TEN00491-04

Operation & Maintenance Manual

WHEEL LOADER **WA150-6**

SERIAL NUMBERS 80051 and up

ecot3

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.

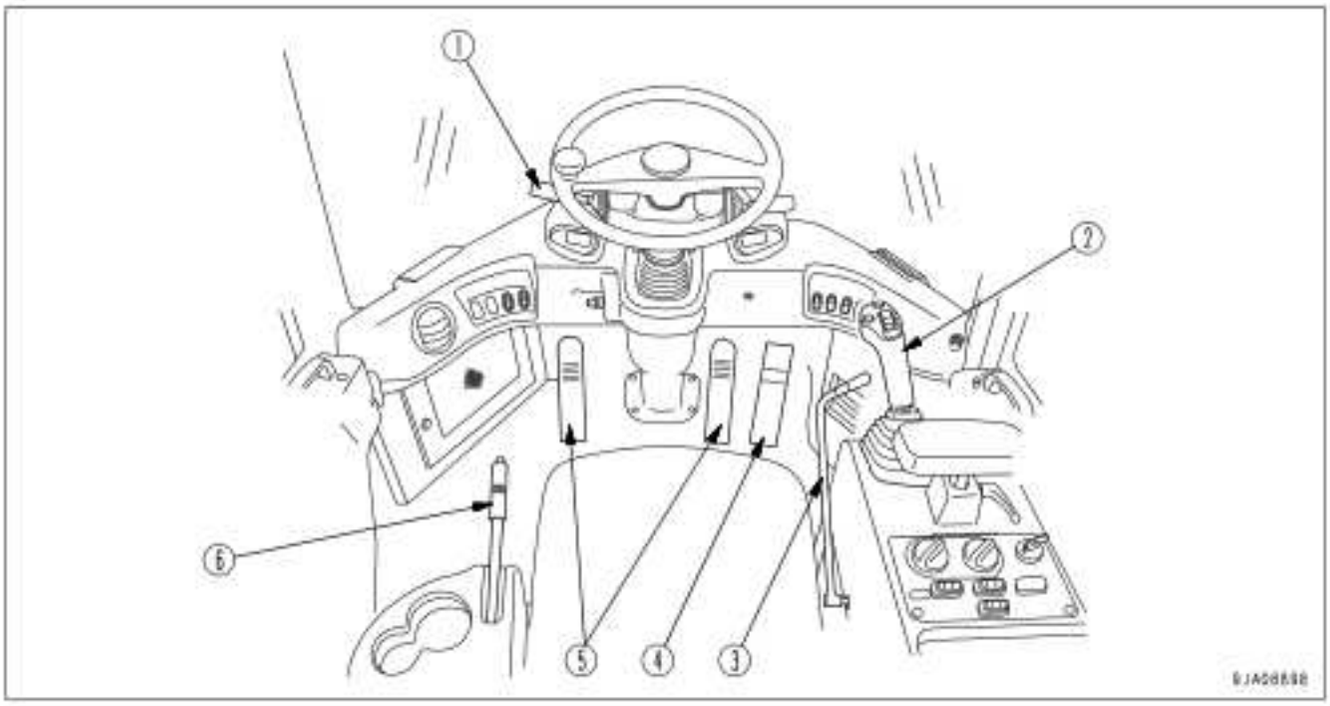
KOMATSU®

MidWestTech | Komatsu WA150-6, WA1450-6 Wheel Loader Operation & Maintenance Man... Order the manual at mid-west-tech.com >

