REFRIGERANT SERVICE TOOLS
CO2, AMMONIA / R134a (Car A/C) / HFO-1234yf Tools
Refrigerant changes, tools also change!!

CO2 REFRIGERANT TOOL
HIGH EFFICIENCY
SYSTEM

CO2 refrigerant tool
CO2 Tool Basic Set
Code No.:CT077
Can be used for maintenance of CO2 air conditioning equipment, etc.
Easy to use manifold with open/close valve.
Carrying case made by tough ABS resin.

CO2 refrigerant tool
CO2 Gauge Manifold
Code No.:CT010
For high pressure CO2.
For checking pressure of CO2 refrigerant.

CO2 refrigerant tool
CO2 Charging Hose
Code No.:CT020
For high pressure CO2.

Accessories:
- Manifold for CO2
- CO2 Charging hose × 2
- Valve for CO2 filling
- Adapter for CO2 Cylinder
- Carrying Case

Vacuum Gauge
Pressure Gauge
-0.1 - 0.0MPa
0 - 25MPa
Connecting port size:
Filling side: G (PF) 1/4" male 30° flare
Vacuuming side: SAE 1/4" male 45° flare

Manifold and Charging hose for CO2 should be used for CO2 charging, pressure test and airtight test.

Manifold and Charging hose for CO2 should be used for CO2 charging, pressure test and airtight test.

Vacuuming → Charging

Vacuuming
Charging

Vacuuming
Charging

Leak test
Soldering
Leak test

Length: 150cm
Max working pressure: 15MPa
Connecting port size: G (PF) 1/4" male 30° flare
CO2 refrigerant tool

Airtight Test Kit for CO2 System
Code No.CT099

Efficient kit for airtight test.
Single action connector for copper pipes.

CO2 refrigerant tool

CO2 High Efficiency Tool Set
Code No.CT088

Tools set for efficient works.
Tube cutter can cut thick copper pipes with minimal burr.
Reamer can remove burrs of thick copper pipes.
Single action connector for copper pipes.

System connection size
1/4" ferrule

Hose connection size
G (PF) 1/4" male 30° flare

Maximum working pressure
10MPa

Diameter
1/4"
**CO2 refrigerant tool**

**Quick Coppler for CO2 Cylinder**

Code No. **CT040**

- Connects to the cylinder by single action.
- Easy to remove.
- Long life.
- Cylinder hook for safety can be added. (optional)
- Safety lock system.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum working pressure</td>
<td>15MPa</td>
</tr>
<tr>
<td>Cylinder connection size</td>
<td>W22 – 14TPI female</td>
</tr>
<tr>
<td>Hose connection size</td>
<td>G (PF) 1/4&quot; male 30° flare</td>
</tr>
</tbody>
</table>

**Adapter for CO2 Cylinder**

Code No. **CT045**

- Easy to connect to CO2 cylinder by a wrench.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cylinder connection size</td>
<td>W22 – 14TPI female</td>
</tr>
<tr>
<td>Hose connection size</td>
<td>G (PF) 1/4&quot; male 30° flare</td>
</tr>
</tbody>
</table>

**Gauge for CO2 Airtight Test**

Code No. **CT050**

- Pressure gauge for CO2 airtight test.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum working pressure</td>
<td>15MPa</td>
</tr>
<tr>
<td>Connection size</td>
<td>Ferrule for 1/4&quot; pipe</td>
</tr>
</tbody>
</table>

**CO2 leak detector II**

Code No. **Y69396**

- Infrared sensor reduces malfunction by correcting density of CO2 in the air.
- Long life sensor.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detecting method</td>
<td>Infrared sensor</td>
</tr>
<tr>
<td>Gas introduction method</td>
<td>Gas suction system</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>Hi: under 400ppm</td>
</tr>
<tr>
<td></td>
<td>Lo: 4,000ppm (atmospheric concentration 350ppm)</td>
</tr>
<tr>
<td>Power</td>
<td>Alkaline battery</td>
</tr>
<tr>
<td>Weight</td>
<td>425g (with battery)</td>
</tr>
</tbody>
</table>
CO2 refrigerant tool

**CO2 Tube Cutter**

Code No. R70014PCO

![CO2 Tube Cutter Image]

- Can cut thick copper pipes with minimal burr.
- With strong thin sharp cutter wheel.

