

Saving Fuel in an Automobile

Effect of Treatment with SRA, 2013-04-17

1 Summary

Power Knot’s salesman in Hawaii treated the refrigerant system in his car with SRA. After treatment, the a/c unit is able to cool the car faster and the fuel economy is improved by 8%.

2 The Problem

Hawaii has average daily temperatures about 82°F (28°C). That is great for tourists, but for a businessperson out all day, the person needs to run the air conditioning in the car all day if he or she doesn’t want to arrive at business meetings dripping with perspiration

Our salesman drives a 2004 Toyota Matrix and has the a/c on all day. The car is light and the engine small, so the a/c is a relatively heavy load on the engine. Therefore, the a/c uses much energy – energy that comes from the gasoline (petroleum).

If the efficiency of the a/c unit can be improved then the overall efficiency of the car can be improved and less fuel will be used.



3 The Solution

The salesman diligently keeps track of the miles he does in his car before he has to refill with gasoline. He always typically does between 290 miles and 300 miles on a tank of fuel, with the average being 297 miles.

On 9 February, he treated the a/c system on his car with the SRA. He injected less than ½ oz. (15 ml) of the SRA product. The SRA is injected while the a/c is running and takes only a few minutes. No refrigerant is removed before installing the SRA.

Within a few minutes he observed that the air coming out of the vent was cooler. Also, the a/c cooled the car much faster after leaving the car in the Hawaiian sun for an hour or two.

Over the next six weeks, he observed the miles that he was getting on a full tank of fuel. The recorded mileages are:

Date	Miles
12-Feb	320
19-Feb	332
26-Feb	326
5-Mar	310
15-Mar	318
23-Mar	322
Average	321
Prior average	297
Improvement	8%

There were no other changes to the car and he kept the a/c set to its coldest setting before and after treatment with the SRA. Also, there were no changes to his driving habits or the brand and type of gasoline used. The improvement in efficiency is due solely to the addition of the SRA.

4 Conclusion

SRA can be added to most air-conditioners or refrigeration systems. After SRA is added to the system, you will immediately start to save energy. As a synthetic component, SRA will not cause any damage to the cooling systems, and on the contrary, it extends the life of the system and thereby reduces maintenance.



SRA is applicable for air cooled and chiller units (for both refrigeration and air conditioning) in residential, commercial, industrial, automotive, and refrigerated transport applications.

Power Knot guarantees an improvement in efficiency of the a/c system of at least 10% after treating with the SRA and in most applications there is a savings in energy of between 15% and 25%.

Power Knot provides safe and economically sound solutions for businesses seeking to reduce energy costs and their carbon footprint through maximizing the efficiency of their cooling systems. Power Knot works with commercial, industrial, and military customers globally to reduce the energy usage of their cooling system, improve energy efficiency, provide colder air, reduce maintenance expenses, and increase the lifetime of the systems. Our technologies are proven, available today, have been in reliable use for many years, and offer a payback period typically of less than three years. Power Knot has its headquarters in Milpitas California. For more information, access www.powerknot.com.

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