

A/C Service Equipment



As long as there's been air conditioning, there's been Robinair, the global leader in automotive and HVAC/R air conditioning (A/C) refrigerant recovery, recycling and recharge tools, equipment and accessories. Vehicle manufacturers (OEMs), dealership service departments, auto repair shops, industrial and commercial contractors have turned to Robinair for A/C service products since 1956.





Protect Your Investment

Robinair technical support, local service centers and flexible ToolGuard™ extended service coverage you can count on.

At Bosch Automotive Service Solutions Inc., we recognize that your purchase of Robinair tools and equipment is an important investment in your business.

Since 1956, Robinair has been and continues to be a world leader and trusted name in automotive HVAC A/C service equipment. We know you rely on the dependability of our products and the way we take care of you and your equipment after purchase. With a technical support team that is eager to help and hundreds of service centers throughout North America, we are able to quickly respond to your service needs.

Warranty Registration

Warranty registration is the most important step in helping us provide exceptional customer service for you. Registration is available online at www.robinair.com/support or call 1-800-822-5561 and follow the prompt for Robinair technical support.

ToolGuard™ Extended Protection Plan

Robinair provides factory warranty coverage with the purchase of your new tool. However, we expect you will be using your tools well beyond your factory warranty. To continue protecting your investment and budget your maintenance costs, consider keeping your coverage with the ToolGuard™ Extended Protection Plan.

To learn more about available coverage, visit us at robinair.com, e-mail us at toolguard@bosch-automotive.com or call us at 1-800-233-7055.

Warranty Replacement or Repair:

Handheld Robinair and TIF products

RepairTrack offers you the ability to manage your warranty replacement or repair experience for the Robinair handheld products by providing you with an easy way to send your product in for replacement or repair and track it. From the moment it leaves your facility to the moment it returns, you will have the latest information. Generate a Repair Return Authorization by printing out a UPS tracking number directly from this site. Review and approve Repair Estimates online. Make Credit Card payments for your Repairs online. Up to date warranty and service information include any special programs that exist with your product. Find out the latest repair policies and procedures, and where to go for additional information. Don't miss out on this valuable service. To learn more, log on to RepairTrack at repairtrack.bosch-automotive.com.

Robinair Refrigerant Recovery, Recycling, and Recharging products

When service is necessary on your Robinair air conditioning equipment in the field, have confidence that Robinair has you covered. Our extensive service network allows us to be truly local everywhere.

Installation, Set- up and Training

- › Provides technical expertise to ensure your product is installed correctly and set up for optimal performance by our factory-trained personnel
- › Standard for select products that require more attention
- › Customized training and setup programs are available to meet your specific needs

Service Network

- › Nationwide coverage with 225+ service centers provides convenience for service & maintenance on our air conditioning equipment in the field
- › Feel confident because our centers are authorized & factory-trained; providing quality, expert service
- › Centers have exclusive access to genuine OEM service parts

Quick Finder Index

R-134a Recovery/Recycling Units	2 – 3
R-1234yf Recovery/Recycling Units	4
Heavy-Duty Recovery/Recycling Units	5
A/C Flushing and Accessories	6 – 8
Refrigerant Identifiers	9
Refrigerant Leak Detectors	10
Combustible Gas Detectors	11
Ultrasonic Leak Detector	12
Digital Thermometer	12
A/C Fluorescent Dyes and UV Leak Detection	13
Thermometers	14
A/C Manifold Kits	15
Digital Manifold Gauges	15
Gauges and Service Couplers	16
Stem Replacement and Special Hoses	17
Charging Hoses	18
Coolant and Transmission Exchangers	19
A/C Vacuum	20 – 23
A/C Scales	24
Tubing Cutters	25
A/C Clutch Tools, Disconnect Tools	26
Fin Straightener, Valve Core Tools	27 – 28



34288NI

Economy R-134a Refrigerant Recovery, Recycling, and Recharging Machine

Combines simple operation with superior accuracy. It recovers, recycles, evacuates, and recharges R-134a mobile A/C systems quickly and accurately. The product meets the most current SAE J-2788 standards for accuracy and efficiency recovering over 95% of the refrigerant in the vehicle's A/C system and charging to within +/- 1/2 oz of the programmed charge amount.

(34288NI-230, 220V)



34788NI

Premier R-134a Refrigerant Recovery, Recycling, and Recharging Machine

Recover, recycle, evacuate, leak-test and recharge R-134a vehicle A/C systems. Features a larger graphical display, leak testing, automatic refrigerant refill and automated oil drain/inject – putting A/C lubricant back into the system. 34788NI also boasts an ability to add a printer and refrigerant identifier. An optional refrigerant charge and oil capacities database is available for North American market vehicles.

(34788NI-230, 220V)

Combining Simple Operation With Superior Accuracy:

These machines will test, recover, and recharge R-134a automotive A/C systems quickly and accurately.

Features	34288NI	34788NI	34788NI-H	34988NI
Fully-Automatic Function: Program to recover, vacuum, leak test and charge without operating panel valves.	–	Yes	Yes	Yes
Automatic Dye Inject: Gives the user the ability to use the machine to inject UV dye into a vehicle's A/C system.	–	–	–	Yes
Automatic Oil Drain: A display reminds you to empty the graduated container to show the amount of oil to replace.	Yes	Yes	Yes	Yes
Oil Inject: Automatically inject oil back into the vehicle's A/C systems.	–	Yes*	–	Yes**
Refrigerant & Oil Database: A/C system capacities for North American market vehicles (Optional – not included with the machine)	Optional	Optional	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)	–	Yes	Yes	Yes
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.	–	Yes	Yes	Yes
Visual & Audible Alarm: Notifies the user when service is complete, or if a problem has occurred.	–	Yes	Yes	Yes
Vacuum Leak Test: Monitors level after evacuation, informs of possible leak.	–	Yes	Yes	Yes
Automatic Air Purge: Eliminates system-damaging air without monitoring gauges or opening valves.	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
Vacuum Feature: Defaults to 15 mins, programmable up to 99 mins. "Remaining time" is displayed.	Yes	Yes	Yes	Yes
Display: Multilingual.	Yes	Yes	Yes	Yes
Refrigerant Charging:	Yes	Yes***	Yes***	Yes***
Refrigerant Management System: Displays refrigerant use and monitors remaining filter life. Prompts appear when 1/3 of filter life remains.	Yes	Yes	Yes	Yes
Electric Vehicle: Capable of servicing high voltage electric compressor A/C systems.	–	–	Yes	–
Printer:	–	Optional	Optional	Yes

* One oil bottle. ** Two oil bottles and one UV dye bottle. *** Charge mode from high or low side, or use both sides.



34788NI-H

Premier R-134a Refrigerant Recovery, Recycling, and Recharging Machine for Hybrid and Non-Hybrid Vehicles

All of the same great features and functions included on the 34788NI, plus the added capability of servicing Hybrid vehicles that use high voltage electric compressors. Recover, recycle, evacuate, leak-test and recharge R-134a vehicle A/C systems. Features a larger graphical display, leak testing, automatic refrigerant refill and automated oil drain. An optional refrigerant charge and oil capacities database is available for North American market vehicles.



34988NI

Premium Refrigerant Recover, Recycle, Recharge Machine

Premium A/C Machine combines ease of use and superior accuracy. It recovers, recycles, evacuates, leak tests and recharges R-134a vehicle systems quickly and accurately. The fully automatic function will recover, vacuum, leak test and charge on its own without the need to stand and monitor the machine. The product is fully SAE J2788 compliant and exceeds the requirements for charge accuracy and recovery efficiency. (34988NI-230, 220V)

Replacement / Accessories / Maintenance Kits	34288NI	34788NI	34788NI-H	34988NI
Replacement Parts				
34724 – Filter (See page 8)	Yes	Yes	Yes	Yes
18190A – Low Side (Blue) Coupler (See page 16)	Yes	Yes	Yes	Yes
18191A – High Side (Red) Coupler (See page 16)	Yes	Yes	Yes	Yes
Accessories				
34412-C – Refrigerant Capacities Database (See page 7)	Yes	Yes	Yes	Yes
18480 and 18490 – Oil Injectors (See page 6)	Yes	–	Yes	–
17499 – Dust Cover, fits 34288NI, 34788NI, 34788NI-H and 34988NI models. (See page 7)	Yes	Yes	Yes	Yes
Maintenance Kits				
13172 – Maintenance Kit (See page 6)	Yes	Yes	Yes	Yes



R-1234yf recovery leaders

Robinair recovery machines are the North American leaders in R-1234yf service.

The AC1234-6 and new AC1234-4 offer fully automatic operation, a powerful 1.5 CFM pump and use a liquid refrigerant flush function to recover more refrigerant faster. Both machines exceed J2843 requirements for R-1234yf recovery, recycle and recharge equipment. Standard features include an integrated refrigerant identifier, automatic internal tank refill, automatic oil drain and a color display.

FOR COMPLETE 1234YF SERVICE, PAIR WITH A ROBINAIR LEAK DETECTOR, PAGE 10



AC1234-4



AC1234-6

Features	AC1234-4	AC1234-6
Fully automatic operation: program for service, walk away and return when complete	Yes	Yes
Integrated refrigerant identifier: (meets SAE J2927)	Yes	Yes
Charge accuracy within +/- .5 oz	Yes	Yes
Automatic internal tank refill: no stopping to fill internal tank during or before service	Yes	Yes
Liquid refrigerant flush function: - flush A/C system components using liquid refrigerant instead of harsh chemicals	Yes	Yes
98.5% recovery efficiency	Yes	Yes
Programmable vacuum operation: quickly achieves necessary vacuum level in any condition	Yes	Yes
Automatic oil drain: shows how much oil was removed from the system during service	Yes	Yes
Automatic air purge: removes potential of air accumulating in the internal tank	Yes	Yes
System leak test to identify gross leaks in a system	Yes	Yes
Color graphical display	4.3" 480x272 QVGA color LCD	5.7" 960x240 QVGA color LCD
On-board printer	Optional	(Yes) for future use
Ethernet Network Port	–	(Yes) for future use
USB 2.0 Port	–	(Yes) for future use
Audio jack	–	Yes
Standard SD Card slot	Yes	Yes
Meets / exceeds SAE J2843 requirement: for R-1234YF recover, recycle and recharge equipment	Yes	Yes
Specifications		
Service time, approx.	60 minutes*	60 minutes*
Operating voltage	103 - 127V, 60 Hz AC	103 - 127V, 60 Hz AC
Pressure gauges	100 mm, EN837-1	100 mm, EN837-1
Keyboard	Alpha-numeric with service function keys	Alpha-numeric with service function keys
Vacuum pump	1.5 CFM dual-stage	1.5 CFM dual-stage
Compressor	1/3 hp hermetic	1/3 hp hermetic
Port access	–	USB, SD, RJ45 I/O
Hoses / couplers	9-foot SAE J2886	9-foot SAE J2886
J2843 compliant	Yes	Yes

*60 minute service time assumes ambient air temp (AAT) of 75 degrees F, vehicle matching AAT, 15-minute vacuum time, 1.2 lbs (550g) R-1234yf refrigerant fill and a 5-minute leak detection cycle.



34888HD

The Robinair 34888HD heavy-duty machine recovers, recycles, evacuates, leak-tests and recharges R-134a with 98.5% efficiency in both small and large mobile air conditioning systems.

- › Large capacity, removable 50-lb. tank and liquid pump for larger A/C systems, typically found in busses
- › Nitrogen port to dry and leak test A/C systems
- › Fully automatic recovery, system evacuation, leak testing, refrigerant charge and oil drain/inject
- › Optional printer for capturing and retaining vehicle service data



Features

Fully-Automatic Function: Program to recover, vacuum, leak test and charge without operating panel valves

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's A/C system

Visual & Audible Alarm: Notifies the user when service is complete, or if a problem has occurred

Nitrogen Port: Inject nitrogen into the vehicle's A/C system to dry or leak check the system

Automatic Air Purge: Eliminates system-damaging air without monitoring gauges or opening valves

Vacuum Feature: Defaults to 15 mins, programmable up to 99 mins. "Remaining time" is displayed

Removal External Tank: The ability to switch tanks when performing multiple recoveries on large mobile A/C systems

Display: Multilingual

Refrigerant Management System: Displays refrigerant use and monitors remaining filter life. Prompts appear when 1/3 of filter life remains

Refrigerant Charging: Select a charge mode from high or low side, or use both sides

Optional: Printer

Replacment Parts

34724 — Spin on filter **34750** — 50 lb. tank for R-134a

Specifications

Operating Temp Range	32° - 120°F (0°-50°C)
Recovery Performance	>95% at 70 to 75° F (21 to 24°C) <30 minutes
Voltage	125 VAC 60 Hz
Charge Performance	+/- 0.5 oz at 70° to 75° F (+/- 15g at 21° to 24° C)
Display	5 cm x 9 cm graphical display
Filter-Drier Capacity	300 lb (136kg), spin-on type
Hoses	18 ft (5.5 m)
Weight	Approximately 295 lbs. (133 kg)
Compressor	3/8 hp, pressure protected, oiled, hermetically sealed
Dimensions (HxWxD)	49 in x 28 x 39 (124.5 cm x 71 cm x 99 cm)
Vacuum Pump	5.0 cfm Dual Stage, 29.9 InHg
Languages	English, French, Spanish
Cylinder	External 50 lb. DOT
Certifications	SAE J2788
Efficiency	Industry-leading 98.5%

17800C

The 17800C recovers, recycles, evacuates and recharges, all in one fast and continuous operation through one hook-up. It's ideal for mass transit vehicles, buses, refrigerated trailers or containers and other applications that use refrigerants not typically found in mobile applications.

