



# TOOLS & SERVICE ITEMS

TOOLS – SERVICE ITEMS

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 Charging Device

# TOOLS — SERVICE ITEMS

## Accessories

TOOLS — SERVICE ITEMS

 <p><b>8719</b> <b>3-In-1 Can Tap Valve</b> Use on: R12, R134a and Oil Charge Cans</p>	 <p><b>8727</b> <b>R134a Can Tap Valve</b> Screw on design. Gasket assures leak proof operation. Built in safety check valve. Full grip valve handle.</p> <p><b>8780 - Gasket Seals</b> (10 per pack)</p>	 <p><b>8728</b> <b>R134a Can Tap Valve</b> Side tap design pierces the can and locks-on with one quick motion.</p>	 <p><b>8729</b> <b>R134a Recharge Kit</b> Screw on design with hose and quick coupler. Built in safety check valve.</p>
 <p><b>8730</b> <b>Handi-Cut A/C Hose Cutter</b> Makes quick clean cuts. Cuts R12, R134a, barrier and non-barrier hoses up to 1 1/2" OD.</p> <p><b>8731 - Replacement Blade</b></p>	 <p><b>8732</b> <b>A/C Ratchet</b> Reversible 9/16", 1/2" Hex, and 1/4", 3/16" Square.</p>	 <p><b>8734</b> <b>Coil Fin Comb</b> Cleans and straightens evaporator and condenser coils. Six sided head for 6, 8, 10, 12, 14, and 15 fins per inch applications.</p>	 <p><b>8735</b> <b>Safety Goggles</b> A must for work with refrigerants and flushing agents. Quality goggles with specially designed vents</p>
 <p><b>8736</b> <b>UV Safety Goggles</b> These are a must for protection against ultraviolet light when using UV light for leak detection.</p>	 <p><b>8781</b> <b>Refrigerant Hose Gasket, R12</b> Valve Gasket 1/4" 10 per pack</p>	 <p><b>8782</b> <b>Refrigerant Hose Depressor, R12</b> Valve Depressor 1/4" 10 per pack</p>	 <p><b>8783</b> <b>Refrigerant Hose Depressor &amp; Gasket Package, R12</b> 1/4" Valve Depressor and Gasket 3 each per pack</p>
 <p><b>8930</b> <b>Orifice Tube Extractor Kit</b> Easily removes damaged orifice tubes in Ford &amp; GM vehicles.</p>	 <p><b>8964</b> <b>Permagum (DumDum)</b> Used to seal holes in firewall (1 lb. roll)</p>	 <p><b>8990</b> <b>A/C Service Tape</b> 30 Ft. Roll</p>	 <p><b>8890B</b> <b>A/C Service Manual</b> Covers service procedures for R12 / R134a</p>

Accessories

Thermometers



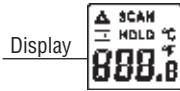
**8723**  
Dial Thermometer  
1 3/8" Face with Range: -40° to 160°F



**8724**.....1 3/4" Face  
**8725**.....1" Face  
Dial Thermometer with Range: 0° to 220°F



**8726**  
Digital Thermometer  
1" Dial Size, Battery Operated  
Range: -58° to 320°F



**8774**  
Infrared Thermometer w/Target Laser  
7/8" Digital Display, Battery Operated  
Range: -4° to 932°F, 8:1 Ratio



**8775**  
Dual Temp Infrared w/Contact Thermometer  
7/8" Digital Display, Battery Operated  
Range: -76° to 1400°F, 30:1 Ratio

Flushing Components



**8805 - System Flush Kit**  
Includes flush gun, hose, canister, and canister adapter. Uses shop air to propel flush solvent through each component.

**8807 - Flush Kit**  
with quart of flush solvent



**8806**  
Replacement Flush Probe w/Tip



**8808**  
**Flush Capturing Unit**  
Unit gives technician the opportunity to analyze flush debris as it is being removed. Collects flush material for disposal.



**8817**  
**Flush Kit - R12/R134a**  
systems with all oil types  
Contains: gun, hose, 1 gallon of flush solvent, and complete instructions. Adapts to use with all quick coupler types!

A/C Flushes

**PREMIUM A/C FLUSH (non-flammable)**

Johnsen's A/C Flush is an effective flushing solution that removes debris and sludge from A/C components. The solvency action of Johnsen's A/C flush dissolves deposits, is compatible with R12/R134a A/C systems and contains no CFC's. With Johnsen's A/C flush, flushing has never been more economical and convenient.

Johnsen's lubricant based flush is designed for use with both closed loop flushing machines and pressurized flush guns. Very effective, economical, convenient, and requires no special labeling when shipping. (MSDS available upon request).

**Lubricant Based Flush**

**8811A** .....Gallon  
**8812A** .....Quart



## Chemicals and Lubricants

### R134a/R12 POLYOL ESTER OIL

Johnsen's Synthetic Polyol Ester Lubricant (POE) is specifically formulated for mobile a/c systems. It's unique chemistry allows it to be used in either R12 or R134a systems. For use in factory fill or retrofit applications. Johnsen's POE is approved by automotive compressor OEM's and is formulated with a proprietary additive package that requires no different handling, safety or disposal precautions than conventional mineral oil. It is compatible with R12 and R134a refrigerant, Neoprene and HNBR o'rings, and XH5, XH7 and XH9 desiccant. Ester oil is fully miscible with conventional refrigerant oils.

Specifications:	ISO Grade: 100	<b>8201</b> .....8 oz.
	Viscosity@100°F(SUS):500	<b>8202</b> .....12 oz.
	Viscosity@40°C(cSt):100	<b>8203</b> .....Quart
	Pour Point: -22°F	<b>8204</b> .....Gallon
	Flash Point: 491°F	

**Ester Oil** - Use when retrofitting system from R12 to R134a and residual amounts of mineral oil are left in the system.



