# Tools & Equipment

## Quick Reference Guide

<table>
<thead>
<tr>
<th>Item</th>
<th>Details</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charging &amp; Recovery Equipment:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Charging, Recovery, Recycling, Multi-Function Stations</td>
<td></td>
<td>390 - 391</td>
</tr>
<tr>
<td>- Charging Cylinders (&quot;Dial-A-Charge&quot; Cylinders)</td>
<td></td>
<td>391</td>
</tr>
<tr>
<td>- Manifold Test Gauges, Lines, Manifold Spares</td>
<td></td>
<td>393 - 395</td>
</tr>
<tr>
<td>- Scales, Refrigerant Weighing</td>
<td></td>
<td>392</td>
</tr>
<tr>
<td>- Vacuum Pumps and Spares</td>
<td></td>
<td>392 - 393</td>
</tr>
<tr>
<td>Leak Detection:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Electronic Leak Detectors</td>
<td></td>
<td>396 - 397</td>
</tr>
<tr>
<td>- Ultra-Violet Leak Detectors</td>
<td></td>
<td>398 - 399</td>
</tr>
<tr>
<td>Test Equipment:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Refrigerant Analysers</td>
<td></td>
<td>399</td>
</tr>
<tr>
<td>- Thermometers: Pocket, Digital, Thermo-Couple, Infra-Red</td>
<td></td>
<td>400</td>
</tr>
<tr>
<td>General Tools and Service Items:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Access Fittings, Couplers, Spares</td>
<td></td>
<td>395</td>
</tr>
<tr>
<td>- Compressor Repair</td>
<td></td>
<td>395</td>
</tr>
<tr>
<td>- Cylinders: Refrigerant, Refrigerant Recovery</td>
<td></td>
<td>401</td>
</tr>
<tr>
<td>- Dye: Leak Detection</td>
<td></td>
<td>398</td>
</tr>
<tr>
<td>- Flushing &amp; Flush Recovery Equipment, Flush Solvent</td>
<td></td>
<td>392</td>
</tr>
<tr>
<td>- Gauges: Manifold Sets</td>
<td></td>
<td>393</td>
</tr>
<tr>
<td>- Gauges: Vacuum Testing</td>
<td></td>
<td>402</td>
</tr>
<tr>
<td>- Hose Crimping Tools</td>
<td></td>
<td>402</td>
</tr>
<tr>
<td>- Injectors, OIL</td>
<td></td>
<td>403</td>
</tr>
<tr>
<td>- Inspection Tool, Fibre Optic</td>
<td></td>
<td>404</td>
</tr>
<tr>
<td>- O-Rings: Access Valves and Couplers</td>
<td></td>
<td>395</td>
</tr>
<tr>
<td>- O-Rings: Manifold and Valve Repair</td>
<td></td>
<td>394</td>
</tr>
<tr>
<td>- Orifice Removal, Core Removal Tools</td>
<td></td>
<td>395</td>
</tr>
<tr>
<td>- Sealants, System Sealant</td>
<td></td>
<td>395</td>
</tr>
<tr>
<td>- Springlock Repair Tools</td>
<td></td>
<td>395</td>
</tr>
<tr>
<td>- Unions: Cylinder, Manifold, Vacuum Pump</td>
<td></td>
<td>406</td>
</tr>
<tr>
<td>- Wrenches: Service Valve</td>
<td></td>
<td>406</td>
</tr>
</tbody>
</table>
Digital scales allow charging with specified amounts of refrigerant accurately.

### CHARGING STATIONS

- **TO-73210 AIR-CHIEF DIGITAL CHARGING STATION**
- **TO-73215 REFCO HAND - CARRY DIGITAL CHARGING STATION**
- **ROBINAIR DIGITAL CHARGING STATION 2-STAGE VACUUM PUMP**
  - TO-73207: 28 lpm vacuum pump
  - TO-73208: 94 lpm vacuum pump

### RECOVERY STATIONS

#### CPS

- **TO-73270 - CR300E RECOVERY STATION**
  - OIL-FILLED COMPRESSOR
- **TO-73272 TO-73277 CR500E AR500E RECOVERY / RECYCLE OIL-LESS COMPRESSOR**

#### Robinair

- **ROBINAIR RECOVERY STATION (LIMITED STOCK)**
- **ROBINAIR MINIMAX-E RECOVERY STATION**
  - RECOVERY ONLY with oil separator
  - RECOVERY WITH RECYCLE KIT
- **TO-73430 ROBINAIR RECYCLE UNIT**
  - CAN BE USED IN CONJUNCTION WITH MOST ROBINAIR RECOVERY STATIONS.
  - (TO-73257 ILLUSTRATED)

**NOTE:** All current model Robinair Recovery Stations have oil-less compressors.
### Charging and Recovery Equipment

#### Recovery-Recycle-Recharge Stations

**TO-73324**
- **ROBINAIR AC350-2K**
- 4 in 1 Semi-Automatic Unit with Built-in Gauges

**TO-73335**
- **ROBINAIR 34701-2K**
- Fully Automatic Unit with Internal Scales and Tank

### Station Replacement Parts

<table>
<thead>
<tr>
<th>PART No.</th>
<th>ITEM</th>
<th>TYPE / APPLICATION</th>
<th>STATION</th>
<th>OEM APPLICATION DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>TO-18830</td>
<td>COMPRESSOR</td>
<td>RECLAIM, 1/3 hp</td>
<td>TO-73242</td>
<td>ROBINAIR No. RA17411</td>
</tr>
<tr>
<td>TO-28385</td>
<td>FILTER</td>
<td>RECYCLING</td>
<td>TO-73255</td>
<td>ROBINAIR No. 17130</td>
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<tr>
<td>TO-28392</td>
<td>FILTER</td>
<td>RECYCLING</td>
<td>TO-73295</td>
<td>ROBINAIR No. 17430</td>
</tr>
<tr>
<td>TO-28410</td>
<td>FILTER</td>
<td>RECYCLING</td>
<td>TO-73390</td>
<td>ROBINAIR No. 34430</td>
</tr>
<tr>
<td>TO-28417</td>
<td>FILTER</td>
<td>RECYCLING</td>
<td>TO-73422</td>
<td>ROBINAIR No. 17678</td>
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<tr>
<td>TO-31495</td>
<td>GASKET (set of 2)</td>
<td>LIQUID RECYCLING PUMP</td>
<td>TO-73210</td>
<td>ROBINAIR No. RA17068</td>
</tr>
<tr>
<td>TO-73650</td>
<td>SWITCH, POWER</td>
<td>RECLAIM UNIT</td>
<td>TO-73242</td>
<td>ROBINAIR No. RA17135</td>
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<tr>
<td>TO-73680</td>
<td>SWITCH, POWER</td>
<td>RECLAIM UNIT</td>
<td>TO-73242</td>
<td>ROBINAIR No. RA17138</td>
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<tr>
<td>TO-73720</td>
<td>SWITCH, PRESSURE</td>
<td>RECLAIM UNIT</td>
<td>TO-73242</td>
<td>ROBINAIR No. RA17072</td>
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<tr>
<td>TO-73750</td>
<td>SWITCH, VACUUM</td>
<td>RECLAIM UNIT</td>
<td>TO-73242</td>
<td>ROBINAIR No. RA18752</td>
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<tr>
<td>TO-81200</td>
<td>WHEEL</td>
<td>STATION</td>
<td>TO-73210</td>
<td>AIR-CHIEF</td>
</tr>
</tbody>
</table>