- › Automatically controls machine functions, leading the user through operations and also notifying when it's time to change the filter drier, and vacuum pump oil
- › Automatically adjusts from liquid to vapor for fast and efficient recovery.
- › Electronic scale makes it simple to recharge to factory specifications; also weighs recovered refrigerant and provides tank overflow protection.
- › 5 cfm vacuum pump is large enough to thoroughly evacuate almost any system; making it ready for recharging.
- › Manual air purge function to remove any non-condensable contaminants.
- › Vacuum leak test function allows user to monitor the system for vacuum decay to determine if a leak exists in the A/C system.
- › Automatic oil drain allows the user to see amount of oil removed from the system being serviced.
- › Heavy-duty filter can handle up to 300 lbs. of refrigerant, effectively removing moisture and acid from the refrigerant.
- › Easy to view 4.3" color graphical display.
- › Maintenance counters to monitor cumulative amounts of refrigerant recovered and charged, as well as other machine operation variables.
- › Optional printer can be added to expand capabilities and provide printed record of service performed.
- › Compatible with R12, R22, R134A, R401A, R401B, R402A, R402B, R404A, R407A, R407B, R407C, R410A, R500, R502, and R507 refrigerants.



Replacement Parts

19776 — Quick change filter **17572** — 50 lb. tank with float switch

Specifications

Voltage	115VAC, 60Hz (17800C), 230VAC, 50Hz (17801C)
Operating Temp Range	50 to 105° F (11 to 41° C)
Recovery rate	Vapor, 0.5 lbs./min and Liquid 1 lbs./min
Vacuum Pump	5.0 cfm at 60 Hz
Hose length	18 ft. (5.5 m)
Recycling filter	300 lbs. refrigerant capacity
Dimensions	47" H x 26" W x 30" D
Certification	UL 1963, UL STANDARD FOR SAFETY REFRIGERANT RECOVERY/RECYCLING EQUIPMENT
Weight	230 lbs. 104 kg (without tank)





17580

A/C flushing unit

Make flushing part of your regular A/C service

You know that not all A/C jobs are simple recharges — there are times when you need to flush a vehicle's air conditioning system to ensure that it operates properly. These circumstances fall into three categories:

Routine Maintenance — As an air conditioning system ages, oil, sludge, and particulates build up, plugging screens, expansion valves, and capillary tubes. Periodically, you should flush the system components to remove these contaminants.

Repairs — To be sure the system will operate properly, you should flush it whenever you repair or replace components. Failed components may contain metal shavings, sludge, and other debris that damage the system or affect the operation.

R-134a Retrofits — In some cases, conversion procedures call for complete removal of existing oil in an A/C system before changing fittings and recharging with R-134a. Flushing is the most thorough means of removing the oil, and it will also pick up any refrigerant residue in the system. Flushing, combined with pulling a deep vacuum, is your assurance the system is ready for the new refrigerant.

A/C Component Flusher

The 17580 makes flushing of lines, evaporators, and condensers fast and easy.

Features

Closed Loop Circulates solvent continuously through components. Includes two adapters. Additional adapters may be needed, sold separately.

Pulsing Action Loosens dirt, corrosion and other debris. Switching hoses allows a back flush option.

Air Agitation Needle Valve Bubbles air into liquid stream to enhance cleaning action.

Hose Adapters Contains adapters to mate with 1/4" flare and 3/8" quick disconnect fitting kits.

Sight Glass To observe flow rates and cleaning process.

One gallon of solvent is needed for the flush procedure. The unit purges solvent from the component, collecting the used material in the collection tank. An activated charcoal filter limits emissions and odors during flushing and purging.

Adapter Kit

17607 — Universal A/C flushing adapter kit.

17581 — Adapter.

Specifications

Dimensions	52" H x 33" W x 20" D
Weight	110 lbs. (50 kg)
Supply Pressure	80–150 psi.



17607



13169

13172

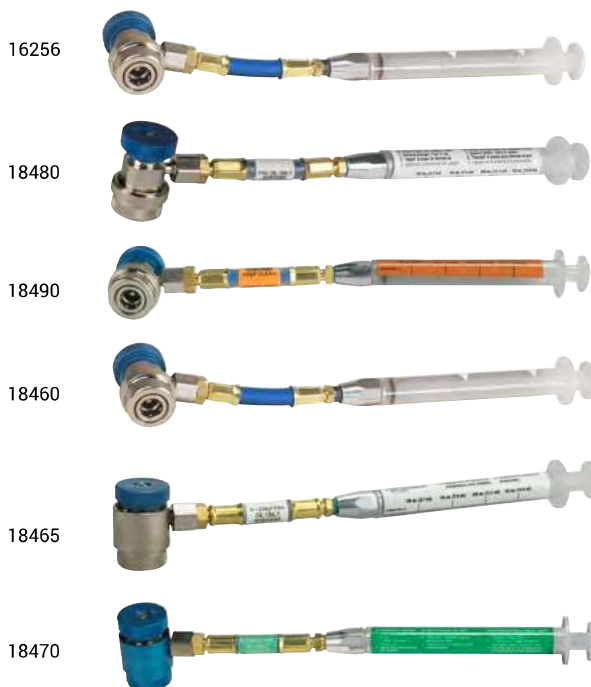
Maintenance Kits

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

13172 — Maintenance kit for models using No. 34724 filter-drier (34288, 34788, 34788-H, 34988, 34288NI, 34788NI, 34788NI-H, 34988NI, AC1234-6, 17700A, 17700-2K, 34700, 34700-2K, 34700Z, 342000, 34711-2K, 34800, 34800-2K, 34900 series).

13169 — Maintenance kit for early models using No. 34430 filter-drier (AC375A, AC374C, AC374, 34134Z, 34134-2K, 17700A, 34700, 34300-2K, 34134Z, 34134-2K).

See your instruction manual if you have questions about which filter-drier to use.



16256

18480

18490

18460

18465

18470

Syringe-Type Injectors

Use these syringe-type injectors to add oil to a fully pressurized A/C system. Fill the barrel with the amount of oil needed, connect the injector, and press the plunger.

16256 — R-134a oil injector, 1/2" Acme quick coupler.

18480 — R-134a oil injector, PAG labeled

18490 — R-134a oil injector, POE labeled

18460 — R-1234yf oil injector, Generic

18465 — R-1234yf oil injector, PAG labeled

18470 — R-1234yf oil injector, POE labeled

Not recommended for UV dye injection.

Vehicle Database Screens

R-134a Vehicle A/C Refrigerant Database 2019

- › Confirm A/C system charge capacities directly from your Robinair A/C RRR machine for R-134a systems.
- › Includes charge amounts and component oil capacities for vehicle model years 1997-2019 using R-134a refrigerant.
- › Database helps ensure the vehicle system is charged correctly with the correct amount of oil, per factory and OEM specification

34411-J – R-134a Vehicle A/C Refrigerant Database 2019. Compatible with legacy Robinair R-134a machines 34788, 34788-H, 34988.

34412-D – R-134a Vehicle A/C Refrigerant Database 2019. Compatible with new Robinair R-134a machines 34288NI, 34788NI, 34788NI-H, 34988NI.



34411-J
134a database
For 34788, 34788-H
& 34988 machines



34412-D
134a database
For 34288NI, 34788NI,
34788NI-H & 34988NI machines



34413-B
1234yf database
For AC1234-4
machines

Vehicle Database Screens

R-1234yf Vehicle A/C Refrigerant Database 2019

- › Confirm A/C system charge capacities directly from your Robinair A/C RRR machine for R-1234yf systems.
- › Includes charge amounts and component oil capacities for vehicle model years 2013-2019 using R-1234yf refrigerant.
- › Database helps ensure the vehicle system is charged correctly with the correct amount of oil, per factory and OEM specification.

34413-B – R-1234yf Vehicle A/C Refrigerant Database 2019. Compatible with new Robinair AC1234-4 R-1234yf recovery machine.



17490



17492



17499

Vinyl Dust Covers

Protect your investment with a heavy-duty vinyl cover. Features corded seams for durability; medium gray color with CoolTech logo.

17490 – Fits all 34888HD, 17800C, 75700, 17800B, 34900, 34800-2K, series.

17492 – Fits all 34288, 34788, 34788-H, 34988, AC375C, AC375A, AC375, 342000, 17700-2K, 34700-2K, 34134Z, 34700Z, 34711-2K, 17700Z, 34702Z.

Dust Cover for A/C RRR Machines

17499 – Fits 34288NI, 34788NI, 34788NI-H, 34988NI, AC1234-4 and AC1234-6, models.

Recycling Filter-Driers

Specially blended for maximum acid and moisture removal.

19776 – Quick change filter for 17800B, 17800C.

34430 – Quick change filter for older 17700A, 34450, 34700 (1997), AC375, AC375A, AC375C, 34134Z.

34724 – Spin-on filter for 17700-2K, 34134A, 34134-2K, 342000, 34234, 34300-2K, 34700, 34700-2K, 34700Z, 34788, 34800, 34800-2K, 34900, 34288NI, 34788NI, 34788NI-H, 34988NI, 34888HD series.



19776



34430



34724

Refrigerant Tanks

17121 – 30 lb. tank, 1/4" fittings (25150, 25175, 25200B, 34234, 34300-2K, 34800 series).

17506 – 50 lb. tank, 1/4" fittings (17800A, 17800-2K, 17700A, 25150, 25175, 25200B series).

17605 – 30 lb. tank with float switch (17650A series).

17572 – 50 lb. tank with float switch. (17800C series).

34102 – 30 lb. tank for R-134a (34234, 34300-2K, 34800, 34134A, 34134-2K series).

34579 – 30 lb. tank (34650 series).

34750 – 50 lb. tank for R-134a (34700, 34888HD series).



17121



17506



17605



17572



34102



34579



34750



10986

Orifice Tube Remover

Use this handy tool to remove the orifice tube before flushing. Speeds service by removing the build-up of particulates on the orifice screen and restrictions that slow flushing. The basic tool works on GM and Ford vehicles and comes with: an extender body for 1985 and newer Ford models; an adapter for 1989-91 GM "J", "L", and "N" cars; and an adapter for 1991 and newer GM "C" and "K" trucks with #3096068 orifices.



17595

Flush Gun Kit

An economical means of flushing contaminants and scale from A/C system components, the flush gun uses dry shop air to pressurize the solvent. The process thoroughly cleans the part, removing oil, any refrigerant contaminants, and residue. The attached nozzle directs the flow of solvent without spray-back.



17565



17609

Power Flush Solvent

Gives you the cleaning power to flush particulates and system lubricant from A/C and refrigeration lines, evaporators, and condensers. An ideal substitute for CFC-113, it has excellent cleaning properties and good evaporation rate. Compatible with all CFC, HCFC, and HFC refrigerants. Meets ANSI/ASHRAE 97-1933.

17565 – Gallon, six per carton.

17609 – Quart, six per carton.



R-ID and R-ID Plus, Refrigerant Analyzer

The Robinair R-ID Plus refrigerant analyzer is a tool to meet the service needs of vehicles equipped with either a R134A or the newer R-1234yf A/C system. It quickly tells the user whether or not the refrigerant in the vehicle's A/C system is good or bad. It is certified to the SAE J2912 standard and is capable of connecting directly to any SAE J2843 or J3030 AC service machine that has an external USB port and is not equipped with a refrigerant analyzer. With a large, easy to read color display results are quickly and accurately displayed to user allowing them to make the right service decisions. The Robinair R-ID Plus comes with an internal printer giving the user the ability to print final test results.

