

# PARTS & SERVICE NEWS

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(C)

**SUBJECT:** HOIST VALVE UPGRADE KIT

**PURPOSE:** To inform the field of a kit containing a new hoist valve for improved reliability.

**APPLICATION:** Komatsu 210M Dump Trucks: BFA40-A & Up

**FAILURE CODE:** 6BN0Z9

**DESCRIPTION:** Hoist Valve Upgrade Kit (AK5056)

A new hoist valve has been developed for replacing the hoist valve (PB7361 or B15539) on 210M dump trucks. The hoist valve is included in Hoist Valve Upgrade Kit (AK5056). The kit contains the necessary parts to perform the installation of the new valve. Refer to Table 1 for a listing of the contents of the kit. Several drawings have been included in the kit for referencing the hydraulic system and related components. Refer to Kit Installation Procedure for instructions on installing the new hoist valve.

HOIST VALVE UPGRADE KIT (AK5056)		
Part Number	Description	Quantity
TX3666	Drawing, Hose Code	1
YA1636	Drawing, Hydraulic System Installation	1
YA2833	Drawing, Frame, Operator Module	1
YA2835	Drawing, Hydraulic Sub-Group	1
25512R1	Capscrew - 5/8 - 11 x 5 in.	2
343909R1	O-ring	7
C1540	Lockwasher - 1/2 in.	7
C1609	Capscrew - 7/16 - 14 x 1.50 in.	12
C1613	Capscrew - 1/2 - 13 x 1.25 in.	3
C1614	Capscrew - 1/2 - 13 x 1.50 in.	4
C1634	Capscrew - 5/8 - 11 x 3 in.	1
C5775	Lockwasher 7/16 in.	12
HA5897	Hose	1
PE7947	Adapter, Flange	1
TF3237	Clamp, Split Flange - 1 1/4 in.	6
TF8090	Clamp, Split Flange - 1 1/2 in.	2
TR9082	Flatwasher - 5/8 in.	3
VG9095	O-ring	2
WB0501	Fitting, Elbow	1
WB0576	Fitting, Straight	1
XA2537	Valve, Hoist	1
XA2666	Hose	1
XA2667	Hose	1
XA2668	Plate, Hoist Valve Mounting	1

**▲ IMPORTANT ▲**

*After initial installation of the new hoist valve, the pressure reducing valve located on the auxiliary manifold must be adjusted to 150 psi (1034 kPa). The previous setting was 125 psi (862 kPa).*

**Kit Installation Procedure**

**▲ WARNING ▲**

- Refer to the appropriate shop manual for proper safety and servicing procedures before removing hydraulic lines.
- Ensure the hoist lever is in the **FLOAT** position and the body is at rest on the body pads before servicing the hoist valve.

1. Remove the existing hoist valve from the truck. Capture all oil, and cap all removed lines to prevent hydraulic system contamination.
2. Attach the new hoist valve mounting plate to the existing mounting plate using three capscrews (C1613) and three lockwashers (C1549).
3. Prepare the new hoist valve by installing the fittings in the hoist pilot line ports on each side of the valve. Install straight fitting (WB0576) into pilot port (2, Figure 1), and elbow fitting (WB0501) into pilot port (5).
4. Install new elbow flange (PB7947) and a new O-ring (343909R1) onto inlet port (1). Connect the flange using split flange clamps (TF3237), capscrews (C1609) and lockwashers (C5775). Tighten the clamp capscrews to standard torque.
5. Lift the hoist valve into position on the mounting plate. Install two capscrews (25512R1), cap-screw (C1634), and three flatwashers (TR9082). Tighten the capscrews to standard torque.
6. Remove the existing inlet hose from the pump. Replace this hose with new hose (HA6807), and two new O-rings (343909R1). Connect the hose to the pump and to the elbow flange on the hoist valve using the existing hardware. Tighten the clamp capscrews to standard torque.
7. Remove the existing port (3) hose (HA6719) from the overcenter valve. Install new hose (XA2667) and two new O-rings (343909R1) in its place. Connect the hose to the overcenter valve. Connect the opposite end of the hose to the hoist valve using split flange clamps (TF3237), capscrews (C1609) and lockwashers (C5775). Tighten the clamp capscrews to standard torque.

