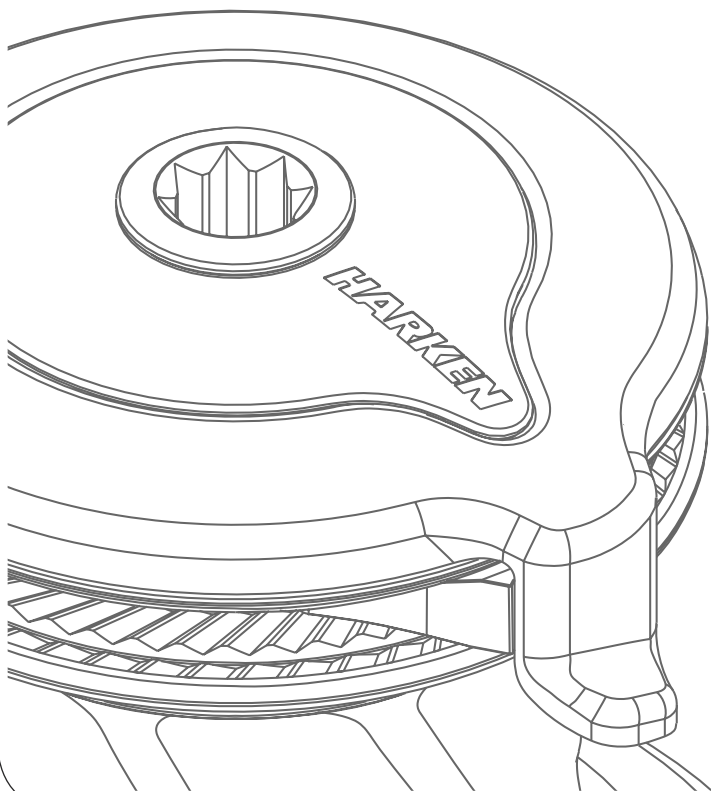


# Installation and Maintenance Manual

MRU-E

## Radial UniPower



**HARKEN**<sup>®</sup>

|                                                |           |
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## Introduction

This manual gives technical information on winch installation and maintenance, including disassembling and reassembling.

This information is DESTINED EXCLUSIVELY for specialised personnel or expert users.

Installation, disassembling and reassembling of the winch by personnel who are not experts may cause serious damage to users and those in the vicinity of the winch.

Harken® accepts no responsibility for defective installation or reassembly of its winches.

In case of doubt the Harken® Tech Service is at your disposal at [techservice@harken.it](mailto:techservice@harken.it)

This Manual is available only in English. If you do not fully understand the English language, do not carry out the operations described in this Manual.

## NOTICE

To use and understand this manual, user must refer to other documents, available on web site [www.harken.com](http://www.harken.com) and listed below:

- The Dual Function Control Box user manual, for the use of the Dual Function Control Box.
- The Dual Function Control Box installation manual, for all details, informations, wiring schemes and warnings about its installation

## Technical characteristics

### Maximum working load



#### WARNING!

The maximum working load (MWL) for the UniPower Radial Winch is 900 Kg (1984 lb).

Subjecting the winch to loads above the maximum working load can cause the winch to fail or pull off the deck suddenly and unexpectedly during high loads causing severe injury or death.

| Power ratio* | Gear ratio** |
|--------------|--------------|
| 9,75 : 1     | 100 : 1      |

\*Socket input

\*\*Motor input

The theoretical power ratio does not take friction into account.

### Performance data

#### UniPower Winch

|               | motor nominal power 700 W | motor nominal power 900 W |
|---------------|---------------------------|---------------------------|
|               | 12 V (700 W)              | 24 V (900 W)              |
| line speed*** | 25 m/min - 82 ft/min      | 25 m/min - 82 ft/min      |
| max load      | 900 Kg - 1984 lb.         | 900 Kg - 1984 lb.         |

\*\*\*Line speed is measured with no load

|                    | motor nominal power (W) |      | Current absorption at winch MWL (A) |      |
|--------------------|-------------------------|------|-------------------------------------|------|
|                    | 12 V                    | 24 V | 12 V                                | 24 V |
| 900 Unipower Winch | 700                     | 900  | 195                                 | 110  |

## Weight

|        | A                 | C/CW              | BBB/CCC              |
|--------|-------------------|-------------------|----------------------|
| weight | 12 Kg - 26,50 lb. | 14,50 Kg - 32 lb. | 15,70 Kg - 34,61 lb. |

Versions:

A = drum in anodised aluminium

C = drum in chrome bronze

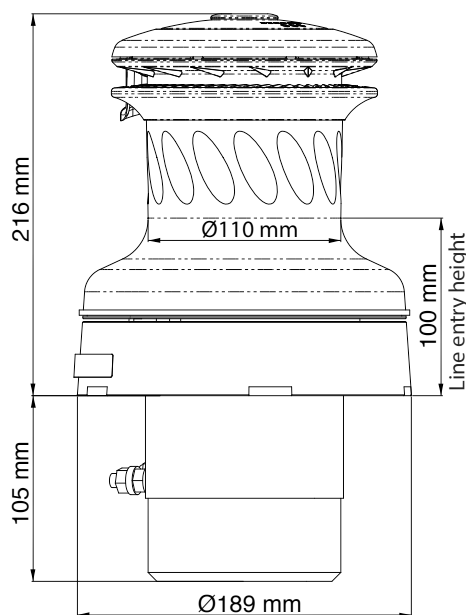
CW = chrome/white

BBB = all bronze

CCC = All-Chrome bronze

## Outline

### UniPower Radial Winch



## Installation

The winch must be installed on a flat area of the deck, reinforced if necessary to bear a load equal to at least twice the maximum working load of the winch. It is the installer's responsibility to carry out all structural tests needed to ensure that the deck can bear the load. Harken® does not supply the screws needed to install the winch since these may vary depending on the deck on which it is to be installed. It is the installer's responsibility to choose the correct screws taking account of the loads they will have to bear. Harken® assumes no responsibility for incorrect installation of its winches or for an incorrect choice of mounting screws.



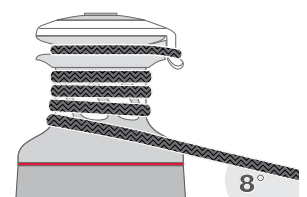
### **DANGER!**

Incorrect installation of the winch may cause severe injury or death. Consult the yard that built the boat in the case of doubt over the correct positioning of the winch.



### **WARNING!**

Failure to use the correct number and type of mounting fasteners or failure to ensure the correct deck strength can result in the winch pulling off the deck suddenly and unexpectedly during high loads causing severe injury or death.





**WARNING!**

Verify the entry angle of the sheet. This must be 8° with tolerance of ±2°, to avoid sheet overrides and damaging the winch or making the winch inoperable leading to loss of control of the boat which can lead to severe injury or death.

