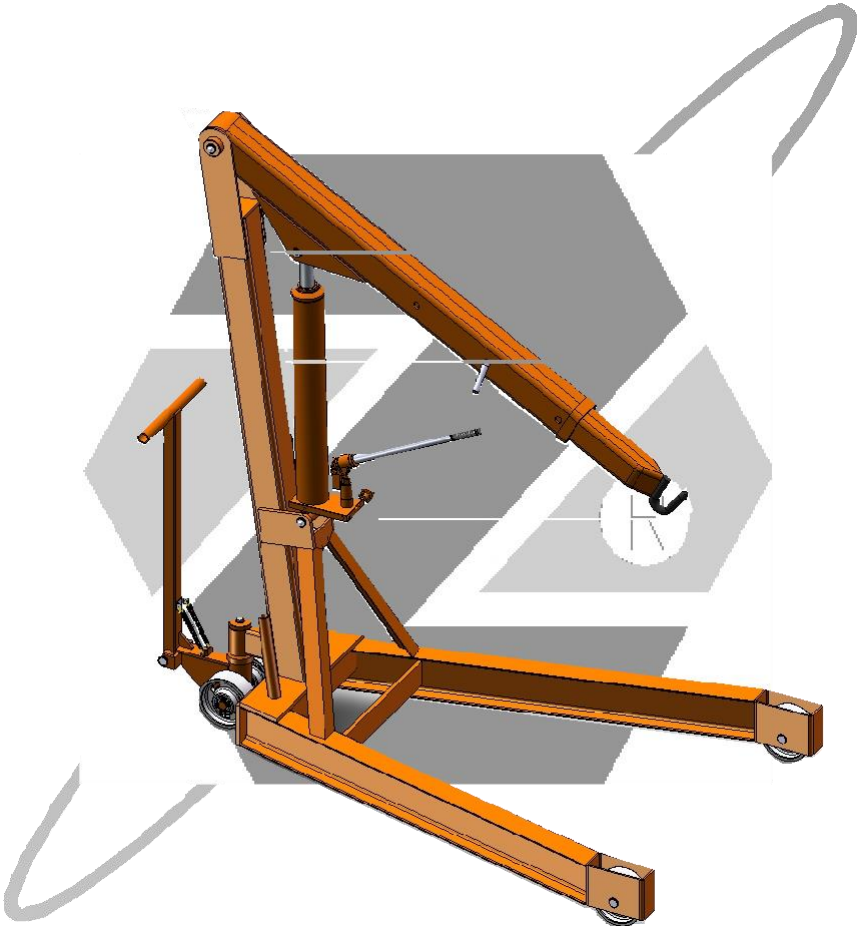




HYDRAULIC WINCH G-1000

OPERATION AND MAINTENANCE MANUAL



ZELOSO®

Since 1956



HYDRAULIC WINCH

USE:

This manual contains information for operation and maintenance, as well as an illustrated parts list of the ZELOSO's HYDRAULIC WINCH.

MODEL:

G -1000

OPTIONS FOR WHEELS:

RF = IRON WHEELS

RN = NYLON WHEELS

RU = POLYURETHANE-COATED IRON WHEELS



PURPOSE

This manual is intended to provide technical information for the correct operation and maintenance of the HYDRAULIC WINCH.

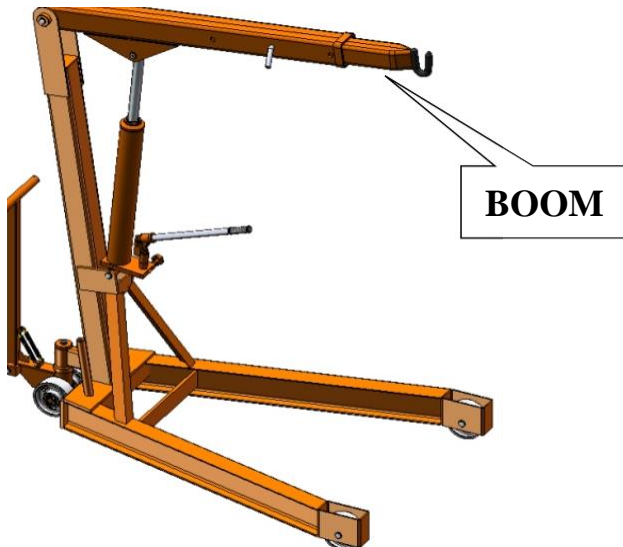
USE

The HYDRAULIC WINCH was designed to lift various types of loads in an agile and simple way.

