

The only limitation is your imagination



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www.mapleleafwheelchair.ca

Operating & Service Manual





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REFERENCE INFORMATION

Serial Number	Contact Person
Model Number	Phone Number
Description	DealerInformation
Date Purchased	(Name & Address)

Please contact your dealer or Maple Leaf Wheelchair customer service with any questions or concerns you may have with your wheelchair. The above information will help in the process of completing your request.

LIMITED WARRANTY

Maple Leaf Wheelchair Manufacturing guarantees all parts of our wheelchair to be free of defects in workmanship and materials for a period of two (2) years from date of purchase. "Wear" items such as tires, tubes, armpads and upholsteries are excluded from this warranty.

In addition the frame and crossbraces are guaranteed to be free of defects in workmanship and material (to the original purchaser) for a period of five (5) years from date of purchase.

This warranty is invalid if the chair has been damaged by accident, misuse, neglect, improper application, unauthorized service repair, or the addition of non-factory approved accessories.

Maple Leaf Wheelchair will repair or replace defective parts as required. A return authorization must me obtained and the parts returned to us freight prepaid, within the warranty period. Labour and freight charges incurred for replacements or repairs are not covered.

*Please fill out the "Maple Leaf Wheelchair Warranty Card" attached, and return the required part to our Maple Leaf Wheelchair facility.





WARRANTY CARD

Buver & Dealer Information

Please complete this Maple Leaf Wheelchair Warranty Card and return it to our facility within 30 days of delivery of the equipment. This will assist in intiating your warranty coverage

Name		
Address		
Phone #		
Email		
Dealer Information (Name & Address)		
Product Inform	<u>ation</u>	
The serial number the device need se	r of your device contains important information. This number will be required sl ervice or replacement parts. Please write down the serial number for future refer	hould rence.
*NOTE - The seria	al number is located on the right side (when seated) of the wheelchair on the low	ver frame.
Serial #		
Purchase Date _ (M/D/Y)		

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Valued Customer,

Thank you for your purchasing a Maple Leaf Wheelchair product. At Maple Leaf we manufacture top quality "Made In Canada" products, using as many Canadian made materials as possible. Your wheelchair should provide you with many years of service, but like any piece of equipment, it will require proper care and service for it to perform efficiently.

Your satisfaction is necessary and important to us and we want to guarantee it. However we suggest you regularly inspect your chair, checking for loose fasteners, excess play and damage. We also strongly recommend that regular maintenance be done by your service dealer.

Please complete your Warranty Registration Card and return it to us at Maple Leaf Wheelchair.

Also please read this manual to help you understand the proper operation, safety and maintenance of your new chair. If you have any difficulties or require additional information contact your dealer or our customer service department at Maple Leaf Wheelchair Manufacturing.

MAINTENANCE GUIDE

Your wheelchair is designed to give you many years of trouble-free use with proper care. Some servicing can be done at home, but we recommend that periodic maintenance be performed at your dealer. Service frequency depends strongly on the type of use and your dealer can best advise you on the time interval

CLEANING

All chrome parts can be cleaned with a mild-non abrasive cleaner such as window cleaner. Stubborn spots or rust can be removed with automotive chrome cleaner.

The arms and nylon upholstery should be cleaned with mild soap and water solution. Both should be rinsed well with clean water to remove all soap residues. The molded wheels and casters should also be cleaned with a mild soad and water solution.

LUBRICATION

Your wheelchair has been made with low friction plastic, aluminum and polished chrome to reduce friction and wear. However a light use of thin lubricant, such as WD40 or silicone spray will reduce friction and wear, making your chair easier to use.

SAFETY & HANDLING

The safe handling of your chair depends on understanding the purpose and fuction of your particular wheelchair. Recognizing the chairs; limitations will increase your confidence level.





MAINTENANCE GUIDE

LEANING

Leaning should be avoided when possible, as this weight transfer will reduce your chair's stability. When leaning forward or sideways make sure the casters are turned in the direction you are leaning as this will lengthen the wheel base, increasing stability. Also make sure the wheel locks are engaged, to prevent your chair from rolling.

