

# Upright Service Manual



## **Table of Contents**

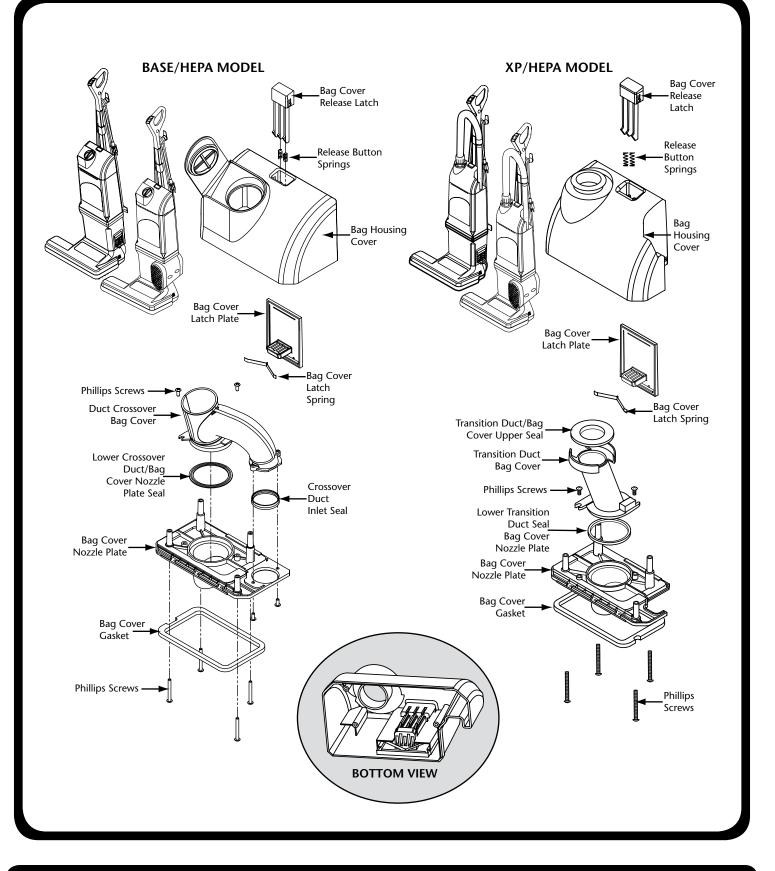
### ATTENTION

Before servicing any part or proceeding with any repair procedure on any ProTeam vacuum, ALWAYS disconnect the vacuum from power source.

BAG COVER	
Index	
Disassembly	••••••
BAG HOUSING	
Index	
Disassembly	
Bag Lockout Switch Replacement	
Hose Cap Collar Repair	
Quick Release Clip Replacement	
Bag Housing to Motor Housing Assembly	
MOTOR HOUSING	
Index	
Disassembly	11-
Wand Guide	
ELECTRICAL	
Wire Harness Replacement	16-
MOTOR	
Carbon Brushes	
POWER NOZZLE	
Index	
Assembly	
Power Nozzle to Body Assembly	
Hose Sleeve Replacement	
Pivot Bearing Replacement/Wheel Replacement	
Detent Spring Replacement	
	••••••
HOSE AND POWER CORD	
Index	
HANDLE	
Index	
Assembly	33-
Handle/New Power Cord & Strain Relief Replacement	
Handle and Power Cord Installation	
Impact Bumper Installation	
FINAL VACUUM	
Assembly	••••••
TROUBLESHOOTING	
Clearing Hose and Wand Obstructions	

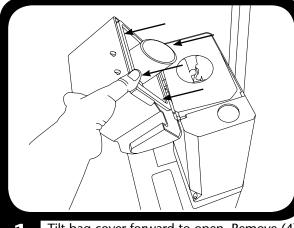
View Upright Vacuum Wiring Schematic at www.pro-team.com

## Bag Cover

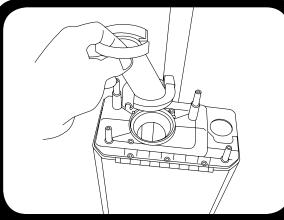


## **Bag Cover**

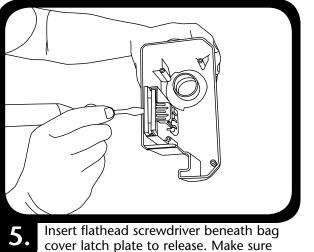
### **DISASSEMBLY**



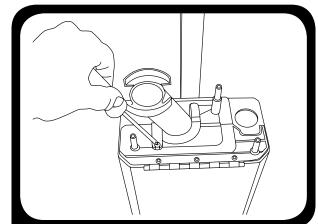
Tilt bag cover forward to open. Remove (4)
Phillips screws to release from bag cover nozzle plate.



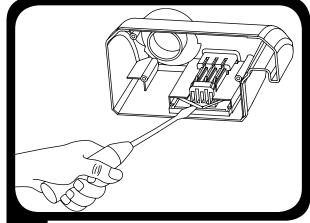
**B.** Lift transition duct/duct crossover from bag cover nozzle plate and remove.



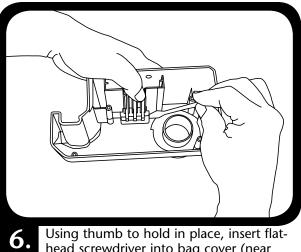
rounded points clear holes in bag cover.



2. To release XP transition duct remove (2) Phillips screws from bag cover nozzle. Base model duct crossover has (4) Phillips screws.

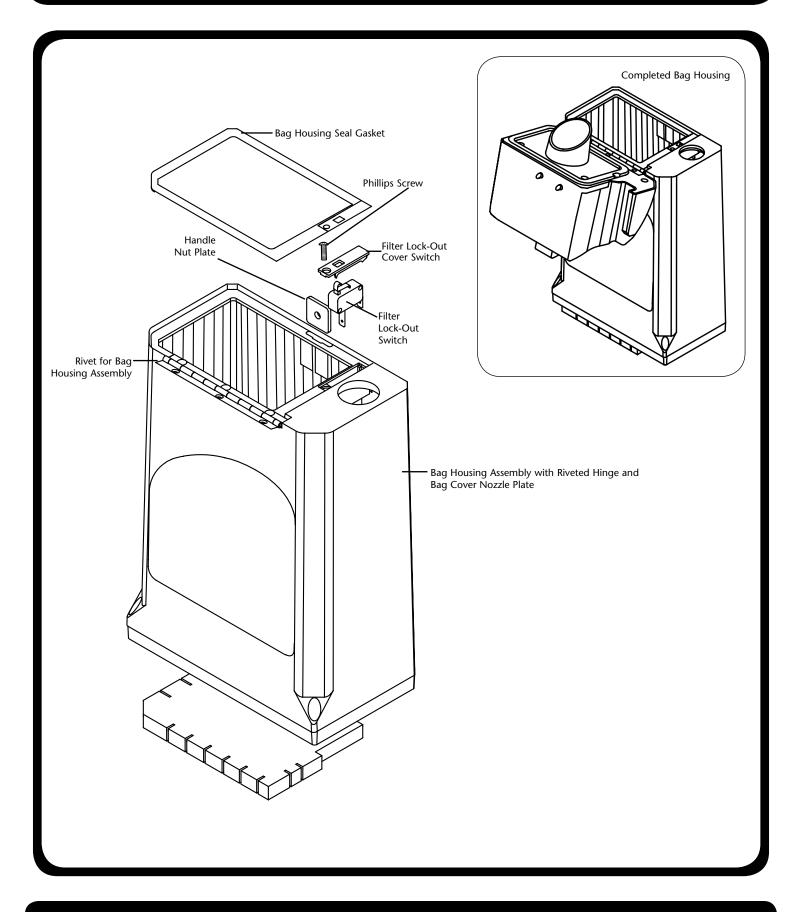


Using a flathead screwdriver pry upward on bag cover latch spring to release.

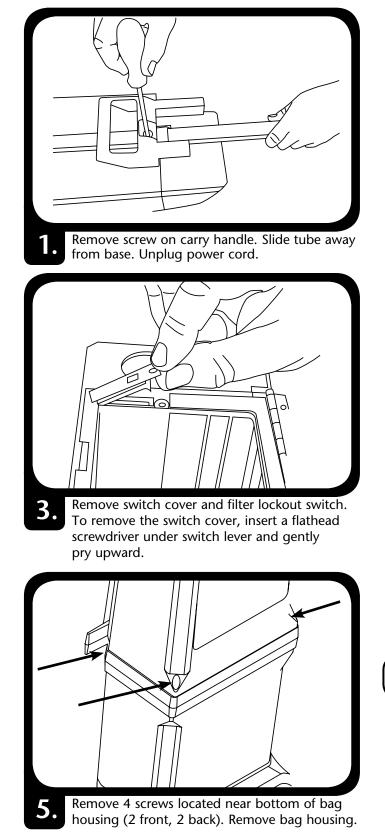


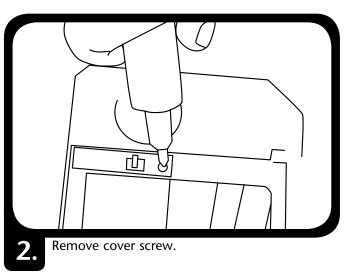
head screwdriver into bag cover (near top) to release bag cover release latch.

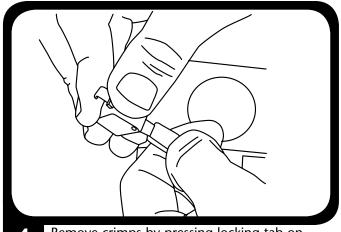
To Reassemble. Repeat steps in reverse.



