CEBM015101

Shop Manual

830E

DUMP TRUCK

SERIAL NUMBERS **A30741 & UP**

With Full Time Axle Blower

KOMATSU®

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SECTION A

GENERAL INFORMATION

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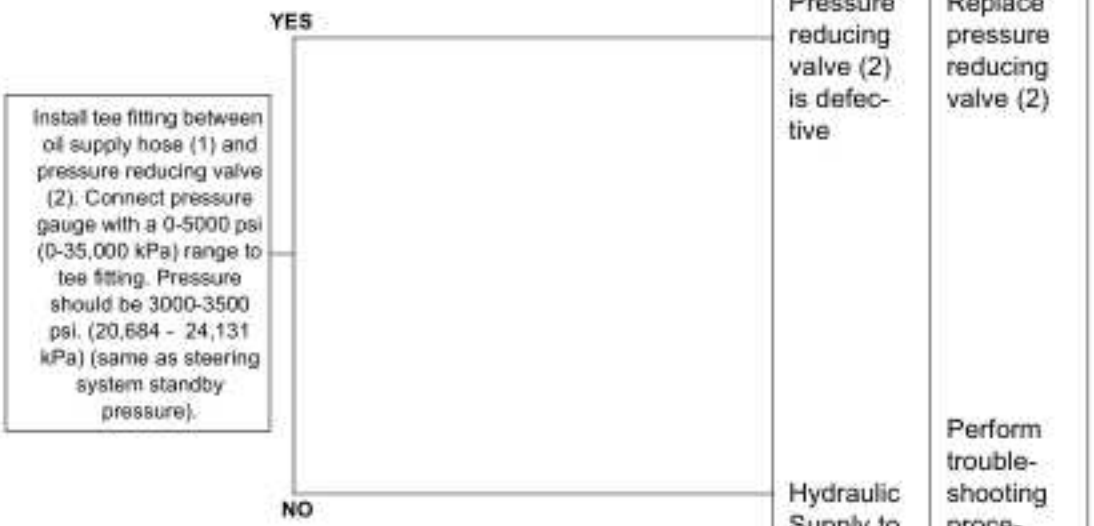
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Table 4: Engine Fault Codes (continued)					
VHMS Fault Code	VHMS Fault Description	Source	Sent via OrbComm	Snapshot Trigger	Model Notes
C633	Low Power #3 RB	Engine			All
C634	Low Power #4 RB	Engine			All
C635	Low Power #5 RB	Engine			All
C636	Low Power #6 RB	Engine			All
C637	Low Power #7 RB	Engine			All
C638	Low Power #8 RB	Engine			All
C639	Intake Air Leak LBR	Engine	X	X	All
C641	High Exh Temp #1 LB	Engine		X	All
C642	High Exh Temp #2 LB	Engine		X	All
C643	High Exh Temp #3 LB	Engine		X	All
C644	High Exh Temp #4 LB	Engine		X	All
C645	High Exh Temp #5 LB	Engine		X	All
C646	High Exh Temp #6 LB	Engine		X	All
C647	High Exh Temp #7 LB	Engine		X	All
C648	High Exh Temp #8 LB	Engine		X	All
C649	Change Lubricating Oil and Filter	Engine			All
C651	High Exh Temp #1 RB	Engine		X	All
C652	High Exh Temp #2 RB	Engine		X	All
C653	High Exh Temp #3 RB	Engine		X	All
C654	High Exh Temp #4 RB	Engine		X	All
C655	High Exh Temp #5 RB	Engine		X	All
C656	High Exh Temp #6 RB	Engine		X	All
C657	High Exh Temp #7 RB	Engine		X	All
C658	High Exh Temp #8 RB	Engine		X	All
C661	High Power #1 LB	Engine			All
C662	High Power #2 LB	Engine			All
C663	High Power #3 LB	Engine			All
C664	High Power #4 LB	Engine			All
C665	High Power #5 LB	Engine			All
C666	High Power #6 LB	Engine			All
C667	High Power #7 LB	Engine			All
C668	High Power #8 LB	Engine			All
C671	Exh Temp Ckt Failed Low #1 LB	Engine			All
C672	Exh Temp Ckt Failed Low #2 LB	Engine			All
C673	Exh Temp Ckt Failed Low #3 LB	Engine			All
C674	Exh Temp Ckt Failed Low #4 LB	Engine			All
C675	Exh Temp Ckt Failed Low #5 LB	Engine			All

