

# The right machine is always Robinair



## Robinair R-134a and R-1234yf A/C Comparison

Combining simple operation with superior accuracy. These machines will test, recover and recharge R-134a automotive and R-1234yf AC system quickly and accurately.

Robinair A/C service tools and equipment are sold through distribution partners, resellers and retailers.

34998

AC1234-9

# The right machine is always Robinair

## Standard on Robinair R-134a machines:

- > 1.5 CFM dual-stage vacuum pump (single-stage on 34288NI)
- > 30-lb DOT internal tanks (22-lb DOT on 34288NI)
- > 9' SAE J2886 hoses (9' SAE J2196 on 34288NI)
- > 150-lb (68kg) spin-on filter, P/N 34724
- > Integrated cord wrap
- > Unmatched minimum 98.5% refrigerant recovery
- > Charging accurat to within +/- 0.5 oz



Features	34288NI	34788NI	34788NI-H	34988NI	34998
Fully-Automatic Function	Semi-automatic, manual valves	Yes	Yes	Yes	Yes
Automatic Dye Inject: 1/4-oz during recharge, user-selectable	–	–	–	Yes	Yes
Automatic Oil Drain: Shows amount of oil to replace	Yes	Yes	Yes	Yes	Yes
Automatic Oil Inject, user-programmable	18480 or 18490 syringe required	Yes*	18480 or 18490 syringe required	Yes*	Yes*
Refrigerant & Oil System Capacity Database for North American market vehicles	Optional, 34412-E	Optional, 34412-E	Optional, 34412-E	Optional, 34412-E	Optional, 34001
A/C System Refrigerant Flush (Flushing adapters not included)	–	Yes	Yes	Yes	Yes
Save, print and store before and after service data	No save, optional printer 30038	Yes, optional printer 30038	Yes, optional printer 30038	Yes, printer included	Yes; Mopria Print Service wireless printing
Visual & Audible Alarm / Notifications	–	Yes	Yes	Yes	Yes
Vacuum Leak Test and Monitoring	–	Yes	Yes	Yes	Yes
Automatic Air Purge: Eliminates system-damaging air without monitoring gauges or opening valves.	Yes	Yes	Yes	Yes	Yes
Automatic Refrigerant Refill: Maintains a user-selectable amount of refrigerant in an internal vessel and signals when it's time to change supply tank, no monitoring required	–	Yes	Yes	Yes	Yes
Vacuum Feature: Defaults to 15 mins, programmable up to 99 mins. "Remaining time" is displayed.	Yes	Yes	Yes	Yes	Yes
WiFi / Bluetooth capable	Yes, requires 80211TMP or 80211VCI master kit	Yes, requires 80211TMP or 80211VCI master kit	Yes, requires 80211TMP or 80211VCI master kit	Yes, requires 80211TMP or 80211VCI master kit	WiFi, Bluetooth enabled from the factory
Display: Multilingual.	Yes, 4.3" 480x272 QVGA Color LCD	Yes, 4.3" 480x272 QVGA Color LCD	Yes, 4.3" 480x272 QVGA Color LCD	Yes, 7" graphical LCD	Yes, 10.5" hi-res touch screen
Refrigerant Charging:	Low side only	High, low or both sides	High, low or both sides	High, low or both sides	High, low or both sides
Refrigerant Management System: Displays refrigerant use & monitors remaining filter life. Prompts appear when 1/3 of filter life remains.	Yes	Yes	Yes	Yes	Yes
Electric Vehicle: Capable of servicing high voltage electric compressor A/C systems.	–	–	Yes	–	–

\*34788NI uses one oil bottle; 34988NI and 34998 include two oil bottles and one UV dye bottle

