

# YELLOW JACKET®

SUPEREVAC™ 4, 6, 8 CFM Vacuum Pumps

Top to bottom, right to the last detail...



**NEW DESIGN**

*Updated housing is balanced and lighter weight for easy carrying. Larger fins for cooler running.*



*so you pull more, pull fast, and pull for years without a problem*

**Pull more.** A YELLOWJACKET pump pulls a vacuum down to 15 microns and better, eliminating contaminants that could cause system failure and no-charge call-backs. The smaller the micron number, the better the vacuum and the higher your productivity.

**Pull fast.** Every pump pulls a vacuum fast, giving you more time for more calls.

**Pull for years.** Each all-metal pump is engineered for the long run in the field. No plastic to crack or fall off. Heavy-duty steel handle screws into the housing for secure carrying. Durable base assembly provides stability and height.

#### Designed inside and out for PULLING power and reliability

- High-efficiency 2-stage rotary vane design produces a deep vacuum field rating of 15 microns and lower.
- Precisely machined and fitted parts with running clearances of less than .001" generate a very deep vacuum.
- Exclusive built-in vacuum gauge shows evacuation progress down to the green 29" to 30" range when it's time to use an electronic gauge for more precise readings in the low-micron range.
- Large intake fittings (1/2" and 1/4") for maximized flow.
- Hardened cap screws keep pumping module components tightly together.
- Hardened drive shaft and large bearing provide long life.
- Intake filter screen keeps damaging particles out of the pump.
- Heavy-duty, high torque 1/2 HP, 1725 RPM motor reliably starts the pump when cold.
- Improved drive coupling transmits consistent power from the motor.

#### Designed for OILING ease and reliability

- Large diameter oil fill port for easy filling and less mess (also threaded for exhausting outside through a garden hose).
- Large reservoir to reduce operating temperatures and dilute more contaminants.
- Large sight glass for easy monitoring of oil levels.
- Large brass oil drain plug for easy access.
- Ball valve to isolate system and to change oil without losing vacuum in the system.
- Internal intake check valve helps prevent oil back-up during power failure.
- Gas ballast valve keeps oil cleaner longer.

# Tips, techniques, and facts for faster evacuation and fewer call backs.

## Performance tip on built-in vacuum indicator gauge –

Every YELLOW JACKET pump features an exclusive built-in indicator gauge to monitor the evacuation progress down to the green (29"-30") range. If the reading stays in the mid range, there is either high contamination or a large leak in the system.

If you think there is excessive moisture, blow out the AC/R system with dry nitrogen wherever possible before connecting the vacuum pump to the system.



Gross leak

This reduces the amount of contaminants that must be "pulled" into the pump and increases evacuation speed.

Use a nitrogen regulator valve with pressure limited to 150 PSI, and a frangible disc device set at 175 PSIG.



Turn on electronic gauge.

System pressure **must** be reduced to zero PSI before connecting vacuum pump.

When the indicator reaches the green (29"-30") range, turn on the YELLOW JACKET electronic micron gauge for more precise readings in the low micron range.

## What is a micron as a unit of measurement for a vacuum?

In weather readings, atmospheric pressure is measured on a barometer in "inches of mercury." In the same way, a micron unit refers to "microns of mercury" in a vacuum measurement. One inch of mercury is equivalent to about 25,000 microns.

To help clarify terminology, remember that the deeper the vacuum, the more complete the vacuum; and the more complete the vacuum, the lower the number of microns.

Refer to [www.yellowjacket.com](http://www.yellowjacket.com) for other technical articles.

## How to speed evacuation

Keep vacuum pump oil clean. Milky oil is water saturated and limits pump efficiency. YELLOW JACKET® Vacuum Pump Oil is recommended for use with traditional and new alternative refrigerants, regardless of the oil type in the system. This mineral-based formulation is specially refined for extremely low vapor pressure and high pump efficiency at all temperatures.

Remove valve cores from both high and low fittings with a vacuum/charge

valve tool to reduce vacuum time through this orifice by at least 20%.

Evacuate both high and low sides at the same time. Use short, 3/8" diameter and larger YELLOW JACKET hoses.

YELLOW JACKET SUPEREVAC Systems, including large size valves, hoses, and core tools, can reduce evacuation time by over 50-60%. These pumps are rated at 15 microns (or less) to pull a vacuum quickly. Large inlet allows you to utilize the capacity of a large diameter hose.

## Full Quality Check

As the only manufacturer that completely tests and runs in pumps at the factory, Ritchie Engineering ships with confidence that each pump will meet your expectations right from the box and for years to come on the job.

## YELLOW JACKET® SUPEREVAC™ PUMPS SPECIFICATIONS (4-8 CFM)

Domestic	Model 93540	Model 93560	Model 93580
Free air displacement	4.0 CFM	6.0 CFM	8.0 CFM
Number of stages	2 stage rotary vane	2 stage rotary vane	2 stage rotary vane
Field blankoff	15 microns	15 microns	15 microns
Intake	1/4" and 1/2" M. flare	1/4" and 1/2" M. flare	1/4" and 1/2" M. flare
Motor	1/2 hp - 1725 rpm	1/2 hp - 1725 rpm	1/2 hp - 1725 rpm
Internal capacitor thermal overload	Temperature rise 40° C	Temperature rise 40° C	Temperature rise 40° C
Voltage (single phase)	115 Volt - 60 cycle	115 Volt - 60 cycle	115 Volt - 60 cycle
Power cord	8' - motor mounted switch	8' - motor mounted switch	8' - motor mounted switch
Oil capacity	24 ounces	27 ounces	32 ounces
Dimensions	15.25" L x 6" x 11.5" H	15.25" L x 6" x 11.5" H	16.75" L x 6" x 11.5" H
Net weight	30 lbs. (13.5 kg)	32 lbs. (14.5 kg)	34 lbs. (15.4 kg)

• Spare parts for previous models will be stocked. • 93420 2.0 CFM pump still available.

Distributed by:

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