### TOOLS & SERVICE ITEMS

<table>
<thead>
<tr>
<th>Category</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCESSORIES</td>
<td>463</td>
</tr>
<tr>
<td>CHARGING ADAPTERS</td>
<td>473</td>
</tr>
<tr>
<td>CHARGING HOSES</td>
<td>472</td>
</tr>
<tr>
<td>CHARGING MANIFOLDS</td>
<td>475</td>
</tr>
<tr>
<td>CHEMICALS AND LUBRICANTS</td>
<td>464-468</td>
</tr>
<tr>
<td>CLUTCH PLATE TOOLS</td>
<td>480</td>
</tr>
<tr>
<td>CLUTCH PULLEY PULLERS</td>
<td>480</td>
</tr>
<tr>
<td>COMPRESSOR GUARD</td>
<td>476</td>
</tr>
<tr>
<td>DIPSTICKS</td>
<td>465</td>
</tr>
<tr>
<td>FLUSHES AND COMPONENTS</td>
<td>464</td>
</tr>
<tr>
<td>GAUGES</td>
<td>72</td>
</tr>
<tr>
<td>ICE&lt;sup&gt;32&lt;/sup&gt;</td>
<td>468</td>
</tr>
<tr>
<td>LEAK DETECTORS</td>
<td>467-470</td>
</tr>
<tr>
<td>LUBRICANT ENHANCER (ICE&lt;sup&gt;32&lt;/sup&gt;)</td>
<td>468</td>
</tr>
<tr>
<td>LUBRICANTS/OILS</td>
<td>465-466</td>
</tr>
<tr>
<td>MASTERCOOL PRODUCTS</td>
<td>469</td>
</tr>
<tr>
<td>MASTERCOOL HOSE CRIMPER</td>
<td>368</td>
</tr>
<tr>
<td>OIL TYPES - CHART</td>
<td>228</td>
</tr>
<tr>
<td>OIL INJECTORS</td>
<td>474</td>
</tr>
<tr>
<td>ROBINAIR RECYCLING FILTER</td>
<td>470</td>
</tr>
<tr>
<td>SERVICE ADAPTER KITS</td>
<td>474</td>
</tr>
<tr>
<td>SERVICE COUPLERS</td>
<td>475</td>
</tr>
<tr>
<td>SERVICE EQUIPMENT</td>
<td>470</td>
</tr>
<tr>
<td>SERVICE TOOL SETS</td>
<td>481</td>
</tr>
<tr>
<td>SHRADER VALVES AND TOOLS</td>
<td>477-478</td>
</tr>
<tr>
<td>SYSTEM GUARD</td>
<td>476</td>
</tr>
<tr>
<td>THERMOMETERS</td>
<td>464</td>
</tr>
<tr>
<td>TRACERLINE PRODUCTS</td>
<td>467</td>
</tr>
<tr>
<td>VALVE CORE AND TOOLS</td>
<td>477-478</td>
</tr>
<tr>
<td>VACUUM PUMPS</td>
<td>479</td>
</tr>
<tr>
<td>VACUUMM FITTINGS, OIL</td>
<td>479</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>---------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>8719</td>
<td>3-In-1 Can Tap Valve Use on: R12, R134a and Oil Charge Cans</td>
</tr>
<tr>
<td>8728</td>
<td>R134a Can Tap Valve Side tap design pierces the can and locks-on with one quick motion.</td>
</tr>
<tr>
<td>8729</td>
<td>R134a Recharge Kit Screw on design with hose and quick coupler. Built in safety check valve.</td>
</tr>
<tr>
<td>8730</td>
<td>Handi-Cut A/C Hose Cutter Makes quick clean cuts. Cuts R12, R134a, barrier and non-barrier hoses up to 1 1/2&quot; OD. 8731 - Replacement Blade</td>
</tr>
<tr>
<td>8732</td>
<td>A/C Ratchet Reversible 9/16&quot;, 1/2&quot; Hex, and 1/4&quot;, 3/16&quot; Square.</td>
</tr>
<tr>
<td>8734</td>
<td>Coil Fin Comb Cleans and straightens evaporator and condenser coils. Six sided head for 6, 8, 10, 12, 14, and 15 fins per inch applications.</td>
</tr>
<tr>
<td>8735</td>
<td>Safety Goggles A must for work with refrigerants and flushing agents. Quality goggles with specially designed vents</td>
</tr>
<tr>
<td>8736</td>
<td>UV Safety Goggles These are a must for protection against ultraviolet light when using UV light for leak detection.</td>
</tr>
<tr>
<td>8781</td>
<td>Refrigerant Hose Gasket Valve Gasket 1/4&quot; 10 per pack</td>
</tr>
<tr>
<td>8782</td>
<td>Refrigerant Hose Depressor Valve Depressor 1/4&quot; 10 per pack</td>
</tr>
<tr>
<td>8783</td>
<td>Refrigerant Hose Depressor &amp; Gasket 1/4&quot; Valve Depressor and Gasket 3 each per pack</td>
</tr>
<tr>
<td>8930</td>
<td>Orifice Tube Extractor Kit Easily removes damaged orifice tubes in Ford &amp; GM vehicles.</td>
</tr>
<tr>
<td>8990</td>
<td>A/C Service Tape 30 Ft. Roll</td>
</tr>
<tr>
<td>8890B</td>
<td>A/C Service Manual Covers service procedures for R12 / R134a</td>
</tr>
<tr>
<td>1000-DVD</td>
<td>A/C Procedures &amp; Classroom Training DVD - two-disc set</td>
</tr>
</tbody>
</table>
TOOLS — SERVICE ITEMS

