# SPX ROBINAR

# AIR CONDITIONING SERVICE EQUIPMENT



# UV Leak Detection Kit UV leak detection finds auto leaks quickly without mess, measuring, or calculations. Ultraviolet dye is injected and circulated throughout the A/C system refrigerant, then seeps out at the point of a leak. With the high-power UV lamp, the leak will glow brightly and be spotted easily. No. 16350 – UV leak detection kit includes: Powerful 50-watt/12-volt UV lamp with

 Injection gun with R-134a hose & 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.

No. 16380 – UV leak detection kit includes:

- Cordless/rechargeable true UV LED light.
- Six 1/4 oz. dye cartridges (No. 16357).
- UV enhancing glasses with dye cleaner.
- Injection gun with R-134a hose & R-12 adapter.

# **Universal A/C Dyes**

- Four twist-on cartridges. Enough dye for 20 applications (OEM-approved and SAE-certified dye).
- For kits No. 16350, 16380 and 16355.
- No. 16356 Four 1 oz./30 ml cartridges
- Six twist-on cartridges. Enough dye for 6 applications (OEM-approved and SAE-certified dye).

cord and battery clips.

• For kits No. 16350, 16380 and 16355.

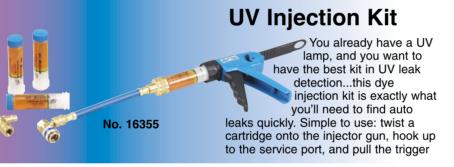
No. 16357 - Six 1/4 oz./7.5 ml cartridges





No. 16356

No. 16357



to inject the dye into the A/C system. Put your old lamp to use to spot the leak, and you're done.

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

# Cordless/Rechargeable True UV LED Light

- 12 LEDs produce hi-intensity true UV light.
- · Battery charger included.

UV enhancing glasses.

No. 16345 – Cordless/rechargeable true UV LED light





# Flex UV LED Light

- Three LEDs affixed to a flexible shaft that makes hard-to-reach spots readily accessible.
- Battery (3N size) included.

UV enhancing glasses.

No. 16291 - Flex UV LED light

# **Inspection Lights**

Fiber optics provide a bright light, but the shaft is just 7.6 mm in diameter. A durable cover fits over the 15" flexible shaft for protection. Powered by three AA batteries.

No. 13182 - Fiber optic inspection light

- High intensity LED light.
- •18" flexible shaft that stays in position.
- Magnetic base allows for hands-free operation.

•

No. 45355 – Inspection light with magnetic tip and base





# Fluorescent Dye Flex-View

#### **Features**

- Flex-View fluoresces UV dyes.
- May be used as traditional bore-scope.
- · Battery powered.

#### **Benefits**

- Quick detection of leak dye in hard to see and reach places.
- Ability to inspect inside components.
- Confirms leaks where component removal would normally be required.

#### **Cost Savings**

- Saves time trying to diagnose A/C evaporator leaks.
- Inspect the top side of fuel tanks for EVAP leaks without removal.

 Saves costs by eliminating the need to remove and replace unrelated components.

#### Uses

- A/C systems: √ Evaporator/condenser
   √ Hoses
   √ Compressor
- · EVAP system.
- Engine oil, transmission, and power steering fluid.
- · Coolant and fuel systems.

#### Complements

- ACR2000
   EVAP Tester
- Any system using fluorescent dye.

No. 3591 - 18" Flex-View in a sturdy case



To check for leaks in the evaporator, the technician simply drills a 1/2" hole in the housing top and inserts the Flex-View. UV dye leak is fluoresced by the Flex-View.





# A/C Diagnostic Tool

# It's a master A/C technician, in-house!

The 16800 is a single, self-contained diagnostic tool that reads temperature and pressure without any extra equipment or tools.

#### Features:

- Pinpoints faults, cuts troubleshooting time, and verifies repairs when service is completed.
- Works on R-134a A/C systems found on the latest cars.
- Walks you through a logical, multi-level testing process for accurate diagnosis.
- Enables you to print out logged data

for your customer or include a copy with a faulty component returned under warranty.

- Includes large, easy-to-use PDA (Personal Digital Assistant) as an interface.
- Easy-to-read screens walk you through the diagnostic sequence, while clearly displaying system conditions.
- The temperature probe and service couplers provide real-time data.
- Includes special tape, which allows for accurate IR temperature measurements.

**No. 16800** – A/C diagnostic tool. Includes PDA, temperature probe, high-and low-side connectors, and tape

# R-134a Manifold Kit

- Deluxe combination side can tap features:
  - 1/4" MFI and 1/2" ACME ports
- hinged inserts for cans of R-12, R-134a and their respective oils
- hinged insert does not get lost
- 72" hoses for R-134a with automatic couplers.
- · Aluminum manifold.
- 1" dial thermometer.
- Temperature/pressure chart.
- · Blow-molded case.

No. 13136 - R-134a manifold kit



# R-134a Side Wheel Manifold

#### For Automotive Service

**Universal Gauges** — Easy-to-read dial faces show R-134a temperatures in degrees Fahrenheit, plus pressures in psi and bar.

**Pressure/Temperature Chart** — Stores in a slot on the back of the manifold; gives you multiple refrigerant capability.

Includes — R-134a low permeation hoses

with field service couplers on the high- and low-side hoses; yellow hose is 1/4" FFL x 1/2" Acme with Quick Seal Fitting.

