D874 Procedure to Upgrade the Reservoir in the Cooling System

Context

Trendsetter Autoloader
Trendsetter 3244
Trendsetter Spectrum
Trendsetter 3230

If you discover a leak in the old water reservoir system (MACHINES FROM KIEL), replace using kit #05-0183. The kit contains a mounting bracket for TS8 as well as one for TS4. Time: 3hrs

NOTE: For machines that already have the new reservoir system but don't have the strainer basket yet, add a strainer basket on the next service call.
Part required: 57-8167a strainer basket
Tools required: 3/4" open end wrench
Time required: TE and PX = 2 min. Auto loader models, requires removing the AL pan and replacing it afterwards, so add an extra 13 min.

Machines Affected

All machines prior to TE0080 & PX0030

Parts

Water Reservoir Upgrade kit #05-0183:

- 50-2173A reservoir assembly
- 50-1925C reservoir-to-head hose assembly
- 50-1927C reservoir-to-pump hose assembly
- 57-7135B bracket for the water reservoir in the TS8 fanbox
- 57-5518C bracket for the water reservoir in the TS4 fanbox
- 57-8182A bracket for the water reservoir tab, right
- 57-8183A bracket for the water reservoir tab, left
- 52-6998 clamp
- 57-8190A bracket air ducting,air hose
- 52-4483 screw,m5*10,sock-cap,s-plated (quantity 9)
- 52-4375 washer, m5,flt,s- plated (quantity 9)
- 52-4029 lock washer,m5, split s-plated (quantity 9)

Tools

- 3/4" and 7/8" open end wrenches
- 10"cresent wrench
- 25 in-lb torque wrench with 8mm socket
- side cutters
- empty 4L water jug
- paper towel,

Steps

Draining the Old Reservoir

You'll need an empty clean coolant bottle to drain the reservoir into. If one

isn't available, buy a 4-litre (gallon) jug of bottled water and empty it.

1. Cut any cable ties that secure the hoses.
2. Disconnect the reservoir-to-head hose at the head CPC fitting.
3. Remove the hose from the cable track.

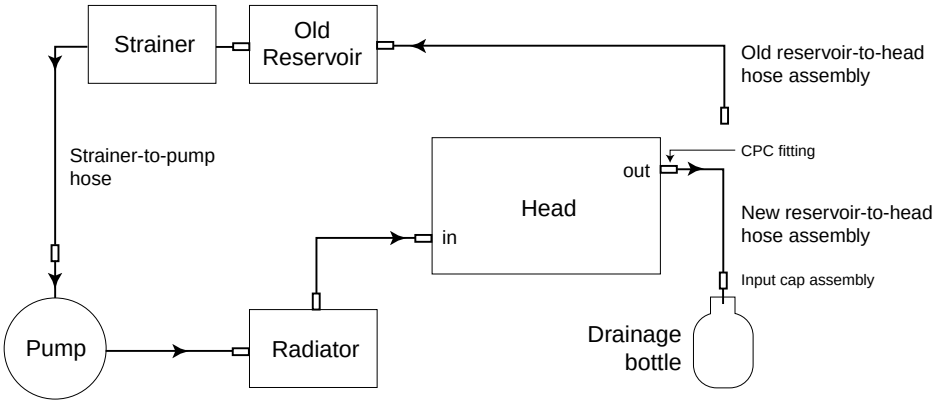
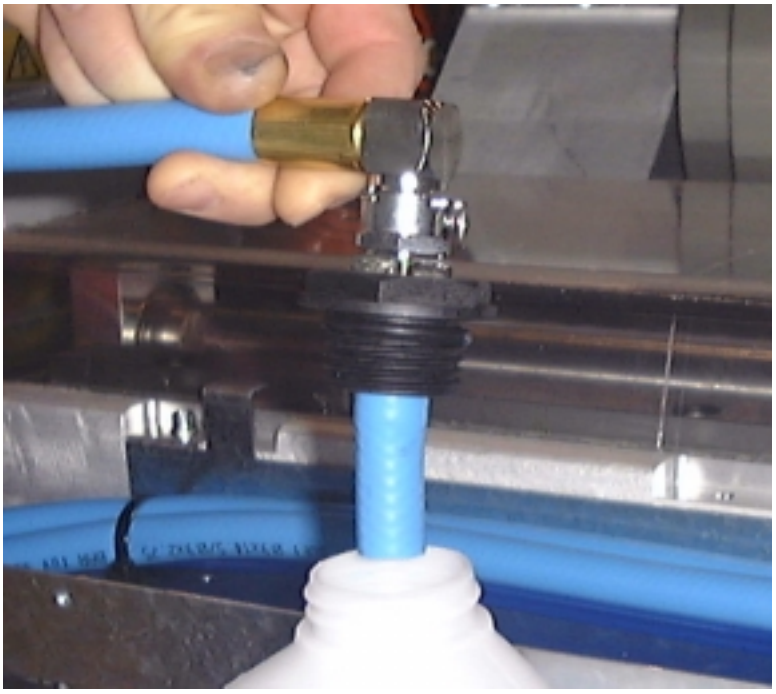


