



JB INDUSTRIES

JUST BETTER SINCE 1967 | HVAC TOOLS, VALVES AND FITTINGS



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PRODUCT CATALOG



For the year 2020, one of JB's most important goals is to increase our product portfolio. The recent announcement of the acquisition of C&D Valve in Oklahoma City, OK, is a step to offering a more expansive line of premier HVAC/R products. In addition to this acquisition, JB continues to enhance and expand our product offering with new, innovative tools and equipment that serve the HVAC/R industry. Some of the new 2020 product line additions include battery powered pumps, redesigned hoses, and Bluetooth capable manifolds. The goal is to offer tools that not only help technicians be more efficient but respond to changing requirements that are encountered on the job-site. New product development input continues to come from customers, sales representatives, distributors, technicians, and employees to ensure that our product development efforts are in lock-step with our customer's needs.

Our plan for the upcoming year also includes continuous investment in the JB Aurora, IL manufacturing facility and JB's most important asset its people. Throughout the years, we have been fortunate when adding great people to the JB team. We continue to attract highly talented individuals that support our customers and bring JB valuable field and industry experience. You will see that several employees are being featured in this year's catalog.

Please watch out for the launch of JB's new digital platform. This roll-out will include a new more interactive website, additional product and training videos, more prominent social media presence, and more collateral. We are developing a program to be announced in the near future to strengthen our partnerships with our most loyal customers.

Of course, none of what we do at JB has any meaning without our loyal distributors and the customers they serve. We are indebted to them all for their support. Honesty, flexibility, fairness, integrity, and consistency represent JB's approach to customer relationships. These core values have served JB well for 50 plus years.

All of these investments will make 2020 a very exciting year and the goal is always to ensure that JB's reputation as a high-quality Made in America manufacturer never changes.

Thank you for a great 2019, and all the best to you for a healthy and prosperous 2020.

Jeff Cherif
President

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“I like that JB is a smaller company with a comfortable atmosphere—feels like family. I don’t have a favorite product because I’m proud of all the products we sell!”

— Patti Berke, Customer Service



PLATINUM® FLEX

Battery Powered Vacuum Pump

EXTRA FREEDOM. EXTRA POWER. EXTRA CAPACITY.

Work better with the American made PLATINUM® FLEX battery or AC powered vacuum pump. Top of the line for both quality and durability—pump of choice for HVAC/R technicians.

Compatible with major brand 18v/20v Lithium-ion Battery (not included)

3 CFM; 1725 RPM

5 CFM; 1725 RPM

Low Battery Warning

Easy access 1/4", 3/8" or 1/2" intake tee

15 micron vacuum rating

Gas ballast and blank-off isolation valve

Metal construction with finned aluminum heavy-duty housing, brass fittings, and stainless steel valving

Ergonomic 1/2" NPT exhaust handle with lift ring

Large, easy-to-see oil level sight glass with easy access oil fill located on cover

O-ring sealed oil drain valve to prevent leaks and tethered safety cap to prevent oil spills

Internal check valve prevents oil backflow during power failure

Field repairable

1 year OTC warranty

NEW! **MADE IN USA**



Compatible with major brand 18v/20v Lithium-ion Battery (purchased separately)

“Working with JB ownership and employees is a pleasure. My favorite product is the quality built, highly functional and easily maintained PLATINUM Vacuum Pump.”

– George Kief, Western U.S. Manufacturer’s Representative

PLATINUM® BATTERY POWERED VACUUM PUMPS		
	DV-85BP	DV-142BP
CFM	3 CFM (85 l/m)	5 CFM (142 l/m)
MOTOR	1/2 HP, 1725 RPM	1/2 HP, 1725 RPM
VOLTAGE	18v/20v	18v/20v
INTAKE PORT	1/2" x 1/4" x 3/8"	1/2" x 1/4" x 3/8"
OIL CAPACITY	26oz (798cc)	21oz (680cc)
110V-18V AC ADAPTER	Included	Included

PLATINUM®

Best Vacuum Pump in the Industry

- 2-Stage direct drive with 1/2 HP capacitor start and thermal overload protection
- Available in 1.5, 3, 5, 7 and 10 CFM
- Easy access 1/4", 3/8" or 1/2" intake tee
- 15 micron vacuum rating
- Gas ballast and blank-off isolation valve
- All metal construction with finned aluminum heavy-duty housing, brass fittings, stainless steel valving and splash guard
- Ergonomic 1/2" NPT break-resistant exhaust handle with lift ring
- Large, easy-to-see oil level sight glass with easy access oil fill on cover
- O-ring sealed oil drain valve to prevent leaks and tethered safety cap to prevent oil spills
- Internal check valve prevents oil backflow during power failure
- 100% field repairable; see page 74 for repair parts
- Available in 115v or dual voltage motor with switch (115v/230v)
- Removable, interchangeable power cord on dual voltage motors
- 2 year OTC warranty

Spark-Proof Pump

Spark-proof, dual voltage motor with switch and removable, interchangeable power cord for use on Class A1, A2L, A2 and A3 refrigeration systems, **DV-200N-250SP**

International Dual Voltage Pump

PLATINUM® -250 and -250SP Series models feature a dual voltage motor with switch and removable, interchangeable power cord. Specify US, EU, UK, AU or BR plug type.



US Cord
PR-110 (110v)
PR-230 (230v)

EU Cord
PR-136

UK Cord
PR-236

AU Cord
PR-336

BR Cord
PR-436



DV-200N



Sliding switch for 115v or 230v on dual voltage models



Sliding switch for 115v or 230v on spark-proof models



DV-200N-250SP
Spark-Proof



PLATINUM® PUMPS						
	DV-42N	DV-85N	DV-142N	DV-200N	DV-285N	
CFM	1.5 CFM (42 l/m)	3 CFM (85 l/m)	5 CFM (142 l/m)	7 CFM (200 l/m)	10 CFM (285 l/m)	
MOTOR	1/2 HP, 1725 RPM	1/2 HP, 1725 RPM	1/2 HP, 1725 RPM	1/2 HP, 1725 RPM	1/2 HP, 1725 RPM	
VOLTAGE	115v/60Hz	115v/60Hz	115v/60Hz	115v/60Hz	115v/60Hz	
INTAKE PORT	1/4"	1/4" x 3/8"	1/2" x 1/4" x 3/8"	1/2" x 1/4" x 3/8"	1/2" x 1/4" x 3/8"	
OIL CAPACITY	26oz (798cc)	26oz (798cc)	21oz (680cc)	21oz (680cc)	26oz (798cc)	
SHIPPING DIMS	17-5/8" x 9-1/8" x 14"	17-5/8" x 9-1/8" x 14"	17-5/8" x 9-1/8" x 14"	17-5/8" x 9-1/8" x 14"	17-5/8" x 9-1/8" x 14"	
WEIGHT	29lbs (13.2kg)	30lbs (13.6kg)	32lbs (14.5kg)	32lbs (14.5kg)	34lbs (15.4kg)	
PLATINUM® DUAL VOLTAGE PUMPS						
	DV-42N-250	DV-85N-250	DV-142N-250	DV-200N-250	DV-200N-250SP SPARK-PROOF	DV-285N-250
MOTOR	1/2 HP, 1725/1425 RPM	1/2 HP, 1725/1425 RPM	1/2 HP, 1725/1425 RPM	1/2 HP, 1725/1425 RPM	1/2 HP, 1725/1425 RPM	1/2 HP, 1725/1425 RPM
VOLTAGE	115v/60Hz, 230v/50Hz	115v/60Hz, 230v/50Hz	115v/60Hz, 230v/50Hz	115v/60Hz, 230v/50Hz	115v/60Hz, 230v/50Hz	115v/60Hz, 230v/50Hz
PLUG OPTIONS*	US/EU/UK/AU/BR	US/EU/UK/AU/BR	US/EU/UK/AU/BR	US/EU/UK/AU/BR	US/EU/UK/AU/BR	US/EU/UK/AU/BR

*Specify plug type when ordering; -250 for US, -250EU for EU, -250UK for UK.

ELIMINATOR®

USA Made Economy Vacuum Pump

- 2-Stage direct drive with 1/2 HP 1725 RPM motor
- Available in 3, 4 and 6 CFM
- Easy access 1/4" or 3/8" intake tee
- 25 micron vacuum rating
- All metal construction with burnished cover, brass fittings and stainless steel valving
- Ergonomic 1/2" break-resistant exhaust handle
- Large, easy-to-see oil level sight glass with easy access oil fill on cover
- Tethered safety cap to prevent oil spills
- 100% field repairable; see page 76 for repair parts
- Available in 115v or dual voltage motor with switch (115v/230v)
- Removable, interchangeable power cord on dual voltage motors
- 2 year OTC warranty

Spark-Proof Pump

Spark-proof, dual voltage motor with switch and removable, interchangeable power cord for use on Class A1, A2L, A2 and A3 refrigeration systems, **DV-6E-250SP**

International Dual Voltage Pump

ELIMINATOR® -250 and -250SP Series models feature a dual voltage motor with switch and removable, interchangeable power cord. Specify US, EU, UK, AU or BR plug type.



US Cord
PR-110 (110v)
PR-230 (230v)

EU Cord
PR-136

UK Cord
PR-236

AU Cord
PR-336

BR Cord
PR-436



DV-6E



Sliding switch for 115v or 230v on dual voltage models



Sliding switch for 115v or 230v on spark-proof models



DV-6E-250SP
Spark-Proof



ELIMINATOR® PUMPS				
	DV-3E	DV-4E	DV-6E	
CFM	3 CFM (85 l/m)	4 CFM (113 l/m)	6 CFM (170 l/m)	
MOTOR	1/2 HP, 1725 RPM	1/2 HP, 1725 RPM	1/2 HP, 1725 RPM	
VOLTAGE	115v/60Hz	115v/60Hz	115v/60Hz	
INTAKE PORT	1/4" x 3/8"	1/4" x 3/8"	1/4" x 3/8"	
OIL CAPACITY	28oz (828cc)	25oz (739cc)	25oz (739cc)	
SHIPPING DIMS	17-5/8" x 9-1/8" x 14"	17-5/8" x 9-1/8" x 14"	17-5/8" x 9-1/8" x 14"	
WEIGHT	29lbs (13.2kg)	30lbs (13.6kg)	30lbs (13.6kg)	
ELIMINATOR® DUAL VOLTAGE				
	DV-3E-250	DV-4E-250	DV-6E-250	DV-6E-250SP
MOTOR	1/2 HP, 1725/1425 RPM	1/2 HP, 1725/1425 RPM	1/2 HP, 1725/1425 RPM	1/2 HP, 1725/1425 RPM
VOLTAGE	115v/60Hz, 230v/50Hz	115v/60Hz, 230v/50Hz	115v/60Hz, 230v/50Hz	115v/60Hz, 230v/50Hz
PLUG	US 220v	US 220v	US 220v	US 220v
PLUG OPTIONS*	US/EU/UK/AU/BR	US/EU/UK/AU/BR	US/EU/UK/AU/BR	US/EU/UK/AU/BR

*Specify plug type when ordering; -250 for US, -250EU for EU, -250UK for UK.

BLACK GOLD®



Pump Oil

Acts as a coolant, lubricant and sealant—simultaneously. Non-detergent, hydroprocessed.



PART NO.	QTY.	DESCRIPTION
DVO-1	24	BLACK GOLD pint case
DVO-12	12	BLACK GOLD quart case
DVO-24	6	BLACK GOLD gallon case

Oil Mist Filter



Eliminates oil mist from pump handle



DV-F8

PART NO.	DESCRIPTION
DV-F6	Oil mist filter 3/8"; ELIMINATOR (pre-2011) and PLATINUM (pre-2008)
DV-F8	Oil mist filter 1/2"; ELIMINATOR (2011+) and PLATINUM (2000+)

DV-T1



THE TANK Vacuum Pump Caddy

Extend pump life with easy and convenient oil changes between jobs

No mess – no spills

Environmentally friendly

Capacity to hold up to five oil changes



PART NO.	DESCRIPTION
DV-T1	The TANK pump oil caddy

VL-100



VELOCITY Rapid Evacuation Kit

The Velocity Rapid Evacuation Kit paired with a vacuum pump allows technicians to remove restrictive valve cores and perform AC/R system evacuations up to ten times faster

60 inch, 1/2" diameter evacuation hose; 3/8" x 1/4" SAE flare

A32525N Valve Core Tool removes restrictive cores; vacuum rated to 20 microns

Opens up over 90% of internal diameter of access port

Vacuum certified hose will not collapse or permeate



PART NO.	DESCRIPTION
VL-100	VELOCITY evacuation kit with hose and valve core removal tool
A32525N	Valve core removal tool
CL264-60	60 inch, 1/2" diameter hose; 3/8" x 1/4" SAE flare
P325	1/4" and 5/16" replacement gaskets for A32525N (1 each)

Quick Couplers



Features o-ring seal and no depressor.



QC-E64

PART NO.	DESCRIPTION
QC-E64	3/8" QC x 1/4" SAE elbow
QC-S64	3/8" QC x 1/4" SAE straight
P90009	1/4" Replacement o-ring (10 pack)
P90012	3/8" Replacement o-ring (10 pack)

Shutoff Valve



O-ring quick coupler shutoff valves for blanking off vacuum system; pressures up to 800lbs.



D10162

PART NO.	DESCRIPTION
D10162	1/4" Female QC x 1/4" flare

Swivel Couplers



Features an o-ring seal



D10244

PART NO.	DESCRIPTION
D10244	1/4" Female swivel coupler
D10266	3/8" Female swivel coupler
P90009	1/4" Replacement o-ring (10 pack)
P90012	3/8" Replacement o-ring (10 pack)

Vacuum Pump Tips

Change Your Pump Oil

Deep vacuum cannot be achieved with contaminated oil, which can damage pump and shorten pump life. JB recommends pump oil be changed after every evacuation for maximum performance and pump efficiency.

Use a Micron Gauge

The best test to check for oil contamination is through a micron gauge. In a leak-free system, if micron gauge is not reading a deep vacuum, the oil is contaminated and should be changed. During testing process is the only time it is recommended to have a micron gauge attached directly to pump.

Choosing Proper CFM

CFM² = Maximum Tonnage Rating

Take the CFM rating and multiply it by that number to find the maximum number of tons a pump is rated for:

3 CFM pump (3x3) is rated for 9 tons
7 CFM pump (7x7) is rated for 49 tons

Depending on the system line size, it is better to use two or more small, easily maneuverable pumps at different locations to overcome pressure drop issues and evacuate faster than a single, large pump. Pumps in the 1.5 to 10 CFM class are adequate to handle 99% of the work.

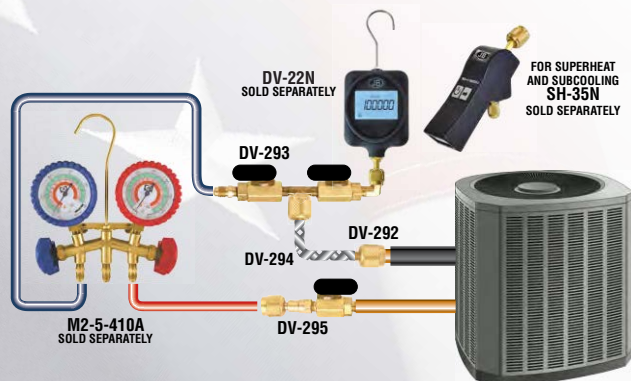
JB pumps are built to last and are the best and longest lasting pumps in the industry. To learn how to properly care for your pump, visit jbind.com.

DV-29



Vacuum Gauge Blank-off Test Kit

The DV-29 Vacuum Gauge Blank-off Test Kit works with vacuum gauges and the SH-35N Wireless Digital Gauge for Superheat and Subcooling to create a closed system ideal for checking leaks.



PART NO.	DESCRIPTION
DV-29	Leak-proof micron hook-up test kit, includes: DV-292, DV-293, DV-294, and DV-295
DV-291	Replacement 1/4" SAE swivel coupler (D10244)
DV-292	Replacement 90° male flare with 1/4" o-ring QC
DV-293	Replacement valve assembly 1/4" MFL connector
DV-294	Replacement 10" (25.4 cm) metal hose with o-ring
DV-295	Replacement ball valve with o-ring QC and depressor
P90009	Replacement o-ring (10 pack)

Using a Vacuum Gauge

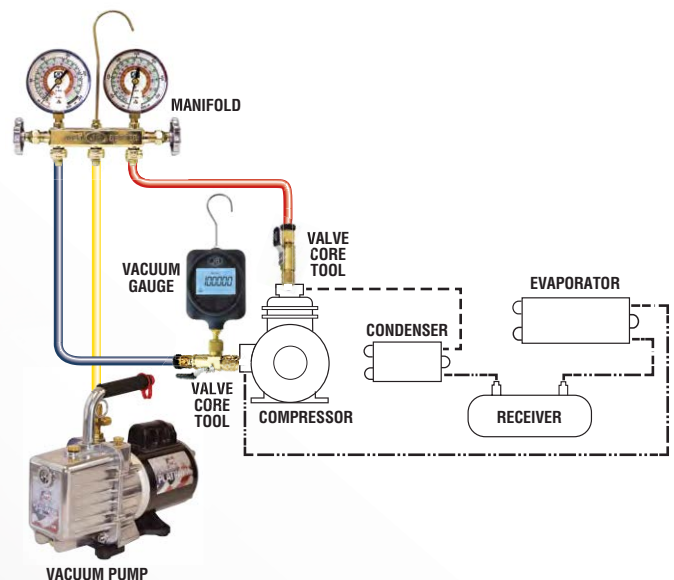
How to Measure Evacuation

Digital vacuum gauges such as the DV-41 SUPERNOVA, the DV-40S or the DV-22N can precisely read the low pressures produced when evacuation/dehydration is complete. Evacuation is complete when a system holds at 500 microns. Although a compound gauge can indicate that a vacuum is being produced, it cannot measure pressure accurately or indicate whether moisture or contaminants remain in the system. A digital vacuum gauge can positively indicate that the system is free of leaks and non-condensables.

Placement of the digital vacuum gauge is important. The ideal location to measure vacuum is at the system, not the pump. Attach the digital vacuum gauge directly to the system, isolating the gauge from the pump, hoses and manifold for an accurate measurement of the vacuum in a system.

For faster evacuation time and to achieve optimum pump performance:

1. Select the correct pump CFM.
2. Use clean oil and be sure to change pump oil with **BLACK GOLD** Vacuum Pump Oil after each use. Clean oil improves pump efficiency and extends pump life.
3. Remove restrictive valve cores from both high and low side fitting with the **A32525N** and **A32500N** valve core tools.
4. Evacuate both high and low side of the system simultaneously with a short, 3/8" diameter or larger size evacuation hose, such as the **VL-100 VELOCITY** Rapid Evacuation Kit.
5. Attach a **DV-22N** digital vacuum gauge directly to the system to monitor accurate measurement of vacuum.



F6-DP™

Refrigerant Recovery Unit

- Full one horsepower motor
- Powerful dual piston compressor
- Self-purge without changing hoses
- Simple two valve operation
- Micro-channel condenser for industry leading recovery rates
- Oversized cooling fan for superior heat dissipation
- Full size protected gauges for suction and tank pressure
- Heavy-duty handle with comfortable rubber grip and detachable power cord
- For use with all Class III, IV and V refrigerants, including R410A
- Filter/drier included
- 3 year OTC warranty



Refrigerant Recovery Tanks

- For safely storing or transporting refrigerant
- Available in 30lb and 50lb tanks



PART NO.	DESCRIPTION
F6-DP	F6 Refrigerant Recovery Unit (115v)
F6-DP-250	F6 Refrigerant Recovery Unit (230v)
F6-FLT	Filter/drier attachment
F6-STRAP	Replacement carrying strap
F6-BH	Replacement blue knob and screw
F6-RH	Replacement red knob and screw
F6-110-CRD	Replacement power cord
F6-RBFT	Replacement rubber foot
F6-RHP	Replacement gauges
REC-TANK-30	30lb Empty refrigerant tank cylinder
REC-TANK-50	50lb Empty refrigerant tank cylinder



DV-22N

Digital Vacuum Gauge

- Extended range MEMS sensor
- Vacuum reading range 100,000 to 10 microns
- Easy-to-read back-lit display
- Improved response time for instantaneous vacuum reading
- Working Temperature +32°F to 120°F (+0°C to 48.9°C)
- Allows for direct connection to A/C unit without a hose
- Audible and visual alarms when target vacuum level is achieved
- Intuitive user menu with custom setting options
- Low battery indicator with automatic shutoff
- Measures in microns, psia, inHg, pascals, Torr, mTorr and mBar
- Operates with three AA batteries (included)
- Available with protective carrying case as DV-24N
- 1 year warranty



PART NO.	DESCRIPTION
DV-22N	Digital vacuum gauge
DV-24N	DV-22N with protective carrying case
DV-27N	Protective carrying case only (models after July 2017)
DV-FILTER	Replacement depressor and gasket with filter
P511	Replacement gasket (6 pack)
P511-10	Replacement gasket (10 pack)
P90009	Replacement o-ring for older models with o-ring (10 pack)

SH-35N

Wireless Gauge for Superheat and Subcooling

- Wirelessly connects to smart devices with SH-35N app; share screenshots right from your phone
- OLED sunlight readable screen
- Protective carrying case
- Built-in valve port to easily adjust refrigerant charge
- Range up to 400ft (unobstructed)
- Rechargeable lithium polymer battery
- 50+ Refrigerants
- 1 year warranty

Specifications

- Operating Temperature 14°F to 122°F (-10°C to 50°C)
- Storage Temperature -4°F to 140°F (-20°C to 60°C)
- Pressure Range -14.7 psi to 670 psi
- Pressure Accuracy +/- 0.5%FS
- Temperature Range -58°F to 302°F (-50°C to 150°C)
- Temperature Accuracy +/- 1.2%FS



Base Screen



DEALER DESIGN AWARDS
NEWS RELEASE

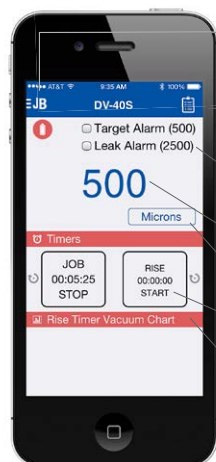


PART NO.	DESCRIPTION
SH-35N	Digital wireless gauge for superheat/subcooling includes temperature clamp, power charger and protective carrying case
SH-35-CL	Temperature clamp
SH-56	Socks (5)
SH-35N-CS	Protective carrying case
P511	Replacement gasket (6 pack)
P511-10	Replacement gasket (10 pack)

DV-40S

Wireless Digital Vacuum Gauge

- Factory calibrated for accuracy
- Vacuum reading range 100,000 to 10 microns
- Wirelessly connects to smart devices with DV-40S app
- Backup display on the gauge
- Heavy-duty, water-resistant design
- 8 hour rechargeable lithium ion battery with USB charging adapter
- Programmable alarm system for low/high limits and approaching/leaking
- Data logging for recording and sharing job statistics
- Light or dark app theme for easy visibility
- Protective carrying case
- 1 year warranty



- JB Main Menu**
Advanced features including color theme options and scanning for connection devices
- Clipboard**
Access data logging and sharing features; save data and email as text
- Target and Leak Alarms**
Selection boxes arm and silence
- Main Vacuum Reading Display**
- Unit of Measure Selection**
- Job and Rise Test Timers**
Can be managed and recorded separately
- Rise Vacuum Chart**
Line graph display of the change in vacuum during the rise test



PART NO.	DESCRIPTION
DV-40S	Wireless digital vacuum gauge with case and charging adapter
DV-40S-CS	Protective carrying case for the DV-40S
DV-40S-AC	Charging adapter with cord
A34000D	1/4" QC x 1/4" access tee with depressor
DV-FILTER	Replacement depressor and gasket with filter
P511	Replacement gasket (6 pack)
P511-10	Replacement gasket (10 pack)
P90009	Replacement o-ring for older models with o-ring (10 pack)

DV-41

SUPERNOVA® Digital Vacuum Gauge

- Fully programmable gauge includes approach and leak alarm settings with automatic shutoff and back light duration
- Vacuum reading range 100,000 to 10 microns
- Measures in microns, psia, inHg, pascals, Torr, mTorr and mBar
- Easy-to-read LCD screen
- Factory calibrated
- 1/4" SAE flare brass fitting with flexible five foot cord for hard-to-reach spaces
- Easy-to-clean sensor
- Operates with AC adapter (included) or three AA batteries
- Protective carrying case
- 1 year warranty



PART NO.	DESCRIPTION
DV-41	Digital vacuum gauge with AC adapter and protective carrying case
DV-40C	AC adapter and protective carrying case only
DV-40AC	AC Adapter
DV-40HK	Hanging hook replacement
A34000D	1/4" QC x 1/4" access tee with depressor
DV-FILTER	Replacement depressor and gasket with filter
P511	Replacement gasket (6 pack)
P511-10	Replacement gasket (10 pack)
P90009	Replacement o-ring for older models with o-ring (10 pack)



LD-6000IR

AURORA® Infrared Refrigerant Leak Detector

- Detects all CFC, HFC, HCFC, HFO-1234YF and blended refrigerants
- Infrared sensor life > 10 years
- High (0.10 oz/year and higher), medium (0.25 oz/year and higher), and low (0.5 oz/year and higher) sensitivity settings
- Visual and audible alerts
- Accurate to 0.10oz/year
- Will not trigger on oil or moisture
- Convenient magnetic hanger
- Easy-to-read LED display
- Stores highest change in refrigerant concentration achieved
- 16" flexible probe
- Protective carrying case
- Magnetic hanger
- 8 hour rechargeable lithium ion battery
- 1 year warranty



Sensitivity

R1234yf
R22
R134a
R404A
R407A
R410A
R427A
R502

PART NO.	DESCRIPTION
LD-6000IR	AURORA leak detector in case
LDA-WE9	Wand extension – 9"
LDA-NNP4	Needle nose probe – 4-3/4"
LDA-NNP9	Needle nose probe – 9"
LDA-VCH	12v vehicle charger
LDA-WCH	120-240v wall charger
LDA-WCHUS	Wall charger – US connector (also available for UK, EU)
LDA-LI	3.7v Lithium ion battery 1800 mAh
LDA-WTP	Wand tip
LDA-PK	Filters (10) for wand tip and probes plus o-rings (5)

LD-5000

PROWLER® Electrochemical Refrigerant Leak Detector

- Detects all HFC, HCFC, HFO and blended refrigerants
- Sensor life > 10 years; proprietary electrochemical sensor will not diminish over time or with use
- Manual calibration mode and reset control
- High, medium, and low sensitivity settings
- Warm up time < 30 seconds; response time immediate
- Mutable alarm with silent vibrating handle
- Back-lit LCD screen tilts up for easy viewing at any angle
- 17" flexible probe
- Protective carrying case
- Operates with four AA batteries (included)
- 2 year warranty



Sensitivity

R1234yf	.0125 oz/yr
R22	.025 oz/yr
R32	.05 oz/yr
R134a	.05 oz/yr
R404A	.05 oz/yr
R407A	.05 oz/yr
R410A	.05 oz/yr
R427A	.05 oz/yr



PART NO.	DESCRIPTION
LD-5000	PROWLER leak detector in case
LD-S101	Replacement sensor (6 prong)
LD-RF5	Replacement filters (5 pack)
LD-TV	Replacement leak test vial
LD-PK	Parts kit (includes 6 prong sensor, filter kit and test vial)
LD-CS	Protective carrying case
LD-ST	Replacement sensor tip

LDC-4000

Combustible Gas and HC Refrigerant Leak Detector

- High sensitivity to all HC refrigerants and combustible gases
- Long life, solid state heated sensor
- Sensitive to < 5 ppm of methane
- Sensor life > 300 hours
- Automatic calibration and reset to ambient
- Comfortable rubber handle
- Intrinsically safe certified
- Low battery indicator
- 17" flexible probe
- Protective carrying case
- Operates with four AA batteries (included)
- 2 year warranty



Detects

Methane (R50)
Propane (R290)
Isobutane (R600A)
Butane (R600)
Ethane (R170)
Ammonia (R717)
Acetylene
Ethanol
Acetone
Gasoline
and more...



