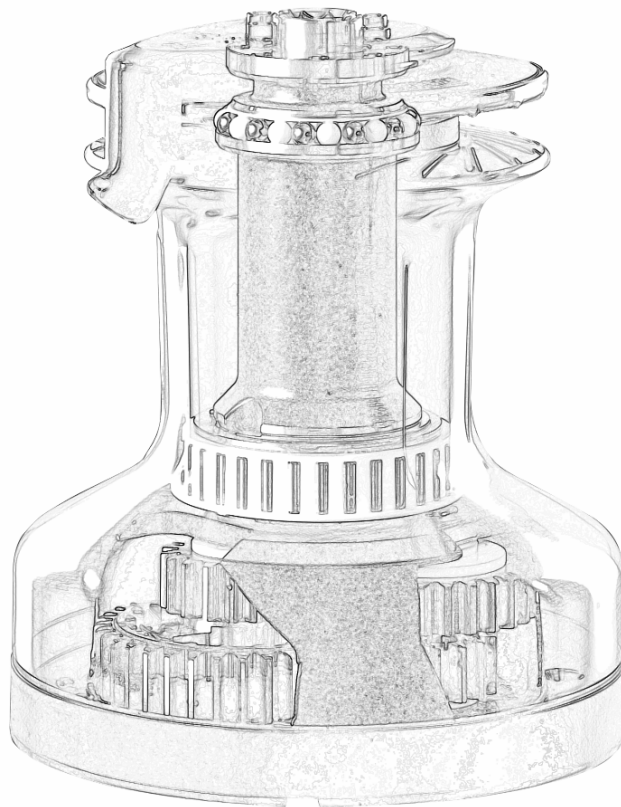


# Manual 46ST/FS

Version 3.1



STAINLESS STEEL WINCHES • STAINLESS STEEL EQUIPMENT

# 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.

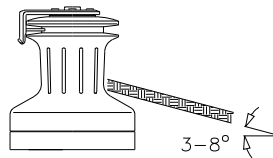
We strongly recommend always to use ANDERSEN WINCH GREASE, when lubricating your winch. ANDERSEN WINCH GREASE is a high quality silicone/Teflon grease product. Most other types of grease, including "marine grease" are not suitable for lubrication of winches. Non-suitable grease products can cause malfunction,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

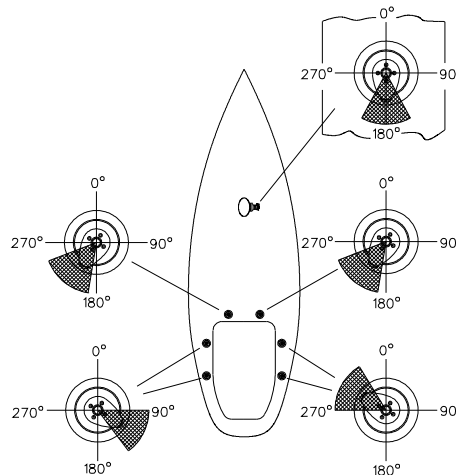
When the winch handle is not in use but the winch is under load, we recommend, from a safety point of view, to remove the winch handle from the winch.

To ensure correct function of the selftailing unit, only use recommended line sizes. When using the winch with mooring lines DO NOT use the selftailing function and be sure that the mooring line is not in contact with the selftailing 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 selftailing arm is positioned correctly. We recommend to have the selftailing arm positioned within the shaded area. On 12ST and 28ST the position of the selftailing arm is fixed, making it very important to establish the proper location of the holes prior to drilling these in the deck. On all other models, the selftailing arm can be placed in several different positions after having installed the winch.



# INSTALLATION

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.).

ø8.5 mm. (11/32") drill.

5 pcs. M8 (5/16") bolts.

Ring spanner to match nuts.

1. Remove screws (1).
2. Remove self-tailing arm (2) and drum (10).
3. Mark location of bolt holes using the lower base (21) as a template.
4. Remove complete winch. Be sure that no dust comes into contact with the winch while drilling.
5. Drill bolt holes ø8.5mm (11/32").
6. Apply a light coat of bedding compound, ensuring that each bolt hole is bedded. Keep drain grooves clear.
7. Fasten lower base (21) into place using 5 pcs. M8 (5/16") bolts. Use large washers or a backing plate.
8. Assemble in reverse order.
9. Check that the winch is functioning correctly:  
The drum should operate smoothly, by turning the drum clockwise by hand.  
The drum must not turn when trying to turn the drum anti clockwise.  
While turning the winch handle clockwise the drum should turn slowly.  
While turning the winch handle anti clockwise the drum should turn fast.

