

**Model No.:**

PMR-42000-1

**Serial No.:**

5W01-002

## INTRODUCTION

Before using this manual, we recommend you double check that the model number and serial number on your grapple and/or rotation assembly are identical to the numbers listed below.

This parts and maintenance manual was prepared to help you get acquainted with your new Rotobec unit. We strongly recommend that you look through your manual and keep it with your machine for future reference.

It is designed to:

- Provide necessary information for installation, maintenance and instructions for ordering replacement parts.
- Assist in troubleshooting.
- Provide warranty information and registration certificate.

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Your Rotobec unit was built to maintain a high degree of efficiency at all times. In order to preserve this quality, ***it is important to establish a good maintenance program, (see the maintenance section of this manual)***. Ask your dealer or your representative to explain the operating functions and the maintenance procedures.

### PARTS ORDERING INSTRUCTIONS

When ordering parts, mention part name and part number. Always specify your model number, serial number and give specific shipping instructions.

Please note that the accuracy of the illustrations has been set aside in order to group different models on the same page.



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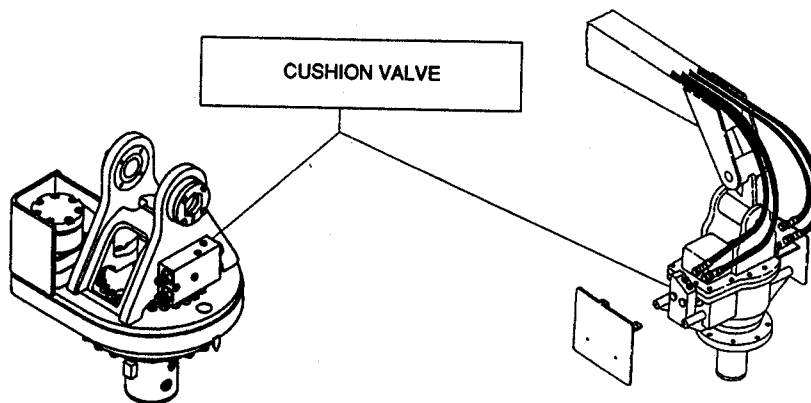
**INSTALLATION INSTRUCTIONS ON THE LOADER  
FOR ROTOBEC ROTATION SYSTEMS  
BUILT SINCE JULY 1986**

9150, 24000, 25000, 26000 and 40000 Models , 42000

To assure proper protection of your rotation system, the hydraulic pressure and the oil flow *from the control valve going towards the cushion valve* should be respectively of 1500 PSI or less (recommended pressure 1200 PSI) and 25 GPM or less for all models except for the 40000 rotation which should be 40 GPM or less.

On the other hand, *from the rotation system going towards the control valve*, the oil flow should be as free as possible.

If your loader fits all of the above requirements, a ROTOBEC rotation system can be installed without any modification. However if this is not the case, it is usually easy to remedy. (See next page for instructions)





## INSTALLATION INSTRUCTIONS ON THE LOADER FOR ROTOBEC ROTATION SYSTEMS

3250, 3500, 5400, 9150,  
24000, 25000, 26000 AND 40000 MODELS  
42000

### Example I: For exceeding pressure:

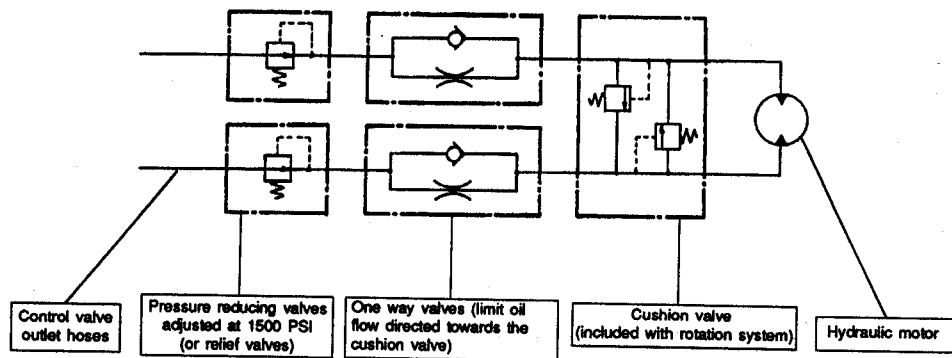
On some loaders, relief valves are provided. It is then fairly easy to reduce the pressure by adjusting them.

