Shop Manual

DG715



210M

DUMP TRUCK

SERIAL SUFFIX **BFA40DA THRU EP**
24501 THRU 24647

KOMATSU®

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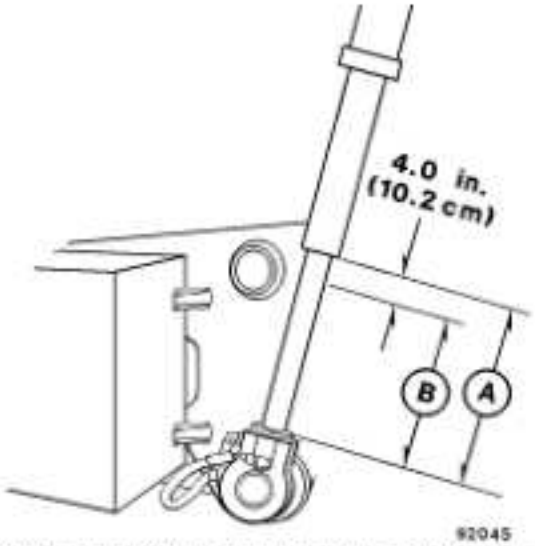


FIGURE 3-8. HOIST CYLINDER MEASUREMENT

A. Length of Cylinder Rod @ Complete Extension
B. Complete Extension less 4 in. (10.16 cm).

3. Measure length of lower hoist cylinder rod shown as "A", Figure 3-8. Record measurement.
4. Lower body to frame. Subtract 4 in. (10.16 cm.) from dimension found in Step 3 and record as dimension "B".
5. Raise body until exposed length of lower hoist cylinder rod equals dimension "B".
6. Install indicator arm plate (2, Figure 3-9). Loosen capscrews and nuts (4, Figure 3-10) and adjust gap between body-up limit switch (2) and indicator arm plate (1) to 0.25 in. (6.35 mm.) Tighten nuts (4) to standard torque.
7. Loosen capscrews (1, Figure 3-9) on indicator arm plate (2). Adjust arm to **overlap** end of switch (5) by 0.75 ± 0.25 in. (19.05 ± 6.35 mm). Tighten capscrews to standard torque.
8. Place hoist control switch in "Power Down" position and lower body to frame.

