

Reliance with Heart
信頼の心を極める

Rwith H Corporation



Quality with Heart

Reliance with Heart

2023 OEM&ODM PRODUCT CATALOG



Rwith H Cororation



Osaka branch office

〒540-0012

NS21 Building 9F ,3-1-18,Tanimachi, Chooku, Osaka,
540-0012, Japan

Guangzhou Plant

〒510800

Factory:6 Floor, No.4, Dayang Rd, Tanbu Town, Huadou
District Guangzhou,Guangdong, China



Made In Japan

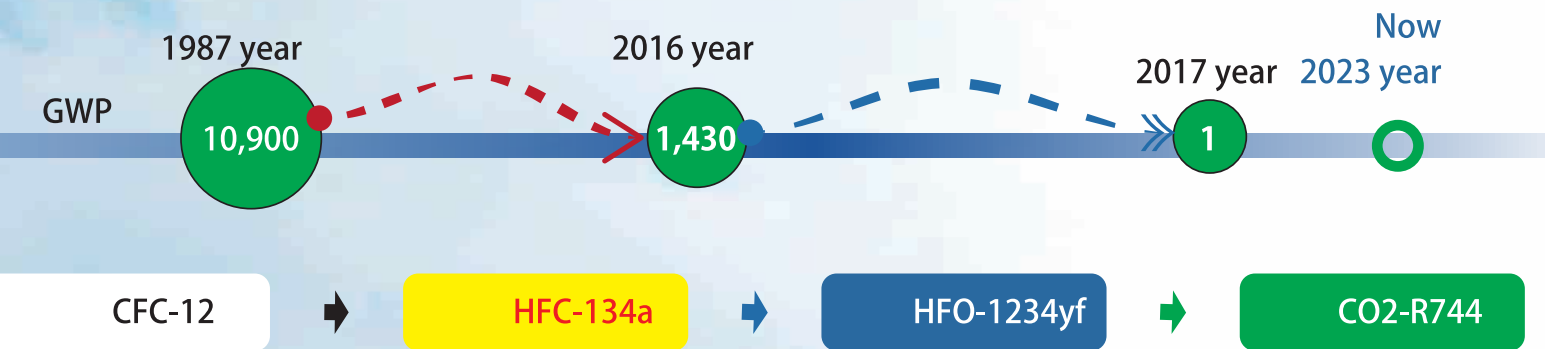


RH MO Compressor Oil

The future of the world is in our hands

カーエアコンにおいて **世界中 HFO 冷媒 1234yf を採用、**
引き続き、CO2 に挑戦中

■CFC ⇒ HFC ⇒ HFO ⇒ CO2 We continue to take on new challenges.



Get to Know Us

R with H Corporation is as a manufacturer specializing in gauge manifold sets like R1234yf, R134a, CO2, R32 etc. and works to solve our customer's problems swiftly through our activities that are closely associated with customer site. We aim to provide our products and solutions with high added value.

Design, manufacturing, assembly and shipping are done at our factory located in Guangzhou, China. More than 90% of the parts used are produced in-house and less than 10% are outsourced to exacting specifications and a strict quality control.

Our starting point is to continue contributing to a better society with the spirit of "serving our stakeholders with the highest quality and best service", and "continue to cultivate the softening of the heart while living with people and time together and to realize the true trustworthy". We will continue to take on challenges with sincerity to realize our founding aspiration.

