



FOR INDUSTRY PROFESSIONALS

TradePro™ TP-V5-USA 5 CFM Deep Vacuum Pump

OPERATING INSTRUCTIONS & PARTS MANUAL 2-Stage, Direct Drive

Specifications

Models 5 CFM 

MOTOR

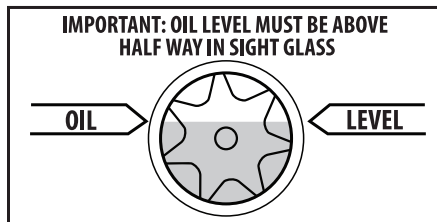
1/2 HP, 60 Hz, 1725 RPM; Capacitor start;
Automatic thermal overload protected.

INTAKE PORTS

1/4" x 3/8" Male Flare

FREE AIR DISPLACEMENT

CFM	Liter Per Minute
5	142



In order to make the best use of your investment, familiarize yourself with the new features and operating instructions before starting the pump. With just routine care your **TradePro™ vacuum pump** will give you years of reliable service by following proper maintenance guidelines.

TradePro™ USA vacuum pumps are designed for deep vacuum work in Air Conditioning and Refrigeration Systems.

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



NOTE: The TradePro™ TP-V5-USA is not to be used on Ammonia or Lithium Bromide (salt water) systems. Pump maintenance is the responsibility of the owner.

The **TradePro™** vacuum pump has been factory tested to guarantee 25 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. You will be notified of any technical updates.

25,400 Microns = 1"

IMPORTANT

This unit has been drained for shipment.

**DO NOT ATTEMPT
TO OPERATE WITHOUT ADDING OIL.**

OIL CAPACITY

Being even a teaspoon low on oil affects the ultimate vacuum and the performance of the pump



Models 5 CFM 22.5 oz.

Slowly add oil until oil level rises even with arrows on front of cover line. Replace oil fill plug.

If oil is too low, you will hear air exit 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, best to check oil level with pump running.

OPERATION

IMPORTANT

DO NOT START PUMP BEFORE ADDING OIL

The following procedures will prevent oil from being drawn into cartridge and creating hard startup.

START-UP

Connect the vacuum pump to the system to be evacuated. Typically a 2-valve or 4-valve manifold is used to connect to both the high and lowside of the system. Connect the center (yellow) hose with a 2-valve manifold to the vacuum pump's 1/4" SAE flare intake port or the 3/8" black hose with a 4-valve manifold to the pump's 3/8" SAE flare intake port. A micron gauge should be placed at the system using a valve core removal tool with a side port. The valve core removal tool will allow for faster evacuation by removing the valve core and also provide a "shut-off" to do a rise test on the system. The micron gauge may also be placed on the open port of the 4-valve manifold.

Simply turn the rocker switch on back of pump to "on". Check to make sure oil level is even with the arrows around the sight glass while pump is running. The manifold ports can now be opened to evacuate the system.

SHUT-DOWN

Crack open unused port to break vacuum. Allow pump to run 2-3 seconds. Shut down and remove hose connections and cap intakes. Once the pump is shutdown, ensure caps are hand tightened and exhaust plug is reattached.

Note: Pump is not a valve and will not hold vacuum when shut off

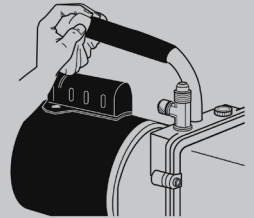
CHANGING OIL

To reach a deep vacuum, the TradePro™ vacuum pump needs 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 a leak-proof corrosive-resistant container.

IMPORTANT

1. After every evacuation while pump is warm and oil is thin, place pump on level surface and open oil drain. Oil can be forced from the pump by opening one intake and partially blocking the exhaust with a cloth while the pump is running. Do not operate the pump for more than 5 minutes using this method.



2. Slowly add oil until oil levels rises even with arrows on front of cover. Replace oil fill plug.

FLUSHING

If the oil is badly contaminated, flushing may be necessary. Slowly pour 1/3 - 1/2 cup of new vacuum 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 the pump.



After Evacuation, Oil Contains Rust Forming Water and Corrosive Acids. Drain Immediately While Pump Is Warm.

Deep Vacuum Accessories

Designed for all pumps without internal shut-off valve to isolate pump from system.

A32525N

VALVE CORE REMOVAL TOOL
Specifically designed to valve off the system to remove valve core, these tools feature a quarter turn ball valve shut-off and O-ring seals.



