

# CP2210/20/30

## Coolant Flush Instruction Sheet

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### INTRODUCTION

If using Jeffcool E105 coolant in your system, it is recommended the coolant system is flushed out every 32,000 hours (or earlier if needed) and refilled with clean coolant. Using other coolants is not recommended and may increase the frequency that the system must be flushed. This procedure is extremely important to prevent overheating and sudden operation failure. For additional information refer to the specific projector *Service Manual*. For refill instructions, refer to the *Coolant Refill Instruction Sheet (P/N: 020-100686-xx)*.

Use the following instructions when performing routine maintenance on the coolant system in the following projectors:

- CP2210 (P/N: 127-001102-01)
- CP2220 (P/N: 127-002103-01)
- CP2230 (P/N: 127-003104-01)

### SAFETY AND WARNING GUIDELINES

**⚠ DANGER** Coolant contains ethylene glycol. Use caution when handling. DO NOT ingest. Minimize contact with skin. Refer to the Material Safety Data Sheet provided in the coolant kit for more information. Use only Christie approved coolants with your projector.

**⚠ WARNING** 1) QUALIFIED SERVICE TECHNICIANS REQUIRED! All module replacement procedures must be performed by qualified service technicians. 2) NON-INSULATED DANGEROUS VOLTAGES MAY BE EXPOSED! Always disconnect from AC prior to disassembly. 3) OBSERVE ALL ELECTROSTATIC PRECAUTIONS! Use a grounded wrist strap when handling electronic assemblies.

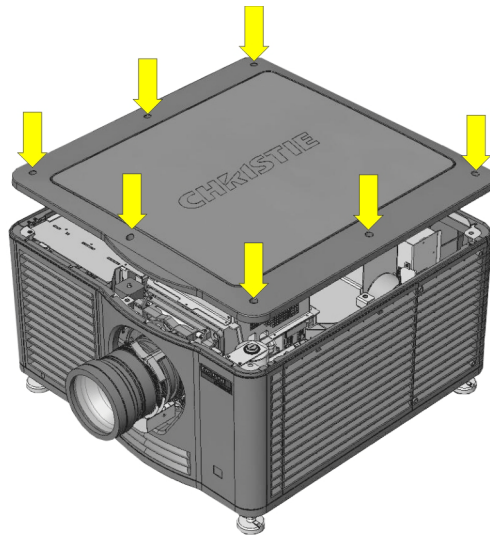
**⚠ CAUTION** 1) HIGH VOLTAGES MAY BE EXPOSED! Always power down and disconnect power sources prior to servicing. Once the projector is powered down, allow the cooling fans to automatically turn OFF before disconnecting from AC and opening the projector. Depending on your projector model this can take 10-15 minutes. 2) Never operate the projector (or the fans) without all the covers installed.

## KITS REQUIRED

- #003-003706-xx Coolant Drain Kit *(1m tubing with quick coupling and gear clamp specific for each model, instructions)*
- #003-001837-xx Coolant Refill Kit *(includes JeffCool E105 jug of coolant, refill bottle, funnel, MSDS sheet)*

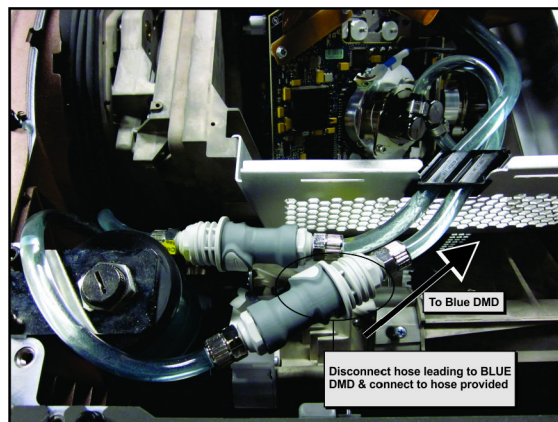
## CP2210 COOLANT FLUSH INSTRUCTIONS

1. Turn the projector lamp OFF and wait for at least 10 minutes to allow for proper cooling to take place before power the projector OFF, via the Touch Panel Controller (TPC).
2. **Remove top lid.**
  - a. Use a #2 Phillips™ to loosen the 7 captive screws securing the top lid to the projector housing (**Figure 1**).