Product Features

- Quickly and accurately determine refrigerant purity
- Displays amount of R-1234yf, R-134a, R-12, R-22 and Hydrocarbons in percentage
- Displays % air in pure R-1234yf & R-134a
- Capable of testing R-12 with optional R-12 hose
- Improved oil resistance with the user replaceable oil restrictor
- Large Color Display
- Battery powered with internal lithium battery
- Ergonomic design with protective boot

16990 – R-ID, Refrigerant Analyzer

16995 – R-ID Plus, Refrigerant Analyzer, same as 16990 plus built in printer and Bluetooth 2.0

Specifications

Refrigerants Measured	R1234yf, R134a, and R12
Contaminants Measure	R22, Hydrocarbons, Unknown
Accuracy	Exceeds SAE J2912 requirements
Refrigerant %'s Displayed	R1234yf, R134a, R22, R12, Hydrocarbons, Air and Unknown
Operating Temperature	0 C to 49 C
Power	12VDC @ 1.5 amps
Battery	Lithium battery
Display	5.0 inch color LCD display with soft keys
Communication Protocols	USB 2.0, (both 16990 and 16995) Bluetooth 2.0, (16995 only)
Languages	ENG, FRE, GER, ITA, POR, SPA, CHI, JAP, KOR, RUS
Certifications	CE, UL and SAE
Warranty	Two Year



16009

DiscovR™ Refrigerant Identifier

How pure is your refrigerant?

Most technicians never question the purity of virgin refrigerant, and most assume the refrigerant in a vehicle is “pure enough” unless the A/C system has a mysterious cooling problem.

If a technician has no way of checking the refrigerant before they pull it out of a customer's vehicle into their recovery equipment it may contaminate their service equipment as well as other vehicles that are serviced with the contaminated equipment.

The first line of defense

The best defense against unknown refrigerant and the risks associated with unknown refrigerant is a refrigerant identifier. With the Robinair 16009 DiscovR™ 134a refrigerant identifier you can:

Protect your A/C service equipment – Know whether or not you have acceptable R-134a refrigerant before servicing the vehicle.

Guard against costly recovery equipment repairs – Contaminated refrigerant can wreak havoc on any R-134a recovery, recycle and recharge machine. Shield your RRR machine from contaminated refrigerant by using the DiscovR™ refrigerant identifier before connecting to the vehicle.

Uncover hard to find air contamination – DiscovR™ refrigerant identifier notifies you when the system contains excessive air.

Fast and Accurate – “Pass” and “Fail” lights clearly show if refrigerant is pure enough to be recovered.

Replacement Parts

16109 – Replacement hose and filter (3 pack).

Specifications

Refrigerant	R-134a
Input Power	12 VDC
Accuracy	Pass/Fail - 95% pure R-134a
Air Detection	Yes
Approvals	SAE J1771 - UL/C



- › Loud audible alert
- › Automatic calibration

- › Color display with graphics and visual alerts
- › Bar graph mode helps locate leaks faster
- › Loud audible alert
- › LED inspection lights
- › Automatic and Manual calibration

- › Color display with graphics and visual alerts
- › Bar and Pinpoint graphing modes help locate leaks faster
- › Loud audible alert with mute option
- › UV and Clear LED inspection lights
- › Automatic and Manual calibration

* Made in USA with globally sourced components



MEETS SAE J2913 (R-1234yf) AND SAE J2791 (R-134a)
ASRAE 173-2012, EN14624-2012 INDUSTRY STANDARDS

COMPATIBLE WITH ALMOST ALL COMMON
REFRIGERANTS INCLUDING R-1234yf AND R-134a

LD3 Features

Long life, stable sensor up to 10 years
Automatic calibration and reset to ambient
3 adjustable sensitivity levels
Low battery indicator
True mechanical pump
Uses 4 AA alkaline batteries included
Comfortable Santoprene handle grip

LD5 Features

Unique color graphic LCD display
Long life, stable sensor up to 10 years
Automatic calibration and reset to ambient
User friendly message and error screens
Hi intensity LED inspection light
3 adjustable sensitivity levels
Low battery indicator
True mechanical pump
Audio mute function
Uses 4 AA alkaline batteries included
Comfortable Santoprene handle grip

LD7 Features

Patented 3 LED UV lights with 395-415 nm; wavelength is optimum for A/C dye fluorescence
Unique color graphic LCD display
Long life, stable sensor up to 10 years
Sweep mode function to pinpoint leak source
Automatic calibration and reset to ambient
User friendly message and error screens
Hi intensity LED inspection light
3 adjustable sensitivity levels
Low battery indicator
True mechanical pump
Audio mute function
Uses 4 AA alkaline batteries included
Comfortable Santoprene handle grip

Specifications	LD3	LD5	LD7
Sensitivity	.05 oz/yr R-134a, .0123 oz/yr R1234yf	.05 oz/yr R-134a, .0123 oz/yr R1234yf	.05 oz/yr R-134a, .0123 oz/yr R1234yf
UV Mode	—	—	3 UV LEDs
UV Wave-length	—	—	395-415 nanometers
Sensor Life	> 10 years	> 10 years	> 10 years
Response Time	Instantaneous	Instantaneous	Instantaneous
Power Supply	4 AA alkaline batteries included	4 AA alkaline batteries included	4 AA alkaline batteries included
Battery Life	4 hours continuous	4 hours continuous	4 hours continuous
Warm up time	< 20 seconds	< 20 seconds	< 20 seconds
Alarm Near Sensor	—	—	Visual probe LED
LCD Display	—	128 x 160 full color graphic display	128 x 160 full color graphic display
Probe length	17 inches	17 inches	17 inches
Weight, lbs	1.5 lbs	1.5 lbs	1.5 lbs
Warranty	2 years (includes sensor)	2 years (includes sensor)	2 years (includes sensor)

TIF8800X

Combustible Gas Detector

The TIF8800X is a low maintenance, battery operated, combustible gas detector that provides a ticking signal that increases in frequency as the source of combustible gas or vapor is located. The TIF8800X is small enough to be operated with just one hand, yet loaded with the kind of advanced features service professionals demand. This tool allows you to pinpoint combustible gas leaks as small as 1 ppm quickly, while checking a relatively large area in a short amount of time with absolutely no calibration required.

Applications

The TIF8800X may be used in almost any situation where a combustible gas, vapor, or residue needs to be found. An ideal instrument for pinpointing combustible gas leaks in commercial, residential, and industrial applications.

- › Audible “ticking” signal
- › Leak strength indicating LEDs
- › Adjustable sensitivity
- › Cordless operation
- › Fast warm-up
- › Battery status indicator
- › 15 inch flexible probe for hard-to-reach areas
- › One-year warranty

Kit includes: TIF8800X, battery, battery charger and soft case.

International models

TIF8800X-E – 220V

Replacement Parts

TIF8801 – Sensor

TIF8802 – A/C adapter

TIF8802E – A/C adapter 220V

TIF8808 – Battery cover

TIF8809 – Ni Mh battery pack

TIF8818 – Rubber boot



TIF8900

Combustible Gas Detector

The TIF8900 is a super-sensitive, cordless, combustible gas detector that detects a broad range of natural gases including propane, methanol, butane, and gasoline.

- › Solid-state sensor technology, long life, and precision.
- › Adjustable sensitivity levels; as low as 5ppm.
- › Audible “Geiger counter” signal.
- › Rechargeable battery and charger included.

International models

TIF8900-E – 220V.

Replacement Parts

TIF8801 – Sensing tip.

TIF8803A – 115V battery charger.

TIF8805 – Cigarette lighter adapter.

TIF8806A – Rechargeable Ni-Cad batteries.

TIF8806B – 220V battery charger.



Specifications

Power Source	Two 2.4V Ni-Cad batteries (included)
Battery Life	Approx. 4 hours per charge
Dimensions	8-1/2" L x 2-1/2" W x 2" D (21.59 cm x 6.35 cm x 5.08 cm)
Operating Range	32° F to 105° F
Probe Length	16 inches, weights 12.3 oz.

Specifications

Power Source	4.8V NiMH rechargeable battery pack lifetime up to 500 charge cycles
Operation	Continuous
Time	Approximately 4 hours
Warm-up	30 seconds
Duty Cycle	Continuous; no limitation
Response Time	Instantaneous
Sensitivity	Variable; as low as 1 ppm (gasoline)
Operating Environment	32°F to 104°F (0°F to 40°C)
Weight	16 ounces (454 grams)
Dimensions	8 in. x 3 in. x 1.8 in. (20.3 x 7.6 x 4.6 cm)
Certifications	UL913 7th Edition (use in Class I, II, or III, Division 1 hazardous (classified) locations)

16455

TruTrack Ultrasonic Leak Detector

Use TruTrack to identify:

- › Refrigerant leaks
- › Pressurized gas leaks
- › Vacuum leaks
- › Dry nitrogen gas leaks
- › Steam leaks
- › Failing solenoids, valves, bearings

Easy to Use — Just put on the headset, adjust the sensitivity level, and place the sensor near the suspected problem area; you can use the sensor alone or with one of the probes.

Positive Identification — You hear the sound of the leak in the headset with no beeps or squeals; the sound is loudest when you are near the leak.

Accurate — Wind, stray gases, or other contaminants will not trigger a false alarm; the unit suppresses most background noises.

Dependable — There are no clogged tips to clean, or sensors to replace, for accurate readings.

Versatile — Ideal for a wide range of service and preventive maintenance applications. Taking regular readings of bearing or solenoid function, for instance, can show increased noise, which may be a sign the component is starting to fail.

16455 — Comes complete with padded carrying case, headset, solid contact probe, and flex tube.

Replacement Parts

16456 — Contact probe.

16458 — Replacement headset.



43240

Digital Thermometer

- › Sampling time is just one second; HOLD button freezes display for accuracy.
- › Easy-to-read display can be read even in direct sunlight.
- › Durable case includes a cover to protect the probe.
- › Min/Max display for reading temperature ranges.

Specifications

Range	-40° to 390° F (-40° to 200° C)
Accuracy	± 2° F between -14° and 212° F ± 1° C between -10° and 100° C, Otherwise: ± 3° F (±1° C)
Display Resolution	0.1° F (0.1° C) throughout range
Battery	One 1.5V x 1, Size LR44 (battery included)

43230

Swivel Head Digital Thermometer

- › 180° swivel head makes display easier to read in tight places.
- › Reliable readings over the entire temperature range.
- › Sampling time is just one second.
- › Durable case includes a pocket clip.
- › For surface, liquid, and air temperatures.



Specifications

Range	-58° to 302° F (-50° to 150° C)
Accuracy	± 2° F between -4° and 248° F ± 1° C between -20° and 120° C, Otherwise: ± 4° F (±2° C)
Display Resolution	0.1° between -19.9 to 199.9, otherwise 1°
Battery	One 1.5V x 1, Size LR44 (battery included)
Automatic Power OFF	After 10 minutes if ON/OFF is not pressed.

16451

TruTrack Ultrasonic Sound Generator

An ideal accessory for Robinair's Model 16455 Ultrasonic Leak Detector, the sound generator detects seal failure in refrigerators, microwaves, vehicle passenger compartments, trunks, and any other location where there should be a good seal. Battery-operated unit emits special frequency from inside the test area; where the sound can be heard, a leak exists.



Dial Thermometers

All pocket thermometers come with a pocket-clip carrying case for protection and easy access. Easy-to-read faces are available in a variety of sizes and ranges.

Part No.	Temperature	Size
10596	-40° to + 160°F	1" dial face
10597	0° to + 220°F	1" dial face
10945	0° to + 220°F	1-3/4" dial face
40859	-40° to + 70°C	1" dial face

Specifications

Power Source	One 9V battery (included)
Dimensions	4-1/2" L x 3-3/8" W x 3/4" D (11.43 cm x 8.57 cm x 1.9 cm)
Weight	5 oz. (140 g)



UV Leak Detection

- › Meets SAE J2297 standard for use with both R-134a and R-1234yf.
- › The easiest and most accurate gun available today.
- › One squeeze injects a pre-measured amount (1/8 oz.) of dye. No more adding too much dye.
- › Brightest dyes in the industry, exceeds all industry performance standards.
- › Most powerful light in its class. Fluorescent dye visible from up to 50ft away. (Light is only used in 16235 kit)

16235

Injection gun.
Fluorescent light.
Fluorescent leak detection dye.
Fluorescent dye cleaner.
UV glasses and blow molded case.

16215

Fluorescent light.
UV glasses.



16235

16215

A/C Fluorescent Dyes

- › Exceeds all industry performance standards.
- › Compatible with all materials found in a vehicle's A/C system.
- › Meets the new SAE J2297 standard for use with both R-134a and R-1234yf.
- › REACH and CLP compliant.



16240

64 applications
One 8 oz. bottle



16241

64 applications
One 8 oz. bottle



16242

12 applications
Twelve 1/4 oz. bottles



16243

24 applications
Six 1 oz. bottles

UV Leak Detection

UV leak detection can be used for both automotive and HVAC-R systems, and dyes won't harm the system.

