

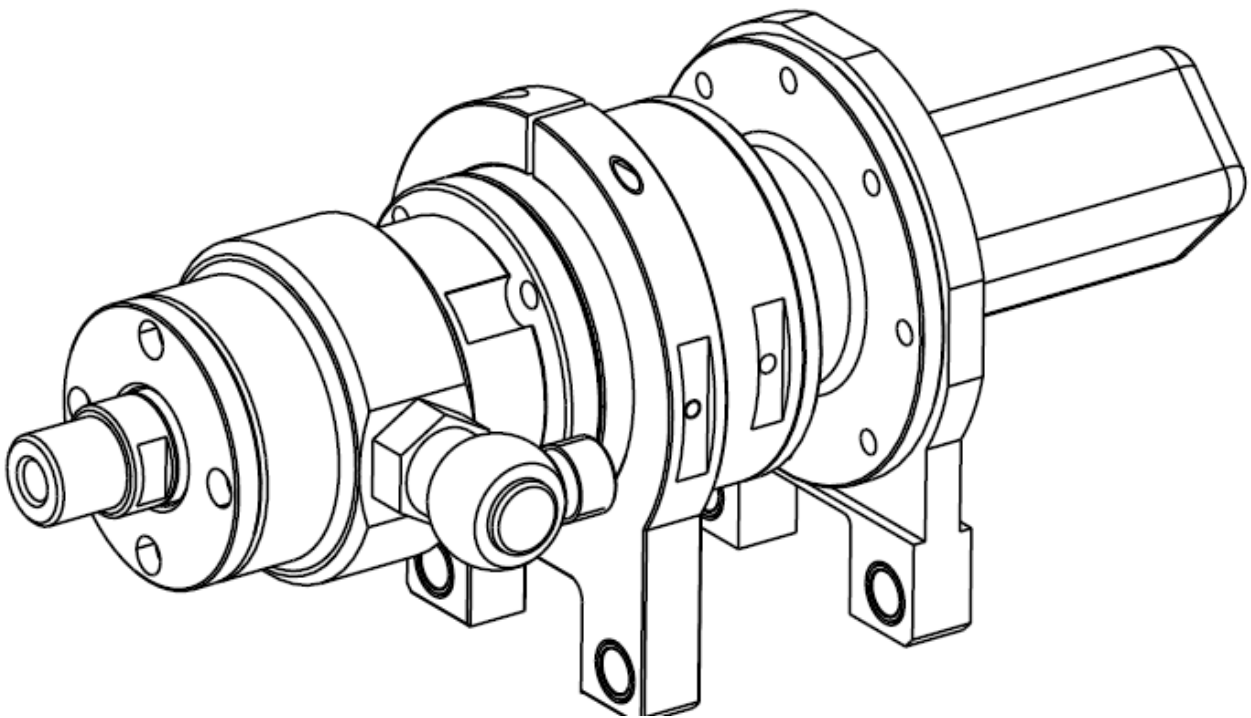


**ROTATION HEAD**

**- *RP 100W* -**

**Hydraulic drive**

**User and Maintenance Manual**



**Ripamonti**

**RIPAMONTI**

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## WARNING

Before any machine handling or use operation read carefully the user and maintenance manual.

This manual contains reserved information. All rights reserved  
Any copy, adaptation or translation without the written consent of **Ripamonti** is forbidden.

**Ripamonti** is not liable for personal or property direct or indirect damage due to the use of this manual or of the machine in conditions other than those indicated or that do not guarantee operator's safety.

### General notes on delivery:

Upon machine delivery, open the package and check that the supply corresponds to order specifications and to the content of the shipping document attached.  
In case of deterioration or lack of parts immediately notify it clearly and in details to the carrier and send a copy to **Ripamonti**.

Manufacturer	RIPAMONTI DR. GIANNI S.r.l.
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Managing Director	GIOVANNI RIPAMONTI

Machine	ROTARY HEAD
Type	RP 100
Model	RP100/YYY
Serial no	RP100-XXX
Year of Manufacture	

Customer	
Address	
Lessee	
Phone	
Fax	
Manager	

Herein we certify that Type RP 100 hydraulic head was marked with the below plate:

	<b>Ripamonti</b> Ripamonti Dr. Gianni S.r.l. Strada Romana di Sotto 28877 ORNAVASSO ( VB )	
	MACCHINA TIPO EQUIPMENT TYPE	RP100/YYY
	N° MATRICOLA SERIAL N°	RP100-XXX
	ANNO DI FABBRICAZIONE YEAR OF MANUFACTURE	

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## 1 Introduction

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User and maintenance manual is an essential and integral part of the machine and should be delivered to the user.

