DG666

Shop Manual



330M

DUMP TRUCK

SERIAL NUMBERS **24181, 24195, 24295, 24330**

KOMATSU®

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MONITOR PANEL TROUBLESHOOTING

TROUBLESHOOTING CHARTS

This section provides detailed electrical circuit troubleshooting diagrams for the monitor panel and electronic display.

The charts are labelled with possible problems which may be encountered. Follow the diagrams, starting at box # 1 and the "yes/no" path according to the results of the tests. The probable cause is noted and an arrow points to the recommended repair required. To aid in troubleshooting, applicable portions of the electrical schematic circuits and specification charts are shown at the bottom of the page or at the end of the troubleshooting "problem".

NOTE: Be certain all connectors are properly inserted before troubleshooting a circuit. Reinstall connectors before proceeding from one step to the next.

Refer to Section D4 for the physical location of the connectors and connector pin designations.

Some problems may be intermittent and require operation of the truck under specific conditions which cause the fault to re-occur (high speed, rough haul road etc.).

TROUBLESHOOTING INDEX

Refer to the following index to quickly locate the applicable page for troubleshooting procedures.

No.	PROBLEM	Page No.
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CLUTCH PRESSURE CHECK & ADJUSTMENT

Refer to the *330M Transmission Shift Checker Instruction Manual* for additional information.

Note: Prior to checking clutch pressure, test and verify main relief pressure is normal.

1. Park truck on a level surface, raise dump body and lock in raised position with safety pins.
2. Shut down engine and be certain key switch is Off.
3. Install the shift checker (part number 799-607-2000) as follows (Refer to Figure 2-40):
   a. Disconnect the chassis harness (6, Figure 2-40) from the transmission control box (4).
   b. Connect shift checker harness (3) (white connectors) to the truck chassis harness connectors (SC1, SC2, SC3 & SC4) removed in step a.
   c. Be certain shift checker power switch is Off. Connect harness (3) black connector to shift checker.
4. Referring to Figure 2-41, install a pressure gauge at the pressure test port of the ECMV for the clutch to be tested. The gauge should be installed directly at the pressure test port without the use of a hose.
5. Start the engine, allow air pressure to build to normal operating range and be certain the parking brake is applied.
6. With the transmission range selector in "N", turn the shift checker power switch On.
   a. Press the clutch operation button for the desired clutch.
   b. With engine at high idle, measure and note the clutch pressure gauge reading.
   c. After reading is obtained, release accelerator and press button selected in step a. to release clutch.
7. Shut down the engine and remove the gauge installed in step 4 and replace port plug.
8. Repeat steps 4 through 7 as necessary to check other clutch pressures.

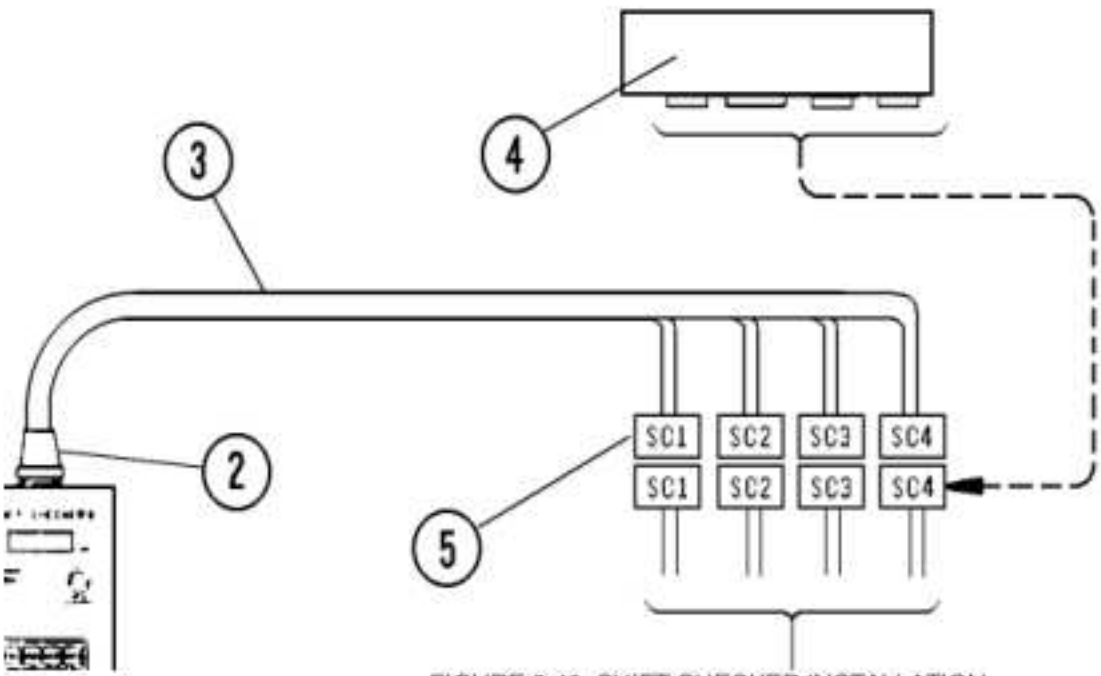


FIGURE 2-40. SHIFT CHECKER INSTALLATION

1. Shift Checker (Part No. 799-607-2000)
2. Harness connector, black (to Shift Checker)
3. Harness Assembly (Part No. 799-607-2020)
4. Transmission Control Box
5. Harness connectors, white (to Chassis Harness)
6. Truck chassis Harness (Transmission Control Box)