Once you have decided the correct mounting position for the winch on the deck and checked the space available below deck for the motor and electrical wiring, proceed with the installation.

**Installation procedure**

To install the winch, remove the drum and use Socket Head (SH) bolts.

Tools needed



To identify the various parts, refer to the exploded view at the end of this Manual.

 Torque to apply when assembling



1. Unscrew the central screw ( 2Nm/18 in-lb)



2. Slide off the assy socket n°26 and the cover n°9



3. Unscrew the three screws n°20 (4Nm/35 in-lb) and remove the self-tailing arm n°7 by rotating and lifting it.



4. Lift off the drum n°22

Install the winch on the deck in the position you have chosen, keeping in mind the limits described on page 4 and using socket head (SH) bolts.

Carry out **Installation procedure**, then install the winch on the deck in the chosen position.

**NOTICE**

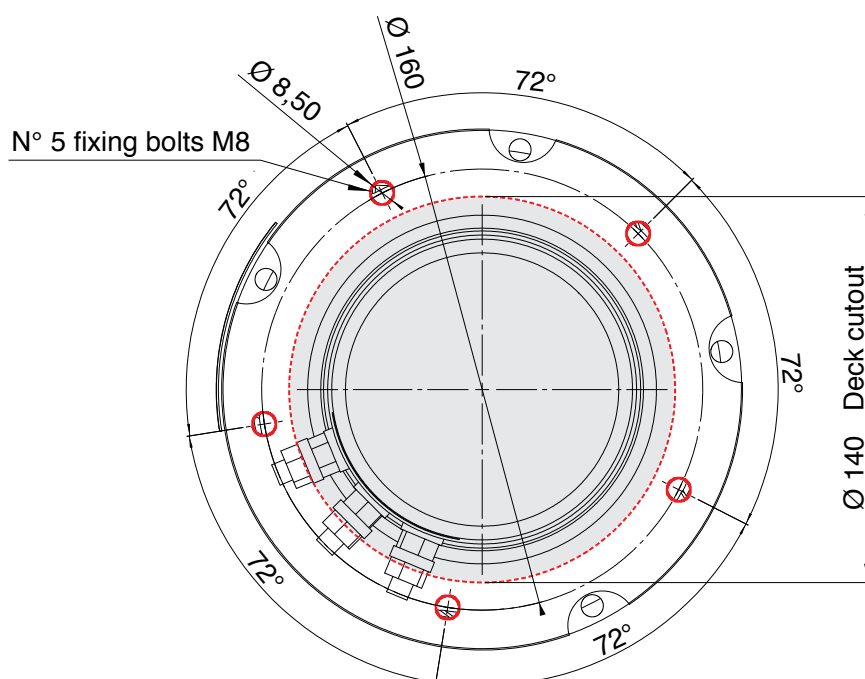
Before drilling the deck, check the space available below deck for the motor.

- A.** Locate the point where you have decided to place the winch. Drill the deck with a  $\varnothing 140$  mm hole, insert the motor through the hole, position the base of the winch on the deck and mark the position of the holes.

Winch can be mounted in any direction without concern for drive gear location.

Below is a reduced scale diagram.

The drilling cut out template is available on the Harken® website, [www.harken.com](http://www.harken.com)



- B.** Remove the winch and drill the five 8.5 mm diameter holes and the 140 mm hole.  
**C.** Bolt the base of the winch to the deck using five socket headed M8 (not supplied by Harken®), correctly chosen for the thickness and type of the boat deck. Consult the yard that built the boat in case of doubt.



**WARNING!**

To install the winch on the deck, use only bolts in A4 stainless steel (DIN 267 part11). Bolts made of other materials may not have sufficient strength or may corrode which can result in winch pulling off deck suddenly and unexpectedly during high loads causing severe injury or death.

**NOTICE**

To mount winches on the deck, do not use countersunk bolts.

- D.** Fill the mounting holes with a suitable marine sealant.  
**E.** Remove the excess adhesive/sealant from the holes and base drainage channels.  
**F.** Reassemble the winch following the steps in **Installation procedure** in the reverse order, and apply the products indicated in the section on maintenance.

## NOTICE

Before closing the winch, make sure the holes and drainage channels in the base of the winch are not obstructed.

### Positioning the self-tailing arm

Position the self-tailing arm so that the line leaving the winch is led into the cockpit.

## Motor installation procedure

### Electric equipment

To guarantee greater efficiency in terms of safety and long life, for every winch model is mandatory to install the Dual Function Control Box.

*To fasten the Dual Function Control Box containing solenoids to bulkhead or wall, for all installation details and for all electric wiring schemes, refer to the Dual Function Control Box manual.*



### **WARNING!**

Before installing and using the device, read carefully the Dual Function Control Box manual available on web site [www.harken.com](http://www.harken.com)

Refer to the following chart for wire size:

*Total distance between winch and battery*

| Winch size | Current voltage | Under 16.4 ft<br>AWG | Under 5 m<br>mm <sup>2</sup> | 16.4 - 32.8 ft<br>AWG | 5 m - 10 m<br>mm <sup>2</sup> | 32.8 - 49.2 ft<br>AWG | 10 m - 15 m<br>mm <sup>2</sup> | 49.2 - 65.6 ft<br>AGW | 15m - 20 m<br>mm <sup>2</sup> |
|------------|-----------------|----------------------|------------------------------|-----------------------|-------------------------------|-----------------------|--------------------------------|-----------------------|-------------------------------|
| UniPower   | 12 V            | 2                    | 32                           | 0                     | 50                            | 00                    | 70                             | 000                   | 95                            |
| UniPower   | 24 V            | 5                    | 16                           | 3                     | 25                            | 2                     | 35                             | 0                     | 50                            |

Refer to the following chart for HCP model:

| Winch size | Current voltage | HCP model | Ampere rating |
|------------|-----------------|-----------|---------------|
| UniPower   | 12 V            | HCP1717   | 80A           |
| UniPower   | 24 V            | HCP1717   | 80A           |

After winch is assembled and before sailing, test the powered winch functioning: press the switch and check that the drum turns.

**NOTICE**

To connect motor, attach cable terminals to clamps between nut and lock nut. Hold nut in contact with motor using a spanner and tighten other nut with second spanner. Take special care not to turn the central spindles. These instructions apply when assembling and disassembling. We recommend using a torque wrench so as to obtain a torque equal to and no greater than 10 Nm (88 in-lb).

**NOTICE**

Note that correct electrical contact sequence is:  
Nut – Cable Terminal – Self-Locking Washer – Lock Nut



## Maintenance

### Washing

Winches must be washed frequently with fresh water, and in any case after each use. Do not allow teak cleaning products or other cleaners containing caustic solutions to come into contact with winches and especially anodised, chrome plated or plastic parts. Do not use solvents, polishes or abrasive pastes on the logos or stickers on the winches. Make sure that the holes and drainage channels in the base of the winch are not obstructed so that water does not collect.

