CEAM010001

Operation & Maintenance Manual



930E-2

DUMP TRUCK

SERIAL SUFFIX **930E A30246 and up**

KOMATSU®

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SAFETY . . . . . SECTION 2

Safety records of most organizations will show that the greatest percentage of accidents are caused by unsafe acts of persons. The remainder are caused by unsafe mechanical or physical conditions. Report all unsafe conditions to the proper authority. These safety rules are provided as a guide for the Komatsu truck operator.
However, local conditions and regulations may add many more to this list.

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OPERATION . . . . . SECTION 3

This portion of the manual covers Identification, location,and operation of the controls, switches, and indicators in the Operator's Cab and use / function of these controls, switches, and indicators.

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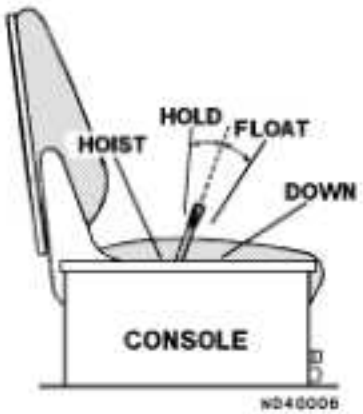
HOIST CONTROL LEVER

The hoist control (3, Figure 3-4) is a four position hand-operated lever located between the operator seat and the Center Console.

To Raise dump body:

1. Pull the lever to the rear to actuate hoist circuit. (Releasing the lever anywhere during "hoist up" will place the body in "hold" at that position.)
2. Raise engine RPM to increase hoist speed.
3. Reduce engine RPM as the last stage of the hoist cylinders begin to extend and then let the engine go to low idle as the last stage reaches half-extension.
4. Release hoist lever as the last stage reaches full extension.
5. After material being dumped clears the body, lower the body to frame.

Refer to "OPERATING INSTRUCTIONS, DUMPING" for more complete details concerning this control.



To lower body:

Move hoist lever forward to "down" position and release. Releasing the lever places hoist control valve in the "float" position allowing the body to return to frame.

ASH TRAY

The Ash Tray (4, Figure 3-4) is used for extinguishing and depositing smoking materials. DO NOT use for flammable materials, such as paper wrappers, etc.
Be certain that all fire ash is extinguished!

LIGHTER

The LIGHTER (5, Figure 3-4) may be used for lighting cigars/cigarettes.
Always use CAUTION with smoking materials!.

This socket may also be used for a 12 VDC power supply.

L.H. WINDOW CONTROL SWITCH

This switch (6, Figure 3-4) is spring-loaded to the "OFF" position. Pushing the front of the switch raises the left side cab window. Pushing the rear of the switch lowers the window.

R.H. WINDOW CONTROL SWITCH

This switch (7, Figure 3-4) is spring-loaded to the "OFF" position. Pushing the front of the switch raises the right side cab window. Pushing the rear of the switch lowers the window.

ENGINE SHUTDOWN SWITCH

This switch (8, Figure 3-4) is used for engine shutdown by depressing this button and holding it until engine stops.

Use this switch to shutdown engine if engine does not shutdown by turning off keyswitch, or to shutdown engine without turning off 24 VDC electric circuits.

There is also a ground level engine shutdown switch on the left front frame rail behind the ladder.

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500 HOUR LUBRICATION AND MAINTENANCE CHECKS

Maintenance requirements for every 10, 50, & 250 hour Lubrication and Maintenance Checks should also be carried out at this time.
NOTE: "Lube Key" references are to the Lubrication Specification Chart.