### Charging Cylinders

**TO-18350**
- **ROBINAIR 34205A**
- 2200 gram (5 lb)

**TO-18355**
- **REFCO**
- 4000 gram (10 lb)

### Charging Cylinder Replacement Parts

<table>
<thead>
<tr>
<th>PART No.</th>
<th>ITEM</th>
<th>TYPE / APPLICATION</th>
<th>OEM APPLICATION / DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>TO-18328</td>
<td>CASING, CALIBRATED</td>
<td>CHARGING CYLINDER</td>
<td>REFCO SUITS TO-18355</td>
</tr>
<tr>
<td>TO-18334</td>
<td>CASING, CALIBRATED</td>
<td>CHARGING CYLINDER</td>
<td>ROBINAIR 113125</td>
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<tr>
<td>TO-31322</td>
<td>GASKET KIT</td>
<td>CHARGING CYLINDER</td>
<td>REFCO 4000 gram</td>
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<tr>
<td>TO-31350</td>
<td>GASKET KIT</td>
<td>CHARGING CYLINDER</td>
<td>ROBINAIR 2200 gram</td>
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<tr>
<td>TO-31370</td>
<td>GASKET KIT</td>
<td>CHARGING CYLINDER</td>
<td>ROBINAIR 4400 gram</td>
</tr>
<tr>
<td>TO-31785</td>
<td>GAUGE, R12 / R134a</td>
<td>CHARGING CYLINDER</td>
<td>SUITS REFCO AND ROBINAIR</td>
</tr>
<tr>
<td>TO-70700</td>
<td>SIGHT GLASS</td>
<td>CHARGING CYLINDER</td>
<td>ROBINAIR 4400 gram</td>
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</tbody>
</table>
### Refrigerant Weighing Scales

**TO-69110**
- **AIR-CHIEF ELECTRONIC WEIGHING SCALES**
  - 50 kg total capacity (including cylinder)
  - remote read-out
  - 20 gram increments
  - battery operated (TO-15184 supplied)

**TO-69302**
- **ROBINAIR ELECTRONIC WEIGHING SCALES**
  - 100 kg total capacity (including cylinder)
  - remote read-out
  - 4 gram increments
  - Charging and Recovery Capabilities

**TO-69306**
- **ROBINAIR PROGRAMMABLE CHARGING / RECOVERY METER**
  - 100 kg total capacity (including cylinder)
  - remote read-out
  - 4 gram increments
  - Automatic Charging and Recovery Operations

**TO-15184**
- 9 volt battery for scale head

**TO-61344**
- OPTIONAL POWER PACK (9-Volt) for TO-69110

### Vacuum Pumps

**TO-62190**
- **JAVAC MINIVAC - 2 VACUUM PUMP 2-STAGE**

**TO-62234**
- **REFCO VACUUM PUMP 30 lpm 2-STAGE**
  - discontinued, replaced by TO-62260

**TO-62260**
- **REFCO VACUUM PUMP 35 lpm 2-STAGE**

**TO-62265**
- **REFCO VACUUM PUMP 65 lpm 2-STAGE**

**TO-62297**
- **REFCO VACUUM PUMP 150 lpm 2-STAGE**

**ROBINAIR 28 lpm VACUUM PUMP**
- TO-64028 28 lpm, SINGLE STAGE
- TO-64128 28 lpm, TWO STAGE

**ROBINAIR 93 & 142 lpm VACUUM PUMPS**
- TO-64194 93 lpm, TWO STAGE
- TO-64210 142 lpm, TWO STAGE
VACUUM PUMPS . . . cont’d

Vacuum Pump Selection Guide

<table>
<thead>
<tr>
<th>PART No.</th>
<th>BRAND</th>
<th>MODEL</th>
<th>MOTOR SIZE</th>
<th>CAPACITY (lpm)</th>
<th>VACUUM CAPABILITY</th>
<th>REFRIG. TYPE</th>
<th>OTHER INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>TO-62190</td>
<td>JAVAC</td>
<td>MINIVAC-2</td>
<td>1/5 H P</td>
<td>35</td>
<td>15 microns</td>
<td>R-12 / R-134a</td>
<td>ROTARY, TWO - STAGE</td>
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<tr>
<td>TO-62260</td>
<td>REFCO</td>
<td>RL 4</td>
<td>1/4 H P</td>
<td>65</td>
<td>15 microns</td>
<td>R-12 / R-134a</td>
<td>ROTARY, TWO - STAGE</td>
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<tr>
<td>TO-62297</td>
<td>REFCO</td>
<td>RL 8</td>
<td>1/2 H P</td>
<td>150</td>
<td>15 microns</td>
<td>R-12 / R-134a</td>
<td>ROTARY, TWO - STAGE</td>
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<tr>
<td>TO-64028</td>
<td>ROBINAIR</td>
<td>34117</td>
<td>1/8 H P</td>
<td>28</td>
<td>50 microns</td>
<td>R-12 / R-134a</td>
<td>DISCONTINUED</td>
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<tr>
<td>TO-64128</td>
<td>ROBINAIR</td>
<td>15296</td>
<td>1/8 H P</td>
<td>28</td>
<td>50 microns</td>
<td>R-12 / R-134a</td>
<td>ROTARY, TWO - STAGE</td>
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<tr>
<td>TO-64194</td>
<td>ROBINAIR</td>
<td>15444</td>
<td>1/3 H P</td>
<td>93</td>
<td>20 microns</td>
<td>R-12 / R-134a</td>
<td>ROTARY, TWO - STAGE</td>
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<tr>
<td>TO-64210</td>
<td>ROBINAIR</td>
<td>15605</td>
<td>1/3 H P</td>
<td>142</td>
<td>20 microns</td>
<td>R-12 / R-134a</td>
<td>ROTARY, TWO - STAGE</td>
</tr>
</tbody>
</table>

NOTE: FOR THE PURPOSE OF EVACUATION OF AN AIR CONDITIONING SYSTEM, A VACUUM PUMP MUST BE CAPABLE OF PULLING A VACUUM OF 200 MICRONS OR LESS TO VAPORIZE AND EXTRACT MOISTURE AT NORMAL TEMPERATURES.

Vacuum Pump Replacement Parts

<table>
<thead>
<tr>
<th>PART No.</th>
<th>BRAND</th>
<th>MODEL</th>
<th>MAKE</th>
<th>MODEL</th>
<th>OTHER INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASE,</td>
<td>ROBINAIR</td>
<td></td>
<td>15024, 15044, 15405, 15601, 15605</td>
<td>TO-15120</td>
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<tr>
<td>BASE,</td>
<td>ROBINAIR</td>
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<td>15113, 15117, 34117</td>
<td>TO-15127</td>
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</tr>
<tr>
<td>HANDLE,</td>
<td>REFCO</td>
<td>ROY-2</td>
<td>ROBINAIR</td>
<td>15296</td>
<td>TO-33800</td>
</tr>
<tr>
<td>HANDLE</td>
<td>ROBINAIR</td>
<td></td>
<td>15024, 15044, 15405, 15601, 15605</td>
<td>TO-33805</td>
<td></td>
</tr>
<tr>
<td>HANDLE</td>
<td>ROBINAIR</td>
<td></td>
<td>15296</td>
<td>TO-33812</td>
<td></td>
</tr>
<tr>
<td>JOINT,</td>
<td>JAVAC</td>
<td>DS40</td>
<td>ROBINAIR</td>
<td>15117</td>
<td>TO-70975</td>
</tr>
<tr>
<td>SIGHT GLASS</td>
<td>REFCO</td>
<td>ROY-2</td>
<td>ROBINAIR</td>
<td>15117</td>
<td>TO-70975</td>
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<tr>
<td>SIGHT GLASS</td>
<td>JAVAC</td>
<td>DS40</td>
<td>ROBINAIR</td>
<td>15117</td>
<td>TO-70975</td>
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<tr>
<td>VANE (SET OF 6)</td>
<td>REFCO</td>
<td>ROY-2</td>
<td>ROBINAIR</td>
<td>63117</td>
<td>TO-80010</td>
</tr>
</tbody>
</table>

MANIFOLD GAUGE SETS

REFCO FRONT WHEEL, 2-WAY, MULTI-REFRIGERANT MANIFOLD. SUPPLIED COMPLETE WITH 1830mm LINES AND R134a COUPLERS.

