Ohio® Medical

# instavac®

MOBILE ASPIRATOR

## Operator/Maintenance Manual

**Multipurpose Suction Unit**
**Medical Equipment**

**Rx Only**

550102 (Rev. 12) 10/2021

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IMPORTANT: This device is for use only by persons properly trained in medical suction techniques and in the operations of suction equipment. Improper use could cause injury. Thoroughly read this operations manual to familiarize yourself with the Instavac before using the device.

DANGER: POSSIBLE EXPLOSION HAZARD IF USED IN THE PRESENCE OF FLAMMABLE ANESTHETICS.

## 1. Intended Use

The Instavac is a portable aspirator which uses suction as a means to withdraw fluids or foreign bodies from a patient. Its primary intended use is as an aspirator to be used to help evacuate saliva, mucous, vomit or other aspirant from the mouth and/or airway to allow adequate respiration or ventilation of the patient and also as a pleural and wound drainage device.

## 2. Symbols/Definitions

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 9N56 | MEDICAL EQUIPMENT WITH RESPECT TO ELECTRIC SHOCK, FIRE AND MECHANICAL HAZARDS ONLY IN ACCORDANCE WITH UL 60601-1, IEC/EN 60601-1, CAN/CSA C22.2 No. 601.1 | | | | | | | |
| | Caution | I | On | O | Off | | Consult operating instructions | |
| SN | Serial Number | | Type B Applied Part | | | | Protective Earth Terminal | |

CLASSIFICATION:

1. Protection against electric shock Class I, type B applied part.
2. Protection against harmful ingress of water: Ordinary Equipment.
3. Degree of safety in the presence of a flammable anesthetics or oxygen: NOT SUITABLE FOR USE IN THE PRESENCE OF FLAMMABLE ANESTHETICS.
4. Mode of operation: Models 757000/757010 - Continuous; Models 756000/756010 - Intermittent and Continuous.

## 3. About Medical Electrical Equipment

Medical electrical equipment needs special precautions regarding electromagnetic compatibility (EMC) and needs to be installed and put into service according to the EMC information provided.

Portable and mobile radio frequency (RF) communications equipment can affect medical electrical equipment. This product is intended for use in the electromagnetic environments specified.

The end user of this product should assure it is used in such an environment. Portable and mobile RF Communications equipment (cell phones) should not be used at close distances.

Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.

## 4. About Instavac

The purpose of the Instavac is to perform all routine suctioning procedures. These may include tracheal and oral aspiration, wound drainage, gastrointestinal, (units with intermittent module) and thoracic drainage.

The Ohio Medical Instavac is a multipurpose suction unit designed for use in hospitals, surgery centers, and physician offices. Because of the Instavac capacities, it can also be utilized as a back up to wall vacuum systems. The Instavac suction capabilities are driven by a fan cooled, rotary carbon vane pump. It comes equipped with a disposable exhaust filter, an in-line suction filter with 14” of tubing, a disposable 1200cc collection canister with mounting bracket, and a preventative maintenance kit.

| Model | Part Number |
|---|---|
| Instavac®I Constant/Intermittent Suction 120 VAC | 756000/756010 |
| Instavac®C Constant Suction 120 VAC | 757000/757010 |

## 5. Environmental Conditions For Transport & Storage

Ranges must stay within the following:

| | |
|---|---|
| Temperature Range: | -40°F (-40°C) to 158°F (+70°C) |
| Relative Humidity Range: | 10% to 95% RH (non-condensing) |
| Atmospheric Pressure Range: | 500 to 1060 hPa |

If, after reading this manual you require additional information, please contact Ohio Medical's Customer Service Department at 866-549-4099 or your local Ohio Medical distributor.

## 6. Receiving Inspection

Remove product from package and inspect for damage. If product is damaged or incorrect, DO NOT USE. Contact your dealer, equipment provider or manufacturer.

## 7. Instructions For Use

**PRIOR TO INITIAL USE**

Upon receiving your new Instavac, perform the following initial tests to ensure that your unit is in good working order and that no damage has occurred during shipment.

**SET UP INSTRUCTIONS**

1. Visually inspect all components for physical damage that may have occurred during shipping.
2. After removing all components from their cartons, insert the back pole assembly into the back of the Instavac base.
3. Align the two "collection mounting brackets" located at the top of the back pole assembly towards the front of the unit.
4. Tighten the 10-32 set screw located at the back of the base assembly with a 3/32" Allen wrench.
5. Connect the tubing from the bottom of the back pole to the safety overflow trap assembly.
6. This unit comes with a detachable power cord. Attach power cord to the appliance outlet located on the bottom of the unit before plugging unit in. The power cord is to be used for mains disconnection. Plug the power cord into an electrical outlet. Turn the unit on (I) and listen to verify that the pump starts.
7. On Intermittent models (756000/756010) switch the unit to "CONSTANT" suction using the "MODE SELECTION" switch. Plug the vacuum port located at the top of the

back pole and adjust the vacuum level by turning the vacuum regulator knob. Verify that the vacuum gauge reflects a change in vacuum level while turning the regulator knob.

8. Depress the “POWER” switch to turn the unit OFF (O).
9. Place a collection canister bracket (ring) in the mounting bracket of the back pole assembly or pedestal stand and insert a collection canister.

The Instavac will use any collection device. However, if you are not using an Ohio Medical 1200cc disposable collection canister, make sure that the collection device being used is equipped with a safety overflow mechanism to protect the pump from accidental overflow.

**WARNING:** When the overflow protection mechanism is activated on either the collection canister or the unit’s overflow safety trap, suction will not be available even though the pump will continue to run. Empty or replace the canister or trap to continue the suctioning procedure.

Ensure that you have the appropriate collection device and suction tubing. Depending on the procedure, be sure to have the appropriate Chest Drainage Unit, Nasal Gastric tube, aspirating tip, or wound drain for patient use. The Instavac mobile aspirator is now ready to place into service.

## OPERATING INSTRUCTIONS

### PRE-USE CHECKOUT PROCEDURE

**WARNING:** The Pre-Use Checkout Procedure must be performed before using the equipment on each patient. If the equipment fails any part of the Pre-Use Checkout Procedure, it must be removed from service and repaired by qualified service personnel.

1. Verify that a clean bacteriostatic exhaust filter, in line suction filter, collection canister, and the necessary tubing are installed on the Instavac.
2. Verify that the device overflow safety trap is present, connected, and clean.
3. Plug the power cord into an electrical outlet. Turn the unit ON (I) and listen to make sure that the pump starts.
4. On Intermittent models (756000/756010) switch the unit to “CONSTANT” with the “MODE SELECTION” switch. Skip this step for Constant models (757000/757010).
5. Occlude suction by plugging the vacuum port (located at the top of the back-pole) with finger tip. Adjust the vacuum level by turning the vacuum regulator knob. While turning the knob, verify that the vacuum gauge reflects a change in vacuum. Also verify that you feel vacuum at your finger tip.
6. On Intermittent models, switch the unit to “Intermittent” mode. Verify suction starts and stops. Skip this step for Constant models.
7. Secure tubing connections and proceed with suction procedure.