### **DISASSEMBLY**





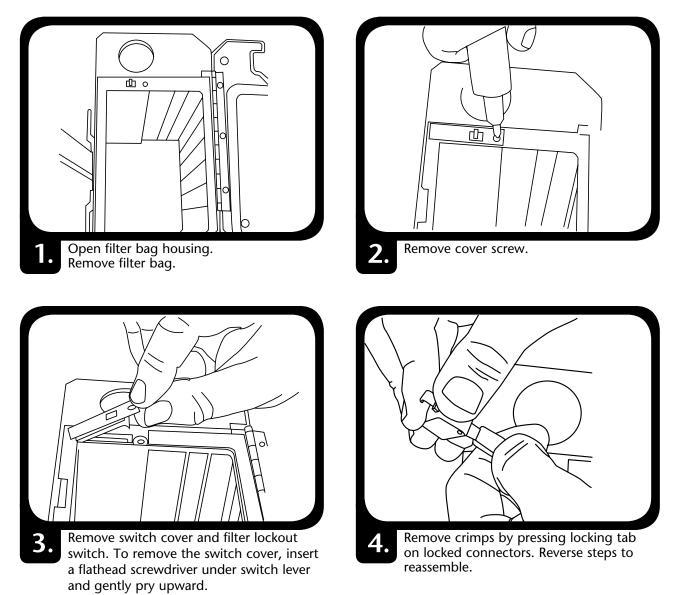


**4.** Re

Remove crimps by pressing locking tab on locked connector.

To Reassemble. Repeat steps in reverse.

### **BAG LOCKOUT SWITCH REPLACEMENT**



### HOSE CAP COLLAR REPAIR – XP Models Only



To inspect the collar, attach the quick release cuff to the bag cover collar. Lift the vacuum by the hose cuff. The collar should support the weight of the vacuum. If not, the collar will fail and separate from the bag cover. The collar will need to be removed from the quick release cuff and re-glued into the bag cover. If this collar test fails, Proceed to Step 2.



2. Clean the quick release cuff and bag cover with rubbing alcohol to ensure a secure grip.

Apply a continuous bead of adhesive\* around the entire perimeter of the detached collar. Care should be taken to avoid drips and runs.



3. Quickly insert collar into bag cover evenly, pressing firmly for 20 seconds to ensure an adequate bond.

IMPORTANT: you have only a few seconds to apply the bead of glue and seat the collar into the bag cover.

\*IMPORTANT: use only Loctite adhesive #454.

## **QUICK RELEASE CLIP REPLACEMENT**



Aligh tabs. Push ends together.

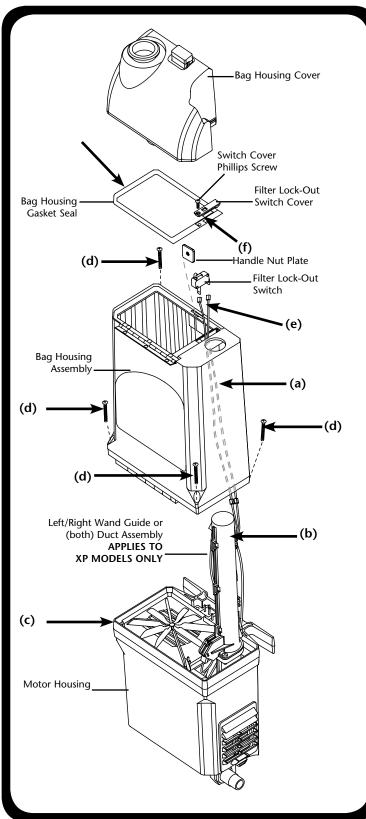




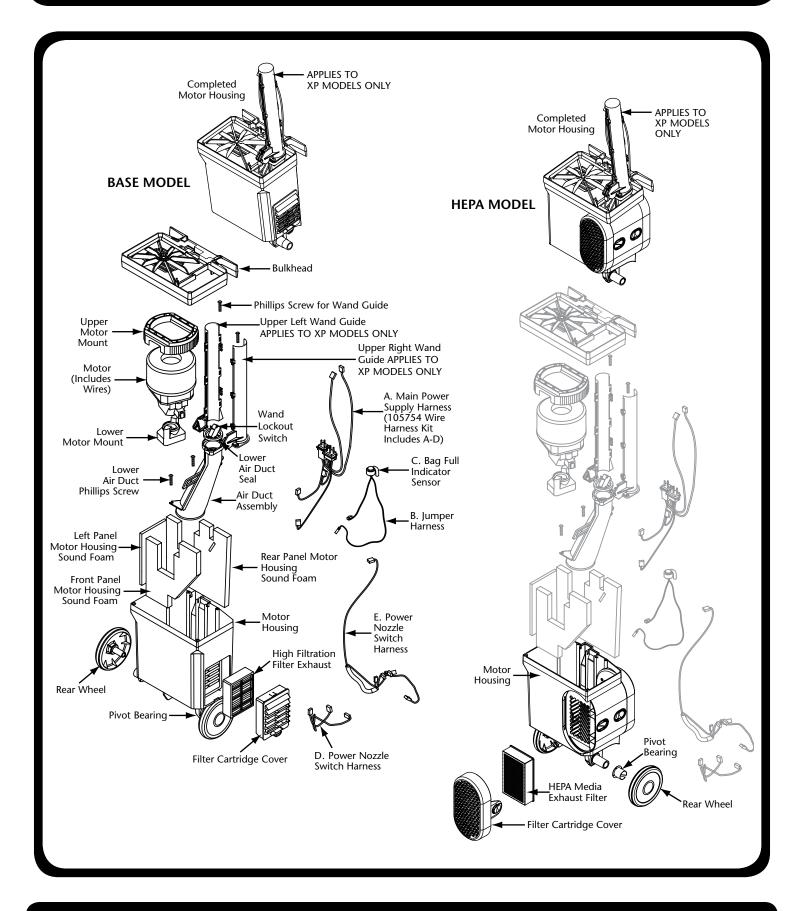
Snap into place.

## **Bag Housing to Motor Housing**

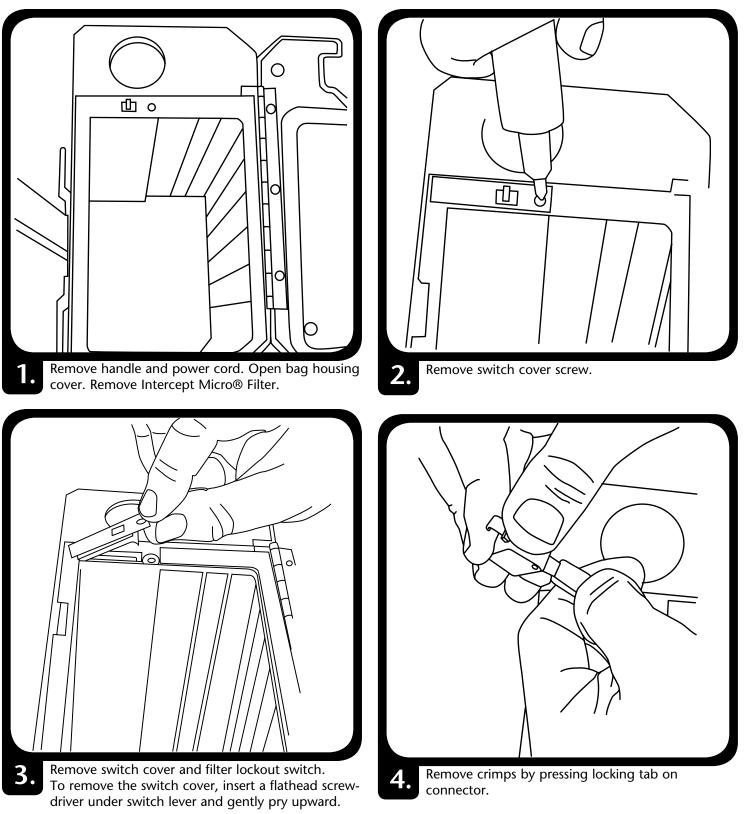
### **ASSEMBLY**



- (a) Feed bag switch wires through bag housing.
- (b) Align duct with opening in bag housing (APPLIES TO XP MODELS ONLY).
- (c) Bag housing assembly should fit neatly onto bulkhead.
- (d) Insert bag housing screws and tighten.
- (e) Attach harness connectors to switch and place switch into position.
- (f) Fasten switch cover with screw.
- (g) If replacing the bag housing seal, do not let the seal cover the lockout switch cover opening.
- **NOTE:** Make sure the handle nut plate is in place before you replace the bag housing gasket seal.

