

CEAM020001

Operation & Maintenance Manual

730E

DUMP TRUCK

SERIAL NUMBERS **A30539 - A30551**

KOMATSU®

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STANDARD TIGHTENING TORQUES For SAE Grade 5 and Grade 8 Cap screws

The following specifications apply to required assembly torques for all grade 5 and grade 8 cap screws.

- Cap screw threads and seats shall be lubricated when assembled.

Unless instructions specifically recommend otherwise, these standard torque values are to be used with simple lithium base chassis grease (multi-purpose EP NLGI) or a rust- preventive grease (see list, previous page) on the threads.

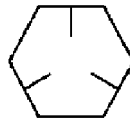
- Torques are calculated to give a clamping force of approximately 75% of proof load.

- The maximum torque tolerance shall be $\pm 10\%$ of the torque value shown.
- In the following table under Cap Screw Size, the first number represents the shank diameter (in.). The second number represents threads per inch.

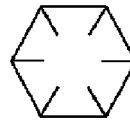
Example: 7/16 - 20

7/16 = shank diameter (7/16 inch (0.438 inch))

20 = threads per inch



GRADE 5



GRADE 8

TABLE 2.
Standard Tightening Torque
for SAE Hex Head Cap Screw And Nut Assembly

Cap Screw Size	Torque - Grade 5			Torque - Grade 8			Cap Screw Size	Torque - Grade 5			Torque - Grade 8		
	N-m	ft lb	kg-m	N-m	ft lb	kg-m		N-m	ft lb	kg-m	N-m	ft lb	kg-m
1/4-20	9.5	7	0.97	13.6	10	1.38	3/4-16	319	235	32.5	454	335	46.3
1/4-28	10.8	8	1.11	14.9	11	1.52	7/8-9	475	350	48.4	678	500	69.2
5/16-18	20.3	15	2.07	28	21	2.90	7/8-14	508	375	51.9	719	530	73.3
5/16-24	22	16	2.21	30	22	3.04	1.0-8	712	525	72.6	1017	750	103.7
3/8-16	34	25	3.46	47	35	4.84	1.0-12	759	560	77.4	1071	790	109.3
3/8-24	41	30	4.15	54	40	5.5	1.0-14	773	570	78.8	1085	800	110.6
7/16-14	54	40	5.5	79	58	8.0	1 1/8-7	881	650	89.9	1424	1050	145
7/16-20	61	45	6.2	84	62	8.57	1 1/8-12	949	700	96.8	1546	1140	158
1/2-13	88	65	9	122	90	12.4	1 1/4-7	1234	910	125.9	2007	1480	205
1/2-20	95	70	9.7	129	95	13.1	1 1/4-12	1322	975	134.8	2142	1580	219
9/16-12	122	90	12.4	169	125	17.3	1 3/8-6	1627	1200	166	2630	1940	268
9/16-18	129	95	13.1	183	135	18.7	1 3/8-12	1776	1310	181	2874	2120	293
5/8-11	169	125	17.3	237	175	24.2	1 1/2-6	2142	1580	219	3471	2560	354
5/8-18	183	135	18.7	258	190	26.2	1 1/2-12	2305	1700	235	3756	2770	383
3/4-10	298	220	30.4	420	310	42.8							

1 ft. lb. = 0.138 kg-m = 1.356 N.m

ROPS Precautions

- The Rollover Protection Structure (ROPS) must be properly installed before using the truck.
- The ROPS is intended to protect the operator if the machine rolls over. It is designed not only to support the load of the machine, but also to absorb the energy of the impact.
- ROPS structures, installed on equipment manufactured and designed by Komatsu America Corp., fulfill all of the regulations and standards for all countries. If it is modified or repaired without authorization from Komatsu, or is damaged when the machine rolls over, the strength of the structure will be compromised and will not be able to fulfill its intended purpose. Optimum strength of the structure can only be achieved if it is repaired or modified, as specified by Komatsu.
- When modifying or repairing the ROPS, consult your nearest Komatsu distributor.
- Even with the ROPS installed, the operator must use the seat belt when operating the machine.

Preventing Injury From Work Equipment

- DO NOT position any part of your body between movable parts, such as the dump body, chassis, or cylinders. If the work equipment is operated, clearances will change and may cause serious bodily injury or death.

Precautions For Optional Attachments

- When installing and using optional equipment, read the instruction manual for the attachment and the information related to attachments in this manual.
- DO NOT use attachments that are not authorized by Komatsu America Corp., or the authorized regional Komatsu distributor. Use of unauthorized attachments could create a safety problem and adversely affect the proper operation and useful life of the machine.
- Any injuries, accidents, and product failures resulting from the use of unauthorized attachments, will not be the responsibility of Komatsu America Corp., or the authorized regional Komatsu distributor.