PART NO.	DESCRIPTION
LDC-4000	Combustible Gas and HC Refrigerant leak detector in case
LDC-4000-1	Replacement sensor (4 prong)
LDC-4000-2	Replacement sensor cover
LDC-4000-3	Combustible leak test vial
LDC-4000-4	Protective carrying case

LD-3000

QUEST® Electrochemical Refrigerant Leak Detector

- Long life, electrochemical sensor
- Detects all CFC, HFC, HFO and HCFC refrigerants, and hydrocarbon blends
- Automatic calibration and reset to ambient levels
- Three adjustable sensitivity levels
- Low battery indicator
- Mutable alarm function
- Comfortable rubber handle
- 18" flexible probe
- Protective carrying case
- Operates with four AA batteries (included)
- 2 year warranty



Sensitivity

R1234yf	.0125 oz/yr
R22	.025 oz/yr
R32	.05 oz/yr
R134a	.05 oz/yr
R404A	.05 oz/yr
R407A	.05 oz/yr
R410A	.05 oz/yr
R427A	.05 oz/yr



PART NO.	DESCRIPTION
LD-3000	QUEST leak detector in case
LD-S101	Replacement sensor (6 prong)
LD-RF5	Replacement filters (5 pack)
LD-TV	Replacement leak test vial
LD-PK	Parts kit (includes 6 prong sensor, filter kit and test vial)
LD-CS	Protective carrying case
LD-ST	Replacement sensor tip

DS-20000

ATLAS® Digital Refrigerant Scale

- Features all metal construction, superior sensitivity and accuracy with replaceable parts
- 220lb (100kg) capacity
- Highly sensitive, solid state load cell (0.25oz/10gm)
- Easy-to-read LCD screen
- Field repairable with replaceable cable, weighing platform and handheld remote
- Displays weight in decimal/pounds, pounds/ounces, and kilograms
- Automatic shutoff option to conserve battery life
- Protective carrying case
- Operates with 9v battery (included)
- 2 year warranty

Specifications

Usage	Indoor/outdoor
Operating Temperature	+32°F to 122°F (0°C to +50°C)
Storage Temperature	+14°F to 140°F (-10°C to +60°C)
Humidity	85% RH @113°F (45°C), non-condensing
Altitude	6500ft (2000m)
Battery Life	Approximately 60 hours



PART NO.	DESCRIPTION
DS-20000	ATLAS® Digital Refrigerant Scale in case
DSR-10	Communication cable
DSR-20	Handheld remote
DSR-30	Weighing platform

DS-20000S

ATLAS® Wireless Refrigerant Scale

- Features a sleek, water-resistant design
- Easy-to-read and record measurements with a smart device and the free DS-20000S app
- 250lb (115kg) capacity
- Wirelessly connects to smart devices via the DS-20000S app
- Oversized, slip-resistant platform
- User defined, programmable weight and approaching alarms
- Job time recording and email accessible data logging
- Adjustable units of measurement
- LED connectivity and power lights
- Water-resistant design
- Protective carrying case
- Operates with four AA batteries (included)
- 2 year warranty

Specifications

Usage	Indoor/outdoor
Operating Temperature	+32°F to 122°F (0°C to +50°C)
Storage Temperature	+14°F to 140°F (-10°C to +60°C)
Humidity	85% RH @113°F (45°C), Non-condensing
Battery Life	Approximately 60 hours



PART NO.	DESCRIPTION
DS-20000S	ATLAS® Wireless Refrigerant Scale in case

DM4-RW

NEW!

REVOLVER® Wireless Digital Manifold

- Wirelessly connects to smart devices with DM4 app
- Simple, easy-to-navigate menu with transfective display for easy reading in direct sunlight
- 60+ Refrigerants; update through app
- Measures high side and low side pressure (psi and kPa) and temperature (°F and °C)
- Calculates superheat, subcooling, vapor and liquid saturation
- Laser welded stainless steel transducers
- Universal K-Type clamp thermocouples
- Protective boot and water-resistant design
- American made forged brass REVOLVER® 4-valve liquid metering ball valve style manifold
- Quarter-turn full open/close handle and 3/8" bore for faster evacuation
- 60" CCLE4-60 KOBRA® hose set included (4 pack)
- Protective carrying case allows storage with connected hoses
- Convenient strap with hanging hook
- Operates with three AA batteries (included)
- 1 year warranty



Digital and Analog View



PART NO.	DESCRIPTION
DM4-RW	REVOLVER® Digital Manifold with KOBRA® 60" hose set (4) in case
DM4-CS	Digital manifold protective carrying case
DM4-TC	Temperature clamps
DM4-BRK	Brackets for clamps and strap
DM4-STRP	Strap with hook
DM4-BT	Protective boot
CCLE4-60	60" Gasket seal KOBRA® hose set (4)

DM4-ZW

NEW!

ZEPPELIN® Wireless Digital Manifold

- Wirelessly connects to smart devices with DM4 app
- Simple, easy-to-navigate menu with transfective display for easy reading in direct sunlight
- 60+ Refrigerants; update through app
- Measures high side and low side pressure (psi and kPa) and temperature (°F and °C)
- Calculates superheat, subcooling, vapor and liquid saturation
- Laser welded stainless steel transducers
- Universal K-Type clamp thermocouples
- Protective boot and water-resistant design
- American made heavy-duty forged aluminum ZEPPELIN® 4-valve piston style manifold
- 3/8" bore for faster evacuation
- 60" CCLE4-60 KOBRA® hose set included (4 pack)
- Soft grip rubber handwheels reduce turning to open/close
- Protective carrying case allows storage with connected hoses
- Convenient strap with hanging hook
- Operates with three AA batteries (included)
- 1 year warranty



Digital and Analog View



PART NO.	DESCRIPTION
DM4-ZW	ZEPPELIN® Digital Manifold with KOBRA® 60" hose set (4) in case
DM4-CS	Digital manifold protective carrying case
DM4-TC	Temperature clamps
DM4-BRK	Brackets for clamps and strap
DM4-STRP	Strap with hook
DM4-BT	Protective boot
CCLE4-60	60" Gasket seal KOBRA® hose set (4)

DM4-R

REVOLVER® Digital Manifold

Simple, easy-to-navigate menu with transfective display for easy reading in direct sunlight

60+ Refrigerants

Measures high side and low side pressure (psi and kPa) and temperature (°F and °C)

Calculates superheat, subcooling, vapor and liquid saturation

Laser welded stainless steel transducers

Universal K-Type clamp thermocouples

Protective boot and water-resistant design

American made forged brass REVOLVER® 4-valve liquid metering ball valve style manifold

Quarter-turn full open/close handle and 3/8" bore for faster evacuation

60" CCLE4-60 KOBRA® hose set included (4 pack)

Protective carrying case allows storage with connected hoses

Convenient strap with hanging hook

Operates with three AA batteries (included)

1 year warranty



Hanging Case Stores Hoses Attached

DM4-Z

ZEPPELIN® Digital Manifold

Simple, easy-to-navigate menu with transfective display for easy reading in direct sunlight

60+ Refrigerants

Measures high side and low side pressure (psi and kPa) and temperature (°F and °C)

Calculates superheat, subcooling, vapor and liquid saturation

Laser welded stainless steel transducers

Universal K-Type clamp thermocouples

Protective boot and water-resistant design

American made heavy-duty forged aluminum ZEPPELIN® 4-valve piston style manifold

3/8" bore for faster evacuation

60" CCLE4-60 KOBRA® hose set included (4 pack)

Soft grip rubber handwheels reduce turning to open/close

Protective carrying case allows storage with connected hoses

Convenient strap with hanging hook

Operates with three AA batteries (included)

1 year warranty



PART NO.	DESCRIPTION
DM4-R	REVOLVER® Digital Manifold with KOBRA® 60" hose set (4) in case
DM4-CS	Digital manifold protective carrying case
DM4-TC	Temperature clamps
DM4-BRK	Brackets for clamps and strap
DM4-STRP	Strap with hook
DM4-BT	Protective boot
CCLE4-60	60" Gasket seal KOBRA® hose set (4)

PART NO.	DESCRIPTION
DM4-Z	ZEPPELIN® Digital Manifold with KOBRA® 60" hose set (4) in case
DM4-CS	Digital manifold protective carrying case
DM4-TC	Temperature clamps
DM4-BRK	Brackets for clamps and strap
DM4-STRP	Strap with hook
DM4-BT	Protective boot
CCLE4-60	60" Gasket seal KOBRA® hose set (4)

DMG2-5

2-Valve Digital Manifold

- Easy-to-read screen with intuitive buttons
- 80+ preprogrammed refrigerants
- Simultaneous calculation of superheat and subcooling
- Data logging capability with DMG2-DATA
- Robust transducer design
- Sturdy body designed for resiliency
- Simple and accessible data display
- Vacuum sensor and data recording modules sold separately
- Heavy-duty K-type thermocouples included
- 60" KOBRA® CCLE hoses included (3 pack)
- Protective carrying case
- 1 year warranty

Specifications

- Pressure Display bar, psi, KPa, Mpa
- Temperature Display °F and °C
- Vacuum Display microns, mbar, mmHg, pascals, mtorr
- Power Source 9V battery (included)
- Monitor (diagonal) 4 -1/3" or 11cm
- Pressure Range -14.5 to 870 psi
- Precision (at 72°F) +/- 0.5% fs
- Temperature Range -58°F to 392°F (-50°C to 200°C)
- Working Temperature 14°F to 122°F (-10°C to 50°C)
- Connections 1/4" SAE (7/16" UNF)



PART NO.	DESCRIPTION
DMG2-5	2-Valve digital manifold with 60" KOBRA® CCLE Hose set
DMG2-8	2-Valve digital manifold
DMG2-CASE	Protective carrying case
DMG2-TC	Heavy-duty K-type thermocouple
DMG2-VAC	DMG2 vacuum sensor module

CO2 Manifold

2-Valve Aluminum Manifold

- For transcritical CO2 applications
- Unique spindle valves tighten easily
- 3-1/8" (80mm) Class 1, 1% pulse-free liquid filled gauges
- 36" hoses with 1/4" SAE fittings (3 pack)
- Working pressure 2900 psi (200 bar)
- Protective carrying case
- 3 year warranty

Specifications

- Low Pressure 30" of Hg to 1200 psi (83 bar)
- High Pressure 30" of Hg to 2300 psi (160 bar)
- Temperature Range -60°F to 80°F (-55°C to 30°C)
- Critical Point 87.98°F/1.071 psi (31.1°C/72.9 bar)
- Certifications EN472/EN837 Pressure Equipment Directive and 2014/68/CE Article 4, Paragraph 3



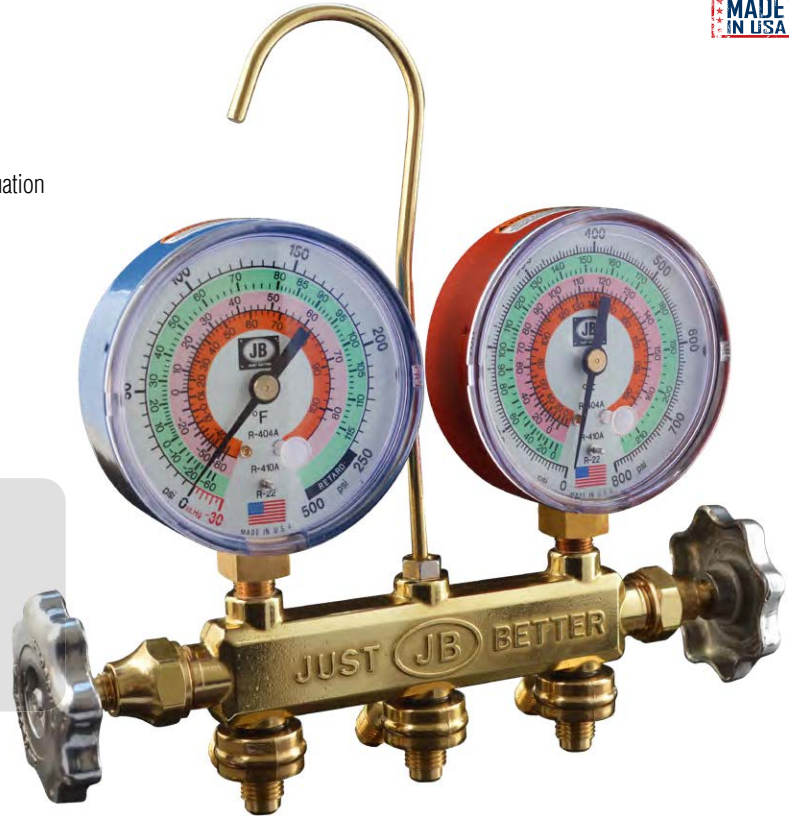
PART NO.	DESCRIPTION
30744	CO2 Manifold with 36" hose set in protective carrying case
M2-744L	Low side replacement gauge (blue)
M2-744H	High side replacement gauge (red)
CL744-36	36" hose set for CO2 manifold
CL744-60	60" hose set for CO2 manifold
744-GK	Replacement gasket kit
U1-4A-2	Flare X male pipe adapter (pack of 2)
29860-CV	Replacement gauge boot (blue)
29865-CV	Replacement gauge boot (red)



PATRIOT™

2-Valve Brass Manifold

- Rugged bar design paired with easy-to-grip metal handles
- Available with assorted gauge options
- Original free floating dual o-ring sealing system for faster evacuation and charging
- Surge dampened gauges for reduced needle movement
- 360° swiveling hose holders
- Pull-out proof hanging hook
- Easy-to-turn metal handwheels
- Solid brass forging
- 1 year warranty; lifetime on bar



22225

The Manifold that Gives Back



For each PATRIOT™, MSKIT1 or MSKIT2 sold, JB will donate to Operation Homefront. To learn more about Operation Homefront, visit www.operationhomefront.net



R22	R404A	R410A	
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
22225	Manifold Only	3-1/8" (80mm)	Illuminating Class 1, 1%
22225L	Manifold Only	3-1/8" (80mm)	LED, Class 1, 1%
22225CM	Manifold Only	3-1/8" (80mm)	Illuminating, Class 1, 1% Camo
22233	CCLC-60"	3-1/8" (80mm)	Illuminating, Class 1, 1%
22233L	CCLC-60"	3-1/8" (80mm)	LED, Class 1, 1%
22233CM	CCLC-60"	3-1/8" (80mm)	Illuminating, Class 1, 1% Camo
22246	CCLS-60"	3-1/8" (80mm)	Illuminating, Class 1, 1%
22246CM	CCLS-60"	3-1/8" (80mm)	Illuminating, Class 1, 1%, Camo

R22	R134A	404A	
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
22125	Manifold Only	3-1/8" (80mm)	Illuminating, Class 1, 1%
22131	CCLC-60"	3-1/8" (80mm)	Illuminating, Class 1, 1%
22133	CCLC-60"	3-1/8" (80mm)	Illuminating, Class 1, 1%

R32	R290	R600A	
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
22725	Manifold Only	3-1/8" (80mm)	Natural Gas
22733	CCLC-60"	3-1/8" (80mm)	Natural Gas
22733RF-18	18" REFFLEX® Hoses	3-1/8" (80mm)	Natural Gas

R410A			
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
22500	Manifold Only	2-1/2" (63.5mm)	R410A Only
22505	Manifold Only (5/16" holder)	2-1/2" (63.5mm)	R410A Only
22525	Manifold Only	3-1/8" (80mm)	R410A Only
22531	CCLC-60"	3-1/8" (80mm)	R410A Only

Additional manifold gauge options, refrigerant combinations and accessories available on page 25. KOBRA hose options available on page 26. Manifold rebuild kits and repair parts on page 78.

REVOLVER®

4-Valve Ball Valve Manifold

- Integrated liquid charging capability
- Adjusts to finite openings for liquid charging
- Quarter-turn full open/close handle
- 3/8" port for faster evacuation
- Available with 2-1/2" and 3-1/8" size gauges
- 360° swiveling hose holders for greater flexibility
- Replaceable, durable hanging hook
- Surge dampened, all metal gauges for reduced needle movement
- 1 year warranty; lifetime on bar

Liquid Charging



26225

R22	R404A	R410A	
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
26200	Manifold Only	2-1/2" (63.5mm)	Standard
26225	Manifold Only	3-1/8" (80mm)	Illuminating
26225L	Manifold Only	3-1/8" (80mm)	LED
26208	CCL4-60"	2-1/2" (63.5mm)	Standard
26233	CCL4-60"	3-1/8" (80mm)	Illuminating
26233L	CCL4-60"	3-1/8" (80mm)	LED
26240	CCLV4-60"	3-1/8" (80mm)	Illuminating
26244	CCLV4-60"	3-1/8" (80mm)	Illuminating
26246	CCLS-60"	3-1/8" (80mm)	Illuminating

R12	R22	R502	
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
26000	Manifold Only	2-1/2" (63.5mm)	Standard
26025	Manifold Only	3-1/8" (80mm)	Illuminating
26008	CCL4-60"	2-1/2" (63.5mm)	Standard
26033	CCL4-60"	3-1/8" (80mm)	Illuminating
26040	CCLV4-60"	3-1/8" (80mm)	Illuminating
26044	CCLS-60"	3-1/8" (80mm)	Illuminating

R22	R134A	404A	
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
26100	Manifold Only	2-1/2" (63.5mm)	Standard
26125	Manifold Only	3-1/8" (80mm)	Illuminating
26108	CCL4-60"	2-1/2" (63.5mm)	Standard
26133	CCL4-60"	3-1/8" (80mm)	Illuminating
26140	CCLV4-60"	3-1/8" (80mm)	Illuminating
26144	CCLS-60"	3-1/8" (80mm)	Illuminating

"Working at JB is like being at home — I live two blocks away! The teamwork and knowing the ins and outs of the job make it joyful. I like the spark-proof, dual voltage pumps — best pumps."

— Antonio Chavez,
Shipping Supervisor



Additional manifold gauge options, refrigerant combinations and accessories available on page 25. KOBRA hose options available on page 26. Manifold rebuild kits and repair parts on page 78.

ZEPPELIN®

2-Valve Aluminum Manifold

- Machined from durable, solid aluminum billets
- Rubber handwheels for improved grip and reduced turns to open/close
- Improved stem design—fully open in only 2-1/2 turns
- Surge dampened gauges for reduced needle movement
- Original free floating dual o-ring sealing system for faster evacuation and charging
- Available with 2-1/2" and 3-1/8" size gauges
- Easy-to-read, color coded refrigerant dials
- Replaceable, durable hanging hook
- Replaceable intake/hose holder fittings
- 1 year warranty; lifetime on bar



24225

R22	R404A	R410A
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PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
24200	Manifold Only	2-1/2" (63.5mm)	Standard
24250	Manifold Only	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
24225	Manifold Only	3-1/8" (80mm)	Illuminating
24208	CCLC-60"	2-1/2" (63.5mm)	Standard
24258	CCLC-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
24233	CCLC-60"	3-1/8" (80mm)	Illuminating
24265	CCLV-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
24240	CCLV-60"	3-1/8" (80mm)	Illuminating
24244	CCLS-60"	3-1/8" (80mm)	Illuminating

R22	R134A	404A
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PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
24100	Manifold Only	2-1/2" (63.5mm)	Standard
24150	Manifold Only	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
24125	Manifold Only	3-1/8" (80mm)	Illuminating
24108	CCLC-60"	2-1/2" (63.5mm)	Standard
24158	CCLC-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
24133	CCLC-60"	3-1/8" (80mm)	Illuminating
24165	CCLBV-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
24140	CCLBV-60"	3-1/8" (80mm)	Illuminating
24169	CCLS-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
24144	CCLS-60"	3-1/8" (80mm)	Illuminating

R22	R134A	R404A	R410A
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PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
24600	Manifold Only	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
24608	CCLC-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
24615	CCLBV-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%

R12	R22	R502
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PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
24000	Manifold Only	2-1/2" (63.5mm)	Standard
24050	Manifold Only	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
24025	Manifold Only	3-1/8" (80mm)	Illuminating
24008	CCLC-60"	2-1/2" (63.5mm)	Standard
24058	CCLC-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
24033	CCLC-60"	3-1/8" (80mm)	Illuminating
24065	CCLBV-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
24040	CCLBV-60"	3-1/8" (80mm)	Illuminating
24069	CCLS-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
24044	CCLS-60"	3-1/8" (80mm)	Illuminating

R410A

PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
24500	Manifold Only	2-1/2" (63.5mm)	R410A Only
24525	Manifold Only	3-1/8" (80mm)	R410A Only
24508	CCLC-60"	2-1/2" (63.5mm)	R410A Only
24533	CCLC-60"	3-1/8" (80mm)	R410A Only

R407A	R422B	R427A
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PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
24325	Manifold Only	3-1/8" (80mm)	Illuminating

R22	R407C	410A
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PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
24425	Manifold Only	3-1/8" (80mm)	Illuminating

Additional manifold gauge options, refrigerant combinations and accessories available on page 25. KOBRA hose options available on page 26. Manifold rebuild kits and repair parts on page 77.

ZEPPELIN®

4-Valve Forged Aluminum Manifold

- Heavy-duty forged aluminum body is rugged and durable
- Rubber handwheels for improved grip and reduced turns to open/close
- Full 3/8" bore evacuates 40% faster
- Surge dampened gauges for reduced needle movement
- Available with 2-1/2", 3-1/8" and 4" gauges
- Easy-to-read, color-coded refrigerant dials
- Replaceable, durable hanging hook
- Replaceable intake/hose holder fittings
- 1 year warranty; lifetime on bar



25225

R22	R404A	R410A	
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
25200	Manifold Only	2-1/2" (63.5mm)	Standard
25250	Manifold Only	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
25225	Manifold Only	3-1/8" (80mm)	Illuminating
25225L	Manifold Only	3-1/8" (80mm)	LED
25208	CCL4-60"	2-1/2" (63.5mm)	Standard
25258	CCL4-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
25233	CCL4-60"	3-1/8" (80mm)	Illuminating
25233L	CCL4-60"	3-1/8" (80mm)	LED
25265	CCLV4-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
25240	CCLV4-60"	3-1/8" (80mm)	Illuminating
25248	CCLV-60"	3-1/8" (80mm)	Illuminating
25269	CCLV4-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
25246	CCLS-60"	3-1/8" (80mm)	Illuminating

R22	R134A	404A	
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
25100	Manifold Only	2-1/2" (63.5mm)	Standard
25150	Manifold Only	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
25125	Manifold Only	3-1/8" (80mm)	Illuminating
25108	CCL4-60"	2-1/2" (63.5mm)	Standard
25158	CCL4-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
25133	CCL4-60"	3-1/8" (80mm)	Illuminating
25165	CCLV4-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
25140	CCLBV-60"	3-1/8" (80mm)	Illuminating
25169	CCLS-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
25144	CCLS-60"	3-1/8" (80mm)	Illuminating

R22	R134A	R404A	R410A
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
25708	CCL4-60"	4" (102mm)	Illuminating
25713	CCLV4-60"	4" (102mm)	Illuminating

R12	R22	R502	
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
25000	Manifold Only	2-1/2" (63.5mm)	Standard
25050	Manifold Only	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
25025	Manifold Only	3-1/8" (80mm)	Illuminating
25008	CCL4-60"	2-1/2" (63.5mm)	Standard
25058	CCL4-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
25033	CCL4-60"	3-1/8" (80mm)	Illuminating
25065	CCLV4-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
25040	CCLV4-60"	3-1/8" (80mm)	Illuminating
25069	CCLS-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
25044	CCLS-60"	3-1/8" (80mm)	Illuminating

R410A			
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
25500	Manifold Only	2-1/2" (63.5mm)	R410 Only
25550	Manifold Only	3-1/8" (80mm)	Liquid Filled, R410 Only
25525	Manifold Only	3-1/8" (80mm)	R410 Only
25508	CCL4-60"	2-1/2" (63.5mm)	R420 Only
25558	CCL4-60"	3-1/8" (80mm)	Liquid Filled, R410 Only
25533	CCL4-60"	3-1/8" (80mm)	R410 Only
25523	CCLV4-60"	2-1/2" (63.5mm)	R420 Only
25573	CCLV4-60"	3-1/8" (80mm)	Liquid Filled, R410 Only
25548	CCLV4-60"	3-1/8" (80mm)	R410 Only

R407A	R422B	R427A	
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
25325	CCL4-60"	3-1/8" (80mm)	Illuminating
25608	CCL4-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%

R22	R407C	410A	
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
25425	Manifold Only	3-1/8" (80mm)	Illuminating

R438A	R407C	422D	
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
25825	Manifold Only	3-1/8" (80mm)	Illuminating
25833	CCL4-60"	3-1/8" (80mm)	Illuminating

Additional manifold gauge options, refrigerant combinations and accessories available on page 25. KOBRA hose options available begin on page 26. Manifold rebuild kits and repair parts on page 77.

