

# Servicing Manual





**Crewsaver: PRD Service Requirements** 

### The Crewsaver:PRD should be inspected and serviced as follows. A Servicing Check List and Schedule should be completed.

- 1. Wash the complete unit with warm soapy water and allow to dry.
- 2. Remove the Product Identification Tube (if fitted) and store safely.
- 3. Remove Plastic End Caps and Nuts from the Tubes, top and bottom, and **DISCARD**.
- 4 Remove Side Pieces.
- 5. Remove all Grub Screws from Rods and store safely.
- 6. Remove the Rods and inspect for damage, corrosion or excessive wear.
- 7. Ensure all Rod Links are present and check for corrosion or excessive wear.
- 8. Check the Tube Assembly Snap Shackle end.

Check all parts are free from damage or corrosion.

Check Tube for wear and thread condition. Ensure Tube is not bent.

Ensure all Tube Links are present and check for excessive wear, damage or corrosion.

Inspect ID Link. If Serial No. is not readable then replace. Stamp a large tube link with the Serial No. which can be found on the Inspection and Service Record inside the Product Identification Tube. On older models the Serial No. is recorded in the Inspection and Maintenance Manual. In case of difficulty, contact Crewsaver.

- 9. Inspect the Snap Shackles and check for damage (eg Locking Pins), corrosion or excessive wear.
- 10. Check the Tube Assembly Hauling Line end.

Check all parts are free from damage or corrosion.

Check Tube for wear and thread condition. Ensure Tube is not bent.

Ensure all Tube Links are present and check for excessive wear damage or corrosion.

- 11. Inspect the Hauling Lines and Lifting Strop(s) and check for damage, fraying or excessive wear.
- 12. Check that the splices are intact.
- 13. Check the Rungs and Connecting Pieces for any damage, cracks, breaks or distortions.
- 14. Ensure that no foreign objects have been added to the PRD.





#### **Crewsaver: PRD Service Requirements cont.**

- 15. Refit the Rods ensuring that they pass through all the Rod Links.
- 16. Check the condition of the retained Grub Screws. Any that show signs of damage or deterioration should be discarded and replaced with **NEW**. Refit the Grub Screws until they are flush with the edge of the rungs. **DO NOT** over tighten.
- 17. Refit the Tubes ensuring that they pass through all the Tube Links.
- 18. Fit **NEW** Locking Nuts to the Tubes and tighten to 30 Nm. using a torque wrench.
- 19. Fit **NEW** Plastic End Caps by tapping into each nut using a mallet.
- 20. Check the Flotation Tubes on Stretcher Kit versions for any damage. Ensure that they are firmly attached to the PRD.
- 21. Ensure that the Product Identification Tube(if originally fitted) is properly attached. The plastic ring is fitted on to the tube at the snap shackle end, between the first two tube links. The Tube is cable tied between the last two rungs on the first row (Serial number end).
- 22. Pack into Valise (FRC and Stretcher Kit).
- 23. Issue Inspection and Service Certificate.
- 24. Complete the Service Record Sheet contained in the Product Identification Tube (where fitted). On older units without a Product Identification Tube complete the relevant section in the Inspection and Maintenance Manual accompanying the unit.

A full version of the re-assembly procedure follows on Page 5





**Crewsaver: PRD Service Check List** 

Shop Order No:			
Customer:	Cust Acc No:	Cust Order No:	
Serial No:	Unit Size:	Rung Batch No:	
(Stretcher unit only) 3 Leg Strop Serial Nos:		Date:	
Inspection Date:	Inspector:	D of M:	
Last Service Date:		Last Service By:	

1	Wash the complete unit with warm soapy water, rinse and allow to dry.	
2	Remove Product Identification Tube (if fitted) and store safely.	
3	Remove all Plastic End Caps and Nuts from Tubes and DISCARD.	
4	Remove Side Pieces.	
5	Remove all Grub Screws from Rods and store safely.	
6	Remove the Rods and inspect for excessive wear.	
7	Ensure all Small Links are present and check for excessive wear.	
8	Check the Tube Assembly – Snap Shackle End.	
8.1	Check all parts are free from damage or corrosion.	
8.2	Check Tube for wear and thread condition.	
8.3	Ensure all Large Links are present and check for damage or excessive wear.	
8.4	Inspect ID Links. If Serial No is not visible then replace.	
9	Inspect the Snap Shackles and check for damage or excessive wear.	
10	Check the Tube Assembly – Hauling Line End.	
10.1	Check all parts are free from damage or corrosion.	
10.2	Check Tube for wear and thread condition.	
10.3	Ensure all Large Links are present and check for damage or excessive wear.	
11	Inspect the Hauling Lines and check for damage or excessive wear.	
12	Inspect the Lifting Strop(s) and check for damage or excessive wear.	
13	Ensure all Rungs and Connecting Bars are in an acceptable condition.	
14	Ensure that no foreign objects have been added to the PRD.	
15	Refit the Rods, ensuring that they pass through all the Small Links.	
16	Refit the Grub Screws. Use retained screws or replace where necessary.	
17	Fit <b>NEW</b> Locking Nuts to the Tubes and tighten to 30Nm.	
18	Fit <b>NEW</b> Plastic End Caps.	
19	Inspect Flotation Tubes on Stretcher Kit and check firmly attached to PRD	
20	Final Inspection.	
21	Pack into Valise (FRC and Stretcher Kit).	
22	Issue of Inspection and Service Certificate.	
23	Complete Service Record.	





