CEAM021602

Operation & Maintenance Manual

860E-1KT

DUMP TRUCK

SERIAL NUMBERS **A30004 - A30014**

KOMATSU®

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CENTER CONSOLE

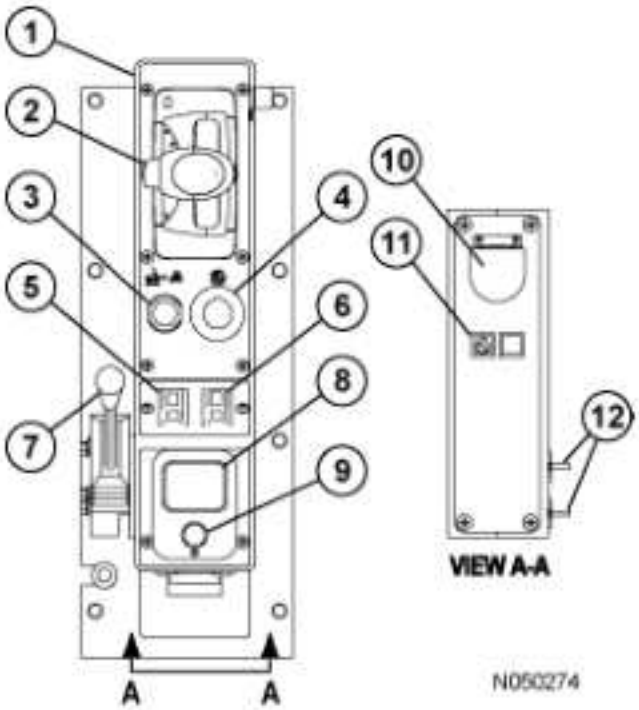


FIGURE 32-3. CENTER CONSOLE

1. Center Console
2. Directional Control Lever
3. Override/Fault Reset Switch
4. Engine Shutdown Switch
5. L.H. Window Control Switch
6. R.H. Window Control Switch
7. Hoist Control Lever
8. Ashtray
9. Lighter
10. Data Store Button
11. Service Engine Light (blue)
12. 12V Auxiliary Power Outlets

Directional Control Lever

Directional control lever (2, Figure 32-3) is mounted on the console to the right of the operator's seat. It is a five position lever that controls the park, reverse, neutral and forward movement, and trolley operation of the truck.

Before moving the directional control lever, apply the service brakes to completely stop the truck. Depress the button on the side to release the detent lock, then move the control lever to the desired position. When the control lever is in the center N position, it is in NEUTRAL. When the control lever is in the P position, it is in PARK, and the parking brake will be applied. The parking brake is spring applied and hydraulically released. It is designed to hold the truck stationary when the engine is off and the key switch is turned OFF.

When the key switch is ON, and the control lever is in PARK, parking brake indicator light (2, Figure 32-9) on the instrument panel will be illuminated.

⚠ IMPORTANT ⚠

The directional control lever must be in PARK to start the engine.

NOTE: Do not move the directional control lever to the PARK position at the shovel or dump site.

The operator can select FORWARD drive by moving the lever to the F position.

The operator can select REVERSE drive by moving the lever to the R position. Do not allow the control lever to travel too far and go into the PARK position when REVERSE is desired.

Any time the directional control lever is placed in the FORWARD or the REVERSE position, the engine speed will go to 1,600 rpm for 15 seconds in preparation for truck movement. If the throttle pedal is not touched within 15 seconds, engine speed will return to 750 rpm.

Any time the truck is moving and engine rpm is above 1,600 rpm and the throttle pedal is released, engine rpm will hold at 1,600 rpm. If the throttle pedal is not touched within 15 seconds, then engine rpm will return to 750 rpm.

The operator can select TROLLEY by moving the lever to the T position. This position will prepare the truck for trolley operation. The pantograph switch on the dash panel is now active. When desired, the operator can raise the pantograph to receive electricity from the overhead wires.

NOTE: The truck must be completely stopped before the control lever is moved to a drive position or into PARK. A fault will be recorded if the control lever is placed into the PARK position while the truck is still moving.