- › High intensity beam makes even small leaks visible and is bright enough to be used in daylight.
- › Rugged case and a shock-absorbing mounting mechanism protect the lamp during use and storage.
- › UV bulb is rated for 3000 hours and is economical to replace.
- › Comes with a 15' (4.57 m) long cord with battery clips for automotive use or with a transformer for 115V operation.
- › Designed with super luminescence, so leaks are easy to spot, even small ones.
- › Won't affect the viscosity of refrigerant lubricants and is safe for the entire A/C system.
- › Speeds service, since there's no need to recover the charge, add dye, and recharge.

16350 – UV leak detection kit includes: Powerful 50-watt/12-volt UV lamp with 15' cord and battery clips. Injection gun with R-134a hose and R-12 adapter. Four universal A/C dye twist-on cartridges (No. 16356). Enough dye for 20 applications (OEM-approved and SAE-certified dye). UV enhancing glasses with dye cleaner.

16355 – UV injection kit includes: Injection gun with R-134a hose and R-12 adapter, four universal A/C dye twist-on cartridges (No. 16356, 1 oz./ 30 ml each), and service stickers.

16356 – Universal A/C dyes includes: Four 1 oz./30 m twist-on cartridges. Enough dye for 20 applications (OEM-approved and SAE-certified dye). For kit Nos. 16350, 16380, and 16355.

16357 – Six 1/4 oz./7.5 ml twist-on cartridges. Enough dye for six applications (OEM-approved and SAE-certified dye). For kit Nos. 16350, 16380, and 16355.



16350



16355



16356



16357

TIF7620, TIF7612, TIF7610 IR Thermometer PRO

- › Complete IR design is incorporated inside of a single chip, reducing space and creating a compact and light weight product.
- › Innovative optical lens – accurate measurements; wide temperature range.
- › Laser pointer – Easy to define the target area to be measured.
- › Extend temperature – TIF7612 and TIF7620 have a thermocouple interface that can extend the temperature up to 1999°F.
- › Simple and easy to operate – Simply point at desired target and press the trigger button for a temperature reading.
- › Set alarm temperatures (Low and High Temperatures) to receive alert information when the you are measured out of the range (TIF7612 and TIF7620 only).
- › (MAX), (MIN), Difference between MAX and MIN (DIF), and average (AVG) modes are available in TIF7612 and TIF7620.
- › Visual low battery indicator.



Specification	TIF7610	TIF7612	TIF7620
Measurement Range	-76 to +932°F (-60 to +500°C)	-76 to +932°F (-60 to +500°C)	-76 to +1400°F (-60 to +760°C)
Thermocouple Measurement Range	N/A	83.2 to +1999°F (-64 to +1400°C)	83.2 to +1999°F (-64 to +1400°C)
Accuracy: Tobj = 59°-95°F (15-35°C) Tamb=77°F (25°C)	±1.8°F (1.0°C)	±1.8°F (1.0°C)	±1.8°F (1.0°C)
Accuracy: Tobj = -27-932°F (-33-500°C) Tamb= 73°F ±5°F (23 ± 3°C)	±2% of reading or 4°F (2°C) whichever is greater	±2% of reading or 4°F (2°C) whichever is greater	±2% of reading or 4°F (2°C) whichever is greater
Thermocouple Accuracy	N/A	±1% of reading or 1.8°F (1°C) whichever is greater (Test under Tamb=73±11°F[23±6°C])	±1% of reading or 1.8°F (1°C) whichever is greater (Test under Tamb=73±11°F[23±6°C])
Emissivity	0.95 fixed	Adjustable	Adjustable
Resolution: 14.2° F~199.9° F (-9.9~199.9°C)	0.1°F/0.1°C (1° below 9.9 and above 199.9)	0.1°F/0.1°C (1° below 9.9 and above 199.9)	0.1°F/0.1°C (1° below 9.9 and above 199.9)
Spectral Response	5 ~ 14μm	8 ~ 14μm	8 ~ 14μm
Response Time (90%)	.5 sec	.5 sec	.5 sec
Distance: Spot	10:1	12:1	20:1
Battery Life	Up to 18 hours	Up to 18 hours	Up to 18 hours
Dimensions	175.2 x 39.0 x 71.9mm	175.2 x 39.0 x 71.9mm	175.2 x 39.0 x 71.9mm
Weight	179 grams including batteries (AAA*2pcs)	179 grams including batteries (AAA*2pcs)	179 grams including batteries (AAA*2pcs)

TIF7201

Pocket IR Thermometer

- › System-on-a-chip SoC technology: compact and lightweight
- › Backlit LCD display w/ dual readings
- › °C / °F Switch and MAX function
- › Auto power off after 15 sec.
- › Battery level indication
- › Distance to spot (D/S): 1:1

Applications:

- › Automotive
- › Electrical
- › General home use
- › HVAC/R
- › Batteries included



TIF7201



2-Way Brass Manifolds

Robinair brass manifold bodies are constructed from solid brass for added durability needed for repeated, tough daily use. Contoured easy to grip hand wheels are color coded for quick and easy identification.

- › Improved face seal valves. Better design provides a tighter seal, less wear and improved flow.
- › Double O-ring piston for extra reliability and longer service life.



44150

Dual R12/134a Kit

- › Brass manifold with easy-to-grip handles.
- › R12/R-134a gauges, PSI, and °F Temp.
- › 1/2" ACME bottom ports.
- › Rear R-134a and 1/2" ACME fittings for holding hoses.
- › 90° manual couplers.
- › 72" R-134a Hose Set (1/2" ACME x 14mm).
- › 72" R12 Hose Set (1/2" ACME x 1/4" MFL).
- › Blow molded carrying case.



45111

R-134a Manifold Hose Kit

- › Brass manifold with easy-to-grip handles.
- › R12/R-134a gauges, PSI, and °F Temp.
- › 1/2" ACME bottom ports.
- › Rear R-134a and 1/2" ACME fittings for holding hoses.
- › 90° manual couplers.
- › 72" R-134a Hose Set (1/2" ACME x 14mm).

2-Way Aluminum Manifolds

Manifold bodies are constructed from solid aluminum for added durability needed for repeated, tough daily use. Contoured easy to grip hand wheels are color coded for quick and easy identification.

- › Improved face seal valves. Better design provides a tighter seal, less wear and improved flow.
- › Double O-ring piston for extra reliability and longer service life.
- › Easy-to-read 3-1/8" gauges with Lexan lenses.
- › Aluminum Manifolds include sight glass.



47150

Dual R12/134a Kit

- › Aluminum manifold.
- › 90° Manual couplers.
- › 72" R-134a Hose Set (1/2" ACME x 14mm).
- › 72" R12 Hose Set (1/2" ACME x 1/4" MFL).
- › Blow-molded carrying case.



48510

R-134a Manifold Hose Kit

- › Aluminum manifold.
- › 90° Manual couplers.
- › 72" R-134a Hose Set (1/2" ACME x 14mm).
- › Blow-molded carrying case.



41234

R-1234yf Aluminum Manifolds and Hose Set

- › Easy-to-read 3-1/8" adjustable gauges.
- › Durable aluminum manifold block with fittings.
- › Improved face seal valves provide a tight seal, less wear and improved flow.
- › Easy-to-grip control knobs.

Digital Manifold Gauges

The low side gauge has a pressure scale of 30 inHg VAC to 250 psig and the high side gauge has a pressure scale of 0 to 800 psig. Gauges come with a backlight to enhance the view and make the gauges easy to see in low light conditions.

- › Includes profiles for 17 common refrigerants.
- › Detects vacuums in "Hg.
- › Selectable temperature and pressure units of measure.
- › Easy-to-read LCD screen with large digits.
- › Automatic shutdown after 15 minutes of inactivity.
- › Low battery indicator.



11910



11920

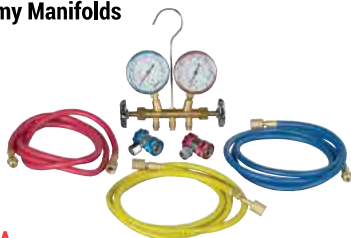


43180



43186

Economy Manifolds



48134A

R134 brass manifold, 90° manual couplers and 60" R-134a hose set.



48134B

R12 and R134 brass manifold, 90° manual couplers and 60" R12/R-134a hose sets.



49134A

R134 aluminum manifold, 90° manual couplers, 60" R-134a hose set and blow-molded case.



49134B

R12 & R-134 aluminum manifold, 90° manual couplers, 60" R12/R-134a hose sets and Blow-molded case.

Part No.	Description
11910	Low side digital gauge
11920	High side digital gauge
43180	2-Way Manifold with Digital Gauges - No hoses
43186	2-Way Manifold with Digital Gauges - and 60" Enviro-Guard hoses



Replacement Gauges

11780 – Replacement gauge. Blue/Low side - 3-1/4 in. PSI pressure readings and R-1234yf temperature readings in degrees F.

11781 – Replacement gauge. Red/High side - 3-1/4 in. PSI pressure readings and R-1234yf temperature readings in degrees F.

11784 – Replacement gauge. Blue/Low side - 3-1/4 in. PSI pressure readings and R12/R-134a temperature readings in degrees F.

11785 – Replacement gauge. Red/High side - 3-1/4 in. PSI pressure readings and R12/R-134a temperature readings in degrees F.)

11794 – Replacement gauge (replaces 11692). Universal compound replacement gauge, psi/kPa pressure readings, R-22 and R-134a temperature readings in degrees Fahrenheit.

11797 – Replacement gauge. Universal compound replacement gauge, psi/kPa pressure readings, R-22 and R-134a temperature readings in degrees Celsius.

11795 – Replaces 11693. Universal pressure replacement gauge, psi/kPa pressure readings, R-22 and R-134a temperature. Temperature readings in degrees Fahrenheit.

11798 – Replacement gauge. Universal pressure replacement gauge, psi/kPa pressure readings, R-22 and R-134a temperature. Temperature readings in degrees Celsius.

11796 – Replacement gauge lens. Replacement gauge lens, quarter turn on-off.



Service Couplers for Automotive R-134a

Field service couplers connect to our special Enviro-Guard hoses to allow access to service ports on automotive R-134a A/C systems. The quick-connect design has an integral safety sleeve, which protects against injury and refrigerant loss if the coupler is disconnected under pressure. The compact design easily fits into tight quarters, which is especially handy for retrofits. Six-ball couplers provide a more stable grip on the fitting than do couplers with four balls.

18190A – Low-side manual coupler, blue actuator.

18191A – High-side manual coupler, red actuator.

18192 – Set of manual service couplers.

18341 – High- and low-side automatic couplers.

19150 – O-ring kit for field service couplers.



R-1234yf Service Couplers

› Integrated safety sleeve, protects against refrigerant loss.

› Compact design.

› Provides a stable grip on the fitting.

18122 – R-1234yf Low side service coupler.

18123 – R-1234yf High side service coupler.

18124 – R-1234yf High- and low-side service coupler set.



Side-Wheel Manifolds with 1/4" Fittings

Our popular side-wheel manifold is easy to use and designed for accuracy.

Bar – Solid forged brass for long life; handwheels are durable, color-coded Lexan™.

Universal Gauges – Clearly marked so they're easy to read and protected with Lexan™ lenses.

Field-Proven Face Seal Valve – Prevents leakage past the stem.

Models

40152 – Standard side-wheel manifold, color-coded gauges, Fahrenheit scale, brass bar, hand wheels, and hanging hook— no hoses.

40151 – Standard side-wheel manifold, color-coded gauges, Celsius scale, brass bar, hand wheels, and hanging hook— no hoses.

40153 – Standard side-wheel manifold set, includes three 36" standard hoses with 1/4" fittings.

40169 – Standard side wheel manifold set, includes three 60" standard hoses with 1/4" fittings.



18576

Replacement Parts Kit for R-134a Manifold Gauges and Hoses

› 4 manifold stems.

› 6 o-rings, 14 mm.

› 12 valve core depressors.

› 12 hose gaskets, 1/4".

› 12 manifold stem o-rings.

› 6 Quick Seal™ o-rings for R-134a.

› 2 caps with straps, 1/2" Acme.

› O-ring lubricant (high vacuum grease).

› Valve core remover/installer with 6 valve cores.

› 4 color-coded Lexan® handwheels & screws.

› Set of R-134a coupler o-rings, high- and low-side.

Stem Replacement Assembly Kit

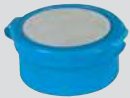
Kits include all necessary parts to service one manifold valve. To replace stems on both valves, order two kits.



40232
Stem assembly kit for manifolds with conical seal design.



13148
Face seal kit for side-wheel manifolds, includes stem with o-rings, spring, and screw. Will not fit sight glass manifold.



