

# TITAN



## Operating Instructions

**MODELS:** T708  
T716  
T720

**QUEST**® ... for Continuous Improvement.  
Windsor's Quality Management System is Certified ISO 9001.



*Read these instructions before using the machine*

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# IMPORTANT SAFETY INSTRUCTIONS

When using an electrical appliance, basic precaution must always be followed, including the following:

## READ ALL INSTRUCTIONS BEFORE USING THIS MACHINE.

This machine is for commercial use.

### WARNING



**DANGER:** Failure to read and observe all DANGER statements could result in severe bodily injury or death. Read and observe all DANGER statements found in your Owner's Manual and on your machine.



**WARNING:** Failure to read and observe all WARNING statements could result in injury to you or to other personnel; property damage could occur as well. Read and observe all WARNING statements found in your Owner's Manual and on your machine.



**CAUTION:** Failure to read and observe all CAUTION statements could result in damage to the machine or to other property. Read and observe all CAUTION statements found in your Owner's Manual and on your machine.

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**DANGER:** Failure to read the Owner's Manual prior to operating or attempting any service or maintenance procedure to your machine could result in injury to you or to other personnel; damage to the machine or to other property could occur as well. You must have training in the operation of this machine before using it. If you or your operator(s) cannot read English, have this manual explained fully before attempting to operate this machine.



**DANGER:** Operating a machine that is not completely or fully assembled could result in injury or property damage. Do not operate this machine until it is completely assembled. Inspect the machine carefully before operation. Use only as described in this manual. Use only the manufacturer's recommended attachments.



**DANGER:** Machines can cause an explosion when operated near flammable materials and vapors. Do not use this machine with or near fuels, grain dust, solvents, thinners, or other flammable materials.



**DANGER:** **Do not** pick up flammable fluids, dust or vapors.



**DANGER:** **Do not** vacuum anything that is burning or smoking, such as cigarettes, matches, or hot ashes.



**DANGER:** This machine **is not** suitable for picking up health endangering dust.



**DANGER:** Using a machine with a damaged power cord could result in an electrocution. Do not use the machine if the power cord is damaged. Do not use the electrical cord to move the machine. Keep cord away from heated surfaces. Do not unplug by pulling on the cord; grasp the plug, not the cord. Turn off all controls before unplugging. Do not close a door on cord or pull around sharp edges or corners.



**DANGER:** Electrocutation could occur if maintenance and repairs are performed on a unit that is not properly disconnected from the power source. Disconnect the power supply before attempting any maintenance or service.



**WARNING:** Operating a machine without observing all labels, decals, etc., could result in injury or damage. Read all machine labels before attempting to operate the machine. Make sure all of the labels are attached or fastened to the machine. Get replacement labels and decals from the manufacturer's distributor.



**WARNING:** Electrical components can "short-out" if exposed to water or moisture. Keep the electrical components of the machine dry. Always store the machine in a dry area.



**WARNING:** Use of this machine to move other objects or to climb on could result in injury to the operator or damage to the machine. Do not use this machine as a step or furniture. Do not allow to be used as a toy. Close attention is necessary when used by or near children.



**WARNING:** Moving parts of this machine can cause injury and/or damage. Keep hands, feet, loose clothing, hair, fingers, and all parts of the body away from openings and moving parts.



**WARNING:** Electrocutation could occur if you handle the plug or appliance with wet hands. Do not handle plug or appliance with wet hands.



**WARNING:** The machine employs a removable float for wet pick-up operation to reduce risk of electric shock. Always install float before any wet pick-up operation.



**WARNING:** Rotating fan blades inside the cover. Before opening cover, switch off machine. Wait until the fan/brush stops completely or dust and debris may be ejected.



**WARNING:** If the machine is **not working properly**, has been dropped, damaged, left outdoors, or dropped into water, return it to an Authorized service center.



**WARNING:** Damage could occur to machine if openings are blocked. Do not put any object into openings. Do not use with any opening blocked; keep free of dust, lint, hair, and anything that may reduce air flow.



**WARNING:** Injury could occur to the operator or the machine if used without the dust bag and/or filters. Do not use the machine without the dust bag and/or filters in place.



**WARNING:** Injury to the operator and/or damage to the machine could occur when cleaning on stairs, unless extra caution is used. Use extra caution when cleaning on stairs.