There is no need for specialized staff to operate the HYDRAULIC WINCH. A single person handles various loads easily and safely.

DESCRIPTION

The HYDRAULIC WINCH has an articulated boom with two manual adjustments on the extension. The boom, by means of a monoblock set (pump, reservoir and hydraulic cylinder) lifts loads with little physical effort.





HYDRAULIC ASSEMBLY

The hydraulic unit is formed by a monoblock type system, which has a base with a pump and a cylinder, which, surrounded by a reservoir, has a compact design.

STRUCTURE

Light and resistant structure built in tubes, plates and steel profiles electrically welded with paint finish in orange synthetic enamel (standard safety characteristic color ZELOS® based on polyurethane).

WHEELS

Two wheels on a rotating axle and two fixed unidirectional wheels. All with shielded and lubricated ball bearings

WORKING PRINCIPLE

The WINCH has the movements of raising and lowering the boom triggered by the advance and return of the piston of the hydraulic assembly. The drive system by manual pumping, in turn, releases hydraulic energy to the cylinder by advancing the piston and, consequently, raising the boom. To lower the boom, the hydraulic pressure is released, causing the hydraulic oil to move to the reservoir. The action of gravity triggers the retraction of the piston and the consequent descent of the boom.

Moving the winch is simple. With a directional helm available, the equipment can be pulled anywhere, easily transported



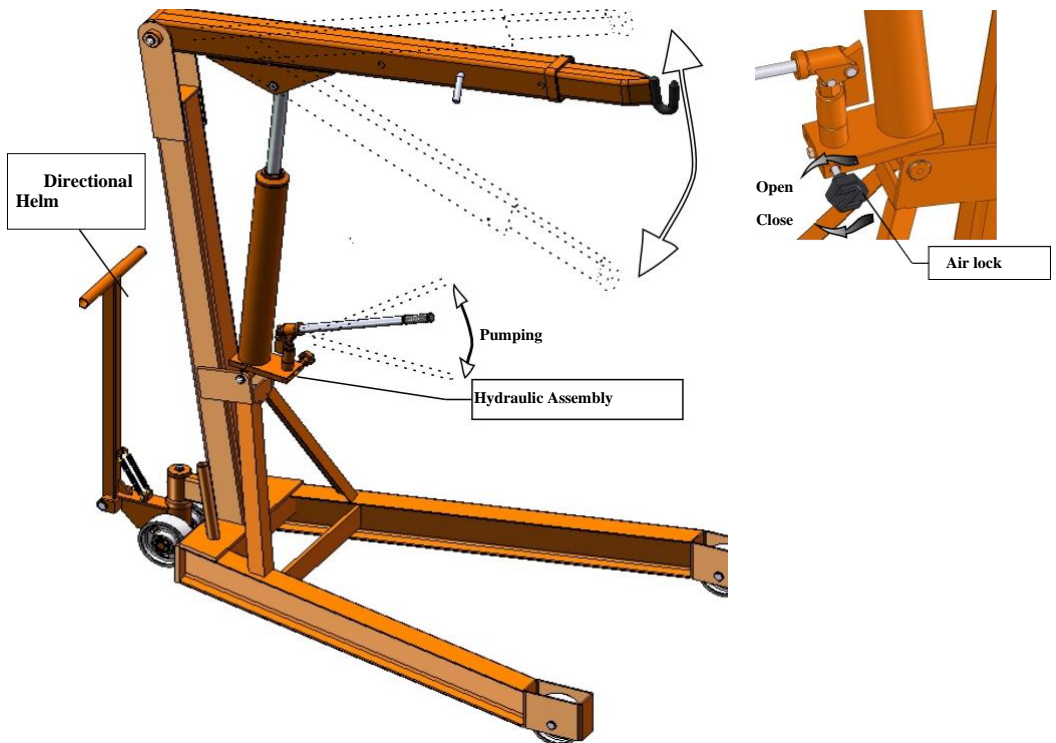
RAISING AND LOWERING THE BOOM

Boom elevation

To raise the boom, first, close the valve's air lock and then pump the lever so that it raises the load to the desired height.

