

# PARTS & SERVICE NEWS

REF NO.	AA00059
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(C)

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- SUBJECT:** HEATER CORE LEAKAGE - WRONG CONNECTIONS
- PURPOSE:** Change heater core if the inlet and outlet connections are inverted and leaking
- APPLICATION:** WA320-3MC Wheel Loader Serial Number A31001 through A31266  
WA380-3MC Wheel Loader Serial Number A51001 through A51194  
WA420-3MC Wheel Loader Serial Number A31001 through A31350  
WA450-3MC Wheel Loader Serial Number A31001 through A31360  
WA450-3MC Wheel Loader Serial Number A35002 through A35003
- FAILURE CODE:** 821BAE
- DESCRIPTION:** Improper hose routing may cause damage to the heater core. Eventually, core damage may result in coolant leakage.

Machine Preparation:

PLEASE OBSERVE ALL SAFETY AND PRECAUTIONARY STANDARDS AS DICTATED BY THE ENVIRONMENT AND WORK CONDITIONS UNDER WHICH THE EQUIPMENT WILL BE INSTALLED, REWORKED, OR REPAIRED. CONSULT THE "SHOP MANUAL", OPERATOR'S AND MAINTENANCE MANUAL", OR YOUR "KOMATSU DISTRICT SERVICE MANAGER" WITH ANY/ALL QUESTIONS REGARDING SAFETY.

1. Park the machine on a flat level surface, lower the boom and bucket to the ground, shut off the engine and cycle the controls to remove any residual hydraulic pressure from the boom and bucket circuits. Fully apply the parking brake.
2. Place chocks at the front and rear of all wheels to prevent machine movement.
3. Remove the key from start switch and retain it until this repair has been completed. Place a tag on the steering wheel advising:  
**This machine is being repaired. It should not be started or moved for any reason until this tag is removed by the person doing repairs.**

PARTS LIST

Item	Part Number	Description	Qty	Remarks
1	ND 116410-9680	Heater Core	1	
2	-	Panel	2	For Reference Only
3	-	Cool and Hot Box Assemblies	-	
4	-	Seat Support Cover	1	
5	-	Console Box Cover	1	
6	-	Harness	1	
7	-	Bolts	3	
8	-	Screw	-	
9	-	Clip	-	

General Information:

Proper connections are shown below as a reference. Figures 1 (WA320, 380, 420-3MC) and 2 (WA450-3MC) are examples of the heater hose routing. Note that this routing may vary according to the model being serviced.