REFCO FRONT WHEEL, 4-WAY, MULTI-REFRIGERANT MANIFOLD. SUPPLIED COMPLETE WITH 1830mm LINES AND R134a COUPLERS.

Manifold Selection Guide

<table>
<thead>
<tr>
<th>PART No.</th>
<th>BRAND</th>
<th>COUPLERS</th>
<th>MANIFOLD TYPE</th>
<th>CHARGING LINES INCL. LENGTH</th>
<th>SIGHT GLASS</th>
<th>OTHER INFORMATION</th>
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</thead>
<tbody>
<tr>
<td>TO-51080</td>
<td>REFCO</td>
<td>R134a, INCLUDED</td>
<td>FRONT WHEEL</td>
<td>YES 1830 mm YES</td>
<td>2-WAY MANIFOLD; BELLOWS GAUGES</td>
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<tr>
<td>TO-51085</td>
<td>REFCO</td>
<td>R134a, INCLUDED</td>
<td>FRONT WHEEL</td>
<td>YES 1830 mm YES</td>
<td>4-WAY MANIFOLD; BELLOWS GAUGES</td>
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<tr>
<td>TO-51095</td>
<td>REFCO</td>
<td>R134a, INCLUDED</td>
<td>FRONT WHEEL</td>
<td>YES 1830 mm YES</td>
<td>4-WAY WITH LIQUID FILLED GAUGES</td>
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Manifold Replacement Gauges

<table>
<thead>
<tr>
<th>ITEM</th>
<th>TYPE</th>
<th>BRAND</th>
<th>DIAL AND CALIBRATION</th>
<th>GAUGE TYPE</th>
<th>PART No.</th>
</tr>
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<tbody>
<tr>
<td>GAUGE, MANIFOLD COMPOUND</td>
<td>ROBINAIR</td>
<td>R12 DIAL</td>
<td>Kpa / psi</td>
<td>Bourdon Type</td>
<td>TO-31765</td>
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<tr>
<td>GAUGE, MANIFOLD COMPOUND</td>
<td>REFCO</td>
<td>R134a DIAL</td>
<td>Kpa / psi</td>
<td>Bourdon Type</td>
<td>TO-31763</td>
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<tr>
<td>GAUGE, MANIFOLD PRESSURE</td>
<td>ROBINAIR</td>
<td>R12 DIAL</td>
<td>Kpa / psi</td>
<td>Bourdon Type</td>
<td>TO-31785</td>
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<tr>
<td>GAUGE, MANIFOLD PRESSURE</td>
<td>REFCO</td>
<td>R134a DIAL</td>
<td>Kpa / psi</td>
<td>Bourdon Type</td>
<td>TO-31820</td>
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<tr>
<td>GAUGE, MANIFOLD PRESSURE</td>
<td>REFCO</td>
<td>R134a DIAL</td>
<td>Kpa / psi</td>
<td>Bellows Type</td>
<td>TO-31833</td>
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<tr>
<td>GAUGE, MANIFOLD PRESSURE</td>
<td>REFCO</td>
<td>R134a DIAL</td>
<td>Kpa / psi</td>
<td>Bellows Type</td>
<td>TO-31835</td>
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</table>
**Highgate Automotive Air Conditioning Catalogue**

### MANIFOLD GAUGE SPARES

<table>
<thead>
<tr>
<th>Item</th>
<th>Model Application and Other Information</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HANDWHEEL</td>
<td>CPS - Most Models 1 Only</td>
<td>TO-34004</td>
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<tr>
<td>HANDWHEEL</td>
<td>REFCO - All Models (Set of 4)</td>
<td>TO-34010</td>
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<tr>
<td>HANDWHEEL</td>
<td>ROBINAIR - Most Models (Set of 2)</td>
<td>TO-34025</td>
</tr>
<tr>
<td>SEAL KIT, MANIFOLD</td>
<td>CPS - Suits Most CPS Manifolds</td>
<td>TO-70468</td>
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<td>SEAL KIT, MANIFOLD</td>
<td>ROBINAIR - Suits Most ROBINAIR Manifolds</td>
<td>TO-70480</td>
</tr>
<tr>
<td>SEAL KIT, MANIFOLD AND LINES</td>
<td>ROBINAIR - Suits Most ROBINAIR Manifolds</td>
<td>TO-70500</td>
</tr>
<tr>
<td>SIGHT GLASS</td>
<td>REFCO - Suits Most REFCO Manifolds</td>
<td>TO-70940</td>
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<tr>
<td>STEM, MANIFOLD VALVE REPAIR</td>
<td>ROBINAIR - Suits Most ROBINAIR Manifolds</td>
<td>TO-73500</td>
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<tr>
<td>STEM, MANIFOLD VALVE REPAIR</td>
<td>REFCO - Suits Most REFCO Manifolds</td>
<td>TO-73501</td>
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### MANIFOLD CHARGING LINES

