

Manual CAPSTAN C4500

Version 1.0



Sail Handling by



Stainless Steel Winches

CONGRATULATIONS

You have purchased an ANDERSEN high quality Capstan. This product is a result of many years of development and experience in producing winches for pleasure boats. This capstan gives you a high degree of functionality and many years of safe and easy mooring handling.

TILLYKKE

De har købt et ANDERSEN Capstan af høj kvalitet. Dette produkt er et resultat af mange års udviklingsarbejde samt erfaring indenfor produktion af spil til lystbåde. Med denne Capstan får De funktionalisme på højt plan med henblik på at yde Dem en behagelig samt sikker sejlads.

Sehr geehrter ANDERSEN kunde,

wir beglückwünschen Sie zu dem kauf einer ANDERSEN Capstan, ein Produkt höchster Qualität, daß ein Resultat jahrelanger Entwicklungsarbeit und Erfahrung in der Produktion von Winden für Segelboote ist. Die funktionalität dieser Capstan ermöglicht Ihnen viele Jahre lang eine handliche und sichere Segelführung.

FÉLICITATIONS

Vous venez d'acheter un Capstan ANDERSEN de grande qualité. Ce produit est le résultat de longues années d'expérience et de développement dans la production des capstans pour voilier. Ce winch vous apportera de nombreuses années de fonctionnement sécurisant, pour une voile facile.

Frode Andersen
Managing Director

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 capstan once every second year. Under extensive use, such as racing, charter or blue water sailing, we recommend to lubricate the capstan once every year.

We strongly recommend always using ANDERSEN WINCH GREASE, when lubricating your capstan. 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 capstans. 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 capstan.

INSTALLATION

CAPSTAN C4500 ver. 1.0

Installing the capstan 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 (5 mm.).

Allen key (10 mm.).

Drill Ø12,5mm.

6 pcs. M12 Hexagon socket head bolts and corresponding nuts (length depending on deck thickness).

6 x large washers or backing plate.

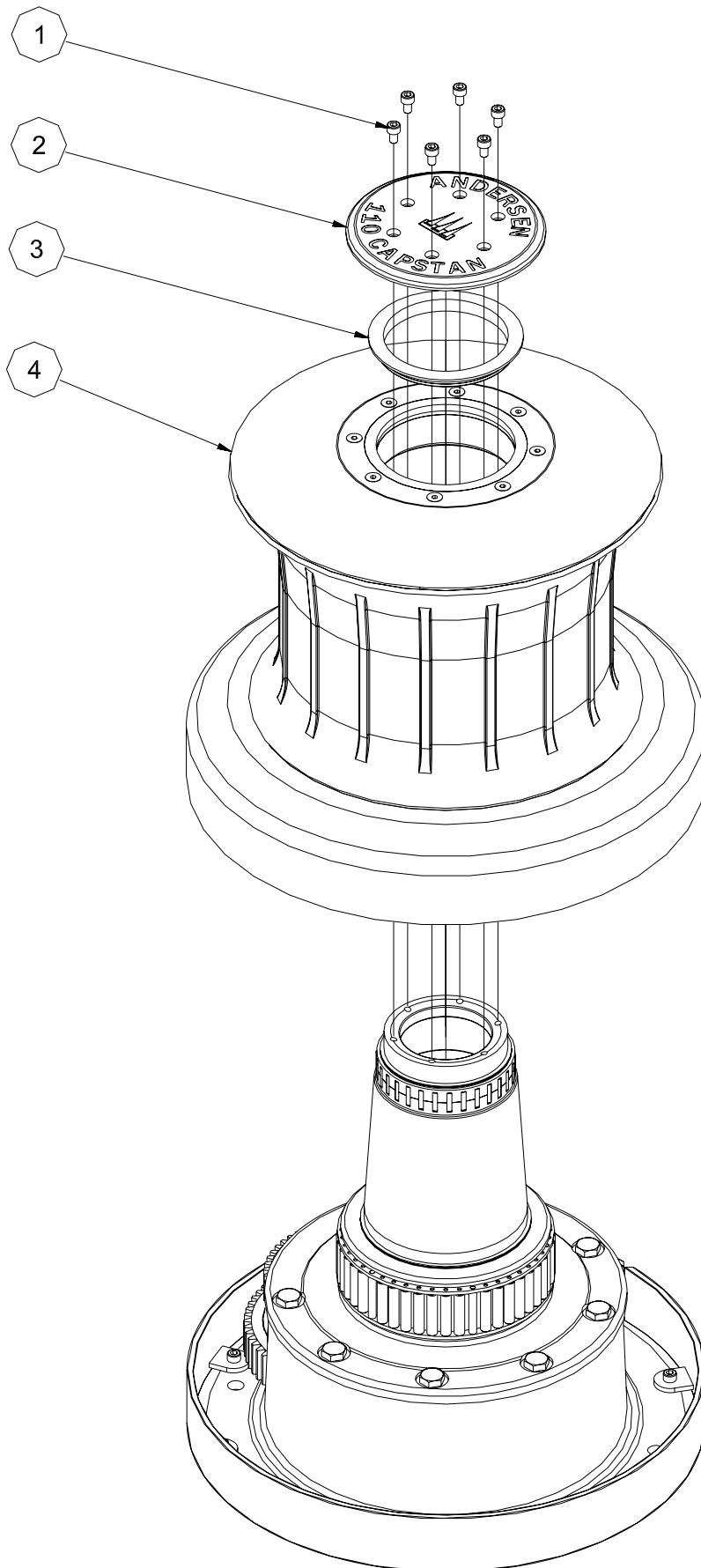
Ring spanner to match nuts.

