



# **JB INDUSTRIES**

PRODUCT













Everyone was ready for a return in 2022 to normal operations and activity. However, the year brought more challenges than anyone expected. We expect that 2023 will bring us a reduction in supply chain disruptions and volatile inflationary pressures.

In 2022, JB, as a USA manufacturer in Aurora, Illinois, continued to operate relatively normally. Despite stocking large quantities of raw material there were so many instances where an "o" ring or other small parts prevented JB from building and shipping as efficiently as we expect.

We are so appreciative of our domestic suppliers keeping us running and are fortunate and grateful for all the hard work and dedication of the JB team. So many worked six days a week to support our customers. While always looking for cost efficiencies and helping minimize price volatility, JB will never sacrifice the product quality and delivery that are synonymous with the JB name.

A guick fun fact: 85% of JB products sold are Made in America. The remaining are engineered and designed in America.

The JB team is especially proud of the new products in this year's catalog. These JB designed and manufactured products not only were recognized by the industry with awards, but also provide time-saving tools for our customers. Our newest products include:

- PLATINUM BEAST 12 CFM pump and the industries best AC/Battery Powered Vacuum Pump PLATINUM FLEX
- F6-BOOST Recovery Machine with industry leading speeds
- ATLAS DS-5000 Propane Scale
- ATLAS DS-250 Digital Scale
- CLIMATE CLASS Wireless Temperature Clamps and Psychrometers
- ACCELERATOR Rapid Evacuation Kit

We are also excited about our longer-term product road map that will include new wireless products, a revamped pump line-up, and other innovative products to make users of JB tools more efficient to complete their jobs faster.

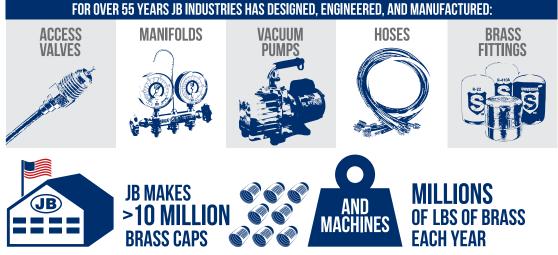
JB continues to add videos and increase social media presence. Please connect with us to see all the great content.

As we enter 2023, we are always thankful for the continued business and partnerships. JB's plan, like it has been for the last 55 years, is simply to continue to manufacture, design, and offer the best products in the industry.

We thank our customers for the continued support and look forward to a great 2023 and beyond together!

Jeff Cherif







JB INDUSTRIES Contents

Climate Class	Refrigerant Hoses	Ball Valves
Wireless Temperature Clamps	CNTL90 Series Pressure Control 30 CLRF Series Flexible Hydrocarbon 30 KOBRA® CLSX Series	Shutoff          Needle          E-Line Retrofit Caps
<b>Digital Manifolds</b> REVOLVER® DM4-RW Digital Wireless <b>6</b> ZEPPELIN® DM4-ZW Digital Wireless <b>7</b>	KOBRA® CLSX Series Repair 31 KOBRA® CLS Series	Refrigerant Ball Valves
Vacuum Pumps/Accessories  PLATINUM® BEAST Pump	KOBRA® CLE Series	Tube Cutters
Refrigerant Recovery Machine <b>14</b> F6-DP™ Refrigerant Recovery Machine <b>15</b>	CoreMax®39	Tube Expander Kit
Refrigerant Scales  ATLAS® DS-5000 Propane 16  ATLAS® DS-250 Wireless 17  ATLAS® DS-20000 Digital 17	Access Valves  Access Valve Overview	Oil Transfer Pump
Digital Vacuum Gauges         DV-22N/DV-24N       18         DVR-22       18         SUPERNOVA® DV-41       19         SH-35N Wireless       19	Copper 90° Elbow       41         Copper Braze Tee       42         Copper Access Union       42         Service Kit       42         Swivel Flare       43	Deburring Tools
Leak Detection         PROWLER® LD-5000       .21         LDC-4000       .21         QUEST® LD-3000       .21	Coupler with Depressor	Automotive 70 LA-CO Products 71 Warranty and Returns 72
Manifolds         PATRIOT™ 2-Valve Brass.       22         REVOLVER® 4-Valve Ball.       23         ZEPPELIN® 2-Valve Aluminum.       24         ZEPPELIN® 4-Valve Aluminum.       25         M2 Standard       26         M2 Heat Pump       27         CO2.       27         Metric.       27	Slide Valve Side Port	Repair Parts
Gauges	Brass Fittings	
LED	American-made Brass	

PRODUCT CATALOG 55 | 800.323.0811 | 630.851.9444 | SALES@JBIND.COM

# We Make Them Like They Used To

# American-Made Strength, Quality and Ingenuity

The heartland of America is where JB Industries was founded in 1967, and it's where we're still manufacturing today. Raw materials, milled in the USA, come into our manufacturing plant and then we produce rugged, long-lasting HVACR tools delivered to wholesalers nationwide, without worry of international supply-chain issues.

Hands-down our pumps outlast any vacuum pump you can buy. And we have options that cover everyone's needs. From 1 CFM all the way up to 12 CFM there's an option for all your job-size needs. Not only does JB offer a variety of pump sizes, we also have options for:

- Spark-Free
- A2I /A3
- Dual Power (Battery and AC)
- Dual Voltage

Whatever the vacuum pump need, JB fills it with fast, efficient, reliable, high-quality vacuum pumps.

And pumps aren't the only thing we're good at. Check out our new wireless CLIMATE CLASS system, the F6-BOOST Recovery Machine that is 20X faster than the competition, our award-winning brass accessories, proven hoses with JB forged brass fittings, and a whole host of other HVACR products.

Check out or website frequently to see What's New Throughout 2023!

#### **CLIMATE CLASS**



#### **Wireless Temperature Clamps**

- Measures pipe temperatures in HVACR; Robust Thermistor sensor for accurate temperature measurements
- Bright OLED screen displays information (does not require an IOS or Android app); includes battery life indicator
- 2 button interface and intuitive menu offers easy setting adjustments
- Over-molded parts for increased grip and durability
- 1 year warranty

#### **Specifications**

Sensor Type Thermistor

Temperature Units Fahrenheit, Celsius

Temperature Range -40 to 302 °F

Accuracy ±2.3 °F (-4 to 185 °F)

Resolution 0.1 °F

Pipe Diameter Range 1/4" to 2"; Large jaws
Bluetooth® Range Up to 350ft (106.6m) —
Dependent on environment
Type AA betteries (included)

Power Supply

Two AA batteries (included)

Battery Life

Approximately 120 hours; indicator light

Operating Temperature

+32°F to 122°F (0°C to +50°C)

Storage Temperature +14°F to 140°F (-10°C to +60°C)
Storage Humidity 85% RH @113°F (45°C), non-condensing

Display OLED Unit Weight 6.5 oz

Compatibility iOS Version: 10.0+, Android Version: 6.0+

IP Rating IP-54



PART NO.	DESCRIPTION
WC-1	Individual Wireless Temperature Clamp (1)
WC-2	Set of Wireless Temperature Clamps in Case (2)

# **Climate Class**

#### **CLIMATE CLASS**

# NEW

#### **Wireless Psychrometers**

- Measures temperature and humidity (Wet Bulb, Dry Bulb, Relative Humidity and Dew Point)
- Permanent swivel cap twists to protect the sensor when not in use; Flexible wand for pin-pointing specific areas
- · Bright OLED screen displays information (without requiring an iOS or Android app); battery life indicator
- 2 button interface and intuitive menu offers easy setting adjustments
- Over-molded parts for increased grip and durability; Rear-mounted magnet for easy and secure positioning

Digital Humidity and

• 1 year warranty

#### **Specifications**

Sensor Type

Temperature Range Temperature Units **Humidity Range** Accuracy Humidity Temperature Accuracy Bluetooth Range

**Power Supply** Battery Life Operating Temperature Storage Temperature Storage Humidity Display Unit Weight Compatibility

PART NO. WH-1

WH-2

Temperature Sensor -40 to +275°F (-40 to +125°C) Fahrenheit, Celsius 0% to 100% Relative Humidity  $\pm 2\% RH$ ± .36°F (± .2°C) Up to 350ft (106.6m) -

Dependent on environment 2 x AA batteries (included) Approximately 120 hours; indicator light

+32°F to 122°F (0°C to +50°C) +14°F to 140°F (-10°C to +60°C) 85% RH @113°F (45°C), non-condensing

OLED 6.2 oz **JB GO Combined Tool App** 

The **JB GO** app is designed to make working on-site with JB wireless and digital tools accurate, fast and efficient.

JB wireless and digital tools have been designed to help technicians and contractors log data and get accurate readouts while on-site. The JB GO app works with the following tools:

- CLIMATE CLASS Wireless Temperature Tools
- DM4-ZW ZEPPELIN® Wireless Digital Manifold
- DM4-RW REVOLVER® Wireless Digital Manifold
- ATLAS® DS-250 Wireless Refrigerant Scale
- SH-35N Wireless Gauge for Superheat/Subcooling







**Look for more CLIMATE CLASS products** coming soon in 2023!



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Individual Psychrometer/Hygrometer (1)

Set of Psychrometers/Hygrometers in Case (2)

SHIELD

Capillary Automotive/ Warranty,
Tubing LA-CO Repair

Hoses

#### DM4-RW

### REVOLVER® Wireless Digital Manifold

- Wirelessly connects to smart devices through the **JB GO** app
- Simple, easy-to-navigate menu with transflective display for easy reading in direct sunlight
- 60+ Refrigerants; update with new refrigerants through app
- Measures high side and low side pressure (ps, kPa, and bar) 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







PART NO.	DESCRIPTION	
DM4-RW	REVOLVER® Digital Manifold (including parts listed below)	
REPLACEMENT Part No.	DESCRIPTION	
DM4-CS	Digital manifold protective carrying case	
DM4-TC	Temperature clamp (1)	
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)	



Scales

# **Digital Manifolds**

### DM4-ZW

## **ZEPPELIN® Wireless Digital Manifold**

- Wirelessly connects to smart devices through the **JB GO** app
- Simple, easy-to-navigate menu with transflective display for easy reading in direct sunlight
- 60+ Refrigerants; update with new refrigerants through app
- Measures high side and low side pressure (ps, kPa and bar) 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-ZW	ZEPPELIN® Digital Manifold (including parts listed below)	
REPLACEMENT PART NO.	DESCRIPTION	
DM4-CS	Digital manifold protective carrying case	
DM4-TC	Temperature clamp (1)	
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)	



Hoses

NEW

JB INDUSTRIES

# **TEAR THROUGH YOUR WORKLOAD. JUST FASTER. JUST BETTER.**



All metal construction with finned aluminum housing for heat dissipation, brass fittings and stainless steel valving

PLATINUM <sub>®</sub> BEAST 12 CFM VACUUM PUMP		
	DV-340N	
CFM	12 CFM (340 I/m)	
MOTOR	1 HP, DC	
VOLTAGE	115v/230v	
INTAKE PORT	1/2" x 1/4" x 3/8"	
OIL CAPACITY	32 oz	
WEIGHT	34 lb	

- 1 HP DC motor with broad operating voltage range
- 2-stage direct drive
- Dual-voltage switch 115v/230v
- 15 micron vacuum rating
- Gas ballast and blank-off isolation valve
- Internal check valve prevents oil back-flow during power failure
- Easy access 1/4", 3/8" or 1/2" intake tee
- Field Repairable; see page 75 for repair parts
- 2 year OTC warranty
- Made in the USA

# **Vacuum Pumps**

#### **Change Your Pump Oil**

Deep vacuum cannot be achieved with contaminated oil which can damage the 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 the micron gauge is not reading a deep vacuum, the oil is contaminated and should be changed. During the testing process is the only time it is recommended to have a micron gauge attached directly to pump.

#### **Choosing Proper CFM**

#### CFM<sup>2</sup> = 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.



NEW

# **AC/Battery Powered Vacuum Pump**

EXTRA FREEDOM. EXTRA POWER. EXTRA CAPACITY.

Work better with the Dealer Design Award-winning PLATINUM® FLEX battery or AC-powered vacuum pump. American-made top-of-the-line for both quality and durability—Pump of Choice for HVACR technicians.

- Powered by JB's 9.0 Ah/18v lithium-ion battery or auto-switching dual voltage AC Adapter
- 1/2 HP DC brushless motor
- Available in 3 CFM or 5 CFM
- · Low battery warning light with audible alert
- 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-read oil level sight glass with easy access oil fill located on cover
- 0-ring sealed oil drain valve to prevent leaks and tethered safety cap to prevent oil spills
- Internal check valve prevents oil back-flow during power failure
- 22oz. oil capacity
- Field repairable
- 1 year OTC warranty; 2 year on vacuum pump
- Made in the USA

#### **Accessories**

Accessories shown right are available in pump kits or sold separately.



DV-BP-BAT









DV-BP-AC

PLATINUM <sub>®</sub> FLEX BATTERY F	PLATINUM <sub>®</sub> FLEX BATTERY POWERED VACUUM PUMPS					
	DV-85-FLEX	DV-85-FLEX-AC	DV-85-FLEX-BAT	DV-142-FLEX	DV-142-FLEX-AC	DV-142-FLEX-BAT
CFM	3 CFM (85 I/m)	3 CFM (85 I/m)	3 CFM (85 l/m)	5 CFM (142 l/m)	5 CFM (142 l/m)	5 CFM (142 I/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	1/2 HP, 1725 RPM
VOLTAGE	Battery: 9.0 Ah/18v Adapter: 115v/60Hz 230v/50Hz	Battery: 9.0 Ah/18v Adapter: 115v/60Hz 230v/50Hz	Battery: 9.0 Ah/18v Adapter: 115v/60Hz 230v/50Hz	Battery: 9.0 Ah/18v Adapter: 115v/60Hz 230v/50Hz	Battery: 9.0 Ah/18v Adapter: 115v/60Hz 230v/50Hz	Battery: 9.0 Ah/18v Adapter: 115v/60Hz 230v/50Hz
INTAKE PORT	1/2" x 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"	1/2" x 1/4" x 3/8"	1/2" x 1/4" x 3/8"
OIL CAPACITY	26oz (769cc)	26oz (769cc)	26oz (769cc)	21oz (621cc)	21oz (621cc)	21oz (621cc)
AC ADAPTER: DV-BP-AC	Included	Included	Not Included	Included	Included	Not Included
BATTERY: DV-BP-BAT Charger: DV-BP-Chrg	Included	Not Included	Included	Included	Not Included	Included
BATTERY RUN TIME	Approximately 90 minutes	Approximately 90 minutes	Approximately 90 minutes	Approximately 60 minutes	Approximately 60 minutes	Approximately 60 minutes

Recovery

Scales

Mini-Split Tool Kits

SHIELD

Access Valves

#### JB INDUSTRIES

#### **PLATINUM**®

#### **Premium Vacuum Pumps**

- 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
- O-ring sealed oil drain valve to prevent leaks and tethered safety cap to prevent oil spills
- Internal check valve prevents oil back-flow 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
- Made in the USA

### **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

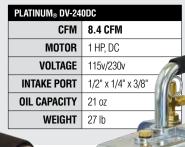
#### **International Dual Voltage Pump**

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.

# Are you ready to shed some weight?

Just in time for your summer rush, JB is developing a lightweight, DC, 8.4 CFM Pump. Forged from

American steel, and manufactured in Aurora, IL, this new DC Pump is tough, versatile, and powerful enough to pull a deep vacuum on virtually any size system. Follow us on social media for news on availability.





COMING SOON!











PLATINUM <sub>®</sub> PUMPS					
	DV-42N	DV-85N	DV-142N	DV-200N	DV-285N
CFM	1.5 CFM (42 l/m)	3 CFM (85 I/m)	5 CFM (142 l/m)	7 CFM (200 l/m)	10 CFM (285 l/m)
MOTOR	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 (769cc)	26oz (769cc)	26oz (769cc)	21oz (621cc)	21oz (621cc)
SHIPPING DIMS	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)

DV-200N-250SP Spark-Proof

PLATINUM® DUAL	PLATINUM® DUAL VOLTAGE AND SPARK-PROOF 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	

## **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
- 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
- Made in the USA



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.

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ELIMINATOR® PUMPS					
	DV-3E	DV-4E	DV-6E		
СЕМ	3 CFM (85 I/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			
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

Scales

SHIELD

Just Better Capillary Automotive/ Warranty/ Tools Tubing LA-CO Repair

JB INDUSTRIES

#### **ACCELERATOR**

#### **VL-200 Rapid Evacuation Kit**

The VL-200 ACCELERATOR Rapid Evacuation Kit paired with a JB vacuum pump allows technicians to remove restrictive valve cores and perform HVACR system evacuations up to 20x Faster.

