



BISSELL Service Guide

Model 1697/1698 Power Steamer Pro Series

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1. Troubleshooting Guide

- **No Spray**

- 1) with unit off, fill both tanks with water, remove and replace each tank, turn on and pull trigger
- 2) check pump belt for damage or wear
- 3) check flow indicator filter, tighten cap securely
- 4) hold tank over sink, manually activate valve on the bottom of each tank and check for flow, check for gaskets on the exit port of each tank
- 5) check for debris in the receivers for each tank
- 6) attempt to spray through upholstery tool, if sprays, the problem is either a pinched hose, bad trigger valve, clogged heater or clogged spray tip (go to #7): if no spray, the problem is either a bad pump, leaky Smart-Mix or leaky tank receiver (go to #11)
- 7) actuate handle trigger slowly and feel for the actuation of the trigger valve (if in doubt, remove upper handle assembly and actuate trigger valve manually)
- 8) unplug unit, remove main housing and check for pinched tubes
- 9) remove handle cover and check for pinched tubes
- 10) blow air through the heater and check for blockage
- 11) blow air through the trigger valve and check function
- 12) remove spray tips and check for blockage
- 13) replace pump and repeat #1
- 14) if still no spray, replace Smart-Mix assembly and/or tank receiver

- **Brush doesn't turn**

- 1) check pump belt and brush belt for damage or wear
- 2) check to see if brush belt is on both pulleys
- 3) remove brush and check bearings and pivot arms, replace any damaged components
- 4) check pump pulley for teeth damage, replace pump if damaged

- **No suction/poor water recovery**

- 1) check that diverter valve is in proper position/operates
- 2) check to make sure tank and lid are seated properly
- 3) check for drain plug and gasket
- 4) check both gaskets between tanks and unit , make sure the motor duct gasket does not get sucked in when the unit is turned on, if so pull up gently on the gasket
- 5) check tank lid for damage
- 6) check that the float is not stuck in the up position
- 7) check placement of gasket between window and main housing

- **No suction from upholstery tool**

- 1) check that diverter valve is in proper position/operates
- 2) check hose attachment at rear of unit
- 3) remove nozzle window, move diverter to upholstery/pre-treat, manually open diverter door farther and check for proper position of upholstery duct
- 4) unplug unit, remove main housing
- 5) check duct/hose for clogs

- **Heater light doesn't come on**
 - 1) check actuation of the switch
 - 2) unplug unit, remove lower front handle cover and check for loose wires
 - 3) replace light assembly

- **No hot water**
 - 1) check that heater switch is on, let the heater warm-up for about 2 minutes and check the temperature of the water coming out the spray tips compared to the temperature in the tank (note: upholstery tool does not spray heated water)
 - 2) unplug unit, remove lower handle cover and check for loose wires
 - 3) replace heater assembly

- **Tank leaks**
 - 1) check for tank drain gasket
 - 2) fill bladder and look for leaks
 - 3) fill tank outside bladder and look for leaks
 - 4) check tank exit port for debris
 - 5) replace tank assembly

- **Unit leaks**
 - 1) check tanks for leaks
 - 2) check bottom of tanks for the gasket, check Smart Mix bottle for straw
 - 3) fill tanks, put tanks in unit, check for leaks with unit off
 - 4) turn on and check for leaks
 - 5) unplug unit, remove housing(s) by leak and check connections