It should be kept with care and read with attention since it contains important safety elements for operators, for operation and proper maintenance. In case of doubts or doubts on the elements supplied in the manual please contact the Ripamonti Customer Care.

The machine should be destined only to the use for which it was explicitly designed. Any other use is to be considered inappropriate and therefore dangerous.

Any manufacturer's contractual liability and extra contractual is excluded for damage due to errors in machine use and handling or anyway failure to comply with the instructions of the manufacturer.

### Note

**RIPAMONTI reserves the right to modify the product and relative technical documentation without any obligation towards third parties. This user and maintenance manual version describes the characteristics relative to the standard machine as of the date of printing of this publication.**

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## 2 General information

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The RP100 hydraulic head is delivered perfectly working and with the manufacturer's warranty. Any alteration or manipulation of original parts supplied, just like the failure to execute maintenance operations according to the indications of the Manufacturer described in the present manual forfeit the warranty.

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### 3 Description – Use

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The RP100W hydraulic drive rotation head was developed to execute holes in any kind of land and in compact rock with the following tools:

- ROTARY DRILLING TOOLS WITH WATER FLUSHING
- CORING TOOLS WITH WATER FLUSHING
- WATER DOWN HOLE HAMMER LIKE WASSARA

ANY OTHER USE OTHER THAN THE RECOMMENDED ONE IS NOT AUTHORIZED.



**RP100W HAS A SPECIAL TYPE OF SWIVEL AND IT'S FORBIDDEN TO WORK WITHOUT WATER.**

In order for the RP100 head to be used it should be installed on an adequate support and connected to energy sources. RP100 was designed for installation on a drilling slide model SPEEDY DRILL ®. In case of application on any other kind of support or slide, please contact RIPAMONTI before installation to check compatibility.



**HEAD INSTALLATION ON A SLIDE OTHER THAN SPEEDY DRILL MODEL IS NOT DIRECTLY MANAGED BY RIPAMONTI, BUT IT IS CARRIED OUT UNDER THE FULL RESPONSIBILITY OF THE INSTALLER. DURING THE USE OF THE HEAD STRICTLY COMPLY WITH THE INSTRUCTIONS OF SLIDE MANUFACTURER.**

RP100 hydraulic drive head (accessory for drilling slides) IS A "MACHINE-COMPONENT" OR "INCOMPLETE MACHINE", DESTINED TO THE EXECUTION OF HOLES UP TO THE MAXIMUM DIAMETER AND DEPTH ALLOWED BY THE ACCESSORIES INSTALLED AND THE DRILLING TECHNIQUE USED.



**RIPAMONTI'S LIABILITY IS LIMITED TO WHAT IS ACTUALLY SUPPLIED. IF THE INSTALLATION IS BY THE CUSTOMER-USER RIPAMONTI IS NOT LIABLE FOR THE SAFETY OF THE GROUP "ROTATION HEAD – TARGET MACHINE".**

The "incomplete machine" object of this manual, is not intended to work independently, but must be built into another machinery or plant to which is applicable the Directive 2006/42/CE (art.2, p.to g). Therefore, is explicitly forbidden to market this "incomplete machine" before that the machine or the plant on which is installed, are made and declared accordant to the directive above.

**Note:** The RP100 rotation head **IS NOT** appropriate for use in potentially explosive atmospheres.

## 4 Operators' qualification

The operations described in this manual for machine operation and maintenance require the presence of operators with a good experience in the sector of building sites and drilling machines.

All the operators for the following operations must know the performances and the working limits of the machine, overall sizes and handling of mobile equipment, both for transportation and working arrangement.

Most of the accidents on building sites are due to the lack of compliance with basic safety standards or to negligence in the approach to working stages with a potential hazard in a certain situation.

The staff in charge of the machine and of the building site equipment supplied with it should be well prepared and have the proper skills and instruments to accurately execute the operations.

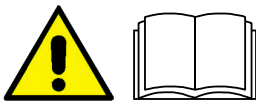
Operators on building sites should never let anybody approach during the use of the machine and should prevent it from being used by staff unauthorized and not trained.

For any doubt on the use of the machine call RIPAMONTI customer service to get all necessary information.