### Maintenance table

Winches must be visually inspected at the beginning and end of every season of sailing or racing. In addition they must be completely overhauled, cleaned and lubricated at least every 12 months. After an inspection, replace worn or damaged components. Do not replace or modify any part of the winch with a part that is not original.

**WARNING!**

Periodic maintenance must be carried out regularly. Lack of adequate maintenance shortens the life of the winch, can cause serious injury and also invalidate the winch warranty. Installation and maintenance of winches must be carried out exclusively by specialized personnel.

In the case of doubt contact Harken® Tech Service at [techservice@harken.it](mailto:techservice@harken.it)

**WARNING!**

Make sure that the power is switched off before installing or carrying out maintenance on the winch.

### Winch disassembly procedure

#### *Tools needed*



*One medium flat-bladed screwdriver*



*A number six hex key*



*Brush*



*Rags*

To identify the various parts refer to the exploded view at the end of this Manual.

 Torque to be applied in assembly phase

Carry out **Installation procedure** as shown in the paragraph on winch installation and then do the following:



5. Unscrew the 6 hex screws n°14 (20Nm/177 in-lb)



6. Slide off the gear carrier n°17. Pay attention to rollers in the gear carrier.



7. Slide out the pawls carrier n°16



8. Lift off the gear n°17



9. Remove the second planetary assy n°17 and remove flange. Pay attention to the o-ring in the ring gear.



10. Slide out the first planetary assy n°19, the ring gear n°4, the o-ring n°8 and the pinion n°2.

If it is necessary to replace any **jaws** of the winch, proceed as follows:



I. Unscrew the 4 screws n°10  
( $\approx 4\text{Nm}/35\text{ in-lb}$ )



II. Remove the jaws n°23

Inspect balls inside the drum and carefully check the correct position; if it is necessary to put back any balls, push balls in the race (as shown below):



Once the winch is completely disassembled, clean the parts with a degreasing that does not leave residues, proper to clean metal components; rinse plastic parts in fresh water. Once you have done this, dry the parts with cloths that do not leave residue.

Inspect gears, bearings, pins and pawls for any signs of wear or corrosion.

Carefully check the teeth of gears and ring gears to make sure there are no traces of wear.

Check the roller bearings and check there are no breaks in the bearing cages.

Replace worn or damaged components.

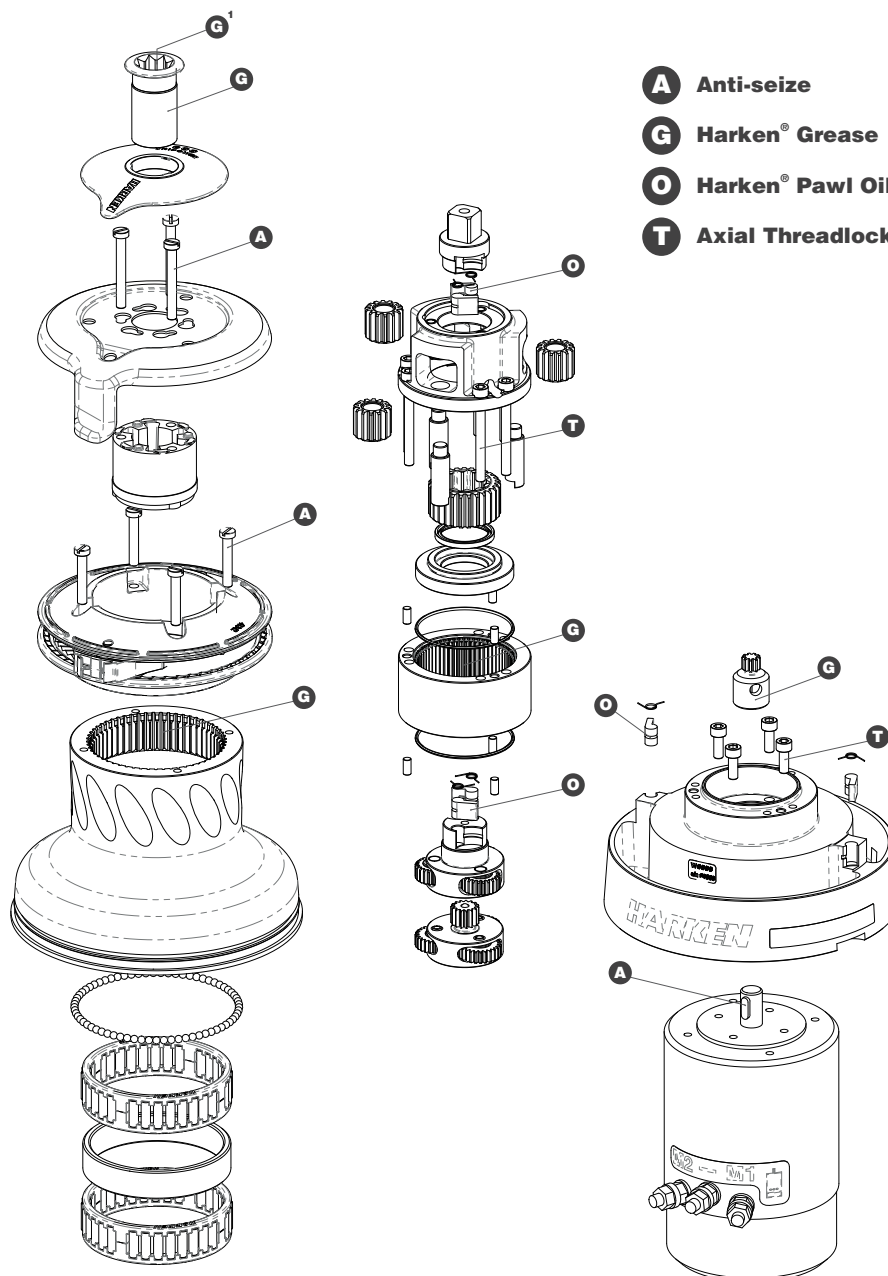
Carry out maintenance on components using the products listed below.

For more information on which products to use where, refer to the exploded diagram below.

Use a brush to lightly lubricate all gears, gear pins, teeth and all moving parts with grease.

Lightly lubricate the pawls and springs with oil. Do not use grease on the pawls!

Winch exploded view with maintenance products



Apply Harken® grease where indicated above  
 Apply Harken® grease: 1. on assy socket screw - 2. on drum gear

**NOTICE**

On every gear and every component that must be greased, apply Harken® grease with a brush in a proper quantity as shown below:



**NOTICE**

Harken® grease to apply on all teeth: do not use excessive quantity of product to void wastes. If in contact with the pawls, an excess of grease can compromise the safety of the winch.