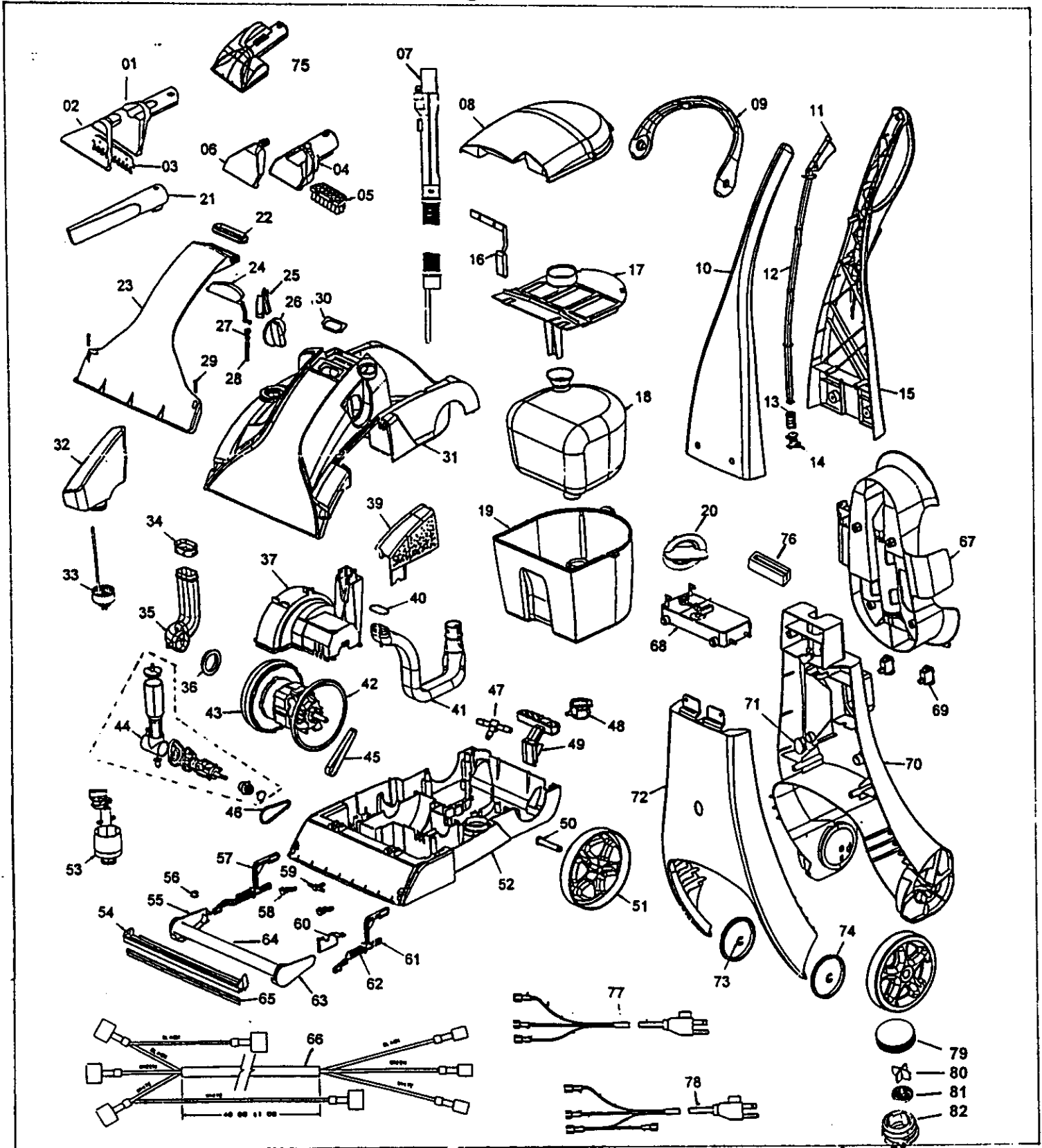
- **Too much/little chemical from Smart-Mix**
 - 1) check position of Smart-Mix knob, should use one bottle of solution with 1-2 tanks of water on High Traffic setting, 2-4 tanks on Normal
 - 2) check bottle for leaks
 - 3) check straw in bottle, o-ring on the insert assembly and gasket on the outside
 - 4) check receiver area for debris

- **Unit sprays for a few seconds then stops**
 - 1) remove belt door and look for air bubbles in the tubing from the pump; if no bubbles, look for pinched tubes (see #5-#7 of the No Spray section)
 - 2) turn Smart Mix setting to water only, if bubbles stop check Smart Mix bottle for missing gasket, straw or o-ring
 - 3) replace gasket on Smart Mix bottle and main tank
 - 4) unplug unit, remove main housing, replace Smart Mix assembly and repeat #1; if still no spray replace tank receiver, then replace pump.