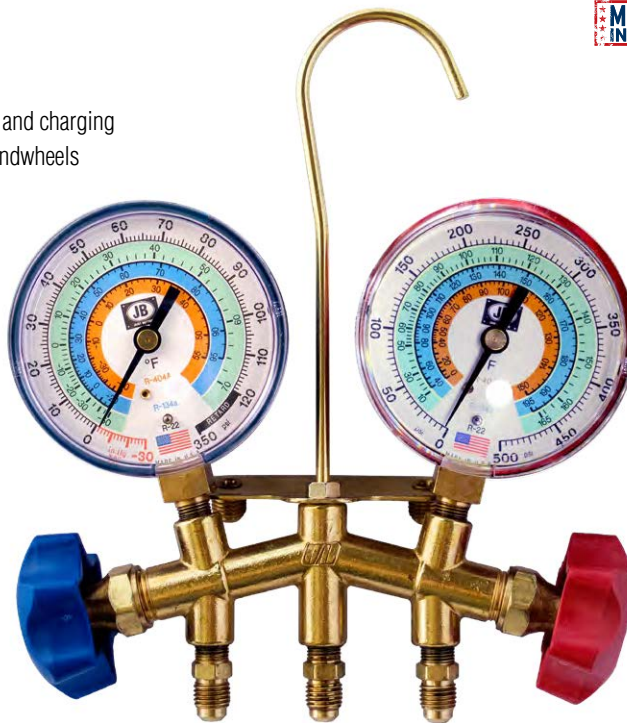
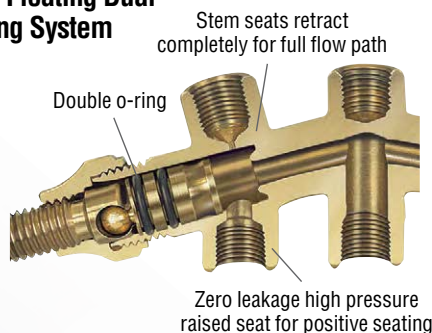


M2 Standard

2-Valve Classic Brass Manifold

- Full flow free floating dual o-ring sealing system design for faster evacuation and charging
- Forged brass bar with angled bar for increased knuckle clearance to rotate handwheels
- Heavy-duty, all metal gauge cases for added durability
- Surge dampened gauges for reduced needle movement
- Available in 2-1/2" and 3-1/8" gauges
- Easy-to-read, color coded refrigerant dials
- Replaceable, durable hanging hook and intake/hose holder fittings
- Easy-to-turn plastic handwheels; metal available on select models
- 1 year warranty; lifetime on bar

Original Free Floating Dual O-Ring Sealing System



M2-23125

R22	R404A	R410A	
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
M2-8-410A*	Manifold Only	2-1/2" (63.5mm)	Standard
M2-8-410AB	Manifold Only	2-1/2" (63.5mm)	Standard w/boots
M2-5-410A*	CCL-60"	2-1/2" (63.5mm)	Standard
M2-5-410AB	CCL-60"	2-1/2" (63.5mm)	Standard w/boots
M2-5-410A-SS	CCLS-60"	2-1/2" (63.5mm)	Standard
M2-23225	Manifold Only	3-1/8" (80mm)	Illuminating, Class 1, 1%
M2-22225	Manifold Only	3-1/8" (80mm)	Illuminating
M2-23231	CCL-60"	3-1/8" (80mm)	Illuminating, Class 1, 1%
M2-22231	CCL-60"	3-1/8" (80mm)	Illuminating
M2-22244	CCLS-60"	3-1/8" (80mm)	Illuminating

R22	R134A	404A	
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
M2-21125	Manifold Only	2-1/2" (63.5mm)	Standard
M2-21125B	Manifold Only	2-1/2" (63.5mm)	Standard w/boots
M2-21131	CCL-60"	2-1/2" (63.5mm)	Standard
M2-21131B	CCL-60"	2-1/2" (63.5mm)	Standard w/boots
M2-23125	Manifold Only	3-1/8" (80mm)	Illuminating, Class 1, 1%
M2-22125	Manifold Only	3-1/8" (80mm)	Illuminating
M2-23131	CCL-60"	3-1/8" (80mm)	Illuminating, Class 1, 1%
M2-22131	CCL-60"	3-1/8" (80mm)	Illuminating

R22	R407C	410A	
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
M2-22425	Manifold Only	3-1/8" (80mm)	Illuminating

R12	R22	R502	
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
M2-8	Manifold Only	2-1/2" (63.5mm)	Standard
M2-8B	Manifold Only	2-1/2" (63.5mm)	Standard w/boots
M2-6	CL-36R, CL-36B, CL-60Y	2-1/2" (63.5mm)	Standard
M2-6B	CL-36R, CL-36B, CL-60Y	2-1/2" (63.5mm)	Standard w/boots
M2-5	CCL-60"	2-1/2" (63.5mm)	Standard
M2-5B	CCL-60"	2-1/2" (63.5mm)	Standard w/boots
M2-36	CCL-36"	2-1/2" (63.5mm)	Standard
M2-36B	CCL-36"	2-1/2" (63.5mm)	Standard w/boots

R410A			
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
M2-21525	Manifold Only	2-1/2" (63.5mm)	R410A Only
M2-21525B	Manifold Only	2-1/2" (63.5mm)	R410A Only w/boots
M2-22525	Manifold Only	3-1/8" (80mm)	R410A Only
M2-21531	CCL-60"	2-1/2" (63.5mm)	R410A Only
M2-21531B	CCL-60"	2-1/2" (63.5mm)	R410A Only w/boots
M2-22531	CCL-60"	3-1/8" (80mm)	R410A Only

R407A	R422B	R427A	
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
M2-22325	Manifold Only	3-1/8" (80mm)	Illuminating

M099	R407C	422D	
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
M2-22825	Manifold Only	3-1/8" (80mm)	Illuminating
M2-22831	CCL-60"	3-1/8" (80mm)	Illuminating

Additional manifold gauge options, refrigerant combinations and accessories available on page 25. KOBRA hose options available begin on page 26. Manifold rebuild kits and repair parts on page 78. * Silver metal handles available; order M2-8-410AM or M2-5-410AM.

M2 Heat Pump Manifold

2-Valve Forged Brass Body

Full flow free floating dual o-ring sealing system design for faster evacuation and charging

Forged brass bar with angled bar for increased knuckle clearance to rotate handwheels

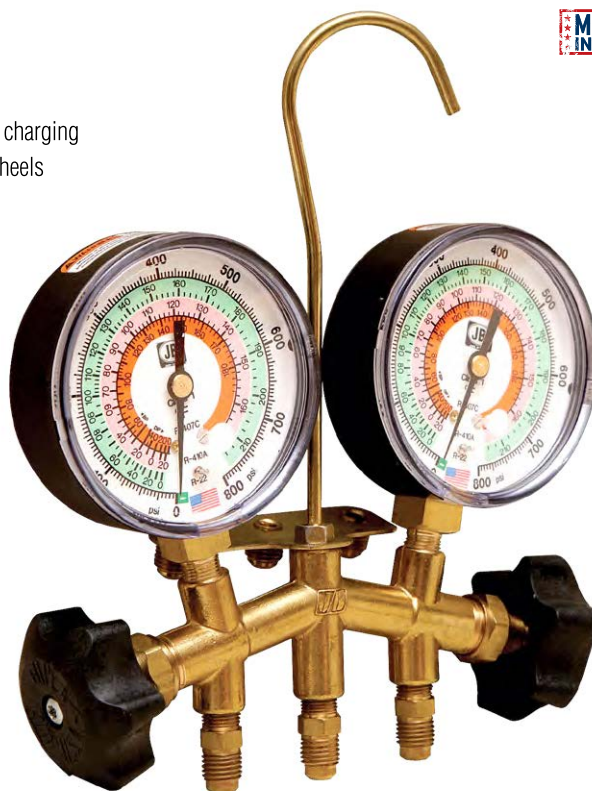
Includes Illuminating, Class 1, 1% metal gauges designed for 800psi to handle heat pump pressures

Pressure/temperature scale has two sections to accommodate temperature glide on R407c

Available with KOBRA® high pressure black hoses

Replaceable, durable hanging hook and intake/hose holder fittings

1 year warranty; lifetime on bar



M2-HP

R22	R407C	410A
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PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
M2-HP	Manifold Only	3-1/8" (80mm)	Illuminating, Class 1, 1%
M2-HP-5	CL6-60" (3)	3-1/8" (80mm)	Illuminating, Class 1, 1%
M2-808	Replacement Gauge	3-1/8" (80mm)	Illuminating, Class 1, 1%

Metric Manifolds

Metric manifolds come with 63.5 mm (2-1/2") metric gauges in BAR/PSI, kPa/PSI, and kg/cm² as well as standard CL and KOBRA® CLE series hoses. Refer to the M2 Brass, 2-Valve Aluminum Zeppelin®, and 4-Valve Zeppelin® pages for a full list of features for each. Also available with 80mm (3-1/8") metric gauges in select quantities. For more information, contact customer service.



DESCRIPTION	M2 BRASS			2-VALVE ZEPPELIN®			4-VALVE ZEPPELIN®			REFRIGERANTS		
	BAR/PSI	kPa/PSI	Kg/cm ²	BAR/PSI	kPa/PSI	Kg/cm ²	BAR/PSI	kPa/PSI	Kg/cm ²	R22	R404A	R410A
Manifold Only	28592	28292	28192	28752	28852	28952	27752	27852	27952	•	•	•
CCL6-60" (152cm)	28596	28296	28196	28754	28854	28954	27754	27854	27954	•	•	•
CCLS5-60 (152cm)	28597	28297	28197	—	—	—	—	—	—	•	•	•
CCLBV KOBRA®	28599	28299	28199	28759	28859	28959	27759	27859	27959	•	•	•
DESCRIPTION	M2 BRASS			2-VALVE ZEPPELIN®			4-VALVE ZEPPELIN®			REFRIGERANTS		
	BAR/PSI	kPa/PSI	Kg/cm ²	BAR/PSI	kPa/PSI	Kg/cm ²	BAR/PSI	kPa/PSI	Kg/cm ²	R12	R22	R502
Manifold Only	28572	28272	28172	28772	28872	28972	27772	27872	27972	•	•	•
CCL-36" (91cm)	28570	28270	28170	28770	28870	28970	27770	27870	27970	•	•	•
CCL-60" (152cm)	28574	28274	28174	28774	28874	28974	27774	27874	27974	•	•	•
CCLS-60" (152cm) UL R410A	28576	28276	28176	28776	28876	28876	27776	27774	27776	•	•	•
DESCRIPTION	M2 BRASS			2-VALVE ZEPPELIN®			4-VALVE ZEPPELIN®			REFRIGERANTS		
	BAR/PSI	kPa/PSI	Kg/cm ²	BAR/PSI	kPa/PSI	Kg/cm ²	BAR/PSI	kPa/PSI	Kg/cm ²	R134A	R404A	R507A
Manifold Only	28582	28282	28182	28782	28882	28982	27782	27882	27982	•	•	•
CCL-36" (91cm)	28580	28280	28180	28780	28880	28980	27780	27880	27980	•	•	•
CCL-60" (152cm)	28584	28284	28184	28784	28884	28984	27784	27884	27984	•	•	•
CCL6-60" (152cm)	28586	28286	28186	28786	28886	28986	27786	27886	27986	•	•	•
CCLS-60" (152 cm) UL R410A	28588	28288	28188	28788	28888	28988	27788	27888	27988	•	•	•
DESCRIPTION	M2 BRASS			2-VALVE ZEPPELIN®			4-VALVE ZEPPELIN®			REFRIG.		
	BAR/PSI	kPa/PSI	Kg/cm ²	BAR/PSI	kPa/PSI	Kg/cm ²	BAR/PSI	kPa/PSI	Kg/cm ²	R134A		
Manifold Only	28502	28202	28102	28732	28832	28932	—	—	—	•		
CCL-36" (91 cm)	28505	28205	28105	28735	28835	28935	—	—	—	•		

Additional manifold gauge options, refrigerant combinations and accessories available on page 25. KOBRA hose options available begin on page 26. Manifold rebuild kits and repair parts on page 78.

Natural Gas Gauges

Natural gas gauges for hydrocarbon refrigerants R290, R600A, and R32

3-1/8" Illuminating, Class 1, 1% metal gauges with high impact clear view Lexan lens

Full size brass movements

See page 18 for manifold pairings



M2-600 Compound
3-1/8" Illuminating, Class 1, 1%



M2-605 Pressure
3-1/8" Illuminating, Class 1, 1%

LED Gauges

3-1/8" Metal gauges for use with R22, R404A and R410A

On/off rocker switch; 250+ Hour battery life

3v Lithium coin cell battery (included)

Available in convenient 8-pack counter display as **M2-LED8PK**



M2-820L Compound/
M2-825L Pressure
3-1/8" LED, Standard



Gauge Boots and Lenses

Protective gauge boots add increased durability to manifold gauges. Available for 2-1/2" and 3-1/8" gauges.



MR-596

PART NO.	DESCRIPTION
MR-590	2-1/2" Black boot (single)
MR-593	3-1/8" Black boot (single)
MR-594	3-1/8" Red boot for M2-865 liquid filled (single)
MR-595	3-1/8" Blue boot for M2-860 liquid filled (single)
MR-596	Set of two 3-1/8" black boots
MR-596L	Set of two 3-1/8" black boots for LED gauges
MR-598	Set of two black 2-1/2" black boots
MR-517	2-1/2" Screw-on lens fits both plastic and metal gauges
MR-533	3-1/8" Snap-on lens

Gauge Options



M2-820
3-1/8" Illuminating, Standard



M2-810 (R410A Only)
3-1/8" Non-illuminating, Standard



M2-860
3-1/8" Liquid Filled, Class 1, 1%



M2-924CM
3-1/8" Illuminating, Class 1, 1%



M2-460
2-1/2" Non-illuminating, Standard



M2-400
4" Illuminating, Class 1, 1%



QC-G430
2-1/2" Single Test, Standard



QC-G851
3-1/8" Single Test, Standard

Gauge Options



All metal gauges with high impact clear view Lexan lens, full size brass movements and recalibrating screw. Available for compound and pressure in assorted sizes and options for use, visibility and refrigerant type. Metric gauges and replacement lenses also available; contact customer service.

PART NO.		SIZE	DESCRIPTION	REFRIGERANTS													
COMPOUND	PRESSURE			R12	R22	R32	R134A	R438A	R-290	R404A	R407A	R407C	R410A	R422B	R427A	R502	R507A
M2-250	M2-500	2-1/2" (63.5mm)	Non-illuminating, Standard	•	•										•		
M2-350	M2-355	2-1/2" (63.5mm)	Non-illuminating, Standard				•										
M2-400	M2-405	4" (102mm)	Illuminating, Class 1, 1%		•		•		•			•					
M2-410	M2-415	2-1/2" (63.5mm)	Non-illuminating, Standard									•					
M2-420	M2-425	2-1/2" (63.5mm)	Non-illuminating, Standard				•		•							•	
M2-430	M2-435	2-1/2" (63.5mm)	Non-illuminating, Standard		•		•		•								
M2-460	M2-465	2-1/2" (63.5mm)	Non-illuminating, Standard		•				•			•					
M2-600	M2-605	3-1/8" (80mm)	Illuminating, Class 1, 1%			•		•									•
M2-800	M2-805	3-1/8" (80mm)	Illuminating, Standard	•	•										•		
M2-810	M2-815	3-1/8" (80mm)	Non-illuminating, Standard									•					
M2-820	M2-825	3-1/8" (80mm)	Illuminating, Standard		•				•			•					
M2-820L	M2-825L	3-1/8" (80mm)	LED, Standard		•				•			•					
M2-826	M2-827	3-1/8" (80mm)	Illuminating, Standard		•		•					•					
M2-828	M2-829	3-1/8" (80mm)	Illuminating, Standard							•			•	•			
M2-830	M2-831	3-1/8" (80mm)	Illuminating, Standard		•						•	•					
M2-844	M2-845	3-1/8" (80mm)	Illuminating, Standard					•			•		•				
M2-851	M2-856	3-1/8" (80mm)	Illuminating, Standard		•		•		•								
M2-860	M2-865	3-1/8" (80mm)	Liquid Filled, Class 1, 1%		•		•		•			•					
M2-870	M2-875	3-1/8" (80mm)	Liquid Filled, Class 1, 1%	•	•										•		
M2-880	M2-885	3-1/8" (80mm)	Liquid Filled, Class 1, 1%		•		•		•								
M2-890	M2-895	3-1/8" (80mm)	Liquid Filled, Class 1, 1%		•				•			•					
M2-924	M2-925	3-1/8" (80mm)	Illuminating, Class 1, 1%		•				•			•					
M2-924CM	M2-925CM	3-1/8" (80mm)	Illuminating, Class 1, 1%, Camo		•				•			•					
M2-951	M2-956	3-1/8" (80mm)	Illuminating, Class 1, 1%		•		•		•								
QC-G430	QC-G434	2-1/2" (63.5mm)	Single Test, Standard		•		•		•								
QC-G460	QC-G465	2-1/2" (63.5mm)	Single Test, Standard		•				•			•					
QC-G820	QC-G825	3-1/8" (80mm)	Single Test, Standard		•				•			•					
QC-G851	QC-G856	3-1/8" (80mm)	Single Test, Standard		•				•	•							

Gauges indicated as Standard are accuracy rated 3-2-3%
 Note: Gauges and hoses not specified for use with R410A can damage product and cause injury.

Metric Gauges



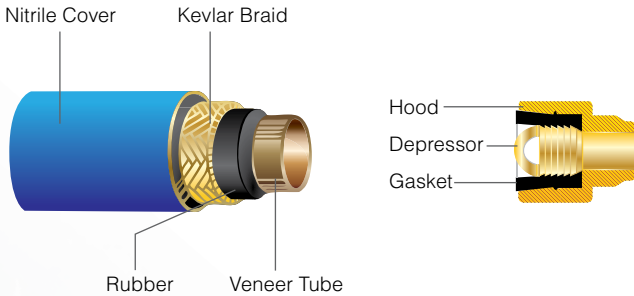
COMPOUND			REFRIGERANTS						
BAR/PSI	K/PSI	KG/CM ²	R12	R22	R134A	R404A	R410A	R502	R507A
29310	29311	29312		•		•	•		
29333	---	---		•	•	•			
29290	---	29292			•	•			•
29280	29260	29384	•	•				•	
29330	29331	29332			•				

PRESSURE			REFRIGERANTS						
BAR/PSI	K/PSI	KG/CM ²	R12	R22	R134A	R404A	R410A	R502	R507A
29315	29316	29317		•		•	•		
29338	---	---		•	•	•			
29295	---	29297			•	•			•
29285	29263	29385	•	•				•	
29335	29336	29337			•				

Hose Overview

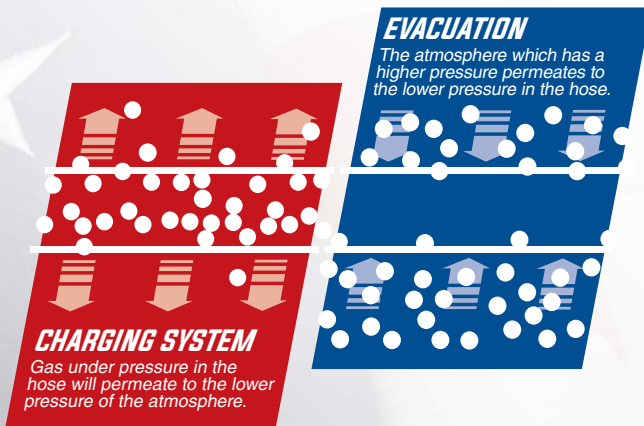
KOBRA® Hose Construction

- Kevlar lined for strength and flexibility
- All brass fittings open to maximum flow
- No blow-outs at high pressures
- UV protective bag to prevent color fading
- Hose fittings field repairable with replacement parts and rebuild kits
- Provides an industry superior 5-to-1 safety factor
- Custom lengths and fittings available; contact customer service



Permeation

Even with the advanced technology of today's hoses, permeation through the hose compound still exists. Only the finest materials available are used to manufacture JB hoses to ensure a minimum amount of permeation (seepage or diffusion) of the refrigerant through the hose. KOBRA® hoses are designed as transfer lines for all refrigerants (except ammonia), nitrogen, and refrigerant oils. When checking pressure rise, the atmosphere will permeate to the lower pressure in the hoses and the micron reading will slowly rise.



REFFLEX® CLRf Series **NEW!**

Flexible Vibration Eliminating Hose

The sophisticated REFFLEX® system is a safe and cost effective polyamide capillary hose for use with critical charge hydrocarbon refrigeration systems. REFFLEX® has excellent mechanical and thermal properties combined with extreme durability and vibration eliminating performance. Highly flexible; extremely short bending radius; 2mm ID. Suitable all non-corrosive refrigerants including HFC/HFO, HC and natural gases such as propane and the relevant special oils such as POE an PAG. Absorbs all possible multi directional vibrations. Temp Range -40°(-40°C) to 266°(130°C). Maximum working pressure 1160 psi (80 bar). Very high burst proof value > 14,500 psi (1,000 bar). Ozone-, UV-, and oil resistant.

Available individually or with the PATRIOT™ 2-valve brass manifold



REFFLEX SERIES



REFFLEX® SERIES 1/4" X 1/4" FLEXIBLE HYDROCARBON HOSE (PSI 1160/14,500)				
LENGTH	BLUE	YELLOW	RED	B/Y/R 3 PACK
18" (46cm)	CLRF-18B	CLRF-18Y	CLRF-18R	CCLRF-18
22733RF-18	2-Valve PATRIOT™ w/R290/R600/R32 illuminating gauges and 18" REFFLEX® Hose Set			

CLSX Series

NEW! 

KOBRA® Secure Seal Hose

800 psi working; 4000 psi burst

Larger fitting for increased flow

UL approved for R410A

Removable head and rebuildable seal kit for quick, easy field repair or replacement

Angled depressor with custom gasket and large fitting to prevent leaks and increase flow

Dual thrust washers (Teflon and stainless steel) for easy turn and free rotation under high pressure

Smooth action, low-loss fitting minimizes refrigerant loss and prevents spray



Dual thrust washers
(Teflon and stainless steel)



Replaceable Head



CLSX SERIES

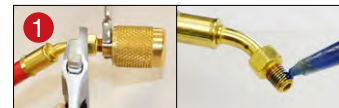
CLSX SERIES KOBRA® 1/4" X 1/4" SECURE SEAL (PSI 800/4000)				
LENGTH	BLUE	YELLOW	RED	B/Y/R 3 PACK
36" (91cm)	CLSX-36B	CLSX-36Y	CLSX-36R	CCLSX-36
48" (122cm)	CLSX-48B	CLSX-48Y	CLSX-48R	CCLSX-48
60" (152cm)	CLSX-60B	CLSX-60Y	CLSX-60R	CCLSX-60
72" (182cm)	CLSX-72B	CLSX-72Y	CLSX-72R	CCLSX-72
Replaceable Head	CLSX-RH			
Rebuild Kit	CLSX-RK			

CLSX Series Repair Instructions

Easily Replace/Repair Head with Basic Tools

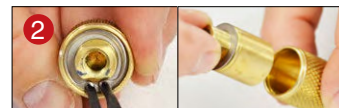
Replace Head CLSX-RH

1. Attach 3/8" wrench to the flats of the head base. Use an adjustable wrench on hex of the barb, and turn counter clockwise to remove the head. Apply one to two drops of a standard thread sealant or Teflon tape to the pipe thread of the hose barb.
2. Attach new head and finger tighten, turning clockwise. Use 3/8" wrench and adjustable wrench to fully tighten. Torque to 6ft/lbs (approximately 3/4 to 1-1/2 turns past finger tight).



Rebuild Head CLSX-RK

1. Attach 3/8" wrench to the flats of the head base. Use an adjustable wrench on hex of the barb, and turn counter clockwise to remove the head.
2. Use spring clip pliers to remove internal spring clip from inside of end cap assembly. Remove coupler nut exposing cup assembly.
3. Remove the metal and nylon thrust washers.
4. Stabilize slot at base of cup assembly with straight-edge and using a 3/8" wrench, turn counter clockwise to detach end cap from cup assembly. Remove and replace end cap o-ring.
5. Remove and discard spring, depressor, and gasket from inside cup using pointed hook or removal tool.
6. Remove and replace o-ring from slotted end of cup.
7. Insert new gasket, depressor and spring in cup. Apply one to two drops of a standard thread sealant or Teflon tape to the pipe thread of the end cap. Reattach end cap with new o-ring to cup assembly using a 3/8" wrench and a straight edge.



8. Replace the metal and nylon thrust washers. Place cup assembly into coupler nut.
9. Use spring clip pliers to secure internal snap ring inside of end cap assembly. Refer to REPLACE HEAD Step 1 and 2 to reassemble.



CLS Series



KOBRA® Secure Seal Hose

800 psi working; 4000 psi burst

UL R410A approved Secure Seal, specially designed to lock refrigerant inside the hose without the need for a ball valve attachment

Fully field repairable with **33112RK/33115RK Rebuild Kits**

Stainless steel thrust washer ensures free rotation under high pressure

Three point contact on depressor



CLS SERIES



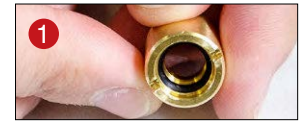
CLS SERIES KOBRA® 1/4" X 1/4" SECURE SEAL HOSE (PSI 800/4000)					
LENGTH	BLUE	YELLOW	RED	B/Y/R 3 PACK	B/Y/R BLACK (3/8") 4 PACK
36" (91cm)	CLS-36B	CLS-36Y	CLS-36R	CCLS-36	CCLS4-36
48" (122cm)	CLS-48B	CLS-48Y	CLS-48R	CCLS-48	CCLS4-48
60" (152cm)	CLS-60B	CLS-60Y	CLS-60R	CCLS-60	CCLS4-60
72" (182cm)	CLS-72B	CLS-72Y	CLS-72R	CCLS-72	CCLS4-72
10' (3m)	CLS-120B	CLS-120Y	CLS-120R		
25' (7.6m)	CLS-300B	CLS-300Y	CLS-300R		
50' (15.2m)	CLS-600B	CLS-600Y	CLS-600R		
75' (22.8m)	CLS-900B	CLS-900Y	CLS-900R		
100' (30.5m)	CLS-1200B	CLS-1200Y	CLS-1200R		
CLS5 SERIES KOBRA® 1/4" X 1/4" SECURE SEAL HOSE* (PSI 800/4000)					
36" (91cm)	CLS5-36B	CLS5-36Y	CLS5-36R	CCLS5-36	
48" (122cm)	CLS5-48B	CLS5-48Y	CLS5-48R	CCLS5-48	
60" (152cm)	CLS5-60B	CLS5-60Y	CLS5-60R	CCLS5-60	
72" (182cm)	CLS5-72B	CLS5-72Y	CLS5-72R	CCLS5-72	

*B/Y/R 3 pack for CLS5 Series includes 5/16" blue and red hose with 1/4" yellow hose.

CLS Series Repair Instructions

For use with 33112RK/33115RK Rebuild Kits

1. Hold the cup in one hand so that the slotted face of the cup is exposed. Pinch the cup seal o-ring and insert it into the large groove to seat it correctly as shown.
2. Install the barb seal o-ring in the groove located between the hex feature and the back portion of thread. Gently stretch and pull it over the threads of the barb fitting. Ensure the seal is not torn or damaged.
3. Insert bushing/seal into the thread side of the cup. Brass bushing side goes in first with seal facing up as shown.
4. Insert depressor with three blade feature into the cup assembly. The depressor fits into the bushing/seal installed in the previous step. The depressor must sit flat and true to the seal surface.
5. Place spring into cup assembly over the boss on the back side of the depressor.
6. Screw cup assembly, with spring in an upward position, onto hose barb fitting. Hand tighten the cup to the barb ensuring cup seats over the barb gasket (o-ring) and does not damage the o-ring.
7. Tighten the cup and hose barb using a 9/16" open end wrench and 1/16" steel blade. Do not over tighten—only 25 to 30 in/lbs is required.
8. Insert barb/cup assembly into the coupler. Seat the thrust washer flat onto the hose barb and inside the coupler. Install the internal snap ring and seat it into the groove of the coupler.



