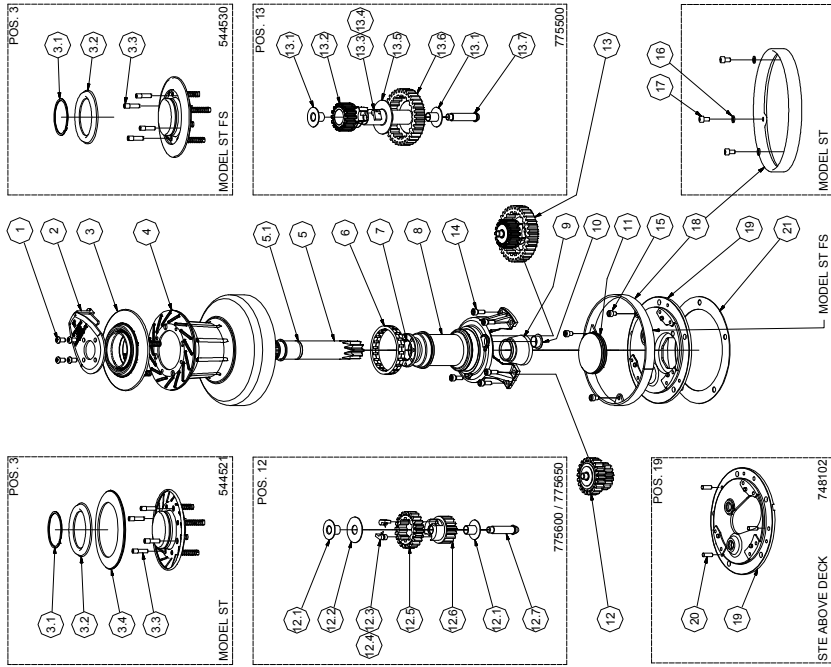


EXPLODED VIEW

46ST / 46ST FS & 48ST / 48ST FS

Version 4.1 Version 4.1.F Version 1.0 Version 1.0.F



MOUNTING INSTRUCTION

46ST / 46ST FS & 48ST / 48ST FS

Version 4.0 Version 4.1.F Version 1.0 Version 1.0.F

Installing the winch is easy, if you follow these instructions. The numbers in () refer to the position numbers in the parts list.

Tools required for the installation:

- Allen key (4 mm).
- Allen key (5 mm).
- Allen key (6 mm).
- Ø 8.5 mm. (11/32") drill.
- 5 pcs. M8 (5/16") bolts and nuts (length depending on deck thickness).
- 5 x large washers or backing plate.
- Ring spanner to match nuts.
- Bedding compound.

- Drill bolt holes Ø8,5mm (11/32") using the winch template. Be sure that no dust comes in contact with the winch, while drilling.
- Remove screws (1).
- Remove self-tailing arm (2) and drum (4).
- Apply a light coat of bedding compound, ensuring that each bolt hole is bedded. Keep drain grooves clear.
- Fasten lower base (19) into place using 5 pcs. M8 (5/16") bolts. Use large washers or a backing plate.
- Assemble in reverse order.
- Check that the winch is functioning correctly.
 - The drum should operate smoothly, by turning the drum clockwise by hand.
 - The drum should operate smoothly, by turning the drum counter-clockwise by hand.
 - While turning the winch handle clockwise the drum should turn slowly.
 - While turning the winch handle anti-clockwise the drum should turn fast.