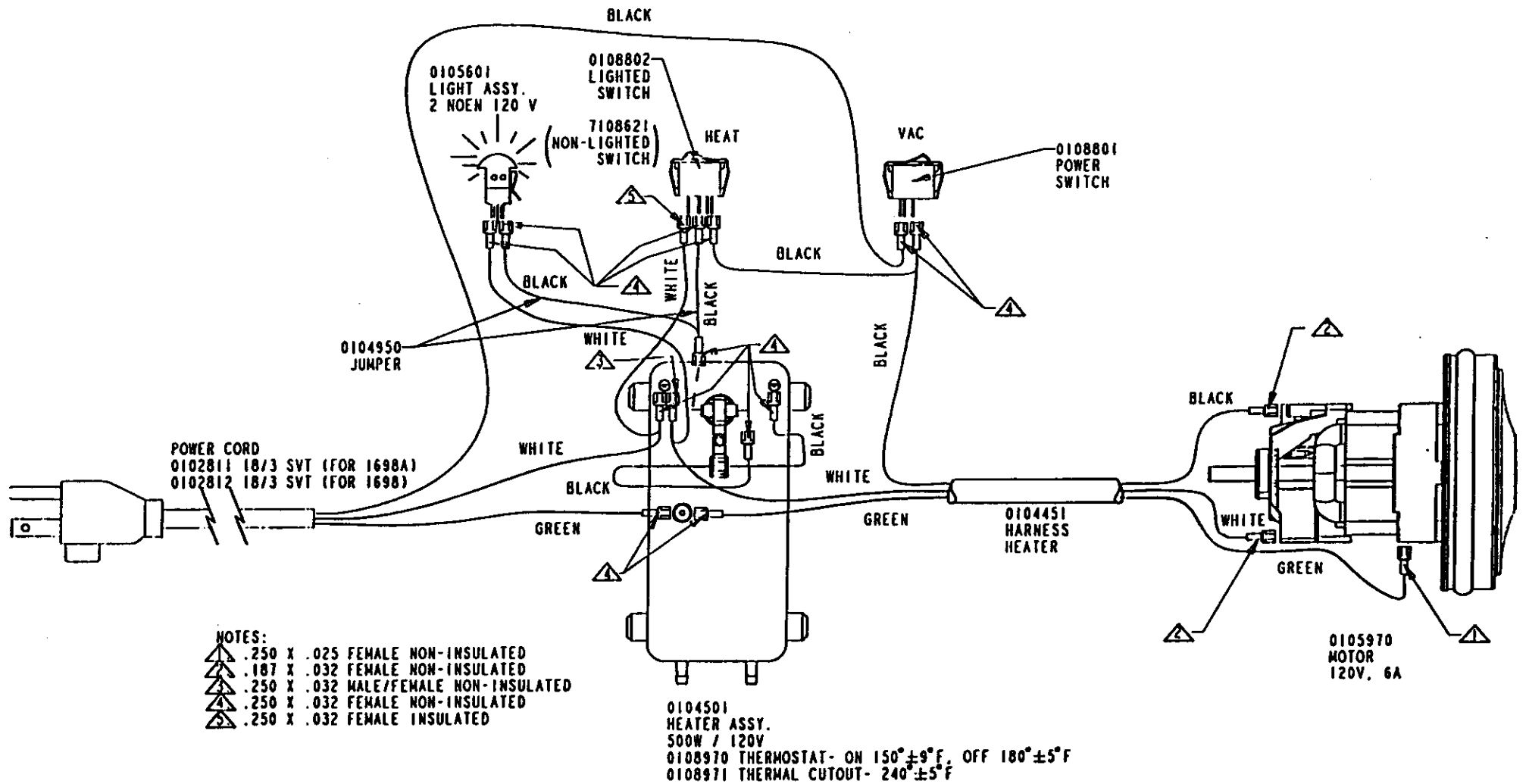
3. Parts List

KEY	PART NO.	DESCRIPTION	KEY	PART NO.	DESCRIPTION
01	0109201	UPH TOOL 4"	51	0139754	WHEEL
02	6030961	WINDOW FOR 4" TOOL	52	0130440	BASE
03	6030966	BRUSH FOR 4" TOOL	53	0100105	AUTOMIX ASSY
04	0159155	TUFF STAIN TOOL 3" WIDE	54	0139131	BARE FLOOR ATTACHMENT
05	0149155	BRUSH FOR 3" TOOL	55	0130050	PIVOT ARM-RIGHT
06	0139850	WINDOW FOR 3" TOOL	56	0107370	ARM RETAINER-RIGHT
07	0109210	HOSE & GRIP ASSY	57	0133261	ELEVATOR LEVER RIGHT
08	0142987	TOP ASSY	58	0106105	SPRAY TIP
09	0134435	TANK HANDLE	59	0102602	T CONNECTOR(REGULAR)
10	0134423	HANDLE UP/FRONT(16981)	60	0107371	ARM RETAINER-LEFT
10	0134445	HANDLE UP/FRONT(1697)	61	0133260	ELEVATOR LEVER LEFT
10	0134446	HANDLE UP/FRONT(1698)	62	0108420	SPRING-ELEVATOR LEVER
11	0139168	TRIGGER-HANDLE	63	0130051	PIVOT ARM-LEFT
12	0137511	PUSH ROD-HANDLE	64	0101174	FLOOR BRUSH ASSY
13	0108422	SPRING-PUSH ROD	65	0108451	WIPER-BARE FLOOR
14	0109592	VALVE ASSY-TRIGGER	66	0104445	WIRING HARNESS(1697)
15	0134424	HANDLE UP/REAR(16981)	66	0104451	WIRING HARNESS(1698)
15	0134426	HANDLE UP/REAR(1697)	67	0136750	CADDY-STORAGE
15	0134428	HANDLE UP/REAR(1698)	68	0104501	HEATER
16	0140325	FLOAT ASSY	69	0108801	SWITCH-HEATER LIGHTED(16981)
17	0130212	BAFFLE-TANK	69	0108802	SWITCH-POWER
18	0100315	BLADDER	69	7108617	SWITCH-RED(1698)
19	0139040	TANK	70	0134414	HANDLE LO/REAR(16981)
20	0104057	GASKET FOR DRAIN CAP	70	0134416	HANDLE LO/REAR(1697)
20	0131782	DRAIN CAP	70	0134418	HANDLE LO/REAR(1698)
21	0109148	CREVICE TOOL	71	0105601	LIGHT ASSY(1698 & 16981)
22	0104052	SEAL-OVAL	72	0134413	HANDLE LO/FRONT(16981)
23	0139860	WINDOW-BASE	72	0134415	HANDLE LO/FRONT(1697)