**ORAL, NASAL AND TRACHEAL ASPIRATION**

1. Place a clean collection canister in the upper bracket, which is located on the back pole assembly of your Instavac . Ensure that the tubing is connected from the "VACUUM PORT ASSEMBLY" of the Instavac to the "vacuum port" of the collection canister and from the "patient port" of the collection canister to the aspirating tip that is being used.
2. Turn the Instavac ON (I).
3. On Intermittent models (756000/756010) switch the unit to "CONSTANT" suction using the "MODE SELECTION" switch. Plug the vacuum port located at the top of the back pole and adjust the vacuum to the desired vacuum level by using the "VACUUM REGULATOR" Knob.
4. Connect the tubing to the vacuum port located at the top of the back pole and proceed with the suction procedure.

**NASOGASTRIC INTERMITTENT SUCTIONING**

(only with Intermittent models 756000/756010)

1. Place a clean collection canister in the upper bracket, located on the back pole assembly of your Instavac. Ensure that tubing is connected from the "VACUUM PORT ASSEMBLY" of the Instavac to the "vacuum port" of the collection canister and from the "patient port" of the collection canister to the nasogastric tube that is being used.
2. Turn the Instavac ON (I).
3. Switch the unit to "CONSTANT" suction using the "MODE SELECTION" switch. Plug the vacuum port located at the top of the back pole and adjust the vacuum to the desired vacuum level by using the "VACUUM REGULATOR" knob.
4. Switch the unit to "INTERMITTENT" suction using the "MODE SELECTION" switch.
5. Connect the tubing to the vacuum port located at the top of the back pole and proceed with the suction procedure.

**PLEURAL DRAINAGE**

Instavac can be utilized with any "Disposable Chest Drainage Unit" available on the market. Some chest drainage units come with a built-in flow adjustment valve and some do not. The Ohio Medical Needle Valve Assembly is available for those units that do not offer this built-in flow adjustment valve.

Follow all manufacturer's directions on the Chest Drainage Unit for its setup and use.

**Chest Drainage Units WITHOUT Built-in Flow Adjustment Valves**

Place the Chest Drainage Unit in the "optional" Ohio Medical Chest Drainage Unit Bracket. Ensure that the tubing is connected from the "VACUUM PORT ASSEMBLY" of the Instavac to the Ohio Medical Needle Valve Assembly which is mounted in the collection canister bracket of the back pole. Connect the tubing from the Needle Valve Assembly to the vacuum port tubing of the Chest Drainage Unit.

**Chest Drainage units WITH Built-in Flow Adjustment Valves**

Place the Chest Drainage Unit in the "optional" Ohio Medical Chest Drainage Unit Bracket. Ensure that tubing is connected from the "VACUUM PORT ASSEMBLY" of the Instavac to the vacuum port tubing of the Chest Drainage Unit.

1. Turn the Instavac ON (I).
2. On Intermittent models (756000/756010) switch the unit to “CONSTANT” suction using the “MODE SELECTION” switch. Plug the vacuum port located at the top of the back pole and adjust the Instavac to a low vacuum setting by using the “VACUUM REGULATOR” knob.

**NOTE**: The Chest Drainage Unit regulates the vacuum level provided to the chest cavity. Setting the Instavac to a low vacuum level ensures that you are producing sufficient vacuum to properly operate the chest drainage unit.

3. Connect the tubing to the vacuum port located at the top of the back pole and proceed with the suction procedure.

## 8. Reprocessing & Cleaning Instructions

1. After EACH suctioning procedure, discard ALL contaminated parts, in accordance with local ordinances. These components may include the collection canister, disposable chest drainage unit, in-line filter, exhaust filter, and all suction tubing.
2. Wipe the surface of the unit with a mild antiseptic and a clean soft cloth.
3. Check the air inlet filter at the back of the unit to make sure that it is clear of any dirt. If cleaning is necessary, vacuum the filter or remove and rinse in water. After the filter is completely dry, reinstall the filter.
4. Inspect the overflow trap assembly for any evidence of an accidental overflow. If an overflow has occurred, perform the following actions, depending upon the overflow condition:

   **OVERFLOW**
   Aspirant has contaminated the overflow trap assembly. Replace and/or clean parts according to the procedures described in OVERFLOW CLEANING PROCEDURE below.

   **SEVERE OVERFLOW**
   Aspirant has contaminated the overflow trap assembly and the vacuum port tubing. Replace and/or clean external parts according to procedure described in OVERFLOW CLEANING PROCEDURE below. In addition, open the unit to assess the extent of the internal over flow.

5. After cleaning, install a new collection canister, suction tubing, and filters with the Instavac.

**OVERFLOW CLEANING PROCEDURE**
**NOTE:** THESE PROCEDURES ARE ONLY REQUIRED WHEN AN OVERFLOW HAS OCCURRED.

1. Discard all external contaminated tubing in accordance with local ordinances.
2. Clean the overflow trap assembly by unscrewing the cap and disassembling the various components. Wash all parts with a mild antiseptic. Dry, reassemble the overflow trap assembly. Verify that the float is in the down position and the cap seals tightly on the glass jar.
3. Replace all discarded tubing.

4. If the vacuum port tubing was contaminated, open the unit and inspect the following parts for contamination (see Maintenance section below for opening the unit):

All Internal Tubing: If contaminated, replace.
Regulator Assembly: If contaminated, clean or replace according to procedure below.
Solenoid Manifold Assembly (Intermittent models only): If contaminated, clean or replace according to procedure on page 9.
Pump Assembly: If contaminated, clean or replace according to procedure on page 10.

## 9. Maintenance

Tools required to service the Instavac:

| | | | |
|---|---|---|---|
| Pliers | Phillips screwdriver | 11/32” nut driver | 5/16” nut driver |
| 5/64” Allen wrench | Adjustable wrench | 1/16” Allen wrench | Flathead screwdriver |

To access the internal components of the Instavac, remove the two (2) Phillips head screws located in the rear of the unit near the back assembly. Tilt the cover forward.

**CAUTION: NEVER DISASSEMBLE THE INSTAVAC WHEN THE POWER CORD IS CONNECTED TO AN ELECTRICAL OUTLET.**

**NOTE**: After performing any service or repair of the Instavac, including preventative maintenance and cleaning for overflow, verify that the device performance specifications are met prior to returning to service. Follow steps in section 10 to verify and adjust the device settings as necessary.

**PREVENTATIVE MAINTENANCE**
The Instavac is warranted for its intended life of three (3) years. Performing periodic preventative maintenance extends the life of the Instavac portable aspirator. Preventative maintenance is required once per year regardless of frequency of use and is recommended every six months with frequent use.

A Preventative Maintenance Kit is available (Part Number AI5801ASY). It contains all necessary items and instructions for performing the preventative maintenance procedure.

**VACUUM REGULATOR REPLACEMENT**
1. Tilt the shroud assembly forward off of the Instavac base (make a note of the orientation of all tubing and the regulator body).
2. Disconnect all three (3) tubing connections from the regulator body.
3. Using a small flathead screwdriver to loosen the set screw on the vacuum regulator knob, unscrew and remove the vacuum regulator knob from the control panel.
4. Remove the outside locknut that secures the regulator to the control panel. The regulator can now be removed.
5. To mount the new regulator, remove the knob from the body by loosening the set screw on the Vacuum regulator knob (use a flathead screwdriver).
6. Mount the new regulator body to the control panel. Make sure the fittings are in the

same orientation as the original, by re-installing the outside locknut.

7. Insert the regulator knob fully onto regulator adjusting shaft.
8. Tighten the set screw onto the flat of shaft, until the regulator knob is secure to the shaft and cannot be pulled off by hand.
9. Reconnect all of the tubing.
10. Proceed to Section 10 Performance Test & Adjustment.

