bezares s.a.

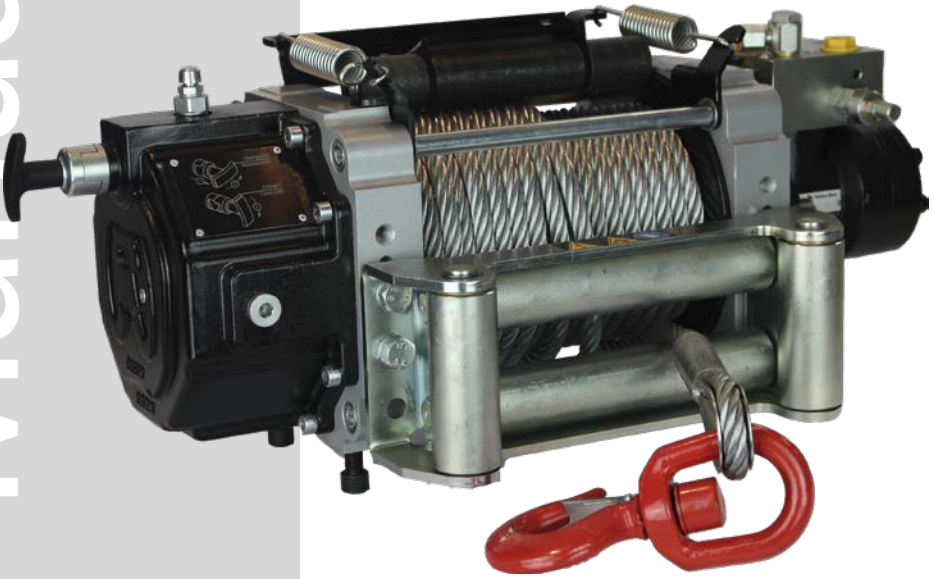
Hydraulic Systems

User Manual

Mammoth

Hydraulic Recovery Winch with planetary gear

User and Maintenance guide



Pull capacity: 5 / 7 Tons
Normal and Large Drums

bezares.com • +34 91 818 82 97
bezares@bezares.com

Translation from the original manual

INDEX

1. GENERAL

1.1 Introduction

IMPORTANT: Read this manual carefully and make sure you fully understand it before installing and using the winch. The following signs are used in this manual according to the type of risk the operator faces:

⚠ DANGER

It warns about dangerous situations. If they cannot be avoided, they may cause death to the operator and the exposed people.

⚠ CAUTION

It warns about incorrect practices in the installation and use of the winch that may result in minor injury to the operator and exposed people, and damage to the winch.

⚠ WARNING

It warns about dangerous situations. If they cannot be avoided, they may cause serious injury to the operator and exposed people, and may also affect later operation of the winch.

NOTE:

It gives suggestions to the operator to facilitate use and maintenance, and to extend the life of the winch.

If you have any doubt about its use or the correct operation, please contact our closest distributor or our after-sales service:

Bezares S.A
Av. de las Retamas. 145
45950 Casarrubios del Monte (Toledo)
(+34) 918 188 297 • bezares@bezares.com

IMPORTANT:
The operator is solely responsible for safe installation and operation.

1.2 General safety recommendations

1. Do not use the winch to move people, lift loads, or maintain them in certain position.

2. An exposed (to the danger) person is anybody who is within the danger area, which is within a radius equal to one and a half times the length of the unrolled cable.

3. Do not exceed the capabilities of the winch and the cable.

4. Always wear protective gloves during regular use of the winch.

5. The identification plate and the warning and use labels should always be visible.

6. This instruction manual should always be included with the winch, thus, it shall always be available for consultation by the operator.

7. Do not move the recovery vehicle while the cable is under tension; the force of the winch plus the force from the vehicle might overload the cable, either breaking it or causing permanent deformation.

8. Do not apply sudden loads on the winch cable.

9. Set the parking brake and wedge all the wheels of the recovery vehicle when using the winch.

10. On platforms and tows, fasten the load with other means in addition to the winch cable.

11. Do not use the winch while under the influence of alcohol, drugs, or medication.

12. Do not weld or machine any of the winch parts.

13. Install texts on the visible areas of the recovery vehicles, warning about the danger involved in the using the winch without having fully read and understood this instruction manual.

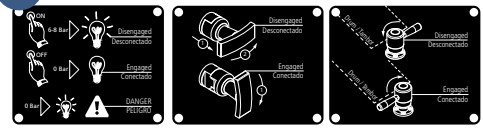
14. Install emergency stops for the hydraulic circuit in areas accessible to the operator while using the winch, and next to potentially hazardous areas, such as the drum.

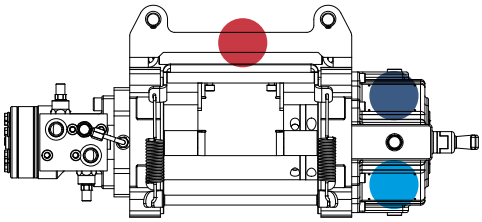
1.3 Marking

SAFETY NOTICE

IDENTIFICATION PLATE

CLUTCH INSTRUCTIONS





1.4 Main characteristics

Rotating direction: bidirectional.

Hydraulic motor:

Model*	E50	E70
F. Max (Kg)	5000	7000
cc/rev	63	80

Double overcenter valve: It regulates the load descending speed, it locks the motor in case the connection hoses break, and it releases the drum if a sudden force is applied to the cable, thus protecting the internal components of the winch.

Mechanical brake: Made of sintered bronze plates. 100% load-retaining capacity.It guarantees the load position in case of hydraulic failure, or internal leaks in the motor and overcenter valve.

Reducer system: Made up of planetary gears in two stages, total reduction 25:1.

Maximum cable rolling capacity, and maximum and minimum admissible cable diameter: For the reduced and short sizes, the diameter is 105 mm, and the thickness is 7.5 mm. The thickness is 11 mm for long cables, with a 112 mm diameter.

