the attendant raised the wheelchair footrest before examination.
- 4) Ensure the attendant installs the accessory rails and bed rails after removal of the side frames.

4 Safety Inspections

IMPORTANT: Have a qualified professional inspect and service the wheelchair every 6 months.

After the initial adjustments are made to suit your specific body structure you should follow these maintenance procedures.

4.1 Weekly Inspection Checklist

- Check to make sure the wheel locks do not interfere with wheel operation.
- Ensure that wheel locks will prevent wheels from moving when engaged.
- Check to make sure the wheel locks are easy to engage.
- Ensure wheel bearings are clean and free of moisture.
- Inspect casters and wheels for cracks and wear.
- Clean all upholstery.

4.2 Monthly Inspection Checklist

- Adjust front casters and wheel bearings if a wheel becomes noisy, binds or wobbles.
- Inspect seat positioning strap (optional), backrest snaps and backrest buckles to verify strength and secure connections on either side of the wheelchair.
- Inspect hand grips to make sure they are not loose or deteriorated.
- Inspect seat and back for loose or broken parts.
- Inspect for damaged or missing labels.
- Inspect for loose or missing hardware.

- Check the frame for dents or bent parts.
- Inspect tires for flat spots and excessive wear.

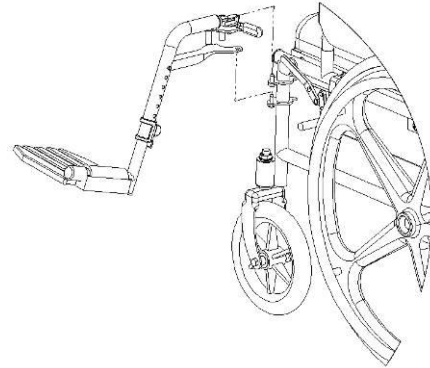
The inspection of your wheels and tires is very IMPORTANT

- Ensure the wheelchair will roll straight with no drag or pull to either side.
- Inspect hand rims for signs of wear, rough edges or peeling.

5 Footrest – Installing & Removing

5.1 Installing Footrest

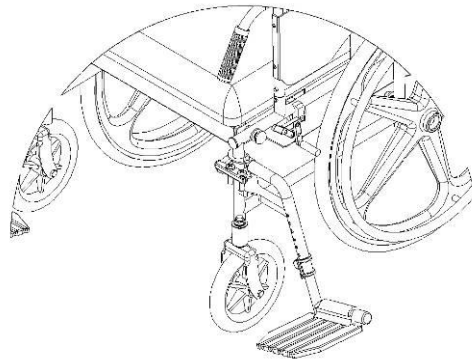
- 1) Position so footplate is perpendicular to the wheelchair.



Steps 1-3

- 2) Turn the footrest to the side as shown in the picture.

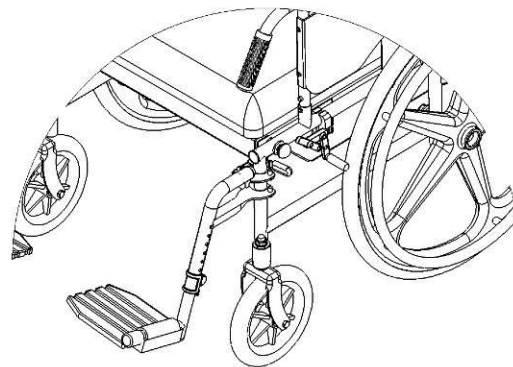
- 3) Install the hinge plates on the footrest assembly onto the hinge pins of the wheelchair frame.



Step 4

- 4) Push the footrest assembly toward the wheelchair until it locks into position.

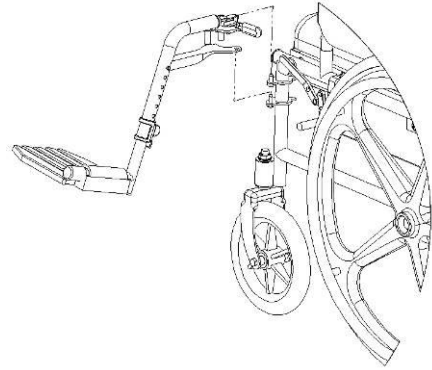
- 5) When properly positioned, the footplates will be facing each other when locked in place.