13067
High vacuum grease.

Replacement Handwheels



40449
Set of one red and one blue with 1/4" drive.



41698
Set of one red and one blue with 1/4" drive (barrel style).

Replacement Parts for Hoses and Adapters

Help's you keep your charging hoses and adapters in top working condition.



40082
1/4" valve core depressors, package of six.



40083
1/4" gaskets, package of six.



40084
3/8" gaskets, package of six.



40677
3/16" gaskets, package of six.



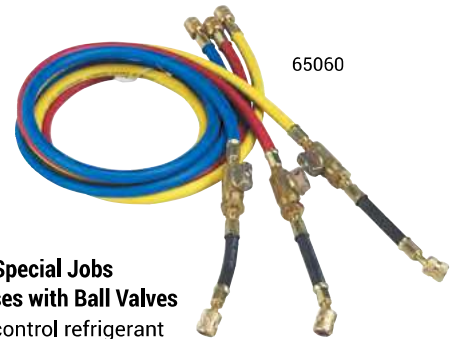
40653B
3/16" valve core depressors, package of six.



30072

Hoses

30072 – Standard hose (500/2500 psi) – 72", 1/4" SAE internal fitting x 1/4" SAE internal.



65060

Special Hoses for Special Jobs Enviro-Guard™ Hoses with Ball Valves

In-line ball valves control refrigerant flow, open and close in a quarter turn.

65060 – Set of three 60" hoses with ball valves.

65160 – 60" Enviro-Guard™ hose with ball valve, yellow.

65260 – 60" Enviro-Guard™ hose with ball valve, blue.

65360 – 60" Enviro-Guard™ hose with ball valve, red.



40333



10328

Hose Extension Coupler

Connect any number of hoses to get the extra length you need – there's no need to order special hose lengths.

40333 – 1/4" MFL x 1/4" MFL, no valve core.

10328 – 1/2" Acme external x 14 mm internal (for automotive R-134a).

20' Charging Hoses

68020 – Set of 20' Enviro-Guard™ red and blue, 1/4" fittings.

68420 – Set of 20' Enviro-Guard™ red and blue, Quick Seal™ fittings.



68020

Charging Hoses

Robinair premium refrigerant charging hoses are built for long life and dependability. A strong, six-sided crimp provides a reliable connection between the hose and barb, even at maximum pressure. The coupler nuts are deeply knurled for quick finger-tightening. Enviro-Guard™ hoses are ideal for high pressure applications, including R-410a systems.



Hose Selection Charts

1/4" Standard Hoses with Standard Fittings

Neoprene-coated for flexibility and wear resistance, with a valve core depressor and a 45° bend on one end for convenient access to the system.

500 psi working pressure;
2500 psi burst pressure.

Length (inches)	Yellow	Blue	Red	Pkg. Set (Blue, Red, Yellow)
36	31036	32036	33036	30036
60	31060	32060	33060	30060
72	31078	32072	31079	30072
96	31096	32096	33096	N/A

1/4" Standard Hoses with Quick Seal™ Fittings

500 psi working pressure;
2500 psi burst pressure.

Length (inches)	Yellow	Blue	Red	Pkg. Set (Blue, Red, Yellow)
72	38172A	38272A	38372A	39072A

1/4" Enviro-Guard™ Hoses with Quick Seal™ Fittings

Special barrier material prevents virtually any permeation of refrigerant, yet remains flexible. With 45° Quick Seal™ fittings.

740 psi working pressure;
3700 psi burst pressure.

Length (inches)	Yellow	Blue	Red	Pkg. Set (Blue, Red, Yellow)
36	68136A	68236A	68336A	69036A
60	68160A	68260A	68360A	69060A
72	68172A	68272A	68372A	69072A
96	68196A	68296A	68396A	69096A

Enviro-Guard™ Hoses for Automotive R-134a

Meets all specifications for low permeation construction. Clearly marked for R-134a. See page 16 for service couplers.

500 psi working pressure;
2500 psi burst pressure.

Length (inches)	Yellow 1/2" ACME x 1/2" ACME	Blue 14 mm x 1/2" ACME	Red 14 mm x 1/2" ACME	Pkg. Set (Blue, Red, Yellow)
72	61072	62072	62244	60072
96	61096	62121	63096	60096
240	NA	NA	NA	64240 (excl. yellow)
240	NA	NA	62246	NA
240	NA	62242	NA	NA

75240

Coolant and Battery Refractometer

This can be used for measuring the freezing point of either propylene and ethylene glycol based cooling systems. It can also be used for checking the strength of electrolyte solution in batteries. This precision instrument features high quality optics with ultra smooth focusing on the body. Coolant scale range: 32° F/0° C to -60° F/-51° C.



75260

Coolant Refiller

- › 26 inHg vacuum refills cooling system without air lock.
- › Eliminates the need for "bleeding."
- › Checks for system leaks and utilizes OEM approved technology.
- › Universal "fits all" cone adapter.
- › Built-in gauge protector.

Multi-purpose Dye and Coolant Fluorescent Dye

- › Brightest dyes in the industry to help find leaks faster.
- › Exceeds all industry performance standards.
- › OEM backed and approved.
- › Solvent-free formula.
- › REACH and CLP compliant.



16244

Tracker Multi-purpose Dye. Six 1/4 oz. bottles, 6 applications



16245

Tracker Multi-purpose Dye. One 8 oz. bottle, 32 applications



16885

Tracker Coolant Dye. Six 1/4 oz. bottles, 6 applications



16890

Tracker Coolant Dye. One 8 oz. bottle, 32 applications

Works on both pressurized and non-pressurized cooling systems.

OUR 10-MINUTE EXCHANGE PROCESS MEANS NO MORE WAITING FOR THE ENGINE TO WARM UP



75700

Coolant Exchange Unit Designed with the user in mind.

Safety First

- › Our "engine off" feature removes pulleys, belts, and fan blades from the safety equation.
- › No additional ventilation required.
- › Vacuum mode creates a "push/pull" exchange process allowing the technician to safely remove high pressure in a hot system.
- › "Hands-off" transfer of used coolant to a bulk tank prevents spills and helps protect the technician.

Simple to Operate

- › Two clearly marked valves and an easy-to-read gauge make this machine very simple to use.
- › Sight glass clearly shows the amount of coolant in the waste tank.
- › One valve controls the flow of coolant; process is easy to understand—no special training needed.
- › No electricity required. 90 psi shop air drives the exchange process, as well as the 2 gpm pump on the waste tank.

Designed to Survive

- › Impact-resistant polypropylene cabinet will not scratch or dent vehicle.
- › Cabinet is impervious to chemicals commonly used in the shop.
- › Large, inflatable tires carry a well-balanced platform easily across any shop floor.
- › Easy to maneuver between bays and vehicles.

Extra Design Features

- › Two external new coolant supply tanks allow on-board storage of two different coolant types.
- › Graduations on tanks show user the amount of new coolant on board.
- › On-board storage of step adapters.
- › Adapter kit included.
- › No hoses to cut.
- › 96" hoses can be neatly stored on unit.
- › One-year warranty.

Replacement Parts and Accessories

75360 – Heavy-duty adapter kit. Links the two tanks for 14 gal. capacity to service class A vehicles. (Note: must have 7-gallon tank No. 75370).

75370 – Replacement 7-gallon coolant tank.

17490 – Heavy-duty vinyl protective cover.



Back View:
7-gallon capacity
supply tanks allow
storage of different
coolants.

92500

Transmission Fluid Exchanger

- › Top-off feature. Add or subtract in 1/10 qt. increments.
- › "Low Fluid Alarm" and "Indicator Light" to alert operator.
- › "Drain Waste" feature automatically pumps used fluid from the machine into a waste oil container.
- › "Drain Pan" feature drains the pan for easy filter replacement. No mess.

Three modes of operations: Dipstick only, cooler line, or a combination of the two

- › Unprecedented one-tenth quart flow metering for adding or subtracting fluid from the pan.
- › Complete set of cooler line adapters for most foreign and domestic vehicles.
- › Works with all types of automatic transmission fluid.
- › Integral performance designed hose and tool compartment with drain.

529734 – Replacement nylon tube.



Specifications

Electrical	12V DC
Exchange Accuracy	+/- 1/4 qt.
Controls	Microprocessor with digital keypad and LEDs
Fluid Tanks	32 quarts supply (24.6 liters), 34 quarts waste (26.6 liters)
Hoses	91" black & red (Exchange); 76" white transfer tube (Straw)
Fluid Types	Multiple fluid capability.
Adapter Set	Complete set for most applications. Standard adapters for Ford, GM, Chrysler, European, and Universal (covering most Asian imports).
Pump	Positive displacement gear pump, 2 gallons per minute maximum
Weight	158 lbs. (72 kg)
Dimensions	52" H x 33" W x 20" D (132 cm x 84 cm x 51 cm)
Process Time	Depends on mode
Warranty	1 year parts and labor

92000

Transflow Transmission Oil Cooler Flusher

Designed to measure oil flow capacity within the transmission oil cooler, and flush contaminated oil from the TOC after repairs.

- › Only unit in the industry that performs a flow rate test.
- › Flush and flow test time is 5 to 8 minutes.
- › 32-quart supply tank; 34-quart waste tank.
- › Supply and waste hoses each 10' long.
- › 10' long, 12V DC power cables with battery lead clips.
- › Requires shop air (90 psi, min.) and 12V DC source.



Specifications

Power Supply	90 psi shop air
Tanks	– Internal waste – 15-gallon capacity – External supply (2) 7-gallon capacity (removable)
Dimensions	47" H x 26" W x 33" D (119 cm x 66 cm x 84 cm)
Medium Step Adapter	Two included; fits hose size 1-1/4", 1-3/8", and 1-1/2"
Large Step Adapter	Two included; fits hose size 1-3/4", 2", and 2-1/4"



13119

13203

13204

Premium High Vacuum Pump Oil

The performance of your pump depends largely on the quality and purity of the vacuum pump oil. Robinair's oil is engineered to maintain maximum viscosity at high running temperatures and to improve cold weather starts.

To keep the pump operating at peak efficiency, change the oil frequently. Moisture and other contaminants can quickly deteriorate the purity of the oil, thinning the oil, and reducing the pump's ability to reach deep vacuum conditions.

Thermally Stable

Laboratory tests prove that Robinair oil is more thermally stable in comparison to other leading brands, which means it resists breaking down due to heat for a longer period of time.

Lower Moisture Content

Robinair oil has a lower moisture content than other oils, thanks to our special packaging and handling procedures. Moisture degrades the oil's purity, thinning it, and reducing the pump's ability to reach a deep vacuum.

13119 – Pint bottle, 12 per case.

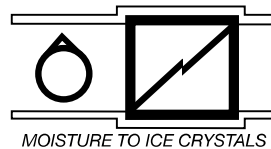
13203 – Quart bottle, 12 per case.

13204 – Gallon bottle, 4 per case.

Change Your Vacuum Pump Oil Frequently

Clean oil is important for peak vacuum pump performance. When the oil is contaminated, it reduces your pump's ability to remove moisture from a system. You should change the pump oil frequently, and especially in the following situations:

- › You have just evacuated a system that you suspect was overly moisture-laden.
- › You have just evacuated a system with a compressor burnout.
- › The pump oil looks cloudy or milky.
- › The pump will not pull to factory specifications when blanked off to an electronic thermistor vacuum gauge.
- › Every 10 hours of operation.



The Importance of Deep Vacuum

The purpose of a vacuum pump is to remove moisture and air from an A/C-R system. Modern systems are built tighter and charges are more critical. That means these systems have a greater sensitivity to moisture and other contaminants, making thorough evacuation more important than ever before.

Moisture in a refrigeration system, directly or indirectly, is the cause of most problems and complaints. First, moisture can cause freeze-up in a system. Moisture is picked up by the refrigerant and transported through the refrigerant line in a fine mist, with ice crystals forming at the point of expansion.

"Freeze-up" is not the only problem caused by moisture. It can also result in corrosion, the effects of which are not apparent until the real damage has occurred. Moisture alone is bad enough, but combined with refrigerants containing chlorine, hydrochloric acids can form. These greatly increase the corrosion of metals.

Also, refrigerant oil rapidly absorbs moisture. Water-formed acids combine with the refrigerant, forming a closely bonded mixture of fine globules. The effect is called sludging and it greatly reduces the lubricating ability of the oil.

A vacuum pump removes troublesome moisture by lowering the pressure within the system and vaporizing (or boiling off) the moisture, then exhausting it along with air.

CoolTech™ – The Inside Story

A vacuum pump that's fast and thorough saves you not only time, but also the expense of callbacks and dissatisfied customers. Robinair pumps perform better than other pumps in the industry, ensuring you complete dehydration before recharging.

