

VACUUM PUMP SYSTEMS






YELLOW JACKET®

BULLET™ Vacuum Pump

A two-stage rotary vane oil-sealed pump that pulls down to 25 microns or better



The BULLET™ pulls down to 25 microns or better, protecting from contaminants and non-condensable gasses in the HVAC system, which can damage components, reduce efficiency and cause system failure.

- Wide mouth oil reservoir port for easier, cleaner filling. Doubles as pump exhaust; threaded to attach garden hose for exhausting to remote location
- Large oil sight glass for easy monitoring of oil level
- Large brass oil drain for easy access to fast oil changes
- Internal intake check valve to help prevent oil backup into the system during a power failure
- Intake filter screen keeps damaging particles from entering the pump
- Heavy-duty rotors and bearings
- Heavy-duty steel handle for well-balanced carrying
- Tethered port caps stay with the pump
- Stable base; wide-stance metal with rubber overlay
- Made in the USA 

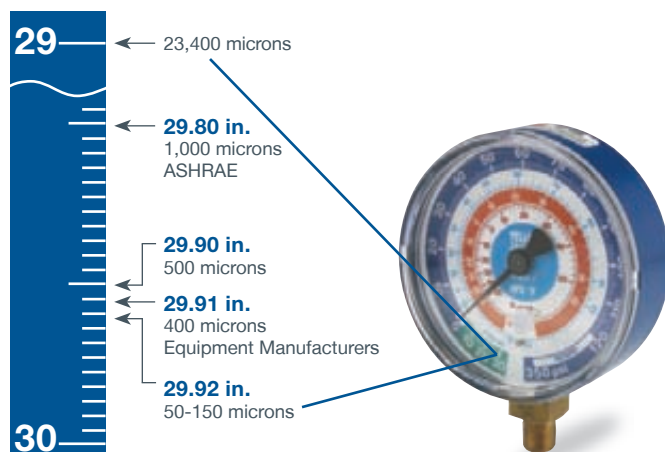
Domestic	Model 93603		Model 93605		Model 93600	
Free air displacement	3.0 cfm		5.0 cfm		7.0 cfm	
Number of stages	2-stage rotary vane		2-stage rotary vane		2-stage rotary vane	
Field blankoff	25 microns		25 microns		25 microns	
Intake	1/4" x 3/8" x 3/8"		1/4" x 3/8" x 3/8"		1/4" x 3/8" x 3/8"	
Motor	1/2 hp - 1725 rpm		1/2 hp - 1725 rpm		1/2 hp - 1725 rpm	
Thermal overload protection	Yes		Yes		Yes	
Voltage (single phase)	115V/60 Hz		115V/60 Hz		115V/60 Hz	
Power cord	6' - motor mounted switch - U.S. plug		6' - motor mounted switch - U.S. plug		6' - motor mounted switch - U.S. plug	
Oil capacity	33.5 oz. (0.991 L)		30 oz. (0.9 L)		28 oz. (0.828 L)	
Dimensions	16.25" L x 6.25" W x 8.25" H (41.3 cm x 15.9 cm x 21 cm)		16.25" L x 6.25" W x 8.25" H (41.3 cm x 15.9 cm x 21 cm)		16.25" L x 6.25" W x 8.25" H (41.3 cm x 15.9 cm x 21 cm)	
Net weight	29.1 lbs. (13.2 kg)		30.0 lbs. (13.6 kg)		31.6 lbs. (14.3 kg)	
Export	EU/UK 93613	AU/NZ 93623	EU/UK 93615	AU/NZ 93625	EU/UK 93610	AU/NZ 93620
Detachable IEC Cord type	EU/UK	AU/NZ	EU/UK	AU/NZ	EU/UK	AU/NZ
Free air displacement	85/70 L/M		142/120 L/M		200/165 L/M	
Motor	1/2 hp - 1725 rpm/1425 rpm		1/2 hp - 1725/1425 rpm		1/2 hp - 1725/1425 rpm	
Voltage (dual phase)	115/230V / 50-60 Hz		115/230V / 50-60 Hz		115/230V / 50-60 Hz	
Dimensions	17" L x 6.25" W x 8.25" H (43.2 cm x 15.9 cm x 21 cm)		17" L x 6.25" W x 8.25" H (43.2 cm x 15.9 cm x 21 cm)		17" L x 6.25" W x 8.25" H (43.2 cm x 15.9 cm x 21 cm)	
Net weight	32.1 lbs (14.6 kg)		33 lbs (15 kg)		34.5 lbs (15.7 kg)	

HOW TO MEASURE AN "ADEQUATE" VACUUM

Many contractors pull the refrigerant out and think the work is done. In reality, when you get to 29 inches of vacuum (the green zone on your gauge), you are only half finished. Once the recovery machine has done its work, it's time to finish off the job with a vacuum pump.

Standard Lo-Side Gauge

Shows vacuum in inches. A ±1% gauge would be accurate to ±7600 microns when calibrated at a full vacuum (which is generally not the case with this type of gauge).



Only an electronic vacuum gauge can precisely measure the level at which non-condensable gas is removed from system.

Why a Vacuum Pump?