For additional information on assembly or disassembly, refer to 33112RK or 33115RK Rebuild Kit Instructions online at JBIND.COM.

CLE Series



KOBRA® Gasket Seal Hose

- 800 psi working; 4000 psi burst
- Gasket seal, high pressure charging hose
- Blow-out resistant gasket locks into the cup of the fitting
- Barbed depressor precisely machined to guide the valve core into place
- Easy grip 14 TPI pitch knurl



CLE SERIES

CLE SERIES KOBRA® 1/4" X 1/4" GASKET SEAL HOSE (PSI 800/4000)					
LENGTH	BLUE	YELLOW	RED	B/Y/R 3 PACK	B/Y/R BLACK (3/8") 4 PACK
36" (91cm)	CLE-36B	CLE-36Y	CLE-36R	CCE-36	CCE4-36
48" (122cm)	CLE-48B	CLE-48Y	CLE-48R	CCE-48	CCE4-48
60" (152cm)	CLE-60B	CLE-60Y	CLE-60R	CCE-60	CCE4-60
72" (182cm)	CLE-72B	CLE-72Y	CLE-72R	CCE-72	CCE4-72
10' (3m)	CLE-120B	CLE-120Y	CLE-120R		
25' (7.6m)	CLE-300B	CLE-300Y	CLE-300R		
50' (15.2m)	CLE-600B	CLE-600Y	CLE-600R		
75' (22.8m)	CLE-900B	CLE-900Y	CLE-900R		
100' (30.5m)	CLE-1200B	CLE-1200Y	CLE-1200R		

CLBV Series



KOBRA® Gasket Seal Quarter-Turn Ball Valve Hose

- 800 psi working; 4000 psi burst
- Meets non-venting requirements by trapping refrigerant with ball valve



CLBV SERIES

CLBV SERIES KOBRA® 1/4" X 1/4" WITH BALL VALVE (PSI 800/4000)					
LENGTH	BLUE	YELLOW	RED	B/Y/R 3 PACK	B/Y/R BLACK (3/8") 4 PACK
36" (91cm)	CLBV-36B	CLBV-36Y	CLBV-36R	CCLBV-36	CCLBV4-36
48" (122cm)	CLBV-48B	CLBV-48Y	CLBV-48R	CCLBV-48	CCLBV4-48
60" (152cm)	CLBV-60B	CLBV-60Y	CLBV-60R	CCLBV-60	CCLBV4-60
72" (182cm)	CLBV-72B	CLBV-72Y	CLBV-72R	CCLBV-72	CCLBV4-72

CLV Series



KOBRA® Gasket Seal Quarter-Turn Ball Valve Hose with 6" Whip End

800 psi working; 4000 psi burst

Meets non-venting requirements by trapping refrigerant with ball valve

CLV6: 6" Ball valve with whip end

CLP: 6" Whip end only

CLP SERIES

CLV6 SERIES

CLV SERIES

CLV SERIES KOBRA® 1/4" X 1/4" W/BALL VALVE WHIP END (PSI 800/4000)					
LENGTH	BLUE	YELLOW	RED	B/Y/R 3 PACK	B/Y/R BLACK (3/8") 4 PACK
36" (91cm)	CLV-36B	CLV-36Y	CLV-36R	CCLV-36	CCLV4-36
48" (122cm)	CLV-48B	CLV-48Y	CLV-48R	CCLV-48	CCLV4-48
60" (152cm)	CLV-60B	CLV-60Y	CLV-60R	CCLV-60	CCLV4-60
72" (182cm)	CLV-72B	CLV-72Y	CLV-72R	CCLV-72	CCLV4-72
CLV SERIES W/BALL VALVE WHIP END ONLY (PSI 800/4000)					
1/4" x 6"	CLV-6B	CLV-6Y	CLV-6R	CCLV-6	CLV-6BL
3/8" x 6"		CLV6-6Y			CLV6-6BL
CLP SERIES KOBRA® 1/4" X 1/4" HOSE WHIP END ONLY (PSI 800/4000)					
6" (15cm)	CLP-6B	CLP-6Y	CLP-6R		
CLV6 AND CL6 SERIES KOBRA® 3/8" X 3/8" CHARGING HOSE (PSI 600/3000)					
LENGTH	BLACK	BLACK W/BALL VALVE	YELLOW		
36" (91cm)	CL6-36	CLV6-36	CL6-36Y		
48" (122cm)	CL6-48	CLV6-48	CL6-48Y		
60" (152cm)	CL6-60	CLV6-60	CL6-60Y		
72" (182cm)	CL6-72	CLV6-72	CL6-72Y		

Heavy-Duty Series



1/4", 3/8" and 1/2" Heavy-Duty Black Charging Hose

1/4": 800 psi working; 4000 psi burst

3/8": 800 psi working; 4000 psi burst

1/2": 640 psi working; 3200 psi burst

Heavy-duty charging hose reduces permeation

Straight fittings by straight fittings



HEAVY-DUTY SERIES

HEAVY-DUTY BLACK CHARGING (PSI 1/4", 3/8" 800/4000, 1/2" 640/3200)			
LENGTH	BLACK (1/4" X 1/4")	BLACK (3/8" X 3/8")	BLACK (1/2" X 1/2")
36" (91cm)	CL4HD-36	CL6HD-36	CL2HD-36
48" (122cm)	CL4HD-48	CL6HD-48	CL2HD-48
60" (152cm)	CL4HD-60	CL6HD-60	CL2HD-60
72" (182cm)	CL4HD-72	CL6HD-72	CL2HD-72
HEAVY-DUTY BLACK EVACUATION/CHARGING HOSE (PSI 800/4000)			
LENGTH	BLACK (3/8")	BLACK (1/2")	
60" (152cm)	CL64-60 (1/4" x 3/8" fitting)	CL84-60 (1/4" x 1/2" fitting)	

Standard Series



1/4" Standard Charging Hose

750 psi working; 3000 psi burst

Ideal for use with all standard refrigerants (except high pressure)

Permeation can be detected and will vary with refrigerant type and time of exposure



STANDARD SERIES

STANDARD 1/4" X 1/4" CHARGING HOSE (PSI 750/3000)				
LENGTH	BLUE	YELLOW	RED	B/Y/R 3 PACK
36" (91cm)	CL-36B	CL-36Y	CL-36R	CCL-36
48" (122cm)	CL-48B	CL-48Y	CL-48R	CCL-48
60" (152cm)	CL-60B	CL-60Y	CL-60R	CCL-60
72" (182cm)	CL-72B	CL-72Y	CL-72R	CCL-72

Flexible Metal Hose



900 psi working; 3500 psi burst

Unlike charging hoses, flexible metal lines will not permeate under vacuum. Our metal lines feature finger-tight o-ring coupler ends.



D10472

PART NO.	DESCRIPTION
D10436	1/4" x 36" Flexible metal line (one 45° fitting)
D10472	1/4" x 72" Flexible metal line (one 45° fitting)
D10636	3/8" x 36" Flexible metal line (one 45° fitting)
D10660	3/8" x 60" Flexible metal line (one 45° fitting)
DV-294	1/4" x 10" Flexible metal line (one 45° fitting)
P90009	1/4" Replacement o-ring (10 pack)
P90012	3/8" Replacement o-ring (10 pack)

Hose Replacement Parts



33112RK

CLSX-RH

T21295

PART NO.	DESCRIPTION
33112RK	1/4" Secure Seal Rebuild Kit
33115RK	5/16" Secure Seal Rebuild Kit
CLSX-RK	CLSX Secure Seal Rebuild Kit
CLSX-RH	CLSX Replacement Head
T21295	Snap Ring Pliers for CLS Secure Seal Fittings, Includes 33112RK 1/4" Rebuild Kit
P90022	O-ring for T21295 and 33112RK (10 pack)
P511	Gasket for 1/4" CLE, CLV, CLB Series Hose (6 pack)
P90514	1/4" Depressor for CLE, CLV and CLB Series (5 pack) used with P509
P90016	Gasket for 3/8" Hose (10 pack)
P90008	Gasket for 1/2" Heavy-duty Black Charging Hose (5 pack)

Secure Seal Adapters



33112N

33113N

PART NO.	DESCRIPTION
33112N	1/4" QC x 1/4" SAE
33113N	1/4" QC x 1/4" SAE 90°
33115N	5/16" QC x 1/4" SAE
33116N	5/16" QC x 1/4" SAE 90°

Mini-Split Tool Kits

MSKIT1 and MSKIT2

Everything you need for R410A ductless mini-splits in one convenient kit. MSKIT1 and MSKIT2 contain all essential tools to get the job done including the award winning PATRIOT™ 2-Valve Manifold, a KOBRA® Secure Seal hose set that is UL approved for R410A, and a heavy-duty six spanner head torque wrench.

MSKIT3

The MSKIT3 is an affordable solution for service technicians who already have a few basic tools in their tool box.

The Manifold that Gives Back



For each PATRIOT™, MSKIT1 or MSKIT2 sold, JB will donate to Operation Homefront. To learn more about Operation Homefront, visit www.operationhomefront.net



MSKIT1 and MSKIT2



MSKIT 3

MSKIT1 (1/4") AND MSKIT2 (5/16") BACKPACK		
MSKIT1	MSKIT2	DESCRIPTION
22500	22505	PATRIOT™ manifold with R410A gauges
CCLS-60	CCLS5-60	KOBRA® UL approved Secure Seal hose set
A32525N	A32535N	Valve core remover w/side port
SHLD-P4	SHLD-E4	SHIELD® locking cap R410A (4 pack)
A31656	A31665	SAE brass adapters (2 included)
NFT5-4	NFT5-5	Brass caps (NFT5-4, 10 pack/NFT5-5, 5 pack)
T30605		Metric (2-8mm) and Imperial (5/64" - 1/4") hex key set
T30600		Ratcheting eccentric cone flare tool
TRQ1080		Torque wrench set with 6 spanner heads
JB-BACKPACK1		JB backpack

MSKIT3 TOOLBAG (1/4" AND 5/16")	
PART NO.	DESCRIPTION
JB-TOOLBAG1	JB tool bag
T30605	Metric (2-8mm) and Imperial (5/64" - 1/4") hex key set
T30600	Ratcheting eccentric cone flare tool
TRQ1080	Torque wrench set with 6 spanner heads
NFT5-4	1/4" Brass caps (10 pack)
NFT5-5	5/16" Brass caps (5 pack)
A31656	5/16" Female x 1/4" SAE brass adapters (2 included)

Mini-Split Kit Product Descriptions



22500 1/4" | 22505 5/16"

PATRIOT™ manifold with surge dampened R410A gauges and 360° swiveling hose holders



CCLS-60 1/4" | CCLS5-60 5/16"

KOBRA® Secure Sealed refrigerant charging hoses with low-loss, UL-approved for R410A



TRQ1080

7.375-59.004 pound-feet (10-80 N-M) torque wrench with six spanner heads (17, 22, 24, 26, 27 and 29mm) and 1/2" DR Ratchet head



T30600

Ratcheting, eccentric cone flaring tool with internal clutch to prevent over-torquing. For tube OD: 3/16", 1/4", 5/16", 3/8", 1/2", 5/8" and 3/4"



A32525N 1/4" | A32535N 5/16"

Valve core remover tool with side port for removing valve cores without losing system charge



SHLD-P4 1/4" | SHLD-E4 5/16"

SHIELD® Refrigerant locking cap with water-resistant rubber sleeves color-coded for R410A



T30605

Metric (2-8mm) and Imperial (5/64" - 1/4") hex key sets



NFT5-4 1/4" | NFT5-5 5/16"

Five finger-tight 1/4" o-ring sealed brass caps



A31656 1/4" | A31665 5/16" male

Brass adapters for 5/16" - 1/4" SAE connections

Additional Accessories



JB-BACKPACK1

Heavy-duty canvas JB backpack



JB-TOOLBAG1

Heavy-duty canvas JB tool bag



TRQ-IMP

Torque wrench imperial heads for TRQ1080 (5/8", 13/16" 15/16", 1-1/8")

"JB has been an industry leader for over 50 years because of unmatched customer service, and exceptional product quality. They have built a community that makes it easy to come to work every day."

*- Preston Collier,
Sales Representative*



SHIELD®



Refrigerant Locking Caps

Easily identifiable with waterproof color-coded caps for R22, R410A and universal refrigerants

Secure, tamper-resistant lock

Protects against unauthorized access to refrigerants and deters against huffing inhalant abuse and theft

Helps prevent leaks and excessive energy usage by providing a strong secondary seal to schrader or backseat valve

All brass, corrosion-resistant design

Available with 1/4" and 5/16" fittings in packs of 4, 12, 50 and 100; also available in bulk

Requires tamper-resistant bit and driver for unlocking

Meets International Safety Codes

International Mechanical Code 1101.10 – Refrigerant circuit access ports located outdoors shall be fitted with locking-type tamper-resistant caps

International Residential Code M1411.6 – Refrigerant circuit access ports located outdoors shall be fitted with locking-type tamper-resistant caps

Universal Refrigerant Locking Cap Key

SHLD-MULTI Refrigerant locking cap key with interchangeable bits conveniently stored inside the tool handle. For use with SHIELD®, C&D Valve™ and Novent® Refrigerant Locking Caps.

SHIELD® Drivers

For use with SHIELD® Refrigerant Locking Caps. Available in 3" (includes one bit), 8" (includes two bits) or combination pack with both driver sizes and two bits, **SHLD-COMBO-DRIVER**.



SHLD-G4

1/4" 4 Pack (R22)



SHLD-P4

1/4" 4 Pack (R410A)



SHLD-U4

1/4" 4 Pack (Universal)



SHLD-E4

5/16" 4 Pack (Universal)



SHLD-MULTI

SHLD-8-DRIVER

SHLD-3-DRIVER



PART NO.	FITTING SIZE	SLEEVE COLOR CODE	DESCRIPTION
SHLD-U4	1/4"	Universal	Locking caps and 1 bit (4 pack)
SHLD-U12	1/4"	Universal	Locking caps and 1 bit (12 pack)
SHLD-U50	1/4"	Universal	Locking caps, 1 bit and 3" driver (50 pack)
SHLD-U100	1/4"	Universal	Locking caps, 2 bits and 8" long driver (100 pack)
SHLD-E4	5/16"	Universal	Locking caps and 1 bit (4 pack)
SHLD-E12	5/16"	Universal	Locking caps and 1 bit (12 pack)
SHLD-E50	5/16"	Universal	Locking caps, 1 bit and 3" driver (50 pack)
SHLD-G4	1/4"	R22	Locking caps and 1 bit (4 pack)
SHLD-G12	1/4"	R22	Locking caps and 1 bit (12 pack)
SHLD-G50	1/4"	R22	Locking caps, 1 bit and 3" driver (50 pack)
SHLD-P4	1/4"	R410A	Locking caps and 1 bit (4 pack)
SHLD-P12	1/4"	R410A	Locking caps and 1 bit (12 pack)
SHLD-P50	1/4"	R410A	Locking caps, 1 bit and 3" driver (50 pack)
PART NO.	DESCRIPTION		
SHLD-CJ	Empty storage jar holds 150 SHIELD® caps		
SHLD-SLU20	Universal (black) SHIELD® sleeves (20 pack)		
SHLD-SLG20	R22 (green) SHIELD® sleeves (20 pack)		
SHLD-SLP20	R410A (pink) SHIELD® sleeves (20 pack)		
SHLD-BIT	SHIELD® 2 pack bit		
SHLD-3-DRIVER	SHIELD® 3" driver with 1 bit		
SHLD-8-DRIVER	SHIELD® 8" long driver with 2 bits		
SHLD-COMBO-DRIVER	SHIELD® 3" and 8" drivers with 2 bits		
SHLD-MULTI	Universal locking cap key for SHIELD®, Novent®, and C&D Valve™ locking caps		

CoreMax®



Rapid Charge and Evacuation System

The innovative CoreMax® family of manufacturing and service tools is an integrated, flexible system design that shortens processing time and provides up to 5x greater flow, dramatically improving sealing with faster access connections. CoreMax® gives you the choice of how you want to test, fill and evacuate your systems.

Process directly through the valve with additional flow and dramatically better sealing

Easy-to-use connector at every process station

Automatic valve shutoff on both sides of connection

Higher flow improves vacuum quality to maximize SEER rating

Improves line throughput and reduces evacuation stations

Easy implementation with lower tool costs

Improves processing time and field service

For more information and instructional video visit jbind.com



CM-VC003
High-Flow Valve Cores



CM-S370
Seats



CM-CRTOOL
Valve Core Removal Tool



CM-TRQ
Manual Torque Wrench
3/8" Drive



CM-SNAP
SnapMate® Connector

PART NO.	DESCRIPTION
CM-VC003	High-Flow Valves with Caps (3 pack)
CM-VC010	High-Flow Valves with Caps (10 pack)
CM-VC025	High-Flow Valves with Caps (25 pack)
CM-VC100	High-Flow Valves with Caps (100 pack)
CM-S370	3/8" Seats (3 pack)
CM-SS370	3/8" Saddle Seats (3 pack)
CM-S250	1/4" Seats (3 pack)
CM-SS250	1/4" Saddle Seats (3 pack)
CM-CRTOOL	Valve Core Removal Tool
CM-SNAP	SnapMate® Service
CM-TRQ	Manual Torque Wrench 3/8" drive



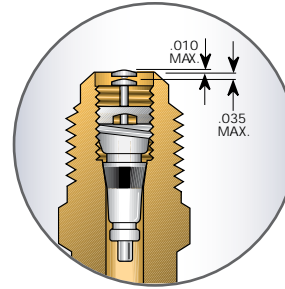


Access Valve Overview

100% Made in the USA

JB machines access valves at our Aurora, Illinois facility using 100% American C360 alloy brass sourced from US mills. Our brass fittings and access valves have high tensile strength and resist corrosion. All of our valves are machined according to strict AHRI specifications to ensure proper sealing of valve and core surfaces. Quality and dependability come standard with an American made product.

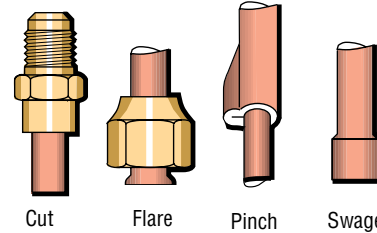
ACCESS VALVES SPECIFICATIONS	
AHRI Standard	720-2002
AHRI Torque	3.0 - 5.0 inches/pound
Temp Range	-40°F to 250°F (-40°C to 121°C)
Valve Bodies	Brass
Valve Core	Stainless steel and brass for use with all refrigerants such as R12, R22, R134a, R410A, and R502. Resistant to oils, alkalites, and diluted mineral acids



Valve Core Pin Location

After valve installation, the valve core can be replaced with valve core tools. Torque to AHRI specifications.

Multi-Step Variants

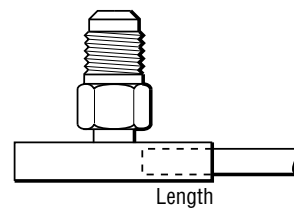


Tube Sizing: ODS and ODF Fit Descriptions

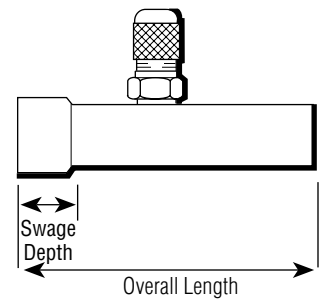
Descriptions for solder/braze access valves specify the connecting tube OD. Size and type fit illustrated are examples of the types of fit for an A31723 valve. The connecting line slips around access fitting; refer to AC/R Copper Tube Fitting Guide and Connecting Tube Size table.

There are two types of ODF fit—external tube fit and swage fit. JB access valve descriptions for ODF refer to swage fit. The connecting tube OD is the same OD as the fitting end. Therefore, the A31723 example above will also slip into 5/16" OD tube. If connecting to wrot copper fitting, use ODF swage size.

Copper Braze Tees

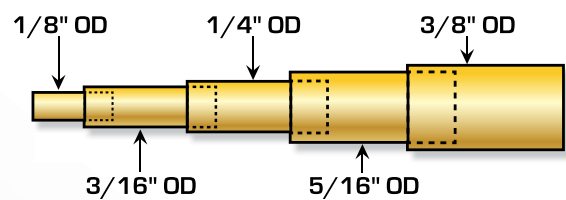


Copper Access Unions



CONNECTING TUBE SIZE			
TUBE SIZE	ODS Internal Tube Fit	ODF External Tube Fit	ODF Swage Fit
1/8"	—	3/16"	—
3/16"	1/8"	1/4"	3/16"
1/4"	3/16"	5/16"	1/4"
5/16"	1/4"	3/8"	5/16"
3/8"	5/16"	—	3/8"

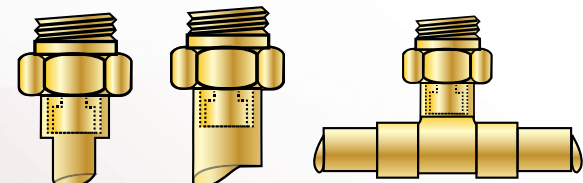
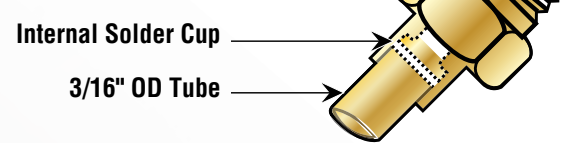
AC/R Copper Tube Fitting Guide



For easy sizing reference, the last two numerals of our flare fittings correspond to their respective tube sizes.

SIZING REFERENCE GUIDE			
NUMBER	TUBE SIZE	NUMBER	TUBE SIZE
02	1/8"	08	1/2"
03	3/16"	10	5/8"
04	1/4"	12	3/4"
05	5/16"	14	7/8"
06	3/8"	18	1-1/8"

3/16" OD FIT



Copper Tube Extension



Single Step

For use with sil-phos alloy and copper fittings
Includes cap (NFT5-4) and valve core, 1/4" ID
Generous counter bore allows removal of core if flare becomes damaged
All tees and crosses are tapped to receive an access core in all 1/4" SAE flare ends
All pipe connections have internal braze cups for dip tube applications
Note: OD x ID sizes are for copper tube extension



A31004

PART NO.	QTY.	DESCRIPTION
A31002	5	1/8" OD
A31003	5	3/16" OD x 1/8" ID
A31004	5	1/4" OD x 3/16" ID
A31005	5	5/16" OD x 1/4" ID
A31006	5	3/8" OD x 5/16" ID
A31008	3	1/2" OD
A31004S	5	1/4" OD

Copper Tube Extension



Multi-Step

For use with sil-phos alloy and copper fittings
Includes cap (NFT5-4) and valve core, 1/4" ID
Generous counter bore allows removal of core if flare becomes damaged
All tees and crosses are tapped to receive an access core in all 1/4" SAE flare ends
All pipe connections have internal braze cups for dip tube applications
Note: OD x ID sizes are for copper tube extension



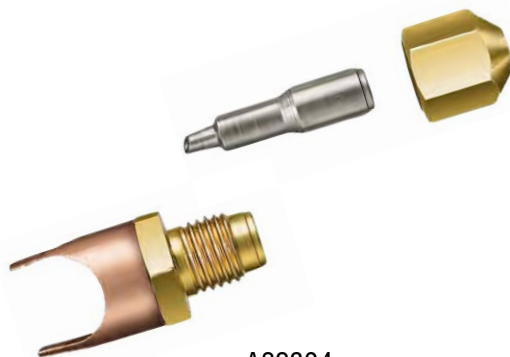
A31009

PART NO.	QTY.	DESCRIPTION
A31009	3	1/8" OD ext; 3/16", 1/4" and 5/16" ODF body steps
A31011	3	3/16" OD ext; 1/4" and 3/8" ODF body step
A31012	3	1/8" OD ext.; 1/8" and 3/16" body step

Copper Braze



Tapper Only



A32804

PART NO.	QTY.	DESCRIPTION
A32804	5	1/4"
A32805	5	5/16"
A32806	5	3/8"
A32808	3	1/2"
A32810	3	5/8"
A32812	2	3/4"
A32814	2	7/8"
A32818	2	1-1/8"

Copper Braze



Saddle with Tapper



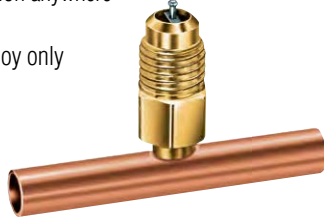
A32904

PART NO.	QTY.	DESCRIPTION
A32904	5	1/4"
A32905	5	5/16"
A32906	5	3/8"
A32908	3	1/2"
A32910	3	5/8"
A32912	2	3/4"
A32914	2	7/8"

Copper Braze Tee

Adjustable

Bend, cut, flare, swage or pinch
 Extra depth slip fit braze cups
 Simple installation anywhere
 along the line
 Use sil-phos alloy only



A31134

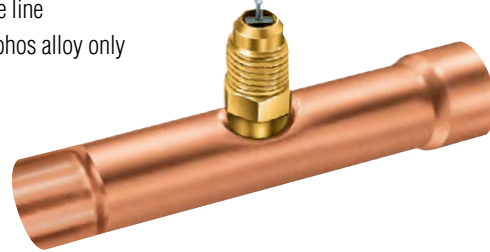
PART NO.	QTY.	SLIP-FIT CONNECT LINE SIZE	OVER ALL LENGTH (OAL)	LENGTH FIG 1. (A)
A31134	3	1/4" ODS x 5/16" ODF	2-1/8"	1"
A31135	3	5/16" ODS x 3/8" ODF	2-1/8"	1"
A31136	3	3/8" ODS x 1/2" ODF	2-1/8"	1"
A31138	3	1/2" ODS	2-1/8"	1"
A31140	1	5/8" ODS	2-1/2"	1"
A31142	1	3/4" ODS	3"	1-1/4"
A31144	1	7/8" ODS	3-1/2"	1-1/2"
A31148	1	1-1/8" ODS	3-13/16"	1-5/8"
A31154	2	3/16" ODS x 1/4" ODF	4"	1-15/16"
A31155	2	1/4" ODS x 5/16" ODF	4"	1-15/16"
A31156	2	5/16" ODS x 3/8" ODF	4"	1-15/16"



Copper Braze Tee

Swaged

Braze cup ends
 Simple installation anywhere
 along the line
 Use sil-phos alloy only



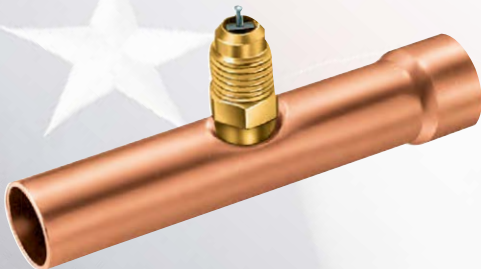
A31334

PART NO.	QTY.	SLIP-FIT CONNECT LINE SIZE	OVER ALL LENGTH (OAL)
A31334	3	1/4" OD	2-1/8"
A31335	3	5/16" OD	2-1/8"
A31336	3	3/8" OD	2-1/8"
A31338	3	1/2" OD	2-1/8"
A31340	1	5/8" OD	2-1/2"
A31342	1	3/4" OD	3"
A31344	1	7/8" OD	3-1/2"
A31348	1	1-1/8" OD	3-13/16"



Copper Access Union

Includes cap (NFT5-4) and valve core
 Install valve in any position
 Connecting line size for ODS and ODF external tube ends
 Use sil-phos alloy only



A31199

PART NO.	QTY.	SLIP-FIT CONNECT LINE SIZE	OVER ALL LENGTH (OAL) FIG 2. (B)	MIN. LENGTH (MIN) FIG 2. (C)
A31199	2	1/4" OD	2-3/8"	5/16"
A31200	2	3/8" OD	2-3/4"	5/16"
A31201	2	1/2" OD	3"	3/8"
A31202	2	5/8" OD	3-1/4"	1/2"
A31204	2	7/8" OD	3-3/4"	3/4"

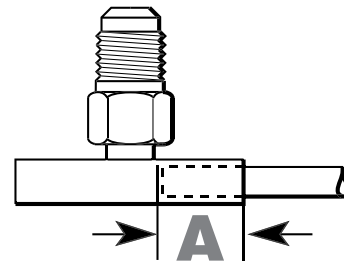


Figure 1. Copper Braze Tees

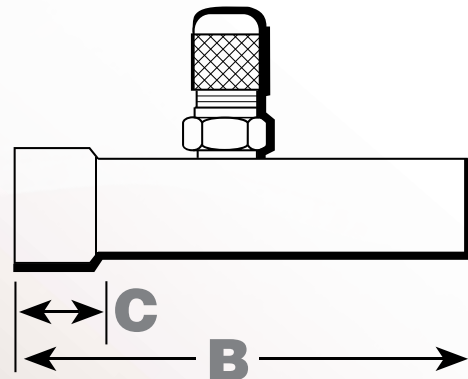


Figure 2. Copper Access Unions

Copper 90° Elbow



Includes cap (NFT5-4) and valve core
Use sil-phos alloy only



A31160

PART NO.	QTY.	SLIP-FIT CONNECT LINE SIZE
A31160	1	5/8" ODS
A31162	1	3/4" ODS
A31164	1	7/8" ODS
A31168	1	1-1/8" ODS

Access Valve Service Kit



The most popular access fittings for service calls in one convenient storage case, includes:

A31002 (3), A31003 (3), A31004 (3), A31005 (3), A31006 (3), NFT5-4 (6), A31851 (1), A31852 (1), A32004 (1), A31998 (3), A33500 (1), A31729 (3)



PART NO.	DESCRIPTION
AVK-001	Access valve service kit in storage case

Bulk Fitting Jar



Best selling access valves packaged in a convenient display jar



A31004-CJ

PART NO.	QTY.	DESCRIPTION
A31004-CJ	250	1/4" OD x 3/16" ID copper tube extension with bulk jar
NFT5-4-CJ	500	1/4" SAE cap with bulk jar

Access Valve Repair and Replacement



NFT5-4



A31999



P90010

PART NO.	QTY.	DESCRIPTION
NFT5-4	10	1/4" SAE o-ring cap
P90010	10	Replacement 1/4" o-ring
A31999	5	1/4" Valve cores

"Every morning I walk into the plant and I see customer orders ready to be shipped out. I cannot help but feel pride knowing that some of the products passed through my hands on their way to the customer."