Robinair pumps are engineered specifically to meet the needs of the kind of A/C work you're doing today, and to give you trouble-free operation. We've put our years of experience and know-how into developing pumps that help you do the job faster and better.

All Robinair pumps are backed by our exclusive "No Hassle" over-the-counter replacement warranty. You can return a pump to your Robinair distributor for an immediate exchange — with no hassle! (In U.S. and Canada only; in other locations, see your Robinair distributor.)

Robinair CoolTech vacuum pumps are designed for use on A/C-R systems using CFCs, HCFCs, and HFCs in conjunction with mineral oil, ester oil, alkylbenzene oil, and PAG oil as lubricants. Do not use them with ammonia or lithium bromide systems; not for use with flammable refrigerants.

U.S. Patent Numbers: 4,523,897; 4,631,006; 5,209,653.

› Oil Fill Port

Makes adding oil simple since the port is accessible from the front or either side. The sight glass on the front of the pump shows you when enough oil has been added.

› Heavy Duty Motor

High torque design for easy startup and efficient operation.

› Molded Base

Durable polycarbonate base improves pump balance and minimizes vibration during operation.

› Iso-Valve™

Isolates the pump from the system with just a quarter-turn.

› Two-stage Design

Cleans the system more thoroughly than a single-stage pump; the second stage starts pumping at a lower pressure so you can pull a deeper ultimate vacuum.

› Die-Cast Aluminum Housing

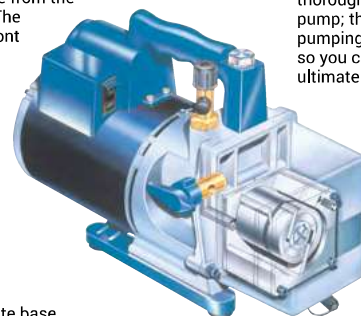
Cast aluminum housings make the pumps lightweight but durable.

› Oil Drain Valve

Positioned at the bottom of the oil reservoir and angled for faster, more complete draining.

› Offset Rotary Vanes

Our proven design builds a powerful compression within the pumping chamber to reduce system pressure and vaporize moisture, so it can be exhausted along with air.



Selecting the right size pump

The more air a pump moves, the faster it can reach an acceptable vacuum. A smaller pump takes more time to evacuate a system than one that's the correct size for the job.



Use this Chart as a Guide to Selecting the Right Size Pump.

System	Recommended Pump Size									
	Robinair® Pump					VacuMaster™ Pump				
Up to 10 tons (35kW); Domestic Refrigeration, Passenger Cars	–					1.5 CFM (35 l/m)				
Up to 30 tons (105kW); Residential A/C, Panel Trucks & RVs	4 CFM (93 l/m)					3 CFM (71 l/m)				
Up to 50 tons (176kW); Rooftop A/C systems, Tractor/Trailers, Buses	6 CFM (142 l/m)					5 CFM (118 l/m)				
Up to 70 tons (246kW)	10 CFM (236 l/m)					8 CFM				
	Oil Fill Port	Heavy Duty Motor	Two-Stage Design	Molded Base	Die-Cast	Oil Drain Valve	Offset Rotary Vanes	Iso-Valve	Gas Ballast	
Robinair® Pumps	•	•	•	•	•	•	•	•	•	
VacuMaster® Pumps	•	•	•		•	•				

All Robinair pumps are backed by our exclusive “No Hassle” over-the-counter replacement warranty. You can return a pump to your Robinair distributor for an immediate exchange — with no hassle. (In U.S. and Canada only; in other locations, see your Robinair distributor.)

Robinair Vacuum Pumps

- ▶ Power and capacity for a wide range of service applications.
- ▶ High CFM rating for fast, thorough evacuation.
- ▶ Two-stage rotary vane design.

Iso-Valve™ – Isolates the pump from the system with just a quarter-turn.

Gas Ballast – Moisture laden air passing through the pump mixes with relatively dry air so compression does not cause condensation.

Two-stage Design – Cleans the system more thoroughly than a single-stage pump; the second stage starts pumping at a lower pressure so you can pull a deeper, ultimate vacuum.

Oil Drain Valve – Positioned at the bottom of the oil reservoir and angled for faster, more complete draining.

Oil Fill Port – Makes adding oil simple since the port is accessible from the front or either side. The sight glass on the front of the pump shows you when enough oil has been added.

Heavy-Duty Motor – High torque design for easy startup and efficient operation.

Offset Rotary Vanes – Proven design builds a powerful compression within the pumping chamber to reduce system pressure and vaporize moisture so it can be exhausted along with air.

Molded Base – Durable polycarbonate base improves pump balance and minimizes vibration during operation.

Die-Cast Aluminum Housing – Cast aluminum housings make the pumps lightweight and durable.



15120A – 10 CFM



15600 – 6 CFM,
15400 – 4 CFM, 15434 – 4 CFM

Model	Free Air Displacement	Factory Micron Rating	No. of Stages	Intake Fitting	Oil Capacity	Motor Size	Voltage	Approvals	Weight	Dimensions
Domestic Models										
15400	4 CFM	15 microns	2	1/4" MFL & 1/2" MFL	15 oz. (445 ml)	1/2 hp	115V 60 Hz	UL	27 lbs. (12.2 kg)	9.75" H x 5.625" W x 15.5" L 247 mm x 143 mm x 394 mm
15434	4 CFM	15 microns	2	1/4" MFL & 1/2" Acme	13 oz. (384 ml)	1/3 hp	115V 60 Hz	UL	29 lbs. (13 kg)	9.75" H x 5.625" W x 15" L 247 mm x 143 mm x 381 mm
15600	6 CFM	15 microns	2	1/4" MFL, 3/8" MFL, & 1/2" MFL	15 oz. (445 ml)	1/2 hp	115V 60 Hz	UL	27 lbs. (12.2 kg)	9.75" H x 5.625" W x 15.5" L 247 mm x 143 mm x 394 mm
15120A	10 CFM	15 microns	2	1/4" MFL, 3/8" MFL, & 1/2" MFL	16.5 oz. (488 ml)	1/2 hp	115V 60 Hz	UL	38 lbs. (17.24 kg)	10.75" H x 5.625" W x 16.5" L 273 mm x 143 mm x 419 mm
International Models										
15401	94 liters/minute	15 microns	2	1/4" MFL & 1/2" MFL	13.5 oz. (400 ml)	1/3 hp	115V/220-250V 50/60 Hz	CE	29 lbs. (13 kg)	9.688" H x 5.625" W x 15.75" L 246 mm x 143 mm x 400 mm
15601	142 liters/minute	15 microns	2	1/4" MFL, 3/8" MFL, & 1/2" MFL	13.5 oz. (400 ml)	1/3 hp	115V/220-250V 50/60 Hz	CE	29 lbs. (13 kg)	9.688" H x 5.625" W x 16.5" L 246 mm x 143 mm x 419 mm
15121A	283 liters/minute	15 microns	2	1/4" MFL, 3/8" MFL, & 1/2" MFL	16.5 oz. (488 ml)	1/2 hp	115V/220V 50/60 Hz	CE	41 lbs. (18.60 kg)	10.75" H x 5.625" W x 17.5" L 273 mm x 143 mm x 445 mm

VacuMaster™

Economy Vacuum Pumps

- › Performance tested to meet Robinair's high standards
- › Power and capacity for a wide range of service applications.
- › High CFM rating for fast, thorough evacuation.
- › Two-stage rotary vane design.

Features:

Two-stage Design – Cleans the system more thoroughly than a single-stage pump; the second stage starts pumping at a lower pressure so you can pull a deeper, ultimate vacuum.

Oil Drain Valve – Positioned at the bottom of the oil reservoir and angled for faster, more complete draining.

Oil Fill Port – Makes adding oil simple since the port is accessible from the front or either side. The sight glass on the front of the pump shows you when enough oil has been added.

Heavy-Duty Motor – High torque design for easy startup and efficient operation.

Die-Cast Aluminum Housing – Cast aluminum housings make the pumps lightweight and durable.



15150 – 1.5 CFM

15300 – 3 CFM

15500 – 5 CFM



15800 – 8 CFM

Model	Free Air Displacement	Factory Micron Rating	No. of Stages	Intake Fitting	Oil Capacity	Motor Size	Voltage	Weight	Dimensions
Domestic Models									
15150	1.5 CFM	50 microns	2	1/4" MFL and 3/8" Acme 3/8" FFL x 1/2" Acme adapter	7.4 oz. (219 ml)	1/4 hp	115V 60Hz	22 lbs. (10 kg)	9.5" H x 4.75" W x 12.5" L 240 mm x 120 mm x 315 mm
15300	3 CFM	35 microns	2	1/4" MFL and 3/8" MFL 3/8" FFL x 1/2" Acme adapter	7.5 oz. (220 ml)	1/3 hp	115V 60Hz	28 lbs. (12.5 kg)	10" H x 5" W x 13" L 255 mm x 123 mm x 336 mm
15500	5 CFM	35 microns	2	1/4" MFL and 3/8" Acme 3/8" FFL x 1/2" Acme adapter	7.5 oz. (220 ml)	1/3 hp	115V 60Hz	28 lbs. (12.2 kg)	10" H x 5" W x 13" L 255 mm x 123 mm x 336 mm
15800	8 CFM	35 microns	2	1/4" MFL and 3/8" MFL	18.6 oz. (550 ml)	1 hp	115V 60Hz	37 lbs. (16.8 kg)	16" H x 6" W x 10" L 406 mm x 152 mm x 254 mm
International Models									
15301 3 CFM	71 liters/ minute	35 microns	2	1/4" MFL and 1/2" MFL 3/8" FFL x 1/2" Acme adapter	7.5 oz. (220 ml)	1/3 hp	220V 50Hz	28 lbs. (12.5 kg)	10" H x 5" W x 13" L 255 mm x 123 mm x 336 mm
15501 5 CFM	118 liters/ minute	35 microns	2	1/4" MFL and 1/2" Acme 3/8" FFL x 1/2" Acme adapter	7.5 oz. (220 ml)	1/3 hp	220V 50Hz	28 lbs. (12.5 kg)	10" H x 5" W x 13" L 255 mm x 123 mm x 336 mm

VacuMaster™

Single-Stage Vacuum Pumps

- › Performance tested to meet Robinair's high standards
- › High CFM rating for fast, thorough evacuation.

Features:

The one-stage rotary vane design – provides powerful, quiet, high vacuum capability and ensures moisture removal, while the high pumping capacity reduces evacuation time.

Oil Drain Valve – Positioned at the bottom of the oil reservoir and angled for faster, more complete draining.

Oil Fill Port – Makes adding oil simple since the port is accessible from the front or either side. The sight glass on the front of the pump shows you when enough oil has been added.

The intake screen – prevents foreign matter from entering the pumping chamber, and an internal exhaust filter separates oil vapor from the exhaust flow.

Aluminum housing and rotary vanes – Lightweight and easily portable.



15115 – 1.5 CFM



15310 – 3 CFM or 15510 – 5 CFM

Model	Free Air Displacement	Factory Micron Rating	No. of Stages	Intake Fitting	Oil Capacity	Motor Size	Voltage	Weight	Dimensions
Domestic Models									
15115	1.5 CFM	115 microns	1	1/4" flare and 1/2" Acme	10 oz. (300 ml)	1/5 hp	110V 60Hz	15 lbs. (6.9 kg)	11.25" H x 4.75" W x 11.375" L 286 mm x 124 mm x 288 mm
15310	3 CFM	75 microns	1	1/4" flare and 1/2" Acme	8.5 oz. (250 ml)	1/4 hp	110V 60Hz	18 lbs. (8.2 kg)	10" H x 4.875" W x 13.25" L 255 mm x 123 mm x 336 mm
15510	5 CFM	75 microns	1	1/4" flare and 1/2" Acme	10 oz. (300 ml)	1/2 hp	110V 60Hz	21 lbs. (9.7 kg)	10" H x 4.875" W x 13.25" L 255 mm x 123 mm x 336 mm



34970

Air-Vac™ for R-12 and R-134a

Economical Air-Vac uses shop air to pull the system into vacuum and includes inlet fittings with 1/4" and 1/2" Acme sizes.

Easy-to-use — Unique venturi design runs on shop air.

Rugged Lexan® Case — Both oil- and scratch-resistant and comes with a convenient handle.

Low Maintenance — There's no oil or moving parts to replace.

34977 — Replacement inlet tee, 1/4" MFL and 1/2" acme.