ASHRAE recommends evacuation to below 1000 microns for moisture removal and below 500 microns after replacing a compressor. Some equipment manufacturers call for evacuation to 400 microns to ensure that harmful water vapor is removed from the system.

When you have water vapor in your system, the risk of icing up capillary tubing and expansion valves becomes much higher. A high quality vacuum pump will be able to take you down to 200-500 microns. With the system almost completely free from water vapor, you are ready to put the refrigerant back in the system. A thorough approach to evacuation ensures longer equipment life and reduced risk of problems.

Use a Vacuum Gauge to Read Vacuum Down to 25 Microns

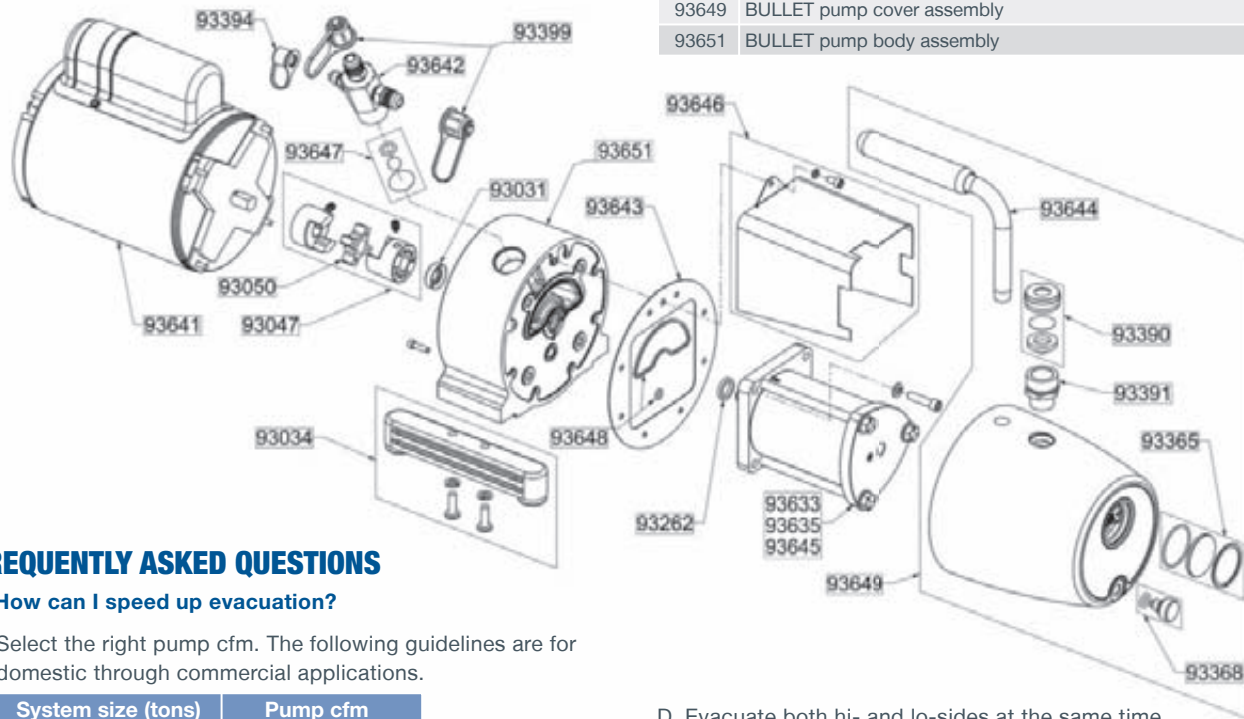
1000 microns equal only 0.039 inches of mercury, a measurement that cannot be made with a mechanical gauge, or determined by evacuation time or the sound of the pump. A popular tool that can measure vacuum at evacuation levels below 1000 microns is an electronic vacuum gauge.

The best place to measure vacuum is at the system, not at the pump. With a combination vacuum/charging valve, you can attach the electronic vacuum gauge directly to the system and isolate it from the pump, hoses and manifold for a true indication of the vacuum in the system. With a digital vacuum gauge, you can see the last evidence of moisture being removed and witness that the system has been dried out.

BULLET™ REPLACEMENT PARTS



BULLET™ replacement parts	
UPC#	Description
93031	Shaft seal
93034	Universal pump leg (1)
93047	Drive coupling (including spider)
93050	Coupling spider for 93047
93262	Cartridge locate ring
93365	Sight glass
93368	Oil drain
93390	Oil fill cap
93391	Oil fill fitting
93394	1/4" Flare cap and strap
93399	3/8" Flare cap and strap
93513	1/2 hp motor (115-230V / 50-60 Hz)
93633	BULLET 3 cfm (85 L/M) cartridge
93635	BULLET 5 cfm (142 L/M) cartridge
93641	1/2 hp Motor 115V/60HZ
93642	3/8", 3/8" and 1/4" Male flare intake fitting
93643	BULLET pump cover gasket
93644	BULLET pump handle
93645	BULLET 7 cfm (200 L/M) cartridge
93646	BULLET cartridge baffle
93647	BULLET anti-suckback assembly
93648	BULLET cartridge gaskets
93649	BULLET pump cover assembly
93651	BULLET pump body assembly



FREQUENTLY ASKED QUESTIONS

1. How can I speed up evacuation?

A. Select the right pump cfm. The following guidelines are for domestic through commercial applications.

System size (tons)	Pump cfm
10-30	4.0
30-45	6.0
40-50	7.0
45-60	8.0
60 and above	11.0

B. Use clean vacuum pump oil. Milky oil is water saturated and limits pump efficiency.

C. Remove valve cores from both high and low fittings with a vacuum/charge valve tool to reduce time through this orifice by at least 20 percent.

