SECTION 5 SERVICE/MAINTENANCE-PERIOD/RECORDS

WHEELCHAIR INSPECTION / MAINTENANCE / SERVICE HISTORY RECORD

Service Ref. No	Wheelchair Serial No	Service Issue Date

Details of Model/Type

……

……

Details of Accessories / Modifications / Special Equipment

……..

……..

Client Details

……..

……..

Service Interval…….....Months

All inspections must be completed using the inspection criteria provided. Failure to carry out inspection and to service and maintain equipment may affect warranty of equipment and liability of failure.

Wheelchair Identification Information	
Manufacturers Serial Number	**Manufacturers Batch Code**

Client Identification Information

Client Name……..

Client Address……

……Post Code…….

Telephone Number…….

Assessment Criteria For Inspection/Service Frequency

The following guidelines are considered by the manufacturer to represent the maximum safe service interval based on usage patterns and user needs. Where the user needs depart from those guidelines such needs will take precedence. Any such departure should be the subject of risk assessment, which should be recorded below.

Newton Products Limited
71-76 Allcock Street
Deritend
Birmingham
B9 4DY

Tel: 0121 773 9111
Fax: 0121 773 0200

A programme of controlled inspection and maintenance can help maintain the wheelchairs performance and safety. Failure to maintain the wheelchair may affect warranty and liability.

RECORD CHECKLIST	These checks are to be carried out at or before the end of the above service interval. **Service No. Initial each box when check is completed.**					
	1	**2**	**3**	**4**	**5**	**6**
Wheels & Tyres						
Castors						
Frame						
Armrests						
Footrests						
Upholstery						
Wiring Loom						
Batteries						
Battery Charger						
Controller						
Drive Motors						
Paintwork/Finish						
Accessories						
Test Drive						

Signature on completion of inspections						
Date inspection completed						

Wheels & Tyres
Inspection Checklist

Failure of or damage to wheels and tyres can cause the wheelchair to become difficult or impossible to control and steer properly. It can cause the wheelchair to become unstable and tip.
Damaged wheels and tyres can indicate the existence of a usage and or environmental problem.
Inspection of wheels and tyres should be recorded against the following inspection checklist.
If any of the inspections prove to be unsatisfactory the particular item or part must be changed.

Inspection To Be Made	Satisfactory Yes/No	Action
Check wheels for any sign of physical damage/deformity.		
Check operation of the freewheel device of each wheel		
Check tyres for signs of damage to tread and side walls.		
Check tyres for attachment to wheel. Tyre must not rotate on the wheel.		
Where pneumatic tyres are fitted, check inflation to recommended pressure and that valve operates effectively.		

Notes:

Castors
Inspection Checklist

Failure of or improper operation of castors can cause instability of the wheelchair. Damage to castors can be an indication of a usage or environmental problem. Castors have sealed bearings.
Inspection of castors should be recorded against the following inspection checklist.
If any of the inspections prove to be unsatisfactory the particular item or part must be changed.

Inspection to be made	**Satisfactory Yes/No**	**List any action required**
Check castor-mounting location for damage/deformity.		
Check castor tyre does not rotate on castor wheel.		
Check castor wheel rim and spokes for damage/deformity.		
Check castor wheel rotates freely and truly on its bearing. Does not bind/no excessive free play.		
Check castor fork for damage/deformity.		
Check castor pivot stem for security of fixing nut and bolt or roll pins.		
Check free rotation of crown bearing. No binding/excessive free play.		

Notes:

Chassis / Frame Inspection Checklist

Damage to the wheelchair chassis and frame can indicate a possible usage or environmental problem.
Damage or failure of the chassis or frame can result in stability problems or adversely affect posture.
Inspection of the chassis and frame should be recorded against the following inspection checklist.

Inspection to be made	**Satisfactory Yes/No**	**List any action required**
Check chassis for signs of damage/distortion		
Check all welds on chassis for signs of damage or distortion. If in doubt as to existence of damage consider the use of a proprietary crack detector.		
Check seat frame for signs of damage/distortion		
Check all welds on seat frame for damage/distortion.		
Check frame of backrest for signs of damage/distortion.		
Check all welds of backrest for sign of damage/distortion.		
Check all chassis and frame fixings for presence/damage/security.		
Check operation of attachment and adjustment mechanism.		

