CEAM033400

Operation & Maintenance Manual

730E

DUMP TRUCK

SERIAL NUMBERS 730E A30686 and up

ENGINE 16V159

April 2018

KOMATSU®

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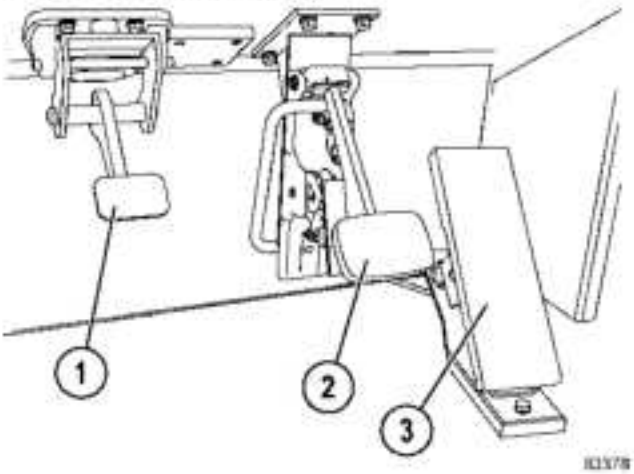
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PEDALS C.7-0000051459



1. Service Brake Pedal
2. Dynamic Retard Pedal
3. Accelerator Pedal

Figure 6-3 PEDALS

Service Brake Pedal

Service brake pedal (1, Figure 6-3 PEDALS, page 6-5) is a foot operated pedal which applies the service brakes. Only apply the service brakes when dynamic retarding requires additional braking force to slow the truck speed quickly, or to bring the truck to a complete stop once truck speed is less than 5 kph (3 mph).

Dynamic Retard Pedal

Dynamic retard pedal (2) is a foot operated pedal which allows the operator to slow the truck and maintain a safe productive speed without the use of the service brakes. For normal truck operation, only dynamic retarding must be used to slow and control the speed of the truck. Use the grade/speed chart, located on the left post next to the windshield, to determine maximum safe truck speeds for descending a grade with a loaded truck. Only apply the service brakes when dynamic retarding requires additional braking force to slow the truck speed quickly or to bring the truck to a complete stop.

When dynamic retarding is in use, the engine rpm will automatically go to an advance rpm retard speed setting (usually 1250 rpm). Dynamic retarding will be applied automatically, if the speed of the truck reaches the predetermined overspeed retard setting. Dynamic retarding is available in FORWARD/REVERSE at all truck speeds above 0 kph/mph, but is available in NEUTRAL only when truck speed is above 5 kph (3 mph).

Dynamic Retarding

Dynamic retarding is a braking torque (not a brake) produced through electrical generation by the wheelmotors when the truck motion (momentum) is the propelling force.

For normal truck operation, dynamic retarding must be used to slow and control truck speed.

Dynamic retarding is available in FORWARD/REVERSE at all truck speeds above 0 kph/mph; however, as the truck speed slows below 5 kph (3 mph), the available retarding force may not be effective. Use the service brakes to bring the truck to a complete stop.

Dynamic retarding will not hold a stationary truck on an incline. Use the parking brake or wheel brake lock for this purpose.

Dynamic retarding is available in NEUTRAL only when truck speed is above 5 kph (3 mph).

When dynamic retarding is in operation, engine rpm will automatically go to an advance retard speed setting. This rpm will vary depending on temperature of several electrical system components.

Dynamic retarding will be applied automatically if the speed of the truck obtains the maximum speed setting programmed in the control system software.

When dynamic retarding is activated, an indicator light in the overhead display will illuminate. The grade/speed retard chart must always be used to determine safe downhill speeds. Refer to the grade speed chart in the cab.

Accelerator Pedal

Accelerator pedal (3) is a foot-operated pedal which allows the operator to control engine rpm depending on pedal depression.

It is used by the operator to request torque from the motors when in forward or reverse. In this mode, the propulsion system controller commands the correct engine speed for the power required. In NEUTRAL, this pedal controls engine speed directly.