# SERVICE INSTRUCTION

Tools required for service:

Allen key (4 mm.).

Allen key (5 mm.).

Screwdriver (small).

Winch handle.

1. Remove screws (1).
2. Remove self-tailing arm (2) and drum (10).
3. Remove screws (36).
4. Remove upper base (35), and find a more comfortable place to dismantle it !
5. Remove drive shaft (12). Use a finger or a winch handle.
6. Clean the balls (33, 34) with a rag. DO NOT remove the balls and the small retaining ring (32) above the balls.
7. To release the roller bearing (30), gently insert a small screwdriver between roller bearing and upper base (36). Remove roller bearing.
8. Remove shafts (20, 45).
9. Remove and dismantle the two free gear units.
10. Clean all parts in petrol. Remember to clean the gear teeth, roller bearing track and ball track inside the drum (10).
11. Assemble in reverse order. During assemble, lightly grease all gear teeth, drive shaft, roller bearing, shafts, balls, pawls, springs and bushings. Use a small, soft brush. Pawls may be lubricated with either 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 functioning. Not properly functioning pawls may lead to unexpected release of the winch force resulting in fatal injuries to the user and others.

Service Kit No: 17 (art. no. 710017) contains spare parts for this winch.

# PARTS LIST

Ver.3.1

POS.	QTY.	DESCRIPTION	ART. NO.
1.	4	Screw	ISO 7380-A4-M6×16
2.	1	Self-tailing arm	734315
3.	1	Washer for self-tailing arm	524101
4.	1	Consol for Self-tailing 4-10mm	781900
4.	1	Consol for Self-tailing 8-14mm	781010
5.	1	Circlip	590300U
6.	1	Disc spring, standard	712200
7.	1	Driving plate, standard	524001
8.	4	Screw M6, standard	585100
9.	1	Self-tailing top 4-10mm. Cpl., standard	544400
9.	1	Self-tailing top 8-14mm. Cpl., standard	544500
10.	1	Drum complete 4-10mm, standard	754000
10.	1	Drum complete 8-14mm, standard	735904
10.	1	Drum complete 8-14mm, full stainless	734102
11.	1	O-ring	RD100302
12.	1	Drive shaft cpl.	711200
13.	1	Bushing	981400
14.	1	Washer	524300
15.	1	Ratchet gear	523000
16.	2	Arm spring	713300
17.	2	Pawl	713200
18.	1	Pawl gear	523802
19.	1	Bushing	981400
20.	1	Shaft, short	980300
21.	1	Lower base	748101
22.	1	Base cover, standard	735300
22.	1	Base cover, full stainless	735320
23.	1	Consol for Self-tailing 4-10mm	781900
23.	1	Consol for Self-tailing 8-14mm	781010
24.	1	O-ring ( only for full stainless model )	RD100430
25.	1	Circlip	590300U
26.	1	Top ring, full stainless	595010
27.	1	Driving plate, full stainless	595416
28.	4	Screw M6, standard	585100
29.	1	Self-tailing top 8-14mm. Cpl., full stainless	544510
30.	1	Roller bearing cpl.	727400
31.	1	Bushing	<i>Not removable</i> 716503
32.	1	Retaining ring	<i>Not removable</i> 523500
33.	14	Ball, stainless steel	724900
34.	14	Ball, POM	724902
35.	1	Upper base	750701
36.	8	Screw	DIN 912-A4-M6×12
37.	1	Bushing	<i>Not removable</i> 734900
38.	1	Bushing	981400
39.	1	Pawl gear	523902
40.	2	Pawl	713200
41.	2	Arm spring	713300
42.	1	Bushing	981400
43.	1	Ratchet gear	541901
44.	1	Bushing	981400
45.	1	Shaft, long	980400
	<b>1</b>	<b>Service kit, consist of pos. 1+5+19+32+33+34+36+40+41</b>	<b>710017</b>

# EXPLODED VIEW