24	0136986	DIVERTER(16981)	72	0134417	HANDLE LO/FRONT(1698)
24	0136987	DIVERTER(1697)	73	0106215	E-RING
24	0136988	DIVERTER(1698)	74	0101256	BUSHING-WHEEL
25	0135171	BASE-KNOB	75	0101185	TURBO BRUSH ASSY
26	0135170	KNOB-DIVERTER	76	0108550	RUBBER BLOCK-HEATER
27	0107067	PLUNGER-DIVERTER	77	0102812	POWER CORD(1697 & 1698)
28	0108421	SPRING-DIVERTER	78	0102811	POWER CORD(16981)
29	8807030	SCREW #8 X 3/4"	79	0101651	CAP-FLOW INDICATOR
30	0104054	GASKET-DIVERTER	80	0107635	SPINNER-FLOW IND
31	0134907	HOUSING(16981)	81	0103510	FILTER-FLOW IND
31	0134908	HOUSING(1697)	82	0100481	BASE-FLOW IND
31	0134909	HOUSING(1698)	XX	0102485	CLAMP-LARGE
32	0101065	SHAMPOO BOTTLE	XX	0102490	CLAMP-SMALL
33	0101795	CAP ASSY-BOTTLE	XX	0104950	WIRING JUMPER
34	0104050	GASKET-SHORT DUCT	XX	0105520	BEARING-FLOOR BRUSH
35	0103161	AIR DUCT SHORT	XX	0105906	OWNERS MANUAL(16981)
36	0104051	GASKET MOTOR INTAKE	XX	0105912	OWNERS MANUAL(1697)
37	0132984	COVER-MOTOR	XX	0105925	OWNERS MANUAL(1698)
			XX	0133722	CORD WRAP
39	0132991	COVER-BELT(16981)	XX	0139440	10" TUBE-CLEAR VINYL
39	0132992	COVER-BELT(1697)	XX	0139442	15" TUBE-CLEAR VINYL
39	0132993	COVER-BELT(1698)	XX	0139444	5" TUBE-CLEAR VINYL
40	0104053	O-RING FOR ABOVE	XX	0139446	28" TUBE-CLEAR VINYL
41	0103160	AIR DUCT-LONG	XX	0139447	14" TUBE URETHANE
42	0104056	GASKET-MOTOR	XX	0139448	32" TUBE-URETHANE
43	0105970	MOTOR ASSY	XX	7103418	GASKET MATERIAL .136" DIA
44	0107185	PUMP ASSY	XX	8807202	SCREW #8-19 X 1/2"
45	0100620	BELT-PUMP	XX	8807204	SCREW 10-32 X 2.75"
46	0100621	BELT-BRUSH	XX	8805040	NUT 10-32 BLACK
47	0102603	T CONNECTOR(ODD BARB)	XX	0100290	SCREWS & NUTS KIT
48	0140710	RECEIVER AUTOLOAD			
49	0135580	PEDAL-HANDLE RELEASE			
50	0100170	AXLE-WHEEL			