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EVERY 1000 HOURS LUBRICATION AND MAINTENANCE B.5-0000053611

NOTE: *Maintenance for every 10, 250, & 500 hour Lubrication and Maintenance Checks must also be performed at this time."Lube Key" references are to the lubrication chart.*

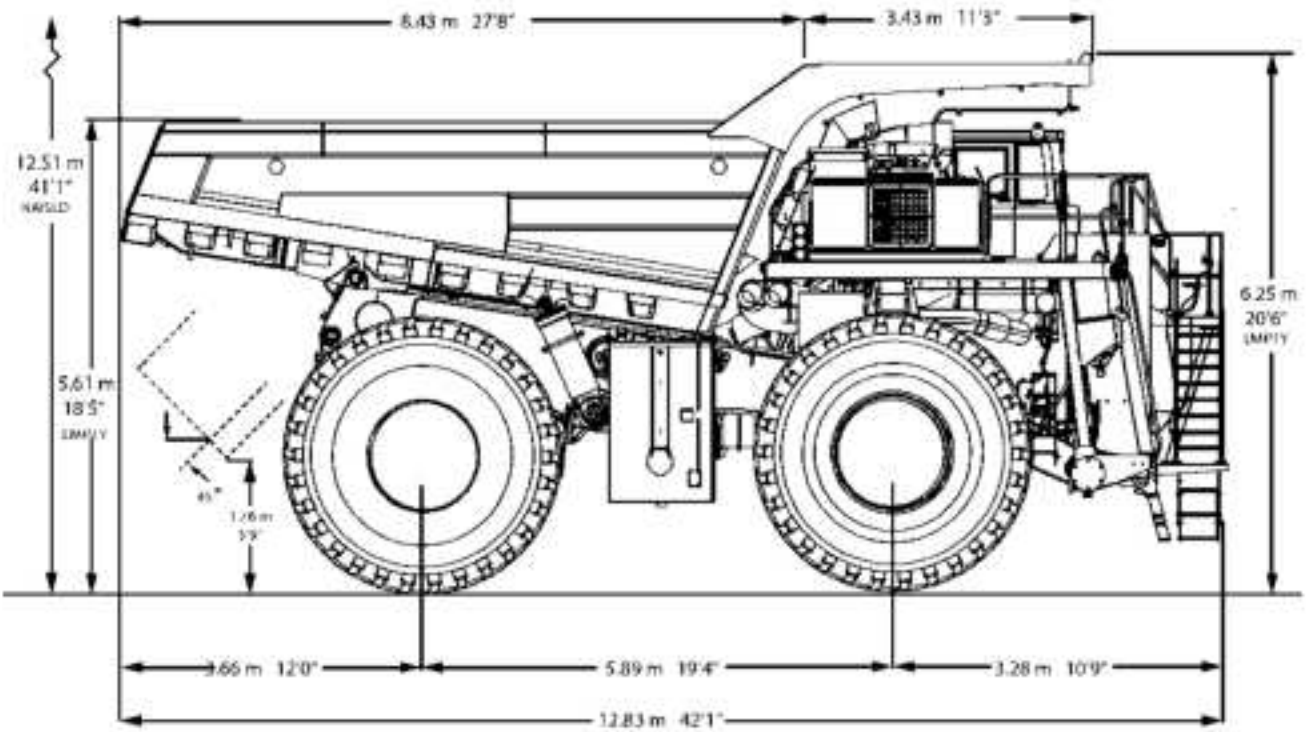
EVERY 1000 HOURS LUBRICATION AND MAINTENANCE	
Item	**Task**
HYDRAULIC SYSTEM	Drain the hydraulic tank and clean the inlet strainer. Refill the tank with new oil. (Lube Key "B"). ***NOTE:*** *Oil change interval can be extended to 2,500 hours if oil is sampled at every 250 hour intervals and no abnormalities are detected.*
COOLING SYSTEM	Clean the cooling system with a quality cleaning agent. Flush the system with water. Refill the system with anti-freeze and water solution. Check the Coolant Specifications, page 7-4 in this chapter.
FUEL SYSTEM	Service the fuel tank breather. Refer to FUEL SYSTEM SERVICE, page 7-5 for more detailed instructions.
OPERATOR'S SEAT	Apply grease to the slide rails. (Lube Key "D").
AUTOMATIC BRAKE APPLICATION	Ensure the brakes are automatically applied when brake pressure decreases below the specified limit. Refer to the Shop Manual, Section 30 for more details.
FRONT ENGINE MOUNT TRUNION	Add one or two applications of grease at the fitting. (Lube key "D"). Refer to FRONT ENGINE MOUNT TRUNNION SERVICE, page 7-7 for more detailed instructions.
AUTOMATIC LUBE SYSTEM	Check pump housing oil level using the dipstick. Add oil if necessary. Fill to bottom of oil level plug with SAE 10W-30 motor oil.
ELIMINATOR FILTER (If Equipped)	Clean and check centrifuge. Refer to engine manufacture's Operation & Maintenance Manual. (Service interval is dependent on duty cycle, oil quality, etc.)