Winch assembly

Make sure that the holes and drainage channels in the base of the winch are not obstructed  
 Assemble the winch in the reverse order of the sequence in the section on disassembly.

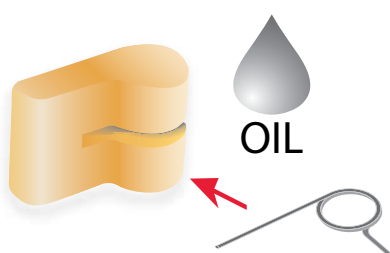
To tighten bolts, use the torque indicated in the disassembly procedure.



*When positioning the stripper arm, align the peeler with it.*

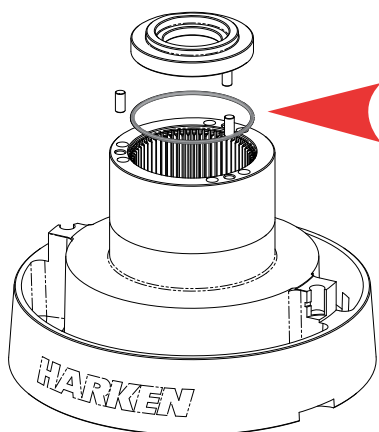


*If the jaws have been disassembled, insert peeler between the two jaws, taking care that the letters TOP on the peeler are facing upwards.*



**To assemble the pawls:**

correctly position the spring in its housing as shown at left. Hold the spring closed and slide the pawl into its housing. Once in position, check that the pawls can be easily opened and closed with a finger.



**NOTICE**

Before assembly the winch check the correct position of the o-ring n°10 between the ring gear n°4 and the flange n°11 and the position of rollers n°5 between the ring gear n°4 and the gear carrier n°21.

Check the correct position of the o-ring n°10 between the ring gear n°4 and the assy base n°3 and the position of the rollers n°5 between the ring gear n°4 and the assy base n°3.

In case of doubt concerning the assembly procedure contact Harken® Tech Service: [techservice@harken.it](mailto:techservice@harken.it)

## Harken® limited worldwide warranty

Refer to the Harken® Limited Worldwide Warranty in the Harken® Catalogue and on the website [www.harken.com](http://www.harken.com)

## Ordering spare parts

Spare parts can be requested from Harken® as described in the Harken® Limited Worldwide Warranty, indicating the part number in the Parts List and including the serial number of the winch for which the parts are required.