– Willis McInerney,
CNC Department Manager



Swivel Flare Connections

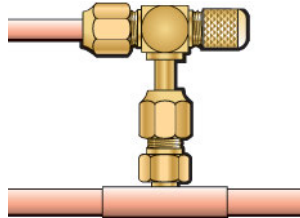
Add Multiple Ports with One Fitting

Safe, simple installation without the need for brazing. Flare ends are tapped to receive access cores. One core and cap are packaged with each valve.



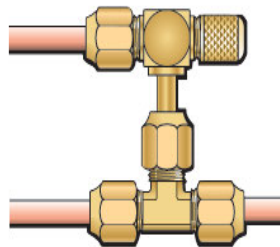
Swivel Flare with Core Depressor

Add a new line or control
No refrigerant loss on charged system



Swivel Flare without Core Depressor

Multiple ports
Additional line or controls
Additional access site



Swivel Flare Tee with Depressor



A31851

PART NO.	QTY.	DESCRIPTION
A31851	3	1/4" Female SAE swivel nut on run
A31852	3	1/4" Female SAE swivel nut on branch

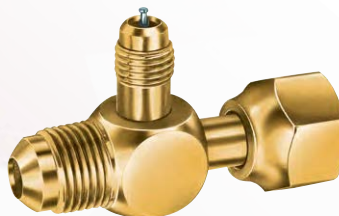
Swivel Flare Tee without Depressor



A31854

PART NO.	QTY.	DESCRIPTION
A31854	3	1/4" Female SAE swivel nut on branch
A31864	3	1/4" FE swivel nut w/o depressor x 1/4" SAE run x 1/4" SAE branch

Swivel Flare 3/8" SAE Tee



A31853

PART NO.	QTY.	DESCRIPTION
A31853	1	3/8" SAE x 3/8" Female SAE swivel nut x 1/4" access tee
A31856	1	3/8" SAE x 1/4" access x 3/8" Female SAE swivel nut

Coupler with Depressor



A33004

PART NO.	QTY.	DESCRIPTION
A33004	1	1/4" SAE swivel flare x male flare

Bulkhead Mounting



A31434

PART NO.	QTY.	DESCRIPTION
A31434*	1	1/4" SAE x 1/4" SAE w/nut
A31727*	1	1/4" SAE x 3/16" and 1/4" ODS or 3/8" ODF

*Core pre-torqued to AHRI

Swivel Cross with Depressor



A31520

PART NO.	QTY.	DESCRIPTION
A31520	1	1/4" Female SAE swivel nut x access

Cross with Three Access Points



A31522

PART NO.	QTY.	DESCRIPTION
A31522	1	1/8" MPT cross

SAE 45° Brass Flared Tube Fittings



A32600

PART NO.	QTY.	DESCRIPTION
A32600	10	1/4" (NS4-4)
A32601	5	5/16" (NS4-5)
A32602	10	3/8" (NS4-6)
A32603	5	1/2" (NS4-8)
A32604	5	5/8" (NS4-10)
A32605	2	3/4" (NS4-12)

Swivel Female Flare x Solder Adapter

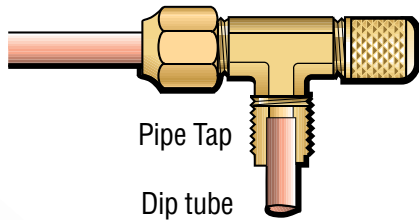


A32700

PART NO.	QTY.	DESCRIPTION
A32700	4	1/4" x 1/4" (US5-44)
A32701	4	3/8" x 3/8" (US5-66)
A32702	4	1/2" x 1/2" (US5-88)
A32703	2	5/8" x 5/8" (US5-1010)
A32704	2	3/4" x 3/4" (US5-1212)

MPT Connections

All MPT Connections have internal braze cup for dip tube installation



MPT Connection



A31482

PART NO.	QTY.	DESCRIPTION
A31482	5	1/4" Flare x 1/8" MPT Half Union
A31484	5	1/4" Flare x 1/4" MPT Half Union
A31492	3	1/4" Flare x 1/8" MPT Elbow
A31494	3	1/4" Flare x 1/4" MPT Elbow

MPT Tee Connection



A31452

PART NO.	QTY.	DESCRIPTION
A31452	3	1/8" MPT x 1/4" SAE Branch Tee
A31454	3	1/4" MPT x 1/4" SAE Branch Tee
A31512	3	1/8" MPT run
A31514	3	1/4" MPT x 1/4" SAE Run x 1/4" SAE Branch Tee

MPT Forged Brass Braze Tee



A31234

PART NO.	QTY.	DESCRIPTION
A31234	3	1/4" ODS x 3/8" ODF
A31235	3	5/16" ODS x 3/8" ODF
A31236	3	3/8" ODS x 1/2" ODF
A31238	3	1/2" ODS x 5/8" ODF

MPT Flared Tube Connection



A31424

PART NO.	QTY.	DESCRIPTION
A31424*	3	1/4" Female SAE union w/flare nut
A31444	3	1/4" Female SAE union w/flare nut

*Core pre-torqued to AHRI

MPT Flare Connection and Flare Fitting Adapter



A31734

PART NO.	QTY.	DESCRIPTION
A31614*	5	1/4" Female SAE w/copper gasket
A31734*	3	1/4" Female SAE swivel nut w/depressor

*Core pre-torqued to AHRI



O-Rings/Gaskets

Replacement Parts



P90009



P90010



P90012



P90016

PART NO.	QTY.	DESCRIPTION
P509	6	1/4" Gasket for quick couplers, gasket caps (6 pack)
P325	2	1/4" and 5/16" replacement gaskets for A32525N (1 each)
P509-25	25	1/4" Gasket for quick couplers, gasket caps (25 pack)
P510	6	1/4" CLA Series R134a gasket (6 pack)
P511	6	Gasket for 1/4" CLE, CLV, CLB Series hose (6 pack)
P511-10	10	Gasket for 1/4" CLE, CLV, CLB Series hose (10 pack)
P90008	5	Gasket for 1/2" heavy-duty black charging hose (5 pack)
P90009	10	1/4" O-ring for couplers, vacuum pumps and flexible metal hose (10 pack)
P90010	5	1/4" O-ring for access valves and liquid charging adapters, 1/4" caps (5 pack)
P90011	5	5/16" O-ring for liquid charging adapters (5 pack)
P90012	10	3/8" O-ring for couplers, vacuum pumps and flexible metal hose (10 pack)
P90016	10	Gasket for 3/8" hose (10 pack)
P90022	10	O-ring for T21295 and 33112RK (10 pack)
P90513	5	1/4" Spring type clip depressor for coupler; used with P509 (5 pack)
P90514	5	1/4" Depressor for CLE, CLV and CLB Series used with P511 (5 pack)



P90513



P509



P90514



P511

MPT Brass Bodies



A31722

PART NO.	QTY.	DESCRIPTION
A31722	3	1/8" ODS x 1/4" ODF
A31723	3	3/16" ODS x 1/4" ODF
A31724	3	1/4" ODS x 3/8" ODF
A31725	3	5/16" ODS x 1/2" ODF
A31726	3	3/8" ODS x 1/2" ODF
A31728	3	1/2" ODS x 5/8" ODF

MPT Multi-Step



A31720

PART NO.	QTY.	DESCRIPTION
A31720	5	3/16" ODS x 1/4" or 3/8" ODF steps
A31729	3	3/16", 1/4", 5/16", 1/2" ODF steps
A31736	3	1/8" ODS x 3/16", 1/4" or 5/16" ODF

"JB has amazing customers that I enjoy working with everyday. Our tight knit JB team makes it a pleasure to meet our customers needs"

-Tom Muncey,
Director of Sales



Vacuum Rated Valve Core Removal Tool with Access Port



Vacuum rated to 20 microns with quarter-turn ball valve shutoff and o-ring seals
Speeds up evacuation, recovery, or recharging through the full flow port
Storage area for spare valve cores



A32525N

PART NO.	QUICK CONNECT	FLARE RUN	SIDE PORT
A32500N	1/4"	1/4"	—
A32505N	5/16"	1/4"	—
A32525N	1/4"	1/4"	1/4"
A32530N	5/16"	1/4"	1/4"
A32535N	5/16"	5/16"	1/4"
A32501N	Core remover bit for A32500N replacement		
A32504	Core remover bit for A32525N replacement		
P325	1/4" and 5/16" replacement gaskets for A32525N (1 each)		

Valve Cores and Tool



Positive stop valve core with neoprene cup washer and PTFE barrel gasket seal for A/C system valves
Installation torque 3 to 5 in/lbs
Max 800 psi and 220°F (104°C)



A32004

A31999

PART NO.	QTY.	DESCRIPTION
A32004	1	1/4" Valve core tool with storage for six valve cores
A31999	5	1/4" Valve cores
A31999-25	25	1/4" Valve cores
A31999-100	100	1/4" Valve cores

Valve Core Torque Tool

Preset torque to 5 in/lbs for precise torquing of core valves
Works with all standard valve cores



A32008

A32008-BX

PART NO.	QTY.	DESCRIPTION
A32008	1	1/4" Valve core torque tool
A32008-B	12	1/4" Valve core torque tools in bulk
A32008-BX	12	1/4" Valve core torque tools in display box

Evacuation Recovery Tool

Plier-type tool with a quick release trigger to puncture large holes into the line for discharge of a recovery unit
Fits 3/16" to 7/8" OD hard tubing



A32100

PART NO.	QTY.	DESCRIPTION
A32100	1	Evacuation/recovery tool
A32101	1	Hardened steel needle and gasket

Quick Seal O-Ring Caps



Deep vacuum and A/C refrigeration
Finger-tight sealing for all male SAE connections



NFT5-4

PART NO.	QTY.	DESCRIPTION
NFT5-4	10	1/4" SAE cap
NFT5-5	5	5/16" SAE cap
NFT5-6	3	3/8" SAE cap
NFT5-8	3	1/2" SAE cap
NFT5-4-25	25	1/4" SAE cap
NFT5-4-100	100	1/4" SAE cap
NFT5-6-100	100	3/8" SAE cap
P90010	10	Replacement 1/4" o-ring
P90011	5	Replacement 3/8" o-ring

Quick Seal Gasket Caps



Deep vacuum and A/C refrigeration
Finger-tight sealing for all male SAE connections



A31985

PART NO.	QTY.	DESCRIPTION
A31985	10	1/4" SAE cap
A31985-100	100	1/4" SAE cap
P509	6	1/4" Replacement gasket
P509-25	25	1/4" Replacement gasket

O-Ring Seal Line Piercing



Spring loaded needle automatically backseats,
forming a leak proof seal
Simple installation that is 100% restriction-free



LT-456

PART NO.	DESCRIPTION
LT-456	1/4" – 3/8" Line piercing valve
LT-810	1/2" – 5/8" Line piercing valve

E-Z Tapper



Backseating stem eliminates line restriction
when servicing through access port or when
using the valve for flow control



EZ-40288

PART NO.	QTY.	DESCRIPTION
EZ-40288	1	E-Z tapper piercing valve 3/16" x 3/8" OD tube
EZ-40288-126	5	E-Z tapper gasket

Wrench Style Seal Cap



For A/C refrigeration service
Brass-to-brass positive seal and permanent
installation



A31986

PART NO.	QTY.	DESCRIPTION
A31986	5	1/4" SAE cap

Backseating Control Valve



Ideal for use on pre-charged line sets
Eliminates spraying of leak detection dye and
refrigerant
Compact brass body for long service
Swivel coupler with double safety grooves



A33000

PART NO.	QTY.	DESCRIPTION
A33000	1	1/4" SAE x 1/4" o-ring quick coupler
P90009	10	Replacement o-ring

Core Removers



A31997



A31998

PART NO.	QTY.	DESCRIPTION
A31997	10	1/4" Core remover cap
A31998	5	1/4" Plastic core removers

Specialty Caps



A31992

PART NO.	QTY.	DESCRIPTION
A31992	5	1/4" SAE cap
A31992-100	100	1/4" SAE cap
13493	2	Plastic cap with retainer strap
13494	1	Plastic cap

QC Angled Adapter 45°



QC-S45-45

PART NO.	DESCRIPTION
QC-S45-45	5/16" Female x 1/4" SAE Male Angled Adapter 45°

QC Straight



QC-S4

PART NO.	DESCRIPTION
QC-S3	3/16" QC x 1/4" SAE
QC-S4	1/4" QC x 1/4" SAE
QC-S46	1/4" QC x 3/8" SAE
QC-S5	5/16" QC x 1/4" SAE
QC-S5S	5/16" QC x 1/4" SAE (w/valve core)
QC-S64	3/8" QC x 1/4" SAE (no depressor)
QC-S65	3/8" QC x 5/16" SAE (no depressor)

QC Female NPT Thread



QC-S4A

PART NO.	DESCRIPTION
QC-S4A	1/4" QC x 1/8" Female NPT
QC-S4B	1/4" QC x 1/4" Female NPT

QC Elbow



QC-E3

PART NO.	DESCRIPTION
QC-E3	3/16" QC x 1/4" SAE elbow
QC-E4	1/4" QC x 1/4" SAE elbow
QC-E5	5/16" QC x 1/4" SAE elbow
QC-E64	3/8" QC x 1/4" SAE elbow (no depressor)

QC SAE Female Adapter



A31656

PART NO.	DESCRIPTION
A31656	1/4" SAE Male x 5/16" SAE Female Adapter
A31665	5/16" SAE Male x 1/4" SAE Female Adapter

QC Access Tee



O-ring seal quick coupler
Includes cap and valve core



A34000

PART NO.	QTY.	DESCRIPTION
A34000	1	1/4" QC x 1/4" access branch tee
P90009	10	Replacement o-ring

Swivel Cylinder Valve



O-ring seal quick coupler
Includes cap and valve core



CV-20004

PART NO.	DESCRIPTION
CV-20004	3/4" NPS x 1/4" M flare
CV-20006	3/4" NPS x 3/8" M flare

Core Depressor



A33500

PART NO.	DESCRIPTION
A33500	1/4" Thumbscrew core depressor
P90009	Replacement o-ring

Liquid Charging Adapters



Metering element assures a safe, fast charge
without damaging the compressor



LC-4/LC-5

PART NO.	DESCRIPTION
LC-4	1/4" Liquid charging adapter
LC-5	5/16" Liquid charging adapter

"U.S. manufacturing is not just a sales slogan, but rather a way of doing business that offers utmost flexibility in meeting our customers' expectations."

- Dave Madden,
Director of Manufacturing



Full Flow Refrigeration Ball Valves

Large port design that provides a minimum pressure drop with straight through flow. Copper end fittings reduce installation time without disturbing valve. Two types of ball valves to suit your needs—traditional refrigerant ball valves with brass actuators and a working pressure rating of 500 psi, and E-Line ball valves featuring stainless steel actuators and a working pressure rating of 700 psi.

Fig 1 – Measurement Chart Key (Fig 1:1 - Fig 1:6 charts page 49)

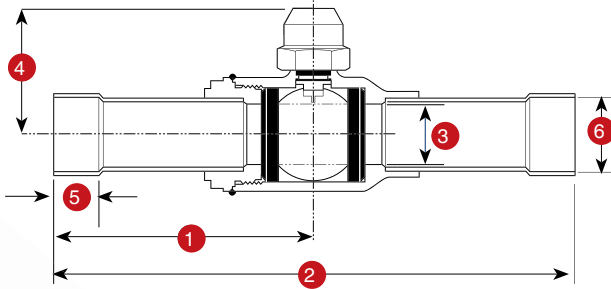


Fig 2 – Ball Valve Operation (7-8)

7 Quarter-turn mechanical stop. Positive open and closed positions. Packing gland adjusting nut.

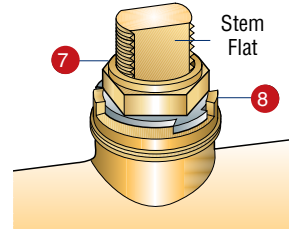
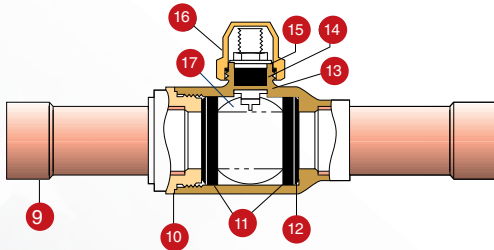


Fig 3 - Anatomy of a Ball Valve (9-17)



- 9 Copper tube extensions
- 10 Hermetic welded and brazed joints
- 11 Reinforced Teflon seats
- 12 One piece forged brass body
- 13 Bearing washer
- 14 Changeable reinforced PTFE stem packing
- 15 Packing gland
- 16 Stem cap assembly with neoprene seal
- 17 Chromium plated ball with vented valve

Shutoff Ball Valves

Straight through flow design has no restriction
Quarter-turn and valve is fully open or closed

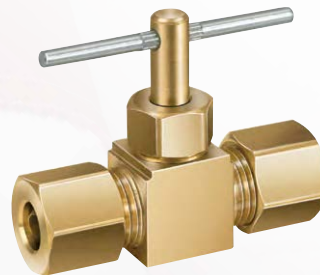


V34900

PART NO.	DESCRIPTION
V34900	1/8" Female NPT x 1/8" Female NPT
V34901	1/4" SAE x 1/8" MPT
V34905	1/4" SAE x 1/4" MPT
V34910	3/8" Female NPT x 3/8" Female NPT

Needle Ball Valves

Resistant to gasoline, oils, and water
Metal-to-metal seating provides ease in shutoff
Working pressures of 105 psi



NV62-4

PART NO.	DESCRIPTION
NV62-4	1/4" COMP x 1/4" COMP

Mini Ball Valves



1/4" for use up to 4000 psi (276 bar) minimum burst; 800 psi (55 bar) maximum working pressure
5/16" for R410A applications; 4000 psi (276 bar) minimum burst; 800 psi (55 bar) maximum working pressure



MBV4-01

PART NO.	DESCRIPTION
MBV4-03	1/4" Compact mini ball valve set (3 pack)
MBV4-01	1/4" Compact mini ball valve
MBV5-03	5/16" QC x 1/4" SAE compact mini ball valve set (3 pack)
MBV5-01	5/16" QC x 1/4" SAE compact mini ball valve

Refrigerant Ball Valves



Pressure rated to 500 psi
 Bolted or screwed bonnets or flanges
 Up to +500°F working temperature at 0 psi
 Up to +300°F working temperature at 500 psi
 Registered to ISO 9001
 UL Listed 57R7



V34202



V34400



PART NO. WITHOUT PORT	PART NO. WITH PORT	OD FIG 1: 6	FIG 1: 1	FIG 1: 2	FIG 1: 3	FIG 1: 4	FIG 1: 5
V34200	V34400	3/8"	3.18"	6.09"	0.30"	1.55"	3/8"
V34201	V34401	1/2"	3.18"	6.09"	0.45"	1.55"	3/8"
V34202	V34402	5/8"	3.43"	6.59"	0.50"	1.55"	1/2"
V34203	—	3/4"	3.45"	7.27"	0.69"	1.89"	3/4"
V34204	V34404	7/8"	3.69"	7.07"	0.75"	1.83"	3/4"
V34206	V34406	1-1/8"	4.20"	8"	1"	2.01"	2-9/32"
V34207	V34407	1-3/8"	4.54"	8.63"	1.25"	2.61"	3-1/32"
V34208	V34408	1-5/8"	4.47"	8.85"	1.50"	2.79"	1-3/32"
V34209	V34409	2-1/8"	4.84"	9.59"	2"	3.17"	1-11/32"
V34210	—	2-1/8"	5"	10"	2.43"	3.90"	1-31/64"
V34211	—	3-1/8"	7"	14"	2.50"	3.90"	1-43/64"

E-Line Actuators

Pressure rated to 700 psi
 Bolted or screwed bonnets or flanges
 UL Listed 32DC



V34307



V34507



For more information see jbind.com

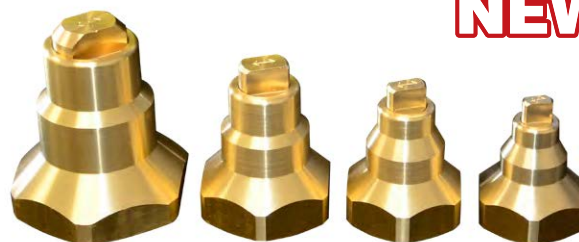
PART NO. WITHOUT PORT	PART NO. WITH PORT	OD FIG 1: 6	FIG 1: 1	FIG 1: 2	FIG 1: 3	FIG 1: 4	FIG 1: 5
V34350	V34525	1/4"	3.25"	6.5"	0.50"	1.51"	3/8"
V34300	V34500	3/8"	3.18"	6.09"	0.30"	1.55"	3/8"
V34301	V34501	1/2"	3.18"	6.09"	0.45"	1.55"	3/8"
V34302	V34502	5/8"	3.43"	6.59"	0.50"	1.55"	1/2"
V34303	V34503	3/4"	3.45"	7.27"	0.69"	1.89"	3/4"
V34304	V34504	7/8"	3.69"	7.07"	0.75"	1.83"	3/4"
V34306	V34506	1-1/8"	4.20"	8"	1"	2.01"	2-9/32"
V34307	V34507	1-3/8"	4.54"	8.63"	1.25"	2.61"	3-1/32"
V34308	V34508	1-5/8"	4.47"	8.85"	1.50"	2.79"	1-3/32"
V34309	V34509	2-1/8"	4.84"	9.59"	2"	3.17"	1-11/32"
V34310	V34510	2-5/8"	5"	10"	2.43"	3.90"	1-31/64"
V34311	V34511	3-1/8"	7"	14"	2.50"	3.90"	1-43/64"

E-Line Actuator Retrofit Caps

For the replacement of existing caps on installed valves. Secures the cap assembly to valve neck, allowing the center post to easily turn for on/off operation. Utilizes a Teflon® o-ring stem seal and base seal to assure a positive seal offsetting any stem packing leak.

PART NO.	DESCRIPTION
V34-RC33	2-1/8" - 3-1/8" Ball valve retrofit cap
V34-RC19	1-3/8" - 1-5/8" Ball valve retrofit cap
V34-RC12	3/4" - 1-1/8" Ball valve retrofit cap
V34-RC4	1/4" - 5/8" Ball valve retrofit cap

NEW!



V34-RC33 V34-RC19 V34-RC12 V34-RC4

American Made Brass

SAE 45° Flared Tube Fittings

For use with copper, brass, aluminum, steel, and plastic tube provided an acceptable flare could be generated with the material.

Vacuum and pressures of 5,000 psi can be handled depending upon the size, material, and conditions. Using a 4:1 safety factor, the following general rule (excluding plastic tube) is used:

3,000 psi to 1/4" 2,000 psi to 1/2" 1,500 psi to 1"

Long nuts are recommended when vibration is a factor. Tubing should be double-flared in extreme applications to minimize flare thinning on over-tightening.

Fittings listed generally comply with SAE, ASA, ASME, and MS standards; however, when design makes dimensions critical, please contact customer service for samples and/or prints for testing and evaluation.

Tube sizes listed are OD (outside diameter). To determine nominal (water tube) size, subtract 1/8", thus 5/8" OD equals 1/2" nominal. Pipe sizes listed are standard nominal pipe size and threads are to dry seal taper pipe standards.