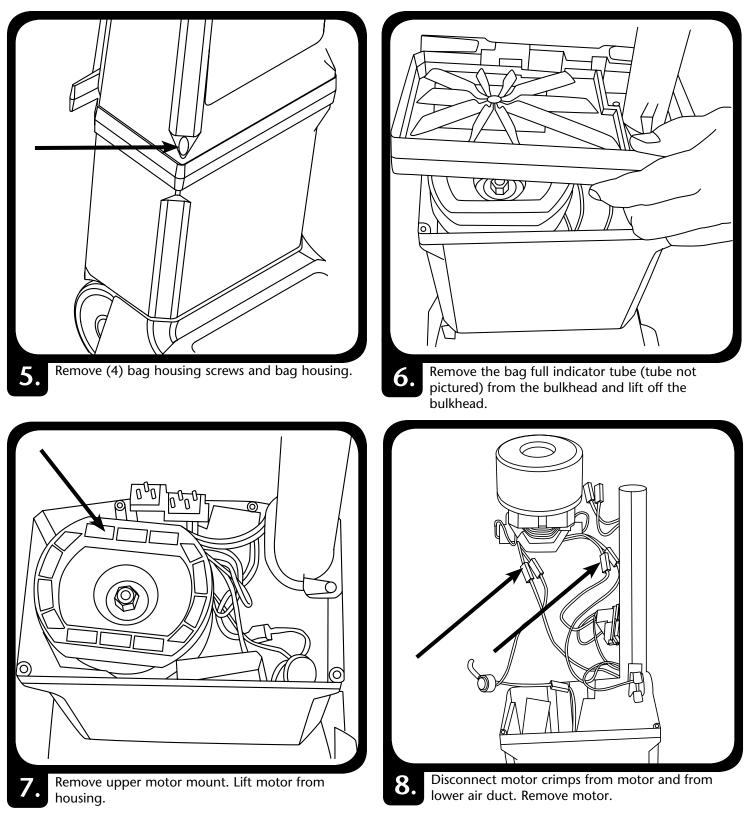


### **DISASSEMBLY**



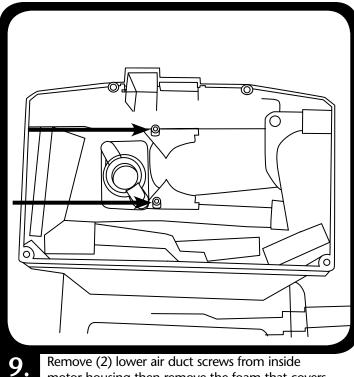
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### **DISASSEMBLY** (CONTINUED FROM PAGE 11)

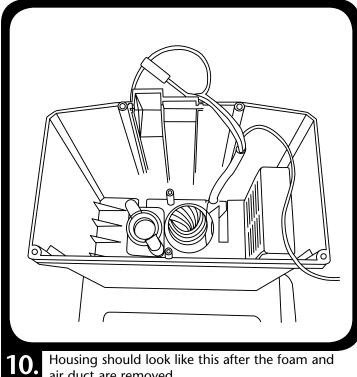


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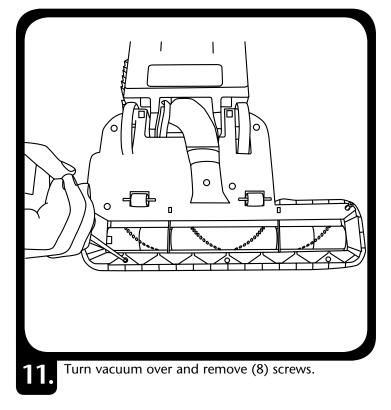
### **DISASSEMBLY** (CONTINUED FROM PAGE 12)

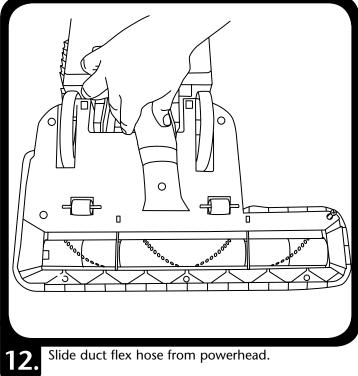


motor housing then remove the foam that covers wire harness.



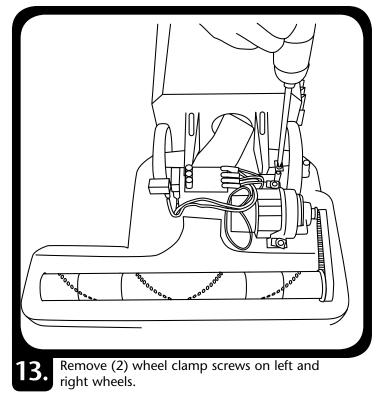
Housing should look like this after the foam and air duct are removed.

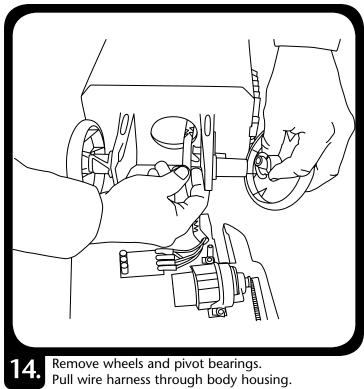




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### **DISASSEMBLY** (CONTINUED FROM PAGE 13)

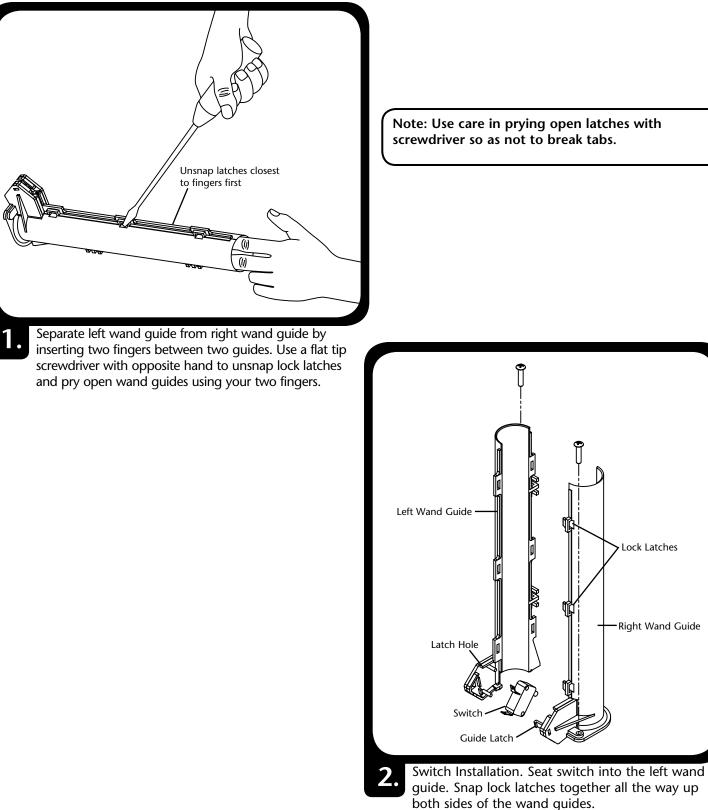




<image><image>

To Reassemble. Repeat steps in reverse.

### WAND GUIDE - For XP Models Only

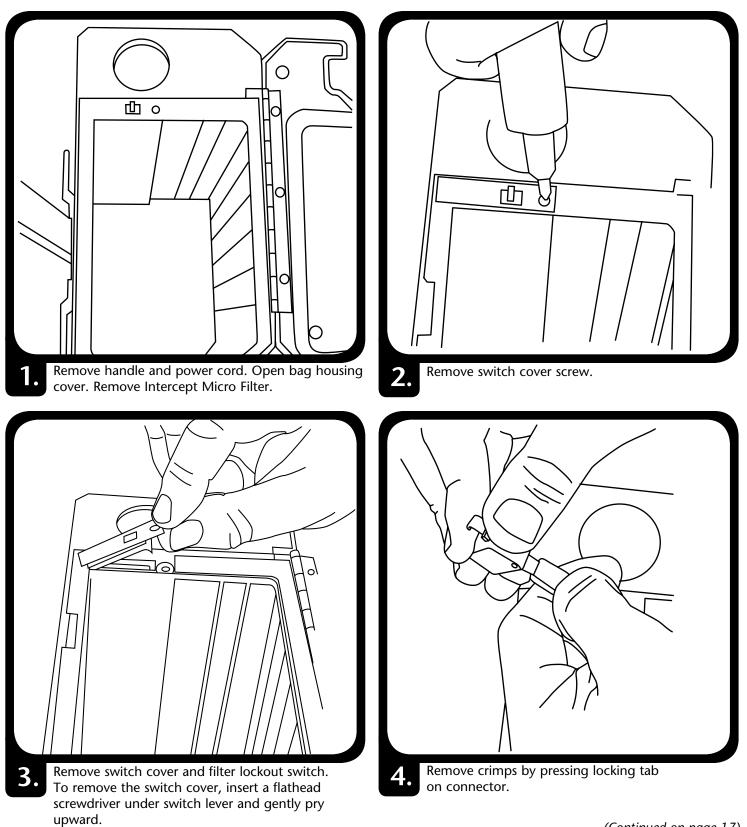


Note: Use care in prying open latches with screwdriver so as not to break tabs.

Lock Latches

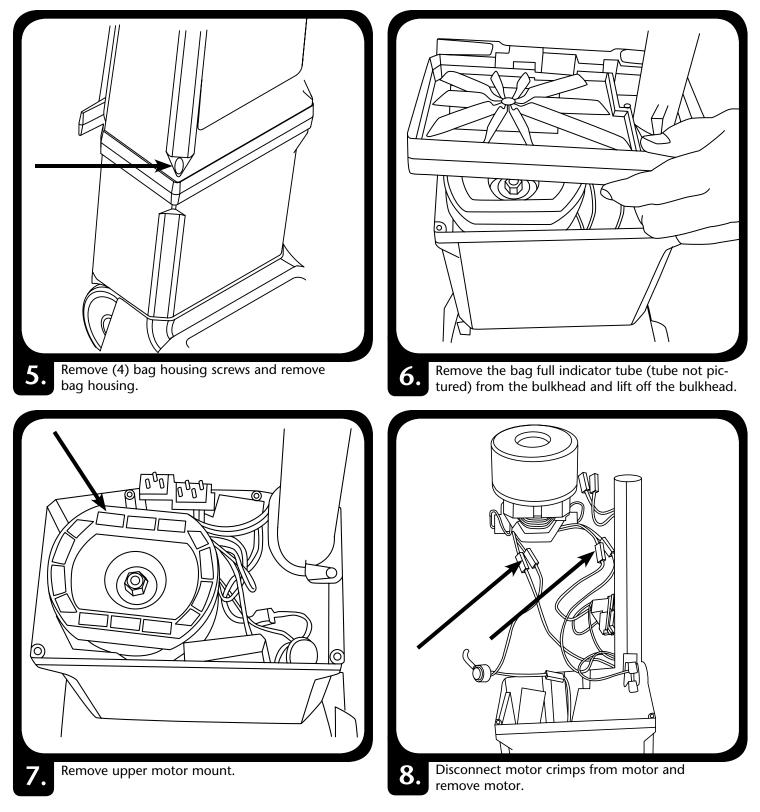
**Right Wand Guide** 

### WIRE HARNESS REPLACEMENT



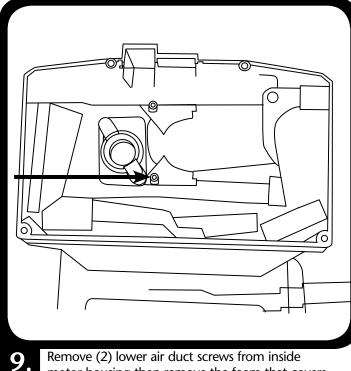
<sup>(</sup>Continued on page 17)