No. 40134A – R-134a manifold gauge set with three 72" color-coded hoses and automotive field service couplers.

Replacement Hoses for 40134A:

**No. 13187** – Blue **No. 13188** – Red

No. 13190 - Yellow





No. 40134A



# **Dual Manifold Gauge Set**

- Dual manifold gauge comes with 72" R-12 and R-134a hoses, high and low R-134a snap couplers, and 1" dial thermometer.
- Set comes in a blow-molded storage case.

No. 48450 - Dual manifold gauge set

# **Aluminum Block Manifold** with Sight Glass

No. 49410 – R-134a manifold with hose set and automatic service couplers





# R-12 Side-wheel Manifold in Protective Holster

**Flexible Holster** — Provides protection against the bumps and knocks of every day use.

Pressure/Temperature Chart — Stores in a slot on the back, giving multiple refrigerant capability.

**Face Seal Valves** — Provide a tight seal, less wear, and improved flow.

Comes with manifold bar, protective holster, 2-1/2" gauges, color-coded hand wheels, and hanging hook.

**No. 41620** – Side-wheel manifold set with protective holster, three 72" standard hoses, standard fittings

# **Brass Manifold**

No. 13202 - R-134a manifold with hose set and service couplers





# A/C System Performance Calculator

- Instant performance test under any ambient temperature condition.
  - Suspends from hood latch or attaches to your manifold gauge set.
- Includes ambient and vent temperature probes.
- Fahrenheit and Celsius scales.
- Diagnostic flow chart and tech tips to guide you through the test.
- · Auto shut-off.

**No. 43310** – A/C system performance calculator

# **Replacement Gauges**

No. 11794 (Replaces 11692)

 Universal compound replacement gauge; psi/kPa pressure readings, R-22 and R-134a temperature readings in degrees Fahrenheit.

#### No. 11795 (Replaces 11693)

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



No. 11794



No. 11795



# **Digital Thermometer**

The head on this digital thermometer swivels, so it's easy for you to see readings, at any angle. The compact size is convenient to carry and store.

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

No. 43230 - Digital thermometer





#### Dial Thermometer

This pocket thermometer features an easy-to-read face (1-3/4" dial), and has a temperature range of 0° to 220° F. It comes with a pocket-clip carrying case for protection and easy access.

Part No.	Temp. Range	Size
10597	$0^{\circ}$ to + 220°F	1" dial face
10945	$0^{\circ}$ to + 220 $^{\circ}$ F	1-3/4" dial face

### CoolTech ID

#### Signals "Go" only if refrigerant is 98% pure

"Go" and "No Go" indicators on display clearly show if refrigerant is pure enough to be recovered or charged.

- Dual power source gives you flexibility. comes with battery clips for 12V power and 115V A/C adapter.
- Displays percent of air in the A/C system or tank.

#### Replacement Parts for 16900

16913 - Replacement filter

19712 - Air detection sensor

19713 - R-12 replacement hose

19714 - R-134a low-side coupler. 1/2" Acme female adapter

19716 - R-134a replacement hose

19718 - 12V battery adapter

19719 - 120V wall adapter

#### **Specifications**

Power Source...12V DC or 115V 60 Hz A/C (adapter included)

Dimensions...11" H x 9" W x 4-1/2" D (27.94 cm x 22.86 cm x 11.43 cm)

Weight...1.75 lbs. (740 g)

No. 16900 - CoolTech ID





### CoolTech ID Plus

#### Identifies refrigerant type and purges damaging air

In addition to dependable refrigerant identification, the ID Plus measures non-condensable gases (air) in the refrigerant, and purges it directly from the tank or system.

- Displays the actual percentage of R-12, R-134a, R-22, and air in the system or tank.
- · Gives you the option of purging air, if significant concentration is found.
- · Hydrocarbon alarm sounds, if flammable substances are sensed.
- Parallel printer port allows you to connect a printer for a hard copy of testing results.

#### Replacement Parts for 16910

16913 - Replacement filter

19713 - R-12 replacement hose

**19714** – R-134a low-side coupler. 1/2" Acme female adapter

19716 - R-134a replacement hose

#### **Specifications**

Power Source...115V 60 Hz A/C; configurable to 220V

**Dimensions**...11" H x 9" W x 4-1/2" D (27.94 cm x 22.86 cm x 11.43 cm)

Weight...1.75 lbs. (740 g)

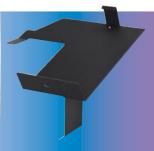
No. 16910 - CoolTech ID Plus

# **Identifier Bracket for 34700Z**

Identifier bracket easily attaches to the 34700Z unit to mount 16900 series refrigerant identifiers.

No. 34715 - Identifier bracket for 34700Z









#### **Specifications**

....115V 60 Hz

Refrigerant Container ...On-board 30 lb. (14 kg) sel (source tank not included)

Operating Range ....50° to 120°F (11° to 49°C) Recycling Filter-drier ...43 cu. in. in-line (710 cc)

Pump Free Air Displacement ...3 cfm (71 //min.)

**Dimensions** .....50" H x 34" W x 23" D (127 cm x 86.4 cm x 58.4 cm)

Shipping Weight .....225 lbs. (102 kg)

# Recovery, Recycling, Recharging Unit

The CoolTech 34134Z recovers. recycles, evacuates, and recharges R-134a refrigerant quickly and accurately.

