CEBM024801

Shop Manual

830E-1AC

DUMP TRUCK

SERIAL NUMBERS **A30589 - A30850**

U.S.A. EPA TIER 4 COMPLIANT

KOMATSU®

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Table 4: Engine Fault Codes (continued)					
KOMTRAX Plus Fault Code	KOMTRAX Plus Fault Description	Source	Sent via ORBCOMM	Snapshot Trigger	Model Notes
C384	Ether Solenoid Ckt Failed	Engine			All
C422	Coolant Level Signal Invalid	Engine			All
C423	Timing Press Incorrect	Engine			All
C426	J1939 Broadcast Data Missing	Engine			All
C427	J1939 Datalink Can Not Transmit	Engine			All
C431	Idle Validation Invalid	Engine			All
C432	Idle Validation Invalid	Engine			All
C441	Low Battery Voltage	Engine			All
C442	High Battery Voltage	Engine			All
C451	Rail Press Ckt Failed High	Engine			All
C452	Rail Press Ckt Failed Low	Engine			All
C455	Rail Actuator Open Ckt	Engine			All
C467	Desired Timing Not Achieved	Engine			All
C468	Desired Rail Press Not Achieved	Engine			All
C473	Remote Oil Level Signal Invalid	Engine	X	X	All
C487	Ether Bottle Empty	Engine			All
C489	AXG Speed Low Error	Engine			All
C514	Rail Actuator Mech Stuck	Engine			All
C524	Alt Droop SW Val Fault	Engine			All
C527	Dual Output A Shorted High or Open	Engine			All
C528	Alt Torque SW Val Fault	Engine			All
C529	Dual Output B Shorted High or Open	Engine			All
C553	Rail Press OOR High	Engine			All
C554	Rail Press Incorrect	Engine			All
C555	High Blow-by Pressure	Engine	X	X	All
C611	Engine Hot Shutdown	Engine			All
C612	High Oil Filter Rest	Engine			All
C616	High Turbo Comp Inlet Temp LBR	Engine			All
C621	Low Power #1 LB	Engine			All
C622	Low Power #2 LB	Engine			All
C623	Low Power #3 LB	Engine			All
C624	Low Power #4 LB	Engine			All
C625	Low Power #5 LB	Engine			All
C626	Low Power #6 LB	Engine			All
C627	Low Power #7 LB	Engine			All
C628	Low Power #8 LB	Engine			All
C631	Low Power #1 RB	Engine			All
C632	Low Power #2 RB	Engine			All

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NOTE: If the brake lining moves away from the caliper while handling during installation, the caliper must be partially disassembled to re-adjust the parking brake adjuster. The brake caliper must be installed with the brake linings completely retracted.

9. Install outer brake caliper half (14) over the two studs. Carefully remove the brake lining retaining wire. Do not let the lining pull away from the caliper. Lubricate then install four cap screws and flat washers (13).
10. Remove the two studs in the center holes.
11. Lubricate then install two cap screws (13) and hardened flat washers. Tighten all cap screws (13) to standard torque. Ensure brake bleeder plugs (4 & 5, Figure 6-3) are installed in the locations shown.
12. Install two 7/8-9 NC X 14 in. studs in the two center caliper mounting cap screw holes for the outer brake caliper (5).
13. Install outer disc adapter (10, Figure 6-2) with six cap screws (9) and tighten securely.
14. Install outboard disc (12) with four equally spaced mounting cap screws (11). Tighten, but do not tighten to final torque at this time.
    a. Measure and record distance from caliper mounting surface to inside face of brake disc (12). This is Dimension "B", Figure 6-2.
    b. If dimension "B" is 126.21 mm (4.97 in.) or greater, install one 1.016 mm (0.040 in.) shim at brake mounting surface. Measure dimension "B" again, measuring from outer surface of shim to inside face of brake disc.
    c. When dimension "B" is less than 126.21 mm (4.97 in.), then, subtract dimension "B" from 126.49 mm (4.98 in.).
    d. Make a measured shim pack equal to the result obtained in Step 14c. If not equal, then within 0.127 mm (0.005 in.) of the result. This will be brake disc shim pack (7).
15. Remove cap screws (11) and outer disc (12). Remove outer disc adapter (10).
16. With brake linings secured to caliper with wire, install inner brake caliper half (5) over the two studs. Ensure brake bleeder plug (3, Figure 6-3) is installed in the location shown.
17. Install outer disc adapter (10, Figure 6-2). Lubricate then install cap screws and flat washers (9). Tighten 12 point head cap screws (9) to standard torque.
18. If brake disc shim pack (7, Figure 6-2) is required (Step 14d), install shims on adapter (10).
19. Install outer brake disc (12) with bushing (8). Lubricate then install all cap screws and flat washers (11) to outer disc. With the brake disc resting against the brake lining, remove the wires retaining the brake linings. Tighten cap screws (11) to standard torque.
20. With brake linings secured to caliper with wire, install outside caliper half (5). Lubricate then install the four outer cap screws and flat washers (6). Remove the wires retaining the brake linings.
21. Remove the two studs in the center holes and install the remaining two lubricated cap screws (6) with washers. Tighten all cap screws (6) to standard torque.
22. Ensure brake bleeder plugs (1 & 2, Figure 6-3) are installed in the locations shown.
23. Ensure all brake bleeders in both calipers are in the exact locations shown in Figure 6-3. Remove all extra brake bleed plugs from brake calipers so they will not be used during the brake bleeding procedure.
24. Install crossover tubes and connect all brake lines.
25. Refer to Park Brake Adjustment Procedure to adjust the parking brake.
26. After the brakes are adjusted, refer to Brake Bleeding procedure to bleed trapped air out of the brake system.

