

Descaling Procedure

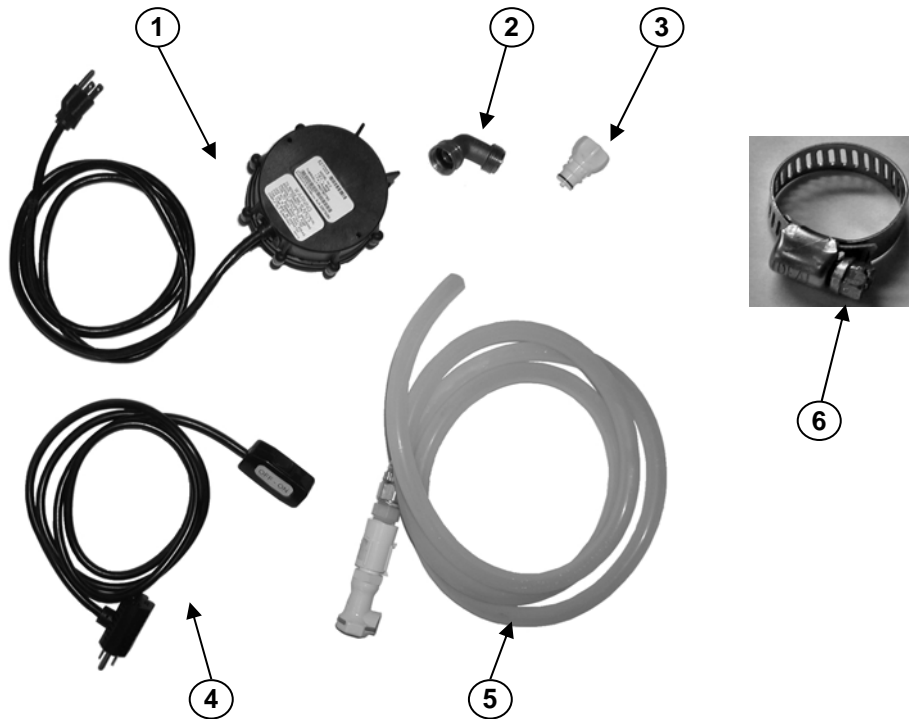
For Convotherm by Cleveland Combination Oven Steamers

Using the Descaling Pump System, Part Number 1071421

For use by qualified Cleveland Range authorized Service Technicians.

Cleveland Range has developed the Descaling Pump System for owners of Convotherm by Cleveland Combination Oven Steamers (Combis).

The Descaling Pump System provides a fast and efficient way to descale Combis. Using the Descaling Pump System with DISSOLVE® descaling solution regularly can help lower maintenance costs, increase operating efficiency, extend operating life, and maintain the warranty.



KIT PARTS LIST

Item No.	Part No.	Description
1	107131	Pump Assembly
2	111282	Gooseneck Elbow
3	111286	Quick Connect Insert, Coupling
4	1108361	110 Volt ON/OFF Power Cord and Switch Assembly
5	111283	Pump Kit Hose Assembly, Atmospheric
6	106219	Hose Clamp, Worm Drive
7	107199	Bucket, With Lid, 5-gallon (not shown)
8	260AYK	Instructions, Atmospheric Descal Pump Kit, Combi Use

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 **Cleveland**

Convotherm by Cleveland Descaling Instructions using the Cleveland Range Model No. 10171421 Atmospheric Pump Kit (For all OEB and OGB Models)

Descaling General Information and Safety

DO NOT HEAT THE COMBI WHILE DESCALING!

The Descaling Process takes about 2 ½ hours.

This entire procedure must be read and understood as it applies to the model being descaled, before beginning the descaling operation.

Steam generators should be descaled at least every 4-6 weeks, depending on scale buildup. Extremely hard water will cause serious steam generator scale buildup, and a water treatment system should be installed for the Combi or, if this is not possible, the frequency of descaling must be increased

Use **DISSOLVE® Descaler Solution, Cleveland Range Part No. 106174**. Use no other system or cleaning agent for steamer descaling.

NOTE: Part No. 106174 is a case of six (6) one (1) gallon containers of **DISSOLVE®** descaler.

