CEAM006200

Operation & Maintenance Manual



830E

DUMP TRUCK

SERIAL SUFFIX A30625 thru A30649

KOMATSU®

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TABLE OF CONTENTS

SUBJECT - SECTION / PAGE

INTRODUCTION **SECTION 1**

Foreword 1-1
ALERTS Page - a description of the DANGER, WARNING, and CAUTION symbols used in this manual. . . 1-2
TABLE OF CONTENTS 1-3
Truck Model Illustration 1-6
About This Manual 1-7
STANDARD CHARTS and TABLES. 1-9

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 operator. However, local conditions and regulations may add many more to this list.

GENERAL SAFETY 2-1
PRECAUTIONS DURING OPERATION 2-5
Operating Machine 2-6
Towing 2-9
Battery 2-10
PRECAUTIONS FOR MAINTENANCE 2-11
Before Carrying Out Maintenance 2-11
During Maintenance 2-12
Tires 2-15
Additional Job Site Rules 2-16
WHEN REPAIRS ARE NECESSARY 2-17
WARNING, CAUTION, and Instruction Plates / Decals . . . . 2-19 thru 2-24

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.

OPERATING INSTRUCTIONS
Preparing For Operation 3-1
Safety Is Thinking Ahead 3-1
At The Truck - Ground Level Walk-Around Inspection 3-1
Walk-Around Inspection - Illustration 3-2
ENGINE START-UP SAFETY PRACTICES 3-4
AFTER ENGINE HAS STARTED 3-5
MACHINE OPERATION SAFETY PRECAUTIONS 3-5
LOADING 3-6
HAULING 3-6
PASSING 3-6
DUMPING 3-7

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TABLE OF CONTENTS (Continued)

SUBJECT - SECTION / PAGE

OPERATION (Continued) **SECTION 3**

TOWING 3-8
SAFE PARKING PROCEDURES 3-9
ENGINE SHUTDOWN PROCEDURE 3-9
DELAYED ENGINE SHUTDOWN PROCEDURE 3-10
OPERATOR CAB and CONTROLS 3-11
STEERING WHEEL AND CONTROLS 3-12
SERVICE BRAKE PEDAL 3-13
DYNAMIC RETARDER PEDAL 3-13
THROTTLE PEDAL 3-13
HEATER / AIR CONDITIONER VENTS 3-13
HEATER / AIR CONDITIONER COMPARTMENT AND CONTROLS 3-14
CENTER CONSOLE 3-16
OPERATOR SEAT 3-20
INSTRUMENT PANEL AND INDICATOR LIGHTS 3-21
Control Symbols 3-21
INSTRUMENT PANEL (Figure 3-6) 3-22
PANEL GAUGES, INDICATORS, AND CONTROLS (Discussion of items 1 - 28, Figure 3-6) 3-23
OVERHEAD STATUS / WARNING INDICATOR LIGHT PANEL (Figure 3-7) 3-28
INDICATOR LIGHT SYMBOLS - Refer to Figure 3-7 by rows (A-E) and columns (1 - 6) 3-29
Hazard Warning Lights (7) 3-35
Lamp Test Switch (8) 3-35

MAINTENANCE **SECTION 4**

This portion of the manual pertains mainly to the periodic Lubrication and Service required to keep the truck operating at its design potential. Routine lubrication and maintenance procedures are provided in this section. For major repairs, refer to the appropriate section in the Truck Shop Manual. Refer to the engine manufacturer's service manual when servicing the engine.

LUBRICATION AND SERVICE 4-1
Lubrication Chart 4-2
10 HOUR (DAILY) Lubrication And Maintenance Checks 4-3
50 HOUR Lubrication And Maintenance Checks 4-5
100 HOUR Lubrication And Maintenance Checks 4-6
250 HOUR Lubrication And Maintenance Checks 4-7
500 HOUR Lubrication And Maintenance Checks 4-9
1000 HOUR Lubrication And Maintenance Checks 4-10
2500 HOUR Lubrication And Maintenance Checks 4-11
5000 HOUR Lubrication And Maintenance Checks 4-12

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TABLE OF CONTENTS (Continued)

SUBJECT - SECTION / PAGE

MAINTENANCE (Continued) SECTION 4

LINCOLN AUTOMATIC LUBRICATION SYSTEM 4-13
General Description 4-13
System Components 4-15
System Operation 4-16
Injector Operation 4-18
General Instructions 4-19
Lubricant Required 4-19
System Priming 4-19
Filter Assembly 4-19
Lubricant Pump 4-20
System Checkout 4-22
24 VDC Solid State Timer Check 4-22
System Troubleshooting Chart 4-23
Preventative Maintenance Procedures. 4-26

SPECIFICATIONS SECTION 5

This portion of the manual covers major component descriptions and truck specifications.

Major Component Description 5-1
Specifications 5-3

OPTIONAL EQUIPMENT SECTION 6

This portion of the manual covers operation/maintenance of OPTIONAL EQUIPMENT.

PAYLOAD METER II INDEX 6-1
CAB RADIO (AM/FM STEREO CASSETTE) 6-35

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(3, Figure 3-6) MANUAL BACKUP SWITCH



The Manual Backup Switch allows backup lights to be turned "On" providing added visibility and safety when the Selector Switch (see OPERATOR CONTROLS) is not in "REV" position. When the SWITCH is pressed toward the "on" position, the MANUAL BACK UP LIGHT indicator (B4, Overhead Panel) will be illuminated.

