

Thanner A/S QA System	Service instruction	QA.dok.No 2004
	Thanner Hydrostatic Release Unit	Issue. No:9
	DK- 84/RN-2	Date: 21.09.2016

Manufacturer: THANNER A/S,
Phone: 0045-75-130066
Fax.: 0045-75-452993
e-mail: admin@thanner.dk

Inspection and service of DK- 84/RN-2 Hydrostatic Release Unit.

Every 6 months on board the HRU-84/RN-2 must undergo a visual Inspection:

- a) The HRU is inspected for paint, dirt and foreign particles which can disturb the function of the HRU Important is the 3 water entrance holes for the membrane must remain open. See page 6

IMPORTANT:

When inspected the HRU must be cleaned with fresh water.

The spring leaf on the side of the release pawl is welded to the release and must be cleaned from salt and dirt.

The welding spot must be protected with HTS-1400 grease (16) (see pictures page 5).

Before installation on board be sure the spot at protected.

After installation on board the welding spot MUST be covered by HTS-1400 grease (16), to avoid corrosion between the welding spot and spring leaf.

- b) Allover inspection.

Every 12 months the HRU DK 84/RN-2 must undergo a release test:

IMPORTANT:

Secure the raft before release test.

- a) Remove the safety split (8) and push down the release button by hand, open the release pawl by hand on top of the HRU.
- b) When the HRU is released inspect by shaking the HRU the moveable parts as release pawl and reset pawl are loose and moveable.
- c) Reset the HRU by pushing the release pawl back into the position with the reset pawl as the re-lease mechanism is back in stand by position, then turn the index bolt(17)back to position "I" with a top spanner size 17. A clear "click" will indicate the release pawl and resetting pawl are in locked position and the HRU is locked and rearmed. Insert the safety split.

IMPORTANT:

The index bolt must be in initial "I"

Thanner A/S QA System	Service instruction	QA.dok.No 2004
	Thanner Hydrostatic Release Unit	Issue. No:9
	DK- 84/RN-2	Date: 21.09.2016

IMPORTANT:

When inspected the HRU must be cleaned with fresh water.

The spring leaf on the side of the release pawl is welded to the release and must be cleaned from salt and dirt.

The welding spot must be protected with HTS-1400 grease (16) (see pictures page 5)

Before installation on board be sure the spot at protected.

After installation on board the welding spot **MUST** be covered by HTS-1400 grease (16), to avoid corrosion between the welding spot and spring leaf.

- d) If any malfunction occurs – the HRU must be replaced and send for service.

- e) Inspect the blue label on the top of the membrane house (15), it must be undamaged and easy readable. If not, remove the old label off and refit a new label (14)

Inspection and Service on the authorized service station.

The HRU DK 84/RN-2 must be serviced and overhauled at intervals **not exceeding 24 months from last installation on board**. The service shall take place at a MOD/ US Navy approved service station. The procedure is as followed:

IMPORTANT:

When inspected the HRU must be cleaned with fresh water.

The spring leaf on the side of the release pawl is welded to the release and must be cleaned from salt and dirt.

The welding spot must be protected with HTS-1400 grease (16) (see pictures page 5)

Before installation on board be sure the spot at protected.

After installation on board the welding spot **MUST** be covered by HTS-1400 grease (16), to avoid corrosion between the welding spot and spring leaf.

VISUAL INSPECTION:

When the HRU comes in for inspection it must undergo a visual inspection.

Remaining paint, dirt or foreign particles must be removed by cleaning the HRU. Before cleaning the HRU make sure the 3 water inlet holes are clean and open, see page 6. Now the HRU is cleaned under tap running cold water or a bucket of fresh water.

After cleaning the HRU is dried carefully with air. After the visual inspection and cleaning the release procedure takes place.

Thanner A/S QA System	Service instruction	QA.dok.No 2004
	Thanner Hydrostatic Release Unit	Issue. No:9
	DK- 84/RN-2	Date: 21.09.2016

Release test:

- a) The HRU is tested for its performance and correct opening pressure in a test tank part no: 10-050 When the test instruction is carefully read and understood the following action shall be taken: The release pressure in the test tank is 18 feet -2+2 feet water gauge or 0.48 to 0.60 bars. The test must be carried out with water. See QA 2093.
- b) If the HRU does not release by the prescribed pressure it has to be removed from the test tank and manually released as follows:
- c) Remove the safety split (8) and push down the release button and open the HRU by pulling the release pawl up on the top at the HRU.
- d) Inspect, clean the release and reset pawls and lubricate the reset and release pawls with HTS-1400 grease (16) (see picture page 5) Reset the HRU by pushing the release and reset pawl in locked position and turn the index bolt (17) back to "I" by means of a top spanner size 17. A clear "click" will indicate the pawls are in locked position and the HRU is rearmed. When the index bolt is back in "I" please refit the safety split (8) Replace the HRU in the test tank and repeat the testing.
- e) If the HRU fails again, the HRU is removed from the test tank and the membrane assembly (9) must be inspected for defects and if necessary the membrane assembly must be disposed and replaced with a new assembly (9)

NOTICE:

Before starting removing the screws the DK 84/RN-2 must be secured in a vice bench. The spring force is heavy and uncontrolled disassembling can cause injuries.