D. Evacuate both hi- and lo-sides at the same time. Use short, 3/8" diameter and larger hoses.

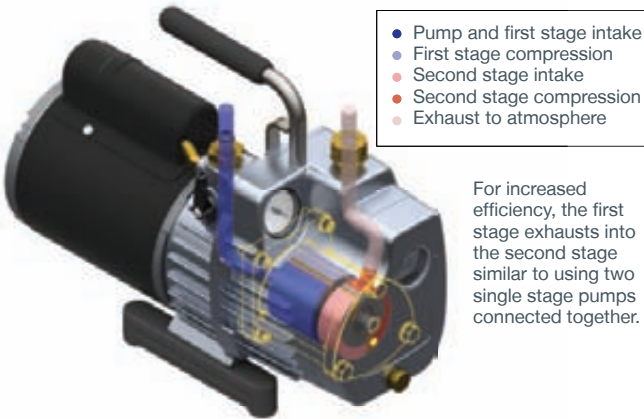
E. SUPEREVAC™ manifolds can reduce evacuation time by over 50-60 percent.

F. Use a heat gun.

2. Does extension cord length affect performance?

To ensure proper starting and running performance from your YELLOW JACKET pump, always use a minimum 12 gauge extension cord for lengths up to 100 feet. Extension cords over 100 feet are not recommended.

4, 6, 8, & 11 SUPEREVAC™ VACUUM PUMPS



- Pump and first stage intake
- First stage compression
- Second stage intake
- Second stage compression
- Exhaust to atmosphere

For increased efficiency, the first stage exhausts into the second stage similar to using two single stage pumps connected together.

The SUPEREVAC™ vacuum pump is a highly efficient, two-stage rotary vane oil-sealed pump field-rated at 15 microns or better.

- Isolation valve for oil changes without losing vacuum in the system
- Built-in vacuum indicator gauge
- Wide-mouth oil reservoir port for easier, cleaner filling. Doubles as pump exhaust—threaded to attach garden hose for exhausting to remote location
- Large oil sight glass for easy monitoring of oil level
- Large brass oil drain for easy access to fast oil changes
- Gas ballast valve keeps oil cleaner, longer during evacuation of wet systems
- Internal intake check valve to help prevent oil backup into the system during a power failure
- Intake filter screen keeps damaging particles from entering the pump
- Heavy duty rotors and bearings
- Heavy duty steel handle with lift hook for well-balanced carrying
- Tethered port caps stay with the pump
- Metal with rubber overlay base for stability
- Made in the USA

Domestic	Model 93540	Model 93560	Model 93580	Model 93590
Free air displacement	4.0 cfm	6.0 cfm	8.0 cfm	11.0 cfm
Number of stages	2-stage rotary vane	2-stage rotary vane	2-stage rotary vane	2-stage rotary vane
Field blankoff	15 microns	15 microns	15 microns	15 microns
Intake	1/4" and 3/8" Male flare	1/4" and 3/8" Male flare	1/4" and 1/2" Male flare	1/4" and 1/2" Male flare
Motor	1/2 hp - 1725 rpm	1/2 hp - 1725 rpm	1/2 hp - 1725 rpm	1/2 hp - 1725 rpm
Thermal overload protection	Yes	Yes	Yes	Yes
Voltage (single phase)	115V/60 Hz	115V/60 Hz	115V/60 Hz	115V/60 Hz
Power cord	6' - motor mounted switch	6' - motor mounted switch	6' - motor mounted switch	6' - motor mounted switch
Oil capacity	36 oz.	34 oz.	47 oz.	44 oz.
Dimensions	16" L x 6" W x 11.5" H (40.6 cm X 15.2 cm X 29.2 cm)	16" L x 6" W x 11.5" H (40.6 cm X 15.2 cm X 29.2 cm)	17.5" L x 6" W x 11.5" H (44.5 cm X 15.2 cm X 29.2 cm)	17.5" L x 6" W x 11.5" H (44.5 cm X 15.2 cm X 29.2 cm)
Net weight	30.3 lbs. (13.7 kg)	31.2 lbs. (14.2 kg)	32.5 lbs. (14.8 kg)	34.1 lbs. (15.4 kg)
Export	Model 9354x	Model 9356x	Model 9358x	Model 9359x
Free air displacement	113/95 L/M	170/142 L/M	225/190 L/M	310/260 L/M
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
Motor voltage (dual phase)	115/230V / 50-60 Hz	115/230V / 50-60 Hz	115/230V / 50-60 Hz	115/230V / 50-60 Hz
Dimensions	16.75" L x 6" W x 11.5" H (42.5 cm X 15.2 cm X 29.2 cm)	16.75" L x 6" W x 11.5" H (42.5 cm X 15.2 cm X 29.2 cm)	18.25" L x 6" W x 11.5" H (46.4 cm X 15.2 cm X 29.2 cm)	18.25" L x 6" W x 11.5" H (46.4 cm X 15.2 cm X 29.2 cm)
Net weight	33.2 lbs. (15.1 kg)	33.9 lbs. (15.4 kg)	35.5 lbs. (16.1 kg)	37.0 lbs. (16.8 kg)
Model #	93542 (95 L/M at 50 Hz) (113 L/M at 60 Hz)	93562 (142 L/M at 50 Hz) (170 L/M at 60 Hz)	93582 (190 L/M at 50 Hz) (225 L/M at 60 Hz)	93592 (260 L/M at 50 Hz) (310 L/M at 60 Hz)
US plug	230V	230V	230V	230V
Factory voltage setting				
Model # Euro plug	93543 (95 L/M at 50 Hz)	93563 (142 L/M at 50 Hz)	93583 (260 L/M at 50 Hz)	93593 (260 L/M at 50 Hz)
Factory voltage setting	230V	230V	230V	230V (EU/UK plug)
Model # AU/NZ plug	93544 (95 L/M at 50 Hz) (113 L/M at 60 Hz)	93564 (142 L/M at 50 Hz) (170 L/M at 60 Hz)	93584 (190 L/M at 50 Hz) (225 L/M at 60 Hz)	93595 (260 L/M at 50 Hz) (310 L/M at 60 Hz)
Factory voltage setting	230V	230V	230V	230V
Model # UK Plug	93547 (95 L/M at 50 Hz)	93567 (142 L/M at 50 Hz)	93587 (190 L/M at 50 Hz)	93593 (260 L/M at 50 Hz)
Factory voltage setting	230V	230V	230V	230V (EU/UK plug)

