

When should a Filter-Drier be replaced?

April 2014

It is not uncommon to see refrigeration and air conditioning systems that have operated for decades without any service being performed and with the Filter-Drier undisturbed since the original installation. This speaks well, not only for the reliability and durability of all the system operating components, but also for the Filter-Drier which has provided protection to these components over the many years they have operated.

At the initial start-up the Filter-Drier removed any dirt or excessive moisture that may have been in the system. During the years of operation, the Filter-Drier continued to provide protection by insuring that no acid or contaminants formed during periods of high condensing or discharge temperatures.

Unfortunately, things do not always go this smoothly and service calls are necessary. This is when consideration should be given to changing the filter-drier.

1. Did the Sight Glass indicate moisture was present?
2. Was the system open during service?
3. Were there any unusual circumstances that could have permitted moisture to enter the system? (ruptured chiller or water cooled condenser; wet conditions in area where repairs are taking place)
4. Was there a hermetic motor burn-out involved?
5. Was excessive compressor heat involved in the failure?
6. Is the refrigerant oil discolored or found to be acidic? (A Parker Acid Test Kit will determine this)
7. Was it evident that dirt, metal chips or other contaminants were involved in causing the failure?

If the answer to any of these is "yes", a new Filter-Drier is good insurance against a repeat problem. If questions 3, 4 or 5 are answered "yes", both a suction line and liquid line Filter-Drier are recommended to remove acids and products of oil decomposition. See Parker [Tech Tip February 2014 - System Clean-up Procedure](#) to review this this type of clean-up. The Parker Sight Glass and Acid Test Kits are excellent service tools for determining if a replacement of the Filter-Drier or other filter-drier is required.



Review Parker CAT A-1 for more detail.