- a) Remove the 10 screws (10&13) from the diaphragm housing; remove the spring (16) and the membrane assembly (9). Inspect the membrane assembly for visual damage if necessary replace it.
- b) The existing or replaced membrane assembly (9) is to be placed with the index bolt in position "I", to ensure the correct compression in the membrane housing (15)
- c) Insert the spring (16) and the membrane housing (15) is placed. The membrane housing (15) must be kept to the device with a Clamp tooling.
- d) Place the screws to the membrane housing (15) and tighten the screw diagonally.
- e) Torque: 4 Nm.
- f) Please note: diaphragm assembly Part no.10-102 (9) is not to separate.

Thanner A/S QA System	Service instruction	QA.dok.No 2004
	Thanner Hydrostatic Release Unit	Issue. No:9
	DK- 84/RN-2	Date: 21.09.2016

IMPORTANT:

The diaphragm assembly can not be separated. The diaphragm assembly must be replaced after 5 years' service time.

g) Re-test the HRU in the test tank see QA 2093

h) When the test is done and the HRU is OK, the log card (10-055) shall be recorded with the date of testing, serial No. and MOD / US Navy Service station

NOTICE:

The remaining part of the DK 84/RN-2 cannot be taken apart. This parts contains the release mechanism and if fail function appears, the part must be cleaned and dried.

The section shall be greased with HTS-1400 grease (16) (see pictures page 5) on the release curve and the release arm. If the part still do not work satisfactory, the part must be disposed and replaced by an inspected and approved DK 84/RN-2 from stock.

CLEANING OF THANNER HRU DK 84/RN-2:

When the DK 84/RN-2 comes back from the ship the surface can be slightly tarnished. The rusty color it not from the stainless steel itself, but from the processing tools which have been used through out the production of the parts for the HRU.

If the HRU has to be cleaned for the tarnished surface, we recommend a brass brush.

The brass brush is more flexible and gives easier access to the nooks and corners of the HRU.

Thanner A/S QA System	Service instruction	QA.dok.No 2004
	Thanner Hydrostatic Release Unit	Issue. No:9
	DK- 84/RN-2	Date: 21.09.2016

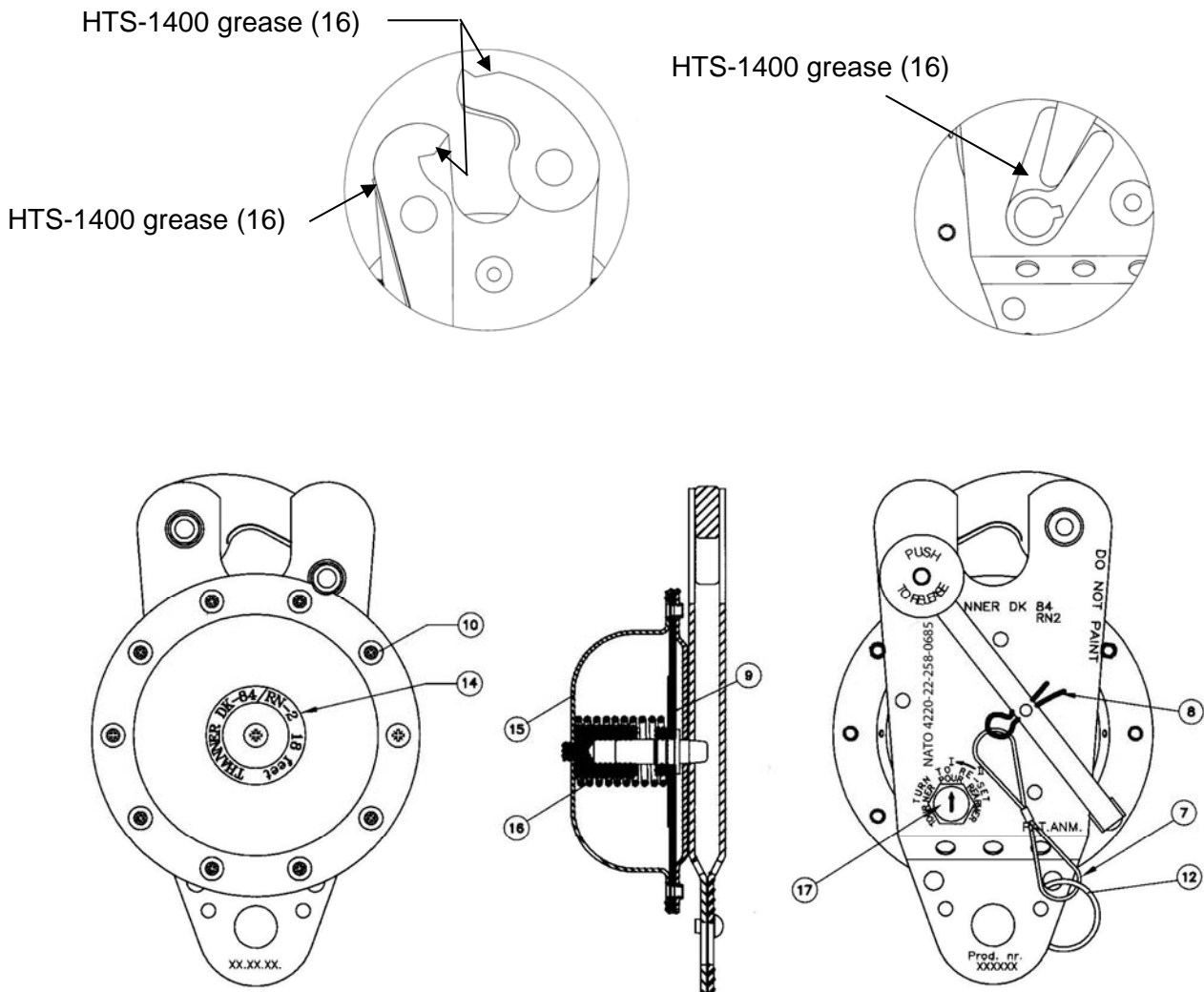
DO NOT USE A STEEL BRUSH!