<table>
<thead>
<tr>
<th>Weight</th>
<th>290g</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turning radius</td>
<td>118 ~ 133mm</td>
</tr>
<tr>
<td>Quantity</td>
<td>1</td>
</tr>
</tbody>
</table>

---

**CO2 Mini Cutter**

Code No. R70015CO

![CO2 Mini Cutter Image]

- Can cut thick copper pipes with minimal burr.
- With strong thin sharp cutter wheel.

<table>
<thead>
<tr>
<th>Weight</th>
<th>270g</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turning radius</td>
<td>58mm</td>
</tr>
<tr>
<td>Quantity</td>
<td>1</td>
</tr>
</tbody>
</table>

---

**Crank Type Scraper**

16: Code No. CT401 19: Code No. CT427

Speedy and precise deburring with crank type.

- Can remove chips easily from tube.

<table>
<thead>
<tr>
<th>Item</th>
<th>Crank type scraper 16</th>
<th>Crank type scraper 19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>ø1/4” ~ 5/8”</td>
<td>ø1/4” ~ 3/4”</td>
</tr>
</tbody>
</table>

---

**Vacuum Pump 1.8CFM Eco**

Code No. WV210

![Vacuum Pump Image]

- High–performance model suitable for vacuuming of CO2 refrigerant and air conditioning equipment.

- Suitable material: copper, steel, stainless steel, aluminum, brass, plastic pipes

<table>
<thead>
<tr>
<th>Item</th>
<th>Blade</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suitable material</td>
<td>40 pieces</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>208g</td>
<td></td>
</tr>
</tbody>
</table>

---

**Vacuum Pump 1.8CFM Eco**

Code No. WV211 (220 ~ 240V)

<table>
<thead>
<tr>
<th>Ultimate vacuum</th>
<th>3.9Pa abs (15 micron)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exhaust rate</td>
<td>42 / 50L (50 / 60Hz)</td>
</tr>
<tr>
<td>Intake</td>
<td>1/4” ~ 5/16”</td>
</tr>
</tbody>
</table>
**Ammonia Manifold Kit**

- Code No.: Y40193
- Gauge diameter: ø68mm
- NH3 (R717)

Heavy-duty charging hose.
Flutterless technology.
Easy and accurate valve adjustment.

**For vacuuming of the ammonia refrigeration machine!!**

- Gauge diameter: ø68mm
- Standard accessories: For ammonia 1/4" Charging hose (strong type) 122cm×3

**Ammonia Manifold**

- 1/4": Code No. Y40192
- 3/8": Code No. Y401923
- NH3 (R717)

- 1/4":
  - Low pressure: -0.1 ~ 1.0MPa
  - High pressure: -0.1 ~ 2.8MPa
  - Connecting port size: 1/4" Flare (UNF 7/16 – 20TPI)

- 3/8":
  - Low pressure: -0.1 ~ 1.0MPa
  - High pressure: -0.1 ~ 2.8MPa
  - Connecting port size: 3/8" Flare (UNF 5/8 – 18TPI)

**Ammonia Charging Hose**

- NH3 (R717)

<table>
<thead>
<tr>
<th>Size</th>
<th>Code No.</th>
<th>Proof Pressure</th>
<th>Burst Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot; Flare</td>
<td>Y16846</td>
<td>0.2MPa</td>
<td>24.9MPa</td>
</tr>
<tr>
<td>183cm</td>
<td>Y16872</td>
<td></td>
<td></td>
</tr>
<tr>
<td>244cm</td>
<td>Y16896</td>
<td></td>
<td></td>
</tr>
<tr>
<td>305cm</td>
<td>Y16910</td>
<td></td>
<td></td>
</tr>
<tr>
<td>366cm</td>
<td>Y16912</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1000cm</td>
<td>Y16933</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Size</th>
<th>Code No.</th>
<th>Proof Pressure</th>
<th>Burst Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8&quot; Flare</td>
<td>Y19448</td>
<td>0.2MPa</td>
<td>20.7MPa</td>
</tr>
<tr>
<td>183cm</td>
<td>Y19472</td>
<td></td>
<td></td>
</tr>
<tr>
<td>244cm</td>
<td>Y19496</td>
<td></td>
<td></td>
</tr>
<tr>
<td>305cm</td>
<td>Y19510</td>
<td></td>
<td></td>
</tr>
<tr>
<td>366cm</td>
<td>Y19512</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1000cm</td>
<td>Y19533</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000cm</td>
<td>Y19566</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Ammonia Vacuum Pump**