- Automatic recovery/recharge by weight
- Programmable vacuum time intervals

Manual Air Purge - Removes air from the internal storage vessel. The gauges on the control panel show when to purge the air.

Oil Drain - The display reminds you to drain the system oil captured during recovery. Graduations on the container clearly show you how much oil needs to be replaced.

Oil Inject - System prompts user to inject oil before charge. O-ring on oil reservoir provides visual reference on graduated container.

Electronic Scale - The scale is mounted internally for protection, and has a dampening mechanism that protects against impact shocks, such as movement over rough surfaces. The scale weighs recovered refrigerant and charges by weight for greatest accuracy.

Internal Storage Vessel - Refrigerant is recovered into and charged out of this vessel, which is permanently mounted to the electronic scale for continuing reliability.

Internal Manifold - Block manifold contains solenoids that control refrigerant flow, reducing the possibility of leaking connections.

#### **Maintenance Prompts**

- · System prompts user to change vacuum pump oil when needed.
- · System prompts user to change filterdrier when needed.

#### Easy to Use!

Ergonomic Design – The cabinet is easy to maneuver between service bays and position near the vehicle.

Gauges - The high- and low-side gauges are mounted at an angle that's easy to see.

Unit of Measure - Select pounds or kilograms through the menu.

No. 34134Z - CoolTech recovery, recycling, recharging unit



Design certified by UL to meet SAE J-2210.

# R-134a Recovery / Recycling Unit

#### Combines simple operation with superior accuracy

The CoolTech 34700Z recovers, recycles, evacuates, leak tests, and recharges R-134a quickly and accurately.

**Automatic Function** — With this new option, you can program the unit to recover, vacuum, leak test, charge, and then walk away without having to operate panel valves.

Vacuum Leak Test - Will monitor the vacuum level after an evacuation, and inform the technician of a possible leak in the vehicle's A/C system.

Automatic Refrigerant Refill - With this latest advance, you never have to stop in the middle of a job to change refrigerant tanks. The unit maintains 12 to 15 pounds of refrigerant in an internal vessel, and signals when it's time to change the supply tank, so no monitoring is required.

**Automatic Air Purge** — Eliminates damaging air without any monitoring of gauges or opening of valves.

Automatic Oil Drain - The unit automatically drains system oil captured during recovery, and the display reminds you to empty the bottle.

Refrigerant Charging — Has never been this easy. Select a charge mode from either the high side, low side, or both.

#### Accuracy features eliminate guesswork!

Electronic Scale — The scale weighs recovered refrigerant and charges by weight for greatest accuracy.

Internal Storage Vessel — Refrigerant is recovered into and charged out of this vessel, which is permanently mounted to the electronic scale for continuing reliability.

Internal Manifold — A Robinair exclusive, this block manifold contains all the solenoids that control refrigerant flow in and out of the unit, reducing the possibility of leaking connections and eliminating the need to operate panel valves.

No. 34700Z - CoolTech recovery / recycling unit



Voltage....115V 60 Hz Refrigerant Container....On-board 30 lb. (14 kg)

vessel (source tank not included)

Operating Range....50° to 120° F (11° to 49° C)

Recycling Filter-drier....43 cu. in. spin-on type

Pump Free Air Displacement....6 cfm (142 //min.)

Dimensions....52" H x 33" W x 20" D

(132 cm x 83.8 cm x 50.8 cm)

Weight....180 lbs. (81.65 kg)



# R-134a Recovery / Recycling Unit

# The Industry's Most Advanced Model is also The Easiest To Use!

The 342000 automates A/C service from start to finish. Using temperature probes and service hoses, it gives you a snapshot of the system's operation — which can be printed — then verifies the refrigerant type, recovers, recycles, evacuates, and recharges. It even drains system oil once the job is finished.

#### **Exceptional Accuracy**

**Electronic Scale** — Scale is mounted internally and is shock resistant.

**Microprocessor** — Controls preprogrammed functions; also signals when it's time to drain the oil container, change the filter-drier, or change the source tank.

Refrigerant Identifier — Warns of contaminated or mixed refrigerants. Verifies 98% purity automatically at the beginning of each job.

**6 CFM Vacuum Pump** — Power to quickly evacuate the system.

**Heavy-Duty Compressor** — Pulls from both the high and low sides for fastest recovery.

**Built-in Printer** — Increases customer confidence with a hard copy of data.

**Plain Language Prompts** — Leads the technician through the process.

#### Simplifies A/C service...

**Identification** — Active Flow Control protects the identifier from contaminants.

**Recovery** — Automatically restarts if the unit senses a rise in pressure.

**Simple Maintenance** — Filter-drier life is monitored by the microprocessor.

**Power Charge** — If the transfer of refrigerant stalls for 30 seconds, the unit goes into an automatic Power Charge mode.