JB will provide flare fitting to SAE Standard J513 whenever possible. In some cases, slight deviations will occur when full compliance fittings are not available.

Heavy-duty ACR tube fittings generally conform to SAE, ASA, and AHRI Standards for hydraulic, marine, and refrigeration service. Long dry seal pipe threads minimize leakage and provide more clearance for tightening flare nuts. Shapes, elbows, tees, etc., are made from brass forgings to maximize strength and eliminate cracks.

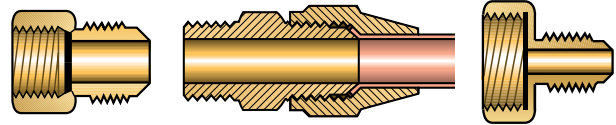
Assembly Instructions



1. Cut tube square and remove cut-off burr
2. Slide nut on tube, threaded end facing end of tube
3. Flare tube following flaring tool manufacturers instructions (check flare quality)
4. Thread nut on to fitting body "hand tighten"
5. With proper wrench, tighten to a solid feel

CAUTION: Over-tightening and dirt can damage fittings and/or tube causing leaks.

NOTE: Lubrication of flare faces and threads is recommended when practical.



Copper seal gaskets (B2) series furnished with all female flares

Fiber gaskets (K1 and D/E) furnished with all drum adapters (K1-1 through 8)

THREAD SIZE OF TUBE ENDS			
OD TUBE	SAE - FLARE	OD TUBE	SAE FLARE
1/8"	5/16" - 24	1/2"	3/4" - 16
3/16"	3/8" - 24	5/8"	7/8" - 14
1/4"	7/16" - 20	3/4"	1-1/16" - 14
5/16"	1/2" - 20	7/8"	1-1/4" - 12
3/8"	5/8" - 18	1"	1-3/8" - 12
7/16"	11/16" - 16	—	—

TORQUE POUNDS FOR FLARE FITTING (DRY THREAD)	
SIZE	FT/LBS
1/4"	8-10
3/8"	15-25
1/2"	25-35
5/8"	40-55
3/4"	50-60

Copper Flare Bonnet



Use with flare nut to cap fittings



B1-3

PART NO.	SIZE	QTY.
B1-3	3/16"	5
B1-4	1/4"	25
B1-6	3/8"	5
B1-8	1/2"	5
B1-10	5/8"	10
B1-12	3/4"	5

Copper Flare Gasket



For brass-to-brass or brass-to-steel connections to prevent leaks



B2-3

PART NO.	SIZE	QTY.
B2-3	3/16"	5
B2-4	1/4"	25
B2-5	5/16"	5
B2-6	3/8"	25
B2-8	1/2"	25
B2-10	5/8"	10
B2-12	3/4"	10

Flare x Female Solder Ell



For brass-to-brass or brass-to-steel connections to prevent leaks



ES2-44

PART NO.	SIZE	QTY.
ES2-44	1/4" x 1/4"	5
ES2-66	3/8" x 3/8"	5
ES2-68	3/8" x 1/2"	2
ES2-88	1/2" x 1/2"	2

Flare x Male Pipe Ell



E1-12E

PART NO.	SIZE	QTY.
E1-2A	1/8" x 1/8"	5
E1-3A	3/16" x 1/8"	2
E1-4A	1/4" x 1/8"	10
E1-4B	1/4" x 1/4"	10
E1-4C	1/4" x 3/8"	5
E1-5A	5/16" x 1/8"	5
E1-5B	5/16" x 1/4"	5
E1-5C	5/16" x 3/8"	5
E1-6A	3/8" x 1/8"	5
E1-6B	3/8" x 1/4"	10
E1-6C	3/8" x 3/8"	10
E1-6D	3/8" x 1/2"	5
E1-6E	3/8" x 3/4"	2
E1-8B	1/2" x 1/4"	5
E1-8C	1/2" x 3/8"	5
E1-8D	1/2" x 1/2"	10
E1-8E	1/2" x 3/4"	2
E1-10C	5/8" x 3/8"	2
E1-10D	5/8" x 1/2"	2
E1-10E	5/8" x 3/4"	2
E1-12D	3/4" x 1/2"	2
E1-12E	3/4" x 3/4"	2

Flare x Female Pipe Ell



E3-4A

PART NO.	SIZE	QTY.
E3-4A	1/4" x 1/8"	5
E3-4B	1/4" x 1/4"	2
E3-5B	5/16" x 1/4"	2
E3-6A	3/8" x 1/8"	5
E3-6B	3/8" x 1/4"	2
E3-6C	3/8" x 3/8"	2
E3-6D	3/8" x 1/2"	2
E3-8C	1/2" x 3/8"	2
E3-8D	1/2" x 1/2"	2
E3-8E	1/2" x 3/4"	2
E3-10D	5/8" x 1/2"	2
E3-10E	5/8" x 3/4"	2

Flare Ell



E2-2

PART NO.	SIZE	QTY.
E2-2	1/8"	5
E2-3	3/16"	5
E2-4	1/4"	5
E2-5	5/16"	5
E2-6	3/8"	5
E2-8	1/2"	5
E2-10	5/8"	2
E2-12	3/4"	2

Refrigerant Drum Adapter



NPS cylinder x male flare; with fiber gasket



K1-1

PART NO.	SIZE	QTY.
K1-1	3/4" x 1/4"	10
K1-3	3/4" x 3/8"	2
K1-5	3/4" x 1/2"	2
K1-8	1/2" x 1/4"	2

Female Flare x Flare Ell



Includes copper gasket



E4-44

PART NO.	SIZE	QTY.
E4-44	1/4" x 1/4"	5
E4-66	3/8" x 3/8"	2
E4-88	1/2" x 1/2"	2

Reducing Flare Ell



ER2-64

PART NO.	SIZE	QTY.
ER2-64	3/8" x 1/4"	5
ER2-84	1/2" x 1/4"	2
ER2-86	1/2" x 3/8"	5
ER2-108	5/8" x 1/2"	2

Swivel Female Flare x Flare Ell



ES4-44

PART NO.	SIZE	QTY.
ES4-44	1/4" x 1/4"	2
ES4-66	3/8" x 3/8"	2
ES4-88	1/2" x 1/2"	2
ES4-1010	5/8" x 5/8"	2
ES4-1212	3/4" x 3/4"	2

Fusible Pipe Plug



FP-C-283



PART NO.	SIZE	QTY.
168°F		
FP-A-168	1/8"	5
FP-B-168	1/4"	5
FP-C-168	3/8"	2
210°F		
FP-A-210	1/8"	5
FP-B-210	1/4"	5
FP-C-210	3/8"	2
283°F		
FP-A-283	1/8"	5
FP-B-283	1/4"	2
FP-C-283	3/8"	2

Flare Cap



N5-3

PART NO.	SIZE	QTY.
N5-3	3/16"	5
N5-4	1/4"	25
N5-5	5/16"	5
N5-6	3/8"	25
N5-8	1/2"	10
N5-10	5/8"	10
N5-12	3/4"	2

Fusible Flare x Pipe Adapter



FU-4C-210



PART NO.	SIZE	QTY.
168°F		
FU-4B-168	1/4" x 1/4"	2
FU-4C-168	1/4" x 3/8"	2
FU-6C-168	3/8" x 3/8"	2
210°F		
FU-4B-210	1/4" x 1/4"	2
FU-4C-210	1/4" x 3/8"	2
FU-6C-210	3/8" x 3/8"	2
283°F		
FU-4B-283	1/4" x 1/4"	2
FU-4C-283	1/4" x 3/8"	2
FU-6C-283	3/8" x 3/8"	2

Old Style Extra Heavy Nut



HNS4-12

PART NO.	SIZE	QTY.
HNS4-4	1/4" (3/4" hex)	25
HNS4-6	3/8" (7/8" hex)	25
HNS4-8	1/2" (1" hex)	10
HNS4-10	5/8" (1-1/8" hex)	10
HNS4-12	3/4" (1-3/8" hex)	2

Cross



C1-6

PART NO.	SIZE	QTY.
C1-4	1/4"	2
C1-6	3/8"	2

Fiber Drum Adapter Seal Gasket



K1-D

PART NO.	SIZE	QTY.
K1-D	1/2"	10
K1-E	3/4"	10

Long Forged Refrigeration Nut



N4-12

PART NO.	SIZE	QTY.
N4-4	1/4"	10
N4-5	5/16"	5
N4-6	3/8"	10
N4-8	1/2"	5
N4-10	5/8"	5
N4-12	3/4"	2

Flare x Flare x Male Pipe Tee



T1-10D

PART NO.	SIZE	QTY.
T1-4A	1/4" x 1/4" x 1/8"	10
T1-4B	1/4" x 1/4" x 1/4"	10
T1-4C	1/4" x 1/4" x 3/8"	2
T1-5B	5/16" x 5/16" x 1/4"	2
T1-6B	3/8" x 3/8" x 1/4"	5
T1-6C	3/8" x 3/8" x 3/8"	5
T1-6D	3/8" x 3/8" x 1/2"	2
T1-8B	1/2" x 1/2" x 1/4"	2
T1-8C	1/2" x 1/2" x 3/8"	2
T1-8D	1/2" x 1/2" x 1/2"	2
T1-10C	5/8" x 5/8" x 3/8"	2
T1-10D	5/8" x 5/8" x 1/2"	2

Short Forged Nut



NS4-14

PART NO.	SIZE	QTY.
NS4-3	3/16"	10
NS4-4	1/4"	25
NS4-4-CS	1/4"	1000
NS4-5	5/16"	10
NS4-6	3/8"	25
NS4-6-CS	3/8"	500
NS4-8	1/2"	25
NS4-8-CS	1/2"	350
NS4-10	5/8"	10
NS4-10-CS	5/8"	200
NS4-12	3/4"	5
NS4-12-CS	3/4"	100
NS4-14	7/8"	2

Frost-Proof Forged Nut



Holes relieve frost in thread area



NST4-10

PART NO.	SIZE	QTY.
NST4-4	1/4"	5
NST4-6	3/8"	5
NST4-8	1/2"	10
NST4-10	5/8"	2

Reducing Nut



NRS4-43

PART NO.	SIZE	QTY.
NRS4-43	1/4" x 3/16"	5
NRS4-54	5/16" x 1/4"	5
NRS4-64	3/8" x 1/4"	10
NRS4-65	3/8" x 5/16"	10
NRS4-86	1/2" x 3/8"	10
NRS4-108	5/8" x 1/2"	5
NRS4-1210	3/4" x 5/8"	2

Flare Tee



T2-12

PART NO.	SIZE	QTY.
T2-3	3/16"	5
T2-4	1/4"	10
T2-5	5/16"	5
T2-6	3/8"	10
T2-8	1/2"	5
T2-10	5/8"	2
T2-12	3/4"	2

Reducing Flare Tee



TR2-446

PART NO.	SIZE	QTY.
TR2-446	1/4" x 1/4" x 3/8"	5
TR2-664	3/8" x 3/8" x 1/4"	5
TR2-668	3/8" x 3/8" x 1/2"	2
TR2-886	1/2" x 1/2" x 3/8"	2

Flare Plug



P2-12

PART NO.	SIZE	QTY.
P2-3	3/16"	5
P2-4	1/4"	10
P2-5	5/16"	5
P2-6	3/8"	10
P2-8	1/2"	10
P2-10	5/8"	5
P2-12	3/4"	2

Flare x Male Pipe Adapter



U1-12E

PART NO.	SIZE	QTY.
U1-2A	1/8" x 1/8"	5
U1-3A	3/16" x 1/8"	5
U1-3B	3/16" x 1/4"	5
U1-4A	1/4" x 1/8"	25
U1-4B	1/4" x 1/4"	25
U1-4C	1/4" x 3/8"	10
U1-4D	1/4" x 1/2"	10
U1-5A	5/16" x 1/8"	5
U1-5B	5/16" x 1/4"	5
U1-5C	5/16" x 3/8"	5
U1-6A	3/8" x 1/8"	10
U1-6B	3/8" x 1/4"	10
U1-6C	3/8" x 3/8"	10
U1-6D	3/8" x 1/2"	10
U1-6E	3/8" x 3/4"	5
U1-8A	1/2" x 1/8"	2
U1-8B	1/2" x 1/4"	5
U1-8C	1/2" x 3/8"	10
U1-8D	1/2" x 1/2"	10
U1-8E	1/2" x 3/4"	5
U1-10B	5/8" x 1/4"	5
U1-10C	5/8" x 3/8"	5
U1-10D	5/8" x 1/2"	10
U1-10E	5/8" x 3/4"	5
U1-12C	3/4" x 3/8"	2
U1-12D	3/4" x 1/2"	2
U1-12E	3/4" x 3/4"	2
U1-14E	7/8" x 3/4"	2

Flare x Female Pipe Adapter



U3-10E

PART NO.	SIZE	QTY.
U3-2A	1/8" x 1/8"	5
U3-3A	3/16" x 1/8"	5
U3-4A	1/4" x 1/8"	10
U3-4B	1/4" x 1/4"	10
U3-4C	1/4" x 3/8"	5
U3-5A	5/16" x 1/8"	5
U3-5B	5/16" x 1/4"	5
U3-6A	3/8" x 1/8"	5
U3-6B	3/8" x 1/4"	5
U3-6C	3/8" x 3/8"	5
U3-6D	3/8" x 1/2"	5
U3-8B	1/2" x 1/4"	5
U3-8C	1/2" x 3/8"	5
U3-8D	1/2" x 1/2"	5
U3-8E	1/2" x 3/4"	2
U3-10C	5/8" x 3/8"	5
U3-10D	5/8" x 1/2"	5
U3-10E	5/8" x 3/4"	2

Flare x Solder Adapter



Furnished with copper gasket



US3-1214

PART NO.	SIZE	QTY.
US3-44	1/4" x 1/4"	10
US3-45	1/4" x 5/16"	5
US3-46	1/4" x 3/8"	5
US3-64	3/8" x 1/4"	5
US3-65	3/8" x 5/16"	5
US3-66	3/8" x 3/8"	10
US3-68	3/8" x 1/2"	5
US3-610	3/8" x 5/8"	5
US3-86	1/2" x 3/8"	2
US3-88	1/2" x 1/2"	5
US3-810	1/2" x 5/8"	2
US3-108	5/8" x 1/2"	2
US3-1010	5/8" x 5/8"	5
US3-1012	5/8" x 3/4"	2
US3-1014	5/8" x 7/8"	2
US3-1212	3/4" x 3/4"	5
US3-1214	3/4" x 7/8"	2

Flare x Male Pipe x Flare Tee



T3-4A

PART NO.	SIZE	QTY.
T3-4A	1/4" x 1/8" x 1/4"	5
T3-4B	1/4" x 1/4" x 1/4"	5
T3-5B	5/16" x 1/4" x 5/16"	2
T3-6B	3/8" x 1/4" x 3/8"	5
T3-6C	3/8" x 3/8" x 3/8"	2
T3-6D	3/8" x 1/2" x 3/8"	2
T3-8C	1/2" x 3/8" x 1/2"	2
T3-8D	1/2" x 1/2" x 1/2"	2
T3-10D	5/8" x 1/2" x 5/8"	2

Flare x Flare x Female Flare Tee



T6-4

PART NO.	SIZE	QTY.
T6-4	1/4"	2

Finger Tight Flare Cap



Neoprene seal; small packs



NFT5-4

PART NO.	SIZE	QTY.
NFT5-4-101	1/4"	1000
NFT5-6-101	3/8"	500

Flare Union



U2-3

PART NO.	SIZE	QTY.
U2-2	1/8"	5
U2-3	3/16"	5
U2-4	1/4"	25
U2-5	5/16"	10
U2-6	3/8"	25
U2-8	1/2"	10
U2-10	5/8"	10
U2-12	3/4"	2
U2-14	7/8"	2

Reducing Flare Union



UR2-84

PART NO.	SIZE	QTY.
UR2-43	1/4" x 3/16"	5
UR2-54	5/16" x 1/4"	5
UR2-64	3/8" x 1/4"	10
UR2-65	3/8" x 5/16"	5
UR2-84	1/2" x 1/4"	5
UR2-86	1/2" x 3/8"	10
UR2-106	5/8" x 3/8"	5
UR2-108	5/8" x 1/2"	5
UR2-128	3/4" x 1/2"	2
UR2-1210	3/4" x 5/8"	2

Female Flare x Flare Adapter



UR3-1210

PART NO.	SIZE	QTY.
UR3-43	1/4" x 3/16"	2
UR3-46	1/4" x 3/8"	10
UR3-48	1/4" x 1/2"	5
UR3-64	3/8" x 1/4"	20
UR3-68	3/8" x 1/2"	10
UR3-84	1/2" x 1/4"	10
UR3-86	1/2" x 3/8"	10
UR3-810	1/2" x 5/8"	10
UR3-108	5/8" x 1/2"	5
UR3-1012	5/8" x 3/4"	2
UR3-1210	3/4" x 5/8"	2

Female Flare x Female Flare Connector



Includes two copper gaskets



U4-12

PART NO.	SIZE	QTY.
U4-4	1/4"	10
U4-6	3/8"	10
U4-8	1/2"	2
U4-10	5/8"	2
U4-12	3/4"	2

Swivel Female Flare Connector



US4-10

PART NO.	SIZE	QTY.
US4-4	1/4"	10
US4-5	5/16"	5
US4-6	3/8"	10
US4-8	1/2"	10
US4-10	5/8"	5

Swivel Female Flare x Solder Adapter



US5-1212

PART NO.	SIZE	QTY.
US5-44	1/4" x 1/4"	5
US5-66	3/8" x 3/8"	5
US5-88	1/2" x 1/2"	5
US5-1010	5/8" x 5/8"	5
US5-1212	3/4" x 3/4"	2

Brass Pipe Fittings

American made forged brass pipe fittings manufactured from CA 377 alloy and threaded to Dry Seal Taper Pipe Standards to comply with SAE, ASA, ASME, and MS Standards

Forgings can be used on vacuums to pressures of 5,000 psi depending on size, material, and conditions

- Vibration-resistant
- Low cost
- Easy assembly

Recommended for use with a compatible thread sealant and tightened 2-1/2 full turns past hand tight; over-tightening and dirt can damage fittings

NOMINAL PIPE SIZE THREADS			
NOM. PIPE	THD. / IN.	NOM. PIPE	THD. / IN.
1/16"	27	2"	11.5
1/8"	27	2-1/2"	8
1/4"	18	3"	8
3/8"	18	3-1/2"	8
1/2"	14	4"	8
3/4"	14	5"	8
1"	11.5	6"	8
1-1/4"	11.5	8"	8
1-1/2"	11.5	—	—

Extra Long Flare x Male Pipe Adapter



UX1-4B

PART NO.	SIZE	QTY.
UX1-4A	1/4" x 1/8"	2
UX1-4B	1/4" x 1/4"	5

Female Flare x Female Pipe Adapter



Includes copper seal gasket



U5-4B

PART NO.	SIZE	QTY.
U5-4A	1/4" x 1/8"	5
U5-4B	1/4" x 1/4"	10
U5-6B	3/8" x 1/4"	5
U5-8C	1/2" x 3/8"	2
U5-8D	1/2" x 1/2"	2

Female Flare x Male Pipe Adapter



U6-4B

PART NO.	SIZE	QTY.
U6-4A	1/4" x 1/8"	2
U6-4B	1/4" x 1/4"	2

Extra Long Flare Union



UX2-4

PART NO.	SIZE	QTY.
UX2-4	1/4"	5

Long Nipple



113-D35

PART NO.	SIZE	QTY.
113-A15	1/8" x 1-1/2"	5
113-A2	1/8" x 2"	5
113-A25	1/8" x 2-1/2"	5
113-A3	1/8" x 3"	5
113-A35	1/8" x 3-1/2"	5
113-B15	1/4" x 1-1/2"	5
113-B2	1/4" x 2"	5
113-B25	1/4" x 2-1/2"	5
113-B3	1/4" x 3"	5
113-B35	1/4" x 3-1/2"	5
113-C15	3/8" x 1-1/2"	5
113-C2	3/8" x 2"	5
113-C25	3/8" x 2-1/2"	5
113-C3	3/8" x 3"	5
113-D15	1/2" x 1-1/2"	5
113-D2	1/2" x 2"	5
113-D25	1/2" x 2-1/2"	5
113-D3	1/2" x 3"	2
113-D35	1/2" x 3-1/2"	2

Compression Break-Off Sleeve Pilot Nut



81LB-4

PART NO.	SIZE	QTY.
81LB-4	1/4"	10

Hex Brushing (R1)



110-EA

PART NO.	SIZE	QTY.
110-BA	1/4" x 1/8"	10
110-CA	3/8" x 1/8"	5
110-CB	3/8" x 1/4"	10
110-DA	1/2" x 1/8"	5
110-DB	1/2" x 1/4"	10
110-DC	1/2" x 3/8"	10
110-EA	3/4" x 1/8"	2
110-EB	3/4" x 1/4"	5
110-EC	3/4" x 3/8"	5
110-ED	3/4" x 1/2"	5
110-FD	1" x 1/2"	2
110-FE	1" x 3/4"	2

Street Ell



116-D

PART NO.	SIZE	QTY.
116-A	1/8" Forged	5
116-B	1/4" Forged	5
116-C	3/8" Forged	5
116-D	1/2" Forged	2

Hex Nipple (U10)



122-E

PART NO.	SIZE	QTY.
122-A	1/8"	5
122-B	1/4"	10
122-C	3/8"	5
122-D	1/2"	5
122-E	3/4"	5

Ell



100-E

PART NO.	SIZE	QTY.
100-A	1/8"	5
100-B	1/4"	5
100-C	3/8"	5
100-D	1/2"	2
100-E	3/4"	2

Coupling PC



103-E

PART NO.	SIZE	QTY.
103-A	1/8"	5
103-B	1/4"	10
103-C	3/8"	5
103-D	1/2"	5
103-E	3/4"	5

Close Nipple



112-B

PART NO.	SIZE	QTY.
112-A	1/8"	5
112-B	1/4"	10
112-C	3/8"	5
112-D	1/2"	5
112-E	3/4"	5

Hex Head Plug (P3)



121-C

PART NO.	SIZE	QTY.
121-A	1/8"	10
121-B	1/4"	10
121-C	3/8"	5
121-D	1/2"	5
121-E	3/4"	5
121-F	1"	2

Tee



101-E

PART NO.	SIZE	QTY.
101-A	1/8"	5
101-B	1/4"	10
101-C	3/8"	5
101-D	1/2"	2
101-E	3/4"	2

Introducing JUST BETTER TOOLS for HVAC/R industry professionals

NEW!

High quality JUST BETTER TOOLS feature superior craftsmanship for dependable performance, reliability and durability you can count on—from the brand you trust. The full line of heavy-duty, high performance tools and accessories from JB Industries ensures your tool kit has everything you need to get the job done.

JUST BETTER SINCE 1967—JB Industries is dedicated to providing quality and innovative products to satisfy customer needs and serve the HVAC industry.



Large and small planogram options available for quick and easy displays.

Product literature can be downloaded at jbind.com. Contact customer service for more information.