### R134a PAG OIL

Johnsen's Polyalkylene Glycol Lubricant (PAG) is specifically formulated for R134a mobile a/c systems. PAG oils are more abrasive to the skin than that of Mineral or Ester oils. Special requirements are needed when handling this product. It is compatible with R134a refrigerant only, Neoprene, HNBR, Buna N o'rings, and XH7 and XH9 desiccant. PAG oils and refrigerants are hydroscopic relative to mineral or ester oils and their exposure to air should be minimized in order to avoid excessive water absorption.

Three different viscosity grades of polyalkylene glycol lubricants formulated for R134a A/C systems are available, they meet or exceed OEM specifications.

FORD 10PA, FS10 SELTEC TM, Scroll <b>ISO 46 PAG OIL</b>	SANDEN <b>ISO 100 PAG OIL</b>	GMC <b>ISO 150 PAG OIL</b>
<b>8207</b> .....8 oz.	<b>8206</b> .....8 oz.	<b>8208</b> .....8 oz.
<b>8225</b> .....Quart	<b>8227</b> .....Quart	<b>8229</b> .....Quart
<b>8226</b> .....Gallon	<b>8228</b> .....Gallon	<b>8230</b> .....Gallon



### R12 REFRIGERANT MINERAL OIL

A premium quality wax-free, non-foaming compressor oil for all air conditioning systems using **R12** refrigerant **ONLY**. It is compatible with NBR, Buna N and Buna o'rings and XH5, XH7 and XH9 desiccant.

Specifications:
ISO Grade: 100
Viscosity@100°F(SUS): 525
Viscosity@40°C(cSt): 110
Pour Point: -10°F
Flash Point: 360°F

**8240** .....Quart



### DIPSTICKS

**8165**  
Dipstick - T/CCI/York  
Style -oil level checker

**8166**  
Dipstick - Sanden  
oil level checker

### POE32 OIL

Carrier/Thermoking  
For: R22, R134a, R404a, R407C

<b>8222</b> .....Gallon
SW32; BSE32; HFC32; 07-00354-00P04
<b>8223</b> .....Quart
SW32; BSE32; HFC32; 203-513



### POE68 OIL

Carrier/Thermoking  
For: R22, R134a, R404a, R407C

<b>8238</b> .....Gallon
SW68; BSE55; HFC68; 07-00317-00
<b>8239</b> .....Quart
SW68; BSE55; HFC68; 07-00317-00



Chemicals and Lubricants (continued)

**SANDEN R134a  
PAG SP15 OIL**



8248 .....8.45 oz.

Used when servicing Sanden Compressors in systems that are charged with 134a. For use with SD 508, 510, 709, 5H14, 7H15 Compressors. **SP15 replaces SP20**

**SP10 is PAG46** NOTE: SSB / EDGE Models use SP10 / PAG46

**VACUUM PUMP OIL**



8257 .....12 oz.

8256 .....Quart

8255 .....Gallon

Vacuum Pump Oil promotes internal sealing for good vacuum and absorbs unwanted vapor from evacuated units. Regular oil changes promote longer vacuum pump life.

**PAG OIL CHARGE**



8209 .....4 oz. PAG 150

A quick and easy way to add premium lubricant to an A/C system without having to discharge the refrigerant.

**POLYOL ESTER OIL  
CHARGE OIL**



8210 .....4 oz.

8212 .....12 oz.

A quick and easy way to add premium lubricant to an A/C system without having to discharge the refrigerant.

TOOLS — SERVICE ITEMS

**Lube and Seal**

**R134a Leak Stop**

**BIG BLU™ Leak Finder**



8217A .....8 oz. Pump Spray Bottle

**A/C Lube and Seal**

A premium mineral lubricant specially formulated for use with all a/c systems. It lubricates and seals parts such as o-rings, fittings, compressor shaft seals, and gaskets to assure a safe reliable seal.



8218 .....4 oz. Aerosol

8218A .....4 oz. Bottle (pour only)

**Johnson's Leak Stop**

Detects and helps to seal most common leaks in R134a A/C systems.



**SPRAY-ON BIG BLU LEAK FINDER**

Works like magic,  
A must for every shop!

8473 .....16 oz. Spray Bottle

8474 .....1 Gallon Refill

**Micro Leak Detector Spray Coating**

The only bubble/foam indicator capable of detecting freon (gas) leakage down to 0.65 oz. per year.

# TOOLS — SERVICE ITEMS

## Leak Detectors, Dyes and Accessories

TOOLS — SERVICE ITEMS

### TRACERLINE- Leak Detection



**8448A**

**EZ-Shot™ A/C Kit**

**Most Affordable - Leak Detection OPTI-PRO Kit**

- Includes the #8458A Opti-Pro LED Leak Detection Flashlight (true UV violet light)
- EZ-Shot A/C dye injection gun
- R134a hose/coupler & purge fitting
- 8 oz BigEZ universal/ester A/C dye cartridge, services up to 64 vehicles
- 8 oz spray bottle GLO-AWAY dye cleaner
- Fluorescence-enhancing glasses
- Rugged Carrying Case



**8449A**

**EZ-Shot™ A/C Kit**

**Most Complete - Leak Detection OPTI-PRO Kit**

- Includes the #8458A Opti-Pro Leak Detection Flashlight (true UV violet light)
- EZ-Ject A/C dye injector
- R134a hose/coupler & purge fitting
- EZ-Ject universal/ester A/C dye cartridge for servicing up to 14 vehicles
- 1 oz Dye-Lite All-In-One standard oil dye for all oil-based fluid systems
- 1 oz bottle of Dye-Lite water based coolant dye
- Fluorescence-enhancing glasses
- Rugged Carrying Case



**8443**

**EZ-Shot™ Injector**

Used to inject dye cartridges.



**8475** .....4 oz.

**8476** .....8 oz.

**A/C Dye Cartridges**

Prefilled and disposable. One ounce (1oz) of die treats up to 5-8 vehicles.