Specifications

Drive	Compressed air
Free Air Displacement	1 CFM
Input Pressure	75 psi
Vacuum Rating	29 in./Hg
Intake Fitting	1/4" MFL and 1/2" ACME
Dimensions	4-1/2" H x 4" W x 7-1/2" L
Weight	2 lbs./1 kg

Pump Intake Fitting

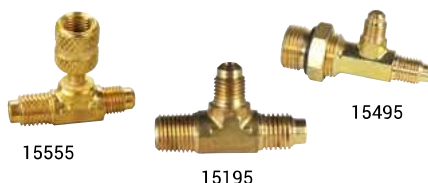
R-12/R-134a Dual Inlet Fitting Convert your pump to R-12 and R-134a. Solid brass tees replace inlet fittings on pump; includes a branch with a 1/4" MFL fitting for R-12 (and other refrigerants) and a branch with 1/2" Acme fitting for automotive R-134a.



13110

Pump Intake Fitting Adapter:

13110 — Adapter, 3/8" FFL to 1/4" MFL.



15555

15195

15495

Also Available:

15555 — Screw-on inlet adapter converts any pump, 1/4" FFL coupler x 1/4" MFL x 1/2" Acme.

15195 — 1/4" MFL/1/2" Acme combination inlet fitting for 15200 series vacuum pumps.

15495 — 1/4" MFL/1/2" Acme combination inlet fitting for 15400/15600 series vacuum pump.

RAVG-1

Digital Vacuum Gauge Easy as 1 - 2 - 3

Connect, Measure, Test

The RAVG-1 employs a sophisticated MEMS Pirani type sensor that directly measures flow. Unlike all other field service gauges on the market, the RAVG-1 is NOT affected by temperature.

The RAVG-1 measures vacuum from Atmosphere to 10 microns in 6 different scales, and can withstand overpressure beyond 30 bar. The unit employs an industry first multi-color backlight that functions as an instant go/no go indicator of acceptable vacuum or leakage.



Highlight: Integrated "Magnetic Hook" or connect to a manifold.



First time introduction: 3 color backlight display offers at one glance the vacuum process status

Features

- High Resolution and unique backlight indicator make precision readings easy
- Patent Pending design, employs a sophisticated MEMS Pirani sensor
- Range from Atmosphere down to 10 microns
- Measure vacuum in Microns, mmHg, inHg, mBar, Pascals or Torr
- Extremely accurate at low micron levels
- Impact and water resistant case with protective Rubber boot
- Rapid response to changes in vacuum
- Large easy to read 5 digit display
- Auto shut off feature prolongs battery life
- Battery powered
- Integrated "magnetic" hook
- Includes carrying case and tee adapters or in-line connections (1/4" MFL x 1/4" MFL and 1/4" FFL x 1/4" MFL versions)

Specifications

Operating Range	Atmosphere to 10 Microns
Resolution	As low as 5 Microns/ 0.005mmHg/0.002inHg/0.00 7mBar/0.66Pa/0.005Torr
Accuracy	As low as +/- 5 % of RDG
Over pressure	~ 31 Bar/450 psi
Measuring Units	Microns/mmHg/inHg/ mBar/Pa/Torr
Display	5 digit STN LCD, 50 x 30 mm with tricolor LED backlight
Power Supply	3 x size "AAA" 1.5 V batteries included
Input Connection	1/8"-27 NPT Male

14777

Compact Electronic Vacuum Gauge

Robinair's 14777 electronic vacuum gauge is just 2-1/2" x 3" in size, but accurate enough to clearly indicate when the system is free from moisture and ready for recharging. Specifically designed for use with a high vacuum pump, the 14777 measures to 10 microns.

Clearly Shows Vacuum Level — The display is an easy-to-read LCD type with readout showing the current vacuum level.

6' Lead for Service Flexibility — Hang the gauge in a location that's convenient for you to monitor vacuum level.

Mounting Magnet — Position the 14777 where it's easy-to-read the LCD.

14778 — Replacement thermistor tube.

Specifications

Power Supply	One 9V battery (included)
Vacuum Fitting	1/4" MFL
Length of Lead	6 feet (8.3 m)
Vacuum Rating	29 in./Hg
Dimensions	3" H x 2.5" W x 1" D (7.62 cm x 6.35 cm x 2.54 cm)



14778

14777

Slimline Refrigerant Scales

The TIF Slimline scales offered industry leading accuracy and performance with the choice of getting the familiar usability and quality in either a 120 pound/55 kg. or 200 pound/91 kg. capacity.

Features

- › Touch Key controls.
- › Three display modes – Lbs./oz.; Decimal Lbs.; Kilograms.
- › Extremely Accurate.
- › Auto Zero.
- › Removable platform and control box with prop stand/hanging hook.
- › Compact design, completely portable.
- › Removable control box with prop stand/hanging hook.
- › CE approved.
- › Two year warranty.
- › Blow molded case.



TIF9010A

TIF9020A



Specifications	TIF9010A	TIF9020A
Range 15.8 oz., OR	0 lbs. 0.0 oz. to 120 lbs. 0.0 oz., 0.000 lbs. to 120.000 lbs., OR 0.000 kg to 55.000 kgs	0 lbs. 0.0 oz. to 199 lbs. 0.000 lbs. to 199.990 lbs., OR 0.000 kg to 100.000 kg
Resolution	0.1 oz./0.005 lbs./2 grams	0.2 oz./0.010 lbs./4 grams
Accuracy	± 0.5% of reading	± 0.5% of reading ± 1 digit
Operating Temp	32° to 120°F (0° to 49°C)	32° to 120°F (0° to 49°C)
Power Supply	9VDC	9VDC
Battery Life	30 hours	30 hours
Coil Cord Length	6 ft. (1.8m)	6 ft. (1.8m)



TIF9031



TIF9030

Economy Digital Refrigerant Scale

- › Easy to carry and store.
- › Capacity up to 220 lbs. (100 kg). Display shows lbs./oz. and kg.
- › High accuracy (±0.5 oz.) and resolution (0.1 oz.).
- › 9-volt battery power.
- › Platform to adapt to most existing tanks (9" x 9").
- › Three control keys: On/Off, automatic zeroing, and measurement units.
- › Charging and recovery capabilities
- › CE approved.
- › One-year warranty.



TIF9030 – Economy digital refrigerant scale.

TIF9031 – Economy digital refrigerant scale carrying case.

TIF9055

Certified Refrigerant Scale

- › 220 pound / 100 kg capacity.
- › Allows automatic charging or recovery operations.
- › Color-coded keypad controls.
- › Three display modes – lbs./oz.; decimal lbs.; kilograms.
- › Very high resolution – 0.2 oz./0.010 lbs./4 grams.
- › Can be used with all refrigerants.
- › Advanced charge and recovery modes – uses tare weight and maximum capacity of cylinder to calculate maximum charge/recovery available.
- › User programmable memory for up to 99 different stored values.
- › "Repeat" charge feature.
- › Removable platform and control box with prop stand/hanging hook.
- › Compact design – completely portable, battery powered.
- › Low battery indicators.
- › Five-year warranty.



Specifications

Range	0 lbs. 0.0 oz. to 219.99 lbs. 0.0 oz., OR 0.000 lbs. to 219.990 lbs., OR 0.000 kg to 100.000 kg
Resolution	0.2 oz./0.010 lbs./4 grams
Accuracy	± 0.5% of reading
Power Supply	Four AA batteries & one 9V battery
Battery Life	30 hours
Max. Solenoid Operating Pressure	500 psi
Operating Temp.	32°F to 120°F (0°C to 49°C)
Inlet/Outlet Ports	1/4" MFL fittings with 1/2" ACME adapters
Weight	Approx. 7 lbs.

10994

Heater Blanket

Robinair's heater blanket speeds charging by maintaining a constant temperature, thus creating a positive pressure between the refrigerant tank and the A/C system.

- › Fits 30 and 50 pound refrigerant tanks.
- › Thermostat is set at 125°F (55°C).
- › 300 watts, 2.6 amps.
- › Thermal cut-off switch protects against overheating.



International Models

13184 – Heater blanket, 220V–240V 50 Hz, with internal IEC receptacle.



42022

Mini Tubing Cutter

With a short swing radius, this cutter makes quick work of cutting tubing in tight spots. The 42022 is especially versatile with its larger range: 1/8" to 1-1/8" O.D. tubing capacity.



42024

Mini Tubing Cutter

With the smallest cutting radius in the industry, the 42024 is ideal for extremely tight places. A finer thread screw provides easier tightening. For 1/8" to 5/8" O.D. tubing.



6514

Mini Tubing Cutter

- › Works on tubing sizes 1/8" to 5/8" O.D. (3 mm to 16 mm).
- › Easily cuts copper, brass, aluminum, and steel brake lines in hard-to-reach places.
- › Ream folds onto cutter body for storage.
- › Extra cutting wheel stored under ream.



6512

Heavy-Duty Tubing Cutter

- › Works on tubing sizes 1/8" to 1-1/8" O.D. (3 mm to 29 mm).
- › Easily cuts copper, brass, aluminum, and steel brake lines.
- › Ream folds onto cutter body for storage.
- › Extra cutting wheel stored under ream.



42028

Tubing Cutter

Our roller-type cutter makes clean cuts in copper, aluminum, steel, and stainless steel tubing. Features easy action, wide capacity range, and a pencil reamer. For 1/4" to 1-1/2" O.D. tubing



42035

Slip-Adjust Tubing Cutter

- › All metal construction.
- › Spring-loaded cutting tool for faster cutting.
- › Two locations for spare cutting wheels (1 included).
- › For 1/4" to 2" tubing.
- › Includes attached reaming tool.



42080, 42090

42071

Ratcheting Tubing Cutters

- Designed for confined spaces.
- Unique ratcheting action operates like a socket ratchet, but cuts copper, aluminum, stainless steel, and PVC.
- Spring-loaded adjusting screw applies continuous pressure while cutting.

42071 – Ratcheting tubing cutter for 1/8" to 1/2" tubing.

42080 – Ratcheting tubing cutter for 1/4" to 7/8" tubing.

42090 – Ratcheting tubing cutter for 1/4" to 1-1/8" tubing.



Replacement Cutter Wheels

These top quality replacement cutter wheels are thinner for cleaner cuts with less effort. Made of high quality, shock-resistant, tool steel, the cutters are also heat treated to resist breakage and last longer. Cutter wheels are available to fit Robinair cutters, and can be used as replacements in nearly all other brands.

Replacement Wheel Chart

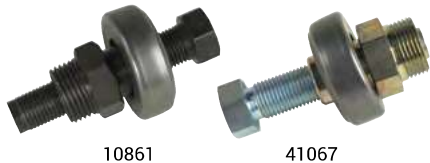
Model No.	Fits Cutter No.
42062	42028
42073	42071
42083	42080, 42090



42040

Single Blade Deburring Tool

This handy tool removes internal burrs in copper tubing. It features a high-speed steel, blade, aluminum handle, and pocket clip. Tubing size is unlimited.



10861

41067

Clutch Plate Remover/Installer

These compact tools are used both to remove the clutch for access to the shaft seal and to re-install it by simply inverting the nut and main bearing.

10861 – A6, R4. **41067** – V5, DA6, HR6.



7238

Spring Lock Coupler Disconnect Set

Set includes four sizes for use on 3/8", 1/2", 5/8", and 3/4" tubes. Allows quick, safe disconnect of spring lock couplers on late model Ford systems and Tecumseh HR980 compressors.



6511

Fuel Line Disconnect Tool

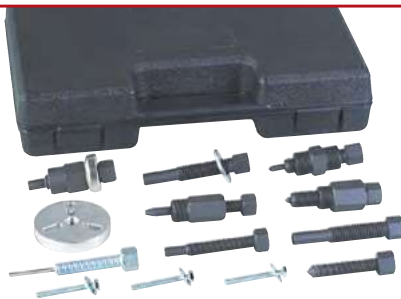
Special low-profile design works in close quarters on GM, Ford, and Chrysler vehicles where there is limited clearance between the fuel line fittings and fuel filters, fuel rails, or sending units. This tool is designed to access the center port on the GM fuel tank sending unit. For 3/8" and 1/2" applications; will also service 2001 thru current 3/4- and 1-ton trucks with the Duramax Diesel engine.



4536

A/C Clutch Pulley Puller Set

- For removal of stubborn air conditioning clutch pulleys. Also used on many alternator, generator, power steering, and crankshaft pulleys, harmonic balancers, and fiber timing gears.
- Set includes drop-forged components: one 3/4"-16 x 5" live-center forcing screw, 5-1/2" crossbar with three spread settings, two pairs of jaws, and a clamp bolt.
- Spread: 3" to 5"; Reach: 1" to 5".
- Includes blow-molded plastic case.