1. FINAL DRIVE CASE BREATHERS - Remove breather elements for motorized wheels and clean or replace elements.
2. HYDRAULIC SYSTEM FILTERS - Replace tank breathers and high pressure filter elements. Check oil level. Add oil as necessary. Lube Key "B".
3. HYDRAIR® SUSPENSION - Check for proper piston extension (front and rear).
4. THROTTLE AND BRAKE PEDAL (NOT SHOWN) - Lubricate treadle roller and hinge pins with lubricating oil. Lift boot from mounting plate and apply a few drops of lubricating oil between mounting plate and plunger.
5. HOIST LIMIT SWITCH (NOT SHOWN) - Check operation. Clean and adjust as necessary.
6. HOIST ACTUATOR LINKAGE (NOT SHOWN) - Check operation. Clean, lubricate, and adjust as necessary.
7. PARKING BRAKE (NOT SHOWN) - Refer to the Shop Manual, Section "J", PARKING BRAKE MAINTENANCE, and perform the **Inspection** recommended.
8. Reserve Engine Oil System (Optional)
   a. Check electrical system connections for tightness, corrosion and physical damage. Check battery, oil pressure switch, junction boxes, remote control fill box and circuit breakers.
   b. Examine all electrical cables over their entire length for possible damage.
   c. Examine all hoses, including those on the reserve tank and the ones leading to and from the engine, for leaks, cracks or damage. Check all fittings for tightness, leakage or damage.

Truck Serial Number _____
Site Unit Number _____
Date:_____Hour Meter_____

Name of Service person_____

COMMENTS	√'d	INITIALS

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STANDARD DUMP BODY*

Capacity:

Struck	224 yds^3	171 m^3
Heaped @ 2:1 (SAE)	276 yds^3	211 m^3
Width (Inside)	26 ft. 9 in. (8.15 m)	
Depth	10 ft. 3 in. (3.1 m)	
Loading Height	23 ft. (7.01 m)	
Dumping Angle	45°	

* OPTIONAL Capacity Dump Bodies are available.

TIRES

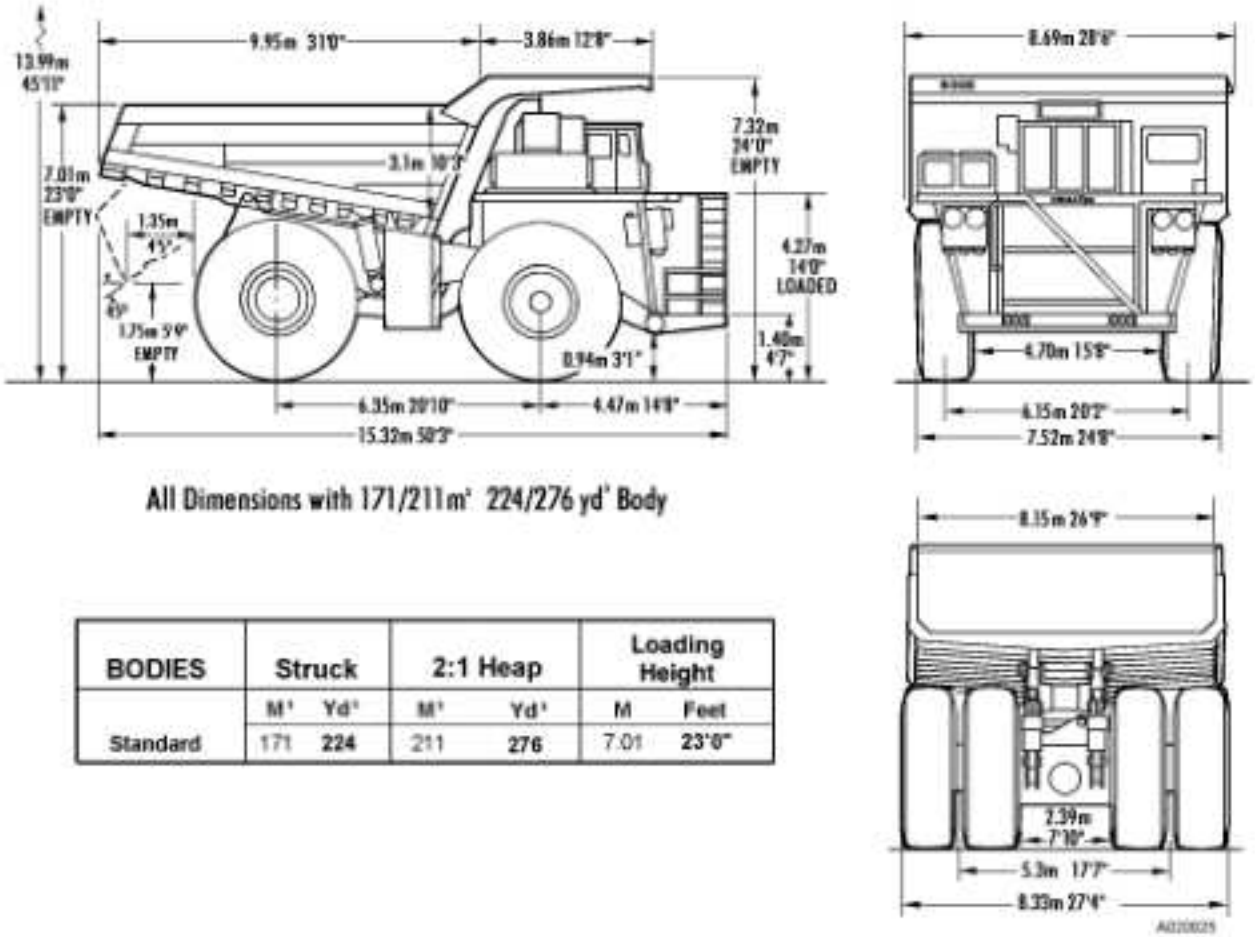
Radial Tires (standard)	53/80 R63
Rock Service, Deep Tread	Tubeless
Rims	(patented Phase II New Generation™ rims)