***The serial number of the winch is printed on a plate on the drum support of the winch.***



### Manufacturer

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### Headquarters

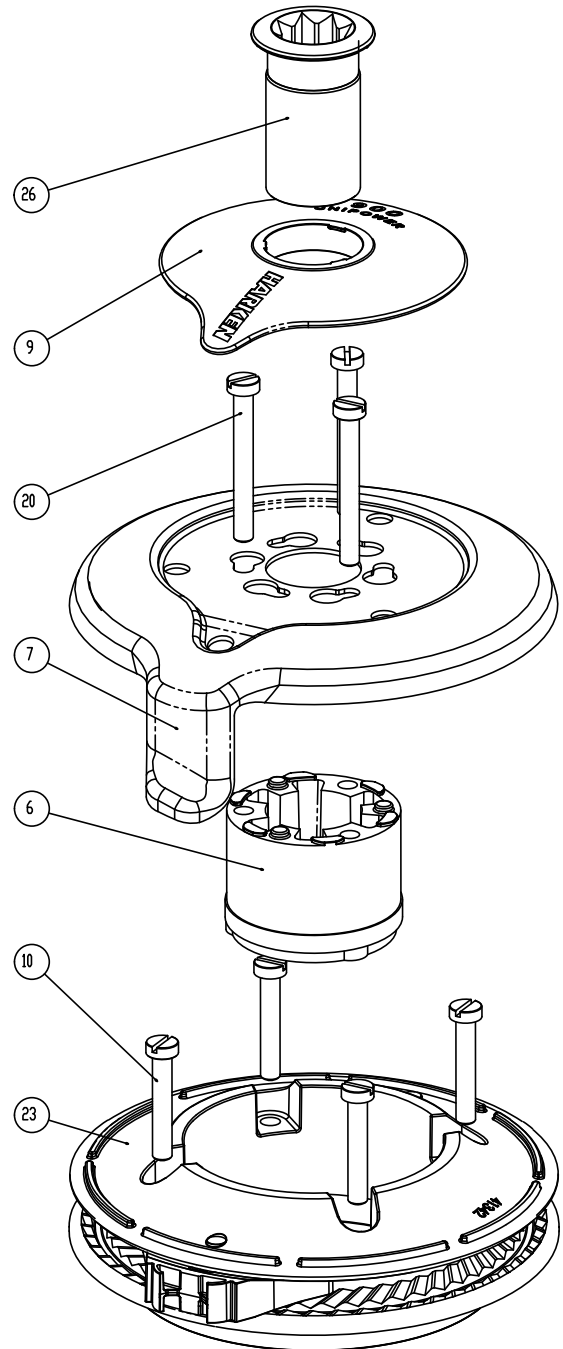
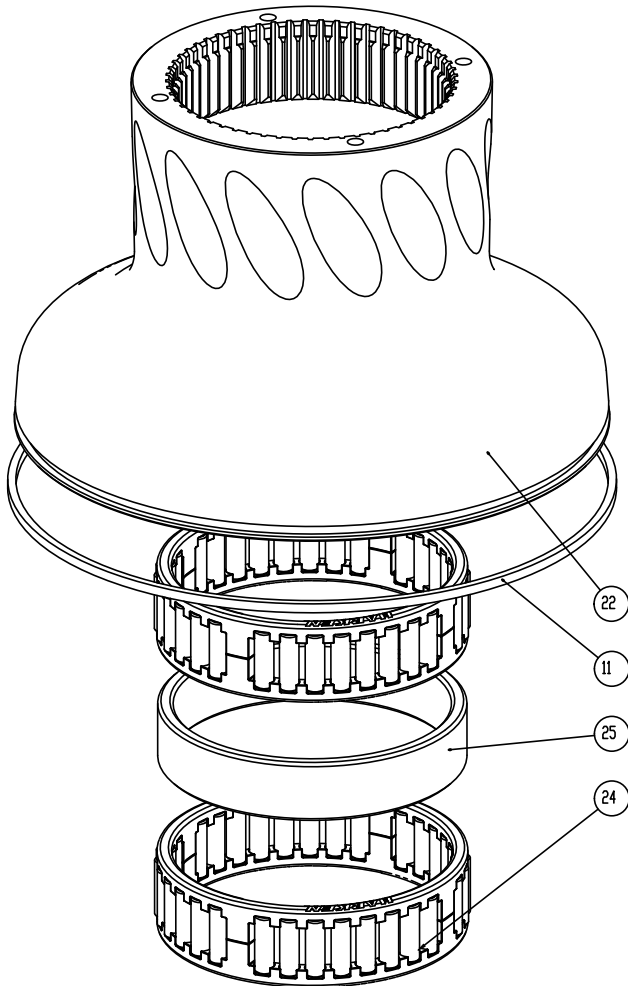
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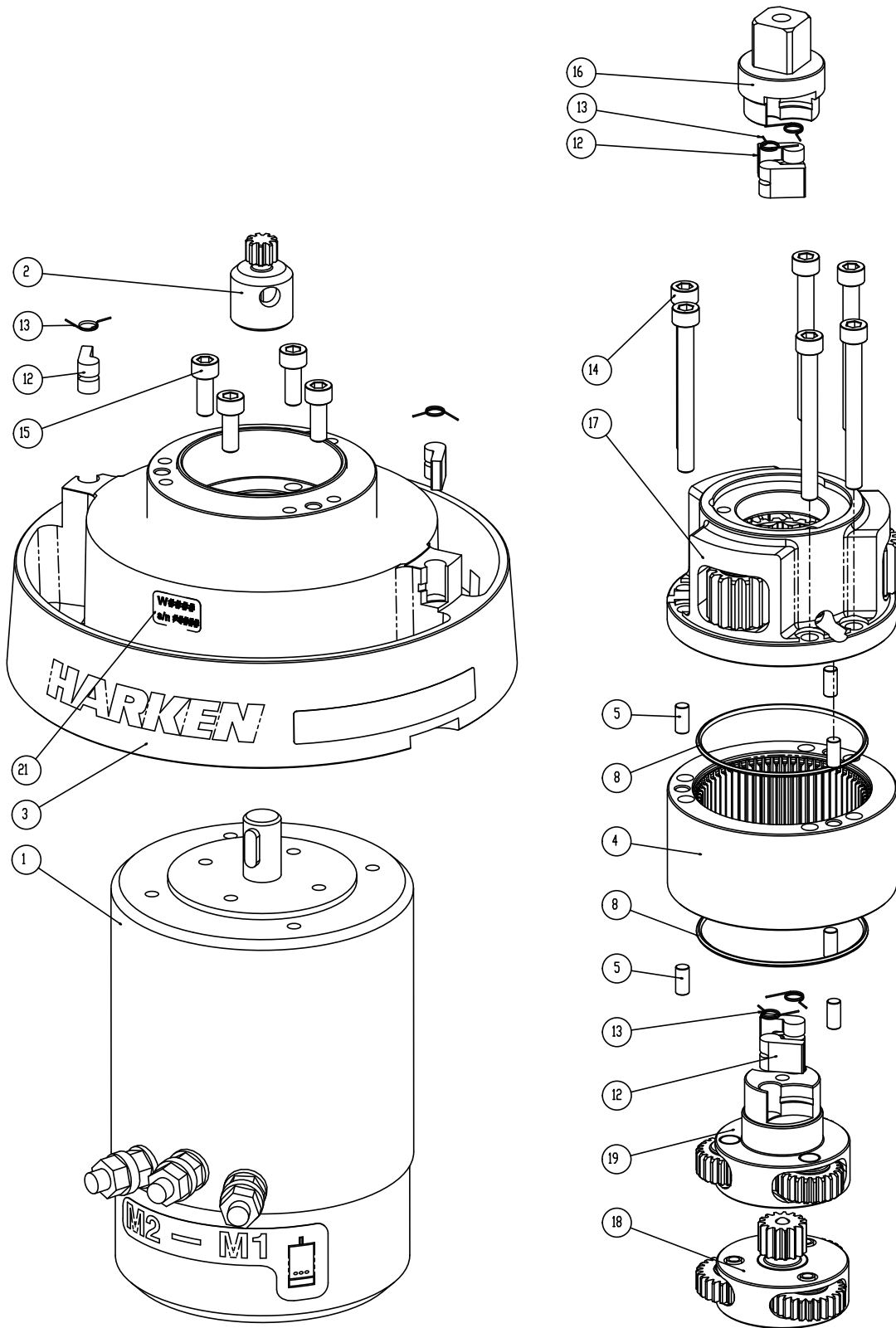
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**Exploded view**

Winch Radial UniPower 900 A, C, CW, BBB, CCC



Winch Radial UniPower 900 A, C, CW, BBB, CCC



**Parts List**

UniPower 900 A

A = drum in anodised aluminium

| Pos. | Q.ty | Code       | Description                                                                                         | Pos. | Q.ty     | Code       | Description                                                                                  |
|------|------|------------|-----------------------------------------------------------------------------------------------------|------|----------|------------|----------------------------------------------------------------------------------------------|
| 1    | 1    | A94953300  | Kit Motor 0,7kW 12V Unipower 900                                                                    | 18   | 1        | A94909800  | First planetary assy<br>Gear Carrier<br>Gear z=26<br>Ball 3/16"<br>Pin Ø6<br>Bushing 0608-10 |
|      | 1    | A96508600  | Kit Motor 0,9kW 24V Unipower 900<br>Electric motor<br>Polarity motor sticker<br>Key DIN 6885 5x5x15 |      |          |            |                                                                                              |
|      | 1    | M6014206   |                                                                                                     |      |          |            |                                                                                              |
| 2    | 1    | S490310004 | Pinion Z=9                                                                                          | 19   | 1        | A94910000  | Second planetary assy<br>Pawl Carrier<br>Gear Z=23<br>Pin Ø8<br>Bushing 0810-12              |
| 3    | 1    | A94903300  | Assy base Unipower 900<br>Support Unipower 900<br>Winch Product Sticker**                           |      |          |            |                                                                                              |
| 4    | 1    | S490340004 | Ring gear Z=63                                                                                      |      |          |            |                                                                                              |
| 5    | 6    | S450660003 | Roller Ø5x10.5                                                                                      | 20   | 3        | M6007103   | Screw M6x50 UNI6107                                                                          |
| 6    | 1    | S4129400A0 | Stripper arm support                                                                                | 21   |          |            | Winch Serial Number Sticker                                                                  |
| 7    | 1    | S413440019 | Stripper arm                                                                                        | 22   | 1        | A94904200  | Assy Drum Unipower<br>Drum Unipower 900<br>Ball 3/16"                                        |
| 8    | 2    | M6004597   | O Ring 2237                                                                                         | 23   | 69       | M0619580   |                                                                                              |
| 9    | 1    | S4908800A5 | Cover Unipower 900                                                                                  |      | 1        | A94907700  | Assy Jaws Unipower 900<br>Lower jaw<br>Upper jaw Unipower 900<br>Peeler W46 - 50<br>Spring   |
| 10   | 4    | M0601803   | Screw UNI EN ISO 1207 - M6x35 - A4                                                                  | 24   | 1        | S414280080 |                                                                                              |
| 11   | 1    | S281690097 | Red line                                                                                            |      | 4        | S385970001 |                                                                                              |
| 12   | 6    | S000080003 | Pawl Ø8*                                                                                            | 25   | 1        | S413520080 | Spacer                                                                                       |
| 13   | 6    | S000380001 | Pawl Spring Ø8*                                                                                     | 26   | 1        | A94136400  | Assy Socket W20-80<br>Socket Handle W20/80<br>Washer Ø7.7xØ25x5.8<br>Screw M8x20 UNI 6109    |
| 14   | 6    | M0606103   | Screw M6x60 UNI5931                                                                                 |      | 1        | S415130085 |                                                                                              |
| 15   | 4    | M0635103   | Socket head screw M6x16 UNI 5931                                                                    | 1    | M0614303 |            |                                                                                              |
| 16   | 1    | S490960004 | Pawls carrier                                                                                       |      |          |            |                                                                                              |
| 17   | 1    | A94904100  | Gear carrier<br>Gear carrier<br>Seal Ø30xØ38x4<br>Flange                                            |      |          |            |                                                                                              |
|      | 3    | S414890080 | Bushing Ø9xØ11x7                                                                                    |      |          |            |                                                                                              |
|      | 3    | S490390004 | Gear Z=14                                                                                           |      |          |            |                                                                                              |
|      | 3    | M6017594   | Bushing Ø14xØ18x20                                                                                  |      |          |            |                                                                                              |
|      | 1    | S490780004 | Gear Z=27                                                                                           |      |          |            |                                                                                              |
|      | 3    | S490810004 | Pin Ø12                                                                                             |      |          |            |                                                                                              |