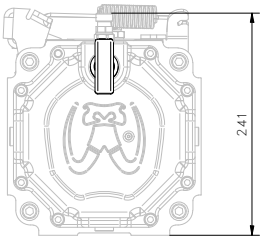
CHECK SECTION 2.6 - CABLE INSTALATION

Clutch: Manual pull handle, manual lever or pneumatic, it releases the drum to be able to manually unroll the cable. Hydraulic clutch available upon request.

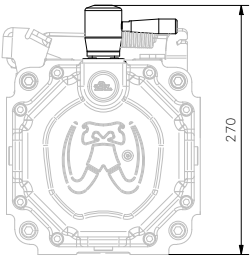
2. INSTALLATION

2.1 Dimensions

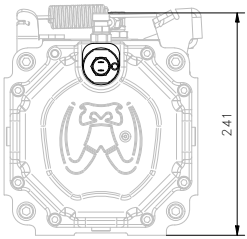
1

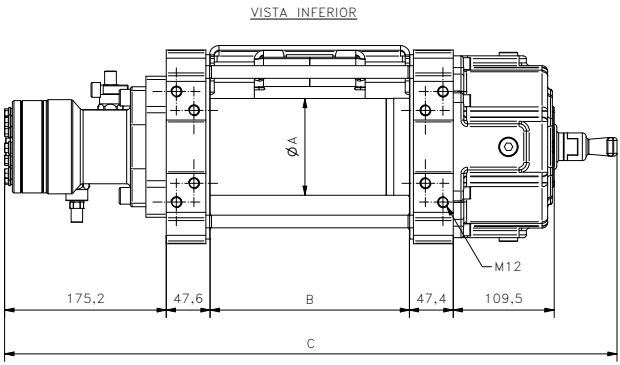


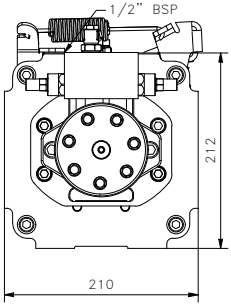
2



3







	A	B	C	
E50 E70C	105	216	664	1
			623	2
			676	3
E70	112	276	724	1
			683	2
			736	3

2.2 Assembly on the vehicle

These instructions should be respected in order to avoid winch misalignment under load, which might block the internal components (planetary gears, clutch, mechanical brake), cause excessive bearing wear, and breaking of fastening screws.

Use the following template for drilling in order to fasten the winch to the vehicle chassis:

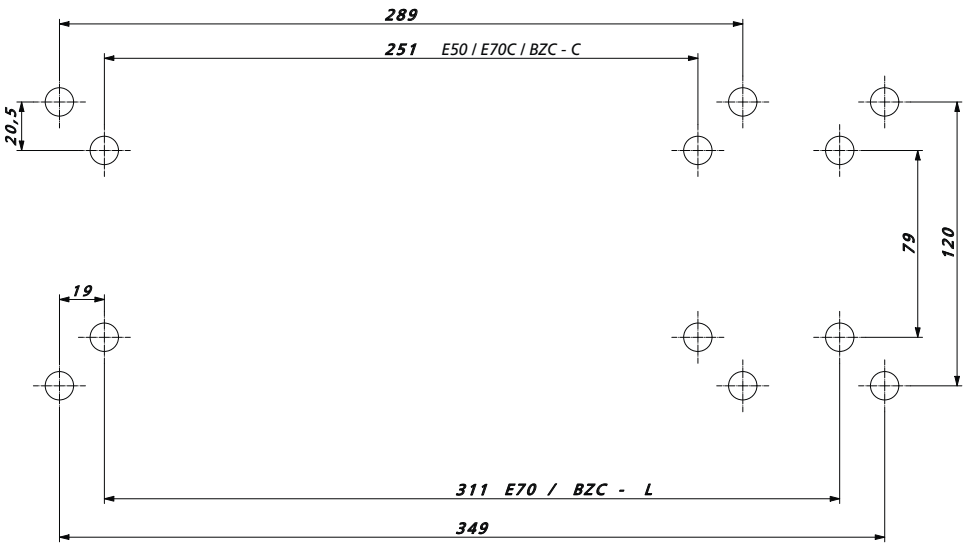
The surface on which the winch is bolted should be made of steel, with a thickness no less than 10 mm, and with a flatness equal to or less than 0.4 mm.. In order to fasten the winch to this surface, eight M12 screws, of ISO 10.8 quality minimum, should be used, which should be inserted 20 to 25 mm into the aluminium winch supports. The screws should be self-locking through impregnation, or DIN 6798-type serrated washers. If the winch is mounted on a base plate with the holes drilled according the template indicated below, it should be screwed to the chassis with the same number of screws and of the same quality.

Drills Mounting Template

DOWNLOAD THE 1:1 TEMPLATE FROM:

E50 / 70

https://bezares.com/templates/E50.pdf



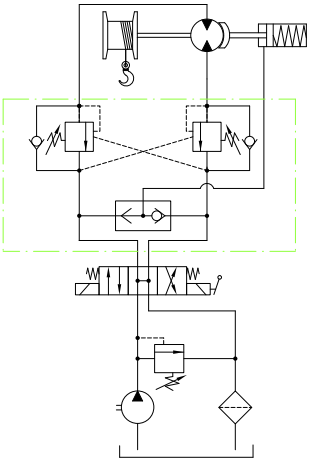
E50 Drum

E70 Drum

2.3 Hydraulic circuit

⚠ WARNING

The maximum flow rate and pressure should not exceed the values shown in the following hydraulic model:



Filters on the pump suction line are not recommended.

The filter on the return line should have a filtering capacity between 10 µm and 25 µm.

