

Refrigerant Identification Testing - Vehicles With: R1234YF Refrigerant

Special Tool(s) / General Equipment

Refrigerant Identification Equipment

Activation

1. **NOTE:** Use Refrigerant Identification Equipment to identify gas samples taken directly from the refrigeration system or storage containers prior to recovering or charging the refrigerant system.

NOTE: Use Refrigerant Identification Equipment that conforms to SAE J2912 standard for R-1234yf.

Follow the instructions included with Refrigerant Identification Equipment to obtain the sample for testing.

- 198•RI2012yfp A/C Refrigerant Analyzer for use with R134a and R1234yf vehicles
Use the General Equipment: Refrigerant Identification Equipment

2. **NOTE:** The refrigerant identifier displays one of the following:

- If the purity level of R-1234yf is 98% or greater by weight, the green PASS LED. The weight concentrations of R-1234yf, R-134a, R-12, R-22, hydrocarbons and air will be displayed on the digital display.
- If refrigerant R-1234yf does not meet the 98% purity level, the red FAIL LED and an alarm sounds alerting the user of potential hazards. The weight concentrations of R-1234yf, R-134a, R-12, R-22 and hydrocarbons will be displayed on the digital display.
- If hydrocarbon concentrations are 2% or greater by weight, the red FAIL LED, "Hydrocarbon High" will be displayed on the digital display, and an alarm will sound alerting the user of potential hazards. The weight concentrations of R-1234yf, R-134a, R-12, R-22 and hydrocarbons will also be displayed on the digital display.

3. The percentage of air contained in the sample will be displayed if the R-1234yf content is 98% or

greater. The refrigerant identifier eliminates the effect of air when determining the refrigerant sample content because air is not considered a contaminant, although air can affect A/C system performance. When the refrigerant identifier has determined that a refrigerant source is pure (R-1234yf is 98% or greater by weight) and air concentration levels are 2% or greater by weight, it will prompt the user if an air purge is desired.

4. If contaminated refrigerant is detected, repeat the refrigerant identification test to verify the refrigerant is indeed contaminated.
5. **NOTICE: If contaminated refrigerant is detected, DO NOT recover the refrigerant into R-1234yf recovery/recycling equipment. Recovery of contaminated refrigerant contaminates the recovered refrigerant supply and may damage the recovery/recycling equipment.**

NOTE: *Install a new suction accumulator or receiver drier or receiver drier element as directed by the A/C system flushing procedure.*

Recover the contaminated refrigerant using suitable recovery-only equipment designed for capturing and storing contaminated refrigerant only.

6. Determine and correct the cause of the customer's initial concern.
7. Refer to Air Conditioning (A/C) System Flushing procedure in Group 412.
8. Dispose of the contaminated refrigerant in accordance with all federal, state and local regulations.