Accessories

Thermometers

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8723</td>
<td>Dial Thermometer 1 3/8&quot; Face with Range: -40° to 160°F</td>
</tr>
<tr>
<td>8724</td>
<td>1 3/4&quot; Face Dial Thermometer with Range: 0° to 220°F</td>
</tr>
<tr>
<td>8725</td>
<td>1&quot; Face Dial Thermometer with Range: -58° to 320°F</td>
</tr>
<tr>
<td>8726</td>
<td>Digital Thermometer 1&quot; Dial Size, Battery Operated Range: -58° to 320°F</td>
</tr>
<tr>
<td>8774</td>
<td>Infrared Thermometer w/Target Laser 7/8&quot; Digital Display, Battery Operated Range: -4° to 932°F, 8:1 Ratio</td>
</tr>
<tr>
<td>8775</td>
<td>Dual Temp Infrared w/Contact Thermometer 7/8&quot; Digital Display, Battery Operated Range: -76° to 1400°F, 30:1 Ratio</td>
</tr>
</tbody>
</table>

Flushing Components

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8805</td>
<td>System Flush Kit Includes flush gun, hose, canister, and canister adapter. Uses shop air to propel flush solvent through each component.</td>
</tr>
<tr>
<td>8807</td>
<td>Flush Kit with quart of flush solvent</td>
</tr>
<tr>
<td>8806</td>
<td>Replacement Flush Probe w/Tip</td>
</tr>
<tr>
<td>8809</td>
<td>Replacement Rubber - Tip Only</td>
</tr>
<tr>
<td>8808</td>
<td>Flush Capturing Unit Unit gives technician the opportunity to analyze flush debris as it is being removed. Collects flush material for reuse or disposal.</td>
</tr>
<tr>
<td>8817</td>
<td>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!</td>
</tr>
</tbody>
</table>

A/C Flushes

**PREMIUM SOLVENT-BASED**

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.

**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
- **Viscosity@100°F(SUS):** 500
- **Viscosity@40°C(cSt):** 100
- **Pour Point:** -22°F
- **Flash Point:** 491°F

**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.

**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

**UNIVERSAL A/C LUBRICANT**

Castrol Universal A/C Lubricant is a high quality synthetic lubricant designed for use in all mobile air conditioning systems. It can be used in a/c systems using R12 or R-134a refrigerant.

**DIPSTICKS**

- 8165 Dipstick - T/CCI/York Style - oil level checker
- 8166 Dipstick - Sanden oil level checker
## 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)*

### VALEO R134a PAG OIL ISO VG 46

- **8250A ... 354cc**
  - Used when servicing Zexel Compressors in systems that are charged with R134a. For use with DKS 15, 16, 17, 26 compressors.