Precautions When Starting The Machine

- Start the engine from the operator's seat only.
- DO NOT attempt to start the engine by shorting across the starter terminals. This may cause fire or serious injury or death to anyone in the machine's path.



TIRES

Handling Tires

Rim and tire maintenance can be hazardous unless the correct procedures are followed by trained personnel.

Improperly maintained or inflated tires can overheat and burst due to excessive pressure. Improper inflation can also result in cuts in the tire caused by sharp stones. Both of these conditions can lead to tire damage, serious personal injury, or even death.

To safely maintain a tire, adhere to the following conditions:

- Before a tire is removed from a vehicle for tire repair, the valve core must be partially removed to allow deflation, and then the tire/rim assembly can be removed. During deflation, persons must stand outside of the potential trajectory of the locking ring of a multi-piece wheel rim.
- After the tire/rim assembly is installed on the vehicle, inflate the tires to their specified pressure. Abnormal heat is generated, particularly when the inflation pressure is too low.

NOTE: To prevent injury from the wheel rims during tire inflation, use one of the following:

1. A wheel cage or other restraining device that will constrain all wheel rim components during an explosive separation of a multi-piece wheel rim, or during the sudden release of air.
 2. A stand-off inflation device which permits a person to stand outside of the potential trajectory of the wheel components.
- Use the specified tires.

The tire inflation pressure and permissible speeds, given in this manual, are general values. The actual values may differ, depending on the type of tire and the specific operating conditions. For details, please consult the tire manufacturer.

When the tires become overheated, a flammable gas is produced inside the tire which can ignite. It is particularly dangerous if the tires become overheated while the tires are pressurized. If the gas generated inside the tire ignites, the internal pressure will suddenly rise, and the tire will explode, resulting in danger and/or death to personnel in the area. Explosions differ from punctures or tire bursts because the destructive force of the explosion is extremely large. Therefore, the following operations are strictly prohibited when the tire is pressurized:

- Welding the rim.
- Welding near the wheel or tire.
- Smoking or creating open flames.

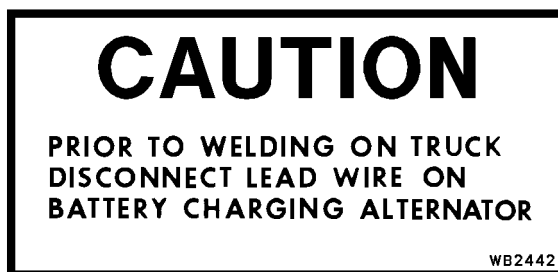


A0055110

The parking brake is spring-applied and hydraulically released. It is designed to hold a stationary truck when the engine is off. The truck must be completely stopped before applying the parking brake, or damage may occur to the parking brake. To apply the parking brake, press the rocker switch toward the ON symbol. To release the parking brake, press the rocker switch toward the OFF symbol. When the key switch is ON and the parking brake switch is applied, parking brake indicator light (A3, overhead panel) will be illuminated.

NOTE: DO NOT use the parking brake when loading or dumping. With the key switch ON and the engine on, sudden shock caused by loading or dumping could cause the system's motion sensor to release the parking brake.

The brake lock switch is for holding the truck while parked at the shovel during loading or while dumping. It applies the rear service brakes only. If the brake pedal malfunctions while the truck is in motion, apply the brake lock to stop the truck. DO NOT use this brake as a parking brake when leaving the truck. With the engine off, the hydraulic system will depressurize, releasing the service brakes.



High voltage danger plates and caution plates are attached to the doors of the electrical control cabinet. The high voltage plate is also attached to the blown grid housing, extended range housing, rectifier housing, inlet duct, and rear hatch cover.

Before arc welding on the truck, disconnect the positive and negative battery cables of the vehicle. Failure to do so may seriously damage the battery and electrical equipment. Disconnect the battery charging alternator lead wire and isolate the electronic control components before welding. It is not necessary to disconnect or remove any control circuit cards or any of the Alarm Indicating Device (AID) circuit control cards.

Fasten the welding machine ground (-) lead to the piece being welded. The grounding clamp must be attached as near as possible to the weld area. DO NOT allow welding current to pass through the ball bearings, roller bearings, suspensions, or hydraulic cylinders. DO NOT lay welding cables over or near the vehicle electrical harnesses. The welding voltage could be induced into the electrical harness and possibly cause damage to the components.



This plate is mounted on the top side of the blown grid housings. Stepping or standing here may result in serious personal injury.