\*Available with service kit; see website [www.harken.com](http://www.harken.com)

\*\*Winch product sticker



## UniPower 900 C

C = drum in chrome bronze

| Pos. | Q.ty | Code       | Description                                                               | Pos. | Q.ty | Code       | Description                                                          |
|------|------|------------|---------------------------------------------------------------------------|------|------|------------|----------------------------------------------------------------------|
| 1    | 1    | A94953300  | Kit Motor 0,7kW 12V Unipower 900                                          | 18   | 1    | A94909800  | First planetary assy                                                 |
|      | 1    | A96508600  | Kit Motor 0,9kW 24V Unipower 900                                          |      |      |            |                                                                      |
|      | 1    | M6014206   | Electric motor<br>Polarity motor sticker<br>Key DIN 6885 5x5x15           |      |      |            | Gear Carrier<br>Gear z=26<br>Ball 3/16"<br>Pin Ø6<br>Bushing 0608-10 |
| 2    | 1    | S490310004 | Pinion Z=9                                                                | 19   | 1    | A94910000  | Second planetary assy                                                |
| 3    | 1    | A94903300  | Assy base Unipower 900<br>Support Unipower 900<br>Winch Product Sticker** |      |      |            |                                                                      |
| 4    | 1    | S490340004 | Ring gear Z=63                                                            |      |      |            | Pawl Carrier<br>Gear Z=23<br>Pin Ø8<br>Bushing 0810-12               |
| 5    | 6    | S450660003 | Roller Ø5x10.5                                                            | 20   | 3    | M6007103   | Screw M6x50 UNI6107                                                  |
| 6    | 1    | S4129400A0 | Stripper arm support                                                      | 21   |      |            | Winch Serial Number Sticker                                          |
| 7    | 1    | S413440019 | Stripper arm                                                              | 22   | 1    | A94904200  | Assy Drum Unipower 900 C                                             |
| 8    | 2    | M6004597   | O Ring 2237                                                               |      | 69   | M0619580   | Drum Unipower 900 C                                                  |
| 9    | 1    | S4908800A5 | Cover Unipower 900                                                        |      |      |            | Ball 3/16"                                                           |
| 10   | 4    | M0601803   | Screw UNI EN ISO 1207 - M6x35 - A4                                        | 23   | 1    | A94907700  | Assy Jaws Unipower 900                                               |
| 11   | 1    | S281690097 | Red line                                                                  |      |      |            |                                                                      |
| 12   | 6    | S000080003 | Pawl Ø8*                                                                  |      | 1    | S414280080 | Lower jaw                                                            |
| 13   | 6    | S000380001 | Pawl Spring Ø8*                                                           |      | 4    | S385970001 | Upper jaw Unipower 900                                               |
| 14   | 6    | M0606103   | Screw M6x60 UNI5931                                                       |      |      |            | Peeler W46 - 50                                                      |
| 15   | 4    | M0635103   | Socket head screw M6x16 UNI 5931                                          | 24   | 2    | A74135100  | Bearing Ø85xØ97x26                                                   |
| 16   | 1    | S490960004 | Pawls carrier                                                             | 25   | 1    | S413520080 | Spacer                                                               |
| 17   | 1    | A94904100  | Gear carrier                                                              | 26   | 1    | A94136400  | Assy Socket W20-80                                                   |
|      |      |            | Gear carrier                                                              |      | 1    | S415130085 | Socket Handle W20/80                                                 |
|      |      |            | Seal Ø30xØ38x4                                                            |      | 1    | M0614303   | Washer Ø7.7xØ25x5.8                                                  |
|      |      |            | Flange                                                                    |      |      |            | Screw M8x20 UNI 6109                                                 |
|      | 3    | S414890080 | Bushing Ø9xØ11x7                                                          |      |      |            |                                                                      |
|      | 3    | S490390004 | Gear Z=14                                                                 |      |      |            |                                                                      |
|      | 3    | M6017594   | Bushing Ø14xØ18x20                                                        |      |      |            |                                                                      |

\*Available with service kit; see website [www.harken.com](http://www.harken.com)