#### **Re-assembly Procedure**

#### **Required Tools List**

Nylon/ Rubber Mallet

Torque Wrench - M16 Socket

3mm Allen Key
(Electric screwdriver with torque setting and 3mm hex key)
Set of 5mm Numbered Metal Punches

- Take the first rung and slide on a connecting piece, ensuring that the holes for the
- connecting rod line up. Continue to add rungs and connecting pieces until the required rung width has been assembled. N.B. The end rungs of the row should not have a connecting piece on the outer edge.
- 2. Assemble sufficient rows of rungs to complete the rung length of the unit being assembled.
- 3. Place the assembled rows on a flat surface with the logo face side down. Locate the rod links in the pre-formed slots in the bottom of the rungs (two per rung) of the first row. Ensure that all the links are in place before starting the next stage.
- 4. Using the hammer provided, feed a connecting rod through the holes in the rungs. Ensure that the rod passes through every link as it is pushed through the row.
- 5. Locate the rod links of the first row into the pre-formed slots in the top of the second row. Feed a connecting rod through the holes in the top of the rungs. Ensure that the rod passes through every link as it is pushed through the row.
- 6. Repeat the operation until all the rows of rungs are connected.
- 7. Locate the large tube links in the pre-formed slots in the top row of the assembled unit. The link with the serial number must be on the top left tube link at the end of the row with the serial number facing outwards.
- 8. Using the hammer provided, feed a connecting rod through the holes in the rungs. Ensure that the rod passes through every large link as it is pushed through the row.
- 10. Repeat the operation on the last row of the assembled unit.





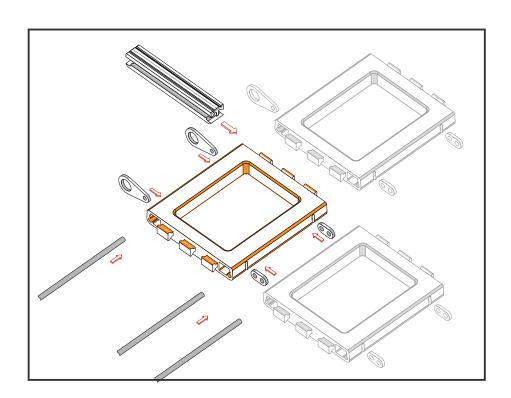
#### **Re-assembly Procedure**

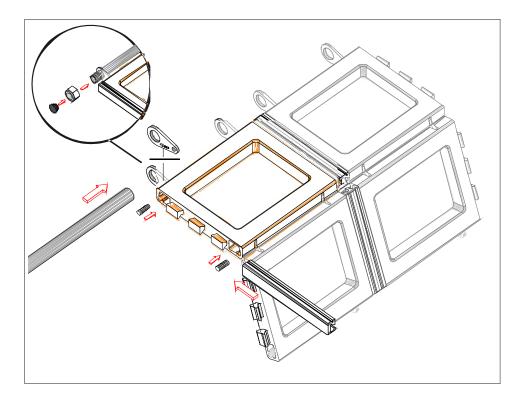
- 11. Using a short spare rod, hammer one end of each connecting rod into the rung to a depth of approx. 10mm. Fit the grub screws to hold the rods in place. These should be screwed in until flush with the edge of the rung so that the side pieces can be fitted correctly. N.B. Grub screws should be fitted on both sides of the assembled unit.
- 12. Fit the side pieces to the ends of each row of rungs. Bend the complete unit as shown in the drawing and tap the end pieces into position using a mallet.
- 13. **Completion of top of unit snap shackle end.** Slide a tube through all of the large links and snap shackles. Where the unit has only two snap shackles these should be positioned above the rungs at the end of each row. Where the unit has more than two snap shackles the extra ones should be positioned equidistantly between the two at each end.
- 14. **Stretcher units** do not require snap shackles. Slide the tube equidistantly through the loops on one of the three-legged strops making sure that the serial number is facing inwards.
- 15. Check that the correct number of links has been fitted and that the tube has passed through all the links and snap shackles (and three-legged strop on Stretcher unit). Fit the tube nuts to each end of the tube and tighten to 30 Nm. using a torque wrench. Tap a tube end cap into each nut using a mallet.
- 16. Completion of bottom of unit hauling rope and lifting strop end. Select the correct hauling lines (two required) for the length of the assembled unit and the correct size and quantity of lifting strops. Slide a tube through all of the large links, hauling lines and strops. The hauling lines should be placed at each end of the row. Where only one lifting strop is required this should be placed central to the unit. Where two lifting strops are fitted these should be placed at each end of the row, stretched over three rungs.
- 17. **Stretcher units** do not require hauling lines and lifting strops. Slide the tube equidistantly through the loops on the second of the three-legged strops making sure that the serial number is facing inwards.
- 18. Check that the correct number of links has been fitted and that the tube has passed through all the links, hauling lines and lifting strops (and three-legged strops on Stretcher unit). Fit the tube nuts to each end of the tube and tighten to 30 Nm. using a torque wrench. Tap a tube end cap into each nut using a mallet.
- 19. **Fast Rescue Kit:** Pack the PRD into the valise.
- 20. **Stretcher Unit:** Using the velcro straps attach the flotation tubes to the outer edge of the Stretcher unit. Pack the unit into the bag.





