

## Giving the compressor more of a fighting chance

In the January/February 2014 issue of MACS Action Magazine, there was a compressor installation article (cover story) titled "Giving the new compressor a fighting chance," which described what it takes to reduce the high failure and return rate of replacement compressors. The compressor supplier recommendations described in that article almost mirror the OE installation procedures, and wisdom from the field described proper practice issues such as fit, torque, belts, tensioners, flushing, charge pressures, leaks, and more.

Looks like we have got it all covered; so why do replacement compressors continue to fail? Many of you would answer this question with opinions about product quality, country of origin, installation procedures, factory service procedures, training, tooling, etc. While I can agree that many of these reasons are valid at times, they are not the root cause.

From my perspective (and I'm not alone in this observation), the root cause is the failure to completely and properly clean and/or return the system to like-new condition. We need to look more closely at the fact that a failed compressor contaminates a system with used oils of unknown quality and quantity, potential additive cocktails and a high probability of metal shards and debris. Doing nothing more than "poofing" some solvent at it and installing new parts is not enough. We must face the facts and accept the responsibility of properly preparing the system for a new compressor, or replacement compressors will continue to fail.

The compressor manufacturers understand contamination; they do forced-failure tests and then effectively flush and clean their test stands between tests. Regardless of brand or country of origin, each manufac-

turer tests and measures the quality of their product, and they would never release a faulty product into the market. They see repeat failures as an installation issue, and many have made flushing a condition of their warranty "using approved flushing products and procedures."

The methods they "approve" just mirror the OE procedures that require only the low-flow, closed-loop flush available in the RRR machine that OEs require their dealership service departments to have in their shops. Many require using refrigerant only and warn against the use of solvents. Why? Because this satisfies the OE's warranty, reduces their environmental liabilities and shifts almost all of the responsibility and associated costs to you, the Professional Installer.

But is it enough? Don't you already go beyond minimum warranty requirements for other repairs when you know it decreases the chances of a repeat failure which is ultimately your responsibility?

Superior, proven and validated cleaning methods exist and they are used every day in Automotive, Fleet, Aviation, and Industrial applications to clean multi path and micro channel heat exchangers. "You can't flush those" is a myth. Other than replacing every component in the system, complete and effective enhanced-energy flushing is the only way to achieve the goal of returning a system to like-new conditions. Going beyond minimum warranty requirements is a step that always pays for itself.

Karl Matis  
HECAT Inc.



**DuPont™**  
AUTOMOTIVE REFRIGERANT  
HFO-1234yf

**Opteon® YF**

**DU PONT**

# Science of Cool

Opteon® YF is now available at these preferred partners and other DuPont distributors nationally!

For more on Opteon® YF, visit [SmartAutoAC.com](http://SmartAutoAC.com)

**FACTORY MOTOR PARTS™**  
[www.factorymotorparts.com](http://www.factorymotorparts.com)

**O'Reilly AUTO PARTS**  
PROFESSIONAL PARTS PEOPLE

Copyright 2014 DuPont. All rights reserved. The DuPont Oval Logo, DuPont™ and Opteon YF are registered trademarks or trademarks of E. I. du Pont de Nemours and Company or its affiliates. K-28356 (04/14)