Chill Jet® Nozzle Cleaning

Technical Bulletin

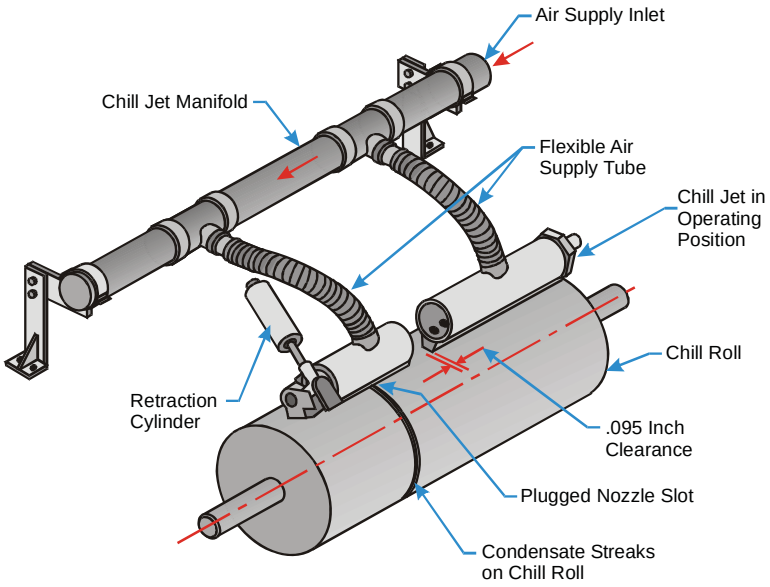

Figure 1

The Chill Jet ® system is designed to reduce or eliminate web flotation over the first chill roll in high-speed applications. This technical bulletin is a guide for cleaning the Chill Jet nozzle slots.

During printing, narrow solvent streaks can build up on the first chill roll, causing web marking. Dirt or debris lodged in the Chill Jet nozzle slot causes condensate streaks on the chill roll. Refer to Figure 1. The nozzle slot should be cleaned monthly to help prevent web marking. To clean the nozzle slot, refer to the following steps.

1. Move the Chill Jet nozzle to the retracted position.

2. Shut down and lockout the equipment.

Important: Do not remove the nozzle socket head screws from the Chill Jet body. This will damage the factory set nozzle slot gap.

3. Remove the hose clamps from the bottom of air supply tubes. Remove the air supply tubes from the nozzle assembly, as shown in Figure 2.

4. Remove retraction cylinder pin and turn Chill Jet up for access to slot.

5. Connect a shop vacuum cleaner hose to one air inlet opening using duct tape, as shown in Figure 2.

6. Plug the other air inlet opening with duct tape as shown in Figure 2.

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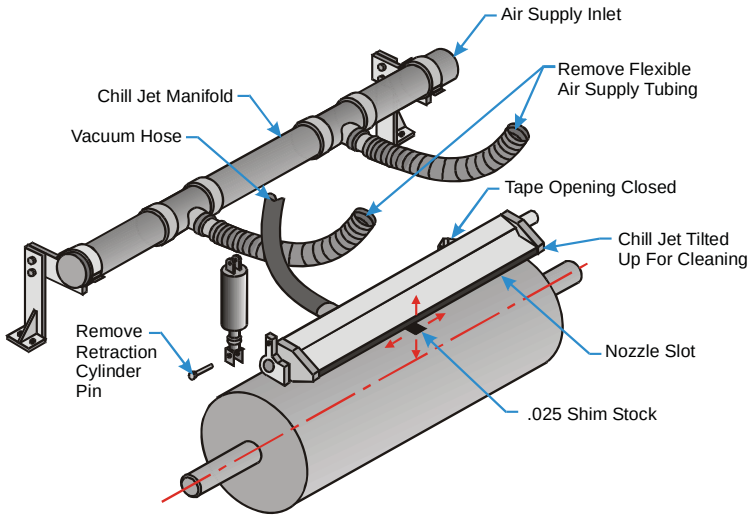
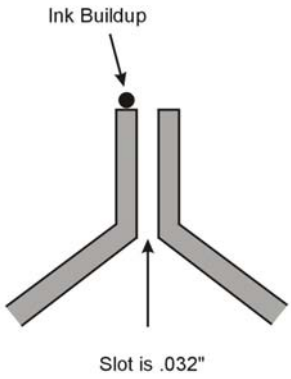


Figure 2.

