

# HCPRO®

KEEP IT RUNNING



**INNOVATIVE SOLUTIONS**  
FOR AUTOMOTIVE & HVAC-R



 **2024** Product Catalog  
Automotive / HVAC-R  
[www.hcproproducts.com](http://www.hcproproducts.com)

PAG Lubricants / Mineral Lubricants / POE Lubricants / Synthetic Lubricants / Sealers / Cleaners / Vacuum / Manifolds / Charging and Evacuation / Adapters / Tube Cutters / Hand Torches / Recovery Cylinders





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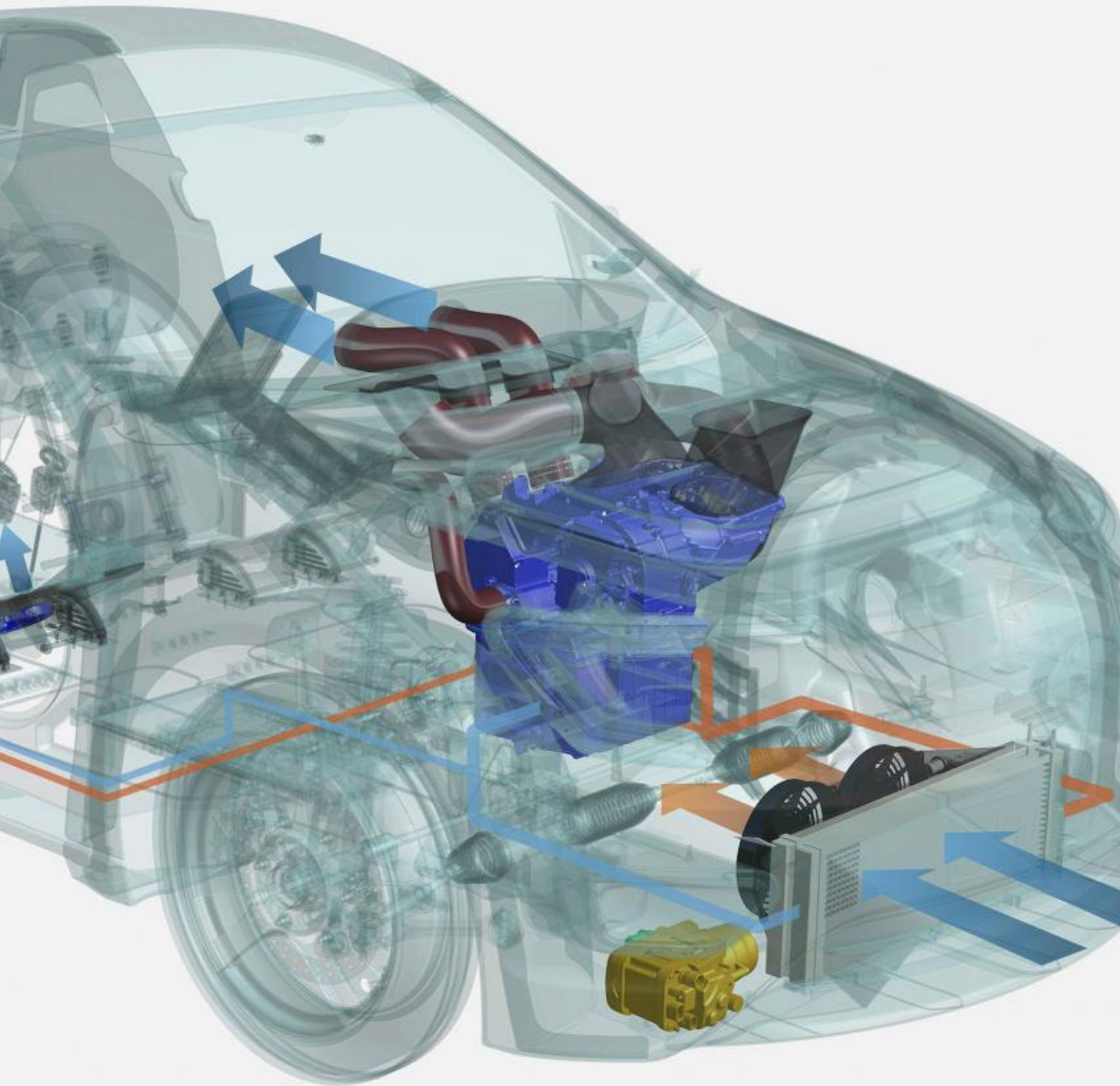
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# *Automotive*



# HCPRO PAG 46 Refrigeration Compressor Lubricant

Automotive R-134a PAG 46 Lubricant.

## Features and Benefits

- Low viscosity Polyalkylene Glycol (PAG) oil for R134a air conditioning systems.
- Advanced, high performance synthetic PAG lubricant provides excellent resistance to moisture.
- Meets OEM performance specifications.
- Specially formulated for aftermarket air conditioning systems using R134a refrigerant.
- Helps reduce compressor wear.
- Contains conditioners, inhibitors & anti-wear agents for excellent lubricity and compressor protection.
- Reduces internal A/C system corrosion.
- Always replenish compressor oil in accordance with the quantity evacuated or the quantity recommended by the OEM.

## Specifications

- Item: A/C Compressor PAG Lubricant
- Container Type: Plastic Bottle
- Freezing Point (F): -
- Flash Point (F): 442 Degrees F
- Dissolves: -
- Specific Gravity: 0.93
- For Use With: R134a
- Standards: ASTM D445, D2270, D92, D97, D974, D2783, E203, D4052, D1401, ANSI-ASHRAE 97-1989, ATM D972, Modified IP48, FZG
- Boiling Point (F): -
- Package Quantity: 1
- Type: -
- pH Value: -
- Size: 8 oz
- Viscosity (SUS @ 100 F): 59 SUS
- Color: Red/Yellow Tint
- Appearance: Bright and Clear
- Viscosity Index: 46
- VOC Content: -
- Application: -
- pH: 7
- Dilution Ratio: -
- Size/Net Weight: 8 oz
- Pour Point (F): -42 Degrees F
- Country of Origin (subject to change): United States



MPN: HCP468 | SKU: 02-0030 | UPC: 655881996524

## Polyalkylene Glycol Synthetic PAG Oil Explained

The terms polyalkylene glycol and polyglycol are used interchangeably. These fluids can be manufactured to be either water soluble or water insoluble (oil soluble). The most common are the water-soluble fluids, and thus they can have some very different properties.

**Polyglycols** are moderately polar, which gives them moderate film strength properties. They have a very high viscosity index (180 to 280) and good low and high temperature abilities.

They burn off cleanly, leaving no residue, and have been used as a carrier oil for solid lubricants for high-temperature chain lubrication. Some versions are food grade and biodegradable. They are used as compressor oils in rotary screw and reciprocating units, worm gear oils, fire-resistant lubricants, metal-working fluids and as brake fluids.

Water-soluble polyglycols are not compatible with mineral oils and therefore must be handled and disposed of separately. They should not be mixed with mineral oils. The result is a gelatinous, goeey mess. Although they are excellent lubricants, they can pose a logistic problem in plants. They can also have some negative effects on paints and seals, and are very expensive.

Water-insoluble (oil-soluble) polyglycols are likely to become more common and are used as heat transfer fluids, high-temperature bearing oils and in screw-type refrigeration compressors.

For centuries, lubricants have been

utilized as a way to reduce friction and wear on moving parts. In 2005, 40 million tons of lubricants were produced.

While natural mineral oil-based fluids represent the majority of the market demand, many technological advances in equipment and machinery would not be possible without the benefits offered by improvements in synthetic lubricants, which currently make up only two percent of the market.

While polyalphaolefins (PAOs) fill some of these needs, a growing number of applications are demanding higher performance requirements, or require unique specifications that are not met by traditional lubricants.

One of the most versatile types of synthetics is polyalkylene glycol (PAG) lubricants. PAGs are generally known as compressor lubricants, and their use in industry has increased since the 1980s. Increasing performance standards in the automotive and industrial markets peg these sectors as areas that show promise for growth.

This article offers an overview of the main synthetic base stock chemistries and an in-depth analysis of the benefits and uses of PAGs.





**PAG oils** are best known as compressor lubricants. PAGs are also the lubricant of choice in high-pressure natural gas and ethylene compression, where the viscosity stability of hydrocarbon-based lubricants is adversely affected due to solubility of the gas in the fluid.

PAG oils offer quality lubricity, high natural viscosity index and good temperature stability. PAG base fluids are available in both water soluble and insoluble forms, and in a wide range of viscosity grades. They offer low volatility in high-temperature applications and can be used in high- and low-temperature environments. They are commonly used as quenchants, metalworking fluids, food-grade lubricants and as lubricants in hydraulic and compressor equipment. However, the water soluble PAG oils are incompatible with petroleum oil, and care must be taken in transitioning equipment from hydrocarbon oils to PAG oils.



### The Development of Polyalkylene Glycol

PAG oils were one of the first synthetic lubricants to be developed and commercialized. They were created under mandate from the U.S. Navy in response to hydraulic fluid fires on ships resulting from ordnance strikes during World War II. In 1942, and for the next 30 years, the Navy began to exclusively use PAG-based water glycol hydraulic fluids that were fire-resistant and could operate over a wide temperature range. Later, PAG oils began to see extensive use as textile lubricants and as quenchants in metal heat treating. PAG oils are classified by their weight percent composition of oxypropylene versus oxyethylene units in the polymer chain. PAG oil with 100 weight percent oxypropylene groups are water insoluble; whereas those with 50 to 75 weight percent oxyethylene are water soluble at ambient temperatures.

Although PAG oils have long been used as industrial lubricants, recent work has led to the development of PAG lubricants for use in equipment in the food processing industry. These products are known as food-grade approved lubricants.

In these applications, they offer excellent lubricity, increased oxidative stability, a high viscosity index (180 to 280) and low pour points. They are one of the few synthetic substances identified in the FDA's food additive regulation for food-grade lubricant base stocks, 21 CFR § 178.3570, for use in industrial machinery when incidental food contact with a lubricant may occur.

### HCPRO KNOWLEDGE

PAG oils are also valued for their low volatility in high-temperature applications, and for resistance to formation of residue and deposits. Their biodegradability makes them ideal for environmentally sensitive applications.

## HCPRO PAG 46 + UV DYE Refrigeration Compressor Lubricant

Automotive R-134a PAG 46 + UV Dye Lubricant.

### Features and Benefits

- Low viscosity Polyalkylene Glycol (PAG) oil for R134a air conditioning systems.
- Advanced, high performance synthetic PAG lubricant provides excellent resistance to moisture.
- Meets OEM performance specifications.
- Specially formulated for aftermarket air conditioning systems using R134a refrigerant.
- Helps reduce compressor wear.
- Contains conditioners, inhibitors & anti-wear agents for excellent lubricity and compressor protection.
- Reduces internal A/C system corrosion.
- Always replenish compressor oil in accordance with the quantity evacuated or the quantity recommended by the OEM.
- Contains UV Dye.

### Specifications

- Item: A/C Compressor PAG Lubricant w/UV Dye
- Container Type: Plastic Bottle
- Freezing Point (F): -
- Flash Point (F): 442 Degrees F
- Specific Gravity: 0.93
- For Use With: R134a
- Standards: ASTM D445, D2270, D92, D97, D974, D2783, E203, D4052, D1401, ANSI-ASHRAE 97-1989, ATM D972, Modified IP48, FZG
- Boiling Point (F): -
- pH Value: -
- Type: With UV Dye
- Size: 8 oz
- Viscosity (SUS @ 100 F): 59 SUS
- Color: Red/Yellow Tint
- Appearance: Bright and Clear
- Viscosity Index: 46
- VOC Content: -
- Application: -
- pH: 7
- Dilution Ratio: -
- Size/Net Weight: 8 oz
- Pour Point (F): -42 Degrees F



MPN: HCP46UV8 | SKU: 02-0033 | UPC: 655881996555

# HCPRO PAG 100 Refrigeration Compressor Lubricant

Automotive R-134a PAG 100 Lubricant.

## Features and Benefits

- Medium viscosity Polyalkylene Glycol (PAG) oil for R134a air conditioning systems.
- Advanced, high performance synthetic PAG lubricant provides excellent resistance to moisture.
- Meets OEM performance specifications.
- Specially formulated for aftermarket air conditioning systems using R134a refrigerant.
- Helps reduce compressor wear.
- Contains conditioners, inhibitors & anti-wear agents for excellent lubricity and compressor protection.
- Reduces internal A/C system corrosion.
- Always replenish compressor oil in accordance with the quantity evacuated or the quantity recommended by the OEM.

## Specifications

- Item: A/C Compressor PAG Lubricant
- Container Type: Plastic Bottle
- Flash Point (F): 450 Degrees F
- For Use With: R134a
- Freezing Point (F): -
- Application: -
- Pour Point (F): -36 Degrees F
- Appearance: Bright and Clear
- Specific Gravity: 0.93
- Boiling Point (F): -
- Color: Red/Yellow Tint
- pH: 7
- Size: 8 oz
- Viscosity (SUS @ 100 F): 98 SUS
- Viscosity Index: 100
- Dilution Ratio: -
- Standards: ASTM D445, D2270, D92, D97, D974, D2783, E203, D4052, D1401, ANSI-ASHRAE 97-1989, ATM D972, Modified IP48, FZG
- Dissolves: -
- pH Value: -
- Size/Net Weight: 8 oz
- Application: -
- VOC Content: -



## Versatility Meets Performance



For more than 60 years, synthetic lubricants have provided a viable alternative to traditional hydrocarbon lubricants. Each type serves unique roles, with PAG oils performing in both high- and low-temperature environments, in areas of extreme pressure and where water solubility is desired.

With continuing emphasis on **environmentally acceptable lubricants** in industry, these qualities will continue to push PAG oils to the forefront of the synthetic market.

MPN: HCP1008 | SKU: 02-0038 | UPC: 655881996548

## Reduce Maintenance Cost by up to 40%

*Keeping oil clean - It's your best insurance!*

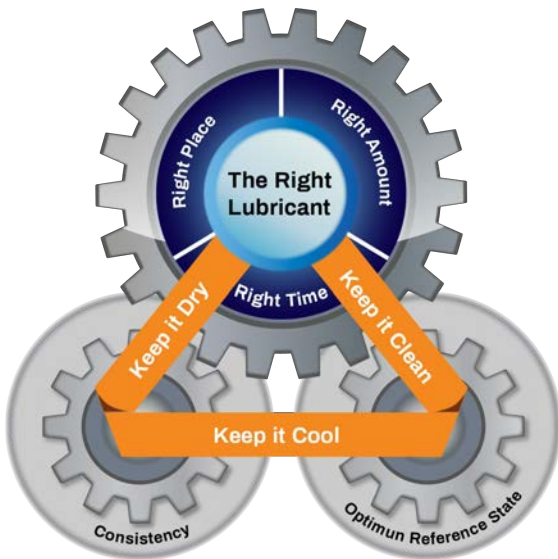
**Clean incoming oil - because new is NOT clean oil** Keep your first fill from starting things off on a dirty foot. These contaminants are seeds of increased maintenance cost in the form of downtime, wear, and repair.

**Keep oil clean - remove solids and moisture** HCPRO keep your compressor clean and operating at its peak performance. Keeps moisture and contaminants from accumulating in your oil. This prevents premature wear, and reduces cost.

## LUBRICATION EXCELLENCE GOALS

The goals of lubrication excellence can be defined as:

- The four rights: right lubricant, right amount, right frequency and right lubricated component.
- Keep the lubricant contaminants controlled: clean, cool and dry (no excess temperature).
- Do it consistently. Regardless of who is executing the job, it must be done following the same best practices. This requires training, procedures, tools, communication and team alignment.
- Follow best practices according to machine criticality, operational conditions and risk.











