Shop Manual

CEBM011500



730E

DUMP TRUCK
with TROLLEY ASSIST

SERIAL NUMBERS **A30225 and A30226**

KOMATSU®

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8. Thermostat: The engine thermostat operation should be checked according to engine manufacturer's specifications and recommendations.
9. Fan clutch: After each 1000 hours, the fan clutch should be checked for signs of internal wear as follows:
   a. Bearing wear: With the engine off and no oil supply to the fan clutch, push the fan forward-rearward. No movement of the fan mounting hub should occur.

NOTE: For the next tests, it is necessary to provide an external supply of oil pressure at 40 psi (275 KPa) minimum, 100 psi (689 KPa) maximum. The oil supply should be compatible with the oil being used in the engine.

   b. Clutch Plate Drive Slot Wear: With the engine off and the clutch locked up, rotate the fan with a light force clockwise-counter-clockwise. Movement at the tip of a 68 in. (1.7 M) Dia. fan blade should not exceed 1.12 in. (28.4 mm). Excess movement indicates excessive wear at the drive tangs.
   c. Clutch Plate Wear: With the engine off, apply 40 psi (275 kPa) oil pressure to lockup the clutch. Using a pull type scale connected to the fan blade 30 in. (76 cm) from the center of fan, a pull of no less than 250 lbs. (1023 N) should be required to rotate the blade independent of the pulley.

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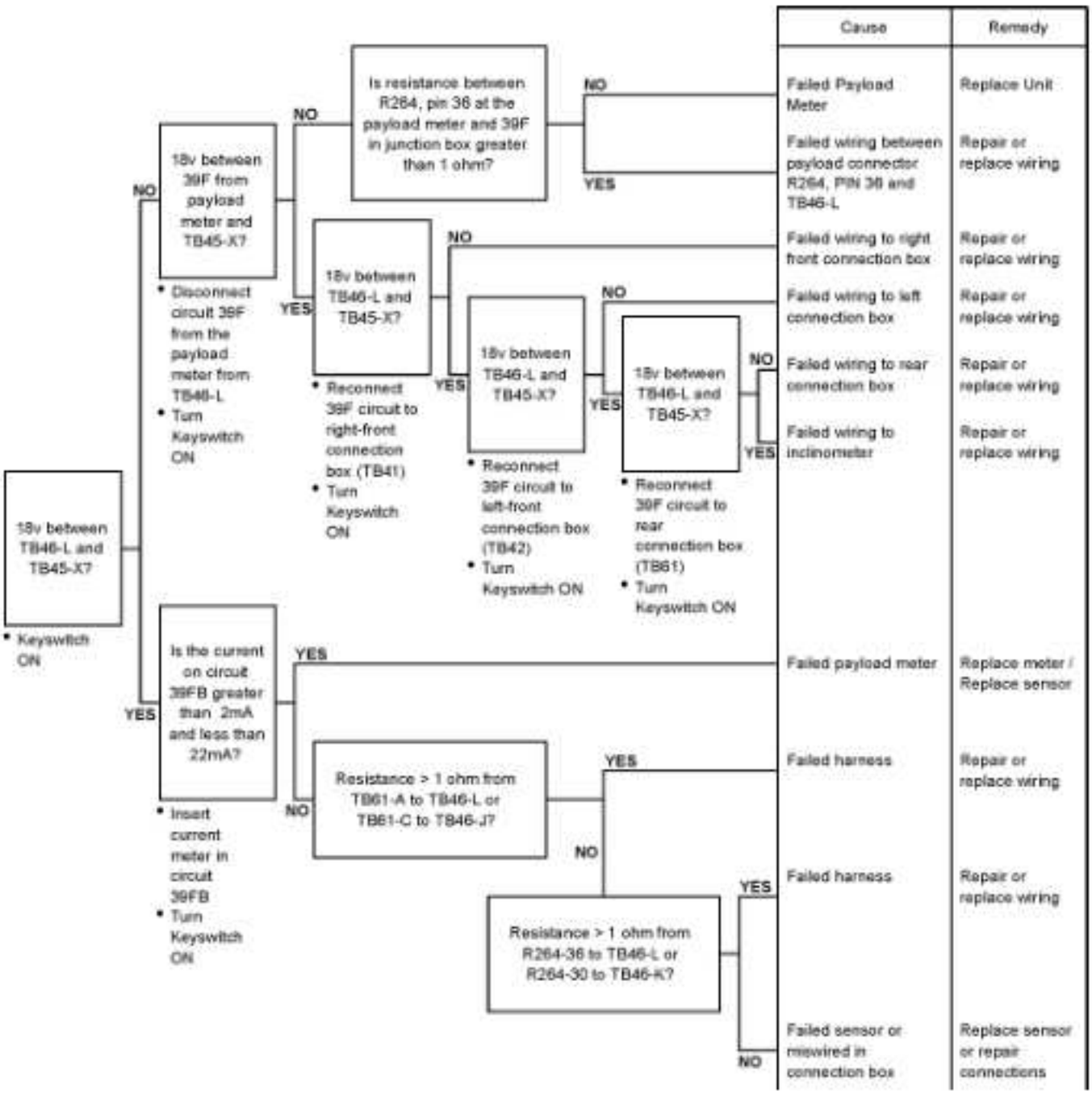
Alarm 5 -Left Rear Pressure High