Bedding compound

1. Remove screws (1).
2. Remove the top plate (2), bushing (3) and drum (4).
3. Mark location of bolt holes using the template.
4. Remove complete capstan. Be sure that no dust comes into contact with the capstan while drilling.
5. Drill bolt holes ø12,5 mm.
6. Apply a light coat of bedding compound, ensuring that each bolt hole is bedded. Keep drain grooves clear.
7. Fasten basecover (25) into place using 6 pcs. M12 bolts. Use large washers or a backing plate.
8. Assemble in reverse order.
9. Check that the capstan 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.

INSTALLATION VIEW

CAPSTAN C4500 ver. 1.0



SERVICE INSTRUCTION

CAPSTAN C4500 ver. 1.0

Tools required for service:

Allen key (6 mm.).

Allen key (8 mm.).

Spanner (17 mm.).

Screwdriver (small).

ANDERSEN Winch grease.

1. Remove screws (1).
2. Remove the top plate (2), bushing (3) and drum (4).
3. Remove circlip (8) and disk (9) Remove and clean roller bearings (11).
4. Clean the balls (10) and the small retaining ring (14) above the balls with a small soft brush.
5. Remove screws (19 and 21).
6. Remove upper base (5).
7. Remove and dismantle the three gear units (22), (23), and (24).
8. Clean all parts in benzine. Remember to clean the inside of the drum.
9. Assemble in reverse order. During assemble, lightly grease all gear teeth, drive shaft, roller bearings, shafts, balls, pawls, springs and composite bushings. Use a small, soft brush. Pawls may be lubricated with a very thin film of ANDERSEN WINCH GREASE. It is very important that pawls can move freely.

IMPORTANT: When assembling the capstan, check the function of each pawl by pushing the pawl against the spring. The pawls should smoothly and automatically return to their normal position, where the pawls engage with the teeth. If the pawls do not function correctly, clean and lightly lubricate the pawls and gears again and replace the springs where necessary.