#### **Re-assembly Procedure**

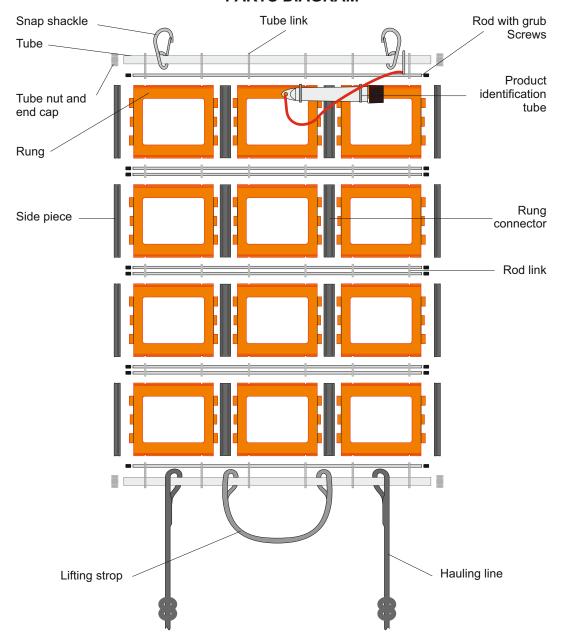






#### **Re-assembly Procedure**

#### **PARTS DIAGRAM**







#### **Spare Parts**

#### **Standard Parts**

Service Stations should carry a stock of the following parts, sufficient to meet their anticipated requirements.

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#### **Spare Parts**

Service Stations should order the following parts from Crewsaver as and when required to carry out servicing

#### **Size Specific Parts**

	1
Part No:	Part Name
SEPRDSSR3 SEPRDSSR4 SEPRDSSR5 SEPRDSSR6 SEPRDSSR7 SEPRDSSR8 SEPRDSSR9 SEPRDSSR10 SEPRDSSR11 SEPRDSSR12	S/S Rod - 3 Rung S/S Rod - 4 Rung S/S Rod - 5 Rung S/S Rod - 6 Rung S/S Rod - 7 Rung S/S Rod - 8 Rung S/S Rod - 9 Rung S/S Rod - 10 Rung S/S Rod - 11 Rung S/S Rod - 12 Rung
SEPRDSST3 SEPRDSST4 SEPRDSST5 SEPRDSST6 SEPRDSST7 SEPRDSST8 SEPRDSST9 SEPRDSST10 SEPRDSST11	S/S Tube - 3 Rung S/S Tube - 4 Rung S/S Tube - 5 Rung S/S Tube - 6 Rung S/S Tube - 7 Rung S/S Tube - 8 Rung S/S Tube - 9 Rung S/S Tube - 10 Rung S/S Tube - 11 Rung

#### **Hauling Lines & Strops**

Part No:	Part Name
SEPRDHL-03	3 Metre Line
SEPRDHL-04	4 Metre Line
SEPRDHL-05	5 Metre Line
SEPRDHL-06	6 Metre Line
SEPRDHL-07	7 Metre Line
SEPRDS17	0.432m/17" Strop
SEPRDS25	0.635m/25" Strop

#### **FRC and Stretcher Kits**

Part No:	Part Name
SEPRDPK SEPRD3RO/VAL SEPRD4RO/VAL SEPRD5RO/VAL	Hypalon Patch Kit 3 Rung Orange Valise 4 Rung Orange Valise 5 Rung Orange Valise
SEPRDT09 SEPRDT11 SEPRD3LGWST	9 Rung Flotation Tube 11 Rung Flotation Tube 3 legged Webbing Strop