- Code No.: Y93539
- NH3 (R717)

- Degree of vacuum: 2.0Pa abs.
- Exhaust velocity: 229L/min
- Oil backflow prevention valve: 2 stage rotary pump
- Weight: 14kg

Uncorrosive iron fitting.
High volume vacuuming by 3/8" suction port.
Exhaust port supports both 3/8" charging hose and oil exhaust filter.

**For the various service of the ammonia refrigeration machine!!**

**Hose Adapter**

- Stainless steel flare union.

<table>
<thead>
<tr>
<th>Size</th>
<th>Code No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot; (UNF 7/16 – 20TPI)</td>
<td>XP822</td>
</tr>
<tr>
<td>3/8&quot; (UNF 5/8 – 18TPI)</td>
<td>XP823</td>
</tr>
</tbody>
</table>
Automatic recovery • reclaim • vacuum pulling • oil charge • charging !!

FOR CAR A/C

REFRIGERANT CLEANER

Recovery • Reclaim of refrigerant from car A/C
Charging refrigerant to car A/C
Charging oil • Vacuuming
Improves cooling power of the car A/C

Refrigerant cleaning system for automobile A/C

Refrigerant Cleaner

with vacuum pump: Code No. FC060G
Code No. FC060GS

R134a
Vapor recovery: 120g/min
Auto

"Fluorocarbons Recovery and Destruction" compliant machine

Refrigerant Cleaner C60G
Operating time: 15 ~ 25min.
Refrigerant Cleaner C60GS
Operating time: 10 ~ 20min.

Easy operation with full automatic control

1. Recovery, recycling
   Improved cooling power

2. Vaccuming
   Contaminated refrigerant is cleaned through special filters
   Maintains cooling power

3. Charging
   Easy and safe charging
   Appropriate amount of refrigerant is charged through high performance scale

Fully automatic recovery, reclaim, vacuuming and charging with easy setting.
(refrigerant charging amount/vacuuming time/oil charging amount)
Vacuuming can be done only with C60G (equipped with a vacuum pump)

Large display
- Large and easy to read LED display indicates amount/time.
- Illuminated indication.
- Amount/time setting with ten keys.

Equipped with 2 special filters
- Cleans contaminated refrigerant when recovered.
  Improves cooling ability.

Equipped with a 2 stage vacuum pump
(Except C60GS)
- Dries the A/C system and eliminates moisture shortly.

All modes can be operated individually
- Recovery, Vacuuming (only C60G), Refrigerant charge, Oil charge can be operated individually as well.

Back pocket
- Possible to storage 6 service cans.

Equipped with a heat exchange type oil separator

Conventional refrigerant can and oil can are applicable

Oil less system

Equipped with a 6L cylinder

Item | C60G (with vacuum pump) | C60GS
--- | --- | ---
Applicable refrigerant | R134a | |
Auto operating | Cleaning / recovery / reclaim / vacuuming / charging | Cleaning / recovery / reclaim / charging
Voltage | 100V (50/60Hz) | |
Compressor | 375W | Oilless
Weight | 83kg | 75kg
Operating temperature | 5 ~ 40°C | |
Vacuum pump | Exhaust rate: 51~57L/min (50/60Hz) | Ultimate vacuum: 2.0 Pa abs. (15 micron)
   | Equipment cylinder: 6L cylinder (stationary) | Equipped cylinder: 6L cylinder
Oil separator | Separating system: Heat exchanger type / Capacity: 900mL | |
Weighing method | by Road cell | |
Standard accessories | High and low pressure charging hose (2.5m) × 1 each, Thermometer, Filter dryer × 2, High and low pressure quick joint × 1 each | |
With printer type is also available.
Please contact us when recovery to hybrid car.