Use hydraulic oil with anti-wear and anti-foam additives, according to the standard DIN 51524 / 51525 (type HLP). In general the following viscosities are recommended, based on the room temperature:

- 22 cSt for cold temperatures
- 37 cSt for mild temperatures
- 46 cSt for warm temperatures

The oil temperature should not be lower than -15° C or higher than 80° C.

PRESION MAX.		CAUDAL MAX.	
E50	E70	E50	E70
170 bar	180 bar	50 l/min (continuous)	60 l/min (continuous)

NOTE: Before rolling the cable and using the winch for the first time, it should be operating without a load for sufficient time so that all of the oil in the hydraulic circuit has gone through the return filter at least once. It is recommended to operate the winch without a load for 10 minutes to eliminate all the air from the circuit, and to prevent the formation of foam in the tank.

2.4 Roller guide Installation

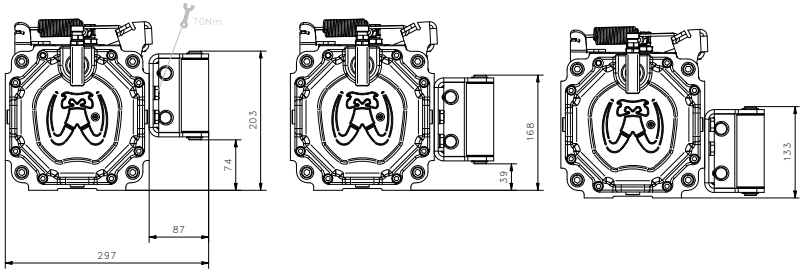
The roller guide may be assembled in three different positions, depending on where the drum will collect the cable.

The lower position of the guide is to collect the cable under the drum. Recommended.

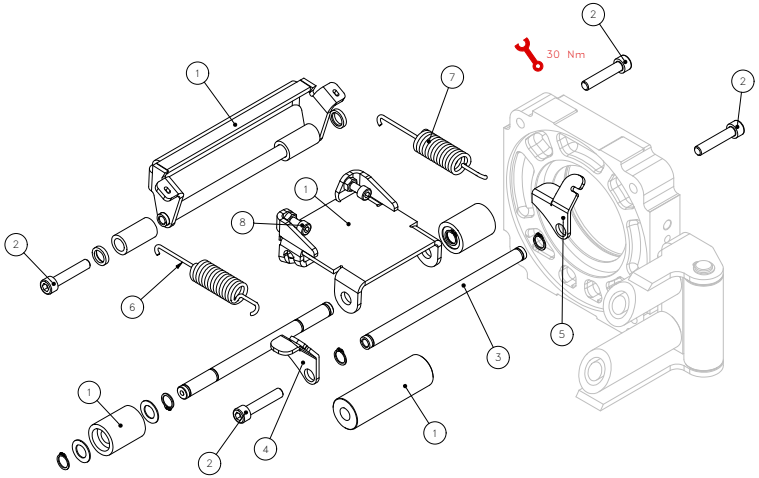
The upper position of the guide is to collect the cable on top of the drum.

The center position of the guide is for cases where there is interference with the chassis, where the two previous assemblies are not possible. Not recommended.

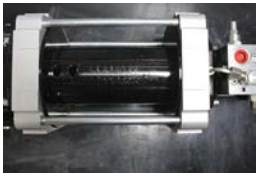
The drawings show the installation for reduced, short, and long drum winches.



2.5 Cable tensioner Installation



1.

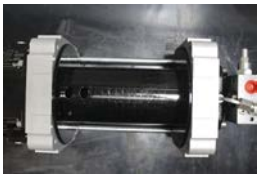


If the winch is not installed on the crane, be sure to perform the installation on a flat surface. Read the instructions in their entirety before proceeding with the cable gland installation.

1 Installation must be done before placing the cable on the drum. Therefore, if you already have the cable coiled, you will need to unroll it first and release the end of the fixing hole to facilitate the assembly of the springs.

2 Remove the two upper spreader bars:

2.



a) Loosen only the M12 Din 912 screws on one side of the guide rail.

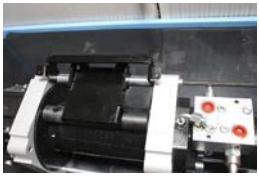
rollers if mounted.

b) Unscrew the four Din 912 M10 screws (2) on the sides

of the winch brackets, corresponding to the upper bars.

3 Install the plate and roller assembly:

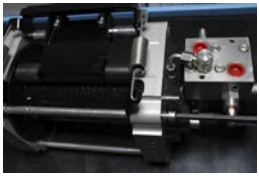
3.



a) Position the assembly (1) between the supports, in the appropriate position. It must be placed on the opposite side of the roller guide when it is mounted in the lower position. For a top mounting of the guide, the cable gland assembly will be placed on the side closest to the roller guide.

b) Secure the position using the Din 912 M10 x50 screws (2), but do not tighten them yet.

4.



4 Fit the tensioner assembly:

a) Position the tensioners (4) (5) at the ends of the rod (3). The spring clamping area must be in an open position with respect to that of the winch supports (see figure).

b) Position the tensioner assembly between the winch brackets without moving it into position with respect to the bracket holes.

c) Insert the springs (6) (7) in the tensioning plate of the assembly, inserting the hook through the upper part of it. Make sure to place the coiled area of the spring in the position furthest from the plate.

5.

d) Insert the other end of the springs into each of the tensioners. Make sure to place the rotated spring hook in the open position relative to the brackets (see figure).

5 Position the tensioner assembly:

a) Once the springs are in place, position the tensioner assembly, using the rod (3), in the holes of the supports. Fix this position using the Din 912 M10 screws (2).

6.

b) Tighten the four screws once they are in position.

6 Adjust the tension of the cable gland (optional):

Adjust the tension of the cable gland using the screws (8) located on the center plate of the plate and roller assembly. Once the desired tension is reached, fix it using the nuts located on the screws (8). If you do not know what final tension you want, keep the screws in the supplied state (recommended).

