

PLATINUM® SERIES VACUUM PUMPS

OPERATING INSTRUCTIONS & PARTS MANUAL

2-STAGE,
DIRECT DRIVE



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TM

ABOUT THE PLATINUM® PUMP

***25,400 MICRONS = 1 INCH OF HG.**

Each PLATINUM® pump has been factory tested to guarantee 15 micron* or better and listed CFM performance. The serial number has been recorded. Complete and mail the Warranty Registration Card within 10 days of purchase to validate your warranty. Or you can register your product on-line at www.jbind.com. You will be notified of any technical updates.

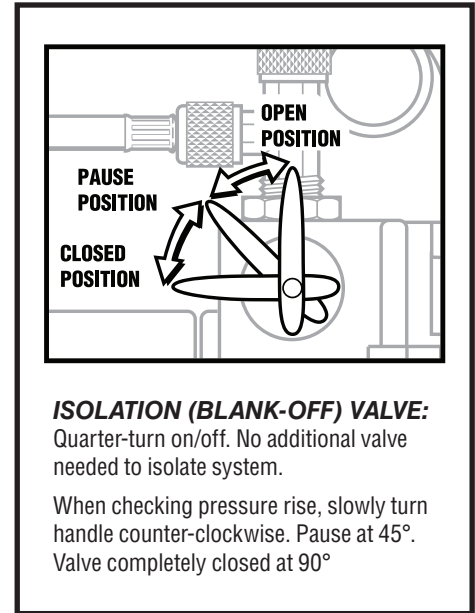
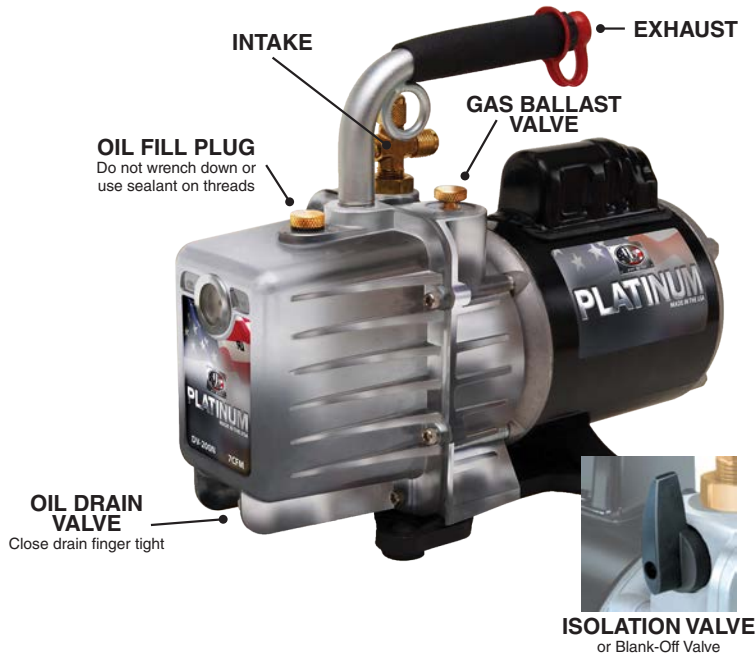
NOTE *Platinum® pumps are not to be used on Ammonia or Lithium Bromide (salt water) systems. Pump maintenance is the responsibility of the owner.*

**PLEASE READ THE
"KEEPING THE LIFE IN YOUR PUMP" BOOKLET**

SPECIFICATIONS

PUMP MOTOR:

Pump and oil must be above 30°F. Line voltage must be equal to motor nameplate ±10%. Normal operating temperature is approximately 160°F, which is hot to the touch. Line voltage and ambient conditions will affect this somewhat. Motor has automatic resetting thermal overload protection. Platinum® is designed for continuous duty and will run for extended periods without overheating.



US DOMESTIC

	DV-42N	DV-85N	DV-142N	DV-200N	DV-285N
CFM	1.5 CFM (42 l/m)	3 CFM (85 l/m)	5 CFM (142 l/m)	7 CFM (200 l/m)	10 CFM (285 l/m)
MOTOR	1/2 HP, 1725 RPM	1/2 HP, 1725 RPM	1/2 HP, 1725 RPM	1/2 HP, 1725 RPM	1/2 HP, 1725 RPM
VOLTAGE	115v, 60Hz	115v, 60Hz	115v, 60Hz	115v, 60Hz	115v, 60Hz
INTAKE PORT	1/4"	1/2" 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	26 oz (798 cc)	26 oz (798 cc)	21 oz (680)	21 oz (680)	26 oz (798 cc)

DUAL VOLTAGE (-250 series)

	DV-42N-250	DV-85N-250	DV-142N-250	DV-200N-250	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
VOLTAGE	115v, 60Hz, 230v, 50Hz	115v, 60Hz, 230v, 50Hz	115v, 60Hz, 230v, 50Hz	115v, 60Hz, 230v, 50Hz	115v, 60Hz, 230v, 50Hz

IMPORTANT:
THIS UNIT HAS BEEN DRAINED OF OIL FOR SHIPMENT. DO NOT ATTEMPT TO OPERATE WITHOUT ADDING OIL.