Boom lowering

To lower the boom, open the air lock gently to control the speed of descent so that it does not come down abruptly.





SECTION III

MAINTENANCE PRACTICES

PERIODIC CHECK

DAILY CHECK

- Check the WINCH for apparent damage, general cleanliness, and absence of obstacles in its path.
- Eliminate all particles and possible contaminants, emphasizing the regions of the wheels' axles, casters, and cylinders.
- Check for oil leakage.
- Recommended hydraulic oil: ISO-VG 68. ($\pm 1.5L$)

VERIFICATION EVERY THREE MONTHS OF OPERATION

- Check the general condition for excessive wear.
- Check the wheels for excessive wear.
- Grease the joints with good multipurpose grease.

TESTING, VERIFICATION AND TROUBLESHOOTING

- Whenever you want to check the perfect functioning of the HYDRAULIC WINCH - and after having performed any maintenance or assembly or disassembly operation - perform the following test:

Close the air lock and operate the lever (without load) until the piston travels to the end. Then open the air lock to lower the boom and repeat the process with the maximum load (boom retracted) or with adequate load (boom extended).



TROUBLESHOOTING

FAILURE	PROBABLE CAUSE	CORRECTIVE MEASURE
THE BOOM CANNOT BE RAISED	Air lock is opened.	Close the air lock.
	System oil level below the required minimum.	Complete the fluid level.
	Oil leak.	Eliminate the leak.
THE BOOM CANNOT BE LOWERED	Obstacle in the course of lowering the arm.	Eliminate the obstacle.

GENERAL CLEANING

The cleaning of the HYDRAULIC WINCH is carried out with normal neutral cleaning products. Abrasive or paint-damaging materials and products must not be used under any circumstances..

CLEANING THE HYDRAULIC CYLINDER

Always keep the piston clean, free from any kind of particles, especially if those are metallic.