**VACUUM REGULATOR CLEANING**

1. Remove the vacuum regulator assembly as described in the VACUUM REGULATOR REPLACEMENT section.
2. Discard all of the tubing.
3. Using a Phillips screwdriver, open the regulator by removing the two (2) screws on the cap.
4. Disassemble the black cartridge from the unit by unscrewing it from the brass adjusting screw and cap sub-assembly and removing the two (2) O-rings.
5. Clean the body, adjusting screw and cap, fittings and O-rings in a mild soap solution or isopropyl alcohol and dry all parts completely. DO NOT wash black cartridge.
6. Apply a light coat of a silicone based lubricant (i.e. Dow Corning® 111) to the O-rings and reassemble back onto the black cartridge.
7. Reassemble the vacuum regulator and mount the regulator in the Instavac.
8. Attach new vacuum tubing.
9. Proceed to Section 10 Performance Test & Adjustment.

**SOLENOID MANIFOLD REPLACEMENT** (on Intermittent models 756000/756010)

1. From the inside of the Instavac base, locate and remove four (4) 11/32" nuts that hold the chassis into the base.
2. Disconnect the three (3) wires from the power cord assembly.
3. Disconnect the four (4) wires from the solenoid to the Printed Circuit Board (PCB).
4. Disconnect the tubing from the solenoid manifold and the long tubing from the vacuum regulator.
5. Without disconnecting any of the switch wires, carefully lift up the chassis up and rest the chassis on its side in the base.
6. On the underside of the chassis, locate and remove the two (2) Phillips screws that secure the solenoid manifold in place. Remove the solenoid manifold.
7. Mount the new solenoid manifold by securing the two (2) Phillips screws to the underside of the chassis.
8. Mount the chassis back into the Instavac base.

9. Reconnect all of the tubing.
10. Reconnect the four (4) wires from the solenoids to the Printed Circuit Board and the three (3) wires from the power cord assembly.
11. Proceed to Section 10 Performance Test & Adjustment to set vacuum & flow.

**SOLENOID MANIFOLD CLEANING** (on Intermittent models 756000/756010)

1. Remove the solenoid assembly as described in the solenoid manifold replacement section.
2. Using a flathead screwdriver, remove both solenoids from the manifold.
3. Loosen the set screw (located on the top of the manifold block) and remove the needle adjustment valve.
4. Remove and disassemble the relief valve and check valve assembly from the solenoid manifold.
5. With a cotton swab and an isopropyl alcohol solution, clean all internal areas of the manifold, check valve, relief valve, and flow adjustment valve.
6. After thoroughly drying all parts, reassemble the solenoid manifold. Upon reinstallation, ensure that the internal diaphragm for the check valve is facing AWAY from the solenoid manifold.
7. Proceed to Section 10 Performance Test & Adjustment to set vacuum & flow.

**CAUTION**: Avoid aspirating moisture into the pump; moisture leads to rust of internal components which can cause the pump to seize. Always use a collection canister with overflow protection, in-line filter, and overflow safety trap. If ingress of moisture into the pump is suspected, clean or replace the pump.

**PUMP REPLACEMENT**

1. Disconnect the three (3) pump wires from the PCB and the two (2) wires from the capacitor.
2. Disconnect the tubing from the pump fittings.
3. If necessary, loosen the mounting bracket for the capacitor and remove the capacitor.
4. Using an 11/32" nut driver, remove the four (4) nuts from the base of the pump. Remove the pump.
5. Follow instructions provided with replacement pump kit to install the new pump and capacitor.
6. Verify all pump wire connections are secure at the PCB and capacitor.
7. Reconnect all of the tubing.
8. Proceed to Section 10 Performance Test & Adjustment.

**PUMP CLEANING**

**NOTE:** The heart of the Instavac is a rotary carbon vane pump. It is NOT recommended

that the pump be disassembled for routine cleaning. However, if performance has been affected by the pump becoming contaminated with aspirant, or if an overflow problem has occurred, the following procedure can be performed.

1. Remove the pump assembly from the Instavac as described above in the PUMP REPLACEMENT section.
2. Remove the pump head screws to remove the pump head, noting screw size and location.
3. Remove the cover plate, shim, wear plate and the four (4) vanes. If vanes show signs of significant wear, replace with new vanes. If significant amount of rust is present, pump performance will be negatively affected and could seize. Consider replacing the pump.
4. Wash all exposed areas with an isopropyl alcohol solution.

**CAUTION**: Before reassembling the pump, make certain that all components are completely dry. Rust may form if any moisture is present.

5. Install the vanes, wear plate, shim, and cover plate.
6. Replace and equally tighten the three (3) pump head screws.
7. Reinstall the pump assembly.
8. Proceed to Section 10 Performance Test & Adjustment.

## 10. Performance Test & Adjustment

After performing any service or repair of the Instavac, including preventative maintenance and cleaning for overflow, follow the steps below to verify that the device performance specifications in section 12 are met prior to returning to service.

**To verify pump and regulator operation:**

1. Plug the power cord into an electrical outlet. Turn the unit ON (I) and listen to make sure that the pump starts.
2. On Intermittent models (756000/756010) switch the unit to “CONSTANT” with the “MODE SELECTION” switch. Plug the vacuum port (located at the top of the back pole) and adjust the vacuum level by turning the vacuum regulator knob. While turning the regulator knob, verify that the vacuum gauge reflects a change in vacuum level. Verify that you feel vacuum at your finger tip.
3. Turn the unit OFF (O).

**The following steps will verify the flow and the vacuum specifications:**

1. Connect a suction flow measuring device to the vacuum outlet of the Instavac.
2. Turn the unit ON (I).
3. Adjust the Instavac to full vacuum and verify that both the flow and vacuum specifications match the specifications found in section 12 of this manual.

**To adjust the vacuum level, locate the vacuum relief valve on the solenoid manifold. (On Intermittent models 756000/756010)**

1. Turn the relief body (large knurled knob) counterclockwise to LOOSEN while turning the locking ring (small knurled ring) clockwise. DO NOT remove the relief body.
2. With a vacuum testing device attached to the vacuum outlet (located at the top of the back pole), turn the unit ON (I). Switch to "CONSTANT" suction and adjust the vacuum regulator knob, which is located on the control panel to full vacuum.
3. Slowly turn the relief body until the vacuum specification (section 12) is reached. Once the desired vacuum level has been reached, and while holding the relief body in place, turn the locking ring counterclockwise until it locks the relief body in place.

**To adjust the flow level for intermittent, locate the flow adjustment valve on the end of the solenoid manifold. There is no adjustment to be made for the flow level on "CONSTANT". (On Intermittent models 756000/756010)**

1. With a flow testing device attached to the vacuum outlet, turn the unit ON (I). Switch to"INTERMITTENT" suction and adjust the vacuum regulator knob (located on the control panel) to full vacuum.
2. With a 1/16" Allen wrench, loosen the set screw. Turn the flow adjustment valve until the flow specification (section 12) is reached. Tighten the set screw.

