CEAM020902

Operation & Maintenance Manual

730E

DUMP TRUCK

SERIAL NUMBERS **A30552 - A30596**

KOMATSU®

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TABLE OF CONTENTS

INTRODUCTION **10-1**

FOREWORD 10-1
TRUCK MODEL ILLUSTRATION 10-2
ABOUT THIS MANUAL 10-3
ALERTS PAGE 10-4
TABLE OF CONTENTS 10-5

STANDARD CHARTS AND TABLES **12-1**

GENERAL SAFETY **20-1**

PERSONAL SAFETY 20-1
Safety Rules 20-1
Truck Safety Features 20-1
Clothing And Personal Items 20-1
Unauthorized Modification 20-1
Leaving The Operator's Seat 20-1
Mounting And Dismounting 20-1
Fire Extinguishers And First Aid Kits 20-2
Precautions For High Temperature Fluids 20-2
Asbestos Dust Hazard Prevention 20-2
Fire Prevention For Fuel And Oil 20-2
ROPS Precautions 20-3
Preventing Injury From Work Equipment 20-3
Precautions For Optional Attachments 20-3
Precautions When Starting The Machine 20-3
PRECAUTIONS FOR TRUCK OPERATION 20-4
Safety Is Thinking Ahead 20-4
Safety At The Work Site 20-4
Fire Prevention 20-4
Preparing For Operation 20-4
Ventilation For Enclosed Areas 20-4
Mirrors, Windows, And Lights 20-4
In The Operator's Cab - Before Starting The Engine 20-5
OPERATING THE MACHINE 20-5
Starting The Engine 20-5
Truck Operation - General 20-5
Traveling In The Truck 20-6
Precautions When Traveling In Reverse 20-6
Traveling On Slopes 20-6

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TABLE OF CONTENTS (cont.)

Ensuring Good Visibility 20-7
Operating On Snow 20-7
Avoid Damage To The Dump Body 20-7
Driving Near High-Voltage Cables 20-7
When Loading The Truck 20-7
When Dumping 20-7
Working On Loose Ground 20-7
Parking The Machine 20-8
TOWING 20-8
WORKING NEAR BATTERIES 20-8
Battery Hazard Prevention 20-8
Jump-Starting With Booster Cables 20-9
Jump Starting With Receptacles 20-9
PRECAUTIONS FOR MAINTENANCE 20-10
BEFORE PERFORMING MAINTENANCE 20-10
Stopping The Engine Before Service 20-10
Warning Tag 20-10
Proper Tools 20-10
Securing The Dump Body 20-10
DURING MAINTENANCE 20-11
Personnel 20-11
Attachments 20-11
Working Under The Machine 20-11
Keeping The Machine Clean 20-11
Rules To Follow When Adding Fuel Or Oil 20-11
Radiator Coolant Level 20-11
Use Of Lighting 20-11
Precautions With The Battery 20-12
Handling High-Pressure Hoses 20-12
Precautions With High-Pressure Oil 20-12
Maintenance Near High Temperatures And High Pressures 20-12
Rotating Fan And Belts 20-12
Waste Materials 20-12
TIRES 20-13
Handling Tires 20-13
Tire Maintenance 20-14
Storing Tires After Removal 20-14
ADDITIONAL JOB SITE RULES 20-15
WHEN REPAIRS ARE NECESSARY 20-16

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TABLE OF CONTENTS (cont.)

WARNINGS AND CAUTIONS **22-1**

OPERATING INSTRUCTIONS **30-1**

PREPARING FOR OPERATION 30-1
SAFETY IS THINKING AHEAD 30-1
WALK AROUND INSPECTION 30-1
ENGINE START-UP 30-6
AFTER ENGINE HAS STARTED 30-7
EMERGENCY STEERING SYSTEM 30-8
Operation 30-8
Pre-Operation Testing 30-8
Additional Guidelines 30-9
MACHINE OPERATION SAFETY PRECAUTIONS 30-9
LOADING 30-10
HAULING 30-10
PASSING 30-11
DUMPING 30-11
To Raise The Dump Body 30-11
To Lower The Dump Body (When dumping over a berm or into a crusher) 30-12
To Lower The Dump Body (When dumping on flat ground) 30-12
SAFE PARKING PROCEDURES 30-13
ENGINE SHUTDOWN PROCEDURE 30-13
DELAYED ENGINE SHUTDOWN PROCEDURE 30-14
SUDDEN LOSS OF POWER 30-14
DISABLED TRUCK DUMPING PROCEDURE 30-15
Hookup 30-15
Raising the Body 30-15
Lowering the Body 30-15
TOWING 30-16

OPERATOR CAB AND CONTROLS **32-1**

STEERING WHEEL AND CONTROLS 32-2
STEERING WHEEL 32-2
HORN BUTTON 32-2
TILT/TELESCOPE LEVER 32-2
MULTI-FUNCTION TURN SIGNAL SWITCH 32-2
Turn Signal Operation 32-2
High Beam Headlight Operation 32-2
Windshield Wiper Operation 32-2

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Headlight Switch



Instrument panel lights, clearance lights, and headlights are controlled by headlight switch (27, Figure 32-10). OFF is selected by pressing the bottom of the switch. Press the top of the switch until it reaches the first detent to select the panel, clearance, and tail lights only. Press the top of the switch again until it reaches the second detent to select the headlights, as well as the panel, clearance, and tail lights.