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BRAKE CHAMBER

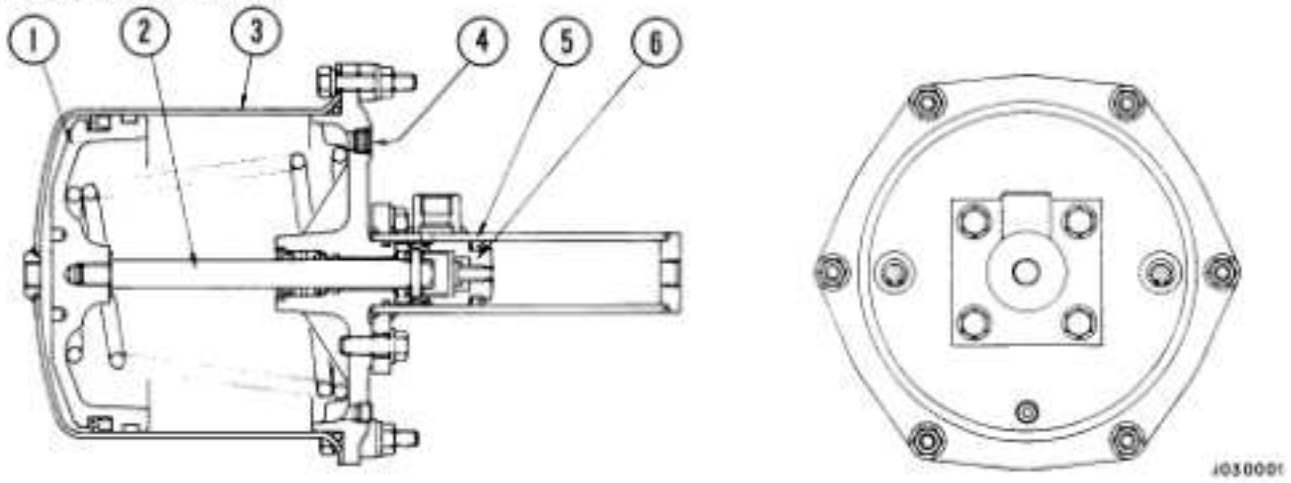


FIGURE 2-20. FRONT BRAKE CHAMBER

1. Piston 2. Push Rod 3. Air Cylinder 4. Breather 5. Master Cylinder 6. Piston

Front

1. Air cylinder
   Ratio: 23.7:1
   Fluid used: Air
   Effective area: 314 cm^2 (48.7 $in.^2$)
   Stroke: 100 mm (3.94 in.)
   Max. operating pressure: 9 kg/cm^2 (128 PSI)
   Normal operating pressure: 8.3 kg/cm^2 (118 PSI)
2. Master cylinder
   Fluid used: Engine oil (SAE10W)
   Effective area: 12.6 cm^2 (1.95 $in.^2$)
   Delivery oil quantity: 120 cc @ 97 mm (3.88 in.) stroke
   Max. operating pressure: 207 kg/cm^2 (2944 PSI)
   Normal operating pressure: 200 kg/cm^2 (2845 PSI)

REAR

1. Air cylinder
   Ratio: 5.7:1
   Fluid used: Air
   Effective area: 314 cm^2 (48.7 $in.^2$)
   Stroke: 100 mm (3.94 in.)
   Max. operating pressure: 9 kg/cm^2 (128 PSI)
   Normal operating pressure: 8.3 kg/cm^2 (118 PSI)
2. Master cylinder
   Fluid used: Engine oil (SAE10W)
   Effective area: 50.2 cm^2 (7.78 $in.^2$)
   Delivery oil quantity: 480 cc @ 97 mm (3.88 in.) stroke
   Max. operating pressure: 51 kg/cm^2 (725 PSI)
   Normal operating pressure: 47 kg/cm^2 (668 PSI)