## 11. Troubleshooting

| Cause | Correction |
|---|---|
| **Problem**: Low or no vacuum on running unit | |
| 1. Regulator is turned all the way off. | 1. Turn regulator knob clockwise to start flow or increase vacuum. |
| 2. An improper tubing connection or crimped tube in the system. | 2. Check all external vacuum parts for crimped tubing. If still no vacuum, check all internal tubing connections. |
| 3. Mechanical shut-off is activated in either the overflow trap assembly or the collection canister. | 3. If mechanical shut-off has been activated on a full canister, replace the canister. If the overflow trap assembly has been activated in the safety overflow jar, follow Cleaning Instructions on page 7. |
| 4. Vacuum ports (Dual Vacuum Port; optional feature) are turned OFF. | 4. Open the vacuum outlet on the Dual Vacuum Port. |
| 5. Collection canister improperly installed or defective. | 5. Check canister for cracks. Verify that all ports on the canister lid are tight. |
| 6. Worn pump vanes. | 6. Replace vanes or entire pump. |
| **Problem**: Pump does not turn on when power switch is depressed | |
| 1. Unit is not plugged in. | 1. Plug the unit into an outlet. |

| | |
|---|---|
| 2. Blown fuse(s). | 2. Replace fuse(s). Also check if pump has seized. |
| 3. Faulty capacitor. | 3. Replace capacitor. |
| 4. Faulty electrical connections. | 4. Make sure that all wires are secured tightly on the lugs and the lugs themselves are secure on the terminals. |
| 5. Pump has seized. | 5. Replace the pump. |
| 6. The motor may be worn and cannot deliver the torque required to operate the pump, or the bearing is damaged and is locking the rotor in place. | 6. Replace the pump. |
| **Problem**: Low or no flow on INTERMITTENT models (756000/756010) | |
| 1. Faulty MODE SELECTION switch or its electrical connections. | 1. Check that all wires are connected properly or replace switch. |
| 2. Faulty 3-way solenoid on the manifold | 2. Check that the 3-way solenoid is operating properly. |
| 3. Flow adjustment valve for intermittent flow is set OFF or too low. | 3. Adjust flow rate according to the directions found on page 12. |
| **Problem**: High flow on INTERMITTENT models | |
| 1. Flow adjustment valve for intermittent flow is set too high. | 1. Adjust the flow rate according to the directions found on page 12. |
| 2. Faulty 2-way solenoid on the manifold. | 2. Check that the 2-way solenoid is operating properly. |
| **Problem**: Gauge does not register vacuum level | |
| 1. Gauge is not connected. | 1. Check that the tubing is properly connected between the vacuum regulator and gauge. |
| 2. Gauge is faulty. | 2. Replace gauge. |
| 3. Blockage in vacuum lines. | 3. Check that the 2-way solenoid is not stuck in the open position; or that the Check Valve is not stuck in the closed position; or that the vacuum regulator is not completely turned off. |
| **Problem**: High noise level | |
| 1. Unit enclosure is not properly closed. | 1. Check that the unit is properly closed. Verify that the outer flanges of the edge trim are not stuck between the enclosures. |
| 2. Pump is running a high pitch. | 2. Replace the vanes and clean the pump or replace the entire pump. |
| 3. Loose fittings on the exhaust side of the pump. | 3. Check all fittings on the exhaust side of the pump for any loose connections. |

## 12. Device Specifications

| | Intermittent Model | Constant Suction Model |
|---|---|---|
| **Performance** | | |
| Vacuum Range | Up to 380 mmHg | Up to 550 mmHg |
| Free Air Flow | 36 L/min minimum (constant mode)<br>8 L/min (intermittent mode) | 38 L/min minimum |
| **Controls** | | |
| Vacuum Regulator | Rotary type on panel | Rotary type on panel |
| Vacuum Gauge | Calibrated to 0-300 mmHg | Calibrated to 0-500 mmHg |
| **Electrical Requirements** | 120VAC, 60 Hz, 3A | |
| **Pump** | Rotary Carbon Vane | |
| **Collection Device** | | |
| Canister | Disposable plastic with mechanical shutoff | |
| Capacity | 1200cc standard | |
| Tubing | 14” with bacterial filter | |
| **Physical Dimensions** | | |
| Dimensions | 28” H to top of housing; 46” H overall x 14” W x 16” D | |
| Weight | 39 lbs. | 37 lbs. |
| **Warranty** | 3 years | |

## 13. Replacement Parts & Accessories

| Replacement Parts and Accessories | |
|---|---|
| **Part Number** | **Description** |
| AI4125000 | Ring Bracket for 1200cc Canister |
| AI5785-14C | Suction Filter and Tubing, 14" (Case of 50) |
| AI756150 | Dual Vacuum Port Assembly |
| AI4120010 | Disposable Collection Canister, 1200cc (Case of 10) |
| AI4120025 | Disposable Collection Canister, 1200cc (Case of 25) |
| 749002 | Yankauer Suction Tip, Sterile |
| 749003 | Suction Tubing with End Connections, 72"x 1/4"ID, Sterile |

| Service Kits | | |
|---|---|---|
| **Part Number** | **Kit Description** | **Kit Contents** |
| AI5801ASY | Instavac P.M. Kit | Replacement Filters & Components, Tubing, Instruction Sheet |
| 756250 | Kit, Vacuum Gauge, 300 mmHg (for 756000) | 300 mmHg Vacuum Gauge, Mounting Bracket and Nuts |
| 752304 | Kit, Vacuum Gauge, 500 mmHg (for 757000) | 500 mmhg Vacuum Gauge, Mounting Bracket and Nuts |
| 756530 | Kit, Regulator Assembly | Vacuum Regulator, Housing, Fittings |
| 756606 | Kit, 10µF Capacitor (replaces 756370) | Capacitor (10µF), Terminal Cover, Mounting Strap |
| 756608 | Kit, Pump Replacement 120V (replaces AI5511) | Vacuum Pump (Gast), Capacitor, Fittings, Wire Terminals, Instructions |
| 756605 | Kit, Vane Replacement (Case of 4), Gast Pump | Replacement Vanes and Instructions |
| 756611 | Insulation Kit, Top | All sound insulation pieces for upper housing |
| 756612 | Insulation Kit, Bottom | All sound insulation pieces for lower housing |