**HCPRO PAG 100 + UV DYE Refrigeration Compressor Lubricant**  
Automotive R-134a PAG 100 + UV Dye Lubricant.

**Features and Benefits**

- Low viscosity Polyalkylene Glycol (PAG) oil for R134a air conditioning systems.
- Advanced, high performance synthetic PAG lubricant provides excellent resistance to moisture.
- Meets OEM performance specifications.
- Specially formulated for aftermarket air conditioning systems using R134a refrigerant.
- Helps reduce compressor wear.
- Contains conditioners, inhibitors & anti-wear agents for excellent lubricity and compressor protection.
- Reduces internal A/C system corrosion.
- Always replenish compressor oil in accordance with the quantity evacuated or the quantity recommended by the OEM.
- Contains UV Dye.

**Specifications**

- Item: A/C Compressor PAG Lubricant, w/UV Dye
- Container Type: Plastic Bottle
- Color: Red/Yellow Tint
- Specific Gravity: 0.93
- Boiling Point (F): -
- VOC Content: -
- Freezing Point (F): -
- For Use With: R134a
- Package Quantity: 1
- Appearance: Bright and Clear
- Type: With UV Dye
- Flash Point (F): 450 Degrees F
- Size: 8 oz
- Viscosity (SUS @ 100 F): 98 SUS
- Viscosity Index: 100
- Dilution Ratio: -
- Pour Point (F): -36 Degrees F
- Standards: ASTM D445, D2270, D92, D97, D974, D2783, E203, D4052, D1401, ANSI-ASHRAE 97-1989, ATM D972, Modified IP48, FZG
- Dissolves: -
- pH Value: -
- Size/Net Weight: 8 oz
- pH: 7
- Application: -



**MPN: HCP100UV8 | SKU: 02-0034 | UPC: 661094573650**





## HC PRO PAG 150 Refrigeration Compressor Lubricant

Automotive R-134a PAG 150 Lubricant.

### Features and Benefits

- High viscosity Polyalkylene Glycol (PAG) oil for R134a air conditioning systems.
- Advanced, high performance synthetic PAG lubricant provides excellent resistance to moisture.
- Meets OEM performance specifications.
- Specially formulated for aftermarket air conditioning systems using R134a refrigerant.
- Helps reduce compressor wear.
- Contains conditioners, inhibitors & anti-wear agents for excellent lubricity and compressor protection.
- Reduces internal A/C system corrosion.
- Always replenish compressor oil in accordance with the quantity evacuated or the quantity recommended by the OEM.

### Specifications

- Item: A/C Compressor PAG Lubricant
- Container Type: Plastic Bottle
- Specific Gravity: 0.93
- Viscosity Index: 150
- Freezing Point (F): -
- Pour Point (F): -31 Degrees F
- Package Quantity: 1
- pH: 7
- VOC Content: -
- Standards: ASTM D445, D2270, D92, D97, D974, D2783, E203, D4052, D1401, ANSI-ASHRAE 97-1989, ATM D972, Modified IP48, FZG
- Dilution Ratio: -
- pH Value: -
- Size: 8 oz
- Viscosity (SUS @ 100 F): 130 SUS
- For Use With: R134a
- Application: -
- Boiling Point (F): -
- Type: -
- Size/Net Weight: 8 oz
- Appearance: Bright and Clear
- Flash Point (F): 455 Degrees F
- Dissolves: -
- Color: Red/Yellow Tint



MPN: HCP1508 | SKU: 02-0032 | UPC: 661094573674

## HCPRO PAG 150 + UV DYE Refrigeration Compressor Lubricant

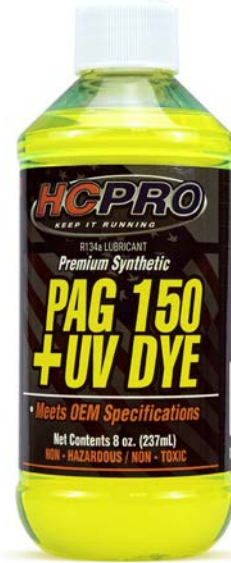
Automotive R-134a PAG 150 + UV Dye Lubricant.

### Features and Benefits

- High viscosity Polyalkylene Glycol (PAG) oil for R134a air conditioning systems.
- Advanced, high performance synthetic PAG lubricant provides excellent resistance to moisture.
- Meets OEM performance specifications.
- Specially formulated for aftermarket air conditioning systems using R134a refrigerant.
- Helps reduce compressor wear.
- Contains conditioners, inhibitors & anti-wear agents for excellent lubricity and compressor protection.
- Reduces internal A/C system corrosion.
- Always replenish compressor oil in accordance with the quantity evacuated or the quantity recommended by the OEM.
- Contains UV Dye.

### Specifications

- Item: A/C Compressor PAG Lubricant, w/UV Dye
- Container Type: Plastic Bottle
- For Use With: R134a
- Appearance: Bright and Clear
- Specific Gravity: 0.93
- Freezing Point (F): -
- Standards: ASTM D445, D2270, D92, D97, D974, D2783, E203, D4052, D1401, ANSI-ASHRAE 97-1989, ATM D972, Modified IP48, FZG
- Size/Net Weight: 8 oz
- VOC Content: -
- Type: With UV Dye
- Pour Point (F): -31 Degrees F
- Size: 8 oz
- Viscosity (SUS @ 100 F): 130 SUS
- Viscosity Index: 150
- Color: Red/Yellow Tint
- pH Value: -
- Flash Point (F): 455 Degrees F
- Dissolves: -
- Dilution Ratio: -
- pH: 7
- Boiling Point (F): -
- Application: -



MPN: HCP150UV8 | SKU: 02-0035 | UPC: 661094573681

### Troubleshooting: Compressor Oil

# Compressor oil: all you need to know

### HCPRO Learning Tips

## The Right Way>>>

Calculation to confirm the correct amount of oil:  $A - B = C$

A = Total oil amount in new compressor

B = Amount of oil drained from the old compressor

C = Amount of oil to remove from new compressor

### Ensure the correct amount of oil is used

#### Essential action when removing a compressor:

**1. After recovery of refrigerant:** When removing refrigerant, some compressor oil will be mixed with the refrigerant and will be removed from the refrigerant circuit together with the refrigerant. It is essential that this oil is drained off at the A/C service station and its volume measured precisely. The volume drained need to be charged to the refrigerant cycle when refilling with refrigerant.

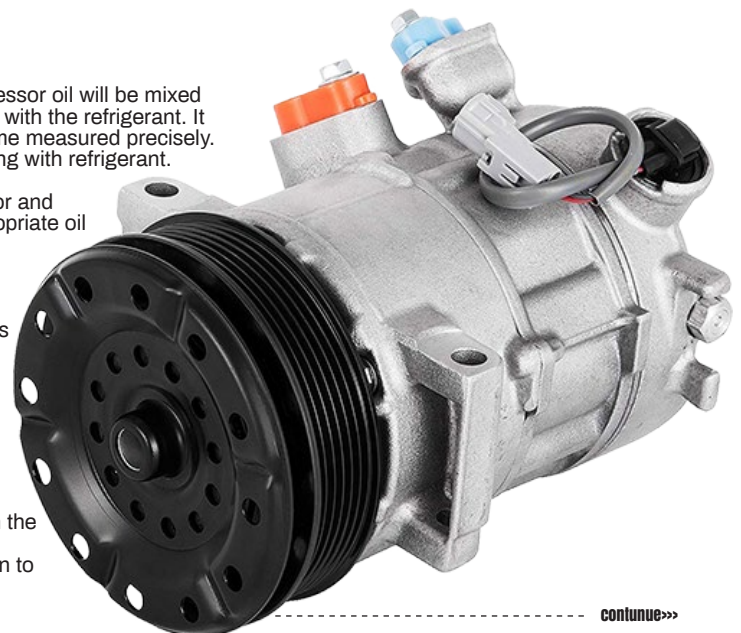
**2. After removal of the old compressor:** Drain the oil from the compressor and measure the amount. Check the compressor installation guide for the appropriate oil drain procedure.

**Caution!** Between 30-50% of the total oil quantity should be drained. Otherwise, the system could be overcharged from refilling with too much compressor oil or UV leak dye during A/C service. 3 to 5cc of UV leak dye is tolerated for systems up to 1000 gram of refrigerant! Oil distribution within the A/C system (reference values, varying depending on outside temperature and engine load)

#### Compressor installation tips:

**1. If the system has been flushed:** Compressors which are delivered with the correct amount of oil can be installed directly. Turn the compressor systematically by hand to distribute oil evenly. This will avoid damage when the compressor starts moving or during start-up.

**2. If flushing of the system is NOT required:** Use the following calculation to confirm the correct amount of oil to remove from the new A/C Compressor.



continue>>>



# HCPRO Universal PAG + UV DYE Refrigeration Compressor Lubricant

Automotive R-134a Universal PAG + UV Dye Lubricant.

## Features and Benefits

- High viscosity Polyalkylene Glycol (PAG) oil for R134a air conditioning systems.
- Advanced, high performance synthetic PAG lubricant provides excellent resistance to moisture.
- Meets OEM performance specifications.
- Specially formulated for aftermarket air conditioning systems using R134a refrigerant.
- Helps reduce compressor wear.
- Contains conditioners, inhibitors & anti-wear agents for excellent lubricity and compressor protection.
- Reduces internal A/C system corrosion.
- Always replenish compressor oil in accordance with the quantity evacuated or the quantity recommended by the OEM.
- Contains UV Dye.

## Specifications

- Item: A/C Compressor PAG Lubricant, w/UV Dye
- Container Type: Plastic Bottle
- For Use With: R134a
- Appearance: Bright and Clear
- Specific Gravity: 0.93
- Freezing Point (F): -
- Standards: ASTM D445, D2270, D92, D97, D974, D2783, E203, D4052, D1401, ANSI-ASHRAE 97-1989, ATM D972, Modified IP48, FZG
- Size/Net Weight: 8 oz
- VOC Content: -
- Type: With UV Dye
- Pour Point (F): -31 Degrees F
- Size: 8 oz
- Viscosity (SUS @ 100 F): 130 SUS
- Viscosity Index: 150
- Color: Red/Yellow Tint
- pH Value: -
- Flash Point (F): 455 Degrees F
- Dissolves: -
- Dilution Ratio: -
- pH: 7
- Boiling Point (F): -
- Application: -



MPN: HCUP8UV | SKU: 02-0036 | UPC: 661094573667

## Calculation example:

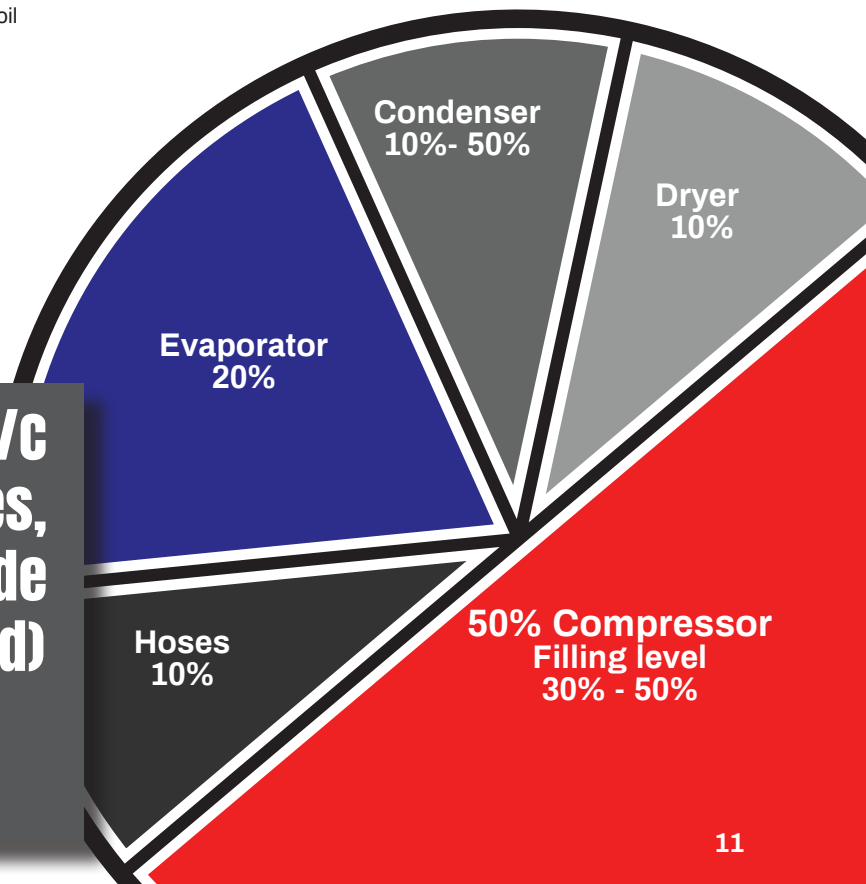
The total amount of oil in the new compressor (A) is 120 cm<sup>3</sup>. The oil amount drained from the old compressor (B) is 50 cm<sup>3</sup>. The amount of oil to remove (C) from the new compressor is A-B, 120-50= 70 cm<sup>3</sup>.

A 120 cm<sup>3</sup> (Oil level in new compressor)

- B 50 cm<sup>3</sup> (Amount of oil drained from the old compressor)

=C 70 cm<sup>3</sup> (Amount of oil to remove from new compressor)

3. For some applications it is necessary to add oil. For example, where there is one and the same part number for Single and Dual evaporator cycles or when the oil quantity of the new compressor differs from the vehicle specifications. If this is the case, always check the car manufacturer data to confirm the correct oil amount. Never add oil directly into the compressor, always add it to the condenser, receiver dryer or second evaporator cycle.



oil distribution within the A/C system (reference values, varying depending on outside temperature and engine load)

50% Compressor  
Filling level  
30% - 50%





***HVAC-R  
Lubricants***



## HCPRO RPO 32 Synthetic POE Refrigeration Lubricant

Is formulated from synthesized polyol esters to provide outstanding lubricity and wear protection as well as chemical and thermal stability.

### Features and Benefits

- Compatible with HFC, HCFC, CFC and Blend Refrigerants.
- Low Pour Point.
- Low Moisture Content.
- Low Carbon Forming Tendencies.
- High Chemical & Thermal Stability.
- Helps Prevent Acid Formation & Corrosion.
- Premium Synthetic Polyol Ester Oil.
- Reduces system wear.
- Extends system life.
- Can be used in systems containing R-12, R-134a, R-22, R-23, R-404A, R-407A, R-407C, R-408A, R-409A, R-410A, R-417A, R-422A, R-422D, R-423A, R-437A, R-438A, R-502, R-507, R-508B.

### Applications

- Reciprocating rotary and scroll residential and industrial refrigeration compressors.

### Specifications

- Item: Compressor Lubricant
- Base: Polyol Ester (POE)
- Container Size: 32 / 128 Oz.
- Container Type: Can
- Application: HFC Refrigeration Applications
- Color: Slight Yellow Tint
- Size: 32 / 128 Oz.
- Item: POE Refrigeration Lubricant
- ISO Viscosity Grade: 32
- Standards: OSHA HazCom Standard 29 CFR 1910.1200
- Viscosity Index: 199



MPN: HCRPO32Q | SKU: 22-0053 | UPC: 661094573865



Part# | SKU: 02-0053

# RECIPROCATING COMPRESSORS *Basics*

A reciprocating compressor is a positive-displacement machine that uses a piston to compress a gas and deliver it at high pressure. They are often some of the most critical and expensive systems at a production facility, and deserve special attention.

Gas transmission pipelines, petrochemical plants, refineries and many other industries all depend on this type of equipment.

Due to many factors, including but not limited to the quality of the initial specification/design, adequacy of maintenance practices and operational factors, industrial facilities can expect widely varying lifecycle costs and reliability from their own installations.

Various compressors are found in almost every industrial facility.

#### Types of gases compressed include the following:

- Air for compressed tool and instrument air systems
- Hydrogen, oxygen, etc. for chemical processing

- Light hydrocarbon fractions in refining
- Various gases for storage or transmission
- Other applications

There are two primary classifications of industrial compressors: intermittent flow (positive displacement), including reciprocating and rotary types; and continuous flow, including centrifugal and axial flow types.