On the loaders which are not equipped with such valves, it is possible to install some at the control valve outlets. In most cases, GRESEN WJL valves with 1500 PSI cartridge or a pressure reducing valve will correct the pressure problem.

### Example II: For exceeding oil flow:

The addition of one way valves will reduce the oil flow going from the control valve towards the cushion valve. They should be installed as shown below. We recommend GRESEN LT50 one way valves or equivalent.

- NOTE:** - For models 3250, 3500 and 5400 one way valves are included with the rotation system.  
- For model 9150, 1/8" bored.  
- For model 24000, 5/32" bored.  
- For model 25000, 5/32" bored.  
- For model 26000, 7/32" bored.  
- For model 40000, 1/4" bored.





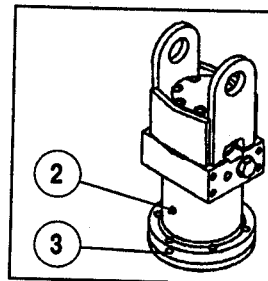
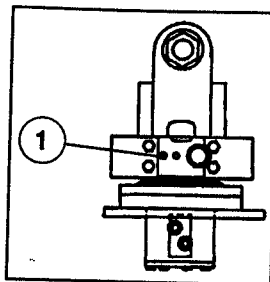
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## MAINTENANCE INSTRUCTIONS FOR ROTOBEC ROTATION SYSTEMS

3250, 3500, 5400, 9150,  
24000, 25000, 26000 AND 40000 MODELS  
42000

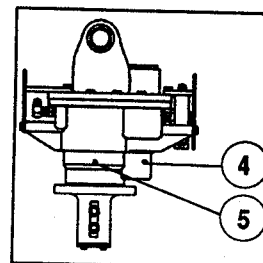
### 3250, 3500 and 5400 Models

One shot of pressure gun every 200 hours of operation through the grease fitting (no. 1) for the 3250 rotation, one shot through the grease fitting (no. 2) for the 3500 rotation and one shot through the grease fitting (no. 3) for the 5400 rotation.



### 9150 Model

**Greasing of the rotation system's bearings:** We recommend one shot of pressure gun in each of the two grease fittings (no.4 and no.5) after every 100 hours of operation.  
**Type of lubricant to use:** Extreme pressure grease Shell Darina E.P.2, Shell Alvania E.P.2 or equivalent.



### 24000, 25000, 26000 and 40000 Models

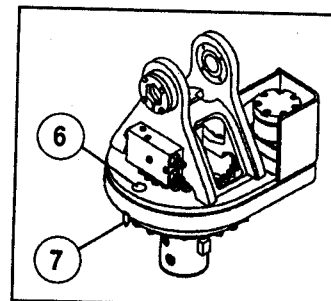
Periodic internal and external greasing of the slewing ring of your rotation system is important.

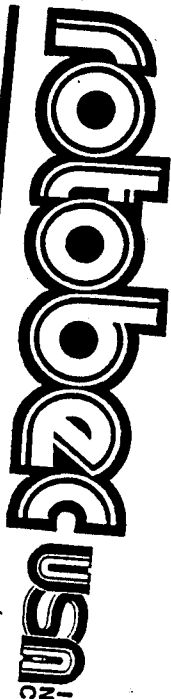
**Internal:** Line up the position pointers (no.7) then apply three shots of a pressure gun in each of the two grease fittings through the opening (no.6) provided for this procedure. Repeat after every 50 hours of operation.