TIPPING YOUR CHAIR BACK

Tipping the chair is necessary when negotiating curbs and steps. Your chair has a balance point at about 30° when tipped backwards. Tipping with attendant's help should first be practiced before tipping on your own.

With an attendant's help:

- 1) Firmly plant your feet on the footplates, making sure your hands are away from the wheels, then release the brakes.
- 2) Ask the attendant to firmly grip the handle bars, place one foot on the tail tube and tilt the chair back by pulling back on the handle bars and pushing down on the tail tube.

This will rotate the chair around the rear wheel axles allowing the chair to be easily moved forward or backward on the rear wheels.

To return the chair to its' upright position, reverse the procedure, easing the chair down gently.

Without an attendant's help:

To tip yourself, push forward on the handrims while you push back. Keep your knees bent and your back straight. Once you have obtained the balance point, practice maintaining it. This practice is good for maneuvering your chair around obstacles, but with caution.

MANEUVERING RAMPS, CURBS & STAIRS

Lean forward in chair, putting your weight the over front casters when going up inclines. When going down, do so slowly by controlling your speed using the handrims and not the wheel.

To mount a curb use the tipping method, tip the chair so front casters clear curb height, roll foward placing the front casters on curb then continue to roll forward lifting rear wheels onto curb. To descend a curb it is safest to dismount the curb backward, lowering the rear wheels first. You may also roll yourself forward and down but do so extremly slowly.

DO NOT USE your chair on an escalator. Find the nearest elevator instead. Going up or down stairs should be down with at least two (2) attendants at all times.

TRANSFERRING IN A WHEELCHAIR

Attendant assistance is recommended to stabilize the chair and help in lifting you, if necessary. Transfers are best accomplished by following these guidelines:

- Use a chair with removable or flip back arms
- Position your chair as close as possible to transfer object
- Engage your wheel locks to prevent movement
- Try to transfer to objects of similar height





TILT

#	Description	Quantity
1	Gas Cylinders	2
2	Stationary Frame	1
3	Tilting Frame	1
4	Release Handle	1
5	Stroller Handle	1

Tilting is adjusting the seating to different angles while the base remains level to the ground. This is adventageous for positioning, by allowing the entire body to be positioned simultaneously.

Tilt is achieved through the use of gas cylinders that are positioned under your chair and fixed to the lower stationary frame(2) and the upper tilting frame(3). This cylinder is activated by a cable connected to the release handle(4) located on the chairs stroller handle(5).

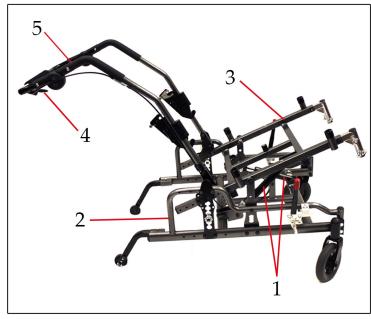


Fig. 1

Frame in Tilt

To Tilt Chair:

- 1) Squeeze the release handle(4) and push downward on the stroller handle(5)
- 2) When at required degree of tilt rlease the release handle and the chair will lock into place.

To Recover Chair From Tilt:

- 1) Squeeze the release handle(4) and pull upward on the stroller handle(5)
- 2) When the chair is in the upright position release the release handle and the chair will lock into place.





Headrest Installation and Adjustment

To install the headrest please follow these instructions:

#	Description	Quantity
1	Height Adjustment Knob	1
2	Headrest Plate	1
3	Vertical Extension	1
4	Horizontal Slider	1
5	Slider Socket	1
6	Depth Adjustment Knob	1
7	Contour Headrest	1





Fig. 3

Headrest Parts Diagram

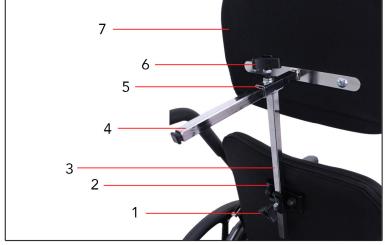


Fig. 4

To adjust height:

- 1. Loosen the height adjustment knob(1) on the headrest plate(2).
- 2. Slide the vertical extension(3) into the headrest plate(2).
- 3. Tighten the height adjustment knob(1) when the contour headrest(7) is at the desired height.