WEIGHT DISTRIBUTION

EMPTY	Pounds	Kilograms
Front Axle (49.3%)	220,319	999 351
Rear Axle (50.7%)	225,527	102 297
Total (50% Fuel)	445,846	202 232
LOADED		
Front Axle (33.9%)	372,900	169 147
Rear Axle (66.1%)	727,100	329 813
Total	1,100,000	498 960

Not to exceed 1,100,000 lbs. (498 960 kg), including options, fuel, and payload. Weights in excess of this amount require factory approval.

OVERALL TRUCK DIMENSIONS



All Dimensions with 171/211m³ 224/276 yd³ Body

BODIES	Struck		2:1 Heap		Loading Height	
	M³	Yd³	M³	Yd³	M	Feet
Standard	171	224	211	276	7.01	23'0"

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PLM3 System Configuration

Starting Communications

The PDM software allows users to download and configure the system.



Before connecting to the payload meter, select "Change Program Options" and confirm that the program has selected the correct laptop serial port. Most laptops use Comm 1 for serial communications. The units displayed for reports and graphs by the PC software can be set on this form. Click "Done" to return to the main menu.



From the main menu, click the "Connect to Payload Meter" button. The PC will try to connect to the payload meter and request basic information from the system. In the event of communications trouble, the PC will try 3 times to connect before "timing-out". This may take several seconds.

Displayed Payload Units



Three options are available for the display of units in the PC software, reports, and graphs:

Short Tons: Payload is displayed in short tons, distances and speeds will be displayed in Miles

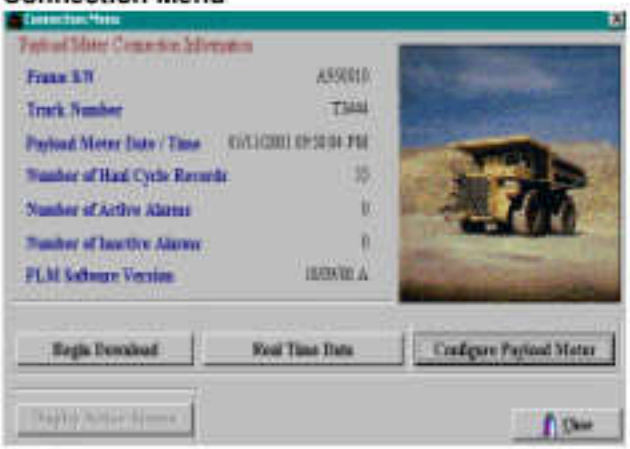
Metric Tons: Payload is displayed in metric tons, distances and speeds are displayed in Kilometers

Long Tons: Payload is displayed in long tons, distances and speeds are displayed in Miles

Time Units

Minutes and Seconds Example:
Five minutes and thirty-two seconds = 5:32
Decimal Minutes Example:
Five minutes and thirty-two seconds = 5.53

Connection Menu



The connection screen displays basic system information to the user.