PARTS LIST

46ST / 46ST FS & 48ST / 48ST FS

Version 4.1 Version 4.1.F Version 1.0 Version 1.0.F

POS.	QTY.	DESCRIPTION	ART. NO.
1.	4	Screw	ISO7380-A4-M6*12
2.	1	Self-tailing arm	Model 46ST 734315
3.	1	Self-tailing arm	Model 48ST 734355
3.1	1	Self-tailing top complete	544521
3.2	1	Self-tailing top complete	544530
3.3	1	Circlip	590300U
3.4	1	Top ring	595010
3.5	4	Screw	585100
3.6	1	Disc	712210
4.	1	Drum complete	735901
5	1	Drive shaft complete	711211
5.1	1	O-ring	RD100302
6	1	Roller bearing complete	727400
7.	1	Bushing	716503
8.	1	Upper Base plate with bushings	775400
9.	1	Bearing bushing	734900
10.	1	Bushing	RD677000
11.	1	Plug for deck plate	783900
12.	1	Small Ratchet gear complete	775600
12.1	2	Small Ratchet gear complete	775650
12.2	1	Bushing	981410
12.3	2	Washer	524300
12.4	2	Pawl	713200
12.5	1	Arm spring	713300
12.6	1	Ratchet gear wheel	523000
12.7	1	Ratchet gear wheel	523050
12.8	1	Gear wheel	523802
13.	1	Shaft for Small Ratchet gear	980300
13.1	2	Bushing	775500
13.2	1	Pawl gear wheel	981410
13.3	2	Arm spring	523903
13.4	2	Pawl	713300
13.5	1	Bushing	525500
13.6	1	Ratchet gear wheel	525300
13.7	1	Shaft for Ratchet gear	980410
14.	6	Screw	DIN912-A4-M6X12
15.	3	Screw	DIN912-A4-M6X8
16.	3	Washer	DIN125-A4-M6
17.	3	Screw	DIN6912-A4-M6X10
18.	1	Base cover	735302
18.1	1	Base cover	735321
19.	1	Deck plate for STE Below Deck motor and manual operated winch	746801
19.1	1	Deck plate STE Above Deck Compact motor	748102
20.	3	Pin	713401
21.	1	Sealing for Aluminium deck	Not included
21.1	1	Service kit No 19 (Not included)	710019

SERVICE INSTRUCTION

46ST / 46ST FS & 48ST / 48ST FS

Version 4.1 Version 4.1.F Version 1.0 Version 1.0.F

Tools required for service:

- Allen key (4 mm).
- Allen key (5 mm).
- Spanner (small).
- Winch handle (small).
- ANDERSEN winch grease
- Remove screws (1).
- Remove self-tailing arm (2) and drum (4).
- Remove screws (14).
- Remove upper base (6), and place it in a safe and comfortable place before dismantling it!
- Remove drive shaft (5), by using a finger or a winch handle.
- To release the roller bearing (6), gently insert a small screwdriver between roller bearing and base plate (8).
- Remove roller bearing.
- Remove shafts (12.7, 13.7).
- Remove and dismantle the two gear units.
- Clean all parts in benzine. Remember to clean the gear teeth, roller bearing track and bushing inside the drum (4).
- Assemble in reverse order. During assembly, by the use of a small soft brush lightly grease all gear teeth, drive shaft, roller bearing, shafts, pawls, springs and bushings. Pawls should only be lubricated with a very thin film of ANDERSEN WINCH GREASE. It is very important that pawls can move freely.

IMPORTANT: When assembling the winch, check the functioning of each pawl by pushing the pawl against the spring. The pawls should move smoothly and automatically return to their normal position, where the pawls engage with the teeth. If the pawls do not function correctly, clean and lubricate the pawls and gears. Check the function of the pawls again to make sure that it works correctly. If the pawls do not work correctly replace the springs and recheck the function.

Malfunctioning pawls may lead to unexpected failure of a loaded winch resulting in material damage or fatal personal injury.

Service Kit No. 19 (art. no. 710019) contains spare parts for this winch.

GENERAL INFORMATION

Due to the best choice of materials and high precision in manufacturing, we recommend, for normal use, only to dismantle, clean and lubricate the winch once every second year. Under extensive use, such as racing, charter or blue water sailing, we recommend to lubricate the winch once every year.

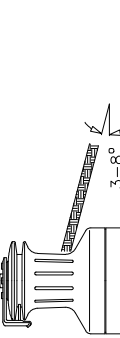
We strongly recommend always to use ANDERSEN WINCH GREASE, when lubricating your winch. ANDERSEN WINCH GREASE is a high quality silicone/Teflon grease product. Most other types of grease, including "marine grease" are not suitable for lubrication of winches. Non-suitable grease products can cause malfunction, which could result in fatal injuries for the user and others.

Pawl arm springs should be replaced every second year. Spare arm springs and other parts that may be required are included in the ANDERSEN Service Kit. Please refer to the service instruction for the Service Kit suitable for the specific winch.