**WARNING:** To reduce the risk of electrical shock, always use a 3-wire electrical system connected to the electrical ground. Whenever possible connect the machine to an outlet protected by a ground fault interrupter (GFCI). See "Grounding Instructions."

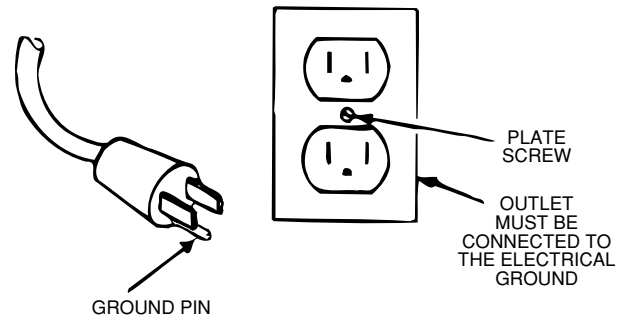
**SAVE THESE INSTRUCTIONS**

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## 120 Volt Machine Instructions For Connection To The Power Supply And The Electrical Ground

This machine must be connected to the electrical ground to protect the operator from electric shock. The machine has an approved power cord with three conductors and a plug with three terminals. Connect the plug to a receptacle that has three holes and is connected to the electrical ground. The green (or green and yellow) conductor in the cord is the ground wire. Never connect this wire to any terminal other than the ground terminal.

This machine uses a 120 volt AC 60 cycle electrical circuit. Make sure you have the correct frequency and voltage before connecting the power cord to an outlet. The machine has a plug as shown in Figure 1. If a receptacle connected to the electrical ground as shown in Figure 1 is not available, have one installed by an electrical contractor. Do not use an adapter.



**WARNING:** To reduce the risk of electric shock, protect the machine from rain. Keep the machine in a dry area.



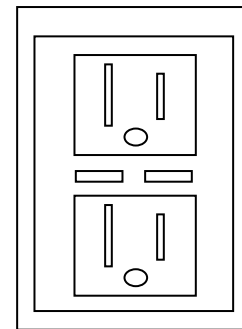
**WARNING:** To reduce the risk of electric shock, always use a 3-wire electrical system connected to the electrical ground. Whenever possible connect the machine to an outlet protected by a ground fault interrupter (GFCI).



**WARNING:** Do not cut, remove or break the ground pin. If the outlet does not fit the plug, consult your electrical contractor.