CARING FOR YOUR PUMP

In order to make the best use of your investment, familiarize yourself with the new features and operation instructions before starting pump. With just routine care your PLATINUM® will give you years

OIL

Slowly add oil until oil level rises to the top of the OIL LEVEL line. Replace oil fill plug.

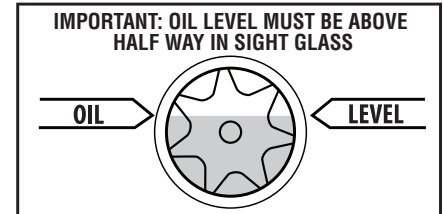
If oil is too low, you will hear air out of the exhaust. If the oil level is too high, excess oil will be blown out the exhaust. Pump oil should be

of reliable service by following proper maintenance guidelines. PLATINUM® pumps are designed for deep vacuum work in refrigeration systems and air conditioning only.

changed after each use. If system is heavily contaminated, oil may have to be changed several times during evacuation.

After initial fill up of oil, it is best to check oil level with pump running.

IMPORTANT: Use oil specifically refined for deep vacuum pumps. Using oil not refined for deep vacuum pumps and/or operation with contaminated oil will void warranty.



AFTER EVACUATION, OIL CONTAINS RUST FORMING WATER AND CORROSIVE ACIDS. DRAIN IMMEDIATELY WHILE PUMP IS WARM.

CHANGING OIL

To reach deep vacuum, Platinum® pumps need clean, moisture-free oil throughout evacuation. Care should be taken to avoid contact on skin and clothing when changing oil. Used oil should be disposed of in the DV-T1 TANK oil caddy after every evacuation while the pump is warm and the oil is thin.

- 1 Place the Tank on a level surface. Unscrew black plug counterclockwise in drain base to open.
- 2 Place vacuum pump in the cradle and drain pump.
- 3 Once the pump has finished draining, turn the black cap clockwise to close after every use (the Tank can hold up to 5 oil changes)
- 4 Close drain on pump. Remove oil fill cap and fill to top of OIL LEVEL line with **BLACK GOLD Pump Oil**. Replace oil fill cap.

FLUSHING: **ALWAYS DRAIN PUMP BEFORE FLUSHING!**
If the oil is badly contaminated, flushing may be necessary.

Slowly pour 1/3 - 1/2 cup of BLACK GOLD Pump Oil into the intake connection while pump is running. Repeat as required until contamination is removed from oil reservoir, pump rotors, vanes and housing.

Dispose of all oil used in flushing of pump.

IMPORTANT
DO NOT START PUMP BEFORE ADDING OIL



OPERATION

The following procedures will prevent oil from being drawn into the pump cartridge and creating hard start-up.

START-UP:

Open one intake port and isolation valve, close gas ballast valve and start pump. Make vacuum connections.

Crack gas ballast valve for the first part of the evacuation procedure. After pump quiets down from initial volume of air, close valve and continue evacuating. Failure to close valve will result in poor pump performance.

SHUT-DOWN:

Close isolation valve and open gas ballast valve all the way. Continue running pump for 2-3 seconds. With gas ballast valve still opened, stop pump and then close valve.

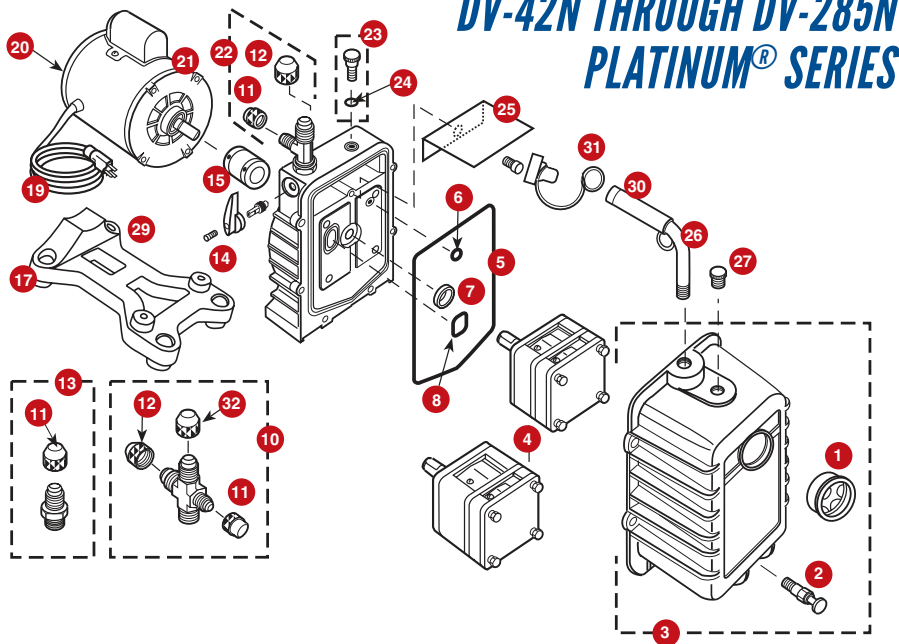
Remove hose connections and cap intakes.