Recovery rate

Vapor (g/min) | 120 (240)

Rates vary under different conditions.
Vapor recovery capability value is a value by JIS B8629 inspection criteria.
For automobile A/C

**Manifold Set**

92cm: Code No. Y40967A  152cm: Code No. Y409675A

- **R134a**
  - Gauge diameter ø88mm
  - Plus II hose

<table>
<thead>
<tr>
<th>Low pressure gauge</th>
<th>High pressure gauge</th>
<th>Port size</th>
</tr>
</thead>
<tbody>
<tr>
<td><del>0.1</del>1.7MPa</td>
<td><del>0.1</del>3.5MPa</td>
<td>1/4&quot; flare (UNF 7/16~20TPI)</td>
</tr>
</tbody>
</table>

The set consists of Manifold, Quick joint and Adapter for different diameter which are necessary for recovery from auto A/C. Excellent air–tightness by double O–ring & high quality nylon gasket. Large handle which opens for full flow by 1 1/2 turn. Sliding type for easy replacement of piston.

**Charging hose 92cm**

- Manifold for R407C • R404A • R507A • R134a, 1/4" charging hose 92cm × 3. High pressure quick joint 1/4", Low pressure quick joint 1/4", Adapter M10 female × 1/4" male

**Charging hose 152cm**

- Manifold for R407C • R404A • R507A • R134a, 1/4" charging hose 152cm × 3. High pressure quick joint 1/4", Low pressure quick joint 1/4", Adapter M10 female × 1/4" male, Case

---

**Manifold Set 2Cans Type**

Code No. Y409272C

- **R134a**
  - Gauge diameter ø88mm
  - Sight glass
  - Access port valve opener
  - Plus II hose

<table>
<thead>
<tr>
<th>Low pressure gauge</th>
<th>High pressure gauge</th>
<th>Port size</th>
</tr>
</thead>
<tbody>
<tr>
<td><del>0.1</del>2.4MPa</td>
<td><del>0.1</del>3.5MPa</td>
<td>1/4&quot; flare (UNF 7/16~20TPI)</td>
</tr>
</tbody>
</table>

The set consists of Manifold, Quick joint, Refrigerant can valve, 2 cans multi joint and Adapter for different diameter which are necessary for recovery from auto A/C. Two refrigerant cans can be connected in one time. Excellent air–tightness by double O–ring & high quality nylon gasket. All ports have 100 micron mesh filters which prevent particles from entering.

**Manifold Set 4Cans Type**

Code No. Y409273C

- **R134a**
  - Gauge diameter ø88mm
  - Sight glass
  - Access port valve opener
  - Plus II hose

<table>
<thead>
<tr>
<th>Low pressure gauge</th>
<th>High pressure gauge</th>
<th>Port size</th>
</tr>
</thead>
<tbody>
<tr>
<td><del>0.1</del>2.4MPa</td>
<td><del>0.1</del>3.5MPa</td>
<td>1/4&quot; flare (UNF 7/16~20TPI)</td>
</tr>
</tbody>
</table>

The set consists of Manifold, Quick joint, Refrigerant can valve, 4 cans multi joint and Adapter for different diameter which are necessary for recovery from auto A/C. Four refrigerant cans can be connected in one time. Excellent air–tightness by double O–ring & high quality nylon gasket. All ports have 100 micron mesh filters which prevent particles from entering.

---

**Connectable up to 2 cans!!**

- 1/4" flare female
- 1/4" flare female (with valve opener)

**Connectable up to 4 cans!!**

- 1/4" flare female
- 1/4" flare female (with valve opener)
CO2, AMMONIA, R134a (Car A /C), HFO-1234yf Tools

AIR CONDITIONER CLEANING
MEASURING TOOLS
REFRIGERANT SERVICE TOOLS

For automobile A/C
Charging Hose for R134a

R134a

<table>
<thead>
<tr>
<th>Length (cm)</th>
<th>Color</th>
<th>Code No.</th>
<th>Screw size</th>
<th>Working pressure</th>
<th>Burst pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>92</td>
<td></td>
<td>Y02209A</td>
<td>M10</td>
<td>3.4MPa</td>
<td>17.2MPa</td>
</tr>
<tr>
<td>92</td>
<td></td>
<td>Y02409A</td>
<td>M10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>92</td>
<td></td>
<td>Y02309A</td>
<td>M12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>92</td>
<td>3 PCS</td>
<td>Y02909A</td>
<td>YL×BL:M10 RD:M12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>152</td>
<td></td>
<td>Y02215A</td>
<td>M10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>152</td>
<td></td>
<td>Y02415A</td>
<td>M10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>152</td>
<td></td>
<td>Y02315A</td>
<td>M12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>152</td>
<td>3 PCS</td>
<td>Y02915A</td>
<td>YL×BL:M1  RD:M12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

※ Optional item: Hose packing for M12×10. (Code No. Y0309A)
※ Please contact us when in need of hose with valve core opener.