**WARNING:** Have worn, cut or damaged cords and plugs replaced by an authorized service person.



GFCI Outlet

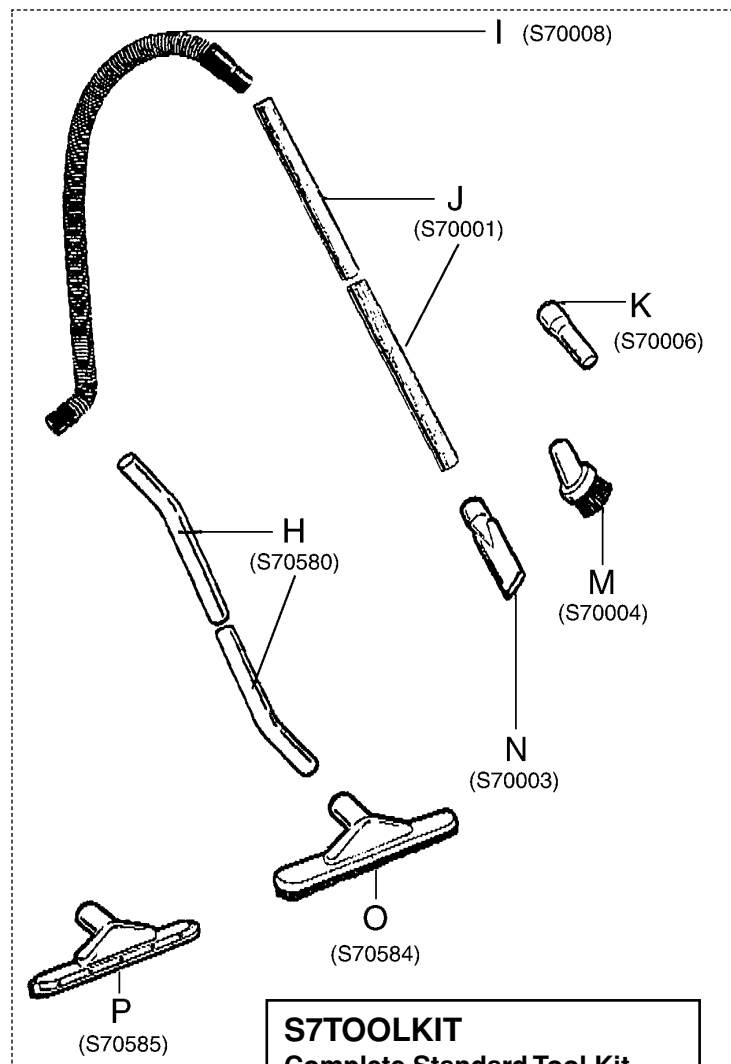
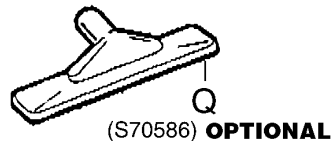
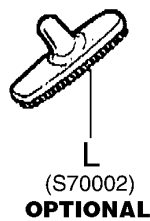
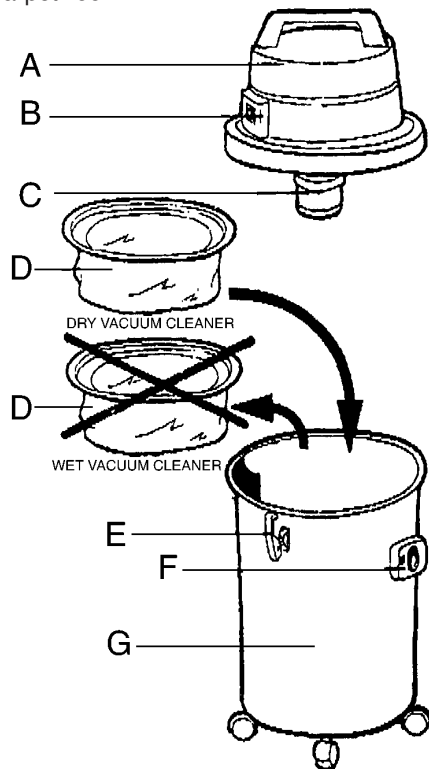
## VACUUM AND ACCESSORIES

- A Motor Block
- B On/Off Switch
- C Float: Keeps liquid out of Motor Block
- D Polyester Filter: Remove for use with liquids
- E Hooks: Secure Motor Block to Tank
- F Suction Inlet
- G Tank
- H 2-pc. Chrome Wand
- I 10-ft. x 1-1/2" Flexible Hose
- J 2-pc PVC Wand
- K Universal Adapter
- L 9" Brush
- M 3" Round Brush
- N Crevice Tool
- O 16" Brush
- P 16" Squeegee
- Q Fixed Carpet Tool

**ATTENTION:** The Polyester Filter must be cleaned after each use to maintain efficient suction.

### IMPORTANT INSTRUCTIONS

- Before use, the equipment must be correctly assembled with all its components.
- Check that electrical outlet is correct for use with the plug on the machine.
- Before connecting, check that the specified motor voltage corresponds to the main voltage available.
- Never use the equipment near inflammable, explosive or toxic substances: sparks from the motor could cause dangerous reactions.
- Always unplug the machine from electrical outlet when leaving machine unattended or before attempting any repair.
- Service and repair should be done by qualified personnel only. Use only original manufacturer's replacement parts.



**S7TOOLKIT**  
**Complete Standard Tool Kit**  
 includes H, I, J, K, M, N, O and P.

## OPERATION

This machine is a commercial vacuum designed for wet and dry pick-up. The dual vac motors can be run together or separately as the job requires.

Dry soil can be vacuumed directly into the tank. To empty the tank of dry soil, remove the top and dump into trash receptacle.

For wet pick-up, remove polyester filter. The machine is equipped with a float shut-off. As the tank is filled to capacity, a float rises and seals the vac intake, causing loss of vacuum. Switch off the vacuum when this happens and bring the machine to a floor drain.

Use the convenient drain hose at the back of the vacuum to empty the tank.

With both wet and dry applications be sure to frequently clean the filter. This is especially true when the vacuum is being used with strippers and wax.