AFTER ENGINE HAS STARTED

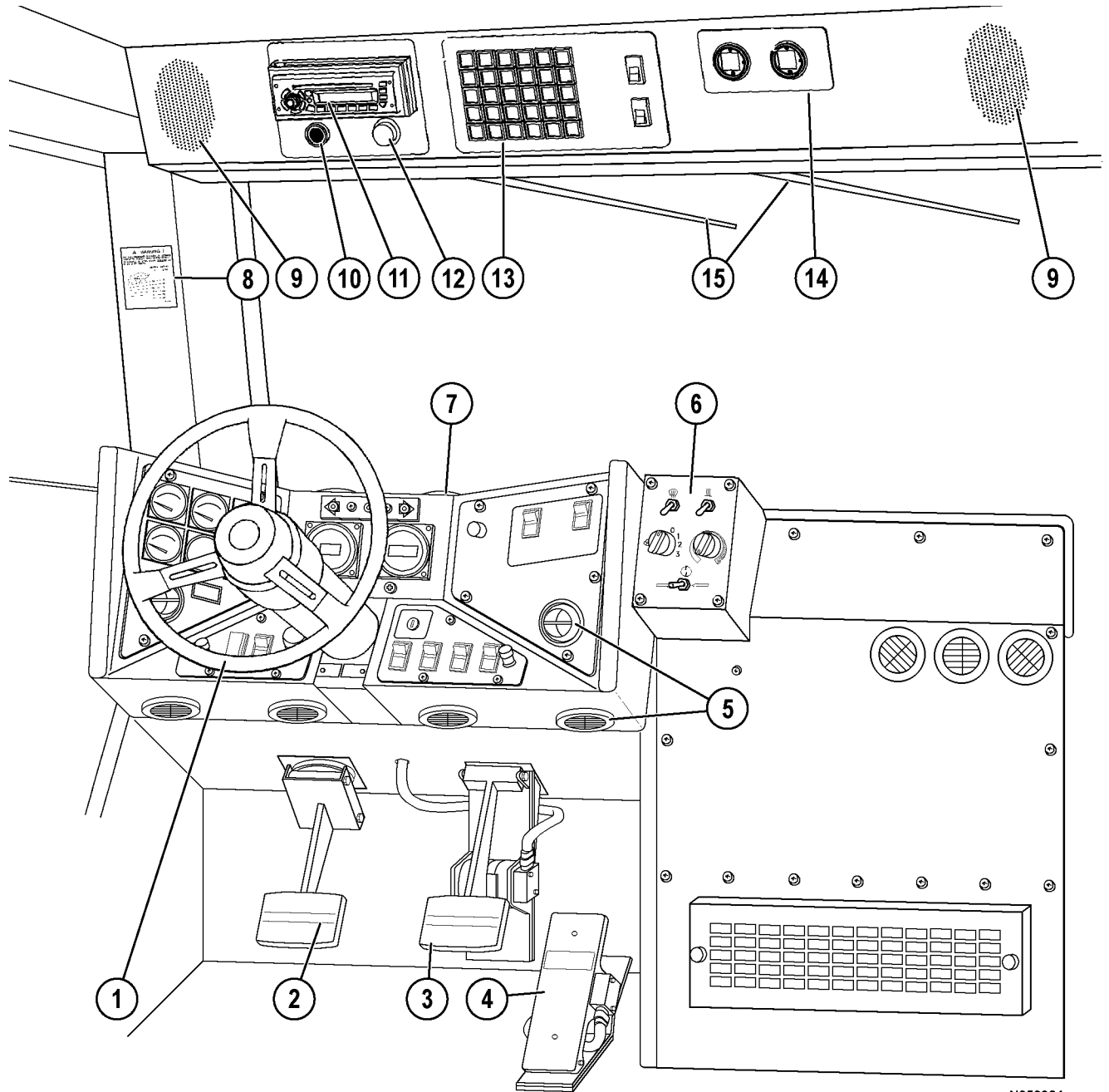


Do not leave the truck unattended while the engine is running. Move the directional control lever to PARK and turn off the engine before leaving the truck.

Become thoroughly familiar with the steering and emergency controls.

1. After the engine has started and the low pressure and warning systems are normal, test the truck steering in extreme right and left directions. If the steering system is not operating properly, shut the engine off immediately. Determine the steering system problem and repair before resuming operation.
2. Check the brakes before moving the truck. Start the engine and allow the hydraulic system to fully pressurize. Activate the service brake, parking brake, and brake lock at least twice. If a warning alarm is activated when a brake is applied or released, DO NOT operate the truck. If the application and release of any brake appears slow or improper, DO NOT operate the truck. If a brake problem is suspected, shut the engine off and notify maintenance personnel.
3. Check the gauges, warning lights, and instruments before moving the truck to ensure proper system operation and proper instrument functioning. Observe the braking and steering circuit hydraulic warning lights. If the warning lights come on, shut the engine off immediately and determine the cause.
4. Make sure the headlights, work lights, and tail-lights are in proper working order. Check the operation of the windshield wipers. Good visibility may help prevent an accident.
5. When the truck body is in the dump position, DO NOT allow anyone beneath it unless the body-up retaining cable is in place.
6. DO NOT allow unauthorized personnel to ride in the truck. DO NOT allow anyone to ride on the stairs or ladder of the truck.
7. DO NOT leave the truck unattended while the engine is on. Shut the engine off, and apply the parking brake before getting out of the cab.

