CEAM031300

Operation & Maintenance Manual

Dump Truck

830E-1AC

Serial Numbers A40993 & 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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- Never allow welding current to pass through ball bearings, roller bearings, suspensions, or hydraulic cylinders.

Discharging Control Cabinet Capacitors

The control cabinet is equipped with two capacitor charge lights, one on the exterior of the cabinet and one in the interior. The capacitor charge lights, when off, indicate to service personnel that the drive system is safe to work on. Certain drive system failures, however, can result in a condition where one or more capacitors can remain in a charged state even though the capacitor charge lights are off.

Because a danger can still exist with the capacitor charge lights off, refer to the shop manual "Manual Discharge of Capacitors" before servicing the drive system. Adhere to the proper procedures for disabling the drive system. Only authorized service personnel are allowed to service the drive system.

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1. Move the hoist lever to the LOWER position and release. Releasing the lever places the hoist control valve in the FLOAT position, allowing the body to return to the frame.

NOTE: *If dumped material builds up at the rear of the body and the body cannot be lowered, perform Steps a and b below:*

a. Move the hoist lever back to the RAISE position to fully raise the dump body. Release the hoist lever to return it to the HOLD position.

NOTE: *DO NOT drive forward if the tail of the body will not clear the crusher wall in the fully raised position.*

b. Move the directional control lever to FORWARD, release the brake lock. Depress the override button and drive forward to clear the material. Stop, shift the directional control lever to NEUTRAL, apply the brake lock and lower the body again.

NOTE: *When an attempt to lower the body is unsuccessful because of material obstruction, raise the body back up. This will help to prevent the body from suddenly dropping when pulling away from the obstruction.*

2. With the body returned to the frame, move the directional control lever to FORWARD, release the brake lock, and carefully leave the dump area.

SUDDEN LOSS OF ENGINE POWER OR LOSS OF DRIVE SYSTEM FUNCTION F.13-0000051428

The loss of engine power and/or drive system will result in loss of retard/propel functions on the truck. Under loss of retard/propel conditions, the truck should be immediately stopped using the service brakes. In all cases, the service brakes should be utilized to stop the truck.

⚠ WARNING

- **Dynamic retarding will not be available. DO NOT use the service brakes for continuous retarding purposes.**

If the engine and/or drive system functionality is lost, there is enough hydraulic pressure stored in the brake and steering accumulators to allow the operation of the steering and brake functions. However, this oil supply is limited so it is important to stop the truck as quickly and safely as possible.

If the brake supply pressure drops to a pre-determined level, the red warning light will illuminate and a buzzer will sound. If the brake pressure continues to decrease, the auto-apply feature will activate and the service brakes will apply automatically to stop the truck.

When loss of engine power or drive system function occurs, perform the following:

1. Bring the truck to a safe stop as quickly as possible by using the foot pedal to apply the service brakes. If possible, safely steer the truck to the side of the road while braking.
2. As soon as the truck has stopped moving, park the truck.
3. Slowly release the service brakes to check the capacity of the parking brake. If the parking brake can not hold the truck stationary, apply the service brakes and hold them ON. DO NOT turn the key switch OFF, and DO NOT release the service brakes.
4. Notify maintenance personnel immediately.
5. If the truck is on level ground, or if the parking brake can hold the truck stationary and the truck is in a stable condition, it is then OK to turn the key switch OFF.
6. If safe to do so, have maintenance personnel place wheel chocks or other mechanisms in front or behind the wheels, depending on the slope, to reduce the risk of the truck rolling.
7. If traffic is heavy near the disabled machine, mark the truck with warning flags during daylight hours or use flares at night. Adhere to local regulations.

EMERGENCY STEERING SYSTEM F.7-0000051427

Operation

This truck is equipped with an emergency steering system. This system is a backup in the event of loss of oil supply to the main steering system. The emergency steering system was designed to meet or exceed SAE J1511 and ISO 5010 standards.

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EVERY 500 HOUR LUBRICATION AND MAINTENANCE D.49-0000051632

NOTE: *Maintenance requirements for every 10 & 250 hour Lubrication and Maintenance Checks must also be performed at this time. "Lube Key" references are to the lubrication chart.*

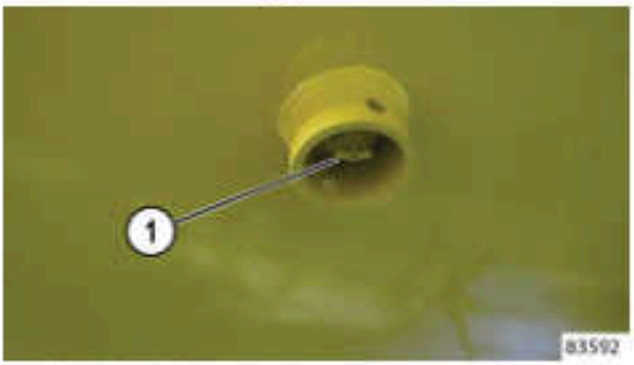
INITIAL 500 HOUR MAINTENANCE (Includes after rebuild)	
Item	**Task**
WHEEL MOTOR	Change or filter the gear case oil.