CFC-12 Naphtenic base oils



- Recommended by most major equipment manufacturers and refined from especially selected naphtenic base oils. Highly stable, essentially wax free, thus providing excellent low temperature properties and assuring long trouble-free life. RH-MO oils can be used in virtually any installation, regardless of compressor or evaporation temperature and are miscible with CFC-12 refrigerant.
 - RH-MO oils can be applied in commercial as well as in residential refrigeration and air conditioning systems.
- Compressor oils in general have a limited shelf live.
 - The shelf life for RH oils is 24 MONTHS

RH-06250

oem
GRADE

RH-06250-F

Items	Unit/Color	Standard Value	RH-06250	RH-06250-F
		ASTM	MO oil	MO oil with Dye
ISO Viscosity Grade	VG	-	-	-
Appearance	-	D1500	L0.5	>L2.0
Relative Density	At 15°C	D1298	0.91	0.89
	At 40°C	D445	29.5	29.1
	At 100°C	D445	4.31	4.25
Viscosity Index	-	D2270	217	-
Pour Point	°C	D97C	-45	-40
Flash Point	COC °C	D92	178	>88
Moisture Content	ppm	RH's management standard value	≤800	≤500
Contains	ml	-	250	250
Refrigerant Type			R12	
Compressor Type			Reciprocating Swash Plate	
Equivalent Oil Type			ND-6、ND-7、SP-10、Suniso 3 GS & 4 GS	
Regulatory Information		UN Identification No	-	-



HFO-1234YF • HFC-134A Electric Driven Compressors ND11

HFO-1234YF • HFC-134A Belt Driven Type ND12



Compressor Oil lubricates the compressor parts for proper functioning.

RH-POE is a so called Polyol Ester Oil. RH-POE is used in the electric driven scroll compressors, because POE oils have a very high isolation resistance. POE oil is less hygroscopic, compared with PAG oils.

- Designed for all imported and domestic vehicle A/C systems, high-voltage hybrid applications / hybrid vehicles with Denso compressors using HFO-1234yf and HFC-134a
- Extends compressor life and the life of the A/C system.
- Protects A/C systems, Superior Rust Prevention.
- Good Heat Stability and Resistance to Carbonization and good Moisture Separation.

1. Compressor oils in general have a limited shelf live.
2. The shelf life for RH oils is 24 MONTHS



Compressor Oil lubricates the compressor parts for proper functioning.

The use of incorrect compressor oils, such as universal oils or oil mixtures, inevitably leads to seizure and damage. This is because universal oils, often preferred by garages, are PAO-oils or mineral oils with a different viscosity to that of synthetic PAG-oils. PAO-oils do not mix well with PAG-oils and with refrigerant R134a or R1234yf, leading to poor lubrication and increased wear.

- Designed for all imported and domestic vehicle A/C systems using HFC-134a.
- Improves wear protection, superior thermal and oxidation stability.
- Extends compressor life and the life of the A/C system.
- PAG with fluorescent dye for refrigerant leak detection.

1. Compressor oils in general have a limited shelf live.
2. The shelf life for RH oils is 24 MONTHS



RH-11250



RH-11250-F

Items	Unit/Color	Standard Value	RH-11250	RH-11250F
		ASTM	POE oil	POE oil with Dye
ISO Viscosity Grade	VG	-	-	-
Appearance	-	D1500	L0.5	>L2.0
Relative Density	At 15°C	g/cm ³	D1298	0.98
	At 40°C	cSt	D445	84.7
	At 100°C		D445	9.63
Viscosity Index	-	D2270	217	90
Pour Point	°C	D97C	-45	-35
Flash Point	COC °C	D92	> 200	207
Moisture Content	ppm	RH's management standard value	≤ 800	≤ 800
Contains	ml	-	250	250
Refrigerant Type		R134A • R1234YF		
Compressor Type		Electric Compressor-driven Type		
Equivalent Oil Type		ND-11、ND-14、SE-10Y、RB-32 & 68、RB-100EV		
Regulatory Information	UN Identification No		UN 3082	UN 3082
			Packing Group: III	Packing Group: III