DIGITAL VACUUM GAUGE

SUPERNOVA
DV-41

- Fully programmable including alarm settings, shut-off & back-light duration
- Large, easy to read LCD screen
- Factory calibrated and requires no additional calibration
- Measures in microns, PSIA, INHG, Pascals, torr, MTORR, and MBAR
- Allows you to perform other tasks
- Sensor contamination easily cleaned with simple alcohol
- Brass fitting on lengthy flexible cord for hard to reach places

REPAIR PARTS



DV-42N THROUGH DV-285N PLATINUM® SERIES

TROUBLESHOOTING

Symptom	Possible Cause(s)	Corrective Action
Pump won't start	<ol style="list-style-type: none"> 1. Power cord not plugged in securely 2. Motor switch not on 3. Pump temp. below 30°F 4. Inconsistent line voltage 	<ol style="list-style-type: none"> 1. Plug power cord in securely 2. Turn motor switch to ON position 3. Warm up pump to 30°F & turn motor switch on 4. Line voltage must be within 10% of 115 volts
Pump won't pull deep vacuum	<ol style="list-style-type: none"> 1. Contaminated oil 2. Oil level too low 3. Air leak in system being evacuated 4. Pump inlet fittings missing or not tightened 5. Coupler slipping 	<ol style="list-style-type: none"> 1. Change oil 2. Add oil 3. Locate & repair leak(s) 4. Clean or replace O-ring 5. Tighten coupler setscrews to flats of cartridge and motor
Oil drips from point where shaft enters the pump housing	Damaged shaft seal	Replace
Pump shuts down and will not start	Thermal overload may be open	Disconnect pump from system. Wait about 15 minutes for motor to cool and turn it on again. If it cycles off again, return pump to factory for repair.
Pump cycles on and off from a completely cold start and then runs smoothly	Oil backed up into cartridge and was being cleared out. Pump has not been shutdown properly.	Remove 1/4" cap then turn pump on

WARRANTY

Platinum® pumps are warranted against defects in materials and workmanship for 2 years. All JB products are guaranteed when used in accordance with our directions and recommendations, and we limit this warranty to the repair, replacement, or credit at invoice price (our option) of products which in our opinion are defective due to defects in workmanship and/or materials. In no case 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 your wholesaler for details.

REF. NO. | PART NO. | DESCRIPTION

PLATINUM® PUMP REPAIR PARTS

REF. NO.	PART NO.	DESCRIPTION
1	PR-1	Sight glass
2	PR-2	Drain valve
3	PR-300	DV-42N through DV-200N cover assy. w/sight glass and drain valve
	PR-301	DV-285N cover assy. w/sight glass and drain valve
4	PR-302	DV-85N cartridge w/O-rings and cover seal
	PR-303	DV-142N cartridge w/O-rings and cover seal
	PR-304	DV-200N cartridge w/O-rings and cover seal
5	PR-305	DV-42N Cartridge w/O-rings and cover seal
	PR-314	DV-285N cartridge w/O-rings and cover seal
5	PR-311	Cover seal
6	PR-211	Trap O-ring, gas ballast
7	PR-3	Shaft seal
8	PR-315	Trap O-ring, intake
10	PR-76	Intake cross with caps
11	NFT5-4	1/4" O-ring, intake
12	NFT5-6	3/8" O-ring cap
13	PR-32	1/4" Intake with cap
14	PR-209	Plastic isolation valve handle and screw w/ stem and retainer (not interchangeable w/PR-210)
	PR-208	Flexible coupler (3 parts)
15	PR-308	Flexible section only
	PR-59	Rubber foot for base
19	PR-31	Line Cord (Emerson Motor)
	PR-58	Line Cord (Marathon Motor)
20	PR-35	Rocker Switch With Prongs (Marathon 1101-0105)
	PR-54	Rocker Switch With Wire Leads (Emerson)
21	PR-206	1/2 Hp, 115v, 60 Hz Motor With Line Cord And Switch
	PR-207	1/2 Hp, 115/230v, 50/60 Hz Motor w/ Line Cord And Switch
22	PR-5	Intake Tee With Caps
23	PR-7	Gas Ballast Valve With O-ring
24	P90009	O-ring, Gas Ballast Valve
25	PR-40	Splash Guard And Screw (Excludes 3 CFM Manufactured Before 1/01. Use PR-39.)
26	PR-75	Cushioned Handle With Lift Ring 1/2" NPT And DV-EP-8 As Of 2008
27	PR-22	Oil Fill Plug with O-ring
29	PR-62	Pump Base (Includes Feet)
	PR-501	Cushion And Cap 1/2" NPT
31	DV-EP8	Tethered Safety Cap 3/8"
32	NFT5-8	1/2 Cap With O-ring



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