

# ROBINAIR.

09-134 Rev. C ©2014 Bosch Automotive Service Solutions. All rights reserved. Because of ongoing product improvements, we reserve the right to change design, materials and specifications without notice. Certain kits may require additional cables or adapters. Product shipped may differ from photo(s) shown.



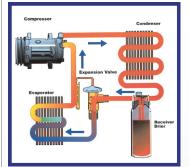
## **Setting The Course For Change**

In June 2005, the Society of Automotive Engineers (SAE) started a research program to reduce the emissions of R-134a. The program, called I-MAC (Improved Mobile Air Conditioning), was tasked with cost effectively improving R-134a systems while reducing refrigerant emissions. The I-MAC members have pledged to design smaller systems with fewer leak points and improve service equipment. As a result of this program, the SAE recently approved tighter standards for automotive A/C recovery. recycle and recharge equipment. The new standard, SAE J-2788, requires that all service equipment manufactured after December 31, 2007, must recover 95% of the refrigerant and recharge to within 1/2 ounce.

### **How will this affect ME?**

For years, R-134a was cheap and plentiful. Today it's a different story – refrigerant is much more expensive and not always available. The Robinair 34988, 34788 & 34288 recover up to 20% more refrigerant, which means it will cost less to recharge the system. The best charge accuracy that could be claimed by older generation service machines was +/- 1 ounce, a 3% error on a two-pound system. That same charge accuracy on a 14-ounce system is over twice the error (7%). Early R-134a systems could still provide some cabin cooling when they were 4-6 ounces (12-18%) low on refrigerant. However, new designs are so efficient, they do not have reserve refrigerant, and charge accuracy is critical. The 34988, 34788 & 34288 will recharge the vehicle to within 1/2 ounce of the charge capacity, and you will avoid the dreaded "come back". As the shop owner, you will realize more profits per service by recovering more refrigerant and charging less. Refer to the ROI worksheet on the back of this brochure to determine your actual cost savings. The savings will be obvious.

## Applying The New Standard

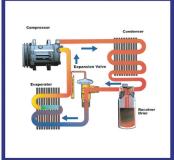


©MACS Worldwide 2007

Older, larger systems and components served as a reservoir for refrigerant.

Capacity . . . . . . . . 28 oz. Charge Accuracy. . . ±1 oz. Charge Error . . . . . 3.6%

2000 Chevrolet Malibu



©MACS Worldwide 2007

New A/C systems are physically smaller and require increased charge accuracy.

Capacity . . . . . . 21.6 oz. Charge Accuracy. . 0.5 oz. Charge Error . . . . . 2.3%

2006 Chevrolet Malibu

# **Combining Simple Operation With Superior Accuracy:**

Whether it's the fully-automatic 34988, 34788 or the semi-automatic 34288, these machines will test, recover, and recharge R-134a automotive AC systems quickly and accurately.	428	874	498
Features:			0
Fully-Automatic Function: Program to recover, vacuum, leak test and charge without operating panel valves.	-	V	V
Automatic Dye Inject: Gives the user the ability to use the machine to inject UV dye into a vehicle's A/C system.	-	-	✓
Automatic Oil measure & Inject: The machine will automatically determine how much lubrication oil needs to be injected back into the A/C system based on how much oil was taken out during recovery.	-	-	<b>✓</b>
Automatic Oil Drain: A display reminds you to empty the graduated container to show the amount of oil to replace.	✓	✓	✓
Oil Inject: Automatically inject oil back into the vehicle A/C systems.	-	<b>✓</b>	<b>✓</b>
Refrigerant & Oil Database: A/C system capacities for North American market vehicles.	-	Optional	Optional
A/C system flush: Flushes a vehicle's A/C system with refrigerant eliminating any residual oil or other liquid. (Flushing adapters - not included)	-	-	<b>✓</b>
Save & Print before and after service data: Allows the user to store before and after service information by vehicle and print this information to provide to a customer.	-	-	<b>✓</b>
Indicator light and notification alarm: Notifies the user when service is complete, or if a problem has occurred.	-	-	✓
Vacuum Leak Test: Monitors level after evacuation, informs of possible leak.	-	<b>✓</b>	<b>✓</b>
Automatic Air Purge: Eliminates damaging air without monitoring gauges or opening valves.	✓	<b>✓</b>	<b>✓</b>
Automatic Refrigerant Refill: Maintains a user-selectable amount of refrigerant in an internal vessel and signals with it's time to change supply tank, no monitoring required.	~	~	<b>~</b>
Vacuum Feature: Defaults to 15 mins, programmable up to 99 mins. "Remaining time" is displayed.	-	<b>V</b>	<b>✓</b>
Display: Multilingual	✓	<b>✓</b>	V
Refrigerant Charging: Select a charge mode from high or low side.	high or Low	high/Low/Both	high/Low/Both

## **Investing In The Future**

appear when 1/3 of filter life remains.

#### Your Cost 34288, 34788 & 34988 Return On Investment **National Average** \$149.99 A. Price for A/C Service B. Value of refrigerant recovered from vehicle being serviced. Low charge in vehicle (1 lb.) and \$6.00 recovered at 95% efficiency. C. Material Cost (1.5 lbs. of R 134a and PAG oil) -\$10.00 -\$50.00 D. Labor/Overhead \$95.99 E. Profit per Service (A+B+C+D) \$2,399.00 F. Monthly Profit (25 Services)

Refrigerant Management System: Displays refrigerant use and monitors remaining filter life. Prompts

Maintain your profitability and avoid costly "come backs" by ensuring critical charge accuracy! Refrigerant service equipment manufactured under the old standard cannot guarantee charge accuracy. The Robinair 34288, 34788 and 34988 can pay for itself in as little as 2.5 months.



- Keep recovery and recycling units operating at peak efficiency with a convenient maintenance kit.
- Contains one quick change filter-drier to be used on both R-12 and R-134a stations, and one 16 ounce bottle of our Premium High Vacuum Pump Oil.

**No. 34724** Spin-on recycling filter-drier 34988, 34788, 34288, 34700Z, & 34134Z.

**No. 13172** Spin-on recycling filter-drier 34988, 34788, 34288, 34700Z, & 34134Z. Includes premium high vacuum pump oil.