Specifications	34288NI	34788NI	34788NI-H	34988NI	34998
Operating voltage	115V, 60 Hz	125 VAC, 60 Hz	125 VAC, 60 Hz	125 VAC, 60 Hz	125 VAC, 60 Hz
Pressure gauges	80mm	100mm, EN-837-1	100mm, EN-837-1	100mm, EN-837-1	Digital display
Keyboard	Alpha-numeric with service function keys	Alpha-numeric with service function keys	Alpha-numeric with service function keys	Alpha-numeric with service function keys	Touchscreen virtual keyboard
Compressor	1/3 hp hermetic	3/8 hp, pressure-protected, oiled, hermetically sealed	3/8 hp, pressure-protected, oiled, hermetically sealed	3/8 hp, pressure-protected, oiled, hermetically sealed	3/8 hp, pressure-protected, oiled, hermetically sealed
SAE compliance for R-134a	Yes, J2788 certified	Yes, J2788 certified	Yes, J2788H certified	Yes, J2788 certified	Yes, J2788 certified

# OEM-trusted, shop-tested R-1234yf recovery machines

## Standard on all Robinair R-1234yf machines:

- > 1.5 CFM dual-stage vacuum pump
- > 22-lb DOT internal tanks (30-lb DOT on AC1234-9)
- > 9' SAE J2886 hoses (8' SAE J2888 on AC1234-6)
- > 330-lb (150kg) spin-on filter, P/N 34724
- > Integrated cord wrap
- > Unmatched minimum 98.5% refrigerant recovery
- > Charging accuract to within +/- 0.5 oz



Features	AC1234-6	AC1234-4	AC1234-9
WiFi capable	No	Yes, requires 80211TMP or 80211VCI master kit	Yes, enabled from the factory
Bluetooth capable	No	Yes, requires 80211TMP or 80211VCI master kit	Yes, enabled from the factory
Operating system	Windows CE	Robinair proprietary OS	Android 8.1 Oreo
Free WiFi software updates	N/A - not WiFi capable	Yes, requires 80211TMP or 80211VCI master kit	Yes, enabled from the factory
Fully-Automatic Function	Yes	Yes	Yes
Integrated refrigerant identifier (meets SAE J2927)	Yes	Yes	Yes
Automatic Refrigerant Refill: Maintains a user-selectable amount of refrigerant in an internal vessel and signals when it's time to change supply tank, no monitoring required	Yes	Yes	Yes
A/C System Refrigerant Flush (Flushing adapters not included)	Yes	Yes	Yes
Vacuum Feature: Defaults to 15 mins, programmable up to 99 mins. "Remaining time" is displayed.	Yes	Yes	Yes
Automatic Oil Drain: Shows amount of oil to replace	Yes	Yes	Yes
Automatic air purge - removes potential of air accumulating in the internal tank	Yes	Yes	Yes
Vacuum Leak Test and Monitoring	Yes	Yes	Yes
Display: Multilingual.	5.7" 960x240 QVGA color LCD	Yes, 4.3" 480x272 QVGA Color LCD	Yes, 10.5" hi-res touch screen
Refrigerant charging	High, low or both sides	High, low or both sides	High, low or both sides
Refrigerant & Oil System Capacity Database for North American market vehicles	Optional, 34414-B	Optional, 34413-D	Optional, 34002
Save, print and store before and after service data	Yes, printer included	Yes, optional printer 30038	Yes; Mopria Print Service wireless printing and PDF export option
Refrigerant Management System: Displays refrigerant use and monitors remaining filter life. Prompts appear when 1/3 of filter life remains.	Yes	Yes	Yes
Electric Vehicle: Capable of servicing high voltage electric compressor A/C systems.	Yes	Yes	Yes
Visual & Audible Alarm / Notifications	Yes	Yes	Yes

Specifications	AC1234-6	AC1234-4	AC1234-9
Operating voltage	103 - 127V, 60 Hz AC	115 VAC, 60 Hz	125 VAC, 60 Hz
Pressure gauges	100mm, EN-837-1	100mm, EN-837-1	Digital display
Keyboard	Alpha-numeric with service function keys	Alpha-numeric with service function keys	Touchscreen virtual keyboard
Compressor	1/3 hp hermetically sealed	1/3 hp hermetically sealed	3/8 hp, pressure-protected, oiled, hermetically sealed
SAE compliance for R-1234yf	Yes, J2843, J2927 certified	Yes, J2843, J2927 certified	Yes, J2843, J2927 certified