### WIRE HARNESS REPLACEMENT (CONTINUED FROM PAGE 16)

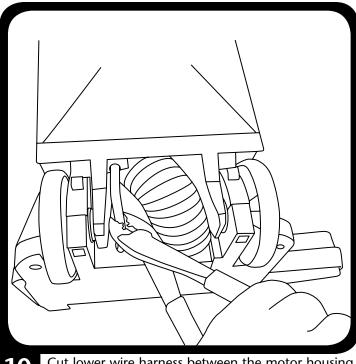


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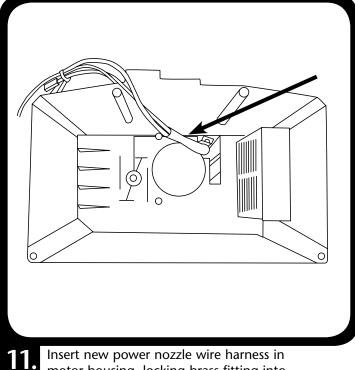
### WIRE HARNESS REPLACEMENT (CONTINUED FROM PAGE 17)



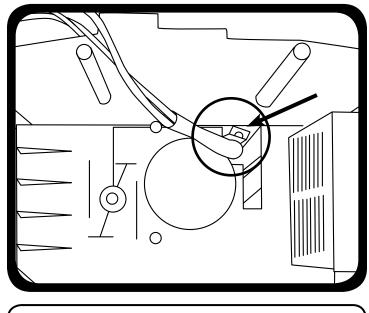
Remove (2) lower air duct screws from inside motor housing then remove the foam that covers wire harness.



10. Cut lower wire harness between the motor housing and the base assembly. Pull the air duct system, air duct hose and lower wire harness out of the motor housing.



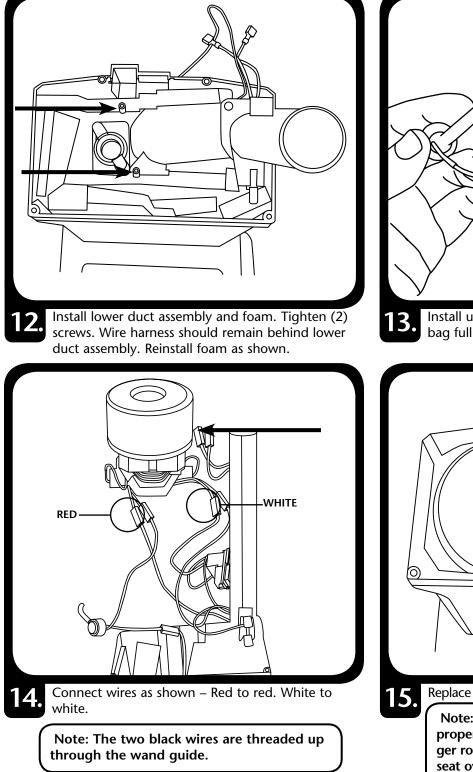
motor housing, locking brass fitting into position as shown.

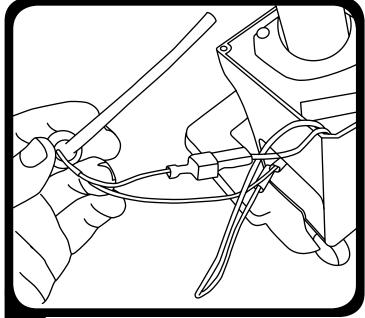


Note: Rotate brass fitting so it cannot be trapped by the lower duct.

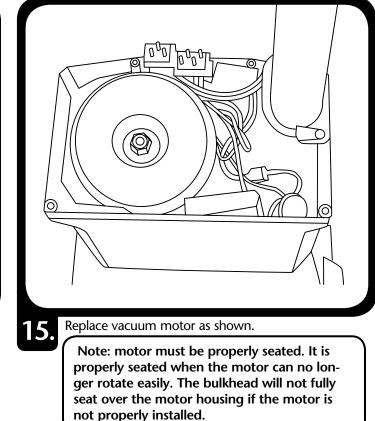
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### WIRE HARNESS REPLACEMENT (CONTINUED FROM PAGE 18)



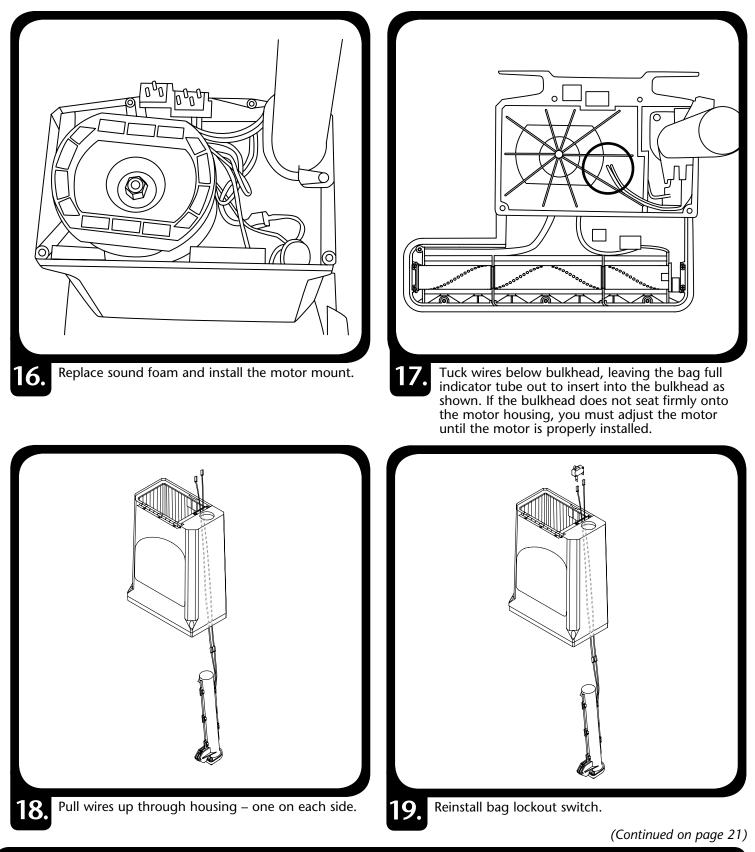


Install upper wire harness and connect the vacuum bag full sensor.

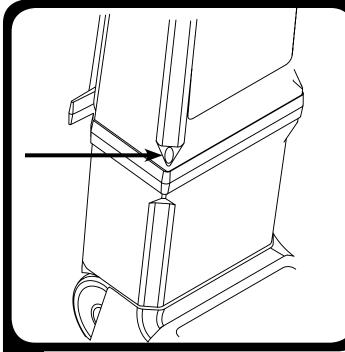


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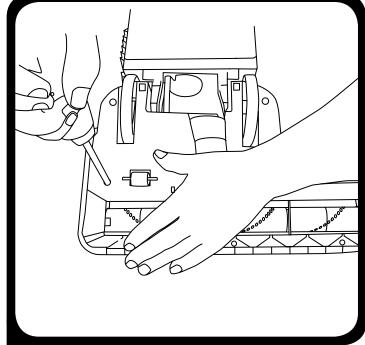
### WIRE HARNESS REPLACEMENT (CONTINUED FROM PAGE 19)



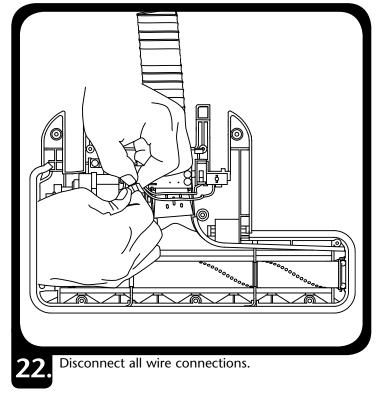
### WIRE HARNESS REPLACEMENT (CONTINUED FROM PAGE 20)

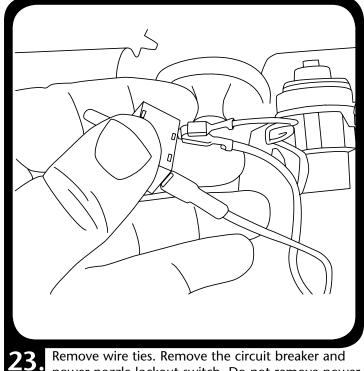


Attach bag housing. Insert (4) bag housing screws. 20. Upper wire harness replacement now complete.



To replace lower wire harness remove (8) 21. baseplate screws and turn vacuum back over to remove base cover.

