TEN00448-02

Operation & Maintenance Manual

MOTOR GRADER **GD655-3E0**

SERIAL NUMBERS 51923 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.

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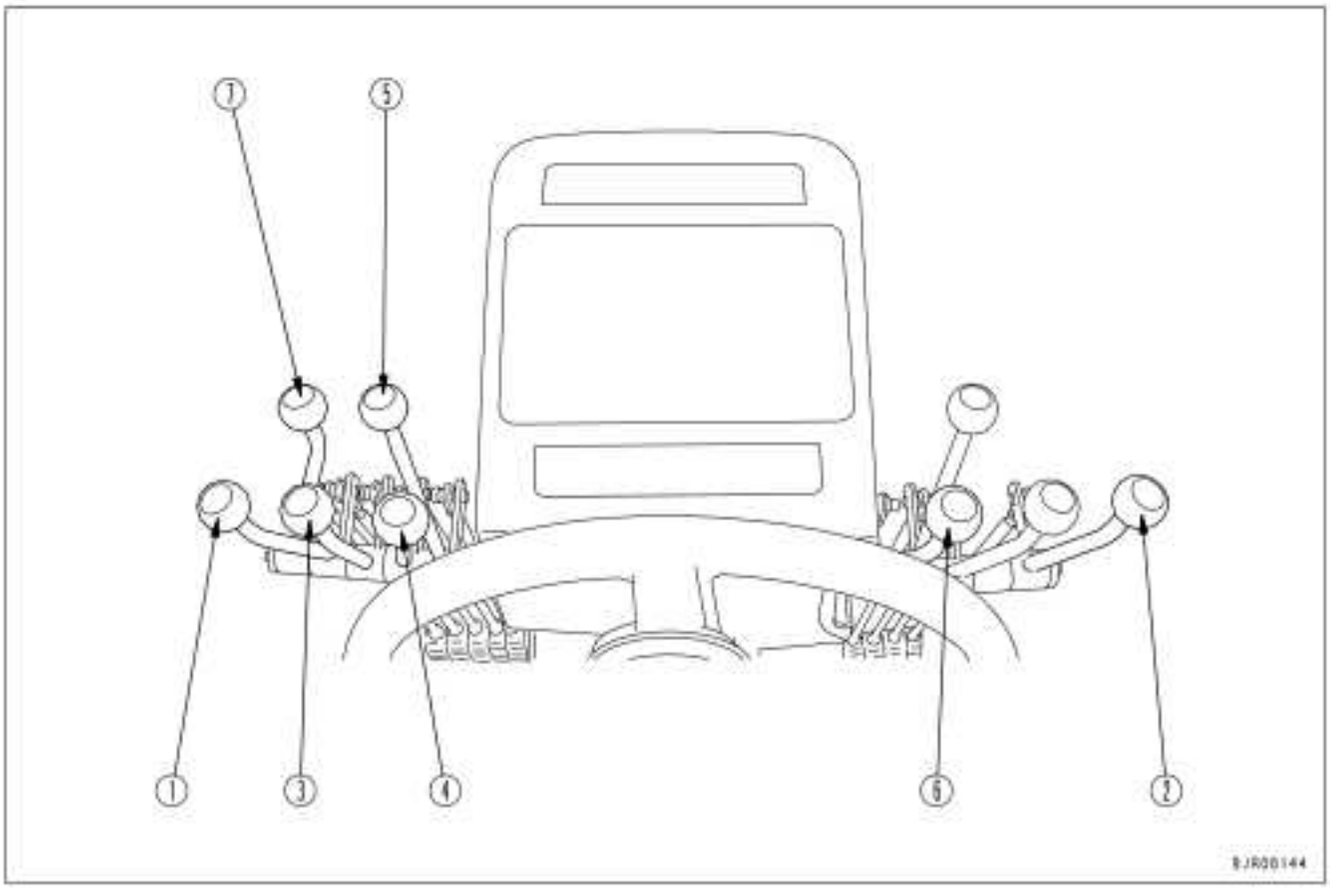
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OPERATING WORK EQUIPMENT



(1) Left blade lift cylinder control lever
(2) Right blade lift cylinder control lever
(3) Blade side shift control lever
(4) Blade rotation control lever
(5) Power tilt control lever
(6) Drawbar side shift control lever
(7) Ripper/Scarifier control lever (if equipped)

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TRANSPORTATION

When transporting the machine, observe all related laws and regulations, and be careful to assure safety.

STEPS FOR TRANSPORTATION

As a basic rule, always transport the machine on a trailer.
When selecting the trailer, see the weights and dimensions given in "SPECIFICATIONS (PAGE 5-2)".
Note that the specifications for the weights and dimensions for transportation differ according to the type of tires and type of blade.

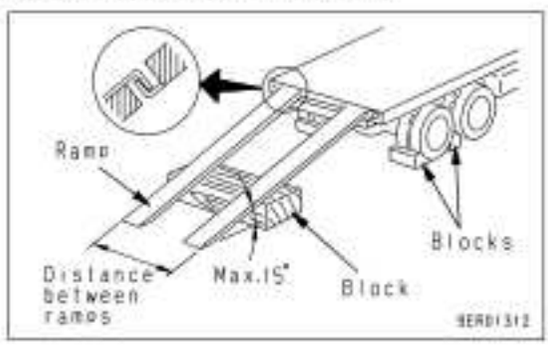
LOADING, UNLOADING WORK

⚠ WARNING

- **When loading or unloading the machine, run the engine at low speed, travel at low speed, and operate slowly.**
- **When loading or unloading the machine, stop the trailer on firm level ground.**
  In addition, keep well away from the road shoulder.
- **Use ramps of ample width, length, thickness, and strength, and install them securely at an angle of less than 15 deg.**
  When using an embankment, compact the fill soil thoroughly and make sure that the slope face does not collapse.
- **Remove the mud stuck to the undercarriage to prevent the machine from slipping to the side on the ramps.**
  In addition, remove any water, snow, ice, grease, or oil from the ramps.
- **Never change direction on the ramps. There is danger that the machine may tip over.**
  If it is necessary to change direction, return to the ground surface or the trailer platform, correct the direction, and start again.
- **The position of the center of gravity of the machine will change suddenly at the connection of the ramp and trailer, and there is danger of the machine losing its balance. Always drive slowly over this point.**

When loading or unloading, always use ramps or a platform and carry out the operations as follows.

1. Apply the brakes on the trailer securely and insert blocks under the tires to ensure that the trailer does not move.
   Then fix the ramps in line with the centers of the trailer and the machine.
   Be sure that the two sides are at the same height as one another.
   Make the angle of the ramps a maximum of 15 deg.
   Set the distance between the ramps to match the center of the tires.
2. Set the machine in line with the ramps, then drive the machine slowly to load or unload it.
3. Load the machine correctly in the specified position on the trailer.



REMARK

- When loading or unloading the machine, rotate the blade from the travel posture, then raise it fully. This makes it easier to load or unload the machine.
- If the ripper teeth make it difficult to load the machine, remove the ripper teeth or install them so that they face the top inside. This makes loading easier.

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EVERY 1000 HOURS SERVICE

Maintenance for every 50, 250 and 500 hours should be carried out at the same time.

REPLACE FUEL MAIN FILTER CARTRIDGE

⚠ WARNING

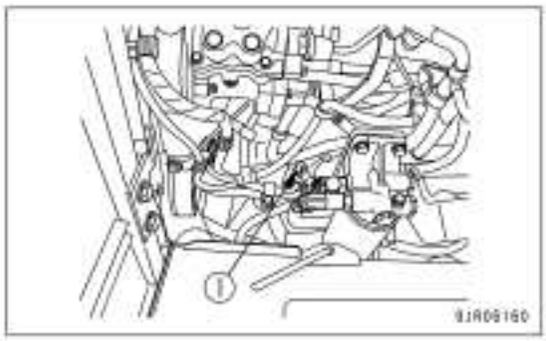
- **Immediately after the engine is stopped, all parts are still very hot. Accordingly, wait until they have cooled down before replacing the filter.**
- **High pressure is generated inside the engine fuel piping system when the engine is running.**
  When replacing the filter, wait for at least 30 seconds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

NOTICE

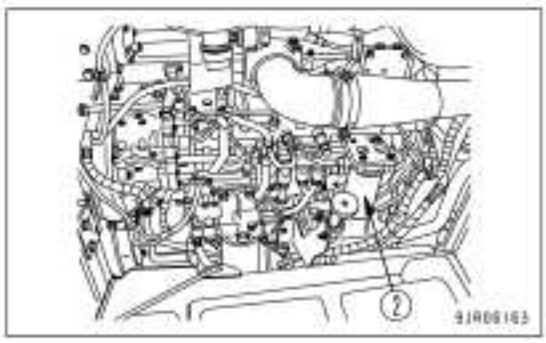
- **Genuine Komatsu fuel filter cartridges use a special filter that has highly efficient filtering ability. When replacing the filter cartridge, always use a genuine Komatsu part.**
- **The common rail fuel injection system used on this machine consists of more precise parts than the conventional injection 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.**

- Container to catch the fuel
- Prepare a filter wrench

1. Open the engine side cover on the left side of the machine.
2. Close valve (1) at the side of the fuel pre-filter.
3. Set a container under the fuel main cartridge to catch the fuel.



4. By using a filter wrench, turn filter cartridge (2) counterclockwise to remove it.
5. Clean the filter holder, coat the packing surface of the new filter cartridge thinly with oil, then install it to the filter holder.
6. 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.
   - When tightening with a filter wrench, be extremely careful not to dent or damage the filter.
7. Open valve (1) at the side of the fuel pre-filter.



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