\*\*Winch product sticker



## UniPower 900 CW

CW = chrome/white

| Pos. | Q.ty | Code        | Description                                                                                                                                           | Pos. | Q.ty       | Code        | Description                                                                                              |
|------|------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------|-------------|----------------------------------------------------------------------------------------------------------|
| 1    | 1    | A94953300   | Kit Motor 0,7kW 12V Unipower 900                                                                                                                      | 18   | 1          | A94909800   | First planetary assy<br>Gear Carrier<br>Gear z=26<br>Ball 3/16"<br>Pin Ø6<br>Bushing 0608-10             |
|      | 1    | A96508600   | Kit Motor 0,9kW 24V Unipower 900<br><i>Electric motor<br/>Polarity motor sticker<br/>Key DIN 6885 5x5x15</i>                                          |      |            |             |                                                                                                          |
|      | 1    | M6014206    |                                                                                                                                                       |      |            |             |                                                                                                          |
| 2    | 1    | S490310004  | Pinion Z=9                                                                                                                                            | 19   | 1          | A94910000   | Second planetary assy<br>Pawl Carrier<br>Gear Z=23<br>Pin Ø8<br>Bushing 0810-12                          |
| 3    | 1    | A96726400W  | Assy base Unipower 900 RAL9003<br><i>Support Unipower 900<br/>Winch Product Sticker**<br/>Skirt Unipower 900 RAL9003</i>                              |      |            |             |                                                                                                          |
|      | 1    | S6620800A5W |                                                                                                                                                       |      |            |             |                                                                                                          |
| 4    | 1    | S490340004  | Ring gear Z=63                                                                                                                                        | 20   | 3          | M6007103    | Screw M6x50 UNI6107                                                                                      |
| 5    | 6    | S450660003  | Roller Ø5x10.5                                                                                                                                        | 21   |            |             | Winch Serial Number Sticker                                                                              |
| 6    | 1    | S4129400A0  | Stripper arm support                                                                                                                                  | 22   | 1          | A94904200   | Assy Drum Unipower 900 C<br><i>Drum Unipower 900 C<br/>Ball 3/16"</i>                                    |
| 7    | 1    | S413440019  | Stripper arm                                                                                                                                          |      | 69         | M0619580    |                                                                                                          |
| 8    | 2    | M6004597    | O Ring 2237                                                                                                                                           | 23   | 1          | A94907700W  | Assy Jaws Unipower 900 W<br><i>Lower jaw<br/>Upper jaw Unipower 900 W<br/>Peeler W46 - 50<br/>Spring</i> |
| 9    | 1    | S4908800A5W | Cover Unipower 900 W                                                                                                                                  |      |            |             |                                                                                                          |
| 10   | 4    | M0601803    | Screw UNI EN ISO 1207 - M6x35 - A4                                                                                                                    |      | 1          | S414280080W |                                                                                                          |
| 11   | 1    | S281690097  | Red line                                                                                                                                              |      | 4          | S385970001  |                                                                                                          |
| 12   | 6    | S000080003  | Pawl Ø8*                                                                                                                                              | 24   | 2          | A74135100   | Bearing Ø85xØ97x26                                                                                       |
| 13   | 6    | S000380001  | Pawl Spring Ø8*                                                                                                                                       | 25   | 1          | S413520080  | Spacer                                                                                                   |
| 14   | 6    | M0606103    | Screw M6x60 UNI5931                                                                                                                                   | 26   | 1          | A94136400   | Assy Socket W20-80<br><i>Socket Handle W20/80<br/>Washer Ø7.7xØ25x5.8<br/>Screw M8x20 UNI 6109</i>       |
| 15   | 4    | M0635103    | Socket head screw M6x16 UNI 5931                                                                                                                      |      |            |             |                                                                                                          |
| 16   | 1    | S490960004  | Pawls carrier                                                                                                                                         |      | 1          | S415130085  |                                                                                                          |
| 17   | 1    | A94904100   | Gear carrier<br><i>Gear carrier<br/>Seal Ø30xØ38x4<br/>Flange<br/>Bushing Ø9xØ11x7<br/>Gear Z=14<br/>Bushing Ø14xØ18x20<br/>Gear Z=27<br/>Pin Ø12</i> |      | 1          | M0614303    |                                                                                                          |
|      |      |             |                                                                                                                                                       | 3    | S414890080 |             |                                                                                                          |
|      |      |             |                                                                                                                                                       | 3    | S490390004 |             |                                                                                                          |
|      |      |             |                                                                                                                                                       | 3    | M6017594   |             |                                                                                                          |
|      |      |             |                                                                                                                                                       | 1    | S490780004 |             |                                                                                                          |
|      |      |             |                                                                                                                                                       | 3    | S490810004 |             |                                                                                                          |

\*Available with service kit; see website [www.harken.com](http://www.harken.com)

\*\*Winch product sticker



## UniPower 900 BBB

BBB = all bronze

| Pos. | Q.ty | Code       | Description                                                                                                                                                                                     | Pos. | Q.ty       | Code       | Description                                                                                                                        |
|------|------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------|------------|------------------------------------------------------------------------------------------------------------------------------------|
| 1    | 1    | A94953300  | Kit Motor 0,7kW 12V Unipower 900<br>Kit Motor 0,9kW 24V Unipower 900<br><i>Electric motor</i><br><i>Polarity motor sticker</i><br><i>Key DIN 6885 5x5x15</i>                                    | 18   | 1          | A94909800  | First planetary assy<br><i>Gear Carrier</i><br><i>Gear z=26</i><br><i>Ball 3/16"</i><br><i>Pin Ø6</i><br><i>Bushing 0608-10</i>    |
|      | 1    | A96508600  |                                                                                                                                                                                                 |      |            |            |                                                                                                                                    |
|      | 1    | M6014206   |                                                                                                                                                                                                 |      |            |            |                                                                                                                                    |
| 2    | 1    | S490310004 | Pinion Z=9                                                                                                                                                                                      | 19   | 1          | A94910000  | Second planetary assy<br><i>Pawl Carrier</i><br><i>Gear Z=23</i><br><i>Pin Ø8</i><br><i>Bushing 0810-12</i>                        |
| 3    | 1    | A96940600  | Assy base Unipower 900 BBB<br><i>Support Unipower 900 BBB</i><br><i>Winch Product Sticker**</i><br><i>Skirt for base UP900 BBB</i>                                                              |      |            |            |                                                                                                                                    |
| 4    | 1    | S490340004 | Ring gear Z=63                                                                                                                                                                                  | 20   | 3          | M6007103   | Screw M6x50 UNI6107                                                                                                                |
| 5    | 6    | S450660003 | Roller Ø5x10.5                                                                                                                                                                                  | 21   |            |            | Winch Serial Number Sticker                                                                                                        |
| 6    | 1    | S4129400A0 | Stripper arm support                                                                                                                                                                            | 22   | 1          | A96940500  | Assy Drum Unipower BBB<br><i>Drum Unipower 900 BBB</i><br><i>Ball 3/16"</i>                                                        |
| 7    | 1    | S693340019 | Stripper arm BBB                                                                                                                                                                                | 23   | 69         | M0619580   | Assy Jaws Unipower 900 BBB<br><i>Lower jaw BBB</i><br><i>Upper jaw Unipower 900 BBB</i><br><i>Peeler W46 - 50</i><br><i>Spring</i> |
| 8    | 2    | M6004597   | O Ring 2237                                                                                                                                                                                     |      |            |            |                                                                                                                                    |
| 9    | 1    | A76940700  | Cover Unipower 900 BBB                                                                                                                                                                          | 1    | 4          | S414280080 | Bearing Ø85xØ97x26                                                                                                                 |
| 10   | 4    | M0601803   | Screw UNI EN ISO 1207 - M6x35 - A4                                                                                                                                                              | 4    | S385970001 | Spacer     |                                                                                                                                    |
| 11   | 1    | S281690097 | Red line                                                                                                                                                                                        | 24   | 2          | A74135100  | Socket W20-80<br><i>Socket Handle W20/80</i><br><i>Washer Ø7.7xØ25x5.8</i><br><i>Screw M8x20 UNI 6109</i>                          |
| 12   | 6    | S000080003 | Pawl Ø8*                                                                                                                                                                                        | 25   | 1          | S413520080 |                                                                                                                                    |
| 13   | 6    | S000380001 | Pawl Spring Ø8*                                                                                                                                                                                 | 26   | 1          | A94136400  |                                                                                                                                    |
| 14   | 6    | M0606103   | Screw M6x60 UNI5931                                                                                                                                                                             | 1    | 1          | S415130085 |                                                                                                                                    |
| 15   | 4    | M0635103   | Socket head screw M6x16 UNI 5931                                                                                                                                                                | 1    | 1          | M0614303   |                                                                                                                                    |
| 16   | 1    | S490960004 | Pawls carrier                                                                                                                                                                                   |      |            |            |                                                                                                                                    |
| 17   | 1    | A94904100  | Gear carrier<br><i>Gear carrier</i><br><i>Seal Ø30xØ38x4</i><br><i>Flange</i><br><i>Bushing Ø9xØ11x7</i><br><i>Gear Z=14</i><br><i>Bushing Ø14xØ18x20</i><br><i>Gear Z=27</i><br><i>Pin Ø12</i> |      |            |            |                                                                                                                                    |
|      | 3    | S414890080 |                                                                                                                                                                                                 |      |            |            |                                                                                                                                    |
|      | 3    | S490390004 |                                                                                                                                                                                                 |      |            |            |                                                                                                                                    |
|      | 3    | M6017594   |                                                                                                                                                                                                 |      |            |            |                                                                                                                                    |
|      | 1    | S490780004 |                                                                                                                                                                                                 |      |            |            |                                                                                                                                    |
|      | 3    | S490810004 |                                                                                                                                                                                                 |      |            |            |                                                                                                                                    |