THESE INSTRUCTIONS ARE FOR USE WITH DISSOLVE® DESCALER SOLUTION, Cleveland Range Part Number 106174 ONLY.

WARNING

The liquid solution in Cleveland Range Descaler Solution Part No. 106174 can be harmful if not handled properly.

Follow these basic safety rules for handling and using this product:

Wear protective clothing when mixing or applying chemical cleaners.

Wear OSHA approved eye protection and rubber gloves when descaling to help avoid injury.

Avoid breathing fumes.

If liquid comes in contact with skin: wash with soap and water.

If chemical contacts eyes: flush with water.

If irritation persists, seek medical attention

If chemical is swallowed or ingested, drink 1 or 2 glasses of water and call a physician.

CAUTION

Do not use any product for or method of descaling other than the **DISSOLVE®** Descaler method using Part Number 106174.

A. EQUIPMENT SET- UP

1. Inspect Pump Kit Hose Assembly for any wear or damage to the hose and fittings. Do **NOT** use a Pump Kit Hose Assembly that is worn or damaged.
2. Install the Pump Kit Hose Assembly on to the Pump Assembly as shown in Figure 1.
3. Secure the Pump Hose Assembly with the Hose Clamp.

4. Inspect the Gooseneck Elbow for any wear or damage. Do **NOT** use a Gooseneck Elbow that is worn or damaged.
5. Make sure that a gasket is present and in good condition in the Female Garden Hose end of the Gooseneck Elbow (item 2 the Parts List).
6. Inspect the Quick Connect Insert for any wear or damage. Do **NOT** use a Quick Connect Insert that is worn or damaged.
7. Make sure that a gasket is present and in good condition in the Female Garden Hose end of the Quick Connect Insert (item 3 on the Parts List).
8. Attach the Gooseneck Elbow to the Quick Connect Insert as shown in Figure 2.
9. Make sure the 110-Volt ON/OFF Power Cord and Switch Assembly is unplugged and turned off.
10. Plug the Pump Assembly power cord into the into the 110-Volt ON/OFF Power Cord and Switch Assembly

