DG738

Operation & Maintenance Manual

630E

DUMP TRUCK

SERIAL SUFFIX **AFE42-M** and up
AFE46-U

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 Haulpak 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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OPERATOR CAB AND CONTROLS

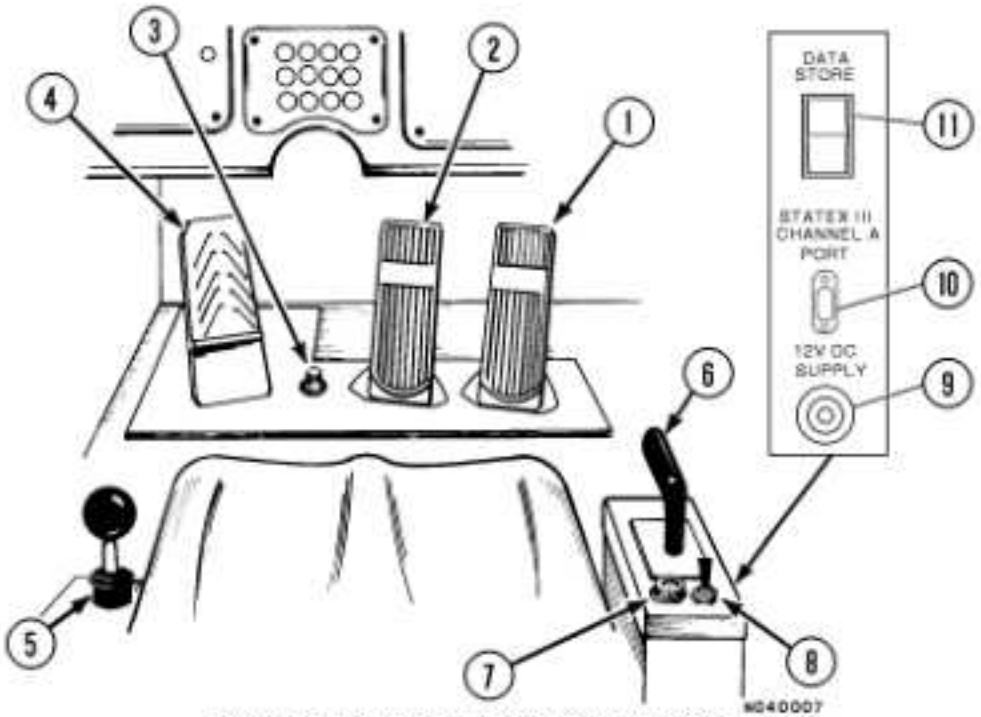


FIGURE 3-1. OPERATOR CONTROLS

1. Throttle Pedal
2. Retard Pedal
3. Dimmer Switch
4. Brake Pedal
5. Hoist Control Valve
6. Selector Switch
7. Engine Shutdown Switch
8. Engine Idle Switch
9. 12VDC Power Supply
10. Computer Diagnostic Port
11. Data Store Switch

(1) THROTTLE PEDAL

The Throttle Pedal is a foot operated pedal which allows the operator to control engine RPM.

(2) DYNAMIC RETARDING PEDAL

The Dynamic Retarding Pedal is a foot operated pedal which allows the operator to slow the truck without the use of the service brakes to maintain a safe productive speed. The Dynamic Retarding should be used to slow and control the speed of the truck. Service brakes should be used to bring the truck to a complete stop.

When Dynamic Retarding is in operation, the engine RPM will automatically go to retard RPM setting.

The Dynamic Retarding system will be applied automatically if operator allows speed of truck to reach the predetermined overspeed retard setting.

(3) DIMMER SWITCH

The dimmer switch is a foot actuated electric switch. If headlights are on low beam, depression of the switch will change headlights to high beam and high beam indicator on instrument panel will light.
Depressing switch again, changes headlights back to low beam.

(4) BRAKE PEDAL

The Brake Pedal is a foot operated pedal controlling a hydraulic valve, which modulates pressure to the service brakes.

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5000 HOURS LUBRICATION AND MAINTENANCE CHECKS

Maintenance for every 10, 50, 100, 250, 500, & 1000 hour Lubrication and Maintenance Checks should also be carried out at this time.

NOTE: "Lube Key" references are to the Lubrication Specification Chart.

