MERC®System Power Specifications

2-Ton Models
Full Load Amp Rating: approximately 22 at 230|1|60
Generator: 8,000 to 10,000 watt starting (surge) rating and 7,000 to 7,500 watt continuous load rating
Plug requirement: 2-Ton 230|1|60 twist lock plug = L6-30P, 30 Amp

1-Ton Models
Full Load Amp Rating: approximately 15 at 230|1|60
Generator: 6,000 to 8,000 watt starting (surge) rating and 5,000 to 5,500 watt continuous load rating
Plug requirement: 1-Ton 230|1|60 twist lock plug = L6-20P, 20 Amp

3/4-Ton Models
Full Load Amp Rating: approximately 22 at 115|1|60
Generator: 4,000 to 5,000 watt starting (surge) rating and 3,000 to 3,500 watt continuous load rating
Plug requirement: 3/4-Ton 230|1|60 twist lock plug = L6-20P, 20 Amp

Frequently Asked Questions

What is the best temperature for cooling human remains? Between 38 & 40 degrees Fahrenheit, will turn on 2 degrees above set temperature and off 2 degrees below set temperature.

What is the mix ratio for the cooling solution? Approximately a 70/30 mix water to Dow Frost. You want to mix it so it has a freeze point somewhere between -10 and +10 degree Fahrenheit.

Does the system need to be left on when not in use? No. You can turn the system on when you need it and off when you do not need it.

Is the cooling solution reusable? Yes. You can recover the fluid for later use. It must be kept in sealed air tight buckets and tested before using again to make sure it still has a freeze point between -10 & +10 degree Fahrenheit. You can also leave the fluid in the MERC® unit when not in use as long as it is not left for an extended amount of time without use.

Can the unit be used with straight water? Yes, but for training only and the temperature must be set above 50 degrees Fahrenheit.

Does the MERC®System have a warranty? The warranty on the MERC® Series 1 and 2 lasts for one year after manufacturer's training. The warranty on the MERC® Series 3 lasts for one year after receipt of unit.

Are the cooling pads disposable? No. The cooling pads should be santized and reused.

Should the cooling pad be placed on top of the body bag or on top of the remains? The cooling pad should be placed directly on top of the remains. The MERC®System works through direct contact cooling. The pad should be placed to cover as much of the body as possible from the neck down.

Questions?
Please contact a Mortuary Response Solutions representative at 864-261-5151 or training@mortuaryresponse.com.

Mortuary Response Solutions
Mobile Solutions for Critical Situations

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MERC®System Set-Up

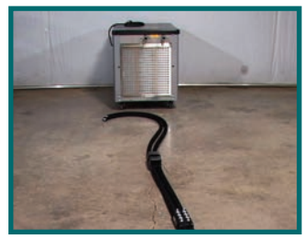
Step 1: Remove system and all components from skid and packaging.

Step 2: Do a walk-around and carefully inspect machine to ensure that there is no damage caused in transit.

Step 3: Carefully remove cord from plastic wrapping and locate operator's manual.[1]

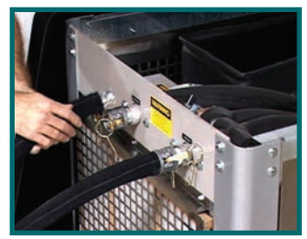
Step 4: Once operator's manual is located, place machine on a level surface and lock wheels.

STEP 5



Position machine making sure there is adequate space for the entire system set-up. Please be aware of the machine's ventilation and leave adequete space. Place manifold system on floor spreading outward.[2]

STEP 6

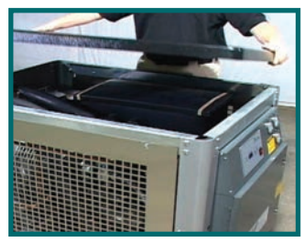


Install and lock supply/return hoses to machine.

STEP 7

Verify power source and plug machine into appropriate power supply.[3]

STEP 8

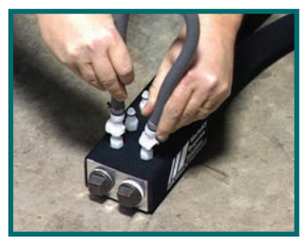


Remove lid from machine and then carefully remove lid from cooling solution tank. Place both lids to side of machine.

STEP 9

Mix cooling solution to designated ratio and pour cooling solution into tank.[4] Replace both lids, making sure they are properly secured.