Will not work with NH.

RECOVERY MACHINES
 VACUUM PUMP SYSTEMS
 VACUUM AND CHARGING HOSES
 HOSE ADAPTERS, VALVES AND PARTS
 CHARGING SYSTEMS
 GAUGES
 ELECTRONIC INSTRUMENTS
 HEATING INSTRUMENTS
 LEAK MONITORS AND DETECTORS
 SYSTEM TOOLS

SUPEREVAC™ REPLACEMENT PARTS

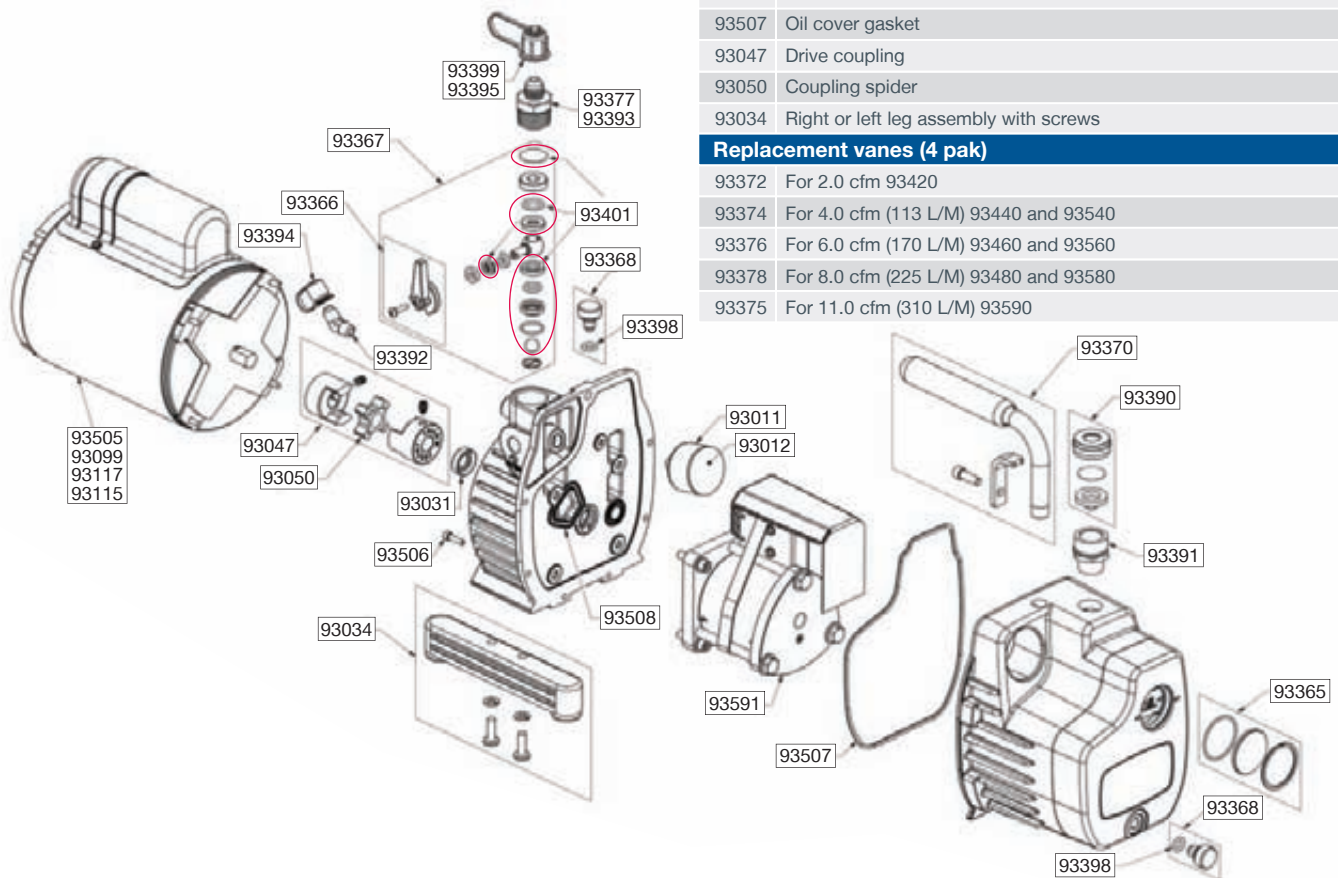


SUPEREVAC™ replacement parts

UPC# 2005-present 4, 6, 8, 11 cfm

Pump oil cover

93370	Handle assembly
93390	Oil fill cap with seal
93391	Oil fill fitting
93365	Oil sight glass
93368	Drain/gas ballast plug



SUPEREVAC™ replacement parts

UPC# 2005-present 4, 6, 8, 11 cfm

Vacuum cartridge

93541	4 cfm cartridge complete
93561	6 cfm cartridge complete
93581	8 cfm cartridge complete
93591	11 cfm cartridge complete

Mounting body

93031	Shaft seal
93011	0-30" Vacuum indicator
93012	Vacuum gauge lens
93368	Drain/gas ballast plug
93398	"O" ring for gas ballast/drain plug
93392	1/4" Male flare x 1/8" NPT fitting
93377	4 and 6 cfm intake fitting (3/8" Male flare x 3/4" NPT)
93393	8 and 11 cfm intake fitting (1/2" Male flare x 3/4" NPT)
93394	1/4" Flare cap
93399	4 and 6 cfm 3/8" flare cap
93395	8 and 11 cfm 1/2" flare cap
93366	Blank-off handle
93367	Complete parts for blank-off handle
93401	Blank-off rebuild kit
93508	Intake port gasket

Motor

93513	1/2 hp motor 115-230V / 50-60 Hz
93505	1/2 hp - 115V/60 Hz* (includes parts listed below)
93099	8/32 x 7-1/4" Motor bolts (4)
93117	Rocker style switch
93115	6' Long cord

Final assembly parts

93506	8/32 x 5/8" Socket head screws
93507	Oil cover gasket
93047	Drive coupling
93050	Coupling spider
93034	Right or left leg assembly with screws

Replacement vanes (4 pak)

93372	For 2.0 cfm 93420
93374	For 4.0 cfm (113 L/M) 93440 and 93540
93376	For 6.0 cfm (170 L/M) 93460 and 93560
93378	For 8.0 cfm (225 L/M) 93480 and 93580
93375	For 11.0 cfm (310 L/M) 93590

