

CHAPTER 33

CLEANING INSTRUCTIONS – BLADDER /TANK COLLAPSIBLE

- 33.1 This chapter provides basic and specific cleaning requirements for selected equipment. Where there is a specific requirement or need to highlight particular problem areas detailed cleaning guides are provided as tables and figures in this chapter.
- 33.2 Bladders/tanks collapsible do appear to be quite innocuous but they are complex pieces of equipment. While all contamination and BRM must be removed, the main areas of concern are:
- external/internal areas;
 - hoses;
 - taraulins; and
 - transit cases.
- 33.3 All points are not specific to all bladders/tanks collapsible.

External/Internal Areas

- 33.4 The cleaning instructions for the bladder/tank collapsible include the points detailed in Table 33–1.

Table 33–1: Cleaning Instructions for the Bladder/Tank Collapsible

<i>Serial</i>	<i>Comments or Tasks</i>	<i>Technical Time (hours)</i>
1	The water bladder is to be washed with high-pressure water and then treated with chlorinated water and allowed to air dry.	
2	The bladder is to be sprayed internally with a chlorine solution (400 parts per million) and then allowed to air dry or fill the bladder to full and chlorinate the water as above and then drain and air dry.	
3	DA may require the inclusion of a super chlorinated sample to be sealed inside the tank after inspection to teat any residual water.	
4	All ground mats and bund liners are to be washed with high-pressure water and then treated with chlorinated water and allowed to air dry.	

Hoses

- 33.5 The cleaning instructions for water hoses include the points detailed in Table 33-2.

Table 33–2: Cleaning Instructions for the Water Hoses

<i>Serial</i>	<i>Comments or Tasks</i>	<i>Technical Time (hours)</i>
1	Unroll all hoses and clean all oil and grease material to ensure there is no soil, plant or insect matter. Clean hose assembly with a high-pressure water cleaner.	

<i>Serial</i>	<i>Comments or Tasks</i>	<i>Technical Time (hours)</i>
2	Clean all hose couplings and hose coupling assembly with a high-pressure water cleaner.	
3	The inside of the hoses is to be flushed out and treated with chlorinated water with a chlorine solution (400 parts per million) and then allowed drain and air dry.	

Tarpaulins

33.6 The cleaning instructions for the tarpaulins include the points detailed in Table 33-3.

Table 33–3: Cleaning Instructions for Tarpaulins

<i>Serial</i>	<i>Comments or Tasks</i>	<i>Technical Time (hours)</i>
1	All tarpaulins are to be given a brush down, brush scrubbing and hose cleaning, paying particular attention to the seam areas and then hung so as not to contact the ground for drying	
2	All ropes and universal dispatch straps are to be extended to their full length and wiped or washed clean of all soil, plant and insect matter Attention to attachment points and fixtures and tension devices is required Personnel are to inspect and remove all twigs, foliage, and so on that has become embedded in the rope fibres	
3	Velcro panels and seams (where fitted) are to be brushed and washed to ensure all seed, plant and soil material is removed	
4	Canvas bags are to be turned inside out and checked for burrs, seeds and insects;	
5	Where fitted, poles, knuckles and pegs are to be subject to a high-pressure water clean to remove all soil, plant and insect matter (ants, spiders and mud wasps are of particular concern)	
6	If tarpaulins have not been used during the entire deployment, then the requirement is for all tarpaulins to be unrolled, brushed and swept clean to ensure no vermin or insect infestation and then subject to an inspection	

Transit Cases

33.7 The cleaning instructions for Transit Cases include the points detailed in Table 33–4.

Table 33–4: Cleaning Instructions for Transit Cases

<i>Serial</i>	<i>Comments or Tasks</i>	<i>Technical Time (hours)</i>
1	All ground mats, bladder covers and hoses are to be washed with high-pressure water and then treated with chlorinated water and allowed to air dry.	
2	All transit cases are to be emptied of all contents.	
3	All contents of the transit cases are to be cleaned and be free of BRM.	
4	All transit cases are to be wiped clean and are to be free of BRM.	