#### **Replacement Parts**

No. 34724 — Spin-on recycling filter-drier
No. 16913 — Refrigerant identification filter
No. 34215 — Thermal paper for printer
No. 19697 — Flushing kit adapter

No. 342000 - R-134a recovery / recycling unit



Specifications
Voltage....115 V 60 Hz
Source Tank....30 or 50 lbs. (23 kg) not included
Operating Range....50° to 120° F (11° to 49° C)
Recycling Filter-drier....43 cu. in. (710 cc) spin-on
Scale Resolution....1/100 lb. (.02 kg)
Dimensions....52" H x 33" W x 20" D
(132 cm x 83.8 cm x 50.8 cm)
Weight....202 lbs. (91.63 kg) without source tank

# No. 34800-2K

# Specifications Voltage....115V 60 Hz Refrigerant Tanks....Two 30 lb. (14 kg), DOT approved Operating Range...50° to 120° F (11° to 49° C) Recycling Filter-drier....43 cu. in. (710 cc) Spin-on Type Scale Resolution....1/100 lb. (.02 kg) Pump Free Air Displacement...6 CFM (142 //min.) Dimensions....46" H x 27" W x 32" D (116.8 cm x 68.6 cm x 81.3 cm) Weight....Approx. 200 lbs. (90.72 kg)

# R-12 & R-134a Recovery / Recycling Unit

#### **Automatic Dual Operation Unit**

Use the same unit for both R-12 and R-134a. You can switch from one refrigerant to the other at the touch of a button. The 34800-2K comes with two built-in manifolds, two tanks, two compressors, and two electronic scales; so there's no need to clear or switch tanks.

Microprocessor with Scrolling
Display — Controls all functions
including evacuation time and recharge
amount, plus signals when it's time to
change the filter-drier, pump oil, etc.;
easy to understand alphanumeric display.

**Automatic Air Purge** — Air in the tanks is automatically purged to prevent problems caused by air in a vehicle's A/C system; no gauges to monitor or valves to open.

**Electronic Scale** — Automatic shut-off when the programmed amount of refrigerant has been recharged; provides tank overfill protection and monitors amount of refrigerant recovered. Permanent storage vessels never need recertification.

# Speeds service for increased profitability

**Single Hook-up** — All functions are done in one fast, continuous operation through the one hook-up to the vehicle.

Heavy-duty Compressor — Pulls refrigerant from both the high and low sides of the A/C system for fast recovery; compressor return oil separator keeps the compressor lubricated for long life.

**6 CFM Vacuum Pump** — Powerful CoolTech vacuum pump has the power and capacity to pull down quickly and dehydrate thoroughly to prepare the system for a recharge.

**Super-fast Charging** — A typical auto recharge takes a minute or less.

**Oil Injection** — Lets you add system oil in just seconds, while the unit is in a vacuum.

#### **International Model**

No. 34801-2K - 220-240V 50/60 Hz

No. 34802-2K - 100V 60 Hz

#### Replacement Part

No. 34724 - Spin-on recycling filter-drier

No. 34800-2K - CoolTech R12 & R134a recovery / recycling unit

Design certified by UL to meet SAE J-2210.

Design certified by UL to meet SAE J-1990.





**Specifications** Voltage....115V 60 Hz

Tanks....Two 50 lb. (23 kg) refillable

Operating Range....50° to 105° F (11° to 41° C)

Recovery Rate....Vapor — 1/2 lb./min. (.2

1 lb./min. (.4 kg/min)

Recycling Rate....4 lbs/min. (1.8 kg/min.) flow

Recycling Filter-drier....1150 g XH-9 Pump Free Air Displacement....6 cfm (142 //min.)

at 50 Hz **Dimensions**....47" H x 26" W x 30" D

119 cm x 66 cm x 77 cm)

Weight....256 lbs. (116 kg) without tank

# Multiple Recovery / Recycling Unit

For Multiple Refrigerants...

The No. 17800B recovers, recycles. evacuates, and recharges — all in one fast, continuous operation through one hook-up. It's ideal for refrigerated trailers, buses, RVs, and other vehicles that use more than one refrigerant. The CoolTech Multi is also great for fleet maintenance, covering a variety of makes and models, since it has R-12 and R-134a capabilities. In-plant maintenance departments will find it can handle the different types of refrigerants used in various systems.

Microprocessor — Controls functions; prompts lead you through programming, and also signal when it's time to change the filter-drier, vacuum pump oil, and compressor oil.

Float Chamber — Automatically adjusts from liquid to vapor for most efficient recovery.

Electronic Scale — Makes it simple to recharge to factory specifications; also weighs recovered refrigerant, and provides tank overfill protection.

CoolTech Vacuum Pump — 6 CFM has the capacity to thoroughly evacuate system, readying it for recharging.

Lockout Panel - Prevents mixing of refrigerants: rotates to one side for 1/4" fittings and to the other for 1/2" Acme fittings.

Single-pass Recycling - Makes an initial pass through the filter-drier; additional recycling can be programmed in case of compressor burn-out, or other conditions.

**Heavy-duty Filter-drier** — Removes moisture and acid from the refrigerant; can handle up to 200 pounds between changeovers.

Three sets of charging hoses are included - one for R-12, one for automotive R-134a (with field service couplers), and one for other refrigerants using 1/4" SAE fittings.

#### **International Models**

No. 17801B - 220-240V 50 Hz, readout in kilograms.

#### **Replacement Parts**

No. 19776 - Recycling filter-drier

No. 17506 - 50 lb. (23 kg) refillable tank, 1/4" fittings

No. 34750 - 50 lb. (23 kg) refillable tank, 1/2" ACME fittings

No. 17800B - Multiple recovery / recycling unit





Design certified by UL to meet SAE J-1770. Also listed in ARI directory.

# **Recovery Unit**

#### **Universal Recovery Station** for Contaminated or Mixed Refrigerant...

With the CoolTech 680, you don't have to turn away A/C jobs because the refrigerant is contaminated.