To adjust depth:

- 1. Loosen the depth adjustment knob(6) and slide the horizontal slider(4) into the slider socket.
- 2. Tighten the depth adjustment knob(6) once the contour headrest(7) is at the desired depth position.





Multi-Axis Headrest Adjustment

The ML Multi-Axis headrest is our most versatile headrest. Its unique design allows for the most headrest positioning for maximum comfort for the user.

Multi-Axis Headres	N	lu.	lti-	Axis	Н	leac	lrest
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#	Description	Quantity
1	Contour Headrest	1
2	Horizontal Slider	1
3	Pivot Ball	1
4	Clamp Handle	1
5	Clamp	1
6	Goose Neck Vertical Extension	1
7	Multi-Axis Ball	1

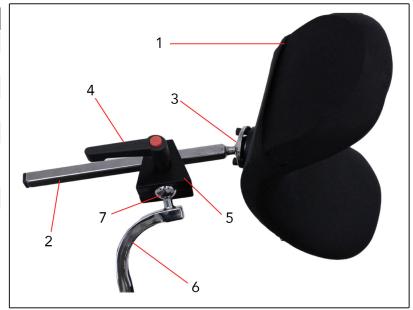


Fig. 5

The ML Multi-Axis headrest also comes with a swivel headrest feature. To adjust the headrest angle simply rotate the headrest(1) around the pivot ball(3).

For even more adjustment loosen the clamp handle(4) on the clamp(5). This will allow the clamp(5) to rotatate freely around the multi-axis ball(7). Once the headrest is in the desired position tighten the clamp handle(4).





Stroller Handle

#	Description	Quantity
1	Stroller Handle	1
2	Adjustment Release Buttons	2

Your stroller handle is designed to maximize pushing comfort by offering multiple angled positions. It can also be removed easily for replacement

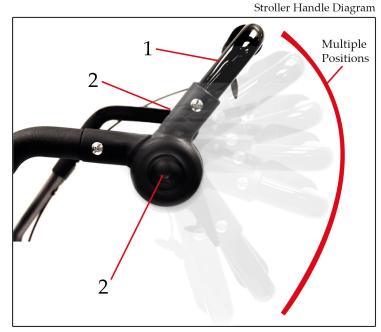


Fig. 6

To adjust the angle (height):

- 1) Push in both round bottons (A) located on the outside ends of the stroller handle and hold simultaneously.
- 2) While pushing and holding the end bottons, rotate stroller handle to desired angle and height.
- 3) Release end bottons to lock the stroller handle into place.
- 4) After releasing the end bottons, make sure the stroller handle "clicks" into the closest locked position.





Arms - Conventional

#	Description	Quantity
1	Arm Top	2
2	Arm Base	2
3	Height Adjustment Knob	2
4	Arm Removal Knob	2

Your chair has standard fixed height, or adjustable height, removable or flip back arms. Either style may be easily removed from the chair.

To adjust the height

- 1) Pull the height adjustment knob(3) out.
- 2) Slide the arm top(1) to the desired height.
- 3) Release the height adjustment knob(3) will then slide back into the locked position into the closest locking hole

To remove "Removable" arm type

- 1) Pull the arm removal knob(4) out.
- 2) Lift the arm base(2) straight out.

To remove "Flip Back" arm type

- 1) Pull the arm removal knob(4) out.
- 2) Pull the arm base(2) up and back "flipping" it behind the chair back and then pull the arm base striaight back

Conventional Arm Type Diagram

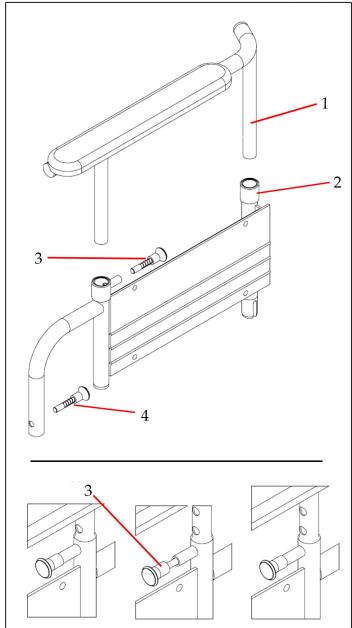


Fig. 7





FOOTREST

#	Description	Quantity
1	Footplate	2
2	Release Handle	2
3	Mounting Pins	4
4	Pin Holes	4

The footrest on your chair is designed to swing out and remove easily.