### VACUUM PUMP OIL

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

### Lube and Seal

- **8217 ...... 7 oz. Aerosol**
  - 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.

### R134a Leak Stop

- **8218 ...... 4 oz.**
  - Johnson’s Leak Stop - Detects and helps to seal most common leaks in R134a A/C systems.

### Big Blu™ Leak Finder

- **8473 ...... 16 oz. Spray Bottle**
- **8474 ...... 1 Gallon Refill**
  - **BIG BLU LEAK FINDER**
  - Works like magic, A must for every shop!
  - **Micro Leak Detector Spray Coating**
  - The only bubble/foam indicator capable of detecting freon (gas) leakage down to 0.65 oz. per year.
Leak Detectors, Dyes and Accessories

TRACERLINE- Leak Detection

8448
EZ-Shot™ Leak Detection Kit
Kit includes:
• Inspection lamp
• Dye injection gun, hoses, couplers for R-12/R134a systems
• Dye cartridge (8oz.) universal for all a/c systems
• Dye cleaner spray bottle (8oz.)
• Plastic case
• Enhancing glasses
• Underhood labels

8449
EZ-Ject™ Leak Detection Kit
Kit includes:
• Inspection lamp
• Dye injection gun w/R134a hose/coupler w/R12 adapter/fitting
• Dye cartridge universal for all a/c systems
• Dye for all oil-based fluids (1 oz. bottle)
• Leak dye coolant/auto body (1 oz. bottle)
• Plastic case
• Enhancing glasses
• Underhood labels

8458
OPTIMAX Jr™
Mini flashlight reveals leaks, Compatible with all leak dyes, Ultra compact, lightweight, LED bulb, batteries included.

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Type</th>
<th>Weight</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>8460</td>
<td>Ester R134a</td>
<td>.03 oz.</td>
<td>Capsule</td>
</tr>
<tr>
<td>8460EA</td>
<td>Ester R134a</td>
<td>.03 oz.</td>
<td>Capsule</td>
</tr>
<tr>
<td>8461</td>
<td>PAG R134a</td>
<td>.03 oz.</td>
<td>Capsule</td>
</tr>
<tr>
<td>8461EA</td>
<td>PAG R134a</td>
<td>.03 oz.</td>
<td>Capsule</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Type</th>
<th>Weight</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>8463</td>
<td>Ester R134a</td>
<td>.5 oz.</td>
<td>Capsule</td>
</tr>
<tr>
<td>8463EA</td>
<td>Ester R134a</td>
<td>.5 oz.</td>
<td>Capsule</td>
</tr>
<tr>
<td>8464</td>
<td>PAG R134a</td>
<td>.5 oz.</td>
<td>Capsule</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Type</th>
<th>Weight</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>8466</td>
<td>Ester R134a</td>
<td>.5 oz. Cartridge</td>
<td>Qty 6 ea.</td>
</tr>
<tr>
<td>8467</td>
<td>PAG R134a</td>
<td>.5 oz. Cartridge</td>
<td>Qty 6 ea.</td>
</tr>
<tr>
<td>8468</td>
<td>Mineral Oils</td>
<td>.5 oz. Cartridge</td>
<td>Qty 6 ea.</td>
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</table>

DYES

All-In-One Dye for Non-A/C Applications
For gasoline, diesel engine oils, fuel; a/trans., power steering, hydraulic and lubrication fluids.

<table>
<thead>
<tr>
<th>Code</th>
<th>Weight</th>
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<tbody>
<tr>
<td>8477</td>
<td>8oz.</td>
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</tbody>
</table>

Universal UV Dye for A/C Applications

<table>
<thead>
<tr>
<th>Code</th>
<th>Weight</th>
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</thead>
<tbody>
<tr>
<td>8478</td>
<td>8oz. (squeeze bottle)</td>
</tr>
</tbody>
</table>
## 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. Aerosol Can
(2 oz. of ICE\textsuperscript{32} Lubricant Enhancer and 1 oz. of R134a)

### 8302
8 oz. bottle, non-aerosol
(ICE\textsuperscript{32} Lubricant Enhancer)

### 8303
1.5 oz. bottle, non-aerosol
(ICE\textsuperscript{32} Lubricant Enhancer)

### 8304
Aerosol Can Installation Kit
Kit includes: Can Tap, Fittings, Gauge, Injector Hose, 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.

