
CoolMate Water Cooler



Maintenance Manual

 **Genesis® Systems Group**



Important Safety Information

Genesis Systems Group is concerned with the safety and welfare of its customers and their employees. Careful consideration has been given to the design and integration of safety hardware and software into this system. The safety equipment is intended as a supplement to the customer's complete safety program for this installation. **These safety precautions are not meant to replace any related Federal, State or Municipal laws, regulations, or guidelines pertaining to safety.**

Genesis Systems Group believes that the appropriate levels of safety for an installation can best be determined by safety professionals who are most familiar with the intended application. **It is the responsibility of the customer** to insure that this level of safety is accomplished. We recommend that each customer consult with safety professionals in order to provide a workplace that allows for the safe application, use, and operation of this system.

For further information contact:

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CoolMate
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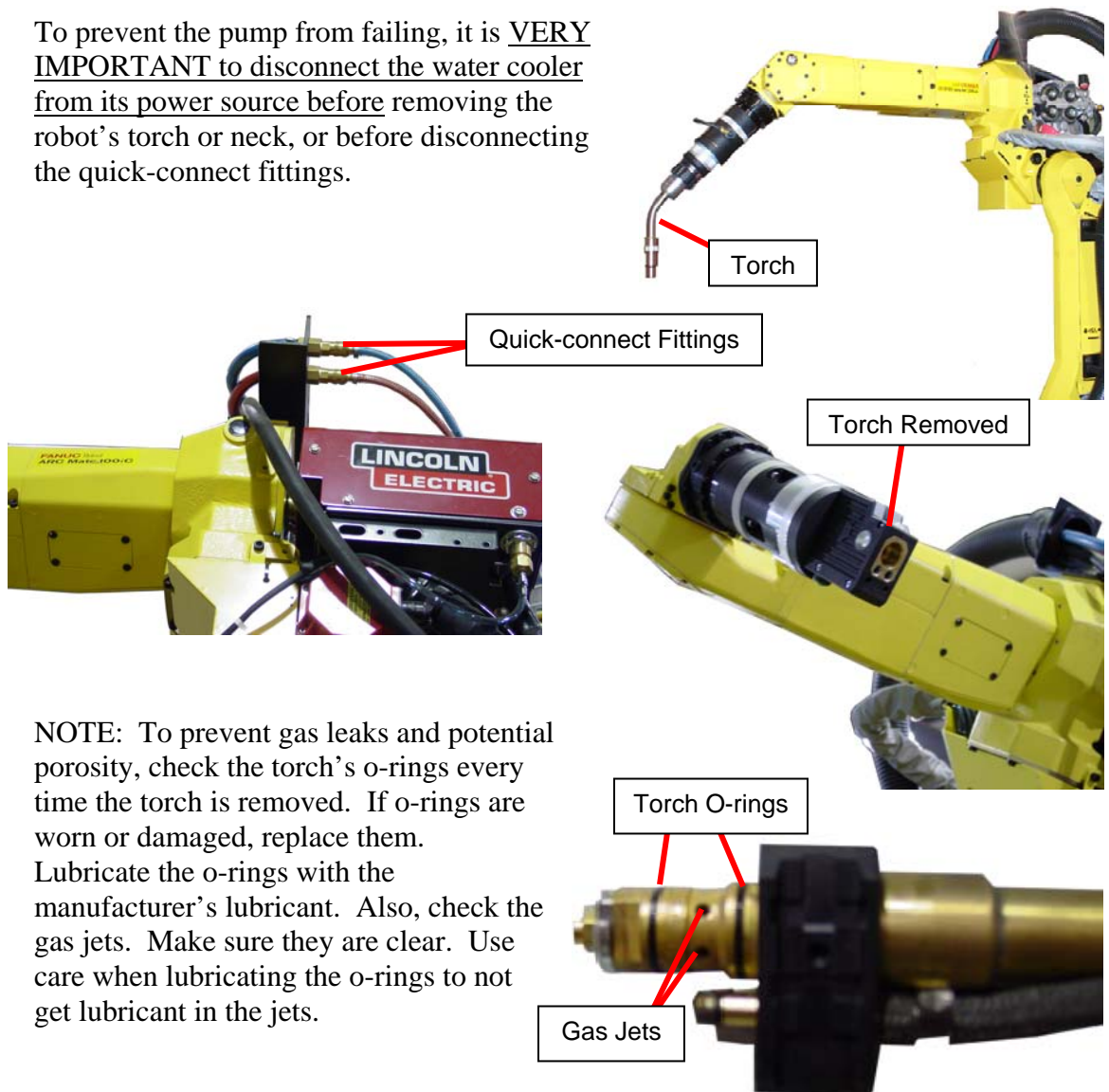
Overview

Proper maintenance of the water cooler is essential for maintaining optimum operating condition and for preventing water cooler failure. Perform maintenance according to the schedules recommended in this manual. Also, refer to the manufacturer's documentation for additional detailed maintenance instructions.