**8458A**

**OPTI-PRO™ Flashlight**

**LED Leak Detection - True UV (Violet Light) Flashlight Cordless, Economical - Works with all Tracerline Dyes**

- Provides optimal fluorescent dye response and contrast
- Power comparable to high-intensity 100 Watt lamps
- Inspection range of 15 feet
- 100,000 hr LED service life
- Uses 3 AAA batteries (included)
- 1 oz bottle of Dye-Lite water based coolant dye
- Fluorescence-enhancing glasses, belt holster & lanyard



### Stick Capsules

**Tracer Stick Capsules**

Tracer stick is injected into the a/c system through the low pressure valve. The a/c system is then operated to thoroughly circulate the dye in the system. When the refrigerant escapes from the system, it will leave a residual amount of dye at the point of leakage. The ultraviolet light will then locate the point of leakage revealed by a bright fluorescent glow.

**Low Side Small Capsules For 1-2.9 lbs. Refrigerant Systems**

<b>8460</b>	Ester R134a	.03 oz. Capsule	Qty 6 ea.
<b>8460EA</b>	Ester R134a	.03 oz. Capsule	Qty 1 ea.
<b>8461</b>	PAG R134a	.03 oz. Capsule	Qty 6 ea.
<b>8461EA</b>	PAG R134a	.03 oz. Capsule	Qty 1 ea.



**Low Side Large Capsules For 3-4.9 lbs. Refrigerant Systems**

<b>8463</b>	Ester R134a	.5 oz. Capsule	Qty 6 ea.
<b>8463EA</b>	Ester R134a	.5 oz. Capsule	Qty 1 ea.
<b>8464</b>	PAG R134a	.5 oz. Capsule	Qty 6 ea.



### DYES



**8477** .....8oz.

**All-In-One Dye**

**for Non-A/C Applications**

For gasoline, diesel engine oils, fuel; a/trans., power steering, hydraulic and lubrication fluids.

**EZ-Ject Stick Capsules**

Disposable capsules come pre-filled with a pre-measured dose of dye suited to the type and amount of refrigerant/lubricant in a system (use multiple capsules for larger systems).

**EZ-Ject Multi-Dose Dye Cartridges**

<b>8466</b>	Ester R134a	.5 oz. Cartridge	Qty 6 ea.
<b>8467</b>	PAG R134a	.5 oz. Cartridge	Qty 6 ea.
<b>8468</b>	Mineral Oils	.5 oz. Cartridge	Qty 6 ea.



**Universal UV Dye for A/C Applications**



**8478** .....8oz.

R12/R134a

(squeeze bottle)

A/C Lubricant Enhancer



Typical truck installation (one evaporator) use 1.5 oz. with sleeper unit use 2 oz. (recommended)

- Cold Air Faster
- Reduces Interior Humidity
- Extends Compressor Life
- Increases Heat Transfer Efficiencies
- Works Year-Round



**8301**  
3.0 oz. Pressurized Can  
(2 oz. of ICE<sup>32</sup> Lubricant Enhancer and 1 oz. of R134a)



**8303**  
1.5 oz. bottle, non-pressurized  
(ICE<sup>32</sup> Lubricant Enhancer)



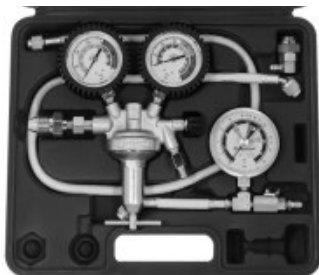
**8304**  
**Aerosol Can Installation Kit**  
Kit includes: Can Tap, Fittings, Gauge, Injector Hose, and Instructions.



**8305**  
**Manual Injector Kit**  
Fast, Easy and Simple!  
Connect injector to the low side service port of the A/C system. Uses #8302 or #8303 bottles.

TOOLS — SERVICE ITEMS

NITROGEN PRESSURE TESTING REGULATOR KIT



Use to pressurize the A/C system with nitrogen to locate any leaks. Removes the need to add refrigerant, find leak and re-cycle refrigerant.

- 1/4" SAE flare outlet port, with control valve, to keep pressure on the regulator at all times
- T-Handle for ease of pressure adjustment
- 63mm (2-1/2") gauges with guards
- High pressure gauge 4400 psig (300 bar)
- Low pressure gauge 1000 psig (70 bar)
- Nitrogen Pressure Regulator
- 48" Yellow Charging Hose
- Leak Testing Adapter
- Kit comes in a blow, molded case.

**8444**  
**Mastercool's new Nitrogen Pressure Regulator**  
Specifically designed to meet the specifications of HVAC/R and automotive A/C systems.

# TOOLS — SERVICE ITEMS

## Leak Detectors, Dyes and Accessories

### Mastercool™ UV Leak Locator Kits



**8445A**

**UV LEAK LOCATOR KIT**

- FLEXnGLOW™ Compact Kit Design
  - Brilliant 12V/50 Watt UV Light
  - Compact Professional Dye Injector
  - 10 Applications (R12/R134a universal concentrated dye)
  - UV Enhancing Safety Glasses
  - Dye Cleaner
  - R12 Adapter
  - 10 Service Info. Labels
- Uses **#8470** dye cartridges.

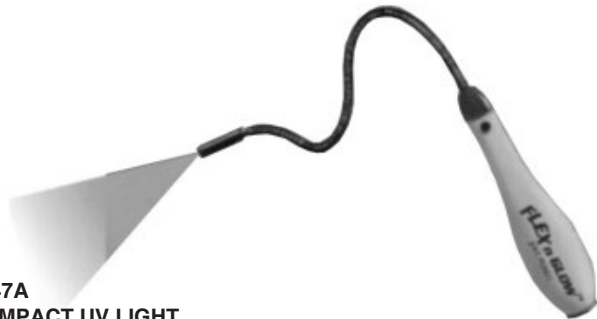


**8446**

**UV LEAK LOCATOR KIT**

- FLEXnGLOW™ Light
  - R12 Adapter
  - 10 Applications (universal concentrated dye)
  - 10 Service Info. Labels
  - Includes UV Enhancing Safety Glasses
  - Mini Dye Injector with Hose/Low Side, R134a Coupler
- Uses **#8470** dye cartridges.