- Y-FORCE Dual, High-speed Coupler Connector increases speed of evacuation
- 48" long, 1/2" diameter vacuum certified evacuation hose will not collapse or permeate
- 1/4" valve core tool removes restrictive cores and maximizes flow: Vacuum rated to 20 microns
- Opens up over 90% of internal diameter of access port
- Slide valve easily attaches and protects vacuum gauge with the slide valve side port
- Made in the USA





gauge with the slide valve side port





Increase speed of evacuation with the Y-FORCE Coupler Connector and two large diameter hoses

PART NO.	DESCRIPTION	
VL-200	ACCELERATOR evacuation kit with A32525N, A32525SV, QC-208, QC-206, CL264-48 (2) and convenient storage bag	
REPLACEMENT PART NO.	DESCRIPTION	
A32525SV	Valve Core Removal Tool with Slide Valve Side Port	
A32525N	Valve Core Removal Tool	
QC-206	(3/8") Y-FORCE Dual, High-Speed Coupler Connector	
QC-208	(1/2") Y-FORCE Dual, High-Speed Coupler Connector	
CL264-48	(2) 48" long, 1/2" diameter evacuation hose with 3/8" x 1/4" SAE female swivel hose connections	
P325	1/4" and 5/16" replacement gaskets for A32525N (1 each)	





### **VELOCITY**

#### **VL-100 Rapid Evacuation Kit**

The VL-100 VELOCITY Rapid Evacuation Kit paired with a vacuum pump allows technicians to remove restrictive valve cores and perform HVACR system evacuations up to 10x Faster.

- 60" long, 1/2" diameter evacuation hose
- 1/4" 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
- Made in the USA

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



QC-208 (1/2") QC-206 (3/8")

# Y-FORCE

## NEW

# Dual, High-Speed Coupler Connectors

Work faster with the Y-FORCE Dual, High-Speed Coupler Connector available with a 3/8" or 1/2" connection.

- Speed up evacuation with dual hose connections; Easily connects two hoses to one point
- Vacuum rated and designed for high-pressure refrigerants
- Rugged solid brass construction
- Use with any vacuum pump
- Made in the USA



3/8" or 1/2"



PART NO.

QC-206

QC-208

Increase speed of evacuation with the Y-FORCE Dual, High-speed Coupler Connector and two large diameter hoses.

DESCRIPTION

3/8" x 3/8" x 3/8'

3/8" x 3/8" x 1/2"

#### DV-T1

#### The TANK Vacuum **Pump Oil Container**

Changing the oil after every job will extend the life of your vacuum pump and clean oil ensures peak pump efficiency and deep vacuum.

- Holds up to 10 quarts
- · No mess, No spills
- Corner hand grips for easy handling
- Stores upright or flat with no spills
- Environmentally friendly
- Made in the USA





#### PART NO DV-T1 The TANK Vacuum Pump Oil Caddy

# **Quick Couplers**

- Features o-ring seal and no depressor
- Made in the USA



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**

- 0-ring quick coupler shutoff valves for blanking off vacuum system; pressures up to 800lbs
- Made in the USA



D10162

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

# **BLACK GOLD**®

#### Pump Oil

- Acts as a coolant, lubricant and sealant simultaneously. Non-detergent, hydro-processed
- Made in the USA



PART NO.	QTY.	DESCRIPTION
DV0-1	24	BLACK GOLD pint case
DV0-12	12	BLACK GOLD quart case
DV0-24	6	BLACK GOLD gallon case

# **Oil Mist Filter**

Eliminates oil mist from pump handle

Made in the USA



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+)

# **Swivel Couplers**

- Features an o-ring seal
- Made in the USA



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)

Recovery

Scales

SHIELD

# FE-BUST

# NEW

#### **BLDC Ignition-Proof Refrigerant Recovery Machine**

The F6-BOOST Refrigerant Recovery Machine provides over 20% faster recovery rates than competitor models. The unique 2-cylinder, oilless compressor and long-lasting pistons are contained in a lightweight, ergonomically designed, easy-to-use unit. The F6-BOOST gives the user fast and reliable refrigerant recovery.

#### **FEATURES**

- Dual voltage (100-240VAC 50/60Hz)
- Powerful 1.25 HP BLDC (Brushless DC) motor-driven oilless compressor
- Ignition-proof design tested and approved to ISA 12.12.01:2016 Ed.7
- High air-flow fan with a micro-channel condenser keeps the unit running cool
- Variable speed motor (based on load)
- 2-piece, oilless piston-seal design with long-lasting, durable elastomer, easy-to-replace piston seals
- Non-pressurized vented crank case (prevents refrigerant from damaging bearings or seals)
- Built-in purge functionality (self-clearing or pump down) to prevent cross-contamination
- High-pressure 550 PSIG cutout switch
- Easy-to-use interface with 2-1/4" high/low gauges
- Auto shut-off when recovery is complete
- Status indicator light
- Compact lightweight 23.5lb unit with robust, high-impact, injection-molded case
- Recessed folding handle with rubber grip and padded shoulder strap
- 10' locking power cable and velcro cord wrap
- 1 year OTC warranty / 2 year return and repair; Use this device to recover only HVACR refrigerants from sealed HVACR systems. Warranty voided if used for any other purpose.

PART NO.	DESCRIPTION
F6-B00ST	BLDC Ignition-Proof Refrigerant Recovery Machine







Unit has rugged recessed handle for storage, locking cable and velco cord wrap. Knock-out location for optional tank overflow switch (sold separately).

<sup>\*</sup>Speed based on vapor recovery for certain refrigerants.

# **Refrigerant Recovery Machine**

- 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
- Filter/drier included
- 3 year OTC warranty

# **Recovery**

#### Safety

- · Refrigerant should be recovered by trained professionals only
- Wear protective gear, gloves and eye protection
- · Never mix refrigerants
- Do not overfill tanks past 80% capacity

#### **Use Proper Equipment**

Use a refrigerant scale such as JB's DS-250 to ensure proper refrigerant measurement.











PART NO.	DESCRIPTION	
F6-DP	F6 Refrigerant Recovery Machine (115v)	
F6-DP-250	F6 Refrigerant Recovery Machine (230v)	
REC-TANK-30	30lb Empty refrigerant tank cylinder	
REC-TANK-50	50lb Empty refrigerant tank cylinder	
REPLACEMENT PART NO.	DESCRIPTION	
F6-FLT	Filter/drier attachment	
F6-STRAP	Carrying strap	
F6-BH	Blue knob and screw	
F6-RH	Red knob and screw	
F6-110-CRD	Power cord	
F6-RBFT	Rubber foot	
F6-RHP	Gauges	

Recessed gauges

Sturdy metal knobs

Easy access filter

Self-purge without changing hoses



Carrying strap with shoulder pad Heavy-duty metal handle with comfortable rubber grip

Rugged blow-molded outer shell

Micro-channel condenser for industry-leading recovery rates Large fan for superior heat

dissipation

Circuit breaker

Detachable and replaceable power cord for easy maintenance

# **Refrigerant Scales**

#### JB INDUSTRIES

#### ATLAS DS-5000

#### **Propane Scale**

- Back-lit LCD display
- · Large weighing platform
- · Durable and sturdy injected molded components
- · High accuracy load cell
- Pass-through charging (moving the charge hose does not affect weight)
- Small diameter durable CLRF Series hoses included
- Charging valve included for precision charging
- Schrader valves included to prevent refrigerant loss/leaks
- Cylinder adapter with Secure Seal low-loss fitting included for inverted charging
- · 2 charging orientation options: upright and inverted
- Velcro loop included for stabilizing the refrigerant canister (upright charging)
- Designed for R600a and R290
- Other charging methods are possible by using additional adapters for different canister types
- 1 year warranty

# **Specifications**

 Capacity
 5000g / 176oz

 Accuracy
 1g / 0.1oz

Power Supply Two AA batteries (included)
Dimensions (L x W x H) 7.9" x 5.9" x 1.9"
(200mm x 150mm x 48mm)



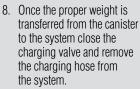
DEALER DESIGN AWAR DS

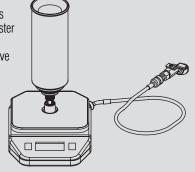
P	ART NO.	DESCRIPTION
DS	-5000	ATLAS Propane Scale with two CLRF-18Y Series hoses, MBV4-01 Mini Ball-valve fitting, Propane cylinder adapter, Velcro loop and case.

# **ATLAS DS-5000 Propane Scale**

#### **Inverted Charging:**

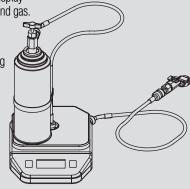
- 1. Connect the charging hose to the scale side port.
- 2. Connect the other end of the charging hose (with the charging valve closed) to the system.
- 3. Attach the secure-seal adapter fitting to the refrigerant canister.
- 4. Invert the can and connect the secure seal fitting to the fitting on the scale platter.
- 5. Turn on the scale. Scale will display combined weight of cylinder and gas.
- 6. Short press the TARE button to zero the scale.
- 7. Charge the system by throttling the charging valve and monitoring the scale weight.





#### **Upright Charging:**

- 1. Connect the charging hose to the scale side port.
- 2. Connect the other end of the charging hose (with the charging valve closed) to the system.
- 3. Attach can tap to the refrigerant canister (Can tap should not release refrigerant).
- 4. Connect one end of the hose to the can tap.
- 5. Connect the other end of the hose to the scale platter fitting.
- Use Velcro loop to secure the can to the hose and stabilize the can on the scale platter.
- 7. Open the can tap valve to release the refrigerant.
- 8. Turn on the scale. Scale will display combined weight of cylinder and gas.
- 9. Short press the TARE button to zero the scale.
- Charge the system by throttling the charging valve and monitoring the scale weight.
- 11. Once the proper weight is transferred from the canister to the system close the can tap and charging valve and remove the charging hose from the system.



#### **ATLAS DS-250**

# Wireless Digital Refrigerant Scale with Wired Handset

- Wireless connection to smart devices via DS-250 app available through **JB GO**
- · Wired, full-color, LCD display on removable handset
- Job time recording/data logging with email capability
- Wired handset with built-in magnets and hanging hook
- Programmable weight alarms
- · Adjustable units of measurement
- Selectable auto-shutoff
- Slip-resistant platform and water-resistant design
- Durable, blow-molded case
- Safe for use with A2L refrigerants
- 2 year warranty

### **Specifications**

Capacity 250lb (113kg)
Resolution 0.25 oz
Display units lb/oz, oz, lb, kg

Operating Temperature  $+32^{\circ}$ F to  $122^{\circ}$ F (0°C to  $+50^{\circ}$ C) Storage Temperature  $+14^{\circ}$ F to  $140^{\circ}$ F ( $-10^{\circ}$ C to  $+60^{\circ}$ C)

Humidity 85% RH @113°F (45°C), non-condensing

Power Supply Four AA batteries (included)
Battery Life Approximately 58 hours

Accuracy Minimum +/- 0.3% of reading +/- 10g

Bluetooth® Range 300ft (92m)













PART NO.	DESCRIPTION
DS-250	ATLAS Wireless Refrigerant Scale with Wired Handset

#### **ATLAS DS-20000**

#### **Digital Refrigerant Scale**

- Features all-metal construction, superior sensitivity and accuracy with replaceable parts
- Highly sensitive, solid-state load cell (0.25oz/10g)
- 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
- 2 year warranty

#### **Specifications**

Capacity 220lb (100kg)

Operating Temperature  $+32^{\circ}F$  to  $122^{\circ}F$  (0°C to  $+50^{\circ}C$ ) Storage Temperature  $+14^{\circ}F$  to  $140^{\circ}F$  ( $-10^{\circ}C$  to  $+60^{\circ}C$ ) Humidity  $85^{\circ}$  RH @113°F ( $45^{\circ}C$ ), non-condensing

Power Supply One 9v battery (included)
Battery Life Approximately 60 hours



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

# **Digital Vacuum Gauges**

#### **JB INDUSTRIES**

### **DV-22N/DV-24N**

### **Digital Vacuum Gauge**

- Factory calibrated extended range MEMS sensor; vacuum reading range 100,000 to 10 microns
- Easy-to-read back-lit display
- Working temperature +32°F to 120°F (+0°C to 48.9°C)
- Allows for direct connection to A/C unit without a hose
- Intuitive user menu with custom setting options; Audible and visual alarms when target vacuum level is achieved
- · 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
REPLACEMENT Part No.	DESCRIPTION
DV-27N	Protective carrying case only
DV-FILTER	Depressor and gasket with filter
P511	Gasket (6 pack)
P511-10	Gasket (10 pack)
P90009	O-ring for older models with o-ring (10 pack)

#### **DVR-22**

# NEW

#### **Digital Vacuum Gauge**

- Measures vacuum levels in HVACR equipment
- Brass female 1/4" flare fitting easily attaches to common system fittings; Includes an angled adapter fitting for alternate positioning and improved visibility
- Large back-lit LCD display is easy to read
- Intuitive design saves the lowest vacuum reading
- · Adjustable auto-off feature, long run-times and battery life indicator
- Four button interface offers easy setting adjustments
- Durable plastic housing
- Thermistor sensor for accurate vacuum measurements and easy cleaning
- 1 year warranty
- Made in the USA

# Specifications

Vacuum Range 10,000 micron – 20 microns

Accuracy +/- 20% between 10,000 and 1000 microns

+/- 15% below 1000 micron

Resolution Varies based on depth of vacuum. 1 micron

resolution (below 70 microns)

Sensor type Thermistor

Vacuum units Microns, Torr, mTorr, PSIA, mBar, Pascals, InHg

Power Supply

Battery Life
Operating Temperature
Storage Temperature

Three AA batteries (included)
Approximately 90 hours
+32°F to 122°F (0°C to +50°C)
+14°F to 140°F (-10°C to +60°C)

Humidity 85% RH @113°F (45°C), non-condensing

Display Backlit LCD Unit weight 9.5 oz



PART NO.	DESCRIPTION
DVR-22	Digital Vacuum Gauge
REPLACEMENT PART NO.	DESCRIPTION
P511	Gasket (6 pack)
P90514	Depressor (5 pack)

# **Digital Vacuum Gauges**

## **DV-41**

## **SUPERNOVA**® Digital Vacuum Gauge

- Fully programmable gauge includes approach and leak alarm settings with automatic shutoff and backlight 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
- 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		
REPLACEMENT PART NO.	DESCRIPTION		
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	Depressor and gasket with filter		
P511	Gasket (6 pack)		
P511-10	Gasket (10 pack)		
P90009	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 through **JB GO**: 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











PART NO.	DESCRIPTION		
SH-35N	Digital wireless gauge for superheat/subcooling includes temperature clamp, power charger and protective carrying case		
REPLACEMENT Part No.	DESCRIPTION		
SH-35-CL	Temperature clamp		
SH-35N-CS	Protective carrying case		
P511	Gasket (6 pack)		
P511-10	Gasket (10 pack)		

# **Digital Vacuum Gauges**

**JB INDUSTRIES** 

# **Using a Vacuum Gauge**

#### **How to Measure Evacuation**

Digital vacuum gauges 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.

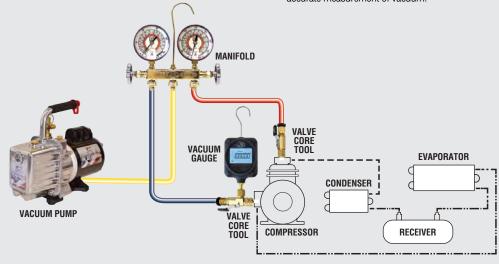
Placement of the digital vacuum gauge is important. The ideal location to measure vacuum is at the system not the pump. Attach the digital vacuum gauge directly to the system isolating the gauge from the pump, hoses and manifold for accurate measurement of the vacuum in a system

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.



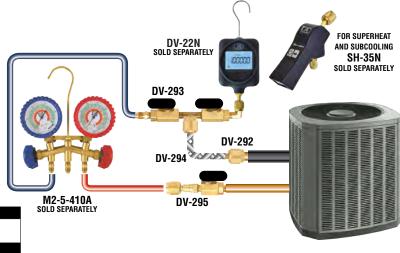
- Remove restrictive valve cores from both high and low side fitting with the A32525N or A32500N valve core tools.
- Evacuate both high and low sides of the system simultaneously with a short 3/8" diameter or larger size evacuation hose, such as the VL-100 VELOCITY Rapid Evacuation Kit.
- Attach a digital vacuum gauge directly to the system to monitor accurate measurement of vacuum.