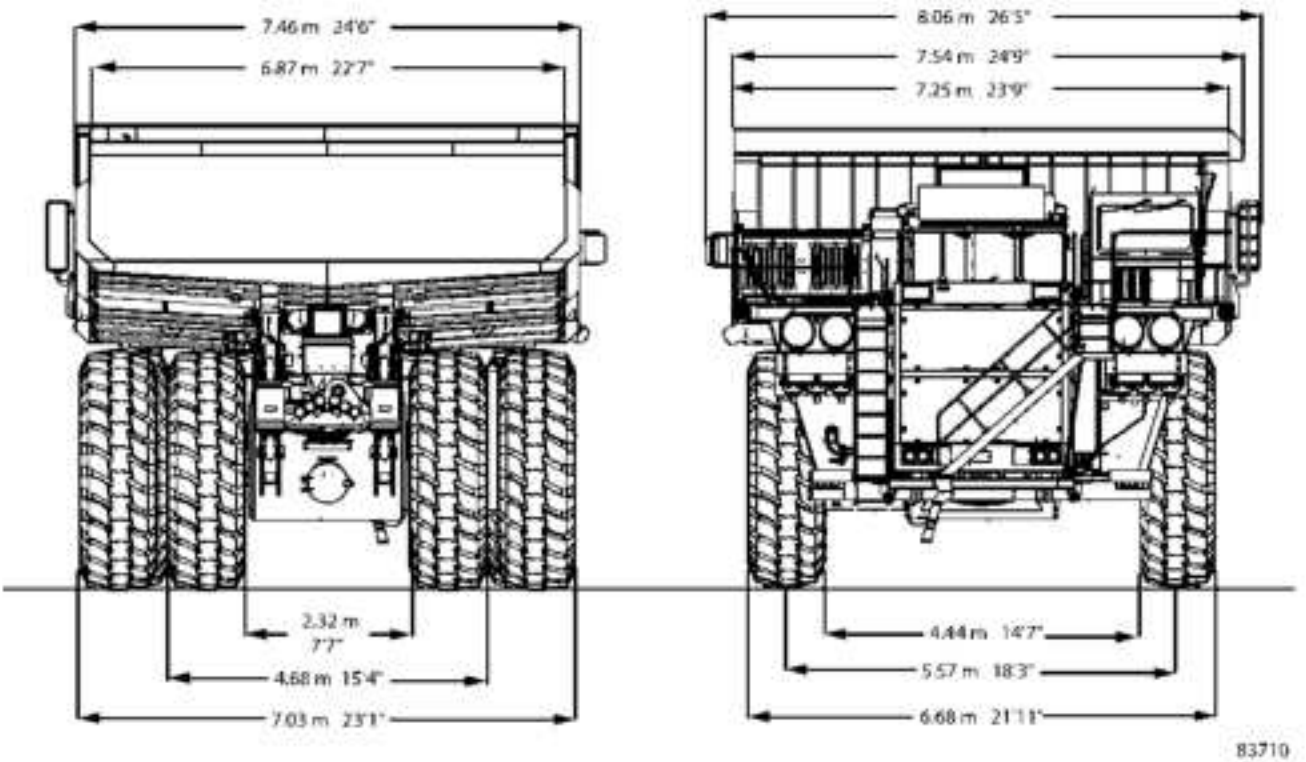
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Overall Truck Dimensions B.3-0000053335

(Empty With Standard Body)

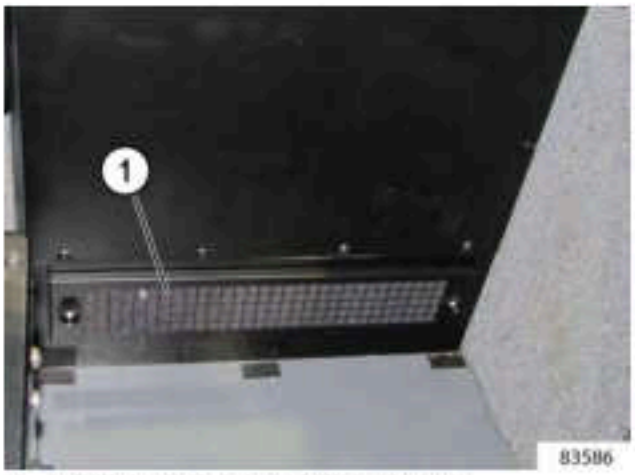
Length	12.83 m (42 ft. 1 in.)
Width	8.06 m (26 ft. 5 in.)
Height with Canopy	6.25 m (20 ft. 6 in.)
Height with Dump Body Up	12.51 m (41 ft. 1 in.)





