Operation & Maintenance Manual

SEAM009003T

PC300,300LC-6
PC350,350LC-6

HYDRAULIC EXCAVATOR

SERIAL NUMBERS PC300,300LC-33466 and up
PC350,350LC-12284

WARNING

Unsafe use of this machine may cause serious injury or death. Operators and maintenance personnel must read this manual before operating or maintaining this machine. This manual should be kept near the machine for reference and periodically reviewed by all personnel who will come into contact with it.

NOTICE

Komatsu has Operation & Maintenance Manuals written in some other languages. If a foreign language manual is necessary, contact your local distributor for availability.

KOMATSU®

MidWestTech | Komatsu PC300-6, PC300LC-6, PC350-6, PC350LC-6 Hydraulic Excavator... Order the manual at mid-west-tech.com >

5. CONTENTS

1. **Foreword** 0- 1

2. **Safety information** 0- 2

3. **Introduction** 0- 3

4. **Location of plates, table to enter serial No. and distributor** 0- 4

SAFETY

6. **General precautions** 1- 2

7. **Precautions during operation** 1-11
   - 7.1 Before starting engine 1-11
   - 7.2 Operating machine 1-13
   - 7.3 Transportation 1-21
   - 7.4 Battery 1-23
   - 7.5 Towing 1-25
   - 7.6 Bucket with hook 1-26

8. **Precautions for maintenance** 1-27
   - 8.1 Before carrying out maintenance 1-27
   - 8.2 During maintenance 1-32

9. **Position for attaching safety labels** 1-39

OPERATION

10. **General view** 2- 2
    - 10.1 General view of machine 2- 2
    - 10.2 General view of controls and gauges 2- 3

11. **Explanation of components** 2- 4
    - 11.1 Machine monitor 2- 4
    - 11.2 Switches 2-15
    - 11.3 Control levers, pedals 2-19
    - 11.4 Ceiling window 2-24
    - 11.5 Front window 2-25
    - 11.6 Door lock 2-27
    - 11.7 Cap, cover with lock 2-28
    - 11.8 Hot and cool box 2-29
    - 11.9 Luggage box 2-29
    - 11.10 Ashtray 2-29
    - 11.11 Handling air conditioner 2-30
    - 11.12 Car radio 2-33
    - 11.13 Electric power take-out adapter 2-37
    - 11.14 Fuse 2-38
    - 11.15 Fusible link 2-39
    - 11.16 Controllers 2-39
    - 11.17 Tool box 2-39
    - 11.18 Greas gun holder 2-39
    - 11.19 Handling accumulator 2-40

MidWestTech | Komatsu PC300-6, PC300LC-6, PC350-6, PC350LC-6 Hydraulic Excav... Order the manual at mid-west-tech.com >

12. Operation 2-41
12.1 Check before starting engine 2-41
12.2 Starting engine 2-52
12.3 Operations and checks after starting engine 2-55
12.4 Moving machine off 2-61
12.5 Steering machine 2-64
12.6 Stopping machine 2-66
12.7 Swinging 2-67
12.8 Operation of work equipment 2-68
12.9 Handling active mode 2-69
12.10 Handling working mode 2-70
12.11 Prohibitions for operation 2-72
12.12 Precautions for operation 2-74
12.13 Precautions when traveling up or down hills 2-75
12.14 How to escape from mud 2-77
12.15 Work possible using hydraulic excavator 2-78
12.16 Replacement and inversion of bucket 2-79
12.17 Parking machine 2-81
12.18 Check after finishing work 2-82
12.19 Stopping engine 2-83
12.20 Check after stopping engine 2-84
12.21 Locking 2-84

13. Transportation 2-85
13.1 Transportation procedure 2-85
13.2 Loading, unloading work with trailers 2-86
13.3 Method of lifting machine 2-92

14. Cold weather operation 2-93
14.1 Precautions for low temperature 2-93
14.2 Precautions after completion of work 2-95
14.3 After cold weather 2-95