#### **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	Leakproof micron hook-up test kit Includes: DV-292, DV-293, DV-294 and DV-295		
REPLACEMENT Part No.	DESCRIPTION		
DV-291	1/4" SAE swivel coupler (D10244)		
DV-292	90° male flare with 1/4" o-ring QC		
DV-293	Valve assembly 1/4" MFL connector		
DV-294	10" (25.4 cm) metal hose with o-ring		
DV-295	Ball valve with o-ring QC and depressor		
P90009	O-ring (10 pack)		

 $C \in$ 

#### 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 a 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
- Made in the USA with globally sourced parts





PART NO.	DESCRIPTION		
LD-5000	PROWLER Leak Detector in Case		
REPLACEMENT PART NO.	DESCRIPTION		
LD-S101	Sensor (6 prong)		
LD-RF5	Filters (5 pack)		
LD-TV	Leak test vial		
LD-PK	Parts kit (includes 6 prong sensor, filter kit and test vial)		
LD-CS	Protective carrying case		
LD-ST	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

PART NO.	DESCRIPTION		
LDC-4000	Combustible Gas and HC Refrigerant Leak Detector in Case		
REPLACEMENT PART NO.	DESCRIPTION		
LDC-4000-1	Sensor (4 prong)		
LDC-4000-2	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, 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
- Made in the USA with globally sourced parts

PART NO.	DESCRIPTION		
LD-3000	QUEST Leak Detector in Case		
REPLACEMENT PART NO.	DESCRIPTION		
LD-S101	Sensor (6 prong)		
LD-RF5	Filters (5 pack)		
LD-TV	Leak test vial		
LD-PK	Parts kit (includes 6 prong sensor, filter kit and test vial)		
LD-CS	Protective carrying case		
LD-ST	Sensor tip		

Manifolds JB INDUSTRIES

#### **PATRIOT**<sup>™</sup>

#### 2-Valve Brass Manifold

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





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	CCLE-60"	3-1/8" (80mm)	Illuminating, Class 1, 1%
22233L	CCLE-60"	3-1/8" (80mm)	LED, Class 1, 1%
22233CM	CCLE-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	R404A	
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
22125	Manifold Only	3-1/8" (80mm)	Illuminating, Class 1, 1%
22133	CCLE-60"	3-1/8" (80mm)	Illuminating, Class 1, 1%

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

Additional manifold gauge options, refrigerant combinations and accessories available on page 29. Hose options available begin on page 30. Manifold rebuild kits and repair parts on page 77.



R32	R290	R600A	
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
22725	Manifold Only	3-1/8" (80mm)	Illuminating, Class 1, 1% Hydrocarbon
22733	CCLE-36"	3-1/8" (80mm)	Illuminating, Class 1, 1% Hydrocarbon
22733RF-18	18" CLRF Hoses	3-1/8" (80mm)	Illuminating, Class 1, 1% Hydrocarbon

R32	R454B	R410A	
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
22633	CCLE-60"	3-1/8" (80mm)	Illuminating, Class 1, 1% Hydrocarbon
22600	Manifold Only	3-1/8" (80mm)	Illuminating, Class 1, 1% Hydrocarbon
22605	Manifold Only (5/16")	3-1/8" (80mm)	Illuminating, Class 1, 1% Hydrocarbon

R448A	R449A	R410A	
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
22833	CCLE-60"	3-1/8" (80mm)	Illuminating, Class 1, 1% Hydrocarbon

R448A	R449A	R407A	
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
22933	CCLE-60"	3-1/8" (80mm)	Illuminating, Class 1, 1% Hydrocarbon
		_	
R134A	R1234YF		
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES

PART NO.	HOSES	<b>GAUGE SIZE</b>	GAUGE FEATURES
22433	CCLE-60"	1-1/2" (63.5mm)	Illuminating, Class 1, 1% Hydrocarbon

#### **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
- Made in the USA



## **Liquid Charging**

1. Full Open









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	CCLE4-60"	2-1/2" (63.5mm)	Standard
26233	CCLE4-60"	3-1/8" (80mm)	Illuminating
26233L	CCLE-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

R22	R134A	R404A	
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	CCLE4-60"	2-1/2" (63.5mm)	Standard
26133	CCLE4-60"	3-1/8" (80mm)	Illuminating
26140	CCLV4-60"	3-1/8" (80mm)	Illuminating
26144	CCLS-60"	3-1/8" (80mm)	Illuminating

JB PART AND	2225	B-4DA
R12 R22	R502	

KIZ	KZZ	NƏUZ	
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	CCLE4-60"	2-1/2" (63.5mm)	Standard
26033	CCLE4-60"	3-1/8" (80mm)	Illuminating
26040	CCLV4-60"	3-1/8" (80mm)	Illuminating
26044	CCLS-60"	3-1/8" (80mm)	Illuminating

Manifolds JB INDUSTRIES

#### **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
- Made in the USA



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R22	R404A	R410A	
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	CCLE-60"	2-1/2" (63.5mm)	Standard
24258	CCLE-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
24233	CCLE-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	
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	CCLE-60"	2-1/2" (63.5mm)	Standard
24158	CCLE-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
24133	CCLE-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
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
24600	Manifold Only	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
24608	CCLE-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
24615	CCLBV-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
24615	CCLBV-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%

Additional manifold gauge options, refrigerant combinations and accessories available on page 29. Hose options available begin on page 30. Manifold rebuild kits and repair parts on page 77.

R12	R22	R502	
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	CCLE-60"	2-1/2" (63.5mm)	Standard
24058	CCLE-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
24033	CCLE-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	CCLE-60"	2-1/2" (63.5mm)	R410A Only
24533	CCLE-60"	3-1/8" (80mm)	R410A Only

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

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

## **ZEPPELIN**®

#### **4-Valve Forged Aluminum Manifold**

- Heavy-duty forged aluminum body is rugged and durable
- Rubber handwheels for improved grip and reduced effort 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
- Made in the USA





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	CCLE4-60"	2-1/2" (63.5mm)	Standard
25058	CCLE4-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
25033	CCLE4-60"	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

PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
25500	Manifold Only	2-1/2" (63.5mm)	R410A Only
25550	Manifold Only	3-1/8" (80mm)	Liquid Filled, R410A Only
25525	Manifold Only	3-1/8" (80mm)	R410A Only
25508	CCLE4-60"	2-1/2" (63.5mm)	R410A Only
25558	CCLE4-60"	3-1/8" (80mm)	Liquid Filled, R410 Only
25533	CCLE4-60"	3-1/8" (80mm)	R410A Only
25523	CCLV4-60"	2-1/2" (63.5mm)	R410A Only
25573	CCLV4-60"	3-1/8" (80mm)	Liquid Filled, R410A Only
25548	CCLV4-60"	3-1/8" (80mm)	R410A Only

R407A	R422B	R427A	
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
25325	CCLE-60"	3-1/8" (80mm)	Illuminating
25608	CCLE4-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%

R22	R407C	410A	
PART NO.	HOSES	<b>GAUGE SIZE</b>	GAUGE FEATURES
25425	Manifold Only	3-1/8" (80mm)	Illuminating
			_
R438A	R407C	4220	

PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
25825	Manifold Only	3-1/8" (80mm)	Illuminating
25833	CCLE-60"	3-1/8" (80mm)	Illuminating

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	CCLE4-60"	2-1/2" (63.5mm)	Standard
25258	CCLE4-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
25233	CCLE4-60"	3-1/8" (80mm)	Illuminating
25233L	CCLE4-60"	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	R404A	
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	CCLE4-60"	2-1/2" (63.5mm)	Standard
25158	CCLE4-60"	3-1/8" (80mm)	Liquid Filled, Class 1, 1%
25133	CCLE4-60"	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
25144	CCLS-60"	3-1/8" (80mm)	Illuminating

NZZ	NI JAA	N <del>4U4A</del>	N41UA
PART NO.	HOSES	GAUGE SIZE	GAUGE FEATURES
25708	CCLE4-60"	4" (102mm)	Illuminating
25713	CCLV4-60"	4" (102mm)	Illuminating

Additional manifold gauge options, refrigerant combinations and accessories available on page 29. Hose options available begin on page 30. Manifold rebuild kits and repair parts on page 77.

# **M2 Standard**

#### 2-Valve Classic Brass Manifold

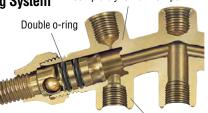
• Full-flow, free-floating, dual o-ring sealing system design for faster evacuation and charging

• 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
- Made in the USA

Free-Floating, Dual O-Ring Sealing System Stem seats retract completely for full flow path



Zero leakage high-pressure raised seat for positive seating

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*	CCLE-60"	2-1/2" (63.5mm)	Standard		
M2-5-410AB	CCLE-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	CCLE-60"	3-1/8" (80mm)	Illuminating, Class 1, 1%		
M2-22231	CCLE-60"	3-1/8" (80mm)	Illuminating		
M2-22244	CCLS-60"	3-1/8" (80mm)	Illuminating		

R22	R134A	R404A			
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	CCLE-60"	2-1/2" (63.5mm)	Standard		
M2-21131B	CCLE-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	CCLE-60"	3-1/8" (80mm)	Illuminating, Class 1, 1%		
M2-22131	CCLE-60"	3-1/8" (80mm)	Illuminating		

KZZ	K4U/G 41UA		
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

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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	CCLE-60"	2-1/2" (63.5mm)	R410A Only
M2-21531B	CCLE-60"	2-1/2" (63.5mm)	R410A Only w/boots
M2-22531	CCLE-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
			_
MAGG	RAN7C	<b>⊿22</b> 0	

PART NO.	HOSES	<b>GAUGE SIZE</b>	GAUGE FEATURES
M2-22825	Manifold Only	3-1/8" (80mm)	Illuminating
M2-22831	CCLE-60"	3-1/8" (80mm)	Illuminating

Manifolds

Pumps

ps Recovery

Scales

Digital Gauges

n Gaug

Hos

Mini-Split

SHIELD Corel

Access

inns ass

Just Better

apillary Auton III-

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y/ Index/

# **M2 Heat Pump Manifold**

## 2-Valve Forged Brass Body

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

- 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
- Replaceable, durable hanging hook and intake/hose holder fittings
- 1 year warranty; lifetime on bar
- Made in the USA



M2-HP

# CO<sup>2</sup> 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)
- 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 2014/6 8/CE Article 4,

Paragraph 3

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PART NO.	DESCRIPTION
30744	CO2 Manifold with 36" hose set in protective carrying case
CL744-36	36" single hose for CO2 manifold

R22	R407C	410A	
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. Made in the USA

DESCRIPTION		M2 BRAS	S	2-VA	LVE ZEPP	ELIN®	4-VA	LVE ZEPP	ELIN®	RE	FRIGERA	NTS
DESCRIPTION	BAR/PSI	kPa/PSI	Kg/cm²	BAR/PSI	kPa/PSI	Kg/cm²	BAR/PSI	kPa/PSI	Kg/cm2	R22	R404A	R410A
Manifold Only	28592	28292	28192	28752	28852	28952	27752	27852	27952	•	•	•
CCLE-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	BAR/PSI	M2 BRASS	S Kg/cm²		LVE ZEPP kPa/PSI	ELIN® Kg/cm²	4-VA BAR/PSI	LVE ZEPP		R12	FRIGERAI R22	NTS 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	BAR/PSI	M2 BRASS	S Kg/cm²		LVE ZEPP kPa/PSI	ELIN® Kg/cm²		LVE ZEPP kPa/PSI		RI: R134A	FRIGERAI R404A	NTS 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	•	•	•
CCLE-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 kPa/PSI			LVE ZEPP kPa/PSI			LVE ZEPP kPa/PSI		REFRIG. R134A		
Manifold Only	28502	28202	28102	28732	28832	28932	_	_	_	•		
CCL-36" (91 cm)	28505	28205	28105	28735	28835	28935	_	_	_	•		

Hoses

**Gauges** JB INDUSTRIES

NEW

# **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
- Made in the USA



PART NO.	DESCRIPTION
M2-820L	3-1/8" Compound, LED
M2-825L	3-1/8" Pressure, LED
M2-LED8PK	8 pack LED counter display

# A2L/ Hydrocarbon Gas Gauges

- Flammable gas gauges for hydrocarbon refrigerants
- 3-1/8" Illuminating, Class 1, 1% metal gauges with high impact clear view Lexan lens
- Full-size brass movements
- See page 22 for PATRIOT manifold pairings
- Made in the USA



REFRIGERANT COMBINATIONS IN CHART P. 29								
COMPOUND	PRESSURE							
M2-600	M2-605							
M2-861	M2-862							
M2-871	M2-872							
M2-472	M2-473							
M2-876	M2-877							

# **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%

# **Gauge Boots/Lenses** Gas

- Protective gauge boots add increased durability to manifold gauges
- Available for 2-1/2" and 3-1/8" gauges
- Made in the USA





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

# **Gas Pressure Test Kits**

Made in the USA



PART NO.	DESCRIPTION
29433	Natural and LP gas; Scale 0-20 oz/sq. in; 0-15" of water column
29435	Natural and LP gas; Scale 0-20 oz/sq. in; 0-30" of water column
29436	Natural gas only; Scale 0-6 oz/sq. in; 0-10" of water column

# **Gas Test Bell Gauges**

Made in the USA



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



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

JB INDUSTRIES Gauges

**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. Made in the USA

PAR	T NO.	0175	DESCRIPTION									REF	RIGER <i>i</i>	NTS									
COMPOUND	PRESSURE	SIZE	DESCRIPTION	R12	1234YF	R22	R32	R134A	R438A	R290	R404A	R407A	R407C	R410A	R422B	R427A	R448A	R449A	R454B	R502	R507A	R600A	
M2-861	M2-862	3-1/8" (80mm)	Illuminating, Class 1, 1%				•							•					•				
M2-871	M2-872	3-1/8" (80mm)	Illuminating, Class 1, 1%									•					•	•					
M2-472	M2-473	3-1/8" (80mm)	Illuminating, Class 1, 1%		•			•															
M2-876	M2-877	2-1/2" (63.5mm)	Illuminating, Class 1, 1%											•			•	•					S
M2-250	M2-500	2-1/2" (63.5mm)	Non-illuminating, Standard	•		•														•			cauyes
M2-350	M2-355	2-1/2" (63.5mm)	Non-illuminating, Standard					•															
M2-400	M2-405	4" (102mm)	Illuminating, Class 1, 1%			•		•			•			•									שופוני
M2-410	M2-415	2-1/2" (63.5mm)	Non-illuminating, Standard											•									Detection
M2-420	M2-425	2-1/2" (63.5mm)	Non-illuminating, Standard					•			•										•		
M2-430	M2-435	2-1/2" (63.5mm)	Non-illuminating, Standard			•		•			•												cauyes
M2-460	M2-465	2-1/2" (63.5mm)	Non-illuminating, Standard			•					•			•									8
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			•					•			•									100
M2-820L	M2-825L	3-1/8" (80mm)	LED, Standard			•					•			•									N
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%	•		•														•			Vd
M2-880	M2-885	3-1/8" (80mm)	Liquid Filled, Class 1, 1%			•		•			•												SAMIPA
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%			•					•			•									riuliya
M2-924CM	M2-925CM	3-1/8" (80mm)	Illuminating, Class 1, 1%, Camo			•					•			•									Sull
M2-951	M2-956	3-1/8" (80mm)	Illuminating, Class 1, 1%			•		•			•												
QC-G430	QC-G434	2-1/2" (63.5mm)	Single Test, Standard			•		•			•												Valves
QC-G460	QC-G465	2-1/2" (63.5mm)	Single Test, Standard			•					•			•									Ü
QC-G820	QC-G825	3-1/8" (80mm)	Single Test, Standard			•					•			•									_
QC-G851	QC-G856	3-1/8" (80mm)	Single Test, Standard			•		•			•												SIDOL

Gauges indicated as Standard are accuracy rated 3-2-3%

Note: Gauges and hoses not specified for use with R410A can damage tool and cause injury.

