CEBM023301

Shop Manual

730E Trolley

DUMP TRUCK

SERIAL NUMBERS **A30600 - A30616**

KOMATSU®

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FIGURE 2-25. RESET HARDWARE STARTUP EVENT INSTRUCTIONS

b. When the EVENT DATA DISPLAY SCREEN is displayed, press the help key [F1] for additional information regarding the event description and troubleshooting tips.

NOTE: Moving too quickly between Event Menu, Event Summary, and Event Details screens may cause the PTU to issue an error message at the bottom of the screen. If this occurs, press the [SPACE] bar to continue.

7. To upload event data for future review, return to the EVENT DATA MENU and move the cursor to select "GE engineering format event data" and press [ENTER]. A screen titled UPLOAD GE EVENT DATA YES/NO MENU will appear.

   a. Select "YES, UPLOAD GE FORMAT EVENT DATA to a File". Press [ENTER]. A screen asking for a path name will appear.

      1.) If only the file name is entered, the data will be saved, under the file name typed, to the GE default directory.

      2.) If a specific directory has been setup on the PTU hard drive for storing event data files, type in the full path name followed by the file name chosen. For example, if a directory named EVENTDAT has been setup on drive "C" for storing event data files, and the name of the file is to be EV001, this entry would be typed as:

      ```
      C:\eventdat\ev001
      ```

      3.) If the event data is to be stored on a floppy disk, insert a formatted floppy disk in drive A. If the file name used above is chosen, the entry would be typed as: `A:ev001`

   b. After entering the appropriate name, press [ENTER]. The information will then be transferred from the CPU to the PTU and stored under the file name assigned. The transfer may take several minutes to complete, depending on the number of events being saved to the file. After the file transfer is complete, a message will appear stating `"Received xxxxxx bytes. . . Returning to PTU. Press Space"`. Press [SPACE] bar to return to the UPLOAD GE EVENT DATA YES/NO MENU.

8. When the recorded events are no longer needed, they may be erased by selecting "ERASE EVENT DATA YES/NO MENU" from the Event Data menu.

NOTE: ALL EVENTS WILL BE ERASED! Only certain privilege levels are authorized to erase event data.

   a. With the cursor on "erase event data yes/no menu", press [ENTER]. A screen titled RESET "ALL" YES/NO MENU appears.

   b. To erase the event data, move the cursor to "YES, Erase Truck Events" and press [ENTER].

   c. Exit back to the desired menu following screen instructions as they appear.

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Installation

1. Move the brake valve into position and secure in place with the cap screws and lock washers. Tighten the cap screws to standard torque.
2. Remove the plugs from the brake valve assembly and hydraulic lines. Install the fittings, and connect the lines to the brake valve assembly and tighten. Connect the differential pressure switch to the harness.

NOTE: Prior to checking the brake valve, the steering system must have the proper nitrogen precharge in the steering accumulators. Refer to Section L, Hydraulic System, for the steering accumulator precharge procedure. In addition, the brake system lines must have the air removed and the brake accumulators must also be precharged with nitrogen. Refer to the Brake Accumulator Precharge procedures in this section.

3. If equipped, install the electronic retard pedal to the brake pedal (Figure 3-3).
4. With the engine shut off and the key switch off, open both the brake accumulator bleed-down valves. Precharge both the accumulators.

NOTE: For best performance, charge the accumulators in the temperature conditions the vehicle is expected to operate in. During the precharge, allow the temperature of the nitrogen gas to come into equilibrium with the ambient temperature.

5. Close both the accumulator bleed-down valves after the precharge is complete.

NOTE: To prevent excess oil from coming in contact with the brake assemblies during the brake bleeding procedure, attach a hose to the bleeder screw. Direct the hose into a container.

6. Start the engine and remove air from the brake lines and brakes. Actuate the brake lock switch and open the uppermost bleeder screw on all the rear brake assemblies until a steady stream of oil appears. Close the bleeder screw.
7. Release the brake lock switch and bleed the remaining front brakes in the same manner by depressing the brake pedal. Check for fluid leaks at the brake valve.

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SYSTEM PERFORMANCE TEST

This test is performed to establish the condition of all components in the system. Observe these conditions during testing:

1. Place a fan in front of the condenser to simulate normal ram air flow and allow the system to stabilize.
2. Install a thermometer into the air conditioning vent closest to the evaporator.
3. Start the engine and operate at 1000 rpm.
4. Evaluate the readings obtained from the gauges to see if they match the readings for the ambient temperature.
5. Set air conditioning system at maximum cooling and maximum blower speed operation.
6. Close all windows and doors to the cab.
7. Carefully feel the hoses and components on the high side. All should be warm-hot to the touch. Check the inlet and outlet of receiver-drier for even temperatures, if outlet is cooler than inlet, a restriction is indicated.