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Type</th>
<th>Colour</th>
<th>Length</th>
<th>Fittings</th>
<th>Manufacturer</th>
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<tbody>
<tr>
<td>TO-40212</td>
<td>STANDARD</td>
<td>BLUE</td>
<td>300 mm</td>
<td>1/4&quot; - 1/4&quot;</td>
<td>AIR-CHIEF</td>
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<tr>
<td>TO-40312</td>
<td>STANDARD</td>
<td>RED</td>
<td>300 mm</td>
<td>1/4&quot; - 1/4&quot;</td>
<td>AIR-CHIEF</td>
</tr>
<tr>
<td>TO-42472</td>
<td>STANDARD</td>
<td>BLUE</td>
<td>1830 mm</td>
<td>1/4&quot; - 1/4&quot;</td>
<td>REFCO</td>
</tr>
<tr>
<td>TO-42772</td>
<td>STANDARD</td>
<td>RED</td>
<td>1830 mm</td>
<td>1/4&quot; - 1/4&quot;</td>
<td>REFCO</td>
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<tr>
<td>TO-42972</td>
<td>STANDARD</td>
<td>YELLOW</td>
<td>1830 mm</td>
<td>1/4&quot; - 1/4&quot;</td>
<td>REFCO</td>
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<tr>
<td>TO-43172</td>
<td>QUICK-SEAL</td>
<td>BLUE</td>
<td>1830 mm</td>
<td>1/4&quot; - 1/4&quot;</td>
<td>ROBINAIR</td>
</tr>
<tr>
<td>TO-43272</td>
<td>QUICK-SEAL</td>
<td>RED</td>
<td>1830 mm</td>
<td>1/4&quot; - 1/4&quot;</td>
<td>ROBINAIR</td>
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<tr>
<td>TO-43372</td>
<td>QUICK-SEAL</td>
<td>YELLOW</td>
<td>1830 mm</td>
<td>1/4&quot; - 1/4&quot;</td>
<td>ROBINAIR</td>
</tr>
<tr>
<td>TO-47120</td>
<td>STANDARD</td>
<td>BLUE</td>
<td>3050 mm</td>
<td>1/4&quot; - 1/4&quot;</td>
<td>REFCO</td>
</tr>
<tr>
<td>TO-48120</td>
<td>STANDARD</td>
<td>RED</td>
<td>3050 mm</td>
<td>1/4&quot; - 1/4&quot;</td>
<td>REFCO</td>
</tr>
<tr>
<td>TO-49120</td>
<td>STANDARD</td>
<td>YELLOW</td>
<td>3050 mm</td>
<td>1/4&quot; - 1/4&quot;</td>
<td>REFCO</td>
</tr>
<tr>
<td>TO-49236Y</td>
<td>STANDARD</td>
<td>YELLOW</td>
<td>915 mm</td>
<td>1/4&quot; - 1/2&quot;</td>
<td>2 ACME REFCO</td>
</tr>
<tr>
<td>TO-49372B</td>
<td>BLUE</td>
<td>1830 mm</td>
<td>ACME - M14</td>
<td>REFCO</td>
<td></td>
</tr>
<tr>
<td>TO-49372R</td>
<td>RED</td>
<td>1830 mm</td>
<td>ACME - M14</td>
<td>REFCO</td>
<td></td>
</tr>
<tr>
<td>TO-49372Y</td>
<td>YELLOW</td>
<td>1830 mm</td>
<td>ACME - ACME</td>
<td>REFCO</td>
<td></td>
</tr>
<tr>
<td>TO-49420B</td>
<td>BLUE</td>
<td>3050 mm</td>
<td>ACME - M14</td>
<td>REFCO</td>
<td></td>
</tr>
<tr>
<td>TO-49420R</td>
<td>RED</td>
<td>3050 mm</td>
<td>ACME - M14</td>
<td>REFCO</td>
<td></td>
</tr>
<tr>
<td>TO-49420Y</td>
<td>YELLOW</td>
<td>3050 mm</td>
<td>ACME - ACME</td>
<td>REFCO</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

1. Lengths of charging lines are nominal and may vary slightly.
2. All REFCO and ROBINAIR charging lines are warranted for 12 months against faulty manufacture and are designed for working pressures up to 3,500 kpa (500 psi), with a burst pressure of 17,500 kpa (2,500 psi).
3. 1/4" lines suit standard 1/4" MF (7/16 - 20 UNF). Adaptors for 3/16" MF access valves are available.
4. ACME lines suit standard 1/2" male ACME fittings.

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**TOOLS & SERVICE EQUIPMENT**

**Highgate Automotive Air Conditioning Catalogue**

**Manifold - Test Gauge Sets and Spares**

**MANIFOLD GAUGE SPARES**

**MANIFOLD CHARGING LINES**

**NOTE:** COUPLERS ARE NOT INCLUDED.
**Manifold - Test Gauge Sets and Spares**

### R12 ACCESS ADAPTORS & COUPLERS

**STANDARD STRAIGHT R-12 ACCESS COUPLERS**
- TO-12010: R-12 3/16"FF - 1/4"MF
- TO-12500: R-12 1/4" FF - 1/4"MF

**STANDARD 90 deg. R-12 ACCESS COUPLERS**
- TO-12090: R-12 3/16"FF - 1/4"MF
- TO-12590: R-12 1/4" FF - 1/4"MF

**ROBINAIR R-12 ANTI-BLOWBACK ACCESS COUPLERS**
- TO-13185: R-12 3/16"FF - 1/4"MF
- TO-13200: R-12 1/4" FF - 1/4"MF

**R-12 ACCESS COUPLER ADAPTOR BALL VALVE VALVE SHUT-OFF, 150 mm HOSE**
- TO-13250: R-12 1/4" FF - 1/4"MF LOW SIDE (BLUE HOSE)
- TO-13255: R-12 1/4" FF - 1/4"MF HIGH SIDE (RED HOSE)

### R134a ACCESS ADAPTORS & COUPLERS

**R134a ACCESS COUPLER**
- COMPACT TYPE
  - HANDWHEEL OPERATION
  - TO-14128: DISCHARGE
  - TO-14130: SUCTION (Air - Chief)

**R134a 90 deg. ACCESS COUPLER**
- COMPACT TYPE
  - HANDWHEEL OPERATION
  - TO-14134: DISCHARGE
  - TO-14236: SUCTION

**TO-13284**
- R134a IN-LINE BALL VALVE
  - 1/2" MALE ACME - 1/2" FEM. ACME

### ACCESS ADAPTOR DEPRESSORS

**R-12 ACCESS FITTING DEPRESSORS**
- TO-25050: 3/16" (PACK OF 6)
- TO-25051: 3/16" (PACK OF 10)
- TO-25150: 1/4" (PACK OF 6)

### ACCESS ADAPTOR GASKETS & O-RINGS

**TO-31050**
- EARLY ANTI-BLOWBACK SEAL - FLAT SECTION
  - (DISCONTINUED)

**TO-55900**
- REPLACEMENT O-RING FOR LATE TYPE TO-13185
  - (PACK OF 6)

**TO-55934**
- O-RING KIT FOR COUPLERS
  - TO-14128, TO-14130, TO-14134
  - TO-14138, TO-14140, TO-14136

**NOTE:** TO ASSIST IDENTIFICATION, THE O-RINGS ILLUSTRATED ABOVE ARE SHOWN ACTUAL SIZE.
ELECTRONIC LEAK DETECTORS

TO-25265
CPS - L780B Leak - Seeker

SUITABLE FOR R134a, R-12, MOST CFC'S & HCFC'S
SENSITIVITY: 7 grams (1/4 oz) PER YEAR

FEATURES:
- INSTANT RESPONSE
- AUDIBLE ALARM PLUS VISUAL RED INDICATOR
- BUILT IN SUCTION PUMP
- VISUAL INDICATOR SHOWS REFRIGERANT CONCENTRATION
- LOW BATTERY INDICATOR
- AMBIENT CONDITION BALANCE ADJUSTMENT
- ADJUSTABLE SENSITIVITY
- FLEXIBLE PROBE
- DESIGNED TO SAE J1627 SPECIFICATIONS

REPLACEMENT PARTS:
SENSING ELEMENT - TO-28180
SENSING ELEMENT COVER - TO-75350

TO-25270
CPS - L790B Leak - Seeker

SUITABLE FOR R134a, R-12, MOST CFC'S AND HCFC'S
SENSITIVITY: 3 grams (1/10 oz) PER YEAR

FEATURES:
- INSTANT RESPONSE
- AUDIBLE ALARM, VISUAL RED INDICATOR (EITHER OR BOTH CAN BE SELECTED)
- VISUAL INDICATOR SHOWS REFRIGERANT CONCENTRATION
- BUILT IN SUCTION PUMP
- LOW BATTERY INDICATOR
- ADJUSTABLE SENSITIVITY
- AMBIENT CONDITION BALANCE ADJUSTMENT
- FLEXIBLE PROBE
- AUTOMATICALLY SWITCHES OFF WHEN NOT IN USE
- EARPHONE INCLUDED
- DESIGNED TO SAE J1627 SPECIFICATIONS