RH-12250



RH-12250-F

Items	Unit/Color	Standard Value	RH-08250	RH-08250-F
		ASTM	PAG oil	PAG oil with Dye
ISO Viscosity Grade	VG	-	-	-
Appearance	-	D1500	L0.5	>L2.0
Relative Density	At 15°C	g/cm ³	D1298	0.99
	At 40°C	cSt	D445	42.9
	At 100°C		D445	9.51
Viscosity Index	-	D2270	217	210
Pour Point	°C	D97C	-45	-40
Flash Point	COC °C	D92	204	> 152
Moisture Content	ppm	RH's management standard value	≤ 1800	≤ 1800
Contains	ml	-	250	250
Refrigerant Type		R134A		
Compressor Type		Belt Driven Type		
Equivalent Oil Type		ND-8、DN-PS、VG46-PAG		
Regulatory Information	UN Identification No		.UN 3082	UN 3082
			Packing Group: III	Packing Group: III

RH R134a Gauge Manifold-OEM

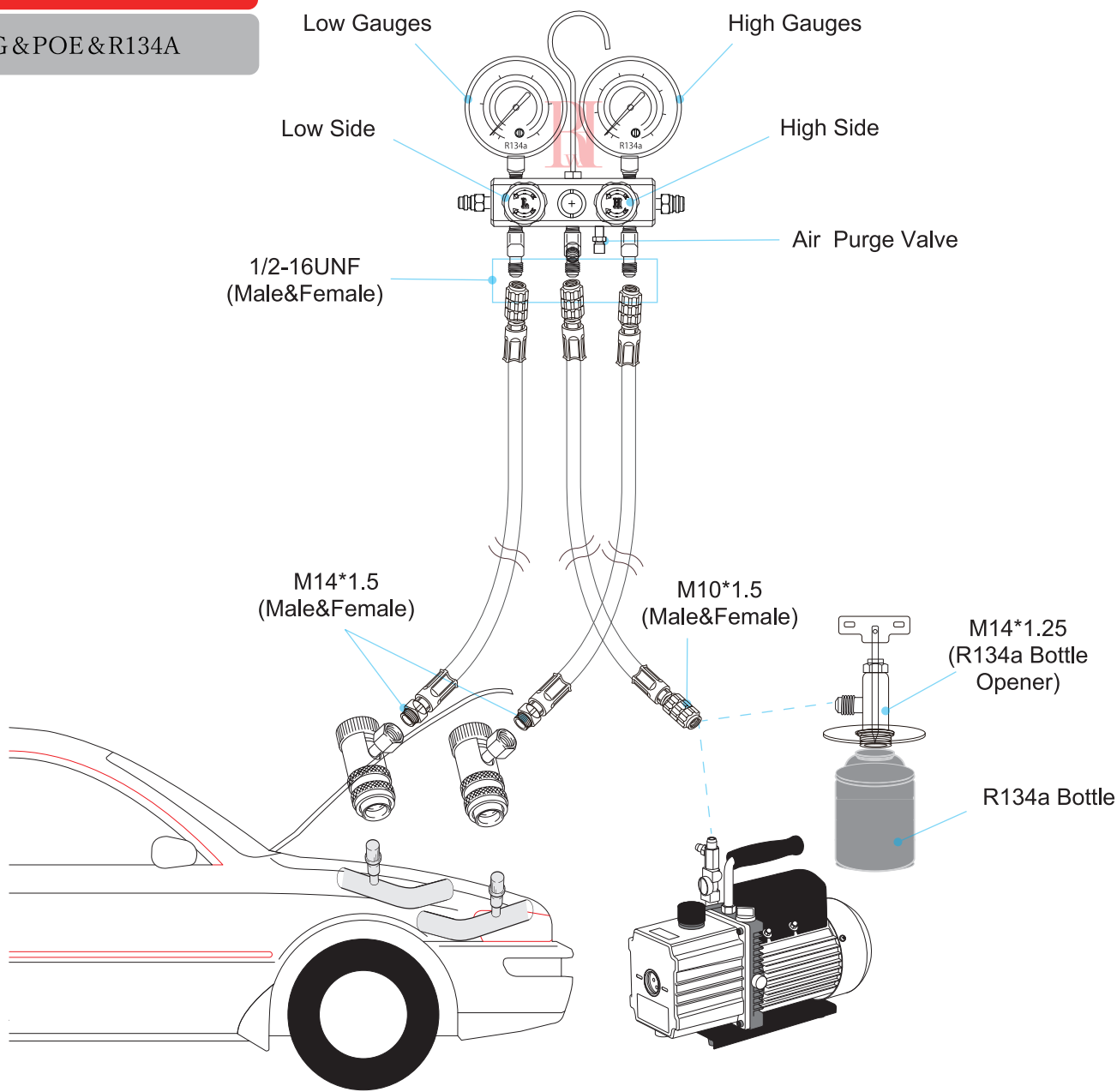


RH R1234yf Gauge Manifold-OEM

R with H will create new value by integrating our distinctive and leading-edge technologies as well as turning out proprietary technologies to continue providing top-quality products and services that cultivate customer trust and satisfaction. We will do our best to accommodate all of requests as much as possible.