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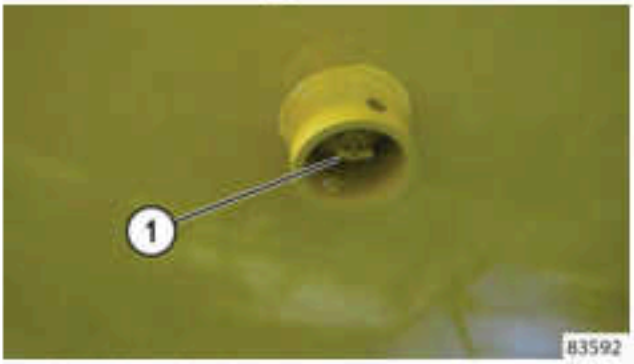
1. HVAC Recirculation Filter Element

Figure 7-6 HVAC RECIRCULATION FILTER LOCATION

1. Clean both filter elements (1, Figure 7-5 CAB AIR FILTER LOCATION, page 7-4 and Figure 7-6 HVAC RECIRCULATION FILTER LOCATION, page 7-5) with mild soap and water.
2. Rinse completely clean and air dry with a maximum of 275 kPa (40 psi).
3. Reinstall the filters.

FUEL SYSTEM SERVICE B.2-0000053613

Fuel Tank Cleaning



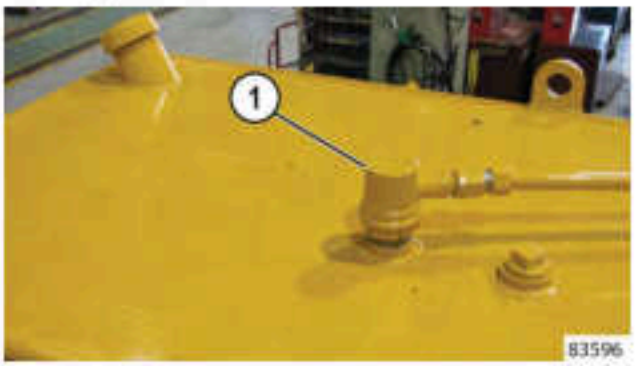
1. Fuel Tank Drain

Figure 7-7 FUEL TANK

Open fuel tank drain (1, Figure 7-7 FUEL TANK, page 7-5) 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.

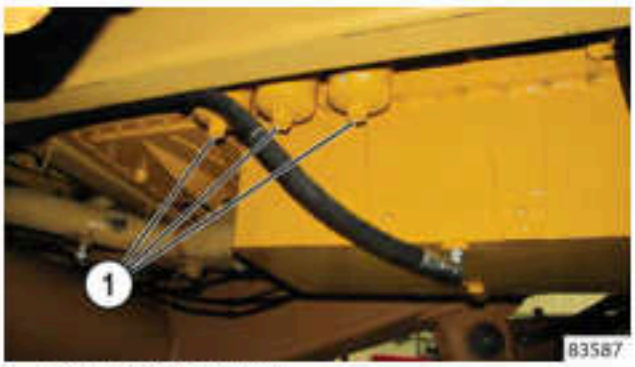


1. Fuel Tank Breather

Figure 7-8 FUEL TANK BREATHER

Remove breather (1, Figure 7-8 FUEL TANK BREATHER, page 7-5) and clean in solvent. Dry with pressurized air and reinstall.

Fuel Filter Service



1. Water Drain Valves

Figure 7-9 WATER SEPARATOR DRAIN

Open water drain valves (1, Figure 7-9 WATER SEPARATOR DRAIN, page 7-5) to remove water from the fuel/water separators daily.

INTAKE AIR CLEANER SERVICE B.4-0000053612

⚠ 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.**

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HAUL CYCLE WARNING FLAGS A.8-0000073397

Haul Cycle Data

All data is calculated and stored in metric units within the payload meter. The data can be downloaded directly into the .CSV file format. Units for displaying haul cycle data and for downloading haul cycle data file should be configured in the System Configuration web page. Whether the user has configured Metric, Short or Long tons, the data on both the real time data page and the view haul cycle data page will be converted to the selected unit. The haul cycle file download will be in the selected unit.