2.6 Cable installation

Use a cable with the following characteristics: Galvanized 6x19+1 construction, according to standards DIN 3060 and DIN 3066 respectively, or its equivalent ISO 2408.

Minimum / Recommended resistance of the cable section: 180 Kg/mm2.

The minimum effective breaking strength is for a new cable. Under the UNE-EN 14492-1 the minimum wire's breaking load must double the maximum winch traction.

Model	E50	E70
Ø min (mm) Recommended	12	14
Minimum effective breaking load (kg)	7600	10400

The maximum cable dimensions depending on the drum size are:

DRUMS	E50			E70		
Ø cable	10	12	14	10	12	14
m. CABLE (max.)	35	25	20	45	30	25

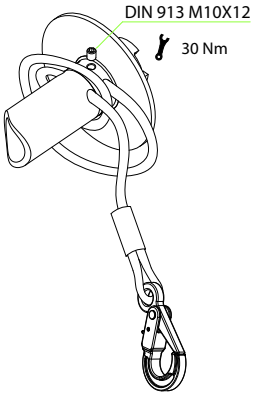
(*) 25 m maximum for Ø12 and short and reinforced drums to 7000Kg.

⚠ CAUTION

Wear thick leather gloves to install the cable and never let the cable run through your hands, even with the gloves on.

Ensure that the clutch is in the disengaged position and that the drum can be rotated manually.

NOTE: Unroll the cable on the floor, making sure that it does not fold on itself; this will facilitate rolling the cable on the drum. Insert the cable through the two holes (except for the reduced drum winch), leaving two rolled turns (except for the reduced drum winch), and screw in the DIN 913 M10x8 set screw as shown in the drawing, making sure that the cable end does not exceed the hole where the set screw is screwed.



⚠ WARNING

When rolling the cable for the first time, apply a minimum load of 50 kg to the cable to prevent trapping of the external turns on the internal ones, which would cause deformation and knots in the cable when working with a heavy load. Roll the cable in an ordered manner.

⚠ CAUTION

If the cable is rolled at the factory, it is necessary to roll it again in the previous conditions.

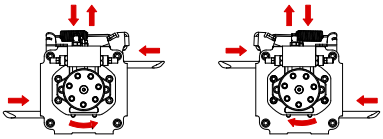
⚠ DANGER

The set screw does not retain the cable under load by itself. Leave at least 5 turns of rolled cable on the drum to operate safely.

NOTE: It is recommended to paint the last four meters of cable red or yellow, on the end opposite to the hook; this will warn you that the cable is on the last layer and that there are approximately 10 rounds left, 5 to reach the hazardous area.

The drum has been designed so that the cable does not completely unrolled due to the operator error, leaving two rolled turns. These two remaining turns may prevent the cable from coming free under load, but they do not resist the maximum force that the winch is designed for. If overlooked, the cable would be rolled in the opposite direction, and it might be seriously damaged.

Follow the hydraulic connection instructions on the overcenter valve, shown in the following figure, in order to obtain the desired rotating direction based on where the drum will collect the cable.



2.7 Pneumatic clutch installation

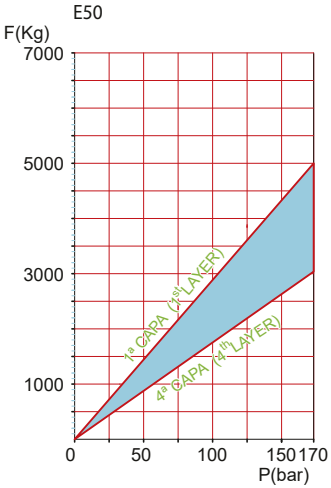
The pneumatic version of the clutch consists of a simple effect pneumatic cylinder. The air pressure for actuation should be between 6 and 8 bar. The body has a machined 1/8 BSP thread and the supplied quick connector is for 6x4 tube. At the back part there is the piston vent and a switch (opened) that closes the circuit when the clutch shaft is not at its rest position, that is, it has not entered completely or that the pneumatic valve is at the disengaged position. This switch should be used to close a circuit supplying a visual or acoustic signal; it can also be combined with the remote command to cancel the lifting function until the clutch is completely engaged.

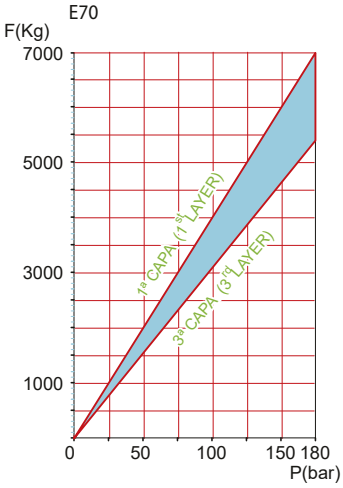
3. USE AND MANEUVERING

3.1 Technical characteristics

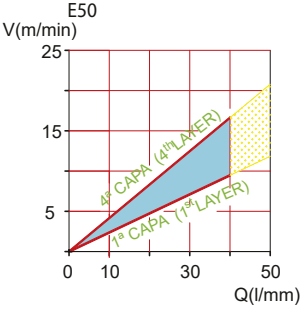
The mechanical brake has a 7.000 kg braking capacity.

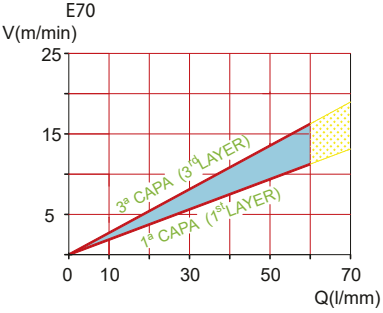
PULLING CAPACITY AND MAXIMUM PRESSURE





COLLECTION SPEED AND MAXIMUM FLOW





3.2 Practices

The best way to prevent accidents and extend the life of all the winch components is to practice before using it. There are two parameters the operator can easily control while handling the winch: the collecting speed and the sound of the winch and the valves. Get used in differentiating the cable speed depending on the layers rolled on the drum.