SUPEREVAC™ PUMP FOR AMMONIA SYSTEMS




Designed and built to the same quality specifications as other SUPEREVAC™ pumps. Features a pump exhaust that doubles as an oil fill port.



	Model 93530	Model 93533
Free air displacement	8.0 cfm	190 L/M (50 Hz)
Number of stages	2-stage rotary vane	2-stage rotary vane
Field blankoff	15 microns	15 microns
Intake	1/2" Male pipe	1/2" Male pipe
Motor	1/2 hp – 1725 rpm	1/2 hp – 1425 rpm (50 Hz)
Thermal overload	Yes	Yes
Voltage	115V/60 Hz	115/230V 50 Hz*
Power cord	6' – rocker style switch	6' – rocker style switch
Oil capacity	47 oz.	47 oz.
Dimensions	17.5" L x 6.0" W x 11.5" H	18.25" L x 6.0" W x 11.5" H
Net weight	36.2 lbs. (16.4 kg)	38.8 lbs. (17.6 kg)

* The 93533 is factory wired for 230V. It can also be configured for 115V. Remove the motor switch plate and make connections as shown on the motor label.

BELT DRIVE VACUUM PUMPS (0.88-17.7 cfm) by Hyvac Products


These two-stage pumps are lab rated at 0.1 micron and feature large oil capacity, vented exhaust, standard belt guards, motor capacitors and automatic overload protection. Optional exhaust filters available. 



UPC#	80200	80210	80220	80230	80240
cfm - free air (L/M)	0.88 (25)	2.79 (79)	5.6 (160)	10.6 (310)	17.7 (500)
Ultimate vacuum (lab)	0.1 micron	0.1 micron	0.1 micron	0.1 micron	0.1 micron
Stages	2	2	2	2	2
Motor hp (ODP)	1/4	1/3	1/2	1	1-1/2
Voltage (single phase)	115V/60 Hz	115V/60 Hz	115V/60 Hz	115V/60 Hz	115V/60 Hz
Pump rpm	580	525	525	525	550
Oil capacity	1 quart	1-1/2 quart	2.5 quarts	3.5 quarts	4.5 quarts
Gas ballast	Standard	Standard	Standard	Standard	Standard
Intake O.D.	9/16"	7/8"	1-1/4"	1-5/16"	1-13/16"
Dimensions (L x W x H)	15" x 10" x 11"	18" x 12" x 11"	18" x 13" x 16"	18" x 16" x 19"	21" x 20" x 20"
Shipping weight	70 lbs.	110 lbs.	135 lbs.	154 lbs.	242 lbs.