# **Metric Gauges**

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

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

Digital Leak Manifolds/ Hoses Mini-Split SHIELD CoreMax

Valves Ju

er Capillary

HOSES JB INDUSTRIES

#### **CNTL90 Series**

# NEW

#### **2mm Pressure Control Hose**

Pressure control hose is constructed of an inner core of polyamide and an outer cover of vinyl. The polyamide inner core is wrapped with a synthetic fiber to give the hose pull strength. The polyamide inner lining is the reason it can withstand higher pressures and eliminates the vibration failures of copper capillary tube installations. Higher temperature ratings up to 266°F eliminate the failures caused by maximum loads on rubber hoses.

- Highly flexible; extremely short bending radius; 2mm ID
- Suitable for all non-corrosive refrigerants including flammable gases, HFC, HFO, HC and CO2 sub-critical refrigerants and the relevant special oils such as ester- and PAG
- 90° x Straight, 1/4" FFL Connects
- Absorbs all possible multidirectional vibrations
- 1000 psi working; 5000 psi burst
- Temp Range -40°(-40°C) to 266°(130°C)
- Ozone-, UV- and oil resistant

#### **CLRF Series**



#### 2mm Polyamide Capillary Flexible Vibration Eliminating Hydrocarbon Hose

The sophisticated CLRF Series hose system is a safe and cost effective polyamide capillary hose for use with critical charge hydrocarbon refrigeration systems. CLRF Series hose has excellent mechanical and thermal properties combined with extreme durability and vibration eliminating performance.

- Highly flexible; extremely short bending radius; 2mm ID
- Suitable for all non-corrosive refrigerants including flammable gases, HFC, HFO, HC and CO2 sub-critical refrigerants and the relevant special oils such as ester- and PAG
- Absorbs all possible multidirectional vibrations
- Maximum working pressure 1160 psi (80 bar)
- Very high burst proof value > 14,500 psi (1,000 bar)
- Temp Range -40°(-40°C) to 266°(130°C)
- · Ozone-, UV- and oil resistant



CNTL90 SERIES 1/4" X 1/4" 2MM PRESSURE CONTROL HOSE (PSI 1160/14,500)								
PART NO.	LENGTH	COLOR						
CNTL90-12	12" (30cm)	Black						
CNTL90-18	18" (46cm)	Black						
CNTL90-24	24" (61cm)	Black						
CNTL90-30	30" (76cm)	Black						
CNTL90-36	36" (91cm)	Black						
CNTL90-48	48" (122cm)	Black						
CNTL90-60	60" (152cm)	Black						



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

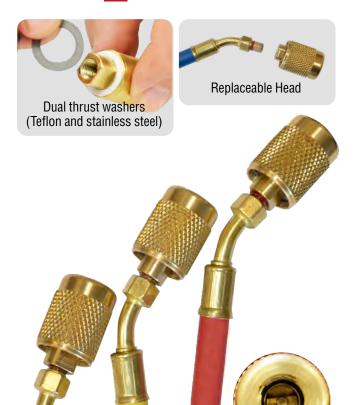
Hoses **JB INDUSTRIES** 

### **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
- Made in the USA



<b>CLSX SERIES I</b>	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 counterclockwise 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 counterclockwise 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 counterclockwise 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.





















SHIELD

Capillary Automotive/ Warranty, Tubing LA-CO Repair

**CLSX SERIES** 

**Hoses** JB INDUSTRIES

#### **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



					/4
<b>CLS SERIES K</b>	(OBRA <sub>®</sub> 1/4")	X 1/4" SECUP	E SEAL HOS	E (PSI 800/40	00)
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		
<b>CLS5 SERIES</b>	KOBRA® 1/4	' X 5/16" SEC	URE SEAL H	OSE* (PSI 80	0/4000)
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 emboss on the back 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 tightenonly 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 I	KOBRA® 1/4'	' X 1/4" GAS	KET SEAL HO	OSE (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	CCLE-36	CCLE4-36
48" (122cm)	CLE-48B	CLE-48Y	CLE-48R	CCLE-48	CCLE4-48
60" (152cm)	CLE-60B	CLE-60Y	CLE-60R	CCLE-60	CCLE4-60
72" (182cm)	CLE-72B	CLE-72Y	CLE-72R	CCLE-72	CCLE4-72
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		
CLE5 SERIES	KOBRA® 1/4	I" X 5/16" G <i>A</i>	SKET SEAL	HOSE PSI 8	00/4000)
LENGTH	BLUE 1/4" x 5/16"	YELLOW 1/4" x 5/16"	RED 1/4" x 5/16"	BLUE/RED: 1/4" x 5/16" YELLOW: 1/4" x 1/4" 3 PACK	B/Y/R 5/16" x 5/16"
36" (91cm)	CLE5-36B	CLE5-36Y	CLE5-36R	CCLE5-36	CCLE55-36

# **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
  1/4 turn lever-style ball valve fitting at one end opens to full flow

 Barbed depressor locks into the gasket exuding more outward force pushing the gasket further into place



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					

CCLBV5 SERIES KOBRA® 1/4" X 5/16" WITH BALL VALVE (PSI 800/4000)		
LENGTH	BLUE/RED: 1/4" x 5/16" YELLOW: 1/4" x 1/4" 3 PACK	
36" (91cm)	CCLBV5-36	
60" (152cm)	CCLBV5-60	
72" (182cm)	CCLBV5-72	

CLE5-60R

CLE5-72R

CCLE5-60

CCLE5-72

CCLE55-60

CCLE55-72

60" (152cm)

72" (182cm)

CLE5-60B

CLE5-72B

CLE5-60Y

CLE5-72Y

SHIELD

Ball /alves

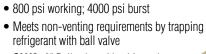
72" (182cm)

CL6-72

HOSES JB INDUSTRIES

# **CLV Series**

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







CLV SERIES K	OBRA® 1/4" )	( 1/4" W/BAI	L VALVE WH	IIP 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
<b>CLV SERIES W</b>	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
CI D SEDIES N	ODDA - 1/4"	V 1/A" LINGE	WILLD END O	MIV (DCI ON	1/4000\

**CLV SERIES** 

CL6-72Y

6" (15cm)	CLP-6B	CLP-6Y	CLP-6R		
CLV6 AND CL6	SERIES KOB	RA® 3/8" X 3	3/8" CHARGI	NG HOSE (PS	31 600/3000)
LENGTH	BLACK	BLACK W/	BALL VALVE	YEL	LOW
36" (91cm)	CL6-36	CLV	6-36	CL6-	-36Y
48" (122cm)	CL6-48	CLV	6-48	CL6-	-48Y
60" (152cm)	CL6-60	CLV	6-60	CL6-	-60Y

CLV5 AND CCLV5 SERIES KOBRA® W/BALL VALVE WHIP END 1/4" X 5/16" (PSI 800/4000)				
LENGTH	BLUE/RED: 1/4" x 5/16"	BLUE	YELLOW	RED
	YELLOW: 1/4" x 1/4"	1/4" x 5/16"	1/4" x 5/16"	1/4" x 5/16

CLV6-72

	YELLOW: 1/4" x 1/4" 3 PACK	1/4" x 5/16"	1/4" x 5/16"	1/4" x 5/16"
36" (91cm)	CCLV5-36			
60" (152cm)	CCLV5-60	CLV5-60B	CLV5-60Y	CLV5-60R
72" (182cm)	CCLV5-72			

# **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

Made in the USA





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 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

# **Hose Replacement Parts**



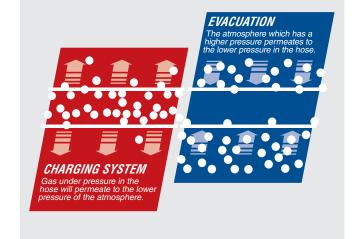
PART NO.	DESCRIPTION
A10974	O-ring/Gasket Removal Tool
33112RK	1/4" Secure Seal Rebuild Kit
33115RK	5/16" Secure Seal Rebuild Kit
CLSX-RK	CLSX Secure Seal Rebuild Kit
CLSX-RH	CLSX Replacement Head
T21295	Snap Ring Pliers for CLS Secure Seal Fittings, Includes 33112RK 1/4" Rebuild Kit
P90022	O-ring for T21295 and 33112RK (10 pack)
P511	Gasket for 1/4" CLE, CLV, CLBV Series Hose (6 pack)
P90514	1/4" Depressor for CLE, CLV and CLBV 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)

# **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 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.



## **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
- Made in the USA



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
P511	Replacement Gasket

# **Flexible Metal Hose**

- 900 psi working; 3500 psi burst
- Unlike charging hoses, flexible metal lines will not permeate under vacuum
- Metal lines feature finger-tight o-ring coupler ends



ARREST MI	
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)

# **Secure Seal Adapters**

- Convert your CLE Series hose into CLS Secure Seal
- Made in the USA





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**

#### **JB INDUSTRIES**

# **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 toolbox.

#### 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 (1/4") AND MSKIT2 (5/16") BACKPACK		
MSKIT1 Includes	MSKIT2 Includes	DESCRIPTION
22600	22605	PATRIOT™ manifold with R410A/R32/R454B gauges NEW
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
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)
TRQ1080		Torque wrench set with 6 spanner heads
JB-BACKPACK1		JB backpack (40 pockets)

MSKIT3 TOOLBAG (1/4" AND 5/16")			
MSKIT3 Includes	DESCRIPTION		
JB-TOOLBAG1	JB tool bag (30 pockets)		
T30605	Metric (2-8mm) and Imperial (5/64" - 1/4") hex key set		
T30600	Ratcheting eccentric cone flare tool		
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)		
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)		



### 22600 1/4" | 22605 5/16"

PATRIOT™ 2-valve Brass Manifold with R410A/R32/R454B Gauges

Made in the USA





#### 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", 3/4"



### 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)



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

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

Made in the USA



### A32525N 1/4" | A32535N 5/16"

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

Made in the USA



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

Five finger-tight 1/4" o-ring sealed brass caps Made in the USA





#### JB-BACKPACK1

Heavy-duty canvas JB backpack



#### TRQ1080

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

Made in the USA



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

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

Made in the USA



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

Brass adapters for 5/16" - 1/4" SAE connections Made in the USA



#### T30605

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

Made in the USA



#### JB-TOOLBAG1

Heavy-duty canvas JB tool bag

### **SHIELD®**

# **Refrigerant Locking Caps**

- Easily identifiable with water-resistant 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
- Made in the USA

### **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

AWARDS  NEWS BRONZE					
PART NO.	QTY.	FITTING SIZE	SLEEVE COLOR CODE	DESCRIPTION	
SHLD-U4	4	1/4"	Universal	Locking caps and 1 bit (4 pack)	
SHLD-U12	12	1/4"	Universal	Locking caps and 1 bit (12 pack)	
SHLD-U50	50	1/4"	Universal	Locking caps, 1 bit and 3" driver (50 pack)	
SHLD-U100	100	1/4"	Universal	Locking caps, 2 bits and 8" long driver (100 pack)	
SHLD-E4	4	5/16"	Universal	Locking caps and 1 bit (4 pack)	
SHLD-E12	12	5/16"	Universal	Locking caps and 1 bit (12 pack)	
SHLD-E50	50	5/16"	Universal Locking caps, 1 bit and 3" drive (50 pack)		
SHLD-G4	4	1/4"	R22 Locking caps and 1 bit (4 pack)		
SHLD-G12	12	1/4"	R22	Locking caps and 1 bit (12 pack)	
SHLD-G50	50	1/4"	R22 Locking caps, 1 bit and 3" driv (50 pack)		
SHLD-P4	4	1/4"	R410A	Locking caps and 1 bit (4 pack)	
SHLD-P12	12	1/4"	R410A	Locking caps and 1 bit (12 pack)	
SHLD-P50	50	1/4"	R410A	Locking caps, 1 bit and 3" driver (50 pack)	
PAI	RT NO.			DESCRIPTION	
SHLD-CJ			Empty storage jar holds 150 SHIELD <sub>®</sub> caps		
SHLD-SLU20			Universal (black) SHIELD <sub>®</sub> sleeves (20 pack)		
SHLD-SLG20			R22 (green) SHIELD® sleeves (20 pack)		
SHLD-SLP20			R410A (pinl	k) SHIELD® sleeves (20 pack)	
SHLD-BIT			SHIELD® 2 pack bit		
SHLD-3-DRIVER			SHIELD <sub>®</sub> 3" driver with 1 bit		
SHLD-8-DRIVER			SHIELD <sub>®</sub> 8" long driver with 2 bits		
SHLD-COMBO-DRIVER			SHIELD <sub>®</sub> 3" and 8" drivers with 2 bits		

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. This dramatically improves 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
- Made in the USA

### For more information and instructional video visit jbind.com





Valve Core Removal Tool

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-SEAL	Main Seal Replacement for CM-CRTOOL
CM-RBK	Rebuild Kit for CM-CRTOOL
CM-SNAP	SnapMate® Service
CM-TRQ	Manual Torque Wrench 3/8" drive





CM-SNAP
SnapMate® Connector



# **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 our American-made tools.

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			

### **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.

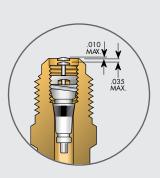
There are two types of ODF fit—external tube fit and swage fit. JB access valve descriptions for ODF refer to swage fit. The connecting tube OD is the same OD as the fitting end. Therefore, the A31723 example above will also slip into 5/16" OD tube. If connecting to wrot copper fitting use ODF swage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

CONNECTING TUBE SIZE					
TUBE SIZE	<b>ODS</b> Internal Tube Fit	<b>ODF</b> External Tube Fit	<b>ODF</b> 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"		

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"		

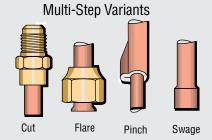






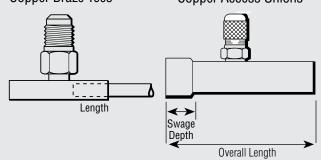
#### Valve Core Pin Location

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

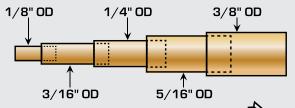


# Copper Braze Tees

### Copper Access Unions



### AC/R Copper Tube Fitting Guide











5/16" Tube 1/4" OD Tube

Wrot Copper Fitting 1/4" x 1/4" x 1/4" Tee

# **Copper Tube Extension**

### **Single Step**

- For use with Sil-Fos alloy and copper fittings
- Includes 1/4" ID cap (NFT5-4) and valve core
- Generous counterbore 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
- Made in the USA

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-Fos alloy and copper fittings
- Includes 1/4" ID cap (NFT5-4) and valve core
- Generous counterbore 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
- Made in the USA

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**

Made in the USA



# **Copper Braze**

### **Saddle with Tapper**

Made in the USA



# Copper 90° Elbow

- Includes cap (NFT5-4) and valve core
- Use Sil-Fos alloy only
- Made in the USA



A32904

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"

A32804

QTY.	DESCRIPTION
5	1/4"
5	5/16"
5	3/8"
3	1/2"
3	5/8"
2	3/4"
2	7/8"
	5 5 5 3 3

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

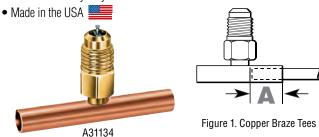
A31160

### **JB INDUSTRIES**

# **Copper Braze Tee**

### **Adjustable**

- Bend, cut, flare, swage or pinch; extra depth slip fit braze cups
- Simple installation anywhere along the line
- Use Sil-Fos alloy only



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 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-Fos alloy only
- Made in the USA

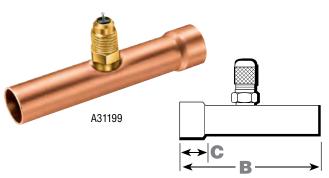


Figure 2. Copper Access Unions

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"

# **Copper Braze Tee**

### **Swaged**

- Braze cup ends
- Simple installation anywhere along the line
- Use Sil-Fos alloy only
- Made in the USA



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"

# **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)
- Made in the USA



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

# **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

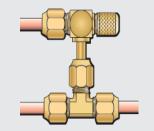
**Swivel Flare Tee** 

without Depressor

Additional access site

Made in the USA





# **Swivel Flare**



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

# **3/8" SAE Tee**

Made in the USA



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

# **Bulkhead Mounting**

A31854

DESCRIPTION

1/4" Female SAE swivel nut on branch 1/4" FE swivel nut w/o depressor x

1/4" SAE run x 1/4" SAE branch

Made in the USA

PART NO.