RH-GM40A

PAG & POE & R134A

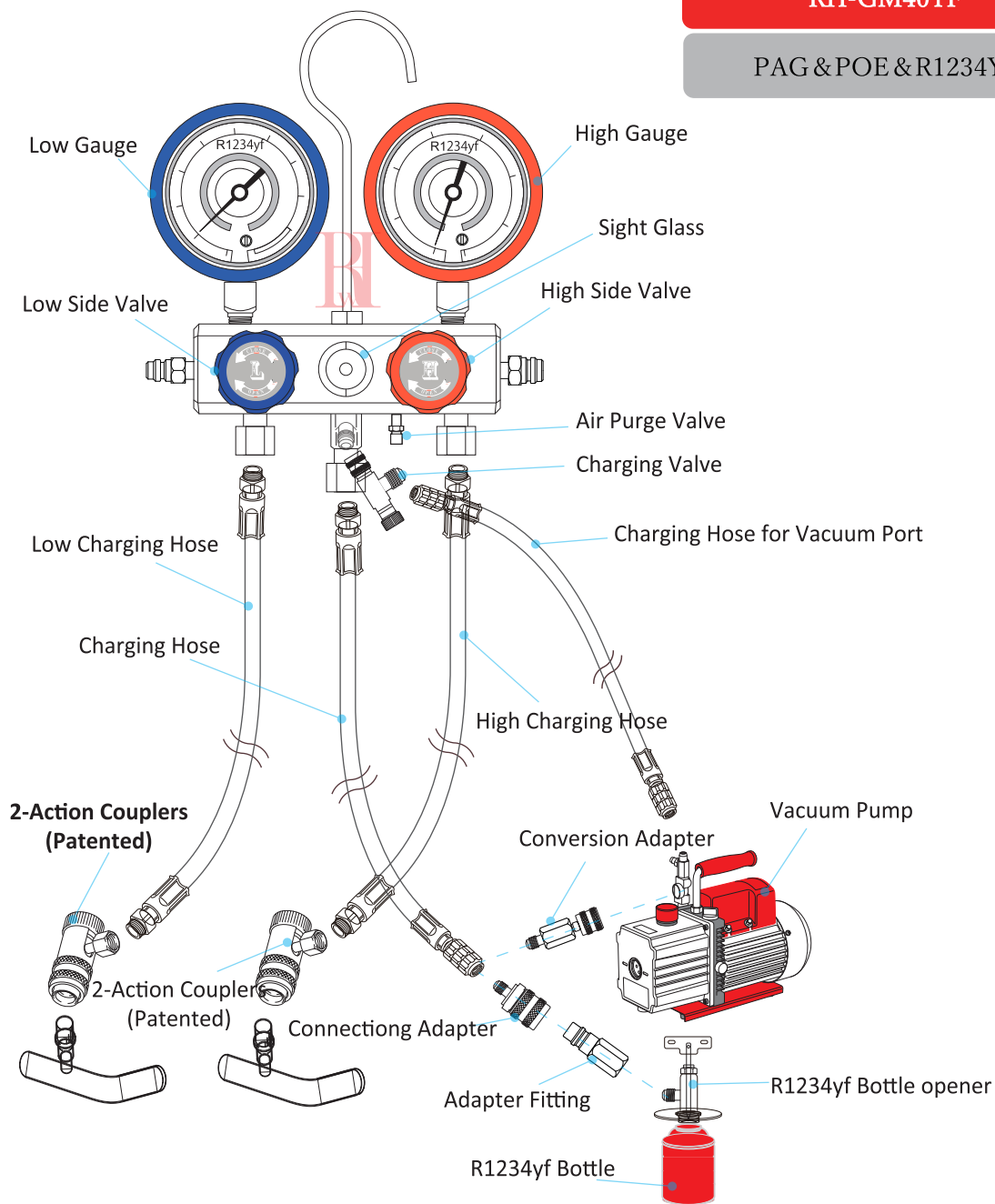


1. Dial-style Low&High Couplers enable the easy connection of Low or High pressure sides.
2. R134a main body color is GRAY, there is a feature that is easy to harmonize with the service can and imagine it.
3. A additional connection port for the vacuum pump is specially designed, using the charging hoses with charging valve included to connect the vacuum pump port and also be able to connect the charging port with charging hose, we pursues usability for users.
4. Coming with identification label for PAG&POE(If required) which it can be used separately for electric compressor system.
5. Coming with a carrying case for on-site repair.

1. 2-Action Low&High Couplers enable the easy connection of Low or High pressure sides. ※2-Action Low&High Couplers are Patented product.
2. Preventing refrigerant leaks when connected to SAE R1234yf service fittings high&low side like Alternative 2
3. R1234yf main body color is RED, there is a feature that is easy to harmonize with the service can and imagine it.
4. A additional connection port for the vacuum pump is specially designed, using the charging hoses with charging valve included to connect the vacuum pump port and also be able to connect the charging port with charging hose, we pursues usability for users.
5. Coming with identification label for PAG&POE(If required) which it can be used separately for electric compressor system.
