TEN00091-03

Operation & Maintenance Manual

WHEEL LOADER **WA470-5**

SERIAL NUMBERS 80613 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.

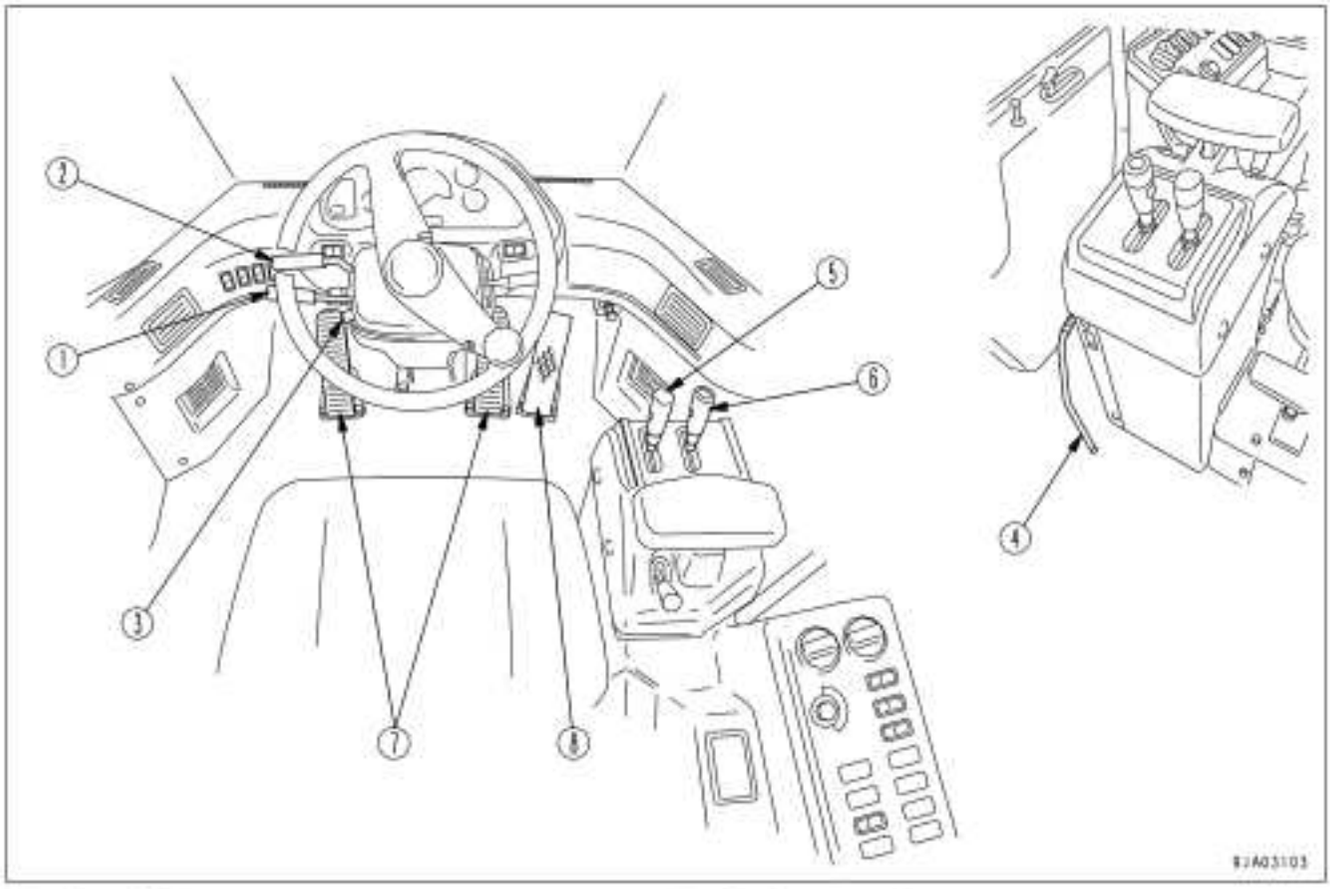
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CONTROL LEVERS, PEDALS



(1) Gearshift lever
(2) Directional lever
(3) Gearshift lever stopper
(4) Work equipment lock lever
(5) Bucket control lever
(6) Lift arm control lever
(7) Brake pedal
(8) Accelerator pedal

GEARSHIFT LEVER

This lever (1) changes the speed range of the transmission.

MANUAL SHIFT

This machine has a 4-FORWARD, 4-REVERSE speed transmission.
Place the gearshift lever in a suitable position to obtain the desired speed range.
1st and 2nd speeds are used for working.
3rd and 4th speeds are used for traveling.
However, when the gearshift lever stopper is being used, it is impossible to shift to 3rd or 4th. Disengage the gearshift lever stopper before trying to shift gear.
Position (a): 1st
Position (b): 2nd
Position (c): 3rd
Position (d): 4th



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PRECAUTIONS WHEN DRIVING MACHINE

When the machine travels at high speed for a long distance, the tires become extremely hot. This causes early wear of the tires and should be avoided as much as possible. If the machine must be driven for a long distance, take the following precautions.

- Follow the regulations related to this machine, and drive carefully.
- Before driving the machine, carry out the checks before starting.
- The most suitable tire pressure, travel speed, or tire type differ according to the condition of the travel surface. Contact your Komatsu distributor or tire dealer for information.
- The following is a guide to suitable tire pressures and speeds when traveling on a paved surface with standard tires. (23.5-25-20PR)
  Tire pressure
  Front wheel: 0.39 MPa (4.0 kg/cm^2, 56.8 PSI)
  Rear wheel: 0.31 MPa (3.2 kg/cm^2, 45.4 PSI)
  Speed:14 km/h (8.7 MPH)
- Check the tire pressure before starting, when the tire is cool.
- After traveling for one hour, stop the machine for 30 minutes and check the tires and all parts for any abnormality. Check the oil level and coolant level also.
  When stopping the machine in extremely cold areas, do as follows.
  To prevent the radiator water temperature from rising suddenly, do not suddenly stop the engine. Gradually cool the radiator water down before stopping the engine.
- Always travel with the bucket empty.
- Never put "calcium chloride" or "dry ballast" in the tires when traveling.

PRECAUTIONS REGARDING BRAKE FUNCTION

When traveling long distances continuously downhill, the frequency of using the brake may increase. As a result, depending on the weight of the machine and the grade of the slope, the machine's braking capacity may be exceeded and the brakes may overheat.
The table below shows a guideline of the values for this machine.

Machine weight (t)	Slope grade (%)	Braking capacity limit	
		Average travel speed limit (km/h (MPH))	Downhill distance limit (continuous) (km)
22 - 24 (unloaded)	10	40 (24.9)	2
	20	17 (10.6)	1.2
28.5 - 30.5 (loaded)	10	30 (18.6)	1.8
	20	12 (7.5)	0.6

If the braking capacity limit is exceeded, a forced cooling system for the brakes is needed, so please consult your Komatsu distributor.

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MAINTENANCE SCHEDULE CHART

MAINTENANCE SCHEDULE CHART

The maintenance interval for adjusting the injector differs according to the exhaust gas regulations for each area. When carrying out the adjustment, check the maintenance time. For details, see "ADJUST INJECTOR (PAGE 4-16)".

INITIAL 250 HOURS SERVICE (ONLY AFTER THE FIRST 250 HOURS)

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EVERY 50 HOURS SERVICE

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EVERY 100 HOURS SERVICE

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EVERY 250 HOURS SERVICE

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