CEAM004402

Operation & Maintenance Manual

KOMATSU®

WA700-3L

WHEEL LOADER

SERIAL NUMBERS WA700-3L A50001 and up

ENGINE 6D170E

April 2016

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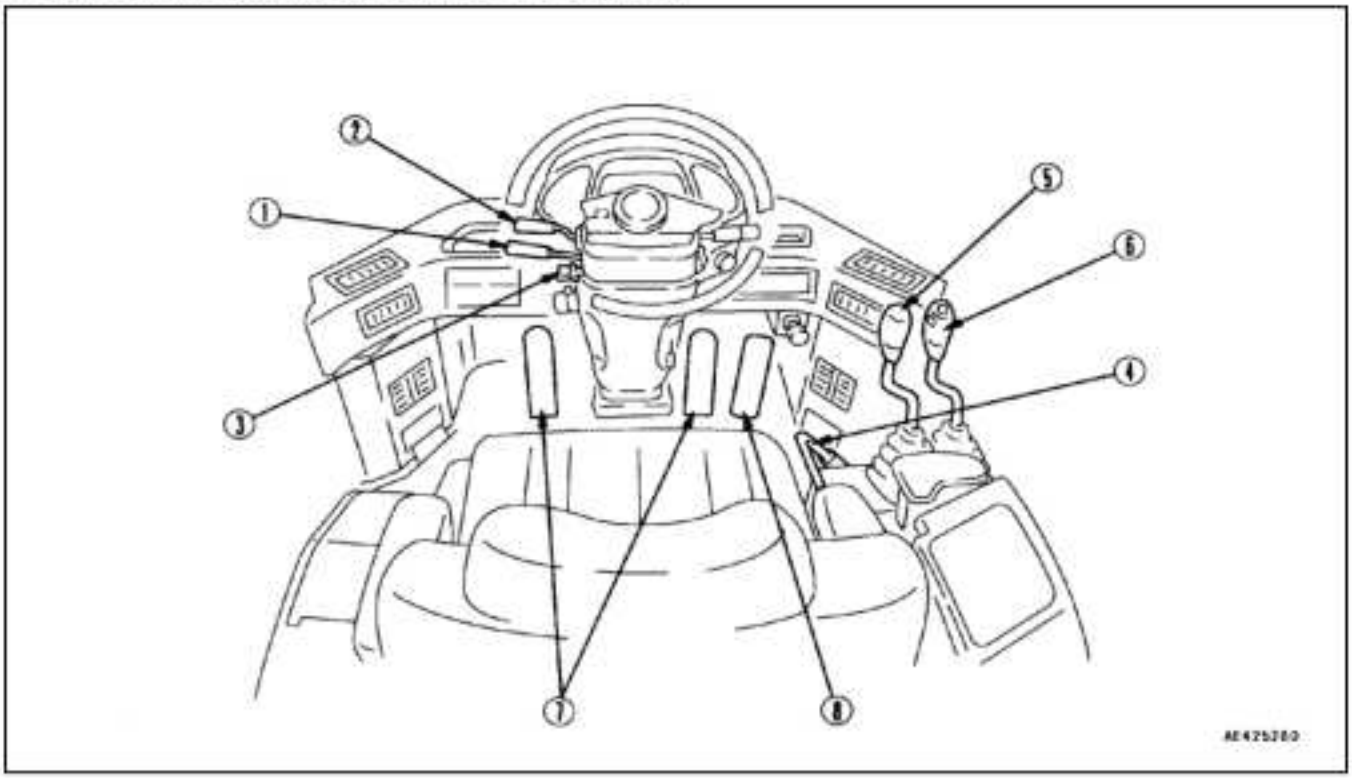
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CONTROL LEVERS AND PEDALS



(1) Speed Control Lever	(6) Boom Control Lever
(2) Directional Lever	(7) Brake Pedals
(3) Speed Control lever Lock	(8) Accelerator Pedal
(4) Safety Lock Lever	(9) Joystick Steering Lever
(5) Bucket Control Lever	

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TRANSMISSION, CONVERTER, TRANSFER CASE, COOLER, SERVICE BRAKES AND HYDRAULIC SYSTEM OIL SPECIFICATIONS

KOMATSU Engine Oil or engine oil meeting American Petroleum Institute (API) performance classification CF-4, CG-4, CF-4/SG or CG-4/SH or MIL-L-2104D or E is recommended.