### 8306
Start Up Kit
Kit includes:
- All Season consumer brochures sm. (25/pk), Counter Display, Pocket Brochure, Poster, Window Decal

### 8310
Toolbox Demo Kit
Kit Includes:
- 3.0 oz. ICE\textsuperscript{32} (8301) ............... 3 Cans
- 1.5 oz. ICE\textsuperscript{32} (8303) ............... 6 Bottles
- Aerosol Injector Kit (8304) ....... 1
- Manual Injector (8305) ............. 1
- Clear Safety Goggles ............... 1
- Clipboard .............................. 1
- Consumer Brochures ............... 2 Packs
- ICE\textsuperscript{32} Aerosol Video .......... 1
- ICE\textsuperscript{32} Installation Forms ....... 2 Pkgs
- Plastic Tool Box ...................... 1
- Uei Digital Thermometer .......... 1
- Under Hood Stickers .......... 2 Sheets
- Window Decals ...................... 2
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**

**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.
Mastercool™ Electronic Leak Detectors

**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.

**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

**8771**
2-In-1 Electronic UV Leak Detector
The INSPECTOR offers:
- 6 levels of sensitivity (15 levels of detection)
- Ultra Bright UV/Blue LED Light
- 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

Service Equipment

**8418**
Portable Recycler - Includes 30 lb. DOT Tank
Recover 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

**8705**
R134a, 30 lb. Recovery Refrigerant Tank (sold empty).

Robinair Filters

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

**8708**
Spin-On Recycling Filter Drier
Service Equipment (continued)

8414 (R134a)
Portable 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”, carrying case, extra large LCD display and reliable membrane keypad switches.

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/cm²
  (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

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

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.

8756A (R12/R134a)
Dual Brass 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.

8754A (R134a)
Deluxe Brass Side Wheel Manifold
Manifold gauge has three 72” 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.

8869
R134a Conversion Kit
Converts R12 manifold set to R134a.
TOOLS — SERVICE ITEMS

Replacement Compound Gauges

<table>
<thead>
<tr>
<th>Diameter</th>
<th>2 1/2&quot; Diameter</th>
<th>2 1/2&quot; Diameter</th>
<th>3 1/8&quot; Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>R12</td>
<td>8760 ...........</td>
<td>8764 ...........</td>
<td>8766 ...........</td>
</tr>
<tr>
<td>High Side Pressure Gauge (Red)</td>
<td>High Side Pressure Gauge (Red)</td>
<td>High Side Pressure Gauge (Red)</td>
<td></td>
</tr>
<tr>
<td>R134a</td>
<td>8761 ...........</td>
<td>8765 ...........</td>
<td>8767 ...........</td>
</tr>
<tr>
<td>Low Side Pressure Gauge (Blue)</td>
<td>Low Side Pressure Gauge (Blue)</td>
<td>Low Side Pressure Gauge (Blue)</td>
<td></td>
</tr>
</tbody>
</table>

Replacement Charging Hoses with Quick Seal Fittings

<table>
<thead>
<tr>
<th>Hose Length</th>
<th>Blue (96&quot;)</th>
<th>Red (96&quot;)</th>
<th>Yellow (96&quot;)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R134a</td>
<td>8790</td>
<td>8791</td>
<td>8792</td>
</tr>
<tr>
<td>R12</td>
<td>8793</td>
<td>8794</td>
<td>8795</td>
</tr>
</tbody>
</table>

Charging Hose Sets

<table>
<thead>
<tr>
<th>Hose Length</th>
<th>R12 High Side Pressure Gauge</th>
<th>R134a High Side Pressure Gauge</th>
</tr>
</thead>
<tbody>
<tr>
<td>96&quot;</td>
<td>Blue 8796</td>
<td>Red 8797</td>
</tr>
<tr>
<td>1/4&quot; Standard hoses with Quick Seal fittings</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Charging Adapters & Seals