OPERATOR CONTROLS



N050324

FIGURE 32-1. CAB INTERIOR - OPERATOR VIEW

- | | | |
|---------------------------------|--|--|
| 1. Steering Wheel and Controls | 6. Heater/Air Conditioner and Controls | 11. Radio, AM/FM, CD Player |
| 2. Service Brake Pedal | 7. Instrument Panel | 12. Warning Lights Dimmer Control |
| 3. Dynamic Retarder Pedal | 8. Grade/Speed Warning Chart | 13. Warning/Status Indicator Light Panel |
| 4. Throttle/Accelerator | 9. Radio Speakers | 14. Air Cleaner Vacuum Gauges |
| 5. Heater/Air Conditioner Vents | 10. Warning Alarm Buzzer | 15. Windshield Wipers |

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OPERATOR SEAT

The operator's seat provides a fully adjustable cushioned ride for the driver's comfort.

ADJUSTMENT

The following adjustments must be made while sitting in the seat.

1. **Headrest:** Move up, down, fore, or aft by moving headrest (1, Figure 32-10) to the desired position.
2. **Armrests:** Rotate the adjusting knob until the armrest is in the desired position. The knobs are located at the front of the armrests.
3. **Backrest:** Lift backrest adjustment (3) to release, and select the backrest angle. Release the control handle to set.
4. **Seat Belt:** The operator must have seat belt (4) buckled in place and properly adjusted whenever the vehicle is in motion.
5. **Seat Slope:** Lift seat slope adjustment (5) and hold to adjust the slope of the seat. Release the lever to lock the adjustment.
6. & 7 **Air Pillow Lumbar Support:** Each upper/lower air pillow lumbar support (6 or 7) controls an air pillow. Switch (7) controls the lower air pillow, and switch (6) controls the upper air pillow. To inflate, press on top of the rocker switch and hold for the desired support, then release. To deflate, press on the bottom of the rocker switch and hold for the desired support, then release. Adjust each pillow for the desired support.
8. **Seat Suspension:** Move suspension adjustment (8) up to increase ride stiffness and down to decrease ride stiffness.
9. **Horizontal Adjustment:** Lift horizontal adjustment (9) and hold. Bend knees to move the seat to a comfortable position. Release the control lever to the lock adjustment.
12. **Seat Height:** Lift seat height adjustment (12) and hold to adjust the height of the seat. Release the lever to lock the adjustment.

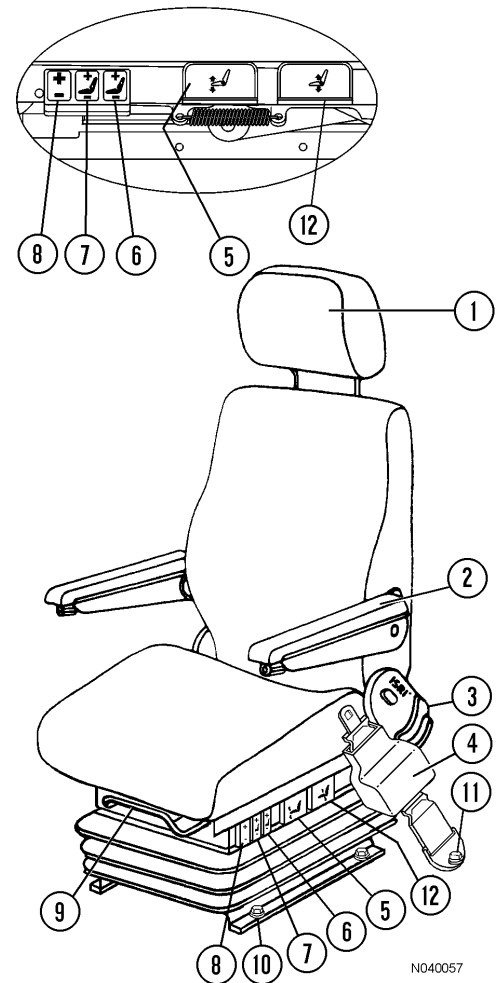
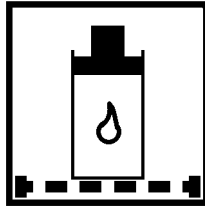


FIGURE 32-10. OPERATOR SEAT
ADJUSTMENT CONTROLS

1. Headrest
2. Armrest Adjustment
3. Backrest Adjustment
4. Seat Belt
5. Seat Slope Adjustment
6. Upper Air Pillow Lumbar Support
7. Lower Air Pillow Lumbar Support
8. Suspension Adjustment
9. Horizontal Adjustment
10. Mounting Cap Screws and Hardware
11. Seat Belt Tether Cap Screw
12. Seat Height Adjustment

D2. Hydraulic Oil Filter Monitor

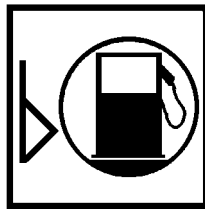
This amber light indicates a restriction in the high pressure filter assembly for either the steering or hoist circuit. This light will illuminate before filters start to bypass. Notify maintenance personnel at earliest opportunity after the light illuminates.