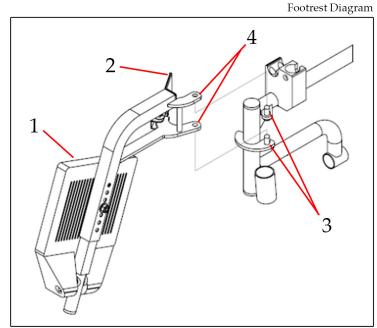


Fig. 8

To remove:

- 1) Remove feet from the footplates and fold the footplates (1) up.
- 2) Then pull on the release handle (2) while swinging the footrest to the outside of your chair.
- 3) Remove by lifting it straight up clearing the pin holes(4) from the mounting pins(3)

To replace:

- 1) Hold the footrest at the side of your chair
- 2) Insert the pin holes(4) onto the mounting pins(3) *be sure to allow it to drop all the way in
- 3) Swing the footrest towards the front of the chair, when it hits center it will lock into place.
- 4) Flip down the footplate(1)





FOOTREST

#	Description	Quantity
1	Footplate	2
2	Release Handle	2
3	Footrest Bushing	2
4	Footrest Housing	2
	Post	

The footrest on your chair is designed to symmetrically swing awayand removes easily. This means you can swing the footrest in or out.

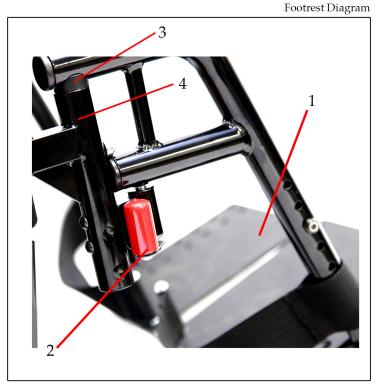


Fig. 9

To remove:

- 1) Remove feet from the footplates and fold the footplates (1) up.
- 2) Then push the release handle (2) on the footrest down.
- 3) Swing the footrest to the side of your chair and then remove by lifting it straight up.

To replace:

- 1) Hold the footrest at the side of your chair
- 2) Insert the footrest bushing (3) into the footrest housing post (4) *be sure to allow it to drop all the way in
- 3) Swing the footrest towards the front of the chair, when it hits center it will lock into place.





ELEVATING LEGREST

#	Description	Quantity
1	Elevaing Locking System	2
2	Release Tab	2
3	Locking Nut	2
4	Legpad	2
5	Locking Pin	2
6	Height Adjustment Swivel Bracket	2
7	Footplate	2

Your legrest is designed to be removed and replaced the same as your footrest. However it is advisable to remove and replace your legrest white the footrest is in a down position. Lifting on the footplate(7) raises the legrest and it will automatically lock at the raised position. Pulling back on the black coated release tab(2) on the elevating locking device(1) lowers the legrest.

To adjust your legrest extension, undo the nut(3) with a 7/16" wrench. Slide down to desired length and then secure the extension by locking into place with the same nut.

Your legpad(4) is adjustable and allows for 3 adjustments. To adjust,

- 1) Pull the legpad(4) forward clearing the locking pin(5) from the slot on the height adjustment swivel bracket(6)
- 2) Slide the legpad(4) to desired adjusment height.
- 3) Push the legpad(4) back inserting the locking pin(5) into the new slot on the height adjustment swivel bracket(6)

