TEN00371-03

Operation & Maintenance Manual

DUMP TRUCK **HD785-7**

SERIAL NUMBERS 8085 and up

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 HD785-7 Dump Truck Operation & Maintenance Manual | Publicat... Order the manual at mid-west-tech.com >

FUSES ---- 3- 49
CAR RADIO ---- 3- 53
CAR STEREO ---- 3- 59
AIR CONDITIONER ---- 3- 68
HANDLING MACHINES EQUIPPED WITH VHMS ---- 3- 73
OPERATION ---- 3- 75
CHECK BEFORE STARTING ENGINE ---- 3- 75
STARTING ENGINE ---- 3- 98
BREAKING-IN THE MACHINE ---- 3-100
OPERATIONS, CHECKS AFTER STARTING ENGINE ---- 3-100
STOPPING ENGINE ---- 3-101
CHECKS AFTER STOPPING ENGINE ---- 3-101
MOVING MACHINE OFF (FORWARD, REVERSE), STOPPING ---- 3-102
SHIFTING GEAR ---- 3-107
TRAVELING DOWNHILL ---- 3-109
STEERING THE MACHINE ---- 3-123
LOADING OPERATIONS ---- 3-123
DUMP OPERATIONS ---- 3-124
PRECAUTIONS FOR OPERATION ---- 3-126
PARKING MACHINE ---- 3-127
CHECKS AFTER COMPLETION OF WORK ---- 3-128
LOCKING ---- 3-128
HANDLING TIRES ---- 3-129
DETERMINING AND MAINTAINING TRAVEL ROAD ---- 3-132
DETERMINING TRAVEL ROAD ---- 3-132
MAINTAINING TRAVEL ROAD ---- 3-132
TRANSPORTATION ---- 3-133
PRECAUTIONS WHEN TRANSPORTING ---- 3-133
STEPS FOR TRANSPORTATION ---- 3-133
METHOD OF SECURING MACHINE ---- 3-133
METHOD OF LIFTING MACHINE ---- 3-135
COLD WEATHER OPERATION ---- 3-138
PRECAUTIONS FOR LOW TEMPERATURE ---- 3-138
PRECAUTIONS AFTER COMPLETION OF WORK ---- 3-139
AFTER COLD WEATHER ---- 3-140
LONG-TERM STORAGE ---- 3-141
BEFORE STORAGE ---- 3-141
DURING STORAGE ---- 3-141
AFTER STORAGE ---- 3-141
PRECAUTIONS BEFORE TRAVELING AFTER LONG-TERM STORAGE ---- 3-141
TROUBLESHOOTING ---- 3-142
AFTER RUNNING OUT OF FUEL ---- 3-142
IF TRANSMISSION HAS TROUBLE ---- 3-143
METHOD OF LOWERING DUMP BODY IN EMERGENCY ---- 3-143
METHOD OF TOWING MACHINE ---- 3-144
IF BATTERY IS DISCHARGED ---- 3-148
OTHER TROUBLE ---- 3-152
MAINTENANCE ---- 4- 1
GUIDES TO MAINTENANCE ---- 4- 2
OUTLINE OF SERVICE ---- 4- 6

MidWestTech | Komatsu HD785-7 Dump Truck Operation & Maintenance Manual | Pu... Order the manual at mid-west-tech.com >

IF ACCELERATOR PEDAL HAS FAILED

In addition to the potentiometer detecting the pedal depression depth, the switch (check switch) is installed on the accelerator pedal assembly in order to detect whether the accelerator pedal is depressed or not.

If the pedal depression depth is not detected correctly due to a failure of the accelerator pedal or incorrect electric wiring, the engine controller controls the engine speed responding to the signal from this check switch. The engine runs at 1500 rpm when the accelerator pedal is depressed, while the engine runs at low idle when the pedal is released. The engine speed varies depending on the load.

After using the accelerator pedal to move the machine to a safe place, check the service code and contact your Komatsu distributor.

There are two methods when operating the accelerator pedal: either release the pedal (check switch is OFF, low idle), or depress the pedal fully (1500 rpm).

If the accelerator pedal is held at an intermediate position, the system may not be able to judge if the accelerator pedal is being operated or not.

