TEN00451-03

Operation & Maintenance Manual

WHEEL LOADER **WA470-6**

SERIAL NUMBERS 90234 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.

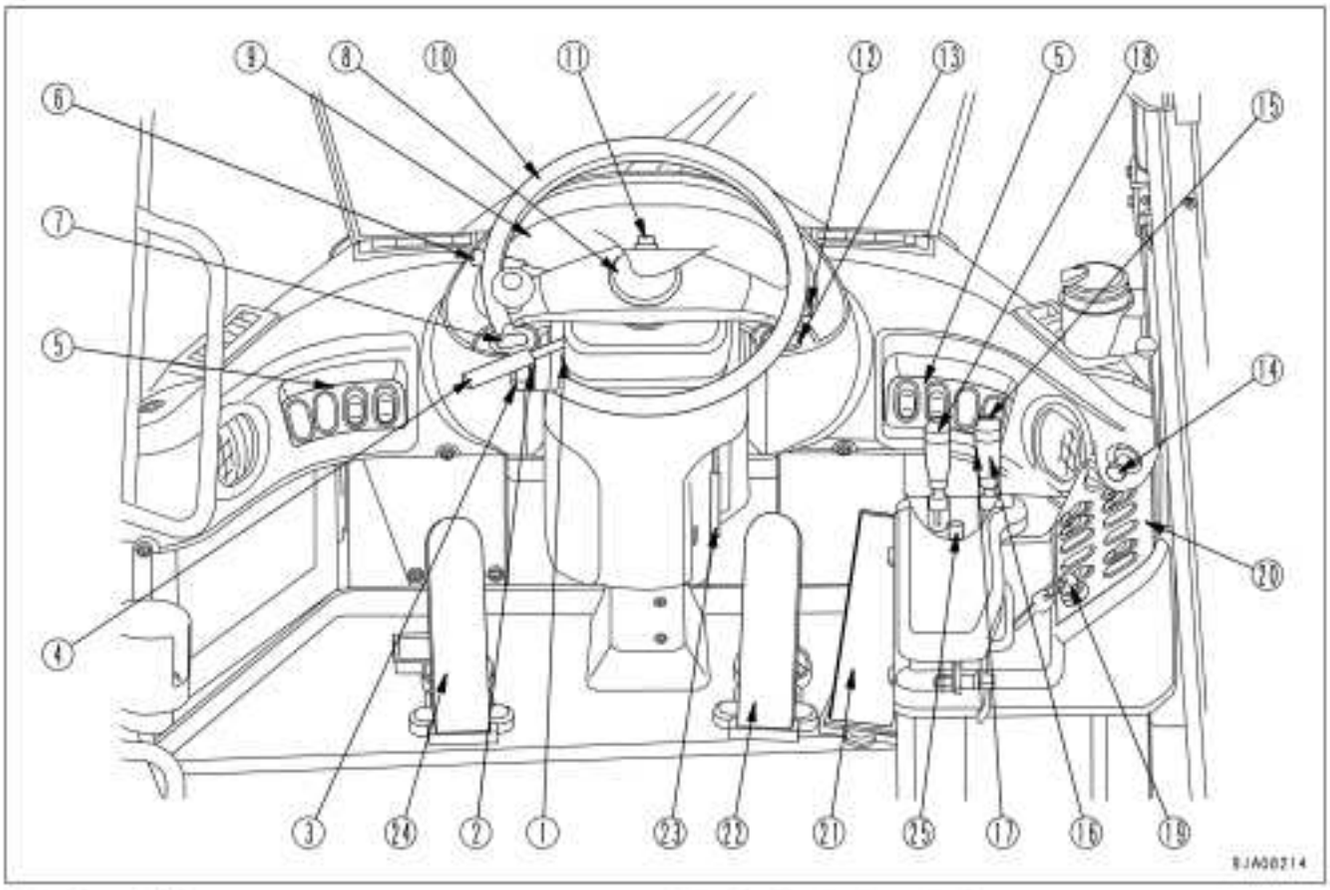
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GENERAL VIEW OF CONTROLS AND GAUGES