**THE PURCHASER AND THE OPERATOR OF THIS MACHINE SHOULD READ CAREFULLY THE USER MANUAL THE FIRST TIME THEY START USING THE DRILLING MACHINE.**

**IF THIS DEVICE IS SUPPLIED WITH USE AGREEMENT OR LEASE AGREEMENT, THE OWNER COMPANY SHOULD CHECK THAT THE NEW USER READS AND UNDERSTAND THE USER MANUAL.**



**FOR MORE DETAILS ON THE DRILLING TECHNIQUES, NOT ILLUSTRATED IN THIS MANUAL, PLEASE READ SPECIALIZED TEXTS.**



**INDIVIDUAL PROTECTION EQUIPMENT IS COMPULSORY**

(Protective glasses, Soundproof earmuffs, Working suit, Protective gloves, Helmet and Protective glasses).



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## 5 Safety standards during operation

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The risk of accidents can be cut down or removed complying with the following simple rules and general precautions:

- The head should be used installed on drilling slide or adequate support (See sect. 3)
- RP100 can be used **only** by trained operators (See sect. 4)
- Check the head was subject to proper maintenance
- At the start and during each working shift check the state of supply pipes. If they have signs of wear replace them before starting to operate
- Be cautious during machine use. Do not approach the drilling centre, always keep adequate safety distance. Danger of entrapment of operator's limbs and/or clothing in the rotating organs of the machine running.
- Pay the highest attention during the stages of rod change. Operate only with machine idle and check that supplies were disabled.
- Before intervention on supply circuits make sure they are not under pressure.

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## 6 Residual risks

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The versatile use of the RP100 rotation head exposes the operator to the following residual risks:

- **SCATTERING OF DUSTS, FRAGMENTS OR SPLINTERS OF THE DRILLED ELEMENT;**
- **ACCIDENTAL CONTACT WITH PARTS IN MOTION;**
- according to the kind of drilling and to the operating head used, **PROLONGED EXPOSURE TO NOISE;**
- **BREAKDOWN DURING OPERATION.**

THE MAIN DEFENSE AGAINST THE UNAVOIDABLE ABOVE RISKS IS OPERATOR'S POSITIONING AS FAR AS POSSIBLE FROM THE DRILLING Centre.

The above breakdown risk is not the one due to inappropriate use, which on the contrary was accurately considered at the stage of design but is relative to some precise components (in particular PIPES UNDER PRESSURE).

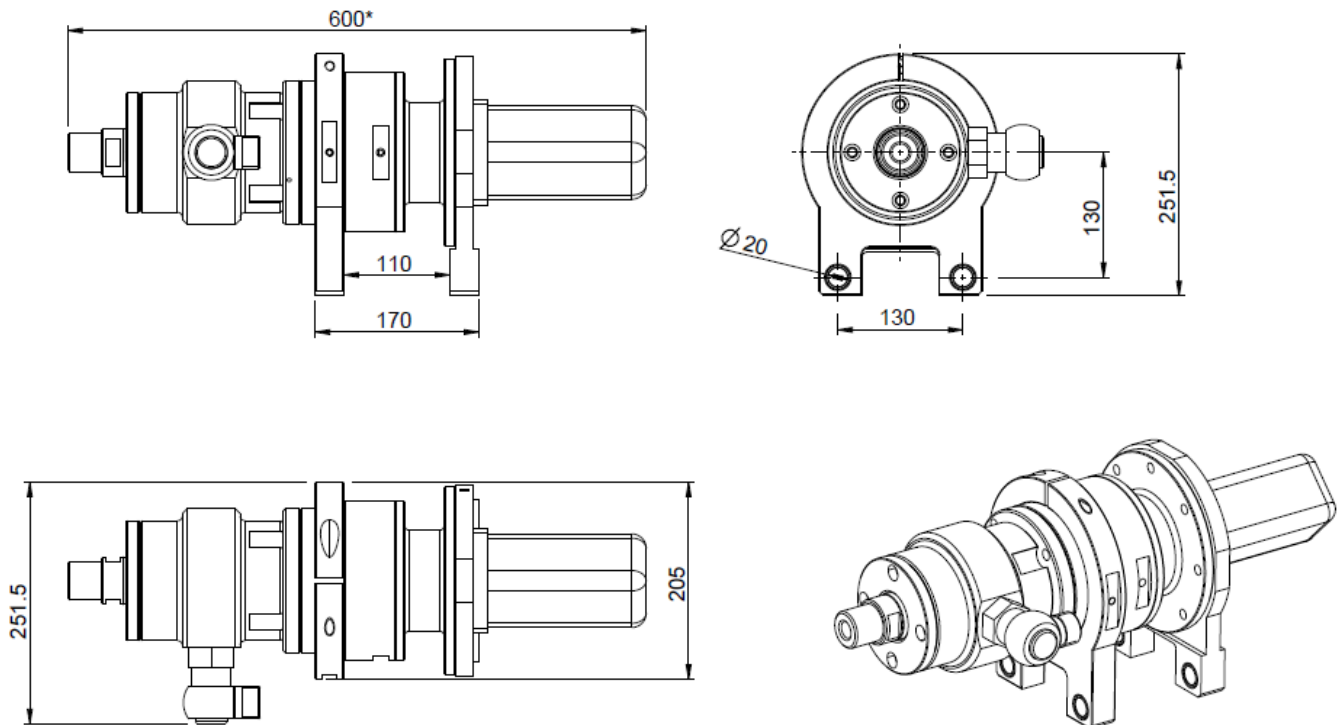
Partly for use conditions, but mainly due to bad maintenance or worst negligence of the device, the mentioned components can break during use with effects sometimes disastrous as for example the "whiplash injury".