GREASE PUMP ---- 3- 62
OPENING, CLOSING CAB DOORS, WINDOWS ---- 3- 63
FUSE ---- 3- 67
SLOW BLOW FUSE ---- 3- 69
POWER OUTLET ---- 3- 70
STORAGE BOX ---- 3- 70
AM/FM RADIO-CASSETTE STEREO ---- 3- 71
AIR CONDITIONER ---- 3- 79
HANDLING CAB WIPER ---- 3- 86
OPERATION ---- 3- 87
CHECK BEFORE STARTING ENGINE, ADJUST ---- 3- 87
STARTING ENGINE ---- 3-106
CHECKS AFTER STARTING ENGINE ---- 3-110
OPERATIONS AND CHECKS AFTER STARTING ENGINE ---- 3-111
STOPPING ENGINE ---- 3-114
MOVING THE MACHINE (DIRECTIONAL, SPEED), STOPPING THE MACHINE ---- 3-115
TURNING ---- 3-121
OPERATION OF WORK EQUIPMENT ---- 3-123
WORK POSSIBLE USING WHEEL LOADER ---- 3-125
PRECAUTIONS FOR OPERATION ---- 3-131
ADJUSTING WORK EQUIPMENT POSTURE ---- 3-133
PARKING MACHINE ---- 3-135
CHECKS AFTER COMPLETION OF OPERATION ---- 3-137
LOCKING ---- 3-137
HANDLING THE TIRES ---- 3-138
TRANSPORTATION ---- 3-140
TRANSPORTATION PROCEDURE ---- 3-140
LOADING, UNLOADING WORK WITH TRAILERS ---- 3-140
LIFTING MACHINE ---- 3-144
COLD WEATHER OPERATION ---- 3-146
PRECAUTIONS FOR LOW TEMPERATURE ---- 3-146
PRECAUTIONS AFTER COMPLETION OF WORK ---- 3-147
AFTER COLD WEATHER ---- 3-147
LONG-TERM STORAGE ---- 3-148
BEFORE STORAGE ---- 3-148
DURING STORAGE ---- 3-148
AFTER STORAGE ---- 3-148
TROUBLESHOOTING ---- 3-149
WHEN MACHINE RUNS OUT OF FUEL ---- 3-149
METHOD OF TOWING MACHINE ---- 3-149
IF BATTERY IS DISCHARGED ---- 3-151
OTHER TROUBLE ---- 3-154
MAINTENANCE ---- 4- 1
GUIDES TO MAINTENANCE ---- 4- 2
OUTLINES OF SERVICE ---- 4- 4
HANDLING OIL, FUEL, COOLANT, AND PERFORMING OIL CLINIC ---- 4- 4
OUTLINE OF ELECTRIC SYSTEM ---- 4- 7
WEAR PARTS ---- 4- 8
WEAR PARTS LIST ---- 4- 8
RECOMMENDED FUEL, COOLANT, AND LUBRICANT ---- 4- 9

MidWestTech | Komatsu WA150-6, WA1450-6 Wheel Loader Operation & Maintenance... Order the manual at mid-west-tech.com >

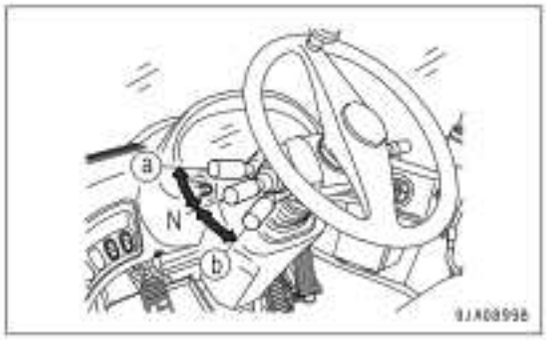
CONTROL LEVERS, PEDALS



(1) Directional lever
(2) Work equipment control lever
(3) Work equipment lock lever
(4) Accelerator pedal
(5) Brake pedal
(6) Parking brake lever

DIRECTIONAL LEVER

This lever (1) is used to switch the direction of travel of the machine between forward and reverse.
When starting the engine, if the directional lever is not at N position, the engine will not start.
Position (a): FORWARD
Position N: NEUTRAL
Position (b): REVERSE



REMARK
When the starting switch is turned to the ON position, if the directional lever is not at the N position, the centralized warning lamp lights up and the alarm buzzer sounds intermittently.
When the directional lever is set to the N position, the centralized warning lamp goes out and the alarm buzzer stops.

MidWestTech | Komatsu WA150-6, WA1450-6 Wheel Loader Operation & Maintenance... Order the manual at mid-west-tech.com >

BATTERY

WARNING

- **The battery generates flammable gas. Do not bring open flame near the battery.**
- **Battery electrolyte is dangerous. If it gets in your eyes or on your skin, wash it off with a large amount of water and consult a doctor.**
- **Battery electrolyte dissolves paint. If it gets on the bodywork, wash it off immediately with water.**
- **If the battery electrolyte is frozen, do not charge the battery or start the engine with a different power source. There is danger that the battery may explode.**
- **Battery electrolyte is toxic. Do not let it flow into drainage ditches or spray it on to the ground surface.**

When the ambient temperature drops, the capacity of the battery will also drop. If the battery charge ratio is low, the battery electrolyte may freeze. Maintain the battery charge as close as possible to 100%. Insulate it against cold temperature to ensure the machine can be started easily the next morning.

