

Understanding Lubricant Enhancers

Why would you want to use A/C Lubricant Enhancer?

There is one reason that makes the use of superior lubricant important - **CUSTOMER SATISFACTION!** When a customer spends \$800 or more for a repair job, they want results. Choosing the right enhancer will provide your customer with:

- Faster Cool Down - Colder air
- Lower Humidity
- Improved mileage
- Extended Compressor Life
- It works year round

ICE32 has run hundreds of studies on the effects of adding an enhancer to the lubricants found in today's A/C systems. By adding ICE32 to the system you will get colder air, lower humidity, improved gas mileage and longer service life from the compressor. When your customer starts their vehicle they will be pleasantly surprised at how well it cools down.

What does this mean for you?

One function of the enhancer is to reduce wear on the moving parts of the compressor. What it means to you is longer service life and reduced warranty work. Zexel Valeo tested two GM HT-6 (Delphi) compressors for 36,000 miles. One had the standard PAG 150 (Delco 15-118) charge of lubricant while the other had an ICE32 treatment. The results of the Wear Metal Comparison showed the compressor with ICE32 had:

Element		HT-6 w/ Factory Lubricant (36,000 miles)	HT-6 w/ Factory lubricant and ICE 32 Treatment (36,000 miles)	Differences	HT-6 w/ factory lubricant and ICE 32 treatment (150,000 Miles)	Differences
Fe	Iron	13.2 ppm	3.1ppm	77% less	1.0ppm	93% less
Cu	Copper	7.9 ppm	<1.0ppm	88% less	2.0ppm	75% less
Al	Aluminum	7.0 ppm	<1.0ppm	86% less	1.0ppm	86% less
Sn	Tin	12.7ppm	2.8ppm	78% less	<1.0ppm	92% less
Si	Silicon	5.8ppm	3.8ppm	35% less	12.0ppm	52% more
Na	Sodium	1.5ppm	3.4ppm	56% more	9.0ppm	84% more
P	Phosphorus	190ppm	252.2ppm	25% more	691.0ppm	73% more
Zn	Zinc	88.1ppm	63.8ppm	28% less	9.0ppm	90% less
Mg	Magnesium	<1.0ppm	1.6ppm	83% more	11.0ppm	91% more
K	Potassium	2.3ppm	5.7ppm	60% more	<5.0ppm	54% more

You will notice that the last two columns show an HT-6 with 150,000 miles. The compressor was installed on a 2000 Suburban with 50 miles on the odometer was it was treated with ICE32. At 150,000 miles, even though the system was still operating normally, the oil was drained and tested. We have tried to find a HT-6 with a 150,000 miles running just the factory lubricant to test, but haven't found one. The results of the Wear Metal Comparison shows that even with 150,000 miles there was less wear than a compressor with only 36,000 with only the factory lubricant.

In this case "less" is better! The tests show ICE32 improves the compressor life by reducing friction and maintains that production for well over 100,000 miles.

Are all Lubricant Enhancers Created Equal?

The Society of Automotive Engineers (SAE) has developed SAE J2670 for all products used in an automotive system using R-134a. Dyes, lubricants, additives and enhancements must meet these standards. If they don't, use of them may void component warranties and damage the system.

ICE32 is proud to say we meet or exceed SAE J2670. In addition, we have conducted numerous tests at independent laboratories to prove our claims of improving overall system operation, including extended life and faster cool down.

What about others that claim to be lubricant enhancements?

There are products out there that claim to be lubricant enhancers, but when tested at an independent laboratory, none of them offered system improvements that ICE32 does. In each test performed ICE32 was the clear leader. Ask your representative for the test results and see for yourself, ICE32 is simply the BEST. Then try ICE32, you will see the results instantly - lower system pressures, colder duct temperatures, and improved component life.

Will ICE32 fix a failing system?

Simply said, nothing fixes broke. If the system has problems, the most common procedure is to fix the problem. But, there are times when that just is not possible. Your customers budget just won't allow an \$800 bill. By adding ICE32 to the system in question, you will get the advantage of the film that is applied to all the metal surfaces. This will have the immediate affect of reducing friction and additional wear maximizing the efficiency of the failing compressor.

ICE32 features and benefits

The unique properties of ICE32 extend air conditioning system life because it:

- Reduces friction, which cuts down the wear on metal parts and seals in the compressor
- Prevents oxidation and acid formation in the system
- Helps to keep compressor clean
- Improves thermal conductivity of the condensor and evaporator

The proof is in the testing

ICE32 is the result of years of development and testing. We have done an extensive series of tests at independent labs to prove our claims of system improvement and reduced wear. In addition, fleet tests have been conducted to establish the cost saving in maintenance costs and fuel saving. The results of these tests are available in a booklet that we published and available through our web site. www.ice32.com