IT IS RECOMMENDED TO EXECUTE PRECISELY ALL THE INSPECTIONS AND MAINTENANCE INTERVENTIONS SCHEDULED.

The staff in charge should be especially aware of this.

## 7 Technical Specifications

- Dimensions**



- Weight \*:** 30-40Kg
- Possible motorizations and performances for each motor:**

Model	Motor displacement	Torque max kgm	Rpm max 1/min	Maximum oil capacity l/min	Pressure max
RP100/80	80	20	810	65	175 bar
RP100/100	100	29	750	75	205 bar
RP100/125	125	37.5	600	75	205 bar
RP100/160	160	46	470	75	205 bar
RP100/200Y	200	56	375	75	200 bar
RP100/250Y	250	70	300	75	200 bar
RP100/315Y	315	90	240	75	200 bar

\*: According to the motor installed



**FOR PROPER OPERATION OF THE SUPPLY HYDRAULIC POWER UNIT IT SHOULD NOT PROVIDE CAPACITY VALUES AND HYDRAULIC OIL PRESSURE HIGHER OR LOWER THAN THOSE IN THE TABLE.**

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## 8 Maintenance

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The RP 100 hydraulic head is normally delivered with grease lubrication on the bearings as shown in the following figure. Anyway, the customer before using the head, should check that the head is greased sufficiently. Otherwise add grease for bearings with degree EP2 from the specific greaser.



**ALL MAINTENANCE OPERATIONS SHOULD BE MADE WITH MACHINE IDLE. BEFORE ANY OPERATION DISCONNECT ALL ENERGY, SOURCES AND CHECK THERE ARE NO CIRCUITS UNDER PRESSURE.**

- **Every day**

At the beginning of each working shift check the head bolts screwing. If any of them is loosened tighten them. At the beginning and during the shift, proceed with a complete greasing of the head.

- **Every 100 hours**

If the machine is working with water, change the complete seal kit.

- **Periodically**

Periodically check the connection of head to slide, the wear state of the bushes and of the two fastening flanges as well as of supply pipes. If necessary, replace the worn components.



**IN CASE OF LACK OF MAINTENANCE, THE WATER COULD ENTER IN THE HYDRAULIC CIRCUIT THROUGH THE SEALS. IF NECESSARY CHANGE THE COMPLETE SEAL KIT: DON'T WORK WITH WORN SEALS!**

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## 9 Warranty terms and conditions

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The Ripamonti company guarantees the machine and its components are manufactured regularly and free from any fault or manufacturing vice for a period of **twelve months\*** from the purchase date; in this period the warranty covers all machine parts with manufacturing faults.

The warranty is limited to manufacturing faults and does not cover the parts with ordinary wear (tools, tool hold-down, bushes, tools guide, caterpillars, anti-vibration means, plates etc.) or electrical components at all.

For warranty acknowledgement, faulty parts should be returned to the Manufacturer ex its plant and will be made available for the Customer, repaired or replaced, as soon as possible. Shipment and transportation are charged to the Customer.

With this warranty Ripamonti undertakes to repair or replace all those parts that, at its sole discretion, are considered as faulty.

Concerning the commercial origin motors, the warranty is regulated according to terms and conditions of the manufacturer.

Anyway, the replacement of the machine and the extension of warranty terms following repair or parts replacement are excluded.