Reciprocating compressors are typically used where high compression ratios (ratio of discharge to suction pressures) are required per stage without high flow rates, and the process fluid is relatively dry.

Wet gas compressors tend to be centrifugal types. High flow, low compression ratio applications are best served by axial flow compressors.

Rotary types are primarily specified in compressed air applications, though other types of compressors are also found in air service.

## HCPRO RPO 68 Synthetic POE Refrigeration Lubricant

Is formulated from synthesized polyol esters to provide outstanding lubricity and wear protection as well as chemical and thermal stability.

### Features and Benefits

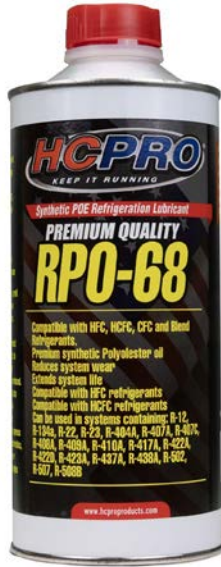
- Compatible with HFC, HCFC, CFC and Blend Refrigerants.
- Low Pour Point.
- Low Moisture Content.
- Low Carbon Forming Tendencies.
- High Chemical & Thermal Stability.
- Helps Prevent Acid Formation & Corrosion.
- Premium Synthetic Polyol Ester Oil.
- Reduces system wear.
- Extends system life.
- Can be used in systems containing R-12, R-134a, R-22, R-23, R-404A, R-407A, R-407C, R-408A, R-409A, R-410A, R-417A, R-422A, R-422D, R-423A, R-437A, R-438A, R-502, R-507, R-508B.

### Applications

- Reciprocating rotary and scroll residential and industrial refrigeration compressors.

### Specifications

- Item: Compressor Lubricant
- Base: Polyol Ester (POE)
- Container Size: 32 / 128 Oz.
- Container Type: Can
- Application: HFC Refrigeration Applications
- Color: Slight Yellow Tint
- Size: 32 / 128 Oz.
- Item: POE Refrigeration Lubricant
- ISO Viscosity Grade: 68
- Standards: OSHA HazCom Standard 29 CFR 1910.1200
- Viscosity Index: 201



Part# | SKU: 02-0055



Part# | SKU: 02-0027

## HCPRO HC-OHV2.6 Refrigerant Oil Hand Pump

# OIL HAND PUMP



## HCPRO HC-OHV2.6 Refrigerant Oil Hand Pump

The HCPRO HC-OHV2.6 refrigerant oil pump, is designed to allow service technicians to pump refrigerant oil directly into a refrigeration system while the system is still under pressure. This eliminates the need to recover the refrigerant from a system when adding oil is required.

### Features and Benefits

- Universal style tapered rubber adapter is designed to fit all container.
- One size pump fits all 1, 2-1/2, and 5 gallons refrigeration oil containers. With the oil hand pump, you can smoothly pump into the compressor on the down stroke while the system is under pressure. This makes pumping easier with a positive stroke.
- Pumps against 200 psi pressure.
- Comfort-grip rubber handle.
- Compatible with all oil types (Alkyl-benzene, Ester-based, Polyol Esters, Mineral, Paraffin-based, and synthetic types).
- Universal stopper automatically adjusts to all standard openings in 1; 2½ and 5-gallon oil containers.

### Specifications

- Item: Refrigerant Oil Pump
- Max. Pressure: 13,8 Bar
- Includes: 1/4" SAE M/F Adapter.
- Pump: 78 ml (2.6 ounces) per stroke
- Pumps: against 200 psi pressure
- Handle Material: Rubber Comfort-Grip
- Type: Hand Operated
- Oil Types: Alkyl-benzene, Ester-based, Polyol Esters, Mineral, Paraffin-based, and synthetic types
- Stopper Type: Universal
- Opening: 1; 2½ and 5-gallon oil containers

Part# | SKU: 02-0053



## HCPRO Premium Synthetic Vacuum Pump Oil ISO VG46

HCPRO Premium synthetic vacuum pump oil helps extend the life of vacuum pumps. Advanced high-performance formula provides low volatility and high resistance to oxidation. Non misting formulation. Compatible with all vacuum pump brands. Contains conditioners, inhibitors and anti-wear agents for excellent lubricity and pump protection. Helps reduce vacuum pump wear.

### Features and Benefits

- Synthetic oil improves performance.
- Extends life of vacuum pumps.
- Compatible with all vacuum pump brand.
- Non-misting formulation.
- Provides low volatility and high resistance to oxidation.
- ISO viscosity grade 46.

### Specifications

- Item: Vacuum Pump Oil
- SAE Grade: Not Specified
- Container Size: 32 / 128 Oz.
- Four-Ball Wear: Not Specified
- Container Type: Bottle
- Timken OK Load: Not Specified
- Viscosity Index: 118
- Viscosity @ 100C: 9.789 cSt
- Food Grade: No
- ISO Viscosity Grade: ISO VG46
- Base Oil: Synthetic
- NSF Rating: Not Rated
- Lubricant NSF Rating: Not Rated
- Base: Synthetic
- Flash Point: 220 Degrees C
- Viscosity @ 40C: 71.42 cSt



Part# | SKU: 02-0028



Part# | SKU: 02-0039



## Understanding Refrigeration

**A**ir conditioning is the process of treating the air to control its temperature, moisture content, cleanliness, odor, and circulation as needed by the occupants of a place, a process, or products all at the same time. Refrigeration and air conditioning system have a long history that dates back to the human need for sustenance and comfort. The history of refrigeration is fascinating since it includes issues such as refrigeration availability, advances in prime movers and compressors, and refrigeration methods.

In this article, you'll learn the definition, applications, diagram, method, types, working, advantages, and disadvantages of refrigeration.

### What is refrigeration?

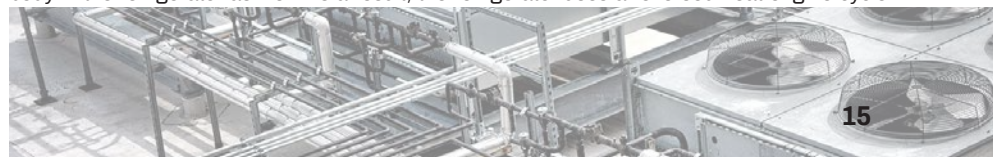
A refrigeration system, in general, is the process of cooling, and it entails removing heat and disposing of it at a higher temperature. As a result, refrigeration is a technology that moves heat from a lower to a higher temperature. Refrigeration is used in air conditioning and heat pumps, in addition to cooling applications. Physics and thermodynamics are the fundamental principles, and they apply to all applications.

The preservation of perishable food goods by storing them at low temperatures is one of the most well-known applications of refrigeration. Refrigeration systems are also commonly employed to provide humans with thermal comfort via air conditioning.

### Working principle

The working principle of refrigeration is less complex and can be easily understood. A refrigerator is a machine that extracts heat from a body that is at a low temperature and then rejects it to a body that is at a high temperature. A refrigerator is a machine whose primary function is to cool a particular thing. Heat does not transfer from a low-temperature body to a high-temperature body without the assistance of external labor, according to the second rule of thermodynamics (Clausius statement). As a result, external labor is required to operate a refrigerator. With the help of an external source, a heat engine can run in a reversible cycle.

Heat is absorbed from a cold body and rejected by a hot body in this cycle. As a result, the engine is known as a heat pump. Heat is extracted from the cold body and refused to the hot body in the refrigerator as well. As a result, the refrigerator uses a reversed heat engine cycle.





## HCPRO 3G Mineral Refrigeration Oil SUS150–ISO VG32

HCPRO 3GS refrigeration oil is a premium quality lubricant made from specially refined naphthenic base oil that is highly refined to provide the low pour point necessary for proper lubrication in refrigeration and air conditioning systems. HCPRO refrigeration oil offers excellent chemical stability when in the presence of refrigerant and other compressor materials and helps provide maximum wear protection for air conditioning compressors and components. HCPRO 3GS refrigeration oil has excellent thermal stability to ensure peak performance at high temperatures as well as excellent low temperature properties to prevent congealing in the evaporator. The oil is also wax-free to prevent floc problems in the evaporator and expansion valve.

### Features and Benefits

- 3G – SUS 150 (ISO VG32) VISCOSITY (3GS EQUIVALENT).
- Premium Quality OEM approved
- Compatible with CFC, HCFC and Ammonia Refrigerants.
- Low pour point and wax content.
- High chemical and thermal stability.
- 30 cSt viscosity.

### Specifications

- Item: Mineral Refrigeration Oil
- Lubricant Type: 3G – SUS 150 (ISO VG32) VISCOSITY (3GS EQUIVALENT)
- Viscosity: 30 cSt
- ISO Viscosity Grade: SUS 150 (ISO VG32)
- Color: Yellow
- SAE Grade: Not Specified
- Container Size: 1 gal
- Container: 1 gal Bottle
- Food Grade: No



Part# | SKU: 02-0042

## HCPRO 4G Mineral Refrigeration Oil SUS150–ISO VG32

HCPRO 4GS refrigeration oil is a premium quality lubricant made from specially refined naphthenic base oil that is highly refined to provide the low pour point necessary for proper lubrication in refrigeration and air conditioning systems. HCPRO refrigeration oil offers excellent chemical stability when in the presence of refrigerant and other compressor materials and helps provide maximum wear protection for air conditioning compressors and components. HCPRO 4GS refrigeration oil has excellent thermal stability to ensure peak performance at high temperatures as well as excellent low temperature properties to prevent congealing in the evaporator. The oil is also wax-free to prevent floc problems in the evaporator and expansion valve.

### Features and Benefits

- 4G – SUS 300 (ISO VG68) VISCOSITY (4GS EQUIVALENT).
- Premium Quality OEM approved
- Compatible with CFC, HCFC and Ammonia Refrigerants.
- Low pour point and wax content.
- High chemical and thermal stability.
- 68 cSt viscosity.

### Specifications

- Item: Mineral Refrigeration Oil
- Lubricant Type: 4G – SUS 3000 (ISO VG68) VISCOSITY (4GS EQUIVALENT)
- Viscosity: 68 cSt
- ISO Viscosity Grade: SUS 300 (ISO VG68)
- Color: Yellow
- SAE Grade: Not Specified
- Container Size: 1 gal
- Container: 1 gal Bottle
- Food Grade: No



Part# | SKU: 02-0041

### Working principle

**The working principle of refrigeration** is less complex and can be easily understood. A refrigerator is a machine that extracts heat from a body that is at a low temperature and then rejects it to a body that is at a high temperature. A refrigerator is a machine whose primary function is to cool a particular thing. Heat does not transfer from a low-temperature body to a high-temperature body without the assistance of external labor, according to the second rule of thermodynamics (Clausius statement). As a result, external labor is required to operate a refrigerator. With the help of an external source, a heat engine can run in a reversible cycle. Heat is absorbed from a cold body and rejected by a hot body in this cycle. As a result, the engine is known as a heat pump. Heat is extracted from the cold body and refused to the hot body in the refrigerator as well. As a result, the refrigerator uses a reversed heat engine cycle.

### Advantages:

- Most of the time, the air is utilized as a refrigerant since it is widely available and cheap.
- Refrigeration systems are simple to design and produce, with few complicated parts and low maintenance costs.
- Non-toxic, non-flammable, and non-corrosive refrigerant is used.
- If the refrigeration system is run much beyond its design parameters, there will be no substantial change in its performance. They might result in a significant temperature difference between hot and cool areas. As a result, the cooling and heating effects are achieved using the same system.

### Disadvantages:

- Despite the good advantages of refrigeration, some limitations still occur. Below are the disadvantages of refrigeration in its various applications:
- In comparison to other refrigeration cycles, the refrigeration system has a lower coefficient of performance.
- The refrigeration system's operating costs are rather expensive.
- This system's components are bulky and take up a lot of room.
- Because the air carries impurities, open systems should clean their air filters on a regular basis.







## HCPRO Air Conditioner Flash Flush

AC Flush, Solvent Base Solution, White, Can, Liquid, Boiling Point (F) Greater Than 100 Degrees F, 0.68 – 0.72g/ml Specific Gravity, VOC Content 100.

### Features and Benefits

- Compatible with Automotive and HVAC systems.
- 10 ounces can treat up to 5-ton systems.
- Fast evaporation rinse.
- Perfect replacement for R141b.
- Penetrates quickly removing oil and other contaminants from A/C systems.
- No leave residues.
- Effective cleaner.
- No corrosive.
- Solvent base solution.
- Our canister contains a security seal that preserves the quality of the original formula and helps avoid spills.

### Specifications

- Boiling Point (F): Greater Than 100 Degrees F
- Type: Solvent Base Solution
- Container Size: 32 / 128 Oz.
- Container Type: Can
- Item: A/C Flush
- Product Type: A/C Flush
- Specific Gravity: 0.68 - 0.72g/ml
- Appearance: Liquid
- VOC Content: 100
- Color: White

**CAUTION: This product is extremely flammable**

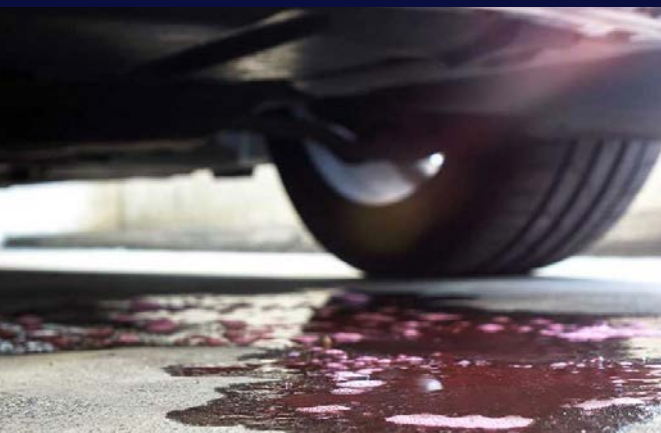


Part# | SKU: 02-0025



Part# | SKU: 02-0024

# Why your HVAC lubrication program deserves more attention



In the constant battle to trim costs and increase profits, plant managers would do well to cast their gaze skyward – not in search of divine intervention (though that wouldn't be unwelcome), but to the HVAC system. Why? Because plants could save thousands of dollars per year if managers were to ask the right questions about HVAC lubrication.

HVAC systems are out of sight, but that shouldn't mean they're out of mind. If anything, their hidden location is a good reason to give them closer scrutiny. It's the same logic parents use when they realize their kids haven't made a peep for the past half-hour. Quiet doesn't mean everything's fine – it often means the opposite. HVAC also occupies a strange niche in the world of the plant manager. It's a crucial part of plant equipment, so that makes it a manager's responsibility. But it's not directly related to production, so it doesn't receive the same attention as machines on the line.

For this reason, HVAC systems are often left out of PdM planning. The impact this has on the bottom line can be significant in two specific areas: (1) energy costs, and (2) surprise repair or replacement costs.

# Automotive & HVAC Leak Sealers

## HCPRO Automotive Leak Sealer

Automotive Leak Sealer.

### Features and Benefits

- For Automotive systems.
- Permanently seals leaks.
- Does not contain polymers, will not harm A/C system or components.
- Additive package protects against future corrosion.
- Compatible with all lubricants & refrigerants.
- 45° swivel adapter for easy access application.

### Specifications

- Item: Leak Sealer Syringe
- Application: Automotive Systems
- For use on: Evaporators, Condensers, Rubber Hose Gaskets and O-rings
- Compatible with: R134a air conditioning Systems
- Safe for use: Electric and Hybrid A/C systems
- Includes: 45° swivel adapter for easy access application
- Net Content: 0.25 oz per Unit
- Pack Quantity: 12 Syringes
- Box Type: Display



Part# | SKU: 22-0075

## HCPRO HVAC Leak Sealer

Automotive Leak Sealer.