### Mastercool™ UV Compact Light



**8447A**

**COMPACT UV LIGHT**

- FLEXnGLOW™ Flexible Wand
- Quad UV Light - 4 bulbs
- Bright LED Technology
- Rugged Ergonomic Grip
- Includes UV Enhancing Safety Glasses

### Mastercool™ Replacement Dyes



Mastercool Injector Only  
(Universal Dyes see page 557)

**8470** .....10 application dye ONLY FITS: 8445A & 8446 injectors.  
12 c.c. bottle R12/R134a Dye Cartridge

**8471** .....25 application dye ONLY FITS: 8445 & 8457 injectors.  
25 c.c. bottle R12/R134a Dye Cartridge

### Mastercool™ Cartridge Type Dye Injector

**8457**

**Dye Injector (Cartridge Type)**

Adding dye is fast and easy, simply connect the injector to the low side of the A/C System and twist the handle to the next application line. Replaceable cartridges provide 25 applications of dye that is compatible with R12/22/502 and R134a Systems. The injector hose comes complete with an R134a coupler and a drip free control valve for 1/4 flare systems.

Uses **#8471** dye cartridges.





Leak Detectors, Dyes and Accessories

Mastercool™ Electronic Leak Detectors



**8770A**  
**Electronic Leak Detector**  
 An Accurate And Reliable Solution To Electronic Leak Detection

- 3 levels of sensitivity (5 levels of detection)
- Visual leak level indicator
- Detects leaks as small as 1/4 ounce (7gr) per year
- Custom molded carrying case

**8773**.....Replacement Sensor Tip

**The INSPECTOR**

This new design allows the user to perform electronic and UV leak detection all with one tool. The ultra bright UV light is built into the end of the probe allowing easy access into tight areas. Incorporating both electronic and UV technology into one unit insures that even the toughest leaks can be found.



**8771**  
**2-In-1 Electronic UV Leak Detector**  
 The INSPECTOR offers:

- 6 levels of sensitivity (15 levels of detection)
- Ultra Bright UV/Blue LEDLight
- UV Safety Glasses
- Tri-Colored visual leak level indicator
- Mute function
- Detects leaks as small as 1/10 ounce (3gr) per year
- Custom molded carrying case

**8772**.....Replacement LED Bulb  
**8773**.....Replacement Sensor Tip

TOOLS – SERVICE ITEMS

Service Equipment

**8418**  
**Portable Recycler Only**  
**Includes 30 lb. DOT Tank (sold empty)**  
 Recovers and removes moisture, oil and debris from refrigerant. New Recovery System offers a State of the Art 1/2 hp Oil-less Compressor with a built-in High Volume Cooling Fan for fast recovery. Color-coded Sight Gauge identifies when Filter Dryer replacement is needed. Complete A/C Recovery System Unit with built in Oil Separator and Filter Dryer, 30 lb. DOT Tank and Cable, 72" Yellow and Blue Hoses, R134a Low Side Coupler and Oil Purge Bottle.  
 Note: Does not recharge.



**Recovery Refrigerant Tank**  
 (sold empty)

**8705**..... 30 lb.  
**8706**..... 50 lb.



Robinair Filters



**8707**  
**Quick Change Recycling Filter**  
 Flare type for older Robinair Models:  
 17700A, 34430, 34450, 34700 series.



**8708** (OE Robinair)  
**Spin-On Recycling Filter Drier**  
 for Robinair Model: 34134K-2K., 17700-2K, 34234, 34300-2K, 34700 thru 34900 series.  
**8708G** (Aftermarket)  
 Replacement Filter (for model #34724)

## Service Equipment (continued)

### 8414 (R134a) Portable Electronic Charging Stations Single Stage Pump

A lightweight, durable, steel frame cart that contains all the necessary tools to quickly and conveniently charge the A/C system. No need for different sized charging cylinders with Mastercool's rugged die cast electronic scale. Simply place the refrigerant cylinder on the scale and charge.



#### MANIFOLD VACUUM

- 2-Way Aluminum Block
- 5 CFM 110v / 60Hz

### 8750 (R134a) Digital Manifold Set

A plastic molded case includes a manifold with a set of 3 -72" hoses and a set of manual couplers.



#### SPECIFICATIONS

- Pressure Display: PSI, IN-Hg, BAR, MPa and kg/cm<sup>2</sup>  
(Low Side Range: 0 - 350 PSI)  
(High Side Range: 0 - 500 PSI)
- Operating Temperature: 16 - 42°C (60 - 108°)
- Battery Life: 50 hours
- Idle Mode: 400 hours
- Auto Shut-off: 15 minutes

## Charging Manifolds

### 8753 (R134a) Deluxe Aluminum 4-Way Manifold

Manifold gauge set with three 72" color-coded hoses with quick coupling valves. Four-way manifold gauges give you more control over air conditioning service. Four ball valves control refrigerant flow, vacuum and access to the system high and low sides with only a quarter turn. Four-way manifolds attach to service tools and the A/C system once. After that, control everything with a simple quarter turn of the valves.



### 8754A (R134a) Deluxe Aluminum Side Wheel Manifold

Manifold gauge has three 96" R134a color coded hoses with quick coupling valves. Silicone dampened anti-flutter gauges, extruded aluminum manifold body with easy access hand valves attached to free floating piston valves for smooth and trouble free operation.



### 8755 (R12) Deluxe Brass Side Wheel Manifold

Manifold gauge set with three 96" color-coded hoses with quick coupling valves. Unit has brass forged body for extreme durability with angled side hand valves for ease of operation. Double o-ring seals for smooth action valves and anti-flutter gauges for smooth pressure readings.



### 8756A (R12/R134a) Dual Aluminum Manifold Set

Manifold gauge has three 96" nylon hoses, standard couplers, tank adapter, and 2 1/2" silicone anti-flutter gauges.