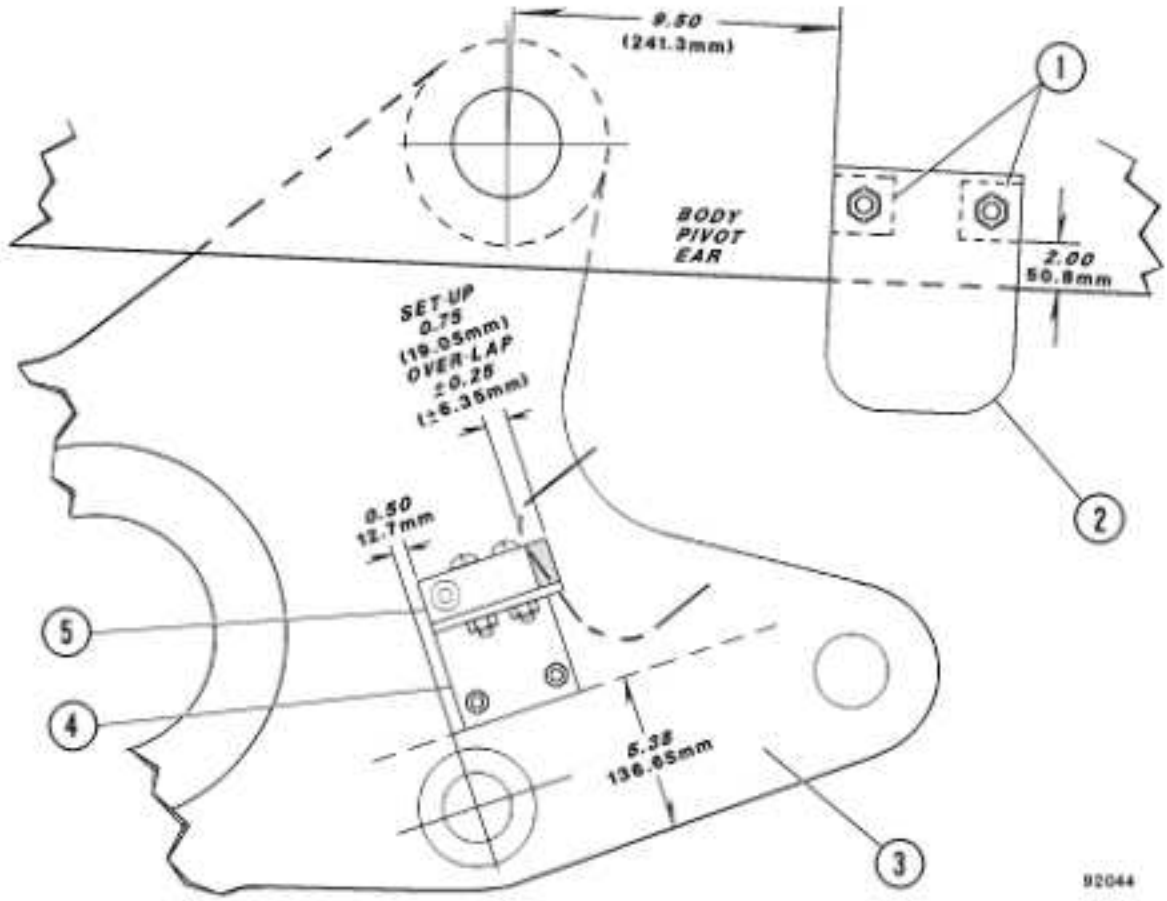


FIGURE 3-9. BODY-UP LIMIT SWITCH ADJUSTMENT

1. Tapped Pads and Capscrews
2. Indicator Arm Plate
3. R.H. Frame (Inboard Rear)
4. Mounting Bracket with Mounting Hardware
5. Body-Up Limit Switch with Mounting Hardware

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TROUBLESHOOTING CHART FOR STEERING AND BRAKE CIRCUIT (Continued)

POSSIBLE CAUSES	*SUGGESTED CORRECTIVE ACTION*
TROUBLE: Free Wheeling - Steering Wheel Turns Freely with No Back Pressure or No Action of the Front Wheels	
Lower splines of column may be disengaged or damaged.	Repair or replace steering column.
No flow to steering control valve can be caused by:	
1. Low oil level.	1. Add oil and check for leakage.
2. Ruptured hose.	2. Replace hose.
3. Broken gerotor drive pin.	3. Replace drive pin.
TROUBLE: Excessive Free Play at Steered Wheels	
Broken or worn linkage between cylinder and steered wheels.	Check for loose fitting bearings at anchor points in steering linkage between cylinder and steered wheels.
Leaky cylinder seals.	Remove and replace cylinder seals.
TROUBLE: Binding or Poor Centering of Steered Wheels	
Binding or misalignment in steering column or splined column or splined input connection.	Align column pilot and spline to steering control unit.
High back pressure in tank can cause slow return to center. Should not exceed 300 psi (2068 kPa).	Reduce restriction in the lines or circuit by removing obstruction or pinched lines, etc.
Large particles can cause binding between the spool and sleeve in the steering control valve.	Clean the steering control valve and filter the oil. If another component has malfunctioned generating contaminating materials, flush the entire hydraulic system.
TROUBLE: Steering Control Valve Locks Up	
Large particles in meter section.	Clean the steering control valve.
Insufficient hydraulic power (units over 15 inch).	Check hydraulic power supply.
Severe wear and/or broken pin.	Replace the steering control valve.
TROUBLE: Steering Wheel Oscillates or Turns By Itself	
Lines connected to wrong ports.	Check line routing and connections.
Parts assembled wrong. Steering control valve improperly timed.	Reassemble correctly and retime control valve.
TROUBLE: Steered Wheels Turn in Opposite Direction When Operator Turns Steering Wheel	
Lines connected to wrong cylinder ports.	Check proper line connections.

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SECTION R

SYSTEM SCHEMATICS

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