REMARK
Measure the specific gravity and calculate the charging rate from the following conversion table.

Charging Rate (%) \ Electrolyte Temperature	20°C (68°F)	0°C (32°F)	-10°C (14°F)	-20°C (-4°F)
100	1.28	1.29	1.30	1.31
90	1.26	1.27	1.28	1.29
80	1.24	1.25	1.26	1.27
75	1.23	1.24	1.25	1.26

- As the battery capacity drastically drops in low temperatures, cover or remove the battery from the machine, store the battery in a warm place, and install it again the next morning.
- If the electrolyte level is low, add distilled water in the morning before beginning work. Do not add water after the day's work to prevent diluted electrolyte in the battery from freezing during the night.

PRECAUTIONS AFTER COMPLETION OF WORK

To prevent mud, water, or the undercarriage from freezing and making it impossible for the machine to move on the following morning, observe the following precautions.

- Remove all the mud and water from the machine. In particular, wipe the hydraulic cylinder rods clean to prevent damage to the seal caused by mud, dirt, or drops of water on the rod from getting inside the seal.
- Park the machine on hard, dry ground.
  If this is impossible, park the machine on boards.
  The boards prevent the tracks from freezing to the ground, and allow the machine to be moved the next morning.
- Open the drain valve and drain any water collected in the fuel system to prevent it from freezing.
- Fill the fuel tank to capacity. This minimizes moisture condensation in the tank when the temperature drops.

AFTER COLD WEATHER

When the season changes and the weather becomes warmer, do as follows.

- Replace all fuel and oil with fuel and oil of the specified viscosity. For details, see "RECOMMENDED FUEL, COOLANT, AND LUBRICANT (PAGE 4-9)".

MidWestTech | Komatsu WA150-6, WA1450-6 Wheel Loader Operation & Maintenance... Order the manual at mid-west-tech.com >

REPLACE FUEL MAIN FILTER CARTRIDGE

⚠ WARNING

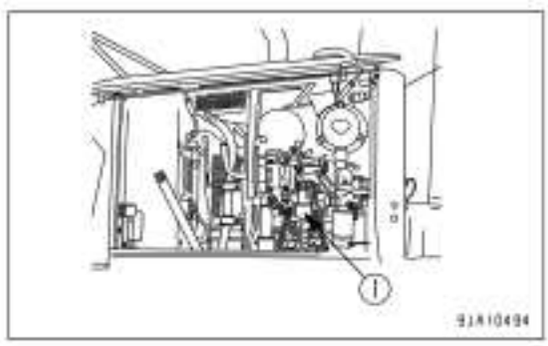
- **Immediately after the engine is stopped, all parts are still very hot. Accordingly, wait until they have cooled down before replacing the filter.**
- **High pressure is generated inside the engine fuel piping system when the engine is running.**
  When replacing the filter, wait for at least 30 seconds after stopping the engine to let the internal pressure go down before replacing the filter.
- **Do not bring any open 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 performing 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.**

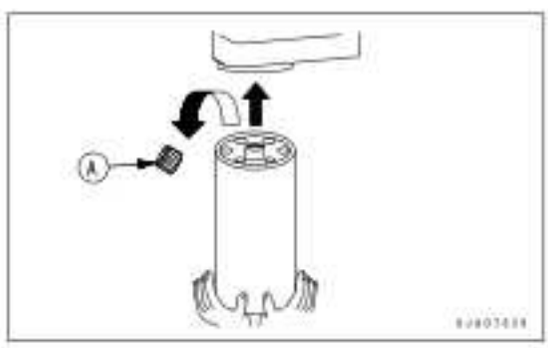
- Prepare a filter wrench

1. Open the engine side cover on the right side of the machine.
2. Set the container to catch the fuel under the filter cartridge.
3. By using a filter wrench, turn filter cartridge (1) counterclockwise on remove it.
4. Clean the filter holder.



NOTICE
Do not fill the filter cartridge with fuel.
Cap (A) is installed to prevent dirt from entering the inside of the filter cartridge.

5. Coat the packing surface of the filter cartridge with oil.



6. Remove filter cartridge cap (A) and install to the filter holder.
7. When installing, tighten until the packing surface contacts the seal surface of the filter head, then tighten it 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 the correct amount.

MidWestTech | Komatsu WA150-6, WA1450-6 Wheel Loader Operation & Maintenance... Order the manual at mid-west-tech.com >