CEBM021804

Shop Manual

930E-4

DUMP TRUCK

SERIAL NUMBERS **A30750 - A30795**

Tier II

KOMATSU®

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Fault Code A361: Overload on output 1T

Operator Action	None
Fault Code	A361
Description	Overload on output 1T
Fault Conditions	Sets if driver chip detects overcurrent or over temp on output 1T. Output is turned off when overload is detected. Resets at power down.
Operator Alerting System Response	Amber "IM Maintenance" Lamp No Buzzer Right Lamp Module Row 5, Column 3
Resulting Problem(s)	Hydraulic filter problems will not be indicated by the Pump Filter lamp.
Related Information	A laptop running "IM Realtime Data Monitor" software may be required to resolve this fault.

Table

1. This fault's logic contains more than one parameter, which may have additional fault code(s). This fault may be resolved by resolving the parameter(s) active fault code(s). Refer to the Troubleshooting Instructions for the active parameter fault(s).
2. If there are no active parameter fault codes, then based on the truck's setup while this fault is active, determine which of the parameters in the Table is not shown in its expected state on the IM Realtime Data Monitor program. Refer to the schematic to identify which item(s) may be causing the parameter(s) to be in the unexpected state. Troubleshoot these items.
3. If this fault is not currently active or if no parameters are currently in the unexpected state and the malfunction is still unresolved, then check each of the parameters in the Table for proper functionality. Troubleshoot all item(s) related to the parameter(s) which are found to be malfunctioning.

Parameter	**Expected State and/or Related Fault(s)**
Pump Filter Switches Lamp (IM1 T)	Status - Open Load: Unexpected. Troubleshoot Status - Normal: Expected Status - Shorted to Ground: Unexpected. Troubleshoot Status - Overload: Unexpected. Troubleshoot. 0: Lamp Off (IM output at B+) 1: Lamp On (IM output at ground)
IM Maintenance Lamp (IM1 X)	Status - Open Load: Unexpected. Troubleshoot Status - Normal: Expected Status - Shorted to Ground: Unexpected. Troubleshoot Status - Overload: Unexpected. Troubleshoot. 0: Lamp Off (IM output at B+) 1: Lamp On (IM output at ground) Fault(s): A363

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TABLE 1. SPINDLE REMOVAL TOOL DIMENSIONS		
Dimension	**Description**	**Measurement**
"A"	Plate Bolt Hole Diameter	34.8 mm (1.37 in.)
"B"	Plate O.D.	577.9 mm (22.75 in.)
"C"	Bolt Circle Diameter	517.7 mm (20.38 in.)
"D"	Plate I.D.	50.8 mm (2.00 in.)
"E"	Plate Thickness	34.8 mm (1.37 in.)
"F"	Pusher Cylinder Height	133.4 mm (5.25 in.)
"G"	Pusher Cylinder O.D.	320.6 mm (12.62 in.)
"H"	Pusher Cylinder I.D.	228.6 mm (9.00 in.)
"I"	Cylinder Wall Thickness	46.0 mm (1.81 in.)

Refer to Section G for information about using the spindle removal tool.

The following table lists more special tools that will be necessary for various service procedures:

Part No.	Description	Use
EK6089	Front Brake Tool Group	Front Brake Removal
EK6090	Rear Brake Tool Group	Rear Brake Removal
EJ2847	Pin Removal Tool	Rear Suspension Pin Removal
EJ2848	Cylinder	Rear Suspension Pin Removal
EJ2849	Hand Pump	Rear Suspension Pin Removal
EJ2850	Shackle	Rear Suspension Pin Removal
MM0093	Capscrew - M16 x 2.00 x 70	Rear Suspension Pin Removal
XB0887	Vacuum Pump	Hydraulic System Service
EC6027	Oil Charge Kit	Suspension Oil Charging
SS1143	Hoist Cylinder Quill Installation Tool	Hoist Cylinder Quill Installation
SS1153	Hoist Cylinder Quill Plug Tool	Hoist Cylinder Quill Plug Removal and Installation
VJ6567	Radiator Tube Installation Tool	Radiator Tube Installation
XA2307	Breaker Tool	Radiator Tube Removal
BF4810	Bearing Tool	24V Alternator
BF4818	Front Bearing Removal Tool	24V Alternator
BF4820	Bobbin Removal Tool	24V Alternator
BF4821	Bearing Insertion Tool	24V Alternator
BF4822	Stator Service Tool	24V Alternator

The tools in the following table can be ordered from Kent-Moore:

