**Product Group: Roller** 

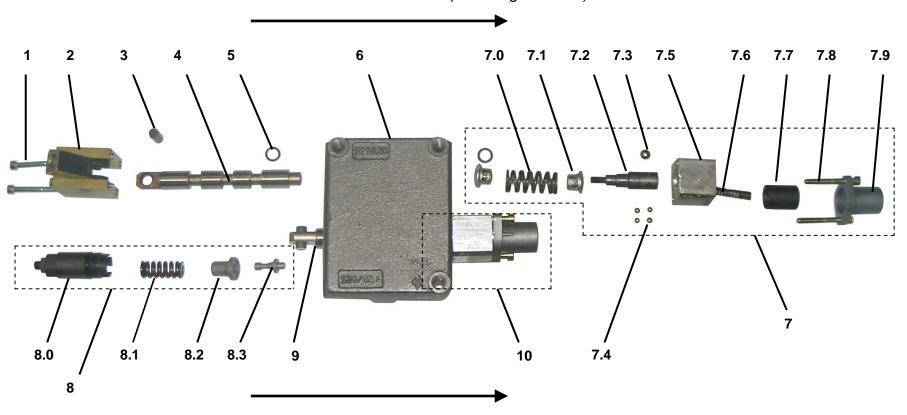
Model: RAMMAX 1504 - P33/24 HHM/HHMR/HHMCR

This bulletin is provided for technical reference and service related updates. If you have any questions, comments or do not wish to receive these e-mails, please reply to this e-mail or call the Service Technical Support Group 800 478-1244.

#### **CONTROL VALVE R&R**

MQ PART# 50932

POSITION OF HIGH SPEED (in driving direction)



POSITION OF VIBRATION (in driving direction)

GASKET SET STEERING - MQ PART# 50946 GASKET SET VIBRATION - MQ PART# 50947



#### **PARTS LIST**

PART	DESCRIPTION	PART NUMBER
1	Hex bolt M5 x 50mm	54558
2	Socket	50954
3	Bolt	50957
4	Distributing regulator High speed	48062
5	O-ring Ø15.88 x 2.62mm	50336500
6	Control valve	48012
7	Spring alignment High speed (set)	50937
7.0	Big spring Ø 20mm	Included in set 50937
7.1	Aluminum bush	Included in set 50937
7.2	Spindle	Included in set 50937
7.3	Big ball Ø 8.5mm	Included in set 50937
7.4	Small ball Ø 4.5mm	Included in set 50937
7.5	Aluminum housing	Included in set 50937
7.6	Small spring Ø 7.5mm	Included in set 50937
7.7	Sleeve High speed	Included in set 50937
7.8	Hex bolt M5 x 45mm	Included in set 50937
7.9	Protection cap	Included in set 50937
8	Pressure relief valve (set)	50935
8.0	Valve seat	Included in set 50935
8.1	Spring	Included in set 50935
8.2	Set piston	Included in set 50935
8.3	Valve cone	Included in set 50935
9	Distributing regulator Vibration	48101
10	Spring alignment set Vibration	50936



# **IMPORTANT!**



Working with hydraulic systems should only be done by service technicians with the adequate skills and experience in hydraulics.

Drain hydraulic oil in a suitable container and dispose it with the filter element for recycling.



DANGER OF SCALDING! When draining hot hydraulic oil there is the danger of scalding!

MULTIQUIP, INC. is not responsible for any damage to equipment or components caused by unqualified technicians.



1

Mounting direction



#### **ATTENTION:**

The distributing regulator must not be damaged or impure at the red marked diameter.

The distributing regulator has to be exchanged if it is damaged.



2



Mounting of distributing regulator:

- Insert the O-rings (Spare parts list, part. 5) on both sides in the control valve, (part. 6).
- Afterwards insert the distributing regulator (Spare parts list, part. 4).



REMARK: The O-rings must not be damaged.

#### **DEMOUNTING OF VALVE CATCH:**

- Before the distributing regulator is dismounted the control valve has to be removed out of the machine.
- Disassembly of connection endplate (sheet) included safety bar.
- Loosen hydraulic hoses of the affected valve and remove the valve.
- Dismount the spring alignment set (part. 7)

3



4





#### **TOOLS NEEDED:**

- 13mm RING SPANER
- PIPE WRENCH





Check all parts of the catch on damages, if necessary exchange them.

#### **MOUNTING OF VAVLE CATCH:**

- Grease the endings of the spring (part. 7.0) and insert it afterwards in the aluminum bush (part. 7.1).
- The grease serves for the fixation of the bushes in the spring.
- Put the complete unit on the spindle (part 7.2) and screw it into the threaded pin of the distributing regulator, (see picture 3).
- Fix the distributing regulator with a pipe wrench and tighten the Spindle, (see picture 4).

5

6

7







#### **MOUNTING OF SPRING ALIGNMENT:**

- Grease the spring (part. 7.6) and insert it afterwards in the spindle. (part. 7.2). Push the spring until the end of the drilling.
- Grease the drillings of the spindle (part. 7.2) and put afterwards the balls (part. 7.4) in the holes.



#### **ATTENTION:**

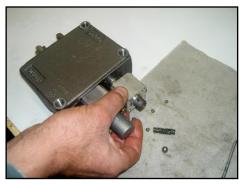
Grease the small holes ( $\emptyset$  5) thoroughly to avoid that the small balls (part. 7.4) will fall out.



8

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#### **IMPORTANT:**

Push the aluminum housing (part 7.1) before inserting the big ball (part. 7.3).

Grease the front hole of the spindle thoroughly.

11



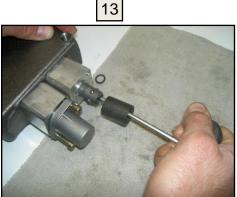
Insert the big ball (part. 7.3) into the hole of the spindle next to the small balls. (part. 7.4)

#### **TOOLS NEEDED:**

Allen key with handle bar S 4-8 Allen key S 4mm







Push the sleeve (part. 7.7), on the spindle. Shortly before that, push the big ball with the aid of, e.g. a thin Allen key with sliding bar behind the small balls. After that, slide on the entire sleeve.



14



15



16



#### **IMPORTANT:**



The function of the control valve is only given, if the big ball is positioned behind the small balls before sliding on the sleeve.

The protective cap (part. 7.9) needs to be tightened with hex bolts M5 x 45 (part. 7.8) and a torque of 6Nm.

Push the bolt (part. 3) in the drilling of the distribution regulator on the high speed side.

#### TOOLS NEEDED:

Allen key S 4mm Ring spanner S19mm





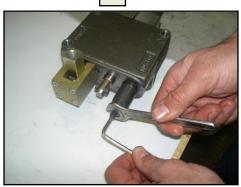
17



18



19



Tighten the socket (part. 2) with the hex bolts M5 x 50, (part. 1).

Screw in the pressure relief valve SD5, (part. 8) in the control valve.

Loosen the lock nut with a ring spanner S 19. Use a socket wrench size 4 to tighten or loosen the threaded pin, (as necessary). Retighten the lock nut.

Through the threaded pin at the pressure relief valve the hydraulic pressure of the lever can be adjusted.

Turn threaded pin right = more pressure - Turn threaded pin left = less pressure