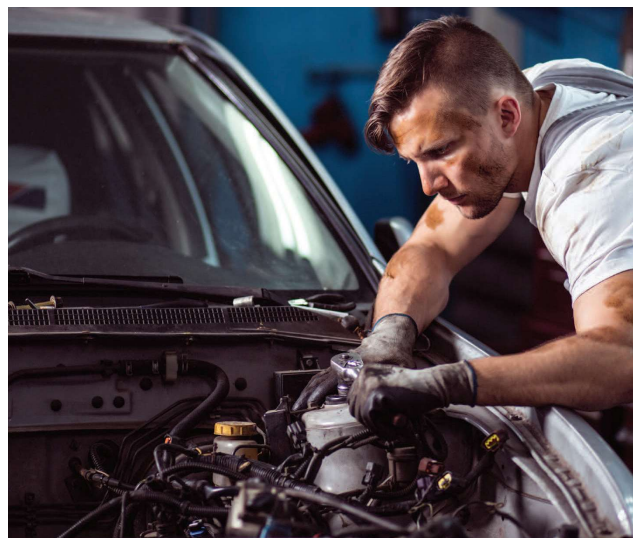


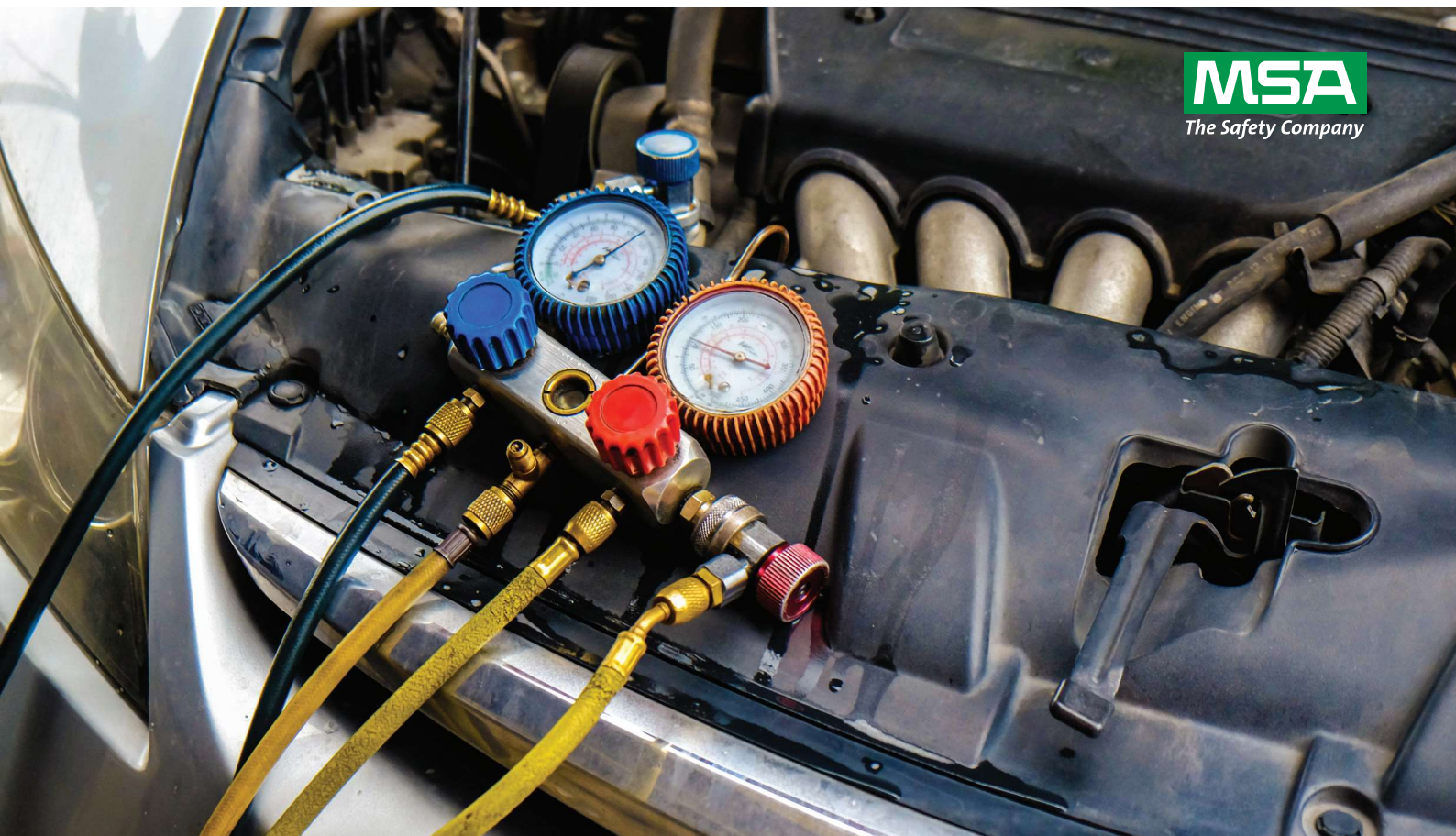
## MSA for Refrigerant Identification

*Refrigerant identification was first developed in the 1990's when the mobile air conditioning market transitioned away from R-12 refrigerant to R-134a. Since then, the environmental impacts of refrigerant continue to drive evolution with new refrigerants entering the market all the time. It is important to test refrigerant to ensure safety, efficiency, and optimize cooling. MSA's refrigerant identifiers, powered by Neutronics technology, are the established leader for the global Automotive and HVACR industries.*