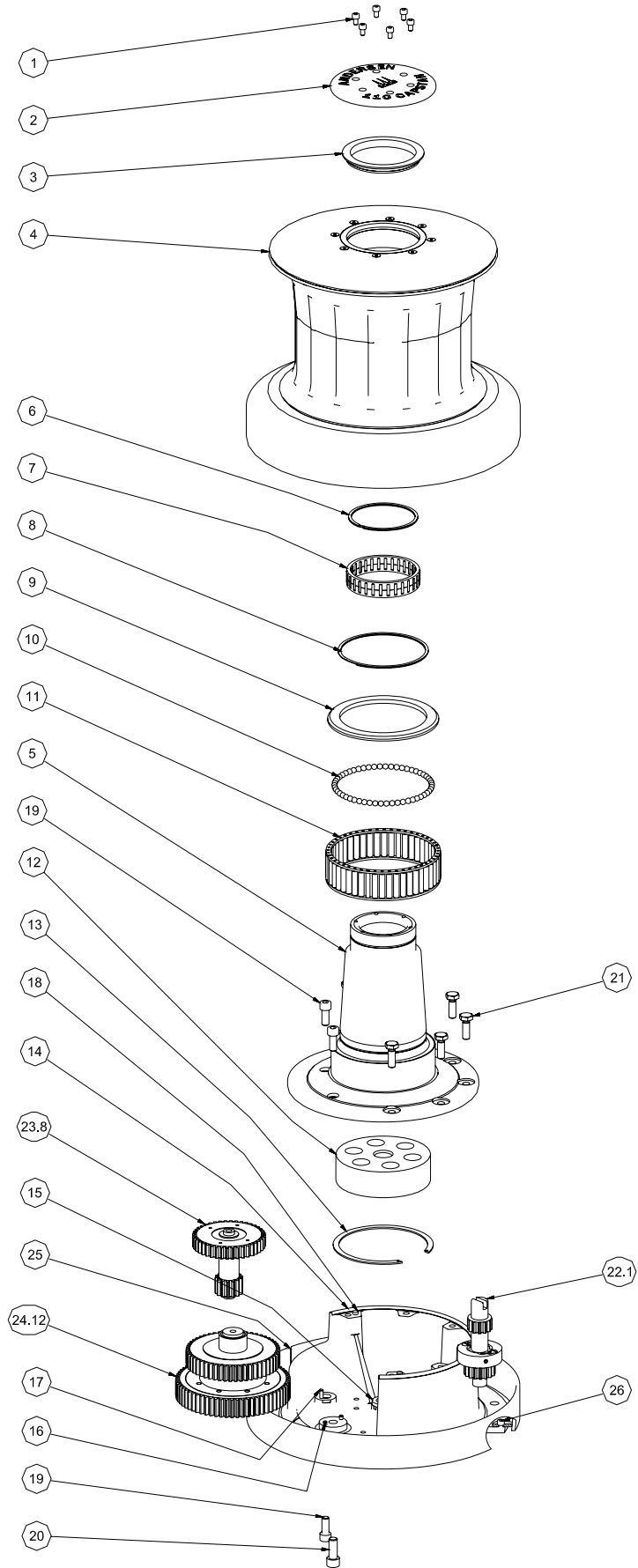
Malfunctioning pawls may lead to unexpected failure of a loaded capstan resulting in material damage or fatal personal injury.

Service Kit No: 7 (part. no. 710007) contains spare parts for this Capstan.