Notes:

Armrests
Inspection Checklist

Damage to armrests can indicate unnecessary weight/force being applied to the armrests. Users should be advised that armrests should not be used for leverage.
Damage or failure of the armrests could result in injury.
Inspection of the armrests should be recorded against the following inspection checklist.
If any of the inspections prove to be unsatisfactory the particular item or part must be changed.

Inspection to be made	**Satisfactory Yes/No**	**List any action required**
Check for any cracks or damage in weld around socket joints. If in doubt as to existence of damage consider the use of a proprietary crack detector.		
Check the hand wheel / latch lever operation.		
Check that the arm pad is securely fixed and screws are not missing or loose.		
Check that the height adjustment facility moves freely when the hand wheel/latch lever is disengaged. There should be NO upward/downward movement when the hand wheel and latch lever are secured.		
Check that the controller mounting is secure		

Notes:

Upholstery
Inspection Checklist

Damaged upholstery, where the covering material is damaged, can prevent the proper cleaning of the upholstery. This can result in risk to the user through their contact with unhygienic upholstery material and foams.
Inspection of upholstery should be recorded against the following inspection checklist
If any of the inspections prove to be unsatisfactory the particular item or part must be changed.

Inspection to be made	**Satisfactory Yes/No**	**List any action required**
Check backrest for any damage to material. Splits/holes/excessive wear.		
Check backrest for any damage to seams/joints/fixings		
Check backrest for any underlying deformity of the foam.		
Check seats for any damage to materials. Splits/holes/excessive wear.		
Check seat for any damage at seams/joints/fixings.		
Check seat for any underlying deformity of the foam.		
Check armrests for any damage to materials. Slits/holes/excessive wear.		
Check armrests for any damage at seams/joints/fixings.		
Check armrest for any underlying damage or deformity to the foam.		

Notes:

Footrests
Inspection Checklist

Failure of footrests can have adverse effect on posture and can result in injury to the user.
Instability can result where footrests foul the travelling surface or kerbs etc.
Inspection of the footrests should be recorded against the following inspection checklist.
If any of the inspections prove to be unsatisfactory the particular item or part must be changed.

Inspection to be made	**Satisfactory Yes/No**	**List any action required**
Check folding mechanism for proper action, action is positive not stiff/not too much free play.		
Check footplate adjustment and adjustment screw.		
Check upright and horizontal members for signs of damage/deformity.		
Check latch levers for action/positive engagement.		
Check all adjustment location holes for damage/deformity.		
Check function of all adjustment options.		

Notes:

Wiring Loom & Connections Inspection Checklist

Checks of the wiring loom and connectors are important to ensure the integrity of the wheelchairs electrical circuit.
Damage to the wiring loom and connectors can lead to failure of the wheelchair, Such damage can also result in overheating and risk of fire.
Inspection of the wiring loom and connectors should be recorded against the following inspection checklist.
If any of the inspections prove to be unsatisfactory the particular item or part must be changed.

Inspection to be made	**Satisfactory Yes/No**	**List any action required**
Check whole of the wiring loom for any sign of damage/chaffing/exposed wires/evidence of entrapment.		
Check cable shrink covering/cable ties for any sign of damage.		
Check connections to motors for damage/loose fitting/over heating.		
Check wiring loom routing does not risk or cause entrapment.		

Notes:

Battery
Inspection Checklist

Damaged batteries can be a cause of corrosion that can result in failure of the wheelchair or even fire and burns, putting the user at risk.
Batteries that do not accept or retain proper charge can fail to give proper service.
Inspection of batteries should be recorded against the following inspection checklist.

Inspection to be made	**Satisfactory Yes/No**	**List any action required**
Check battery connections are secure and that battery leads are not damaged. Check for signs of chaffing/overheating.		
Check that battery terminals are undamaged.		
Remove batteries and check battery cases for signs of damage/electrolyte seepage.		
Check battery compartment and cover for any sign of corrosion or previous overheating.		

Notes:

Battery Charger
Inspection Checklist

Failure or malfunction of the battery charger can result in batteries not being properly charged.
Damage or failure can result in overheating and possibly fire.
Chargers not supplied by Newton Products Ltd may have different inspection requirements.
Inspection of the battery charger should be recorded against the following inspection checklist.