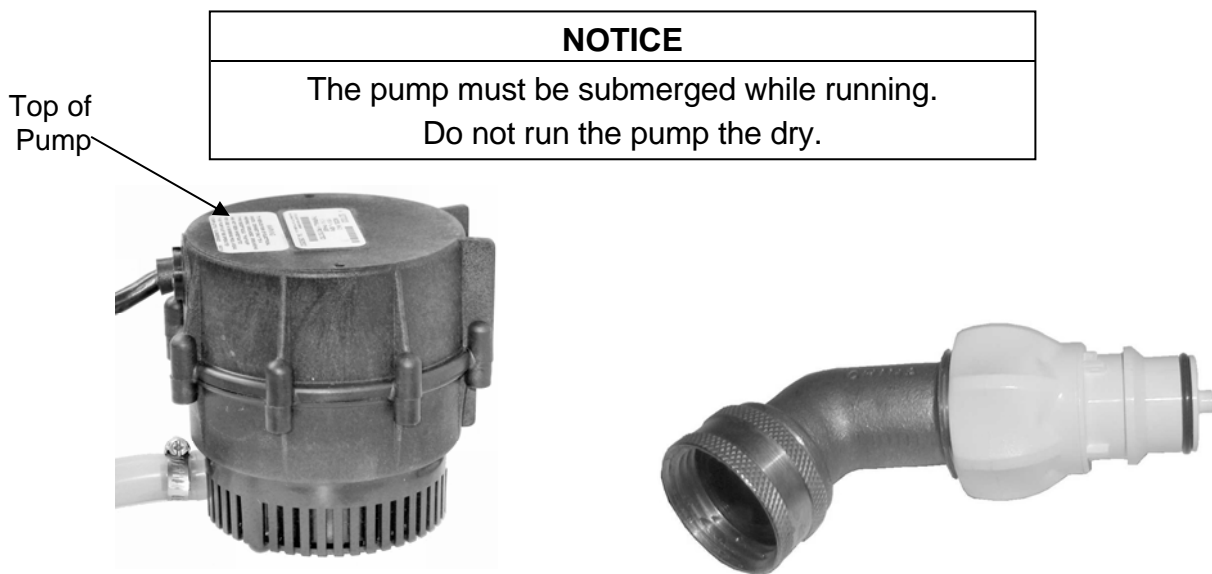



Figure 1 Attaching Pump Hose to Pump Assembly

Figure 2 Assembly of Gooseneck Elbow to the Coupling Insert

B. DESCALING

1. **DO NOT HEAT THE COMBI STEAM GENERATOR DURING DESCALING.**
2. This entire procedure must be read and understood as it applies to the model being descaled, before beginning the descaling operation.
3. Wear OSHA approved rubber gloves, and eye protection (not supplied) during the entire descaling procedure to help avoid personal injury.
4. Open the door of the cooking compartment.
5. Turn OFF the COMBI with the ON / OFF key .
6. Turn OFF the Combi at the Control Power Service Disconnect Switch located below the hand shower.
7. Remove the cap from the descale port located at the top of the unit. See Figure 3
8. Attach the Gooseneck / Quick Connect Insert Assembly to the descale port as shown in Figure 3.

9. Place the Pump Assembly in the 5-gallon bucket, with the top of the pump up (see Figure 1).
10. Attach the coupling end of the Pump Kit Hose Assembly to the Quick Connect Insert. Make sure that the fitting locks into place.
11. Prepare the *DISSOLVE*[®] descaler solvent and water mixture in the 5-gallon bucket.
 - a. Place 3 gallons of cold water in the 5-gallon bucket.
 - b. Add 1 gallon of Dissolve for the 20.20 Combi.
 - c. Add ½ gallon of Dissolve for all other Combis.

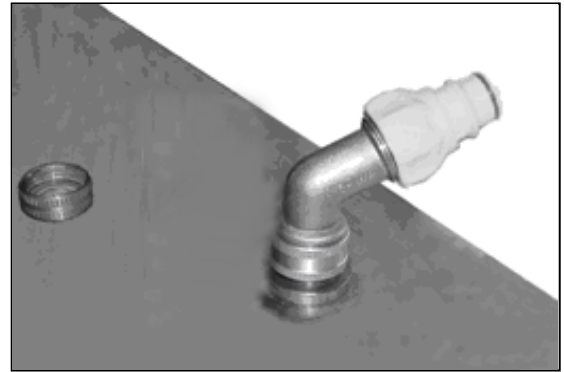


Figure 3 Gooseneck/Quick Connect Insert Assembly Installed on Descale Port

 **WARNING**

If at any time, during the pumping should solution begin to leak out of the Pump Hose Assembly, or its connection to the Combi: Immediately turn OFF the pump and correct the problem (by tightening fittings, securing connections, etc.) before continuing.

Once the problem is resolved, the spilled solution should be wiped up immediately before continuing with the descaling of the unit.

Never use a pump kit hose assembly that is worn, damaged, or leaking.

12. Remove all accessories and racks from the oven compartment.
13. Open the Suction Plate (Fan Guard).
14. Make sure the 110-Volt ON/OFF Power Cord switch is in the OFF position (See Figure 4).
15. Plug the 110-Volt ON/OFF Power Cord into a suitable 3-prong grounded receptacle.
16. If an extension cord is necessary, use only a 3-pronged cord with a ground connection.
17. Do not cut or remove the grounding prong from the plug.

SWITCH IS OFF WHEN DEPRESSED
ON END TOWARDS THE PUMP

TOWARDS
PUMP
















Figure 4 Switch Shown in OFF Position

18. Pump the *DISSOLVE*[®] and water solution into the Steam Generator switch located on the 110-Volt ON/OFF Power Cord.
19. Turn the pump switch OFF, when the *DISSOLVE*[®] and water solution comes out of the steam port in the cooking compartment.
20. Wipe up any solution from the inside of the cooking compartment to prevent discoloration of the cooking compartment interior.
21. Allow the solution to work in the steam generator for 60 to 90 minutes.
- 22. Do NOT heat the Combi Steam Generator while descaling.**
23. While the solution is working in the Steam Generator, remove the Pump Hose Assembly from the Gooseneck/Quick Connect Insert Assembly by depressing the gray release button and pulling the Pump Hose Assembly away from the Quick Connect Insert.
24. Remove the pump from the 5-gallon container.
25. Dump out the remaining *DISSOLVE*[®] solution, and rinse the bucket thoroughly with water.
