Refer to Table 5-3 HAUL CYCLE DATA, page 5-27 for details on each column of the haul cycle record.

NOTE: *Pressure Sensor selection is only for Real Time data display.*

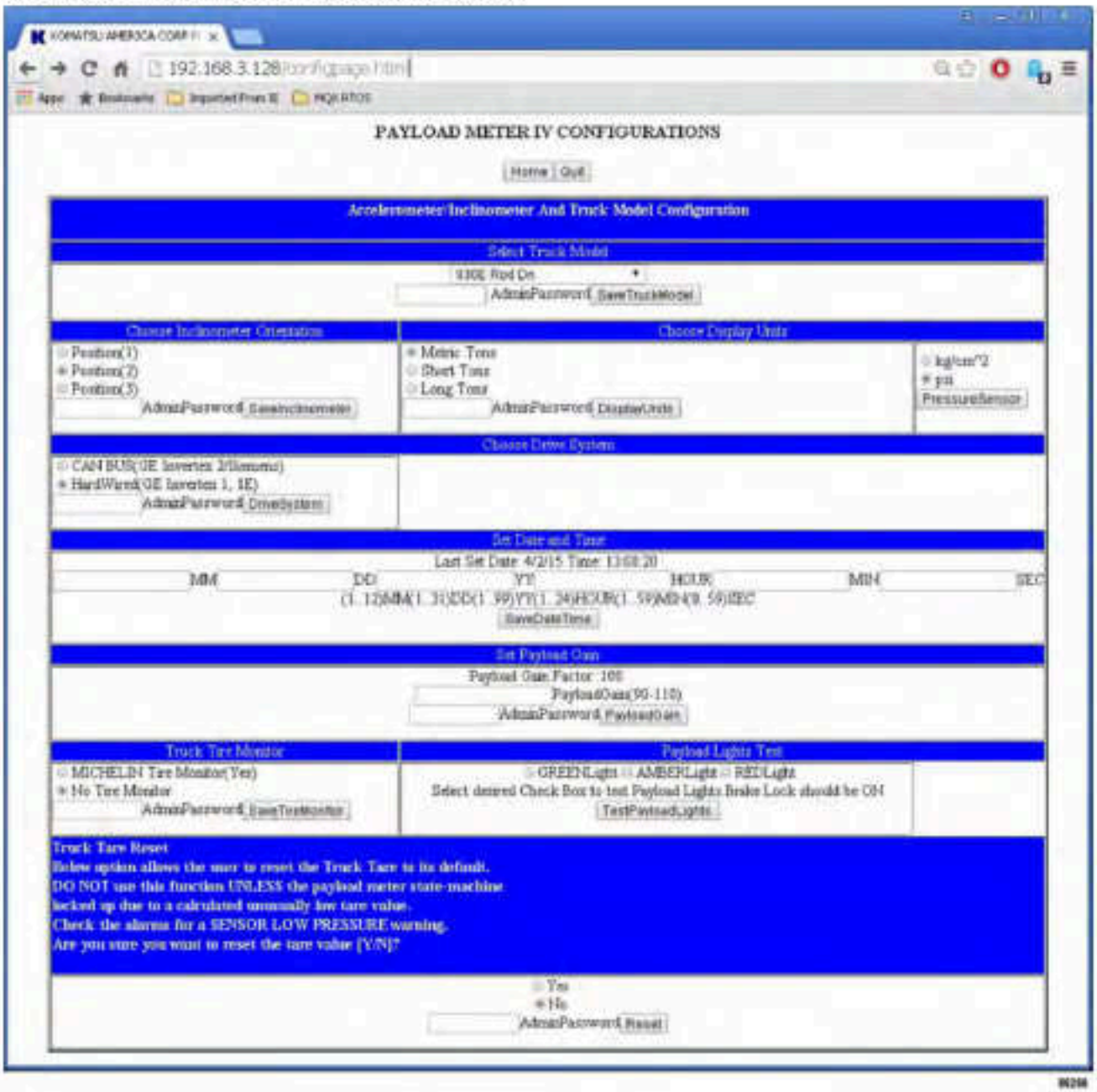


Figure 5-12 PLM IV CONFIGURATION

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