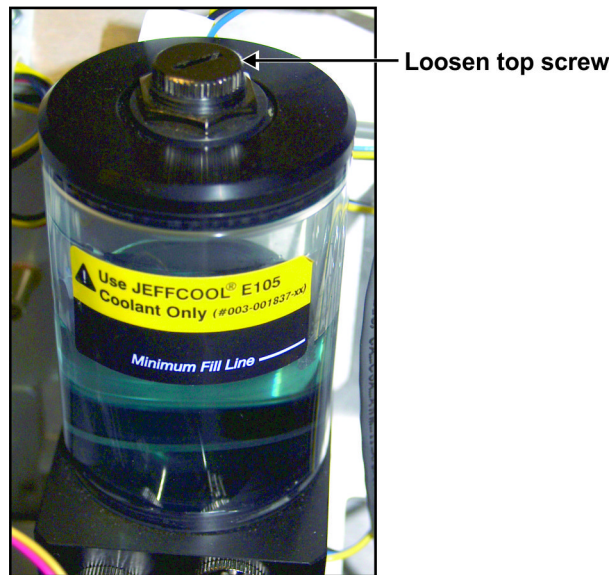
**Figure 1 Remove Top Lid**

- b. Unlock the rear access door using the low security key. Lift the lid up from the rear of the projector and pull it away from the 2 tabs on the front skin.
3. Disconnect the hose leading to the Blue DMD from the pump and replace it with the hose provided (**Figure 2**).



**Figure 2 Disconnect Hose Leading to Blue DMD**

4. Place the attached hose into an open container that is capable of holding up to 2 liters of liquid.  
**NOTE:** For proper disposal instructions, refer to the MSDS sheet provided with the kit.
5. Flush out the cooling system. **NOTICE:** DO NOT let the reservoir run dry during this process.
  - a. Power the projector ON via the TPC.
  - b. Once the reservoir is nearly empty power the projector OFF. Wait for the coolant in the hose to drain out.
  - c. Loosen the top screw on the reservoir (**Figure 3**) and use the fill bottle provided to add distilled water to the reservoir.

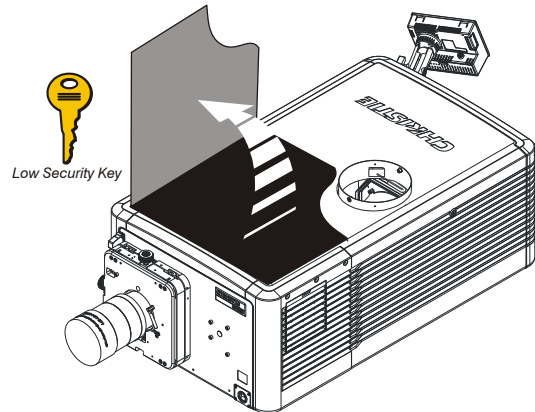


**Figure 3 Fill Reservoir with Distilled Water**

- d. Power the projector ON to allow the water to flush the system. Continue adding water until the hose runs clear.
- e. Power the projector OFF and wait for the water in the hose to drain out.
- f. Add coolant to the reservoir using the fill bottle provided.
- g. Power the projector ON to allow the coolant to flush the water out. Continue adding coolant until the drained liquid is the color of coolant.
- h. Power the projector OFF and reconnect the hose leading to the Blue DMD to the original connection.
- i. Power the projector ON. Continue to add coolant until the amount of coolant in the reservoir is at least to the minimum fill line.

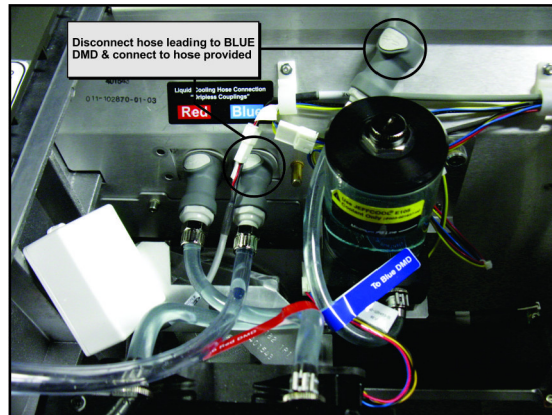
## CP2220 AND CP2230 COOLANT FLUSH INSTRUCTIONS

1. Turn the projector lamp OFF and wait for at least 10 minutes to allow for proper cooling to take place before powering the projector OFF via the Touch Panel Controller (TPC).
2. Unlock front top lid using the low security key provided. Lift the lid up and remove (Figure 4).



**Figure 4 Remove Front Top Lid**

3. Disconnect the hose to the Blue DMD from the system and replace with the hose provided (Figure 5).



**Figure 5 Disconnect Hose Leading to Blue DMD**

4. Flush out the cooling system. **NOTICE:** *DO NOT let the reservoir run dry during the process.*
5. Power the projector ON via the TPC.
6. Power the projector OFF once the reservoir is nearly empty. Wait for the coolant in the hose to drain out.
7. Add distilled water to the reservoir using the fill bottle provided and then power up the projector to let the water flush the system. Continue adding water until the hose runs clear. more detail add photo or diagram to explain how to open reservoir and use the bottle to fill it.
8. Power the projector OFF and wait for the water in the hose to drain out.
9. Add coolant to the reservoir using the fill bottle provided and then power the projector ON to allow the coolant to flush the water out. Continue adding coolant until the drained liquid is the color of the coolant.
10. Power the projector OFF and reconnect the hose leading to the Red DMD to the original connection.
11. Power the projector ON. Add coolant until the amount of coolant in the reservoir is at least to the minimum fill line.