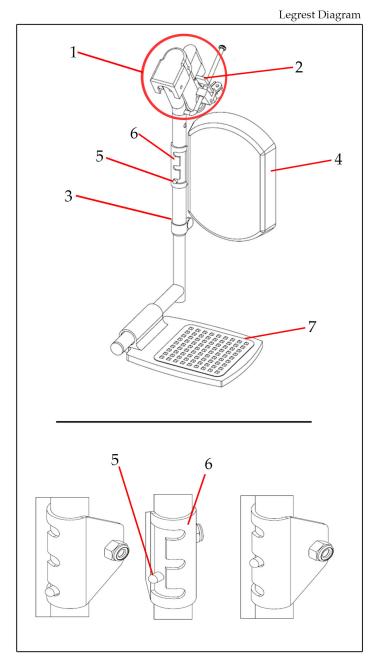


Fig. 10





Angle Adjustable Footplates

#	Description	Quantity
1	Footplate	2
2	Bolts	4
3	Nuts	4
4	Depth Adjustment Holes	4
5	Clamp	2

Angle adjustable footplates are designed to allow for both depth and angle adjustment.

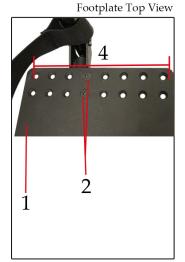


Fig.11

Footplate Bottom View

1
5
3

Fig. 12

To adjust depth:

- 1. First remove the nuts(3) and bolts(2) with a 4mm Allen Key and 10mm
- 2. Slide the footplate(1) to the desired depth, lining the holes up with the 2 on the clamp(5)
- 3. Refasten the nuts(3) and bolts(2) at new depth hole(4)
- 4. Repeat for both sides of the chair if neccessary.

To adjust angle:

- 1. First loosen the nuts(3) and bolts(2) with a 4mm Allen Key and 10mm
- 2. Rotate the footplate(1) to the designed angle.
- 3. Tighten the nuts(3) and bolts(2) at once new angle is achieved.
- 4. Repeat for both sides of the chair if neccessary.





Seat Depth Adjustment

#	Description	Quantity
1	Adjustment Bolt	2
2	Adjustment Nut	2
3	Extension Tube	2
4	Housing	2

You can change the depth of your chair by extending the front tubes outwards. Please keep in mind you may need to purchase a new seat base or cushion to fit your new desired seat depth.

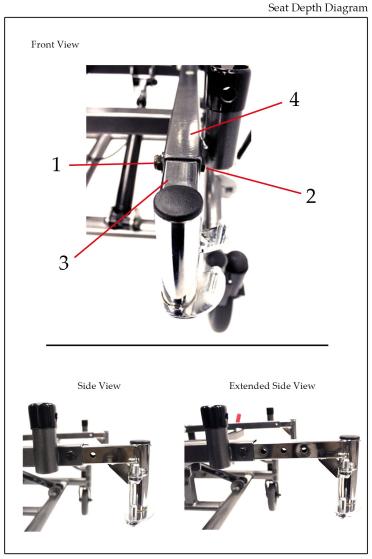


Fig. 13

To adjust the depth: (please follow instructions for both left and right extension tubes)

- 1) Remove the adjustment bolt(1) and angle nut(2) with two 7/16" wrenches.
- 2) Sliding the extension tube(3) our of the housing(4) ro desired seat depth.
- 4) Insert the adjustment bolt(2) back into the new extension holes and tighten with the adjustment nut(2).





Seat Width Adjustment

#	Description	Quantity
1	1/4" Hex Bolt	16
2	1/4" Hex Nut	16
3	Extension Tube	4
4	Extenstion Tube Housing	8

You can change the width of your chair by extending the lower and upper frame horizontal supports. Please keep in mind you may need to purchase a new seat base, cushion, back and stroller handle to accomadate the chair's new dimensions.

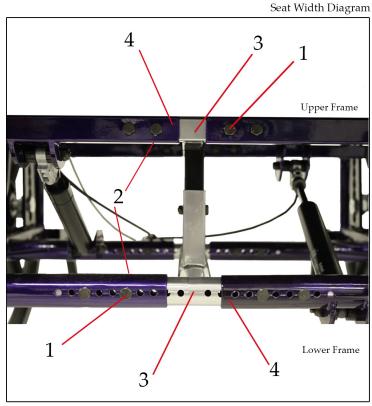


Fig. 14

To adjust the width: (please follow instructions for both upper and lower frames)

- 1) Remove the stroller handle, all seating, and the seat base.
- 2) Remove the adjustment bolts from both the front and back extension tube housings.
- 3) Slide the outter frame in or out to desired width, Keep in mind each hole adjustment equals a half inch change on each side.
- 4) Fasten the bolts to secure at new width,





Angle Adjustable Back Posts

#	Description	Quantity
1	Back Post Brackets	1
2	Angle Adjustment Bolt	2
3	Angle Adjustment Nut	2
4	Support Bolt	2
5	Support Nut	2
6	Back Post	2

The back posts on your chair are designed to maximize comfort. The angle of the back post can be changed to 6 different settings.