Alarm 6 - Left Rear Pressure Low

Troubleshoot Wiring to Left Rear Suspension

These alarms indicate that the current being read by the payload meter is higher than 22ma or lower than 2ma. The pressure sensor is designed to output 4-20ma over a pressure range of 4000 psi.

- Confirm 18v sensor supply at TB46-L in payload junction box.
- Confirm proper connection of signal circuit 39FC from right suspension connection box, TB41-B to payload junction box TB46-G to payload meter connector R264, pin 20.



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HYDRAULIC BRAKE SYSTEM SCHEMATIC EJ1735

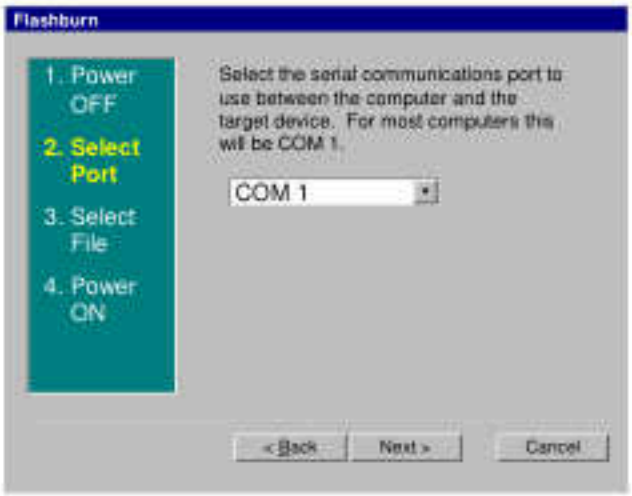
HYDRAULIC SYSTEM SCHEMATIC EK3630

ELECTRICAL SCHEMATIC XS1000

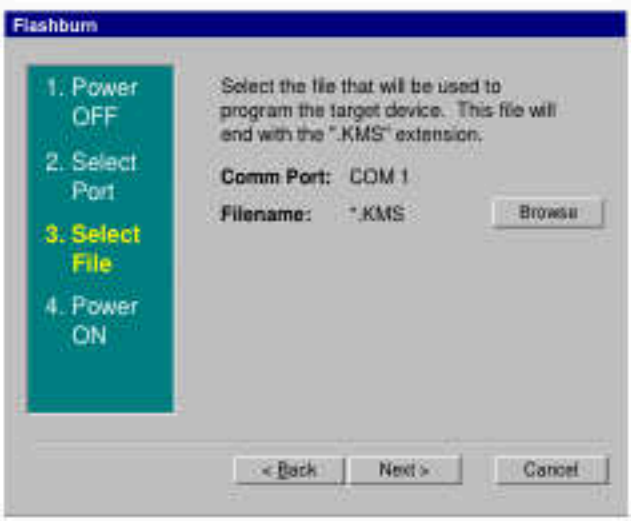
PAYLOAD METER III ELECTRICAL SYSTEM SCHEMATIC (730E & 830E) HE481

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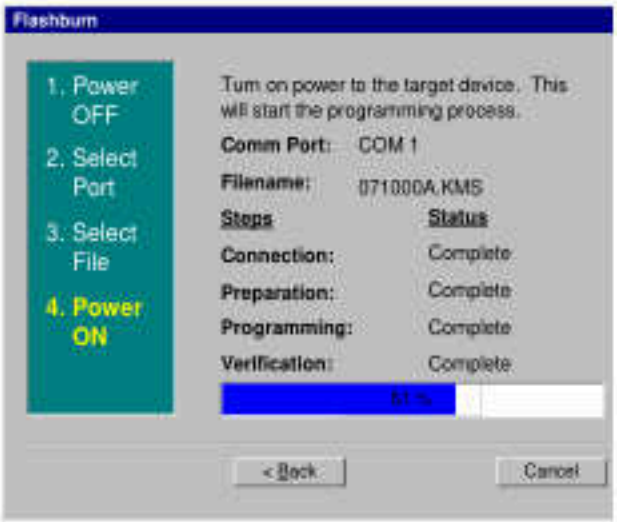
4. Confirm the proper communications port for the programming laptop. This is usually COM 1. Press "NEXT".



