

1/100th of an inch of corrosion on an air conditioner condenser coil can increase cost of operation by 30%.

SIZE UNIT	COST OF ENERGY		ENERGY SAVINGS	MIRACOIL PURCHASED		NET SAVINGS
	RUN DIRTY	RUN CLEAN		GALLONS	COST	
1 TON	\$ 190	\$ 137	\$ 53	1	\$ 15	\$ 38
3 TONS	\$ 568	\$ 412	\$ 156	1	\$ 15	\$ 141
5 TONS	\$ 812	\$ 550	\$ 262	2	\$ 30	\$ 232
10 TONS	\$1681	\$1231	\$ 450	5	\$ 60	\$ 390
20 TONS	\$3237	\$2081	\$1156	10	\$120	\$1036
40 TONS	\$6637	\$4150	\$2487	20	\$240	\$2247
60 TONS	\$9262	\$6300	\$2962	30	\$360	\$2602

POTENTIAL SAVINGS

Potential savings in energy are based on calculations from January 2002 rates of the Philadelphia Electric Co. The amount of Miracoil 2 needed to refurbish an air conditioning unit varies according to the accumulated soil and corrosion. The figures shown are a conservative estimate of the savings that can be accomplished with Miracoil 2. In order to continue these savings, units should be cleaned each season. The amount of Miracoil 2 shown on the chart as purchased is generally enough for the first use at full strength and cleaning the second season in dilute form.

FUTURE BENEFITS

The savings in energy and in repairs from the use of Miracoil 2 become quite apparent. Less obvious, but of considerable importance is the fact that regular cleaning with Miracoil 2 retards future oxidation and corrosion. Just as rust on iron and steel breeds more rust, so does "white rust" spread more rapidly on oxidized aluminum. Regular cleaning with Miracoil 2 removes oxidation, thus retarding future corrosion and pitting and extends the life of your air conditioning unit.

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You get your money back each time you clean your air conditioner coil with MIRACOIL 2.

You actually save three ways when you clean air conditioning coils with Miracoil 2.

A clean unit uses less electricity. A recent review, based on Philadelphia Electric Company's 2002 rates, shows a cost of \$412 per season for operating a simple 3 ton unit with a clean condenser coil, versus \$568 if the coil is dirty. A saving of \$156. For a 60 ton unit, it's \$9862 to operate a dirty unit and \$6300 if it's clean – a saving of \$3562. With the spiralling cost of energy, you can't afford *not* to clean your air conditioner regularly.

Second, it is a fact that more air conditioning units fail because they are not clean, rather than because of mechanical problems. Even

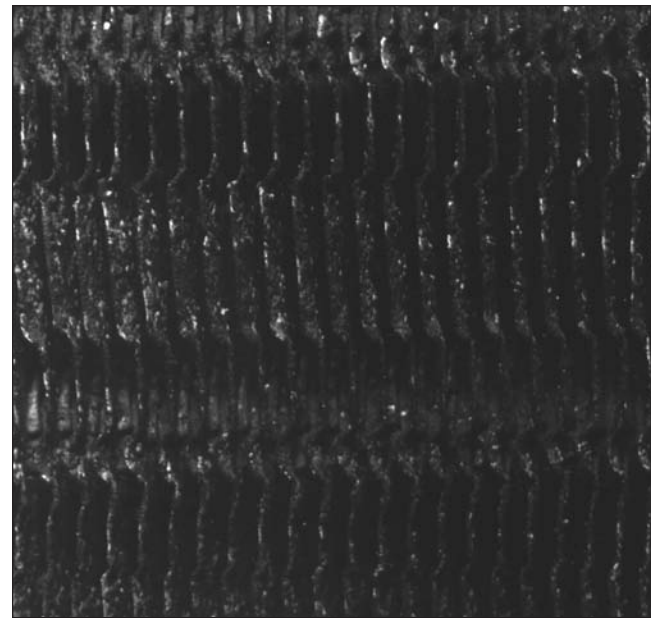
though the problems from running dirty units are still equipment breakdowns, they are the result of dirt and corrosion, reducing the efficiency of the unit so that it is forced to run too frequently. An air conditioner condenser coil is designed to transfer heat. Dirt and corrosion on the coil act as an insulation that interferes with this heat dispersing function. The result is that the motor, the pump, the switches, the bearings, all are thus subjected to additional wear.