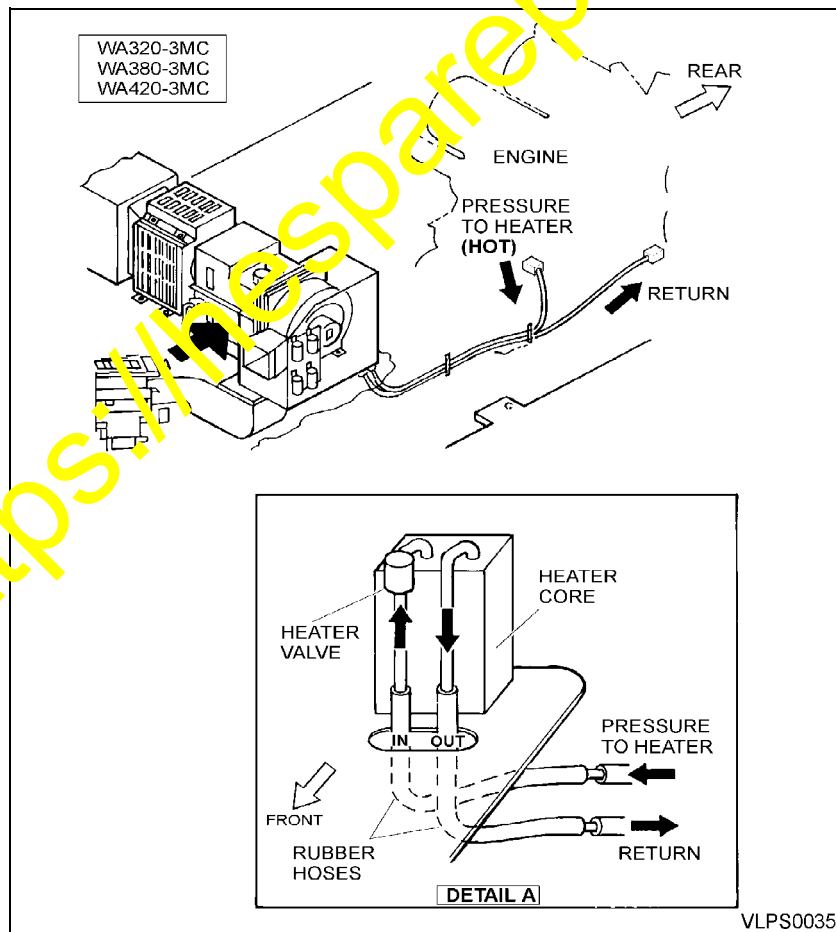


Figure 1

VLPS0035

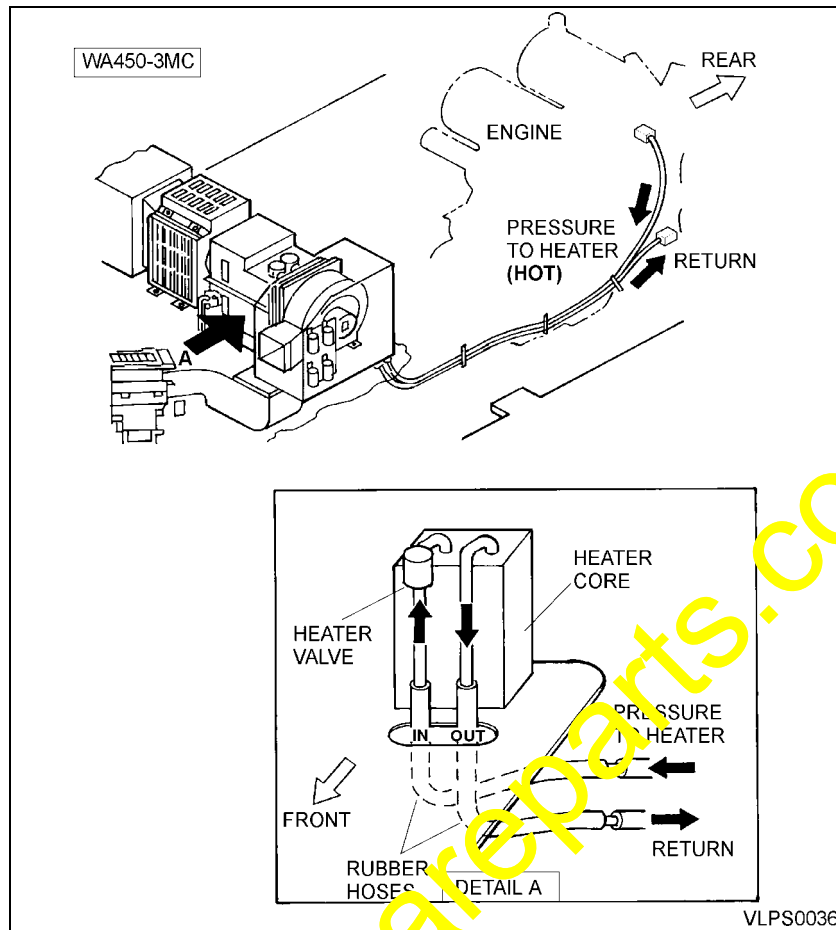
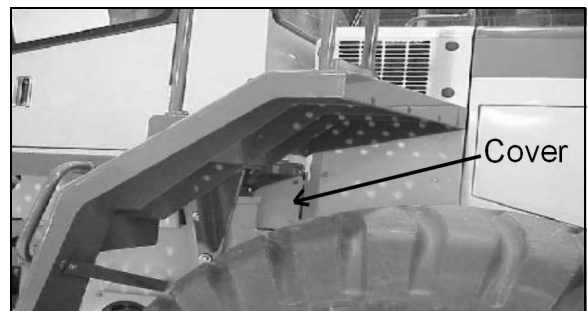


Figure 2

Instructions:

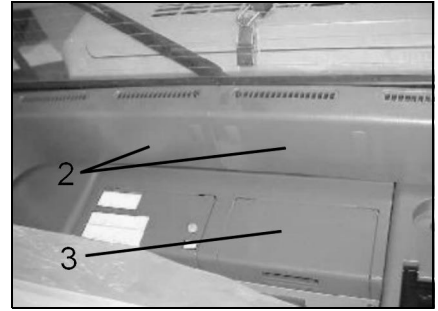
1. Remove the left side cover of the bulkhead.



