CEBM013301

Shop Manual

930E-3

DUMP TRUCK

SERIAL NUMBERS **A30310 thru A30328**

KOMATSU®

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SECTION A

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TABLE IV: DID PANEL FAULT CODES
(Codes Received from TCI)

EVENT NUMBER		EVENT DESCRIPTION	EVENT RESTRICTION	DETECTION INFORMATION
636		AUX INVERTER	SYS Event	An Auxiliary Blower Control failure has occurred.
	:01	buss volts low		Low dc bus detected during powerup.
	:02	buss volts high		High dc bus detected during powerup.
	:03	overcurrent		Overcurrent condition detected during operation.
	:04	battery loss		Loss of blower control battery voltage has occurred.
	:05	high dc buss when running		High dc bus voltage detected during operation.
	:06	high dc buss after pc powerup		High dc bus voltage detected after phase controller powerup.
	:07	Low dc buss after pc powerup		Low dc bus voltage detected after phase controller powerup.
	:08	high dc buss when running		High dc bus voltage detected during operation.
	:09	overcurrent after pc powerup, current overload		Overcurrent condition detected after phase controller power up.
	:10	current overload		Sustained current overload exists.
	:11	low dc buss overcurrent		Overcurrent due to low dc bus voltage.
	:12	low dc buss current overload		Sustained current overload due to low dc bus voltage.
	:13	gate drive trip		IGBT protection circuit detected overload.
	:14	no input voltage		Zero input voltage detected.
638		ENGINE CRANKING TIMEOUT	SYS Event	Engine cranking longer than allowed.
639		ENGINE START REQUEST WHILE RUNNING	SYS Event	Engine start request signal while engine RPM greater than 600 RPM, and longer than 3 seconds.
640		ACCEL PEDAL TOO HIGH	No Propel	Accelerator pedal voltage high.
641		ACCEL PEDAL TOO LOW	SYS Event	Accelerator pedal voltage low.
696		UNEXPECTED TCI CPU RESET	SYS Event	TCI CPU reset without request.
698		DATA STORE	SYS Event	A data snapshot has been manually initiated.

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SYSTEM ELECTRICAL SCHEMATICS

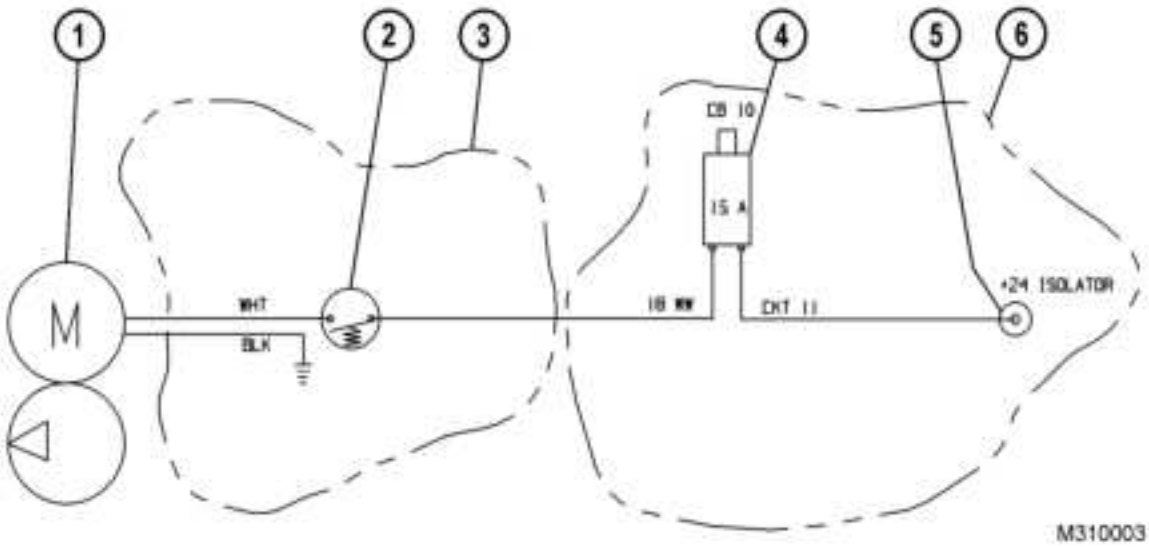


FIGURE 31-4. SYSTEM SCHEMATIC

1. Pumping Unit (Pump 1 & Pump 2)
2. Engine Oil Pressure Switch
3. Engine Subframe
4. 15 Amp Circuit Breaker or Fuse (CB10 or Fuse Block 2, position 10)
5. Power Supply
6. Auxiliary Box