Panel Illumination Lights Dimmer Rheostat



Panel illumination lights dimmer rheostat (28, Figure 32-10) allows the operator to vary the brightness of the instruments and panel lights. Rotating the knob to the full counterclockwise position turns the panel lights on to the brightest condition. Rotating the knob clockwise continually dims the lights until the OFF position is reached at the full clockwise rotation.

Payload Meter Switch



Payload meter switch (29, Figure 32-10) is a two-way, momentary switch. The top position is the select position which is used to step through the different displays. The lower position is the set position which is used to set the operator ID or clear the load and total ton counters. Refer to Payload Meter in this module for a complete description of the payload meter system and its functions.

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5000 HOUR LUBRICATION AND MAINTENANCE CHECKS

Truck Serial Number_____ **Site Unit Number**_____ **Date**_____
Hourmeter_____ **Name of Service Technician**_____

	TASK	COMMENTS	CHECKED	INITIALS
1.	AIR CLEANERS - Clean the Donaclone tubes in the pre-cleaner section of the air filter. Use low pressure cold water or low pressure air to clean the tubes. Refer to Section C, Air Cleaners. *NOTE: Do not use a hot pressure washer or high pressure air to clean the tubes. Hot water/high pressure causes the pre-cleaner tubes to distort.*			
2.	FRONT WHEELS - If oil sampling is done every 500 hours - And the contamination trends are not rising, do not replace the wheel bearings. Refer to Section G of the shop manual for more detailed instructions on oil sampling. If oil samples are not taken - Drain oil and completely disassemble the front wheel bearings and check all parts for wear or damage. Refer to Section G of the shop manual for disassembly and assembly procedures. Refill with oil. Check the oil level at the oil level plug on wheel hub. Lube key "E".			
3.	BLEED-DOWN MANIFOLD CHECK VALVE - Verify check valve has not vibrated loose. Tighten check valve to **190 - 203 Nm (140 - 150 ft-lbs)**			

Complete the 10, 50, 100, 250, 500, 1000, and 2500 hour lubrication and maintenance checks.

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INJECTORS (SL-1 Series H)

Injector Specifications

- Each lubrication injector services only one grease point. In case of pump malfunction, each injector is equipped with a covered grease fitting to allow the use of external lubricating equipment.
- Injector Output Volume:
  Maximum Output =1.31 cc (0.08 in^3)
  Minimum Output = 0.13 cc (0.008 in^3)
- Operating Pressure:
  Minimum - 12 755 kPa (1,850 psi)
  Maximum- 24 133 kPa (3,500 psi)
  Recommended - 17 238 kPa (2,500 psi)
- Maximum Vent Pressure (Recharge):
  4 137 kPa (600 psi)

Injector Adjustment

The injectors may be adjusted to supply from 0.13 - 1.31 cc (0.008 - 0.08 in^3) of lubricant per injection cycle. The injector piston travel distance determines the amount of lubricant supplied. This travel is controlled by an adjusting screw in the top of the injector housing.

Turn adjusting screw (1, Figure 42-10) counterclockwise to increase lubricant amount delivered and clockwise to decrease the lubricant amount.

When the injector is not pressurized, maximum injector delivery volume is attained by turning adjusting screw (1) fully counterclockwise until piston assembly (8) touches the adjusting screw. At the maximum delivery point, about 9.7 mm (0.38 in.) adjusting screw threads must be showing. Decrease the delivered lubricant amount by turning the adjusting screw clockwise to limit injector piston travel. If only half the lubricant is needed, turn the adjusting screw to the point where about 4.8 mm (0.19 in.) threads are showing. The injector will be set at the minimum delivery point with about 0.22 mm (0.009 in.) thread showing.

NOTE: The above information concerns adjustment of injector delivery volume. The timer adjustment must also be changed if overall lubricant delivery is too little or too much. Injector output must not be adjusted to less than one-fourth capacity.

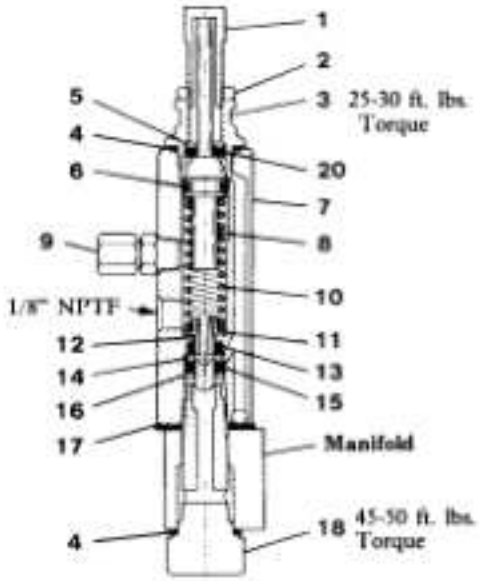


FIGURE 42-10. TYPE SL-1 INJECTOR

1. Adjusting Screw
2. Locknut
3. Piston Stop Plug
4. Gasket
5. Washer
6. Viton O-Ring
7. Injector Body Assembly
8. Piston Assembly
9. Fitting Assembly
10. Plunger Spring
11. Spring Seat
12. Plunger
13. Viton Packing
14. Inlet Disc
15. Viton Packing
16. Washer
17. Gasket
18. Adapter Bolt
19. Adapter
20. Viton Packing

NOTE: Piston assembly (8) has a visible indicator pin at the top of the assembly to verify injector operation.