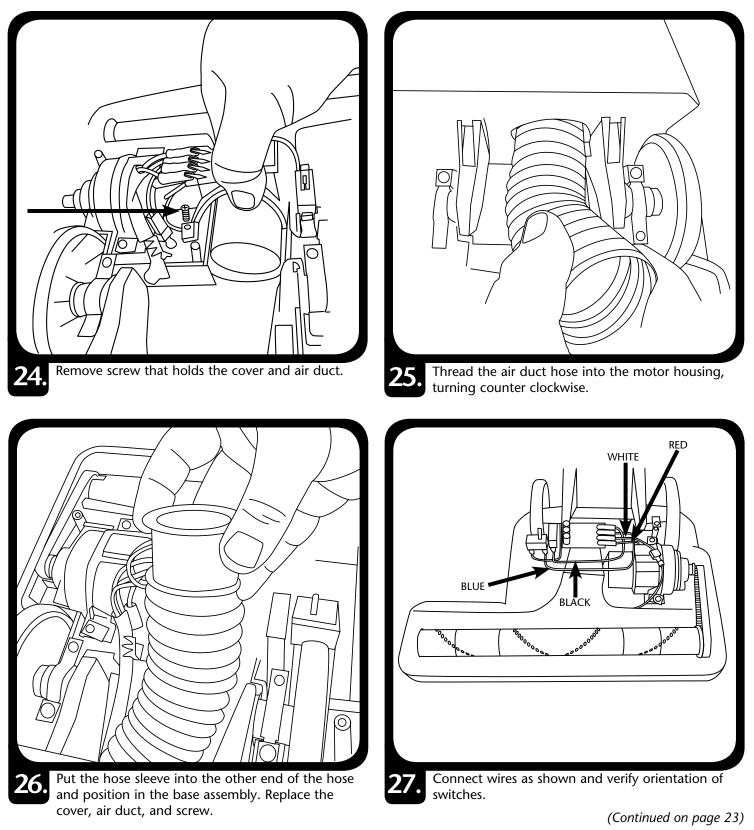




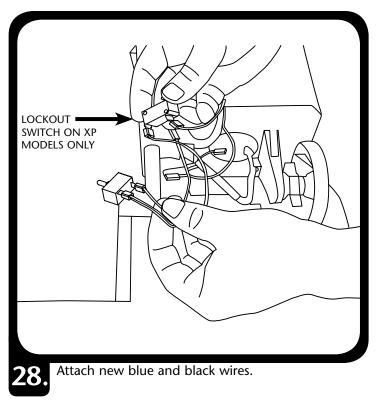
power nozzle lockout switch. Do not remove power nozzle motor.

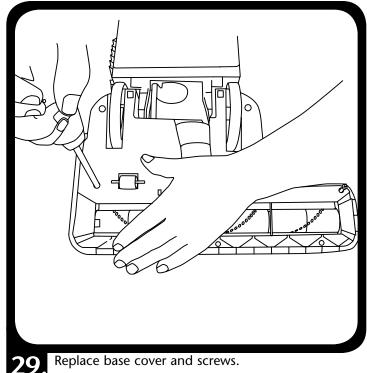
\*ProCare models do not have a power nozzle lockout switch.

### WIRE HARNESS REPLACEMENT (CONTINUED FROM PAGE 21)



### WIRE HARNESS REPLACEMENT (CONTINUED FROM PAGE 22)





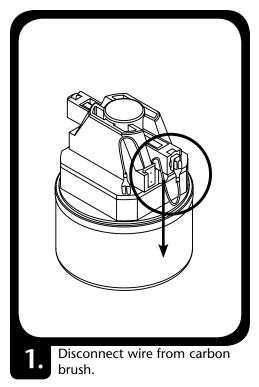
To Reassemble. Reverse Steps 29 through 1 to finish reassembly.

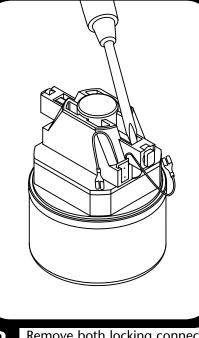
### TO PERFORM A FUNCTION TEST:

- 1. Reinstall handle assembly and cord.
- 2. Install Intercept Micro Filter.
- 3. Plug in vacuum and turn vacuum on in the number two (II) position.
- 4. Powerhead motor should be running. Release vacuum from upright locked position.
- 5. The brush roll motor should stop and the red warning light should light up. Release the switch and the powerhead should go back to normal operation.
- 6. Turn the vacuum on in position number one (I). The vacuum motor should be on. Pull out the wand and cover the end of the wand with your hand. This will simulate blockage and the bag full light should come on. Take your hand off the end of the wand and the light should turn off. If your vacuum passes these tests, your vacuum is ready to use.

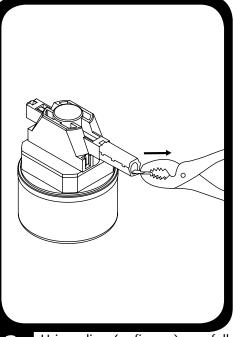
Motor

### **REMOVING CARBON BRUSHES**



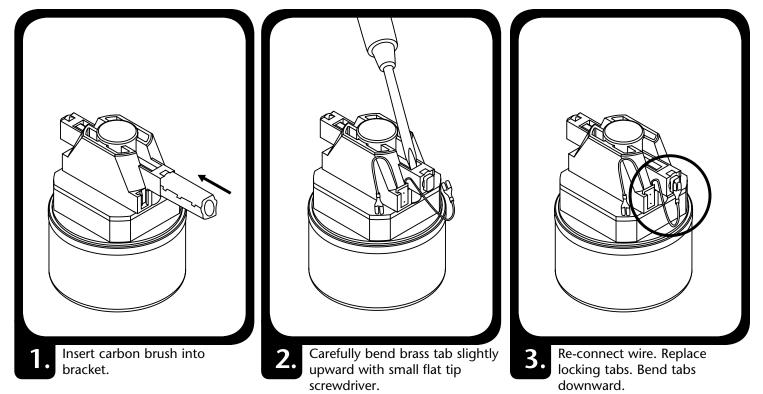


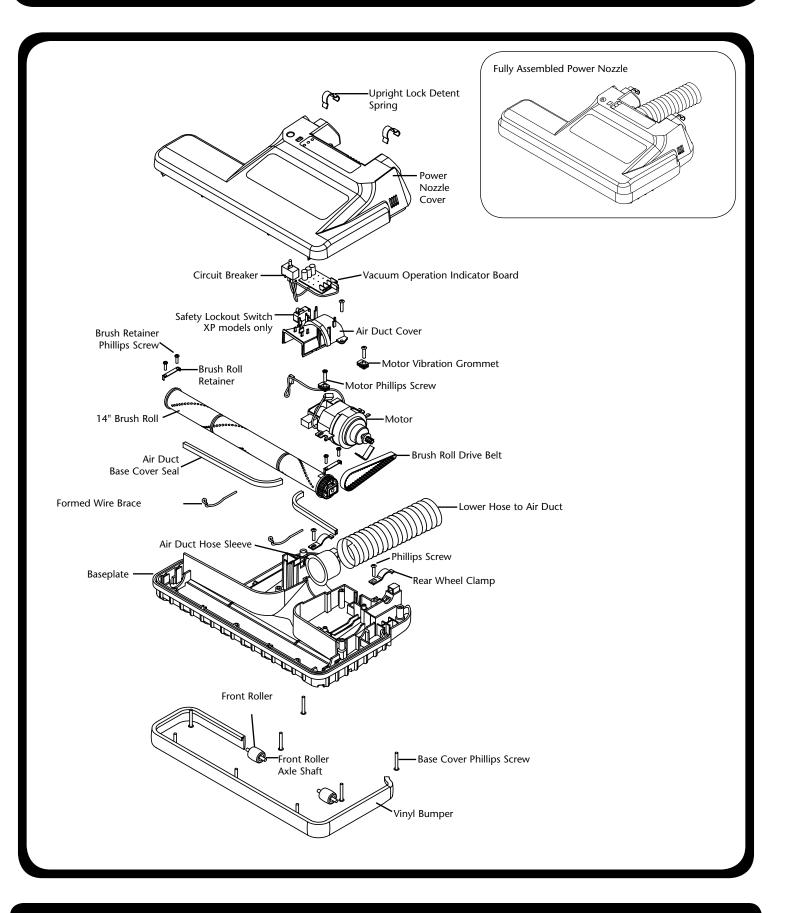
Remove both locking connec-2. tors with small flat tip screwdriver. Press brass tab (inside bracket) down so it is flush with brush.



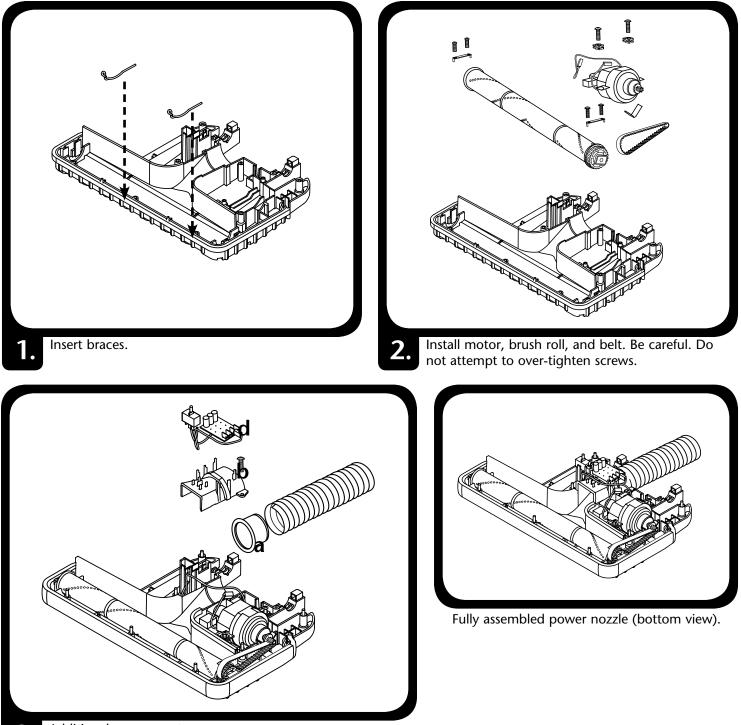
Using pliers (or fingers), carefully 3. grasp tab and remove carbon brush from bracket







