## () rehab Reconditioning Guide - HD Balance



The following documents should be at hand when reconditioning. All documents are available for download at the HD Rehab web site, www.hdrehab.se.

| Art. nr.                      | Document name                                  |  |
|-------------------------------|--|--|
| 95740-1                       | Spare Parts                                    |  |
| 95726-1                       | 26-1 Reconditioning Checklist                  |  |
| 95764-1                       | 764-1 Labeling                                 |  |
| 95720-1 Technical Information |  |  |
| 95724-1                       | Changes Permitted While Maintaining CE Marking |  |

General points about reconditioning:

- Reconditioning work must be performed by trained personnel.
- The latest revision of this document must be used. It can be downloaded from www.hdreab.se, or mailed as requested from HD Rehab AB.
- Only original spare parts from HD Rehab should be used. Use of standard fasteners from other suppliers is approved subject to our specifications for strength grade and surface treatment being met.
- For further information contact HD Rehab AB.

Note! An asterisk \* under position number indicates a change in the section from the previous edition.

Changes in text are marked with a bold line to the left of the text section

Position numbers and sheet names in the Procedure column refer to the exploded views in the Spare Parts list.

| Pos. | Section               | Procedure   |
|------|-----------------------|---|
| 1    | General assessment of | Check that the load-bearing members - wheel frame, seat frame, and back       |
| *    | wheelchair condition  | frame - are free from major damage, warping, broken welds, etc.               |
|      |                       | Reinforced wheelchairs should be checked with extra care as they are          |
|      |                       | generally subject to higher wear.   |
|      |                       | Make a general assessment of the wheelchair to determine whether it           |
|      |                       | should be reconditioned or discarded.   |
|      |                       | If the wheelchair is to be used by a new user, reset any modifications to the |
|      |                       | standard configuration. This is a safety precaution to avoid inappropriate    |
|      |                       | prescription.   |
|      |                       | If the wheelchair is equipped with accessories from other manufacturers it    |
|      |                       | should be given special consideration. See document 95724-1.                  |
|      |                       | Specifically, wheelchairs equipped with electrical drive units cannot be used |
|      |                       | longer than 5 years while maintaining CE marking.                             |
|      |                       |   |

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| os. | Section   | Procedure   |
|-----|---|---|
| 2   | Washing<br>Normal alkaline laundry<br>detergent in heated<br>cleaning fluids / water is<br>recommended. Do not use<br>highly caustic detergent. | Very soiled wheelchairs should be washed in special wash equipment.<br>Heated cleaning fluid (60°C) can be used. 3 to 5 minutes washing time is<br>normally sufficient.<br>Preparation for wash: remove all accessories, these are dealt with<br>individually. Remove seat and back cushions, and armrests. Remove leg<br>rests (these can be washed together with the chair if the calf supports are<br>disassembled (see view D 1.1).<br>Pull off the seat plate by simultaneously pressing the latch and adjustment<br>levers. The seat plate can tolerate washing together will the chair but may<br>expand and cause other difficulties.<br>Disassemble Flexi back by unscrewing the 4 back bolts (21 view 0.1).<br>Remove the drive wheels and take out anti-tip devices, these can be<br>washed in the same manner as the chair.<br>Pull the push bar out of the back frame put leave the cables attached. This<br>helps the water to drain out.<br>Remove any card holders. |
|     |   | Wash the chair with the back frame folded down.<br>After washing, tip the chair forwards for better draining. Use compressed a<br>to blow inside the back frame, and outside by the wheel attachments, brak<br>system, cable controls and seat depth controls.  |
| 3   | Paint damage  | Check for damage to painted surfaces while cleaning and washing. Touch up as necessary.   |
| 4   | Drive wheels / hand rims  | The wheels are cleaned as the chair, in a spray-type wash.<br>Wheelchairs are normally equipped with PUR tires. Inspect the tires. If they<br>need to be replaced they can be cut off. Both 24" and 16" tires are mounted<br>as normal pneumatic tires.<br>Check that hand rims on 24" wheels are secure and undamaged. Replace if<br>necessary.<br>Inspect wheel bearings. These are sealed and cannot be re-greased.<br>Check wheel axles and grease lightly as needed.<br>Check the spokes on 24" wheels.<br>Note while working on wheel axles: The wheel axles are fastened with<br>retaining rings. These are very safe provided they are handled correctly.<br>Retaining ring pliers <b>must</b> be used. Retaining rings must not be spread out<br>more than intended. Damaged retaining rings must not be re-used.  |
| 5   | Castors   | Standard castors are puncture-free with PUR tracks. Check and clean. The<br>wheels may have to be disassembled from the forks to be properly cleaned<br>particularly from hair and the like.<br>Inspect wheel bearings. These are sealed and cannot be re-greased.<br>Check and tighten the axle bolts and lock nuts as necessary.<br>Note! Check the castors particularly carefully if the wheelchair is equipped<br>with an electric drive unit.  |

