

Guide to re-opening bars & clubs

AIR CONDITIONING UNITS, ERV'S AND AHU'S

As Air Conditioning Units, ERV's and AHU's, are being switched back on, many of which have been turned off or not monitored over winter, please find below a start up and check over procedure

Pre-start up

1. Firstly, before any investigation works are performed make sure you have correct and relevant PPE.
2. Looks for any visible signs of refrigerant leakage e.g. Oil traces on the coils and flare nuts/pipe joints. If required spray any suspect joints/ connections with Advanced Easy Find and should there be any oil traces use Advanced Grease Gobbler to remove them. Attach manifolds to the system/s to see that there is refrigerant before allowing the compressor/s to run.
3. Check the electrical connections and any cable for damage caused by deterioration, burn out due to power spikes and vermin damage. Also check that the PCB's are clear on any debris that may cause a short.
4. Check any moving parts e.g. Fans are free spinning and secure.
5. Check the condensate pumps to make sure float switches aren't stuck, hoses haven't deteriorated or the water and debris in the sumps haven't turned into a gelatinous soup that the pump won't be able to remove. Advanced 1 shot drain clean or Drain Safe will help clean and reduce condensate removal issues.
6. Clean any grilles or fascia's using Advanced Easy Finish and Easy Wipes
7. Check for deterioration of Mounts on Fans, compressors etc
8. In the condensing unit, especially on the compressors, check for rodents' nests as if the systems have been on the crankcase heater would have made the perfect environment for them.
9. Check the evaporator and condensing units' coils for anything that could restrict the air flow and will effectively inhibit the system performance. Debris can build up between the fins of the coils. Clean the coils with the relevant cleaner. Also, if required straighten any damaged fins with a JAVAC Fin Comb. Using a chemical cleaner would be beneficial as this will not only help remove dust build up it will also help remove other deposits. Advanced Vertex is a smart chemical that changes its PH to suit what it is removing and can be used on both evaporators and condensing units. Advanced Condencide has now been proven to kill SARS-CoV-2.

10. Check that the filters are clean and undamaged, it would be advisable to use a cleaner such as Advanced Easy Care as this is an Anti-Bacterial, fungus and Virus spray.
11. Check the insulation of the pipework for damage or break down and repair or replace as required.
12. If you have an ERV or AHU the above will need to be checked, a few other checks will need to be performed.
 - Check for bird nests in the ductwork
 - If the fan is belt driven check that the belt is tight and hasn't deteriorated
 - Replace bag filters
 - Check the humidifier (if one is fitted) for leakage due to seal deterioration, scale build up, electric element failure, water solenoid actuates and discard any water inside the humidifier but be careful of any risk of legionella.
 - Clean out the heat exchanger (if one is fitted)
 - Check ductwork insulation, flexible connections and PIB if used.
 - Check fire dampers haven't closed
 - Check access hatches haven't been removed or fallen off
13. An easy after-market fit that kills Covid and other viruses on wall mounted units is the Blue Science UV air disinfectant system which takes approximately 10-15 minutes to fit to most wall mounted units. For more details please contact your TF Solutions account manager.

Start up

14. When performing the prestart up checks, if any components are found to be damaged or faulty make sure these are repaired or replaced before proceeding any further or if you suspect the system/s have lost refrigerant perform relevant tests to comply with FGAS legislation.
15. If the power has been turned off, after performing your checks and it is safe to do so turn the power on and allow the crank case heaters to warm the compressors as per the manufacturer's requirements before starting the system.
16. Due to the systems potentially not running for a while, run the system in cooling/test cooling as the pressure will be lower and it will give you more of an indication that the system hasn't lost refrigerant (this does not mean the charge is correct)
17. Check the system pressures, air on and off temperature, running amps, fan rotation and air flows. In short treat the system as if it was new and you were commissioning for the first time.
18. Don't forget, it's also important to introduce fresh air, so make sure windows are open and extract fans are running

Below is a list of some of the materials you may require enabling you to get the air conditioning clean and up and running all of which you can pick up at your local TF Branch.

Advanced Engineering

- DrainKleen – Single use ready to use condensate drain cleaner 250ml
- Drain Safe – Ready mixed condensate drain unblocker 5litre
- Easy Find – Bubble up leak detector spray aerosol 400ml
- Grease Gobbler – Solvent based Aerosol 400ml
- Condencide – Coil cleaner and disinfectant post mix 5 litre
- Vertex – Neutral Ph 7 adaptive cleaner post mix 5litre
- Easy Foam – Aerosol Heavy Duty condenser cleaner 600ml
- Easy Care – Aerosol Evaporator cleaner and disinfectant kills Fungi, Bacteria & Viruses 600ml
- Hydro Sprayer – 10 litre pump sprayer designed for chemical use.
- Easy Finish – Aerosol Fascia & Case cleaner removes grease, nicotine & general grime.
- Easy Wipes – Cleans hands, surfaces & tools 50 wipes
- Easy Fresh – Aerosol odour neutraliser 400ml
- Smelly Jelly – Fragrancing gel various aromas, mini and large
- StayClean – Condensate tray bacterial control 6 strips or 20 tablets
- Tie Tite & Hook Tite – Cleaner cover that protects walls, carpets & surrounding equipment whilst cleaning 1 per pack
- JAVAC Fin Combe – EL70925 Fin Combe straightens fins 8,9,19,12,14 & 15 fins per inch
- Big Wipes – Multi Purpose antibacterial wipes 80 wipes
- Blue Science – UV Air disinfectant system Standard, pro kit and combined.



Other chemicals by other manufacturers are available. for more information and pricing please contact your local TF Solutions branch or your Account Manager

For any technical advice, please email acteam@tfsolutions.co.uk