## 14. Detailed Drawings & Parts List

Instavac I
756000/756010

*See page 18 for Parts List*

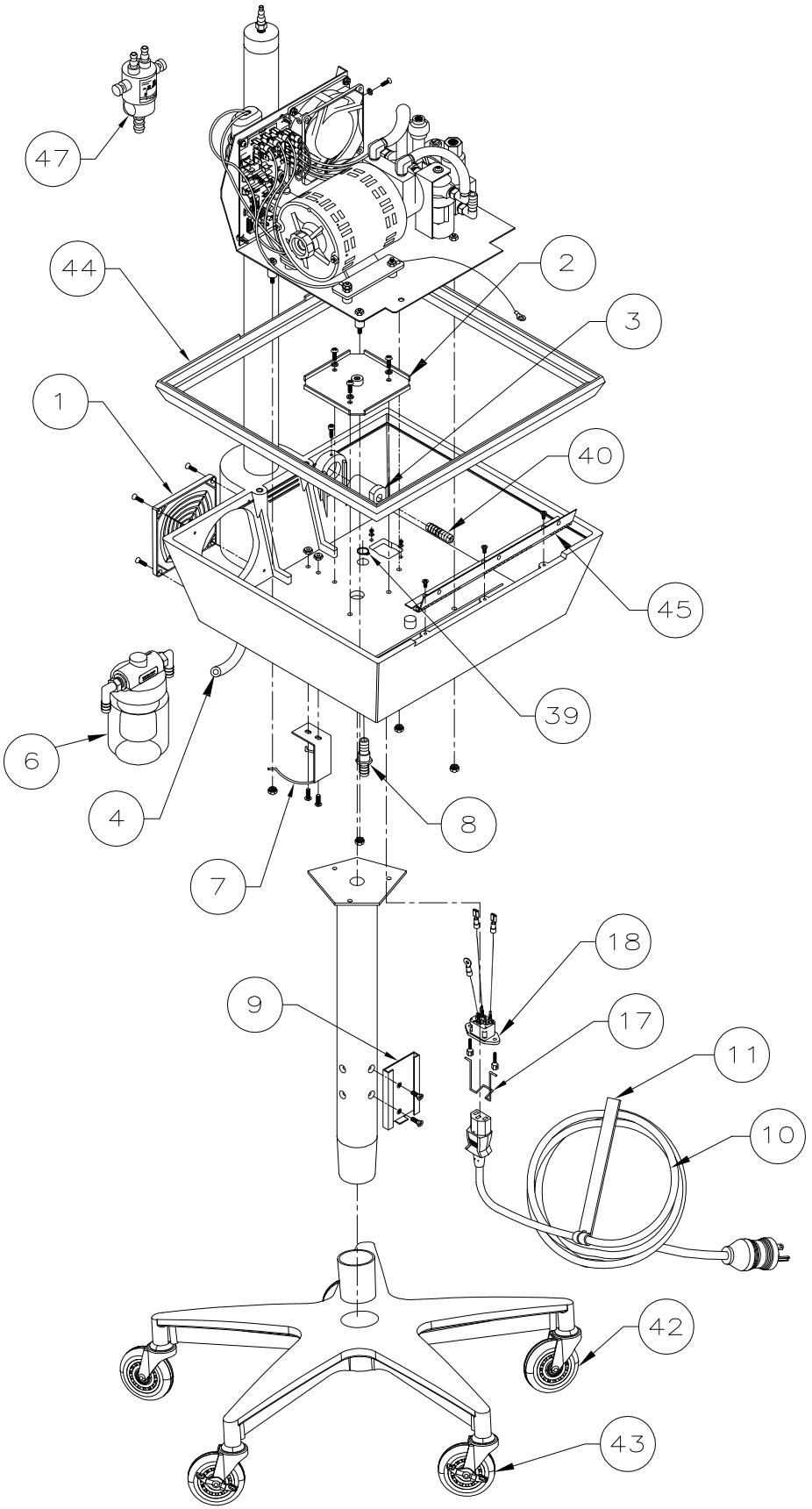


Figure 1

*See page 18 for Parts List*

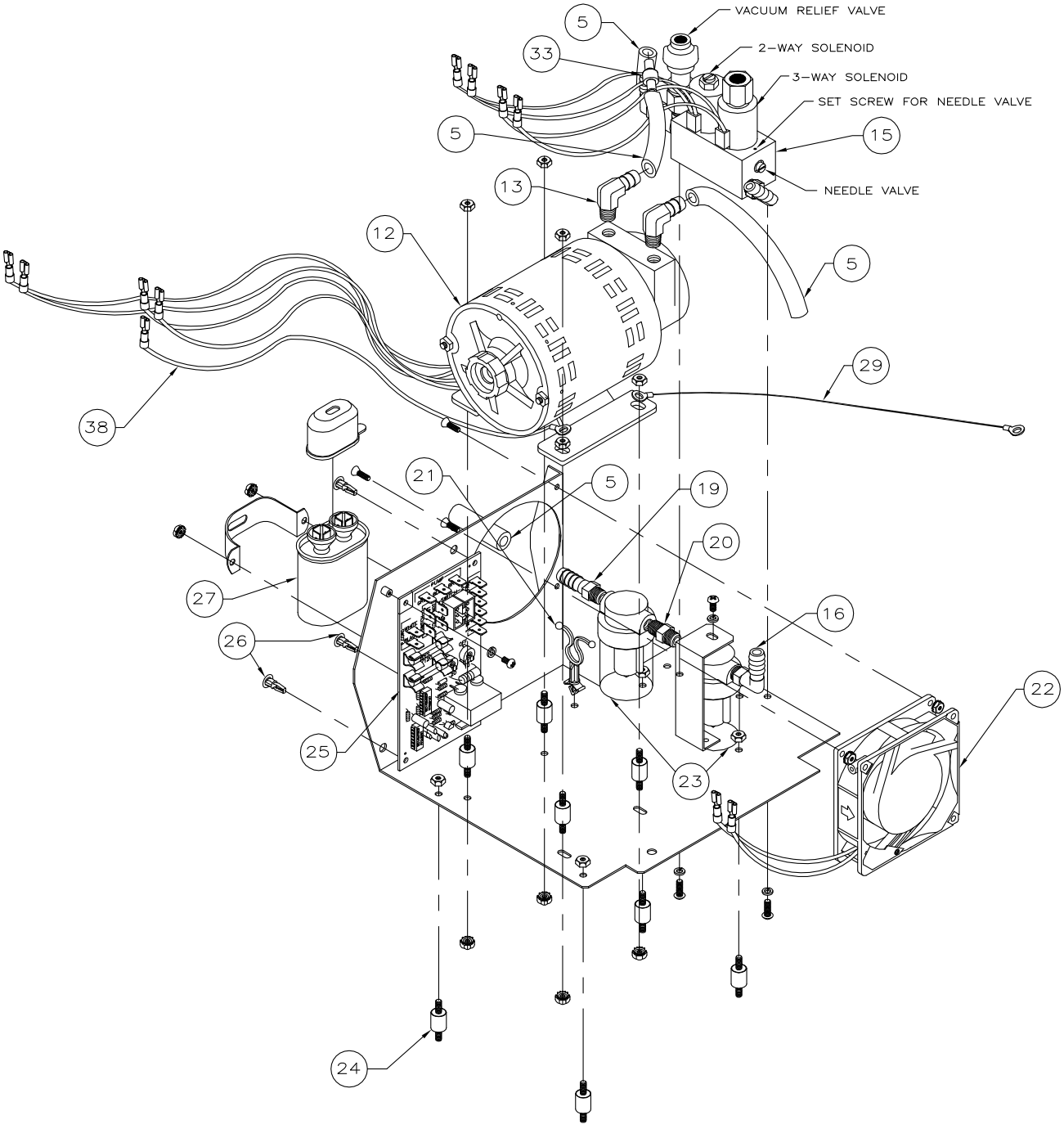


Figure 2

Instavac I
756000/756010

*See page 18 for Parts List*

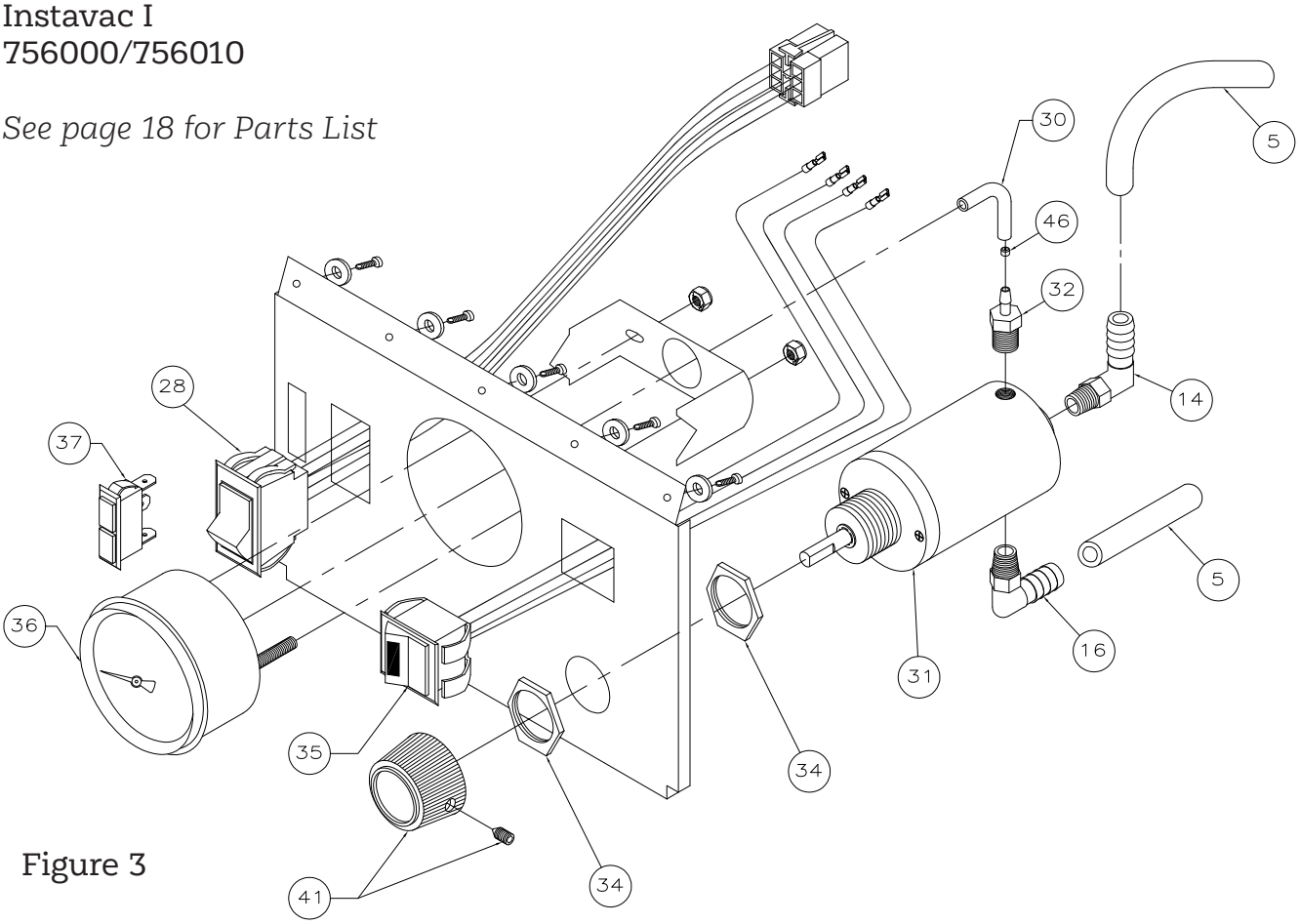


Figure 3

## Instavac I Parts List

*See page 14 for Service Kits contents

**MODELS 756000/756010 (120V) REFERENCE FIGURES 1, 2, 3 ONLY**

| Item | Qty | Part Number | Description |
|---|---|---|---|
| 1 | 1 | 756303 | Filter Assembly, Inlet |
| 2 | 1 | 756309 | Bracket, Base Support |
| 3 | 1 | AI5581 | Mount, Disposable Filter |
| 4 | 36 | 703501 | Tubing, Vinyl 3/8" ID x 9/16" OD (UOM = Inches) |
| 5 | 48 | AI5100162 | Tubing Silicone 5/16" ID (UOM = Inches) |
| 6 | 1 | 756400 | Overflow Trap Assembly |
| 7 | 1 | 756310 | Bracket, Overflow Trap |
| 8 | 1 | 756318 | Connector, Brass Panel for 3/8" ID Tubing |
| 9 | 3 | 756307 | Bracket, Collection Canister |
| 10 | 1 | 766411 | Power Cord, 120V Detachable |
| | | AI5584012 | Power Cord, 120V (Hard-wired, old version) |
| 11 | 1 | 754004 | Strap, One Wrap Velcro |
| 12 | 1 | 756608* | Kit, Pump Replacement 120V (replaces AI5511) |
| 13 | 2 | 756601 | Fitting, Elbow, Barb 1/4" NPT Male x 3/8" ID Brass |
| 14 | 1 | 703002 | Fitting, Elbow 3/8" ID Barb x 1/8" NPT Male Black |
| 15 | 1 | 756320 | Solenoid Manifold Assembly, Instavac 120V |
| 16 | 2 | 703003 | Fitting, Elbow 3/8" ID Barb x 1/8" NPT Male White |