Third, Miracoil 2 eliminates "downtime." As indicated above, regular cleaning reduces breakdowns. In addition, with Miracoil 2, units can be cleaned in place, without disassembly, an additional saving.

NON-ACID

Miracoil 2 contains no acids or other harmful ingredients. Will not corrode metals, etc. Safe to handle with normal personal protection. It is used exclusively on exterior surfaces and therefore does not require professional training to be used. But cleaning air handling systems does present some special problems not common with other cleaning jobs. Removing surface dirt and soil is only a small part of the job.

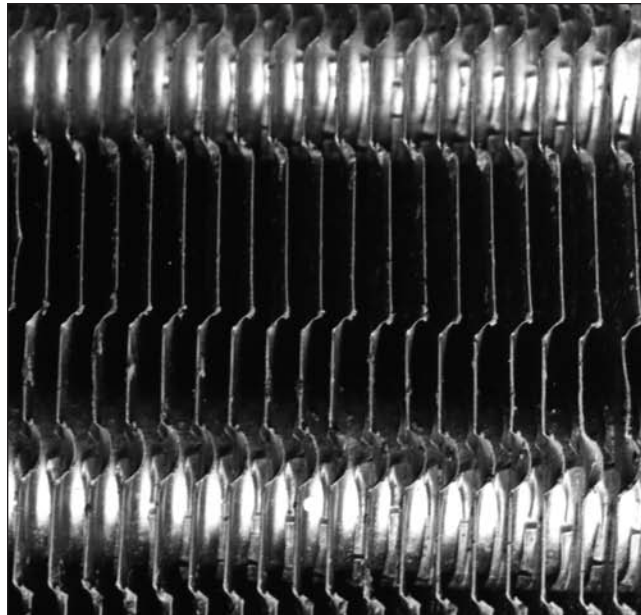
The fins of a condenser coil are almost always made of aluminum. Aluminum not only gets dirty, it oxidizes and corrodes. This corrosion or "white rust" as it is often called is even more restricting to heat transfer than soil. If it is not removed, your cleaning effort can be a waste of time and money.



Dirt and corrosion have insulated this coil to restrict heat exchange.

Competitive products do not remove this oxidation. They are generally nothing more than butyl cleaner/degreasers. They may remove soil but do nothing against the "white rust" that is the real problem.

Miracoil 2 is different. It deoxidizes as it cleans, leaving aluminum bright and new-like, ready to transfer heat at 100% efficiency.



Miracoil 2 cleans and deoxidizes in one easy operation, leaving aluminum bright and new-like.

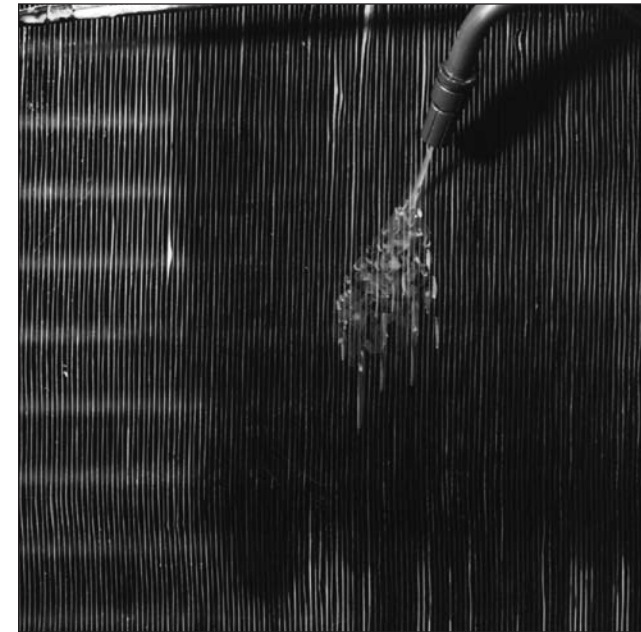
The job is done so completely that some have questioned the possible effect of Miracoil 2 on the aluminum. Independent laboratory tests confirm that there is no concern in this regard. Weight loss of typical aluminum fins after cleaning with Miracoil 2 proved to be only 1% per cleaning. And in the case of a corroded coil a 1% loss in weight can represent only the removal of the accumulated oxidation.