15. Long-term storage 2-96
15.1 Before storage 2-96
15.2 During storage 2-97
15.3 After storage 2-97
15.4 Starting machine after long-term storage 2-97

16. Troubleshooting 2-98
16.1 Phenomena that are not failures 2-98
16.2 Method of towing machine 2-98
16.3 Using method for light-weight towing hole 2-98
16.4 Precautions on particular jobsites 2-99
16.5 If battery is discharged 2-99
16.6 Other trouble 2-104

MidWestTech | Komatsu PC300-6, PC300LC-6, PC350-6, PC350LC-6 Hydraulic Excav... Order the manual at mid-west-tech.com >

MAINTENANCE

17. Guides to maintenance 3- 2

18. Outlines of service 3- 5
18.1 Outline of oil, fuel, coolant 3- 5
18.2 Outline of electric system 3- 8
18.3 Outline of hydraulic system 3- 9

19. Wear parts list 3-10

20. Use of fuel, coolant and lubricants according to ambient temperature 3-12

21. Standard tightening torques for bolts and nuts 3-16
21.1 Introduction of necessary tools 3-16
21.2 Torque list 3-17

22. Periodic replacement of safety critical parts 3-18

23. Maintenance schedule chart 3-20
23.1 Maintenance schedule chart 3-20
23.2 Maintenance interval when using hydraulic breaker 3-22

24. Service Procedure 3-23
24.1 Initial 250 hours service 3-23
24.2 When required 3-24
24.3 Check before starting 3-42
24.4 Every 50 hours service 3-46
24.5 Every 100 hours service 3-48
24.6 Every 250 hours service 3-50
24.7 Every 500 hours service 3-57
24.8 Every 1000 hours service 3-65
24.9 Every 2000 hours service 3-68
24.10 Every 4000 hours service 3-74
24.11 Every 5000 hours service 3-75

SPECIFICATIONS

25. Specifications 4- 2

MidWestTech | Komatsu PC300-6, PC300LC-6, PC350-6, PC350LC-6 Hydraulic Excav... Order the manual at mid-west-tech.com >

24.7 EVERY 500 HOURS SERVICE

Maintenance for every 50, 100 and 250 hours service should be carried out at the same time.

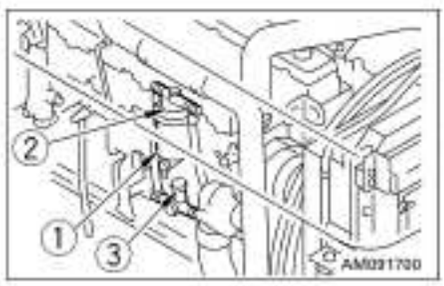
24.7.1 REPLACE FUEL FILTER CARTRIDGE

⚠WARNING

- **Engine is at high temperature immediately after the machine has been operated. Wait for engine to cool down before replacing the filter.**
- **Do not bring fire or sparks near the fuel.**

Prepare a filter wrench and a container to catch the fuel.

1. Set the container to catch the fuel under the filter cartridge.
2. Using a filter wrench, turn filter cartridge ① counterclockwise to remove it.
3. Clean the filter holder, fill a new filter cartridge with clean fuel, coat the packing surface with engine oil, then install it to the filter holder.
4. When installing, tighten until the packing surface contacts the seal surface of the filter holder, then tighten it up 1/2 to 3/4 of a turn.
   If the filter cartridge is tightened too far, the packing will be damaged and this will lead to leakage of fuel. If the filter cartridge is too loose, fuel will also leak from the packing, so always tighten to the correct amount.
5. After replacing the fuel filter cartridge, bleed the air from the system.
   Bleed the air as follows.
6. Fill the fuel tank with fuel (to the position where the float is at the maximum position).
7. After replacing filter cartridge ①, loosen air bleed plug ②.
8. Loosen the knob of feed pump ③, operate it up and down, and continue until no more bubbles come out with the fuel from air bleed plug ②.
9. Tighten air bleed plug ②.
   Use a genuine Komatsu filter cartridge.
   After replacing the filter cartridge, start the engine, and check that there is no leakage of fuel from the filter seal surface.