### 8416A Accu-Charge Electronic Refrigerant Scale

Features include 15 minute auto-off function, memory function saves last weight when unit shuts off, 176 pound capacity, 60 hour performance on one 9V alkaline battery, compact 9"x9" platform, carrying case, extra large LCD display and reliable membrane keypad switches.



### 8417 Accu-Charging Module

This Charging Module turns Accu-Charge Electronic Refrigerant Scale into an automatic programmable scale. This module allows the user to control the exact amount of refrigerant transferring to and from the A/C System. Battery powered 9 volt. Includes hose for tank connection, USB cord and 1/4" flare 1/2" ACME adapters.



### Vapor•Vue™ Charging Device

Protects compressor from liquid slugging when charging system.



w/R12 fittings

**8425**

Vapor•Vue™ is a visible vapor charging device that absorbs heat naturally and flashes the liquid refrigerant from the cylinder and charges into the system as a vapor. Connects to the low side of charging manifold - increases the charging rate up to 8 times faster - the liquid is controlled by adjusting the manifold valve and monitoring the vapor rate through the double sight glass.



**8869**

**R134a Conversion Kit**

Converts R12 manifold set to R134a.

### Replacement Compound Gauges

**2 1/2" Diameter**



**8760** .....R12  
High Side Pressure Gauge (Red)

**8761** .....R12  
Low Side Pressure Gauge (Blue)

**2 1/2" Diameter**



**8764** .....R134a  
High Side Pressure Gauge (Red)

**8765** .....R134a  
Low Side Pressure Gauge (Blue)

**3 1/8" Diameter**



**8766** .....R134a  
High Side Pressure Gauge (Red)

**8767** .....R134a  
Low Side Pressure Gauge (Blue)

### Replacement Charging Hoses with Quick Seal Fittings

**R134a**

Length	60"	96"	144"
Blue		<b>8790</b>	<b>8798</b>
Red		<b>8791</b>	<b>8799</b>
Yellow	<b>8789</b>	<b>8792</b>	<b>8801</b>



**R12**

Length	96"
Blue	<b>8793</b>
Red	<b>8794</b>
Yellow	<b>8795</b>



### Charging Hose Sets



**8796**  
**96" Charging Hose Set - R12**  
1/4" Standard hoses with Quick Seal fittings



**8797**  
**96" Charging Hose Set - R134a**  
14mm x 1/2" ACME

**R12 Charging Hoses with Manual (Ball Valve) Shut-Off**



<b>R12</b>	
Length	96"
Blue	<b>8813</b>
Red	<b>8814</b>

# TOOLS — SERVICE ITEMS

TOOLS — SERVICE ITEMS

## Charging Adapters & Seals

 <p><b>Manual Control Valves</b> <b>8867</b> 1/4" FFL x 1/4" MFL</p>	 <p><b>8874</b> <b>Charging Hose Seals</b> For use with R134a Charging Hoses with 1/2" ACME Fittings. Fits onto Manifold end of hose (for red/blue and yellow hoses). Box of 10</p>	 <p><b>8887</b> <b>Manual Shut-Off Ball Valve</b> 1/4" x 1/4" Swivel Ball (less hose)</p>	 <p><b>8891</b> <b>Service Port - GM High Side</b> 1/4" x 3/16" Female</p>
 <p><b>Service Port - 90° GM High Side</b> <b>8892</b> 1/4" x 3/16" Female <b>8893</b> 1/4" x 1/4" Female</p>	 <p><b>8896</b> <b>Charging Adapter</b> 6" Flexible 1/4" x 1/4"</p>	 <p><b>8897</b> <b>Charging Adapter</b> Ford 1/8" High Side Adapter</p>	 <p><b>8898</b> <b>Charging Adapter</b> GM 6" Flexible 1/4" x 3/16"</p>
 <p><b>8899</b> <b>Access Service Valve</b> 1/2" ACME-M x 1/8" MPT</p>	 <p><b>8900</b> <b>Schrader Adapter Fitting</b> For installation in drier pressure ports. 3/8" x 7/16"</p>	 <p><b>8903</b> <b>Adapter Fitting</b> 1/2" ACME-M x 1/2" ACME-M union</p>	
 <p><b>8904</b> .....1/4" x 1/4" <b>8905</b> .....1/4" x 3/16" <b>Straight Manual Shut Off Valve</b> 1/4" turn ball valve controls the flow of refrigerant. Anti-Blowback fitting automatically shuts off high side charging hose when disconnected from system; no refrigerant loss or finger burns.</p>		 <p><b>8907</b> .....1/4" x 1/4" <b>90° Manual Shut Off Valve - R12</b> Manual control valve controls the flow of refrigerant, meeting EPA requirements to contain R12. Attaches to charging hose end.</p>	

## Quick Seal Fitting Adapter - Anti-blow back fitting for charging hoses.

 <p><b>8909</b> 1/2" ACME x 1/2" ACME <b>8784</b> Replacement Seal, R12</p>	 <p><b>8910</b> 1/4" MFL x 1/4" FFL <b>8784</b> Replacement Seal, R12</p>	 <p><b>8911</b> 1/4" MFL x 3/16" FFL <b>8784</b> Replacement Seal, R12</p>
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Service Adapter Kits and A/C Service Repair Kit



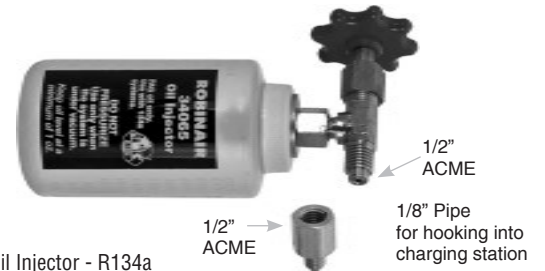
**8883 Deluxe A/C Service Repair Kit**  
Replacement gaskets, depressors, and o-rings for charging hoses and adapters.