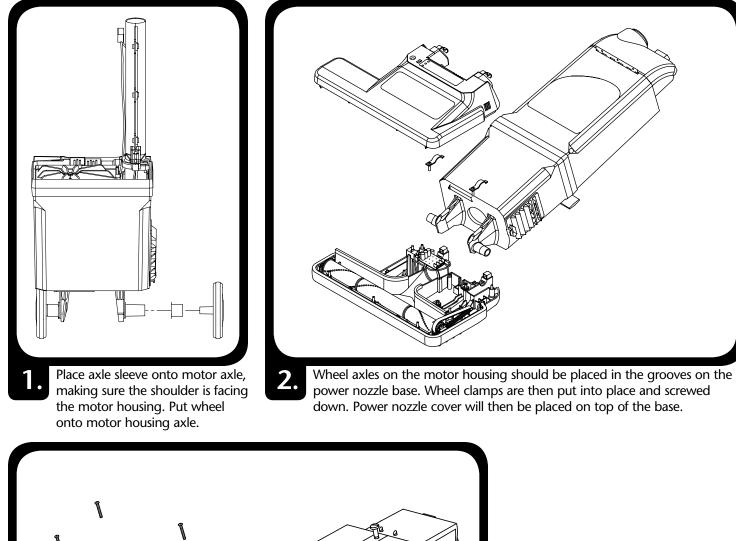
### **ASSEMBLY**

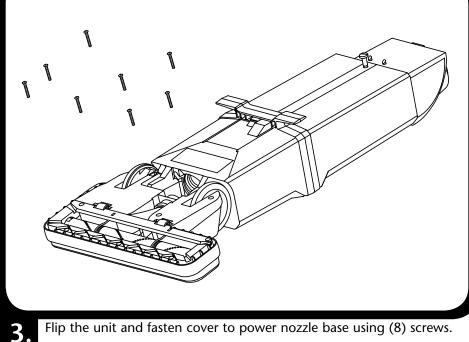


- Additional components: 3.
  - a) Install sleeve and hose.
  - b) Install duct cover.
  - c) Install electronic components, Vacuum Operation Indicator Board, circuit breaker, and power nozzle lockout switch (lockout switch XP models only - not pictured).
  - d) Attach jumper wire to Vacuum Operation Indicator Board.
  - e) Make sure components are properly seated in the base.

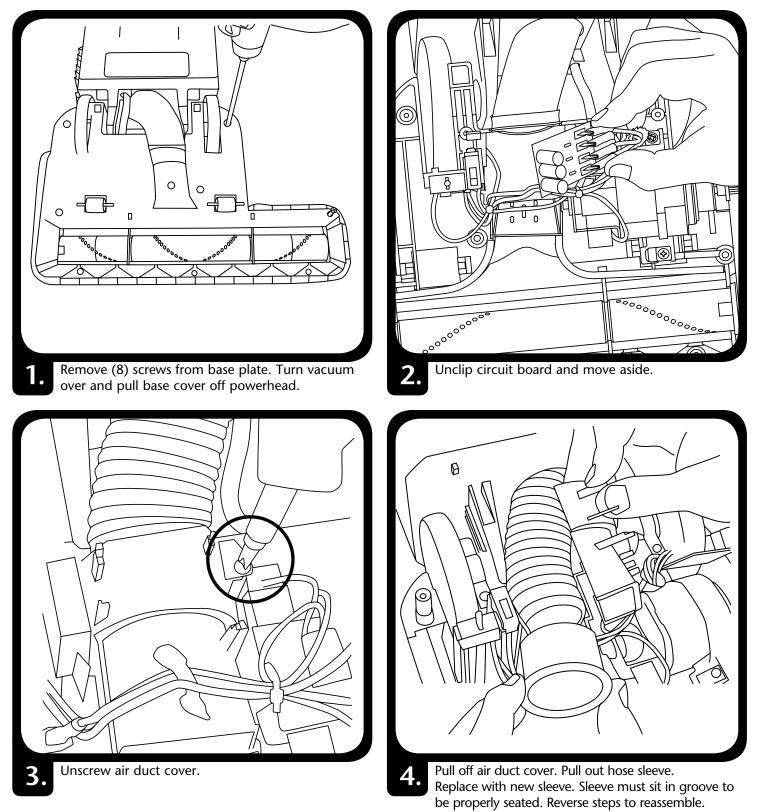
## Power Nozzle to Body Assembly

### **ASSEMBLY**

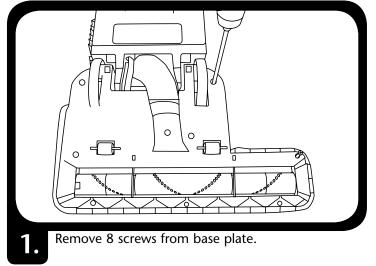


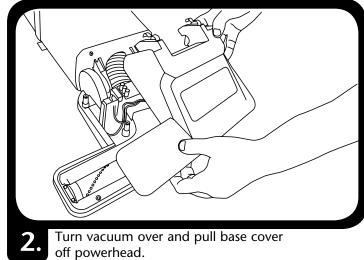


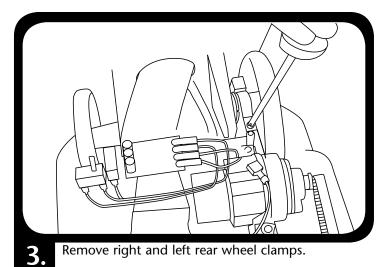
### **HOSE SLEEVE REPLACEMENT**



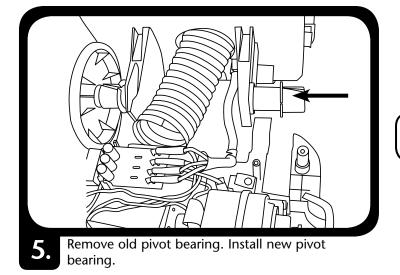
### **PIVOT BEARING REPLACEMENT/WHEEL REPLACEMENT**





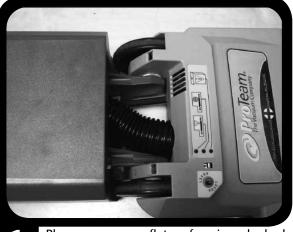


4. Lift bag housing from powerhead and remove



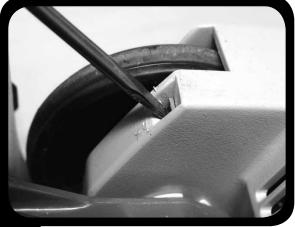
To Reassemble. Repeat steps in reverse.

### **DETENT SPRING REPLACEMENT**



1.

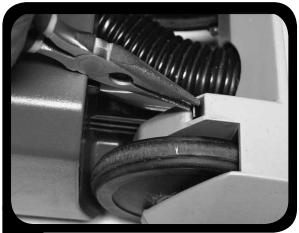
Place vacuum on flat surface in unlocked position exposing detent springs.



3. If there is not enough detent spring to remove with pliers use a flat head screwdriver to pry out broken spring.



5. Push down on detent spring until fully seated.



2.

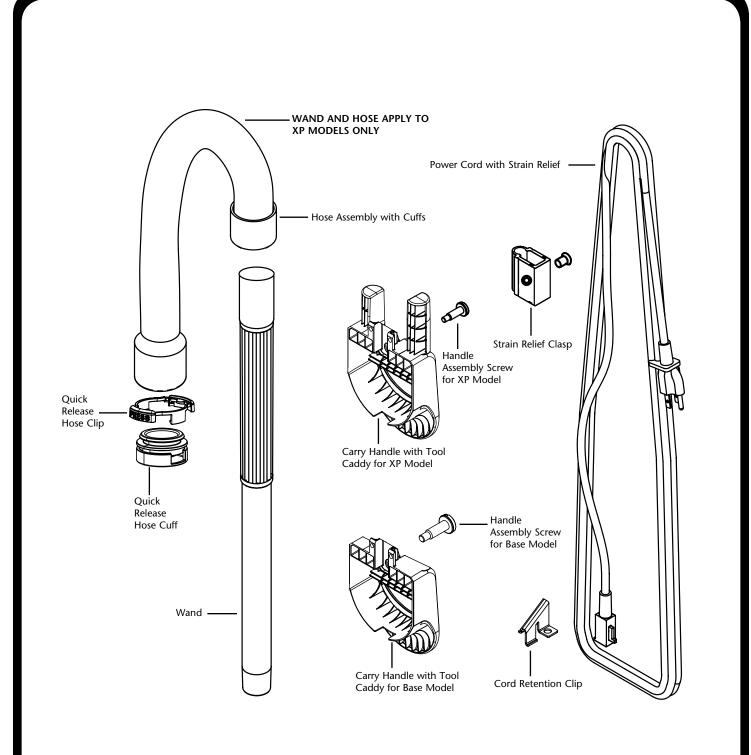
Use needle nose pliers to remove detent spring if there is adequate spring to grab.

