

Operation & Maintenance Manual

PC40-6


HYDRAULIC EXCAVATOR

SERIAL NUMBERS PC40-10001 and up



FOREWORD

This manual describes procedures for operation, handling, lubrication, maintenance, checking, and adjustment. It will help the operator or anyone realize peak performance through effective, economical and safe machine operation and maintenance.

- Please read this manual carefully **BEFORE** operating the machine.
- Please continue studying this manual until proper operation is completely reinforced into personal habit.
- This manual describes the basic techniques. Skill is performed as the operator or anyone get the correct knowledge and performance of the machine.
- Operation, inspection, and maintenance should be carefully carried out, and the safety must be given the first priority. Safety precautions are indicated with  marks and technical precautions with ★ marks in this manual. The safety information contained in this manual is intended only to supplement safety codes, insurance requirements, local laws, rules and regulations.
- Some photographs and illustration pictures are different from your machine as technical improvement is continuously reflected on it. Revision to up-to-date manual's content is performed in later editions.
- This operation & maintenance manual may contain attachments and optional equipment that are not available in your area. Please consult your local Komatsu distributor for those items you may require. Materials and specifications are subject to change without notice.

BREAKING IN YOUR NEW MACHINE

Each machine is carefully adjusted and tested before shipment. However, a new machine requires careful operation during the first 100 hours to break in the various parts.

If a machine is subjected to unreasonably hard use at the initial operation stage, the potential of performance will prematurely deteriorate and the service life will be reduced. A new machine must be operated with care, particularly with regard to the following items.

- After starting, let the engine idle for 5 minutes to allow proper engine warm-up prior to actual operation.
- Avoid operation with heavy loads or at high speeds.
- Sudden starting or acceleration, unnecessarily abrupt braking and sharp turning should be avoided.
- At the first 50 hours of operation, the machine should be maintained in the following manner in addition to usual 50 hours service:
 - 1) Replacement of hydraulic oil filter element
 - 2) Cleaning of hydraulic tank strainer
- At the first 250 hours of operation, the machine should be maintained in the following manner in addition to usual 250 hours service:
 - 1) Checking and adjustment of engine valve clearance
 - 2) Changing of final drive case and swing machinery case oil
- ★ When replacing oil filter elements (cartridges), check their interiors for dirt and dust. If heavily collected, check for possible cause before starting operation.
- ★ Hours of operation are indicated by the service meter.

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GENERAL LOCATIONS AND SPECIFICATIONS

- | | |
|--------------------|------------------|
| 1. Bucket | 6. Boom cylinder |
| 2. Bucket cylinder | 7. Sprocket |
| 3. Arm | 8. Track frame |
| 4. Arm cylinder | 9. Idler |
| 5. Boom | 10. Track shoe |
| | 11. Front blade |

Operating Weight

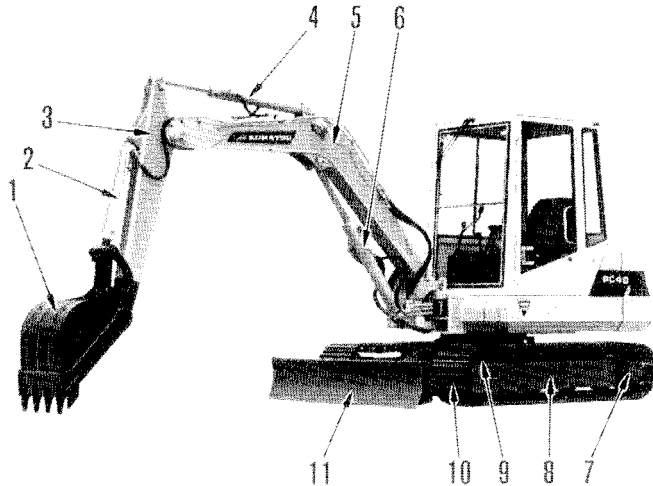
With canopy	4085 kg
With cab	4235 kg

Performance

Bucket capacity (SAE)	0.15 m ³
(CECE)	0.14 m ³
Travel speed	High 3.6 km/h
	Low 2.1 km/h
Swing speed	10.3 rpm

Engine

Model	Komatsu 3D95S-W-1 Diesel Engine
Flywheel horsepower/Rated rpm	38.5 HP/2600 rpm



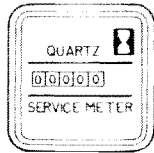
With cab

NOTE: Specifications are subject to change without notice.

INSTRUMENTS AND CONTROLS

METERS AND LAMPS

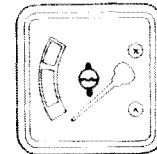
1. SERVICE METER



This meter shows the total operation hours of the machine. The service meter advances while the engine is running — even if the machine is not traveling.

Refer to the section "SERVICE METER".

