

In This Issue:

- Help!....Now What?
- Charge 'Em Like The Doctor Does
- Who To Call When You Need Help
- 2003 Mid-Season Contamination Report
- Neutronics Introduces Two Break-through Product Updates
- Tips & Tricks
- Frequently asked Questions???

FAQ's**How do the Neutronics Refrigerant Identifiers decide if the refrigerant is good or bad?**

The SAE specification for refrigerant purity in a vehicle determines whether or not the refrigerant passes the identifier test. The pass/fail set point is 98% for reclaimed refrigerant. If the refrigerant tested is greater than 98% pure, it passes the test. If it is less than 98% pure, it fails.

Do I still need to change the vehicles A/C fittings when I use a blend refrigerant that is "EPA Approved For Use"?

YES!! Every Approved refrigerant has special fittings that must be used. Visit www.epa.gov/ozone/snap/refrigerants/fittlist.html for a complete list.

Have a comment or question about blend refrigerants, contamination, sealants, or anything else A/C. Email me at:

Peter.Coll@Neutronicsinc.com
Or call 610-524-8800 x 112

A/C Refrigerant Identifier P/N's:

Snap-On Tools	EEAC312C
Robinair ID Jr.	16900
Robinair Deluxe	16910
Neutronics ID Jr.	ID Jr.
Neutronics Deluxe RI-2002P-Air	

For more Products visit:
www.RefrigerantID.com

Help! I Found Sealant In A Car!!! Now What?

This is typical of the phone calls we've been getting all summer long:

Today there are two choices, fix the car or send the customer away. Fixing the vehicle is always the preferred choice. Repairs of this nature are very profitable and, one way or another, that system is going to be repaired by someone. In order to get started, take the following steps:

First, Inform the customer of what you have found and the resulting problem. Advise them that A/C Sealant should only be used as a last resort when the cost of properly repairing a leak exceeds the value of the vehicle. Let them know that the system can be repaired but, without replacing the entire system, there can be no warranty on the work.

Second, Recover the refrigerant using a "Junk" machine. Charge the customer a fee for recovery of the refrigerant equal to 20% of the value of the machine. Low end recovery only machines are available from many sources with prices starting around \$600.00.

Third, Flush the system components using a flush agent designed for removal of liquid sealant. Check with your flush agent supplier to see if it is certified for the removal of liquid sealant from the recovered refrigerant.



A/C System hoses clogged with sealant can make diagnosis of the problem nearly impossible.

Fourth, Repair or replace components as necessary until the system operates properly. Any sealant that had solidified in the system may cause restrictions and thus require component replacement.

Finally, Remember that you did not cause the problem!! Have sympathy for the customer but be sure to protect yourself from future problems by explaining the options to the customer.

Charge 'Em Like The Doctor Does....**"Sorry Car Repair Man, I Just Can't Afford It Right Now." Joe Customer**

Every automotive technician has had to deal with customers that want you to tell them what's wrong and then decide that they don't want you to fix it. They figure they will call the local parts store themselves, buy the part and spend a few hours at their brother-in-laws house installing it. Inevitably, some of them come back to you when their "Joe Backyard Mechanic" repair just doesn't work out or when they discover that they need a special \$700 tool to remove the old part. This type of customer was probably in your shop last week and will likely be back in one form or another every week until you retire.

When was the last time you went to the doctor and he told you there was no charge for his diagnosis, just get the prescription and have a nice day? When?...NEVER! The doctor charges for everything and doesn't think twice about it.

The patients expect to be charged for the doctor's "expertise", education, training and tools. In order to perform their craft, the doctor has to have a stethoscope, thermometer, blood pressure gauge, etc. Sound familiar? Automotive Technicians, Doctors, Veterinarians and the Maytag repair man all do the same thing. Yea there are differences, the doctor always has to work on the patient when it's running but the Maytag man doesn't and he charges whether the customer likes it or not.

Add It All Up!

Just like those highly paid Doctors, Automotive Technicians have "expertise", education, training and tools. These are not free and have to be paid for in order to maintain their practice. Every customer that hands you the keys should leave money in your cash register regardless of the circumstances. If you find no problem, charge them. If they don't want the work done charge them. Charge for EVERYTHING!!!

To Subscribe to the Contaminator, visit our website at www.RefrigerantID.com In the unlikely event that you wish to stop receiving this incredible newsletter full of great information, please send your name and email address to info@neutronicsinc.com with unsubscribe in the subject.