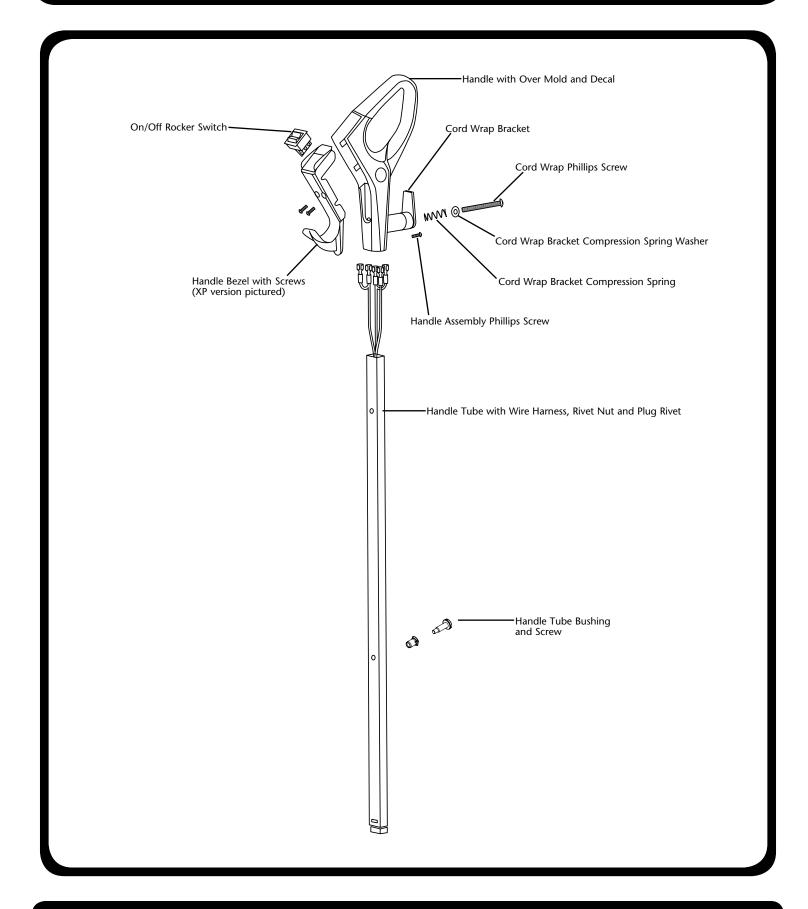




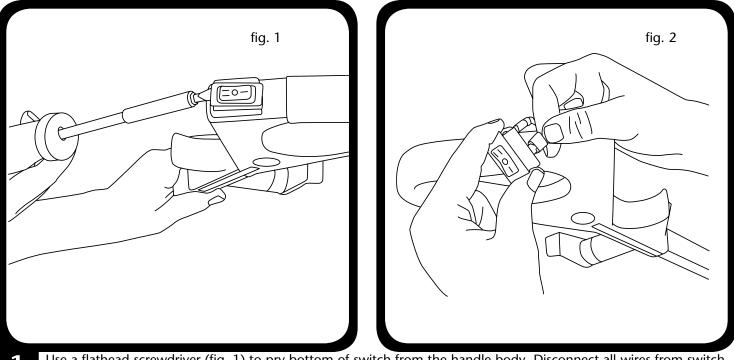
Place new detent spring into spring slot in vacuum power head as shown.

## Hose and Power Cord

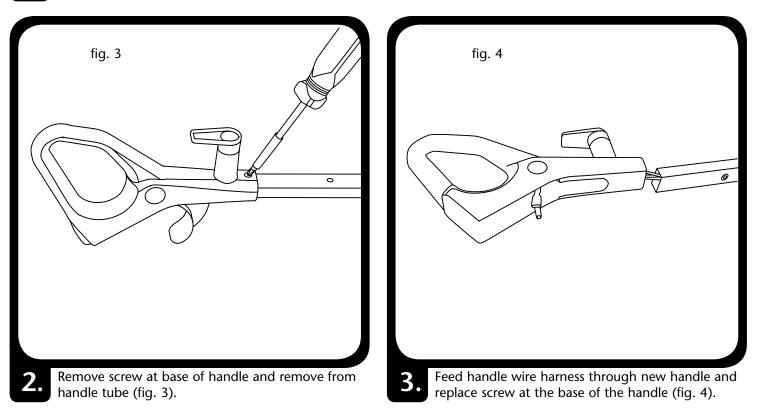




### HANDLE ASSEMBLY

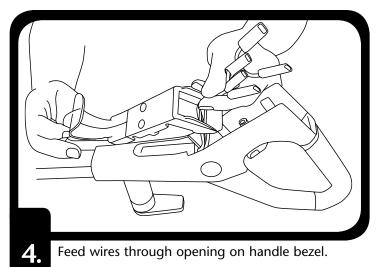


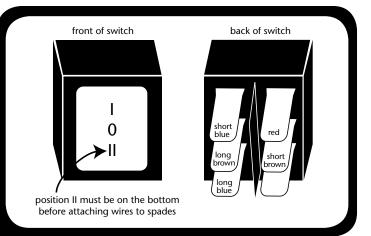
Use a flathead screwdriver (fig. 1) to pry bottom of switch from the handle body. Disconnect all wires from switch posts by depressing locking tab on base of crimps. (fig. 2)



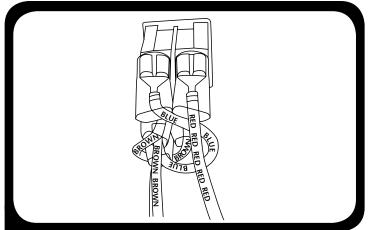
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### HANDLE ASSEMBLY (CONTINUED FROM PAGE 33)

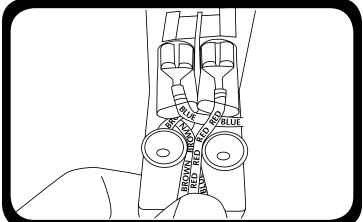




- 5. Using the diagram provided above, attach wires to switch. Orient the switch box with the II position on the down side.
  - a) Attach the first plug on the brown wire to the middle left spade.
  - b) Attach the first plug on the blue wire to the lowest left spade. Wait to attach the last blue plug.
  - c) Wrap the second brown plug underneath blue and attach to the middle right spade.
  - d) Attach the last blue plug to the upper right spade. The bottom right spade will remain unattached.
  - e) Connect the red wire to the top right spade.



When finished with steps **a**) through **e**) your final wire connection configuration should appear as above.

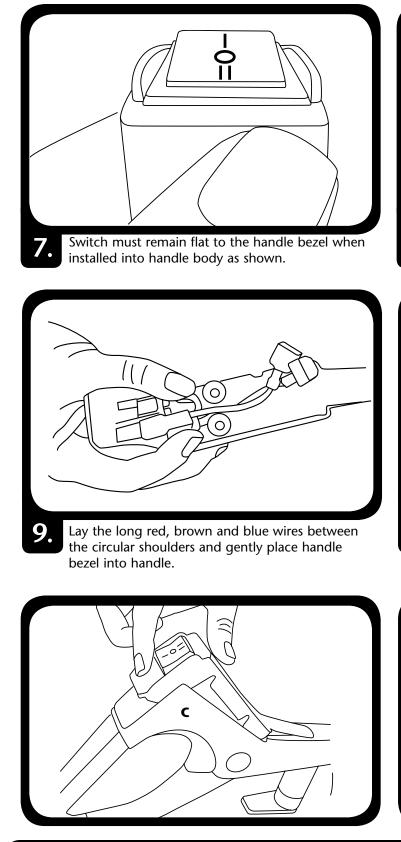


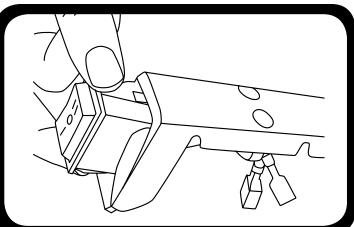
Install the switch into the handle bezel. Place the long BLUE, BROWN, then RED wires between the screw bosses in that order (as shown). BROWN and BLUE wire loops must be positioned above the screw bosses on the handle bezel as shown.

(Continued on page 35)

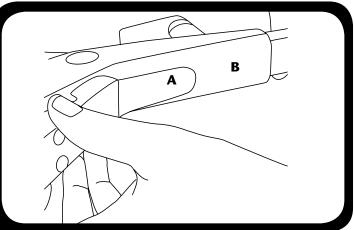
6.

### HANDLE ASSEMBLY (CONTINUED FROM PAGE 34)

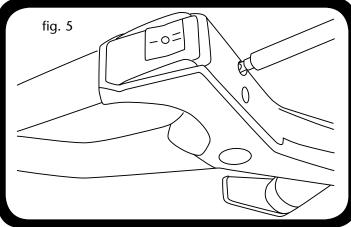




8. Press the switch into place in the handle bezel. The II position should be closest to the front of the bezel.

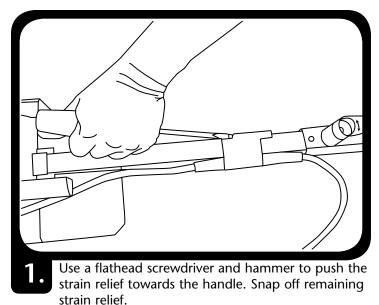


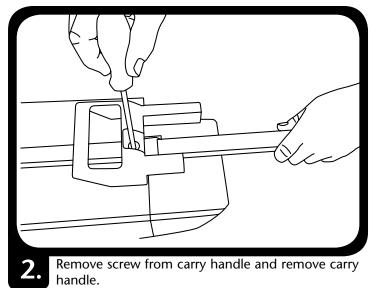
10. Slide tab A into handle slot B and press firmly into place at C. Be sure all switch wires are routed between screw bosses to ensure that the wires do not get damaged. Insert screws into bezel (fig. 5).

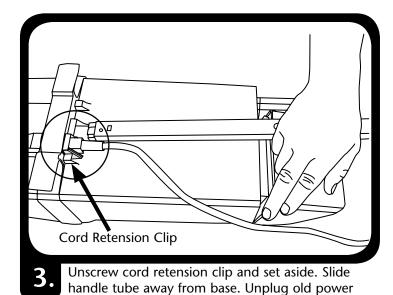


## Handle and Power Cord

### **NEW CORD AND STRAIN RELIEF REPLACEMENT**







Feed new strain relief clasp over the new power

Feed new strain relief clasp over the new power cord. Slide strain relief up to the groove on the power cord and snap strain relief clasp into place.