1. FRONT WHEELS - Drain oil and check bearing preload as covered in the Service Manual, Section "G". Use Lube Key "C**" and refill with oil. Check the oil level at oil level sight gauge on wheel hub.

** USE **ONLY SAE 80W-90** FOR FRONT WHEEL BEARINGS.

2. AIR CLEANER - Clean the Donaclone Tubes in the pre-cleaner section of the air filter. Use low pressure cold water or low pressure air to clean tubes. Refer to the Service Manual, Section "C".

NOTE: Do not use a hot pressure washer or high pressure air to clean tubes, high pressure causes pre-cleaner tubes to distort.

Truck Serial Number _____

Site Unit Number _____

Date:_____Hour Meter_____

Name of Service person_____

COMMENTS	√'d	INITIALS

10000 HOURS LUBRICATION AND MAINTENANCE CHECKS

Maintenance for every 10, 50, 100, 250, 500, 1000 & 5000 hour Lubrication and Maintenance Checks should also be carried out at this time.

1. FRONT WHEELS - Completely disassemble and check all parts for wear or damage. Refer to the Service Manual, Section "G", for complete Front Wheel Disassembly and Bearing Adjustment procedure.

Truck Serial Number _____

Site Unit Number _____

Date:_____Hour Meter_____

Name of Service person_____

COMMENTS	√'d	INITIALS

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SPECIFICATIONS

ENGINES (Standard Options)

Cummins KTTA 50-C

Number of Cylinders	16
Operating Cycle	4-Stroke
Rated Brake HP	1800 HP (1342 kW) @ 1900 RPM
Flywheel HP	1704 HP (1271 kW) @ 1900 RPM
Weight (Dry)	10,895 lbs. (4942 kg)

Detroit Diesel 16V-149TIB

Number of Cylinders	16
Operating Cycle	2-Stroke
Rated Brake HP	1800 HP (1342 kW) @ 1900 RPM
Flywheel HP	1704 HP (1271 kW) @ 1900 RPM
Weight (Dry)	11,210 lbs. (5085 kg)

ELECTRIC DRIVE SYSTEM

STATEX III	**AC/DC Current**
Alternator	General Electric GTA - 22
Motorized Wheels	General Electric 776
Standard Gear Ratio	28.85:1
Maximum Speed	34.0 MPH (54.7 km/h)

DYNAMIC RETARDING

Electric Dynamic Retarding	Standard
Maximum Retarding	2677 HP (1996 kW)
Optional	3700 HP(2759 kW)
With	Continuous Rated Blown Grids
	Extended Range Retarding
	Reverse Retarding

24Volt ELECTRIC SYSTEM

Batteries	Two 12 Volt Batteries in Series
	140 Ampere-Hour Capacity
	With Disconnect Switch
With OPTIONAL Electric Start:	
Batteries	4 (four)12 Volt Batteries
	2 in Series; 2 in parallel
Alternator	24 Volt, 100 Ampere Output
Lighting	24 Volt

SERVICE CAPACITIES

	U.S. Gallons	Liters
Crankcase (Includes lube oil filters)		
Detroit Diesel	50.0	189
Cummins	56.6	214
Cooling System	83	314
Fuel	850	3217
Hydraulic System	134	507
Wheel Motor Gear Box	4.5/Wheel	17/Wheel

AIR SYSTEM

Compressor	Bendix-Westinghouse TU-FLO 501
Capacity	12 ft^3/min. (0.34 m^3/min.)
Starter with Interlock	Ingersol Rand 815
	Optional, Electric Start
Air Tank Capacity	15 cubic feet (425 liters)

HYDRAULIC SYSTEM

Pump	145 GPM (549 liters/min.) @ 1900 RPM
Relief Pressure- Hoist	2500 psi (17.2 MPa)
Relief Pressure- Steering	3000 psi (20.7 MPa)
Hoist	3-Stage Hydraulic Twin Cylinders
Tank	Non-Pressurized
Service Capacity	134 U.S. Gal. (507 Liters)
Filtration	Accessible, Replaceable, Elements
Suction	Single, Full Flow, 100 Mesh
Hoist & Steering High Pressure Filters	
	Full Flow, 7 Micron

SERVICE BRAKES

Actuation	All Hydraulic	
	(Front)	(Rear)
Type	Single Disc	Dual Disc
	Wheel Speed	Armature Speed

STEERING

Turning Circle (SAE)	80 ft. (24.4 m)
Emergency Power Steering With Accumulators	

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