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2,000 HOUR MAINTENANCE CHECKS

All *10 Hour (Daily) Inspections, 250 Hour Lubrication and Maintenance Checks, 500 Hour Lubrication and Maintenance Checks,* and *1000 Hour Lubrication and Maintenance Checks* should also be performed at this time.

NOTE: "Lube Key" references are to the ***Lubrication Chart*** *on page 40-5.*

Truck Serial Number_____ **Site Unit Number**_____ **Date**_____

Hourmeter_____ **Name of Service Technician**_____

	TASK	COMMENTS	CHECKED	INITIALS
1.	MOTORIZED WHEELS - Drain and refill the wheel motor final drive with new oil. (Lube key C).			
2.	IGBT CONTROL BOX - Inspect contactor K103, K105, and K109 for excessive wear, replace as necessary.			
3.	GRID BLOWER SHAFT COUPLING - On the coupling, add one or two applications of grease. (Lube Key G)			

3,000 HOUR MAINTENANCE CHECKS

All *10 Hour (Daily) Inspections, 250 Hour Lubrication and Maintenance Checks, 500 Hour Lubrication and Maintenance Checks,* and *1000 Hour Lubrication and Maintenance Checks* should also be performed at this time.

NOTE: "Lube Key" references are to the ***Lubrication Chart*** *on page 40-5.*

Truck Serial Number_____ **Site Unit Number**_____ **Date**_____

Hourmeter_____ **Name of Service Technician**_____

	TASK	COMMENTS	CHECKED	INITIALS
1.	MAIN ALTERNATOR a. Add 80 g (2 oz) of grease per bearing. Do not over grease. (Lube Key E) b. Clean condensation water drain holes at the underside of the alternator.			

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WEIGHT DISTRIBUTION

Vehicle Weights		
Standard Trolley Chassis	140 046 kg	(308,749 lbs)
Standard Komatsu body	33 643 kg	(74,171 lbs)
Standard tire weight	23 033 kg	(50,780 lbs)
Option Allowance	3 629 kg	(8,000 lbs)
Empty Vehicle Weight	**200 351 kg**	**(441,700 lbs)**
Front Axle (49%)	98 361 kg	(216,850 lbs)
Rear Axle (51%)	101 990 kg	(224,850 lbs)
Gross Vehicle Weight	**454 363 kg**	**(1,001,700 lbs)**
Front Axle (33.5%)	152 392 kg	(335,871 lbs)
Rear Axle (66.5%)	301 971 kg	(665,829 lbs)
Max. Nominal Payload*	**254 012 kg**	**(560,000 lbs)**

NOTE: All weights shown with 100% fuel load.

* *Nominal payload* is defined within Komatsu America Corporation's payload policy documentation. In general, the nominal payload must be adjusted for the specific vehicle configuration and site application. The figures listed are provided for basic product description purposes. Please contact your Komatsu distributor for specific application requirements.

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PLM III SYSTEM CONFIGURATION

Starting Communications



Before connecting to the payload meter, select "Change Program Options".

- Confirm that the program has selected the correct Com Port. Most laptop computers use Comm 1 for serial communications.
- Three options are available for the displaying payload units in the 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.
- Two options are available for displaying time units in the software, reports, and graphs:

  Minutes and Seconds:
  Five minutes and thirty-two seconds = **5:32**

  Decimal Minutes:
  Five minutes and thirty-two seconds = **5.53**



Click "Done" to return to the main menu. From the main menu, select "Connect to Payload Meter". The computer will try to connect to the payload meter and request basic information from the system. In the event of communications trouble, the computer will try three times to connect before "timing out". This may take several seconds.

Connection Menu



The connection screen displays basic system information to the user.

- **Frame S/N** should be the same as 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.
- **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 system on the truck.

There are also many configuration and download options available from this screen. The Connection Menu is updated only when the connection is first made. It does not update automatically. To view changes made while connected, the user must close the window and reconnect to the payload meter.

The connection menu is displayed after a serial connection has been established and the PDM software has connected to the payload meter.