(1) Gearshift lever stopper
(2) Rear wiper switch
(3) Front wiper switch
(4) Gearshift lever
(5) Front switch panel
(6) Directional lever
(7) E.C.S.S. (electronic conrtrolled suspension system) switch
(8) Horn button
(9) Machine monitor
(10) Steering wheel
(11) Hazard lamp switch
(12) Lamp switch
(12) Turn signal lever
(12) Dimmer switch
(13) Parking brake switch
(14) Cigarette lighter
(15) Kickdown switch
(16) Lift arm control lever
(17) Hold switch
(18) Bucket control lever
(19) Starting switch
(20) Right switch panel
(21) Accelerator pedal
(22) Right brake pedal
(23) Steering tilt lock lever
(24) Left brake pedal
(25) Work equipment lock lever

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Capacity \ Reservoir		Engine oil pan	Transmission case	Hydraulic system	Axle		Cooling system	Fuel tank
					Front	Rear		
Specified	liters	47	76	270	60	56	61	413
	US gal	12.42	20.08	71.33	15.85	14.80	16.11	109.10
Refill	liters	38	65	173	60	56	-	-
	US gal	10.04	17.17	45.7	15.85	14.80	-	-

NOTICE

Always use diesel oil for the fuel.

To ensure good fuel consumption characteristics and exhaust gas characteristics, the engine mounted on this machine uses an electronically controlled high-pressure fuel injection device. This device requires high precision parts and lubrication, so if low viscosity fuel with low lubricating ability is used, the durability may drop markedly.

Note 1: HTHS (High-Temperature High-Shear Viscosity 150°C (302°F)), specified by ASTM D4741 must be equal to or higher than 3.5 mPa-S. Komatsu EOS0W30 and EOS5W40 are the most suitable oils.

Note 2: Powertrain oil has different properties from engine oil. Be sure to use the recommended oils.

Note 3: Axle oil AXO80 has the function of preventing squealing from the brakes and LSD (Limited Slip Differential). If only AXO80 is recommended, use Komatsu genuine AXO80 or equivalent.

Note 4: When the ambient temperature is higher than 45°C (113°F) and the machine operation hour is longer than 12 hours/day, then the use of TO50 instead of AXO80 is recommended.
Squealing of the brakes may occur with TO50, but there is no problem with the brake performance or durability.
For machines with LSD, use AXO80 regardless of the ambient temperature. Do not use TO50.

Note .5: Hyper grease (G2-T, G2-TE) has a high performance.
When it is necessary to improve the lubricating ability of the grease in order to prevent squeaking of pins and bushings, the use of G2-T or G2-TE is recommended.

Note 6: COOLANT

1) Komatsu genuine SUPERCOOLANT (AF-NAC) has the important function of preventing corrosion as well as preventing freezing.
Even in the areas where freezing is not an issue, the use of antifreeze COOLANT is essential.
Komatsu machines are supplied with SUPERCOOLANT (AF-NAC). SUPERCOOLANT (AF-NAC) has excellent anticorrosion, antifreeze and cooling properties and can be used continuously for two years or 4000 hours. SUPERCOOLANT (AF-NAC) is strongly recommended wherever available.
2) For details of the density of the COOLANT, see "CLEAN INSIDE OF COOLING SYSTEM (PAGE 4-21)".
COOLANT is supplied already diluted. In this case, add the pre-diluted fluid to keep the tank full. (Never dilute the COOLANT with ordinary water.)
3) To maintain the anticorrosion properties of COOLANT, always keep the density of COOLANT between 30% and 64%.

RECOMMENDED BRANDS, RECOMMENDED QUALITY FOR PRODUCTS OTHER THAN KOMATSU GENUINE OIL

When using commercially available oils other than Komatsu genuine oil, consult your Komatsu distributor.