Step 5

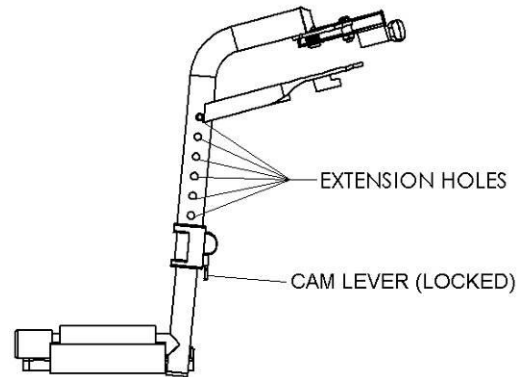
5.2 Removing Footrest

- 1) Push the foot release lever inward.
- 2) Rotate the footrest assembly outward.
- 3) Lift and remove the footrest assembly.
- 4) Repeat steps 1 through 3 for the other side.



6 Footrest Height Adjustment

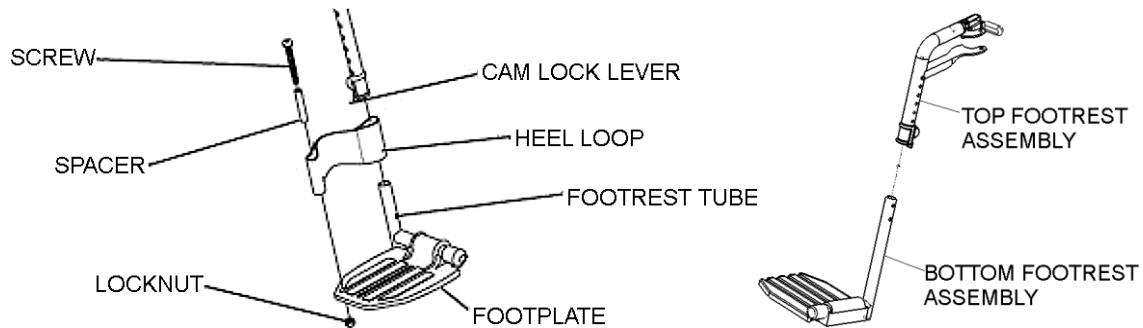
- 1) To remove the footrest assembly, see [Removing Footrest](#).
- 2) The best way to do this is to put the wheelchair on a flat surface.
- 3) Put the cam lever in the up position and press the release button located in one of the extension holes to release the footrest assembly.
- 4) Reposition the lower footrest to the desired height. The release button should automatically lock into one of the extension holes on the side of the footrest assembly.
- 5) Put the cam lever in the down position to lock the footrest.
- 6) Repeat steps 3 - 5 for the other footrest.



WARNING

After adjustments, service or repair, make sure attaching hardware is securely tightened. Otherwise, injury or damage may occur.