4535

A/C Clutch Hub Remover/Installer Set

- For damage-free removal and installation of the clutch hubs on these air conditioning compressors: GM-Harrison DA-6, HR-5, V-5, A-6, and early R4; Nippondenso Ford/Chrysler A590, C171, FS-6, 6P148A (new style); Sanden & Sankyo; York/Tecumseh HR980; Zexel/Mitsubishi CH series.
- Set includes a removing flange, plus forcing screws and adapter assemblies to remove and install virtually all clutch hubs.
- Includes blow-molded plastic case.



4537

A/C Clutch Holding Tool

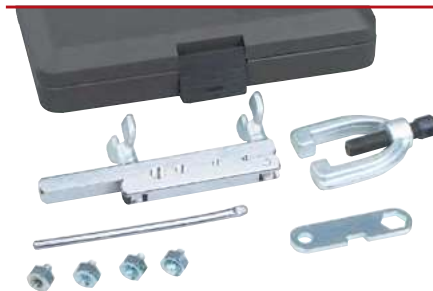
This three-stud spanner wrench keeps the A/C clutch from turning when loosening or tightening the retaining nut. Adjusts quickly with brass thumbscrews to fit various styles of A/C compressors used on GM, Ford, and Chrysler vehicles. Also fits a variety of other pulleys.



4503

Double Flaring Tool Kit

- Designed for double or single flare in copper, aluminum, soft steel brake line, and brass tubing (to 45 degrees).
- Includes five adapters 3/16" through 1/2" (4.8 mm through 12.7 mm).
- Chrome swivel, made of alloy steel, reduces friction. Forged yoke made of heat-treated steel. Housed in a blow-molded storage case.



4504

Bubble (I.S.O.) Flaring Tool Kit

- Designed for crack-free bubble flares on soft steel tubing used in automotive brake systems.
- Includes four dies: 4.75, 6, 8, and 10 mm adapters.
- Forged steel yoke, flaring bar, and all the adapters needed for ISO bubble flaring.
- The most economical "Bubble" flare tool to date. Housed in a blow-molded storage case.



18410

Hydraulic Flaring Kit

- › Fabricates a variety of fuel, brake and A/C line flares.
- › Push connect 1/4, 5/16 and 3/8".
- › GM fuel line, brake line and transmission 5/16 and 3/8".
- › Flare and double flare.
- › Metric bubble flare.
- › Comes in a custom blow molded case.



12540

Tubing reamer



18706

Eccentric flaring tool



18403

Fin Straightener

- › Clean and straighten condenser and evaporator coils.
 - › Compact design for confined spaces: the straightener head is 3-1/8" in diameter; the handle is 3-1/2" long.
 - › Includes 12 clearly marked combs
- Wheel 1: 8, 9, 10, 12, 14, & 15 fins per inch
Wheel 2: 10.5, 11, 13, 18, 20, & 22 fins per inch



18560

Valve Core Remover / Installer

Remove and install the valve core from a 1/4" male flare access fitting without the loss of refrigerant. Durable, solid brass tool has a ball valve that can be opened and closed in just a quarter-turn, rather than a stem-type valve. Designed with a stainless steel ball and brazed side fitting for durability and long life.



18561

Valve Core Remover / Installer

Replace leaking valve cores quickly and easily, or remove the valve core and hold it out of place for evacuation or charging. The 18561 features a solid brass body with convenient handle that opens and closes in a quarter-turn to speed service. The compact design easily fits most installations.



14773

Thread Chaser

For use with No. 18560 or 18561, value core remover/ installer. This item actually repairs damaged threads on valve cores in the service line, without releasing refrigerant into the atmosphere.



14774

Pick Extractor

For use with No. 18560 or 18561, valve core remover/ installer, this extractor lets you remove damaged cores in the service line while the system is fully charged. There's no release of refrigerant into the atmosphere.

Access Valve Core Removers Save Service Time

These handy tools remove valve cores without losing the system charge. They're designed specifically for use during evacuation or recharging on any system with valve core-type access ports. Removing the core restriction results in maximum flow, greatly reducing the time required for evacuation and charging.



11014

R-12 Valve Core Remover

Services late model GM cars with deeper valve cores.



10588

R-134a Valve Core Remover

Our popular valve core remover/installer has been engineered for use when servicing deeper core R-134a A/C systems.



13145

1/4" Valve Core Remover, pkg/6

Robinair's standard valve core remover includes six replacement valve cores which store in the tool's body.

Access Adapters

Robinair offers a complete selection of access adapters for hooking up A/C systems for evacuation and recharging. These adapters fit most systems, and sizes are available to fit most passenger cars. "A" models have longer valve core depressors to work on both standard and the deeper-set valve cores in some vehicles. Check manufacturer's specifications for specific applications.

90° Style Adapters

Solid brass fitting is ideal for tight spots or locations where making connections is difficult.

10469A – 1/4" MFL x 3/16" FFL.

40563A – 1/4" MFL x 1/4" FFL.

Straight Style Adapters

Straight adapter is versatile and easy to use. Made of solid brass.

10468A – 1/4" MFL x 3/16" FFL.

40560A – 1/4" MFL x 1/4" FFL.

Flexible Adapters

Flexible adapters feature brass fittings and a durable neoprene-coated hose, 6" long.

10470A – 1/4" MFL x 3/16" FFL, red.

10778 – 1/4" MFL x 1/4" FFL, yellow.

40677 – 3/16" gasket.

40653B – 3/16" valve core depressors.

40082 – 1/4" valve core depressors.

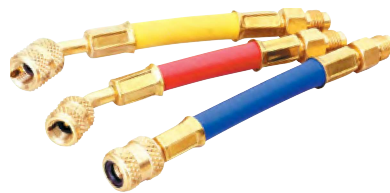
40083 – 1/4" hose gaskets.



40563A



10468A



10237A

Fits-All Adapter Kit

Our access adapters have been combined into a kit that's ideal for accessing R-12 vehicle A/C systems, as well as other types of systems. Five different adapters are included with 1/4" fittings: three flexible adapters (part numbers 10470A, 10778) and two 90° brass adapters (part numbers 10469A and 40563A).



10292

Quick Seal™ Adapters

Quick Seal fittings automatically shut off the charging hose when you disconnect it from the system, so any refrigerant left in the hose is not released. This also prevents "finger burn" and adds an extra measure of safety. Made of solid brass.

10292 – 1/4" MFL to 1/4" FFL.

10250 – 1/4" MFL to 1/4" FFL, 90°.

14450

Heat Gun

A lightweight source of directed heat offering 500°F and 750°F settings, and also has a "cold" setting. This handy heat gun is ideal for many applications, including:

- › Fast heating/drying of materials.
- › Quick curing/drying of epoxies.
- › Applying shrink tubing.
- › Softening tubing for bending.
- › Speed-drying of touch-up paint to eliminate "haze."
- › Drying out condensation in motors, clutches, controls, etc. Shock-proof and cool-running with a tough Lexan® housing, the unit weighs just 2-1/2 lbs.
- › 115V 50/60 Hz.



Replacement parts

44997 – Switch assembly.



18451

Quick Seal Repair Kits

18451 – 45° 1/4" Quick Seal™ kit.

40302 – 1/2" Acme Quick Seal™ kit.



40572

Brass Caps

40572 – 1/4" solid brass caps have knurled ridges for easy gripping. Package of six.

4503.....	26	15495.....	23	18706.....	27	42035.....	25	AC1234-6.....	4
4504.....	26	15500.....	22	19150.....	16	42040.....	26	LD3.....	10
4535.....	26	15501.....	22	19776.....	5, 8	42062.....	25	LD5.....	10
4536.....	26	15510.....	22	30036.....	18	42071.....	25	LD7.....	10
4537.....	26	15555.....	23	30060.....	18	42073.....	25	RAVG-1.....	23
6511.....	26	15600.....	21	30072.....	17, 18	42080.....	25	TIF7201.....	14
6512.....	25	15601.....	21	31036.....	18	42083.....	25	TIF7610.....	14
6514.....	25	15800.....	22	31060.....	18	42090.....	25	TIF7612.....	14
7238.....	26	16009.....	9	31078.....	18	43180.....	15	TIF7620.....	14
10237A.....	28	16109.....	9	31079.....	18	43186.....	15	TIF8800X.....	11
10250.....	28	16215.....	13	31096.....	18	43230.....	12	TIF8800X-E.....	11
10292.....	28	16235.....	13	32036.....	18	43240.....	12	TIF8801.....	11
10328.....	17	16240.....	13	32060.....	18	44150.....	15	TIF8802.....	11
10468A.....	28	16241.....	13	32072.....	18	44997.....	28	TIF8802E.....	11
10469A.....	28	16242.....	13	32096.....	18	45111.....	15	TIF8803A.....	11
10470A.....	28	16243.....	13	33036.....	18	47150.....	15	TIF8805.....	11
10588.....	27	16244.....	18	33060.....	18	48134A.....	15	TIF8806A.....	11
10596.....	12	16245.....	18	33096.....	18	48134B.....	15	TIF8806B.....	11
10597.....	12	16256.....	6	34102.....	8	48510.....	15	TIF8808.....	11
10778.....	28	16350.....	13	34288NI.....	2	49134A.....	15	TIF8809.....	11
10861.....	26	16355.....	13	34288NI-230.....	2	49134B.....	15	TIF8818.....	11
10945.....	12	16356.....	13	34411-H.....	7	60072.....	18	TIF8900.....	11
10986.....	8	16357.....	13	34412-C.....	7	60096.....	18	TIF8900-E.....	11
10994.....	25	16451.....	12	34413-A.....	7	61072.....	18	TIF9010A.....	24
11014.....	27	16455.....	12	34430.....	8	61096.....	18	TIF9020A.....	24
11780.....	16	16456.....	12	34579.....	8	62072.....	18	TIF9030.....	24
11781.....	16	16458.....	12	34724.....	5, 8	62121.....	18	TIF9031.....	24
11784.....	16	16885.....	18	34750.....	5, 8	62242.....	18	TIF9055.....	24
11785.....	16	16890.....	18	34788NI.....	2	62244.....	18		
11794.....	16	16990.....	9	34788NI-230.....	2	62246.....	18		
11795.....	16	16995.....	9	34788NI-H.....	3	63096.....	18		
11796.....	16	17121.....	8	34888HD.....	5	64240.....	18		
11797.....	16	17490.....	7, 19	34970.....	23	65060.....	17		
11798.....	16	17492.....	7	34977.....	23	65160.....	17		
11910.....	15	17499.....	7	34988NI.....	3	65260.....	17		
11920.....	15	17506.....	8	34988NI-230.....	3	65360.....	17		
12540.....	27	17565.....	8	38172A.....	18	68020.....	17		
13067.....	17	17572.....	5, 8	38272A.....	18	68136A.....	18		
13110.....	23	17580.....	6	38372A.....	18	68160A.....	18		
13119.....	20	17581.....	6	39072A.....	18	68172A.....	18		
13145.....	27	17595.....	8	40082.....	17, 28	68196A.....	18		
13148.....	17	17605.....	8	40083.....	17, 28	68236A.....	18		
13169.....	6	17607.....	6	40084.....	17	68260A.....	18		
13172.....	6	17609.....	8	40151.....	16	68272A.....	18		
13184.....	25	17800C.....	5	40152.....	16	68296A.....	18		
13203.....	20	18122.....	16	40153.....	16	68336A.....	18		
13204.....	20	18123.....	16	40169.....	16	68360A.....	18		
14450.....	28	18124.....	16	40232.....	17	68372A.....	18		
14773.....	27	18190A.....	16	40302.....	28	68396A.....	18		
14774.....	27	18191A.....	16	40333.....	17	68420.....	17		
14777.....	23	18192.....	16	40449.....	17	69036A.....	18		
14778.....	23	18341.....	16	40560A.....	28	69060A.....	18		
15115.....	22	18403.....	27	40563A.....	28	69072A.....	18		
15120A.....	21	18410.....	27	40572.....	28	69096A.....	18		
15121A.....	21	18451.....	28	40653B.....	17, 28	75240.....	18		
15150.....	22	18460.....	6	40677.....	17, 28	75260.....	18		
15195.....	23	18465.....	6	40859.....	12	75360.....	19		
15300.....	22	18470.....	6	41067.....	26	75370.....	19		
15301.....	22	18480.....	6	41234.....	15	75700.....	19		
15310.....	22	18490.....	6	41698.....	17	92000.....	19		
15400.....	21	18560.....	27	42022.....	25	92500.....	19		
15401.....	21	18561.....	27	42024.....	25	529734.....	19		
15434.....	21	18576.....	16	42028.....	25	AC1234-4.....	4		

BOSCH AUTOMOTIVE SERVICE SOLUTIONS INC.
28635 MOUND ROAD
WARREN, MI 48092 USA

CUSTOMER SERVICE
PHONE 800 533 6127
FAX 800 283 8665

TECH SUPPORT
PHONE 800 533 6127
FAX 866 259 1241

www.robinair.com