| 17 | 1 | 766412 | Kit, Retainer Clip |
| 18 | 1 | 766413 | Kit, Connector, Business Machine |
| 19 | 1 | 703010 | Fitting, 1/8 NPT Male x 5/16" ID Hose Barb |
| 20 | 1 | AI5657R | Hex Nipple |
| 21 | 1 | 756354 | Mount, Standoff Wire with Lock |
| 22 | 1 | 756260 | Kit, Fan 120V |
| 23 | 2 | AI5526-01 | Muffler Exhaust Bottle |
| 24 | 8 | 756353 | Bumper, Vibration 3/8" Long Studs |
| 25 | 1 | 756355 | Timer, Circuit Board, Instavac I |
| 26 | 3 | AI5100073 | Spacer, PC Board |
| 27 | 1 | 756606* | Kit, 10µF Capacitor (replaces 756370) |
| 28 | 1 | 756205 | Switch Assembly, C/I |
| 29 | 1 | 756358 | Cable, Shroud Restraint |
| 30 | 5 | AI8023 | Tubing, Silicone 1/8" ID (UOM = Inches) |
| 31 | 1 | 756530* | Kit, Regulator Assembly |
| 32 | 1 | AI5591 | Connector, 1/8" NPT Male x 1/8" ID Hose Barb |
| 33 | 1 | 756359 | Check Valve |
| 34 | 2 | AI3609 | Locking Nut, Regulator |
| 35 | 1 | 756609 | Power Switch, Wired with Terminals |
| 36 | 1 | 756250* | Kit, Vacuum Gauge, 0-300 mmHg |
| 37 | 1 | 756214 | Light, Neon Indicator 120V Green/Amber |
| 38 | 1 | 756603 | Pump Ground Wire |
| 39 | 1 | 756321 | Ring, Retaining 1/2" Shaft |
| 40 | 1 | 703009 | Fitting, Tubing Connector |
| 41 | 1 | 736044 | Regulator Knob & Set-Screw |
| 42 | 3 | 756305 | Caster, without Brake |
| 43 | 2 | 756306 | Caster, with Brake |
| 44 | 1 | 756209 | Trim, External Bumper |
| 45 | 1 | 756210 | Hinge |
| 46 | 1 | 6700-0121-600 | Restriction Orifice |
| 47 | - | 756150 | Optional Dual Vacuum Port Assembly |

