CEAM026604

# Operation & Maintenance Manual

# WA500-7

## WHEEL LOADER

SERIAL NUMBERS WA500-7 A94001 and up

ENGINE 6D140E-6

July 2016

KOMATSU®

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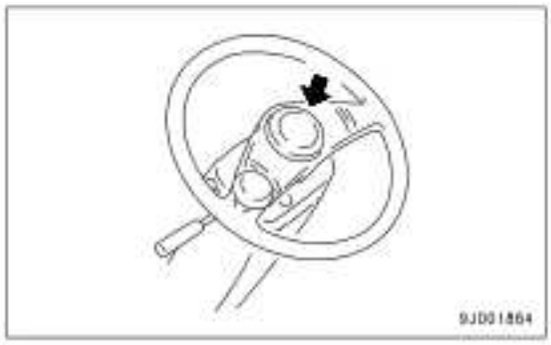
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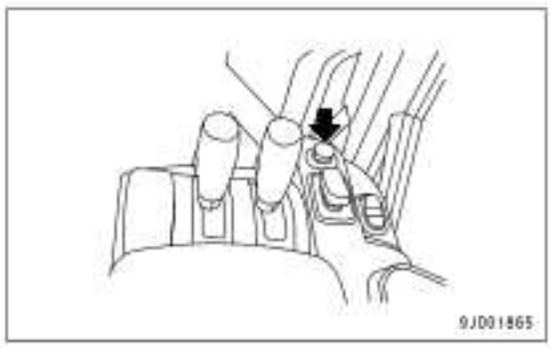


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## HORN SWITCH (WA500-Q543-043-K-00-A)

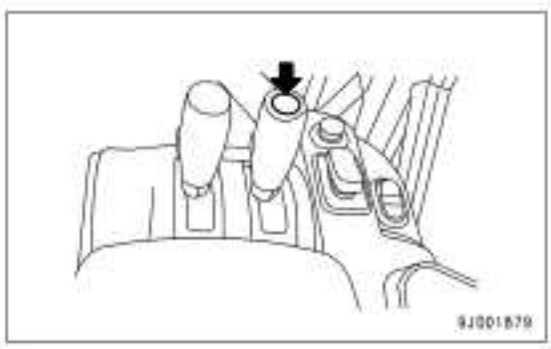
When switch (4) is pressed, the horn sounds.




## KICKDOWN SWITCH (WA500-CP22-043-K-00-A)

When traveling in the F2 position, if this switch (5) at the top of the boom control lever is pressed, the gear speed is shifted down to F1.
Use this switch to increase the traction force during excavation.
When the transmission shift range (actual gear speed) is F1 and the power mode selector switch is set to the E mode, if switch (5) is pressed, the power mode changes to the P mode.
Use this switch to increase the traction force further during excavation or for pile-up work.




In E mode

| | | | | |
|---|---|---|---|---|
| 2nd E mode | → | 1st E mode | → | 1st P mode |

In P mode

| | | |
|---|---|---|
| 2nd P mode | → | 1st P mode |

When the transmission is in the auto-shift mode and the travel speed is 12.5 km/h {7.8 MPH} or slower, the kickdown switch operates and the gear speed can be shifted down to the 1st gear speed from any gear speed of the forward or reverse travel.
This function facilitates the load-and-carry operation.



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## EVERY 250 HOURS MAINTENANCE (ALL-3380-015-A-01-A)

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

## CHECK LEVEL OF BATTERY ELECTROLYTE (WA380-AW10-217-K-00-A)

Perform this procedure before operating the machine.

**⚠ WARNING**

- **Do not use the battery if the battery electrolyte level is below the LOWER LEVEL line. The continuous use of the battery as it is will accelerate the deterioration of the inside materials of the battery and reduce the service life of the battery. In addition, it may cause an explosion.**
- **The battery generates flammable gas and there is a danger of explosion. Do not bring fire or sparks near the battery.**
- **Battery electrolyte is dangerous material. If it gets in your eyes or on your skin, wash it off with a large amount of water and consult a doctor.**

**NOTICE**

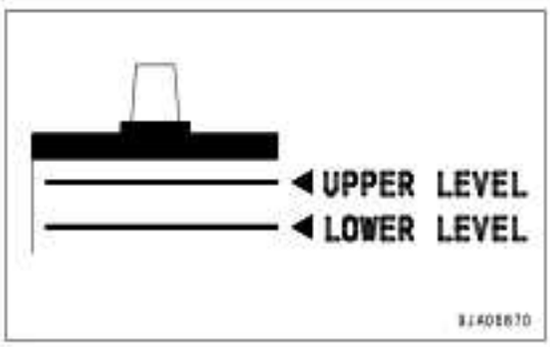
- **Do not add the electrolyte to the battery exceeding the UPPER LEVEL line. If the electrolyte level is too high, it may leak and cause damage to the paint surface or corrode other parts.**
- **When adding purified water in cold weather, add it before starting operations in the morning to prevent the purified water from freezing.**

Inspect the battery electrolyte level at least once a month and follow the procedures given below.