7. Turn the shop vacuum ON.

8. Carefully slide a .025 inch thick piece of shim stock into nozzle slot. Remove debris by moving shim across the slot opening as shown in Figure 2.

8.5 After cleaning the inside of the slot, use the shim stock to remove any dried ink or debris from the flat surface adjacent to the slot of each vane that forms the slot. See figure 3.



Important: Do not nick or scratch the nozzle slot or chill roll.

9. Use a compressed air hose to blow air into nozzle slots.

10. Repeat this procedure until debris is removed. Turn shop vacuum OFF.

11. Clean the Chill Jet blower inlet filter at the blower.

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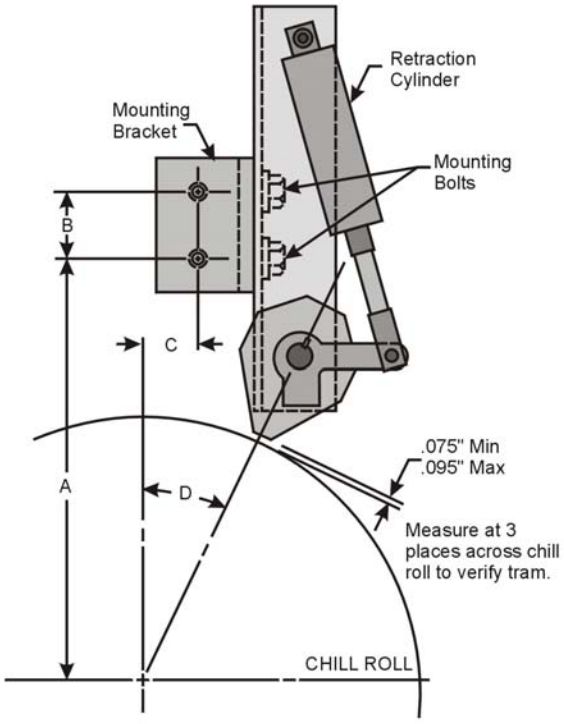
12. Close the nozzle pressure damper to 50 percent open.
13. Remove the nozzle inlet air supply flexible hose from the Chill Jet manifold.
14. Secure the flexible hose and then start the blower for 15 seconds to blow out debris from piping. Reconnect the inlet air supply flexible hose to the manifold.
15. Reset nozzle pressure damper to original position.
16. Reconnect the air supply tubes to the nozzle assembly.
17. Reinstall retraction cylinder pin.
18. Set the clearance between the Chill Jet nozzle and chill roll to .085” minimum to .095” maximum in three places across the surface, as shown in Figure 4.



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19. Use nylon string wrapped around the Chill Jet nozzle end shaft and around the Chill Roll journal in a “figure 8” pattern (Figure 5) at the nozzle end cap. It should align with the reference marks on the end cap. (Figure 6) Adjust the air cylinder stop bolt to align the string with the reference marks if necessary.

Refer to Chill Jet Operator’s Manual for complete operating and maintenance instructions.

If you have questions or require additional information, please contact MEGTEC Systems Parts/Service Department at (920) 337-1410 or 1-800-558-5535.

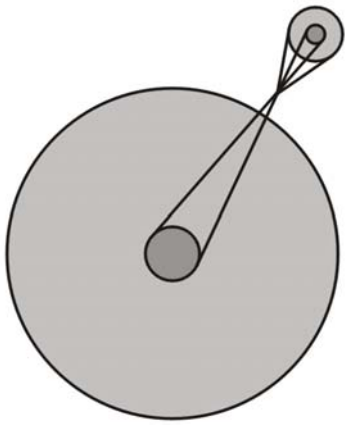

Figure 5

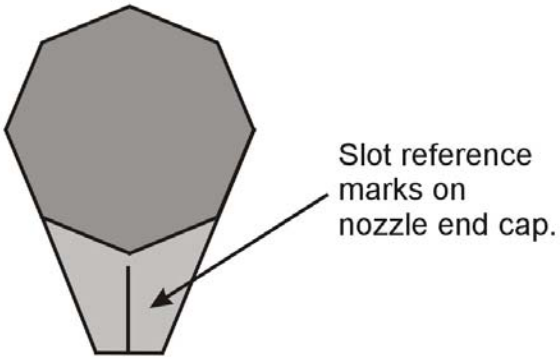

Figure 6