### Features and Benefits

- For HVAC systems.
- Permanently seals leaks.
- Does not contain polymers, will not harm A/C system or components.
- Additive package protects against future corrosion.
- Compatible with all lubricants & refrigerants.
- 45° swivel adapter for easy access application.

### Specifications

- Item: Leak Sealer Syringe
- Application: HVAC Systems
- For use on: Evaporators, Condensers, Rubber Hose Gaskets and O-rings
- Compatible with: R134a air conditioning Systems
- Safe for use: Electric and Hybrid A/C systems
- Includes: 45° swivel adapter for easy access application
- Net Content: 0.25 oz per Unit
- Pack Quantity: 12 Syringes
- Box Type: Display



Part# | SKU: 22-0076

## HCPRO Stop Leak Sealer 2oz / 60mL

Stop Leak Sealer.

### Features and Benefits

- SAE Certified for R134a and HFO-1234yf A/C systems, safe for hybrid and electric A/C systems.
- Detectable when exposed to any U/V light, compatible with PAG, PAO, Ester and mineral oils.
- Does not contain solvents, will not harm A/C systems or recovery equipment.
- Anti-Wear agents and friction modifiers enhance compressor and A/C system efficiency while reducing compressor wear rates to extend compressor life.
- Anti-Oxidants protect system against formation of sludge and other deposits which shorten compressor life and reduce system efficiency.

### Specifications

- Item: Stop Leak Sealer
- Contain UV: Yes
- Includes: (1) 45 Degree swivel adaptor
- For Use With: R134a and HFO-1234yf A/C systems, safe for hybrid and electric A/C systems
- Compatible With: PAG, PAO, Ester and mineral oils
- Number of Pieces: 1
- Application: Treat up to 6 Ton unit
- Weight: 2 Oz (60 ml) Syringe



Part# | SKU: 02-0037





# HVAC-R TOOLS



# CUSTOMIZE IT AS YOU WANT

# ANTI-BLOWBACK BALL-VALVE STANDARD

## HCPRO HCBK-2V2F5BK 2 Valve Piston Type Manifold R134a, R404a, R22, R410a

Fahrenheit 2 Valve Piston Type Manifold R134a, R404a, R22, R410a

### Features and Benefits

- Class 1.6 Accuracy 80mm Gauge °F/PSI
- Smooth valve finish for easy operation.
- 3/16" inside chamber diameter for maximum flow.
- Sleek and durable design with hex handles for precise pressure control.
- 4000 PSI burst, 800 PSI working Pressure 5FT Premium Barrier Hoses SAE J2196 / SAE J2888.
- R410A compatible, as well CFC, HCFC, HFC Refrigerants blends.

### Specifications

- Item: 2 Valve Piston Type Manifold
- Product Type: Manifold Gauge
- Refrigerant Compatibility: Multiple Refrigerants
- Vacuum Port Size: 1/4 in
- Gauges Low Side: 0 to 30 psi
- Gauges Low Side: 0 to 30 psi
- Gauges High Side: 0 to 800 psi
- Hose Length: 60 in
- Material: Brass, Plastic, Glass
- Refrigerant Type: R134a, R22, R404a, R410a
- Class: 1.6 Accuracy 80mm Gauge (PSI °F)
- Includes: 60 in Refrigerant Hose Set, Brass Bar, Fahrenheit Scale, Hand Wheels, Hanging Hook
- Number of Hoses: 3
- Refrigerant Blend: R410a, CFC, HCFC, HFC
- Application: HVAC-R
- Gauge Size: 80 mm
- Temperature scales: PSI °F



HCBK-2V2F5BK | SKU: 22-0037 | w/Standad Hoses  
HCBK-2V2F5AB | SKU: 22-0107 | w/Anti-Blow-Back Hoses  
HCBK-2V2F5BV | SKU: 22-0106 | w/Ball Valve Hoses



## HCPRO HCBK-2V2C5BK 2 Valve Piston Type Manifold R134a, R404a, R22, R410a

Celsius 2 Valve Piston Type Manifold R134a, R404a, R22, R410a

### Features and Benefits

- Class 1.6 Accuracy 80mm Gauge °C/PSI
- Smooth valve finish for easy operation.
- 3/16" inside chamber diameter for maximum flow.
- Sleek and durable design with hex handles for precise pressure control.
- 4000 PSI burst, 800 PSI working Pressure 5FT Premium Barrier Hoses SAE J2196 / SAE J2888.
- R410A compatible, as well CFC, HCFC, HFC Refrigerants blends.

### Specifications

- Item: 2 Valve Piston Type Manifold
- Product Type: Manifold Gauge
- Refrigerant Compatibility: Multiple Refrigerants
- Vacuum Port Size: 1/4 in
- Gauges Low Side: 0 to 30 psi
- Gauges Low Side: 0 to 30 psi
- Gauges High Side: 0 to 800 psi
- Hose Length: 60 in
- Material: Brass, Plastic, Glass
- Refrigerant Type: R134a, R22, R404a, R410a
- Class: 1.6 Accuracy 80mm Gauge (PSI °C)
- Includes: 60 in Refrigerant Hose Set, Brass Bar, Fahrenheit Scale, Hand Wheels, Hanging Hook
- Number of Hoses: 3
- Refrigerant Blend: R410a, CFC, HCFC, HFC
- Application: HVAC-R
- Gauge Size: 80 mm
- Temperature scales: PSI °C



HCBK-2V2C5BK | SKU: 22-0038 | w/Standad Hoses  
HCBK-2V2C5AB | SKU: 22-0108 | w/Anti-BlowBack Hoses  
HCBK-2V2C5BV | SKU: 22-0109 | w/Ball Valve Hoses





# CUSTOMIZE IT AS YOU WANT



## HCPRO HCBK-2VY5P 2 Valve Piston Type Manifold R600a, R290, R32

Fahrenheit | Celsius 2 Valve Piston Type Manifold Hydrocarbon R600a, R290, R32



### Features and Benefits

- Class 1.6 Accuracy 80mm Gauge (PSI °C/°F)
- Smooth valve finish for easy operation.
- 3/16" inside chamber diameter for maximum flow.
- Sleek and durable design with hex handles for precise pressure control.
- 4000 PSI burst, 800 PSI working Pressure 5FT Premium Barrier Hoses SAE J2196 / SAE J2888.
- R410A compatible, as well CFC, HCFC, HFC Refrigerants blends.
- A3 & A2L compatible, as well HFCS refrigerants blends.

### Specifications

- Item: 2 Valve Piston Type Manifold
- Product Type: Manifold Gauge
- Refrigerant Compatibility: Multiple Refrigerants
- Vacuum Port Size: 1/4 in
- Gauges Low Side: 0 to 30 psi
- Gauges High Side: 0 to 800 psi
- Hose Length: 60 in
- Material: Brass, Plastic, Glass
- Refrigerant Type: R22, R290, R600a
- Class: 1.6 Accuracy 80mm Gauge (PSI °C/°F)
- Includes: 60 in Refrigerant Hose Set, Brass Bar, Fahrenheit Scale, Hand Wheels, Hanging Hook
- Number of Hoses: 3
- Refrigerant Blend: HFCS, Hydrocarbon
- Application: HVAC-R
- Gauge Size: 80 mm
- Temperature scales: PSI °C/°F



Part# | SKU: 22-0085

## HCBK-2V5C5BK 2 Valve Piston Type Manifold R134a, R404a, R407c, R507

Celsius 2 Valve Piston Type Manifold R134a, R404a, R407c, R507



### Features and Benefits

- Class 1.6 Accuracy 80mm Gauge °C/PSI
- Smooth valve finish for easy operation.
- 3/16" inside chamber diameter for maximum flow.
- Sleek and durable design with hex handles for precise pressure control.
- 4000 PSI burst, 800 PSI working Pressure 5FT Premium Barrier Hoses SAE J2196 / SAE J2888.
- R410A compatible, as well CFC, HCFC, HFC Refrigerants blends.

### Specifications

- Item: 2 Valve Piston Type Manifold
- Product Type: Manifold Gauge
- Refrigerant Compatibility: Multiple Refrigerants
- Vacuum Port Size: 1/4 in
- Gauges Low Side: 0 to 30 psi
- Gauges Low Side: 0 to 30 psi
- Gauges High Side: 0 to 800 psi
- Hose Length: 60 in
- Material: Brass, Plastic, Glass
- Refrigerant Type: R134a, R22, R404a, R410a
- Class: 1.6 Accuracy 80mm Gauge (PSI °C)
- Includes: 60 in Refrigerant Hose Set, Brass Bar, Fahrenheit Scale, Hand Wheels, Hanging Hook
- Number of Hoses: 3
- Refrigerant Blend: R410a, CFC, HCFC, HFC
- Application: HVAC-R
- Gauge Size: 80 mm
- Temperature scales: PSI °C



HCBK-2V5C5BK | SKU: 22-0100 | w/Standad Hoses  
HCBK-2V5C5AB | SKU: 22-0110 | w/Anti-BlowBack Hoses  
HCBK-2V5C5BV | SKU: 22-0111 | w/Ball Valve Hoses

# ANTI-BLOWBACK BALL-VALVE STANDARD

## HCPRO HCBK-2V4YF5BK 2 Valve Piston Type Manifold HFO-R1234YF

Fahrenheit | Celsius 2 Valve Piston Type Manifold HFO-R1234YF



### Features and Benefits

- Class 1.6 Accuracy 80mm Gauge °F/ °C PSI
- Smooth valve finish for easy operation.
- 3/16" inside chamber diameter for maximum flow.
- Sleek and durable design with hex handles for precise pressure control.
- 4000 PSI burst, 800 PSI working Pressure 5FT Premium Barrier Hoses SAE J2196 / SAE J2888.

### Specifications

- Item: 2 Valve Piston Type Manifold
- Product Type: Manifold Gauge
- Refrigerant Compatibility: HFO-R1234YF
- Vacuum Port Size: 1/4 in
- Gauges Low Side: 0 to 30 psi
- Gauges Low Side: 0 to 30 psi
- Gauges High Side: 0 to 800 psi
- Hose Length: 60 in
- Material: Brass, Plastic, Glass
- Refrigerant Type: HFO-R1234YF
- Class: 1.6 Accuracy 80mm Gauge (PSI °F/°C)
- Includes: 60 in Refrigerant Hose Set, Brass Bar, Fahrenheit Scale, Hand Wheels, Hanging Hook
- Number of Hoses: 3
- Refrigerant Blend: HFO-R1234YF
- Application: Automotive
- Gauge Size: 80 mm
- Temperature scales: PSI °F/°C



Part# | SKU: 22-0101

## HCPRO HCE-2V1C3P 2 Valve Piston Type Manifold R404a, R22, R410a

Celsius 2 Valve Piston Type Manifold R404a, R22, R410a



### Features and Benefits

- Class 1.6 Accuracy 68mm Gauge PSI/KPa/°C
- Smooth valve finish for easy operation.
- 3/16" inside chamber diameter for maximum flow.
- Sleek and durable design with hex handles for precise pressure control.
- 4000 PSI burst, 800 PSI working Pressure 3FT Premium Barrier Hoses SAE J2196 / SAE J2888.
- R410A compatible, as well CFC, HCFC, HFC Refrigerants blends.

### Specifications

- Item: 2 Valve Piston Type Manifold
- Product Type: Manifold Gauge
- Refrigerant Compatibility: Multiple Refrigerants
- Vacuum Port Size: 1/4 in
- Gauges Low Side: 0 to 30 psi
- Gauges High Side: 0 to 800 psi
- Hose Length: 36 in
- Material: Brass, Plastic, Glass
- Refrigerant Type: R22, R404a, R410a
- Class: 1.6 Accuracy 68mm Gauge (PSI °C)
- Includes: 36 in Refrigerant Hose Set, Brass Bar, Fahrenheit Scale, Hand Wheels, Hanging Hook
- Number of Hoses: 3
- Refrigerant Blend: R410a, CFC, HCFC, HFC
- Application: HVAC-R - Automotive
- Gauge Size: 68 mm
- Temperature scales: PSI/KPa/°C



Part# | SKU: 22-0036



# UNIVERSAL REPLACEMENT MANIFOLD GAUGES

## HCPRO HC-KG80H2F Universal Replacement Gauge PSI / °F High Side R134a, R404a, R22, R410a

Fahrenheit 2 Valve Piston Type Manifold Replacement Gauge



### Features and Benefits

- High Side Gauge PSI/°F.
- Class 1.6 Accuracy.
- 1/8" 27 NPT Thread.
- 80 mm lens for easy read.
- Rubber Boot Protector.

### Specifications

- Diameter: 3.14 in (80 mm)
- Color: Black
- Material: Brass/Stainless Steel
- Gauge Accuracy: +/-1.60%
- Connection Size: 1/8 in (M)NPT
- Item: Replacement High Side Pressure Gauge
- Application: Replacement Manifold Gauge for Manifold Gauge Sets
- Gauge Type: Non-Liquid Filled
- Working Pressure: 30 in Hg to 800 psi
- For Use With: R-22, R-134A, R-404A, R-410A



Part# | SKU: 22-0047

## HCPRO HC-KG80L2F Universal Replacement Gauge PSI / °F High Side R134a, R404a, R22, R410a

Fahrenheit 2 Valve Piston Type Manifold Replacement Gauge



### Features and Benefits

- Low Side Gauge PSI/°F.
- Class 1.6 Accuracy.
- 1/8" 27 NPT Thread.
- 80 mm lens for easy read.
- Rubber Boot Protector.

### Specifications

- Diameter: 3.14 in (80 mm)
- Color: Black
- Material: Brass/Stainless Steel
- Gauge Accuracy: +/-1.60%
- Connection Size: 1/8 in (M)NPT
- Item: Replacement Low Side Pressure Gauge
- Application: Replacement Manifold Gauge for Manifold Gauge Sets
- Gauge Type: Non-Liquid Filled
- Working Pressure: 30 in Hg to 500 psi
- For Use With: R-22, R-134A, R-404A, R-410A



Part# | SKU: 22-0046

## HCPRO HC-KG80H2C Universal Replacement Gauge PSI / °C High Side R134a, R404a, R22, R410a

Celsius 2 Valve Piston Type Manifold Replacement Gauge



### Features and Benefits

- High Side Gauge PSI/°C.
- Class 1.6 Accuracy.
- 1/8" 27 NPT Thread.
- 80 mm lens for easy read.
- Rubber Boot Protector.

### Specifications

- Diameter: 3.14 in (80 mm)
- Color: Black
- Material: Brass/Stainless Steel
- Gauge Accuracy: +/-1.60%
- Connection Size: 1/8 in (M)NPT
- Item: Replacement High Side Pressure Gauge
- Application: Replacement Manifold Gauge for Manifold Gauge Sets
- Gauge Type: Non-Liquid Filled
- Working Pressure: 30 in Hg to 800 psi
- For Use With: R-22, R-134A, R-404A, R-410A



Part# | SKU: 22-0045

# UNIVERSAL REPLACEMENT MANIFOLD GAUGES

## HCPRO HC-KG80L2C Universal Replacement Gauge PSI / °C Low Side R134a, R404a, R22, R410a

Celsius 2 Valve Piston Type Manifold Replacement Gauge

### Features and Benefits

- Low Side Gauge PSI/°F.
- Class 1.6 Accuracy.
- 1/8" 27 NPT Thread.
- 80 mm lens for easy read.
- Rubber Boot Protector.

### Specifications

- Diameter: 3.14 in (80 mm)
- Color: Black
- Material: Brass/Stainless Steel
- Gauge Accuracy: +/-1.60%
- Connection Size: 1/8 in (M)NPT
- Item: Replacement Low Side Pressure Gauge
- Application: Replacement Manifold Gauge for Manifold Gauge Sets
- Gauge Type: Non-Liquid Filled
- Working Pressure: 30 in Hg to 500 psi
- For Use With: R-22, R-134A, R-404A, R-410A



Part# | SKU: 22-0043

## HCPRO HC-KG80H3CF Universal Replacement Gauge PSI °F/°C High Side R600a, R290, R32

Fahrenheit | Celsius 2 Valve Piston Type Manifold Replacement Gauge

### Features and Benefits

- High Side Gauge PSI/°F.
- Class 1.6 Accuracy.
- 1/8" 27 NPT Thread.
- 80 mm lens for easy read.
- Rubber Boot Protector.