EVERY 500 HOUR LUBRICATION AND MAINTENANCE	
Item	**Task**
WHEEL MOTOR	• Check the gear case oil level. • Replace the wheel motor breather elements. • Remove and clean the gear case magnetic plugs. • Take gear case oil sample. (Refer to the Shop Manual for oil sample instructions.) • Based on oil sample results, refer to the GE Planned Maintenance Schedule to determine if the gear case oil is satisfactory, needs filtered or if an oil change is required.
HYDRAULIC SYSTEM	• Replace the high pressure filter elements. Check the oil level. Add oil as necessary. (Lube Key B) • Replace the breather elements. Refer to HYDRAULIC SYSTEM SERVICE, page 7-2 for detailed instructions.
HYDRAIR® SUSPENSION	Check for proper piston extension (front and rear). Refer to the Shop Manual for more information on proper suspension extension and maintenance procedures.
THROTTLE AND BRAKE PEDAL	Lubricate the treadle roller and hinge pins with lubricating oil. Lift the boot from the mounting plate and apply a few drops of lubricating oil between the mounting plate and the plunger.
HOIST ACTUATOR LINKAGE	Check operation. Clean, lubricate, and adjust as necessary.
ACCUMULATOR PRECHARGE	Check all steering and brake accumulator pre-charge pressures. Refer to the Shop Manual for details.
HVAC	• Clean the air conditioner recirculation filter. Refer to CAB AIR FILTER SERVICE, page 7-6 for more information. • Ensure the air conditioner cab drains are clear of any obstructions. • Wash the air conditioner condenser with a low pressure hose. Check for any obstructions to airflow, clean as required.
COOLING SYSTEM	• Wash the radiator fins with a low pressure hose. Check for any obstructions to airflow, clean as required. • Inspect the radiator stabilizers (upper radiator stabilizers, lower radiator stabilizers and shroud bumpers) for damage and tightness. Fix as required.

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FUEL SYSTEM SERVICE G.36-0000051601

Fuel Tank Cleaning

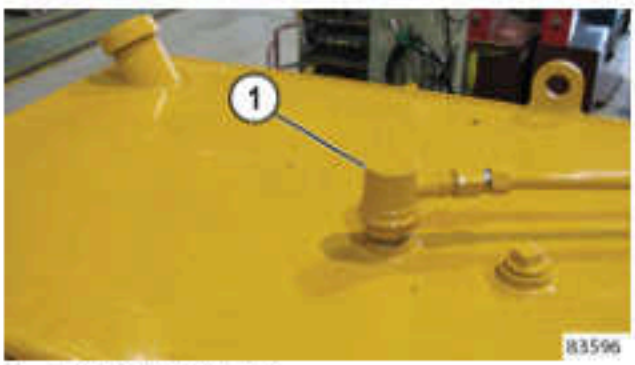


1. Fuel Tank Drain

Figure 7-9 FUEL TANK

Open fuel tank drain (1, Figure 7-9 FUEL TANK, page 7-7) to drain water and sediment from the fuel tank. The fuel tank is provided with a drain and a cleaning port in the side that allows steam or solvent to be utilized in cleaning tanks that have accumulated foreign material.

It is not necessary to remove the tank from the truck for cleaning of sediment, however rust and scale on the walls and baffles may require complete tank removal. Prior to a cleaning procedure of this type, all vents, fuel gauge, and hose connections should be removed and temporarily sealed. After all scale, rust, and foreign material has been removed, the temporary plugs can be removed. A small amount of light oil must be sprayed into the tank to prevent rust if the tank is to remain out of service. All openings should be sealed for rust prevention.



1. Fuel Tank Breather

Figure 7-10 FUEL TANK BREATHER

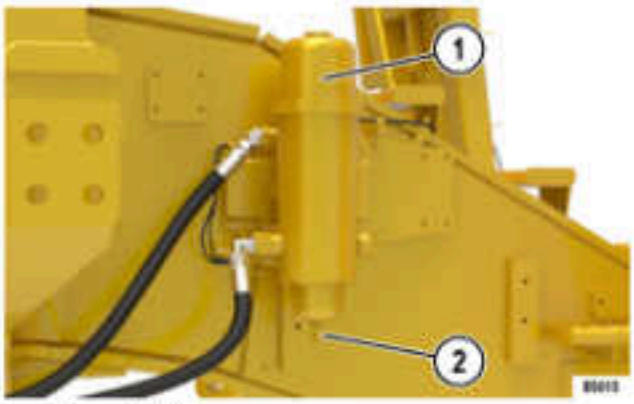
Remove breather (1, Figure 7-10 FUEL TANK BREATHER, page 7-7) and clean in solvent. Dry with pressurized air and reinstall.