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Importing Data

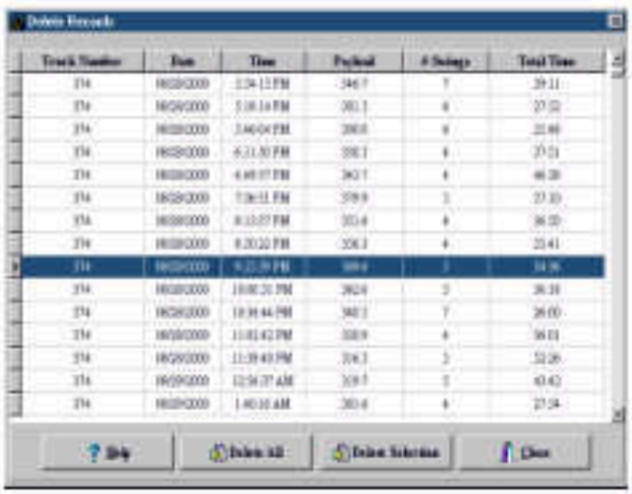
This import function allows the data from one computer to be transferred to another computer. This can be useful when a service laptop is used to download multiple machines and transfer the data to a central computer for analysis. This can also be used to copy haul data from a particular truck from a disk into a database for analysis.

To import data, click on the "Import" button at the bottom of the Payload Summary screen. The program will ask for a .zip file to import. Locate the file and click on "Open". The program will only import .zip files created by another computer that is running the PDM software.

Deleting Haul Cycle Records

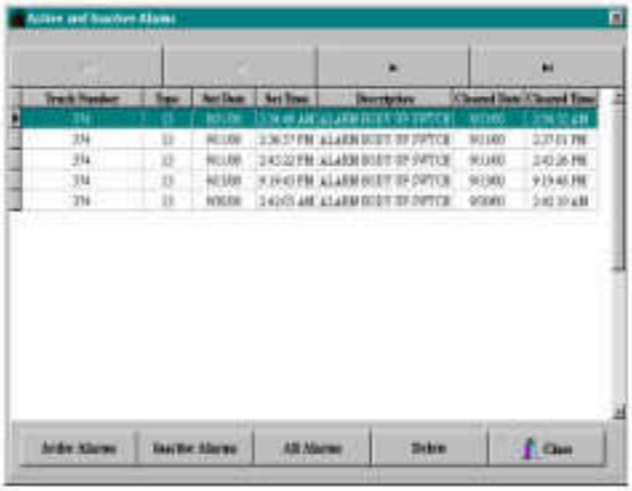
To delete haul cycle records from the main database, click on the "Delete" button at the bottom of the Payload Summary screen. The program will display a summary of the records from the displayed query. To delete a record, select one at a time and click on the "Delete" button. It is recommended that records be exported to a .zip file for archival purposes before deletion. Multiple records may be selected by holding down the Shift key. Clicking on the "Delete All" button will select all the records from the current query and delete them.

NOTE: There is no recovery for records 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.



Viewing Alarms

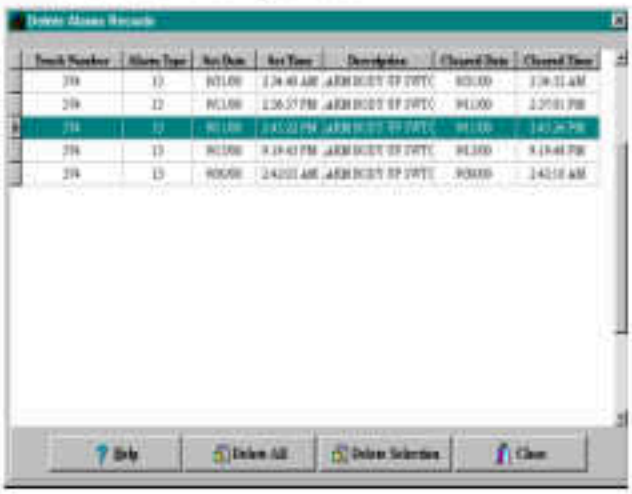
From the Payload Summary screen, click on the "Alarms" button to display the alarm screen. The alarms are sorted by the query settings from the Payload Summary screen. Alarms can be displayed as Active or Inactive.



Deleting Alarm Records

To delete alarm records from the main database, click on 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 click on 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. Clicking on 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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