

Why A Tune-Up?

Years ago, the Louisiana Cooperative Extension Service at Louisiana State University teamed up with Gulf States Power to identify what benefits if any were provided by an air conditioning tune-up. A series of homes were heavily instrumented, data was collected over time, tune-ups were performed, and data was collected again. The results of this landmark study were staggering. The researchers found that tune-ups saved energy and restored lost capacity. How much?

Average Monthly Savings From a Tune-Up \$32.76

Average Cooling Capacity Restored..... 0.79 Tons

The researchers concluded that:

Air conditioning maintenance benefits the consumer by lowering his operating costs, increasing his comfort control capacity, and is believed to extend equipment life.

But do homeowners need a tune-up every year? To answer that question, researchers repeated the study a year later, using the same homes from the prior year. They found that 78% of the savings were present. In other words, one year of operation takes a toll on an air conditioner. It may still function adequately, but not nearly as efficiently as it should.

Average Monthly Savings From a Tune-Up
After One Year Of Operation \$25.60

Granted, these studies were performed years ago. That does not lessen their validity. They continue to be referenced because no one has funded additional research into the residential market. If anything, the studies understate the savings potential from a tune-up. Adjusting for inflation, the monthly savings from the first study would be \$60.59 today. The savings from a tune-up after one year of operation would be \$45.39. In addition, today's air conditioners with greater efficiency levels, are more likely to need maintenance, due to changes in coil design (thinner fins, more surface area, thinner tubing, rifled tubing, etc), changes in refrigerants, and so on. For Homeowners, the bottom line is that given the low cost of a tune-up and the energy savings and restored capacity...



Tune-Ups Are Free!!!

Notes

One of the greatest impediments to the sale of service agreements is the lack of belief in the value of a tune-up on the part of service technicians. Since the service technician has the most customer contact of anyone in the company, he or she is in the best position to effect the enrollment of a homeowner in the service agreement program. Yet, technicians must *believe* in service agreements or they will not only be ineffective in their sales effort, they will not even try.

In 1983, an empirical research study on the value of air conditioning maintenance was performed by researchers at LSU, working with Gulf States Power. They discovered that proper maintenance paid for itself over the course of a few months of summer operation. The study stands out because the LSU researchers selected real homes. The savings discovered were real world, not theoretical. The savings reflected the way people actually used their homes' air conditioners.

The homes selected for the study had not had tune-ups in quite some time. They were not always in the best condition. Thus, it wasn't surprising that savings were found. The researchers wondered how often tune-ups were needed. Were they needed every year?

To answer this question, the study was repeated a year later with the same homes. The researchers found that performance had degraded enough over the course of a year that 78% of the original savings were still present when a tune-up was done a year later.

The "LSU study" has been frequently cited through the years. Some discount it today because the study is nearly twenty years old. However, no one has stepped up to perform a similar study over the last two decades. The age of the research does not minimize its validity. If anything, the savings would be greater today. Not only has inflation had an impact in the intervening time period, but the technology of air conditioning has changed. Today's air conditioners feature thinner fins, differ-

ent cuts and bends on the fins, thinner tubing that is internally rifled, and so on. A small coating of dust has a greater detrimental effect.

Often, the LSU study has been effective in and of itself in persuading technicians of the value of a tune-up. This sheet is designed to be used with technicians. It's purpose is to help technicians understand that they are not persuading homeowners to spend money on a tune-up, they are encouraging them to save money.

Use this sheet in a training meeting with your technicians. In addition, ask the technicians to identify the parts that might fail if not maintained. Ask them in how many homes out of a hundred will they encounter that failure. Repeat it for each part. Typically, the response is along the lines of 2 or 3 (i.e., 2% or 3%). This represents the "incidence" of failure. Multiply the incidence by the cost of the repair. It may only be a few dollars, but it adds to the value of a tune-up.

Tally the repairs, add in the energy savings, plug in the value of a ton of air conditioning to represent the restored capacity (i.e., the cost difference between a three and four ton system), and you can arrive at a value of a tune-up. Typically, the value will add up to several hundred dollars.

If you want, repeat the process for a furnace. You will have to estimate the energy savings from tuning burners. Similar research does not exist for heating system tune-ups.

While this piece of collateral is targeted towards technicians, it can also be used with consumers. You can give it to technicians to hand to homeowners, include it with sales proposals when persuading homeowners to bundle an extended service agreement in the proposal, pass it out at home shows, give it to members of your service club, include it in a direct mail effort, and so on.