REMARK

If the engine controller cannot perform normal reception of the signal of the accelerator pedal depth, the central warning lamp flashes and simultaneously the alarm buzzer sounds and user code 02 appears.

MidWestTech | Komatsu HD785-7 Dump Truck Operation & Maintenance Manual | Pu... Order the manual at mid-west-tech.com >

EVERY 1000 HOURS SERVICE

Carry out maintenance for EVERY 250 HOURS and EVERY 500 HOURS SERVICE at the same time.

REPLACE FUEL MAIN FILTER CARTRIDGE

⚠ WARNING

- **After the engine has been operated, all parts are at high temperature, so do not replace the filter immediately. Wait for all parts to cool down before starting the operation.**
- **High pressure is generated inside the engine fuel piping system when the engine is running.**
  When replacing the filter, wait for at least 30 seconds after stopping the engine to let the internal pressure go down before replacing the filter.
- **Do not bring any fire or flame close.**

NOTICE

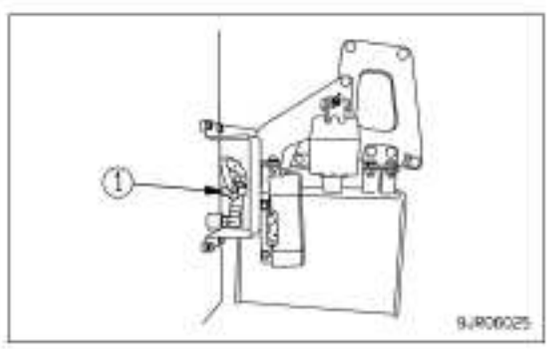
- **Genuine Komatsu fuel filter cartridges use a special filter that has highly efficient filtering ability. When replacing the filter cartridge, always use a genuine Komatsu part.**
- **The common rail fuel injection system used on this machine consists of more precise parts than the conventional injection pump and nozzle.**
  If any part other than a genuine Komatsu filter cartridge is used, dust or dirt may get in and cause problems with the injection system. Always avoid using substitute parts.
- **When carrying out inspection or maintenance of the fuel system, pay more attention than normal to the entry of dirt. If dirt is stuck to any part, use fuel to wash it off completely.**

STANDARD SPECIFICATION

There is one fuel main filter cartridge each on the left and right sides, so follow the same procedure to replace both the left and right cartridges.
Bleed the air from the fuel line in the same way on both the left and right sides.

- Container to catch the oil
- Prepare a filter wrench

1. Close fuel valve (1) at the side face of the fuel tank.
2. Set the container to catch the fuel under the filter cartridge.



MidWestTech | Komatsu HD785-7 Dump Truck Operation & Maintenance Manual | Pu... Order the manual at mid-west-tech.com >