REPLACEMENT PARTS:
SENSING ELEMENT - TO-28180
SENSING ELEMENT COVER - TO-75350

TO-25285
CPS - LS3000

SUITABLE FOR R134a, R-12, MOST CFC'S AND HCFC'S
SENSITIVITY: 3 grams (1/10 oz) PER YEAR

FEATURES:
- INSTANT RESPONSE
- AUDIBLE HIGH OUTPUT ALARM WITH TONE CHANGE FUNCTION
- UNIQUE SELECTIVE FILTER DESIGN GIVES EXCELLENT RESISTANCE TO BACKGROUND CONTAMINANTS LIKE OIL AND COOLANT.
- VISUAL INDICATOR SHOWS REFRIGERANT CONCENTRATION IN "TACHOMETER" STYLE DISPLAY
- LONG BATTERY LIFE ON STANDARD 'C' SIZE BATTERIES
- FULLY AUTOMATIC GAIN SELECTION
- RESET FUNCTION
- UNIQUE "GEAR SHIFT" STYLE LEAK SIZE INDICATOR
- FLEXIBLE PROBE
- DESIGNED TO SAE J1627 SPECIFICATIONS

REPLACEMENT PARTS:
SENSING ELEMENT - TO-75353

IMPORTANT NOTE:
ELECTRONIC DETECTORS MUST NOT BE USED WITH FLAMMABLE SUBSTANCES
MOST ELECTRONIC LEAK DETECTORS DESIGNED FOR CFC'S AND R134a USE A HIGH TENSION SPARK IN THE SENSING TIP AND MUST NEVER BE USED TO DETECT FLAMMABLE SUBSTANCES SUCH AS LPG.
**ELECTRONIC LEAK DETECTORS**

**TO-25374**  
Model 5650A  

*Suitable for R134a, R-12, MOST CFC's & HCFC's*  
Sensitivity: 7 grams (1/4 oz) per year  

**Features:**  
- Advanced digital signal processor  
- 2 sensitivity levels  
- INSTANT RESPONSE  
- VERY STABLE AND RELIABLE  
- Audible alarm plus visual red bar-graph indicator  
- Built in suction pump  
- Visual indicator shows refrigerant concentration  
- Low battery indicator  
- Adjustable sensitivity  
- Audible alarm plus visual red indicator  
- Built in suction pump  
- Flexible probe  
- Designed to SAE J1627 specifications  

**Replacement parts:** Sensing element - TO-75364

**TO-25382**  
RX-1A High Tech  

*Suitable for R134a, R-12, MOST CFC's & HCFC's*  
Sensitivity: 7 grams (1/4 oz) per year  

**Features:**  
- Advanced digital signal processor  
- 2 sensitivity levels  
- INSTANT RESPONSE  
- VERY STABLE AND RELIABLE  
- Audible alarm plus visual red bar-graph indicator  
- Built in suction pump  
- Visual indicator shows refrigerant concentration  
- Low battery indicator  
- Adjustable sensitivity  
- Audible alarm plus visual red bar-graph indicator  
- Built in suction pump  
- Flexible probe  
- Designed to SAE J1627 specifications  
- Includes heavy duty carry case  

**Replacement parts:** Sensing element - TO-75364

**TO-25388**  
XP-1A High Performance  

*Suitable for R134a, R-12, MOST CFC's & HCFC's*  
Sensitivity: 3 grams (0.1 oz) per year  

**Features:**  
- Heated pentode operation:  
  - Refrigerant specific detection  
  - Elimination of false alarms  
  - Unaffected by rapid temperature change  
- INSTANT RESPONSE  
- Audible alarm plus visual tri-colour indicator  
- Built in suction pump  
- Battery voltage test / indicator  
- Ambient condition balance adjustment  
- 2 levels of sensitivity  
- 1 touch reset and keypad controls  
- Flexible stainless steel probe  
- Designed to SAE J1627 specifications  
- Heavy duty carry case included  

**Replacement parts:** Sensing element - TO-75364

**TO-25442**  
ZX-1A Heated Pentode  

*Suitable for R134a, R-12, MOST CFC's & HCFC's*  
Sensitivity: 3 grams (0.1 oz) per year  

**Features:**  
- Heated pentode operation:  
  - Refrigerant specific detection  
  - Elimination of false alarms  
  - Unaffected by rapid temperature change  
- INSTANT RESPONSE  
- Audible alarm plus visual tri-colour indicator  
- Built in suction pump  
- Battery voltage test / indicator  
- Ambient condition balance adjustment  
- 2 levels of sensitivity  
- 1 touch reset and keypad controls  
- Flexible stainless steel probe  
- Designed to SAE J1627 specifications  
- Heavy duty carry case included  

**Replacement parts:** Sensing element - TO-75364

**IMPORTANT NOTE:**  
Electronic detectors must not be used with flammable substances.  
Most electronic leak detectors designed for CFC's and R134a use a high tension spark in the sensing tip and must never be used to detect flammable substances such as LPG.
ULTRA - VIOLET LEAK DETECTORS

Glo-Leak Ultra Violet Leak Detection System

1. Air Conditioning and Refrigeration Dye.

<table>
<thead>
<tr>
<th>PART No.</th>
<th>FORMULA</th>
<th>PACK / CONTAINER</th>
<th>APPLICATION REFRIGERANT</th>
<th>COMPATABILITY LUBRICANT</th>
</tr>
</thead>
<tbody>
<tr>
<td>TO-27412</td>
<td>CONCENTRATE</td>
<td>12 SACHETS (7.5ml)</td>
<td>R12, R134a</td>
<td>MINERAL / ESTER / PAG</td>
</tr>
<tr>
<td>TO-27441</td>
<td>STANDARD</td>
<td>CARTRIDGE</td>
<td>R12, R134a</td>
<td>MINERAL / ESTER / PAG</td>
</tr>
<tr>
<td>TO-27444</td>
<td>STANDARD</td>
<td>CARTRIDGE (4-PACK)</td>
<td>R12, R134a</td>
<td>MINERAL / ESTER / PAG</td>
</tr>
<tr>
<td>TO-27452</td>
<td>CONCENTRATE</td>
<td>50 ml BOTTLE (PACK of 2)</td>
<td>R12, R134a</td>
<td>MINERAL / ESTER / PAG</td>
</tr>
<tr>
<td>TO-27455</td>
<td>CONCENTRATE</td>
<td>100 ml VIAL, SUITS TO-36100</td>
<td>R12, R134a</td>
<td>MINERAL / ESTER / PAG</td>
</tr>
<tr>
<td>TO-27583</td>
<td>STANDARD</td>
<td>250 ml PLASTIC BOTTLE</td>
<td>R12, R134a</td>
<td>MINERAL / ESTER / PAG</td>
</tr>
<tr>
<td>TO-27600</td>
<td>CONCENTRATE</td>
<td>250 ml PLASTIC BOTTLE</td>
<td>R12, R134a</td>
<td>MINERAL / ESTER / PAG</td>
</tr>
</tbody>
</table>

**INJECTION AMOUNT CAN BE VARIED ON TO-36115 INJECTION GUN**


<table>
<thead>
<tr>
<th>PART No.</th>
<th>FORMULA</th>
<th>APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>TO-27650</td>
<td>DYE, AUTOMOTIVE TRANSMISSION</td>
<td>250 ml</td>
</tr>
<tr>
<td>TO-27700</td>
<td>DYE, AUTOMOTIVE, INDUSTRIAL ENGINE (RADIATOR) COOLANT</td>
<td>250 ml</td>
</tr>
<tr>
<td>TO-27760</td>
<td>DYE, AUTOMOTIVE, INDUSTRIAL ENGINE OIL, HYDRAULIC OIL AND FUEL SYSTEMS</td>
<td>250 ml</td>
</tr>
</tbody>
</table>

FOR FURTHER INFORMATION, SPECIFICATIONS AND TECHNICAL DATA, PLEASE REFER TO THE LEAK DETECTION SECTION OF THE TECHNICAL GUIDE.
Ultra - Violet Leak Detectors

TO-36100 INJECTOR GUN

REPLACEMENT PARTS:
TO-19850 FEMALE COUPLER
TO-22100 CALIBRATED CYLINDER
TO-38745 OVERHAUL KIT (INCLUDES CYLINDER)

TO-36115 INJECTOR GUN FOR USE WITH TO-27441 CARTRIDGE.

