

Shop Manual

PC4000-6

HYDRAULIC MINING SHOVEL SERIAL NUMBERS PC4000-6 8170

This material is proprietary to Komatsu Mining Germany GmbH and is not to be reproduced, used, or disclosed except in accordance with written authorization from Komatsu Mining Germany GmbH.

It is our policy to improve our products whenever it is possible and practical to do so. We reserve the right to make changes or improvements at any time without incurring any obligation to install such changes on products sold previously.

Due to this continuous program of research and development, revisions may be made to this publication. It is recommended that customers contact their distributor for information on the latest revision.

Copyright 2006 Komatsu
Printed in U.S.A.
Komatsu Mining Germany

December 2006

CONTENTS

TABLE OF CONTENTS

- 00 Safety - Foreword**
- 01 Technical DATA (Leaflet)**
- 02 Assembly PROCEDURE (Brochure)**

Section

- 1. Main assembly groups**
- 2. Drive.**
- 3. Hydraulic oil tank.**
- 4. Hydraulic oil cooling.**
- 5. Controlling.**
- 6. Components**
- 7. Main hydraulic pumps and pump regulation.**
- 8. Operating hydraulic.**
- 9. Hydraulic track tensioning system.**
- 10. Hydraulic operated excess ladder**
- 11. Central refilling system**
- 12. Hints for the hydraulic circuit diagram**
- 13. Hints for the electric circuit diagram**
- 14 VHMS / ECS-T / ETM**
- 15 Lubrication Systems**

APPENDIX



- **Each section includes a detailed table of contents.**

SAFETY

SAFETY NOTICE

- **IMPORTANT SAFETY NOTICE**

Proper service and repair is extremely important for safe machine operation. The service and repair techniques recommended by Komatsu and described in this manual are both effective and safe. Some of these techniques require the use of tools specially designed by Komatsu for the specific purpose.

The following Symbols are used in this Manual to designate Instructions of particular Importance.



WARNING - Serious personal injury or extensive property damage can result if the warning instructions are **not** followed.

To prevent injury to workers, this symbol is used to mark safety precautions in this manual. The cautions accompanying these symbols should always be followed carefully. If any dangerous situation arises or may possibly arise, first consider safety, and take the necessary actions to deal with the situation.



CAUTION - Minor personal injury can result or a part, an assembly, or the shovel can be damaged if the caution instructions are **not** followed.



NOTE - Refers to special information

GENERAL PRECAUTIONS

Mistakes in operation are extremely dangerous. Read the OPERATION & MAINTENANCE MANUAL carefully BEFORE operating the machine.

1. Before carrying out any greasing or repairs, read all the precautions given on the decals which are fixed to the machine.
2. When carrying out any operation, always wear safety shoes and helmet. Do not wear loose work clothes, or clothes with buttons missing.
 - Always wear safety glasses when hitting parts with a hammer.
 - Always wear safety glasses when grinding parts with a grinder, etc.

continued

Cont'd:

GENERAL PRECAUTIONS

3. If welding repairs are needed, always have a trained, experienced welder carry out the work. When carrying out welding work, always wear welding gloves, apron, glasses, cap and other clothes suited for welding work.
4. When carrying out any operation with two or more workers, always agree on the operating procedure before starting. Always inform your fellow workers before starting any step of the operation. Before starting work, hang UNDER REPAIR signs on the controls in the operator's compartment.
5. Keep all tools in good condition and learn the correct way to use them.
6. Decide a place in the repair workshop to keep tools and removed parts. Always keep the tools and parts in their correct places. Always keep the work area clean and make sure that there is no dirt or oil on the floor. Smoke only in the areas provided for smoking. Never smoke while working.

PREPARATIONS FOR WORK

7. Before adding oil or making repairs, park the machine on hard, level ground, and block the wheels or tracks to prevent the machine from moving.
8. Before starting work, lower bucket, hammer or any other work equipment to the ground. If this is not possible, insert the safety pin or use blocks to prevent the work equipment from falling. In addition, be sure to lock all the control levers and hang warning signs on them.
9. When disassembling or assembling, support the machine with blocks, jacks or stands before starting work.
10. Remove all mud and oil from the steps or other places used to get on and off the machine. Always use the handrails, ladders or steps when getting on or off the machine. Never jump on or off the machine. If it is impossible to use the handrails, ladders or steps, use a stand to provide safe footing.

PRECAUTIONS DURING WORK

11. When removing the oil filler cap, drain plug or hydraulic pressure measuring plugs, loosen them slowly to prevent the oil from spurting out. Before disconnecting or removing components of the oil, water or air circuits, first remove the pressure completely from the circuit.
12. The water and oil in the circuits are hot when the engine is stopped, so be careful not to get burned.
Wait for the oil and water to cool before carrying out work on the oil or water circuits.

continued

It's a preview. You can download the full file by clicking the link below.

<https://shopservicemanual.com/>

Service Manuals from 2\$