Instavac C
757000/757010

*See page 22 for Parts List*

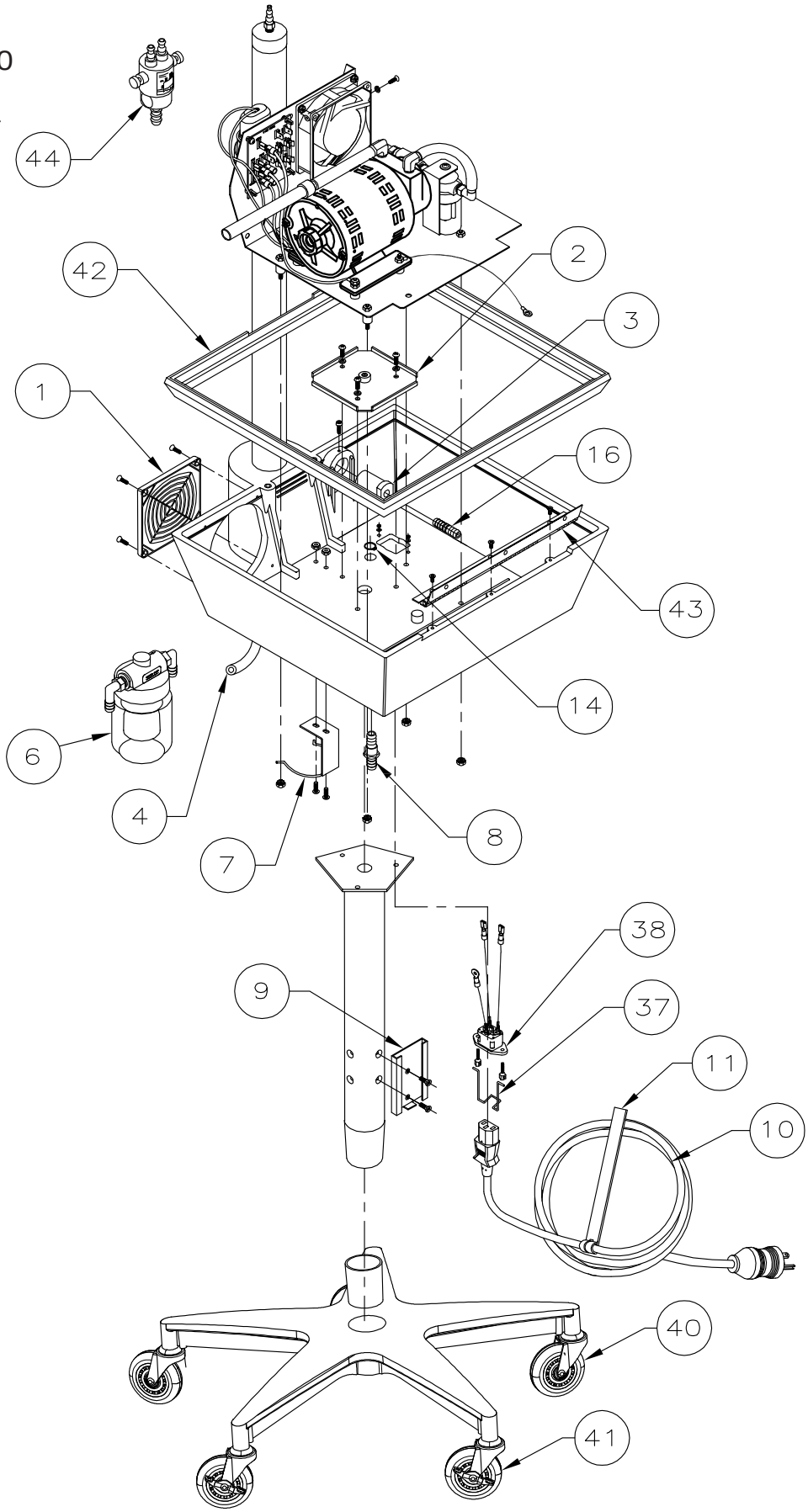


Figure 4

*See page 22 for Parts List*

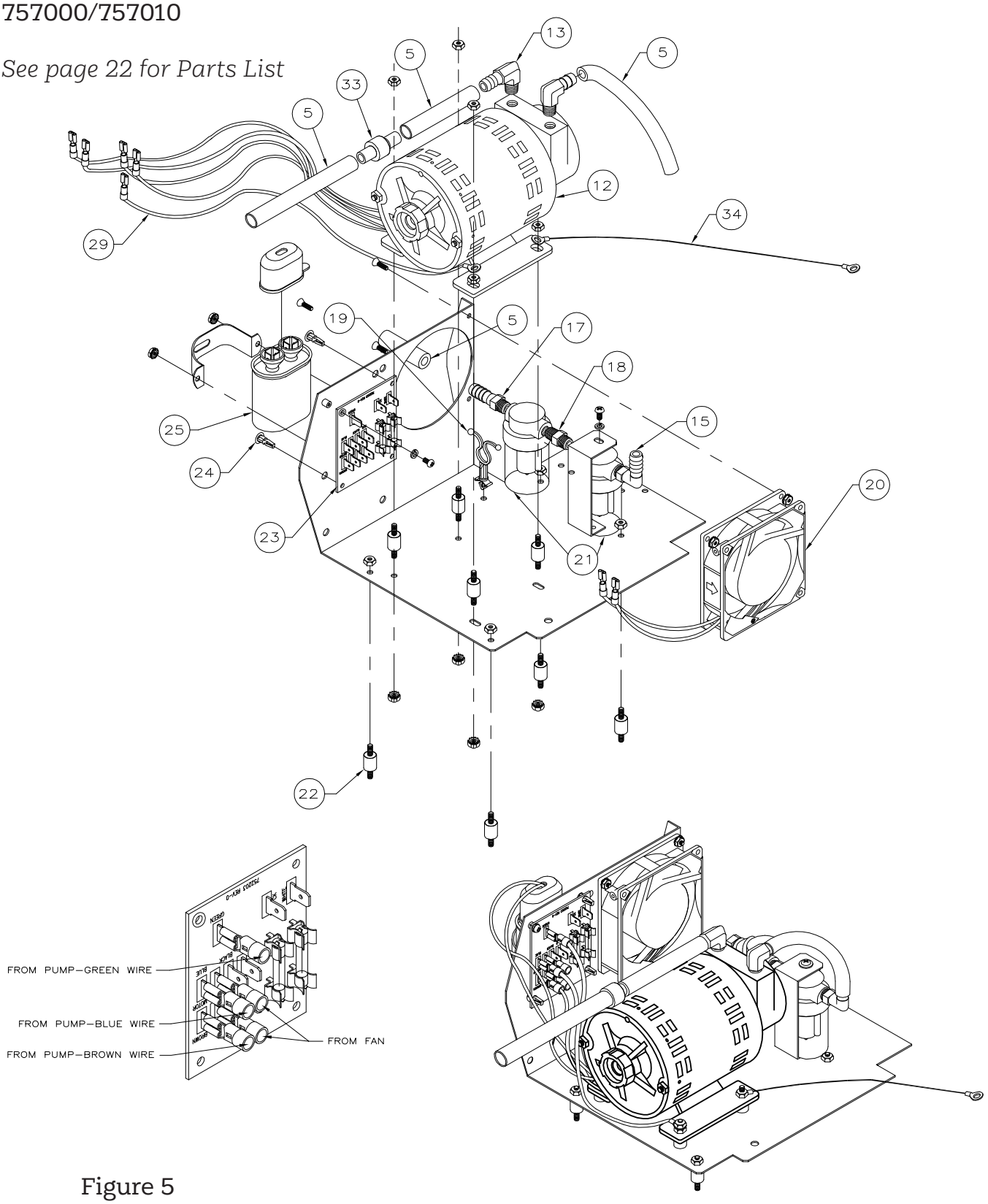


Figure 5

Instavac C
757000/757010

*See page 22 for Parts List*

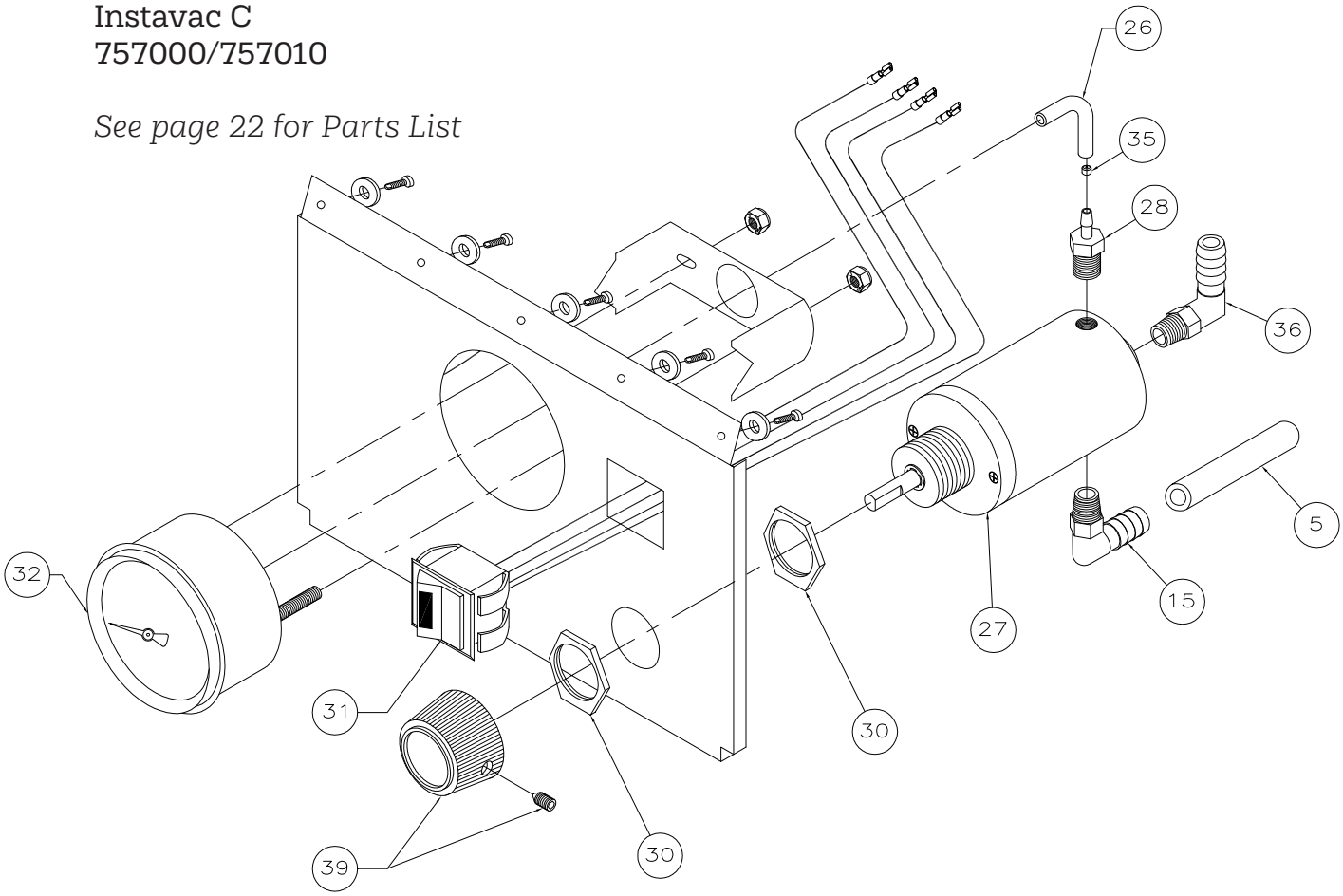


Figure 6

## Instavac C Parts List

*See page 14 for Service Kits contents

**MODELS 757000/757010 (120V) REFERENCE FIGURES 4, 5, 6 ONLY**

| Item | Qty | Part Number | Description |
|---|---|---|---|
| 1 | 1 | 756303 | Filter Assembly, Inlet |
| 2 | 1 | 756309 | Bracket, Base Support |
| 3 | 1 | AI5581 | Mount, Disposable Filter |
| 4 | 36 | 703501 | Tubing, Vinyl 3/8" ID x 9/16" OD (UOM = Inches) |
| 5 | 48 | AI5100162 | Tubing Silicone 5/16" ID (UOM = Inches) |
| 6 | 1 | 756400 | Overflow Trap Assembly |
| 7 | 1 | 756310 | Bracket, Overflow Trap |
| 8 | 1 | 756318 | Connector, Brass Panel for 3/8" ID Tubing |
| 9 | 3 | 756307 | Bracket, Collection Canister |
| 10 | 1 | 766411 | Power Cord, 120V Detachable |
| | | AI5584012 | Power Cord, 120V (Hard-wired, old version) |
| 11 | 1 | 754004 | Strap, One Wrap Velcro |
| 12 | 1 | 756608* | Kit, Pump Replacement 120V (replaces AI5511) |
| 13 | 2 | 756601 | Fitting, Elbow, Barb 1/4" NPT Male x 3/8" ID Brass |
| 14 | 1 | 756321 | Ring, Retaining 1/2" Shaft |
| 15 | 2 | 703003 | Fitting, Elbow 3/8" ID Barb x 1/8" NPT Male White |
| 16 | 1 | 703009 | Fitting, Tubing Connector |