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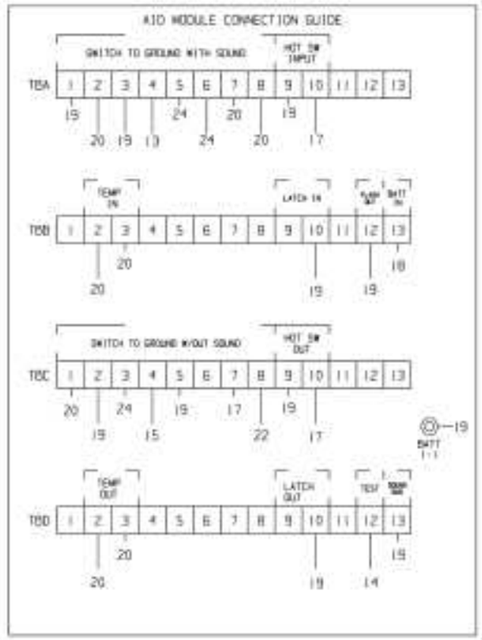


Cause	Remedy
Pressure reducing valve (2) is defective	Replace pressure reducing valve (2)
Hydraulic Supply to shutters is incorrect	Perform trouble-shooting procedures in appropriate shop manual to correct truck hydraulic system

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SYMBOLS USED IN SCHEMATICS

- TERMINAL POINT IN REAR AXLE BOX
- TERMINAL POINT IN CONTROL CABINET
- TERMINAL POINT IN CONTROL CABINET JUNCTION BOX
- TERMINAL IN INSTRUMENT PANEL AREA
- TERMINAL POINT IN LADDER JUNCTION BOX
- TERMINAL POINT IN AUX. RETARDING COMPARTMENT
- TERMINAL POINT IN HOT START JUNCTION BOX
- TERMINAL POINT IN FRONT FRAME RAIL JUNCTION BOX
- KNIFE DISCONNECT
- GROUND WITHIN G.E. COMPONENT PACKAGE
- FACTORY WIRING
- VENDOR SUPPLIED WIRING
- CONNECTOR - R FOR RECEPTICAL SIDE, P FOR PLUG SIDE
- SHIELDED WIRE
- SHIELDED TWISTED WIRE
- SWITCH
- PUSHBUTTON SWITCH - NORMALLY CLOSED
- CIRCUIT BREAKER
- VARISTER
- DIODE
- SOLENOID
- CONNECTION POINT
- OPERATING COIL (Z,Y-X) ← CONTACT LOCATION INFORMATION; ZONE LOCATION; SHEET NUMBER
- CONTACT - NORMALLY OPEN (Z,Y-X) ← OPERATIN COIL LOCATION INFORMATION --TYPICAL FOR BOTH NORMALLY OPEN AND NORMALLY CLOSED CONTACTS--; ZONE LOCATION; SHEET NUMBER
- CONTACT - NORMALLY CLOSED
- C FORM CONTACT - 1 NORMALLY OPEN CONTACT & 1 NORMALLY CLOSED CONTACT COMMON ON ONE SIDE
- PRESSURE SWITCH - PRESSURE TO OPEN
- PRESSURE SWITCH - PRESSURE TO CLOSE
- FLUID LEVEL SWITCH - LOW FLUID LEVEL TO CLOSE
- FLUID LEVEL SWITCH - LOW FLUID LEVEL TO OPEN
- PRESSURE OPERATED VARIABLE RESISTOR
- FLUID OPERATED VARIABLE RESISTOR
- TEMPERATURE SWITCH - INCREASE TEMPERATURE TO OPEN
- TEMPERATURE SWITCH - DECREASE TEMPERATURE TO OPEN
- TEMPERATURE OPERATED VARIABLE RESISTOR
- LIMIT SWITCH - CAM TO CLOSE
- LIMIT SWITCH - CAM TO OPEN
- RESISTOR
- ADJUSTABLE RESISTOR
- SOLID STATE AMPLIFER (INPUT - FOR NON INVERTED OUTPUT) (INPUT - FOR INVERTED OUTPUT)
- M MOTOR