7 Heel Loop Installation/Removal



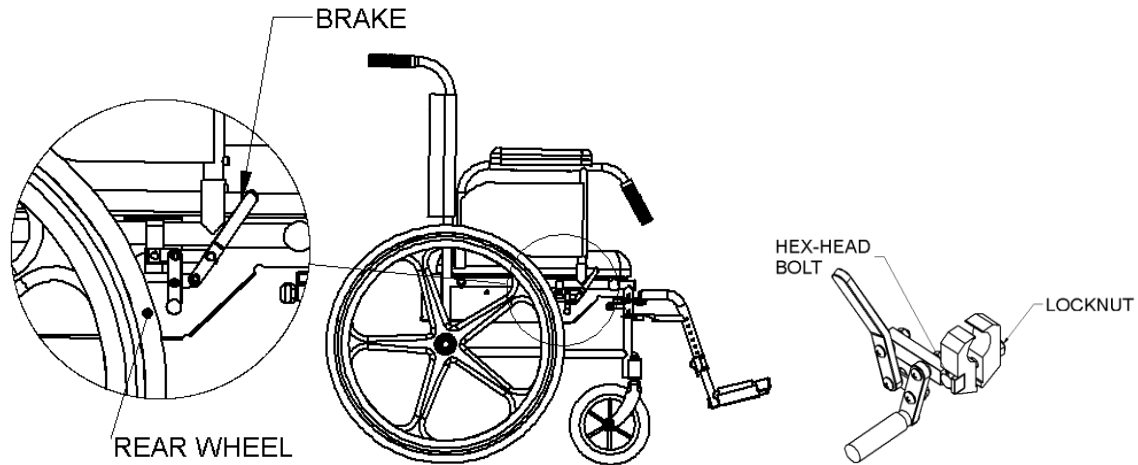
- 1) Pull the cam lever into the up or “unlocked” position.
- 2) Push in the release button and remove the bottom footrest assembly from the upper support.
- 3) Remove the mounting screw, spacer and locknut that secure the existing heel loop to the footrest.
- 4) Slide the existing heel loop off the lower footrest assembly.
- 5) Slide the new heel strap onto the lower footrest assembly.
- 6) Reverse steps 1-4 to reassemble the footrest.
- 7) When securing the heel loop to the footrest assembly, tighten the mounting screw and locknut until the spacer is secure.



WARNING

After adjustments, service or repair, make sure attaching hardware is securely tightened. Otherwise, injury or damage may occur.

8 Wheel Locks



8.1 Wheel Lock Removal

- 1) Disengage wheel lock.
- 2) Loosen the 10mm hex-head bolt and nut that secure the wheel lock to the wheelchair frame.

8.2 Wheel Lock Installation

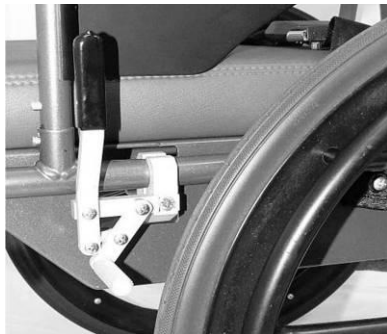
- 1) Reposition the wheel lock and the wheel lock clamp so that when engaged, the wheel lock shoe embeds the tire $\frac{3}{16}$ " and holds the occupied wheelchair in place when pushed.
- 2) Securely tighten the nut securing the wheel lock to the wheelchair frame.
- 3) Engage the wheel lock.
- 4) Measure the distance the wheel lock is embedded into the tire (this should be $\frac{1}{8}$ "- $\frac{3}{16}$ ").
- 5) Repeat STEPS 1-4 until the wheel lock shoe embeds in the tire $\frac{1}{8}$ "- $\frac{3}{16}$ " and holds the occupied wheelchair when pushed.



- 6) Repeat ALL STEPS for the opposite wheel lock.
- 7) Engage BOTH wheel locks to ensure the wheelchair will be held in place when pushed.

8.3 Using Wheel Locks

- 1) To perform this procedure, position the wheelchair on a flat level surface.
- 2) The wheelchair should not be moving when attempting to engage the wheel locks.
- 3) Push-to-Lock to engage: Push the lock handle forward to lock the wheel in place.
- 4) Disengage the wheel locks by reversing Step 3.



WARNING

If wheel locks do not hold the occupied wheelchair in place, contact a MI Tech Support at 1-888-833-5173. Otherwise serious injury or damage may occur.

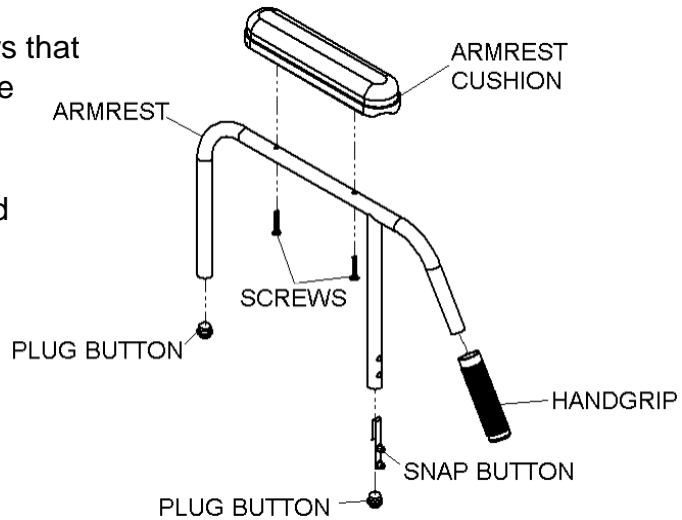
8.4 Adjusting Wheel Locks

- 1) Disengage wheel lock.
- 2) Loosen nut that secures the wheel lock to the wheelchair frame.