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<i>Serial</i>	<i>Comments or Tasks</i>	<i>Technical Time (hours)</i>
2	Refer to Chapter 33 for detailed cleaning guidelines.	

Annexes:

- A. Cleaning Instructions - Water Bladder
- B. Cleaning Instructions - Tank, Fabric, Collapsible 136,400 L Fuel
- C. Cleaning Instructions - Tank, Fabric, Collapsible Marine (TFCM)
- D. Cleaning Instructions - Tank, Fabric, Collapsible Pillow Tank (22,500 & 136, 000 L)

ANNEX A TO CHAPTER 33

CLEANING INSTRUCTIONS – WATER BLADDER

1. This chapter provides basic and specific cleaning requirements for selected equipment. Where there is a specific requirement or need to highlight particular problem areas detailed cleaning guides are provided as tables and figures in this Annex.
2. The cleaning requirements that follow are in addition to those points for bladder/tanks collapsible included in Chapter 33 of this publication.

External Areas

3. The cleaning instructions for the water bladder, as illustrated in Figures 33A–1 and 33A–2, include the point detailed in Table 33A–1.



Figure 33A–1: Water Bladder

Table 33A–1: Cleaning Instructions for the Water Bladder

<i>Serial</i>	<i>Comments or Tasks</i>	<i>Technical Time (hours)</i>
1	The water bladder is to be washed with high-pressure water and then treated with chlorinated water and allowed to air dry.	
2	All ground mats, bladder covers and hoses are to be treated as per the water bladder.	
3	All packing container are to be wiped clean and are to be free of BRM.	
4	Refer to Chapter 33 for detailed cleaning guidelines.	

Tarpaulins

4. The cleaning instructions for the tarpaulins include the points detailed in Table 33A-2.



Figure 33A-2: Water Bladder

Table 33A-2: Cleaning Instructions for the Tarpaulin Areas

<i>Serial</i>	<i>Comments or Tasks</i>	<i>Technical Time (hours)</i>
1	All tarpaulins are to be given a brush down, brush scrubbing and hose cleaning, paying particular attention to the seam areas and then hung so as not to contact the ground for drying	
2	Refer to Chapter 33 for detailed cleaning guidelines.	

ANNEX B TO CHAPTER 33

CLEANING INSTRUCTIONS –TANK FABRIC, COLLAPSIBLE

136,400 L FUEL

1. This chapter provides basic and specific cleaning requirements for selected vehicles. Where there is a specific requirement or need to highlight particular problem areas detailed cleaning guides are provided as tables and figures in this Annex.
2. The cleaning requirements that follow are in addition to those points for bladder/tanks collapsible included in Chapter 33 of this publication.

External Areas

3. The cleaning instructions for the Tank, Fabric, Collapsible 136,400 L Fuel, as illustrated in Figures 33B–1 and 33B-2, include the points detailed in Table 33B–1.



Figure 33B–1: Tank, Fabric, Collapsible 136,400 L Fuel



Figure 33B–2: Tank, Fabric, Collapsible 136,400 L Fuel

Table 33B-1: Cleaning Instructions for the Tank, Fabric, Collapsible 136,400 L Fuel

<i>Serial</i>	<i>Comments or Tasks</i>	<i>Technical Time (hours)</i>
1	The water bladder is to be washed with high-pressure water and then treated with chlorinated water and allowed to air dry.	
2	Refer to Chapter 33 for detailed cleaning guidelines.	

Piping and Components

4. The cleaning instructions for the Tank, Fabric, Collapsible Fuel Piping and Components, as illustrated in Figure 33B-3, include the points detailed in Table 33B-2.



Figure 33B-3: Tank, Fabric, Collapsible Fuel Piping and Components

Table 33B-2: Cleaning Instructions for the Tank, Fabric, Collapsible Fuel Piping and Components

<i>Serial</i>	<i>Comments or Tasks</i>	<i>Technical Time (hours)</i>
1	All ground mats, bladder covers and hoses are to be washed with high-pressure water and then treated with chlorinated water and allowed to air dry.	
2	Refer to Chapter 33 for detailed cleaning guidelines.	