Mobile Air Conditioning service is always evolving. One of the latest advances is the use of R-1234yf refrigerant to cool a vehicles cabin. Prior to the introduction of R-1234yf, mechanics were servicing vehicles equipped with R-12 or R-134a. But with the high ozone depletion potential (ODP) nature of R-12 and the high global warming potential (GWP) of R-134a came an industry demand for something more environmentally sustainable.

With tens of millions of vehicles equipped with R-1234yf falling out of warranty each year, it is imperative for technicians to have the tools required to service these vehicles.





## New Regulations Require New Tools

With the adoption of this new refrigerant comes new regulations and required tools. One of the newest tools in a mechanics kit will be the use of a refrigerant identifier. Prior to recovering refrigerant for A/C service a mechanic will need to complete a refrigerant analysis to confirm refrigerant quality.

## The Importance of Refrigerant Identification

In a perfect world the vehicle manufacturer's installed refrigerant would be the only refrigerant you would expect to find under the hood. However, refrigerant contamination can occur at any point after the vehicle leaves the production line and can lead to:

- Cooling loss
- Seal swelling
- A/C System degradation
- Mechanic or vehicle operator risk

## Be Safe. Be Certain.

Whether the refrigerant is incorrect, or mixed, the only way to be certain of what refrigerant is in that system is to test the gas. Refrigerant identifiers are the only sure way to confirm quality before completing automotive A/C service. Refrigerant identifiers protect the mechanic, your equipment, and ensure the service is done right. Refrigerant tampering in new vehicles utilizing R-1234yf is considered emissions tampering, and analyzing the refrigerant in the vehicle confirms emission standards are met, and A/C systems are serviced correctly.

## SAE standards for R-1234yf service tools

SAE International, initially established as the Society of Automobile Engineers and later becoming the Society of Automotive Engineers, is a US-based, globally active professional association and standards developing organization for engineering professionals in various industries. With the introduction of R-1234yf, SAE established new standards for servicing vehicles with R-1234yf. These new standards require a SAE J2843™ or SAE J3030™ approved A/C Service Machine (RRR), a SAE J2913™ Leak Detector, a SAE J2912™ or SAE J2927™ refrigerant analyzer, and a SAE J2851™ recovery machine.

## Built-in refrigerant identifiers or hand-held?

### Built-in refrigerant identifiers:

These are SAE J2927™ and SAE J2912™ certified refrigerant analyzers that are built into RRR A/C Service Machine. This simplifies the whole process and creates one system to both identify, recover, recycle and recharge the refrigerant during A/C Servicing.

### Hand-held refrigerant identifiers:

The Legend Series R-1234yf/R-134a a SAE J2912™ portable refrigerant analyzer that provides a little more flexibility in the shop. This device allows you to have multiple recovery machines (without built-in identifiers), and take one analyzer machine to machine, rather than lugging around one machine from bay to bay. The hand-held devices allow technicians to pre-check vehicles, without having to connect the RRR service cart, reducing evaluation time and helping to sort vehicles before servicing.

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# Internal Automotive A/C Embedded Identifiers

USB and RS-232 interfaces provide clear data connections to the A/C service machine



A Mounting bezel provides a visually pleasing finished appearance to the module and allows access to the Sample Filter from the visible surface of the A/C Service Machine



### More Information:

Scan the QR code to learn more about this and other products built with Neutronics technology.

## EID-1234yf VDA Embedded Identifier

### VDA COMPLIANT R-1234yf ANALYZER (P/N 7-08-1234-00-2)

The EID-1234yf VDA Embedded Identifier is designed to meet the requirements of the German VDA and is installed into VDA compliant A/C service machines. The EID-1234yf VDA Embedded Identifier is considered an OEM product supplied to A/C Service machine manufacturers.

### Application

Installation into VDA Compliant A/C Service Machines

### Features

Refrigerants	R-1234yf
Set Point	95.0%
Output	Pass / Fail
Test Time	60 Seconds
Calibration	Automatic
Interface	USB, RS-232
Sample Type	Vapor Only 300 psig max.
Temperature	50-120°F (10-49°C)
Power	12 VDC
Warranty	One Year

### Certifications

UL, UKCA, CE, VDA

### Accessories

N/A

### Replacement Parts

Replacement Sample Filter	H6-02-6000-08-0
Replacement R-1234yf Flow Restrictor Hose	H6-02-6001-18-1