A31854

A31864



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

# **Swivel Cross** with Depressor



A31520

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

# **Swivel Flare Tee with Depressor**

Made in the USA



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

# **Coupler with Depressor**

Made in the USA



A33004

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

# **Cross with Three Access Points**



A31522

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

# Access Valves JB INDUSTRIES



Most MPT Connections have internal braze cup for dip tube installation



# **MPT Forged Brass Braze Tee**

Made in the USA



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 Connection**

Made in the USA



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

<sup>\*</sup>Core pre-torqued to AHRI

# MPT Flared Tube Connection

Made in the USA



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

<sup>\*</sup>Core pre-torqued to AHRI

## **MPT Tee Connection**

Made in the USA



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 Flare Connection and Flare Fitting Adapter



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

<sup>\*</sup>Core pre-torqued to AHRI

# **MPT Brass Bodies**

Made in the USA



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

A31729

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	

# A32525SV



### Valve Core Removal Tool with Slide Valve Side Port

Designed with the daily job of technicians in mind—The Dealer Design Award-winning A32525SV valve core removal tool utilizes an additional slide valve side port to accommodate a vacuum gauge.

Primary function is to remove and replace the valve core under pressure and/ or to remove valve cores in refrigeration systems to increase evacuation and charging performance.

- Swap out damaged valve cores under pressurized air conditioning and refrigeration systems for much faster evacuation
- Slide valve side port valve provides an excellent location to attach a vacuum gauge so system can be checked for absence of moisture and air
- Slide valve side port provides an easy open/close so vacuum gauge can be removed without the introduction of air into the system before charging
- Protect sensitive vacuum gauge sensors when left on during the charging process by closing slide valve side port
- In-line actuated handle allows the contractor to open and close the valve in tight areas with a single finger
- Uses a series of o-rings and precision machining to stay sealed and not leak during evacuation
- Solid brass construction with the tip machined from A2 tool steel extends tool life
- Made in the USA



PART NO.	DESCRIPTION	
A32525SV	1/4" x 1/4" Valve Core Removal Tool with Slide Valve Side Port	
A32535SV	5/16" x 1/4"Valve Core Removal Tool with Slide Valve Side Port	
P325	Replacement o-rings	

# A32525SVT



**Access Valves** 

### Valve Core Removal Tool with Slide Valve Side Port and Torque Setting

Designed with the daily job of technicians in mind—The A32525SVT valve core removal tool utilizes an additional slide valve side port to accommodate a vacuum gauge.

Primary function is to remove and replace the valve core under pressure and/ or to remove valve cores in refrigeration systems to increase evacuation and charging performance.

- Swap out damaged valve cores under pressurized air conditioning and refrigeration systems for much faster evacuation
- The A32525SVT automatically sets torque 3 to 5 in-lb
- Slide valve side port valve provides an excellent location to attach a vacuum gauge so system can be checked for absence of moisture and air
- Slide valve side port provides an easy open/close so vacuum gauge can be removed without the introduction of air into the system before charging
- Protect sensitive vacuum gauge sensors when left on during the charging process by closing slide valve side port
- In-line actuated handle allows the contractor to open and close the valve in tight areas with a single finger
- Uses a series of o-rings and precision machining to stay sealed and not leak during evacuation
- Solid brass construction with the tip machined from A2 tool steel extends tool life
- Made in the USA



PART NO.	DESCRIPTION	
A32525SVT	1/4" x 1/4"Valve Core Removal Tool with Slide Valve Side Port and Torque Setting; 3 to 5 in-lb	
A32535SVT	5/16" x 1/4" Valve Core Removal Tool with Slide Valve Side Port and Torque Setting; 3 to 5 in-lb	
P325	Replacement o-rings	

# 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
- Made in the USA



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" rep	lacement gaskets for A32	2525N (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)
- Made in the USA



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



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



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
- Made in the USA



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 5/16" o-ring

# **Quick Seal Gasket Caps**

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



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

# **E-Z Tapper**

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



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

# **Backseating Control Valve**

- Ideal for use on pre-charged line sets
- Stops spray of leak detection dye/refrigerant
- Compact brass body for long service and swivel coupler with double safety grooves
- Made in the USA



A33000

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

# **Core Removers**

Made in the USA



A31998

A31997

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

# **O-Ring Seal Line Piercing**

• Spring-loaded needle automatically backseats forming a leakproof seal

**Access Valves** 

• 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

# **Wrench Style Seal Cap**

- For A/C refrigeration service
- Brass-to-brass positive seal and permanent installation
- Made in the USA



A31986

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

# **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

SHIELD

# **Access Valves**

### **JB INDUSTRIES**

# QC Angled Adapter 45°

Made in the USA



QC-S45-45

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

# **QC Elbow**

Made in the USA



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)

# **Core Depressor**

Made in the USA



A33500

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

# **QC Straight**

Made in the USA



QC-S4

PART NO.	DESCRIPTION		
QC-S3	3/16" QC x 1/4" SAE		
<b>QC-S4</b> 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 SAE Female** Adapter

Made in the USA



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

# **Liquid Charging Adapters**

- Metering element assures a safe, fast charge without damaging the compressor
- Made in the USA



LC-4/LC-5

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

# **QC Female NPT Thread**

Made in the USA



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** Access Tee

- O-ring seal quick coupler
- Includes cap and valve core
- Made in the USA



A34000

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

# **Swivel Cylinder Valve**

- 0-ring seal quick coupler
- Includes cap and valve core
- Made in the USA



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

# **O-Rings/Gaskets**

# **Replacement Parts**

Made in the USA

PART NO.

A10974

P90513

P90514

P509



P90009

QTY.

6

5



P90010

DESCRIPTION



P90012

NEW





**Access Valves** 











A10974



1/4" Spring type clip depressor for coupler; used with P509 (5 pack)

1/4" Depressor for CLE, CLV and CLBV Series used with P511 (5 pack)

1/4" Gasket for quick couplers, gasket caps (6 pack)

# American-made Brass

O-ring/Gasket Removal Tool

# **SAE 45° Flared Tube Fittings**

JB fittings are for use with copper, brass, aluminum, steel and plastic tube provided an acceptable flare can 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**

P90514

1. Cut tube square and remove cut-off burr

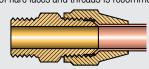
P90513

- 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)

FITTING AD)

FT/LBS 8-10

15-25

25-35

40-55

50-60

THREAD SIZE OF TUBE ENDS			TORQUE PO FOR FLARE (DRY THRE	
OD TUBE	SAE - FLARE	OD TUBE	SAE FLARE	SIZE
1/8"	5/16" – 24	1/2"	3/4" - 16	1/4"
3/16"	3/8" – 24	5/8"	7/8" – 14	3/8"
1/4"	7/16" – 20	3/4"	1-1/16" — 14	1/2"
5/16"	1/2" – 20	7/8"	1-1/4" - 12	5/8"
3/8"	5/8" – 18	1"	1-3/8" - 12	3/4"
7/16"	11/16" – 16			

# **Brass Fittings**

# **Copper Flare Bonnet** • Use with flare nut to cap fittings

Made in the USA



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

# **Swivel Female Flare x Solder Adapter**

Made in the USA



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)

# **Swivel Female Flare x Solder Adapter**

**JB INDUSTRIES** 

Made in the USA



US5-1212

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

# **Copper Flare Gasket**

- For brass-to-brass or brass-to-steel connections to prevent leaks
- Made in the USA



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

# **Short Forged Nut**

Made in the USA



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)

# **Short Forged Nut**

Made in the USA



NS4-14

PART NO.	QTY.	SIZE
NS4-3	10	3/16"
NS4-4	25	1/4" (A32600)
NS4-4-CS	1000	1/4" (A32600)
NS4-5	10	5/16" (A32601)
NS4-6	25	3/8" (A32602)
NS4-6-CS	500	3/8" (A32602)
NS4-8	25	1/2" (A32603)
NS4-8-CS	350	1/2" (A32603)
NS4-10	10	5/8" (A32604)
NS4-10-CS	200	5/8" (A32604)
NS4-12	5	3/4" (A32605)
NS4-12-CS	100	3/4" (A32605)
NS4-14	2	7/8"

# **Flare x Female Solder Ell**

- For brass-to-brass or brass-to-steel connections to prevent leaks
- Made in the USA



ES2-44

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

# **Female Flare x** Flare Ell

- Includes copper gasket
- Made in the USA



E4-44

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

# Flare x Male Pipe Ell

Made in the USA



E1-12E

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

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

Flare Ell

Made in the USA

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

E2-2

# **Reducing Flare Ell**

Made in the USA



# **Swivel Female Flare x Flare Ell**

Made in the USA





ER2-64 ES4-44

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

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

# Flare x **Female Pipe Ell**



E3-5B

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

Brass Fittings

# **Brass Fittings**

# **Fusible Pipe Plug**

Made in the USA



FP-C-283



		LIGILD		
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**

Made in the USA



N5-4

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

# **Fusible Flare x Pipe Adapter**

Made in the USA



FU-4C-210

	FU-4C-210	LISTED		
PART NO.	SIZE	QTY.		
	168° F			
FU-4B-168	1/4" x 1/4"	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**

Made in the USA



HNS4-12

### **Cross**

Made in the USA



**JB INDUSTRIES** 

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

# **Frost-Proof Forged Nut**

- Holes relieve frost in thread area
- Made in the USA



NST4-10

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

# Long Forged Refrigeration Nut



N4-12

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

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

# **Brass Fittings**

# Flare x Flare x **Male Pipe Tee**

Made in the USA



T1-10D

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

# Refrigerant **Drum Adapter**

- NPS cylinder x male flare; with fiber gasket
- Made in the USA



K1-1

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

**Reducing Flare Tee** 

Made in the USA

# **Fiber Drum Adapter** Seal Gasket

Made in the USA



K1-D

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

# **Reducing Nut**



NRS4-43

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

# **Flare Tee**

Made in the USA



	)
T2-12	

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

# TR2-446

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

# **Flare Plug**



P2-12

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

# **Brass Fittings**

# Flare x Male Pipe Adapter

• Made in the USA U1-12E

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

# Flare x Female Pipe Adapter

Made in the USA



U3-10E

Flare x	,
Solder	<b>Adapter</b>

- Furnished with copper gasket
- Made in the USA



**JB INDUSTRIES** 

US3-1214

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

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

# Flare x Male Pipe x Flare Tee



T3-4A

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

# Flare x Flare x Female Flare Tee

Made in the USA



T6-4

# Finger Tight Flare Cap



NFT5-4

				PART NO.	QTY.	SIZE
PART NO.	QTY.	SIZE		NFT5-4-101	1000	1/4"
T6-4	2	1/4"		NFT5-6-101	500	3/8"

### **Flare Union**

Made in the USA



U2-3

# **Reducing Flare Union**

Made in the USA



UR2-54

# **Female Flare x Flare Adapter**

Made in the USA



UR3-1210

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

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

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

# **Female Flare x Female Flare Connector**

• Includes two copper gaskets

Made in the USA

# **Female SAE Flare x Female Pipe Thread**

Made in the USA



# **Swivel Female Flare Connector**





U4-12



U6-4B



US4-10

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

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

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

# **Brass Fittings**

# PROTIPS 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 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.

NO	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	_	_	

# **Long Nipple**

Made in the USA



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

# **Hex Nipple (U10)**

Made in the USA



JB INDUSTRIES

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

# **Close Nipple**

Made in the USA



112-B

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

# Extra Long Flare x Male Pipe Adapter

Made in the USA



UX1-4B

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

# Extra Long Flare Union

Made in the USA



UX2-4

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

# **Female SAE Flare x Male Pipe Thread**

- Includes copper seal gasket
- Made in the USA



U5-4B

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

### EII

Made in the USA



100-E

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

## **Street Ell**

Made in the USA



116-D

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

# **One-way Check Valve**



- 1/4" x 1/4" Flare
- Self centering seal design
- O-ring soft seat / metal back-up seal
- Zero leakage
- 1/3 psi cracking pressure
- Maximum pressure 1500 psig
- Temperature -40 to 300°F
- Made in the USA



# **Coupling PC**

Made in the USA





103-E

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

# Tee

Made in the USA



101-E

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

1/4" x 1/4" Flare Valve

# **Hex Brushing (R1)**

Made in the USA

U2-4CHK



110-EA

# **Compression Break-Off Sleeve Pilot Nut**

Made in the USA



81LB-4

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

# **Hex Head Plug (P3)**



121-C

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

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

Ball Valves JB INDUSTRIES

# **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 59)

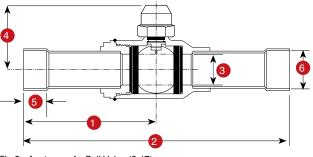


Fig 2 – Ball Valve Operation (7-8)

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

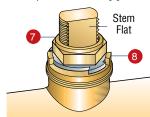
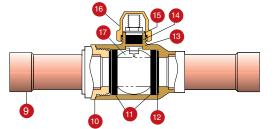


Fig 3 - Anatomy of a Ball Valve (9-17)



- Opper tube extensions
- 10 Hermetic welded and brazed joints
- Reinforced Teflon seats
- 12 One-piece forged brass body
- 13 Bearing washer

- 14 Changeable reinforced PTFE stem packing
- 15 Packing gland
- 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
- Made in the USA



# **Needle Ball Valves**

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

# 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.



V34900



NV62-4



V34-RC33

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

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

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

# **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
- Made in the USA





							LISTED
PART NO. Without Port	<b>Part No.</b> With Port	ID 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	_	2-5/8"	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







							LISTED
PART NO. WITHOUT PORT	PART NO. WITH PORT	ID 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"

# Mini Tube Cutters

### For use with copper

• Large knurled knob for fatigue-free pressure control





JB INDUSTRIES

RT70401

RT70015

JOSI RELIEK	
TOOLS for HVACR	
<b>Industry Professionals</b>	S

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.

Large and small planogram options available for quick and easy displays. Tool literature can be downloaded at jbind.com. Contact customer service for more information.

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

# **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



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

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

### **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



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

### **Ratchet Tube Cutter**

- For use with copper, brass, aluminum, thin-walled steel and plastic coated tubes
- Telescopic guide; automatic spring-driven withdrawal



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

# **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

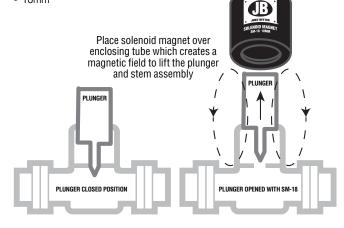


PART NO.	QTY.	DESCRIPTION
RT52000	1	Max. OD 1-5/8", Schedule 40 PVC 1-1/4"
RT52010	1	Max. OD 2", Schedule 40 PVC 1-1/2"
RT52011	1	Replacement blade for RT52010
RT52030	1	ROCUT® 63TC, Max. OD 2-1/2"
RT52042	1	Replacement blade for RT52000

# **SM-18 Solenoid Valve Operating Magnet**

- Designed to convert electrically operated solenoid valves into 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
- Use to hold a solenoid valve open during recovery and evacuation
- Use in place of the powerhead on a hot water oil shutoff valve to eliminate the need to wait for the delay on open
- Use to temporarily replace faulty coil to open solenoid valve
- Use to 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







# **Aluminum Pipe Wrench**



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

# **Slim Profile Adjustable Wrench**

- Slim profile; Extra-wide jaw opening
- Designed for TXV/TEV valves, motor mounts, gas lines, pumps and more

**JB INDUSTRIES** 

- 40% slimmer jaw allows for greater capacity and range of motion in tight spaces
- Extremely strong and durable for years of use
- Comfortable cushion grip handle



١	PART NO.	DESCRIPTION
	RT70170	6" Adjustable wrench
	RT70171	8" Adjustable 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.	DESCRIPTION
RT70531	7" Rolock
RT70532	10" Rolock

# **Machine Grooved Joint Pliers**



PART NO.	SIZE
RT70534	12" Machine grooved joint pliers

# **Service Wrenches**

- Double-end reversible
- · Available in offset, hex and square ends
- Made in the USA





PART NO.	DESCRIPTION	
T21124U	3/16", 1/4" square x 1/2", 9/16" hex port	
T21125U	3/8" Square end and 1/2" square end	
T21126U	Offset 1/4", 3/16" x 3/8", 5/16"	
T21127U	1/4", 3/16" x 3/8", 5/16" on other end	
T21128U	1/8" End Sporlan Wrench	

# Minibend<sub>®</sub> **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

# **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	

# **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

# **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"

# **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 1/4	" OD radius (0.71")
11120170	
<b>RT25131</b> 5/1	6" OD radius (0.95")
<b>RT25913</b> Tub	oe Bender Pro 1/2" OD radius
<b>RT25914</b> Tub	oe Bender Pro 3/4" OD radius
RT25142 1/2	" OD radius
RT25136 5/8	" OD radius (2.28")

SHIELD

# **Spring Tube Benders**

- For use with soft copper, aluminum, brass and steel
- Made in the USA



SPRING TUBE BENDER SETS PART NO. DESCRIPTION			
		2 2 2	
BS-55	1/4", 5/16", 3/8", 1/2", 5/8"	ın poucn	
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"	

# Ratcheting Flare Tool



**JB INDUSTRIES** 

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	

# **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

# **45° Flare Tool**

Made in the USA



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

# 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 Tool**



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

# 45° Flare/Swage

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



PAR	RT NO.	DESCRIPTION
		Flare: 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 3/4"
TO	T0007F	Nominal Flare: 1/8", 1/4", 1/2", 5/8"
T20275	0273	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"

# **Hex Key Adapter**

- For use with 3/16" and 5/16" hex valves
- Made in the USA





PART NO.	DESCRIPTION
T2-HKA	Hex key adapter

# **Tube Expander Kit**

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



# Size Gauge Measures all flares to provide superior seal tightness against flare fittings— a must for every toolbox Made in the USA

**Metal Flare** 



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

# **Steel Strap**

- Zinc plated with alternating 1/8" and 1/4" nail and bolt holes
- Made in the USA



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

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)

# **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

Ball Valves

# **Just Better Tools**

### JB INDUSTRIES

# **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"

# **Single Size Swage Tools**

Made in the USA



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"

# **Multi-Swage**

Made in the USA



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" Nominal

# **Multi-Swage**

Made in the USA



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

# **Hex Key Sets**



PART NO.	DESCRIPTION
T30605	Metric (2-8mm) and Imperial (5/64" - 1/4") hex key sets

# **Braze-Rite Adapter**

- For use with copper tube
- Stepped nitrogen purging adapter for HVACR pipe
- Made in the USA





Braze-Rite Adapter; ACR copper tube size: 1-1/8", 7/8", 3/4", 5/8", 1/2", 3/8"

**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)

# O-ring/Gasket Removal Tool





**Just Better Tools** 

PART NO.	DESCRIPTION
A10974	O-ring/Gasket Removal Tool

# **Deburring Tools**

• For copper and plastic tube

PART NO.