OPERATION AND SAFETY

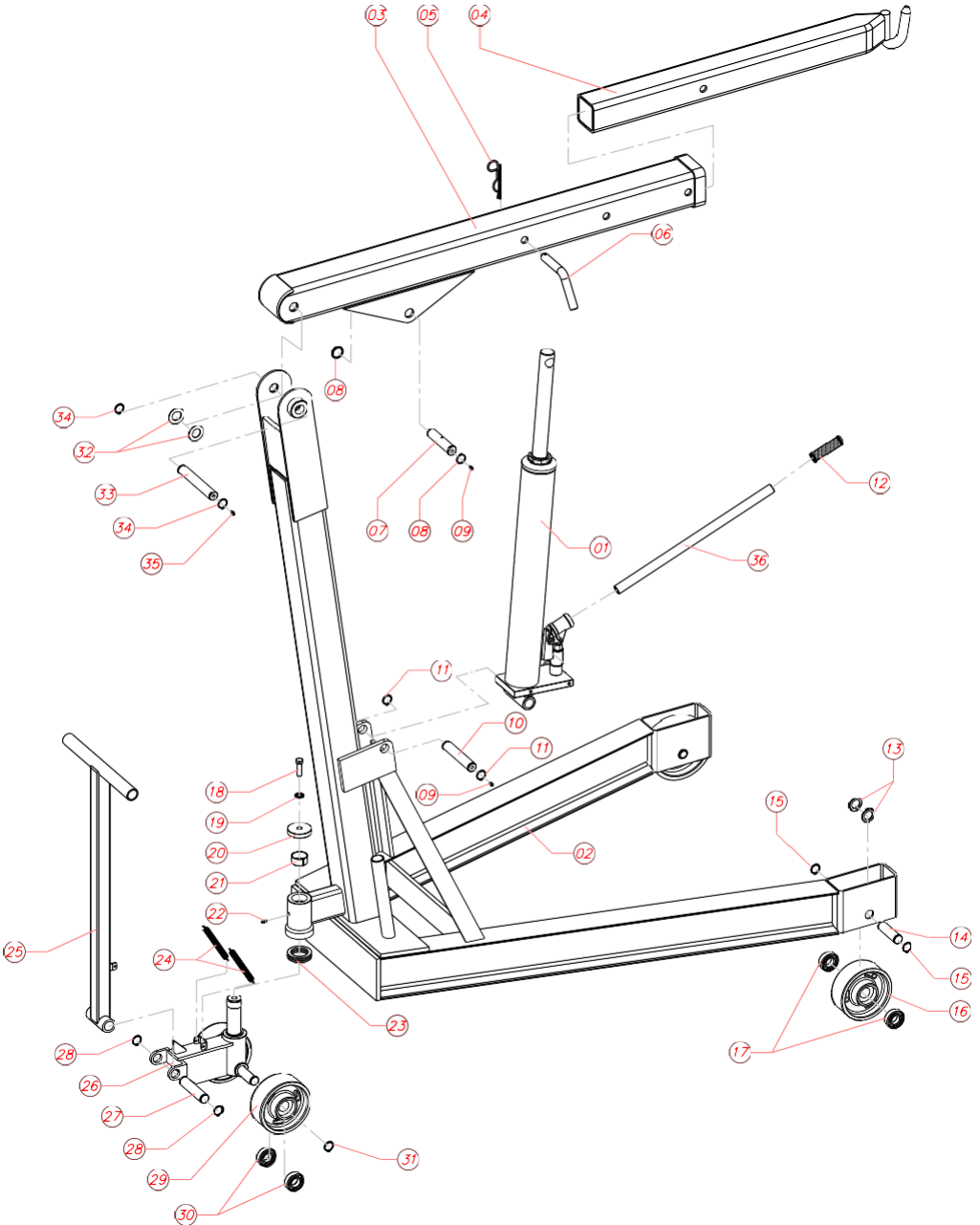
The WINCH operation is simple and safe and can be performed by a single person.

SAFETY RULES TO BE FOLLOWED DURING THE OPERATION

- Never exceed the WINCH load limit (1000 Kg);
- Do not use the WINCH on ramps;
- Do not use the WINCH on uneven floors;
- Make sure that the load to be lifted is fixed and secured;
- Respect your company's safety standards.
- To complete the oil, unscrew the sealing nut No. 8.