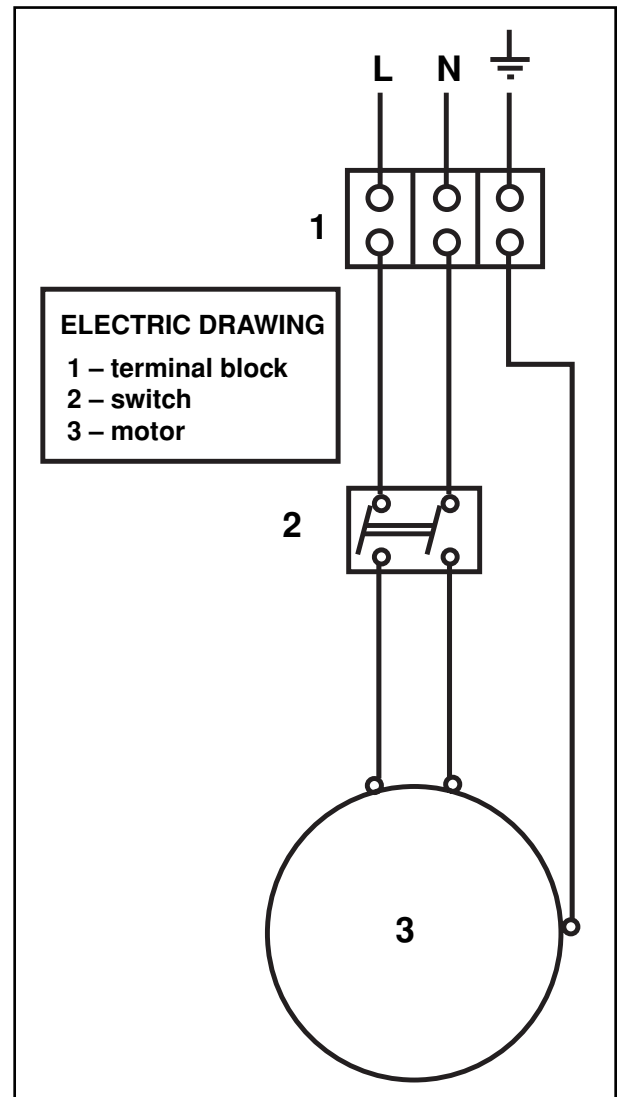
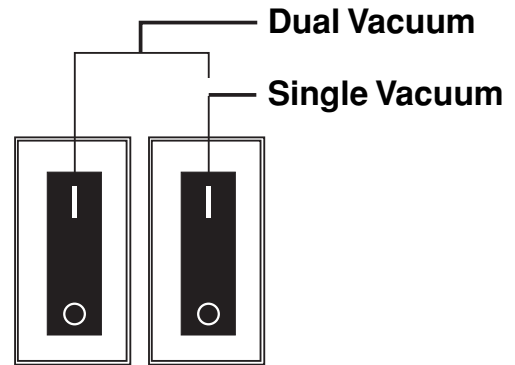
## DAILY MAINTENANCE

**Caution: Strippers and some detergents produce foam which will damage the vac motors. The vac shut-off may not be sensitive to all foams. Be sure to check that the tank is not filling with foam. Use a defoaming agent to avoid pulling foam through vac motor. Should vac motor become wet, remove source of overflow and immediately run vac motor open to dry.**

### *At the end of each working day:*

1. After each use, rinse tank with fresh water. Periodically inspect the recovery tank and decontaminate if necessary, using a Hospital Grade Virucide or a 1:10 bleach to water solution. Waste water should be disposed of properly.
2. Remove head assembly and allow tank to dry.
3. Remove filters for cleaning or to allow to dry.
4. Inspect hoses for wear. Frayed or cracked hoses should be replaced to avoid vacuum loss.
5. Inspect power cord for wear. This cable will lay on wet surfaces. To prevent electrical shock replace cords with frayed or cracked insulation immediately.

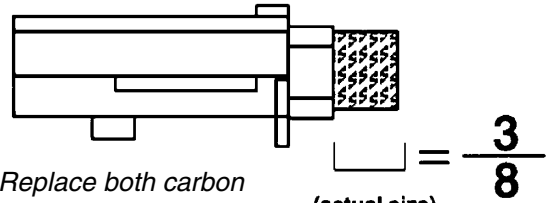
## DUAL SWITCHES



## PERIODIC MAINTENANCE

### *(Every six to twelve months):*

1. Check filter for wear, replace dirt saturated filters that do not respond to normal cleaning.
2. Inspect gasket seals and replace those which have begun to leak.
3. Examine carbon motor brushes and commutator.