If the brass brush can not remove the rusty color – a recommended detergent can remove the rusty color. The steel parts excl. the membrane unit is submerged into the detergent for app. 40 minutes depending of the tarnish of surface of the HRU.

When brushed and cleaned, the stainless steel parts are cleaned with cold tap water and dried. After cleaning and dried the HRU is assembled as described in the assembling of the HRU.

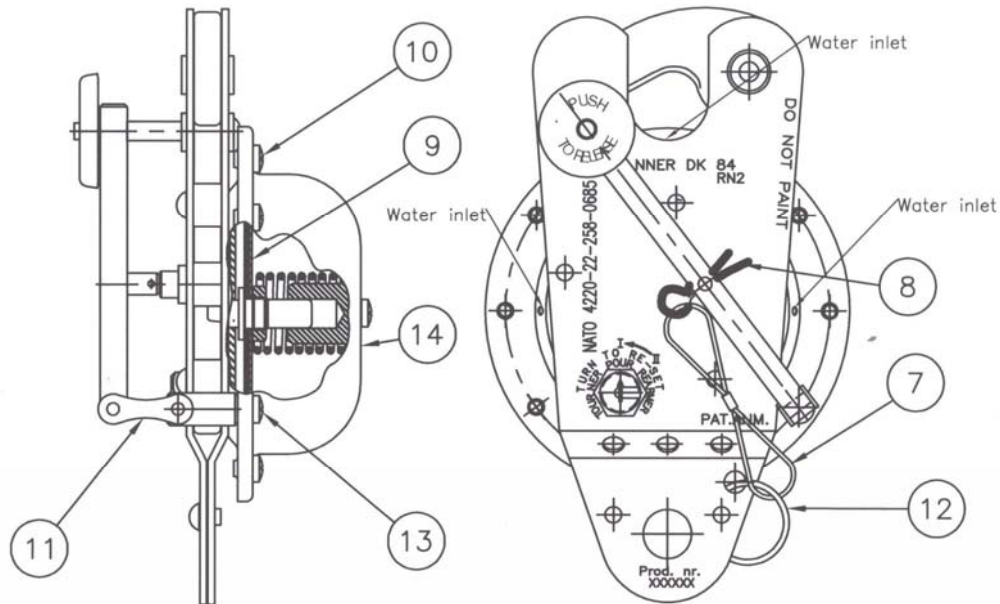
INFORMATION:

The brass brush and the detergent is available from the manufacturer.



Thanner A/S QA System	Service instruction	QA.dok.No 2004
	Thanner Hydrostatic Release Unit	Issue. No:9
	DK- 84/RN-2	Date: 21.09.2016

Spare parts list Dwg. No. 13-400



Pos no.	Mgd.	Description	Dwg. No.	
7	1	Attachment wire	13-033	
8	1	2 mm Safety pin		
9	1	Diaphragm Assembly	10-102	From serial no. 166089
10	9	Screw M5x8 DIN 7985	10-024.1	
11	1	Chain link (462-7)		
12	1	Attachment ring	10-029.2	
13	1	Screw M5x16 DIN 7985		
14	1	Label	13-032	
15	1	Log card	10-055	
16		HTS-1400 Grease		