PLATINUM® SERIES VACUUM PUMPS
OPERATING INSTRUCTIONS
& PARTS MANUAL

2-STAGE,
DIRECT DRIVE

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CONNECT WITH US

AMERICAN MADE

JB INDUSTRIES
WWW.JBIND.COM 800.323.0811 SALES@JBIND.COM
ABOUT THE PLATINUM® PUMP

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

<table>
<thead>
<tr>
<th>Model</th>
<th>CFM</th>
<th>MOTOR</th>
<th>VOLTAGE</th>
<th>INTAKE PORT</th>
<th>OIL CAPACITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>DV-42N</td>
<td>1.5 CFM (42 l/m)</td>
<td>1/2 HP, 1725 RPM</td>
<td>115v, 60Hz</td>
<td>1/4&quot;</td>
<td>26 oz (798 cc)</td>
</tr>
<tr>
<td>DV-85N</td>
<td>3 CFM (85 l/m)</td>
<td>1/2 HP, 1725 RPM</td>
<td>115v, 60Hz</td>
<td>1/2&quot; x 1/4&quot; x 3/8&quot;</td>
<td>26 oz (798 cc)</td>
</tr>
<tr>
<td>DV-142N</td>
<td>5 CFM (142 l/m)</td>
<td>1/2 HP, 1725 RPM</td>
<td>115v, 60Hz</td>
<td>1/2&quot; x 1/4&quot; x 3/8&quot;*</td>
<td>21 oz (680)</td>
</tr>
<tr>
<td>DV-200N</td>
<td>7 CFM (200 l/m)</td>
<td>1/2 HP, 1725 RPM</td>
<td>115v, 60Hz</td>
<td>1/2&quot; x 1/4&quot; x 3/8&quot;*</td>
<td>21 oz (680)</td>
</tr>
<tr>
<td>DV-285N</td>
<td>10 CFM (285 l/m)</td>
<td>1/2 HP, 1725 RPM</td>
<td>115v, 60Hz</td>
<td>1/2&quot; x 1/4&quot; x 3/8&quot;*</td>
<td>26 oz (798 cc)</td>
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<tr>
<td>DV-42N-250</td>
<td>1.2 HP, 1725/1425 RPM</td>
<td>115v, 60Hz</td>
<td>230v/50Hz</td>
<td>26 oz (798 cc)</td>
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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 of reliable service by following proper maintenance guidelines. PLATINUM® pumps are designed for deep vacuum work in refrigeration systems and air conditioning only.

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.

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 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.

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.
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.

**Symptom** | **Possible Cause(s)** | **Corrective Action**
--- | --- | ---


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

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**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
3 | PR-301 | DV-285N cover assy. w/sight glass and drain valve
4 | PR-302 | 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
4 | PR-305 | DV-42N Cartridge w/O-rings and cover seal
5 | PR-306 | DV-285N cartridge w/o-rings and cover seal
6 | PR-307 | Cover seal
7 | PR-211 | Trap O-ring, gas ballast
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 | Flexible coupler (3 parts)
15 | PR-208 | Flexible section only
17 | PR-59 | Rubber foot for base
19 | PR-31 | Line Cord (Emerson Motor)
19 | PR-321 | Line Cord (Marathon Motor)
20 | PR-35 | Rocker Switch With Prongs (Marathon 1101-0105)
20 | PR-54 | Rocker Switch With Wire Leads (Emerson)
21 | PR-206 | 1/2 Hp, 115/60 Hz Motor With Line Cord And Switch
21 | 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 | PR-80009 | 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-501 | Cushion And Cap 1/2” NPT
31 | DV-EP8 | Tethered Safety Cap 3/8”
32 | NFT5-8 | 1/2 Cap With O-ring

**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.