A recovery-only unit designed for quickly capturing contaminated or unknown refrigerants, mixtures, and blends. including sealants. It protects your recovery/recycling equipment and your shop's refrigerant supply.

- Recover into one 50-lb. tank for collection and off-site disposal (mixtures and blends cannot be recycled).
- Simple to hook up and operate with instructions printed on the control panel for quick reference.
- Other features include air regulator for compressor air supply; air line lubricator which prolongs motor life by supplying continuous lubrication; and tank pressure gauge.
- Two hoses are included, one with a 1/4" MFL fitting and one with a 1/2" Acme field service coupler.

# Here's how the CoolTech 680 works:

- · Connect service hose (included) to A/C system's low-side access port.
- Turn switch to "Start." Recovery begins immediately.
- Watch the inlet pressure gauge it shows when the system has been pulled into a vacuum - recovery is complete.

#### **Includes User Safety Features**

- The unit runs on standard (compressed) shop air and the vehicle's battery, reducing risk when recovering flammable hydrocarbons (some substitute refrigerants contain propane or butane).
- · Tank float switch prevents over filling of the 50 lb. tank.

#### **Replacement Part**

No. 17686 - 50 lb. (23 kg) tank with float switch

No. 17680-2K - Recovery unit

Refrigerant collected should not be used in any A/C system. When the tank is full, send it to a disposal facility.





Power Source...12V DC and compressed air (200 psi max., 120 psi min.)

Refrigerant Tank...50 lb. (23 kg) with float switch (included)

Dimensions.......45" H x 22" W x 28" D (114 cm x 56 cm x 71 cm)

Weight........66 lbs. (30 kg) without tank

# A/C System Flusher

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

**Closed Loop** — Circulates solvent continuously through components (adapters are needed).

**Pulsing Action** — Loosens dirt, corrosion and other debris; by switching the hoses, you can also back flush.

**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** — Tank level sight glass for easy filling.

#### **Specifications**

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

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

**No. 17580** — A/C flushing unit. Wt., 110 lbs. (50 kg)

No. 17569 — Chrysler A/C flushing adapter kit

No. 17592 — GM A/C flushing adapter kit

No. 17593 — Ford A/C flushing adapter kit

No. 17607 — Universal A/C flushing adapter kit





# A/C Flush Gun

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.

No. 17595 — Flush gun

# **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.

No. 17565 - Gallon, six per carton

No. 17609 - Quart, six per carton





# **Certified Refrigerant Scale**

- 200 pound or 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 lb. / 4 grams.
- Can be used with all refrigerants.
- Advanced Charge and Recovery Modes – use tare weight and max. 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.

#### **Specifications**

**Range**....0 lbs. 0.0 oz. to 199 lbs. 15.8 oz., OR 0.000 lbs. to 199.990 lbs., OR 0.000 kg. to 100.000 kg

**Resolution**....0.2 oz./0.010 lb./4 grams

**Accuracy**....+/- 0.5% of reading

Power Supply....

Four AA batteries and one 9V battery

Battery Life....30 hours

Max. Solenoid

Operating Pressure...500 psi Operating Temp.....32 to 120° F (0 to 49°)

Inlet/Outlet Ports....1/4" MFL fittings with 1/2" ACME adapters

Weight....Approx. 7 lbs.

No. TIF9055 – Automatic charging scale

# A revicular state of the state

No. TIF9010A

# Slimline Refrigerant Scale

A revised and updated version of the classic TIF Slimline scale, the new TIF9010A brings greater performance, reliability, and usability to the trade. With the greatest resolution in the industry, and no compromise on capacity, this unit offers new features and specs that you won't want to do without.

#### **FEATURES**

- Touch key controls
- Three display modes lbs./oz.; decimal lbs., kilograms
- Very high resolution 0.1 oz/ 0.005 lbs./2 grams
  - Extreme accuracy
  - 110 pound/50 kg capacity
- Auto zero
- Compact design, 2.5" (6.35 cm) thick
- · Charging and recovery capabilities
- · Can be used with all refrigerants
- · Completely portable, battery powered

- Removable control box with prop stand/hanging hook
- · Built into carrying case
- Two-year warranty
   Specifications

to 110 lbs. 0.0 oz. or
os. to 110.000 lbs., or
0.000 kg to 50.000 kg
z./0.005 lbs./2 grams
±0.5% of reading
to 120°F (0° to 49°C)
9V DC
20 hours
6 ft. (1.8 m)
.15.25" x 10.5" x 2.5"
x 26.7 cm x 6.35 cm)
4.5 lbs. (2 kg)

**No. TIF9010A** — Slimline refrigerant scale

# A/C Adapter Sets

CE

- 1/4" x 1/4" shut-off
- 1/4" x 3/16" shut-off
- GM 1991 & later service adapter
- 1/4" x 3/16" GM flex
- 1/4" X 1/8" Ford flex
- · Misc. gaskets, valve cores, depressors

No. 10222 - 5-piece A/C adapter set

- 1/4" x 1/4" shut-off
- 1/4" x 3/16" shut-off
- GM 1991 & later service adapter
- 1/4" x 1/8" 90° shut-off (Ford high side)
- 1/4" x 3/16" 90° shut-off
- · Ford quick disconnect
- GM large bore quick disconnect

No. 10223 - 7-piece A/C adapter set

- 1/4" x 1/4" shut-off
- 1/4" x 3/16" shut-off
- GM 1991 & later service adapter
- 1/4" x 3/16" GM flex
- 1/4" x 1/8" Ford flex
- Ford quick disconnect
- GM and Ford quick disconnect
- GM large bore quick disconnect

No. 10227 - Universal A/C adapter set







# Service Couplers for R-134a A/C Systems

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.