- **Manual Control Valves**
  - 8867 1/4" FFL x 1/4" MFL
  - 8868 1/4" FFL x 13mm
- **8874 Charging Hose Seals**
  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
- **8877 Manual Shut-Off Ball Valve**
  1/4" x 1/4" Swivel Ball less hose
- **8891 Service Port - GM High Side**
  1/4" x 3/16" Female
- **8892 Service Port - 90° GM High Side**
  1/4" x 3/16" Female

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### SERVICE ITEMS — TOOLS

#### Charging Adapters (continued)

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>8896</td>
<td>Charging Adapter</td>
<td>6&quot; Flexible 1/4&quot; x 1/4&quot;</td>
</tr>
<tr>
<td>8897</td>
<td>Charging Adapter</td>
<td>Ford 1/8&quot; High Side Adapter</td>
</tr>
<tr>
<td>8898</td>
<td>Charging Adapter</td>
<td>GM 6&quot; Flexible 1/4&quot; x 3/16&quot;</td>
</tr>
<tr>
<td>8899</td>
<td>Access Service Valve</td>
<td>1/2&quot; ACME-M x 1/8&quot; MPT</td>
</tr>
<tr>
<td>8900</td>
<td>Schrader Adapter Fitting</td>
<td>For installation in drier pressure ports. 3/8&quot; x 7/16&quot;</td>
</tr>
<tr>
<td>8903</td>
<td>Adapter Fitting</td>
<td>1/2&quot; ACME-M x 1/2&quot; ACME-M union</td>
</tr>
<tr>
<td>8904</td>
<td>Straight Manual Shut Off Valve</td>
<td>1/4&quot; x 1/4&quot;</td>
</tr>
<tr>
<td>8905</td>
<td>Straight Manual Shut Off Valve</td>
<td>1/4&quot; x 3/16&quot;</td>
</tr>
<tr>
<td>8906</td>
<td>Fits All Adapter Kit</td>
<td>Top quality adapters used to hook up to high side of vehicle AC systems for service. Five different adapters, three flexible and two 90°, are included to give full coverage.</td>
</tr>
<tr>
<td>8907</td>
<td>90° Manual Shut Off Valve</td>
<td>1/4&quot; x 1/4&quot;</td>
</tr>
<tr>
<td>8908</td>
<td>90° Manual Shut Off Valve</td>
<td>1/4&quot; x 3/16&quot;</td>
</tr>
<tr>
<td>8909</td>
<td>90° Manual Shut Off Valve - R12</td>
<td>Manual control valve controls the flow of refrigerant, meeting EPA requirements to contain R12. Attaches to charging hose end.</td>
</tr>
</tbody>
</table>

**Quick Seal Fitting Adapter**

Anti-blind back fitting for charging hoses.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>8910</td>
<td>1/4&quot; MFL x 1/4&quot; FFL</td>
<td></td>
</tr>
<tr>
<td>8911</td>
<td>1/4&quot; MFL x 3/16&quot; FFL</td>
<td></td>
</tr>
<tr>
<td>8909</td>
<td>1/2&quot; ACME x 1/2&quot; ACME</td>
<td></td>
</tr>
<tr>
<td>8784</td>
<td>Replacement Seal</td>
<td></td>
</tr>
</tbody>
</table>
## Service Adapter Kits and A/C Service Repair Kit

<table>
<thead>
<tr>
<th>Part#</th>
<th>Kit Includes</th>
</tr>
</thead>
</table>
| 8883  | Deluxe A/C Service Repair Kit  
Replacement gaskets, depressors, and o-rings for charging hoses and adapters.                                                                                                    |
| 8884  | Universal A/C Adapter Set  
Kit Includes:  
- 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 & Ford quick disconnect  
- GM Large Bore quick disconnect |
| 8885  | Safety A/C Adapter Set  
Kit Includes:  
- 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 |
| 8886  | Popular A/C Adapter Set  
Kit Includes:  
- 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" shut-off  
- Ford quick disconnect  
- GM Large Bore quick disconnect |