| 17 | 1 | 703010 | Fitting, 1/8 NPT Male x 5/16" ID Hose Barb |
| 18 | 1 | AI5657R | Hex Nipple |
| 19 | 1 | 756354 | Mount, Standoff Wire with Lock |
| 20 | 1 | 756260 | Kit, Fan 120V |
| 21 | 2 | AI5526-01 | Muffler Exhaust Bottle |
| 22 | 8 | 756353 | Bumper, Vibration 3/8" Long Studs |
| 23 | 1 | 752203 | Board, Control, Instavac C |
| 24 | 3 | AI5100073 | Spacer, PC Board |
| 25 | 1 | 756606* | Kit, 10µF Capacitor (replaces 756370) |
| 26 | 5 | AI8023 | Tubing, Silicone 1/8" ID (UOM = Inches) |
| 27 | 1 | 756530* | Kit, Regulator Assembly |
| 28 | 1 | AI5591 | Connector, 1/8" NPT Male x 1/8" ID Hose Barb |
| 29 | 1 | 756603 | Pump Ground Wire |
| 30 | 2 | AI3609 | Locking Nut, Regulator |
| 31 | 1 | 756609 | Power Switch, Wired with Terminals |
| 32 | 1 | 756304* | Kit, Vacuum Gauge, 0-500 mmHg |
| 33 | 1 | 756359 | Check Valve |
| 34 | 1 | 756358 | Cable Shroud Restraint |
| 35 | 1 | 6700-0121-400 | Restrictor Orifice |
| 36 | 1 | 703002 | Fitting, Elbow 3/8" ID Barb x 1/8" NPT Male White |
| 37 | 1 | 766412 | Kit, Retainer Clip |
| 38 | 1 | 766413 | Kit Connector, Business Machine |
| 39 | 1 | 736044 | Regulator Knob & Set-Screw |
| 40 | 3 | 756305 | Caster, without Brake |
| 41 | 2 | 756306 | Caster, with Brake |
| 42 | 1 | 756209 | Trim, External Bumper |
| 43 | 1 | 756210 | Hinge |
| 44 | - | 756150 | Optional Dual Vacuum Port Assembly |

## Notes

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