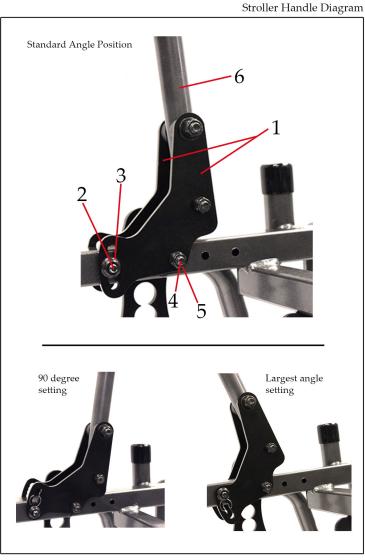


Fig. 15

To adjust the angle: (please follow instructions for both left and right back posts)

- 1) Remove the angle bolt(2) and angle nut(3) with two 7/16" wrenches.
- 2) Loosen the support bolt(4) and support nut(5) with two 7/16" wrenches.
- 3) Move the back post(6), sliding the back post brackets(1) to desired angle.
- 4) Insert the angle bolt(2) back into the angle slots and tighten with the angle bolt.
- 5) Retighten the support bolt(4) and support nut(5)





Front Casters

#	Description

#	Description	Quantity
1	Side Frame	2
2	Caster Housing	2
3	Fork Stem	2
4	Fork Stem Nut	2
5	Caster Fork	2
6	Bearings	4
7	Caster	2
8	Dust Cap	2

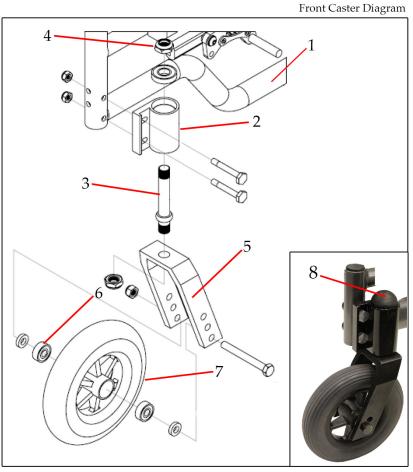


Fig. 16

Your casters(7) are made of injection molded nylon and will not rust. They are also fitted with sealed precision bearings(6) which require no lubrication. If fluttering or pulling is experienced, your fork stem(3) may need adjustment or replacement. To adjust or replace, flip the chair back onto its push handles. Next remove the dust caps(8) from the caster housing(2) with a knife or flathead screw driver. Then tighten the fork stem nut(4) with a 3/4" socket wrench while holding the caster assembly steady. Check for smooth easy turning without side or end play while adjusting. DO NOT overtighten as this may damage the bearings.

Axle adjustment on the caster bearings, although not critical, may also improve performance. The acle nut should be adjusted to produce a smooth free running caster without side play. Again DO NOT overtighten as this will damage the bearings





Rear Wheels

#	Description	Quantity
1	Axle Receiver	2
2	Frame	1
3	Axle Plate	2
4	1/4" x 1 3/4" Hex Cap Bolt	8
5	Axle Nut	2
6	Wheel Bearings	4
7	Nylon Wheel	2
8	1/2" x 3 1/2" Axle	2
9	Hub Cap	2

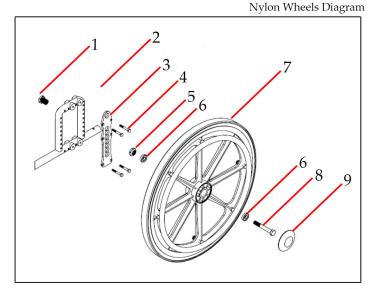


Fig. 17

This chair comes with nylon wheels. They are fitted with sealed precision bearings(6) which require no lubrication. However they may need occasional adjustments due to wear under normal use. Too much side play, looseness or squeaking from your wheel means it needs to be checked. In most cases tightening of the axle bolt(8) will resolve those conditions. Should squeaking and looseness continue, the bearings may need to be replaced. See your servicing dealer for assistance.