### Specifications

- Diameter: 3.14 in (80 mm)
- Color: Black
- Material: Brass/Stainless Steel
- Gauge Accuracy: +/-1.60%
- Connection Size: 1/8 in (M)NPT
- Item: Replacement High Side Pressure Gauge
- Application: Replacement Manifold Gauge for Manifold Gauge Sets
- Gauge Type: Non-Liquid Filled
- Working Pressure: 30 in Hg to 800 psi
- For Use With: R-22, R-134A, R-404A, R-410A



Part# | SKU: 22-0074

## HCPRO HC-KG80L3CF Universal Replacement Gauge PSI °F/°C Low Side R600a, R290, R32

Fahrenheit | Celsius 2 Valve Piston Type Manifold Replacement Gauge

### Features and Benefits

- High Side Gauge PSI/°F.
- Class 1.6 Accuracy.
- 1/8" 27 NPT Thread.
- 80 mm lens for easy read.
- Rubber Boot Protector.

### Specifications

- Diameter: 3.14 in (80 mm)
- Color: Black
- Material: Brass/Stainless Steel
- Gauge Accuracy: +/-1.60%
- Connection Size: 1/8 in (M)NPT
- Item: Replacement High Side Pressure Gauge
- Application: Replacement Manifold Gauge for Manifold Gauge Sets
- Gauge Type: Non-Liquid Filled
- Working Pressure: 30 in Hg to 800 psi
- For Use With: R-22, R-134A, R-404A, R-410A



Part# | SKU: 22-0073



## HCPRO HC-KG80H5C Universal Replacement Gauge PSI / °C High Side R134a, R404a, R407c, R507

Celsius 2 Valve Piston Type Manifold Replacement Gauge



### Features and Benefits

- High Side Gauge PSI/°C.
- Class 1.6 Accuracy.
- 1/8" 27 NPT Thread.
- 80 mm lens for easy read.
- Rubber Boot Protector.

### Specifications

- Diameter: 3.14 in (80 mm)
- Color: Black
- Material: Brass/Stainless Steel
- Gauge Accuracy: +/-1.60%
- Connection Size: 1/8 in (M)NPT
- Item: Replacement High Side Pressure Gauge
- Application: Replacement Manifold Gauge for Manifold Gauge Sets
- Gauge Type: Non-Liquid Filled
- Working Pressure: 30 in Hg to 800 psi
- For Use With: R-22, R-134A, R-404A, R-410A



Part# | SKU: 22-0099

## HCPRO HC-KG80L5C Universal Replacement Gauge PSI / °C High Side R134a, R404a, R407c, R507

Fahrenheit | Celsius 2 Valve Piston Type Manifold Replacement Gauge



### Features and Benefits

- High Side Gauge PSI/°C.
- Class 1.6 Accuracy.
- 1/8" 27 NPT Thread.
- 80 mm lens for easy read.
- Rubber Boot Protector.

### Specifications

- Diameter: 3.14 in (80 mm)
- Color: Black
- Material: Brass/Stainless Steel
- Gauge Accuracy: +/-1.60%
- Connection Size: 1/8 in (M)NPT
- Item: Replacement High Side Pressure Gauge
- Application: Replacement Manifold Gauge for Manifold Gauge Sets
- Gauge Type: Non-Liquid Filled
- Working Pressure: 30 in Hg to 800 psi
- For Use With: R-22, R-134A, R-404A, R-410A



Part# | SKU: 22-0098

## HCPRO HC-KG80H4YF Universal Replacement Gauge PSI °F / °C High Side HFO-R1234YF

Fahrenheit | Celsius 2 Valve Piston Type Manifold Replacement Gauge



### Features and Benefits

- High Side Gauge PSI/°F.
- Class 1.6 Accuracy.
- 1/8" 27 NPT Thread.
- 80 mm lens for easy read.
- Rubber Boot Protector.

### Specifications

- Diameter: 3.14 in (80 mm)
- Color: Black
- Material: Brass/Stainless Steel
- Gauge Accuracy: +/-1.60%
- Connection Size: 1/8 in (M)NPT
- Item: Replacement High Side Pressure Gauge
- Application: Replacement Manifold Gauge for Manifold Gauge Sets
- Gauge Type: Non-Liquid Filled
- Working Pressure: 30 in Hg to 800 psi
- For Use With: R-22, R-134A, R-404A, R-410A



Part# | SKU: 22-0087

## HCPRO HC-KG80L4YF Universal Replacement Gauge PSI °F / °C High Side HFO-R1234YF

Fahrenheit | Celsius 2 Valve Piston Type Manifold Replacement Gauge



### Features and Benefits

- High Side Gauge PSI/°F.
- Class 1.6 Accuracy.
- 1/8" 27 NPT Thread.
- 80 mm lens for easy read.
- Rubber Boot Protector.

### Specifications

- Diameter: 3.14 in (80 mm)
- Color: Black
- Material: Brass/Stainless Steel
- Gauge Accuracy: +/-1.60%
- Connection Size: 1/8 in (M)NPT
- Item: Replacement High Side Pressure Gauge
- Application: Replacement Manifold Gauge for Manifold Gauge Sets
- Gauge Type: Non-Liquid Filled
- Working Pressure: 30 in Hg to 800 psi
- For Use With: R-22, R-134A, R-404A, R-410A



Part# | SKU: 22-0086

## HCPRO HC-RG68H1C Universal Replacement Gauge PSI / KPa / °C High Side R404a, R22, R410a

Celsius 2 Valve Piston Type Manifold Replacement Gauge



### Features and Benefits

- High Side Gauge PSI/KPa/°C
- Class 1.6 Accuracy.
- 1/8" 27 NPT Thread.
- 68 mm lens for easy read.
- Rubber Boot Protector.

### Specifications

- Diameter: 3.14 in (80 mm)
- Color: Red
- Material: Brass/Stainless Steel
- Gauge Accuracy: +/-1.60%
- Connection Size: 1/8 in (M)NPT
- Item: Replacement High Side Pressure Gauge
- Application: Replacement Manifold Gauge for Manifold Gauge Sets
- Gauge Type: Non-Liquid Filled
- Working Pressure: 30 in Hg to 5500 KPa 800 psi
- For Use With: R-22, R-134A, R-404A, R-410A



Part# | SKU: 22-0042

## HCPRO HC-BG68L1C Universal Replacement Gauge PSI / KPa / °C Low Side R404a, R22, R410a

Fahrenheit | Celsius 2 Valve Piston Type Manifold Replacement Gauge



### Features and Benefits

- Low Side Gauge PSI/KPa/°C
- Class 1.6 Accuracy.
- 1/8" 27 NPT Thread.
- 68 mm lens for easy read.
- Rubber Boot Protector.

### Specifications

- Diameter: 3.14 in (80 mm)
- Color: Blue
- Material: Brass/Stainless Steel
- Gauge Accuracy: +/-1.60%
- Connection Size: 1/8 in (M)NPT
- Item: Replacement Low Side Pressure Gauge
- Application: Replacement Manifold Gauge for Manifold Gauge Sets
- Gauge Type: Non-Liquid Filled
- Working Pressure: 30 in Hg to 3450 KPa 500 psi
- For Use With: R-22, R-134A, R-404A, R-410A



Part# | SKU: 22-0041



## AT HCPRO

we know the importance of keeping professionals running with high quality tools that will not let you down on the job. We have developed our products with durability and innovation under the highest standards for the HVAC-R industry.

## Our History

Based in South Florida, HCPRO is a very proud American made product. We strive to be the recognized leader for innovative solutions and products for air conditioning lubricants, tools and other chemical categories in the HVAC and automotive aftermarket.

## Modern Technologies

We aim to be the primary provider of high-end quality, value-added products supported by best-in-class manufacturing and distribution and excellent customer service and support.

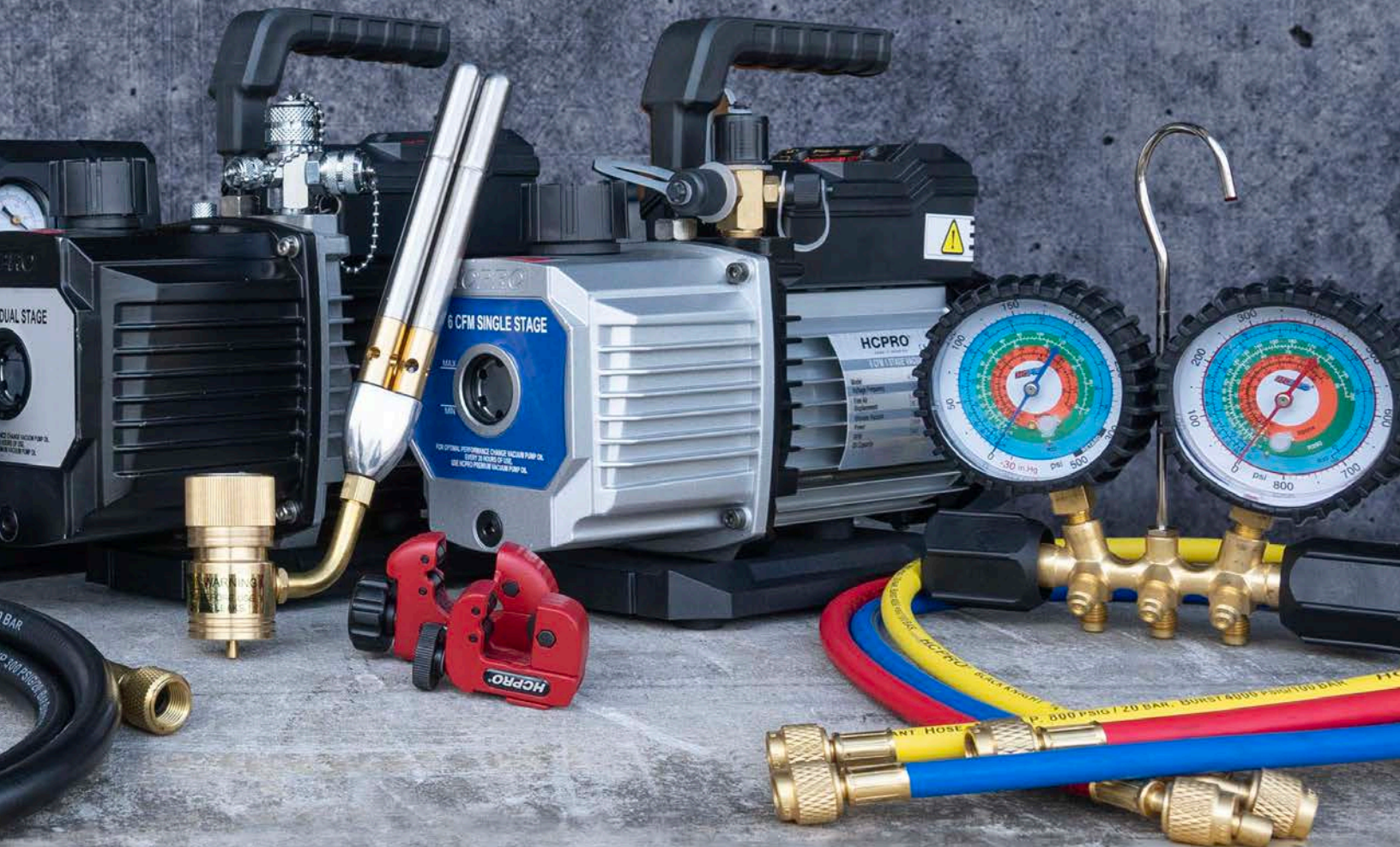
## Professional Teamwork

Our people are essential to the successful delivery of the HCPRO strategy and to sustaining business performance over the long term. Performing competitively in the evolving energy landscape requires competent and empowered people working safely together.

HCPRO Products — Designed & Engineered in USA









# PREMIUM CHARGING & EVACUATION HOSES

## HCPRO HC-PH5BK 5 ft 1/4 SAE Black Premium Charging Hose Set

HCPRO hoses feature an adjustable valve core depressor to compensate with valves that are out of tolerance. Using a valve remover tool turn the depressor clockwise to lower it, and in the opposite direction to raise it.

### Features and Benefits

- 4000 PSI burst.
- 800 PSI working Pressure.
- Premium Barrier Hoses SAE J2196 / SAE J2888.
- Compatible with CFC, HCFC, HFC Refrigerants blends.
- R410A compatible, as well CFC, HCFC, HFC Refrigerants blends.

### Specifications

- Item: A/C Charging Hose Set
- Size (In.): 60 in
- Includes: Black Premium Hoses
- Material: Reinforced Rubber and Brass
- Application: R134a Manifold Gauges
- Tool Type: A/C Manifold Gauge Set
- For Use With: R-134A A/C System
- Package Quantity: 1
- Number of Pieces: 3
- Type: R134a
- Size: 60 in



Part# | SKU: 22-0039



## HCPRO HC-PH5BKAB 5 ft 1/4 SAE Black Premium Anti-Blowback Charging Hose Set

HCPRO hoses feature an adjustable valve core depressor to compensate with valves that are out of tolerance. Using a valve remover tool turn the depressor clockwise to lower it, and in the opposite direction to raise it.

### Features and Benefits

- 4000 PSI burst.
- 800 PSI working Pressure.
- Anti-Blowback Feature.
- Premium Barrier Hoses SAE J2196 / SAE J2888.
- Compatible with CFC, HCFC, HFC Refrigerants blends. R410A compatible, as well CFC, HCFC, HFC Refrigerants blends. J2196 / SAE J2888.
- R410A compatible, as well CFC, HCFC, HFC Refrigerants blends.

### Specifications

- Item: A/C Charging Hose Set
- Size (In.): 60 in
- Includes: Black Premium Hoses
- Material: Reinforced Rubber and Brass
- Application: R134a Manifold Gauges
- Tool Type: A/C Manifold Gauge Set
- For Use With: R-134A A/C System
- Package Quantity: 1
- Number of Pieces: 3
- Type: R134a
- Size: 60 in



Part# | SKU: 22-0089



# PREMIUM CHARGING & EVACUATION HOSES

## HCPRO HC-PH5BKBV 5 ft 1/4 SAE Black Premium Ball Valve Charging Hose Set

HCPRO hoses feature an adjustable valve core depressor to compensate with valves that are out of tolerance. Using a valve remover tool turn the depressor clockwise to lower it, and in the opposite direction to raise it.

### Features and Benefits

- 4000 PSI burst.
- 800 PSI working Pressure.
- Ball Valve Feature.
- Premium Barrier Hoses SAE J2196 / SAE J2888.
- Compatible with CFC, HCFC, HFC Refrigerants blends.R410A compatible, as well CFC, HCFC, HFC Refrigerants blends.J2196 / SAE J2888.
- R410A compatible, as well CFC, HCFC, HFC Refrigerants blends.

### Specifications

- Item: A/C Charging Hose Set
- Size (In.): 60 in
- Includes: Black Premium Hoses
- Material: Reinforced Rubber and Brass
- Application: R134a Manifold Gauges
- Tool Type: A/C Manifold Gauge Set
- For Use With: R-134A A/C System
- Package Quantity: 1
- Number of Pieces: 3
- Type: R134a
- Size: 60 in



Part# | SKU: 22-00090



## HCPRO HC-PH5BKVF 5 ft 1/4 SAE Black Premium Charging Hose Set with HFO-R1234VF Adapters

HCPRO hoses feature an adjustable valve core depressor to compensate with valves that are out of tolerance. Using a valve remover tool turn the depressor clockwise to lower it, and in the opposite direction to raise it.

### Features and Benefits

- 4000 PSI burst.
- 800 PSI working Pressure.
- Premium Barrier Hoses SAE J2196 / SAE J2888.
- Compatible with CFC, HCFC, HFC Refrigerants blends.
- R410A compatible, as well CFC, HCFC, HFC Refrigerants blends.