**Type of lubricant:** Extreme pressure grease Shell Darina E.P.2, Shell Alvania E.P.2 or equivalent.

**External:** Spray-grease the ring gear teeth after each 12 hours of operation.

**Type of lubricant:** Use Shell open gear lubricant (spray can) or equivalent.





P. O. Box 665, Littleton, New Hampshire 03561 (603) 444-2103

**ATTENTION DEALER!**

Enclosed in this packet you will find some very important information that we feel will aid both you and your customer at a later date.

**Enclosed:**

Grapple Manual  
Return Goods Policy  
Warranty Instructions

It is very important that you look through the grapple manual prior to installation/hook up. This may very well prevent problems at a later date. More importantly, please fill out the warranty card on the back cover, on behalf of the end user, and return it immediately to avoid warranty denial.



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**MAINTENANCE INSTRUCTIONS  
FOR ALL ROTOBEC GRAPPLE MODELS**

Grapple lubrication chart

We suggest that the following parts be greased with a pressure gun after every 12 hour period of use. (see note)

- Grapple jaws pivots and/or Grapple head pivots
- Cylinder tubing pivot
- Cylinder rod pivot

We recommend extreme pressure grease: SHELL DARINA E.P.2, SHELL ALVANIA E.P.2 or equivalent.

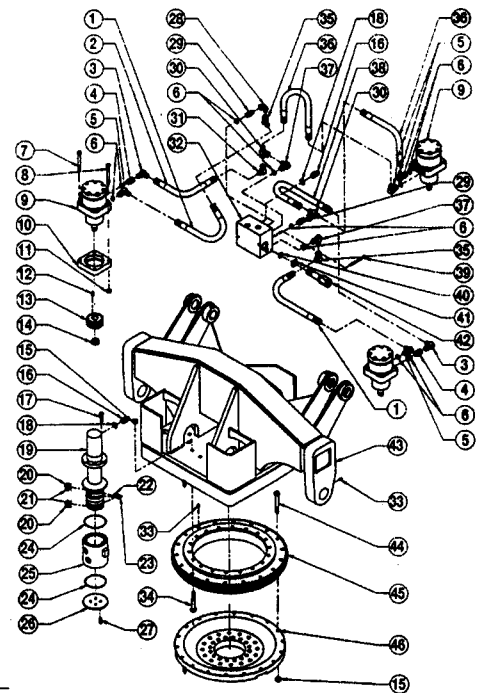
**Note:** If the working environment contains a high percentage of dirt and/or humidity, the lubrication period must be shortened.



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MODEL/QUANTITY

PMR-42000-1



ITEM	A	B	C	D	E	F	NUMBER	DESCRIPTION
1	2						099-8553	HOSE ASSEMBLY
2	1						099-8554	HOSE ASSEMBLY
3	2						030-1290	HYDRAULIC FITTING
4	2						029-1225	HYDRAULIC FITTING
5	4						030-4077	HYDRAULIC FITTING
6	10						041-4740	O-RING
7	4						017-0655	SOCKET HEAD CAP SCREW
8	8						008-0131	CAP SCREW
9	3						064-3949	MOTOR (White)
10	3						510-8574	MOTOR SPACER
11	8						009-0307	NUT
12	3						-----	KEY (INCL. WITH MOTOR)
13	3						503-5301	PINION GEAR
14	3						-----	NUT (INCL. WITH MOTOR)
15	36						009-0309	NUT
16	4						030-1415	HYDRAULIC FITTING
17	4						008-4527	CAP SCREW
18	4						041-3741	O-RING
19	1						712-8854	COLLECTOR CORE
20*	2						044-1963	BACK-UP-RING
21*	2						041-1795	O-RING
22*	3						041-1724	O-RING
23*	3						040-1632	TEFLON BACK-UP-RING
24*	2						044-1971	BACK-UP-RING
25	1						712-8853	COLLECTOR TUBING
26	1						512-5758	END PLATE
27	4						008-0217	CAP SCREW
28	1						030-4032	HYDRAULIC FITTING
29	2						030-1413	HYDRAULIC FITTING
30	2						030-5899	HYDRAULIC FITTING
31	1						030-1403	HYDRAULIC FITTING
32	1						710-8901	CUSHION VALVE HOUSING
33	4						001-3744	GREASE FITTING