- Kit Includes:**
- 1/4" Gasket (10 pcs)..... **8781**
  - 1/4" Depressor (10 pcs)..... **8782**
  - O-Ring for 8913 (10 pcs)..... **8870**
  - O-Ring for 8912 (10 pcs)..... **8871**
  - Gasket for R134a hose (10 pcs)..... **8875**
  - O-Ring for R134a hose (10 pcs)..... **8876**
  - Gasket for 8909 (10 pcs)..... **8877**
  - Gasket for R12 Shut-off valve (10 pcs).... **8882**

Oil Injectors



**8737** .....Oil Injector - R12  
**8738** .....Oil Injector - R134a  
Can be used with charging stations or manifold gauge sets to measure and dispense up to 2 ounces of oil.



**8740** .....Oil Injector - R134a  
Installs on the low side of the manifold to pull refrigeration oil into the system while under vacuum.



**8741** .....Syringe Oil Injector - R134a  
**8742** .....Syringe Oil Injector - R12  
Use to add refrigeration oil to fully charged A/C systems-the fittings connect to the low side access port. Fill the barrel with the amount of oil needed (levels are clearly marked), connect to the port and press the plunger. A check valve prevents any backflow of refrigerant. Also can be used to inject fluorescent dye.



**8743** .....Oil Injector - R134a  
**8744** .....Oil Injector - R12  
Add oil by allowing vacuum to pull it in after evacuation process or use refrigerant to push it in using the recharge process, measures and dispenses up to 2 ounces of oil.

Springlock



**8160 Spring Lock Disconnect Tool**  
Set includes four sizes:  
3/8", 1/2", 5/8", and 3/4".




**8985 R12/R134a Ford Spring Lock O'Ring Kit**  
Garter Springs and O'rings for all size couplers used on 1981 to present Fords.

- Part No Description**
- 0011M** .....No. 6 O-Ring Metric (10 pcs)
  - 0013M** .....No. 8 O-Ring Metric (10 pcs)
  - 0015M** .....No. 10 O-Ring Metric (10 pcs)
  - 0017M** .....No. 12 O-Ring Metric (10 pcs)
  - NSS** .....No. 6 Garter Springs (10 pcs)
  - NSS** .....No. 8 Garter Springs (10 pcs)
  - NSS** .....No. 10 Garter Springs (10 pcs)
  - NSS** .....No. 12 Garter Springs (10 pcs)

# TOOLS — SERVICE ITEMS

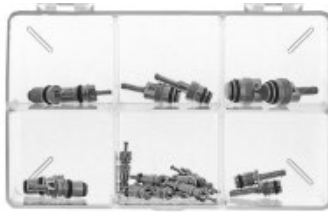
TOOLS — SERVICE ITEMS

R134a Service Couplers		
 <p><b>8720</b> <b>Vacuum Pump Fitting</b> Retro Adapter to convert R12 pumps to R134a</p>	 <p><b>8722</b> <b>"T" Style Retro</b> Adapter to convert R12 Pumps to R134a</p>	 <p><b>8745</b> <b>ACME T-Fitting</b> w/o Schrader</p>
 <p><b>8721</b> <b>Retro</b> - Adapter 1/4" Female x 1/2" ACME to convert R12 Pumps to R134a</p>		
 <p><b>8850</b> .....High Side Coupler - red <b>8851</b> .....Low Side Coupler - blue Unique swivel design enables user to access all service ports even in the tightest applications.</p>	 <p><b>8869</b> <b>R134a Conversion Kit</b> to converts R12 manifold set to R134a</p>	<p><b>Coupler Repair Components</b></p>  <p><b>8870</b> .....5 guides &amp; 5 o-rings (for #8912R) <b>8871</b> .....5 guides &amp; 5 o-rings (for #8913R) <b>8872</b> .....10 o-rings (for #8850) <b>8873</b> .....10 o-rings (for #8851)</p>
<p><b>8876</b> <b>R134a Charging Hose Seals</b> 14mm male end for red/blue hoses (box of 10 pcs.)</p> 	<p><b>8878</b> O-Rings for Brass Manifolds (box of 12 pcs.)</p> 	<p><b>8879</b> Seal and Seat Assembly for Brass Manifolds</p> 
<p><b>8780</b> Gaskets - box of 10 pcs (also for Can Tap #8727)</p> 	<p><b>8894</b> <b>Straight Adapter</b> R134a (low side) 13 mm x 1/2" ACME Female</p>  <p>Gasket #8780</p>	<p><b>8895</b> <b>Adapter Coupler</b> R134a 1/4" Flare (7/16"-20) x 1/2" ACME</p>  <p>Gasket #8780</p>
 <p>(Manual)</p> <p><b>8912</b> ..... Low Side Coupler - blue <b>8912R</b> .... OE Robinair style <b>8913</b> ..... High Side Coupler - red <b>8913R</b> .... OE RobinAir Style Service Couplers for R134a New, smaller design for tight quarters.</p>		