EXPLODED VIEW

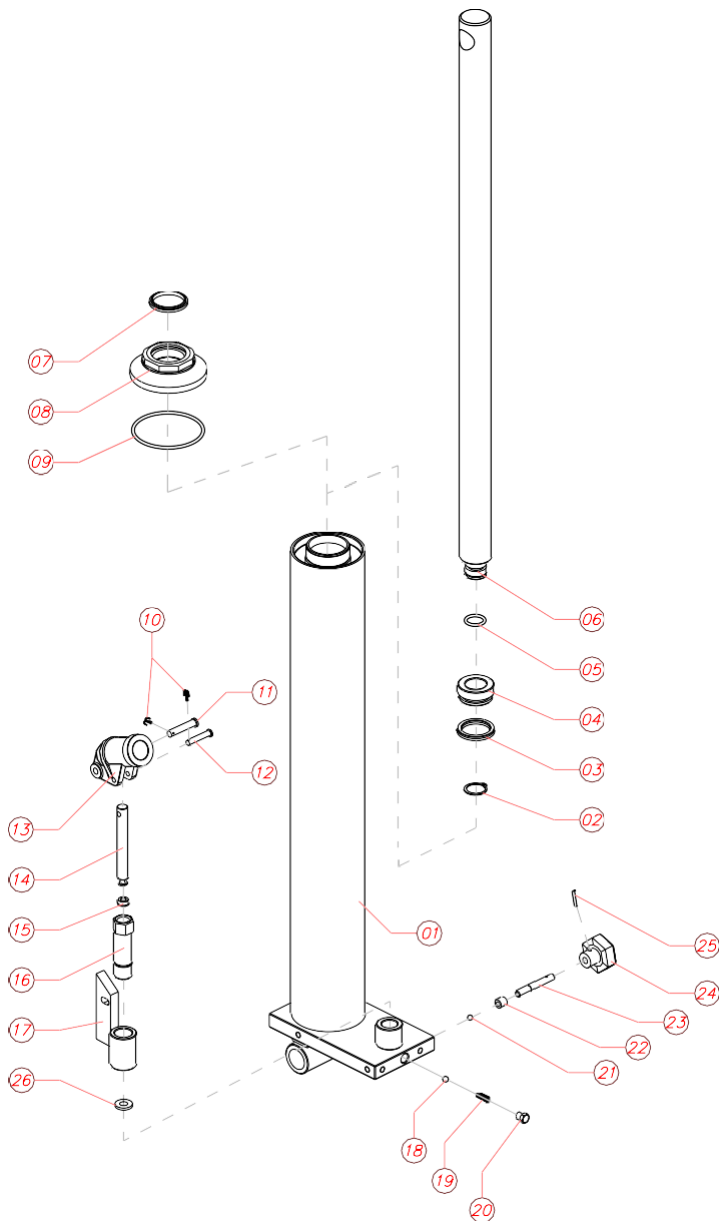


PARTS LIST

SEQ.	COMPONENT	CODE
01	Hydraulic Assembly	GH100001000000
02	Base & Column Assembly	GH100002000000
03	External Boom Assembly	GH100007000000
04	Internal Boom Assembly	GH100008000000
05	Clip	107001
06	Boom Lock	GH100009000000
07	Piston Shaft	GH100014000000
08	Elastic ring	010024
09	Straight grease gun	200301
10	Cylinder Shaft	GH100013000000
11	Elastic ring	010024
12	Straight Lever Sleeve	BH000501020100
13	Flat washer	GH100003000000
14	Front Wheel Axle	GH100004000000
15	Elastic ring	010024
16	Iron Wheel	180004
17	Bearing	090030
18	Hexagon Screw	170074
19	Lock washer	030026
20	Thrust Washer	GH100006040000
21	Bronze Bushing	050011
22	Straight grease gun	200301
23	Bearing	090084
24	Spring	230030
25	Helm Assembly	GH100006010000
26	Swivel Assembly	GH100006000000
27	Helm Axis	GH100006080000
28	Elastic ring	010024
29	Iron Wheel	180004
30	Bearing	190030
31	Elastic ring	010024
32	Bronze washer	GH100011000000
33	Boom Axis	GH100012000000
34	Elastic ring	010024
35	Straight grease gun	200301
36	Actuation Lever	GH100015000000



CONJUNTO HIDRÁULICO





PARTS LIST

SEQ.	COMPONENT	CODE
01	Welded Cylinder Base	GH100001010000
02	Elastic ring	010024
03*	Molythane	020298
04	Piston	GH100001030000
05*	O-ring	020108
06	Piston	GH100001020000
07*	Cleaner	040094
08	Sealing Nut	GH100001040000
09*	O-ring	020133
10	Cotter pin	100001
11	Iron Rivet	170014
12	Iron Rivet	170012
13	Articulating Arm	MOD.024
14	Small piston	GH100001070000
15*	Molythane	020290
16	Pump Cylinder	GH100001060000
17	Swivel Bushing	GH100001050000
18*	Ball	080005
19*	Retention Spring	230003
20*	Plug	110046
21*	Ball	080004
22*	Tube	450003
23	Air lock Rod	GH100001080000
24	Gauntlet	GH100001090000
25	Elastic Pin	200005
26*	Bronze Trim	GH100001100000

* For maintenance parts, ask for the Kit "Kt0276".