- 3) Reposition the wheel lock and the wheel lock clamp so that when engaged, the wheel lock shoe embeds in the tire 1/8"-3/16" and holds the occupied wheelchair in place when pushed.
- 4) Securely tighten the nut securing the wheel lock to the wheelchair frame.
- 5) Engage the wheel lock.
- 6) Measure the distance and confirm the wheel lock shoe is properly embedded into the tire. This should be 1/8"-3/16".
- 7) Repeat STEPS 1-6 until the wheel lock shoe embeds in the tire 1/8"-3/16" and holds the occupied wheelchair when pushed.
- 8) Repeat STEPS 1-7 for the opposite wheel lock.
- 9) Engage BOTH wheel locks to ensure the wheelchair will be held in place when pushed.

9 Replacing the Full Length Armrest

- 1) Remove the mounting screws that secure the armrest pad to the armrest assembly.
- 2) Replace the armrest pad and securely tighten the existing mounting screws.



9.1 Removing Armrest Assembly

- 1) Unlock the armrest by pressing the snap button inward.
- 2) Lift the armrest from the armrest sockets on the wheelchair.



9.2 Replacing the Armrest

- 1) Place the armrest onto armrest sockets located on the side of the wheelchair.
- 2) Push down until the snap button engages and locks the armrest in place.



WARNING

After adjustments, service or repair, make sure attaching hardware is securely tightened, otherwise, injury or damage may occur.

10 Replacing Seat Upholstery

- 1) Remove the four (4) mounting screws that secure the existing seat upholstery to the wheelchair frame.
- 2) Remove the existing seat upholstery from the wheelchair seatbase.
- 3) Install the new seat upholstery by reversing STEPS 1-2.

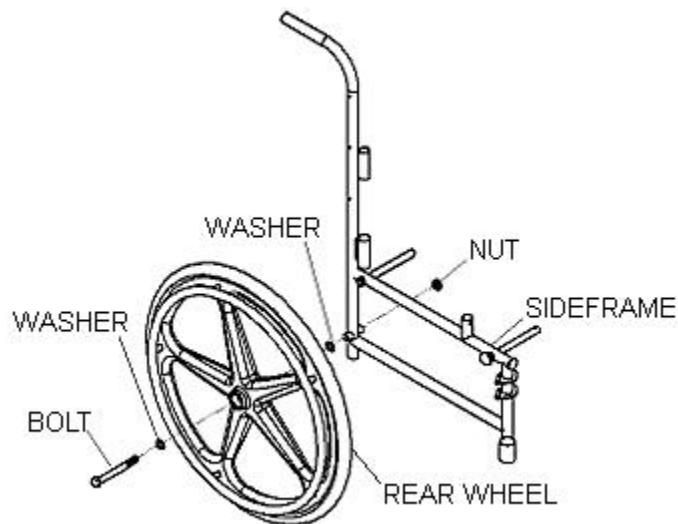
11 Replacing Back Upholstery

- 1) Unbuckle and unsnap the backrest to remove.
- 2) Install new backrest by snapping and buckling to wheelchair side frame.



12 Removing & Installing Rear Wheels

- 1) Place the wheelchair on blocks or a safety stand so that the rear wheels are off of the ground. NOTE: If replacing with the same size wheels, make a note of the mounting position on the wheelchair for proper reinstallation of the new rear wheels.
- 2) Remove the dust cap from the axle (if applicable), bolt, locknut and washer that secure the rear wheel and axle spacer to the wheelchair.