The internal layers collect the cable at a slower speed. The cable speed should be practically the same working with or without a load. Get used to the sound of the winch itself (planetary gears) and of the hydraulic block (hydraulic distributor and pressure relief valve in the circuit).

Differentiate between working without a load and with light load, a very heavy load and a load exceeding the winch dragging capacity, which causes the cable to stop, even if the hydraulic distributor is activated. Use a pulley in this last case.

3.3 Free drum rotation

⚠ WARNING

Never perform this operation with the cable loaded.

This operation is necessary when the cable has to be manually unrolled quickly without starting up the hydraulic circuit, as well as for maintenance tasks and installation of accessories.

⚠ DANGER

Leave at least 5 turns rolled on the drum to operate safely.

3.3.1 Manual clutch

E50 / E70

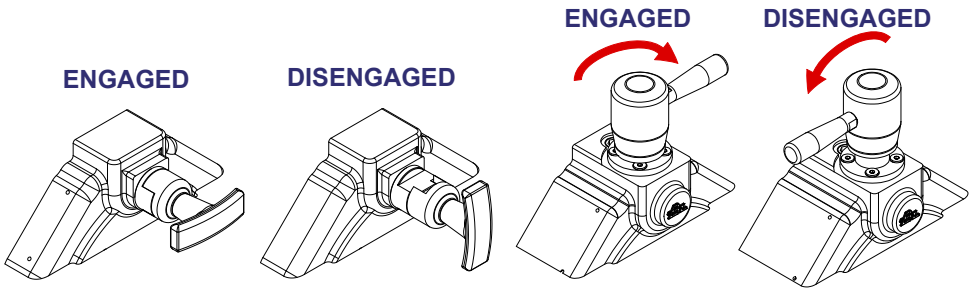
Pull the manual clutch handle until it turns 90°. You will notice the resistance of the internal return spring. The clutch travel distance is approximately 11 mm. Release the rotated handle; it will stay in the "disengaged" position and the drum may rotate freely by hand, although with some resistance. Unrolling the cable may be done easily by pulling the hook by hand.

Rotate the handle 90° again in order to engage the clutch.

If the handle does not go into place, you have two options:

- Pull the cable to rotate the drum.

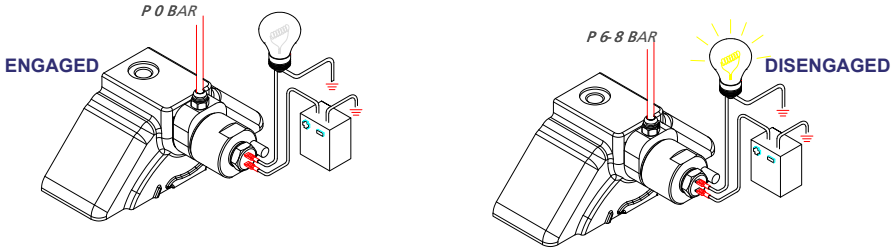
- Operate the winch to retract the cable while holding it at the same time. Until the clutch returns to its position the drum will not start to rotate.



3.3.2 Pneumatic clutch

Activate the pneumatic valve that commands the clutch; the acoustic / illuminated alarm described in section 2.7 will emit a signal.

Unrolling the cable may be done easily by manually pulling the hook. In order to re-engage the clutch, locate the pneumatic valve in the engaged position; the acoustic alarm will stop its signal when the shaft is in the engaged position. If it does not return to this position, you may use the method described previously in the manual clutch section.



⚠ DANGER

Do not let the cable be placed under tension if the clutch has not fully returned to its "engaged" position.

3.4 Reeling in the cable

⚠ DANGER

Never perform this operation if there are less than five turns of rolled cable on the drum.

⚠ WARNING

Do not roll the cable when it is loaded if the clutch is not fully engaged.

Activate the hydraulic distributor to the cable reel-in position. Before moving the load, gently tighten the cable with slow and short movements in order to prevent sudden pulls that may exceed the maximum force of the winch for an instant in time. Remember that the force to move a load is greater than to keep it moving; avoid short movements with constant stops with the cable under load. If the load to be moved is very heavy, use the last layer to move it; in addition to developing more force, it will prevent the upper layers from getting into the lower ones, and ending up deformed (knots).

If the drum stops because the load is more than the force developed by the winch, use a pulley (on the load) and connect the hook on a part of the chassis that is separate from the one used to assemble the winch.

The dragging force is double when using a pulley. Avoid lateral pulling angles greater than 20°; use a pulley in these cases. If the length of the unrolled cable is more than 10 m, place a blanket, jacket, or something similar at approximately 2 m from the hook; this will partly prevent the cable from whipping in case of being released from the hook.

⚠ WARNING

Uneven rolling of the cable on the drum is not a big problem. Avoid rolling at one side of the drum; it might cause serious damage to the cable and the winch, which may ruin both of them.

In this case you should:

- Fasten the load, with the cable being under load.

- Release a little bit of cable.

- Check that the load does not move and release the hook. Unroll all the cable that was rolled unevenly on the drum.

- Roll it again in an orderly manner, following the instructions previously described for the cable installation.

Never try to guide the cable onto the drum with your hands when it is under tension. Check the planetary gear housing temperature. You should be able to bear the temperature when touching the housing with your hand; if not, let it cool.

In order to stop the winch, place the hydraulic distributor in its center rest position.

3.5 Unrolling the cable under load

⚠ DANGER

Do not release the hook from the load until the load is secured, and it is verified that the cable is not under tension.