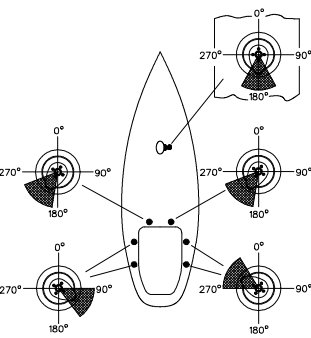
When the winch handle is not in use but the winch is under load, we recommend, from a safety point of view, to remove the winch handle from the winch.

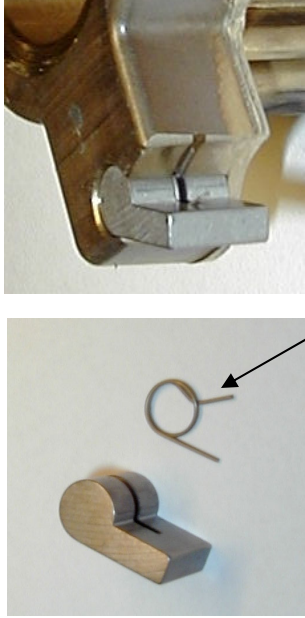
To ensure correct function of the self-tailing unit, only use recommended line sizes. When using the winch with mooring lines DO NOT use the self-tailing function and be sure that the mooring line is not in contact with the self-tailing arm.

To ensure the best possible functioning of the winch, we recommend that the winch is placed in accordance with the line entry shown below.



Be also aware that self-tailing arm is positioned correctly. We recommend to have the self-tailing arm positioned with the shaded area ON 12ST and 28ST the position of the self-tailing arm is fixed, making it very important to establish the projection of the poles or falling heads of the rope. On all other models, the self-tailing arm can be placed in several different positions after having installed the winch.





Note the curved spring "arm"

LIMITED WARRANTY

- 1.1 ANDERSEN issues a three-year warranty on all their products covering manufacturing and material defects on condition that the products are used in normal fashion. The warranty shall apply for three years from the moment ANDERSEN sell the product concerned (to the first buyer).
- 1.2 Within the period of the warranty, and in accordance with the terms of the warranty, ANDERSEN undertake to replace or repair all defective components, which have been used in normal fashion.
- 1.3 The warranty is however subject to the limitations and exceptions outlined below.
- 2.1 **Conditions and limitations:**
ANDERSEN's liability shall be limited to repair or replacement of components, which are defective owing to manufacturing or material defects.
- 2.2 ANDERSEN assume no other liability than this, not even liability for indirect losses caused by defect concerned, including operating losses, loss of profits, or damage caused to real property or moveable property occurring while the product concerned is in the possession of the Buyer.
- 2.3 The Buyer alone shall bear the responsibility and risk involved as to whether the products are suitable for the application intended. ANDERSEN assume no liability in this connection.
- 2.4 ANDERSEN assume no liability for defects which occur due to use of their products for purposes for which they are not intended, or for defects which occur owing to incorrect installation, corrosion, ultraviolet degradation, lack of maintenance, or any alteration or repair of the product carried out incorrectly by the Buyer. Finally, ANDERSEN assume no liability for normal wear and tear, or for depreciation in value.
- 2.5 ANDERSEN do not assume any liability for service carried out by anyone other than authorised ANDERSEN representatives, unless such service is carried out pursuant to guidelines laid down by ANDERSEN and in accordance with good craftsmanship.
- 2.6 The buyer shall inform ANDERSEN in writing of any defects with no undue delay once defects have been registered. Products being dealt with under the warranty shall be returned to ANDERSEN for repair unless any other agreement has been reached in writing.
- 2.7 ANDERSEN shall not cover costs incurred by the Buyer in connection with the transport or wages involved in a warranty case. The Buyer in full shall meet such costs.
- 3.1 **Exceptions:**
The warranty is only valid for one year in respect of components bought for the products concerned, such as electric motors, electric equipment, hydraulic pumps, motors and valves.
- 3.2 ANDERSEN assume no liability for consequential damage of ships, equipment, property or people caused by defects in ANDERSEN products.
- 3.3 The company's products are subject to continuous development, and consequently ANDERSEN reserve the right to change designs and specifications without prior notice.

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