STEP 10



Remove plastic manifold cover[5] and install jumper hose on manifold farthest from machine. This allows cooling solution to circulate through the hoses and back to the machine.[6]

[1] Operator's manuals are located in different places depending on which machine is received. On Series 1, the large unit, the operator's manual is located in the electrical cabinet. On Series 2, 3 and 3-G units, the operator's manual will be located inside unit, under lid or in liquid storage.
[2] On some MERC®System machine models, the manifold is mounted on the rear of the machine and should not be removed.
[3] See Operator's manual for details on electrical requirements.
[4] Mix ratio should be completed according to manufacturer's specifics. See operator's manual for details.
[5] Plastic manifold covers should not be removed unless manifold is in use.
[6] Please note that when connecting jumper hose or cooling pad hoses, connections must always be across manifold so that hoses connect to each a supply hose and a return hose. Failure to do so and the unit will not circulate coolant, and can cause damage to unit, hoses and/or cooling pads. Always load the manifold posts beginning farthest out and moving inward toward machine. Do not remove jumper hose until connection is needed.

MERC®System Set-Up Continued...

STEP 11

Turn machine on to purge system. Machine will automatically begin self checks.

STEP 12

Check pressure to process guage to ensure it is in proper pressure range (20-30 psi).

STEP 13

Set temperature by pressing down and releasing up|down arrow buttons. Recommended temperature for storing human remains is between 38-42 °.

STEP 14

Test cooling pad to ensure that it is working properly.

STEP 15

Remains delivered to morgue as shown.[7] Expose remains.

STEP 16

Unfold cooling pad and place on top of remains from shoulder line down. Each side of the cooling pad should be carefully tucked into the body bag.[8]

STEP 17

Make sure the hose connections remain exposed through the zipper and begin to close up body bag.[9]

STEP 18

Carefully place remain on cadaver storage rack.

STEP 19

Connect supply hoses to cooling pad hose connections and opposite ends to the ports on the appropriate manifold.[10]

[7] Staff should wear appropriate personal protective equipment (PPE).
[8] In the traditional MERC®Systems, MERC® I, II, and III, the cooling pads are made into the body bag and are already in place.
[9] The cooling pads work through surface area contact so be sure the cooling pad remains in place and is positioned correctly on the remains.
[10] Always be sure that hoses connect across manifold - which will connect cooling pad to each the supply line and the return line. Failure to do so, and the cooling solution will not flow properly. This can cause damage to unit, hoses, and/or cooling pads.

MERC®System Breakdown

STEP 1

Power off unit and unplug from outlet.

STEP 2

Remove all supply hoses from cooling pads or bags, depending on which system is in operation.

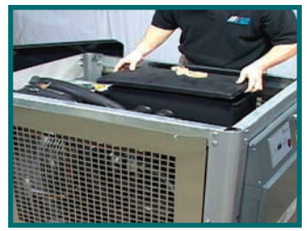
STEP 3

Remove all supply hoses from manifolds.

STEP 4

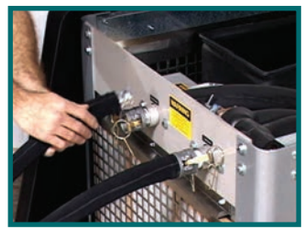
Replace plastic manifold covers.

STEP 5



Remove lid from machine and then carefully remove lid from cooling solution tank. Place both lids to side of machine.

STEP 6

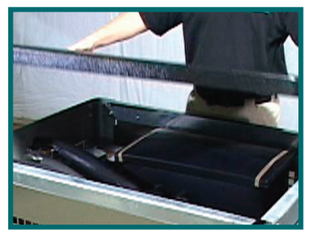


Disconnect manifold lines from machine.

STEP 7

To save and reuse cooling solution, carefully empty any remaining solution in supply/ return lines by draining lines into cooling solution tank. Always drain fluid from the cooling solution tanks in machines. Use operator's manual to locate drain.

STEP 8



Replace both lids, making sure they are properly secured.

Step 9: Roll up hoses and store cooling pads or bags. See operator's manual for storage recommendations.

Step 10: Store unit.

Refractometer
A refractometer is the best method for testing propylene glycol - which is used in the MERC® cooling solution. A refractometer is fast and easy-to-use with an easy-to-read scale. It's the most accurate testing method available for determining freeze point and concentration of coolants. A refractometer can be ordered from Mortuary Response Solutions (Part # MRS-7084VP).