Operation & Maintenance Manual

EEAM023900

D31EX, PX-21
D37EX, PX-21
D39EX, PX-21

BULLDOZER

SERIAL NUMBER

D31EX-21	- 50501 and up
D31PX-21	- 50501 and up
D37EX-21	- 5501 and up
D37PX-21	- 5501 and up
D39EX-21	-1501 and up
D39PX-21	-1501 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

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- **Explosion caused by lighting equipment**
  - When checking fuel, oil, battery electrolyte, window washer fluid, or coolant, always use lighting with anti-explosion specifications. If such lighting equipment is not used, there is danger of explosion that may cause serious injury.
  - When taking the electrical power for the lighting from the machine itself, follow the instructions in this manual.

ACTION IF FIRE OCCURS

If a fire occurs, escape from the machine as follows.

- Turn the start switch OFF to stop the engine.
- Use the handrails and steps to get off the machine.

WINDOW WASHER LIQUID

Use an ethyl alcohol base washer liquid.

Methyl alcohol base washer liquid may irritate your eyes, so do not use it.

PRECAUTIONS WHEN USING ROPS

Install ROPS when working in places where there is danger of falling rocks, such as in mines and quarries, or in places where there is danger of rolling over.



- If ROPS is installed, do not remove it when operating the machine.
- ROPS is installed to protect the operator when machine rolls over. When machine rolls over, ROPS supports its weight and absorbs its impact energy.
- If ROPS is modified, its strength may be reduced. When modifying, consult your Komatsu distributor.
- If ROPS is damaged or deformed by falling objects or by rolling over, its strength will be reduced and it will not be able to fulfill its function properly. In such cases, always Komatsu contact your distributor for advice of the method of repair.

  Even if ROPS is installed, always fasten your seat belt properly when operating the machine. If you do not use your fasten your seat belt properly, it cannot display its effect.

PRECAUTIONS FOR ATTACHMENTS

- When installing optional parts or attachments, there may be problems with safety or legal restrictions. Therefore contact your Komatsu distributor for advice.
- Any injuries, accidents, or product failures resulting from the use of unauthorized attachments or parts will not be the responsibility of Komatsu.
- When installing and using optional attachments, read the instruction manual for the attachment, and the general information related to attachments in this manual.

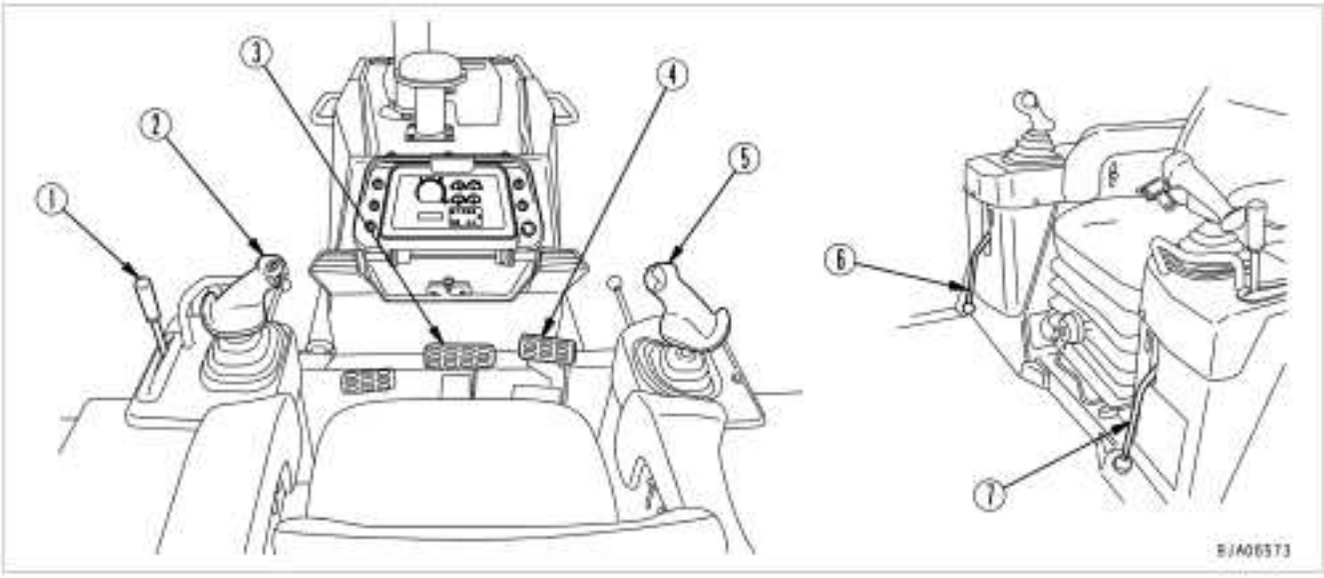
UNAUTHORIZED MODIFICATION

Any modification made without authorization from Komatsu can create hazards. Before making a modification, consult your Komatsu distributor.

- Komatsu will not be responsible for any injuries, accidents, product failures or other property damages resulting from modifications made without authorization from Komatsu.

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CONTROL LEVERS AND PEDALS



(1) Fuel control lever
(2) Joystick (Steering, directional and gear shift lever)
(3) Brake pedal
(4) Decelerator pedal
(5) Blade control lever
(6) Safety lock lever (for blade control lever)
(7) parking lever

FUEL CONTROL LEVER

⚠ WARNING

- **Check that the steering and forward-reverse selector lever is in the N (neutral) position, when operating the fuel control lever to the full stroke, while the machine stands.**
- **When it is necessary to operate the fuel control lever to the full stroke with the steering and forward-reverse selector lever kept either in the forward or reverse position, operate the fuel control lever slowly, while paying a full attention to the surroundings for safety.**

This lever (1) is used to control the engine speed and output.

(a) Low idling position: Push the lever forward fully.

(b) High idling position: Pull the lever fully



REMARK
If high-speed travel is not needed and the work consists of comparatively light loads, return the fuel control lever slightly from the FULL speed position towards low idling. This improves the fuel consumption efficiency and also reduces noise.
For finishing and leveling work or spreading gravel, return the fuel control lever slightly from the FULL speed position towards low idling. This reduces shoe slip and increases the service life of the undercarriage.

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EVERY 500 HOURS SERVICE

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

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 completing the replacement of filter cartridge (1), bleed the air.
6. Bleed the air as follows.

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