Whenever Torch, Neck, or Fittings are Removed

The water cooler pump can overheat and fail if left running while water is not circulating.

To prevent the pump from failing, it is VERY IMPORTANT to disconnect the water cooler from its power source before removing the robot's torch or neck, or before disconnecting the quick-connect fittings.



NOTE: To prevent gas leaks and potential porosity, check the torch's o-rings every time the torch is removed. If o-rings are worn or damaged, replace them. Lubricate the o-rings with the manufacturer's lubricant. Also, check the gas jets. Make sure they are clear. Use care when lubricating the o-rings to not get lubricant in the jets.

Monthly

Clean the metal grate and copper radiator coils. To do this, perform the following steps:

1. Disconnect water cooler from power source.
2. Remove metal grate by removing the three screws.
3. Use compressed air to 'blow out' debris from the grate.
4. From the opposite end of the cooler, use compressed air to blow out debris from the copper coils. It is **important** to blow air from the opposite end so debris does not get into the motor.
5. Reinstall grate. Reconnect power.

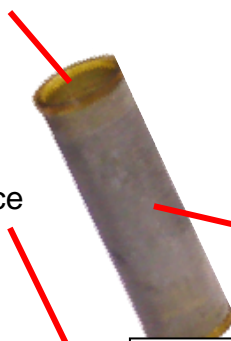


- Clean the filter and check the o-ring. To do this, perform the following steps:

1. Disconnect water cooler from power source.
2. Unscrew the nut that holds the filter.
3. Remove the filter. Rinse it with warm water. Blow out debris with compressed air. If the filter is very dirty, check and clean it weekly, or more often if necessary.

IMPORTANT!: Failure to keep the filter clean can cause the pump to fail.

4. Check the o-ring. If damaged or worn, replace it.
5. Reinstall filter and nut. Reconnect power.



Filter

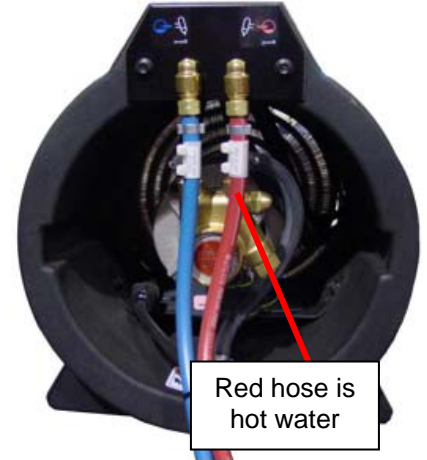


Nut



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- **IMPORTANT!: When performing the monthly cleaning of the filter, if the filter has algae, clean the entire water system. To do this, perform the following steps:**

1. Disconnect water cooler from power source.
2. Disconnect red, hot water hose from water cooler. Drain all water (four gallons) into an acceptable container. Use caution - water may be HOT!
3. Reconnect red hose to water cooler.
4. Fill water cooler with deionized or distilled water to which algaecide has been added per algaecide manufacturer's specifications.
5. Reconnect water cooler to power source. Run water cooler for one hour. Do NOT run the robot.
6. Disconnect cooler from power source. Check the filter. If it is not clean, clean it. Reinstall filter.
7. Repeat steps 5 and 6 until filter is clean.
8. Disconnect red hose from water cooler and drain all water into an acceptable container. Reconnect hose.
9. Fill cooler with four gallons of deionized or distilled water.
10. Reconnect water cooler to power source.



Every Six Months

- Check hoses. Replace if necessary. If replacing, use hoses of the same type and size.
- Replace any labels that are unreadable.
- Change coolant. To do this, perform the following steps:
 1. Disconnect water cooler from power source.
 2. Disconnect red, hot water hose from water cooler. Drain all water (four gallons) into an acceptable container. Use caution - water may be HOT!
 3. Reconnect red hose to water cooler.
 4. Fill water cooler with deionized or distilled water.
 5. Reconnect water cooler to power source.