6. Coming with a carrying case for on-site repair.

RH-GM40YF

PAG & POE & R1234YF



R with H will create new value by integrating our distinctive and leading-edge technologies as well as turning out proprietary technologies to continue providing top-quality products and services that cultivate customer trust and satisfaction. We will do our best to accommodate all of requests as much as possible.



RH-30C30-YF

2-Action Coupler(Low Side)
Length: 45cm

R1234yf Bottle Opener

For Vacuum Pump Air purge valve

Clear Hose

Adapter
M10x1.5
For Vacuum Pump Air purge valve

RH-30YF3

RH-GM40-YF7

R1234yf Bottle Opener
Male: 7/16-20UNF-Left
Female: M14x1.25-Left

M10x1.5

M12x1.5
Length: 30cm

7/16-20UN F-Left

M12x1.5- Right
R1234yf L-Plug

RH-GM30-YF

M12x1.5- Right

R1234yf L-Plug

7/16-20UNF (Right)

RH-33YF1

W24-16 (Left)

RH-33YF2

7/16-20UNF (Right)

1/2acme16L (Left)

For R1234yf Cylinder

Cylinder Adapter

For R1234yf Cylinder

For R134a Cylinder

7/16-20UNF Left=Right

7/16-20UNF (Left)

M10x1.5 (Right)

W24-16 (Right)

RH-GM40-YF12

RH-33A1

Injection kits for aerosol cans

Adapter
M10x1.5
For Vacuum Pump Air purge valve

RH-30YF3

RH-GM40-YF7

R1234yf Bottle Opener
Male: 7/16-20UNF-Left
Female: M14x1.25-Left

M10x1.5

Length: 30cm

M12x1.5

7/16-20UN F-Left

Clear Hose

RH-30YF4-C15

RH-GM40-YF5

2-Action Coupler

R-1234YF

Charging Hoses (Yellow,Blue)