C. CLEAN WATER RINSE

1. Turn ON the Combi at the Control Power Service Disconnect Switch located below the Hand Shower.

2. Turn ON the Combi with the ON / OFF key 
3. Run a manual steam generator rinse cycle.
To Empty and Rinse the Steam Generator:
 - a. Press the Smart Key 
 - b. Select "Manual steam generator rinse"  with the Selector Dial .
 - c. Press the Smart Key 
 - d. Confirm "Yes" with the Smart Key 
 - e. The Steam Generator will rinse and refill to the operating level. (About 5 minutes.)
2. Turn OFF the COMBI with the ON / OFF key 
3. Turn OFF the Combi at the Control Power Service Disconnect Switch located below the hand shower.
4. Refill the 5-gallon bucket full with 4 gallons of water and one cup of baking soda
5. Place the pump in the 5-gallon bucket.
6. Re-attach the Pump Kit Hose Assembly to the Quick Connect Insert.
7. Pump the water and baking soda solution into the Steam Generator by turning ON the Power Switch located on the 110-Volt ON/OFF Power Cord.
8. Turn the pump switch OFF, when the baking soda and water solution comes out of the steam port in the cooking compartment.
9. Let the baking soda solution work for 5 minutes.
10. While the solution is working in the Steam Generator, remove the Pump Hose Assembly from the Gooseneck/Quick Connect Insert Assembly by depressing the gray release button and pulling the Pump Hose Assembly away from the Quick Connect Insert.
11. Remove the pump from the 5-gallon container.
12. Dump out the remaining water and baking soda solution, and thoroughly rinse out the 5-gallon bucket with water.
13. Turn ON the Combi at the Control Power Service Disconnect Switch located below the Hand Shower.
14. Turn ON the Combi with the ON / OFF key 
15. Run a manual steam generator rinse cycle.
To Empty and Rinse the Steam Generator:
 - a. Press the Smart Key 
 - b. Select "Manual steam generator rinse"  with the Selector Dial .
 - c. Press the Smart Key 
 - d. Confirm "Yes" with the Smart Key 
 - e. The Steam Generator will rinse and refill to operating level. (About 5 minutes.)
16. When the Steam Generator is done being descaled, go to Section D: Take Down and Return to Service.

D. TAKE DOWN AND RETURN TO SERVICE

1. Remove the Gooseneck/Quick Connect Insert Assembly from the descaling port.

2. Put the cap back on the descaling port and secure the cap tightly.
3. Replace the Outflow Grate on the Demoisturizing Tray.
4. Secure the Suction Plate (Fan Guard).
5. Run a 30 minute, 212° F Combi Program with Crisp & Tasty function.
 - a. Close the cooking compartment door.
 - b. Press Combi key .
 - c. Press Temperature key .
 - d. Set temperature with Selector Dial  to 212° F.
 - e. Press Time key .
 - f. Set time with the Selector Dial  for 30 minutes.
 - g. Press Smart Key . Various options will appear in the display.
 - h. Select “Crisp & Tasty”  with the Selector Dial .
 - i. Press the Smart Key .
 - j. Select the Crisp & Tasty level to  “high demoisturizing – continuous” with the Selector Dial .
 - k. Confirm “Yes” with Smart Key .
 - l. The Crisp & Tasty icon  appears in the display.
 - m. Press the Start / Stop key .
 - n. Signal Tone sounds and steaming stops after 30 minutes.
 - o. Silence the signal tone by pressing the Start / Stop key  or by carefully opening the door.
5. The Combi is now ready for normal operation.
6. Look over the Combi and the work area and wipe up any spills on the floor or unit.
7. Dry off the components of the kit and put them in the bucket for storage.

Cleveland Range, LLC

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Drawing No.

Revision Index Page

LET	REVISION HISTORY	DATE	BY
A	Production Release Per EO # C-6800	4/5/05	ERB
B	Removed instruction to put Dissolve in the demohurizing tray per EO # C-6876	15/9/05	ERB