PLNG-JBTOOL-LG

Large JUST BETTER TOOL Planogram

PLNG-JBTOOL-SM

Large JUST BETTER TOOL Planogram

Mini Tube Cutters

For use with copper

Large knurled knob for fatigue-free pressure control



RT70401

RT70015

PART NO.	QTY.	DESCRIPTION
RT70401	1	Copper Mini-Cut Pro 1/8" to 5/8" OD
RT70402	1	Copper Mini-Pro 1/4" to 7/8" OD
RT70105	1	Copper Mini-Pro 1/8" to 7/8" OD
RT70015	1	Copper Mini-Max 1/8" to 1-1/8" OD
RT70017B	2	Replacement cutter wheel
RT70017D	5	Replacement cutter wheel
RT70041	1	Replacement axle screw/pin

Ratchet Tube Cutter

For use with copper, brass, aluminum, thin-walled steel, and plastic coated tubes

Telescopic guide; automatic spring-driven withdrawal

Retractable internal deburring tool

Spare cutter wheel in handle



RT70030

PART NO.	QTY.	DESCRIPTION
RT70030	1	1/4" to 2-5/8" OD
RT70142	1	2" to 5" OD
RT70017B	2	RT70030 Replacement wheel
RT70017D	5	RT70030 Replacement wheel
RT70057D	2	RT70142 Replacement wheel
RT21652	1	Replacement deburring blade
RT21652B	10	Replacement deburring blades
RT75007	1	Replacement pin and axle

Professional Tube Cutters

For use with copper, brass and aluminum

Retractable deburrer blade and a spare cutter wheel in the handle

Easy-to-turn knob for quick adjustment



RT70027

RT70029

PART NO.	QTY.	DESCRIPTION
RT70027	1	1/4" to 1-3/8" OD copper, brass and aluminum pipe
RT70029	1	1/4" to 1-5/8" OD copper, brass and aluminum pipe
RT21652	1	Replacement deburring blade
RT21652B	10	Replacement deburring blades
RT70017B	2	Replacement cutter wheel
RT70017D	5	Replacement cutter wheel
RT70056D	5	Replacement cutter wheel for stainless steel

Rotrac Plus Tube Cutters

For use with copper

Smooth-running telescopic action for consistent working radius

Protected screw spindle to shield against dirt and jamming

Includes three spare cutter wheels; storage in handle



RT70020

RT70021

PART NO.	QTY.	DESCRIPTION
RT70020	1	Copper tube 1/8" to 1-1/8" OD
RT70021	1	Copper tube 1/4" to 1-5/8" OD
RT70007B	2	Replacement cutter wheel
RT70007X	10	Replacement cutter wheel
RT99016	1	Replacement clip and axle

JUST BETTER TOOLS

Pipe Shears

For use with PVC, PP, PE, PEX, PB, CPVC and PVDF

Quick release lever

Double-sided stainless steel blade with v-shaped edges

Locking lever



RT52000

PART NO.	QTY.	DESCRIPTION
RT52000	1	Max. OD 1-5/8", Schedule 40 PVC 1-1/4"
RT52010	1	Max. OD 2", Schedule 40 PVC 1-1/2"
RT52011	1	Replacement blade for RT52010
RT52030	1	ROCUT® 63TC, Max. OD 2-1/2"
RT52042	1	Replacement blade for RT52000

Aluminum Pipe Wrench



RT70160

PART NO.	QTY.	DESCRIPTION
RT70159	1	10" Aluminum pipe wrench
RT70160	1	14" Aluminum pipe wrench
RT70161	1	18" Aluminum pipe wrench

Water Pump Pliers

Ideal for hard to reach places

Heavy-duty, slip-proof with self-clamping jaws



RT70522

PART NO.	DESCRIPTION
RT70521	7" Pliers Max. 1" OD
RT70522	10" Pliers Max. 1-1/4" OD
RT70523	12" Pliers Max. 1-1/4" OD

Rolock Pliers

Professional-grade jaw locking system

Groove opening positions up to 2-1/3"



RT70532

PART NO.	QTY.	DESCRIPTION
RT70531	1	7" Rolock
RT70532	1	10" Rolock
RT70533	1	12" Rolock

Machine Grooved Joint Pliers



RT70534

PART NO.	SIZE
RT70534	12" Machine grooved joint pliers

Ro-Grip

Self-adjusting rhombus-shaped jaws securely grab round, hex, sheets, and other shapes up to 1-5/8" OD



PART NO.	SIZE
RT70558	Ro-Grip self-adjusting pliers

Minibend® Tube Bender

For use with soft copper, brass, aluminum, and precision steel
Precise bending up to 180° 1/4", 5/16", and 3/8" OD



PART NO.	DESCRIPTION
RT25151	Minibend® tube bender

Hand Tube Bender

For use with soft copper, aluminum, and light grade stainless steel tubing
Universal tool for bending of 1/2", 5/8", 3/4" and 7/8" OD



PART NO.	DESCRIPTION
RT90614	Hand tube bender

Adjustable Wrench

Slim profile; Extra-wide jaw opening
Designed for TXV/TEV Valves, motor mounts, gas lines, pumps and more
Jaw allows for greater capacity and range of motion in tight spaces
Extremely strong and durable for years of use
Comfortable cushion grip handle



PART NO.	DESCRIPTION
RT70170	6" Adjustable wrench
RT70171	8" Adjustable wrench

Maxi Tube Bender Set

For use on copper and soft aluminum 3/8", 1/2", 5/8", 3/4", and 7/8" OD
Smooth-running feed lever ideal in tight spaces
Single-handed operation
Quick release side lever
Includes tool, bending support, bending formers and case



PART NO.	DESCRIPTION
RT23022	Maxi tube bender set for use on copper and soft aluminum 3/8", 1/2", 5/8", 3/4", and 7/8" OD

JUST BETTER TOOLS



Standard Tube Bender Pro

For use with 1/2" and 3/4" soft copper, aluminum, and precision steel
 Precise bending radius up to 180°
 Clamping mechanism



RT25140

PART NO.	DESCRIPTION
RT25140	1/4" OD radius (0.71")
RT25131	5/16" OD radius (0.95")
RT25913	Tube Bender Pro 1/2" OD radius
RT25914	Tube Bender Pro 3/4" OD radius
RT25142	1/2" OD radius
RT25136	5/8" OD radius (2.28")

Spring Tube Benders

For use with soft copper, aluminum, brass and steel



SPRING TUBE BENDER SETS	
PART NO.	DESCRIPTION
BS-55	1/4", 5/16", 3/8", 1/2", 5/8" in pouch
BS-77	1/4", 5/16", 3/8", 7/16", 1/2", 5/8", 3/4", 7/8" in pouch

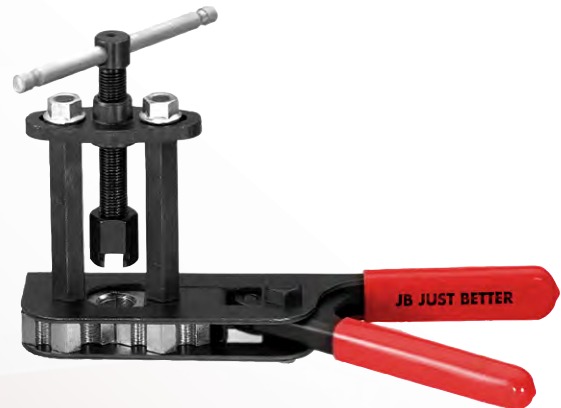
SINGLE SPRING TUBE BENDERS		
PART NO.	TUBE OD	NOM
BS-4	1/4"	1/8"
BS-5	5/16"	—
BS-6	3/8"	1/4"
BS-7	7/16"	—
BS-8	1/2"	3/8"
BS-10	5/8"	1/2"
BS-12	3/4"	5/8"
BS-14	7/8"	3/4"

Flaring Tool 45°



PART NO.	DESCRIPTION
RT222402	Flares: 1/8", 3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4" OD

45° Flare Tool



PART NO.	DESCRIPTION
RT26036	45° Flare tool; flares 3/16", 1/4", 5/16", 3/8", 1/2", and 5/8"

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Ratcheting Flare Tool



PART NO.	DESCRIPTION
T20195	3/16", 1/4", 5/16", 3/8", 7/16" OD (Nom: 1/8", 1/4", 3/8" and 1/2")
T20203	5/8", 3/4", 7/8", and 1-1/8" OD
T20500	3/16", 1/4", 5/16", 3/8", 1/2", 5/8" OD

Ratcheting Flare Tool



PART NO.	DESCRIPTION
T30600	Flares: 3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4" OD

Flare Tool



PART NO.	DESCRIPTION
RT222601	Flare tool; adjustable from 3/16" to 5/8" OD

45° Flare/Swage



Heavy-duty, wide range bar type flaring tool
Centering yoke with hardened chrome plate and swivel-type cone



PART NO.	DESCRIPTION
T20275	Flare: 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 3/4"
	Nominal Flare: 1/8", 1/4", 1/2", 5/8"
	Swage: 3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4"
	Nominal Swage: 1/8", 1/4", 3/8", 1/2", 5/8"

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Swaging Kit

For use with copper, brass, aluminum, and steel tubes

Includes flaring tool, 45° cone, expander pin, internal/external deburrer, tube cutter and plastic case



PART NO.	DESCRIPTION
RT26715	Swaging kit; 3/16", 1/4", 5/16", 3/8", 1/2", 5/8"

Multi-Swage



PART NO.	DESCRIPTION
T21000	Multi-swage Tool Set; 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 5/8", 3/4", 7/8" OD. 1/8", 1/4", 3/8", 1/2", 5/8", 3/4" Nom.

Multi-Swage



PART NO.	DESCRIPTION
T20095	Multi-swage Tool; 1/4", 5/16", 3/8", 7/16", 1/2", 5/8" OD

Single Size Swage Tools



PART NO.	TUBE OD	NOM
T21002	1/8"	—
T21003	3/16"	—
T21004	1/4"	1/8"
T21005	5/16"	—
T21006	3/8"	1/4"
T21007	7/16"	—
T21008	1/2"	3/8"
T21010	5/8"	1/2"
T21012	3/4"	5/8"
T21014	7/8"	3/4"
T21018	1-1/8"	1"
T21024	Packaged set: 1/4", 3/8", 1/2", and 5/8"	Packaged set: 1/8", 1/4", 3/8", and 1/2"

Braze-Rite Adapter



For use with copper tube
Stepped nitrogen purging adapter for AC/R pipe



PART NO.	DESCRIPTION
BRZ1000	Braze-Rite Adapter; ACR copper tube size: 1-1/8", 7/8", 3/4", 5/8", 1/2", 3/8"

Deburring Tools

For copper and plastic tube



PART NO.	QTY.	DESCRIPTION
RT11006	1	Copper and stainless steel internal/external reamer 1/4" to 1-1/2" OD
RT70075	1	Copper and stainless steel internal/external reamer 1/8" to 2" OD
RT21660	1	Deburring tool (blade non-replaceable)
RT21655	1	Deburring tool
RT21652	2	Replacement deburring blades
RT21652B	10	Replacement deburring blades

Metal Flare Size Gauge

Designed to measure all flares to provide superior seal tightness against flare fittings, a must for every toolbox.



PART NO.	DESCRIPTION
T30600-G	Metal Flare Size Gauge; 1/4", 3/8", 1/2", 5/8", 3/4" SAE (6.4mm, 9.5mm, 12.7mm, 15.9mm, 19.1mm)

Fin Straighteners



PART NO.	DESCRIPTION
T20351	For 8, 9, 10, 12, 14, and 15 spacings per inch
T20352	Stainless steel fin straightener
T20353	Stainless steel fin straightener with large, easy-to-grip handle

"JB Industries is synonymous with high quality and premier partner. We value our customers and strive to produce the highest quality products in the HVACR industry. I'm proud to be part of the JB team."

– Jenny Honn,
Director of Sales



JUST BETTER TOOLS

SM-18 Solenoid Valve **NEW!** Operating Magnet

Designed to convert electrically operated solenoid valves in to hand-operated valves to enable service engineers to operate valves manually
Operates by magnetically lifting the stem assembly and plunger to actuate the valve during service.

Use this solenoid service magnet to test, troubleshoot, or manually activate and control a direct connected or pilot operated 2-way solenoid, 3-way reclaim or 4-way reversing valve

Can be used to hold a solenoid valve open during recovery and evacuation

Can be used in place of the power head on a hot water oil shutoff valve to eliminate the need to wait for the delay on open

Can be used to temporarily replace faulty coil to open solenoid valve

Can be used to turn the power on or replace faulty solenoid

Handy pocket size

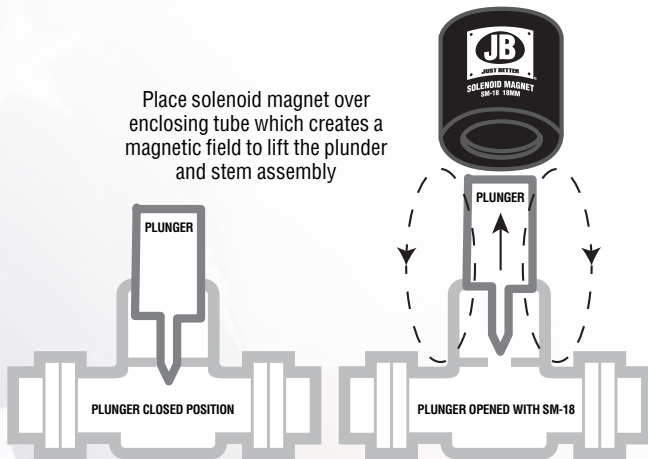
Easy to use and time saving

Permanent magnet molded in ABS plastic

Safe design fits all makes of solenoid valves

18mm

Place solenoid magnet over enclosing tube which creates a magnetic field to lift the plunger and stem assembly



PART NO.	DESCRIPTION
SM-18	18mm Solenoid Magnet

Torque Wrench Kit

Torque range of 7.375 - 59.004 lb-ft or 10-80 Nm with a 1/2" DR ratchet head



PART NO.	DESCRIPTION
TRQ-1080	Torque wrench kit; six spanner heads: 17, 22, 24, 26, 27, 29mm

Imperial Spanner Heads

For use with TRQ1080 torque wrench



PART NO.	DESCRIPTION
TRQ-IMP	Imperial spanner heads; four spanner heads: 5/8", 13/16", 15/16", 1-1/8"

Gas Pressure Test Kits



PART NO.	DESCRIPTION
29435	Natural and LP gas; Scale 0-20 oz/sq. in.; 0-35" of water column
29436	Natural gas only; Scale 0-6 oz/sq. in.; 0-10" of water column

Gas Test Gauges



PART NO.	DESCRIPTION
GTBG-12	3-1/2" Test gauge 0-30lb 3/4" end
GTBG-16	3-1/2" Test gauge 0-30lb 1" end

Tube Expander Kit



High strength, forged aluminum body for lower weight and easy handling
Automatic retractable pin guide



PART NO.	DESCRIPTION
RT12318	Tube expander kit; riveted expander heads in 3/8", 1/2", 5/8", 3/4", 7/8", 1-1/8", internal/external deburring tool, steel case

Hex Key Adapter



For use with 3/16" and 5/16" hex valves



PART NO.	DESCRIPTION
T2-HKA	Hex key adapter

Service Wrenches



Double end reversible
Available in offset, hex and square ends



PART NO.	DESCRIPTION
T21124U	3/16", 1/4" square x 1/2", 9/16" hex port
T21127U	1/4", 3/16" x 3/8", 5/16" on other end
T21126U	Offset 1/4", 3/16" x 3/8", 5/16"
T21125U	3/8" Square end and 1/2" square end

Pinch-Off Tool



Temporarily closes off line during repairs
Quick release trigger and rounded jaws



PART NO.	DESCRIPTION
T21294	Pinch-off tool; For 1/8" to 5/8" OD (1/8" to 1/2" Nominal)

Steel Strap



Zinc plated with alternating 1/8" and 1/4" nail and bolt holes

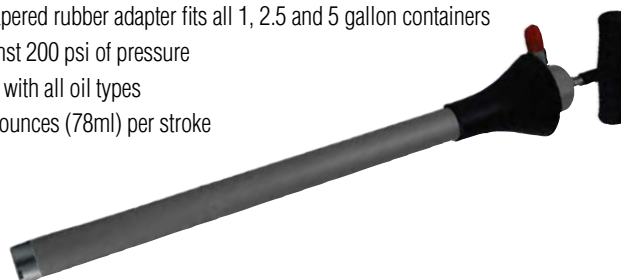


PART NO.	DESCRIPTION
PS-10	10' (3m) Steel strap
PS-25	25' (7.6m) Steel strap
PS-50	50' (15m) Steel strap
PS-100	100' (30.5m) Steel strap

Oil Transfer Pump



Pumps oil into the system without shutting down for charging
Universal tapered rubber adapter fits all 1, 2.5 and 5 gallon containers
Works against 200 psi of pressure
Compatible with all oil types
Pumps 2.6 ounces (78ml) per stroke



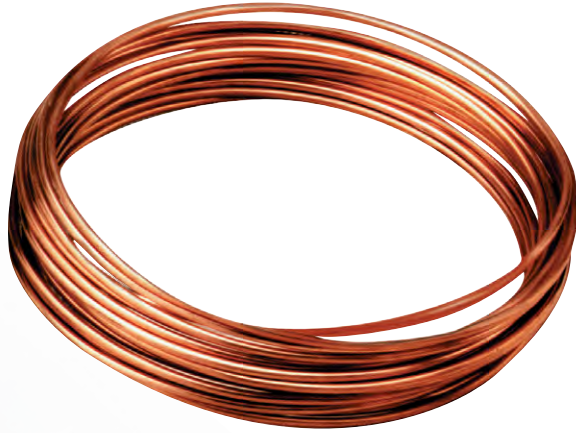
PART NO.	DESCRIPTION
T30251	Oil transfer pump

JUST BETTER TOOLS



Capillary Tubing

Cut from 100' (30.5m) sealed and dehydrated tube
 Boxed with conversion and application charts
 Available in cartons of 10; add suffix -101 to part number



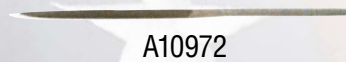
TC-26-16

SHORT COIL	100' COILS	DESCRIPTION
TC-26-16	TC-26-100	0.026 ID x 0.072 OD x 16'
TC-31-12	TC-31-100	0.031 ID x 0.083 OD x 12'
TC-36-12	TC-36-100	0.036 ID x 0.087 OD x 12'
TC-42-12	TC-42-100	0.042 ID x 0.093 OD x 12'
TC-44-12	TC-44-100	0.044 ID x 0.109 OD x 12'
TC-49-11	TC-49-100	0.049 ID x 0.099 OD x 11'
TC-50-11	TC-50-100	0.050 ID x 0.114 OD x 11'
TC-54-11	TC-54-100	0.054 ID x 0.106 OD x 11'
TC-55-11	TC-55-100	0.055 ID x 0.125 OD x 11'
TC-59-10	TC-59-100	0.059 ID x 0.112 OD x 10'
TC-64-10	TC-64-100	0.064 ID x 0.125 OD x 10'
TC-70-12	TC-70-100	0.070 ID x 0.125 OD x 12'
TC-75-9	TC-75-100	0.075 ID x 0.125 OD x 9'
TC-80-10	TC-80-100	0.080 ID x 0.145 OD x 10'
TC-85-9	TC-85-100	0.085 ID x 0.145 OD x 9'
TC-90-7	TC-90-100	0.090 ID x 0.145 OD x 7'
TC-100-10	TC-100-100	0.100 ID x 0.156 OD x 10'

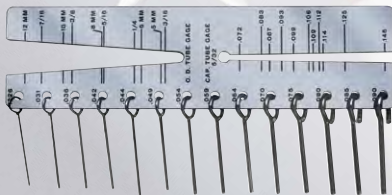
Cap Tube Gauge and File



Specially designed file to cut and open tubes
 ID sizes 0.026 to 0.090 units and OD sizes
 0.072" to 7/16" (5 to 12mm)



A10972



A10971

PART NO.	DESCRIPTION
A10971	Cap tube gauge and file in pouch
A10972	Cap tube file

Cap Tube Cutting Tool

Sturdy cap tube cutter—no collapsing of the tube, no chips, and clean cuts



PART NO.	DESCRIPTION
A10973	Cap tube cutting tool

Acid Brushes

Ideal for thread sealant, flux, and paste solders



PART NO.	DESCRIPTION
C33804	1/4" Flux brush (12 pack)
C33808	1/2" Flux brush (10 pack)
C33808-CTN	1/2" Flux brush (144 bulk)

Capillary Tubing Length Conversion Chart

It is recommended that conversions be made using factors within the unshaded area.

1. Locate recommended Cap Tube ID in left hand column
2. Read across and find conversion factor under Cap Tube ID Size
3. Multiply the given length of the recommended cap tube by the conversion factor
4. The resulting length (min. 5ft/max.16ft) of copper cap tube will give the same flow characteristics as the original recommended cap tube

Example:

Recommended cap tube: 9'-.040 ID

Locate .040 in left hand column. Read across the recommended converted conversion:

Part No. TC-36 = .62, Part No. TC-42 = 1.25

Multiply the recommended cap tube length of 9' by the conversion factor:

Part No. TC-36 = 9' x .62 = 5.58"

Part No. TC-42 = 9' x 1.25 = 11.25"

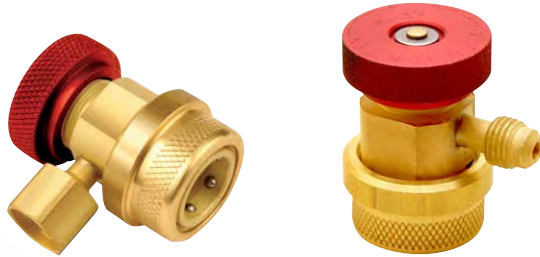
Either of these cap tubes will give the same results as the original cap tube

CAP TUBE ID	PART NO.																
	TC-26 (.026)	TC-31 (.031)	TC-36 (.036)	TC-42 (.042)	TC-44 (.044)	TC-49 (.049)	TC-50 (.050)	TC-54 (.054)	TC-55 (.055)	TC-59 (.059)	TC-64 (.064)	TC-70 (.070)	TC-75 (.075)	TC-80 (.080)	TC-85 (.085)	TC-90 (.090)	TC-100 (.100)
.024	1.44																
.025	1.20																
.026	1.00	2.24															
.028	.72	1.59															
.030	.52	1.16															
.031	.45	1.00	2.00														
.032		.86	1.75														
.033		.75	1.54														
.034		.65	1.35														
.035		.58	1.16	2.31													
.036		.50	1.00	2.10													
.037		.45	.90	1.79	2.22												
.038		.39	.80	1.59	1.92												
.039		.35	.71	1.41	1.75												
.040		.31	.62	1.25	1.55	2.51											
.041		.28	.56	1.12	1.38	2.26	2.50										
.042		.25	.50	1.00	1.24	2.03	2.23										
.043		.23	.45	.87	1.11	1.83	1.98										
.044		.20	.39	.81	1.00	1.62	1.79										
.045			.35	.73	.90	1.47	1.60	2.32									
.046			.32	.67	.82	1.34	1.47	2.08	2.27								
.047				.59	.74	1.20	1.31	1.89	2.06								
.048				.54	.67	1.10	1.20	1.72	1.87								
.049				.49	.61	1.00	1.09	1.55	1.69								
.050				.45	.56	.91	1.00	1.43	1.56	2.14							
.051				.41	.51	.84	.93	1.31	1.44	1.96							
.052					.47	.76	.85	1.19	1.32	1.78							
.053					.43	.69	.78	1.09	1.20	1.64							
.054					.39	.65	.70	1.00	1.09	1.52	2.18						
.055					.36	.59	.64	.92	1.00	1.38	2.00						
.056						.54	.60	.85	.94	1.27	1.85						
.057						.50	.55	.79	.87	1.17	1.72						
.058						.46	.51	.73	.80	1.07	1.56						
.059						.42	.47	.67	.73	1.00	1.44	2.18					
.060						.39	.43	.62	.67	.93	1.33	2.04					
.064							.32	.47	.50	.69	1.00	1.50	2.07				
.070								.30	.33	.46	.67	1.00	1.37	1.84			
.075											.48	.73	1.00	1.37	1.75		
.080												.54	.74	1.00	1.32	1.71	
.085													.57	.76	1.00	1.29	
.090													.43	.62	.76	1.00	1.62
.095														.46	.60	.79	1.27
.100															.48	.62	1.00
.105																.49	.80
.110																	.65
.115																	.53
.120																	.43

R134a Automotive Couplers



Quick connect/disconnect valve actuation without refrigerant venting
 Safety sleeve holds coupler securely to service port
 Color-coded knobs



AC-13430

AC-15530

PART NO.	DESCRIPTION
AC-13430	High side 90° snap coupler x 14 mm
AC-13435	Low side 90° snap coupler x 14 mm
AC-15530	High side 90° snap coupler x 1/4" SAE
AC-15535	Low side 90° snap coupler x 1/4" SAE

R134a Automotive Quick Adapter



Retrofit existing SAE flare fitting for R134a auto service

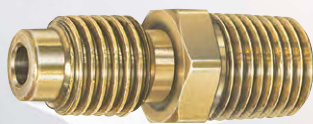


QC-13445-134a

QC-S4A-134a

PART NO.	QC GASKET	DESCRIPTION
QC-S4A-134A	P509	1/4" QC x 1/2" male ACME thread
QC-13445-134A	P510	1/2" ACME QC x 1/4" male flare

1/2" ACME Thread Half Union



AF-13450



AF-13451

PART NO.	DESCRIPTION
AF-13450	1/8" NPTF
AF-13451	1/4" NPTF
AF-13452	3/8" NPTF
AF-13455	1/4" Female SAE
AF-13457	3/8" Female SAE

Automotive Oil Tap Tube



Reduces motor burnout by simplifying acid tests
 Can be left in place for future tests and oil changes



PART NO.	DESCRIPTION
A33600	Automotive oil tap tube

1/2" ACME Service Valve



1/2" ACME x 1/8" NPTF with cap



PART NO.	DESCRIPTION
AF-13550	1/2" Acme service valve

Cool Gel™



Heat Barrier Spray

Prevents heat damage during soldering, brazing, and welding

Safe, non-toxic and odorless



PART NO.	QTY.	DESCRIPTION
11509	12	Cool Gel™ 1 quart bottles

Bloc-It®



Heat Absorbing Paste

Protects against damage caused by heat from soldering, brazing and welding



PART NO.	QTY.	DESCRIPTION
11511	24	Bloc-It® 10oz tubes

Heat-Seal Stik®



Premixed Epoxy Sealer

For use on aluminum, copper, metals, glass and ceramics

Works on R410A based systems

Cures in 90 seconds

Sealing temperature to 350° F (177°C); pressures to 450 psi (31 bar)



PART NO.	QTY.	DESCRIPTION
11575	12	Heat-Seal Stik® 3/8oz sticks

Pipetite-Stik®



For use with water, steam, air, natural gas, and LP gas

Non-toxic and lead-free

Sealing temperature to 350°F (177°C)

Pressures to 2,000 psi (136 bar) for liquids and 350 psi (24 bar) for gases



PART NO.	QTY.	DESCRIPTION
11175	12	Pipetite-Stik® 1.25oz sticks
19571	12	Epoxy-Stik® 4oz sticks

Slic-Tite®



Paste with PTFE

Seals water, air, steam, natural gas, LP gas, refrigerants, ammonia, gasoline, and oil

For use with metal, PVC, CPVC, and ABS plastic threads

Sealing temperature -50°F to 500° F (-46°C to 260°C)

Pressures 3,000 psi (204 bar) for gas, 10,000 psi (680 bar) for liquid.



PART NO.	QTY.	DESCRIPTION
42019	12	Slic-Tite® 8oz bottles

Valve Action™



Paint Marker

Lead-free, weather, water, UV-resistant paint marker dries in three minutes

For use with on metal, wood, glass, plastic, rubber, cardboard, and paper

Marking range -50°F to 150°F (-46°C to 66°C)



PART NO.	QTY.	DESCRIPTION
96822	12	Red Valve Action™ paint marker
96823	12	Black Valve Action™ paint marker
96820	12	White Valve Action™ paint marker

Limited Warranty

All JB Industries, Inc. products are warranted against defects in materials and workmanship for a period of 12 months from the date of purchase with the following exceptions:

- Leak Detectors (LD-5000, LD-3000, LDC-4000): 2 years
- ATLAS Scales (DS-20000, DS-20000S): 2 years
- CO2 Manifold (30744): 3 years
- F6-DP: 3 years OTC
- Vacuum Pumps (PLATINUM, ELIMINATOR): 2 years OTC
 - Rebuilt Vacuum Pumps: 6 months
 - Out of Warranty Vacuum Pump Repairs: 90 days

JB products are guaranteed when used in accordance with guidelines and recommendations. Warranty is limited to the repair, replacement, or credit at invoice price, (our option) of products which, in our opinion, are defective due to workmanship and/or materials. In no instance will we allow charges for labor, expense or consequential damage. Repairs performed on items out of warranty will be invoiced on a nominal basis; contact wholesaler for details. Additional product warranty information available online at www.jbind.com.

NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. Technical information, recommendations and advice as to properties and usages of materials, design, installation and use of products, engineering and other matters are provided as an accommodation and are intended only as suggestions. Although they are believed to be accurate, based on JB's knowledge and experience, JB assumes no obligation or liability for any results obtained in their use or application, and they are not to be construed as establishing any warranty, express or implied. In no event shall JB be liable for claims for any damages whatsoever (whether direct, foreseeable, consequential or special) suffered by buyer or anyone else arising out of any breach by JB. JB makes no warranty to those defined as consumers in the Magnuson-Moss Warranty-Federal Trade Commission Improvement Act.

Disclaimers: All product items pictured, described, or otherwise displayed herein are subject to change, alteration, and/or modification at any time by JB Industries, Inc. The terms and conditions for the purchase of JB Industries, Inc. products are subject to change, alteration, and/or modification at any time by JB Industries, Inc. and will be made available upon request to JB Industries Inc. and shall be provided to customers of JB Industries, Inc. at time of purchase.

Over-the-Counter (OTC) Warranty: Applies ONLY to newly purchased F6™ Refrigerant Recovery Unit (3 year OTC) and PLATINUM® or ELIMINATOR® Vacuum Pumps (2 year OTC). OTC Warranty is limited to manufacturing defects and is VOID if the problem has been determined to be caused by abuse or misuse.

Lifetime Manifold Bar Warranty: Manifold bar only has a lifetime warranty, while the components, i.e. gauges, hoses, handles, hose holders, etc. are covered under the limited warranty policy.

For Professional Use Only. JB manifolds are designed for use by technically trained HVAC/R service engineers only. Due to the high pressures encountered in all systems that manifolds will be used on, plus the dangers due to the physical and chemical nature of refrigerants and oils present in all systems, misapplication could result in injury or death.