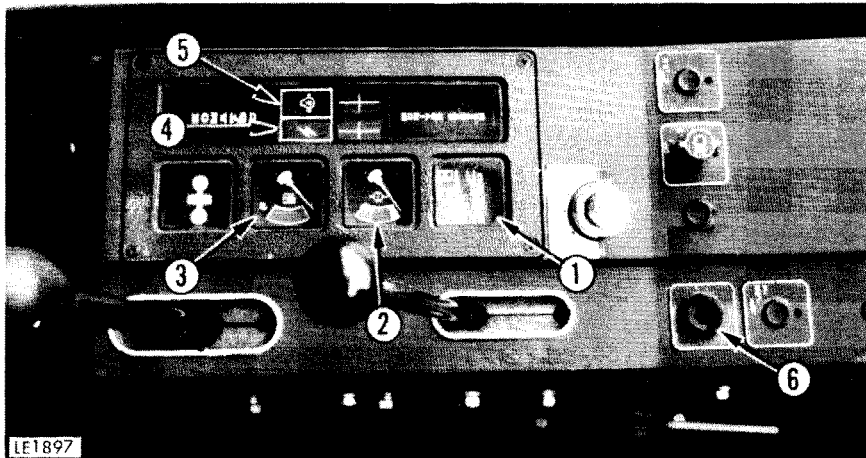
2. ENGINE WATER TEMPERATURE GAUGE



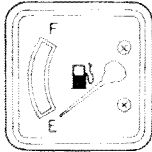
When indicator is in the green range during operation, water temperature is normal.

After engine start-up, warm up the engine until indicator moves into green range.

If indicator moves from green into red range during operation, run the engine at low idling speed until indicator returns green range.



INSTRUMENTS AND CONTROLS

3. FUEL GAUGE

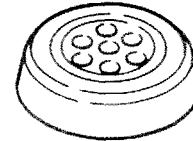
This gauge indicates the amount of fuel in the fuel tank.

4. CHARGING LAMP

Normally this lamp comes on when the starting switch is turned to the ON position and gradually goes out as the engine speed increases.

5. ENGINE OIL PRESSURE WARNING LAMP

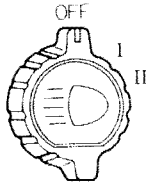
Normally this lamp is out during operation. If it comes on during operation, the oil pressure has dropped. In such a case, immediately stop the engine and check the cause of the trouble.

6. HEATER SIGNAL

This signal is heated red 15 to 20 seconds after the starting switch key is turned to HEAT position, and indicating the glow plug is heated.

SWITCHES

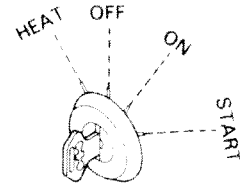
1. LAMP SWITCH



With lamp switch in position I, panel lamps will light.

With lamp switch in position II, head lamp will also light.

2. STARTING SWITCH



OFF

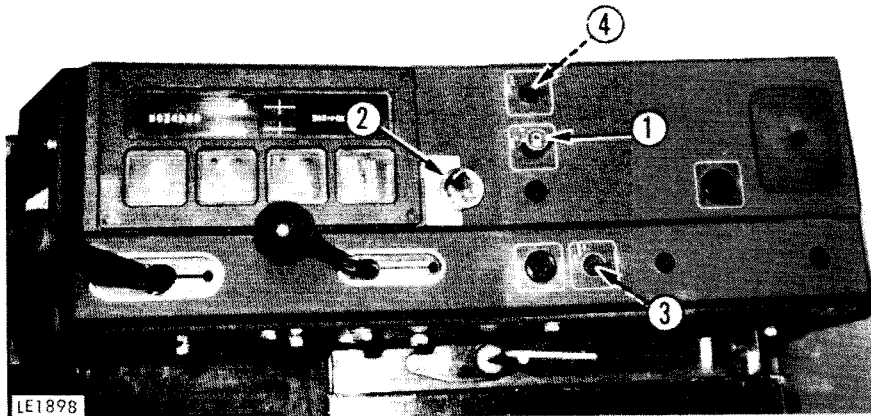
Key insertion-withdrawal position. None of the electrical circuits activate.

ON

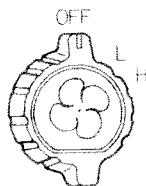
Charging and lamp circuits activate. Keep key at ON after starting.

START

At this key position, the starting motor will crank the engine. Release key immediately after starting.



INSTRUMENTS AND CONTROLS

3. CAB HEATER SWITCH**HEAT**

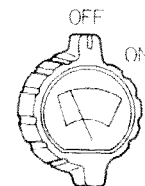
Use this position when starting in cold weather.

Release the key to allow it to return automatically to OFF and then, without delay, turn it to START.

This switch is used to heat the operator's cab. The flow of warm air can be adjusted in 2 steps:

H: Strong
L: Weak

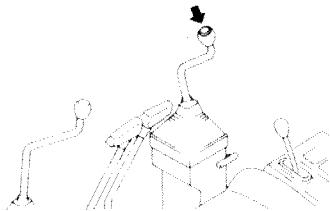
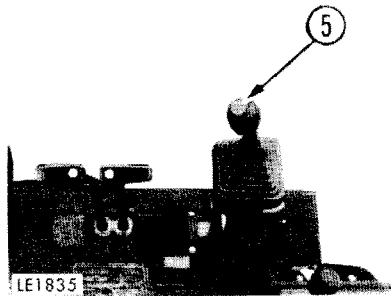
- ★ The cab is heated by means of warm water from the engine. Accordingly, heating can not take place while the engine cooling water is warming up.

4. WIPER SWITCH

This switch is used to turn on the front windshield wiper.

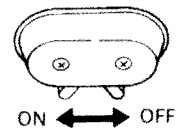
ON: For operation

5. HORN SWITCH



When this switch is pressed, the horn will sound.

6. ROOM LAMP SWITCH



When this switch is moved to ON position, room lamp will light.