In order to unroll the cable under load, place the hydraulic distributor to the unrolling position. The overcenter valve controls the load descending speed. A slow and even descent is recommended instead of a fast one with constant stops; the load inertia may cause impact forces that are higher than the retaining forces developed by the winch

4. MAINTENANCE

⚠ WARNING

Perform all the maintenance operations with the winch stopped, without pressure in the hydraulic circuit and without tension on the cable.

4.1 Winch's Regular maintenance

4.1.1 Yearly

Check the braking capability of the mechanical brake:

- Unscrew the end of the metallic tube over the overcenter valve. Be careful with the closing washer that seals the tube against the valve.

- Unscrew the bolts that fasten the hydraulic motor to the motor support.

- Remove the motor-overcenter valve assembly without moving the metallic pilot tube.

- Adjust the device Code 9030499 on the winch shaft, and apply a torque of 180 Nm; the shaft should not rotate. Otherwise, contact our after-sales service.

Change the oil lubricating the gears and the brake:

-Depending on the drum, the oil capability for each winch is the following:

Drum size	E50	E70
Capacity in liters	0.9	1.3

Use oil for lubrication of gear reducers with EP additives and a viscosity index higher than 95, according to standard ISO 6743-6 CKC or DIN 51517 CLP. The viscosity grade will be chosen depending on the room temperature, according to the following table:

Ambient temperature	+ 5 °C	+ 30 °C	+ 60 °C
	- 20 °C	+ 5 °C	+ 30 °C
ISO VG	100	150	320

⚠ CAUTION

It is very important to follow all the steps in the following order. Replace the copper washers from the unscrewed plugs with new ones.

- Unscrew the upper and lower plugs of the gear housing to empty the oil. Let all the oil drain completely.
- Screw in the lower plug again.
- Unscrew one of the lateral plugs to check the oil level when filling through the upper plug.
- Screw in the lateral plug and then the upper one. The plugs should be tightened to a torque of 50 Nm.

4.1.2 Monthly

Lubricate the manual clutch with oil. Engage and disengage it several times to complete the lubrication. Check that all the winch screws are tightened, including the ones fastening it to the chassis. Check the level of oil by unscrewing one of the lateral screws on the gear housing. If necessary, fill; follow the previous instructions

4.1.3 Daily

Check that there are no oil leaks. Cable lubrication is very important. When the cable operates, the internal wires move and rub against each other; the external wires wear out by rubbing against the pulleys and drums.

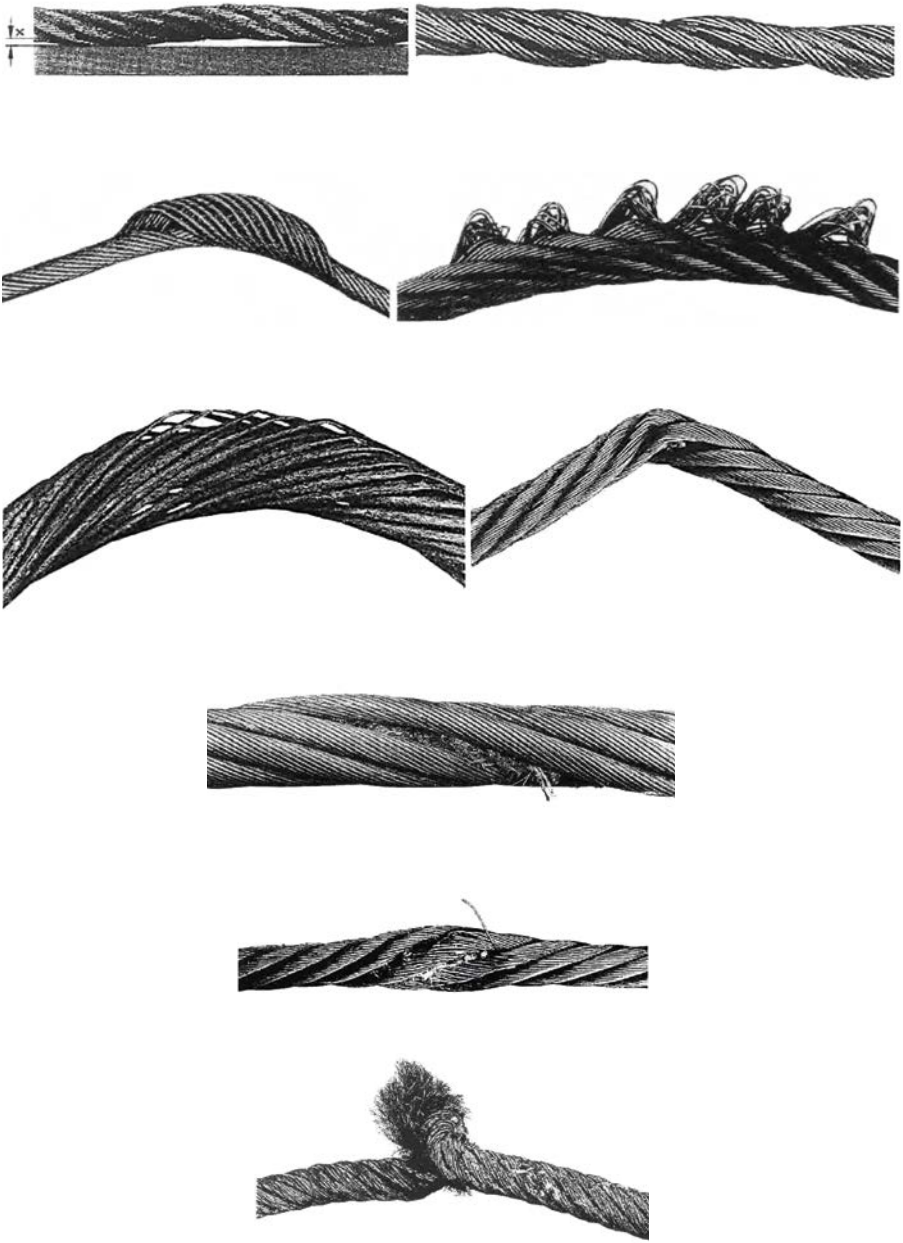
The lubricant reduces the wear, internally and externally; it also protects against corrosion. Lubricate the cable following the manufacturer's instructions (very viscous oil or very light grease with adhesive additives, such as molybdenum bisulfate is recommended) and check that it has been perfectly rolled, as indicated in section 2.6. Clean the outside of the winch. Do not use a water jet; it might damage the seals and watertight o-rings.