### Quick Coupler Features and Benefits

- Simple Snap On Quick Connect Design
- Integral safety sleeve which protects against injury and refrigerant loss
- Compact design
- Six-ball couplers provide a more stable grip

### Specifications

- Item: A/C Charging Hose Set
- Size (In.): 60 in
- Includes: Black Premium Hoses
- Material: Reinforced Rubber and Brass
- Application: R134a Manifold Gauges
- Tool Type: A/C Manifold Gauge Set
- For Use With: R-134A A/C System
- Package Quantity: 1
- Number of Pieces: 3
- Type: R134a
- Size: 60 in



Part# | SKU: 22-0112





## HCPRO HC-PH3CL 3 ft 1/4 SAE Color Code Charging Hose Set

HCPRO hoses feature an adjustable valve core depressor to compensate with valves that are out of tolerance. Using a valve remover tool turn the depressor clockwise to lower it, and in the opposite direction to raise it.

### Features and Benefits

- 4000 PSI burst.
- 800 PSI working Pressure.
- Premium Barrier Hoses SAE J2196 / SAE J2888.
- Compatible with CFC, HCFC, HFC Refrigerants blends.
- R410A compatible, as well CFC, HCFC, HFC Refrigerants blends.

### Specifications

Item: A/C Charging Hose Set  
Size (In.): 36 in  
Includes: Blue Hoses, Red, Yellow  
Material: Reinforced Rubber and Brass  
Application: R134a Manifold Gauges  
Tool Type: A/C Manifold Gauge Set  
For Use With: R-134A A/C System  
Package Quantity: 1  
Number of Pieces: 3  
Type: R134a  
Size: 36 in



Made in USA

Part# | SKU: 22-0040

## HCPRO HCEVCK538-H 5 ft 3/8 SAE Dual Force Evacuation & Charging Hose

The 3/8 service hose connection is for a fast evacuation and charging.

### Features and Benefits

- 3/8" high Volume Black Knight Evacuation Hose.
- 800 PSI Working pressure.
- 4000 PSI Burst Pressure.
- Compatible with all refrigerants, including R-410a.

### Specifications

Item: HVAC Dual Force Evacuation and Charging Hose  
3/8" high volume Dual Force 6 ft evacuation and charging hose  
Working Pressure: 800 psi  
Burst Pressure: 4000 psi  
Length (Straight Wireway): 72 in  
Material: Multi-Layered Reinforced Rubber  
Connection Size: 3/8 in  
Outside Dia.: 1/2 in  
Length: 72 in  
Connection Type: SAE



Made in USA

Part# | SKU: 22-0063



# PRECISE - EFFICIENT - DEPENDABLE



### HCPRO HCEVCK438 1/4" Dual Force Quick Flow Kit

Evacuation is a crucial step in quite a few HVAC-related processes. This action involves the removal of excess air, water vapor, nitrogen, and other non-condensable gases from a refrigerant system. Before a technician can really do much with an air conditioning system or a refrigerator, they should sic a vacuum on it first.

The same is also likely to happen if you use low-quality evacuation pump kits. Any responsible HVAC technician should seek out only the most efficient and effective tools for their trade. Their kits must include powerful vacuum pumps and high-quality hoses that can quickly and completely remove all unwanted gases from a system.

#### Features and Benefits

- 1 Valve Core Remover Tool with built-in magnetic base
- Designed for A/C systems with 1/4" threaded service ports with standard type valve cores, the 3/8 service hose connection is for a fast evacuation, 1/4 side port for service.
- 3/8" high Volume Black Knight Evacuation Hose.
- 800 PSI Working pressure.
- 4000 PSI Burst Pressure.
- Compatible with all refrigerants, including R-410a.

#### Specifications

Item: HVAC Dual Force Evacuation Kit  
 Kit Includes: 1/4" Valve Core Removal Tool, 3/8" high volume Dual Force 6 ft evacuation and charging hose  
 Working Pressure: 800 psi  
 Burst Pressure: 4000 psi  
 Length (Straight Wireway): 72 in  
 Material: Multi-Layered Reinforced Rubber  
 Connection Size: 3/8 in  
 Outside Dia.: 1/2 in  
 Length: 72 in  
 Connection Type: SAE



Part# | SKU: 22-0002

### HCPRO HCEVCK538 5/16" Dual Force Quick Flow Kit

Evacuation is a crucial step in quite a few HVAC-related processes. This action involves the removal of excess air, water vapor, nitrogen, and other non-condensable gases from a refrigerant system. Before a technician can really do much with an air conditioning system or a refrigerator, they should sic a vacuum on it first.

The same is also likely to happen if you use low-quality evacuation pump kits. Any responsible HVAC technician should seek out only the most efficient and effective tools for their trade. Their kits must include powerful vacuum pumps and high-quality hoses that can quickly and completely remove all unwanted gases from a system.

#### Features and Benefits

- 1 Valve Core Remover Tool with built-in magnetic base
- Designed for A/C systems with 5/16" threaded service ports with standard type valve cores, the 3/8 service hose connection is for a fast evacuation, 1/4 side port for service.
- 3/8" high Volume Black Knight Evacuation Hose.
- 800 PSI Working pressure.
- 4000 PSI Burst Pressure.
- Compatible with all refrigerants, including R-410a.

#### Specifications

Item: HVAC Dual Force Evacuation Kit  
 Kit Includes: 5/16" Valve Core Removal Tool, 3/8" high volume Dual Force 6 ft evacuation and charging hose  
 Working Pressure: 800 psi  
 Burst Pressure: 4000 psi  
 Length (Straight Wireway): 72 in  
 Material: Multi-Layered Reinforced Rubber  
 Connection Size: 3/8 in  
 Outside Dia.: 1/2 in  
 Length: 72 in  
 Connection Type: SAE



Part# | SKU: 22-0001



# PRECISE - EFFICIENT - DEPENDABLE



# PREMIUM TOOLS & ACCESSORIES

## HCPRO HCAD140 Adapter 5/16" SAE Male x 1/4" Female Quick Coupler.

### Features and Benefits

- For Use with Quick Connect/Disconnect Refrigeration Hoses Rubber Boot Protector.

### Specifications

Item: Quick Coupler  
 Working Pressure: 1,000 psi  
 Fitting Material: Brass  
 For Use With: Quick Connect/Disconnect Refrigeration Hoses  
 Angle: 0 Degrees  
 Connection Size: 5/16 in SAE Male x 1/4 in Female  
 Features: All Brass Construction  
 Accessory Type: Quick Coupler



Part# | SKU: 22-0084

## HCPRO HCAD410 R410a Adapter 1/4 SAE Male x 5/16 Female Hose Adaptor

### Features and Benefits

- For Use with Mini-Split, Ductless.

### Specifications

Item: Hose Adaptor  
 Temp. Range: 0 Degrees to 122 Degrees F  
 Includes: 1/4 in SAE Male to 5/16 in SAE Female Fitting  
 Length (Straight Wireway): 1 3/8 in  
 Length: 1 3/8 in  
 Application: HVACR  
 For Use With: Mini-Split, Ductless  
 Accessory Type: Hose Adaptor



Part# | SKU: 22-0004

## HCPRO HC-AD410S R410 45° Adapter 1/4" SAE Male x 5/16" Female R410 45-degree swivel adaptor

### Features and Benefits

- For Use with Mini-Split, Ductless.

### Specifications

- Item: Hose Angled Adaptor
- Temp. Range: 0 Degrees to 122 Degrees F
- Includes: 1/4 in SAE Male to 5/16 in SAE Female Fitting, 45 Degrees Swivel
- Length (Straight Wireway): 1 3/4 in
- Length: 1 3/4 in
- Application: HVACR
- For Use With: Mini-Split, Ductless
- Accessory Type: Hose Angled Adaptor



Part# | SKU: 22-0078

## HCPRO RAV1 High Pressure Access Valve

Access Valve Extension Tube, It can be Bent, Cut, Flared or Swaged to Meet Application Requirements

### Features and Benefits

- For Use with All CFC, HCFC and HFC Refrigerants

### Specifications

- Item: 1/4" Access Valve Extension Tube
- For Use With: All CFC, HCFC and HFC Refrigerants
- Includes: 1 Threaded Cap, 1 Valve Core Per Fitting and 1 Mini Core Remover Per Pack
- Material: Brass/Copper
- Length (Straight Wireway): 2 in
- Connection Size: 1/4 in OD
- Outside Dia.: 1/4 in
- Length: 2 in



Part# | SKU: 22-0005

# PREMIUM TOOLS & ACCESSORIES

## HCPRO RAV2 1/4" SAE Brass Cap w/ Core Removal

Gasket and Core Remover.

### Features and Benefits

- For Use with All CFC, HCFC and HFC Refrigerants.

### Specifications

Item: 1/4" SAE Cap w/ Gasket and Core Remover  
Includes: (6) 1/4" SAE Cap w/ Gasket and Core Remover  
For Use With: All CFC, HCFC and HFC Refrigerants  
Connection Size: 1/4 in  
Material: Brass



Part# | SKU: 22-0007

## HCPRO RAV3 High Pressure Valve Cores

The HCPRO valve core is a key component in the function of a tire valve. The valve core is screwed into a housing and functions as the primary seal to prevent leakage.

### Specifications

Item: RAV 3 SAE High Pressure Valve Core  
Max. Working Pressure: 800 psi  
Outside Dia.: 1/4 in  
Length: 3 1/2 in  
Length (Straight Wireway): 3 1/2 in  
Material: metal  
For Use With: HVAC Fittings  
Compatible with: All CFC, HCFC and HFC Refrigerants



Part# | SKU: 22-0006

## HCPRO Valve Core Removal Tool

Valve core remover tool for quick and easy replacement of faulty core depressors.

### Features and Benefits

- \*\*\*5/16" Female x 3/8" Male and 1/4" side port.
- \*\*\*1/4" Female x 3/8" Male and 1/4" side port.
- Rubber coated handle for easy grip.
- Used In Conjunction with Vacuum Pump for Evacuations.
- Vacuum rated 25 microns.

### Specifications

For Use With: Valve Cores  
Application: Used in Conjunction with Vacuum Pump for Evacuations  
Material: Brass/Stainless Steel  
Length (Straight Wireway): 3 7/8 in  
Length: 3 7/8 in  
\*\*\*Includes: 5/16" or 1/4" inside Port Fitting  
Max. Working Pressure: 750 psi  
Width: 1 1/2 in



HCEVCK538-V | SKU: 22-0062  
HCEVCK438-V | SKU: 22-0072

## HCPRO HC-QC90SET 90° R-134a Quick Coupler Set

Snap-On 1/4" SAE Automotive quick connect 90° coupler set for R-134a.

### Features and Benefits

- Adjustable to fit different Valve Cores.
- 1/4" SAE Male Flare Fitting for Automobile A/C Service.
- 1/4" SAE hose fitting to R134a automobile refrigeration tank.

### Specifications

- 1/4" SAE Male Flare 90 Degree



Part# | SKU: 22-0079

## HCPRO HC-HXG6 1/4" Gaskets for Hoses & Adapters

Automotive universal A/C replacement gaskets for charging hoses and adaptors.

### Features and Benefits

- Item: Hose Gaskets
- Size: 1/4"

### Specifications

- 1/4" Replacement gaskets
- Pack: 6 pcs



Part# | SKU: 22-0008



### HCPRO HC-YFQC HFO-R-1234YF Quick Coupler Set

High and Low side Service Couplers HFO-R1234yf. Field service couplers connect to our special Enviro-Guard hoses to allow access to service ports on automotive R-1234yf A/C systems. The quick-connect design has an integral safety sleeve, which protects against injury and refrigerant loss if the coupler is disconnected under pressure. The compact design easily fits into tight quarters, which is especially handy for retrofits. Six-ball couplers provide a more stable grip on the fitting than do couplers with four balls.

#### Features and Benefits

- Simple Snap On Quick Connect Design
- Integral safety sleeve which protects against injury and refrigerant loss
- Compact design
- Six-ball couplers provide a more stable grip

#### Specifications

Thumb Screw Activation Class 1.6 Accuracy.  
1/8" 27 NPT Thread.  
Color: Red | Blue  
Material: Stainless Steel



Part# | SKU: 22-0088

### HCPRO HC-LYFQC HFO-R-1234YF Quick Coupler Low Side



Part# | SKU: 22-0114

### HCPRO HC-HYFQC HFO-R-1234YF Quick Coupler High Side



Part# | SKU: 22-0113

## Recovery Machine Valve Rebuild Kit



### HCPRO HC-TRK21N Oilless Compressor Valve Rebuild Kit with for TRS21/TR21 Recovery Machine

Rebuild kit for existing Compressor head with Neoprene O-rings, Springs, and Valves. Drop-in replacement for CPS p/n TR21X1.

#### Features and Benefits

- Compatible with: TRS 21 Recovery Pump, TRS 19 Recovery Pump, TRS 600 Recovery Pump.
- CPS TR21 Oilless Compressor Valve Rebuild Kit includes valves, valve springs, seals and o-rings and inlet screen.

Part# | SKU: 22-0064



RATED FOR EXTRACTION

### HCPRO 22-0065 HC-TRK21V Oilless Compressor Valve Rebuild Kit with Viton Seals for TRS21/TR21 Recovery Machine ( Version)

Upgrade the compressor head on the TRS21 to be compatible with CBD oils by replacing all the existing O-ring seals with Viton. Replace all brass fittings with Stainless Steel to be inline with FDA on consumable products. Replace springs and valves.

Part# | SKU: 22-0065

## HCPRO HC-738 Quick-Y Adapter for Unrestricted Vacuum Flow $\frac{3}{8}$ " x $\frac{3}{8}$ " x $\frac{3}{8}$ "

The Vacuum Flow Quick-Y Adapter  $\frac{3}{8}$ " features a large inner diameter for unrestricted Full Flow, is Vacuum-Rated to 20 microns and rated for high pressure refrigerants, such as R410A. The Quick-Y makes it easy to connect multiple hoses to a single point without the drawbacks of a traditional manifold.

### Features and Benefits

- Full Flow - Large inner diameter with no restrictions for increased conductance speed.
- Vacuum-Rated to 20 microns.
- Designed for High Pressure - Designed for high pressure refrigerants, such as R410A.
- Simplified Connections - Easily connect multiple hoses to a single point and reduce leak points.
- Durable - Premium aircraft grade aluminum bodies with high quality brass fittings.
- Increase the speed of any vacuum pump or recovery pump with 3/8in connections.

### Why Use a Speed-Y Instead of a Manifold?

Traditional manifolds suffer from a few shortcomings; highly restrictive, not designed for deep vacuum and a lot of potential leak points. The Speed-Y solves all of these issues in a small tidy package. Simplify your job, increase conductance speed and decrease evacuation/recovery times with the MegaFlow 3/8in Speed-Y.

### Working on Large Multi-Port Systems?

With the MegaFlow 3/8in Speed-Y, vacuum pumps with only a few ports are no longer limited. Easily connect multiple hoses to a single port. The Greater the Flow... The Faster it will Go!

### Are your Tools Rated for Vacuum and Pressure?

The MegaFlow 3/8in Speed-Y is Vacuum-Rated to 20 microns and designed for high pressure refrigerants, such as R410A. This combination will give you the peace of mind that your tools aren't going to leak in a deep vacuum or during critical parts of the recovery process.