For special electrical requirements, contact factory. Some 50 Hz available for export.

VACUUM PUMP OIL


YELLOW JACKET vacuum pump oil is specially refined and formulated for extremely low vapor pressure and high pump efficiency at all temperature conditions to help keep your pump running for years. 

MSDS sheet on website

UPC#	Description
93091	Pint of vacuum oil - 24 per case
93092	Quart of vacuum oil - 12 per case
93096	Gallon of vacuum oil - 6 per case
93095	55 gallon drum



VACUUM PUMP ADAPTER

Convert a 3/8" or 1/2" vacuum pump intake into flare and Acme compatible fittings. 




UPC#	Description
36018	1/2" Pump adapter with 1/4" flare and 1/2" Acme Male fittings
19015	1/2" Replacement gaskets for 36018 (10 pak)
36019	3/8" Pump adapter with 1/4" flare and 1/2" Acme Male fittings
19011	3/8" Replacement gaskets for 36019 (10 pak)

VACUUM PUMP INTAKE REDUCER ADAPTER



UPC#	Description
19030	Rubber gasket "O" ring (10 pak) for 19130 and 19133
19130	3/8" Female fl. x 1/4" Male fl. adapter
19131	1/2" Female fl. x 3/8" Male fl. adapter
19132	1/2" Female fl. x 1/4" Male fl. adapter
19133	3/8" Female fl. x 1/2" Male fl. adapter
19160	1/2" Female fl. x 1/2" Male Acme adapter
93058	Rubber gasket "O" ring for 19131, 19132 and 19160

OIL EXHAUST FILTER

Screws onto the pump exhaust to eliminate oil mist. Use on SUPEREVAC™ and BULLET™ pumps. 



UPC#	Description
93386	Exhaust filter
93387	Replacement element

HEAT GUN

600° and 1000°F settings. Shockproof and tough housing is durable and lightweight. Use for:

- Coil defrosting
- Faster vacuums
- Drying out condensation in motors, clutches, etc.



Kits include gun, adapters and case.

UPC#	Description
69092	Heat gun kit 115V - UL, CSA
69093	Heat gun kit 230V - Euro plug, CE

SUPEREVAC™ EVACUATION MANIFOLDS



SUPEREVAC™ manifolds are engineered as system components for the SUPEREVAC pumps to help decrease vacuum time by over 50 percent and improve micron readings. Mounts with 1/2" or 3/8" Female flare quick coupler and provides easy connections for two 3/8" vacuum hoses.

- Flutterless™ gauge
- Non-restricting, full flow valves for fast vacuum
- Convenient 1/4 turn full flow
- Extra port for electronic gauge
- Now includes step-down adapter to connect to 3/8" pump intake

3/8" Female flare coupler

UPC#	Description
93851	Single valve with 1/4" Schrader mount with 3/8" Female flare
93852	Single valve with lo-side gauge mount with 3/8" Female flare
93853	Two valves with lo-side gauge mount with 3/8" Female flare
19011	CH-11 gasket (10 pak)
19131	Pump step-down adapter - 1/2" Female flare to 3/8" Male flare

1/2" Female flare coupler

UPC#	Description
93850	Single valve with 1/4" Schrader mount with 1/2" Female flare
93855	Single valve with lo-side gauge mount with 1/2" Female flare
93860	Two valves with lo-side gauge mount with 1/2" Female flare
19015	CH-80 gasket (10-pak)
19027	1/2" Quad ring (10 pak)
19133	Pump step-up adapter - 3/8" Female flare to 1/2" Male flare

Additional replacement parts

UPC#	Description
19030	3/8" "O" ring (10 pak)
19096	Ball valve replacement handles (2 pak)
40272	1/4" Male flare with Schrader for 93850
41139	3/8" Male flare x 1/4" NPT Male fitting
49002	Blue compound °F gauge
77921	1/4" Flare x 1/8" NPT Male elbow
93211	3/8" Flare cap with gasket
93854	1/2" Flare connector

SUPEREVAC™ EVACUATION SYSTEMS I, II & III



All system components are available separately, but system pricing makes I, II and III attractive buys.

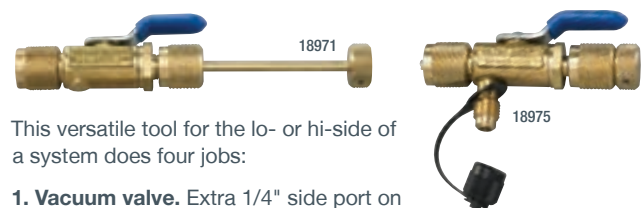
All systems include a two-valve manifold and two 3/8" vacuum hoses for a fast vacuum. Vacuum valves, included with all systems, allow core removal and system isolation. This combination reduces vacuum time by over 50 percent compared to using a regular 1/4" manifold and evacuating through only one side.

System II adds 69075 electronic gauge and standard ratchet wrench to the basic System I.

System III adds a 6 or 8 cfm SUPEREVAC™ pump to System II.