4.1.3 After each use

Verify the condition of the cable (see section 4.2) and the hook.
Roll the cable as indicated in section 2.6.

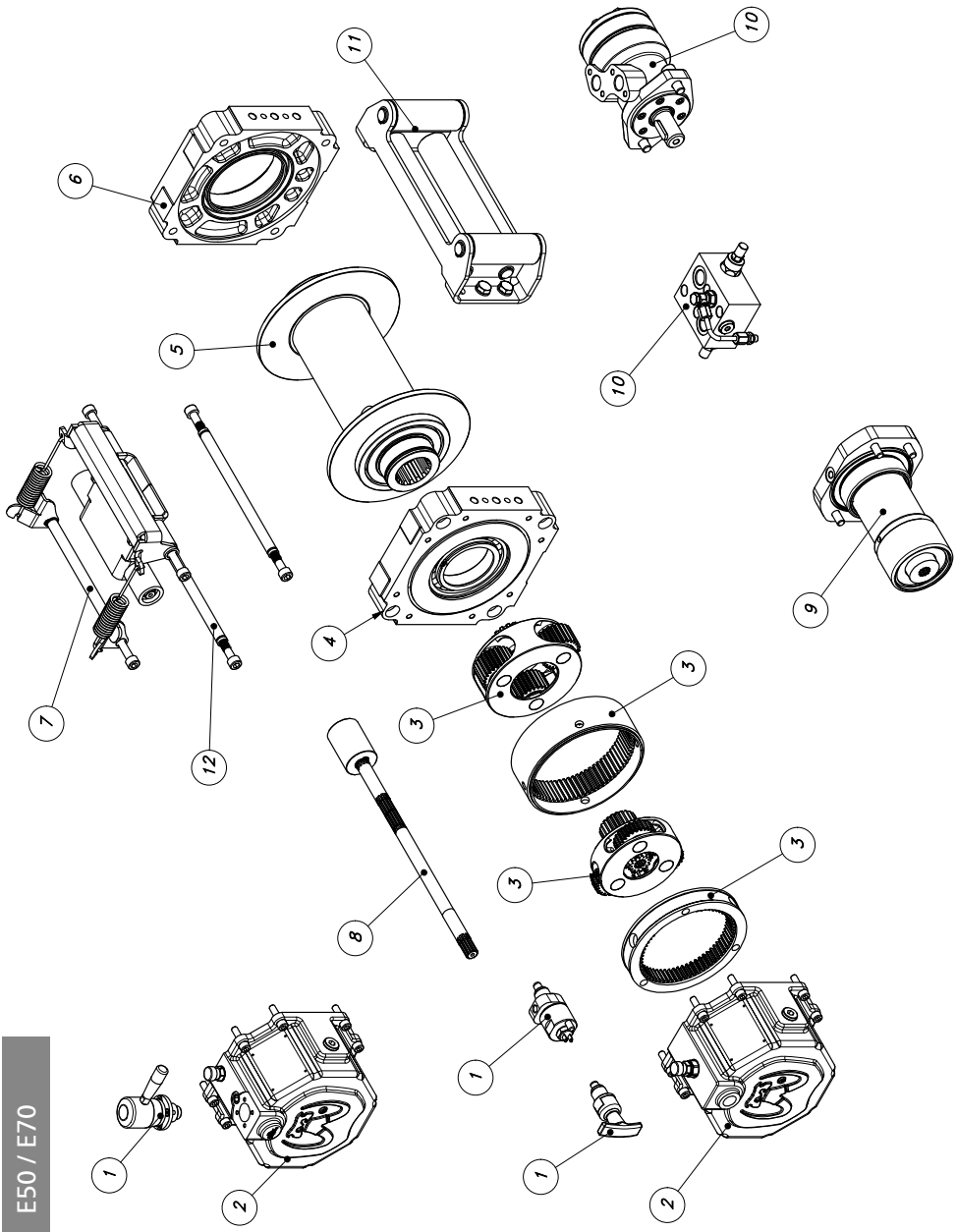
4.2 Cable Inspection

Examples of permanent deformations for which the cable must be replaced.



4.3 Spare parts list

#	Description	Part Number
1	Pulling clutch kit	906125
	Lever clutch kit	9037125
	Pneumatic clutch kit	909325
2	Pulling reducer housing kit	9037925
	Lever reducer housing kit	9037025
3	Reducer kit	9038725
4	Reducer-drum support kit	9039025
5	E50 drum kit	902125
	E70 drum kit	9012925
6	Motor-drum support kit	9039125
7	E50 cable tensioner kit	9038825
	E70 cable tensioner kit	9039825
8	Short E50 shaft kit	9023625
	Long E70 shaft kit	9023725
9	Brake kit	907225
10	E50 hydraulic kit	9020625
	E70 hydraulic kit	9020725
11	E50 roller guide kit	9041525
	E70 roller guide kit	909825
12	E50 cable tensioner shafts kit	9038925
	E70 cable tensioner shafts kit	9039925