ACCESSORIES INCLUDED:
- HOSE (TO-34095) IS INCLUDED.
- COUPLER IS NOT INCLUDED - order TO-14236 if required

Test Equipment

Refrigerant Analysers

TO-26462 REFRIGERANT DETECTOR.

THIS UNIT DETECTS AND IDENTIFIES:
CFC's, HFC's, HCFC's, FLAMMABLES, AND NON-CONDENSABLES.

THE CONTENTS OF THE SYSTEM OR CONTAINER ARE VISIBLE ON A DIGITAL READ-OUT, AND THE INFORMATION CAN BE PRINTED OUT ON MOST COMPUTER PRINTERS.

ONLY A SMALL AMOUNT OF REFRIGERANT IS REQUIRED AND IDENTIFICATION TAKES A FEW SECONDS.

ACCESSORIES INCLUDED:
- R12 and R134a CONNECTION
- BATTERY CLAMP ADAPTOR
- 12V CIGARETTE LIGHTER CORD
- IN-LINE FILTER
- OPERATOR'S MANUAL

REPLACEMENT FILTER: TO-28439

FEATURES:
- MICRO INFRARED SPECTROMETER DETECTION SYSTEM.
- ONE BUTTON TESTING WITH TEST RESULTS IN 3 - 5 SECONDS
- IDENTIFIES AND MEASURES THE PERCENTAGE (PURITY) OF THE REFRIGERANT, INCLUDING R134a, R12, R22, AND HYDROCARBONS.
- AUDIBLE AND VISUAL ALARMS WHERE FLAMMABLE HYDROCARBONS ARE PRESENT.
- INDICATES PRESENCE OF BLENDS AND CONTAMINATED REFRIGERANTS.
- INDICATES PRESENCE AND PERCENTAGE OF AIR IN THE SYSTEM.
- PRINTER PORT FOR RETENTION OF RECORDS - SUITS MOST PC PRINTERS.
- ALTITUDE COMPENSATION FEATURE ENSURES ACCURATE AIR MEASUREMENT.
- OPERATES ON 12 VOLT - OPTIONAL 240 VOLT ADAPTORS AVAILABLE.
- UL LISTED TO SAE J1771
DIAL and DIGITAL THERMOMETERS

TO-75090
DIAL TYPE THERMOMETER
FLEXIBLE PROBE, 100 mm DIAL
TEMPERATURE RANGE: -40 °C. to 40 °C.

TO-75100
DIAL TYPE POCKET THERMOMETER
METAL PROBE
TEMP. RANGE: -40 °C. to 70 °C.

TO-75121
DIGITAL “PEN” POCKET THERMOMETER
TEMP. RANGE: -50 °C. to 150 °C.

TO-75125
PROFESSIONAL DIGITAL THERMOMETER
-40 °C. to 50 °C. (-40 °F. to 122 °F.)
- COMPACT, STEEL PROBE ON FLEXIBLE WIRE LEAD
- FOUR DIGIT DISPLAY ON DIGITAL READ-OUT
- DISPLAYS °C. OR °F
- FAST OR SLOW TEMPERATURE SENSING SPEED (1 OR 15 SECOND SAMPLING CYCLE)
- HIGH & LOW LIMIT TEMPERATURE SETTING FUNCTION

THERMO-COUPLE THERMOMETER

TO-75158
THERMO-COUPLE THERMOMETER
SUPPLIED COMPLETE WITH ONE THERMO-COUPLE PROBE,
QUICK AND EASY TO USE - IDEAL FOR CHECKING SUPERHEAT AND SUB-COOLING.
AN ESSENTIAL TOOL FOR THE MODERN AIR CONDITIONING TECHNICIAN.

REPLACEMENT PROBE: TO-61520

INFRA-RED THERMOMETERS

TO-75164
DELUXE INFRA-RED THERMOMETER
FEATURES:
- LASER INDICATOR ENSURES TARGET ACCURACY
- PISTOL GRIP, EASY TO POINT
- INSTANT TEMPERATURE DISPLAY
- EASY TO READ BACK-LIT DIGITAL DISPLAY
- DISPLAYS °C. OR °F
- LOW BATTERY INDICATOR
- TEMP. RANGE: -20 °C. to 500 °C.
- VIEW FIELD RATIO: 8 : 1

TO-75175
INFRA-RED THERMOMETER
FEATURES:
- LASER 8-POINT CIRCULAR INDICATOR ENSURES TARGET ACCURACY
- PISTOL GRIP, EASY TO POINT
- INSTANT TEMPERATURE DISPLAY
- EASY TO READ DIGITAL DISPLAY
- DISPLAYS °C. OR °F
- CLEAR, BACK-LIT DIGITAL DISPLAY
- LOW BATTERY INDICATOR
- TEMP. RANGE: -32 °C. to 600 °C.
- HIGH - LOW ALARM
- VIEW FIELD RATIO: 30 : 1
- CARRY CASE INCLUDED
BEAKER: OIL DRAIN

TO-15300
100 ml GRADUATED BEAKER
IDEAL FOR OIL MEASUREMENT ETC.

CLEANER

TO-18375
500 ml ATOMISER
GLO-KLENS BIODEGRADABLE CLEANER AND DEGREASER.
A SAFE AND VERSATILE CLEANER, THIS PRODUCT IS NON-TOXIC TO HUMANS AND ANIMALS AND HELPS TO REMOVE TAR, WAXES, ADHESIVES, FRESH PAINT AND MANY OTHER HARD-TO-REMOVE SUBSTANCES.

IDEAL FOR CLEANING OFF GLO-LEAK TRACER DYES.

COMB: FIN REPAIR

TO-18740
FIN COMB
MULTI-HEADED COMB SUITABLE FOR MOST CONDENSER AND EVAPORATOR FINS.

CUTTER: HOSE

TO-21500
ATCO KWIK-CUT HOSE CUTTER
CUTS ALL R-12 AND R134a REFRIGERANT HOSE QUICKLY AND EASILY.
REPLACEMENT BLADE - TO-15500

DEODORANT

TO-24900
HANDY SPRAY CAN (35 ml)
THIS PRODUCT IS BIODEGRADABLE, AND HELPS TO PREVENT ODOURS AND MOULD IN THE EVAPORATOR COIL.
GIVE THE CUSTOMER A CAN TO PREVENT ANY FURTHER PROBLEMS.