NOTE: The filter monitor warning light may also illuminate after the engine is initially started if the oil is cold. If the light turns off after the oil has warmed, filter maintenance is not required.

E2. Low Fuel

This amber low fuel indicator light will illuminate when the usable fuel remaining in the tank is approximately 95 liters (25 gallons). A warning buzzer will also sound.



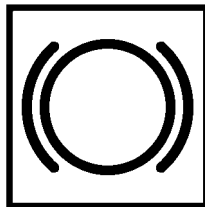
A3. Parking Brake

Amber parking brake indicator light will illuminate when the parking brake is applied. DO NOT attempt to drive the truck with the parking brake applied.



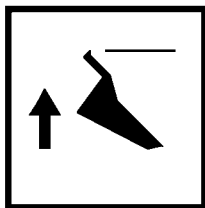
B3. Service Brake

This amber service brake indicator light will illuminate when the service brake pedal is applied or when wheel brake lock is applied. DO NOT attempt to drive the truck from stopped position with the service brakes applied.



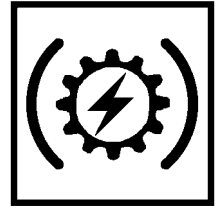
C3. Body Up

This amber body up indicator, when illuminated, indicates that the body is not completely down on the frame. The truck must not be driven until body is down and the light is off.



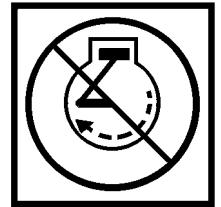
D3. Dynamic Retarding

This amber dynamic retarding indicator light illuminates whenever the retarder pedal is operated, RSC is activated, or the automatic overspeed retarding circuit is energized. It indicates that the dynamic retarding function of the truck is being used.



E3. Stop Engine

Red stop engine warning light will illuminate if a serious engine malfunction is detected in the electronic engine control system. Electric propulsion to the wheel motors will be discontinued, and the maximum engine speed will be reduced to 1,250 rpm. Dynamic retarding will still be available if needed to slow or stop the truck.



- Electric propulsion to the wheelmotors will be discontinued.
- Dynamic retarding will still be available if needed to slow or stop the truck.

CAUTION

1. Stop the truck as quickly as possible in a safe area and shift to PARK.
2. PULL UP ON THE ENGINE STOP SWITCH ON THE CENTER CONSOLE TO STOP THE ENGINE, THEN TURN THE KEY SWITCH OFF. Additional engine damage is likely to occur if operation is continued.

Notify maintenance personnel immediately.

Listed below are a few conditions that could cause the stop engine light to illuminate:

- Low Oil Pressure - red warning light will illuminate, but the engine does not stop.
- Low Coolant Level - red warning light will illuminate, but the engine does not stop.
- Low Coolant Pressure - red warning light will illuminate, but the engine does not stop.
- High Coolant Temperature - red warning light will illuminate, but the engine does not stop.

10 HOUR (DAILY) LUBE AND MAINTENANCE CHECKS

Truck Serial Number _____ Site Unit Number _____ Date _____				
Hourmeter _____ Name of Service Technician _____				
	TASK	COMMENTS	CHECKED	INITIALS
1.	MACHINE - Inspect the entire truck for leaks, worn parts, and damage. Repair as necessary.			
2.	FAN DRIVE AND TURBOCHARGERS - Check for leaks, vibration, or unusual noise. Check alternator and fan belt condition and alignment.			
3.	RADIATOR - Check the coolant level and fill with the proper mixture as shown in the Cooling System Recommendation Chart in this chapter. Refer to the engine manual for proper coolant additives.			
4.	ENGINE - <ul style="list-style-type: none"> a. Check the oil level. To obtain an accurate measurement, remove the dipstick and wipe it off. Then reinsert the dipstick and remove it again to check the oil level. Refer to the engine service manual for oil recommendations. b. Inspect exhaust piping for integrity. c. Check for abnormal noises and fluid leaks. 			
5.	HYDRAULIC TANK - Check the oil level in the tank. The oil must be visible in the top sight glass. Add oil, if necessary, but do not overfill. Refer to Hydraulic Tank Service in this section for additional information. Use Lube Key "B".			
6.	WHEELS AND TIRES - FRONT AND REAR <ul style="list-style-type: none"> a. Verify the tires are properly inflated. b. Inspect the tires for abnormal wear or damage. c. Check for embedded debris in the tires. After each wheel installation, recheck the tightness of the wheel nuts after approximately five hours of operation. Check again at the end of the shift, and then periodically until all the nuts remain at 746 N·m (550 ft lbs) .			
7.	COOLING AIR DUCTWORK - Inspect ductwork from the blower to the rear drive case. Ensure that ductwork is secure, free of damage, and unrestricted.			
8.	AIR INTAKE PIPING - Check all mounting hardware, joints, and connections. Ensure no air leaks exist and all hardware is properly tightened.			