8. Remove the existing outlet port (4) hose (HA6714) from the hydraulic tank filter tube. Install new hose (XA2666) and two new O-rings (VG9095) in place of the existing hose. Connect the hose to the fitting at the filter tube. Connect the opposite end of the hose to the hoist valve using split flange clamps (TF8090), capscrews (C1614) and lockwashers (C1540). Tighten the clamp capscrews to standard torque.
9. Connect the existing hose from the hoist cylinder manifold to port (6) on the hoist valve. Install new O-ring (343909R1) onto the hose. Connect the hose to the hoist valve using split flange clamps (TF3237), capscrews (C1609) and lockwashers (C5775). Tighten the clamp capscrews to standard torque.
10. Install the two existing pilot lines to each end of the hoist valve.
11. Check the oil level in the hydraulic tank, and fill as necessary.
12. Operate the hoist circuit, and check for leaks. Repair leaks if necessary.
13. Adjust the pressure reducing valve located on the auxiliary manifold to 150 psi (1034 kPa) to ensure proper detent release.
14. Operate the hoist circuit in all positions and ensure the system is operating properly.
15. Check the hydraulic tank oil level, again.

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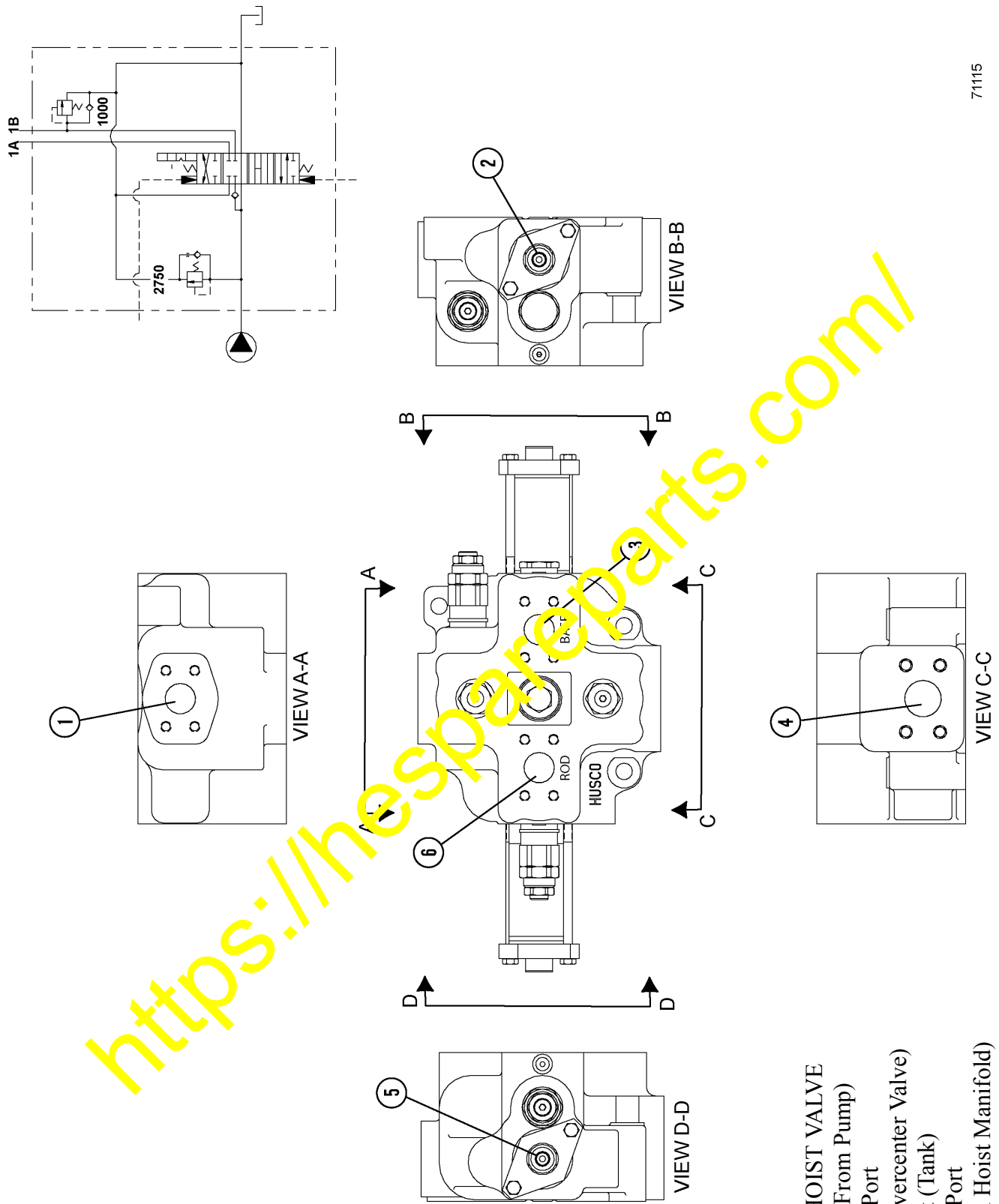


FIGURE 1. HOIST VALVE

- 1. Inlet Port (From Pump)
- 2. Pilot Line Port
- 3. Port (To Overcenter Valve)
- 4. Outlet Port (Tank)
- 5. Pilot Line Port
- 6. Port (From Hoist Manifold)