MidWestTech | Komatsu PC300-6, PC300LC-6, PC350-6, PC350LC-6 Hydraulic Excav... Order the manual at mid-west-tech.com >

PC350-6 AVANCE
PC350LC-6 AVANCE

		PC350-6 AVANCE	PC350LC-6 AVANCE
WEIGHT			
• Operating weight (without operator)		32300 kg (71220 lb)	33400 kg (73650 lb)
PERFORMANCE			
• Bucket capacity (standard bucket) SAE/CECE		1.4 m³ (1.81 cu.yd)/1.2 m³	
• Width of opening	(Standard bucket)	1340 mm (52.8 in)	
	(With side cutter)	1445 mm (56.9 in)	
• Travel speed	Low speed	3.2 km/h (2.0 MPH)	
	Middle speed	4.5 km/h (2.8 MPH)	
	High speeed	5.5 km/h (3.4 MPH)	
• Swing speed		10.0 rpm	
TRACK SHOE			
• Triple grouser shoe (standard)		600 mm (23.6 in) width	600 mm (23.6 in) width
ENGINE			
• Model		Komatsu SAA6D108E-2 diesel engine	
• Flywheel horsepower		173 kW (232 HP)/2050 rpm	
• Starting motor		24 V 7.5 kW	
• Alternator		24 V 33 A	
• Battery		12 V 170 Ah x 2 pieces	

MidWestTech | Komatsu PC300-6, PC300LC-6, PC350-6, PC350LC-6 Hydraulic Excav... Order the manual at mid-west-tech.com >

3. CONTROL PEDAL



This is used to operate the attachment.

The pedal can be depressed to the front, neutral, and rear to operate the attachment as follows.

Hydraulic breaker

Front of pedal ①: Actuate

Pedal neutral Ⓝ : Stop

Rear of pedal ② : Stop

For use of the pedals with other attachments, consult with the attachment manufacturer at the time of installation to determine the operation of the attachment and pedals.

4. LOCK PIN



This locks the control pedal.

Position ①: Lock

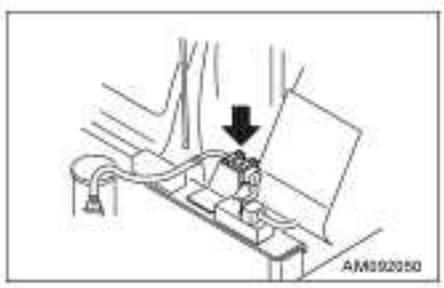
Position ②: Pedal half-stroke position (oil flow 50%)

Position ③: Pedal full-stroke position (oil flow 100%)

- When using the breaker, select the breaker mode on the monitor, and use position ③.
- The oil flow at position ② is smaller, so select it when using other attachments.

Keep the lock pin in the LOCK position except when using the attachment.

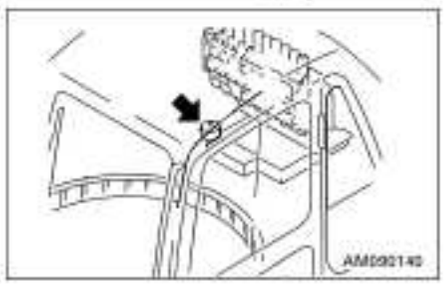
5. ADDITIONAL FILTER FOR BREAKER



This is used to prevent deterioration of the hydraulic oil when using the breaker.

The oil flows through this only when the selector valve is at the breaker position.

6. ACCUMULATOR (FOR CONTROL CIRCUIT)



⚠ WARNING

The accumulator is charged with high-pressure nitrogen gas, and it is extremely dangerous if it is handled mistakenly. For details of handling, see "11.19 HANDLING ACCUMULATOR".

This is installed to release any remaining pressure in the attachment circuit after the engine is stopped. Normally, do not touch it.

MidWestTech | Komatsu PC300-6, PC300LC-6, PC350-6, PC350LC-6 Hydraulic Excav... Order the manual at mid-west-tech.com >