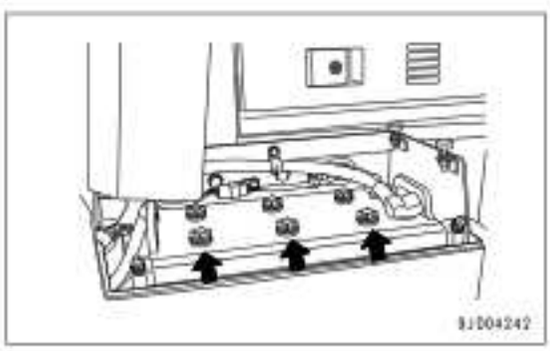
## CHECK ELECTROLYTE LEVEL FROM SIDE OF BATTERY (WA500-AW10-217-K-01-A)

If it is possible to check the electrolyte level from the side of the battery, check as follows.

1. Open the cover of the battery box.
   One each of the battery box is provided on both sides of the rear part of the machine.
2. Clean the area around the electrolyte level lines with a wet cloth and check that the electrolyte level is between the UPPER LEVEL (U.L.) and LOWER LEVEL (L.L.) lines.
   If the battery is wiped with a dry cloth, static electricity may cause a fire or explosion.




3. If the electrolyte level is below the middle between the UPPER LEVEL (U.L.) and LOWER LEVEL (L.L.) lines, immediately remove cap (1) and add purified water (e.g. commercially available replenishment water for a battery) to the U.L. line.
4. After adding the purified water, tighten cap securely.



**REMARK**

If the purified water is added to above the UPPER LEVEL (U.L.) line, use a syringe to lower the level to the UPPER LEVEL (U.L.) line. Neutralize the removed fluid with baking soda (sodium bicarbonate), then flush it away with a large amount of water. If necessary, consult your Komatsu distributor or a battery manufacturer.



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# SPECIFICATIONS (WA500-2110-930-A-00-A)

| | Item | | | Unit | WA500-7 |
|---|---|---|---|---|---|
| | Machine weight | | | kg (lb) | 33,770 (74,446) |
| | Normal load | | | kg (lb) | 9,250 (20,392) |
| | Bucket capacity (with BOC) | | | $m^3$(cu.yd) | 5.6 (7.3) |
| | Engine model | | | - | Komatsu SAA6D140E-6 |
| | Rated horsepower | SAE J1995 (Gross) | | kW {HP} / $min^{-1}$ {rpm} | 266 {357} / 1,900 {1,900} |
| | | ISO 9249 / SAE J1349 (Net) | | | 263 {353} / 1,900 {1,900} |
| A | Overall length | | | mm (ft in) | 9,915 (32' 6") |
| B | Overall height | | | mm (ft in) | 3,785 (12' 5") |
| C | Overall height with bucket lifted up | | | mm (ft in) | 6,430 (21' 1") |
| D | Overall width | | | mm (ft in) | 3,190 (10' 6") |
| E | Min. ground clearance | | | mm (ft in) | 450 (1' 6") |
| F | Bucket width (cutting edge width) | | | mm (ft in) | 3,400 (11' 2") |
| G | Dumping clearance (*1) | Cutting edge [BOC] | | mm (ft in) | 3,405 (11' 2") [3,295 (10' 10")] |
| H | Dumping reach (*1) | Cutting edge [BOC] | | mm (ft in) | 1,445 (4' 9") [1,500 (4' 11")] |
| I | Bucket dump angle (at max. height) | | | deg. | 46 |
| | Min. turning radius | Outside of chassis (Cutting edge [BOC]) | | mm (ft in) | 8,175 (26' 10") [8,220 (26' 12")] |
| | | Center of outside tire | | mm (ft in) | 7,050 (23' 2") |
| | Allowable towing load | | | kg (N) | 24,360 (238,890) |
| | Travel speed (Economy mode) | Forward | 1st | km/h (MPH) | 7.1 (4.4) |
| | | | 2nd | km/h (MPH) | 13.1 (8.1) |
| | | | 3rd | km/h (MPH) | 22.5 (14.0) |
| | | | 4th | km/h (MPH) | 37.2 (23.1) |
| | | Reverse | 1st | km/h (MPH) | 8.0 (5.0) |
| | | | 2nd | km/h (MPH) | 13.0 (8.1) |
| | | | 3rd | km/h (MPH) | 25.0 (14.7) |
| | | | 4th | km/h (MPH) | 37.5 (23.3) |
| | Travel speed (Power mode) | Forward | 1st | km/h (MPH) | 7.5 (4.7) |
| | | | 2nd | km/h (MPH) | 13.1 (8.1) |
| | | | 3rd | km/h (MPH) | 23.7 (14.7) |
| | | | 4th | km/h (MPH) | 37.3 (23.2) |
| | | Reverse | 1st | km/h (MPH) | 8.5 (5.3) |
| | | | 2nd | km/h (MPH) | 13.0 (8.1) |
| | | | 3rd | km/h (MPH) | 26.6 (16.5) |
| | | | 4th | km/h (MPH) | 38.0 (23.6) |

*1: Indicates the value when the bucket dump angle is 45°.



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