

# **ROBINAR**®



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34788-H

ShE J2188

# Recovery/Recycling 34788 & 34788-H



## Suitable for servicing vehicles with a high voltage electric compressor

Hybrid vehicles are becoming more popular these days as the price of gasoline continues to rise. Back in 2001 there were a total of 4 hybrid models available, today in 2011 that number has increased to 41 models available and continues to grow. Looking at the numbers, in 2009, there were over 1.4 million hybrids in the U.S.A. with better than 1 million of them using high voltage electric compressors. As the number of hybrid vehicles continues to increase, it present new challenges to service facilities providing A/C service work to both vehicles with traditional A/C systems, and the high voltage electric compressor systems used on many hybrids.

#### What changes were made to the SAEJ2788 standard?

To address the differences in the A/C system on certain hybrids, in June 2010, the SAE published a revised version of the SAE J2788 standard that covers the operation of an A/C Recover, Recycle and Recharge (RRR) machine. The revised requirements state that a machine must:

- 1. Not have on board automatic/ manual oil or dye injection.
- 2. Must be capable of charging refrigerant into a system with less than 0.1% by weight of any residual oil. A machine must meet these new requirements to be suitable for servicing both vehicles with a high voltage electric compressor that uses POE oil and traditional PAG oil systems.

#### How can you tell if an A/C RRR machine is suitable for servicing hybrid vehicles?

Aside for the obvious—there should be no automatic oil injection anywhere on the A/C RRR machine, another way to tell if a machine is certified as suitable for servicing vehicles that use high voltage electric compressors is to look for the marking shown below:



### Certified for High Voltage Compressor Service

Combining Simple Operation With Superior Accuracy: These machines will test, recover, and recharge R-134a automotive AC systems quickly and accurately. Features:		34788-H	
Fully-Automatic Function: Program to recover, vacuum, leak test and charge without operating panel valves.	<ul> <li>✓</li> </ul>		<b>~</b>
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.	-		-
Automatic Oil Drain: A display reminds you to empty the graduated container to show the amount of oil to replace.	<ul> <li>✓</li> </ul>		<b>~</b>
Oil Inject: Automatically inject oil back into the vehicle A/C systems.	<b>v</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)	-		~
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>		✓
Automatic Air Purge: Eliminates damaging air without monitoring gauges or opening valves.	<ul> <li>✓</li> </ul>		<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.	V		~
Vacuum Feature: Defaults to 15 mins, programmable up to 99 mins. "Remaining time" is displayed.	<b>v</b>		✓
Display: Multilingual	<b>v</b>		✓
Refrigerant Charging: Select a charge mode from high or low side.	high/Low/Both		high/Low/Both
Refrigerant Management System: Displays refrigerant use and monitors remaining filter life. Prompts appear when 1/3 of filter life remains.	V		~