Part# | SKU: 22-0102

# Anti-Blowback Adapters



5/16"

### HCPRO HC-ABB51690 R-410a

5/16" SAE Swivel Female x 1/4" SAE Male 90 Degree Anti-Blowback

Part# | SKU: 22-0097



1/4"

### HCPRO HC-ABB1490 R-410a

1/4" SAE Swivel Female x 1/4" SAE Male 90 Degree Anti-Blowback

Part# | SKU: 22-0095



5/16"

### HCPRO HC-ABB516 R-410a

5/16" SAE Swivel Female x 1/4" SAE Male Anti-Blowback

Part# | SKU: 22-0096



1/4"

### HCPRO HC-ABB14 R-410a

5/16" SAE Swivel Female x 1/4" SAE Male Anti-Blowback

Part# | SKU: 22-0094



### HCPRO HCTC-1 Tube Cutter

The HCPRO® HC-TC1 Mini-Tube Cutter is engineered for precise and cleaner cuts. 2 Black Knight Roller design delivers accurate cuts and prevents walking. For added durability and extend performance, the Black Knight Rollers provide best in class anti-rust protection. With the quick system change, allows fast and easy blade replacement in the job.

#### Features and Benefits

- Professional tube cutter
- For copper, brass, aluminum tube
- Black knight cutting wheel/rollers
- Quick wheel change
- Smooth cuts even on irregular tube
- Smooth Adjustment Mechanism

#### Specifications

1/8"-7/8" O.D (3-22 mm)



BLACK KNIGHT  
HIGH GRADE  
CUTTING BLADE



Part# | SKU: 22-0085

### HCPRO HCTC-3 Tube Cutter

The HCPRO® HC-TC3 Tube Cutter is engineered for precise and cleaner cuts. 2 Black Knight Roller design delivers accurate cuts and prevents walking. For added durability and extend performance, the Black Knight Rollers provide best in class anti-rust protection. With the quick system change, allows fast and easy blade replacement in the job.

#### Features and Benefits

- Built in Deburring Tool
- Professional tube cutter
- For copper, brass, aluminum tube
- Black knight cutting wheel/rollers
- Quick wheel change
- Spare wheel in knob
- Smooth cuts even on irregular tube
- Smooth Adjustment Mechanism

#### Specifications

1/8"-1 1/4" O.D (3-32 mm)

Black Knight high grade cutting blade



BLACK KNIGHT  
HIGH GRADE  
CUTTING BLADE  
\*1 EXTRA BLADE INCLUDED\*



Part# | SKU: 22-0038

## HCPRO HCTC-2 Tube Cutter

The HCPRO® HC-TC2 Mini-Tube Cutter is engineered for precise and cleaner cuts. Rugged cast aluminum body with 2 Black Knight Roller design delivers accurate cuts and prevents walking. For added durability and extend performance, the Black Knight Rollers provide best in class anti-rust protection. With the quick system change, allows fast and easy blade replacement in the job.

### Features and Benefits

- Professional tube cutter
- For copper, brass, aluminum tube
- Black knight cutting wheel/rollers
- Quick wheel change
- Smooth cuts even on irregular tube
- Smooth Adjustment Mechanism

### Specifications

1/8"-1 1/4" O.D (3-28 mm)



BLACK KNIGHT  
HIGH GRADE  
CUTTING BLADE  
"1 EXTRA BLADE INCLUDED"



Part# | SKU: 22-0101



BLACK KNIGHT  
HIGH GRADE  
CUTTING BLADE  
"1 EXTRA BLADE INCLUDED"

## HCPRO HCTC-4 Tube Cutter

The HCPRO® HC-TC4 Tube Cutter is engineered for precise and cleaner cuts. 4 Black Knight Roller design delivers accurate cuts and prevents walking. For added durability and extend performance, the Black Knight Rollers provide best in class anti-rust protection. With the quick system change, allows fast and easy blade replacement in the job.

### Features and Benefits

- Built in Deburring Tool
- Professional tube cutter
- For copper, brass, aluminum tube
- Black knight cutting wheel/rollers
- Quick wheel change
- Spare wheel in knob
- Smooth cuts even on irregular tube
- Smooth Adjustment Mechanism

### Specifications

1-3/4" O.D (3-45 mm)

Black Knight high grade cutting blade

Part# | SKU: 22-0038





## HCPRO Blaze HC-BZT1 Swivel Pro Hand Torch – Swirl Flame

### Features and Benefits

- For use with Propylene (MAPPRO), Propane.
- Efficient high energy swirl flame.
- Up to 1982 °C / 3600 °F
- For soft soldering and brazing of copper, brass and aluminum.
- Stainless steel burner tube.
- 360°swivels.
- Brass regulator.
- Adjustable flame.
- Anti-flare feature.

### Specifications

Item: Hand Torch

Torch Series: BLAZE

Flame Type: Swirl

MAPP Gas Soft Solder: 1/4 in to 6 in

Product Type: Hand Torch

Series: HC-BZT1

Ignition Type: Flame Regulator

Maximum Soft Solder Diameter: 3 in (Propane) ; 6 in (MAP-Pro)

Inlet Thread Direction: Left Hand; Right Hand

Features: Gas Adjustment Knob, 360 Swivels, Regulator Valve Body

Silver Braze Size (MAP-Pro, Maximum): 1 in

Handle Style: Cylinder Grip

Inlet Connection Gender: Female

Inlet Connection Gender: Female

Soft Solder Size (MAP-Pro, Minimum): 1/4 in

Soft Solder Size (MAP-Pro, Maximum): 6 in

Heating Capacity (Propane): 255 BtuH

Ignitor: Regulator On/Off

Gas Service: MAPP/PRO

Fuel: Map-Pro

Propane Gas Soft Solder: 1/8 in to 3 in

For Fuel Type: MAP-Pro

Max Temperature: 1982 °C / 3600 °F

Heating Capacity (MAP-Pro): 433 BtuH

Compatible Fuel Cylinder Size: 14.1 oz, 16 oz

Silver Braze Size (Propane, Maximum): 1 in

Body Material: Brass, Stainless Steel

Includes Cylinder: No

Tip Type: Fixed Tip

Tip Qty: 1

Inlet Connection Type: NPT

Soft Solder Size (Propane, Minimum): 1/8 in

Soft Solder Size (Propane, Maximum): 3 in

Maximum Silver Braze Diameter: 1 in (Propane) ; 1 in (MAP-Pro)

Flame Adjustment: Control Flame



Part# | SKU: 22-0091



## HCPRO Blaze HC-BZT2 Swivel Pro Hand Torch – Swirl Flame

### Features and Benefits

- For use with Propylene (MAPPRO), Propane.
- Efficient high energy swirl flame.
- Up to 1982 °C / 3600 °F
- For soft soldering and brazing of copper, brass and aluminum.
- Stainless steel burner tube.
- 360°swivels.
- Brass regulator.
- Adjustable flame.
- Anti-flare feature.

### Specifications

Item: Hand Torch

Torch Series: BLAZE

Flame Type: Swirl

MAPP Gas Soft Solder: 1/4 in to 6 in

Product Type: Hand Torch

Series: HC-BZT2

Ignition Type: Flame Regulator

Maximum Soft Solder Diameter: 3 in (Propane) ; 6 in (MAP-Pro)

Inlet Thread Direction: Left Hand; Right Hand

Features: Gas Adjustment Knob, 360 Swivels, Regulator Valve Body

Silver Braze Size (MAP-Pro, Maximum): 1 in

Handle Style: Cylinder Grip

Inlet Connection Gender: Female

Inlet Connection Gender: Female

Soft Solder Size (MAP-Pro, Minimum): 1/4 in

Soft Solder Size (MAP-Pro, Maximum): 6 in

Heating Capacity (Propane): 255 BtuH

Ignitor: Regulator On/Off

Gas Service: MAPP/PRO

Fuel: Map-Pro

Propane Gas Soft Solder: 1/8 in to 3 in

For Fuel Type: MAP-Pro

Max Temperature: 1982 °C / 3600 °F

Heating Capacity (MAP-Pro): 433 BtuH

Compatible Fuel Cylinder Size: 14.1 oz, 16 oz

Silver Braze Size (Propane, Maximum): 1 in

Body Material: Brass, Stainless Steel

Includes Cylinder: No

Tip Type: Fixed Tip

Tip Qty: 2

Inlet Connection Type: NPT

Soft Solder Size (Propane, Minimum): 1/8 in

Soft Solder Size (Propane, Maximum): 3 in

Maximum Silver Braze Diameter: 1 in (Propane) ; 1 in (MAP-Pro)

Flame Adjustment: Control Flame



Part# | SKU: 22-0091



**BLACK  
KNIGHT**  
SERIES





## HCPRO Blaze HC-BZT3 Swivel Pro Hand Torch – Swirl Flame

### Features and Benefits

- For use with Propylene (MAPPRO), Propane.
- Efficient high energy swirl flame.
- Up to 1982 °C / 3600 °F
- For soft soldering and brazing of copper, brass and aluminum.
- Stainless steel burner tube.
- 360°swivels.
- Brass regulator.
- Adjustable flame.
- Anti-flare feature.

### Specifications

Item: Hand Torch  
 Torch Series: BLAZE  
 Flame Type: Swirl  
 MAPP Gas Soft Solder: 1/4 in to 6 in  
 Product Type: Hand Torch  
 Series: HC-BZT3  
 Ignition Type: Flame Regulator  
 Maximum Soft Solder Diameter: 3 in (Propane) ; 6 in (MAP-Pro)  
 Inlet Thread Direction: Left Hand; Right Hand  
 Features: Gas Adjustment Knob, 360 Swivels, Regulator Valve Body  
 Silver Braze Size (MAP-Pro, Maximum): 1 in  
 Handle Style: Cylinder Grip  
 Inlet Connection Gender: Female  
 Inlet Connection Gender: Female  
 Soft Solder Size (MAP-Pro, Minimum): 1/4 in  
 Soft Solder Size (MAP-Pro, Maximum): 6 in  
 Heating Capacity (Propane): 255 BtuH  
 Ignitor: Regulator On/Off  
 Gas Service: MAPP/PRO  
 Fuel: Map-Pro  
 Propane Gas Soft Solder: 1/8 in to 3 in  
 For Fuel Type: MAP-Pro  
 Max Temperature: 1982 °C / 3600 °F  
 Heating Capacity (MAP-Pro): 433 BtuH  
 Compatible Fuel Cylinder Size: 14.1 oz, 16 oz  
 Silver Braze Size (Propane, Maximum): 1 in  
 Body Material: Brass, Stainless Steel  
 Includes Cylinder: No  
 Tip Type: Fixed Tip  
 Tip Qty: 3  
 Inlet Connection Type: NPT  
 Soft Solder Size (Propane, Minimum): 1/8 in  
 Soft Solder Size (Propane, Maximum): 3 in  
 Maximum Silver Braze Diameter: 1 in (Propane) ; 1 in (MAP-Pro)  
 Flame Adjustment: Control Flame



Part# | SKU: 22-0091

## HCPRO Blaze HC-BZT5 Self Igniting 5ft Hose Hand Torch

### Features and Benefits

- For use with Propylene (MAPPRO), Propane
- Adjustable Flame Control
- Auto Ignition
- Adjustable Flame
- Anti-Flare Feature
- Stainless Steel Burner Tube
- 5' Hose for Easy Reach
- Brass Regulator
- Cylinder Clip Included

### Specifications

Item: Hand Torch  
Torch Series: BLAZE  
Flame Type: Swirl  
Application: Soft Soldering, Brazing And General Heating  
Includes: 5 ft Hose Torch, Cylinder Clip  
MAPP Btus per Hour: 11,000  
Propane Gas Soft Solder: 1/8 in to 3 in  
Soft Solder Tube Cap.: 1/4 to 4 in  
Propane Temp.: 3,400 Degrees F  
Product Type: Hand Torch  
Features: Pressure Regulated  
Kit Includes: Cylinder Clip, Hose  
Maximum Soft Solder Diameter: 3 in (Propane) ; 4 in (MAP-Pro)  
Soft Solder Size (Propane, Minimum): 1/8 in  
Tip Type: Fixed Tip  
Maximum Flame Temperature (MAP-Pro): 3,600 Degrees F  
Soft Solder Size (MAP-Pro, Maximum): 4 in  
Inlet Connection Gender: Female  
Heating Capacity (MAP-Pro): 433 BtuH  
Inlet Connection Type: NPT  
Includes Cylinder: No  
Ignition Type: Instant On-Off  
Series: HC-BZT5  
Gas Service: MAPP/PRO  
Welding Application: Dismantling, General Brazing, Heating, Soldering  
Type: Hose Torch  
Fuel: Map-Pro  
Propane Btus per Hour: 12,000  
MAPP Gas Soft Solder: 1/4 in to 4 in  
Max Temperature: 1982 °C / 3600 °F  
Characteristics: Trigger Start Ignition, Adjustable Flame, Continuous Run Lock  
Flame Adjustment: Adjustable Flame  
Silver Braze Size (Propane, Maximum): 1 in  
Maximum Silver Braze Diameter: 1 in (Propane) ; 1 in (MAP-Pro)  
Maximum Flame Temperature (Propane): 3,400 Degrees F  
Heating Capacity (Propane): 255 BtuH  
Tip Qty: 1  
For Fuel Type: MAP-Pro  
Body Material: Stainless Steel  
Silver Braze Size (Propane, Maximum): 1 in  
Soft Solder Size (MAP-Pro, Minimum): 1/4 in  
Inlet Thread Direction: Left Hand; Right Hand  
Compatible Fuel Cylinder Size: 14.1 oz, 16 oz



Part# | SKU: 22-0091

Flame  
Regulator



Max  
Temperature



USA Standard  
CGA 600





# BLAZE TRIPLE FLAME TRIGGER TORCH KIT

**FULL METAL AND HEAVY DUTY** - Solid and Ergonomic Metal Handle and Heavy Duty design for Professional Grade Applications, Manufactured with Premium material and under strictest quality controls.

**INTERCHANGABLE TIP DESIGN** - Burner Tip are interchangeable, 3 Tips are included with the kit (Swirl Flame, Shrink Heat Flame, Pencil Fine Flame), make this torch to be an All-Purpose torch to match All your needs from Welding, Brazing, Soldering to Grill, Barbecue and Charcoal Starter. One Torch For ALL!

**FAST & EASY TRIGGER START** - Auto Instant ON/OFF Trigger Start with Safety Lock make it super easy to ignite / extinguish flame with just 1-click, Integrated Adjustable Flame Control Valve allows you to freely adjust flame size to match any of your working needs.

**HIGH INTENSITY AND FUEL EFFICIENCY** - Patent Burner Tubes and Combustion system provide Powerful and more Concentrated Swirl flame, Reach to the Max Temperature 2444°F with much shorter time and fewer fuel, Energy Efficiency at its Best, Plus Bonus Pencil Fine Flame Tube for Precision Soldering and Shrink Heat Tube for Searing and Cooking, Each tube has its optimized BTU and flame shape.

**VERSATILE FUEL OPTIONS** - Compatible with MAP/PRO and Propane.

## IDEAL FOR

- Welding
- Brazing
- Soldering
- Cooking and Grilling
- Charcoal Lighting

## FEATURES

- Full metal body, ergonomic and heavy duty design.
- Interchangeable Anti-Flare Tip Design (Blaze Pencil Tip, Blaze Swirl Tip & Blaze Ultra Flame Heat Tip included).
- Auto-Start / Stop ignition with safety lock.
- High intensity and fuel efficient.
- Versatile fuel options, MAPPRO / Propane.