Fuel Filter Service



1. Water Drain Valves

Figure 7-11 WATER SEPARATOR DRAIN



1. Stage 1 Filter
2. Water Drain Valve

Figure 7-12 WATER SEPARATOR DRAIN (TIER 2 OR TIER 4 ONLY)

Open water drain valve on the engine mounted fuel filters (1, Figure 7-11 WATER SEPARATOR DRAIN, page 7-7) and on the stage 1 fuel filter (2, Figure 7-12 WATER SEPARATOR DRAIN (TIER 2 OR TIER 4 ONLY), page 7-7 to remove water from the fuel/water separator daily.

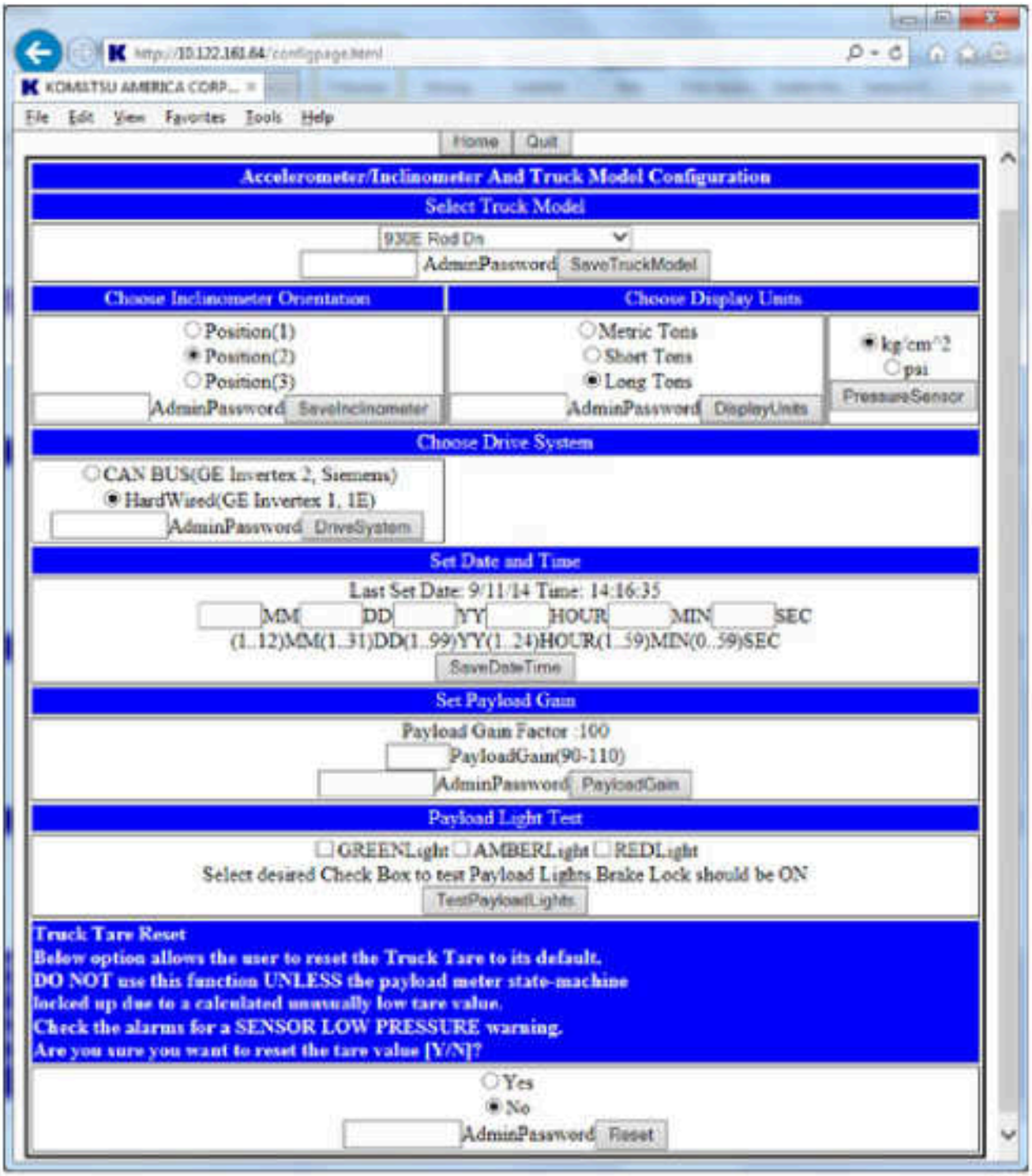
INTAKE AIR CLEANER SERVICE E.5-0000051600

⚠ CAUTION

- **The engine must be turned off before servicing the air cleaner assemblies or opening the engine air intake system. Never start the engine with the filter elements removed. Serious engine damage can result.**

During operation or after the engine has been turned off, observe the air filter restriction gauges mounted on the overhead panel in the cab. When a gauge shows maximum restriction, filter service is required.

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There are eight configuration parameters on this page. Below is a description of each.

- Truck Model
- PLM IV Mounting Orientation
- Gauge Display Units
- Pressure Sensor Units (for RTD web page only)
- Date and Time
- Payload Gain Factor
- Payload Light Test
- Truck Tare Reset

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