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SYMBOLS USED IN SCHEMATICS

- TERMINAL BOARD POINT
- TERMINAL IN LOWER INSTRUMENT PANEL
- TERMINAL IN REAR AXLE JUNCTION BOX
- TERMINAL POINT IN FRAME AREA
- CONNECTION POINT
- KNIFE DISCONNECT/BULLET TERMINAL
- GENERAL GROUND
- FRAME GROUND
- WIRING
- SHIELDED WIRE
- CONNECTOR, INLINE (X IS CAVITY IDENTIFIER)
- CONNECTOR, BULKHEAD (X IS CAVITY IDENTIFIER)
- MOTOR
- MAGNETIC PICKUP
- PROXIMITY SWITCH
- SINGLE ELEMENT LAMP
- DUAL ELEMENT LAMP
- HORN, BUZZER, OR SPEAKER
- TEMPERATURE SENSOR
- LED (LIGHT EMITTING DIODE)
- BATTERY
- FUSE

- PRESSURE SWITCH - PRESSURE TO OPEN
- PRESSURE SWITCH - PRESSURE TO CLOSE
- TOGGLE SWITCH
- ROTARY SWITCH
- PUSHBUTTON SWITCH - NORMALLY CLOSED
- CIRCUIT BREAKER - MANUAL RESET
- PRESSURE OPERATED VARIABLE RESISTOR
- TEMPERATURE SWITCH - INCREASE TEMP. TO OPEN
- TEMPERATURE SWITCH - DECREASE TEMP. TO OPEN
- TEMPERATURE OPERATED VARIABLE RESISTOR
- LIMIT SWITCH - CAM TO CLOSE
- LIMIT SWITCH - CAM TO OPEN
- DIODE
- FIXED RESISTOR
- VARIABLE RESISTOR (POTENTIOMETER)
- SOLENOID
- RELAY
- TIMER MODULE

CNX(1-5)/P30(1-5)
GE IDENTIFIER/ KAC IDENTIFIER

X (X IS CAVITY IDENTIFIER)

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XS6801-2 OCT 10
ELECTRICAL SCHEMATIC
INDEX AND SYMBOLS
830E- 1AC
A30344, A30561 & UP
SHEET 1 OF 36

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CAPACITOR CHARGE LIGHTS

Observe both capacitor charge lights (CCL1, CCL2). CCL1 is on the outside of the contactor box. CCL2 is on the switch panel inside the low voltage area. The lights will stay illuminated as long as the voltage on the DC link is greater than 50 VDC. Refer to Figure 3-8.

⚠WARNING

Hazardous voltages may be present in this equipment even if the engine and capacitor charge lights are off.

Use measurement and protective equipment rated for 2000 VDC minimum to verify that no voltage is present before touching any terminal.

⚠WARNING

Verify functionality of the measurement equipment using site-approved procedures both before and after performing control group measurements.

Failure to observe these precautions may result in death or serious personal injury.