Miracoil 2 is non-flammable. It will not burn or support combustion in its liquid or vapor form. Because so many central air conditioner units are mounted on the roof another important point is that it contains no solvents or other ingredients that might attack asphalt roofing. Inside a building it is non-injurious to tile floors, plastics, carpets, etc.

HOW TO USE MIRACOIL 2

There is no cleaning job any easier than cleaning and deoxidizing air conditioning coils, fins and filters with Miracoil 2. Both cleaning and deoxidizing are done in one easy operation. Miracoil 2 has been formulated to do the work without brushing, scrubbing or need for high pressure water. Such methods could bend the delicate fins.

Using Miracoil 2 is as simple as just spraying it on with a garden style sprayer, or for small units with a trigger sprayer.



Unfortunately most people don't start using Miracoil 2 until their units have already become corroded. Therefore the first time you clean with Miracoil 2 it is best to use it full strength, just as it comes from the container.

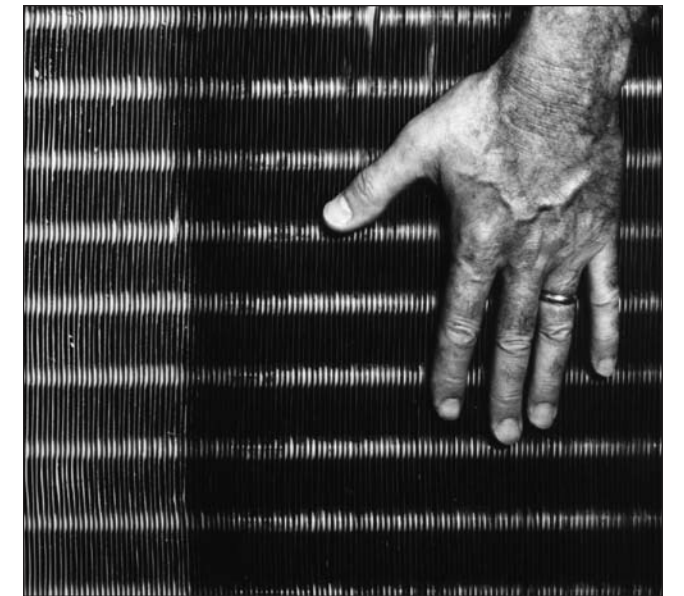
If your air conditioner is reasonably new, or if you are using Miracoil 2 on a regular preventative maintenance schedule, it can be diluted with up to three parts of water. Experience will indicate the proper strength to be used.

Before you even start to clean, make note of the time that the motor driving the pump in the air conditioner cuts on and off during its cycles. It's going to be interesting to compare the timing before and after cleaning.

To clean, set the sprayer to give a coarse spray. A fine spray or fog will not deliver ample liquid and can also drift to contact other surfaces. In this regard, follow cautionary directions on the label closely. Spray the coil liberally. You'll note that Miracoil 2 produces a foam as it is applied. These "scrubbing bubbles" penetrate deep into the coil bank

to loosen dirt, greasy soil and corrosion and bring them to the surface where they will run off freely. Rinsing is not absolutely necessary. But as with any cleaning operation, while the soil is loosened, it is best to rinse it away with clear water, rather than allow it to dry back on the coil.

The entire job is done just that easily. If you were to clean only half of the coil you can actually feel the difference in the efficiency of the unit by placing your hand first on the dirty side and then on the clean side. The clean side will feel warmer, showing that it is transferring more heat to the outside, as it is designed to do.



You can feel the difference in efficiency between a dirty condenser coil and one cleaned with Miracoil 2.

Another proof of the effectiveness of Miracoil 2 and its ability to conserve electricity is to time the running cycle of the compressor pump. Remember, we suggested that you make note of the cycle before cleaning. After cleaning check again. You will find the motor is running less frequently now. Heat is now being transferred correctly and the thermostat is calling for the motor to activate the compressor less often, thus saving electricity as well as the equipment.