\*Available with service kit; see website [www.harken.com](http://www.harken.com)

\*\*Winch product sticker



## UniPower 900 CCC

CCC = All-Chrome bronze

| Pos. | Q.ty | Code       | Description                                                                                                   | Pos. | Q.ty     | Code        | Description                                                                                        |
|------|------|------------|---------------------------------------------------------------------------------------------------------------|------|----------|-------------|----------------------------------------------------------------------------------------------------|
| 1    | 1    | A94953300  | Kit Motor 0,7kW 12V Unipower 900                                                                              | 18   | 1        | A94909800   | First planetary assy<br>Gear Carrier<br>Gear z=26<br>Ball 3/16"<br>Pin Ø6<br>Bushing 0608-10       |
|      | 1    | A96508600  | Kit Motor 0,9kW 24V Unipower 900<br>Electric motor<br>Polarity motor sticker<br>Key DIN 6885 5x5x15           |      |          |             |                                                                                                    |
|      | 1    | M6014206   |                                                                                                               |      |          |             |                                                                                                    |
| 2    | 1    | S490310004 | Pinion Z=9                                                                                                    | 19   | 1        | A94910000   | Second planetary assy<br>Pawl Carrier<br>Gear Z=23<br>Pin Ø8<br>Bushing 0810-12                    |
| 3    | 1    | A96940300  | Assy base Unipower 900 CCC<br>Support Unipower 900 CCC<br>Winch Product Sticker**<br>Skirt for base UP900 CCC |      |          |             |                                                                                                    |
|      | 1    | S694030043 |                                                                                                               |      |          |             |                                                                                                    |
| 4    | 1    | S490340004 | Ring gear Z=63                                                                                                | 20   | 3        | M6007103    | Screw M6x50 UNI6107                                                                                |
| 5    | 6    | S450660003 | Roller Ø5x10.5                                                                                                | 21   |          |             | Winch Serial Number Sticker                                                                        |
| 6    | 1    | S4129400A0 | Stripper arm support                                                                                          | 22   | 1        | A94946100   | Assy Drum Unipower C<br>Drum Unipower 900 C<br>Ball 3/16"                                          |
| 7    | 1    | S413440019 | Stripper arm                                                                                                  | 23   | 69       | M0619580    |                                                                                                    |
| 8    | 2    | M6004597   | O Ring 2237                                                                                                   |      | 1        | A96998300   | Assy Jaws Unipower 900 CCC<br>Lower jaw<br>Upper jaw Unipower 900 W<br>Peeler W46 - 50 W<br>Spring |
| 9    | 1    | A76940400  | Cover Unipower 900 CCC                                                                                        | 24   | 1        | S414280080W |                                                                                                    |
| 10   | 4    | M0601803   | Screw UNI EN ISO 1207 - M6x35 - A4                                                                            |      | 4        | S385970001  |                                                                                                    |
| 11   | 1    | S281690097 | Red line                                                                                                      | 25   | 1        | S413520080  | Spacer                                                                                             |
| 12   | 6    | S000080003 | Pawl Ø8*                                                                                                      | 26   | 1        | A94136400   | Assy Socket W20-80<br>Socket Handle W20/80<br>Washer Ø7.7xØ25x5.8<br>Screw M8x20 UNI 6109          |
| 13   | 6    | S000380001 | Pawl Spring Ø8*                                                                                               |      | 1        | S415130085  |                                                                                                    |
| 14   | 6    | M0606103   | Screw M6x60 UNI5931                                                                                           | 1    | M0614303 |             |                                                                                                    |
| 15   | 4    | M0635103   | Socket head screw M6x16 UNI 5931                                                                              |      |          |             |                                                                                                    |
| 16   | 1    | S490960004 | Pawls carrier                                                                                                 |      |          |             |                                                                                                    |
| 17   | 1    | A94904100  | Gear carrier<br>Gear carrier<br>Seal Ø30xØ38x4<br>Flange                                                      |      |          |             |                                                                                                    |
|      | 3    | S414890080 | Bushing Ø9xØ11x7                                                                                              |      |          |             |                                                                                                    |
|      | 3    | S490390004 | Gear Z=14                                                                                                     |      |          |             |                                                                                                    |
|      | 3    | M6017594   | Bushing Ø14xØ18x20                                                                                            |      |          |             |                                                                                                    |
|      | 1    | S490780004 | Gear Z=27                                                                                                     |      |          |             |                                                                                                    |
|      | 3    | S490810004 | Pin Ø12                                                                                                       |      |          |             |                                                                                                    |

\*Available with service kit; see website [www.harken.com](http://www.harken.com)

\*\*Winch product sticker