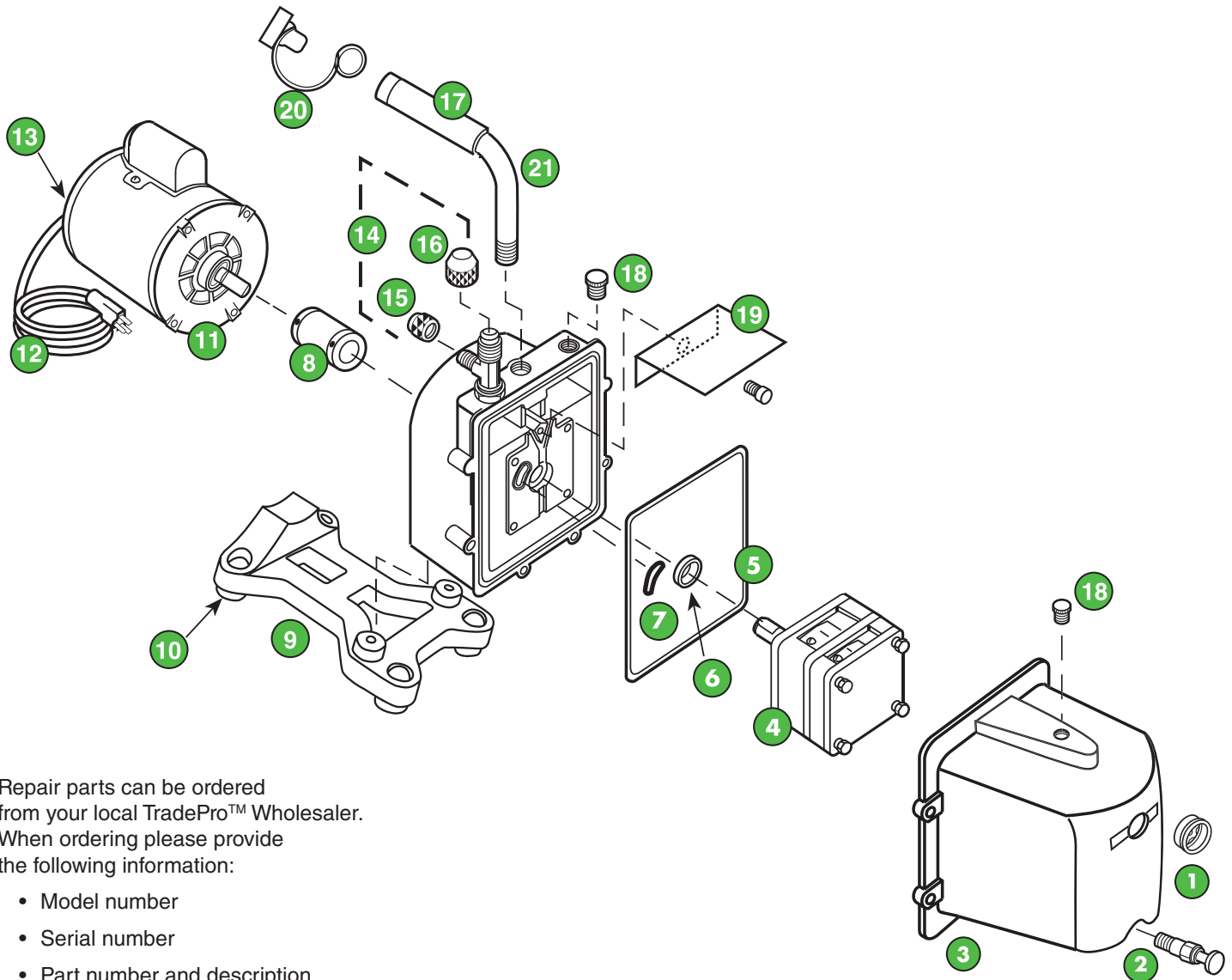
D10162

SHUT-OFF VALVE
O-ring quick coupler valve excellent for blanking off any vacuum system. Excellent for pressure up to 500 lbs



Check our website at www.TradeProParts.com for more product information

REPAIR PARTS



Repair parts can be ordered from your local TradePro™ Wholesaler. When ordering please provide the following information:

- Model number
- Serial number
- Part number and description

REF. NO.	PART NO.	DESCRIPTION
1	PR-1T	Sight Glass
2	PR-2T	Drain Valve
3	PR-10BT	Cover Assy. Includes Sight Glass and Drain Valve
4	PR-404BT	5-CFM 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
8	PR-208BT PR-308	Flexible Coupler (3 Parts) Flexible Section Only
9	PR-62	Pump Base (Includes Rubber Feet)
10	PR-59	Pump Feet (Qty 2)

REF. NO.	PART NO.	DESCRIPTION
11	PR-206	1/2 HP, 115V Motor 60 Hz w/Line Cord
12	PR-31	6' Line Cord 115V Emerson Motor
13	PR-54	Rocker-Switch 115V Emerson Motor (Wire Leads)
14	PR-63♦	Intake Tee with O-Ring
15	NFT5-4	1/4" O-Ring Cap
16	NFT5-6	3/8" O-Ring Cap
17	PR-501	Cushioned Grip with Cap End
18	PR-22	Oil Fill Plug with O-Ring
19	PR-40	Splash Guard with Screw
20	DV-EP-6-101 DV-EP-8-101	3/8" Red Plug for Handle 1/2" Red Plug for Handle
21	PR-65	Handle with Cushion Grip and End Cap

Not Shown:
PR-18 Cartridge Valve Repair Kit

♦ Coat with thread sealant when replacing

TROUBLESHOOTING CHART

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°F4. 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 on4. Line voltage must be within 10% of 115 volt.
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 leaks.4. Clean or replace O-ring5. Tighten coupler setscrews to flats of cartridge and motor.
Oil drips from point where shaft enters the pump housing.	Damaged oil 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.	<ol style="list-style-type: none">1. Remove 1/4" cap.2. Turn pump on.

MOTOR

Pump and oil must be above 30°F. Line voltage must be equal to motor nameplate $\pm 10\%$. 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. **The TradePro™ vacuum pump** is designed for continuous duty and will run for extended periods without overheating.

WARRANTY

TradePro™ pumps are warranted against defects in materials and workmanship for 2 years. All **TradePro™ vacuum pump** 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.

Technical Support

Contact the Sales Center from where the product was purchased for technical support.

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Jacksonville, FL USA