PART No.  CAPACITY  VALVE ARRANGEMENT

TO-22011  10 kg  SINGLE VALVE
TO-22025  22 kg  SINGLE VALVE, LIQUID PICK-UP TUBE
TO-22027  22 kg  DUAL VALVES, SINGLE OUTLET
TO-22044  25 kg  DUAL VALVES, DUAL OUTLET
FLUSHING EQUIPMENT

Flush Kit

TO-28760
AIR-CHIEF FLUSHING KIT
INCLUDES CYLINDER, FLUSH GUN AND LINE
FOR USE WITH TO-28724 FLUSHING SOLVENT.
(FLUSHING SOLVENT IS NOT INCLUDED IN KIT)

ACCESSORIES and PARTS
ACCESS UNION FOR R134a: TO-14450
REPLACEMENT FLUSH GUN: TO-32550
REPLACEMENT RUBBER TIP: TO-75230
SPARE CAN FOR FLUSH: TO-18160

TO-28724
FLUSHING SOLVENT - 5kg CAN
APPROVED FOR USE WITH R-12 AND R134a SYSTEMS.
WE DO NOT RECOMMEND ANY OTHER SOLVENT.
MUST NOT BE USED WITH COMPRESSED AIR.
RECOMMENDED PROPELLANT IS NITROGEN.

TO-66344
NITROGEN REGULATOR
(suits type 50 cylinders)

TO-66555
CONVERTER
(converts old type regulators to suit type 50 cylinders)

Flush Recovery Unit

TO-28766
AIR-CHIEF FLUSH RECOVERY UNIT

CATCH AND REUSE SOLVENT!
THIS SIMPLE, EFFECTIVE DEVICE ATTACHES TO FITTINGS WITHOUT TOOLS, USING A RUBBER MEMBRANE INFLATED BY A FINGER-SIZE PUMP.

GAUGES, VACUUM TESTING

THE VACUUM GAUGE IS AN ESSENTIAL TOOL FOR ACCURATE MEASUREMENT AND TESTING OF THE LEVEL OF VACUUM IN A SYSTEM, AND FOR CHECKING VACUUM PUMPS.

TO-31890
REFCO
DIGITAL VACUUM GAUGE
• reads in seven units: microns, PSI, in/Hg, mbar, Pascals, Torr or mTorr
• hook for easy positioning
• low numeric resolution
• accurate reading

TO-31895
ROBINAIR
DIGITAL VACUUM GAUGE
• reads down to 10 microns
• long lead and magnetic strip for convenient positioning
• low numeric resolution
• accurate reading
TOOLS & SERVICE EQUIPMENT

General Tools and Service Items

OIL INJECTORS

TO-36202
OIL INJECTOR
R134a - ACME

TO-36234
OIL INJECTOR
R134a - ACME

GREASE, DEEP VACUUM

TO-32250
A SPECIAL LOW VAPOUR PRESSURE GREASE FOR USE IN VACUUM VALVES, CHARGING MANIFOLDS, ETC.

MANUAL, SERVICE

TO-52642
AIR-CHIEF BASIC SERVICE AND TRAINING MANUAL

MIRROR, INSPECTION

TO-54012
TELESCOPIC POCKET INSPECTION MIRROR EXTENDS TO 200mm.

SEALANT, LEAK-LOCK

TO-70645
LEAK-LOCK HOSE FITTING SEALANT.
IF USED SPARINGLY, THIS SEALANT IS SAFE FOR USE ON HOSE FITTINGS IN R-12 SYSTEMS.
IT IS NOT DESIGNED FOR USE WITH SOME LUBRICANTS SUCH AS PAG

SEALANT, O-RING

TO-70647
HOSE FITTING AND O-RING SEALANT.
A SAFE SEALANT FOR USE ON O-RINGS AND HOSE FITTINGS IN R134a SYSTEMS.

SEALANT, SYSTEM

TO-70655
AIRCO-SEAL PRO KIT
A SAFE SEALANT FOR USE IN R134a SYSTEMS.
KIT INCLUDES CAN OF SEALANT, TAP AND HOSE
**General Tools and Service Items**

**Syringes**
- TO-73950 Universal 10 ml
- TO-73954 Universal 60 ml

These syringes are useful for injecting small or measured amounts of such things as dye or lubricant.

**Valve - Quick Coupler**
- TO-79650 Quick Coupler Hand Valve
  - 1/4" Male Flare - 1/4" Female Flare

**Tool, Inspection (Fibre Optic)**
- TO-75644 450mm x 5.8mm dia. probe
- TO-75647 450mm x 10.6mm dia. probe

Illuminated fibre optic type inspection tool. An invaluable, versatile inspection tool for air conditioning technicians, mechanics, and many other uses.

**Features:**
- Lamp built into the tip illuminates dark areas at the touch of a button.
- 450mm flexible fibre optic probe (900mm probe model also available)
- Integrated focus adjustment
- Sealed lens and cable are submersible
- Supplied with a sturdy, hard plastic case

**Optional Accessories for 5.8mm Probe:**
- Magnet attachment (clip-on) TO-50861
- Mirror attachment (clip-on) TO-54124

**Spare Parts:**
- Replacement Halogen Globe: TO-31924 (suits 5.8mm and 10.6mm probes)

**Tool, Crimping, Minicrimp**
- TO-75600 ATCO Minicrimp Crimping Tool

For use with standard ATCO aftermarket barb type fittings and ATCO Long Series minicrimp ferrules.

This tool is not designed for use with beadlock or captive ferrule type fittings.

**Replacement Dies**
- DIE SET No. 6 TO-27306
- DIE SET No. 8 TO-27308
- DIE SET No. 10 TO-27310
- DIE SET No. 12 TO-27312
## TOOLS, CRIMPING, BEADLOCK

### Standard Beadlock Crimper

**TO-75602**

ATCO BEADLOCK CRIMPING TOOL FOR USE WITH BEADLOCK TYPE HOSE FITTINGS.

INCLUDES A COMPLETE SET OF DIES FOR STANDARD DIAMETER HOSE.

### Beadlock Crimper Replacement Parts

- **CARRIER, SUIT # 6 DIE (set of 2 pcs) BLACK** TO-18306
- **CARRIER, SUIT # 8 DIE (set of 2 pcs) BLUE** TO-18308
- **CARRIER, SUIT #10 DIE (set of 2 pcs) GREEN** TO-18310
- **CARRIER, SUIT #12 DIE (set of 2 pcs) YELLOW** TO-18312
- **DIE, STANDARD DIAMETER HOSE No. 6** TO-27326
- **DIE, STANDARD DIAMETER HOSE No. 8** TO-27328
- **DIE, STANDARD DIAMETER HOSE No. 10** TO-27330
- **DIE, STANDARD DIAMETER HOSE No. 12** TO-27332
- **DIE, REDUCED DIAMETER HOSE No. 6** TO-27346
- **DIE, REDUCED DIAMETER HOSE No. 8** TO-27348
- **DIE, REDUCED DIAMETER HOSE No. 10** TO-27350
- **DIE, REDUCED DIAMETER HOSE No. 12** TO-27352
- **GREASE TEFILON PLATE, LATCH** TO-32276
- **DIE CARRIER** TO-60560

### Manual / Hydraulic Beadlock Crimpers

#### TO-75606

HYDRAULIC BEADLOCK CRIMPING TOOL FOR USE WITH BEADLOCK TYPE HOSE FITTINGS.