Wheel & Caster Adjustments/Seat Height Adjustments

	Description	Quantity
A	Axle Receiver	2
В	Axle Plate	2
С	1/4" x 1 3/4" Hex Cap Bolt	8
D	Side Frame	2

Rear Wheel

Vertical Adjustment

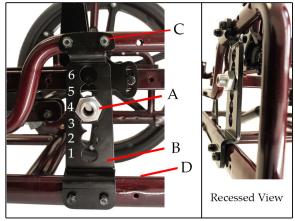
The rear wheels can be adjusted into any of the 6 holes on the axle plate(B). To do so loosen the axle receiver(A) with a 1" wrench and a 11/16" wrench. Then fit into desired hole and tighten. (Refer to Table 1.1 to see corresponding seat heights for the wheels you have)

Horizontal Adjustment

The rear wheels can also be adjusted horizontally. To do so remove the axle plate by removing all 4 hex cap bolts(C) with 2-7/16" wrenchs. Slide the axle plate(B) to the desired position then fasten with the 4 hex cap botls(C).

Caster

To adjust the casters remove the _____ bolts with a _____. Line up the caster wheel with desired hole. Then re-fasten with _____ bolts. Repeat for other side.



Rear Axle Plate

Fig. 18



Caster Forks

Fig. 19

Upper Frame Mount



Fig. 2

SEAT HEIGHT	REAR WHEEL	AXLE PLATE HOLE	CASTER	FORK	FORK HOLE	UPPER FRAME MOUNT	CYLINDER MOUNTS *see next page
13.00"	20"	4	5"	2-Hole	2	А	
13.75"	20"	3	5"	2-Hole	1	А	
14.50"	20"	2	5"	3-Hole	1	А	
14.50"	22"	3	5"	3-Hole	1	А	2A/4A (Right Cylinder 200N)
15.25"	20"	1	5"	5-Hole	2	А	3A/5A (Left Cylinder 500N)
15.25"	20"	1	6"	3-Hole	1	Α	
15.25"	22"	2	5"	5-Hole	2	А	
15.25"	22"	2	6"	3-Hole	1	A	
16.00"	22"	3	6"	3-Hole	2	В	
16.75"	22"	2	6"	3-Hole / 5-Hole	1/3	В	
17.50"	22"	1	6"	5-Hole	2	В	2A/4B (Right Cylinder 200N)
17.50"	22"	1	8"	5-Hole	3	В	3B/5A (Left Cylinder 500N)
17.50"	24"	2	8"	5-Hole	3	В	
18.25"	24"	1	8"	5-Hole	2	В	

Table 1.1

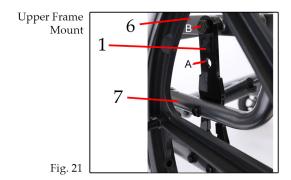


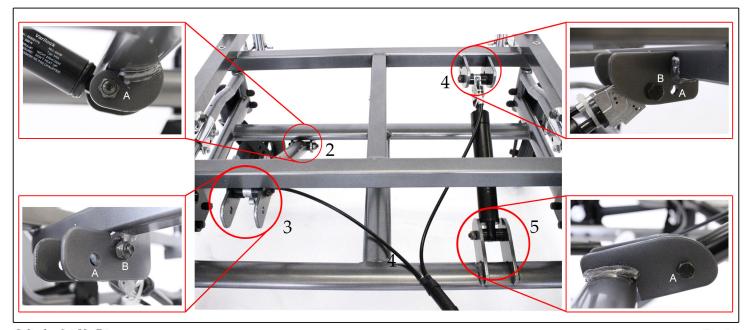


Cylinder Set-Up For Seat Height By Frame

#	Description	Quantity
1	Frame Height Adjustment Bracket	2
2	Lower Frame Cylinder Mounting Bracket (Front)	2
3	Upper Frame Cylinder Mounting Bracket (Rear)	2
4	Upper Frame Cylinder Mounting Bracket (Front)	2
5	Lower Frame Cylinder Mounting Bracket (Rear)	2
6	Upper Frame	1
7	Lower Frame	1