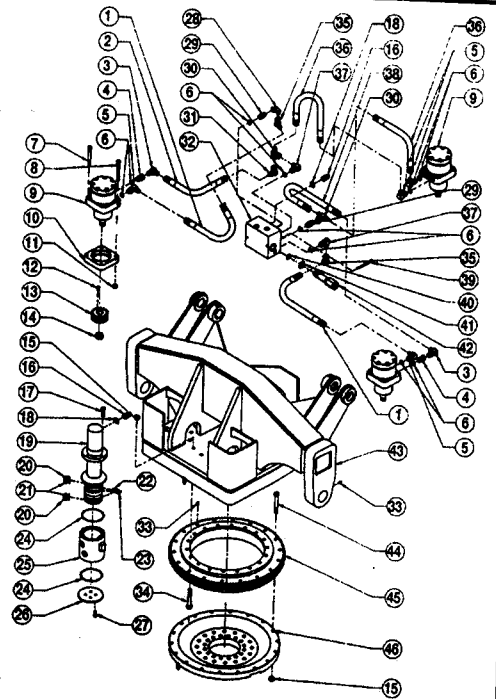
UPDATED 01/95

Office use:

R-20-E (3)

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MODEL/QUANTITY
PMR-42000-1

ITEM	A	B	C	D	E	F	NUMBER	DESCRIPTION
34	2						008-0152	CAP SCREW
35	2						030-3616	HYDRAULIC FITTING
36	2						099-8555	HOSE ASSEMBLY
37	2						030-1428	HYDRAULIC FITTING
38	1						099-8556	HOSE ASSEMBLY
39	2						008-0102	CAP SCREW
40	2						070-3849	O-RING
41	2						070-3856	GASKET
42	2						070-8557	CUSHION VALVE CARTRIDGE
43	1						see note	ROTOR COVER ASSEMBLY
44	34						008-0153	CAP SCREW
45	1						048-2164	SLEWING RING
46	1						510-8849	ROTOR SPACER
19-27	1						712-8852	COMPLETE COLLECTOR ASSEMBLY
	1						097-3008	ROTOR COLLECTOR SEAL KIT (Items 20, 21, 22, 23, 24)

NOTE: To order item 43 (rotor cover assembly) please contact our parts department and give your model and serial number.

UPDATED 01/95

Office use:

R-26-E (4)

PAGE SP

This exploded view diagram illustrates the assembly of a mechanical component, likely a pump or valve. The parts are numbered 1 through 23. The assembly is shown in two main sections, separated by a vertical dashed line. The left section shows the main body and internal components, while the right section shows the external mounting and fastening hardware.

- Part 1:** A small pin or screw at the top.
- Part 2:** A circular plate with four holes.
- Part 3:** A small circular washer or spacer.
- Part 4:** A central shaft or pin passing through the center of the assembly.
- Part 5:** A circular plate with four holes, similar to part 2.
- Part 6:** A small circular washer or spacer.
- Part 7:** A cylindrical component with a flange.
- Part 8:** A circular plate with four holes.
- Part 9:** A circular flange or ring.
- Part 10:** A small pin or screw.
- Part 11:** A small circular washer or spacer.
- Part 12:** A small circular washer or spacer.
- Part 13:** A long, threaded screw or bolt.
- Part 14:** A small circular washer or spacer.
- Part 15:** A small circular washer or spacer.
- Part 16:** A hexagonal mounting bracket or flange.
- Part 17:** A small circular washer or spacer.
- Part 18:** A small circular washer or spacer.
- Part 19:** A small circular washer or spacer.
- Part 20:** A small circular washer or spacer.
- Part 21:** A small circular washer or spacer.
- Part 22:** A small circular washer or spacer.
- Part 23:** A small circular washer or spacer.

064-3949 (WHITE)

**NOTE: PARTS INCLUDED IN THE MOTOR SEAL KIT ARE NOT SOLD SEPARATELY.**