Guarantee certificate

ZELOSO INDUSTRIA E COMÉRCIO LTDA. GUARANTEES, against manufacturing defects, the equipment delivered with invoice number _____, series _____, on _____, _____ for a period of twelve months, provided it is used properly.

This warranty does not cover parts subject to wear and tear in normal use, such as seals, wheels, bearings; improper use of the product; changing the product; and technical assistance provided by third parties not authorized by ZELOSO.

WINCH - MODEL: _____

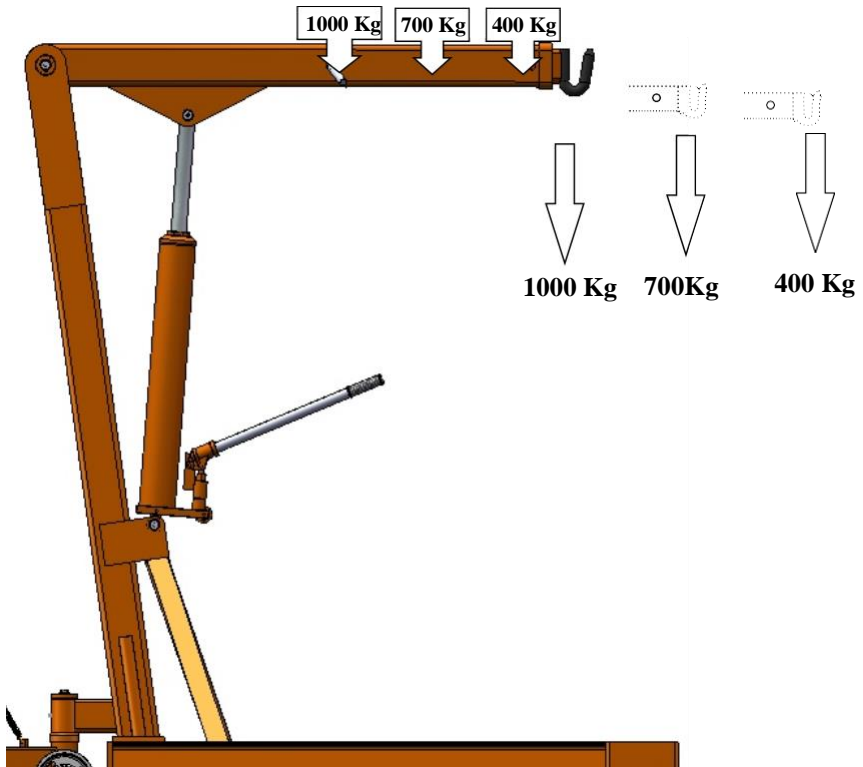
SERIES: _____ WITH LOAD CAPACITY = _____ kg.

ALL WARRANTY SERVICE WILL BE CARRIED OUT WITHIN THE PREMISES OF ZELOSO. THE TRANSPORTATION TO AND FROM THE SITE IS THE BUYER'S RESPONSIBILITY.

ZELOSO IND. E COM. LTDA.



BOOM IDENTIFICATION (CAPACITY IN kg)



OTHER EQUIPMENT



COIL DUMP TRUCK



LIFTING TABLE



LIFTING PLATFORM



HYDRAULIC FORKLIFT



AIRCRAFT HYDRAULIC JACKS



EXTRA LOW TABLE



PALLET MACHINE – SPECI,



PALLET
MACHINE



MAINTENANCE ELEVATOR

Company history

Founded in 1956, ZELOSO® is an inseparable part of the increase in industrialization in the country. The company is part of this process with the supply of hydraulic equipment for movement and strength and the development of several special machines to improve the manufacturing process, with a special focus on aspects related to work safety and ergonomics.

The company has a prominent position as a supplier of equipment and devices, maintaining leadership in several equipment segments in the national market due to the robustness and characteristic functionality of its products.

ZELOSO INDÚSTRIA E COMÉRCIO EIRELI.

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