

# Operation Manual

## OFP400 OIL-FREE VACUUM PUMP



211-3000-00 Rev. E

Analyze • Detect • Measure • Control™

**Thermo**  
ELECTRON CORPORATION

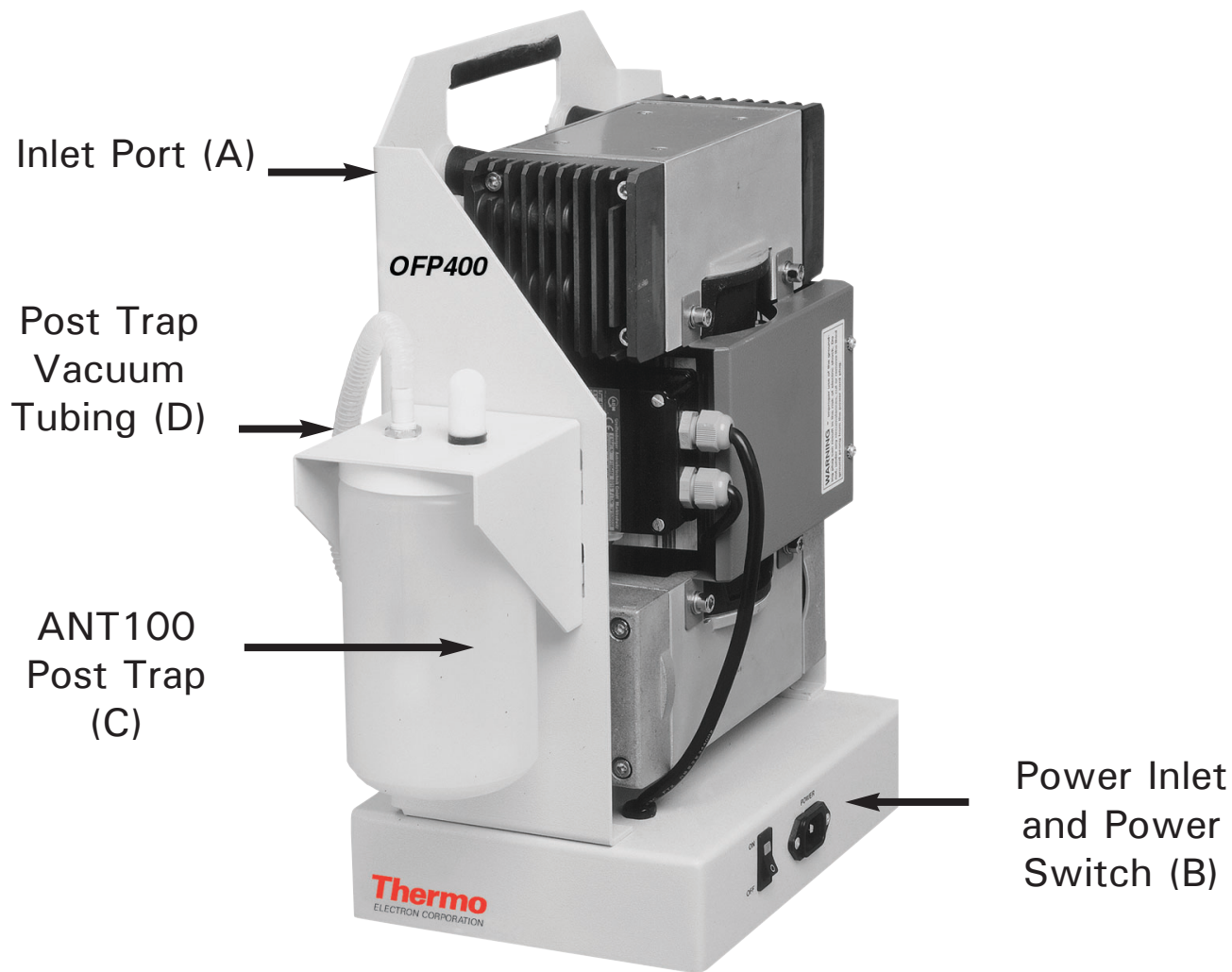


Figure 1. OFP400 Oil-free Vacuum Pump

NOTE: IMPORTANT PUMP CONNECTING OPTIONS (available separately):

- 1) M30-0007-03 – 8 feet of 1/2" I.D. vacuum tubing
- 2) BV130 – external bleeder valve

# OFP400 OIL-FREE VACUUM PUMP

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- Unpack unit from shipping materials.
- Locate the vacuum inlet port (Item A, Figure 1). This identification will help determine the placement of the OFP400 next to the SpeedVac® concentrator, cold trap RVT4104 or RVT400 or any other component that requires vacuum.
- Connect the vacuum tubing line (see Figure 1 note) to the vacuum inlet port (A) of the OFP400. Connect the free end of this tubing to the cold trap RVT4104, RVT400 or other component.
- Locate the mains plug (Figure 1, Item B) on the side of the OFP400 and install the supplied line cord. Plug the line cord into the appropriate voltage source (115 volts or 230 volts).

If post trap is required for neutralizing ammonia or acid vapors:

- Install ANT100 post trap assembly (Item C) into slots in the front of the instrument.
- Connect post trap vacuum tubing (Item D) to the vacuum outlet port of the OFP400.

Neutralizing solutions are available separately.

For ammonia trapping, use ANS121 ammonia neutralizing solution. Replace bottle when solution turns from pink to blue.

For acid trapping, use NSA300TF neutralizing solution for acid. Replace bottle when solution turns from blue to pale yellow.

- Locate the main power switch on side of unit (Figure 1, Item B). Turn pump ON or OFF.

NOTE: It is recommended to run the pump for a few minutes after each run to remove any residual condensation. This will help to prolong pump life and maintain a quality vacuum level.

## SPECIFICATIONS

Displacement:	36 L/min @ 60Hz 30 L/min @ 50Hz
Maximum Vacuum:	0.56 torr (0.75 mbar)
Vacuum Inlet Fitting, in. (cm):	0.5" (1.27) O.D.
Dimensions (W x D x H):	in.: 8.3 x 10.9 x 17.9 (without ANT100) in.: 8.3 x 15.2 x 17.9 (with ANT100) cm: 21.1 x 27.8 x 45.5 (without ANT100) cm: 21.1 x 38.6.8 x 45.5 (with ANT100)
Weight, lbs. (kg):	50 (22.5)
Power requirements:	115 VAC/60 Hz, 4.0 A 230 VAC/50 Hz, 2.0 A

## WARRANTY

All Thermo products mentioned in this manual (except glassware) are warranted against defects in material and workmanship for one year after the date of delivery to the original purchaser. Thermo's warranty is limited to defective materials and workmanship, and does not cover incidental or consequential damages. Warranty work is subject to our inspection of the unit. No instruments, equipment, or accessories will be accepted without a Return Material Authorization (RMA) number issued by Thermo. Costs of shipping the unit are not covered under warranty. The warranty obliges you to follow the precautions in this manual. It is the responsibility of the user to dispose of ALL materials in a manner in accordance with all federal, state and local regulations. ALL RETURNED UNITS MUST BE DECONTAMINATED (FREE OF RADIOACTIVITY, CHEMICAL AND BIOHAZARDOUS MATERIAL) AND SHOULD BE ACCOMPANIED WITH A DECONTAMINATION FORM. PLEASE CONTACT THERMO FOR A COPY OF THE FORM! Under no circumstances shall Thermo be liable for damages due to the improper handling or use of its products. Thermo assumes no liability, express or implied, for your use of this equipment.

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