# Maximize your Robinair investment

## Accessories

### Vehicle refrigerant capacity databases

- › Confirm A/C system charge capacities directly from your Robinair machine
- › Includes charge amounts and component oil capacities for vehicle model years 1997 – 2020 for R-134a machines or 2013 – 2020 for R-1234yf machines

### Thermal printer and paper to document vehicle service

- › 30038 printer for 34288NI, 34788NI and 34788NI-H machines
- › 34214 3-pack printer paper

### Wireless accessories

#### Bluetooth temp probes 80211TMP master kit, 80212 2-pack, 80213 single probe

- › Read and track temperatures from multiple locations from your A/C machine
- › 80211TMP master kit enables WiFi and Bluetooth capabilities on NI and AC1234-4 machines and includes 2 probes
- › Use up to 2 probes per compatible Robinair machine
- › 80212 / 80213 work directly with 34998 and AC1234-9 connected machines

#### 80211VCI master kit + database

- › Enables WiFi and Bluetooth capabilities on NI and AC1234-4 machines
- › Wirelessly gather and transmit vehicle year, make and model info to your compatible Robinair machine
- › Includes current-year refrigerant capacity database to quickly determine correct refrigerant charge, oil type and oil capacity
- › Also reads generic OBDII codes to help troubleshoot A/C system issues

#### ACS-250 Robinair VCI

- › Wirelessly gather and transmit vehicle year, make and model info to your compatible Robinair machine
- › Works directly with 34998 and AC1234-9 connected AC machines; will work with NI and AC1234-4 machines if they have been WiFi/Bluetooth enabled
- › Requires purchase of refrigerant capacity database to show refrigerant capacity, oil type and oil amount
- › Also reads generic OBDII codes to help troubleshoot A/C system issues

## Machine maintenance

### 34724 spin-on recycling filter-drier

- › Specially blended for maximum acid and moisture removal
- › Filters up to 330 lbs (150 kg) of R-1234yf; up to 150 lbs (75 kg) of R-134a
- › See chart below or Robinair.com for machine compatibility

### 13172 Maintenance kit for models using 34724 filter-drier

- › Includes filter-drier and 16-oz bottle of Premium High Vacuum Pump Oil
- › Filters up to 330 lbs (150 kg) of R-1234yf; up to 150 lbs (75 kg) of R-134a
- › See chart below or Robinair.com for machine compatibility

### 17499 Protective cover

- › Heavy-duty vinyl cover protects your investment from dirt, dust and shop spills



34412-F



30038



34214



80211TMP



80212



80213



80211VCI



ACS-250



34724



13172



17499

## Enhance your machine's performance

		Wireless Accessories				
		Non-wireless A/C Machine			Wireless Enabled A/C Machine	
AC Machine	AC Capacities DB	Printer	VCI	Temp Probes	VCI	Temp Probes
34288NI, 34788NI, 34788NI-H	34412-F	30038	80211VCI	80211TMP	ACS-250*	80213 or 80212*
34988NI	34412-F	Included	80211VCI	80211TMP	ACS-250*	80213 or 80212*
34998	34001	Mopria Print Service wireless printing	n/a	n/a	ACS-250	80213 or 80212
AC1234-4	34413-D	30038	80211VCI	80211TMP	ACS-250*	80213 or 80212*
AC1234-6	34414-B	Included	No WiFi capabilities			No WiFi capabilities
AC1234-9	34002	Mopria Print Service wireless printing	n/a	n/a	ACS-250	80213 or 80212

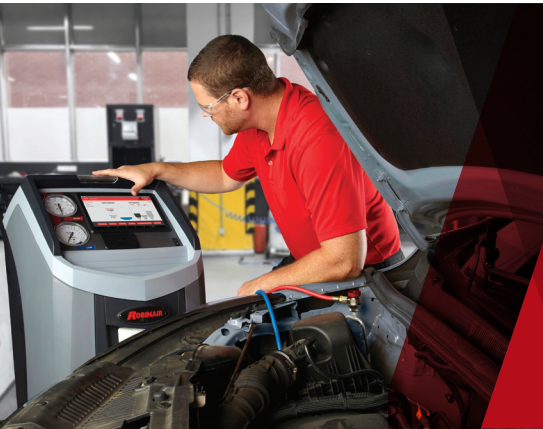
## Maintain your machine for years of reliable service