⚠WARNING

Use extreme caution when placing hands on high side components and hoses. Under most normal conditions these items can be extremely hot.

8. Feel the hoses and components on the low side. They should be cool to the touch. Check connections near the expansion valve; the inlet side should be warm and the outlet side cold.
9. After a minimum of 10 minutes has elapsed and the system has stabilized, observe the gauge readings. Compare the readings to the specifications in Table 1.

NOTE: Pressures may be slightly higher in very humid conditions and lower in very dry conditions. Pressures listed in Table 1 are during compressor clutch engagement.

10. Check the cab vents for cool air. Outlet air temperature should be approximately 16 - 22° C (30 - 40° F) below ambient air temperature.
11. If pressures and temperatures are not within the specified ranges, the system is not operating properly. Refer to Preliminary Checks near the end of this chapter for tips on diagnosing poor system performance.

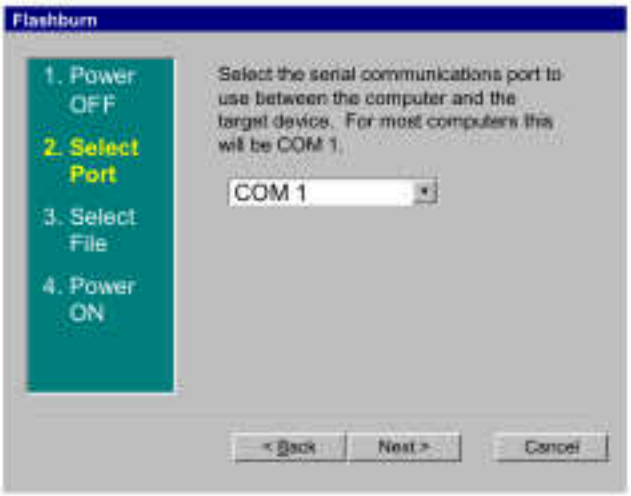
TABLE 1. NOMINAL R-134a PRESSURE RANGES

Ambient Air Temperature	High Side Pressure	Low Side Pressure
21° C (70° F)	820 - 1300 kPa (120 - 190 psi)	70 - 138 kPa (10 - 20 psi)
27° C (80° F)	950 - 1450 kPa (140 - 210 psi)	70 - 173 kPa (10 - 25 psi)
32° C (90° F)	1175 - 1650 kPa (170 - 240 psi)	105 - 210 kPa (15 - 30 psi)
38° C (100° F)	1300 - 1850 kPa (190 - 270 psi)	105 - 210 kPa (15 - 30 psi)
43° C (110° F)	1450 - 2075 kPa (210 - 300 psi)	105 - 210 kPa (15 - 30 psi)

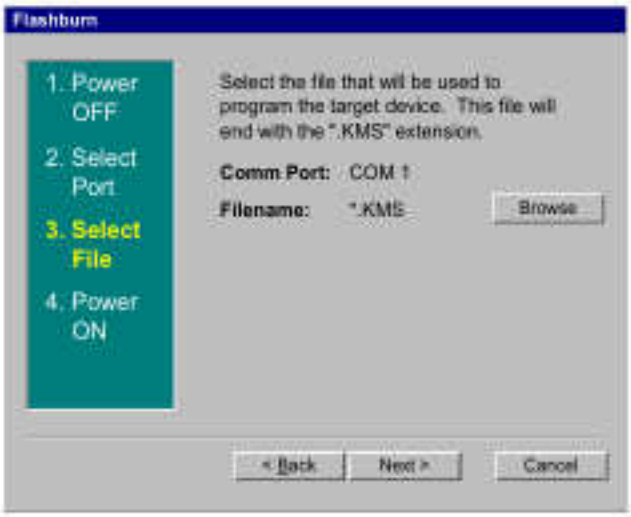
NOTE: All pressures in this chart are for reference, only. Weight is the only absolute means of determining proper refrigerant charge.

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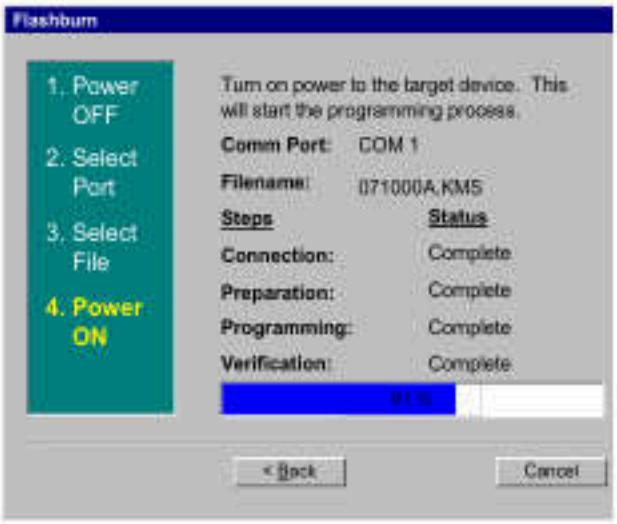
4. Confirm the proper communications port for the programming laptop. This is usually COM 1. Press "NEXT".