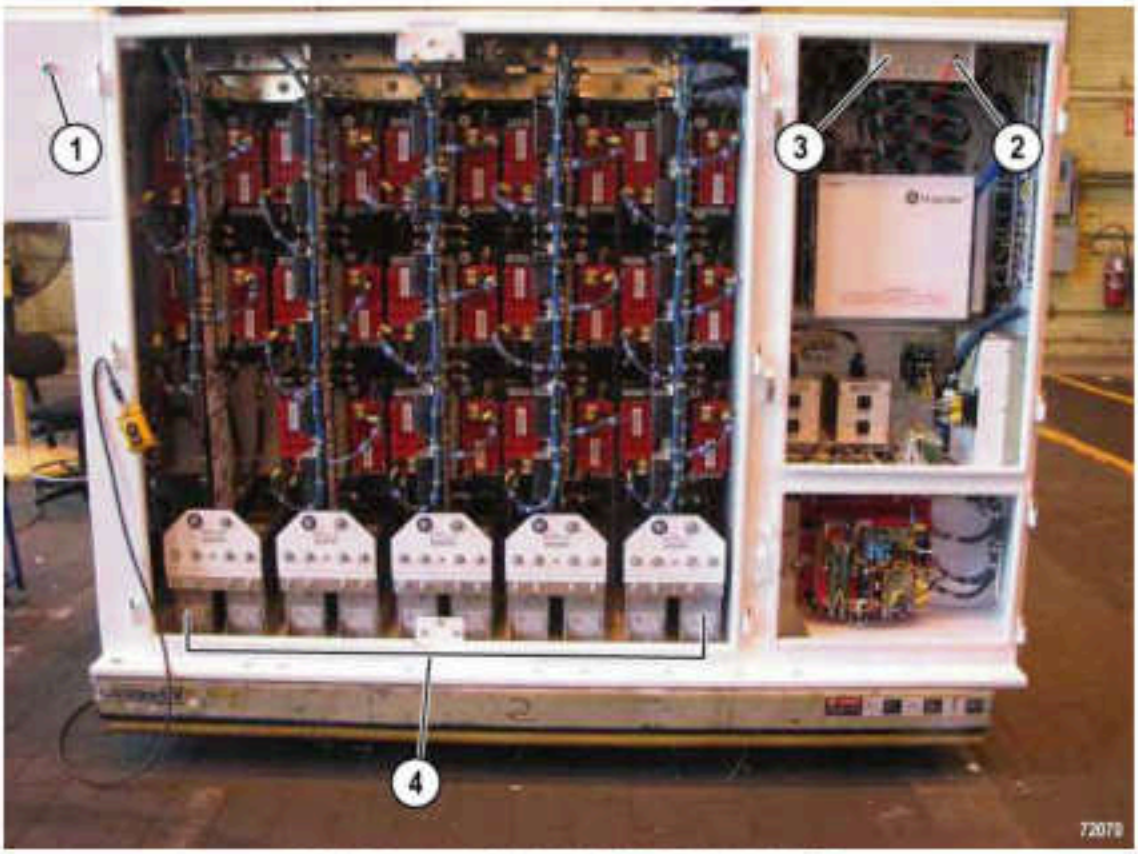


FIGURE 3-8. CAPACITOR CHARGE LIGHTS

1. Exterior Capacitor Charge Light (CCL2)
2. Interior Capacitor Charge Light (CCL1)
3. Information Display Panel
4. DC Link Capacitors

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4. Navigate the highlighted bar downward to the row named "Camera Switch" (Figure 33-17) using the minus button. Press the enter button to cause the setting for this row to become highlighted in green color. Use the plus button or the minus button as needed to cycle to option "4C" in the available settings. When "4C" is shown, select this option by pressing the enter button. Now the complete row should be highlighted in yellow and the text "4C" is shown as the selected option.

NOTE: The other options are also shown in Figure 33-17, and they are QUA, 2C, 3C AND OFF.



FIGURE 33-17.

5. Now Navigate the highlighted bar downward to the row named "Frontcam", then press the enter button. This will have a default setting screen similar to Figure 33-18. Set "Enable Frontcam" to OFF.