Part No.	Description	Use
J-24092	Puller Legs	A/C Service
J-25030	Clutch Hub Holding Tool	A/C Service
J-33884-4	Indicator Switch Tester	A/C Service
J-8092	Universal Handle	A/C Service
J-8433	Pulley Puller	A/C Service
J-9395	Puller Pivot	A/C Service
J-9399	Thin Wall Socket	A/C Service
J-9401	Clutch Plate & Hub Assembly Removal Tool	A/C Service
J-9403	Spanner Wrench	A/C Service
J-9480-01	Drive Plate Installer	A/C Service
J-9480-02	Spacer	A/C Service
J-9481	Puller and Bearing Installer	A/C Service

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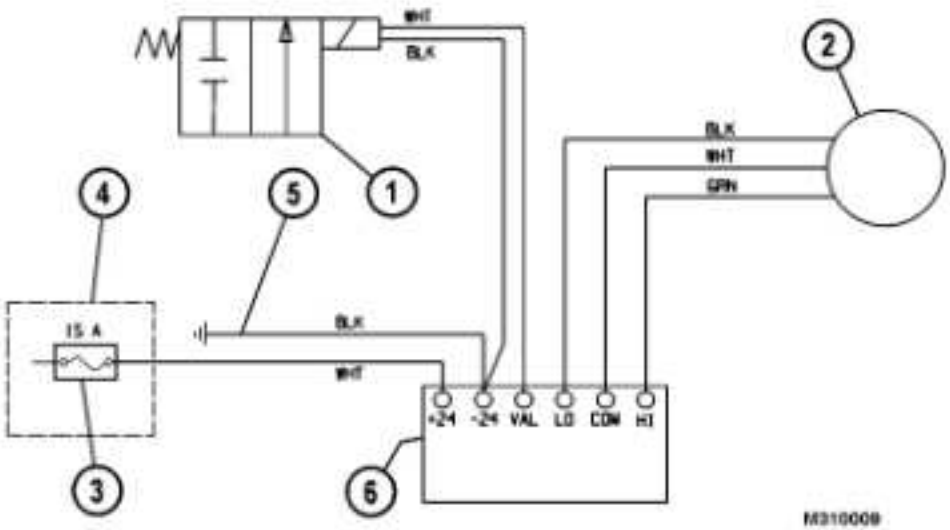
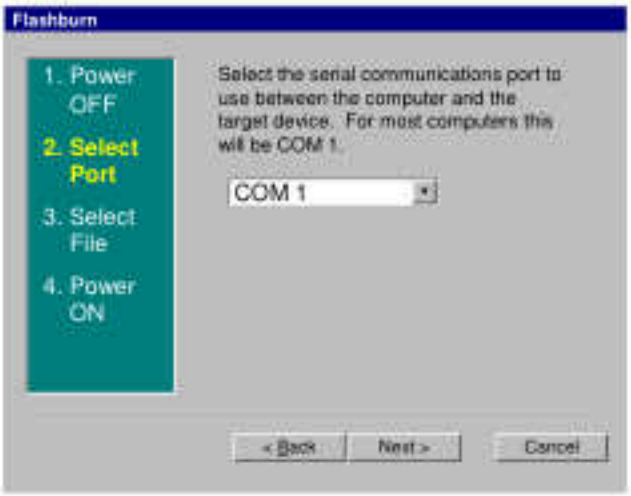


FIGURE 31-4. FILL SYSTEM SCHEMATIC

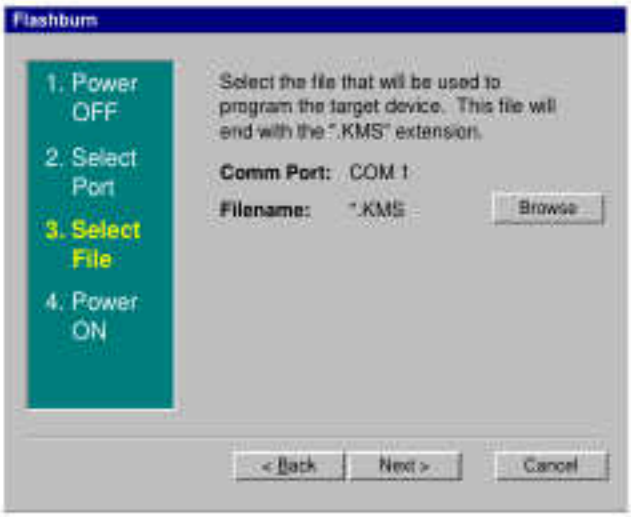
1. Fill Valve
2. Oil Level Sensor (top of reserve oil tank)
3. 15 Amp Fuse
4. Auxiliary Control Box
5. Ground Wire
6. Remote Fill Control Box