## Specifications

Item: Hand Torch  
 Flame Type: Swirl  
 MAPP Gas Soft Solder: 1/4 in to 6 in  
 Product Type: Hand Torch  
 Ignition Type: Instant On-Off  
 Maximum Soft Solder Diameter: 3 in (Propane) ; 6 in (MAP-Pro)  
 Inlet Thread Direction: Left Hand; Right Hand  
 Features: Continuous Flame Lock, Pressure Regulate  
 Silver Braze Size (MAP-Pro, Maximum): 1 in  
 Handle Style: Pistol Grip  
 Inlet Connection Gender: Female  
 Soft Solder Size (MAP-Pro, Minimum): 1/4 in  
 Soft Solder Size (MAP-Pro, Maximum): 6 in  
 Heating Capacity (Propane): 255 BtuH  
 Ignitor: Instant On/Off  
 Gas Service: MAPP/PRO  
 Fuel: Map-Pro  
 Propane Gas Soft Solder: 1/8 in to 3 in  
 For Fuel Type: Propane  
 Heating Capacity (MAP-Pro): 433 BtuH  
 Compatible Fuel Cylinder Size: 14.1 oz, 16 oz  
 Silver Braze Size (Propane, Maximum): 1 in  
 Body Material: Cast Aluminum  
 Includes Cylinder: No  
 Tip Type: Fixed Tip  
 Interchangeable Tips: Yes  
 Inlet Connection Type: NPT  
 Soft Solder Size (Propane, Minimum): 1/8 in  
 Soft Solder Size (Propane, Maximum): 3 in  
 Maximum Silver Braze Diameter: 1 in (Propane) ; 1 in (MAP-Pro)  
 Flame Adjustment: Preset Flame



Part# | SKU: 22-0103







## HCPRO HCBK-12DC 12 CFM Sparkless Vacuum Pump

The HCPRO vacuum pumps are designed for HVAC&R and other related applications. The HCBK-12DC also is designed to meeting ignition proof standards. At the heart of this vacuum pump is a high torque inverted controlled BLDC motor and a direct drive vacuum pump mechanism.

### Features and Benefits

- Spark-less technology compatible with any A2L Refrigerants and Hydrocarbons.
- Patented NO MESS Oil Drain system.
- High Torque BLDC motor that utilizes easy slow ramp up start. Eliminates high current draw on start up.
- Integrated Solenoid Valve to prevent the back flow of vacuum pump oil.
- Universal Voltage for 100-240V 50/60Hz operation.
- Ergonomically designed and placed handle for comfort and easy portability.
- 10' integrated power cord to meet safety guidelines for ignition proof design.
- Built in analog vacuum gauge.
- Internally baffled exhaust to minimize oil mist.
- Reinforced base to absorb normal wear and tear.
- Ultimate vacuum down to 15 microns.
- Gas Ballast Valve.
- Oil Sight Glass for easy viewing of oil level and oil contamination (color).



### Specifications

Item: Dual Stage Vacuum Pump

Model: HCBK-12DC

Stages: 2

Ignition Proof: Meets ANSI 12.12.1 Ignition Proof Standards

Dimensions: 15.0 x 6.30 x 11.20 inches (380 x 160 x 285mm)

Weight: 25.4 lbs. (11.5 Kg)

Operating Temperature Range: 0°C (32°F) to 52°C (125°F)

Series: Black Knight

Power Rating: 100-240VAC — 50/60Hz — 560W

Vacuum Gauge: Built-in Analog

Power: 560W

RPM: 2600

Oil Drain System: Patented NO MESS Oil

Ultimate Vacuum: 15 Microns

Oil Capacity: 20.5oz (600ml)

Overload Protection: Motor Thermally Protected

Control System: ON-OFF Power Switch

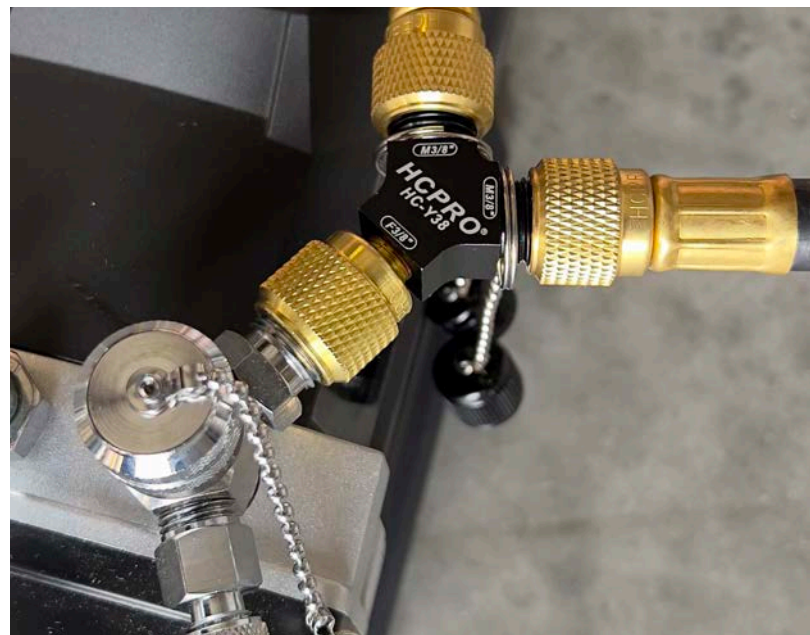
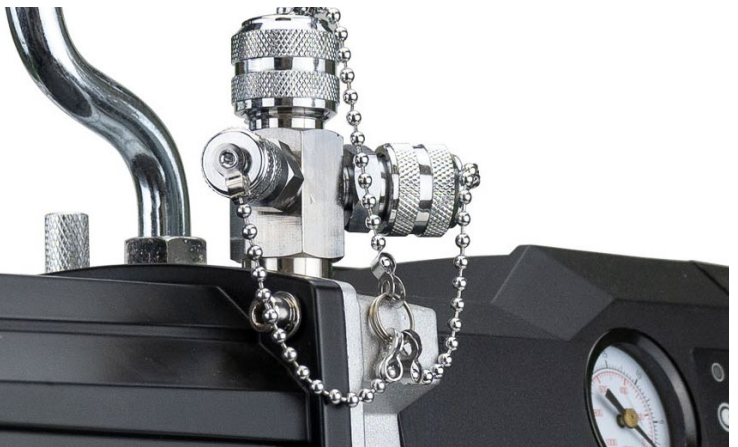
Free Air Displacement: 12 CFM

Intake Fittings: 1/4 SAE , 5/16 SAE and 3/8 SAE w/Internal Solenoid Valve Shutoff

Gas Ballast Valve: Yes



Part# | SKU: 22-0011



## HCPRO HCBK-6D 6 CFM Dual Stage Vacuum Pump

The HCPRO vacuum pumps are designed for HVAC&R and other related applications. The HCBK-6D also is designed with a high velocity air cooled motor and a direct drive vacuum pump mechanism.

### Features and Benefits

- Patented NO MESS Oil Drain system.
- Ergonomically designed and placed handle for comfort and easy portability.
- Internally baffled exhaust to minimize oil mist.
- Reinforced base to absorb normal wear and tear.
- High Velocity air cooled motor to allow for operation at higher ambient temperatures.
- Two Stage models have ultimate vacuums down to 15 microns.
- Gas Ballast valve.
- Oil Sight Glass to easy viewing of oil level and oil contamination.
- Dual Voltage switch for operating at 110-220v 50/60Hz for 2 stage models.
- IEC 320 Inlet port for detachable Electrical Power Cord Set.



### Specifications

Item: Dual Stage Vacuum Pump

Model: HCBK-6D

Stages: 2

Dimensions: 13.7 x 5.5 x 10.7 inches (348 x 140 x 272mm)

Weight: 24.3 lbs. (11.0 Kg)

Operating Temperature Range: 0°C (32°F) to 52°C (125°F)

Series: Black Knight

Power Rating: 115VAC 60Hz / 230VAC 50/60Hz — 390W

Power: 230W

RPM: 3440

Oil Drain System: Patented NO MESS Oil

Ultimate Vacuum: 15 Microns

Oil Capacity: 18.0oz (530mL)

Overload Protection: Motor Thermal Protected

Control System: ON-OFF Power Switch

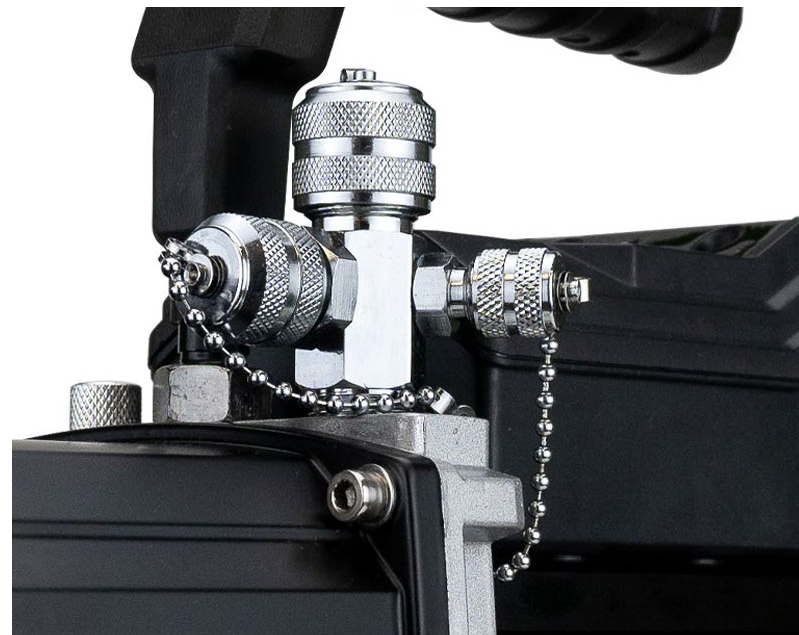
Free Air Displacement: 6 CFM

Intake Fittings: 1/4 SAE, 5/16 SAE and 3/8 SAE

Gas Ballast Valve: Yes



Part# | SKU: 22-0010





## HCPRO HCEC-6S 6 CFM Single Stage Vacuum Pump

The HCPRO vacuum pumps are designed for HVAC&R and other related applications. The HCEC-6S also is designed with a high velocity air cooled motor and a direct drive vacuum pump mechanism.

### Features and Benefits

- Single stage vacuum pump with ultimate vacuum level up to 75 microns.
- Single voltage 115V/60Hz.
- Patented NO MESS Oil Drain system.
- Ergonomically designed handle for comfort and easy portability.
- Internally baffled exhaust to minimize oil mist.
- Reinforced base to absorb normal wear and tear.
- High Velocity air cooled motor to allow operation at higher ambient temperatures.
- Oil Sight Glass to easy viewing of oil level and oil contamination.
- Three inlet port 1/4" FL, 3/8" FL & 1/2" SAE with plastic protective caps.
- IEC 320 Inlet port for detachable Electrical Power Cord Set.



### Specifications

Item: Single Stage Vacuum Pump

Model: HCEC-6S

Stages: 1

Dimensions: 12.4 x 4.8 x 10.2 inches ( 315 x 122 x 258mm)

Weight: 16.5 lbs. (7.5 Kg)

Operating Temperature Range: 0°C (32°F) to 52°C (125°F)

Series: ECO

Power Rating: 115VAC 60Hz

Power: 230W

RPM: 3440

Oil Drain System: Patented NO MESS Oil

Ultimate Vacuum: 75 Microns

Oil Capacity: 13.9oz (410mL)

Overload Protection: Motor Thermal Protected

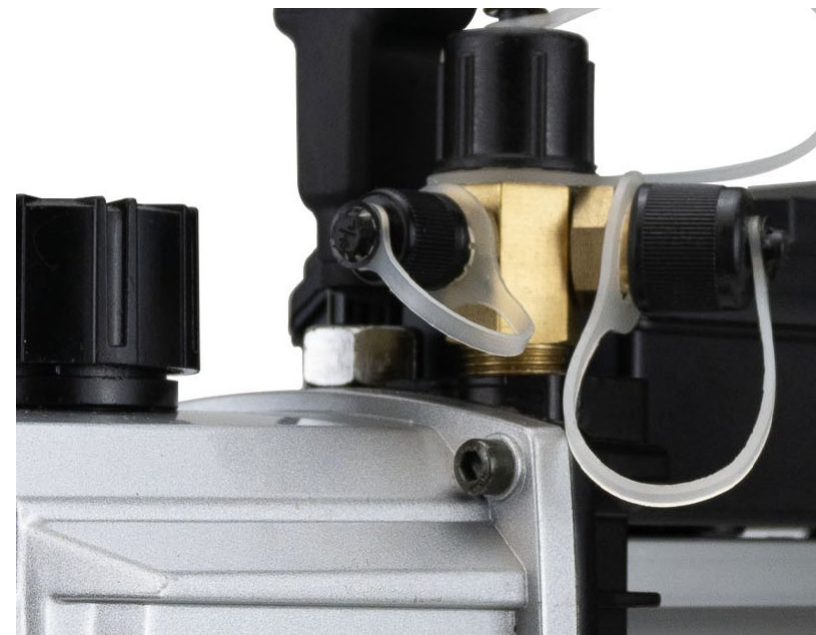
Control System: ON-OFF Power Switch

Free Air Displacement: 6 CFM

Intake Fittings: 1/4 SAE, 5/16 SAE and 3/8 SAE



Part# | SKU: 22-0009



## HCPRO HCRCY-100 Refrigerant Recovery Cylinder

Refrigerant Recovery Cylinder, 30 Lbs

### Features and Benefits

- Powder coated cylinder for high gloss, durable finish
- Y-valve for liquid/vapor
- 3/4" NPT opening accepts 80% fill float switch shut-off device
- Collar design for ease of handling
- Reusable and conforms to DOT-4BA400 specifications and ARI guidelines
- Pre-charged cylinder provides a clean, dry interior
- Storage and transport of recovered refrigerant gases
- AUS Approved and TC Canadian Approved

### Specifications

Size (w x h): 11.25" x 31.81"  
Tare Weight: 50.5 lb  
Standard Specification: DOT-4BW400  
Nominal Water Capacity: >92.5 lb / 41.9 L  
Service Pressure: 400 PSI / 2.7 MPa  
Tank Test Pressure: 800 PSI / 5.5 MPa  
Relief Valve Pressure: 600 PSI / 4.1 MPa  
Air Tightness Pressure: >87 PSI / 0.6 MPa  
Body Material: HP325

### DOT-APPROVED RECOVERY CYLINDER



Part# | SKU: 22-0081

## HCPRO HCRCY-100 Refrigerant Recovery Cylinder

Refrigerant Recovery Cylinder, 30 Lbs

### Features and Benefits

- Powder coated cylinder for high gloss, durable finish
- Y-valve for liquid/vapor
- 3/4" NPT opening accepts 80% fill float switch shut-off device
- Collar design for ease of handling
- Reusable and conforms to DOT-4BA400 specifications and ARI guidelines
- Pre-charged cylinder provides a clean, dry interior
- Storage and transport of recovered refrigerant gases
- AUS Approved and TC Canadian Approved

### Specifications

Size (w x h): 12.25" x 18.78"  
Tare Weight: 28.71 lb  
Standard Specification: DOT-4BA400  
Nominal Water Capacity: >47.7 lb / 21.6 L  
Service Pressure: 400 PSI / 2.7 MPa  
Tank Test Pressure: 800 PSI / 5.5 MPa  
Relief Valve Pressure: 600 PSI / 4.1 MPa  
Air Tightness Pressure: 400 PSI / 2.7 MPa  
Body Material: HP325 or HP345

### DOT-APPROVED RECOVERY CYLINDER



Part# | SKU: 22-0082

## HCPRO HCRCY-100 Refrigerant Recovery Cylinder

Refrigerant Recovery Cylinder, 30 Lbs

### Features and Benefits

- Powder coated cylinder for high gloss, durable finish
- Y-valve for liquid/vapor
- 3/4" NPT opening accepts 80% fill float switch shut-off device
- Collar design for ease of handling
- Reusable and conforms to DOT-4BA400 specifications and ARI guidelines
- Pre-charged cylinder provides a clean, dry interior
- Storage and transport of recovered refrigerant gases
- AUS Approved and TC Canadian Approved

### Specifications

Size (w x h): 9.125" x 17.52"  
Tare Weight: 17.99 lb  
Standard Specification: DOT-4BA400  
Nominal Water Capacity: >26.2 lb / 11.9 L  
Service Pressure: 400 PSI / 2.7 MPa  
Tank Test Pressure: 800 PSI / 5.5 MPa  
Relief Valve Pressure: 600 PSI / 4.1 MPa  
Air Tightness Pressure: 400 PSI / 2.7 MPa  
Body Material: HP295

### DOT-APPROVED RECOVERY CYLINDER



Part# | SKU: 22-0083





[www.hcproproducts.com](http://www.hcproproducts.com)