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| Pos. | Section                           | Procedure  |
|------|-----------------------------------|--|
| 6    | Wheel attachment /<br>Disc brakes | Clean and blow off with compressed air. Check function. Grease brake<br>pin and axle pin as necessary (view A 2.1). Check brake pads and replace<br>as necessary. (Some models are not equipped with disc brakes). |
|      |                                   | Check that cross tube mounting screws are tightened. Use threadlocker (i.e. Locktite 243) for these.   |
| 7    | Tilt lock / Controls              | Clean and blow off. Grease tilt rod with a thin lubricant (pos 2, A 6.1).<br>Apply a few drops of oil on the tilt rod if needed and check locking  |
|      |                                   | function. If function is poor replace entire tilt lock.  |
|      |                                   | Check that controls and cable housings (pos 6) are undamaged (C 3.4).  |
|      |                                   | Adjust tilt lock function with set screw (pos 7, A 6.1). Note! There should  |
|      |                                   | be a little play in the control lever.   |
|      |                                   | When working with the tilt lock refer to Technical Information 95720-1.  |
| 8    | Anti-tip device                   | Anti-tip devices are standard and must be equipped on the chair (pos 29 view 0.2).   |
|      |                                   | After washing, remove the anti-tip devices and dry them off.   |
|      |                                   | Check the labels to verify that the anti-tip devices are of the correct type   |
|      |                                   | (24" or 16"). Check condition. Replace lost or damaged parts. Check the  |
|      |                                   | fit of the anti-tip devices in the wheel frame (pos 11, A1.1 to pos 1, A1.2)   |
|      |                                   | Check the locking function (view A8.1)   |
| 9    | Gas spring / Controls             | Check the gas spring function, pos 15, view 0.1. If necessary the piston   |
|      |                                   | rod can be lightly greased.  |
|      |                                   | Replace the gas spring if it does not lock rigidly.<br>Check that controls and cable housings (pos 6) are undamaged (C 3.4).   |
|      |                                   | Adjust gas spring function with the set screw.   |
| 10   | Seat frame / Seat plate /         | Check the general seat frame condition and verify that it is undamaged.  |
| 10   | Tilt plate                        | If the wheelchair is fitted with non-standard balance plates (lowered,   |
|      |                                   | raised, etc) it should be reset to standard configuration (pos 5, 0.1).  |
|      |                                   | If non-standard balance plates are to remain check the following:  |
|      |                                   | Warning labels must be attached on the balance plates and the user   |
|      |                                   | guide must be complemented with information on this.   |
|      |                                   | Check when assembling or replacing balance plates that the lock nut  |
|      |                                   | (pos 16, B1.1) functions correctly. Replace if in doubt. Also check the  |
|      |                                   | condition of the insert (pos 6, B1.1) in the side support bracket. Replace   |
|      |                                   | necessary.   |
|      |                                   | Check that the seat rails are undamaged and securely fastened.   |
|      |                                   | Check the condition of the seat plate (incl. velcro) and function of the   |
|      |                                   | seat plate levers (pos 7 and 9, B1.1). Grease as necessary.  |
|      |                                   | Check that leg rest attachments (pos 2 and 3, B1.1) are securely fastened  |
| 11   | Back frame / Recline bracket      | Check the general back frame condition and verify that it is undamaged   |
|      |                                   | Check the back frame pivots and retaining rings at the attachment to th  |
|      |                                   | seat frame (pos 12 and 13, 0.1).   |
|      |                                   | Check the recline folding pin function with and without the gas spring (pos 4, 5 and 6, C1.1).   |
|      |                                   | Note! Check that the pin is supported by both sides of the recline   |
|      |                                   |  |
|      |                                   | bracket. Grease lightly as required. Replace damaged parts. The knob<br>(pos 5) should be secured with threadlocker.   |