The warranty does not cover, entailing the termination of any of manufacturer's obligations, breakdowns, faults and malfunctions due to:

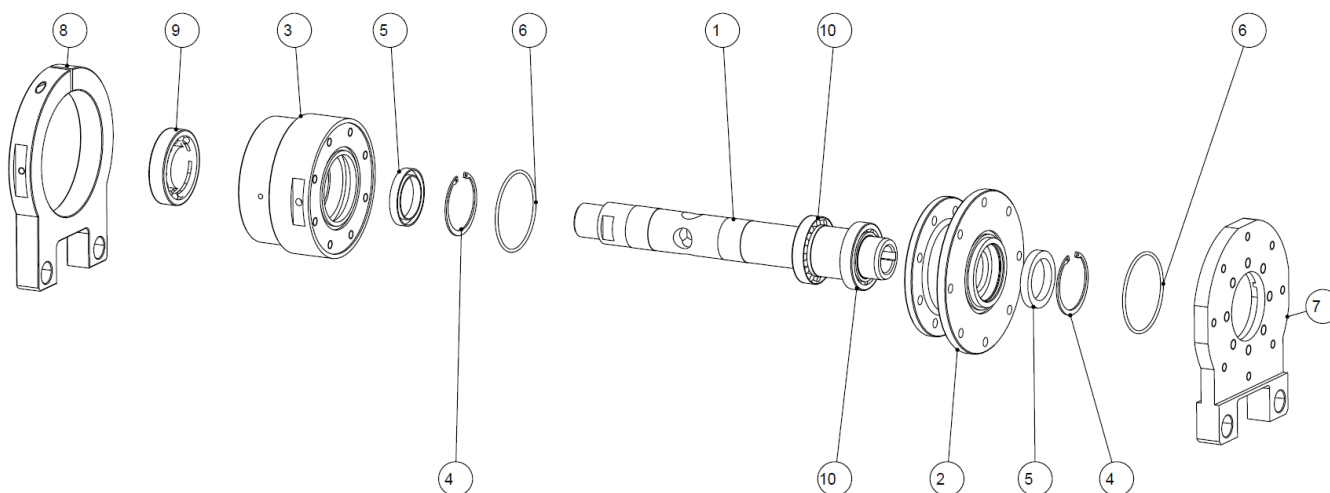
- a** - Wrong positioning or manipulation of the machine.
- b** - Operator's inexperience or inadequacy of aptitude requirements of the, wrong use or overloads.
- c** - Lack of or inadequate maintenance.
- d** - Delay in signaling faults.
- e** - Use other than planned destination.
- f** - Modifications of any kind made without consent and written authorization of the Manufacturer.
- g** - Use of non-original spare parts or execution of repairs without prior notice and/or consent of the Manufacturer.
- h** - Failure to comply with standards and procedures in this manual.

If an intervention by the Manufacturer in the warranty period is later found to be due to a failure not attributable to the Manufacturer and therefore not covered by warranty, all expenses incurred, the cost of replaced parts, and of workforce will be charged to the Customer. In case of machine stops due to failures, even if covered by warranty, the Manufacturer will be entitled to a reasonable time proportionate with respect to the importance of the inconvenience to make necessary repairs and to remove the problems found by the Customer. Anyway, no indemnity will be granted for downtime.

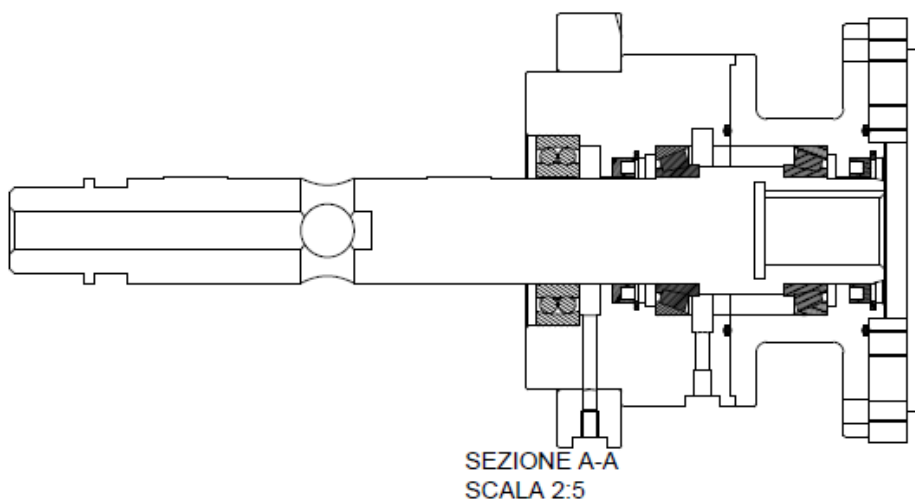
Note:

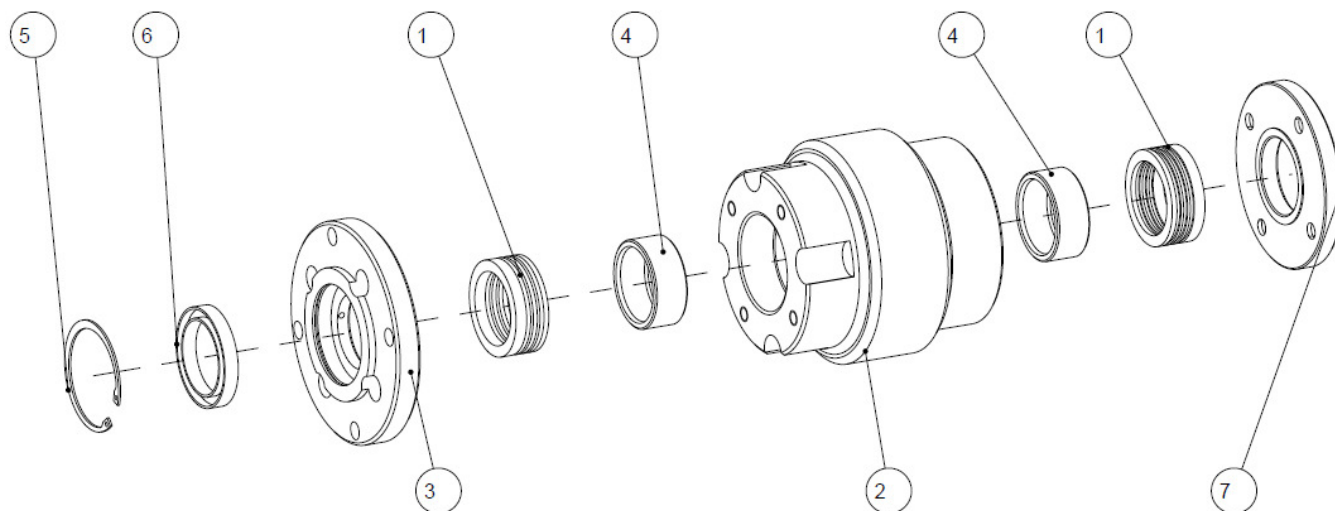
If the machine is used with working times higher than 45 weekly hours, the Manufacturer reserves the right to apply a proportional reduction of the warranty period.

## 10 Spare parts

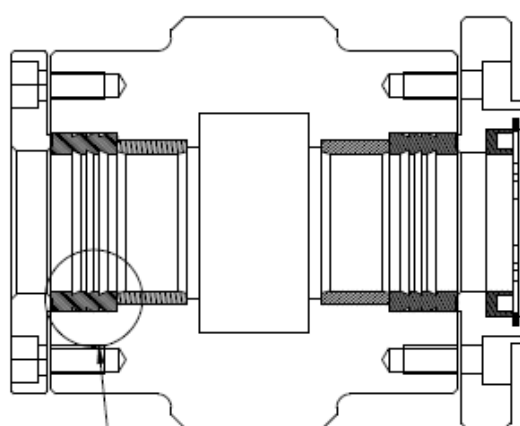


POSIZIONE	CODICE	DESCRIZIONE	QUANTITA'
1	DS0510	Shaft	1
2	120-05-001	Flange	1
3	120-05-003	Flange	1
4	SI_72	Seager	1
5	GU0033	Seal	2
6	GU0026	Oring	2
7	DS0505	Flange	1
8	DS0509	Flange	1
9	BL0291	Bearing	1
10	BL0290	Bearing	2

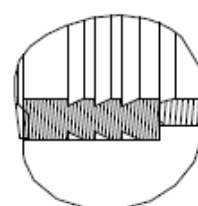




POSIZIONE	CODICE	DESCRIZIONE	QUANTITA'
1	GU0031	Seal	2
2	DS0506	Swivel body	1
3	120-04-005		1
4	DS0508	Bushing	2
5	SI_72	Seager	1
6	GU0033		1
7	120-03-002		1



SEZIONE A-A  
 SCALA 1:2



DETTAGLIO  
 SCALA 1:1



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