AC Machine	Filter	Maintenance kit (Filter + oil)	Cover	Oil injectors	High side coupler	Low side coupler
34288NI, 34788NI, 34788NI-H	34724	13172	17499	18480 or 18490 for hybrid service	18191A	18190A
34988NI, 34998	34724	13172	17499	N/A	18191A	18190A
AC1234-4, AC1234-6, AC1234-9	34724	13172	17499	18460, 18465, 18470	18123	18122

\*Use of ACS-250, 80212 or 80213 on NI and AC1234-4 machines requires machine first be WiFi/Bluetooth enabled using either 80211TMP or 80211VCI master kit

## 80% of the top-10 vehicle models sold in 2019 use R-1234yf

50%+ of all new vehicle models sold also use the new refrigerant



AC1234-4



AC1234-9  
Connected

### Why are manufacturers using R-1234yf?

Automakers receive CAFE credits for using the new refrigerant. Using R-1234yf helps them meet federal requirements for how far a vehicle must travel on a gallon of fuel.

### What do I need to service R-1234yf systems?

- › A new machine meeting SAE J2927 and J2843 standards; Robinair's AC1234-4, AC1234-6 or AC1234-9
- › A new leak detector meeting SAE J2913 and J2791 standards; Robinair's LD3, LD5 or LD7
- › A syringe-type oil injector to inject oil back into the system; Robinair's 18465
- › Optional tracer gas leak detector to reduce cost searching for leak; Robinair's LD9-TG

### Why Robinair?

- › Robinair created the first commercially available R-1234yf machine in North America to fully meet the SAE's requirement for R-1234yf recovery, recycling and recharging
- › Robinair R-1234yf machines are in more repair shops and dealerships in North America than all other brands combined
- › Patented automatic background tank fill ensures you'll always have enough refrigerant to recharge a vehicle
- › New connected machines and accessories for industry-leading connectivity, service and reporting
- › Unmatched efficiency means more refrigerant is recovered for more accurate charging

### Top-10 vehicle models sold in 2019, United States

Vehicle	Uses R-1234yf?	Dealers use Robinair R-1234yf machine?
1 Ford F-150	Yes	Yes
2 Ram trucks	Yes	Yes
3 Chevrolet Silverado	Yes	Yes
4 Toyota Rav-4	Yes	Yes
5 Honda CR-V	Yes	Yes
6 Toyota Camry	Yes	Yes
7 Nissan Rogue	No	Yes
8 Chevrolet Equinox	Yes	Yes
9 Honda Civic	Yes	Yes
10 Toyota Corolla	No	Yes

## Industry-leading efficiency and more accurate service

# R-1234yf: What do I need?

## A new Leak Detector

Your existing leak detector may not recognize R-1234yf, meaning you may not catch an expensive refrigerant leak. Invest in one that meets SAE J2913 and J2791 standards

- › LD3 leak detector automatic calibration and audible alerts
- › LD5 leak detector with bar graph mode and color display
- › LD7 premium leak detector with bar and pinpoint graphing modes



LD7 shown

## New Syringe-Type Oil Injectors

1234yf systems have different fittings and couplers, requiring a new syringe-type oil injector to put oil back into the system. Current SAE standards for 1234yf service does not allow automatic oil injection on a machine

- › 18460 unlabeled 1234yf oil injector
- › 18465 PAG-labeled 1234yf injector
- › 18470 POE-labeled 1234yf injector

18465  
shown

## Optional Tracer Gas Leak Detector

R-1234yf is expensive. Tracer gas is cheap.

When looking for leaks in 1234yf systems, tracer gas and a tracer gas detector can help find leaks faster at a significant savings. The 95% nitrogen / 5% hydrogen gas mix will not harm A/C systems and can help find leaks.

- › LD9-TG tracer gas leak detector
- › LD9-TGKIT tracer gas leak detector with R-1234yf and R-134a couplers, regulator and hose



LD9-TGKIT shown

**ROBINAIR**

Learn more about automotive A/C tools and equipment we have.