BRZ1000



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	1	Replacement deburring blade
RT21652B	10	Replacement deburring blades

# **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

Hoses

Ball Valves

PART NO. A10971

A10972

# **Capillary Tubing**

### JB INDUSTRIES

# **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
- Made in the USA



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'
TC-85-9 TC-90-7	TC-85-100 TC-90-100	0.085 ID x 0.145 OD x 9' 0.090 ID x 0.145 OD x 7'

# **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

Cap tube file

Cap tube gauge and file in pouch

Made in the USA

# **Cap Tube**

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

# **Cutting Tool**

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)

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 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

									PART NO.								
AP TUBE ID	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-10
.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		.20	.35	.73	.90	1.47	1.60	2.32									
.046			.32	.67	.82	1.34	1.47	2.08	2.27								
.047			.02	.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					.00	.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													. 10	.46	.60	.79	1.27
.100														. 10	.48	.62	1.00
.105															.10	.49	.80
.110																. 13	.65
.115																	.53
.113																	.43

# **R134a Automotive Couplers**

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



# **R134a Automotive Quick Adapter**

• Retrofit existing SAE flare fitting for R134a auto service

Made in the USA









AC-13430

AC-15530

QC-13445-134a

QC-S4A-134a

PART NO.	. DESCRIPTION			
AC-13430	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			

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**

Made in the USA



# **Automotive Oil Tap Tube**

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

# 1/2" **ACME Service Valve**

- 1/2" ACME x 1/8" NPTF with cap
- Made in the USA







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		





PART NO.	DESCRIPTION		
A33600	Automotive oil tap tube		

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

LA-CO

**JB INDUSTRIES** 

## Cool Gel™

### **Heat Barrier Spray**

- Prevents heat damage during soldering, brazing and welding
- Safe, non-toxic and odorless
- Made in the USA



# Bloc-It®

### **Heat Absorbing Paste**

- Protects against damage caused by heat from soldering brazing and welding
- Made in the USA





# **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)
- Made in the USA



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

PART NO.	QTY.	DESCRIPTION
11511	24	Bloc-It <sub>®</sub> 10oz tubes

PART NO.	QTY.	DESCRIPTION
11575	12	Heat-Seal Stik <sub>®</sub> 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
- Made in the USA

PART NO 11175

19571

12

12



### 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.
- Made in the USA



	DPC ®	NSF
·V	DECCRIPTIO	A.I



		<b>V</b> • · ·
PART NO.	QTY.	DESCRIPTION
42019	12	Slic-Tite <sub>®</sub> 8oz bottles

# **Valve Action**<sup>™</sup>

### **Paint Marker**

- Lead-free, weather, water, UV-resistant paint marker dries in three minutes
- For use on metal, wood, glass, plastic, rubber, cardboard and paper
- Marking range -50°F to 150°F (-46°C to 66°C)
- Made in the USA



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

NSF

Pipetite-Stik® 1.25oz sticks

Epoxy-Stik® 4oz sticks

# LIMITED WARRANTY

All JB Industries, Inc. tools are warrantied 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:

• CO2 Manifold (30744):	3 years
DS-250, DS-20000	2 years

Recovery:

F6-DP 3 years OTC F6-B00ST 1 year OTC

Vacuum Pumps:

PLATINUM <sub>®</sub>	2 years OTC
PLATINUM® BEAST	2 years OTC
PLATINUM® FLEX	1 year OTC
ELIMINATOR <sub>®</sub>	2 years OTC
Rebuilt Vacuum Pumps	6 months
Out of Warranty Vacuum Pump Repairs	90 days

JB tools 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 tools 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 tool 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 tools, 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, expressed 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 tool 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. tools 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 Machine (3 year OTC), PLATINUM® Vacuum Pumps (2 year OTC), ELIMINATOR® Vacuum Pumps (2 year OTC) and PLATINUM® FLEX Vacuum Pumps (1 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 and tools are designed for use by technically trained HVACR 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**

JB provides reliable, superior quality tools—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 tools 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 tool 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. Tool returns for repair will not be accepted without an RGA number from JB Industries.

### **Contact Customer Service for RGA number:**

800.323.0811 Toll-free 630.851.9444 Tel 800.552.5593 Toll-free Fax 630.851.9448 Fax

### Tools 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 Machine (3 year OTC), PLATINUM® Vacuum Pumps (2 year OTC), ELIMINATOR® Vacuum Pumps (2 year OTC), and PLATINUM® FLEX Vacuum Pumps (1 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: 1 AND 2 YEAR OTC WARRANTIES**

All warranty statements apply to the PLATINUM® (2-year OTC), PLATINUM® FLEX (1-Year OTC) and ELIMINATOR® (2-year OTC) pumps.

JB Industries vacuum pumps are warrantied to be free of defects in materials and workmanship for period indicated 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 tool 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.
- 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.

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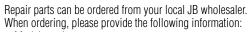
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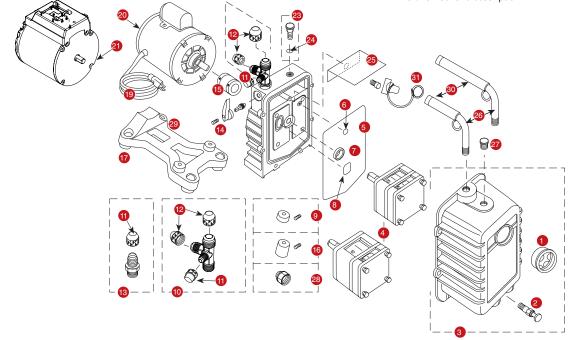
Repair **JB INDUSTRIES** 

# **PLATINUM® Vacuum Pump Repair**

DV-42N through DV-285N Series



- Model numberSerial number
- Part number and description



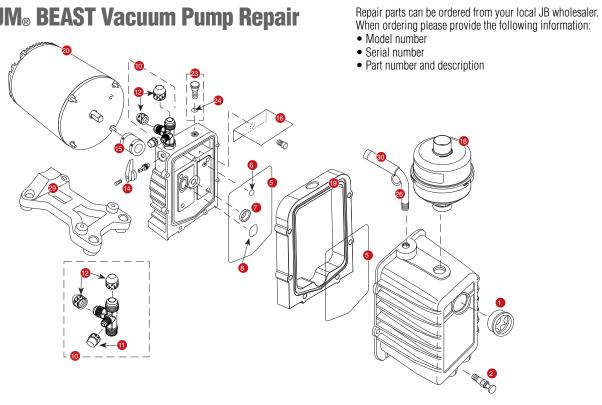
	DI AT	TINUM OFFICE PERMIT PARTS ALL MORELS	
		INUM <sub>®</sub> SERIES REPAIR PARTS – ALL MODELS	
REF.NO.	PART NO.	DESCRIPTION	
1	PR-1	Sight glass	
2	PR-2	Drain valve	
6	PR-211	Trap o-ring, gas ballast	
7	PR-3	Shaft seal	
8	PR-315	Trap o-ring, intake	
9	PR-4	Rubber foot and screw assembly – 1 per package (Prior to 2006)	
10	PR-66	Angled intake tee with caps	
11	NFT5-4	1/4" O-ring, cap	
12	NFT5-6	3/8" O-ring, cap	
12	NFT5-8	1/2" O-ring, cap	
14	PR-209	Plastic isolation valve handle and screw w/stem, o-rings and retainer	
	PR-208	Flexible coupler* 1-1/2"(Start of 1995) 2-1/2" (Prior to 12/1994)*	
15	PR-308	Flexible section only 7/8"; use w/PR-208 flexible coupler*	
15	PR-6	Flexible coupler* 2-1/4"	
	PR-77	1-5/8" Middle section; use w/PR-6 flexible coupler*	
16	PR-42	Motor foot w/screw (prior to 2006)	
17	PR-59	Base foot	
19	PR-31	Line cord (Marathon motor) old style	
20	PR-54	Rocker switch w/wire leads (Emerson) models since 2004	
	PR-607	FLEX motor	
21	PR-206	1/2 Hp, 115v, 60 Hz Motor w/line cord and switch	
21	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)	

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* Coat with to	hread sealant w	hen replacina.				

	PR-75	Cushioned handle w/lift ring 1/2" NPT and DV-EP-8 as of 2008		
26	PR-205	Cushioned handle 3/8" NPT		
	PR-605	Cushioned handle w/lift ring FLEX		
27	PR-22	Oil fill plug w/o-ring		
28	PR-56	Adapter nut w/nut o-ring		
	PR-500	Cushion and cap 3/8" NPT		
30	PR-501	Cushion and cap 1/2" NPT		
	PR-601	Cushion and cap FLEX		
31	DV-EP6	Tethered safety cap 3/8" NPT (prior to 2008)		
31	DV-EP8	Tethered safety cap 1/2" NPT		
		S 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		
	PR-302	DV-42N and DV-85N Cartridge w/o-rings and cover seal		
4	PR-303	DV-142N Cartridge w/o-rings and cover seal		
4	PR-304	DV-200N Cartridge w/o-rings and cover seal		
	PR-314	DV-285N Cartridge w/o-rings and cover seal		
5	PR-311	Cover seal		
13	PR-32	1/4" Intake w/cap		
29	PR-62	Pump base (includes feet); fits all pumps with serial #0101 and higher		
PLATIN	UM <sub>®</sub> SERIES	REPAIR PARTS – MANUFACTURED BEFORE JANUARY 2001		
5	PR-217	Cover seal		
8	PR-215	Trap o-ring, intake		
	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-59 (4), PR-42, PR-208			
JUST BETTER SINCE 1967   HVACR TOOLS, VALVES AND FITTINGS				

**PLATINUM**® **BEAST Vacuum Pump Repair** 

**DV-340N** 



REF.NO.	PART NO.	PLATINUM⊕ BEAST REPAIR PARTS 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		
10	PR-78	Angled intake tee with caps		
11	NFT5-4	1/4" O-ring, cap		
12	NFT5-6	3/8" O-ring, cap		
12	NFT5-8	1/2" O-ring, cap		
14	PR-209	Plastic isolation valve handle and screw w/stem, o-rings and retainer		
15	PR-208	Flexible coupler* 1-1/2"(Start of 1995) 2-1/2" (Prior to 12/1994)*		
	PR-308	Flexible section only 7/8"; use w/PR-208 flexible coupler*		
16	PR-41	Splash Guard		
17	PR-59	Base		
18	PR-307	Filter		
19	PR-306	Spacer		
20	PR-607	Motor		
23	PR-7	Gas ballast valve w/o-ring		
24	P90009	O-ring, gas ballast valve		

	PLATINUM <sub>®</sub> BEAST REPAIR PARTS				
REF.NO.	PART NO.	PART NO. DESCRIPTION			
26	PR-75	Cushioned handle w/lift ring 1/2" NPT			
27	PR-22	Oil fill plug w/o-ring			
28	PR-56	Adapter nut w/nut o-ring			
30	PR-501	Cushion and cap 1/2" NPT			
3	PR-301	DV-285N Cover assembly w/sight glass and drain valve			
5	PR-311	PR-311 Cover seal			
29	PR-62	Pump base (includes feet); fits all pumps with serial #0101 and higher			
	PLATINUM® BEAST REPAIR PARTS - NOT SHOWN				
PR-45	Pump repair kit PR-1, PR-59 (4), PR-2, PR-208				

SHIELD

Index/ Contacts **Repair** JB INDUSTRIES

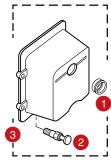
# **ELIMINATOR**<sub>®</sub> **Vacuum Pump Repair** DV-3E, DV-4E and DV-6E Series

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

	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		
	PR-403	DV-3E Cartridge complete w/o-rings and cover seal		
4	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		
	PR-208	1-1/2" Flexible coupler*		
8	PR-308	7/8" Middle section; used w/PR-208 2-1/2" Flexible coupler*		
0	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		

Emerson® is a registered trademark of US Motors. Marathon® is a registered trademark of Marathon Electric.

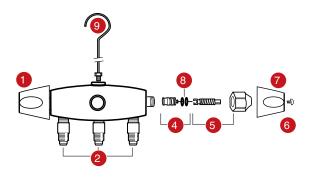
\* Coat with thread sealant when replacing.