10,000 HOUR LUBRICATION AND MAINTENANCE CHECKS

Truck Serial Number _____ Site Unit Number _____ Date _____ Hourmeter _____ Name of Service Technician _____				
	TASK	COMMENTS	CHECKED	INITIALS
1.	WHEEL MOTORS - Clean the area around the grease ports to prevent dirt or other contaminants from entering. Remove the six grease port plugs on each wheel motor. Grease the inboard and outboard wheel hub bearings with one 414 mL (14 oz) cartridge per each grease port.			
2.	BLEED-DOWN MANIFOLD CHECK VALVE - Replace bleed-down manifold check valve. Refer to Bleed-Down Manifold Valve in Section L of the shop manual for additional information.			

Complete the 10, 50, 100, 250, 500, 1000, 2500, and 5000 hour lubrication and maintenance checks.

Filter And Reservoir

Filter assembly (2, Figure 42-8) is mounted on right upright (1) and filters the grease when the grease supply is refilled through the quick fill fittings.

Grease is pumped into the filter through filter inlet hose (4) routed from the service center and then flows out the filter through hose (3) to grease reservoir (5). Vent hose (7) purges air from the reservoir as it is being filled and prevents a vacuum as grease is pumped out.

Cap (6) allows the reservoir to be drained, if desired, and a plate secured on the end of the reservoir (frame torque tube) can be removed if the reservoir requires cleaning.

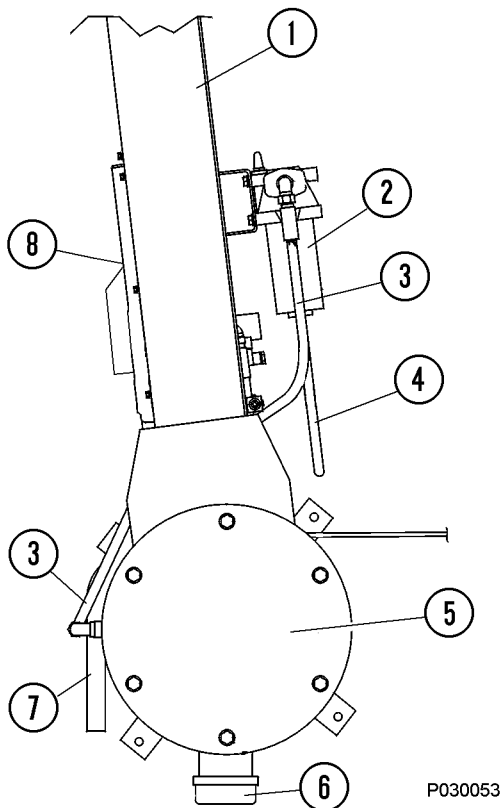


FIGURE 42-8. FILTER AND RESERVOIR

- | | |
|-----------------------|---------------------|
| 1. RH Upright | 5. Grease Reservoir |
| 2. Filter Assembly | 6. Cap |
| 3. Filter Outlet Hose | 7. Vent Hose |
| 4. Filter Inlet hose | 8. Pump Access Door |

Filter Assembly Element

Filter assembly element (5, Figure 42-9) must be replaced if bypass indicator (2) shows excessive element restriction.

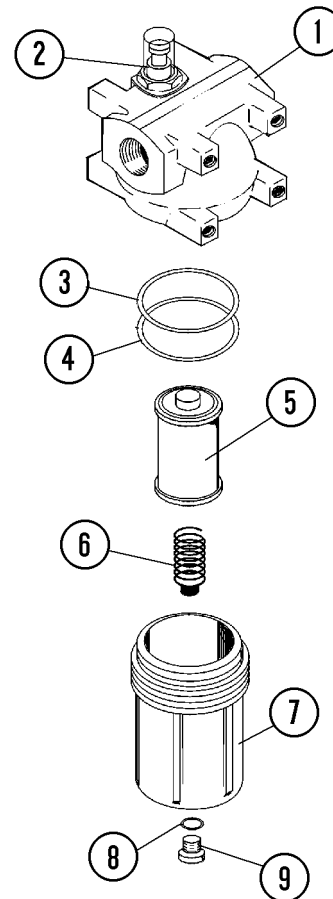


FIGURE 42-9. FILTER ASSEMBLY

- | | |
|----------------------------|-----------|
| 1. Housing | 6. Spring |
| 2. Bypass Indicator | 7. Bowl |
| 3. O-Ring | 8. O-Ring |
| 4. Backup Ring | 9. Plug |
| 5. Filter Assembly Element | |

SPECIFICATIONS

These specifications are for the standard 730E dump truck. Customer options may change this listing.