2. Exploded View Drawing



4. Wiring Diagram



5. Identification of Date Code/Model Number

- Underside of the foot of the unit is a motor rating label that contains the model number and the date of manufacture.

6. Initial Functional Test

- Plug unit into a HI-POT tester to detect dielectric failures.
- Plug unit into 120V outlet to determine obvious failures such as dead motor, dead heater, dead heater light or abnormal noise.
- Fill water and solution tanks.
- Turn on power switch, amps should be approximately 6 AMPS. Then turn on heater switch (if present), the current will jump to approximately 9AMPS. When the heater switch is turned "ON", the heater light and lighted switch (if present) should come on. If any of these conditions do not occur, check for proper wiring (heater switch).
- To test solution flow, depress trigger until the unit's flow indicator fills with water and the red spinner begins to spin rapidly.
- Once proper flow has been determined, all water must be purged from the unit using air at 5-10 PSI. The purpose of removing the water is to prevent cracking of internal components due to freezing and expansion.

Repair Guide Section

- Disconnect cleaner from power source before servicing. Reference wiring diagram before attempting to wire any internal components.

7. Pump

- Remove six screws from the main housing
- Remove window, flow indicator cap and belt access door
- Unsnap main housing from front of base
- Remove main housing assembly
- Remove four screws surrounding pump
- Remove pump by lifting upward and turn to pivot off belts
- Disconnect tubing and remove old pump
- Place smooth belt over pump pulley and insert new pump into cogged belt and seat pump
- Reconnect tubing and secure pump to base with four screws
- Reattach top cover and secure with six screws (Note: It is critical that the upholstery duct tab be properly located into the slot on top of the motor cover to insure proper alignment of main housing over duct. This tab may pop out of the slot each time the housing is removed, so check for this condition on every repaired unit. Also, tubing and ducts should be routed per Photograph #1, section 17)

8. Motor

- Remove six screws from the main housing
- Remove window, flow indicator cap and belt access door
- Unsnap main housing from front of base
- Remove main housing assembly
- Remove smooth belt
- Remove four screws surrounding the motor cover
- Lift and remove motor cover
- Disconnect leads and remove motor
- Reconnect leads and seat new motor in base (Note: Motor gaskets must be attached properly and ground of the motor must be facing downward in base)
- Attach inlet duct to motor (Note: Projection on inlet duct must be held in place by motor cover)
- Replace motor cover and attach with four screws
- Replace pump tube in tube holder on the front of motor cover
- Reattach smooth belt
- Replace top cover and secure with six screws.
- Reattach top cover and secure with six screws (Note: It is critical that the upholstery duct tab be properly located into the slot on top of the motor cover to insure proper alignment of main housing over duct. This tab may pop out of the slot each time the housing is removed, so check for this condition on every repaired unit. Also, tubing and ducts should be routed per Photograph #1, section 17)