Remark

Classification CD, CE, CD/SF or CE/SF oils may be used in areas where CF-4, CG-4, CF-4/SG or CG-4/SH oil is not yet available.

DRIVE AXLE OIL SPECIFICATIONS

For Drive Axle Oil, Use Only The Recommended Oil As Follows	
SHELL	DONAX TT or TD
CALTEX	RPM TRACTOR HYDRAULIC FLUID
CHEVRON	TRACTOR HYDRAULIC FLUID
TEXACO	TDH OIL
MOBIL	MOBILAND SUPER UNIVERSAL

Engine oil SAE 30W API classification CD or CE can be substituted for axle oil, it might increase in brake noise, but it will not affect durability.

DIESEL FUEL SPECIFICATIONS

⚠ WARNING

Never mix gasoline, gasohol and/or alcohol with diesel fuel. This practice creates an extreme fire hazard and under certain conditions an explosion could result in personal injury or death. Never remove the fuel tank filler cap or refill the fuel tank while the engine is running, hot or when the machine is indoors. Fumes are dangerous, as a spark or flame could result in a fire or explosion.

Remark

Due to the precise tolerances of diesel fuel injection systems, it is extremely important the fuel be kept clean and free of contaminates or water. Contaminates or water in the system can cause severe damage to both the injection pump and nozzles.

Remark

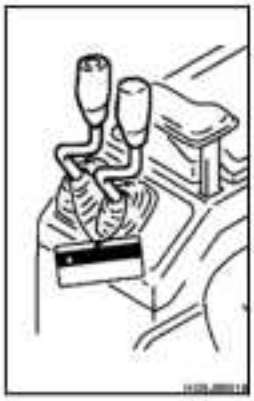
Below -12°C (+10°F) the paraffin in ASTM Grade No. 2-D diesel fuel will change to wax particles and clog the fuel filters. For best results use Grade No. 1-D diesel fuel in cold weather.

For normal service above -10°C (+14°F), the use of ASTM Grade No. 2-D diesel fuel with a minimum Cetane number of 40 is recommended. The use of No. 2-D diesel fuel will result in optimum engine performance under most operating conditions. Fuels with Cetane numbers higher than 40 may be needed in high altitudes or extremely low ambient temperatures to prevent misfires and excessive smoke. At operating temperatures below -10°C (+14°F) or extended engine idle, use ASTM Grade No. 1-D diesel fuel. The use of lighter fuels can reduce fuel economy. Where a winterized blend of Grade No. 2-D and No. 1-D fuels is available, it may be substituted for Grade No. 1-D fuel. It is the suppliers responsibility to provide the fuel for the anticipated ambient temperature. Use a low sulfur content fuel having a cloud point that is at least 10 degrees below the lowest expected fuel temperature. Cloud point is the temperature at which crystals begin to form in the fuel. The viscosity of the fuel must be kept above 1.3 cSt to provide adequate fuel system lubrication. Optionally, the equivalent grades of recognized Federal Government specifications may be used; the latest revisions of VV-F-800a.

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SERVICE PROCEDURE

INITIAL 50 HOURS OF SERVICE



⚠ WARNING

Be sure to put a warning tag on work equipment control levers and remove ignition key.

Carry out the following maintenance only after the initial first 50 hours.

LUBRICATION

Grease to the loader linkage every 10 operating hours or every day for the first 50 operating hours.

For details, see "WHEN REQUIRED" on page 3-24.

INITIAL 250 HOURS OF SERVICE

⚠ WARNING

Be sure to put a warning tag on work equipment control levers and remove ignition key.

Carry out the following maintenance only after the initial first 250 hours.

FUEL FILTER CARTRIDGE

For details of the method of replacing, see "EVERY 500 HOURS OF SERVICE" on page 3-62.

TRANSMISSION OIL FILTER ELEMENT

For details of the method of replacing, see "EVERY 500 HOURS OF SERVICE" on page 3-62.

ENGINE VALVE CLEARANCE

For details of the method of adjustment, see "EVERY 2000 HOURS OF SERVICE" on page 3-75.

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