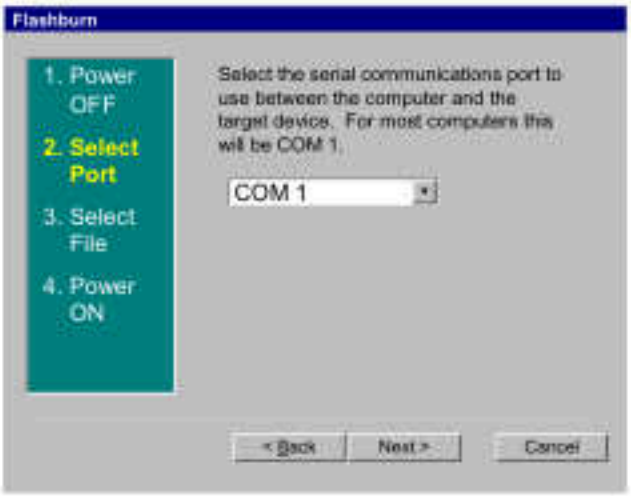
SELECTOR SWITCH CHART				
CONTACT NO	FRWD	NEUT	REV	SHEET NUMBER
1			X	
2			X	
3		X		25, B-4
4	X	X		
5	X			17, A-2
6		X		
7	X			
8			X	17, A-2

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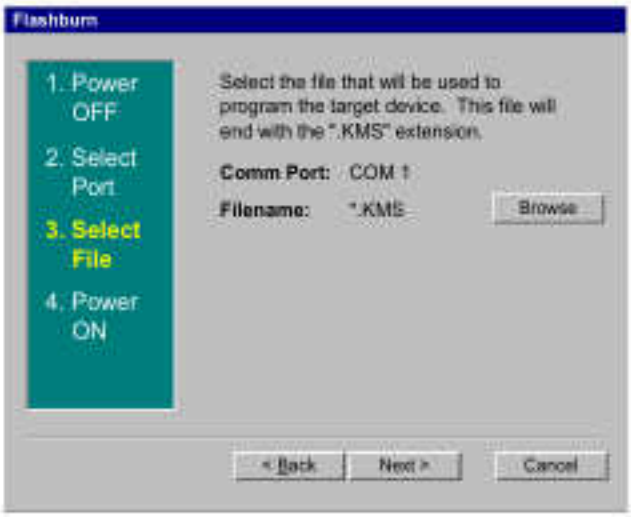
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ELECTRICAL SCHEMATIC
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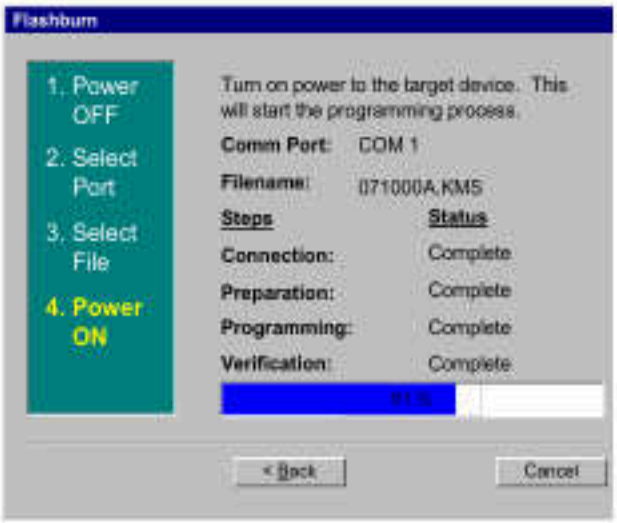
4. Confirm the proper communications port for the programming laptop. This is usually COM 1. Press "NEXT".



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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PLM III SYSTEM CONFIGURATION

Starting Communications

The PDM software allows users to download and configure the system.



Before connecting to the payload meter, select "Change Program Options" and confirm that the program has selected the correct laptop serial port. Most laptops use Comm 1 for serial communications. The units displayed for reports and graphs by the PC software can be set on this form. Click "Done" to return to the main menu.



From the main menu, click the "Connect to Payload Meter" button. The PC will try to connect to the payload meter and request basic information from the system. In the event of communications trouble, the PC will try 3 times to connect before "timing-out". This may take several seconds.

Displayed Payload Units

Three options are available for the display of units in the PC software, reports, and graphs:



Short Tons: Payload is displayed in short tons, distances and speeds will be displayed in Miles

Metric Tons: Payload is displayed in metric tons, distances and speeds are displayed in Kilometers

Long Tons: Payload is displayed in long tons, distances and speeds are displayed in Miles