9. Switch

- Remove two screws from the front of upper handle
- Remove two screws from tool caddy
- Remove tool caddy
- Remove two screws from the rear of the lower handle
- Remove upper handle assembly
- Lay handle horizontal and separate front and rear handles
- Disconnect leads from old switch
- Remove switch
- Install new switch and reassemble (Note: One or more of the insulator caps on the heater may come off when opening the cover. These must be put back in place prior to closing the handle.)

10. Heater

- Remove two screws from the front of upper handle
- Remove two screws from tool caddy
- Remove tool caddy
- Remove two screws from the rear of the lower handle
- Remove upper handle assembly
- Lay handle horizontal and separate front and rear handles

- Remove leads and tubing from heater
- Remove heater assembly
- Install new heater assembly and reassemble (Note: One or more of the insulator caps on the heater may come off when opening the cover. These must be put back in place prior to closing the handle.)

11. Power Cord

- Remove two screws from the front of upper handle
- Remove two screws from tool caddy
- Remove tool caddy
- Remove two screws from the rear of the lower handle
- Remove upper handle assembly
- Lay handle horizontal and separate front and rear handles
- Remove leads from heater and switch
- Install new cord and reassemble (Note: One or more of the insulator caps on the heater may come off when opening the cover. These must be put back in place prior to closing the handle.)

12. Wiring Harness

- Remove top cover and disassemble handle (see Motor and Power Cord for instructions)
- Disconnect leads from heater and switch
- Remove motor cover (four screws)
- Disconnect leads from motor
- Remove clip from right rear wheel
- Remove wheel
- Remove wiring harness
- Replace and reassemble (Note: One or more of the insulator caps on the heater may come off when opening the cover. These must be put back in place prior to closing the handle.)

13. Detent Lever

- Remove six screws from the main housing
- Remove window, flow indicator cap and belt access door
- Unsnap main housing from front of base
- Remove main housing assembly
- Remove detent lever
- Replace and reassemble
- Reattach top cover and secure with six screws (Note: It is critical that the upholstery duct tab be properly located into the slot on top of the motor cover to insure proper alignment of main housing over duct. This tab may pop out of the slot each time the housing is removed, so check for this condition on

every repaired unit. Also, tubing and ducts should be routed per Photograph #1, section 17)

14. Wheels

- Remove six screws from the main housing
- Remove window, flow indicator cap and belt access door
- Unsnap main housing from front of base
- Remove main housing assembly
- Remove clip ring on wheel axle
- Remove wheel and axle assembly
- Replace and reassemble
- (Note: When reattaching the main housing, it is critical that the upholstery duct tab be properly located into the slot on top of the motor cover to insure proper alignment of main housing over duct. This tab may pop out of the slot each time the housing is removed, so check for this condition on every repaired unit. Also, tubing and ducts should be routed per Photograph #1, section 17).

15. Hose

- Remove six screws from the main housing
- Remove window, flow indicator cap and belt access door
- Unsnap main housing from front of base
- Remove main housing assembly
- Disconnect hose from air duct
- Disconnect hose solution tube
- Replace and reassemble
- Reattach top cover and secure with six screws (Note: It is critical that the upholstery duct tab be properly located into the slot on top of the motor cover to insure proper alignment of main housing over duct. This tab may pop out of the slot each time the housing is removed, so check for this condition on every repaired unit. Also, tubing and ducts should be routed per Photograph #1, section 17)

16. Brush Roll

- Recline handle and place base assembly upside down on a flat surface
- Remove two red pivot arm retainers
- Remove pivot arms and belt
- Remove old brush roll
- Insert new brush roll into cogged belt
- Reattach pivot arms and seat brush roll
- Reattach red pivot arm retainers (Note: The guard on the pivot arm must face down towards the floor)