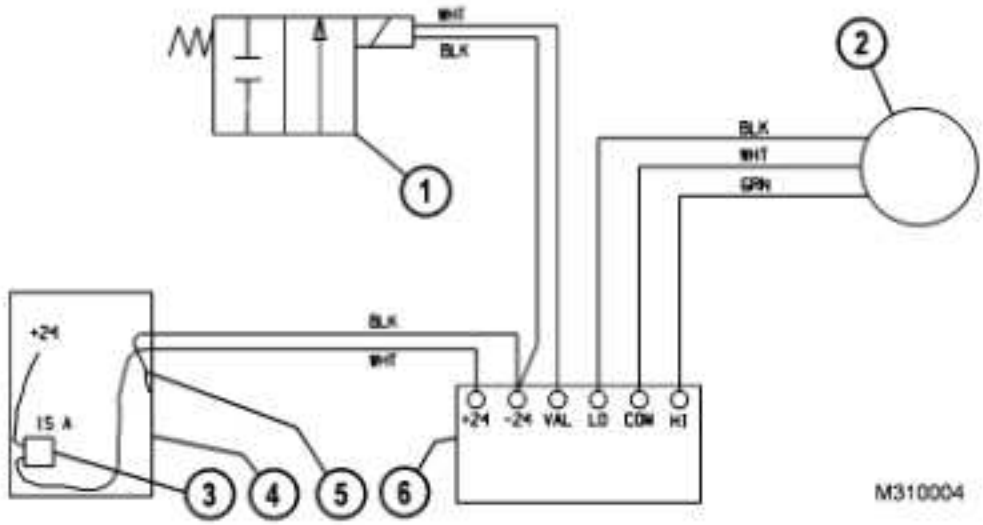


FIGURE 31-5. FILL SYSTEM SCHEMATIC

1. Fill Valve
2. Oil Level Sensor (top of reserve oil tank)
3. 15 Amp Circuit Breaker
4. Battery Disconnect Box
5. Ground Wire
6. Remote Fill Control Box

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SYSTEM CHECKOUT

To check system operation (not including timer), proceed as follows:

1. Turn keyswitch ON and start the engine.
2. Actuate the lube system test switch at the reservoir/pump assembly on the front bumper.
3. The motor and pump should operate until the system attains 2500 psi (17 237 kPa).
4. Once the required pressure is achieved, the pump motor should turn off and the system should vent.
5. Check for pump, hose or injector damage or leakage with the system under pressure.
6. After checking system, shutdown engine, observing normal precautions regarding high voltage present in the propulsion system before attempting to repair lube system.

INJECTORS (SL-1 Series "H"))

Injector Specifications

- Each lube 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 is adjustable:
  Maximum output = 0.08 in^3 (1.31 cc).
  Minimum output = 0.008 in^3 (0.13 cc).
- Operating Pressure:
  Minimum - 1850 psi (12 755 kPa)
  Maximum - 3500 psi (24 133 kPa)
  Recommended - 2500 psi (17 238 kPa)
  Maximum Vent Pressure - (Recharge)
  600 psi (4 137 kPa)

Injector Adjustment

The injectors may be adjusted to supply from 0.008 in3 to 0.08 in^3 (0.13 cc to 1.31 cc) of lubricant per injection cycle. The injector piston travel distance determines the amount of lubricant supplied. This travel is in turn controlled by an adjusting screw in the top of the injector housing.

Turn the adjusting screw (1, Figure 3-8) 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 the adjusting screw (1) fully counterclockwise until the indicating pin (8) just touches the adjusting screw. At the maximum delivery point, about 0.38 inch (9.7 mm) adjusting screw threads should 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 0.19 inch (4.8 mm) threads are showing. The injector will be set at minimum delivery point with about 0.009 inch (0.22 mm) thread showing.