---

For automobile A/C
Adapter for Different Diameter

For connection to different size service port of auto A/C.

For removing sealant charged in auto A/C
Trap Separator

Code No. Y38087

Protect recovery machine by removing sealant, particles, and sludge.
Applicable to all kinds of A/C unit.
Filter is replaceable.
※ Good for 50 pieces of single A/C unit.

Ideal for R134a with a soft hose!!

Filter Dryer 082

Reclaim Unit

Code No. ES080

Reclaiming of contaminated refrigerant from auto A/C and protect a recovery machine.
Removes moisture, acid, etc. by connecting between the car and recovery machine.

Port size: 1/4" flare (UNF 7/16 - 20)
Standard accessories: 1/4" charging hose × 92cm

Filter Dryer 082

Code No. ES082

Wrench tightening type
Hand tightening type

---

For automobile A/C
Adapter for Different Diameter

For connecting to different size service port of auto A/C.

For connecting to different size service port of auto A/C.
Connecting adapter for small service port. (3/16")

Adapter for Different Diameter for Auto A/C

<table>
<thead>
<tr>
<th>Item</th>
<th>Code No.</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adapter for Different Diameter for Auto A/C Wrench tightening type</td>
<td>Y06112A</td>
<td>female M12×male 1/4&quot;</td>
</tr>
<tr>
<td>Adapter for Different Diameter for Auto A/C Hand tightening type</td>
<td>Y06111K</td>
<td>female M10×male 1/4&quot;</td>
</tr>
<tr>
<td></td>
<td>Y06010K</td>
<td>female 1/4&quot;×male M10</td>
</tr>
<tr>
<td></td>
<td>Y06112K</td>
<td>female M12×male 1/4&quot;</td>
</tr>
<tr>
<td></td>
<td>Y06012K</td>
<td>female 1/4&quot;×male M12</td>
</tr>
</tbody>
</table>

---

Trap Separator Replacement Filter

Code No. Y38081

For removing sealant charged in auto A/C
Trap Separator

Reclaim Unit

Code No. Y38087

Removes moisture, acid, etc. by connecting between the car and recovery machine.

Removes oil, moisture, acid, particles, and etc.

Port size: 1/4" flare (UNF 7/16 - 20)

Filter Dryer 082

Code No. ES082

R134a charging hose

Indicates the presence of moisture.

---

Wrench tightening type
Hand tightening type

---

Adapter for Different Diameter

For connecting to different size service port of auto A/C.

R12

For connecting to different size service port of auto A/C.