Transit Cases

5. The cleaning instructions for the Transit Cases, as illustrated in Figure 33B-4, include the points detailed in Table 33B-3.



Figure 33B-4: Tank, Fabric, Collapsible Fuel Transit Case

Table 33B-3: Cleaning Instructions for the Tank, Fabric, Collapsible Fuel Transit Case

<i>Serial</i>	<i>Comments or Tasks</i>	<i>Technical Time (hours)</i>
1	Refer to Chapter 33 for detailed cleaning guidelines.	

ANNEX C TO CHAPTER 33

CLEANING INSTRUCTIONS –TANK FABRIC COLLAPSIBLE

MARINE (TFCM)

1. This chapter provides basic and specific cleaning requirements for selected equipment. Where there is a specific requirement or need to highlight particular problem areas detailed cleaning guides are provided as tables and figures in this Annex.
2. The cleaning requirements that follow are in addition to those points for bladder/tanks collapsible included in Chapter 33 of this publication.

External Areas

3. The cleaning instructions for the Tank, Fabric Collapsible Marine (TFCM), as illustrated in Figure 33C–1, include the points detailed in Table 33C–1.



Figure 33C–1: Tank, Fabric Collapsible Marine (TFCM)

Table 33C–1: Cleaning Instructions for the Tank, Fabric Collapsible Marine (TFCM)

<i>Serial</i>	<i>Comments or Tasks</i>	<i>Technical Time (hours)</i>
1	Ensure the tank has been fully drained.	
2	Remove any tank hose assemblies from the tank.	
3	Remove the fillers or discharge elbows.	0.5
4	Remove any venting assemblies from the flanged adapter and install the dust cap	
5	Inflate the tank with air and air-dry the tank for twenty-four hours.	
6	Flush the tank with detergent solution	

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<i>Serial</i>	<i>Comments or Tasks</i>	<i>Technical Time (hours)</i>
7	Drain the detergent solution from the tank.	1.0
8	Flush the tank with clear water.	
9	Air-dry the tank	
10	Brush off all debris clinging to the fabric material of the tank.	
11	Packing containers are to be wiped clean.	

Meter Manifold

4. The cleaning instructions for the Tank, Fabric Collapsible Marine (TFCM) Meter Manifold, as illustrated in Figure 33C–2, include the points detailed in Table 33C–2.



Figure 33C–2: Tank, Fabric Collapsible Marine (TFCM) Meter Manifold

Table 33C–2: Cleaning Instructions for the Tank, Fabric Collapsible Marine (TFCM) Meter Manifold

<i>Serial</i>	<i>Comments or Tasks</i>	<i>Technical Time (hours)</i>
1	Pump clean water through the system	
2	Ensure all internal areas are free of BRM	
3	Remove any plastic filters/separators for cleaning	0.5
4	Open all valves for flushing action	
5	The pump is to be washed with high-pressure water and then treated with chlorinated water and allowed to air dry.	
6	All ground mats, covers and hoses are to be washed with high-pressure water and then treated with chlorinated water and allowed to air dry.	
7	Packing containers are to be wiped clean.	1.0

Transit Cases

5. The cleaning instructions for the Transit Cases, as illustrated in Figure 33C–3, include the points detailed in Table 33C–3.



Figure 33C-3: Tank, Fabric, Collapsible Marine Transit Case

Table 33C-3: Cleaning Instructions for the Tank, Fabric, Collapsible Marine Transit Case

<i>Serial</i>	<i>Comments or Tasks</i>	<i>Technical Time (hours)</i>
1	Refer to Chapter 33 for detailed cleaning guidelines.	