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

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

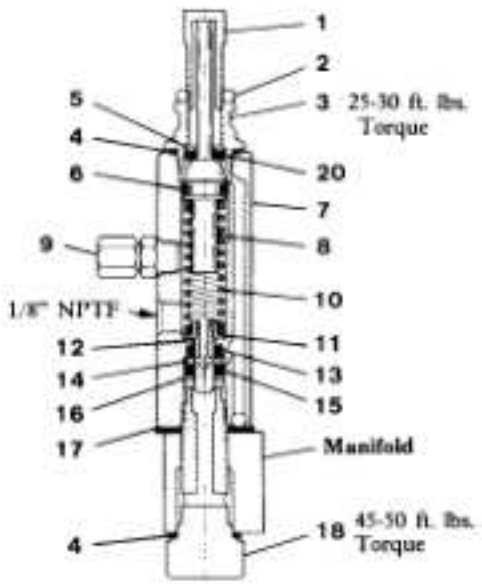
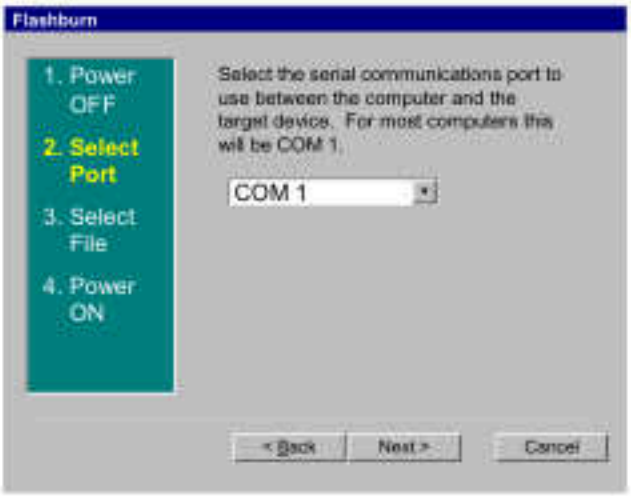


FIGURE 3-8. TYPE SL-1 INJECTOR

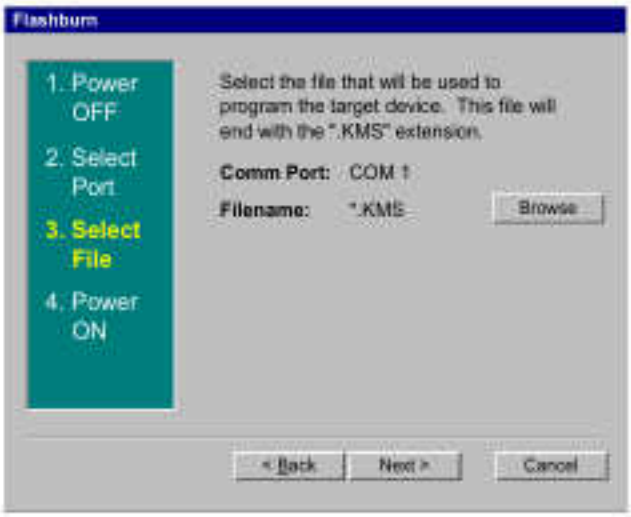
1. Adjusting Screw
2. Locknut
3. Piston Stop Plug
4. Gasket
5. Washer
6. Viton O-Ring
7. Injector Body Assy.
8. Piston Assembly
9. Fitting Assembly
10. Plunger Spring
11. Spring Seat
12. Plunger
13. Viton Packing
14. Inlet Disc
15. Viton Packing
16. Washer
17. Gasket
18. Adapter Bolt
19. Adapter
20.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

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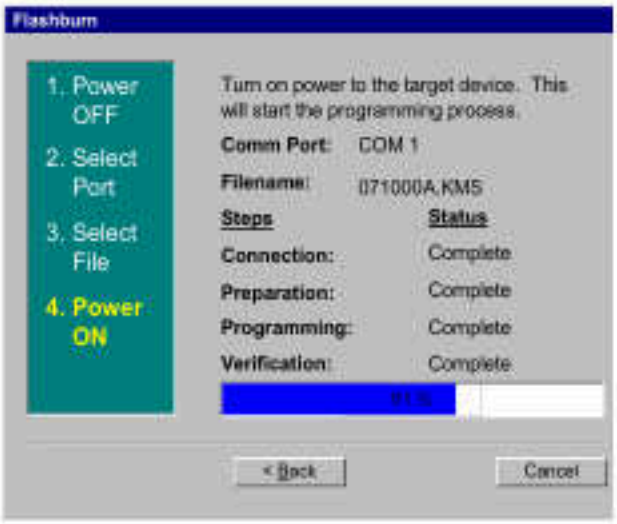
4. Confirm the proper communications port for the programming laptop. This is usually COM 1. Press "NEXT".



5. Press "BROWSE" and select the ".kms" file to program into the payload meter. Press "NEXT".



6. When instructed, turn the keyswitch ON in order to power-up the payload meter. The PC will begin to reprogram the payload meter. This process takes approximately 5 minutes.



7. After successful programming, turn the key witch OFF.
8. Wait 20 seconds and turn the keyswitch ON.
9. The payload meter will need to be configured as instructed in the manual using the Payload Data Manager software on the laptop computer.

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LIGHT, RGT HAND HI-MTD HI BM HOLT	23
LIGHT, RIGHT HIGH BEAM	23
LIGHT, RIGHT LOW BEAM HEADLIGHT	23
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