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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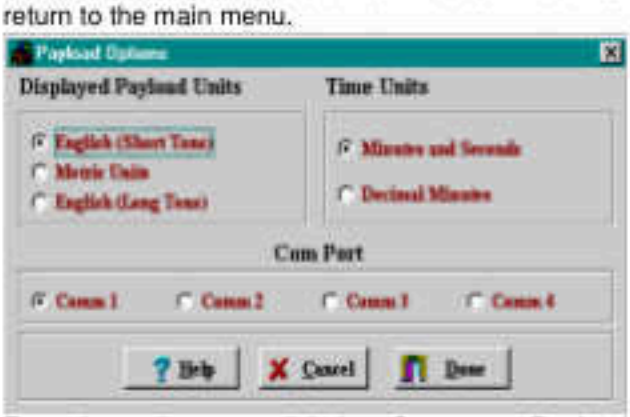
PLMIII System Configuration

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

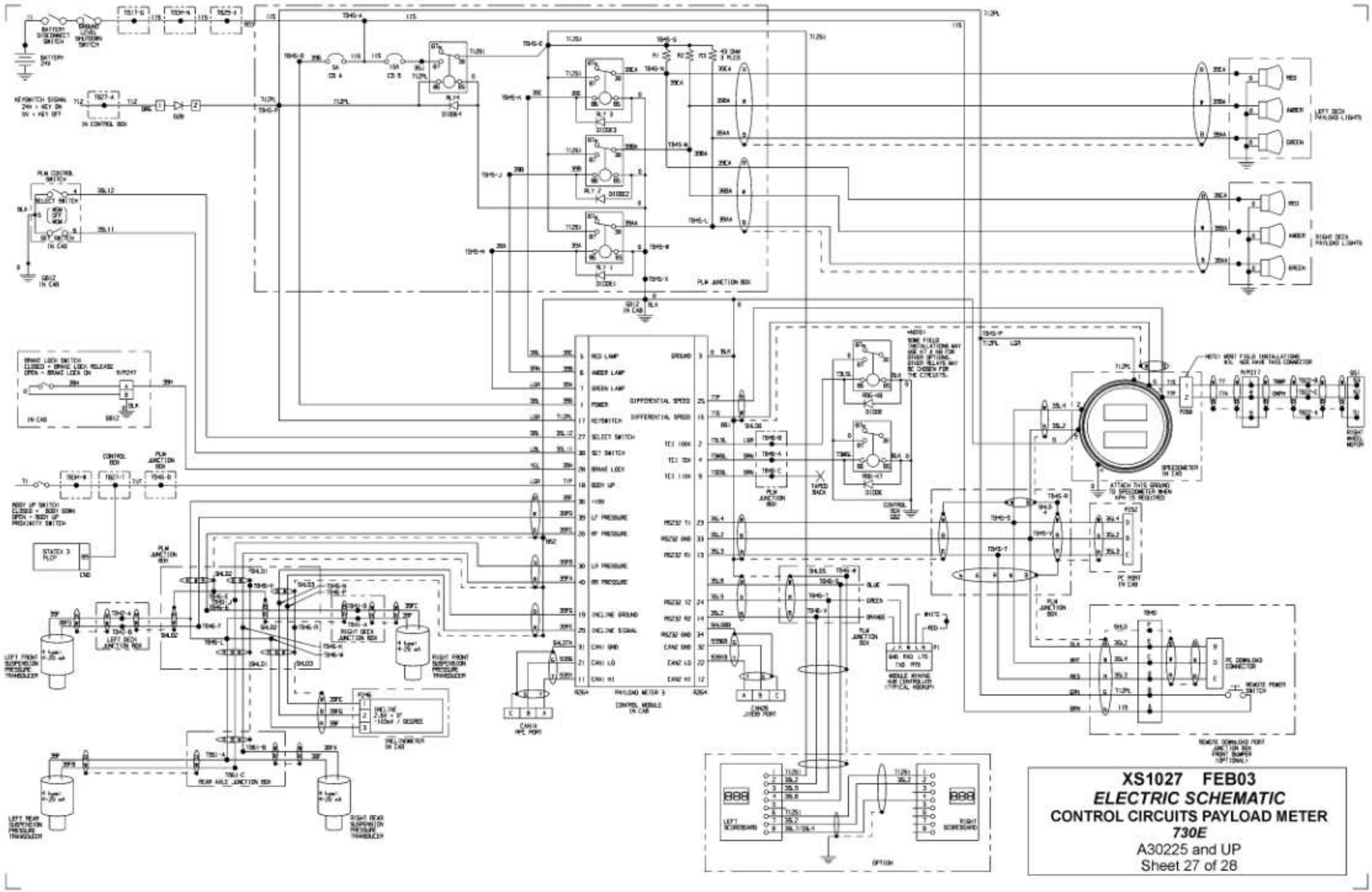


The connection screen displays basic system information to the user.

- 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 meter system on the truck.

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