



Preventative maintenance for your air conditioning

Equipment care bulletin

HSB Canada, part of Munich Re, is a technology-driven company built on a foundation of specialty insurance, engineering, and technology, all working to drive innovation in a modern world, to keep you ahead of risk.

Every year, HSB investigates numerous air conditioning (A/C) unit failures. The primary reason for the majority of these failures is poor preventive maintenance prior to start-up.

To help you achieve the reliable and uninterrupted service you expect from your A/C unit during the coming cooling season, we are offering the following recommendations.

Crankcase

One of the most critical controls in the A/C unit is the crankcase heater. Preferably, the heater should be left energized while the equipment is idle. The energized heater will minimize refrigerant migration to the compressor and dilution of the crankcase coil. In all cases, it is vital that the crankcase heater be energized at least 8 hours before starting the A/C unit.



Condenser

The unit's condenser should be cleaned at a minimum of once each year. If the condenser is located in a high dust and dirt area, it should be scheduled for more frequent cleaning. A clean condenser will prevent high head pressure which can shorten the life of the unit.

Electrical

- The motor magnetic starters should be inspected prior to start-up,
- The contacts may be deteriorated as the result of cycling of the compressor.
- All terminal connections should be checked and tightened, and all pitted contacts should be replaced.
- The overload protection on the unit should also be examined for proper sizing.

Mechanical

Because the operating and safety controls are the heart of the unit, they should be checked to see that they are properly calibrated and in working order. Like all electrical and mechanical equipment, these controls wear out and must be replaced.

The oil in the unit should be tested prior to starting the unit. The results of the analysis will let you know if the oil will hold up for the coming season. If there is any question about the oil quality, the oil should be replaced.

Moisture

The A/C system should be equipped with a moisture indicator. This device will detect the presence of moisture within the system. If moisture is present, filter dryers should be installed or changed to remove this moisture. More importantly, the source of the moisture should be determined and preventive action taken to correct the condition.

Cost

- Even when machinery insurance is available, the deductible may still account for a considerable out-of-pocket expense.
- Because we are talking about A/C units, we are usually talking about hot weather breakdowns.
- Having insurance may be of little comfort when your unit is down, the temperature is high, and your location is sweltering.
- In addition, if you have tenants or are trying to run a business, you don't need the added headaches of irate customers because your system is down from minor maintenance oversights.

Our advice is intended to complement the equipment manufacturer's recommendations – not replace them. If you have doubts about any particular procedure, contact your equipment service representative.