Caring for Your Manual Wheelchair

Your wheelchair is a machine that will help you to be more active and mobile. Check the wheelchair often to be sure that it is working well and safely. There may be a maintenance contract with the purchase of the wheelchair. Check your contract to see what service is provided. You may also be able to contact your wheelchair vendor — the company that sold you the wheelchair — to provide repairs and service as needed. Many vendors will do yearly wheelchair checks and make repairs as needed. Also, be sure to ask your vendor or therapist if you need adjustments or changes as you use the chair.

This handout has a list of things that you may need to check on your wheelchair, depending on the type of accessories you have. It is best to check your wheelchair every month and anytime you think there may be a problem.

Arms

- Armrests – Check for sharp edges, cracks and burrs on screw heads. Be sure the screws do not come through the arm padding.
- Detachable arm assemblies – Fit should be secured, but not binding.
- Adjustable height arms – Check the fit on the upper telescoping portion. Check at each height to be sure it locks in place.
- Arm locks – Locks should engage squarely and fully.
- Side panels – Check for any sharp edges or cracks. Be sure the fasteners are all present and tight.
Back

- Check the material for any rips and tears. It should fit with the same tightness from top to bottom.
- Be sure all hardware is present, tight and installed through metal reinforcing strips.
- Check the back-post brace joints for cracks. Be sure the post is not bent or damaged.
- Check removable hardware of rigid back to be sure it is tight and that the lock and release mechanism work properly.
- Handgrips on the push handles should fit tight and secure and not rotate on the posts.
- Check the safety belts for fraying. Check hardware for tightness.
- Headrests should work well and be put on correctly.
- Reclining back – Check all adjustments to be sure they work the right way. Check the nut and bolt to be sure they are tight. Look for signs of wear, such as cracks, fraying or tears.
- Check folding mechanism of rigid wheelchair locks and unlocks properly.

Seat, cross braces and frame

- Check the seat material for rips and tears. The material should be tight from front to back.
- Check that all hardware is present and tight and fits through reinforcing strips. Check for stripped screws and burrs on screw heads.
- Carrying or lifting straps should not be frayed or worn.
- Fold chair to see if cross braces are sticking. Sight down seat rails to check for bent rails or cracks. Check that center pin nut is on and secure.
- Front post slides – Fold chair fully and sight check the straightness and roundness of both posts. Open chair fully and check front posts to be sure they do not hit crown of caster fork. Again fold chair and check that front post does not come out of frame socket.
- Seat rail guides – Check that guides are present and serviceable. With chair open, make sure seat rails fit firmly into seat rail guides.
- Tipping lever sleeves – Be sure they do not rotate on tipping lever and are serviceable.

Wheel locks

- Check tire pressure on pneumatics before checking the wheel locks.
- Locks should securely engage the tire surface and prevent the wheel from turning.
- Rubber tips are present on locks and not cracked or split.
- Hill climbers – Check for proper operation.
- Check lock grips to be sure they are within reach and are not cracked or sharp.
**Tires**

- Check wheels for wobble or side play called trueness. When it spins, it should spin smooth and straight.
- Strum spokes to check for equal tightness. Check for missing spokes.
- Check wheel for side play. This could be a sign of worn bearings or poor adjustment.
- Check tires for excessive wear or a gap at the joined section.
- Pneumatic tires – Check for cracking or excessive wear. Check tire pressure and adjust as needed.
- Solid tires – Check for cracks or worn areas.
- Axles and axle lock nuts – Anytime the wheels are removed be sure to check the threads as well as the bushings and nuts.
- Quick release axles – Push plunger pin in. Steel balls at other end should be loose and recessed. Release plunger pin and balls at other end should be raised and solid.
- Take quick release axles off weekly. Put a few drops of white lithium grease on a clean cloth and pull it through the axle receptors and bearings. Then wipe off the axles. Place the wheel back on the same side.
- Hub caps should be in place.
- Hand rims and attaching hardware – Check for rough or sharp edges. Check for secure attachment. Look to see that all hardware is present. Rubber tips are in place and free of cracks or splits.
- Axle plates – Make sure plates are secure. If you have camber or toe in or out, make sure you have the same configuration of washers on both sides.
- Axle sleeves – Make sure distances are the same from front to rear.

**Casters**

- Forks and retaining mechanism – Check for signs of bending on sides and stem. Be sure stem is firmly attached to fork. Check threads and locking nut or retaining ring.
- Stem bearings – Check for excessive play, up and down, as well as back and forward.
- Wheels and bearings – Check for excessive wobble in bearings. Check axle and nut for stripping. Be sure felt washers or string guards are present.
- Check tires for excessive wear. Be sure tire is secure on rim. Check and adjust the pressure on pneumatics as needed.
- Caster housing – Select a level surface and roll check chair. If chair veers more than a foot in a ten foot distance, check frame for damage. Check alignment of housing on frame. Check fork and stem for bent condition.
Footrest and leg rest (front rigging)

- Put the lock mechanism on and check for a secure fit. Lock should be placed on and released without problem. Check frames for damage.
- Heel loops – Check hardware to be sure it is tight and in good condition. Check for rips, tears or fraying.
- Footplates and footplate springs – Check for sharp edges. Spring should hold footplate in any position.
- Length adjustment hardware – Check that all hardware is present and in proper adjustment. Look for any damage. Fit should be tight enough that it does not rotate in the hanger tube.
- Leg rest panels or straps – Check for sharp edges. Check all attaching hardware. Check for cracks, splits or fraying.
- Leg rest adjustment rod – Be sure all hardware is present and properly adjusted. Check the rod for scoring. There should be smooth, secure locking in all positions.
- Check angle is correct for foot or footplate.

Hand rims

- Check for loose screws and tighten them as needed.

Metal parts

- Spray the chrome or painted parts with stainless steel spray and wipe clean. Soiled, moving parts will not work well.
- Wipe on car wax with a damp cloth, let it dry to a haze and wipe it off with a dry cloth.

Upholstery

- Wipe down with any household spray cleaners, like Windex or 409.

Telescoping tubes (one time each year)

- Clean the tubes and rub a little paraffin or candle wax. Don’t use oil. It just collects a lot of dust.

Wheel bearings (one time each year)

- Check for side play or wobble. Wobble means your bearings are worn and should be replaced.
Front caster (one time each year)

1. Take off front wheel and pop out the bearings. Check them out and clean or replace them.
2. Remove cap on stem housing. Remove the nut holding the stem. Pull out the wheel, fork and stem. As before, tap out the bearings in the caster housing. Check, clean and replace them.
3. Tighten the caster to where it just about swivels. If you leave it too loose, your front casters will wobble at faster speeds.

Other

- Remember to store your wheelchair indoors in a cool and dry area.
- If you have to take your wheelchair outside in inclement weather, make sure to dry it off when you are indoors again.
- If you notice issues with your wheelchair, such as not rolling properly or damaged parts, contact your vendor right away for service.

Talk to your doctor or health care team if you have any questions about your care.

For more health information, contact the Library for Health Information at 614-293-3707 or e-mail health-info@osu.edu.

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