NEUTRONICS
REFRIGERANT ANALYSIS
456 Creamery Way
Exton, PA 19341

The vast majority of Neutronics manufactured refrigerant identifiers are configured for the detection of R134a, R12, R22 and Hydrocarbons. ***No current or previous Neutronics R134a identifier is/was designed for detection of R40 as a direct contaminant.*** Neutronics has evaluated the performance of both current and legacy refrigerant identifiers to determine their suitability for use in testing cylinders with the suspect material. ***It is important to note that the ONLY acceptable test results for an R134a cylinder is:***

R134a	***100%***
R12	***0.0%***
R22	***0.0%***
HC	***0.0%***
Air/Non	***0.0%***

As a result of this testing, the following chart demonstrates the typical results when detecting small amounts of R40 mixed with R134a.

10% R40, 90%R134a					
Model	**R134a**	**R12**	**R22/Other**	**HC**	**Air/Non**
Ultima ID DX Series	100%	0%	0%	0%	4.1%
Ultima ID HV Series	100%	0%	0%	0%	4.1%
ID Jr.	FAIL	N/A	N/A	N/A	N/A
ACR-2000	98.5%	0%	0%	1.5%	3.4%

Other models such as the Mini ID R134a and Ultima ID Pro are not suitable for detection of 10% R40 Contaminants.

20% R40, 80%R134a					
Model	**R134a**	**R12**	**R22/Other**	**HC**	**Air/Non**
Ultima ID DX Series	97.5%	0%	0%	2.5%	N/A
Ultima ID HV Series	97.5%	0%	0%	2.5%	N/A
Ultima ID Pro	96.8%	0%	0%	3.2%	N/A
ID Jr.	FAIL	N/A	N/A	N/A	N/A
ACR-2000	96.7%	0%	0%	3.3%	10.0%

Other models such as the Mini ID R134a are not suitable for detection of 20% R40 Contaminants.

*Proper precautions should always be taken when working with refrigerants.