Time Units

Minutes and Seconds Example:
Five minutes and thirty-two seconds = 5:32

Decimal Minutes Example:
Five minutes and thirty-two seconds = 5.53

Connection Menu

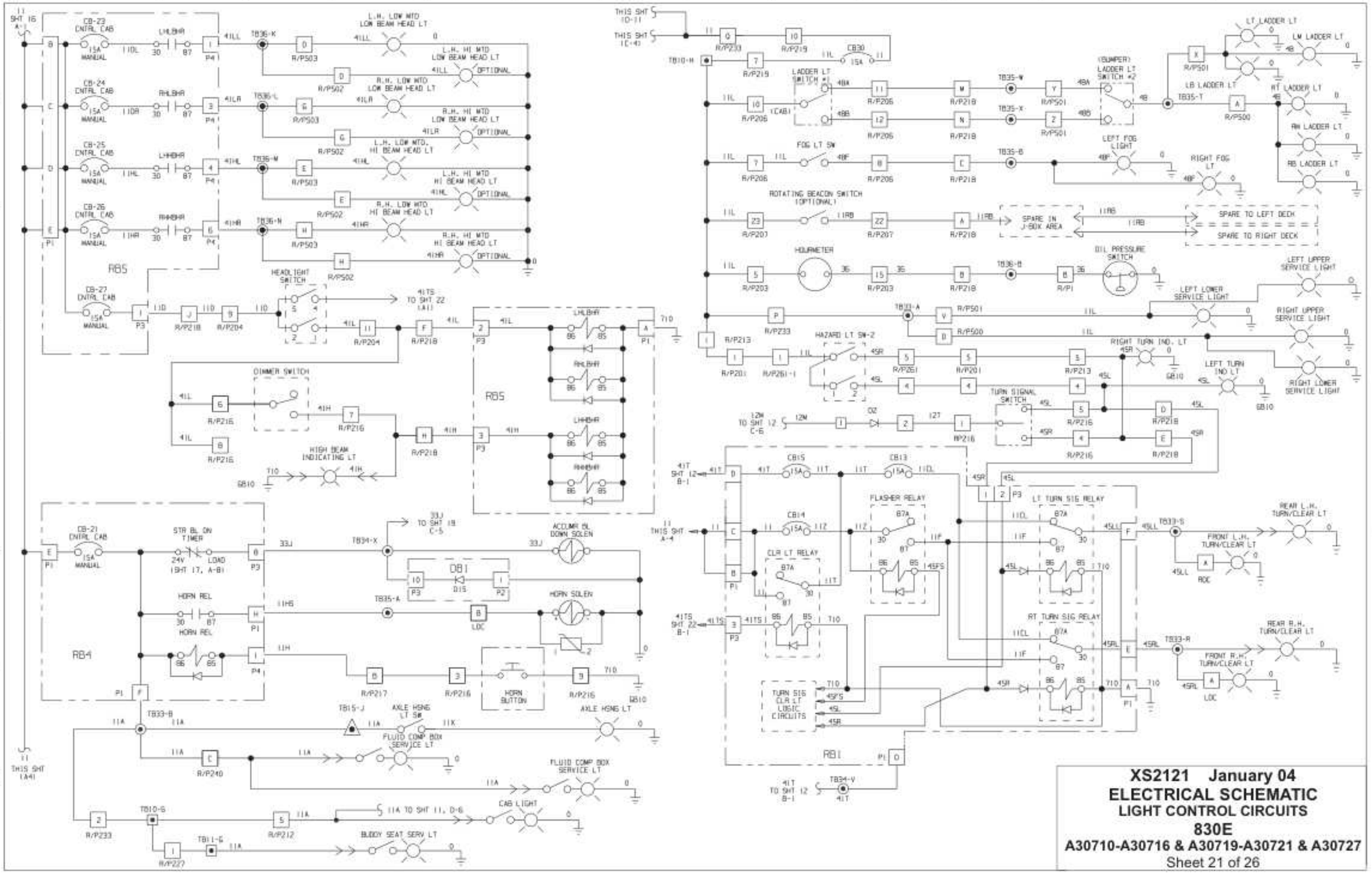


The connection screen displays basic system information to the user.

- Frame S/N should agree with the truck serial number from the serial plate located on the truck frame.
- Truck Number is an ID number assigned to the truck by the mine.
- The Payload Meter Date / Time values come from the payload meter at the moment of connection.
- Number of Haul Cycle Records is the number of haul cycles records stored in memory and available for download.
- Number of Active Alarms shows how many alarms are currently active in the system at the time of connection. If there are active alarms, the "Display Active Alarms" button is available.
- Number of Inactive Alarms shows how many alarms have been recorded in memory and are available for download.
- PLM Software Version displays the current version of software in the payload meter.

The information on the connection menu comes from the configuration of the payload system on the truck.

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ELECTRICAL SCHEMATIC

LIGHT CONTROL CIRCUITS

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