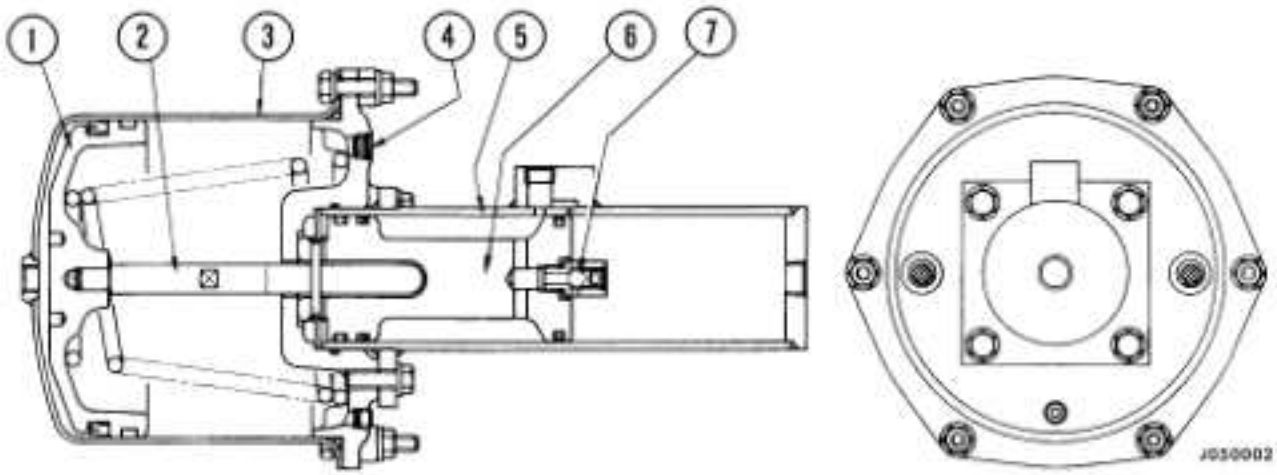
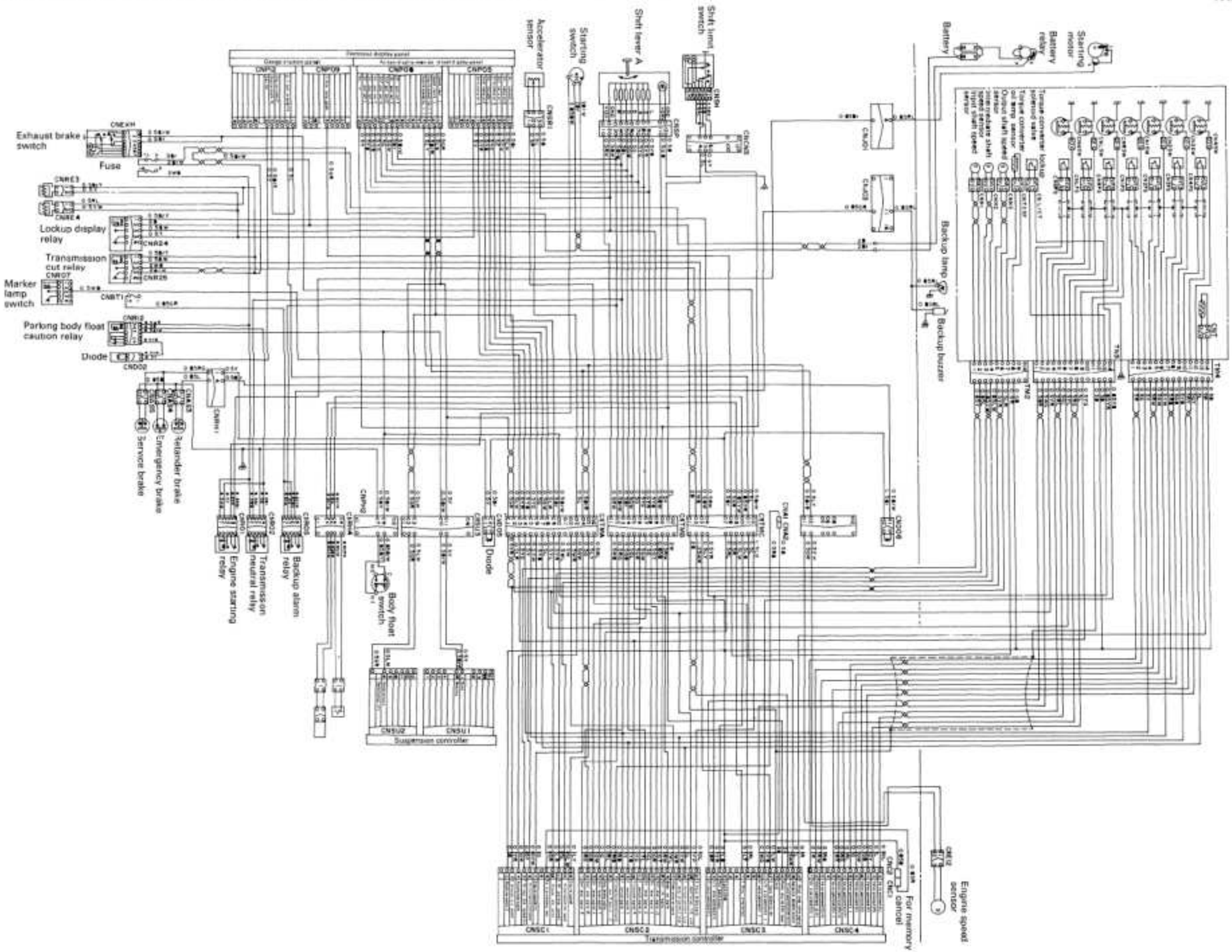


FIGURE 2-21. REAR BRAKE CHAMBER

1. Piston 2. Push Rod 3. Air Cylinder 4. Breather 5. Master Cylinder 6. Piston 7. Ball

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ELECTRICAL CIRCUIT DIAGRAM FOR TRANSMISSION CONTROL SYSTEM



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