Figure 1: Schematic for Draining the Old Reservoir

4. Use a 3/4" open crescent wrench to remove the input cap assembly (#50-2164A) from the new reservoir assembly in the kit. Place the 9mm hose from the input cap assembly into the drainage bottle.
5. Find the new reservoir-to-head hose assembly (#50-1925C) in the 05 kit and attach it to the head. Ensure the CPC fittings tab is pressed in, before pressing in the male elbow. Attach the other end to the input cap assembly in the drainage bottle.



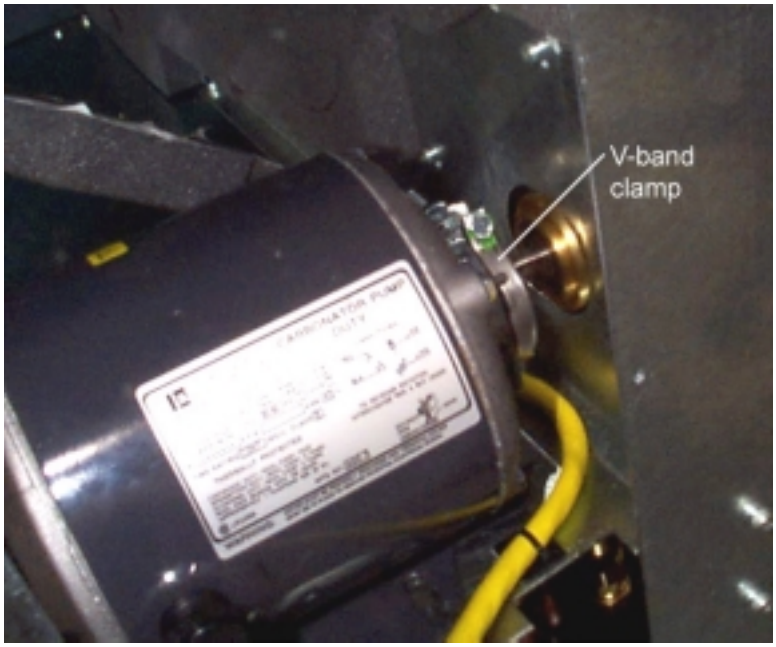
6. Turn on the machine to run the pump.
7. Shut off the machine when the coolant stops flowing.
8. Disconnect the hose from input cap assembly and replace the input cap assembly in the new reservoir.

Removing the Old Reservoir

1. Locate the strainer-to-pump hose and remove the SAE fitting near the pump end.
2. Leave reservoir attached to bracket. Remove bracket, reservoir, strainer and both hoses from the fanbox in one assembly.

The next steps describe how to remove the fittings from the pump.

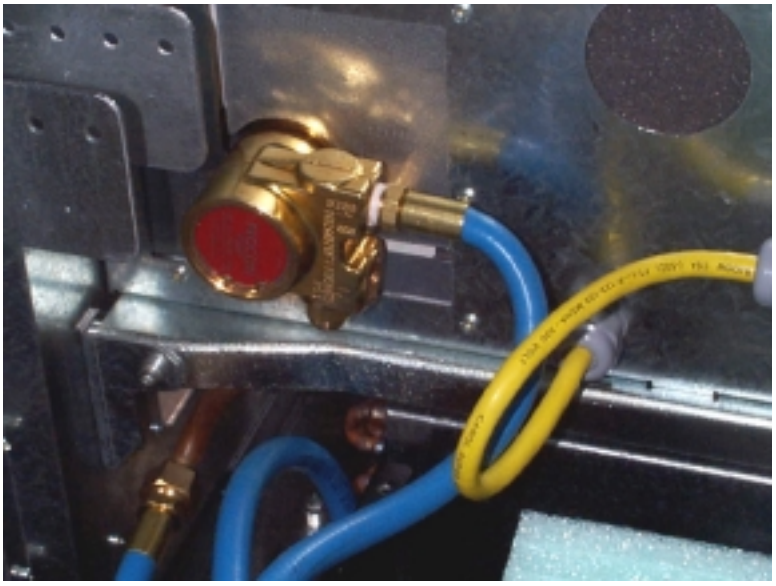
3. Remove the rear dress panel in the fanbox, and the cover panel.
4. Remove the foam from around the pump V-band clamp. See photo