Yellow Hose
Blue Hose
Red Hose

2-Action Coupler(Low Side)

R1234yf Bottle Opener

For Vacuum Pump Air purge valve

Length: 45cm

**RH-31Y45-YF
RH-31B45-YF
RH-31R45-YF**

R-1234YF

Conversion adapter

RH-33YFA1

RH-GM40-YF9

7/16-20UNF (Left)

R1234yf L-Plug

For Charging hose

For Bottle opener

R134a L-Plug

R1234yf L-Plug

7/16-20UNF

RH-33YFA-1

RH-GM40-YF12

R1234yf L-Port

7/16-20UNF (Left)

R-1234YF

R1234yf H-Plug

M12x1.5- Right

RH-GM40-YF6

Clear Hose
Length: 45cm

M10x1.5

7/16-20UNF

Adapter
M10x1.5
For Air purge valve

RH-30A4-C45

RH-30A3

7/16-20UNF

R134a L-Plug

Dial-style Coupler
RH-30A1B

RH-GM40-A7

R134a Bottle Opener
Female: M14x1.25

R-134A

Charging Hoses (Yellow,Blue)

2-Action Coupler (Low Side)

For Air purge valve

R134a Bottle Opener

Yellow Hose
Blue Hose
Red Hose

Length: 45cm

**RH-31Y45-A
RH-31B45-A
RH-31R45-A**

R-134A

R-1234YF

Bottle Opener

For Air purge valve

Charging Valve

79.3

43.85

RH-GM40-A7H

R134a Bottle Opener

Dial-style

Length: 15cm

M10x1.5

Female: M14x1.25

Injection kits for aerosol cans

Length: 60cm

Clear Hose

For Air purge valve

R134a Bottle Opener

Dial-style Coupler (Low Side)

RH-30C60-A

R-134A

Charging Hoses (Yellow,Blue)

Yellow Hose
Blue Hose
Red Hose

7/16-20UNF

M10x1.5

Dial-style

7/16-20UNF

R134a L-Plug

2-Action Coupler(Low Side)

RH-31A1-B

RH-GM40-A7

R134a Bottle Opener

M10x1.5

Female: M14x1.25

R-134A

Smart injector with can opener valve

For Air purge valve

Charging Valve

Length: 8cm

Female: M14x1.25

Bottle Opener

R1234yf L-Plug

R134a L-Plug

**RH-32AB
RH-32YFR**

R-134A

general - purpose tool

RH-33AT2

RH-GM40-YF11

M10x1.5

7/16-20UNF

7/16-20UNF

Service Can Valve T-type Joint for 2 Cans

RH-GM40A-6SL

Straight Coupler (Low Side)

7/16-20UNF

R134a L-Plug

Straight Coupler (High Side)

RH-GM40A-6SH

7/16-20UNF

R134a H-Plug

The original purpose of developing this AC tool cabinet was to train professional mechanics who diagnose, inspect, disassemble, assemble, repair, and adjust car air conditioners. Vocational school, Public vocational school, Technical Training Center, Service training institute training, Filling line factory, Maintenance factory, etc.

It is possible to accept from production, design and design production of original products or your request.



R134a Gauge Manifold Kit

- R134a manifold body
- Charging hose (red/blue/yellow)
- High/low pressure quick couplers
- Can opener valve
- Valve core remover



R1234yf Gauge Manifold Kit

- R1234yf manifold body
- Charging hose (red/blue/yellow)
- High/low pressure quick couplers
- Valve core remover



R410A Gauge Manifold Kit

- R410a manifold body
- Charging hose (red/blue/yellow)
- Charging Valve 7/16-20 UNF
- Valve core remover

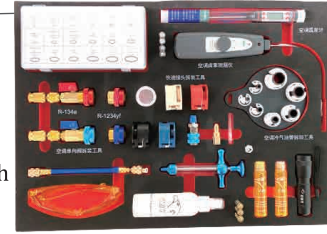


Endoscope with car air conditioner washing function

- Endoscope with car air conditioner washing function
This is an endoscope equipped with a cleaning function that allows you to check or remove dirt in invisible places. It is a special endoscope that combines an endoscope and a cleaning function, and can also be used as a cleaning machine by connecting it to an air compressor.
- Check the internal conditions of the evaporator, piping, etc. through the monitor.