- 3) Repeat STEP 2 for the opposite rear wheel.
- 4) To reinstall the rear wheel onto the wheelchair, reverse STEP 2.
NOTE: Make sure the axle spacer is properly placed between the rear wheel and wheelchair frame.
- 5) Replacing the rear tire or tube will require professional assistance.



WARNING

After adjustments, service or repair, make sure attaching hardware is securely tightened. Otherwise, injury or damage may occur.

13 Front Caster Wheels

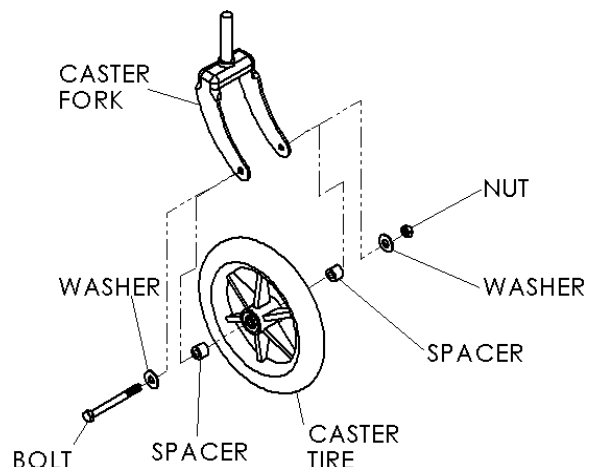
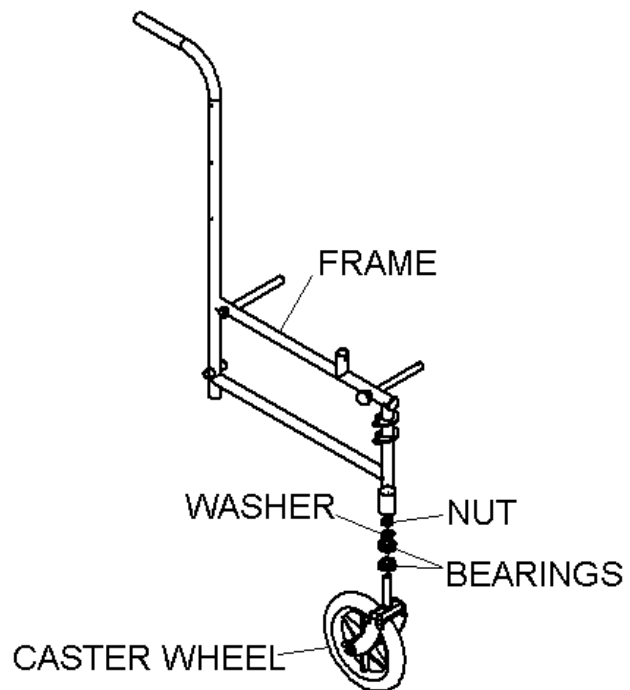
13.1 Installation and Removal

NOTE: If replacing the wheels with a different size wheel, adjustments are necessary to the floor-to-seat height. To do this professional help is needed.

NOTE: Only if you are replacing front caster wheel with the exact same size front caster can this procedure be used.

- 1) Remove the locknut and washer that secures the fork to the caster head-tube.
- 2) Drop the front caster and fork out of the caster head-tube.
- 3) Slide in the new caster and fork.
- 4) Reassembly is done by reversing STEPS 1-2.
- 5) Repeat STEPS 1-4 for the opposite front caster.
- 6) To tighten caster system and guard against wheel flutter, perform the following:

- A. Tip the wheelchair back and rest it on floor.
- B. Simultaneously pivot both forks & casters to the top of their arc.
- C. Let the casters drop to the bottom of their arc (wheels will swing once from side to side and rest in a position straight down).
- D. Adjust locknuts according to freedom of caster position.



- 7) Test wheelchair for maneuverability.
- 8) Readjust locknuts if necessary.
- 9) Repeat STEPS 7 - 8 until correct.



WARNING

After adjustments, service or repair, make sure attaching hardware is securely tightened. Otherwise, injury or damage may occur.