5. Loosen the V-band clamp on the pump and remove pump from motor.
6. Using one wrench to hold the pump and another to loosen the fittings, remove the coupler and then the elbow from the pump input.
7. Clean up and remove any Teflon tape that is loose around the pump inlet.

Installing the New Reservoir

1. Tape and thread a new 3/8" NPT fitting to pump inlet.
2. Mate the pump to the motor realigning the pump so it is turned with the access facing the front of the machine (see photo).



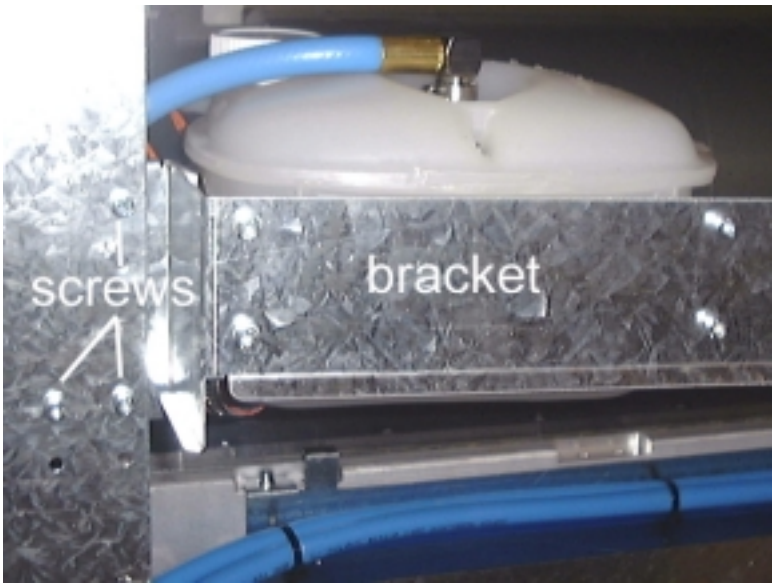
3. Ensure the V-band clamp encompasses both the pump and motor. Tension to 25 in-lbs. Replace foam around the pump V-band clamp.



4. Attach the new reservoir-to-pump hose (part #50-1927C) to the pump inlet with the hose clamp. Torque to 25 in-lbs (orient the clamp so tightening is easily accessible).



5. With the hose clamp oriented correctly press the new hose onto the reservoir barb as far as it will go.
6. Add new bracket to existing fanbox holes (2 for TS4 and 3 for TS8). Place the reservoir in the bracket (see photo shown for TS8).



7. Ensure the hose clamp is beyond the barb knuckle at the reservoir. Tighten to 25 in-lbs.
8. Lay new hose into cable track.
9. Hook up the plenum. Attach the bracket (#57-8190A) to the outermost position of the autoloader arm on the fanbox. Attach the plenum (3 1/2") hose to the bracket using the hose clamp. Ensure the terminated wire end is captured under the hose clamp to prevent it from poking out.



10. Re-assemble the cover panel and the fanbox rear dress panel.

11. The hoses at the head end of cable track should extend 4" and 6" out of the bottom between the second from last flex link. Cable tie the hoses in place along the cable tray

Filling the Reservoir

1. At the reservoir-end of the new reservoir-to-head hose, check that the CPC fitting's tab is pressed in before pressing in the male elbow. Check also that the input cap is hand tight.
2. Loosen the white filler cap, and fill the reservoir to the max level.
3. Turn on the pump (machine); add coolant as the reservoir drains. The coolant level HI and LOW is marked near the split line.
4. Run the machine to confirm no obvious leaks.