3/16" flare service port

---

Y06102K

0.6kg

3 PCS

Screw size

Working pressure

Burst pressure

92cm

Y02209A

M10

3.4MPa

17.2MPa

92cm

Y02409A

M10

92cm

Y02309A

M12

92cm

Y02909A

YL×BL:M10 RD:M12

152cm

Y02215A

M10

152cm

Y02415A

M10

152cm

Y02315A

M12

152cm

Y02915A

YL×BL:M1  RD:M12

92cm

• Y02209A  M10

3.4MPa

17.2MPa

92cm

• Y02409A  M10

92cm

• Y02309A  M12

92cm

• Y02909A  YL×BL:M10 RD:M12

152cm

• Y02215A  M10

152cm

• Y02415A  M10

152cm

• Y02315A  M12

152cm

• Y02915A  YL×BL:M1  RD:M12

92cm

• Y02209A  M10

3.4MPa

17.2MPa

92cm

• Y02409A  M10

92cm

• Y02309A  M12

92cm

• Y02909A  YL×BL:M10 RD:M12

152cm

• Y02215A  M10

152cm

• Y02415A  M10

152cm

• Y02315A  M12

152cm

• Y02915A  YL×BL:M1  RD:M12

92cm

• Y02209A  M10

3.4MPa

17.2MPa

92cm

• Y02409A  M10

92cm

• Y02309A  M12

92cm

• Y02909A  YL×BL:M10 RD:M12

152cm

• Y02215A  M10

152cm

• Y02415A  M10

152cm

• Y02315A  M12

152cm

• Y02915A  YL×BL:M1  RD:M12

92cm

• Y02209A  M10

3.4MPa

17.2MPa

92cm

• Y02409A  M10

92cm

• Y02309A  M12

92cm

• Y02909A  YL×BL:M10 RD:M12

152cm

• Y02215A  M10

152cm

• Y02415A  M10

152cm

• Y02315A  M12

152cm

• Y02915A  YL×BL:M1  RD:M12
**For automobile A/C**

**Low Pressure Quick Joint**

![R134a]

One action to connect to the service port of auto A/C.

<table>
<thead>
<tr>
<th>Code No.</th>
<th>XP794</th>
<th>Y03200A</th>
<th>Y03200T</th>
<th>Y03201T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hose connection</td>
<td>M10</td>
<td>M10</td>
<td>M10</td>
<td>1/4”</td>
</tr>
</tbody>
</table>

**Replacement parts**

D ring × 2 (For XP794 • Y03200A)  
Code No. XP537

D ring × 1 (For Y03200T • Y03201T)  
Code No. Y0320ST

**For automobile A/C**

**High Pressure Quick Joint**

![R134a]

One action to connect to the service port of auto A/C.

<table>
<thead>
<tr>
<th>Code No.</th>
<th>XP797</th>
<th>Y03100T</th>
<th>Y03101T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hose connection</td>
<td>M12</td>
<td>M12</td>
<td>1/4”</td>
</tr>
</tbody>
</table>

**Replacement parts**

D ring × 2 (For XP7974 • Y03100T)  
Code No. Y0310ST

D ring × 1 (For Y03100T • Y03101T)  
Code No. Y0310ST

**For automobile A/C**

**Low Pressure Quick Control Valve 1/4”**

![R134a]

One action to connect to the service port of auto A/C.  
Easy to connect under high pressure with valve.

**Code No. Y41338**

| Hose connection | 1/4” flare male |
| Replacement parts | O ring × 2 | Code No. Y41300 |

**For automobile A/C**

**High Pressure Quick Control Valve 1/4”**

![R134a]

One action to connect to the service port of auto A/C.  
Easy to connect under high pressure with valve.

**Code No. Y41337**

| Hose connection | 1/4” flare male |
| Replacement parts | O ring × 2 | Code No. Y41300 |

**For automobile A/C**

**Quick Charging Valve (High pressure)**

![R134a]

Removes/installs a valve core in auto A/C for R134a without gas leakage.  
For speed up of vacuuming, charging, and recovering by removing a valve core while servicing.  
When recovering refrigerant from auto A/C.

| Hose connection | 1/2” acme (1/4” flare) |
| Standard accessories | 1/2” acme female × 1/4” flare male |

Removes valve core in coupler without gas leakage
**Refrigerant Can Valve**

For automobile A/C

Code No. Y04100A

Valve to connect to refrigerant can.

Replacement parts

| Packing x 10 | Code No. Y04107A |
| O ring x 10 | Code No. Y04108A |

**Oil Injector (quick joint type)**

For automobile A/C servicing


R134a

For adding oil and fluorescent solution.

Refrigerant sampling from system.

Aluminum container.

Can add oil together with fluorescent solution.

**Oil Retainer 60 for R134a**

Code No. ES085

For Maintenance of refrigeration oil of auto A/C.

During refrigerant recovery stores oil in retainer and put back the oil into the compressor when charging.

**Oil Retainer 60 for R12**

Code No. ES084

For Maintenance of refrigeration oil of auto A/C.

During refrigerant recovery stores oil in retainer and put back the oil into the compressor when charging.

**Multi Joint**

For automobile A/C

Code No. Y05200A  for 2 cans:  Code No. Y05100A

To improve efficiency of charging.

For connection to 2 (4) refrigerant cans with 2 (4) refrigerant can valves.