14 Troubleshooting

PROBLEM	SOLUTION
Looseness in chair	Check for loose fork stem, nuts and bolts.
Chair veers to the left or right	Check that both casters contact the ground at the same time.
Casters flutter	Check that both casters contact the ground at the same time.
Squeaks and rattles	Check for loose fork stem, nuts and bolts.
Sluggish turn performance	Check for loose fork stem, nuts and bolts.

15 Label Location

Labels are visible on equipment as indicated



Wheel Lock Label



Weight Capacity Label



Serial Label

16 Product Dimensions & Specifications

	20" Standard	26" Standard	26" Bariatric	30" Bariatric	36" Bariatric
Seat Width	20"	26"	26"	30"	36"
Overall Width	30"	36"	36"	40"	46"
Caster Fork	Standard	Standard	Bariatric	Bariatric	Bariatric
Caster Wheel Size	8"x 1" Solid Rubber	8"x1"	8"x2"	8"x2"	8"x2"
Weight	62 lbs	71.5 lbs	72 lbs	74 lbs	75 lbs
Weight Capacity	600 lbs	600 lbs	1000 lbs	1000 lbs	1000 lbs
Front Riggings	Plastic	Metal	Metal	Metal	Metal
Seat Depth	18"				
Seat to Floor	21"				
Back Style	Fixed				
Back Height	16.5"				
Arm Style	Swingaway/Removable				
Rear Axle	Fixed				
Rear Wheels	24" Composite				
Handrims	Plastic				
Wheel Locks	Aluminum, Push-Lock				
Upholstery	Medical Grade Vinyl				
Frame Colors	Pearlescent Grey				

17 Limited Warranty

Please note the warranty has been drafted to be compliant with Federal Law applicable to product manufactured after July 4, 1975.

This warranty is extended to the original owner of this product prior to its use. This warranty is not transferable to any other user or owner of the product. The warranty will end at the time the original owner sells or transfers ownership of the product to anyone else.

Martin Innovations warrants the side frames and seatbase frame of this product to be free of defects in materials and workmanship for a limited lifetime period from the date of purchase from an authorized Martin Innovations Dealer.* A copy of the sellers invoice is required for coverage under this warranty. Martin Innovations warrants the upholstered materials (seat, & back) and remaining components of this product to be free from defects in (materials and workmanship) for a period of eighteen (18) months from the date of original purchase from an authorized Martin Innovations Dealer. If within the warranty period any such product is found to be defective, Martin Innovations will repair or replace the product at their option.

* The average life expectancy for a wheelchair under normal everyday use is approximately five (5) years.

This warranty does not include the cost associated with labor or shipping incurred in the replacement of repair of the product. The sole obligation of this warranty shall be limited to the repair or replacement of this product.

For warranty service, please contact the Dealer from whom you purchased your Martin Innovations product. If you are not satisfied with the response from the Dealer, please write directly to Martin Innovations. Provide the following information with your letter: Dealer's name, address, the product model number, serial number, date of purchase, and specifically what problems are experienced with the product. DO NOT return any products to our factory without written consent from Martin Innovations.

Limitations and exclusions: The warranty shall not apply to serial numbered products if the serial number has been removed or defaced, products subjected to negligence, accident, improper operation, maintenance or storage, products modified without Martin Innovations written consent including but not limited to, modification using unauthorized parts or attachments; products damaged by attempted repairs to any part of the product. The warranty shall not apply to normal wear or failure to adhere to product instructions.

Legal rights provided for you with this warranty will vary in different States. The foregoing expressed warranty is exclusive and in lieu of any other warranties whether written or implied.

18 Returned Goods Policy

For products being returned due to non-warranty issues, a 10% restocking/handling charge and freight cost will be assessed. To qualify for returns of this nature, the customer must notify Martin Innovations of the return within 30 days of original receipt, and the product must be returned in its original unopened/unused state. To affect a return, notify Martin Innovations Customer Service (1-888-833-5173), who will issue a Return Goods Authorization (RGA) number. All returns must be accompanied with the RGA number that is to be clearly visible on the shipment. All items returned in any other manner will not be accepted.



*Martin Innovations
2555 Wendell Blvd
Wendell, NC 27591
1-888-833-5173 toll free
919-829-8045 fax*

customerservice@martininnovations.com