Schrader Valves and Tools


<p><b>GMC only</b></p>  <p>1/4" OD</p> <p><b>8914</b> <b>1/4"- GM High Flow Large Bore Valve Core</b> Service Port, OAL 3/4" top to bottom (10 per box)</p>	<p><b>Universal Standard Size</b></p>  <p>7/32" OD</p> <p><b>8915</b> <b>1/4"- Replacement Valve Core</b> R12/R134a Service Port OAL 3/4" top to bottom (10 per box)</p>	 <p>9/32" OD</p> <p><b>8916</b> <b>M6 - High Flow Removal Tool</b> R134a; Japanese JRA OAL 3/4" top to bottom (10 per box)</p>	<p><b>Freightliner</b></p>  <p>0.714 mm 1.065 mm 1/4" OD</p> <p><b>8917</b> <b>1/4"- Sprinter Van Valve Core</b> OAL 1-1/16" (1.065mm) top to bottom (10 per box)</p>	 <p><b>8918</b> <b>Universal Large Bore Remover</b> - Used on Standard R12/R134a, and JRA/EATON Large Bore R134a Valve Cores.</p>
 <p><b>8919</b> <b>Universal Valve Core Remover</b> Double ended for Standard, and GM R12 Large Bore Valve Cores.</p>	 <p><b>8921</b> .....R12 <b>Schrader Valve Rethreading Tool</b> Cleans and Deburs O.E. Schrader Ports</p>	 <p><b>8922</b> .....R134a <b>Service Port Reamer Tool</b> Eliminates burrs which nick and cut coupler o'rings causing them to leak.</p>	 <p><b>8924</b> .....R12 <b>Schrader Tool</b> with storage for extra cores. Includes 6 cores.</p>	<p><b>E-Z Clip and High Flow</b></p>  <p>1/4" OD</p> <p><b>8925</b> <b>8925E</b> .....(OE, E-Z Clip) <b>M8 - Eaton 13mm SSV High Flow Low Side Service Port, OAL 7/8" top to bottom</b> (10 per box)</p>
<p><b>E-Z Clip and High Flow</b></p>  <p>11/32" OD</p> <p><b>8926</b> <b>8926E</b> .....(OE, E-Z Clip) <b>M10 - Eaton 16mm SSV High Flow High Side Service Port</b> OAL 7/8" top to bottom (10 per box)</p>	 <p><b>8927</b> .....R134a <b>Heavy Duty Core Removal Tool, Standard Size and Eaton SSV E-Z Clip Size.</b></p>	 <p><b>8936</b> .....Low Side - R134a <b>8937</b> .....High Side - R134a <b>Octagon Service Port Socket</b> Specially designed thin wall sockets for eight sided retrofit adapter.</p>	<p><b>Volvo</b></p>  <p>9/32" OD</p> <p><b>8955</b> <b>M8 - High Flow Schrader Valve Core</b> M24x1.0 thrd, OD Base 7/32" OAL 7/8" top to bottom (10 per box)</p>	

TOOLS - SERVICE ITEMS



**8938**  
**R12/R134a Schrader Valve Core Kit**  
Kit contains:

Qty.	P/N	Description
• 2 ea.	<b>8914</b>	GM Large Bore
• 10 ea.	<b>8915</b>	Standard Flow Valve Core
• 2 ea.	<b>8916</b>	JRA Import Valve Core
• 2 ea.	<b>8925</b>	Eaton 13mm SSV High Flow
• 2 ea.	<b>8926</b>	Eaton 16mm SSV High Flow
• 2 ea.	<b>8955</b>	M8 High Flow Core



**8978**  
**R134a Valve Core Repair Assortment Kit**  
Kit contains:

Qty.	P/N	Description
• 3 ea.	<b>8914</b>	GM Large Bore
• 10 ea.	<b>8915</b>	Standard Flow Valve Core
• 3 ea.	<b>8916</b>	JRA Import Valve Core
• 1 ea.	<b>8919</b>	Universal Core Remover
• 2 ea.	<b>5552</b>	Seal Fitting 16mm x 1.5

## Valve Core Service Tools

**These durable and versatile tools perform three time saving service tasks:**

1. Removal and replacement of service valve cores without losing system charge.
2. Temporary removal of valve cores for quicker, more complete recovery, evacuation, and recharge.
3. Calculation of superheat with excellent accuracy by reading refrigerant temperature and pressure from the same location in the system.



**8931**  
**GM Large Bore Valve Core Remover/Installer**  
 Sturdy ball valve design controls refrigerant flow with 1/4 turn of the valve. Lever position also gives visual indication of whether valve is opened or closed.  
 Includes 1/4" x 3/16" adapter and 1/4" x 1/8" adapter.



**8932**  
**Valve Core Remover/Installer with Access Port**  
 Temporary removal of service valve core eliminates the restriction it creates and provides full flow of refrigerant and vacuum during recovery, evacuation, and recharge saving valuable service time.



**8933**  
**Superheat Determination Set**  
 Special Valve core remover/installer adapter allows replacement of damaged or faulty service valve cores without discharging the system. Valve replacement no longer requires time consuming refrigerant recovery. Calculation of superheat with excellent accuracy by reading refrigerant temperature and pressure from the same location in the system.



**8934** .....R134a  
**Valve Core Remover/Installer**  
 Includes special R134a service port adapters.

## Valve Core Service Tool Kits



**8950** .....R12/R134a  
**Universal Master Kit**

- Valve Assembly
- R134a high side 16mm connector
- R134a low side 13mm connector
- 1/4" FL swivel connector
- Standard valve core remover/installer assembly
- GM large bore valve core remover/installer assembly
- JRA R134a valve core remover/installer
- Eaton R134a low side valve core remover/installer
- Eaton R134a high side valve core remover/installer
- Adapter 1/4"-M x 3/16"-F high side GM/Ford
- Adapter 1/4"-M x 1/8"-F high side Ford



**8951** .....R134a  
**Standard & JRA (M6) Valve Core Kit**

- Valve Assembly
- Standard R134a valve core remover/installer assembly
- R134a high side 16mm connector
- R134a low side 13mm connector



**8952** .....R134a  
**Eaton (M8 & M10) Valve Core Kit**

- Valve Assembly
- Eaton R134a low side valve core remover/installer
- Eaton R134a high side valve core remover/installer
- R134a high side 16mm connector
- R134a low side 13mm connector



Vacuum Pumps

PART#	No. of Stages	Free Air Displacement	Ultimate Vacuum	Pump Speed	Motor	Elec. Specs.	Weight
8709A	1	1.5 cfm	50 microns	1/6 hp	3450 rpm	110V/60 hz	12 lbs.
8710	2	3 cfm	70 microns	1/3 hp	1725 rpm	110V/60 hz	28 lbs.
8711A		1.3 cfm	Air Operated - Requires 4.5cfm/90psi shop air				
8712A	2	5 cfm	25 microns	1/3 hp	1725 rpm	110V/60 hz	32 lbs.
8713	2	7.5 cfm	25 microns	1/2 hp	1725 rpm	110V/60 hz	34 lbs.

