



**CANADIAN MOSS SOLUTIONS INC.**

# **CC-80/90/140/150-IND**

**Installation Instructions**



# Parts List for CC-80/90/140/150-IND Contact Chamber Installation

## Required:

- 2 - true union ball valves for inflow and outflow control / isolation
- 1 - in line vertical flow meter\* (0-25 gpm)

\*Diameter will depend on your installation

## Optional:

- 1 - T-line strainer with clear housing
- 1 - automatic air relief valve
- 1 - For 75 psi CC90/140/150-IND a drain assembly adapter is available. (see p.5)

## Contact Chamber Installation Notes

**NOTE 1:** Install contact chambers prior to filtration or strainers (especially in critical systems) to ensure that any stray ProMoss™ is caught in the filter or strainer.

**NOTE 2:** Multiple contact chambers should be plumbed in parallel, to allow ProMoss™ changes or contact chamber repairs on one unit at a time. See photo below.



# CC-80/90/140/150-IND contact chambers maintenance and operation

WARNING: THIS CONTACT CHAMBER OPERATES UNDER PRESSURE. WHEN ANY PART OF THE CIRCULATING SYSTEM (e.g. LOCK RING, ProMoss™, VALVES, ETC.) IS SERVICED, AIR CAN ENTER THE SYSTEM AND BECOME PRESSURIZED. PRESSURIZED AIR CAN CAUSE THE LID TO BE BLOWN OFF WHICH CAN RESULT IN SEVERE INJURY, DEATH OR PROPERTY DAMAGE. TO AVOID THIS POTENTIAL HAZARD, FOLLOW THESE INSTRUCTIONS.

## Contact chamber installation guidelines:

1. Contact chamber should be mounted on a level concrete slab. Position the contact chamber so that the instructions, warnings, and pressure gauge are visible to the operator. Also, position the contact chamber so that the piping connections, control valve and drain port are convenient and accessible for servicing and winterizing (if applicable).
2. Provide sufficient space above and around the contact chamber to remove the lid for cleaning and servicing (see cut sheet).
3. Position the contact chamber to safely direct water drainage. Rotate the valve to safely direct purged air or water. Water discharge from an improperly positioned contact chamber or valve can create an electrical hazard, as well as damage property.
4. Make all plumbing connections in accordance with local plumbing and building codes. Contact chamber plumbing connections are provided with an O-ring seal. Use only a silicone-based lubricant on the O-rings. DO NOT USE pipe joint compound, glue or solvent on the bulkhead connections.
5. The maximum working pressure of this contact chamber is 50 or 75 psi (refer to placard on contact chamber). Never subject this contact chamber to pressure in excess of this amount, even when conducting hydrostatic pressure tests. Pressures above 50 or 75 psi (refer to placard on contact chamber) can cause the lid to be blown off, which can result in severe injury, death or property damage.
6. One valve controls inflow (top) and one valve controls outflow from contact chamber (bottom). A flow meter is required to monitor product performance. If desired, an automatic air relief valve can be installed in place of the manual air relief valve. If maintaining flow in the chamber is challenging, a boost pump may be added to the system.





## Startup and Adjustment of the CC-80/90/140/150-IND

1. Prior to adding ProMoss™, with the lid off, open the valve on the inlet side of chamber making sure the outlet side valve is closed.
2. Fill chamber with water until it is about 3/4 full, close the inlet valve.
3. Add ProMoss™.
4. Close lid making sure to lubricate both sides of gasket with a Teflon based lubricant.
5. Fully open outlet valve, open inlet valve until the desired pressure reading is achieved.
6. Open manual air release, close when water starts to come out.

## Changing or checking ProMoss™ on the CC-80/90/140/150-IND

1. Close the inlet valve.
2. Open manual air bleed and let water drain for approximately 60 seconds.
3. Close outlet valve.
4. Remove lid and check/remove ProMoss™. Discard spent ProMoss™ in the trash.
5. Replace with new ProMoss™ if necessary and close lid (the gasket on the lid must be lubricated every time the lid is removed and put back on).
6. Fully open outlet valve, open inlet valve until the desired pressure reading is achieved.
7. Open manual air release, close when water starts to come out.

## Cleaning and Maintenance

The contact chamber may be cleaned when needed with mild soap and water if necessary. Use a brush with soft bristles. Take care not to damage the internals, the threads on the lid, or on the chamber when cleaning. Check contact chamber to ensure it is working properly after cleaning.

## Winterization of the CC-80/90/140/150-IND

If the circulation system is shut down during the winter the following procedures are recommended:

- a. Flush chamber out with source water and clean to remove any residue in the chamber
- b. Drain chamber completely of water
- c. Disconnect chamber from water supply
- d. Store chamber out of the sun in a clean dry location

## Troubleshooting and tips

Due to the wide variety of installations possible, proper flow rate may not be achieved. If this is the case it may be necessary to install a booster pump. Please contact your Canadian Moss Solutions representative for proper booster pump installation procedures.

If any leaks may occur check fittings for tightness and make sure all gaskets are in proper working order. To ensure a tight seal of the lid to the chamber be sure to lubricate gasket with a Teflon based lubricant.

If proper flow is achieved then lost, check to make sure the system is free of obstructions, air leaks and that there is no debris in the flow meter causing a false reading.

## CC-90/140/150-IND-75 Drain Assembly Options

Two options for hard plumbing the drain of these vessels (as of now) are as follows, per discussion with manufacturer.

**Option 1A** – part W22392, drain assembly adapter, can be threaded in and glued, and **1” pipe** can be glued into that fitting



**W22392 does NOT have interference threading. It is straight. It is recommended that the part be primed and then glued in order NOT to leak (PVC-PVC).**



Adapter shown on a CC-140-IND-75  
Use on a smaller vessel may have ground clearance issues.

**Option 1B** – Remove the white screen prior to installation of W22392 to increase flow



The white screen is in place for preventing traditional filter media (sand, glass beads) from draining out the bottom, allowing only the water to exit the tank. If collection of sludge-y material is expected with ProMoss™ use, removal of this screen will aid the draining process.

**Option 2:** Remove all parts except the bulkhead and glue 1-1/2” pipe into the bulkhead fitting.



Remove the assembly on the left and work with just the bulkhead fittings, shown on the right. This option gets rid of the screen and gives you a 1-1/2” drain pipe.

# Canadian Moss Solutions Inc.

## Contact Information

24 Boulder Blvd.

Stony Plain, AB T7Z 1V7

**Phone** (780) 913-4817

[marc@canmoss.ca](mailto:marc@canmoss.ca)

[www.canadianmoss.ca](http://www.canadianmoss.ca)