DG729

# Operation & Maintenance Manual

# 330M

## DUMP TRUCK

SERIAL NUMBERS **A10190 - A10211**

KOMATSU®

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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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This portion of the manual pertains mainly to the periodic Lubrication and Service required to keep the truck operating at its designed 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 shop manual when servicing the engine.

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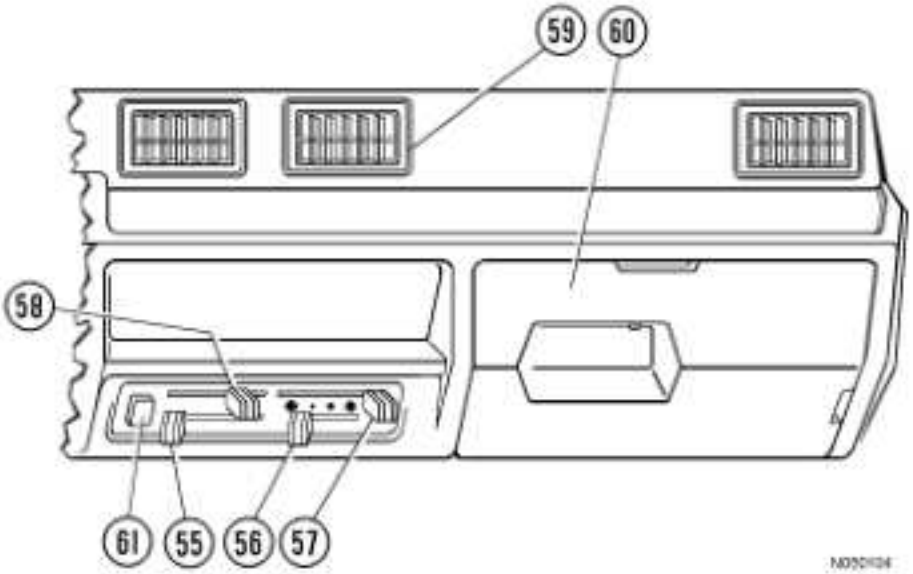



FIGURE 3-9. INSTRUMENT PANEL - RIGHT SIDE

**55. Temperature Adjustment Lever**

The Temperature Adjustment Lever (55, Figure 3-9) is used to adjust the cab air temperature for heating or cooling.

Move the lever to the left toward "WARM" (red bar) for higher temperature.

Move the lever to the right toward "COOL" (blue bar) for lower temperature.

**56. Blower Switch**

The Blower Switch (56) is a four position switch to control fan speed. Move the lever to fan position desired.



The positions - from left to right - are as follows:

"OFF" - Low - Medium - High

Low, Medium, and High are indicated by circular marks of increasing size.

When in the "OFF" position, the air conditioner compressor is de-activated.

**57. Air Selector Lever**

The Air Selector Lever (57) selects the source of air. Outside air enters through a filter and is sent to the cab to ventilate the inside the cab. In this way, a pleasant working environment is always maintained even on dusty job sites.

Move the lever to the left toward "FRESH" for outside air. Air is taken from outside to mix with the air inside the compartment.

Move the lever to the right toward "RECIRC" for recirculation of cab air only. This is generally used to cool the cab quickly.

**58. Vent Selector Lever**

The Vent Selector Lever (58) directs the cool or warm air through one or more of the following outlets: front vents; foot vents; or defroster vents.

Move the lever to the left toward "VENT" to direct heated or cooled air through the front vents (59).

Move the lever to the center to "HEAT" to direct air to the foot vents and defroster vents for heating and dehumidifying.

Move the lever to the right to "DEF" to direct air to the defroster vents to remove and/or prevent mist from forming inside the windshield.

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# 1000 HOUR SERVICE

Truck Serial Number _____

Site Unit Number _____

Date: _____ Hour Meter _____

Name of Service Person _____

In addition to the 250 and 500 hour lubrication and inspection schedules, perform the following:

1. LUBRICATE
   - Transmission mount - 1 point - Refer to Lube Key D.
   - Parking brake linkage - 6 points - Refer to Lube Key D.

2. TRANSMISSION CASE

   Drain oil, remove, and replace element. Remove, clean, and reinstall strainers. Refill tank with oil approximately 28 gal (106 l). Refer to Lubrication Chart for the lubricants and type of oil to use. Refer to Lube Key F.

3. STEERING, HOIST OIL TANK and REAR BRAKE COOLING OIL TANK.

**⚠WARNING**

***Any operating fluid, such as hydraulic oil or brake oil, escaping under pressure can have sufficient force to enter a person's body by penetrating the skin. Serious injury and possibly death may result if proper medical treatment by a physician familiar with this injury is not received immediately.***

   Remove (3) filter elements from tank. Clean all removed parts and the inside of element case. Install new filter elements. Refer to *Hydraulic Tank Service*, page 4-14.

4. REAR BRAKE WEAR
   Refer to, *Brake Circuit Checkout and Adjustment*, page 4-20 for specifications and proper inspection procedure.

**⚠WARNING**

***Carry out inspection when the oil temperature is below 60°C (140°F). Hot oil may cause serious personal injury.***

| COMMENTS | CHECKED | INITIALS |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

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***NOTE: This screen is the only place that the value of the $G_I$ gain potentiometer can be checked.***

There are two gain factors that can be applied to the payload measurement. The first is the $G_I$ gain factor and the other is the UP gain factor. They are not applied uniformly to all payload calculations.

### Example Calculation of Payload

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

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

$$\text{Sprung Weight} = \text{Axle Weight(lbs)}/2000$$

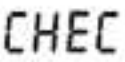
| | | | |
|---|---|---|---|
| Front Weight (6) | 106.00 | Rear Weight (7) | 75.10 |
| **x** Incline Factor (9) | 0.95 | **x** Incline Factor (10) | 0.98 |
| | 100.70 | | 73.90 |
| **x** Link Factor (11) | 1.00 | **x** Link Factor (12) | 1.53 |
| Front Weight | 100.70 | Rear Weight | 113.70 |
| | | | |
| Front Weight | 100.70 | | |
| Rear Weight | 113.70 | | |
| Total Weight | 214.40 | | |
| **x** Gain Factor (14) | 1.00 | | |
| | 214.40 | | |
| - Calibration (13) | -70.60 | | |

FIGURE 3-5.

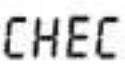
### Viewing Payload Calculation Inputs

The PLM II™ estimates payload by monitoring suspension pressures when the truck is loaded and compares them to truck empty pressure values. The PLM II™ uses one empty truck weight for all payload calculations. This empty truck weight is called the 'tare weight'. It is not the empty vehicle weight (EVW). It is an estimate of the empty weight of all the truck components suspended above the suspensions. The process of making the PLM II™ calculate the tare weight is called the calibration procedure.

This calibration weight is used as item #13 from the manual calculation procedure in Figure 6-4.

1. Press and hold the LIGHT/INC and MODE switches until "CHEC" is flashing on the display. 
2. Press and hold the CAL/CLR switch until "CALL0" is flashing on the display. 
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. 
5. Press MODE once and the meter will return to normal operation.

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