
COMMERCIAL REFRIGERATION

How to reduce costly breakdowns!

It is an unfortunate truth that the majority of businesses don't have their commercial fridges and freezers periodically serviced by trained engineers. If you spent money on a car for example you wouldn't expect it to run for years with no trouble without servicing it regularly. A regular service will reduce...

- **Probability of a Breakdown**
- **Stock Loss**
- **Loss of Trade**

And importantly...

- **Annual Savings**
- **Increase lifespan of the equipment thus capital expenditure!**

Commercial refrigeration equipment is a work horse in comparison to domestic refrigeration, they are more robust in terms of coping with the location temperature, footfall, times opened. They also must meet stringent food safety laws.

How to I prevent a Costly Callout?

1. Prevention Cleaning Commercial Refrigeration units have more powerful condensing units and fans to the rear. As a result debris and dust in the air can be drawn into them easily. A bad example is shown below but it doesn't have to be this bad to have an effect!



If this is left unchecked then the airflow through the condenser can become restricted and the compressor or the pump in the system will run longer and at higher pressure as the heat is not being released from the system due to the clogged fins. This in turn puts excessive strain on all parts of the entire unit.

Can I clean this myself?

Yes! According to your manual you can do this using a Hoover making sure not to damage the fins or a light brush in the direction of the fins. However self-cleaning of the condenser is not as thorough as an engineer as it only removes the surface dirt. The compressed air the engineer uses removes all dirt within the fins of the condenser. Sometimes a cleaning chemical is needed for more stubborn dirt. Manufacturers insist that a technician does this on at least a biannual basis. **Failure to clean leads to loss of warranty protection.**

Other areas to consider to prevent a callout are detailed overleaf.

(Charges apply under warranty if not considered).

How to prevent a Costly Callout?

2. **Where is it Sited?** If sited next to a hot appliance the system will not be able to remove the warm air and stress the system or if sited in a high footfall area then the dust or dirt will be drawn into the condenser quicker as it is in the air more readily.

3. **Is it Level?** Use a spirit level to make sure it is or the water that collects from the moisture in warm air getting into the cabinet will not escape down the drain hole to be evaporated causing leaks.

4. **Has someone turned up the thermostat?** It should be at 3 in a standard dial, if you're turning it up to maintain temperature there may be another problem that needs fixed. Failure to get an engineer to check this may lead to stress on the system and thus breakdowns.

5. **Is there sufficient airflow?** The fan can be obstructed by a tightly packed unit stopping the airflow around the whole cabinet. There should be a gap at the back and the front and underneath the bottom shelf to allow air to flow around. There should also be sufficient airflow around the back of the inside of the cabinet to allow warm air to escape and cold air in.

6. **What are you storing in the unit?** Don't put ambient/chilled/hot in a freezer or ambient/ hot in a fridge. Use a blast chiller or deep freeze to draw the temperature down first! Ambient in a chiller will draw all the cold air coming in to it and away from the other food in cabinet and thus the temperature will raise and the system will be at stress. Non-frozen in a freezer will do the same.

7. **How often is the door opened?** Door open = Warm air in and cold air falls out = System switches on to compensate when door is shut to draw down the temperature. If door opens constantly then the system cannot keep up with the loss of cold air so temperature rises and any of the other factors mentioned above and below make this worse = stress on system = breakdown.

8. **Is the seal on the door intact and does it form a tight seal when closed so no air transfers?** Make sure the seal on the door is cleaned regularly and not damaged by misuse like door being slammed = tight seal lost = warm air in and cold out = stress = breakdown.

9. **Is the Drain clear?** Most cabinets have drainage channels within the inside of the cabinet and this must be kept clean and free from debris, If this is blocked causing leaks then you are not covered under warranty.

For details on a planned maintenance contract then contact the service office and we will be happy to answer any questions you may have. If you follow these simple tips and you will save money.