UPC# for 1/2"	Description	UPC# for 3/8"
93865	System I: 2-valve manifold, 2 16248 48" vacuum hoses, 2 valves	93866
93875	System II: all of above plus 69075 electronic vacuum gauge and ratchet wrench	93876
93886 (8 cfm)	System III: all of above plus a SUPEREVAC pump	93885 (6 cfm)
	CH-11 gasket (10 pak)	19011
19015	CH-80 gasket (10 pak)	

1/4" AND 5/16" BALL VALVE 4-IN-1 VACUUM/CHARGE VALVE & CORE TOOL



This versatile tool for the lo- or hi-side of a system does four jobs:

- Vacuum valve.** Extra 1/4" side port on 18975 to attach electronic micron vacuum gauge right at system for greater accuracy. Working pressure of 800 psi.
- Core removal access.** Lets you evacuate and charge through an unrestricted line for increased speed and higher vacuum.
- Core replacement.**
- Recovery valve.** Core removal speeds recovery process.

Made in the USA

For more details see page 32.

UPC#	Description
18971	1/4" Vacuum/charge valve without side port
18975	1/4" Vacuum/charge valve with side port
18981	5/16" Vacuum/charge valve without side port
18985	5/16" Vacuum/charge valve with side port

SUPEREVAC™ LCD VACUUM GAUGE

Full range from atmosphere to 1 micron

The SUPEREVAC™ LCD vacuum gauge combines thermocouple sensor technology with advanced electronics for precise readings and repeatability not found with thermistor sensors or analog meters.

Thermocouple technology has long been proven in laboratory and precision industrial instrumentation for sensing the deep vacuum range. Thermocouple sensors are factory calibrated and exhibit few of the electronic variances of thermistor sensors found in many other electronic gauges. Durable molded case with storage for sensor, cable and brass connector.

Specifications

Response time: 3 seconds
 Calibration: Automatic
 Warm up: 3 seconds
 Sensor cable: 5.5' (167 cm) coiled
 Sensor connection: 1/4" Male flare
 Maximum pressure: To avoid sensor damage, do not exceed 5 psig
 Operating temperature range: 32° to 120°F (0° to 49°C)
 Display: 0.5" LCD with battery check
 Automatic shut-off: Yes
 Power: D cell battery, 70 hours continuous battery life
 Dimensions: 9" x 12.25" x 2.37" (230 mm x 310 mm x 60 mm)
 Accuracy: ± 20% of reading

UPC#	Description
69075	SUPEREVAC™ LCD vacuum gauge full range complete in case
69067	Optional ball valve to add to sensor 1/8" NPT Female x 1/4" Female flare
69071	Optional brass connector 1/4" Female flare x 1/4" Female flare
69073	Replacement sensor for 69070, 69075
19110	Optional coupler to add to sensor 1/8" NPT Female x 1/4" Female flare
69058	Replacement cord



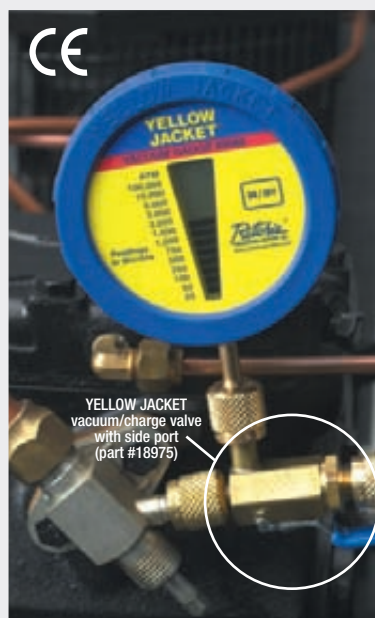
Thermocouple sensor features:

- No adjustments or warm-up. Stays calibrated after on/off switching and long evacuations
- Automatic battery compensation
- Automatic ambient temperature compensation
- Replacement sensor requires no calibration

LCD gauge features:

- Automatic off 20 minutes after power up and no change
- Normal handling and jarring will not affect the LCD reading
- Case protects electronic circuitry and sensor
- Calibration standards traceable to NIST
- Precision circuitry controls sensor and translates sensor input into micron readings
- Made in the USA

DIGITAL LCD ECONOMY VACUUM GAUGE



Connect to the YELLOW JACKET SUPEREVAC™ Vacuum Pump, in line with a tee fitting or directly to the system with YELLOW JACKET core removal tool 18975.

This product is protected by one or more of U.S. Patent Number: 6,779,350; 6,832,491; 7,073,346; 7,310,965; and 7,428,822

The digital LCD economy vacuum gauge indicates air and moisture have been removed from the system. Track down the 14 level bargraph from atmosphere to 25 microns to know that the system is clean and the vacuum pump is performing properly. Packaged complete with 9V alkaline battery and hanging hook.

- Unique thermal conductivity sensor automatically compensates for temperature with no calibration
- Simple On/Off controls
- Easy-to-clean sensor handles 450 psi positive pressure
- Rugged contractor-grade construction with tough ABS housing and solid state circuitry for accuracy
- Automatic battery saver shuts gauge off after 20 minutes with no reading changes
- Low battery indicator
- Calibration standards traceable to NIST
- Patented technology
- Made in the USA

To keep the 69080 vacuum gauge accurate, it is best to avoid oil contamination. Keep the sensor vertical whenever possible and connect the gauge directly to the system, away from the pump.