**For current World Wide Distributor list please see:
www.andersenwinches.com**

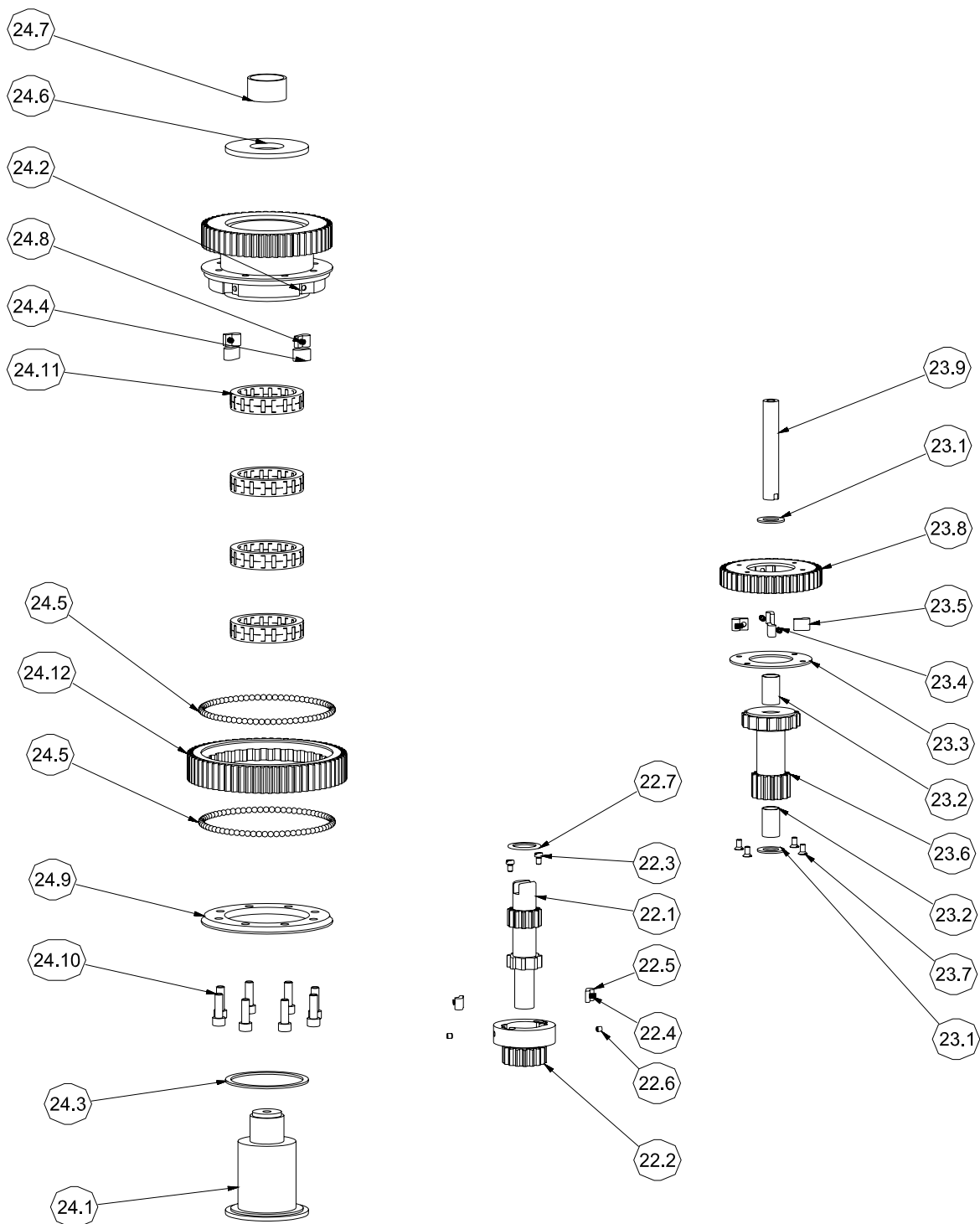
EXPLODED VIEW

CAPSTAN C4500 ver. 1.0



EXPLODED VIEW

CAPSTAN C4500 ver. 1.0
POS. 22, POS.23, POS. 24



PARTS LIST

CAPSTAN C4500 ver. 1.0

POS.	QTY.	DESCRIPTION	ART. NO.
1	6	SCREW M6x10	ISO7380-A4-M6X12
2	1	DISC 110 CAPSTAN	743750
3	1	BUSHING FOR DRUM 110ST	527700
4	1	DRUM 110 CAPSTAN	744550
5	1	BASE 110 CAPSTAN	743250
6	1	CIRCLIP	590100U
7	1	ROLLER BEARING	528601
8	1	CIRCLIP	592500U
9	1	BEARING	527300
10	54	BALL	526302
11	1	ROLLER BEARING	739300
12	1	BUSHING	527600
13	1	CIRCLIP	592600I
14	1	BASEPLATE BOTTOM	743800
15	1	BUSHING	539800
16	2	PIN	DIN7-A1-5H8x14
17	1	PIN	DIN7-A1-5H8X18
18	2	PIN	DIN7-A1-8H8x16
19	3	SCREW M10x25	DIN912-A4-M10X25
20	1	SCREW M12X30	DIN912-A4-M12X30
21	6	SCREW M10x30	DIN933-A4-M10x30
22	1	CENTERGEAR	539701
22.1	1	BOTTOM GEAR	538500
22.2	1	RATCHET GEAR	539700
22.3	2	PIN	DIN 84 - M5 x 8
22.4	2	SPRING	533500
22.5	2	PAWL	533400
22.6	2	PIN	592000
22.7	1	DISC	539900
23	1	RATCHET GEAR, SMALL	538001
23.1	2	DISC	522702
23.2	2	BUSHING	537900
23.3	1	COVER	537800
23.4	4	SPRING	533500
23.5	4	PAWL	533400
23.6	1	GEAR WHEEL	538000
23.7	4	SCREW	DIN963-A4-M5X10
23.8	1	GEAR WHEEL	537500
23.9	1	SHAFT	537600
24	1	RATCHET GEAR, LARGE	738901

PARTS LIST

CAPSTAN C4500 ver. 1.0

POS.	QTY.	DESCRIPTION	ART. NO.
24	1	RATCHET GEAR, LARGE	738901
24.1	1	SHAFT	520400
24.2	1	GEAE	738900
24.3	1	DISC	520403
24.4	4	PAWL	712500
24.5	142	BALL	724900
24.6	1	DISC	520402
24.7	1	BUSHING	520401
24.8	4	SPRING	533500
24.9	1	BALL RING	527400
24.10	8	SCREW	DIN912-A4-M8X25
24.11	4	ROLLER BEARING	926400
24.12	1	GEAR WHEEL	739000
25	1	BOTTOM	743910
26	7	SCREW	DIN912-A4-M6X12

LIMITED WARRANTY

- 1.1 ANDERSEN issue 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 However, the warranty is subject to the limitations and exceptions outlined below.
- 2. Conditions and limitations:**
- 2.1 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 product is suitable for the application intended. ANDERSEN assumes 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 assumes no liability for normal wear and tear, or for depreciation of value.
 - 2.5 Nor do ANDERSEN assume any liability for service carried out by anyone other than authorised representatives of ANDERSEN, 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. Such costs shall be met by the Buyer in full.
- 3. Exceptions:**
- 3.1 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 by defects in ANDERSEN's 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.