E50 / E70

4.4 Troubleshooting

PROBLEM	ROOT CAUSE	SOLUTION
The drum does not rotate without load.	1. Faulty break. 2. Lack of brake pilot pressure. 3. Assembly on chassis defective. Poor alignment of the lateral winch supports. 4. Blocked or defective reducing planetary gears. 5. Clutch in disengaged position.	1. Replace brake 2. Replace overcenter valve. 3. Verify the assembly (flatness, dimensions between holes, etc.) on the vehicle, as shown in section 2.2 4. Clean or replace the affected gears. 5. Make sure the clutch is in the engaged position.
The drum does not rotate with a load, but it does without one.	1. Higher load than that allowed by the winch. 2.Insufficient pressure in the hydraulic circuit. 3. Defective motor.	1.Verify that you are not exceeding the winch pulling specifications (section 3.1). 2. Use a pulley as indicated in section 3.3.2. Verify that the hydraulic circuit meets the specifications in section 2.3. 3. Replace the motor.
The winch rotates slowly.	1. Insufficient pump flow 2. Worn hydraulic motor.	1. Verify that the hydraulic circuit meets the specifications in section 2.3. Verify that the tank oil level is correct. Verify that the pump is operating correctly. 2. Replace the hydraulic motor.
The cable cannot be unrolled freely with the clutch in the disengaged position.	1. Defective clutch assembly. 2. Assembly on chassis defective. Poor alignment of the lateral winch supports 3. Blocked reducing planetary gears 4. Blocking or knotting in the rolled cable.	1. Disassemble the clutch assembly and verify that the rod does not project out in its movement more than 11 mm. 2. Verify the assembly (flatness, dimensions between holes, etc.) on the vehicle, as shown in section 2.2. 3. Clean or replace the affected gears. 4. Apply soft pulls on the cable by hand or with the vehicle in order to untie the knots. Completely unroll the cable and verify its condition. If undamaged, roll it again following the instructions in section 2.6.
Oil leakage through the oil filler cap's evaporator (steel).	Defective brake.	Replace the brake.
Oil leaks between the lateral covers of the drum and the lateral supports of the winch.	Defective drum seals	Replace the drum seals.
The load does not maintain its position.	1. Defective brake. 2. Overcenter defective or with internal dirt	1. Replace the brake. 2. Clean the cartridges and selector or replace the complete overcenter
Excessive noise.	1. Assembly on chassis defective. Poor alignment of the lateral winch supports 2. Excessive rotating speed 3. Very low oil level in the tank.	1. Verify the assembly (flatness, dimensions between holes, etc.) on the vehicle, as shown in section 2.2. 2. Verify that the hydraulic circuit meets the specifications in section 2.3 3. Fill the tank to the appropriate level. Purge the air circuit following the instructions in section 2.3.
Vibration and excessive noise when rotating without load.	Overcenter defective or with internal dirt.	Install a pressure gauge at the pressure inlet on the overcenter valve (according to the activated function, up or down) and tighten the cartridge adjustment screw located on the return side of said valve until the pressure gauge reads between 44 and 48 bar. If the noise remains, please contact our after-sales service

CE CERTIFICATE OF CONFORMITY

The company Bezares S.A. located at Avenida de las Retamas, 145, Polígono Industrial Monte Boyal, Casarrubios del Monte, Toledo, España C.P: 45950, declares under it's sole responsability that the machine:

Cabrestante de arrastre
Model
Options
Code
Serial N°
Production Year
1st layer max. pulling
4th layer max. pulling
1st layer max. speed
4th layer max. speed
Max. work pressure
Max. pump flow

Meets all the requirements of the Directive 2006/42/CE (DOUE L-157. 09-06-2006) on machinery.

Authorised person, stablished in the community, to make the technical documentation:

Alberto López Torrecilla. Bezares S.A.

For the record and the relevant purposes Emilio Nunez certifies this as head representative of Bezares SA Casarrubios del Monte, Toledo, Spain, dated January 1, 2010.

Bezares S.A.

+34 918 188 297 • bezares@bezares.com • bezares.com

Avenida de las Retamas 145, Polígono Industrial Monte Boyal, Casarrubios del Monte, 45950, Toledo, España

Notes

HEADQUARTER

Spain (Toledo)

BEZARES S.A

Av. de las Retamas, 145
Polígono Industrial Monte Boyal • 45950
Casarrubios del Monte • Toledo

Tel:+34 91 818 82 97

bezares@bezares.com

SUBSIDIARIES

Thailand

HIDROPOW CO., LTD

12/19 Moo 5, Kingkaew RD Rachateva,
Bangplee • Samutprakarn • 10540 • Thailand

Phone: +66-2-738-8899

thanaponglavaphan@gmail.com

Italy

BEZARES ITALIA

11, Via Dell'Artigianato
31034 Cavaso del Tomba • Treviso • Italia

Phone:+390 423 544 105

italia@bezares.com

France

BEZARES FRANCE

106, Avenue des Roses. Zac de la Butte Gayen
94440 Santeny • France

Phone:+33 01 45 10 15 40

bezaresfrance@bezares.com

China

ZHEJIANG BEZARES POWER TRANSMISSION CO. LTD.

No. 8. Hongfu East Road, Yaozhuang Town
Zhejiang Province • China

Phone: +86 573 84777638

china@bezares.com

USA

BEZARES USA

27634, Commerce Oaks Drive
Oak Ridge North, Texas 77385

Phone: +1 888 663 1786

pto@bezares.com

Mexico

BEZARES MÉXICO

4ª Avenida N°. 980 Colonia. Zimix
Santa Catarina, N.L. México 66358 • Monterrey

Phone: +52 81 1287 0090

info@bezaresmexico.com

UK

BEZARES UK

Wharf Works, Main Building, Three Bridges
Rd, Long Buckby, Northampton NN6 7PP, UK

Phone: +44 1327 317557

help@bezares.com

India

ALPHADRIVES INDIA

449/1B, PN Palayam Road, Kanuvai,
Coimbatore • 641108

Phone: +91 75388 74333 / +91 99945 88849 •

ptos@alphadrives.co.in

999800/21/06/23

Bezares has an extensive network of distributors at your service worldwide.
Contact our Technical Support Department (+34 918 188 297) to find out which one is nearest to you.