UPC#	Description
69080	Digital LCD vacuum gauge with battery, hook and pouch
69081	Replacement soft-sided protective case
69079	Replacement battery door and screw
69095	Tee fitting

DELUXE LED VACUUM GAUGE

AC powered



Professional laboratory type instrument with 0.56" high bright LED readout is 100 percent automatic. Complete unit includes aluminum LED display unit, sensor with ball valve, cable, brass connector and carrying case.

- Thermocouple sensor technology for precise and repeatable accuracy
- Improved software expands sensing range from atmospheric pressure to 1 micron
- Calibration standards traceable to NIST
- Accuracy: $\pm 15\%$ of reading
- Made in the USA 

Specifications

Response time: 3 seconds	Storage temperature range: -30° to 160°F (-34° to 65°C)
Calibration: Automatic	Power: 115V/60 Hz (230V available)
Warm up: 3 seconds	Power cord: 6'
Sensor cable: 9' (274 cm)	Dimensions: 4.25" x 5.5" x 1.5" (108 mm x 140 mm x 38 mm)
Sensor connection: 1/4" Male flare with isolation valve	Carrying case: 12.25" x 8" x 3.5" (310 mm x 203 mm x 89 mm)
Operating temperature range: -30° to 150°F (-34° to 65°C)	

UPC#	Description
69060	LED vacuum gauge kit complete with case, 115V
69063	LED vacuum gauge kit complete with case, 230V
69064	Sensor for 69060 and 69063
69065	9' sensor cable for above
69066	Carrying/storage case
69067	Ball valve for sensor 1/8" NPT Female x 1/4" Male flare
69071	1/4" Female flare connector
15006	Optional vibration isolation hose

MECHANICAL VACUUM GAUGES



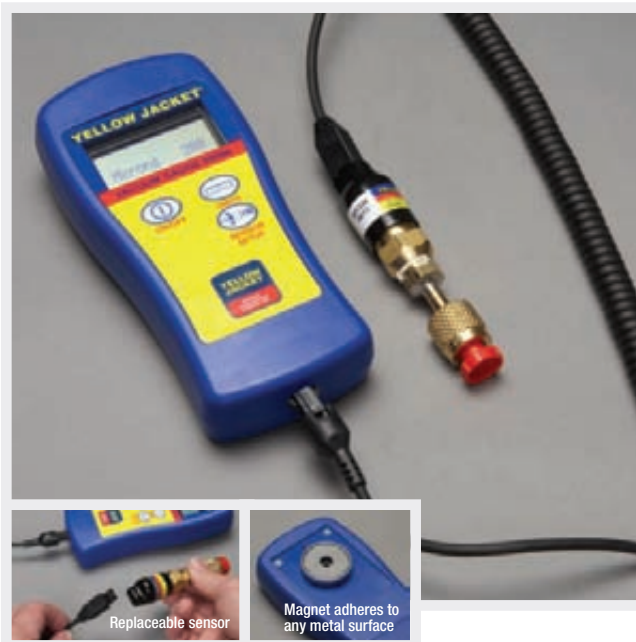
Mechanical vacuum gauges for system installation. Bourdon tube type gauge. 1/8" NPT Male bottom fitting. CAUTION: Handle gauges carefully to assure full service life. See page 53 for further details.

UPC#	Description
69044	3 1/8" Vacuum gauge 0-30 inHg/760-0 Torr (mm)
69045	3 1/8" Vacuum gauge European version (1000-0 millibar/30-0 inch)


DIGITAL VACUUM GAUGE

Seven units of vacuum for confidence

This easy-to-use gauge shows that air and moisture have been removed from the system. Simple push of a button changes the display readout between 7 units of measurement. **Each displays from atmosphere to 10 microns (bargraph indication above 25000 microns) of vacuum to let you know that your vacuum pump is clean and performing properly.** If the sensor gets dirty, simply plug a new sensor into the gauge, run through a quick calibration process and be back on the job within minutes.



This product is protected by one or more of U.S. Patent Number: 6,779,350; 6,832,491; 7,073,346; 7,310,965; and 7,428,822

- Unique patented thermal conductivity sensor automatically compensates for temperature
- Replaceable, cleanable, plug-in sensor (Part #69087) handles 450 psi positive pressure
- Displays seven different units of vacuum (microns, milliTorr, Torr, millimeters of mercury, millibar, kiloPascal and Pascal)
- 12" coiled sensor cord stretches to 24" for easy reach, connectivity and readability of display
- Low battery indicator
- Automatic shut-off after 20 minutes
- Calibration standards traceable to NIST
- 32° to 122°F (0° to 50°C) operating temperature range
- 14 oz. (392 g) with battery
- Approximately 25 hours continuous battery life
- Accuracy $\pm 20\%$ of reading
- Made in the USA 

UPC#	Description
69086	Hand-held vacuum gauge with fabric carry pouch
69087	Replacement sensor
69088	Replacement cable for original version - not detachable
40819	Replacement cable for new version - detachable
69091	Replacement fabric pouch