Replace both carbon brushes when either is (actual size) less than  $\frac{3}{8}$ " long. (PN S8TOEG845)

## SERVICING THE FILTER

The filter is accessed by lifting the head assembly off the tank.

Polyester filter is easily removed by simply lifting the filter basket out of the tank.

Cartridge filters – Remove the filter retainer by turning the black knob 90 degrees counter-clockwise.

Cartridge filter will then slide off of float assembly.

### **NOTE:**

Be sure to frequently clean the filter.

Allow filter to dry after being used for wet pick-up.

Filters used for wet pick-up including stripper must be thoroughly cleaned before being allowed to dry.

Worn filters can affect vacuum performance. Replace the filter when it becomes worn out and normal cleaning will not restore vac performance.

## SERVICING THE VAC MOTOR

### **MOTOR REPLACEMENT**

1. Disconnect power cord from power source.
2. To access the vac motor, remove the screws that attach the main cover to the head assembly and set the cover to one side.
3. Disconnect the motor's 2 red lead wires from the main switch.
4. Disconnect green/yellow wire by removing screw from motor core.
5. Remove the four motor mounting screws.
6. Remove motor plate and set aside.
7. Take out the motor and remove the upper and lower gaskets.
8. Inspect gaskets. If they shown any wear or tear in the material, replace.
9. Install gaskets onto new motor. Make sure gaskets are properly seated.
10. Install the new motor. Make sure foam mufflers are positioned properly.
11. Attach motor plate to motor.
12. Connect green/yellow wire to motor core.
13. Connect motor's 2 red lead wires to main switch.
14. Re-assemble vac cover.
15. Test for proper operation.



## SERVICING THE VAC MOTOR

### CARBON BRUSH REPLACEMENT

1. Disconnect power cord from power source.
2. To access the vac motor, remove the screws that attach the main cover to the head assembly and set the cover to one side.
3. Remove the motor cover by removing two screws. **See Figure 1**
4. Remove the wire terminal from carbon brush housing. **See Figure 2**
5. Remove the carbon brush assembly by removing the 2 screws that attach it to the vac motor. **See Figure 3**
6. Inspect armature commutator. If it is extremely pitted, grooved or not concentric then the motor will need to be replaced or sent to a qualified service center.
7. Slide the yellow brush housing from plastic holder. **See Figure 4**
8. Reverse steps 7 through 4 to install new brush and housing (part number S8TOEG845)
9. Repeat steps 4 through 8 for the other carbon brush.
10. Reverse steps 3 and 2 for re-assembly.
11. Test for proper operation