ELIIVI	INATUK models	s no longer available			
	ELIMINATOR SERIES REPAIR PARTS				
REF.NO.	PART NO.	DESCRIPTION			
	PR-206	1/2 HP, 115v/60Hz motor w/line cord and switch			
11	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)			
13	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			
17	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			
20	DV-EP8	1/2" Red tethered safety exhaust cap			
21	PR-205	3/8" Cushioned handle			
21	PR-65	1/2" Cushioned handle			

- 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 tools and cause injury

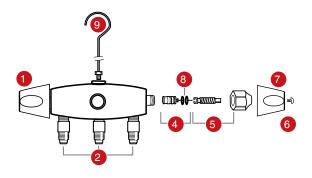
	MANIFOLD REBUILD KITS		
PART NO.	DESCRIPTION		
M2R-S	Standard M2 rebuild (also fits M5 through M9 series)		
M2R-P	Premium M2 rebuild (fits M2 series only)		
M4R-S	Standard M4 rebuild		
M4R-P	Premium M4 rebuild		
2VZR-S	Standard ZEPPELIN 2-valve rebuild (fits both aluminum and brass)		
2VZR-P	Premium 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**



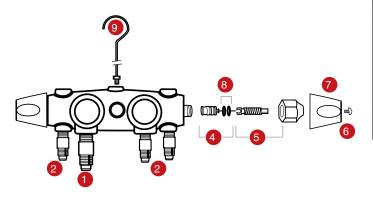
	ZEPPELIN BRASS SERIES MANIFOLD			
REF.NO.	PART NO.	DESCRIPTION		
1	MR-601	Handwheel and screw		
2	U1-4A	1/4" Intake		
4	MR-505	1/4" Manifold piston		
5	MR-516	Stem and nut		
6	MR-601	Handwheel and screw		
7	MR-503	Handwheel screws (2)		
8	MR-509	0-rings (2)		
9	M2-102N	Hanging hook		

## **ZEPPELIN® 2-Valve Aluminum Series**



PART NO.	DESCRIPTION
MR-601	Handwheel and screw
U1-4A	1/4" Intake
MR-505	Piston w/seat and o-rings
MR-516	Stem and nut
MR-601	Handwheel and screw
MR-503	Handwheel screws (two)
MR-509	O-rings (two)
M2-102N	Hanging hook
\ \ \	MR-601 11-4A MR-505 MR-516 MR-601 MR-503 MR-509

## **ZEPPELIN® 4-Valve Aluminum Series**



ZEPPELIN 4-VALVE ALUMINUM			
REF.NO.	PART NO.	DESCRIPTION	
1	U1-6B	3/8" Intake	
2	U1-4A	1/4" Intake	
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	

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SHIELD Mini-Split Hoses Tool Kits Hoses

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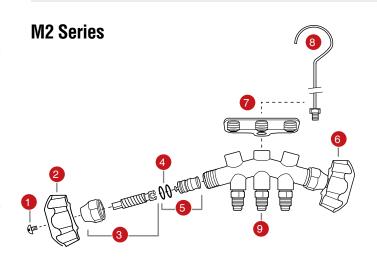
Brass Access Fittings Valves

> Just Better Tools

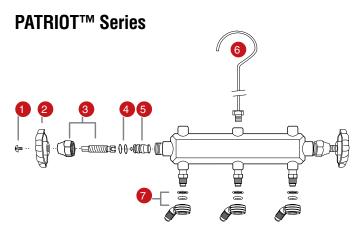
Ball Valves

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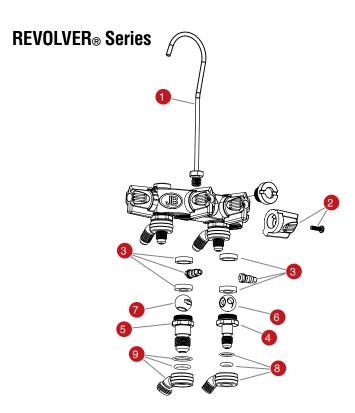
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M2 SERIES MANIFOLDS							
REF.NO.	PART NO. DESCRIPTION						
1	MR-503	Handwheel screw (2)					
2	MR-501B	Blue handwheel and screw					
3	MR-516	Stem and nut					
4	MR-509	0-ring (2)					
5	MR-505	Piston w/seat and o-rings					
6	MR-501R	Red handwheel					
7	M2-300	Hose holder 1/4"					
8	M2-102N	Hanging hook					
9	U1-4A	Intake					



PATRIOT SERIES 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	0-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 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						

100-A		122-E	56	25040			27		27	29337	
100-B	57	13493		25044			27		27	29338	
100-C		13494	47	25050	25	27774	27	28588	27	29384	29
100-D	57	19571	71	25058	25	27776	27	28592	27	29385	29
100-E	57	22125	22	25065	25	27780	27	28596	27	29433	28
101-A		22133		25069			27		27	29435	
101-B		22225		25100		27784	27		27	29436	
101-C		22225CM		25108			27		27	2VZR-P	
101-D		22433		25125			27		27	2VZR-S	
101-E		22225L		25133			27		27	30744	
101-E				25133 25140						33112N	
		22233					27		27		
103-B		22233CM		25144			27		27	33112RK	
103-C		22233L		25150			27		27	33113N	
103-D		22246		25158			27		27	33115N	
103-E		22246CM		25165			27		27	33115RK	
110-BA		2250022,		25169			27		27	33116N	
110-CA	57	2250522,	36,37	25200	25	27882	27	28780	27	42019	71
110-CB	57	22525	22	25208	25	27884	27	28782	27	4VZR-P	77
110-DA	57	22531	22	25225	25	27886	27	28784	27	4VZR-S	77
110-DB		2260022,		25225L			27		27	81LB-4	
110-DC		2260522,		25233			27		27	96820	
110-EA		22633		25233L			27		27	96822	
110-EB		22725		25240			27		27	96823	
110-EB		22733		25246			27		27	A10971	
110-ED		22733RF-18	,	25248			27		27	A10972	
110-FD		22833		25250			27		27	A10973	
110-FE		22933		25258			27		27	A10974	
11175		24000		25265			27		27	A31002	
112-A		24008		25269			27		27	A31003	
112-B		24025		25325		27986	27	28876	27	A31004	
112-C	56	24033	24	25425	25	27988	27	28880	27	A31004-CJ	42
112-D	56	24040	24	25500	25	28102	27	28882	27	A31004S	41
112-E	56	24044		25508	25		27	28884	27	A31005	
113-A15		24050		25523			27		27	A31006	
113-A2		24058		25525			27		27	A31008	
113-A25		24065		25533			27		27	A31009	
113-A3		24069		25548			27		27	A31011	
113-A3		24100		25550			27		27	A31012	
		24108		25558					27		
113-B15							27			A31134	
113-B2		24125		25573			27		27	A31135	
113-B25		24133		25608			27		27	A31136	
113-B3		24140		25708			27		27	A31138	
113-B35		24144		25713			27		27	A31140	
113-C15	56	24150	24	25825	25	28196	27	28976	27	A31142	42
113-C2	56	24158	24	25833	25	28197	27	28980	27	A31144	42
113-C25	56	24165	24	26000	23	28199	27	28982	27	A31148	42
113-C3	56	24169	24	26008	23	28202	27	28984	27	A31154	42
113-D15	56	24200	24	26025	23	28205	27	28986	27	A31155	42
113-D2	56	24208	24	26033	23	28270	27	28988	27	A31156	
113-D25		24225	24	26040			27		29	A31160	41
113-D3		24233		26044			27		29	A31162	
113-D35		24240		26100			27		29	A31164	
11509		24244		26108			27		29	A31168	
11511		24250		26125			27		29	A31199	
11575		24258		26133			27		29	A31200	
116-A		24265		26140			27		29	A31201	
116-B		24325		26144			27		29	A31202	
116-C		24425		26200			27		29	A31204	
116-D		24500		26208			27		29	A31234	
121-A		24508		26225			27		29	A31235	
121-B		24525		26225L		28299	27		29	A31236	
121-C	57	24533	24	26233	23	28502	27	29316	29	A31238	44
121-D	57	24600	24	26233L	23	28505	27	29317	29	A31334	
121-E		24608		26240			27	29330		A31335	
121-F		24615		26244			27		29	A31336	
122-A		25000		26246			27		29	A31338	
122-B		25008		27752			27		29	A31340	
122-C		25025		27754			27		29	A31342	
122-D		25033		27759			27		29	A31344	
122 D		20000	20	21109		20002		23000	23	, 10 10 77	42

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Index	JB INDUSTRIES

101010 10	A22702 F0	CCL PV 72 22	CI 1UD 10 21	OLDE 10D 20	CIV 70V 24
A3134842 A3142444	A3270350 A3270450	CCLBV-7233 CCLBV4-3633	CL4HD-4834 CL4HD-6034	CLRF-18R30 CLRF-18Y30	CLV-72Y34 CLV5-60B34
A3143443	A3280441	CCLBV4-4833	CL4HD-7234	CLS-1200B32	CLV5-60R34
A3144444	A3280541	CCLBV4-6033	CL6-3634	CLS-1200R32	CLV5-60Y34
A3145244	A3280641	CCLBV4-7233	CL6-36Y34	CLS-1200Y32	CLV6-3634
A3145444	A3280841	CCLBV5-3633	CL6-4834	CLS-120B32	CLV6-4834
A3148244	A3281041	CCLBV5-6033	CL6-48Y34	CLS-120R32	CLV6-6034
A3148444	A3281241	CCLBV5-7233	CL6-6034	CLS-120Y32	CLV6-6BL34
A3149244	A3281441	CCLE-3633	CL6-60Y34	CLS-300B32	CLV6-6Y34
A3149444	A3281841	CCLE-4833	CL6-7234	CLS-300R32	CLV6-7234
A3151244	A3290441	CCLE-6033	CL6-72Y34	CLS-300Y32	CM-CRTOOL39
A3151444	A3290541	CCLE-7233	CL64-6034	CLS-36B32	CM-RBK39
A3152043	A3290641	CCLE4-3633	CL6HD-3634	CLS-36R32	CM-S25039
A3152243	A3290841	CCLE4-4833	CL6HD-4834	CLS-36Y32	CM-S37039
A3161444	A3291041	CCLE4-606,7,33	CL6HD-6034	CLS-48B32 CLS-48R32	CM-SEAL39
A3165636,37,48 A3166536,37,48	A3291241 A3291441	CCLE4-7233 CCLE5-3633	CL6HD-7234 CL744-3627	CLS-48Y32	CM-SNAP39 CM-SS25039
A3172044	A3300047	CCLE5-6033	CL84-6034	CLS-46132	CM-SS37039
A3172244	A3300443	CCLE5-7233	CLBV-36B33	CLS-600B32	CM-TRQ39
A3172344	A3350048	CCLE55-3633	CLBV-36R33	CLS-600Y32	CM-VC00339
A3172444	A3360070	CCLE55-6033	CLBV-36Y33	CLS-60B32	CM-VC01039
A3172544	A3400048	CCLE55-7233	CLBV-48B33	CLS-60R32	CM-VC02539
A3172644	A34000D19	CCLRF-1830	CLBV-48R33	CLS-60Y32	CM-VC10039
A3172743	AC-1343070	CCLS-3632	CLBV-48Y33	CLS-72B32	CNTL90-1230
A3172844	AC-1343570	CCLS-4832	CLBV-60B33	CLS-72R32	CNTL90-1830
A3172944	AC-1553070	CCLS-6032,36,37	CLBV-60R33	CLS-72Y32	CNTL90-2430
A3173444	AC-1553570	CCLS-7232	CLBV-60Y33	CLS-900B32	CNTL90-3030
A3173644	AF-1345070	CCLS4-3632	CLBV-72B33	CLS-900R32	CNTL90-3630
A3185143	AF-1345170	CCLS4-4832	CLBV-72R33	CLS-900Y32	CNTL90-4830
A3185243	AF-1345270	CCLS4-6032	CLBV-72Y33	CLS5-36B32	CNTL90-6030
A3185343	AF-1345570	CCLS4-7232	CLE-1200B33	CLS5-36R32	CV-2000448
A3185443	AF-1345770	CCLS5-3632	CLE-1200R33	CLS5-36Y32	CV-2000648
A3185643 A3186443	AF-1355070	CCLS5-4832	CLE-1200Y33	CLS5-48B32	D1016213
A3198547	<i>AVK-00142</i> <i>B1-1050</i>	CCLS5-6032,36,37 CCLS5-7232	CLE-120B33 CLE-120R33	CLS5-48R32 CLS5-48Y32	D10244 13 D10266 13
A31985-10047	B1-1250	CCLSX-3631	CLE-120Y33	CLS5-60B32	D1043635
A3198647	B1-350	CCLSX-4831	CLE-300B33	CLS5-60R32	D1047235
A3199247	B1-450	CCLSX-6031	CLE-300R33	CLS5-60Y32	D1063635
A31992-10047	B1-650	CCLSX-7231	CLE-300Y33	CLS5-72B32	D1066035
A3199747	B1-850	CCLV-3634	CLE-36B33	CLS5-72R32	DM4-BRK6,7
A3199847	B2-1050	CCLV-4834	CLE-36R33	CLS5-72Y32	DM4-BT6,7
A3199946	B2-1250	CCLV-634	CLE-36Y33	CLSX-36B31	DM4-CS6,7
A31999-10046	B2-350	CCLV-6034	CLE-48B33	CLSX-36R31	DM4-RW6
A31999-2546	B2-450	CCLV-7234	CLE-48R33	CLSX-36Y31	DM4-STRP6,7
A3200446	B2-550	CCLV4-3634	CLE-48Y33	CLSX-48B31	DM4-TC6,7
A3200846	B2-650	CCLV4-4834	CLE-600B33	CLSX-48R31	DM4-ZW7
A32008-B46	B2-850	CCLV4-6034	CLE-600R33	CLSX-48Y31	DS-2000017
A32008-BX46	BRZ100067	CCLV4-7234	CLE-600Y33	CLSX-60B31	DS-25017
A3210046 A3210146	BS-1064 BS-1264	CCLV5-3634	CLE-60B33	CLSX-60R31	DS-500016
A32500N46	BS-1264	CCLV5-6034 CCLV5-7234	CLE-60R33 CLE-60Y33	CLSX-60Y31 CLSX-72B31	DSR-1017 DSR-2017
A32500N46	BS-464	CL-36B34	CLE-72B33	CLSX-72B31	DSR-3017
A3250446	BS-564	CL-36R34	CLE-72R33	CLSX-72Y31	DV-142-FLEX9
A32505N46	BS-5564	CL-36Y34	CLE-72Y33	CLSX-RH31,35	DV-142-FLEX-AC9
A32525N 12,36,37,46	BS-664	CL-48B34	CLE-900B33	CLSX-RK31,35	DV-142-FLEX-BAT9
A32525SV 12,45	BS-764	CL-48R34	CLE-900R33	CLV-36B34	DV-142N 10
A32525SVT 12,45	BS-7764	CL-48Y34	CLE-900Y33	CLV-36R34	DV-142N-250 10
A32530N46	BS-864	CL-60B34	CLE5-36B33	CLV-36Y34	DV-142N-250EU 10
A32535N 12,36,37,46	C1-452	CL-60R34	CLE5-36R33	CLV-48B34	DV-142N-250UK 10
A32535SV45	C1-652	CL-60Y34	CLE5-36Y33	CLV-48R34	DV-200N10
A32535SVT45	C3380468	CL-72B34	CLE5-60B33	CLV-48Y34	DV-200N-250 10
A3260050	C3380868	CL-72R34	CLE5-60R33	CLV-60B34	DV-200N-250EU 10
A3260150	C33808-CTN68	CL-72Y34	CLE5-60Y33	CLV-60R34	DV-200N-250SP 10
A3260250	CCL-3634	CL264-4812	CLE5-72B33	CLV-60Y34	DV-200N-250UK 10
A3260350	CCL-4834	CL264-6012	CLE5-72R33	CLV-6B34	DV-22N18
A3260450	CCL-6034	CL2HD-3634	CLE5-72Y33	CLV-6BL34	DV-24N18
A3260550	CCL-7234	CL2HD-4834	CLP-6B34 CLP-6R34	CLV-6R34	DV-240DC10
A3270050 A3270150	CCLBV-3633 CCLBV-4833	CL2HD-6034 CL2HD-7234	CLP-6Y34	CLV-6Y34 CLV-72B34	DV-27N18 DV-285N10
A3270250	CCLBV-4033	CL4HD-3634	CLRF-18B30	CLV-72B34 CLV-72R34	DV-285N-250 10
, 102, 0200	JOLD V 0000	JEHID 0004	OLI II 10D00	OLV 1211	DV 200/V 200 10