AC Fluorescent leak detection

- Fluorescent leak detection kit
- UV lamp set Valve core remover (R1234yf/R134a high and low pressure)
- Digital thermometer
- Halogen leak detector (checks for any halogen-based refrigerant leaks)
- Car air conditioner plumbing pipe removal tool set
- O-ring 18 types set Total 265 pieces



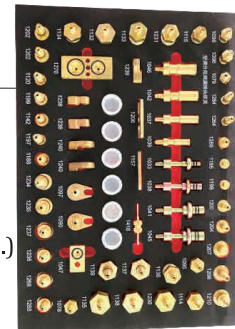
Adapter for AC leak detection

- Japanese cars (Toyota, Honda, Nissan, etc.)



Adapter for AC leak detection

- European cars (BMW, Mercedes-Benz, etc.)
- American car (GM, Ford, etc.)

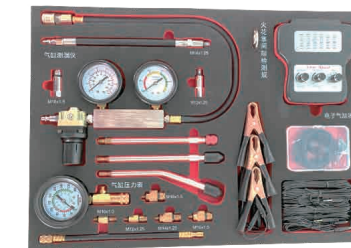


PN : RH-CBT50-7



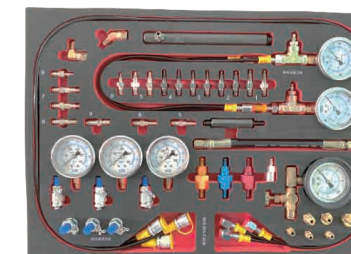
Transmission/Engine/Cooling

- Automatic transmission oil pressure gauge
- Engine oil pressure gauge
- LLC Vacuum Charger



Inspection and maintenance equipment

- Engine compression tester
- Cylinder leak tester
- Electronic cylinder stethoscope
- Spark plug gap gauge



Inspection and maintenance equipment

- Hydraulic oil pressure tester
- Brake hydraulic tester
- Power steering oil pressure measurement testerscope
- Spark plug gap gauge



Inspection and maintenance equipment

- Spark plug tester
- Brake fluid tester
- Digital multimeter infrared thermometer

- Industrial endoscope
- Battery checker
- Paint thickness gauge
- Play keypad thickness gauge

Engine fuel injection pump tester

- Comes with adapters, hoses & fittings, suitable for most cars and trucks and fuel injection systems.
- 3.5" versatile fuel pressure gauge kit features a special expanded 1lb. increment dual dial for accurate reading, with a scale of 0-140 PSI /0-10 bar scale.
- Designed with a relief valve and 6 feet of tubing to relieve the pressure and fuel safely.



Inspection and maintenance equipment



- Air shock absorber leak detector
- Exhaust back pressure tester
- Manual brake bleeder & vacuum pump tester
- Engine vacuum pressure tester



PN : RH-CBT50-8

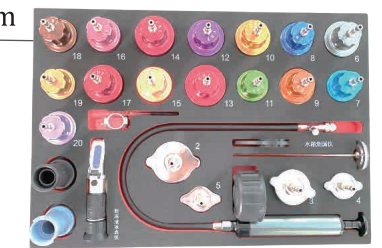
Maintenance tools

- Oil contamination checker
- Oil pipe pliers
- Insulated long pliers
- Pen type electroscopic tester
- LED light
- Wrench
- Ring type clamp plie



- Minus driver
- Phillips screwdriver
- Socket (14/16/21)
- Torque wrench
- Monkey wrench

Cooling system



- Radiator leak tester
- Antifreeze tester (measurement of freezing temperature of cooling water (LLC))