ENGINE

Komatsu SSA16V159
 Number of Cylinders 16
 Operating Cycle 4-Stroke
 Rated Brake HP 1 491 kW (2,000 HP) @ 1,900 RPM
 Flywheel HP . . . 1 388 kW (1,860 HP) @ 1,900 RPM
 Weight (Wet) 5 294 kg (11,670 lbs)

ELECTRIC DRIVE SYSTEM

STATEX III w/Fuelsaver AC/DC Current
 Alternator General Electric GTA - 22
 Motorized Wheels General Electric 788*
 Standard Gear Ratio* 26.825:1
 Maximum Speed 34.6 mph (55.7 km/h)

*NOTE: Wheel motor application depends upon GVW, haul road grade, haul road length, rolling resistance, and other parameters. KOMATSU & G.E. must analyze each job condition to assure proper application.

DYNAMIC RETARDING

Electric Dynamic Retarding Standard
 Maximum Retarding 2 759 kW (3,700 HP)
 With Continuous Rated Blown Grids
 Two-Speed Overspeed & Extended Range Retarding
 Reverse Retarding

BATTERY ELECTRIC SYSTEM

Batteries Bumper-Mounted in Polyethylene Boxes
 Four 12-Volt Batteries in Series/Parallel
 220 Ampere-Hour Capacity
 With Disconnect Switch
 Alternator 24-Volt, 140 Ampere Output
 Lighting 24-Volt
 Starters (2) 24-Volt

SERVICE CAPACITIES

	Liters . . .	U.S. Gallons
Crankcase (includes lube oil filters)		
Komatsu	223	59
Cooling System	409	108
Fuel	3 217	850
Hydraulic System	731	193
Wheel Motor Gear Box	40/Wheel	10.5/Wheel

HYDRAULIC SYSTEM

Pumps:
 Hoist (gear-type) 513 l/min (135.6 GPM)
 at 17 240 kPa (2,500 psi) @ 1,900 rpm
 Steering/Brake (vane-type) 235 l/min (62 GPM)
 at 18 960 kPa (2,750 psi) @ 1,900 RPM
 Relief Pressure-Hoist 17 240 kPa (2,500 psi)
 Relief Pressure-Steering 27 580 kPa (4,000 psi)
 Hoist Two Three-Stage Hydraulic Cylinders
 Tank Vertical - Cylindrical, Non-Pressurized
 Service Capacity 731 Liters (193 U.S. Gal)
 Filtration In-line Replaceable Elements
 Suction Single, Full Flow, 100 Mesh
 Hoist and Steering High-Pressure Filters
 Dual, Full Flow, Seven Micron
 Beta 12 rating = 200

SERVICE BRAKES

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

STEERING

Turning Circle (SAE) 28.0 m (92 ft)
 Twin hydraulic cylinders with accumulator assist to provide constant rate steering.
 Emergency power steering automatically provided by accumulators (meets SAE J1511).

Wiring and Termination

Most of the PLM III truck connections use a heavy-duty cable. This yellow multi-conductor cable uses a 16awg, finely stranded wire designed for continuous motion operations. The conductors are protected by a foil and braided shield for electronic noise immunity and physical strength. This wire is typically terminated with a #10 ring terminal. Most connections for the PLM III system are made in the payload meter junction box.

TCI Outputs

The GE drive system on the 930E/960E requires information from the payload meter regarding the loaded condition of the truck. There are three outputs from the payload meter to GE to indicate the relative load in the truck. 24VDC on the 73MSL circuit indicates that the load is 70% of rated load. 24VDC on the 73FSL circuit indicates the truck is 100% loaded. The 73OSL circuit is not currently used.

PC SOFTWARE OVERVIEW

PC Overview

The PC software has several basic functions:

- Configure the PLM III system on the truck
- Troubleshoot and check the PLM III system
- Download data from the PLM III system
- Analyze data from the payload systems

Configuration, troubleshooting, and downloading require a serial connection to the payload meter on the truck. Analysis can be done at any time without a connection to the payload meter.

Payload data is downloaded from several trucks into one database on the PC. The database can be queried to look at the entire fleet, one truck or truck model. The data can be graphed, reported, imported, or exported. The export feature can take payload data and save it in a format that spreadsheet programs like Excel or word processing programs can easily import.