*NOTE: Piston stop plug (3) must be tightened to **34-41 N·m (25-30 ft lbs)**. Adapter (19) must be tightened to **61-68 N·m (45-50 ft lbs)**.*

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PLM III SYSTEM CONFIGURATION

Starting Communications

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



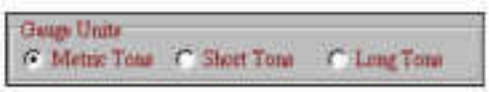
Before connecting to the payload meter, select "Change Program Options" and confirm that the program has selected the correct laptop serial port. Most laptops use Comm 1 for serial communications. The units displayed for reports and graphs by the PC software can be set on this form. Click "Done" to return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

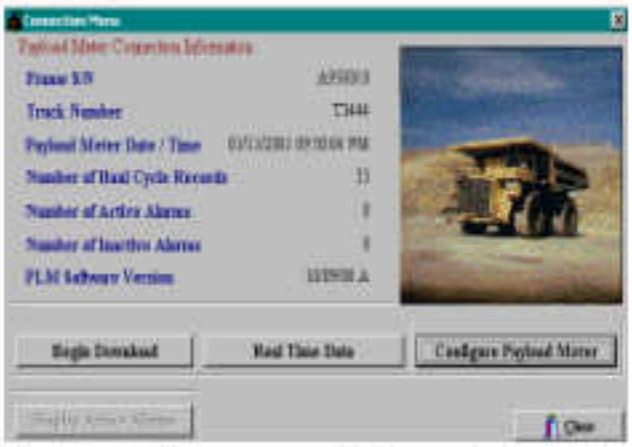
Long Tons: Payload is displayed in long tons, distances and speeds are displayed in Miles

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.

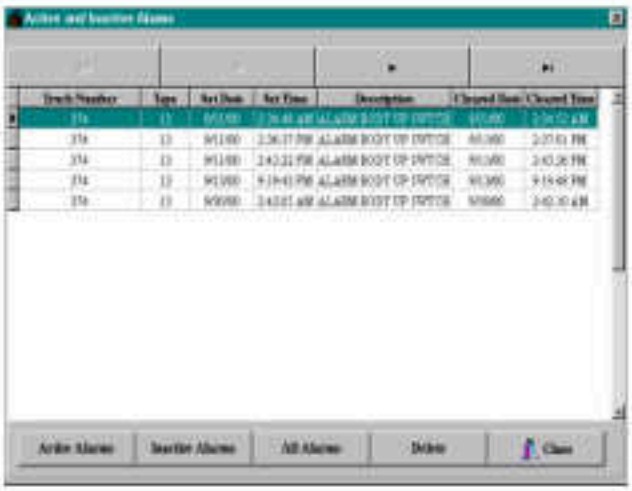
- Frame S/N should agree with the truck serial number from the serial plate located on the truck frame.
- Truck Number is an ID number assigned to the truck by the mine.
- The Payload Meter Date / Time values come from the payload meter at the moment of connection.
- Number of Haul Cycle Records is the 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 system on the truck.

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Viewing Alarms

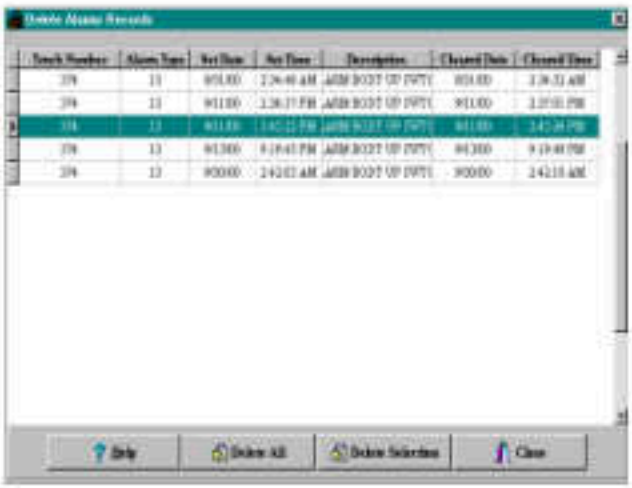
From the Payload Summary screen, click the "Alarms" button to display the alarm screen. The alarms are sorted by the query settings from the Payload Summary screen. Alarms can be displayed as Active or Inactive.



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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