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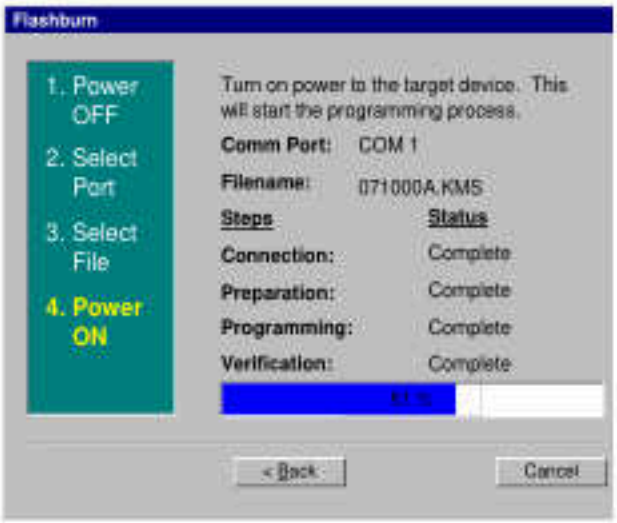
4. Confirm the proper communications port for the programming laptop. This is usually COM 1. Press "NEXT".



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



6. When instructed, turn the key switch 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 key switch 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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A/C DRIVE BELT CHECKOUT PROCEDURE

This procedure must be performed each time any component in the accessory drive is serviced, such as replacing a belt or removing the compressor. In addition, a 250 hour inspection of the AC drive belt is mandatory. The belts must be inspected for indications of wear and damage that may hinder performance. Replace as necessary and perform the following procedure.

Pulley Alignment

1. Install alignment tool (EL8868) onto the pulleys to check the alignment. Refer to Figure 4-15. If misalignment of the pulleys exceeds 3 mm (0.13 in.), the position of the compressor must be adjusted.

Belt Tension Check

NOTE: This procedure has been written for use with belt tension tool (XA3379), shown in Figure 4-13. Other tension tools may differ in functionality.



FIGURE 4-13. BELT TENSION TOOL - XA3379

2. Refer to Figure 4-16 for the proper distance from the centerline of the drive pulley to the centerline of the compressor pulley. Set the tension tool accordingly on the "deflection" scale by moving the deflection O-ring to the corresponding distance on the scale.
3. Slide the O-ring for the "force" scale to zero.



FIGURE 4-14. DEFLECTION MEASUREMENT

4. Find the approximate center of the belt between the two pulleys. Place the tip of the tool onto the outer face of the belt and apply pressure, as shown in Figure 4-14. The tool must be perpendicular to the belt. Push on the tool until the bottom edge of the deflection scale O-ring is even with the outer face of the adjacent drive belt. If only one belt is used, rest a straight edge across both pulleys to serve as the indicating plane.
5. The O-ring on the force scale indicates the force used to deflect the belt. The belt must deflect 5.3 mm (0.21 in.) under a force of 1.6 ± 0.1 kgf (3.44 ± 0.11 lbf). If not, adjust the belt accordingly and recheck the tension.

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ALTERNATOR, BATTERY CHARGING	26
ALTERNATOR, PROPULSION	16
BATTERY, ENGINE CRANKING	9
BATTERIES, START	26,33
CB 13 - CLEARANCE LIGHTS (RB1)	10,22
CB 14 - TURN SIGNAL FLASHER	10,22
CB 15 - TAIL LIGHTS (RB1)	10,22
CB 16 - RETARD LIGHTS (RB3)	10,19
CB 17 - MANUAL BACK-UP LTS (RB3)	10,19
CB 18 - STOP LIGHTS (RB3)	10,12
CB 19 - BACKUP LTS & HORN (RB3)	10,19
CB 20 - PARK BRAKE FAILURE (RB4)	10,27
CB 21 - SERV. LTS, HORN BTN. (RB4)	10,18
CB 22 - ENGINE CONTROL POWER (RB4)	10,27
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CB 24 - HDLIGHTS RT LO BEAM (RB5)	10,23
CB 25 - HDLIGHTS LFT HI BEAM (RB5)	10,23
CB 26 - HDLIGHTS RT HI BEAM (RB5)	10,23
CB 27 - HDLIGHTS & DASH LTS (RB5)	10,23
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FUSE-FB1-2 10A, WINDSHLD WASH/WIPE	10
FUSE-FB1-3 5A, FUEL, TEMP GA. VOLTM	10
FUSE-FB1-4 10A, CAB KEY POWER	10
FUSE-FB1-5 10A, HOIST SOLENOID	10
FUSE-FB1-6 15A, TURN/CLEAR LIGHTS	10
FUSE-FB1-7 10A, ENGINE OPTIONS	10
FUSE-FB1-8 10A, AID & INDIC. LTS	10
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