Return for Repair

Every effort has been made to provide reliable, superior quality products. However, in the event your instrument requires repair, you are required to contact JB Customer Service Department to obtain a Return Goods Authorization (RGA) number.

Ensure that all returned products are packed to avoid damage in shipment. Warranty claims for items damaged in transit will not be honored. Refrain from applying stickers or strong tape on product face as item may be returned with no manufacturer defects. Paperwork should be placed in a separate plastic bag and should include JB's assigned RGA number, a description of the problem, copy of invoice, and any customer assigned repair or purchase order number, if applicable. Please provide contact information (name/address/phone/email) of whom to inform of package receipt as well as the person authorized to accept repair charges should the warranty be void. Product returns for repair will not be accepted without an RGA number from JB Industries.

Contact Customer Service for RGA number:

800.323.0811 Toll	630.851.9444 Tel
800.552.5593 Toll Fax	630.851.9448 Fax

Products should be shipped with freight prepaid to:

JB Industries
 RGA# _____
 601 N. Farnsworth Ave.
 Aurora, IL 60505 USA

Over-the-Counter (OTC) Warranty: Applies ONLY to newly purchased F6™ Refrigerant Recovery Unit (3 year OTC) and PLATINUM® or ELIMINATOR® Vacuum Pumps (2 year OTC). OTC Warranty is limited to manufacturing defects and is VOID if the problem has been determined to be caused by abuse or misuse.

Vacuum Pumps: 2 Year OTC Warranty

All warranty statements apply to both PLATINUM and ELIMINATOR pumps.

JB Industries vacuum pumps are warrantied to be free of defects in materials and workmanship for a period of two years from the date of purchase. This warranty applies to all repairable instruments that have not been tampered with or damaged through improper use including unauthorized opening of the unit.

Pumps received within warranty period are assessed upon arrival at the JB Industries facility to determine warranty coverage. Wholesaler will be notified of warranty coverage determination. Over-the-counter warranty applies only to manufacturing defects and is VOID if determination has been deemed product misuse.

To eliminate unnecessary returns and/or costly repairs, verify oil has been changed and proper pump operation guidelines have been followed prior to requesting a Return Goods Authorization (RGA) number.

NOT CHANGING OIL WILL VOID WARRANTY

Check for Signs of Misuse

- A. Housing area
- B. Broken base
- C. Trap
- D. Damage to fins or drain valve
- E. Sight glass
- F. Damage or dents to pump body
- G. Broken or bent handle
- H. Damaged or missing intake valve



Reasons for Void of Warranty

- Improper usage of pump and pump oil
- Oil has not been changed
- Corrosive substances and/or contaminants found in pump
- Pump has been damaged, altered, or components have been removed or are missing

Packing Vacuum Pump for Return

To ensure that no additional charges are incurred due to improper packaging:

1. Drain ALL oil from pump and close off valves.
2. Place pump in a sealed plastic bag.
3. Package pump in a cushioned bottom carton with packing paper. Be sure to secure and protect pump in carton on all sides. Do not use packing peanuts.
4. Include RGA number issued by JB Industries and supporting paperwork with detailed description of issue in a sealed, separate plastic bag.
5. If an estimate is required, be sure to specify in documentation and include contact information (name/address/phone/email).

F6-DP: 3 Year OTC Warranty

JB Industries warrants the F6-DP Refrigerant Recovery Machine to be free from defects of materials or workmanship for three years from the date of purchase. JB Industries does not warrant any machine that has been subjected to misuse, negligence, or accident, or has been repaired or altered by anyone other than JB Industries.

The compressor is warrantied for a period of three years by the manufacturer. To keep this warranty in force, a filter (included) must be used on the inlet port or hose at all times to prevent particulates from entering the compressor. Failure to use the included filter will void the compressor warranty.

JB Industries liability is limited to repairing or replacing, at its option, a defective machine or part. If a defect arises, a valid claim must be received by JB Industries, with transportation prepaid, no later than thirty (30) days after the warranty period expires. JB Industries will determine whether the machine has malfunctioned due to defective materials or workmanship.

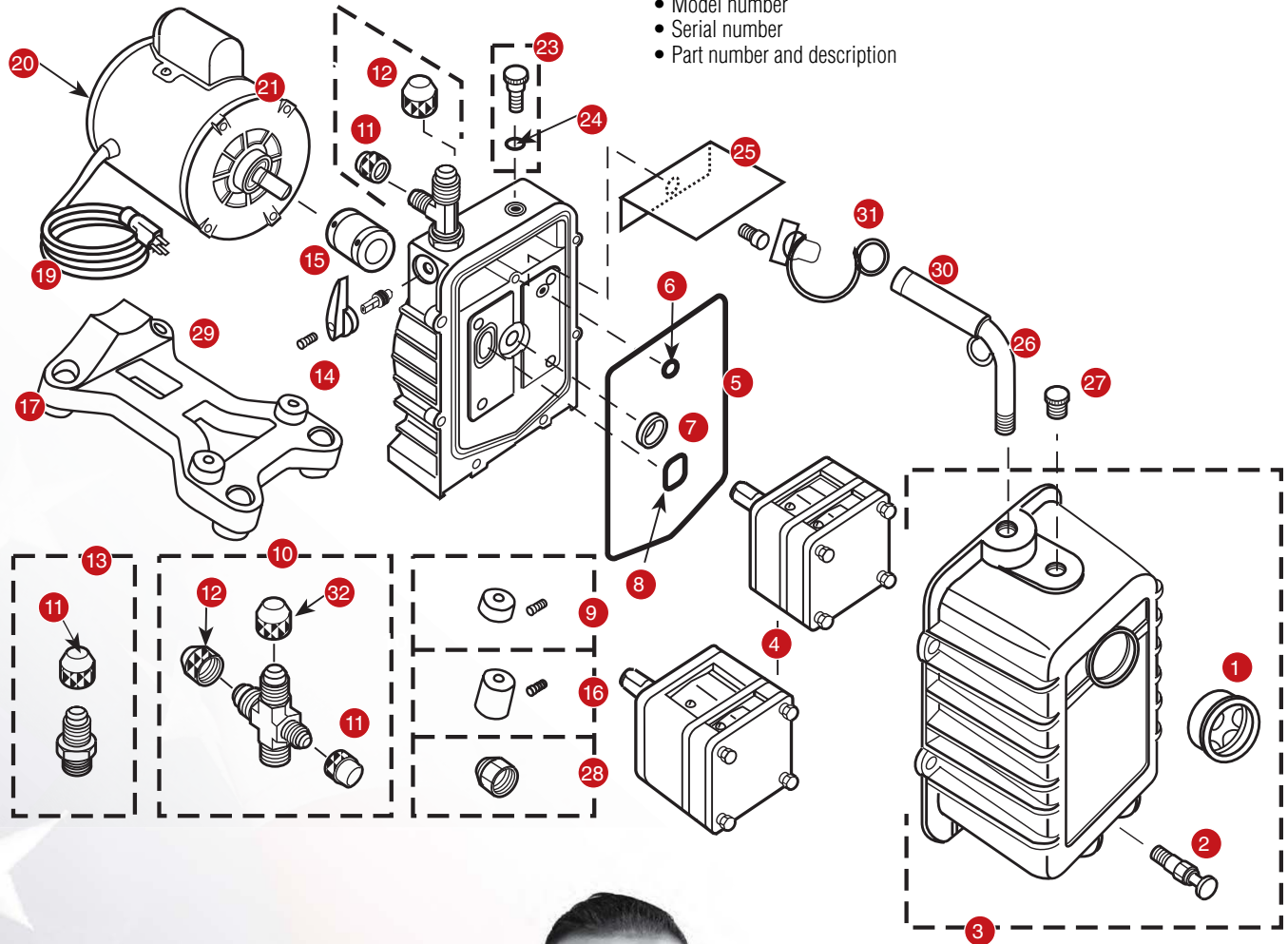


PLATINUM[®] Vacuum Pump Repair

DV-42N through DV-285N Series

Repair parts can be ordered from your local JB wholesaler. When ordering please provide the following information:

- Model number
- Serial number
- Part number and description



"The people and products at JB are wonderful. My favorite JB product... Vacuum pumps of course! They are my expertise and I enjoy building them."

– Fausto Diaz, Pump Production and Repairs Supervisor



PLATINUM[®] Vacuum Pump Repair

DV-42N through DV-285N Series

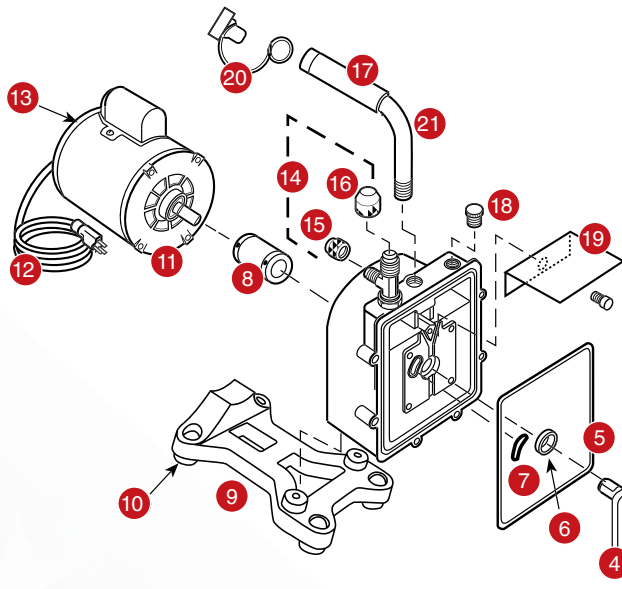
PLATINUM SERIES REPAIR PARTS – ALL MODELS		
REF.NO.	PART NO.	DESCRIPTION
1	PR-1	Sight glass
2	PR-2	Drain valve
6	PR-211	Trap o-ring, gas ballast
7	PR-3	Shaft seal
8	PR-315	Trap o-ring, intake
9	PR-4	Rubber foot and screw assembly (1 per package)
10	PR-76	Intake caps w/cross
11	NFT5-4	1/4" O-ring, intake
12	NFT5-6	3/8" O-ring cap
	NFT5-8	1/2" O-ring cap
14	PR-209	Plastic isolation valve handle and screw w/stem, O-rings and retainer (not interchangeable w/PR-210)
15	PR-208	2-1/2" Flexible coupler*
	PR-308	Flexible section only
	PR-6	2-1/4" Flexible coupler*
	PR-77	1-5/8" Middle section; use w/PR-6 flexible coupler*
16	PR-42	Motor foot w/screw
17	PR-59	Base foot
19	PR-31	Line cord (Emerson motor) old style
	PR-58	Line cord (Marathon motor) new style
20	PR-54	Rocker switch w/wire leads (Emerson) models since 2004
21	PR-206	1/2 Hp, 115v, 60 Hz Motor w/line cord and switch
	PR-207	1/2 Hp, 115/230v, 50/60 Hz Dual Voltage Motor (not shown)
	PR-307	1/2 Hp, 115/230v, 50/60 Hz Spark Proof Motor (not shown)
23	PR-7	Gas ballast valve w/o-ring
24	P90009	O-ring, gas ballast valve
25	PR-40	Splash guard and screw (excludes 3 CFM manufactured before 1/01)
26	PR-75	Cushioned handle w/lift ring 1/2" NPT and DV-EP-8 as of 2008
	PR-205	Cushioned handle 3/8" NPT
27	PR-22	Oil fill plug w/o-ring
28	PR-56	Adapter nut w/nut o-ring
30	PR-500	Cushion and cap 3/8" NPT
	PR-501	Cushion and cap 1/2" NPT
31	DV-EP6	Tethered safety cap 3/8" NPT
	DV-EP8	Tethered safety cap 1/2" NPT
32	NFT5-8	1/2" Cap w/o-ring

PLATINUM SERIES REPAIR PARTS – MANUFACTURED AFTER JANUARY 2001		
REF.NO.	PART NO.	DESCRIPTION
3	PR-300	DV-42N through DV-200N cover assembly w/sight glass and drain valve
	PR-301	DV-285N Cover assembly w/sight glass and drain valve
4	PR-302	DV-42N and DV-85N Cartridge w/o-rings and cover seal
	PR-303	DV-142N Cartridge w/o-rings and cover seal
	PR-304	DV-200N Cartridge w/o-rings and cover seal
	PR-314	DV-285N Cartridge w/o-rings and cover seal
13	PR-32	1/4" Intake w/cap
5	PR-311	Cover seal
20	PR-35	Rocker switch w/prongs (Marathon 1101-0105)
29	PR-62	Pump base (includes feet); fits all pumps with serial #0101 and higher
PLATINUM SERIES REPAIR PARTS – MANUFACTURED BEFORE JANUARY 2001		
5	PR-217	Cover seal
8	PR-215	Trap o-ring, intake
14	PR-210	Metal isolation valve handle and screw
PLATINUM SERIES REPAIR PARTS – NOT SHOWN		
PR-18		Cartridge valve repair kit (includes DV-285N as of 2007 models)
PR-52		DV-285N Cartridge valve repair kit (prior to 2007 models)
PR-45		Pump repair kit PR-1, PR-2, PR-4(2), PR-42, PR-208
PR-211		Trap gas ballast o-ring



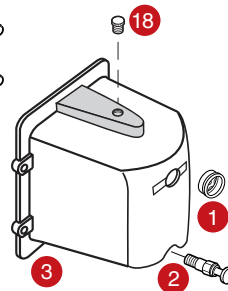
ELIMINATOR[®] Vacuum Pump Repair

DV-3E, DV-4E and DV-6E Series

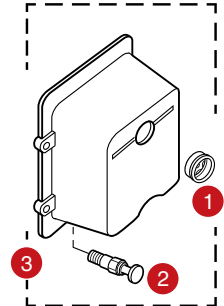


Repair parts can be ordered from your local JB wholesaler. When ordering please provide the following information:

- Model number
- Serial number
- Part number and description



Current chrome cover will fit older black ELIMINATOR models



Black hammertone cover no longer available

ELIMINATOR SERIES REPAIR PARTS		
REF.NO.	PART NO.	DESCRIPTION
1	PR-1	Sight glass*
2	PR-2	Oil drain valve*
3	PR-10	DV-3E, DV-4E and DV-6E cover assembly w/sight glass, drain valve and oil fill plug
4	PR-403	DV-3E Cartridge complete w/o-rings and cover seal
	PR-404	DV-4E Cartridge complete w/o-rings and cover seal
	PR-406	DV-6E Cartridge complete w/o-rings and cover seal
5	PR-217	Cover seal
6	PR-3	Shaft seal
7	PR-315	Trap intake o-ring
8	PR-208	2-1/2" Flexible coupler*
	PR-308	7/8" Middle section; used w/PR-208 2-1/2" Flexible coupler*
	PR-6	2-1/4" Flexible coupler*
	PR-77	1-5/8" Middle section; used w/PR-6 flexible coupler*
9	PR-62	Pump base w/rubber feet and screws (4)
10	PR-59	Rubber pump foot (1)
Not Shown	PR-18	Cartridge valve repair kit

ELIMINATOR SERIES REPAIR PARTS		
REF.NO.	PART NO.	DESCRIPTION
11	PR-206	1/2 HP, 115v/60Hz motor w/line cord and switch
	PR-207	1/2 HP, 115/230v, 50/60Hz dual voltage motor w/line cord and switch (not shown)
	PR-307	1/2 Hp, 115/230v, 50/60 Hz Spark Proof Motor (not shown)
12	PR-31	6' Line cord (Emerson [®] motor)
	PR-58	6' Line cord (Marathon [®] motor)
13	PR-35	Rocker-switch 115v Marathon Motor (prongs)
	PR-54	Rocker-switch 115v Emerson Motor (wire leads)
14	PR-63	Intake tee w/cap
15	NFT5-4	1/4" O-ring cap
16	NFT5-6	3/8" O-ring cap
17	PR-500	3/8" Rubber grip and cap
	PR-501	1/2" Rubber grip and cap
18	PR-22	Oil fill plug w/o-ring
19	PR-40	Stainless steel splash guard w/screw
20	DV-EP6	3/8" Red tethered safety exhaust cap
	DV-EP8	1/2" Red tethered safety exhaust cap
21	PR-205	3/8" Cushioned handle
	PR-65	1/2" Cushioned handle

Emerson[®] is a registered trademark of US Motors. Marathon[®] is a registered trademark of Marathon Electric.
* Coat with thread sealant when replacing.

Manifold Rebuild Kits

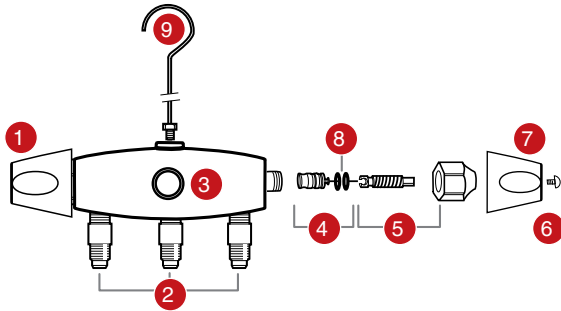
Rebuild kits are available for all manifold series

Standard rebuild kits include a stem, nut, piston with seat, and o-rings

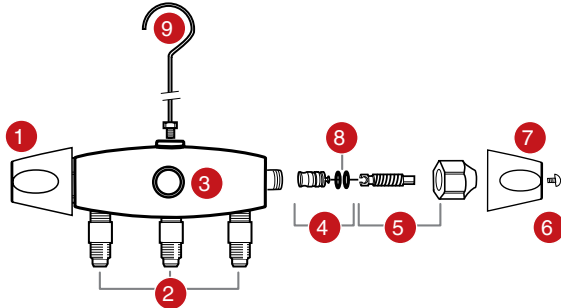
Premium rebuild kits feature two standard kits plus two handwheels and screws

Caution: gauges and hoses not specified for R410A can damage product and cause injury

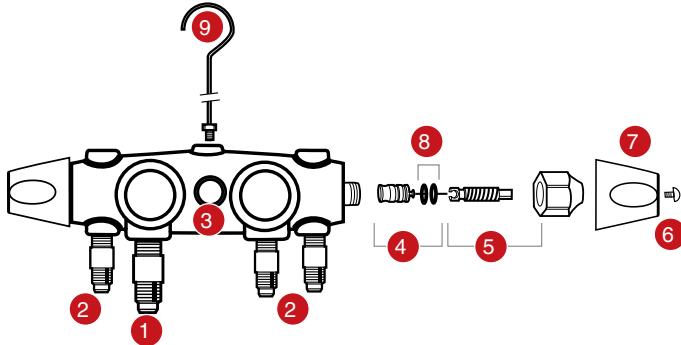
ZEPPELIN® Brass Series



ZEPPELIN® 2-Valve Aluminum Series



ZEPPELIN® 4-Valve Aluminum Series



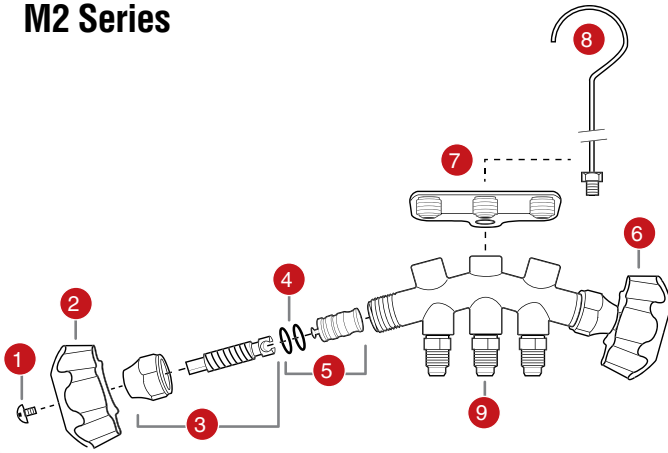
MANIFOLD REBUILD KITS	
PART NO.	DESCRIPTION
M2R-S	Standard M2 rebuild (also fits M5 through M9 series)
M2R-P	Premium M2 rebuild (fits M2 series only)
M4R-S	Standard M4 rebuild
M4R-P	Premium M4 rebuild
2VZR-S	Standard ZEPPELIN 2-valve rebuild (fits both aluminum and brass)
2VZR-P	Premium ZEPPELIN 2-valve rebuild (fits both aluminum and brass)
4VZR-S	Standard ZEPPELIN 4-valve rebuild
4VZR-P	Premium ZEPPELIN 4-valve rebuild
M2-106	1/8" FPT Gauge mounting brackets
M2-108	1/4" FPT Gauge mounting brackets

ZEPPELIN BRASS SERIES MANIFOLD		
REF.NO.	PART NO.	DESCRIPTION
1	MR-601	Handwheel and screw
2	U1-4A	1/4" Intake
3	MR-525	Sight glass
4	MR-505	1/4" manifold piston
5	MR-516	Stem and nut
6	MR-601	Handwheel and screw
7	MR-503	Handwheel screws (2)
8	MR-509	O-rings (2)
9	M2-102N	Hanging hook

ZEPPELIN 2-VALVE ALUMINUM		
REF.NO.	PART NO.	DESCRIPTION
1	MR-601	Handwheel and screw
2	U1-4A	1/4" Intake
3	MR-525	Sight glass
4	MR-505	Piston w/seat and o-rings
5	MR-516	Stem and nut
6	MR-601	Handwheel and screw
7	MR-503	Handwheel screws (two)
8	MR-509	O-rings (two)
9	M2-102N	Hanging hook

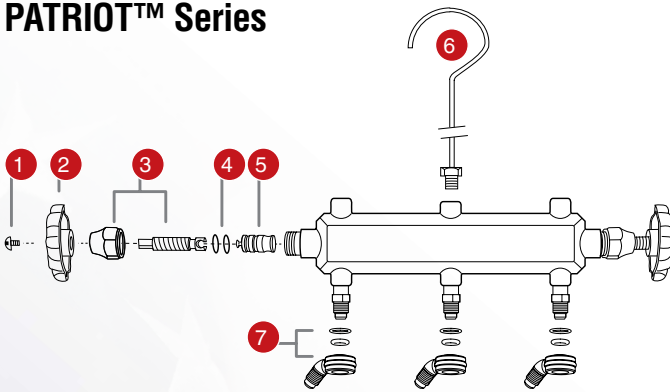
ZEPPELIN 4-VALVE ALUMINUM		
REF.NO.	PART NO.	DESCRIPTION
1	U1-6B	3/8" Intake
2	U1-4A	1/4" Intake
3	MR-525	Sight glass
4	MR-605	Piston w/seat and o-rings
5	MR-607	Stem and nut
6	MR-601	Handwheel and screw
7	MR-503	Handwheel screws (2)
8	MR-409	O-rings (2)
9	M2-102N	Hanging hook

M2 Series



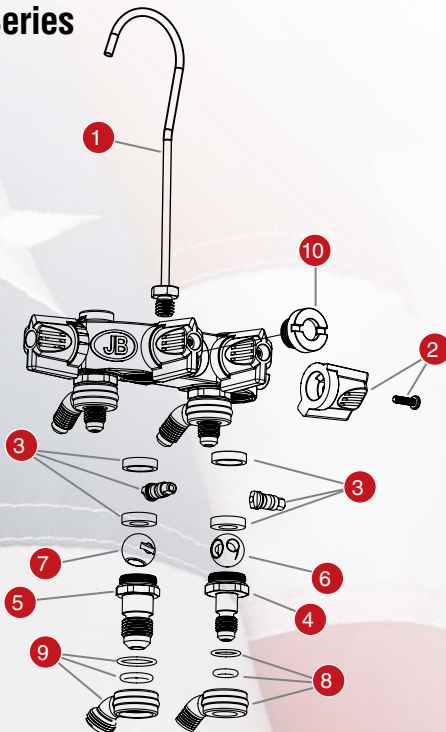
M2 SERIES MANIFOLDS		
REF.NO.	PART NO.	DESCRIPTION
1	MR-503	Handwheel screw (2)
2	MR-501B	Blue handwheel and screw
3	MR-516	Stem and nut
4	MR-509	O-ring (2)
5	MR-505	Piston w/seat and o-rings
6	MR-501R	Red handwheel
7	M2-300	Hose holder 1/4"
8	M2-102N	Hanging hook
9	U1-4A	Intake

PATRIOT™ Series



PATRIOT SERIES MANIFOLDS		
REF.NO.	PART NO.	DESCRIPTION
1	MR-503	Handwheel screw (2)
2	MR-508	Metal handwheel and screw
3	MR-516	Stem and nut
4	MR-509	O-ring (2)
5	MR-505	Piston w/seat and o-rings
6	M2-102N	Hanging hook
7	MR-504	1/4" Hose holder sleeve and o-rings

REVOLVER® Series



REVOLVER 4-VALVE BALL SERIES MANIFOLD		
REF.NO.	PART NO.	DESCRIPTION
1	M2-102N	Hanging hook
2	MR-502	Handle and screw
3	MR-BVK	Ball valve kit including: seals (2), stem (1), o-rings (2) and washer (1)
4	MR-444	1/4" Retainer fitting
5	MR-446	3/8" Retainer fitting
6	MR-611	Throttle ball
7	MR-610	Ball
8	MR-504	1/4" Hose holder sleeve and o-rings
9	MR-506	3/8" Hose holder sleeve and o-rings
10	MR-525	Sight glass w/o-ring

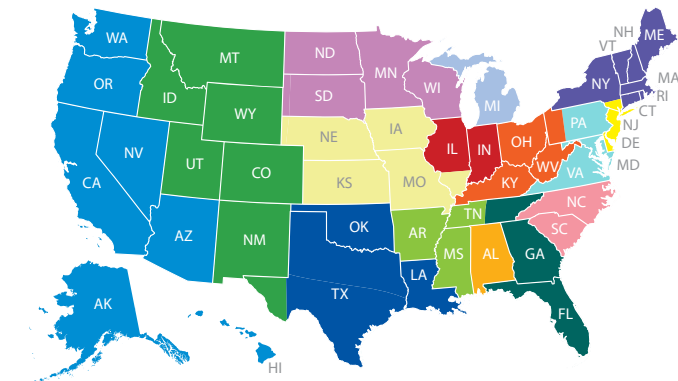
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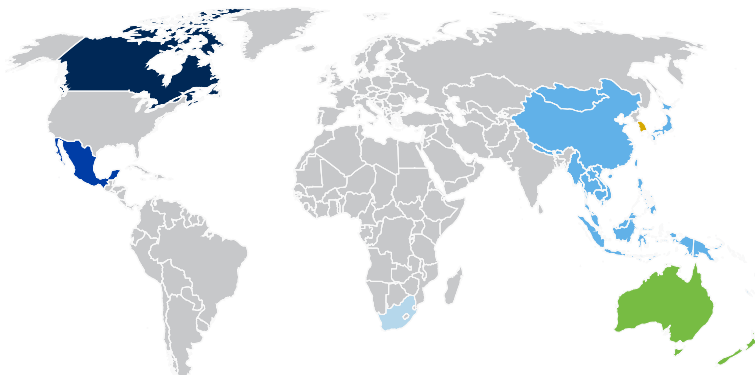
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