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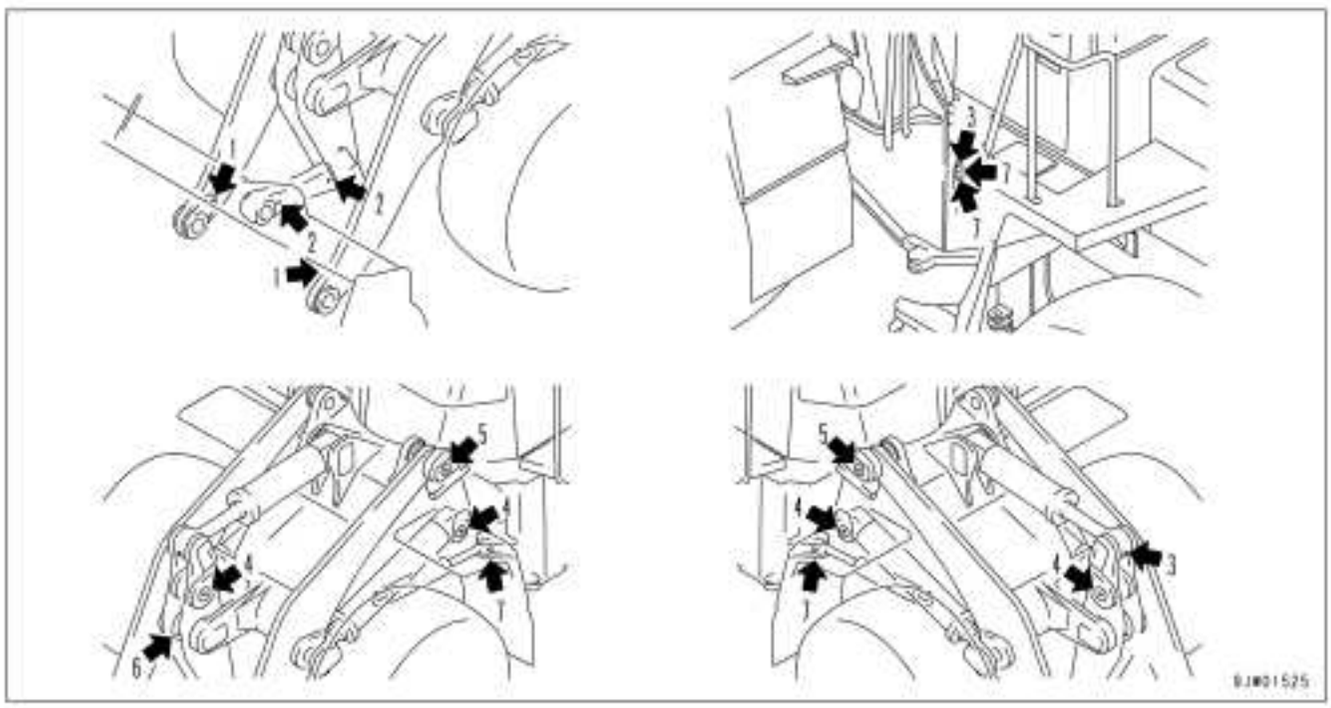
LUBRICATING

1. By using a grease pump, pump in grease through the grease fittings marked by the arrows.
2. After greasing, wipe off any old grease that was pushed out.

NOTICE

When working on jobsites where heavy-duty operations are frequent or when working continuously for more than eight hours, shorten the lubrication interval and carry out lubrication more frequently.

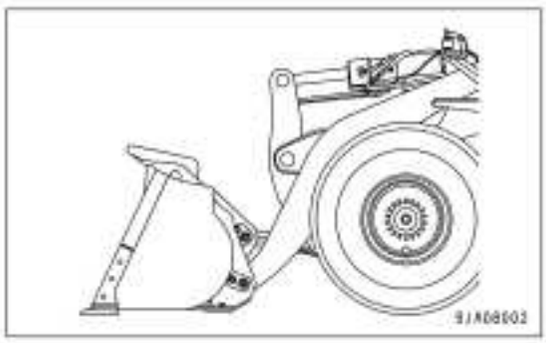
For the initial 50 hours, carry out lubrication every 10 hours.



(1) Bucket pin (2 places)
(2) Bucket link pin (2 places)
(3) Dump cylinder pin (2 places)
(4) Lift cylinder pin (4 places)
(5) Lift arm pivot pin (2 places)
(6) Bell crank pin (1 place)
(7) Steering cylinder pin (4 places)

When carrying out greasing of bucket pin (1), lift arm pivot pin (5), and bell crank pin (6), set the work equipment to the following posture.

Lower the bucket to the ground and set it horizontally.



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