**No. 18190A** – Low-side coupler, blue actuator

**No. 18191A** – High-side coupler, red actuator

**No. 18192** – High- and low-side manual coupler.



#### Valve Core Remover Kit

- · Standard valve core extractor
- 8 mm valve core extractor
- 10 mm valve core extractor
- GM high flow valve core extractor
- JRA valve core extractor
- R-134a low- and high-side body assemblies with side ports
- R-134a low- and high-side port adapters
- · Plastic carrying case
- Usage chart

No. 18340 - Valve core remover kit





# **Fin Straighteners**

Use our handy six-in-one straightener to clean and straighten condenser and evaporator coil fins. Straightener sections are clearly marked for fin size. The tool is compact enough to use even in confined spaces: the straightener

head is 3-1/8" in diameter; the handle is 3-1/2" long.

**18400** – Fin straightener – 8, 9, 10, 12, 14, and 15 fins per inch

# A/C Spring-Lock Coupling Tool Set

These tools will quickly separate springlock refrigerant pressure lines on the air conditioning systems of 1981 to 2002 Ford vehicles, and 1994 to 2002 Chrysler and Jeep vehicles.  Spring-loaded in the closed position to deflect spray that occurs when a line is disconnected.

**No. 7238** – Set of four A/C spring-lock coupling tools: 7239, 7240, 7241, and 7242. Wt., 3 oz.





# Air<sup>™</sup> 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.

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.

#### **Replacement Part**

**34977** – Replacement inlet tee, 1/4" MFL and 1/2" Acme

#### **Specifications**

Drive	Compressed Air
Free Air Displacement	1 CFM
Number of Stages	Venturi
Input Pressure	75 psi
Vacuum Rating	29 in./Hg
Intake Fitting1/4" MF	L and 1/2" ACME
Dimensions4-1/2" H	x 4" W x 7-1/2" L

No. 34970 – Air $^{\text{TM}}$  Vac for R-12 and R-134a

# **Orifice Tube Service Kit**

The screened orifice for A/C cycling clutches requires this special puller. Use this kit to remove complete or damaged tubes in 1985 and later Ford and GM cars. 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 having No. 3096068 orifices.

**No. 10986** – Orifice tube service kit in a blow-molded case.





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 & Sankvo: 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.

No. 4535 – A/C clutch hub remover/ installer set (13 pc.). Wt., 5 lbs., 5 oz.

# A/C Clutch Pulley Puller Set

- For removal of stubborn air conditioning clutch pullevs. Also can be 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 3 spread
- settings, two pairs of jaws, and a clamp bolt.
- Spread: 3" to 5": Reach: 1" to 5".
- Includes blow-molded plastic case.

No. 4536 - A/C clutch pulley puller set. Wt., 4 lbs., 11 oz.





# 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.

No. 4537 - A/C clutch holding tool. Wt., 13 oz.

# Multi-purpose Refrigerant Side Can Tap

- · Hinged design means no inserts to lose.
- R-12 and R-134a port fittings with Shrader valves.

No. 10102 - Multi-purpose refrigerant side can tap





# R-134a Top Can Tap Valve

- 1/2" Acme thread on a brass body.
- · Screws to top of can.

No. 10104 - R-134a top can tap valve

# **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.

No. 42022 - Mini-tubing Cutter





# **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.

No. 42024 - Mini-tubing cutter





# **Tubing Cutter with Deburring Tool**

- · All metal construction.
- Replacement wheel in handle.
- For 1/4" to 1-1/2" tubing.

No. 42028 – Tubing cutter with deburring tool

# 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.

No. 42035 - Slip-adjust tubing cutter





# **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.

**No. 42071** – Ratcheting tubing cutter for 1/8" to 1/2" tubing.

**No. 42080** – Ratcheting tubing cutter for 1/4" to 7/8" tubing.

**No. 42090** – Ratcheting tubing cutter for 1/4" to 1-1/8" tubing.

# **Ratcheting Tubing Cutter Display**

- The No. 42071 ratcheting tubing cutter was 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.

**No. 42012** – Display box of 12 No. 42071 ratcheting tubing cutters for 1/8" to 1/2" tubing.





# **CoolTools™ Thermal Shield**

- Apply to pipes before brazing to retard the heat from traveling to valves, etc.
- Apply to heated surfaces for rapid cooling.
- Apply to sheet metal adjacent to the welding area to help prevent weld slag from adhering to metal.
- Apply directly to the surface to be welded or soldered to provide a shield against overheating or distorting of the metal.

CoolTools Thermal Shield is comprised of a harmless surfactant, water, and an inorganic-based agent.

It is environmentally safe – 100% biodegradable, non-toxic, non-corrosive, and non-flammable.

**13490** – CoolTools Thermal Shield spray gel, 32 oz. bottle

**13491** – CoolTools Thermal Shield paste, 32 oz. jar





# **Vacuum Pumps**

- Power and capacity for a wide range of service applications.
- · High CFM rating for fast, thorough evacuation.
- Two-stage rotary vane design.
- Uses standard 110-volt power source.