ANNEX D TO CHAPTER 33

CLEANING INSTRUCTIONS –TANK, FABRIC, COLLAPSIBLE

PILLOW TANK (22,500 AND 136,000 L)

1. This chapter provides basic and specific cleaning requirements for selected vehicles. Where there is a specific requirement or need to highlight particular problem areas detailed cleaning guides are provided as tables and figures in this Annex.
2. The cleaning requirements that follow are in addition to those points for bladder/tanks collapsible included in Chapter 33 of this publication.

External Areas

3. The cleaning instructions for the Pillow Tank, as illustrated in Figures 33D-1 to 33D-3, include the point detailed in Table 33D-1.



Figure 33D-1: Pillow Tank 22,500 L



Figure 33D-2: Pillow Tank 136,000 L

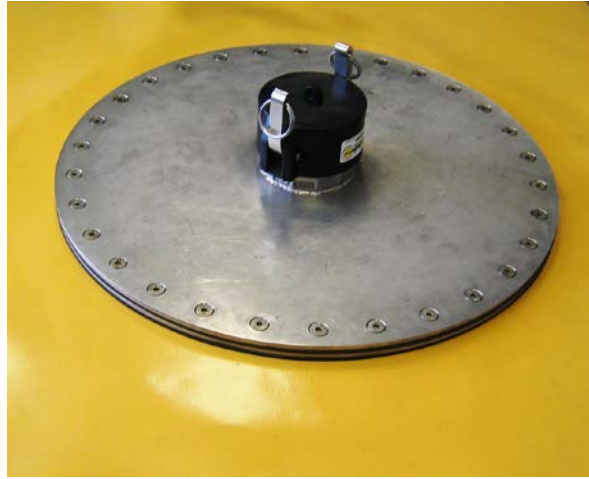


Figure 33D-3: Pillow Tank 136,000 L Manhole Access Assembly

Table 33D-1: Cleaning Instructions for the Pillow Tank

<i>Serial</i>	<i>Comments or Tasks</i>	<i>Technical Time (hours)</i>
1	All bladder covers are to be washed with high-pressure water and then treated with chlorinated water and allowed to air dry.	
2	Clean all lifting handles located at intervals around the outer edge of the tank.	
3	Clean all webbing straps attached above the handles for securing in position when the tank is filled with water	
4	Clean the vent assembly fitted in the centre of the upper surface of the tank. Also clean the protective cover fitted to the vent assembly during storage	
5	Clean the fill assembly and manhole access assembly fitted in the centre panel of the upper surface of the tank. Disconnect all hoses and couplings prior to cleaning.	
6	Clean the drain assembly fitted in one corner of the lower surface of the tank. Disconnect all hoses and couplings prior to cleaning.	
7	Clean all CES individually.	
8	Refer to Chapter 33 for detailed cleaning guidelines.	

Piping and Components

4. The cleaning instructions for the Pillow Tank Piping and Components, as illustrated in Figure 33D-4, include the points detailed in Table 33D-2.



Figure 33D-4: Pillow Tank Hose Suction (Left) and Flat Drain (Right)

Table 33D-2: Cleaning Instructions for the Pillow Tank Piping and Components

<i>Serial</i>	<i>Comments or Tasks</i>	<i>Technical Time (hours)</i>
1	All hoses and couplings are to be washed with high-pressure water and then treated with chlorinated water and allowed to air dry. Special attention is to be made to the ball valve and dust caps.	
2	All ground mats and bund liners are to be washed with high-pressure water and then treated with chlorinated water and allowed to air dry.	
3	Refer to Chapter 33 for detailed cleaning guidelines.	

Transit Cases

- The cleaning instructions for the Transit Cases, as illustrated in Figure 33D-5, include the points detailed in Table 33D-3.



Figure 33D-5: Tank, Fabric, Collapsible Transit Case

Table 33D-3: Cleaning Instructions for the Tank, Fabric, Collapsible Transit Case

<i>Serial</i>	<i>Comments or Tasks</i>	<i>Technical Time (hours)</i>
1	Refer to Chapter 33 for detailed cleaning guidelines.	