#### E1-8D.....51 M2-465.....29 NS4-6-CS.....50 DV-285N-250EU... 10 HNS4-12.....52 MR-501B.....78 DV-285N-250UK... 10 E1-8E .....51 HNS4-4.....52 M2-472......28.29 MR-501R.....78 NS4-8.....50 E2-10 .....51 HNS4-6.....52 M2-473.....28,29 MR-502 .....78 NS4-8-CS.....50 DV-29.....20 HNS4-8.....52 M2-5.....26 MR-503 .....77,78 NST4-10.....52 DV-291.....20 E2-12 .....51 M2-5-410A.....26 JB-BACKPACK1..36,37 MR-504 .....78 DV-292.....20 E2-2.....51 NST4-4 .....52 MR-505 .....77,78 JB-TOOLBAG1..... 36,37 M2-5-410A-SS.....26 DV-293......20 E2-3.....51 NST4-6 ......52 DV-294......20,35 E2-4.....51 K1-1 .....53 M2-5-410AB......26 MR-506 ......78 NST4-8 ......52 DV-295.....20 MR-508 .....78 E2-5.....51 K1-3 .....53 M2-500.....29 NV62-4 .....58 E2-6.....51 MR-509 .....77,78 P2-10 ......53 DV-3E ..... 11 K1-5 .....53 M2-5B ......26 DV-3E-250 ..... 11 E2-8.....51 K1-8 .....53 M2-6.....26 MR-516 .....77,78 P2-12.....53 DV-3E-250EU ...... 11 E3-10D.....51 K1-D.....53 M2-600......28,29 MR-517 ......28 P2-3.....53 DV-3E-250UK ...... 11 M2-605.....28,29 MR-533 .....28 P2-4.....53 E3-10E.....51 K1-E.....53 DV-340N.....8 M2-6B .....26 MR-590 .....28 E3-4A.....51 LC-4.....48 P2-5.....53 MR-593 .....28 DV-40AC.....19 E3-4B .....51 LC-5.....48 M2-8.....26 P2-6.....53 DV-40C .....19 E3-5B .....51 LD-3000 .....21 M2-8-410A.....26 MR-594 .....28 P2-8.....53 M2-8-410AB......26 P325.....12,45,46,49 MR-595 .....28 DV-40HK.....19 E3-6A.....51 LD-5000 .....21 LD-CS.....21 M2-800.....29 MR-596 ......28 P509.....47,49 DV-41.....19 E3-6B ......51 DV-42N ..... 10 E3-6C .....51 LD-PK.....21 M2-805.....29 MR-596L .....28 P509-25.....47,49 DV-42N-250..... 10 E3-6D ......51 LD-RF5.....21 M2-808.....27 MR-598 .....28 P510 .....49 DV-42N-250EU..... 10 M2-810 .....28,29 MR-601.....77 P511 ..... 18,19,35,59 E3-8C .....51 LD-S101 .....21 DV-42N-250UK..... 10 F3-8D ......51 LD-ST.....21 M2-815......29 MR-605 .....77 P511-10......18,19,49 LD-TV .....21 DV-4E ..... 11 M2-820.....28,29 MR-607 ......77 P90008......35,49 E3-8E.....51 P90009 .. 13,18,20,35, DV-4E-250 ..... 11 E4-44.....50 LDC-4000.....21 M2-820L.....28,29 MR-610.....78 47,48,49,74,75 DV-4E-250EU ...... 11 E4-66.....50 LDC-4000-1.....21 M2-825.....29 MR-611.....78 P90010......47,49 DV-4E-250UK ...... 11 E4-88.....50 LDC-4000-2.....21 M2-825L.....28,29 MR-BVK ......78 P90011.....47,49 DV-6E ..... 11 ER2-108.....51 LDC-4000-3.....21 M2-826.....29 MSKIT1 .....36,37 P90012 ...... 13,35,49 LDC-4000-4.....21 MSKIT2 ......36,37 DV-6E-250 ..... 11 ER2-64 .....51 M2-827......29 P90016 ......35,49 DV-6E-250EU ...... 11 M2-828.....29 MSKIT3 .....36,37 ER2-84 .....51 LT-456 ......47 P90022......35,49 DV-6E-250SP ...... 11 M2-829.....29 ER2-86 .....51 LT-810.....47 N4-10.....52 P90513.....49 DV-6E-250UK ...... 11 ES2-44.....50 M2-102N.....77,78 M2-830.....29 N4-12.....52 P90514 ...... 18,35,49 ES2-66.....50 M2-106 ......77 N4-4.....52 DV-85-FLEX.....9 M2-831.....29 PR-1 ..... 74,75,76 M2-108 .....77 DV-85-FLEX-AC ..... 9 ES2-68.....50 M2-844.....29 N4-5.....52 PR-10.....76 DV-85-FLEX-BAT .... 9 ES2-88.....50 M2-21125 ......26 M2-845.....29 N4-6.....52 PR-18 ..... 74,76 DV-85N ..... 10 ES4-1010 .....51 M2-21125B.....26 M2-851.....29 N4-8.....52 PR-2 ..... 74,75,76 DV-85N-250...... 10 ES4-1212.....51 M2-21131 .....26 M2-856......29 N5-10.....52 DV-85N-250EU..... 10 M2-860.....28,29 PR-205 ..... 74,76 M2-21131B.....26 ES4-44.....51 N5-12.....52 PR-206 ..... 74,76 DV-85N-250UK..... 10 ES4-66.....51 *M2-21525......*26 M2-861 ......28,29 N5-3.....52 PR-207 ..... 74,76 M2-862.....28,29 DV-BP-AC.....9 ES4-88.....51 M2-21525B ......26 N5-4.....52 M2-21531.....26 M2-865.....29 N5-5.....52 PR-208 ...... 74,75,76 DV-BP-BAT.....9 EZ-40288......47 PR-209 ..... 74,75 N5-6.....52 DV-BP-CHRG......9 EZ-40288-126......47 M2-21531B ......26 M2-870.....29 PR-211.....74,75 N5-8.....52 F6-110-CRD......15 M2-22125.....26 M2-871.....28,29 DV-EP6......74,76 PR-215 ..... 74 NFT5-4 ... 36,37,47,74, DV-EP8......74,76 F6-BH......15 M2-22131 .....26 M2-872.....28,29 75,76 PR-217 .....74, 76 F6-BOOST ..... 14 DV-F6 ......13 *M2-22225......*26 M2-875.....29 PR-22......74,75,76 NFT5-4-100 ......47 DV-F8 ......13 F6-DP......15 M2-22231.....26 M2-876.....28,29 NFT5-4-101.....54 PR-3 ..... 74,75,76 DV-FILTER ...... 18,19 F6-DP-250......15 M2-22244.....26 M2-877.....28,29 NFT5-4-25.....47 PR-300 ..... 74 M2-880.....29 M2-22325.....26 DV-T1.....13 F6-FLT ...... 15 F6-RBFT ......15 M2-885.....29 NFT5-4-CJ.....42 PR-301 ..... 74 DVO-1.....13 M2-22425.....26 NFT5-5 ... 36,37,47,74, PR-302 ..... 74 DVO-12......13 F6-RH......15 M2-22525......26 M2-890.....29 75,76 PR-303 ...... 74 F6-RHP .....15 M2-22531.....26 M2-895.....29 DVO-24......13 NFT5-6 ......47 PR-304 ..... 74 DVR-22.....18 F6-STRAP ..... 15 *M2-22825......26* M2-8B ......26 NFT5-6-100 ..... 47 PR-307 ...... 74,75,76 FP-A-168 .....52 M2-22831.....26 M2-924.....29 E1-10C ......51 NFT5-6-101.....54 PR-308 ...... 74,75,76 E1-10D ......51 FP-A-210.....52 M2-23125.....26 M2-924CM.....28,29 NFT5-8 ...... 47,74,75 PR-31 ..... 74,76 E1-10E.....51 FP-A-283 .....52 M2-23131.....26 M2-925.....29 NRS4-108.....53 PR-311.....74,75 E1-12D.....51 FP-B-168.....52 M2-23225.....26 M2-925CM.....29 NRS4-1210.....53 PR-314 ..... 74 E1-12E .....51 M2-23231.....26 FP-B-210 .....52 M2-951.....29 NRS4-43.....53 PR-315 ...... 74,75,76 E1-2A.....51 FP-B-283.....52 *M2-250......*29 M2-956.....29 NRS4-54.....53 PR-32 ..... 74 FP-C-168.....52 E1-3A.....51 M2-300.....78 M2-HP.....27 NRS4-64.....53 FP-C-210 .....52 M2-350.....29 M2-HP-5.....27 PR-4 ..... 74 E1-4A.....51 NRS4-65.....53 PR-40 ..... 74,76 M2-LED8PK......28 E1-4B.....51 FP-C-283.....52 M2-355.....29 NRS4-86.....53 PR-403.....76 M2R-P.....77 E1-4C.....51 FU-4B-168.....52 *M*2-36......26 NS4-10 .....50 PR-404 ......76 E1-5A.....51 FU-4B-210.....52 M2-36B ......26 M2R-S.....77 NS4-10-CS.....50 PR-406 ......76 E1-5B.....51 M2-400.....28,29 M4R-P.....77 FU-4B-283 ......52 NS4-12 ......50 PR-41 ......75 E1-5C.....51 FU-4C-210.....52 M2-405.....29 M4R-S.....77 NS4-12-CS.....50 PR-42 ..... 74 E1-6A.....51 FU-4C-283 ..... 52 M2-410 .....29 MBV4-01 .....35 NS4-14 .....50 PR-45 ..... 74,75 E1-6B.....51 FU-6C-168......52 *M2-415*......29 MBV4-03 ......35 NS4-3.....50 PR-500 ..... 74,76 E1-6C.....51 M2-420.....29 MBV5-01 ......35 FU-6C-210......52 NS4-4.....50 PR-501 ..... 74,75 FU-6C-283 .....52 E1-6D.....51 M2-425.....29 MBV5-03 ......35 NS4-4-CS.....50 PR-52 ..... 74.76 GTBG-12.....28 M2-430.....29 MR-409 .....77 E1-6E .....51 NS4-5.....50 PR-54 ..... 74,76 E1-8B.....51 MR-444 .....78 GTBG-16......28 *M2-435.....*29 NS4-6.....50 PR-56 ..... 74,75 MR-446 .....78 HNS4-10.....52 M2-460.....28,29

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RT52042.....61

RT70007B.....60

RT70007X.....60

*T1-8C.....*53

*T1-8D.....*53

T2-10.....53

TC-55-100.....68

TC-55-11.....68

TC-59-10.....68

U3-6B.....54

*U*3-6*C*.....54

U3-6D.....54

## Index JB INDUSTRIES

PR-59 74,75,76	RT7001560	T2-1253	TC-59-10068	U3-8B54	V3420059
PR-674,76	RT70017B60,61	T2-353	TC-64-1068	U3-8C54	V3420159
PR-60174	RT70017D60,61	T2-453	TC-64-10068	U3-8D54	V3420259
	•				
PR-60574	RT7002060	T2-553	TC-70-10068	U3-8E54	V3420359
PR-607 74,75	RT7002160	T2-653	TC-70-1268	<i>U4-1055</i>	V34204 59
PR-6274,75	RT7002760	T2-853	TC-75-10068	<i>U4-1255</i>	V3420659
PR-6376	RT7002960	T2-HKA65	TC-75-968	U4-455	V3420759
PR-6576	RT7003061	T2009566	TC-80-1068	<i>U4-6</i> 55	V3420859
PR-6674	RT7004160	T2019564	TC-80-10068	<i>U4-</i> 855	V3420959
PR-7 74,75	RT70056D60	T2020364	TC-85-10068	<i>U5-4A</i> 56	V3421059
PR-7574,75	RT70057D61	T2027565	TC-85-968	U5-4B56	V3421159
PR-77 74.76	RT7007567	T2035167	TC-90-10068	U5-6B56	V3430059
, -					
PR-7874	RT7010560	T2035267	TC-90-768	U5-8C56	V3430159
PS-1065	RT7014261	T2035367	TR2-44653	U5-8D56	V3430259
PS-10065	RT7015962	T2050064	TR2-66453	<i>U6-4A</i> 55	V34303 59
PS-2565	RT7016062	T2100066	TR2-66853	U6-4B55	V3430459
PS-5065	RT7016162	T2100266	TR2-88653	UR2-10655	V3430659
QC-13445-134A70	RT7017062	T2100366	TRQ-IMP63	UR2-10855	V3430759
QC-206 12,13	RT7017162	T2100466	TRQ108036,37,63	UR2-121055	V3430859
QC-208 12,13	RT7040160	<i>T2100566</i>	U1-10B54	UR2-12855	<i>V</i> 3430959
QC-E348	RT7040260	T2100666	U1-10C54	UR2-4355	V3431059
QC-E448	RT7052162	T2100766	U1-10D54	UR2-5455	V3431159
QC-E548			U1-10E54	UR2-6455	V3435059
	RT7052262	T2100866			
QC-E6413,48	RT7052362	T2101066	U1-12C54	UR2-6555	V3440059
QC-G43028,29	RT7053162	T2101266	U1-12D54	UR2-8455	V3440159
QC-G43429	RT7053262	T2101466	U1-12E54	UR2-8655	V3440259
QC-G46029	RT7053462	T2101866	U1-14E54	UR3-101255	V3440459
QC-G46529	RT7500761	T2102466	U1-3A54	UR3-10855	V3440659
QC-G82029	RT9061463	T21124U63	U1-3B54	UR3-121055	V3440759
QC-G82529	RT9901660	T21125U63	<i>U1-4A54,77,</i> 78	UR3-4355	V3440859
QC-G85128,29	SH-35-CL19	T21126U63	U1-4B54	UR3-4655	V3440959
QC-G85629	SH-35N19	T21127U63	U1-4C54	UR3-4855	V3450059
QC-S348	SH-35N-CS19	T21128U63	U1-4D54	UR3-6455	V3450159
QC-S448	SHLD-3-DRIVER38	T2129467	<i>U1-5A</i> 54	UR3-6855	V3450259
QC-S45-4548	SHLD-8-DRIVER38	T2129535,49	U1-5B54	UR3-81055	V3450359
QC-S4648	SHLD-BIT38	T3-10D54	U1-5C54	UR3-8455	V3450459
QC-S4A48	SHLD-CJ38	T3-4A54	U1-6A54	UR3-8655	V3450659
QC-S4A-134A70	SHLD-COMBO-	T3-4B54	U1-6B 54, 77	US3-101054	V3450759
QC-S4B48	DRIVER38	T3-5B54	U1-6C54	US3-101254	V3450859
QC-S548	SHLD-E1238	T3-6B54	U1-6D54	US3-10854	V3450959
QC-S5S48	SHLD-E436,37,38	T3-6C54	U1-6E54	US3-121254	V3451059
QC-S64 13, 48	SHLD-E5038	T3-6D54	U1-8A54	US3-121454	V3451159
QC-S6548	SHLD-G1238	T3-8C54	U1-8B54	US3-4454	V3452559
	SHLD-G438				
REC-TANK-30 15		T3-8D54	<i>U1-8C</i> 54	US3-4554	V3490058
REC-TANK-50 15	SHLD-G5038	T3025165	<i>U1-8D</i> 54	US3-4654	V3490158
RT1100667	SHLD-MULTI38	T3060036,37,64	U1-8E54	US3-61054	V3490558
RT1231865	SHLD-P1238	T30600-G36,37,65	U2-1055	US3-6454	V3491058
RT2165260,61,67	SHLD-P436,37,38	T3060536,37,66	U2-1255	US3-6554	VL-10012
RT21652B60,61,67	SHLD-P5038	T6-454	U2-1455	US3-6654	VL-20012
	SHLD-SLG2038				
RT2165567		TC-100-1068	U2-255	US3-6854	WC-14
RT2166067	SHLD-SLP2038	TC-100-10068	<i>U</i> 2-355	US3-81054	WC-24
RT22240264	SHLD-SLU2038	TC-26-10068	<i>U2-455</i>	US3-8654	WH-15
RT22260164	SHLD-U10038	TC-26-1668	U2-4CHK57	US3-8854	WH-25
RT2302264	SHLD-U1238	TC-31-10068	U2-555	US4-1055	
	SHLD-U438				
RT2513163		TC-31-1268	<i>U</i> 2-655	US4-455	
RT2513663	SHLD-U5038	TC-36-10068	<i>U</i> 2-855	US4-555	
RT2514063	SM-1861	TC-36-1268	U3-10C54	US4-655	
RT2514263	T1-10C53	TC-42-10068	U3-10D54	US4-855	
RT2515163	T1-10D53	TC-42-1268	U3-10E54	US5-101050	
	T1-4A53				
RT2591363		TC-44-10068	U3-2A54	US5-121250	
RT2591463	T1-4B53	TC-44-1268	<i>U</i> 3-3 <i>A</i> 54	US5-4450	
RT2603664	T1-4C53	TC-49-10068	<i>U</i> 3-4A54	US5-6650	
RT2671566	T1-5B53	TC-49-1168	U3-4B54	US5-8850	
RT5200061	T1-6B53	TC-50-10068	U3-4C54	UX1-4A56	
RT5201061	T1-6C53	TC-50-1168	U3-5A54	UX1-4B56	
	T1-6D53				
RT5201161		TC-54-10068	U3-5B54	UX2-456	
RT5203061	T1-8B53	TC-54-1168	<i>U</i> 3-6 <i>A</i> 54	V34-RC1258	
RT52042 61	<i>T1-8C53</i>	TC-55-10068	U3-6B 54	V34-RC19 58	

V34-RC19.....58

V34-RC33.....58

V34-RC4.....58

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## **Domestic Rep Agencies**

#### MI

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#### OH, WV, WESTERN PA

#### **CKA SALES**

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## ENGINEERING EQUIPMENT SALES

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#### NORTHWEST IN, NORTHERN IL

#### DANCO SALES COMPANY

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## **Domestic Rep Agencies**

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#### **GIMPER IV**

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#### **KASCO**

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#### CO, ID, MT, NM, UT, WY, EL PASO, TX

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#### MN, ND, SD, WI

#### **RAC SALES**

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#### **J&J HVAC LLC**

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#### NC. SC

#### RHODES AND STAFFORD

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#### AR, MS, WESTERN TN

#### SARRIO SALES

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### AL, GA, EASTERN TN

## SHUPE, CARBONI & ASSOCIATES

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#### EUROPE, MIDDLE EAST, AFRICA

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#### CANADA

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