The purpose of a vacuum pump is to remove moisture and air from an A/C or refrigeration system. Robinair vacuum pumps do just that by lowering the pressure within the system and vaporizing (or boiling off) the moisture, then exhausting it along with air.

Robinair vacuum pumps are engineered for today's high efficiency air conditioning and refrigeration systems.

Model	Free Air Displacement	Factory Micron Rating	No. of Stages	Motor Intake Fitting	Oil Capacity	Size	Voltage	Approvals	Weight	Dimensions
15234	1.2 CFM	50 microns	2	1/4" MFL and 1/2" ACME	5 oz. (148 ml)	1/8 hp	115V 50/60 Hz	UL	10 lbs. (4.5 kg)	8.5" H x 4.3" W x 9.5" L 215 mm x 108 mm x 240 mm
15434	4 CFM	20 microns	2	1/4" MFL and 1/2" ACME	15 oz. (445 ml)	1/3 hp	115V 60 Hz	UL	27 lbs. (12.2 kg)	9.5" H x 5.5" W x 15" L 247 mm x 142 mm x 381 mm
15600	6 CFM	20 microns	2	1/4" MFL and 1/2" MFL	15 oz. (445 ml)	1/2 hp	115V 60 Hz	SL	27 lbs. (12.2 kg)	9.5" H x 5.5" W x 15" L 247 mm x 142 mm x 381 mm

Laboratory tests show that Robinair vacuum pumps consistently outperform other major brands. Our Model 15600 reached a vacuum of 600 microns in 60 minutes, while the competitions' pumps took more than two hours to reach the same micron level

Not only are Robinair pumps lighter in weight, they use less oil, which means that your maintenance costs will be much lower over the life of the pump.



Model	Factory Free Air Displacement	Micron Rating	No. of Stages	Intake Fitting	Oil Capacity	Motor Size	Voltage	Weight	Dimensions
	2.00.000		- Clarge	uy	on capacity	0.20	ronago		2
15150	1.5 CFM	50 microns	2	1/4" MFL, 3/8" MFL,	7.5 oz. (220 ml)	1/4 hp	115V 60 Hz	21 lbs. (9.6 kg)	9.5" H x 4.5" W x 12.5" L
				3/8" FFL X 1/2" ACME adptr.		•			240 mm x 120 mm x 315 mm
15151	35 liters/minute	50 microns	2	1/4" MFL, 3/8" MFL,	7.5 oz. (220 ml)	1/4 hp	220V 50 Hz	21 lbs. (9.6 kg)	9.5" H x 4.5" W x 12.5" L
				3/8" FFL X 1/2" ACME adptr.					240 mm x 120 mm x 315 mm
15300	3 CFM	40 microns	2	1/4" MFL, 3/8" MFL,	7.5 oz. (220 ml)	1/3 hp	115V 60 Hz	22 lbs. (10 kg)	10" H x 5" W x 13" L
				3/8" FFL X 1/2" ACME adptr.					255 mm x 123 mm x 385 mm
15301	71 liters/minute	40 microns	2	1/4" MFL, 3/8" MFL,	7.5 oz. (220 ml)	1/3 hp	220V 50 Hz	22 lbs. (10 kg)	10" H x 5" W x 13" L
				3/8" FFL X 1/2" ACME adptr.					255 mm x 123 mm x 385 mm
15500	5 CFM	40 microns	2	1/4" MFL, 3/8" MFL,	7.5 oz. (220 ml)	1/3 hp	115V 60 Hz	28 lbs. (12.5 kg)	10" H x 5" W x 13" L
				3/8" FFL X 1/2" ACME adptr.					255 mm x 123 mm x 385 mm
15501	118 liters/minute	40 microns	2	1/4" MFL, 3/8" MFL,	7.5 oz. (220 ml)	1/3 hp	220V 50 Hz	28 lbs. (12.5 kg)	10" H x 5" W x 13" L
				3/8" FFL X 1/2" ACME adptr.					255 mm x 123 mm x 385 mm



# **Leak Detector**

For all CFC, HCFC, and HFC Refrigerants

Audible and Visual Leak Indicators — An alarm increases in frequency as the tip gets nearer to a high concentration of refrigerant. LEDs are especially helpful when you're working in a noisy environment.

Threshold Balancing Control — Gives you infinite control for eliminating background contamination, so you can zero in on the leak site.

SPX ROBINAIR

**Volume Control** — Adjust the audible leak signal to the volume that's right for the background noise in the shop or at the job site.

Sensing Tip — Specially engineered tip is built with a mirror finish for superior sensitivity and durability. A spare tip is

provided for your convenience.

No. 16600 – Leak detector Replacement Part

**16503** – Sensing tip

#### **Leak Detectors**

#### Model TIFZX-1 Leak Detector **Features**

- Refrigerant specific detection.
- · Detects ALL halogenated refrigerants at levels below 0.1 oz./yr.
- · Tri-color visual leak size indication.
- Tactile keypad controls with one-touch reset and adjustable sensitivity.
- True mechanical pump provides instant response and clearing.
- · Sensor failure indication.
- Carrying case and re-charger included.
- Ni-Cad rechargeable batteries.
- · Flexible stainless probe.