## Oil Injectors

<table>
<thead>
<tr>
<th>Part#</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8737</td>
<td>Oil Injector - R12</td>
</tr>
<tr>
<td>8738</td>
<td>Oil Injector - R134a</td>
</tr>
<tr>
<td>8740</td>
<td>Oil Injector - R134a</td>
</tr>
<tr>
<td>8741</td>
<td>Syringe Oil Injector - R134a</td>
</tr>
<tr>
<td>8742</td>
<td>Syringe Oil Injector - R12</td>
</tr>
<tr>
<td>8743</td>
<td>Oil Injector - R134a</td>
</tr>
<tr>
<td>8744</td>
<td>Oil Injector - R12</td>
</tr>
<tr>
<td>8745</td>
<td>Oil Injector - R134a</td>
</tr>
</tbody>
</table>

**8737, 8738:** Can be used with charging stations or manifold gauge sets to measure and dispense up to 2 ounces of oil.

**8740:** Installs on the low side of the manifold to pull refrigeration oil into the system while under vacuum.

**8741, 8742:** 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, 8744:** 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.
### R134a Service Couplers

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>8720</td>
<td>Vacuum Pump Fitting - Retro Adapter to convert R12 pumps to R134a</td>
<td></td>
</tr>
<tr>
<td>8721</td>
<td>Retro - Adapter 1/4” Female x 1/2” ACME to convert R12 Pumps to R134a</td>
<td></td>
</tr>
<tr>
<td>8722</td>
<td>“T” Style Retro - Adapter to convert R12 Pumps to R134a</td>
<td></td>
</tr>
<tr>
<td>8745</td>
<td>ACME T-Fitting w/o Schrader</td>
<td></td>
</tr>
</tbody>
</table>

### Coupler Repair Components

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8850</td>
<td>High Side Coupler - red</td>
</tr>
<tr>
<td>8851</td>
<td>Low Side Coupler - blue</td>
</tr>
</tbody>
</table>

Unique swivel design enables user to access all service ports even in the tightest applications.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8869</td>
<td>R134a Conversion Kit to converts R12 manifold set to R134a.</td>
</tr>
</tbody>
</table>

### Springlock Tools and Couplers

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8160</td>
<td>Spring Lock Disconnect Tool Set includes four sizes: 3/16”, 1/8”, 5/32”, and 3/16”.</td>
</tr>
<tr>
<td>8161</td>
<td>Individual Disconnect Tools (3/16” * 6)</td>
</tr>
<tr>
<td>8162</td>
<td>(3/16” * 8)</td>
</tr>
<tr>
<td>8163</td>
<td>(3/16” * 10)</td>
</tr>
<tr>
<td>8164</td>
<td>(3/16” * 12)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8980</td>
<td>Springlock Coupling Repair Kits Nylon Construction (3/16” * 6)</td>
</tr>
<tr>
<td>8981</td>
<td>(3/16” * 8)</td>
</tr>
<tr>
<td>8982</td>
<td>(3/16” * 10)</td>
</tr>
<tr>
<td>8983</td>
<td>(3/16” * 12)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8912</td>
<td>Low Side Coupler - blue (Manual)</td>
</tr>
<tr>
<td>8912R</td>
<td>OE ROBINAIR Style</td>
</tr>
<tr>
<td>8913</td>
<td>High Side Coupler - red (Manual)</td>
</tr>
<tr>
<td>8913R</td>
<td>OE ROBINAIR Style</td>
</tr>
</tbody>
</table>

Service Couplers for R134a New, smaller design for tight quarters.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8985</td>
<td>R12/R134a Ford Spring Lock O-Ring Kit Garter springs &amp; O-Rings for all size couplers used on 1981 to present Fords.</td>
</tr>
</tbody>
</table>
System Guard

Protect your work with tamper resistant SYSTEM GUARD

- Insure the service dealer that the customer will come back to him for service
- Assure the service dealer that his shop was the last one to work on the system
- Tamper evident seal protects your work
- Reduce unnecessary warranty work
- Prevent risk of cross-contamination