HANDLING ENGINE, TRANSMISSION, HYDRAULIC TANK AND BRAKE SUB-TANK HEATER

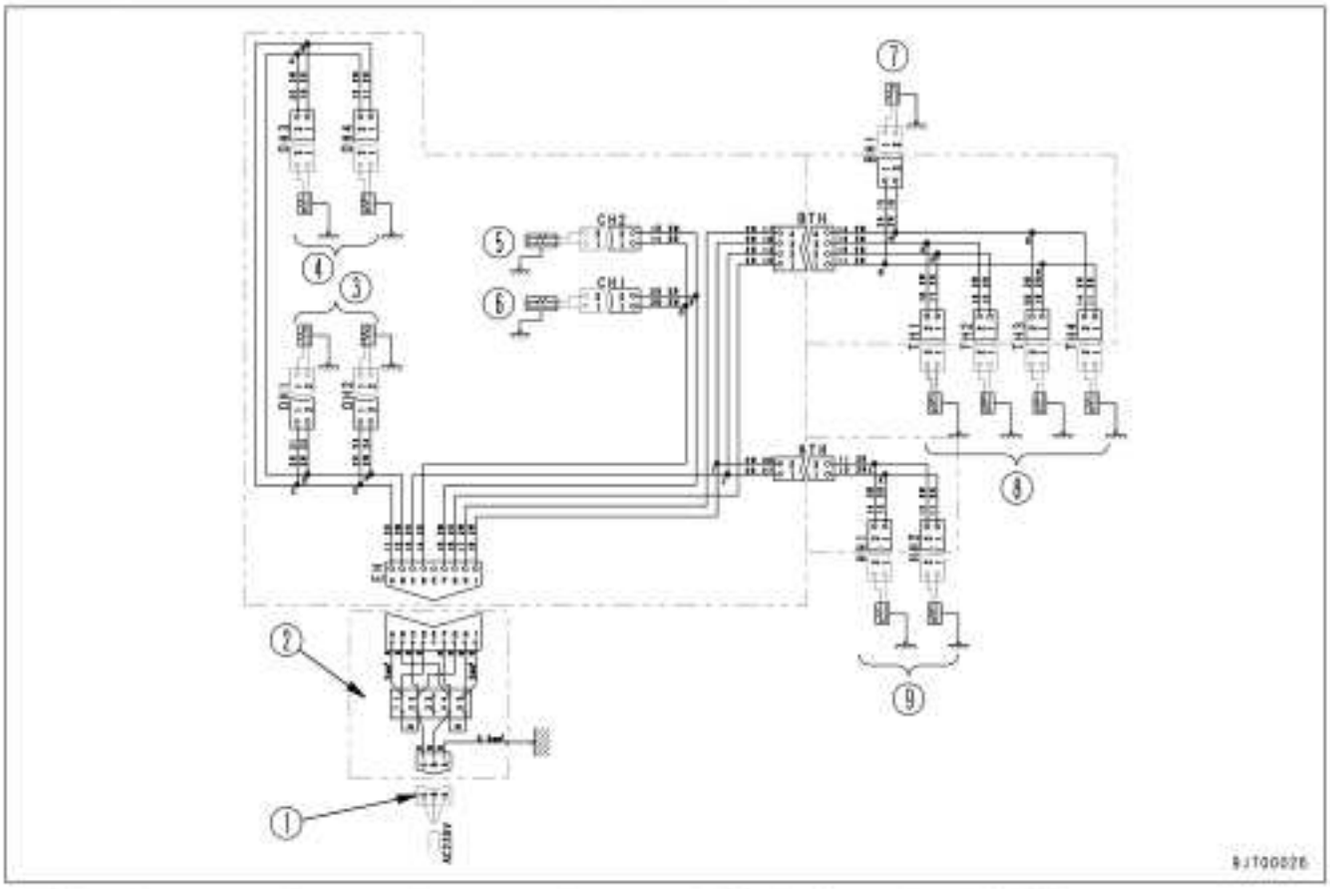
(-40 degrees C specification)

- If the ambient temperature is below -40°C (-40°F), even if electricity is passed through the electric heater, it may be difficult to start the engine again depending on how much time has passed since the engine was stopped. Before starting the engine, use the hot air heater to preheat the engine and engine room.
- If the electric heater has not been used and the temperature of all parts of the machine has dropped to the ambient temperature, use the electric heater and hot air heater to warm up the engine, engine room, transmission oil pan, hydraulic tank and brake sub-tank before starting the engine. The electric heater is designed only to maintain the temperature; using the electric heater alone will require an extremely long time to heat up the engine.
- Even if the electric heater has been used to maintain the temperature, do not try to start the engine if the temperature of the oil is below -20°C (-4°F).
- If the ambient temperature is above -20°C (-4°F), do not use the engine heater. It will cause premature deterioration of the oil.

NOTICE

When starting the engine, turn off the supply of electricity to the electric heater.

- **If the engine is started when the heater is still at high temperature, the strength of the heater generating wire is low, and there is danger that it may break.**
- **If the engine is started when the electricity is still flowing, the oil may overheat.**



(1) Female connector for external power supply
(2) Terminal box (2.7kW)
(3) Engine oil pan heater (left) (0.6kW)
(4) Engine oil pan heater (right) (0.6kW)
(5) Coolant heater (right) (1.5kW)
(6) Coolant heater (rear) (1.5kW)
(7) Brake sub-tank heater (0.6kW)
(8) Transmission oil pan heater (0.6kW)
(9) Hydraulic tank heater (0.6kW)

MidWestTech | Komatsu HD785-7 Dump Truck Operation & Maintenance Manual | Pu... Order the manual at mid-west-tech.com >