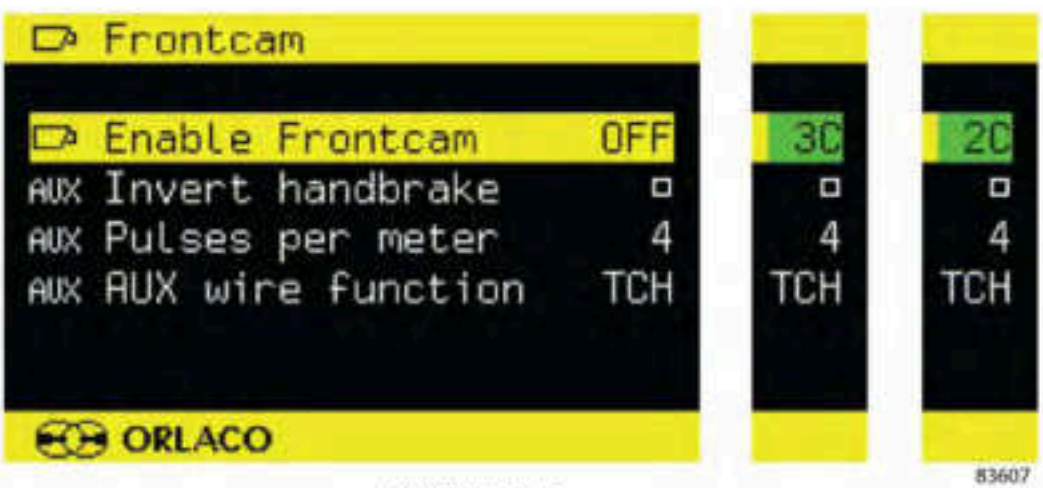
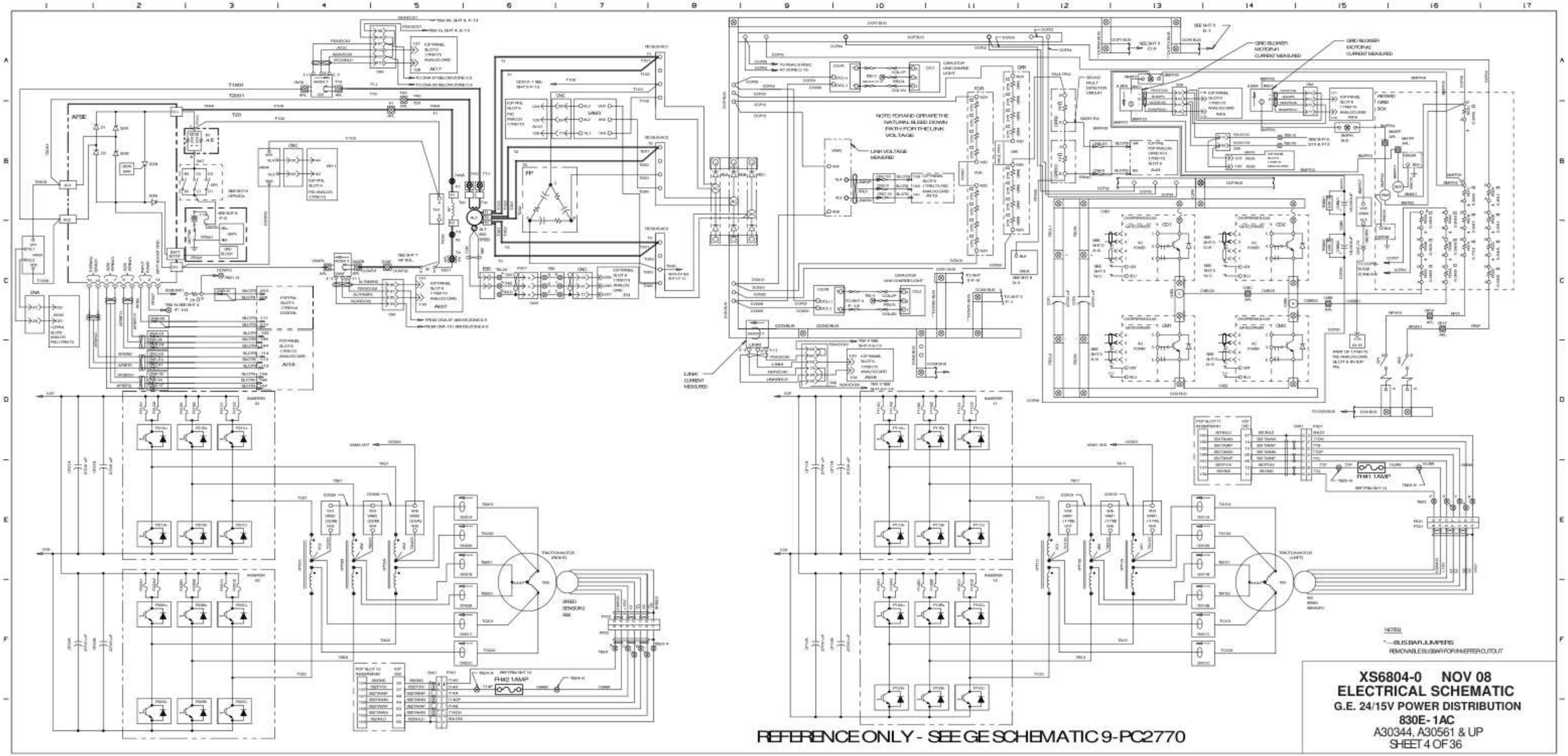


FIGURE 33-18.

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