Slide over charge port cap
Heat with heat gun
System is protected

Compressor Guard

Prevent compressor loss with A/C COMPRESSOR GUARD

- A suction side screen safely removes debris before it harms a compressor
- Quick and easy installation
- Maintains OE configuration
- No hose cutting means no additional leak points
- Screen available in a variety of sizes

Special insertion tool seats the screen securely in the suction side
Extractor tool easily removes screen from the suction side
The suction screen prevents debris from entering the compressor

8830
Complete Kit
Includes 3 extractors, 2 mandrel installers, sizing gauge, 4 ea. of three different screen sizes.

Replacement Screens
8835 — 5 Pack "A" Screens .510 O.D.
8836 — 5 Pack "B" Screens .552 O.D.
8837 — 5 Pack "C" Screens .595 O.D.
## Schrader Valves & Tools

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Type</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8914</td>
<td>GM High Flow Large Bore Valver Core</td>
<td></td>
<td>10 per box</td>
</tr>
<tr>
<td>8915</td>
<td>R12/R134a Replacement Valve Core</td>
<td>Standard 1/4” Service port</td>
<td>10 per box</td>
</tr>
<tr>
<td>8916</td>
<td>R134a Hi-Flow JRA M6 Valve Core</td>
<td></td>
<td>10 per box</td>
</tr>
<tr>
<td>8918</td>
<td>R134a Valve Core Removal Tool</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8919</td>
<td>R12/R134a Universal Schrader Core Remover</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8921</td>
<td>R12 Schrader Valve Retreading Tool</td>
<td>Cleans and Deburs O.E. Schrader Ports</td>
<td></td>
</tr>
<tr>
<td>8922</td>
<td>R134a Service Port Reamer Tool</td>
<td>Eliminates burrs which nick and cut coupler o’rings causing them to leak.</td>
<td></td>
</tr>
<tr>
<td>8924</td>
<td>R12 Schrader Tool</td>
<td>with storage for extra cores, includes 6 cores.</td>
<td></td>
</tr>
<tr>
<td>8925</td>
<td>Eaton M8 13mm SSV High Flow High Side</td>
<td></td>
<td>10 per box</td>
</tr>
<tr>
<td>8926</td>
<td>Eaton M10 16mm SSV/High Flow Low Side</td>
<td></td>
<td>10 per box</td>
</tr>
<tr>
<td>8927</td>
<td>R134a Heavy Duty Core Removal Tool</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8936</td>
<td>Low Side - R134a Octagon Service Port Socket</td>
<td>Specially designed thin wall sockets for eight sided retrofit adapter.</td>
<td></td>
</tr>
<tr>
<td>8937</td>
<td>High Side - R134a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8938</td>
<td>R12/R134a Schrader Valve Core Kit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8978</td>
<td>R134a Valve Core Repair Assortment Kit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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 & pressure from the same location in the system.

8931 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.

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.

8935 GM Large Bore Valve Core Remover/Installer
Includes 1/4" x 3/16" adapter and 1/4" x 1/8" adapter.

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**

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

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

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

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

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

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

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

**8720**
1/4" SAE
Vacuum Pump Fitting - Retro-Adapter to convert R12 pumps to R134a

**8721**
1/2" ACME
Vacuum Pump Fitting - Retro-Adapter to convert R12 pumps to R134a

**8722**
1/4" SAE
1/2" ACME
Vacuum Pump Fitting - "T" Style Retro-Adapter to convert R12 pumps to R134a

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TOOLS — SERVICE ITEMS

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

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 pulley body

Compressor/Clutch Turning Tool

8168
Compressor/Clutch Turning Tool
Allows for the application of force to the hub, to rotate compressor.
## Service Tool Sets

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

**Zexel Seal and Clutch Tool Set**
Services standard Diesel Kiki compressor models: DKS12 and DKS15. Includes tool box and instructions.

**Master Sanden Compressor Tool Service Set**
All specialized tools necessary to service seal, clutch and clutch veering on Sanden 505, 507, 510 and 575 compressors.

**Ford FS-6 Nippondenso Compressor Tool Set**
Contains all the specialized tools required to service Nippondenso Compressors.