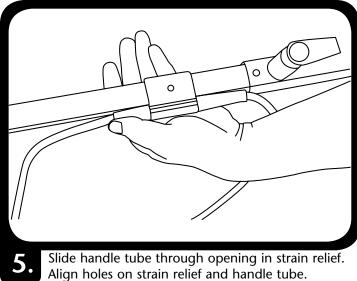
**NOTE:** Use care when sliding the strain relief clasp over the handle tube bushing so as not to damage bushing.

(Continued on page 37)

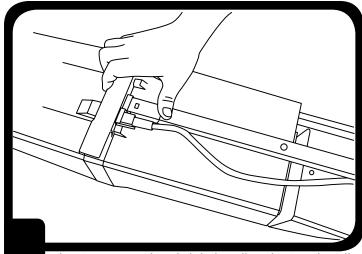
cord.

## Handle and Power Cord

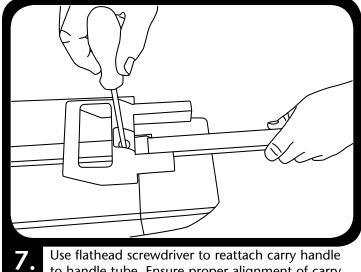
### NEW CORD AND STRAIN RELIEF REPLACEMENT (CONTINUED FROM PAGE 36)



Insert new ratchet fastener in hole and push flush.



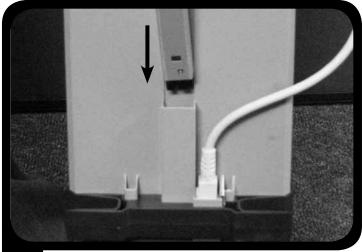
Plug in new cord and slide handle tube into handle 6. sleeve on motor housing. Press firmly down on handle to ensure it is fully seated. Install cord retension clip next to power cord. Install screw and tighten.



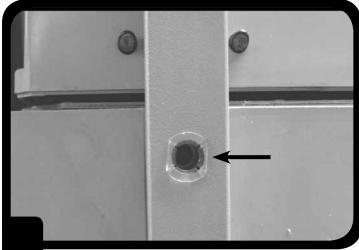
Use flathead screwdriver to reattach carry handle to handle tube. Ensure proper alignment of carry handle by verifying bag cover closure.

## Handle and Power Cord

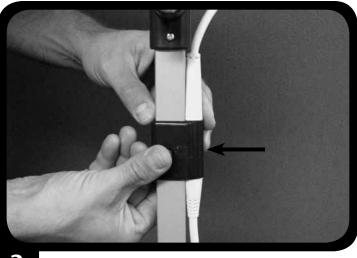
### **HANDLE INSTALLATION**



1. Insert the handle tube into the channel on the bag housing and press downward until it is 2-3 inches inside the channel. It will be correctly inserted when the handle bushing hole in the handle tube aligns with the nut plate hole in the bag housing.



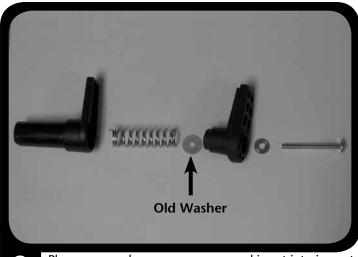
2. Insert ratchet fastener into cord clasp opening by pushing with thumb to connect cord to handle.



### **IMPACT BUMPER INSTALLATION**



Using a Phillips Head screwdriver, remove screw from cord wrap bracket. Discard screw only.



- 2.
- Place new washer on new screw and insert into impact bumper. Place old washer on end of screw. **Note:** Make sure spring is installed as shown above.

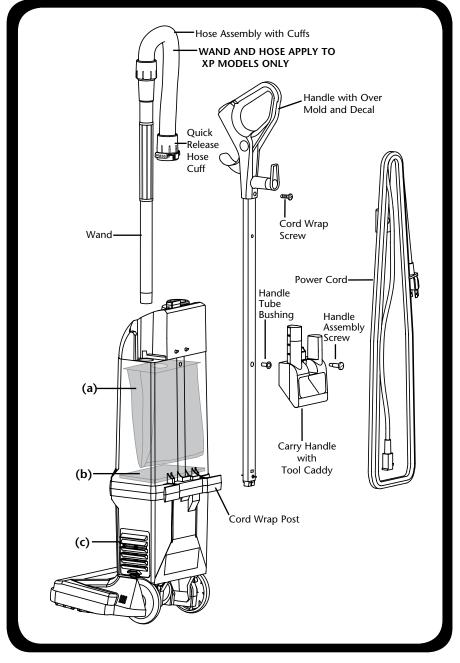


3. Insert impact bumper assembly into cord wrap bracket.

**Note:** Screw should be inserted inside spring from original assembly. Do not over tighten.

## Final Vacuum Assembly

### **ASSEMBLY**



Install all 3 filters: (a) Intercept Micro Filter (b) Motor Intake Filter (c) Exhaust Filter



1.

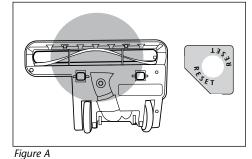
Install Power Cord and Handle with Over Mold and Decal. Attach with Handle Tube Bushing and Carry Handle with Tool Caddy.



Wrap Power Cord around Cord Wrap Post.

## Troubleshooting

## **CLEARING HOSE AND WAND OBSTRUCTIONS – XP MODELS**



Quick

tab

Airflow path and possible

obstruction locations

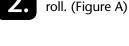
### **CLEARING THE BRUSH ROLL**

Obstructions such as hair, string, and throw rugs may cause the red brush indicator light to be illuminated and the power nozzle to shut off.

Turn off vacuum and unplug power cord from outlet.



On underside of vacuum, pull out, or cut away, obstructions on the brush



Press the reset button on top side of powerhead. Plug-in power cord, and restart motor (Figure A).

### CLEARING HOSE & WAND

### Obstructions in hoses and wands may reduce or eliminate suction.



Familiarize yourself with air flow path and possible obstruction locations (Figure B).



To determine obstruction location, remove wand from port. (Figure C). Turn on vacuum and place hand over wand opening to check for proper suction. If no suction exists, blockage is at location A or B (as shown in Figure B) and proceed to Step 3. If there is proper suction, the blockage is at location C or D (as shown in Figure B) and proceed to Step 5.



Open Bag Housing Cover (Fig. 1) and replace Intercept Micro Filter. A full filter will restrict airflow.

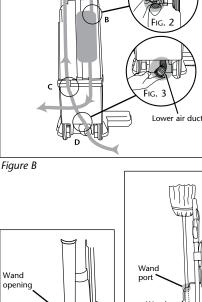


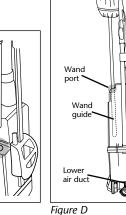
Remove hose from the bag housing cover by using the quick release tabs. (Fig. 2). Look into upper hose and wand. Shake or insert broom handle to clear any visible debris. Replace hose and wand on vacuum.

If blockage is not in the wand or upper hose, disconnect the lower air duct hose on the back of the power nozzle (Fig 3). Visually check the lower air duct hose for debris and remove. To check for unobstructed air flow, turn on vacuum and place hand over opening on lower air duct. If you feel proper suction, reconnect lower air duct and resume vacuuming. If blockage is not in lower air duct hose, proceed to step 6.

With bottom air duct hose and upper hose and wand disconnected, carefully insert a broom handle (or any similar item like a short length of hose, pipe, etc) approximately 14 inches into wand guide on top of vacuum housing (Figure D) to dislodge obstruction or debris. Debris should then drop or move into the lower air duct hose where you can then remove it with your hand (Fig 3).

Reconnect the lower air duct hose and upper hose assembly, and turn on the vacuum.







vacuum.

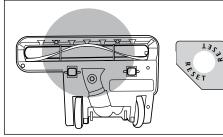
Wand

Figure C

port

## **Troubleshooting**

## **CLEARING HOSE AND WAND OBSTRUCTIONS – HEPA MODELS**





indicator light to be illuminated and the power nozzle to shut off. Turn off vacuum and unplug power cord from outlet.

Obstructions such as hair, string, and throw rugs may cause the red brush



On underside of vacuum, pull out, or cut away, obstructions on the brush roll. (Figure A).



Press the reset button on top side of powerhead. Plug-in power cord, and restart motor. (Figure A).

### **CLEARING HOSE & WAND**

**CLEARING THE BRUSH ROLL** 

Obstructions in hoses and wands may reduce or eliminate suction.



Turn off vacuum and unplug power cord from outlet



Open Bag Housing Cover (Figure B) and replace Intercept Micro Filter. A full filter will restrict airflow.



Disconnect the lower air duct hose on the back of the power nozzle (Figure C). Visually check the lower air duct hose for debris and remove.



To check for unobstructed air flow, turn on vacuum with bag housing cover closed and place hand over opening on lower air duct (Figure C). If you feel prope suction, reconnect lower air duct and resume vacuuming. If blockage is not in lower air duct hose, proceed to step 5.



Carefully insert a broom handle (or any similar item like a short length of hose, pipe, etc.) approximately 14 inches into guide on top of vacuum housing (Figure D) to dislodge obstruction or debris. Debris should then drop or move into the lower air duct where you can then remove it with your hand.



Reconnect the lower air duct and upper hose assembly. Close bag housing cover and power on the vacuum.







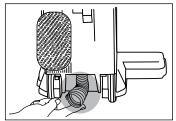
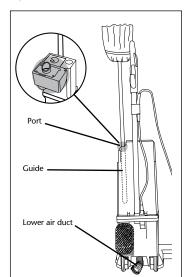


Figure C







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