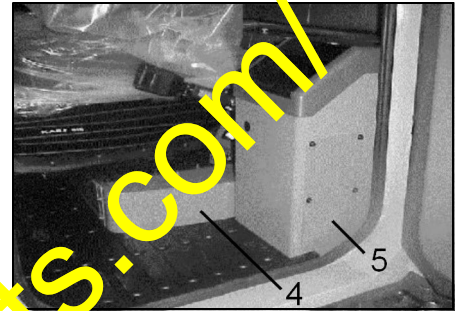
2. Remove cover behind seat.



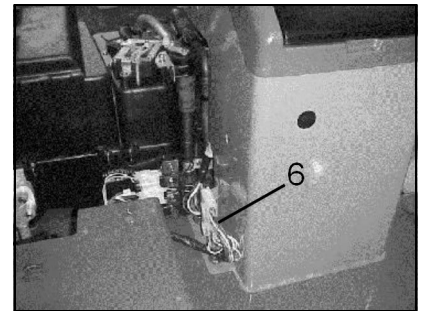
3. Remove the plastic panels (2) inside the cab below the rear window. Also remove the cool and hot box assemblies (3).
4. Drain approximately 5 gallons of coolant from the radiator. This is enough to prevent fluid leakage when the heater hoses are disconnected.
5. Reconnect the heater core's inlet and outlet hoses according to Figure 1 or Figure 2 depending on the machine.



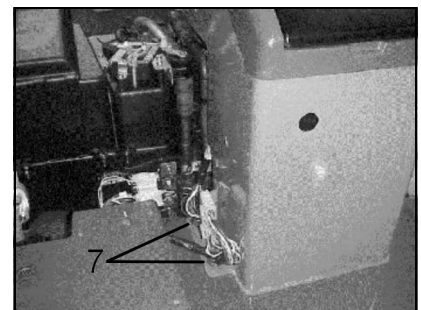
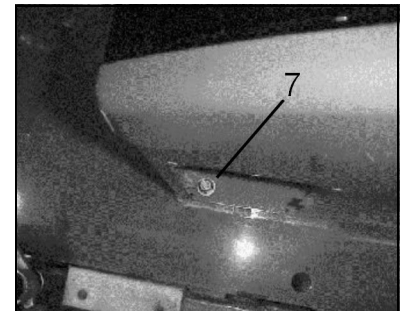
6. Inside the cab, remove the seat support cover (4) on the left side and the left console box cover (5).



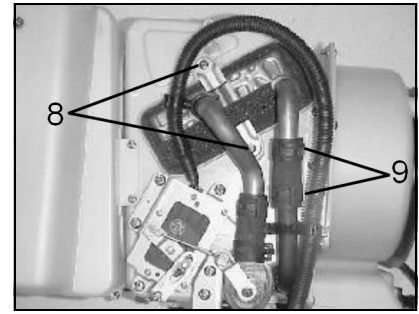
7. Disconnect the harness connections (6) CN8A and CN8E between the left console box and the seat support.



8. Remove the left console's three mounting bolts (7) and remove the console box.



9. Remove the mounting screws (8) and the clips (9) on the hoses.



10. Pull out the heater core, replace it with a new heater core (Item 1), and carry out the installation procedure in reverse to reinstall all removed components.
11. Refill the cooling system to the proper level and run the engine to circulate the coolant through the system. Then check the coolant level again. Check and repair leaks as needed.
12. Check the heater for proper orientation.
13. Reinstall the cool and hot box assemblies, plastic panels, and all covers.
14. Return machine to service.

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