Neutronics Introduces Two Breakthrough Product Updates

A/C Tool Box

The Neutronics A/C Tool Box provides each of the necessary tools needed in addition to your A/C Recovery machine for troubleshooting and diagnosing mobile A/C systems. This exciting new tool includes a flexible, infrared temperature probe, digital gauge set, and refrigerant identifier. In addition, diagnostic software will save valuable time on A/C diagnosis and make the shop more money! This new tool consolidates all of the basics into one economical package. Add a leak detector and recovery machine and you are good to go! For more information of the A/C Tool Box, go to www.RefrigerantID.com



FlexTemp™

The Neutronics FlexTemp™ Temperature Probe provides a fast and easy method of taking temperatures throughout the vehicle. The high temperature range allows surface temperature measurements of up to 800°F on Heating & Cooling systems, Exhaust, Tires, and more. With features like simultaneous Min/Max display, Current, Previous and Differential calculations, °F or °C display and standard 9Vdc battery power, the FlexTemp™ is the ultimate Infrared thermometer. For more information on the FlexTemp™ series and our other exciting Automotive service tools, visit us on the web @ www.RefrigerantID.com



Who To Call?

Need help from a Neutronics Automotive team member? Here's a list of helpful contacts:

Customer Service:
Tracy Tung x 113

Spare Parts:
Marlene Costello x 100

Credit & Accounting:
Cindy Ruggirello x 106

Service:
Jack Derfler x 123

Product Manager:
Peter Coll x 112

"Every customer that hands you the keys should leave money in your cash register regardless of the circumstances."

Tips & Tricks From the Factory & Field

Diagnose A/C components with the Flex-Temp™

As a general rule, you can check to see if a specific A/C component is doing its job using the FlexTemp™ temperature probe. In general:

- The condenser inlet vs. outlet differential should be 25–40 °F.
- The FOT or TXV inlet vs. outlet differential should be 20–60 °F.

The FlexTemp™ features simultaneous differential temperature readings to make these measurements a "piece of cake".

Refrigerant Fingerprinting

Huh?? Fingerprinting is a method of using your Neutronics Refrigerant Identifier to analyzer new refrigerants such as 410A, 407C or the SNAP approved blends. This can give you a reasonable idea of what's in the system without a the need for a piece of NASA hardware. Here's the trick:

Get a virgin bottle of the refrigerant you are interested in and run 5 identifier tests. Print out the results or write them down. Take the lowest and highest reading for each refrigerant and create your fingerprint. Be sure to use a Neutronics Identifier that displays the % of R12, R134a, R22 & HC.

Sealant In Every Car?

Recently, we had a customer call us claiming: "There's sealant in every car I've tested!" We thought that **every** was a little unusual so we went through the "Quick Detect" test procedure with him to make sure he was doing it right. At first glance it certainly looked like he was right until....we discovered that he was disconnecting the unit from the car and then looking at the flow reading. No wonder there was sealant in **every** car. Common sense is not always so common.

Neutronics Releases 2003 Mid-Season Contamination Report

Watch Out For Those R134a Vehicles

The 2003 A/C season is in high gear and refrigerant contamination has once again come along for the ride. For the A/C Service Technician, it no longer matters which type fittings are on the system or which refrigerant is "supposed" to be in the system. Contamination can be found anywhere and everywhere.

R12 Use Declines

Have you noticed the recent decline in the price of R12? If not, take a look around and you'll find the price of R12 down between \$5 and \$10 per pound. The reason for the decrease is threefold: fewer R12 cars on the road, increased use of retrofitting and the surge in blend refrigerant installations. While none of these will increase contamination by themselves, the

missing pieces of the puzzle are the **FITTINGS**. With the increasing number of vehicles retrofitted to SNAP approved refrigerants, technicians should be seeing many instances where there are strange fittings installed on both the High and Low side. Unfortunately, this is just not the case! Any vehicle could have any refrigerant regardless of the connections on the service ports. Go to last column→

Contamination Cont.

What You Can Expect To Find

Reports of A/C system contamination during 2003 have shown a dramatic increase in systems with R134a service ports. Of the hundreds of reported contamination cases, nearly half were reported to have R134a fittings on the service ports. Contamination in these vehicles was primarily a combination of R134a and R12 presumably from a poor retrofit.

The Bottom Line

Identify the refrigerant in every car you touch. Today, it is impossible to tell where the car has been, who has serviced it or if someone has installed a can of "Magic" in an effort to save a few bucks.