System Configuration

PLM III needs to be configured for operation when it is first installed on the truck. This process requires several steps and uses the laptop computer to make the necessary settings. The setup procedure can be broken down into several steps:

- Connecting the laptop to the PLM III system
- Starting communications
- Setting the time and date
- Setting the truck type
- Setting the truck ID
- Setting the speedometer/display gauge units

Installing the PLM III Software

The CD ROM containing the Payload Data Management (PDM) Software will automatically begin installation when it is inserted into the drive on the PC. If this does not happen, the software can be installed by running the Setup.exe program on the CD ROM.

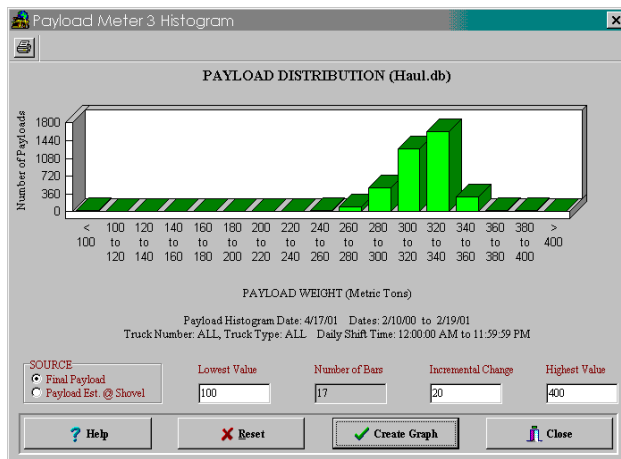
The minimum PC requirements for running the software is a Pentium 133Mhz with 64 MB of ram and at least 300 MB of free hard drive space available. For improved performance, the recommended PC would be a Celeron, AMD K6-2 or better processor with 128 MB of ram running at 400 Mhz. The PDM software uses a powerful database to manipulate the large amounts of data gathered from the PLM III system. Using a more powerful computer and added memory to run the software can result in a significant improvement in performance. The software is written to use a minimum 800x600 screen resolution.

Creating Graphs

The PLM III software can generate graphs that quickly summarize payload data. These graphs can be customized for printing. Just like the reports, the graphs are generated from the query displayed on the payload summary screen. From the Sorting on Time Range example, the graph that is printed would only contain data from truck 374 during the month of July 2000, from 8:00 AM to 5:00 PM.

It is important to carefully select the query data and press the "Query Database & Display" button before creating a graph.

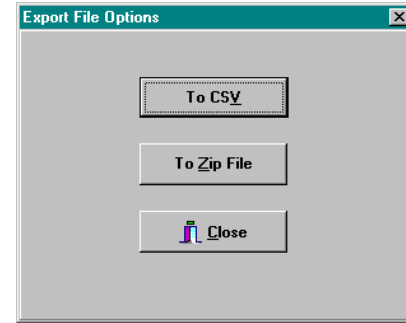
1. From the payload summary screen select the "Graph" button at the bottom. The "Histogram Setup" screen will display



2. Enter the lowest value. This will be the lowest payload on the graph. Any payloads less than this value will be summed in the first bar.
3. Enter the highest value. This will be the highest value on the graph. Payloads over this value will be summed in the last bar.
4. Enter the incremental change. This will determine the number of bars and the distance between them. The program limits the number of bars to 20. This allows graphs to fit on the screen and print onto one page.
5. Press the "Create Graph" button.

The graph will be displayed based on the query settings from the payload summary screen. The graph can be customized and printed.

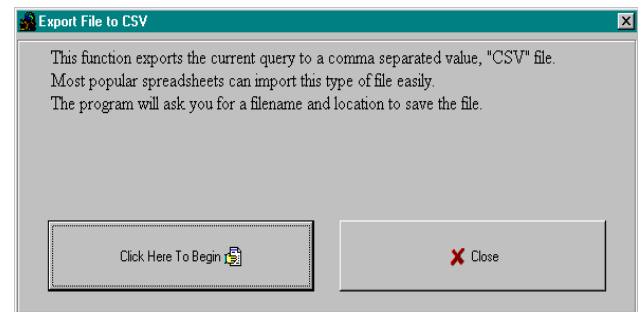
Exporting Data



The data from the database can be exported for use with other software applications. The data is selected from the currently displayed query. The exported data can be put into a .CSV file or a compressed .zip file.

- The .CSV format allows data to be easily imported into spreadsheet applications and word processing applications.
- The .Zip format allows data to be transferred from one computer to the PDM software database on another computer. This offers a compact way to transfer data from one computer to another.

CSV Export



CSV stands for Comma Separated Value. This is an ASCII text file format that allows spreadsheet applications like Excel and Lotus 123 to import data easily. To export the data into a .csv file, press the "Export" button at the bottom of the payload summary screen and select "To CSV". The program will request a filename and location for the file.

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