(4, Figure 3-6) LADDER LIGHT SWITCH



The switch turns the ladder lights "On" or "Off" after or before using ladder. Pressing the top of the rocker switch turns the lights "On". Pressing the bottom of the switch turns the lights "Off". Another switch is mounted at the front left of truck near the base of ladder.

(5, Figure 3-6) FOG LIGHTS (OPTIONAL)



Fog Lights are optional equipment that are useful in foggy conditions and heavy rain. Pressing the top of the rocker switch turns the lights "On". Pressing the bottom of the switch turns the lights "Off".

(6, Figure 3-6) PANEL ILLUMINATION LIGHTS

These lights provide illumination for the instrument panel. Brightness is controlled by the panel light dimmer switch (28).

(7, Figure 3-6) CAB AIR CONDITIONER / HEATER VENTS

These Vents are spherically mounted and may be directed by the operator to provide the most comfortable cabin air flow.

(8, Figure 3-6) ENGINE COLD WEATHER STARTING AID (OPTIONAL)



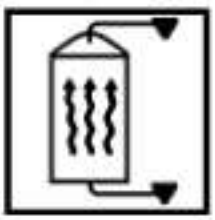
The OPTIONAL Engine Starting Aid switch is spring-loaded to the "Off" position. Use only when ambient temperature is below 50°F (10°C). When switch is held in the "On" position, ether is injected into the engine intake manifold to aid engine starting in cold weather. Move the Engine Starting Aid switch to the "On" position while cranking engine, for three (3) seconds **maximum**, and then release Engine Starting Aid. If engine does not start, wait at least fifteen (15) seconds before repeating the procedure.
Refer to "Operating Instructions", for more specific operating details.

(9, Figure 3-6) ROTATING BEACON LIGHT SWITCH (OPTIONAL)



If truck is equipped with the OPTIONAL Rotating Beacon Light, it will be activated by this rocker-type switch when it is pressed toward the "on" position.

(10, Figure 3-6) HEATED MIRROR SWITCH (OPTIONAL)



If truck is equipped with the OPTIONAL Heated Mirror, it will be activated by this rocker-type switch when it is pressed toward the "on" position.

(11, Figure 3-6) BLANK (Not Used In This Application)

Reserved for future options.

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100 HOUR LUBRICATION AND MAINTENANCE CHECKS

Truck Serial Number _____

Site Unit Number _____

Date:_____Hour Meter_____

Name of Service person_____

Maintenance for every 10 & 50 hour Lubrication and Maintenance Checks should also be carried out at this time.

COMMENTS	√'d	INITIALS

1. HYDRAULIC SYSTEM FILTERS -
   Replace filter elements after the initial 50, 100, and 250 hours of operation; then at each 500 hours of operation thereafter.

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In order to adjust this gain:

1. Start with the payload meter in normal operation mode.
2. Adjust the gain pot, left to reduce the value and right to increase the value.
3. Press and hold the LIGHT/INC and MODE switches until "CHEC" is flashing on the meter. CHEC
4. Press and hold the LIGHT/INC switch until "ALL0" is flashing on the display. "A.FUL" may also be displayed. ALLO
5. Press the LIGHT/INC switch14 times. The number displayed will be the current Gt gain. This is not a "live" reading. Any time the potentiometer is changed, this cycle must be repeated to view the change.
6. Press MODE once and "CHEC" will flash on the display. CHEC
7. Press MODE once and the meter will return to normal operation.

These calculations used a 13" front suspension diameter and 10" rear suspension diameter.

Sprung Weight = $\frac{\pi}{4}$ Suspension Diameter^2 (Psi Left + Psi Right)

Sprung Weight = Axle Weight(lbs)/2000

Example Calculation of Payload

Front Weight (6)	106.00	Rear Weight(7)	75.10
X Incline Factor (9)	0.95	X Incline Factor (10)	0.98
	100.70		73.90
X Link Factor (11)	1.00	X Link Factor (12)	1.53
Front Weight	100.70	Rear Weight	113.70
Front Weight	100.70		
Rear Weight	113.70		
Total Weight	214.40		
XGain Factor (14)	1.00		
	214.40		
- Calibration (13)	-70.60		
Current Load(15)	143.80		

Figure 20-5.

Calculation of the Calibration Load

This procedure is similar to the manual calculation of load. This calibration load is used as item #13 from the manual calculation procedure.

1. Press and hold the LIGHT/INC and MODE switches until "CHEC" is flashing on the display. CHEC
2. Press and hold the CAL/CLR switch until "CALL0" is flashing on the display. CALLO
3. Press the CAL/CLR switch to cycle through the following data. The sequence repeats.

Item and Description	Units
1. Year of Calibration	Last 2 digits of year
2. Month:Day of Calibration	XX:XX
3. Hour:Minute of Calibration	XX:XX
4. Truck Model Setting	
5. Pressure Front Left	Psi
6. Pressure Front Right	Psi
7. Pressure Rear Left	Psi
8. Pressure Rear Right	Psi
9. Front Sprung Weight	Tons
10. Rear Sprung Weight	Tons
11. Degree of Incline	±° Nose Up Positive
12. Incline Factor - Front Axle	
13. Incline Factor - Rear Axle	
14. Link Factor Front Axle	
15.Link Factor Rear Axle	
16. Calibration Weight	Tons

4. Press MODE once and "CHEC" will flash on the display. CHEC
5. Press MODE once and the meter will return to normal operation.

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