INCLUDES A COMPLETE SET OF DIES FOR BOTH STANDARD AND REDUCED DIAMETER BARRIER HOSE.

**Replacement Parts**

- **DIE SET, Black # 6 reduced hose** TO-27115
- **DIE SET, Purple # 6 std. & # 8 reduced hose** TO-27116
- **DIE SET, Red # 8 standard hose** TO-27118
- **DIE SET, Orange # 10 reduced hose** TO-27119
- **DIE SET, Yellow # 10 standard hose** TO-27120
- **DIE SET, Blue # 12 reduced hose** TO-27121
- **DIE SET, Green # 12 standard hose** TO-27122
- **HEAD, Crimper** TO-34047
- **PIN, Yoke pin and Chain assembly** TO-60425
- **RAM, Hydraulic arm** TO-66185

#### TO-75609

MANUAL / HYDRAULIC BEADLOCK CRIMPING TOOL FOR USE WITH BEADLOCK TYPE HOSE FITTINGS.

INCLUDES A COMPLETE SET OF DIES TO SUIT BOTH STANDARD AND REDUCED DIAMETER BARRIER HOSE.

**Features Include:**

- COMPACT, MODULAR TOOL
- LIGHTWEIGHT ALLOY BODY
- CAN BE HAND - HELD OR BENCH MOUNTED
- CONVERTS TO HYDRAULIC OPERATION EASILY
- REPLACEMENT OF DIES IS QUICK AND SIMPLE
- NO SPECIAL TOOLS REQUIRED

**Replacement Parts**

- **CARRIER, White # 6 reduced hose** TO-18265
- **CARRIER, Yellow # 6 std. & # 8 reduced hose** TO-18266
- **CARRIER, Red # 8 standard hose** TO-18268
- **CARRIER, Black # 10 reduced hose** TO-18289
- **CARRIER, Green # 10 std. & #12 reduced hose** TO-18270
- **CARRIER, Blue # 12 standard hose** TO-18272

**• • NOTE: carriers are supplied as a set (2 pcs)**

- **DIE SET, White # 6 reduced hose** TO-27225
- **DIE SET, Yellow # 6 std. & # 8 reduced hose** TO-27226
- **DIE SET, Red # 8 standard hose** TO-27228
- **DIE SET, Black # 10 reduced hose** TO-27229
- **DIE SET, Green # 10 std. & #12 reduced hose** TO-27230
- **DIE SET, Blue # 12 standard hose** TO-27232

**RAM, Hydraulic arm** TO-66197
General Tools and Service Items

TOOL, SPRINGLOCK

TO-75625
SPRINGLOCK HOSE FITTING REPAIR TOOL KIT
COMPRIMES SET OF No.6, 8, 10, AND 12

TOOL, ORIFICE REMOVER

TO-75672
ORIFICE TUBE REMOVER, COMBINATION TOOL, SUITS FORD AND GM ORIFICE TUBES

TOOL, TUBE BENDER

TO-75715
HAND HELD TUBE BENDER
FOR USE WITH COPPER AND ALLOY TUBING
SUITS: 3/16", 1/4", 5/16" AND 3/8" TUBING

TOOL, VALVE CORE

TO-75875
CORE REMOVER FOR STANDARD
AIR CONDITIONING ACCESS VALVE CORES.

TO-75881
CORE REMOVING TOOL FOR HIGH-FLOW
AIR CONDITIONING ACCESS VALVE CORES.
SUITS MOST STANDARD AND HIGH-FLOW CORES

WRENCHES

TO-81340
4-WAY RATCHET WRENCH
3/16" - 1/4" AND 1/2" - 9/16"

TO-81360
4-WAY RATCHET WRENCH
3/16" - 1/4" AND 5/16" - 3/8"
Unions

**CYLINDER, MANIFOLD & VACUUM PUMP**

**REFRIGERANT CYLINDER UNION**
3/4" FEM. GAS - 1/4" MF  
3/4" FEM. GAS - 1/2" ACME  
TO-77300  
TO-77334

**TO-77400**
CHARGING LINE UNION  
1/4" MF - 1/4" MF

**TO-77432**
MANIFOLD UNION  
1/2" FEM ACME - 10mm MALE METRIC

**TO-77500**
VACUUM PUMP "T" UNION  
MALE PIPE - 1/2" MALE ACME - 1/4" MF

**VACUUM PUMP UNIONS**
1/4" FEM. FLARE - 1/2" MALE ACME  
1/2" FEM. ACME - 1/4" MALE FLARE  
TO-77450  
TO-77475

**CYLINDER UNION DUST CAPS**
CAP FOR 1/4" MF  
TO-80795  
CAP FOR 1/2" ACME  
TO-18234

Specialized Service Tools

**COMPRESSOR SERVICE TOOLS**

**TO-90175**
DIPSTICK  
SANDEN SD5 SERIES

**TO-90210**
DIPSTICK  
YORK AND TECUMSEH

**TO-91180**
UNIVERSAL CLUTCH HOLDING TOOL

**TO-91212**
DELPHI V5 CLUTCH HOLDING TOOL

**TO-91240**
SANDEN CLUTCH HOLDING TOOL

**TO-92015**
O-RING INSTALLER  
DELCO A6  
(REPLACES TO-92010)

**TO-92050**
DELCO A6 PULLEY INSTALLER

**TO-92900**
DELCO A6 SEAL PROTECTOR

**TO-92934**
SEAL SLEEVE PROTECTOR  
SANDEN SD505 & 507

**TO-92940**
SANDEN SD508 SEAL PROTECTOR

**TO-92970**
SEAL SLEEVE PROTECTOR  
SANDEN TR & C SERIES

**TO-93010**
CLUTCH PLATE PULLER  
SANDEN SD505 & 507

**TO-93040**
UNIVERSAL PULLEY PULLER

**TO-93100**
ROTOR & BEARING PULLER  
SANDEN SD505 & 507

**TO-93690**
NIPON DENSO HUB REMOVER
Specialized Service Tools

COMPRESSOR SERVICE TOOLS

TO-93800
UNIVERSAL O-RING REMOVER

TO-93892
DELCO A6 HUB REMOVER (use with TO-93895 INSTALLER)

TO-93895
DELCO A6 HUB INSTALLER (USE WITH TO-93892 HUB REMOVER)

TO-93897
DELPHI V5 HUB REMOVER (USE WITH TO-93898 HUB REMOVER)

TO-93898
DELPHI V5 HUB INSTALLER (USE WITH TO-93897 HUB REMOVER)

TO-94020
SEAL REMOVER-INSTALLER
DELCO CERAMIC SEAL

TO-94035
SEAL REMOVER-INSTALLER
DELCO STEEL SEAL

TO-94041
DELCO A6 AND R4 SEAL REMOVER-INSTALLER (COMPLETE KIT)

TO-94060
SEAL SEAT REMOVER-INSTALLER
DELCO A6; SANDEN SD508 (ALSO EARLY SD507)

TO-94257
SEAL REMOVER-INSTALLER
SANDEN SD505; LATE SD507 AND TR SERIES

TO-94270
SEAL REMOVER-INSTALLER
SANDEN EARLY SD507; SD508

TO-94295
SEAL SEAT REMOVER-INSTALLER
SANDEN SD505; LATE SD507

TO-94320
SEAL REMOEVER-INSTALLER
SANDEN SD7H

TO-94375
SEAL REMOEVER-INSTALLER
SANDEN TRS