#### **Specifications**

Sensitivity....Per SAE J1627 criteria: 0.5 oz./yr. (14 gr./yr.) for R-134a, R-22 and R-12

Ultimate Sensitivity...Less than 0.1 oz./yr. (3 gr./yr.) R-134a, in high sensitivity; 0.05 oz./vr. R-12, in low sensitivity

Warm-up Period .... 20 seconds Operating Temp .... 32° to 122° F (0° to 50° C)

Power Supply..Ni-Cad standard, Ni-MH optional

Battery Recharge Time....2 hours, integral charge status indicator

Failed Sensor Indication....LEDs flash red, pump off

Sensor Life....100 to 150 hours Battery Life....battery pack - 4 to 5 hours; optional Ni-MH battery pack - 5 to 6 hours

Unit Dimensions....10.25" L x 2.5" dia. (26 cm L x 6.5 cm dia.)

#### Models TIFXL-1A, TIFRX-1A, TIFXP-1A, and TIF5750A

Innovative MPC circuitry and Advanced Digital Signal Processing monitor the sensing tip up to 2000 times per second. Automatic reset, true mechanical pump and visual indicators (TIFXP-1 and TIFRX-1) speed and simplify leak searches.

A completely re-designed sensing tip increases sensitivity, improves reliability, and lasts twice as long as its predecessor. This results in fewer comebacks, less hassle, and lower maintenance costs.

#### **Specifications**

Power Source....3V DC; 2 "C" cell alkaline batteries

Ultimate Sensitivity..... TIFXL-1A - Less than 0.4 oz./yr. (11 gr./yr.) TIFRX-1A - Less than 0.25 oz./yr. (7 gr./yr.) TIFXP-1A - Less than 0.1 oz./yr. (3 gr./yr.)



No. TIFZX-1 Twenty-five-Year Warranty



No. TIFRX-1A **Two-Year Warranty** 



No. TIFXL-1A **Two-Year Warranty** 



No. TIFXP-1A **Three-Year Warranty** 



No. TIF5750A **One-Year Warranty** 



Design Certified by MET Laboratories, Inc to meet SAE J1627 for R-134a, R-12, and R-22

ROUPS C & D HAZARDOUS LOCATIONS

#### All Models Feature

- Microprocessor controlled circuit with ZZ Advanced Digital Signal Processing.
- Detects ALL halogenated refrigerants.
- Variable frequency audible alarm.
- · Constant power indication.
- Cordless and portable, operates on two C-cell batteries.
- 14" (35.5 cm) flexible stainless steel probe w/Teflon® liner.
- Carrying case included, optional holster.
- Optional reference leak source.

#### **Additional Features** No. TIFXL-1A

· Single switch control.

#### No. TIFRX-1A

- · Six-segment visual leak size indicator.
- True mechanical pump provides positive airflow through sensing tip.
- · High and low sensitivity levels.
- · One-touch reset.
- · Tactile keypad controls.

#### No. TIFXP-1A

- Tri-color, six-segment visual leak size indicator displays 18 alarm levels.
- · Seven levels of sensitivity adjustment provide an increase of up to 64x.
- Battery test function with true voltage indication.
- Mute feature silences audible alarm.
- True mechanical pump provides positive airflow through sensing tip.
- One-touch reset.
- Tactile keypad controls.

#### No. TIF5750A "Super Scanner™"

- Detects ALL halogenated refrigerants.
- · Constant power indication.
- · Cordless and portable, operates on two C-cell batteries.
- 14" (35.5 cm) flexible, stainless probe.

#### **Specifications**

Operating Temp	30° to 125° F			
Response Time	Instantaneous			
Reset Time	One second			
Ultimate SensitivityLess than 0.1 oz./yr.				





# **Premium High Vacuum Pump Oil**

#### **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.

#### Models

**13203** – Quart bottle, 12 per case **13204** – Gallon bottle, 4 per case

## **Maintenance Kits**

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

**13172** – Maintenance kit for models using 34724 Filter-drier (17700A, 17700-2K, 34700, 34700-2K, 34800, 34800-2K, 34900 Series).

**13169** – Maintenance kit for early models using 34430 Filter-drier (17700A, 34700, 34300-2K).

**34430** – Quick change filter for older 17700A, 34450, 34700 series.

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





## **Travel Cooler/Warmer**

No. 99234 - Travel cooler/warmer

Heats...Up to 149°F

Cools...27° F - 45° F below ambient temp.

Voltage .....12V DC or

110-220 VAC 50/60 hz, 2A

Volume.....7.4 quarts Weight......6.25 lbs.

Dimensions....12.5" x 7" x 12.25"

# How much can you make on A/C service?

The examples at right show a range of pricing for a basic recovery, recycling, and recharging job (no repairs are included).

To calculate the profits you can anticipate, use your own pricing and labor costs, then multiply the single job profits by the number of jobs you average each month.

	Low	High
A. Price for A/C service	\$89.95	\$149.95
<b>B.</b> Refrigerant needed (average 2 lbs. R-134a) and PAG oil needed	\$11.00	\$11.00
C. Labor/overhead (one hour per vehicle)	\$40.00	\$60.00
<b>D.</b> Daily net profit = A minus (B + C)	\$ 38.95	\$78.95
E. Monthly profit (D multiplied by 25 jobs)	\$973.75	\$1,973.75

For a complete list of Robinair products, visit our web site at www.robinair.com or www.otctools.com













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