**8709A**  
1.5 CFM Single Stage Vacuum Pump  
Multi-refrigerant compatible.  
Works with R12 & R134a.



Air Disp. .... 1.5 CFM  
Drive..... Direct  
Motor Size..... 1/6HP  
Voltage ..... 110-115V  
Micron Rating ..... 50 Microns  
Oil Capacity ..... 8 oz.  
Intake Fitting ..... 1/2" ACME (R134a); 1/4" Flare (R12)

**8710**  
3 CFM Two Stage Vacuum Pump  
Multi-refrigerant compatible.  
Works with R12 & R134a.



Air Disp. .... 3 CFM  
Drive..... Direct  
Motor Size..... 1/3HP  
Voltage ..... 110-115V  
Micron Rating ..... 70 Microns  
Oil Capacity ..... 22 oz.  
Intake Fitting ..... 1/2" ACME (R134a); 1/4" Flare (R12)

**8711A**  
Air Operated Light Duty Vacuum Pump



Air Disp. .... 1.3 CFM  
Air Operated - Requires 4.5 cfm/90 psi shop air

**8712A**  
5 CFM Two Stage Vacuum Pump  
Multi-refrigerant compatible.  
Works with R12 & R134a.



Air Disp. .... 5 CFM  
Motor Size..... 1/3 HP  
Voltage ..... 115V 60 Hz  
Micron Rating ..... 25 Microns  
Oil Capacity ..... 13.5 oz. (399ml)  
Intake Fitting ..... 1/2" ACME (R134a);  
1/4" Flare (R12), 3/8" Flare (R12)

**8713**  
7 CFM Two Stage Vacuum Pump  
Multi-refrigerant compatible.  
Works with R12 & R134a.



Air Disp. .... 7 CFM  
Motor Size..... 1/2 HP  
Voltage ..... 115V 60 Hz  
Micron Rating ..... 25 Microns  
Oil Capacity ..... 22 oz.  
Intake Fitting ..... 1/2" ACME (R134a);  
1/4" Flare (R12), 3/8" Flare (R12)

**8257** ....12 oz.  
**8256** ....Quart  
**8255** ....Gallon



**Vacuum Pump Oil**  
Promotes internal sealing for good vacuum and absorbs unwanted vapor from evacuated units. Regular oil changes promote longer vacuum pump life.

1/4" SAE  
1/2" ACME

**8720**  
Vacuum Pump Fitting - Retro-Adapter to convert R12 pumps to R134a

1/2" ACME  
1/4" SAE

**8721**  
Vacuum Pump Fitting - Retro-Adapter to convert R12 pumps to R134a

1/2" ACME  
1/4" SAE

**8722**  
Vacuum Pump Fitting - "T" Style Retro-Adapter to convert R12 pumps to R134a

TOOLS - SERVICE ITEMS

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## Clutch Plate Removal Tools



**8940**  
Sanden 505/507/508/510/575  
708/709



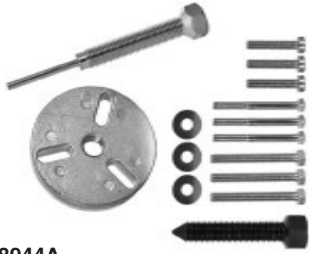
**8941**  
GM A6/R4



**8942**  
Ford FS6  
Chrysler C171/A590



**8943**  
GM DA6/HR6/V5



**8944A**  
Deep Reach Hub Remover  
For Seltec/Valeo TM13-31 models.

## Compressor/Clutch Turning Tool



**8168**  
**Compressor/Clutch Turning Tool**  
Allows for the application of force to the hub, to rotate compressor.  
Great for GMC HT6 Compressors.

## Hub Puller/Installer Kit



**8195**  
**Deluxe Hub Puller/Installer Kit**  
• Kit contains a complete offering of A/C compressor clutch hub pullers and installers for GM, Ford, Chrysler and Imports.  
• Includes a compressor identification chart and comes in a custom molded case.

## Clutch Pulley Pullers



**8196**  
**Universal Clutch Pulley Puller Kits**  
Kit contains:  
• Rotor and bearing pilot  
• Universal puller body  
• Universal puller arbor  
• Universal remover jaws



**8197**  
**Universal Pulley Puller Kits**  
Kit contains:  
• Puller arbor  
• Pulley removal jaws  
• Set of thumb screws and washers  
• GM pulley removal pilot  
• GM pulley hub removal pilot  
• GM puller body

Service Tool Sets



**8175**  
**T/CCI, York, Tecumseh Seal Set**  
 All the specialized tools needed to replace seals.  
 CONTAINS:  
 • 5/8" x 2" x 11" NC Clutch Remover  
 • 5/8" x 2" x 18" SAE Clutch Remover  
 • Seal Remover • Seal Installer & Plate Alignment Tool



**8177**  
**FORD FS6 Seal Set**



**8178**  
**Sanden 508/510 Seal Set**



**8179**  
**Seltec/Zexel Diesel-Kiki Seal Set**  
 All the tools necessary to replace seals on Zexel/Diesel-Kiki DKS12, DKS13, and DKS15 compressors.  
 CONTAINS:  
 • Drive Plate Remover • Drive Plate Installer  
 • Retaining Ring Installer • Pulley Puller Pilot • Seal Remover & Installer



**8181**  
**Master Seal Service Tool Set**  
 Includes the tools necessary to service seals on all GM, Nippondenso, York, Tecumseh, and Sanden compressors.



**8183**  
**Sanden Compressor Clutch Tool Kit**  
 (Essential tools only for removing and installing clutches)



**8184**  
**Seltec/Valeo Compressor Clutch Tool Kit**  
 For TM13-31 compressors.  
 (Essential tools for removing and installing clutches)



**8947**  
**Oval Switch Puller**  
 Used on GM vehicles with Denso 10S17F / 10S20F compressor w/oval head, switch in rear head.



**8948**  
**Round Switch Puller**  
 Used on GM vehicles with Denso 10S17F / 10S20F compressor w/round head, switch in rear head.