Inspection to be made	**Satisfactory Yes/No**	**List any action required**
Check battery charger for signs of damage to casing /chaffing/exposed wires/evidence of entrapment.		
Check vents for any blockage/damage to vents.		
Check mains power cable plug for correct wiring / correct fuse.		
Check connector plug for damage/signs of overheating/damage to pins. Check connector plug for true fit with controller.		
Check function of charger with wheelchair noting operation of indicator lights.		

Notes:

Controller
Inspection Checklist

Failure of the controller can result in a total failure of the wheelchair leaving the user stranded.
Controllers should be inspected and tested using the criteria set by the controller manufacture. Controllers shipped by Newton Products Ltd are shipped with appropriate documentation.
Controller manufacturers can also supply equipment to allow fault diagnosis and to allow the controller to be re-programmed. Only authorised and trained personnel should undertake that work.
Simple physical and operational inspection of the controller should be recorded against the inspection checklist.

Inspection to be made	**Satisfactory Yes/No**	**List any action required**
Check the controller body for signs of physical damage to casing/signs of overheating.		
Check operation of joystick/attendant/dual control for free action in all directions, returning to centre on release.		
Check joystick boot for splits/damage.		
Check joystick knob is secure.		
Check charger connection socket for signs of damage/overheating.		
Check wheelchair connection point for damage/deformity of pins/signs of overheating.		

Notes:

Drive Motors
Inspection Checklist

Failure of drive motors can result in the wheelchair becoming difficult and erratic to steer or become stranded.
Do not break seals on motors that are under warranty as this can invalidate the warranty. For motors under warranty that are the subject of failure the wheelchair manufacturer should be contacted.
Motor function must be tested as part of the test drive after all check and remedial work has been completed.
Inspection of the drive motors should be recorded against the following inspection checklist.

Inspection to be made	**Satisfactory Yes/No**	**List any action required**
Check motor mounting/fixings for security.		
Check motor electrical connections are secure/not loose/no signs of overheating.		
Check brushes for wear replace as necessary.		
Check electromagnetic brake fixings are secure.		
Check electromagnetic brake drive nut for security.		
Check for and remove any dust/debris.		

Notes:

Paint & Finish
Inspection Checklist

Damage to paint and other finishes can be signs of impact damage indicating a possible usage/environmental problem.
Flaking chrome can cause injury.
Inspection of the paint and finish should be recorded against the following inspection checklist.

Inspection to be made	**Satisfactory Yes/No**	**List any action required**
Check paintwork for damage/chipping		
Recheck chassis/frame at site of damage to the paintwork.		
Check chrome work for damage/chipping/flaking.		
Recheck chassis/frame at site of any damage to the chrome work.		

Notes:

Accessories
Inspection Checklist

Accessories supplied by Newton Products Ltd must be inspected and recorded against the following inspection checklist.

Accessories not supplied by Newton Products Ltd should be subject to risk assessments and inspection against the instructions supplied by the supplier/manufacturer.

Inspection to be made	**Satisfactory Yes/No**	**List any action required**
Check attachment mechanism for damage/deformity/function.		
Check accessory for damage/deformity/failure.		
Check any upholstery on accessory using previous criteria.		
Check seats for any damage to materials. Splits/holes/excessive wear.		
Recheck wheelchair for signs of damage at attachment points.		
Check seat restraint belt for any signs of wear, fraying or tearing. Check belt buckle for any cracks or breaks.		
Check seat restraint belt fixing bolts are tight and there is no damage to belt fixing loops.		

Notes:

Test Drive
Inspection Checklist

A full test drive of the wheelchair should be carried out when the inspection/service/maintenance has been completed and before the wheelchair is released back to the user or re-issued.

Where fitted with attendant/dual control a second operative will be required in order to carry out the test drive.

The test drive should be recorded against the following inspection checklist.

Inspection to be made	**Satisfactory Yes/No**	**List any action required**
Carry out test drive: Check power on/off function.		
Check steering function in all directions.		
Check speed control function.		
Check operation of free wheel mechanism on and off.		
Check operation and security of parking brake.		
Check for smooth running, no judder.		
Check operation of kerb-climber where fitted.		

Notes: