TEN00739-03

Operation & Maintenance Manual

WHEEL LOADER **WA320-8**

SERIAL NUMBERS 85001 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.

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ENGINE SHUTDOWN SECONDARY SWITCH

NOTICE

The engine shutdown secondary switch is used to stop the engine when the starting switch is turned to OFF position but the engine does not stop.

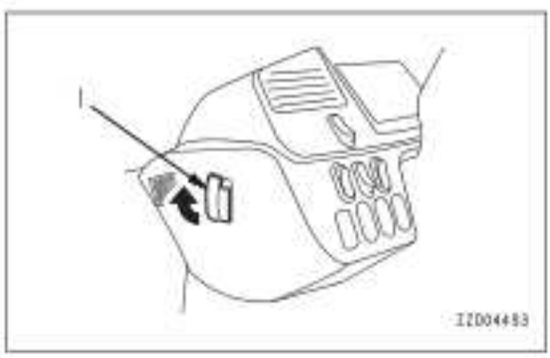
- **Use the engine shutdown secondary switch only in an emergency.**
  Contact your Komatsu distributor for repair immediately when there is any abnormality on this switch.
- **If the engine shutdown secondary switch is set to STOP ENGINE position by mistake while the machine is operating normally, "Engine Shutdown Secondary SW in Operation" is displayed on the machine monitor.**
  If "Engine Shutdown Secondary SW in Operation" is displayed on the machine monitor, check that the switch cover is closed and the switch is in NORMAL position. If not, return it to NORMAL position.

Lower the work equipment to the ground, push the work equipment lock switch to lock the work equipment, turn on the parking brake switch, and turn the starting switch to OFF position.

If the engine does not stop, operate the engine shutdown secondary switch according to the following procedure.

1. Raise cover (1) and open it.

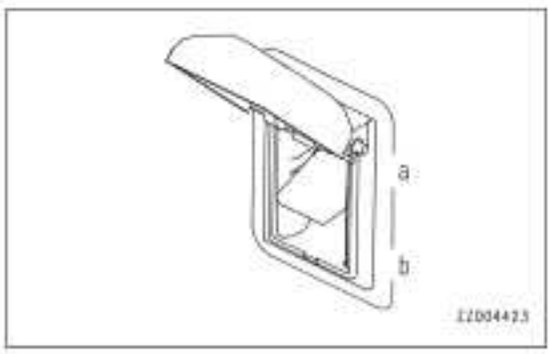
   There is a switch under the cover.



2. Pull up the switch, and the engine stops.

   (a) STOP ENGINE: When abnormal (switch is set up)
   (b) NORMAL: When normal (switch is set down)

   - When cover (1) is closed, the engine shutdown secondary switch automatically returns to NORMAL position (b).
   - When the starting switch is turned to ON position while the engine shutdown secondary switch is in STOP ENGINE position (a), "Engine Shutdown Secondary SW in Operation" is displayed on the machine monitor.
     If this screen is displayed, return the engine shutdown secondary switch to NORMAL position.





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TRANSPORTATION

TRANSPORTATION PROCEDURE

When transporting the machine, choose the transportation method in reference to the weight and dimensions of machine.

Note that the "SPECIFICATIONS" (weight and dimensions) vary depending on the type of tire and bucket.

LOADING AND UNLOADING WITH TRAILER

⚠ WARNING

- **When loading or unloading the machine, run the engine at a low speed and operate the machine slowly in low travel speed.**
- **Select a flat and firm ground when loading or unloading the machine.**
  Maintain a safe distance from the road shoulder
- **Use ramps with ample width, length, thickness, and strength and install them with a maximum slope of 15 °.**

  When using piled soil, compact the piled soil fully to prevent the slope face from collapsing.
- **Remove mud from the undercarriage of the machine so that the machine will not slip sideways on the ramps.**
  In addition, remove water, snow, ice, grease, oil, etc. from the ramps.
- **Never correct your steering on the ramps. There is danger that the machine may tip over.**
  If it is necessary to change the travel direction, return to the ground or to the bed of the trailer, then change the travel direction.
- **The center of gravity of the machine shifts suddenly at the joint of the ramps and the trailer, so there is a danger of the machine losing its balance. Accordingly, pass this point slowly.**

When loading or unloading, always use ramps or a platform. Proceed as follows.

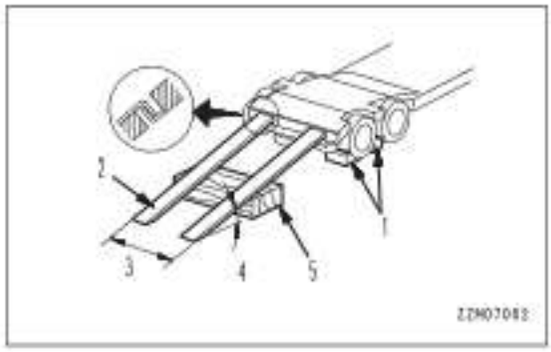
PROCEDURES FOR LOADING MACHINE

Load on a firm and level ground.

Maintain a safe distance from the road shoulder

1. Apply the brake of the trailer securely.
2. Set chocks (1) to the front and rear of the tires to secure the trailer.
3. Set right and left ramps (2) parallel to each other and equally spaced to the right and left of center (3) of the trailer. Make angle of installation (4) a maximum of 15 °.

   If the ramps bend a large amount under the weight of the machine, put blocks (5) under the ramps to prevent them from bending.
4. Set the travel direction toward the ramps and drive slowly for loading.
5. Load the machine correctly in the specified position on the trailer.



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METHOD FOR LUBRICATING CENTER HINGE PIN

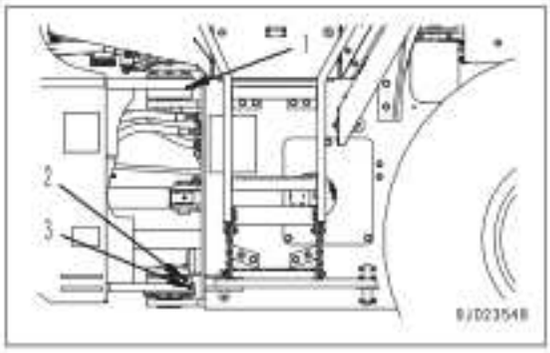
1. By using a grease pump, pump in grease through the grease fittings (1), (2), and (3).

   (1): Upper part of center hinge pin (1 place)

   (2): Top of lower part of center hinge pin (1 place)

   (3): Bottom of lower part of center hinge pin (1 place)

   When greasing the grease fittings (2) and (3), grease (2) first and confirm that the grease is pushed out of the lower dust seal, then grease (3) and confirm that the grease is pushed out of the lower dust seal.



2. After greasing, wipe off any old grease that is pushed out.

METHOD FOR CHECKING ALL TIGHTENING POINTS OF ENGINE INTAKE PIPE CLAMPS

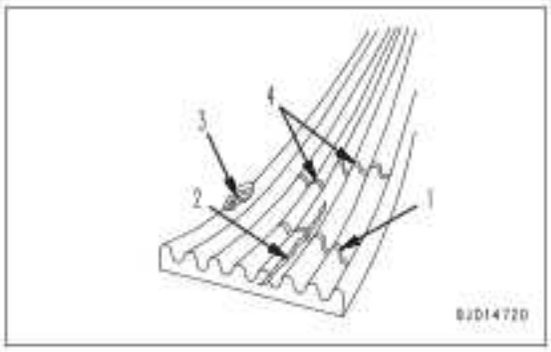
Ask your Komatsu distributor for checking the tightening of the clamps between the air cleaner - turbocharger - aftercooler - engine.

METHOD FOR CHECKING AND REPLACING ALTERNATOR BELT

- Special tools are required for the replacement of the belt. Ask your Komatsu distributor to perform this work.
- Since the auto-tensioner is installed, tension adjustment is not required.

If alternator drive belt shows the following conditions, it must be replaced. Ask your Komatsu distributor to replace it.

- When vertical flaw (2) that crosses horizontal flaw (1) is found.
- When a part of the belt has tears (3).
- You do not need to replace the belt when it has only horizontal flaw (4).



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