Seat Height Adjustment By Frame			
H	ligh Seat Height (16"+)		
Upper Frame Mount Cylinder Mount			
1B	2A/4B (Right Cylinder 200N) 3B/5A (Left Cylinder 500N)		
Low Seat Height (13"-15.25")			
Upper Frame Mount	Cylinder Mount		
1A	2A/4A (Right Cylinder 200N) 3A/5A (Left Cylinder 500N)		









Wheel Locks/Tires

#	Description	Quantity
1	Tires	2
2	Brake Shoe	2
3	Brake Handle	2
4	Brake Clamp *	2
5	5mm Allen Screws	4
6	Aluminum Brake Assembly	2
7	Steel Brake Assembly*	2
8	Bracket Bolt Key	2

*Attaching mechanism depends on chair size and material option

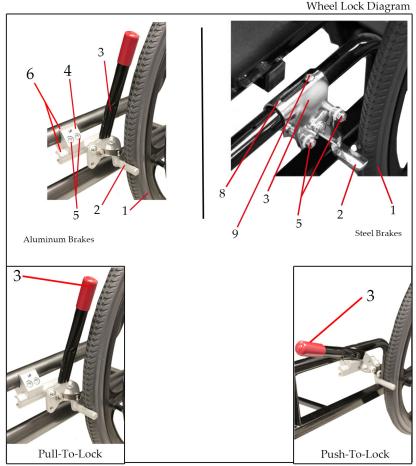


Fig. 23

Tires

The standard tires on your chair are solid, maintenance free urethane. These tires are reliable, long lasting and provide a vert comfortable ride. Your chair may also be equipped with pneumatic tires, these must be regularly checked for wear and proper inflation. Air pressure should not exceed 40psi. Remember heated air expands, and a wheel with 40psi in cold weather will greatly increase outdoors or in the trunk of a car in the hot sun.

Wheel Locks

The position of the wheel locks are preset at the factory to provide you with the safest performance. However, tire(1) and brake shoe(2) will wear under normal usage, and will require some adjustment to ensure continued safe performance.

To adjust, loosen nuts(5) or allen screws(7) depening on attaching mechanism. Slide the brake assembly towards the wheel. Ensure that the brake hold securely but does not require too much effort to be applied. Then tighten nuts or screws securing the assembly in the appropriate position. A light application of lubrication can enhance performance.





Anti-TIppers

#	Description	Quantity
1	Release Pin	2
2	Chair Socket	2
3	Housing	2
4	Bolt	2
5	Height Extension Tube	2
6	Anti-Tipper Wheel	4

The anti-tippers are used to prevent your chair from tipping over while in tilt. Although removable, anti-tippers must never be removed when using the chair.

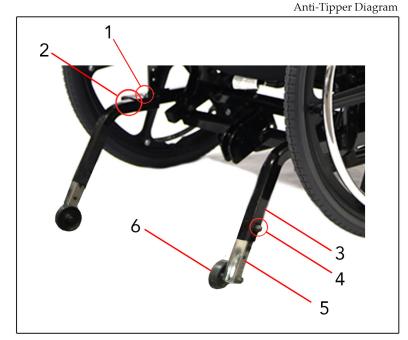


Fig. 24

To remove Anti-Tippers:

Press down on release pin(1) and remove the anti-tipper device by pulling it out of the chair socket(2).

To adjust the Anti-Tipper height:

Loosen bolt(4) from the housing(3) and slide the height extenstion tube(5) to the desired height then tighten the bolt

*Please adjust the Anti-Tippers to a safe height (maximum of 2" from the ground). Whenever the seat height is adjusted by the wheels, be sure to adjust the Anti-Tippers's height as well.





Once again thank you for your purchase of a Maple Leaf Wheelchair. If you have any further questions or concerns, please do not hesitate to contact us directly.



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