

## 8.23.1 Central Air-Conditioner Inspection

*SWS Details: 5.0102.1 Condensate Removal; 5.0109.1 Condensers; 5.0109.2 Air Handlers; 5.0109.3 Evaporators; 5.0109 Clean and Tune; 5.0103 Refrigerant Loop*

Verify proper function and safety of the following system elements: fan motor, compressor, outdoor temperature sensors, bearings, safety devices, electrical disconnect, electrical wiring, contactors, capacitors, fan blades, refrigerant access ports.

On the equipment or in a conspicuous location, post a list of all systems and components inspected and services performed. Include in this list: service technician's name, contact information, and service date.

### Cleaning the Air Handler

Air conditioners move a lot of air, and that air contains dust. The filter in the air handler catches most large dust. However some dust travels around or through the filter, depending on the type of filter and its mounting assembly.

- ✓ Check the filter for dirt and replace it if dirty.
- ✓ Check the filter-mounting hardware for a close fit to avoid dirt moving around the filter and on to the blower and heat exchanger. Repair if necessary.
- ✓ Consider providing a supply of filters for occupants to change.
- ✓ Inspect the blower and clean it if dirty.
- ✓ Clean the blower compartment.

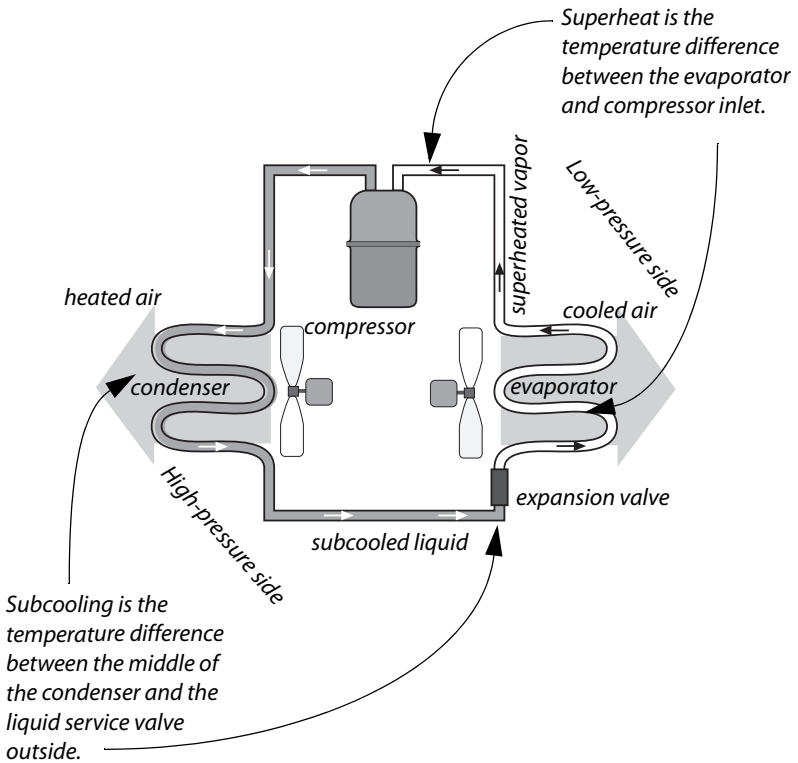
*See also "Ducted Air Distribution" on page 347.*

### Cleaning the Condenser Coil

The condenser coil outdoors isn't protected by a filter and is usually quite dirty. The goal of this procedure is to drive the dirt

out by spraying inside to outside. With high-pressure water, however, you can drive the dirt through the coil and into the cabinet where it drains out through drain holes.

- ✓ Clear foliage, grass, and other debris from within 3 feet of the unit.
- ✓ Inspect the condenser coil and know that it is probably dirty even if it looks clean on the outside. Take a flat toothpick and scrape between the fins. Can you scrape dirt out from between the fins?
- ✓ Apply a biodegradable coil cleaner to the outside of the coil. Then spray cold water through the coil, preferably from inside the cabinet. Many coils can tolerate a high-pressure spray but others require low-pressure spray to avoid bending the fins.
- ✓ Lubricate the blower motor.
- ✓ Straighten bent fins with a fin comb.



## Cleaning the Evaporator Coil

Dirt enters the filter, blower, and coil from the return plenum.

- ✓ Inspect the filter slot in the air handler or the filter grille in the return air registers. Do the filters completely fill their opening? Are the filters dirty?
- ✓ Inspect the blower in the air handler after disconnecting power to the unit. Can you remove significant dirt from one of the blades with your finger? If the blower is dirty, then the evaporator coil is also dirty.
- ✓ Clean the blower and evaporator. Rake surface dirt and dust off the coil with a brush. Then use an indoor coil cleaner and water to clean between the fins.
- ✓ Straighten bent fins with a fin comb.