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

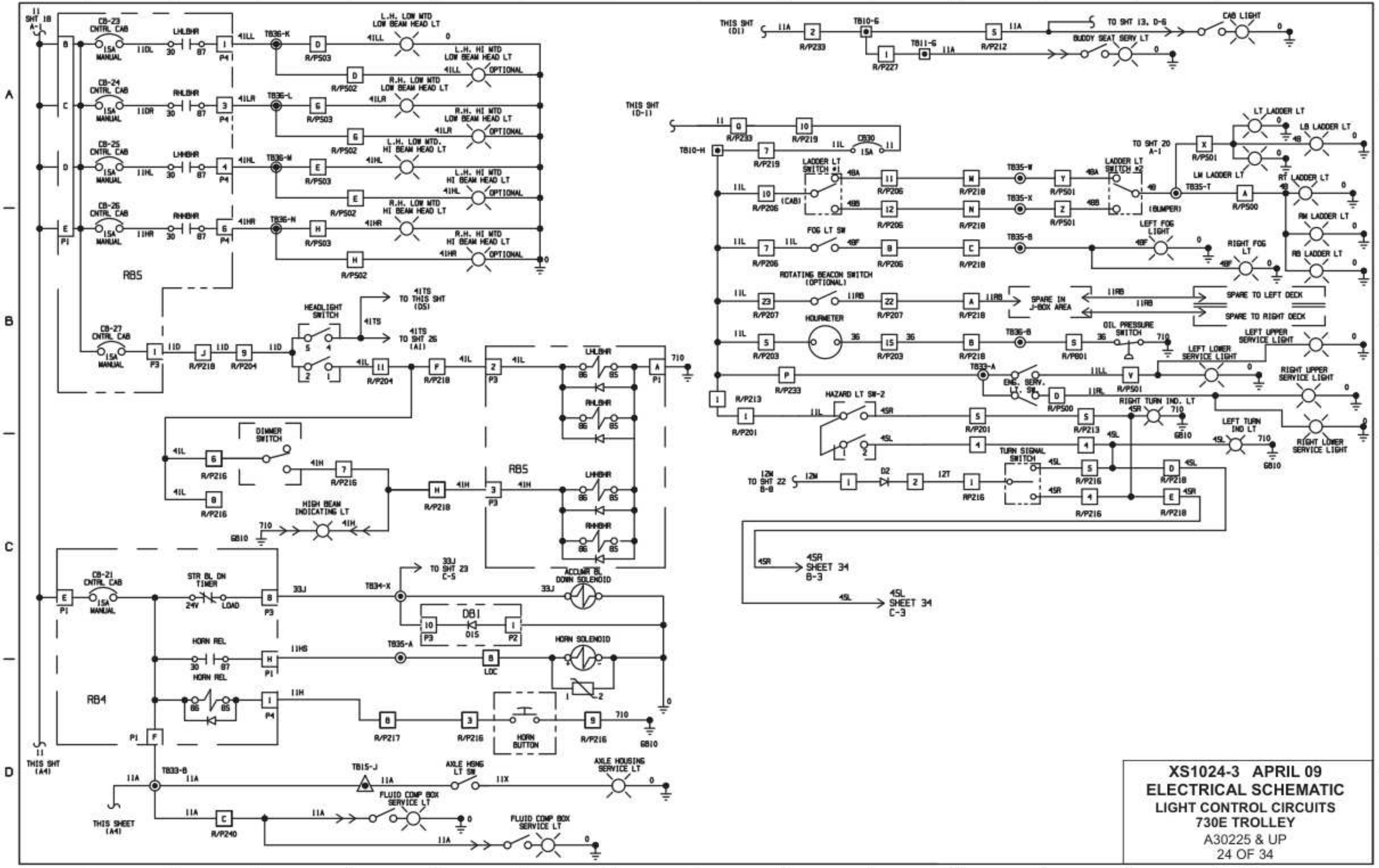
2. Refer to Figure 4-16 for the proper distance from the centerline of the drive pulley to the centerline of the compressor pulley. Set the tension tool accordingly on the deflection scale by moving the deflection O-Ring to the corresponding distance on the scale.
3. Slide the O-Ring for the "force" 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 kg f (3.44 ± 0.11 lbf). If not, adjust the belt accordingly and recheck the tension.

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