**1/4" Oil Injector**

For automobile A/C servicing


R12

For adding oil and fluorescent solution.

Refrigerant sampling from system.

Aluminum container.

Can add oil together with fluorescent solution.

<table>
<thead>
<tr>
<th>Item</th>
<th>S</th>
<th>M</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cylinder capacity</td>
<td>14.8mL</td>
<td>59mL</td>
<td>118mL</td>
</tr>
<tr>
<td>Max. working pressure</td>
<td>4.1MPa</td>
<td>4.1MPa</td>
<td>4.1MPa</td>
</tr>
</tbody>
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</tbody>
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<table>
<thead>
<tr>
<th>Port size</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>M10 flare</td>
<td>60ml</td>
</tr>
</tbody>
</table>

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<th>Port size</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot; flare</td>
<td>60ml</td>
</tr>
</tbody>
</table>
**Refrigerant changes, Tools change!!**

**HFO–1234yf**

**ASADA SERVICE TOOL**

### Difference between HFO–1234yf & R134a

<table>
<thead>
<tr>
<th>Refrigerant</th>
<th>HFO–1234yf</th>
<th>R134a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refrigerant type</td>
<td>single refrigerant</td>
<td>single refrigerant</td>
</tr>
<tr>
<td>Boiling point</td>
<td>–29.4°C</td>
<td>–26.1°C</td>
</tr>
<tr>
<td>Flammability / Safety (ASHRAE34)</td>
<td>Minuteness combustion (A2L)</td>
<td>Non combustion (A1)</td>
</tr>
<tr>
<td>Explosion limit</td>
<td>Max 12.3% min 6.2%</td>
<td></td>
</tr>
<tr>
<td>Pressure (25°C)</td>
<td>0.58MPa</td>
<td>0.58MPa</td>
</tr>
<tr>
<td>Global Warming Potential (Integration period 100y)</td>
<td>4</td>
<td>1,300</td>
</tr>
</tbody>
</table>

### Refrigerant changes, Tools change

**For new refrigerant**

**Manifold for HFO–1234yf**

- Code No. ES615

Manifold – ball valve typed.
American standard HFO–1234yf.
SAE J2888, SAE J639 compliant product.

**HFO–1234yf**

<table>
<thead>
<tr>
<th>Pressure</th>
<th>Low: 2.4MPa / High: 3.5MPa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hose connection</td>
<td>M12–1.5 female</td>
</tr>
</tbody>
</table>

**Standard accessories**

- Manifold for HFO1234yf
- Low pressure quick joint for HFO1234yf
- High pressure quick joint for HFO1234yf
- HFO1234yf hose 12mm–1.5 blue 150cm
- HFO1234yf hose 12mm–1.5 red 150cm
- HFO1234yf hose 12mm–1.5 yellow 150cm
- Ball valve 1/4” female × 12mm × 1.5 female
- Cylinder adapter for HFO1234yf

**Charging Hose for HFO–1234yf**

- BL: Code No. ES618
- RD: Code No. ES619
- TL: Code No. ES620

<table>
<thead>
<tr>
<th>Length</th>
<th>150cm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure</td>
<td>working: 5.5MPa / burst: 24.5MPa</td>
</tr>
<tr>
<td>Hose connection</td>
<td>M12–1.5 female</td>
</tr>
</tbody>
</table>

**Quick Joint for HFO–1234yf**

- For low pressure: Code No. ES616
- For high pressure: Code No. ES617

<table>
<thead>
<tr>
<th>Item</th>
<th>For low pressure</th>
<th>For high pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hose connection</td>
<td>M12–1.5 female</td>
<td>M12–1.5 female</td>
</tr>
<tr>
<td>System connection</td>
<td>14mm</td>
<td>17mm</td>
</tr>
</tbody>
</table>

**Cylinder Adapter for HFO–1234yf**

- Code No. Y19185

| Hose connection | 1/2” acme left screw female × 1/4” flare male |

**For automobile A/C**

**Ball Valve**

- Code No. ES621

<table>
<thead>
<tr>
<th>HFO–1234yf</th>
<th>M12 female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4” flare female</td>
<td></td>
</tr>
</tbody>
</table>

| Hose connection | M12–1.5 female |
| Cylinder connection | 1/4” flare female |