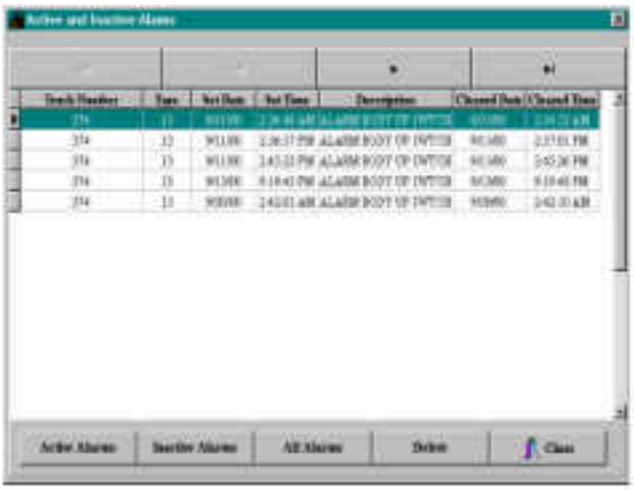
- Frame S/N should agree with the truck serial number from the serial plate located on the truck frame.
- Truck Number is an ID number assigned to the truck by the mine.
- The Payload Meter Date / Time values come from the payload meter at the moment of connection.
- Number of Haul Cycle Records is the number of haul cycles records stored in memory and available for download.
- Number of Active Alarms shows how many alarms are currently active in the system at the time of connection. If there are active alarms, the "Display Active Alarms" button is available.
- Number of Inactive Alarms shows how many alarms have been recorded in memory and are available for download.
- PLM Software Version displays the current version of software in the payload meter.

The information on the connection menu comes from the configuration of the payload meter system on the truck.

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Viewing Alarms

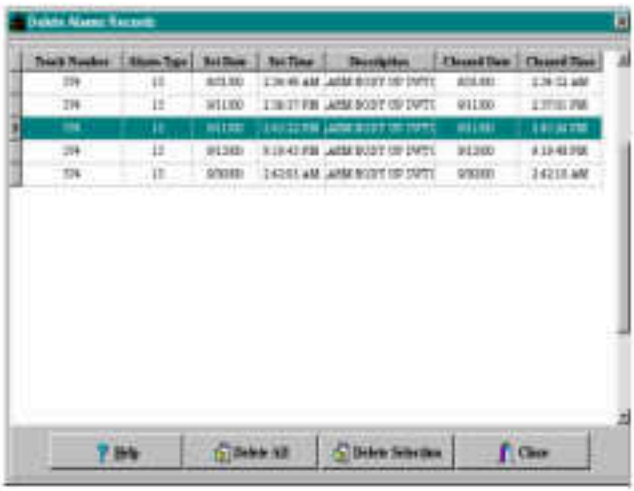
From the Payload Summary screen, click the "Alarms" button to display the alarm screen. The alarms are sorted by the query settings from the Payload Summary screen. Alarms can be displayed as Active or Inactive.



Deleting Alarm Records

To delete alarm records from the main database, press the "Delete" button at the bottom of the "Alarm Display" screen. The program will display a summary of the alarms from the query. To delete an alarm, select one at a time and press the "Delete" button. It is recommended that the query data be exported to a ".zip" file for archival purposes before deletion. Multiple records may be selected by holding down the Shift key. Pressing the "Delete All" button will select all the alarms from the current query and delete them.

NOTE: There is no recovery for alarms that have been deleted from the main database. It is highly recommended that all records be exported and archived in a compressed file format for future reference before being deleted.



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