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| Pos. | Section                     | Procedure   |
|------|-----------------------------|---|
| 12   | Flexi-back                  | The straps and back pieces of the Flexi-back (view C2.1) are cleaned with   |
|      |                             | fabric wash. If particularly dirty they can be machine washed or replaced   |
|      |                             | Check the velcro function after cleaning. The Flexi-back is wiped off with  |
|      |                             | all-purpose cleaner. Check the condition and function of the bracket and  |
|      |                             | lock for head support.  |
| 13   | Push bar / Brake handles    | Pull the push bar out of the back tubes and clean out the tubes (pos 36,  |
|      | with brake cables           | 0.2). These can be lightly greased if they seize but generally this is not  |
|      |                             | necessary. Note! Be careful not to damage the brake cables.   |
|      |                             | Put the push bar back in place and check the snap-in locks for height   |
|      |                             | adjustment (pos 3, C3.3).   |
|      |                             | The push bar is provided with a push bar cover. Replace a defective cove  |
|      |                             | by removing the screws (pos 6, C3.1) and pulling out the bar (2).   |
|      |                             | Check attachment screws even if the push bar has not loosened.  |
|      |                             | The brake handles are integrated with the push bar. (Some models  |
|      |                             | are equipped with brake handles). Inspect the brake cables (pos 11,   |
|      |                             | C3.3) and the brake handles with locking sleeves and covers. Check the braking function, both in parking position and while moving. Replace |
|      |                             | defective parts. Adjust the brake force if necessary. Note! The stop nut at   |
|      |                             | the wheel attachment must be tightened after adjustment.  |
| 14   | Leg rests / Calf supports / | Wipe off and inspect the leg rests upper part. Replace damaged inner  |
| 14   | Foot rests                  | and outer pads (view D1.2). Small nicks on the leg support tubes which  |
|      | 100(103(3                   | are stainless steel can be removed with emery cloth or similar. Check that  |
|      |                             | the leg support tubes are properly tightened (pos 8, D1.2). Check the   |
|      |                             | attachment and locking to the seat frame, and the angle adjustment.   |
|      |                             |   |
|      |                             | Calf supports are cleaned by wiping off with general purpose cleaner.   |
|      |                             | Covers in poor condition can be replaced or replace the whole pad (view   |
|      |                             | D1.4). Check calf support function and tighten screws.  |
|      |                             | Wipe off foot rests and check function and screws (view D1.5).  |
|      |                             | Assemble foot rests to the leg support tubes and check snap-in lock   |
|      |                             | function (pos 1, D1.2).   |
| 15   | Armrests                    | Wipe off the armrests with general all-purpose cleaner.   |
|      |                             | Replaced damaged armrest units and side supports (view E1.1).   |
|      |                             | Check function, depth adjustment and height adjustment. If the armrest  |
|      |                             | rail (pos 13, E2.1) needs to be drawn out (for greasing or cleaning) do   |
|      |                             | not loosen the front cover (pos 16, E2.1) as it is glued in place. Tighten all  |
|      |                             | armrest screws.   |
| 16   | Cushions / Upholstery       | Inspect upholstery. Wash dirty upholstery. Replace worn upholstery.   |
|      |                             | Replace threadbare cushions completely.   |
| 17   | Screws / Knobs / Labeling   | Check screws and knobs and tighten as necessary.  |
|      |                             | Check labeling on wheelchair. Replace damaged labels.   |
|      |                             | Refer to document 95764-1 for which labels must be found on the   |
|      |                             | wheelchair for CE marking to apply.   |
| 18   | Test drive                  | Test drive the wheelchair and test all functions, i.e. braking, recline tilt,   |
|      |                             | seat tilt, leg rest adjustment.   |
| 19   | Colour specifications       | Art.nr. 83008 RAL 9005 Black, gloss 40, 400 ml spray  |
|      |                             | Art.nr. 83028 RAL 9005 Black, gloss 40, 12 ml paint stick   |