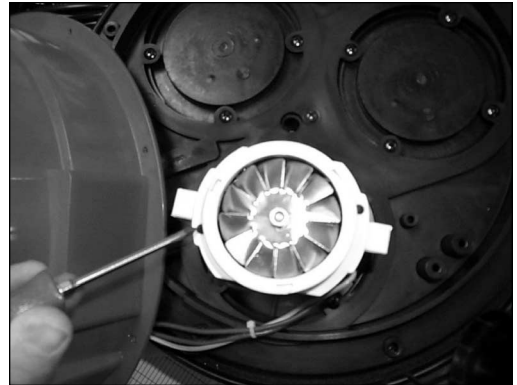


Fig. 1



Fig. 2



Fig. 3

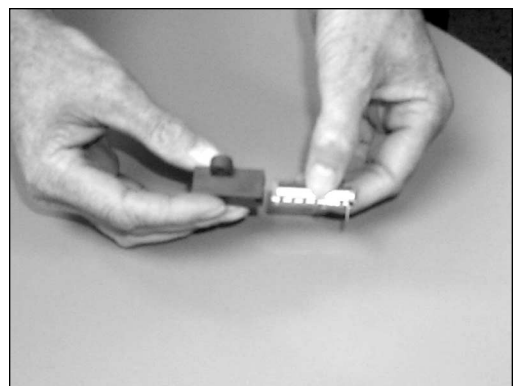
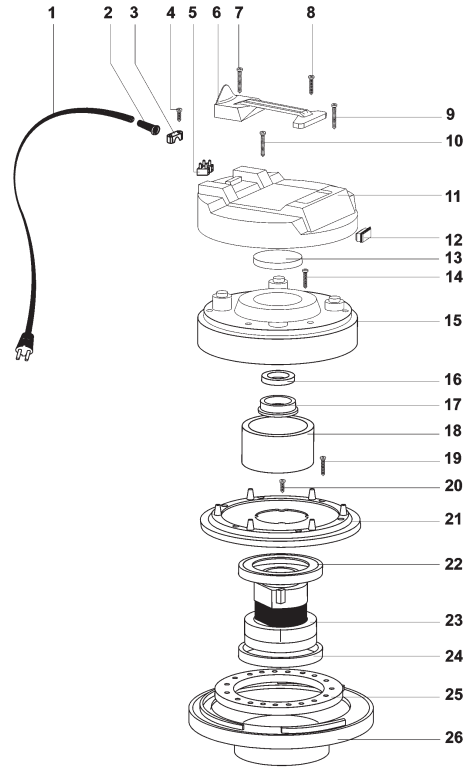


Fig. 4

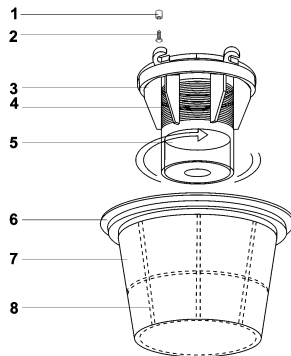


## T708 VACUUM MOTOR ASSEMBLY

No.	Part Num.	Description	Qty.
1.	S80466	Cord	1
2.	S80138	Strain Relief	1
3.	S80139	Terminal Clip	1
4.	S81006	Screw, 5 x 20	2
5.	S80450	Terminal Block	1
6.	S83733AUG6	Handle, Gray	1
7.	S82627	Screw, 5 x 40	4
8.	S81006	Screw, 5 x 20	2
9.	S81054	Screw, 5 x 30	2
10.	S81054	Screw, 5 x 30	2
11.	S83734AUB.LAB	Cover	1
12.	S80326	Switch, On/Off	1
13.	S83937	Filter, Ø95	1
14.	S81050	Screw, 5 x 35	6
15.	S82738AUG6	Cover, Motor, Gray	1
16.	S83969	Gasket	1
17.	S80310	Ring	1
18.	S83900	Filter	1
19.	S82627	Screw, 5 x 40	6
20.	S81006	Screw, 5 x 20	4
21.	S82591AUG6	Motor Ring, Gray	1
22.	S83901	Gasket	1
23.	S80314	Motor	1
24.	S83901	Gasket	1
25.	S83866	Disk, Noise Reduction	1
26.	S81189GG6	Base, Motor, Gray	1



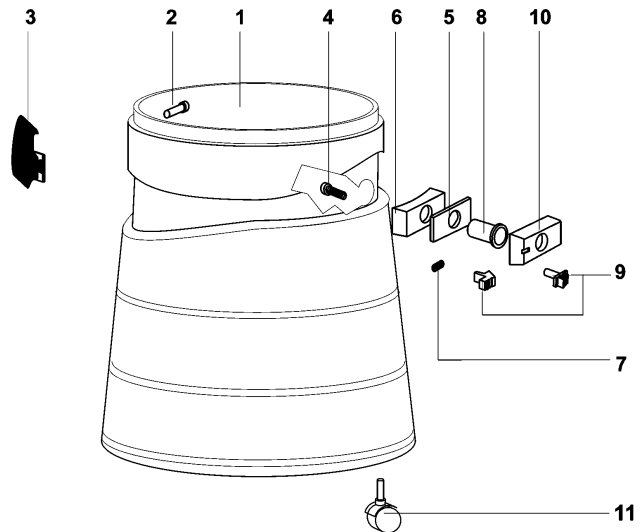
## T708 FILTER GROUP



No.	Part Num.	Description	Qty.
1.	S83706	Bushing	4
2.	S83724	Screw, 5 x 25	4
3.	S82823	Body, Filter Support	1
4.	S83138	Filter/Strainer	1
5.	S82676	Float	1
6.	S80123	Ring, Filter	1
7.	S82860	Filter Bag	1
8.	S82859	Support, Filter Bag	1

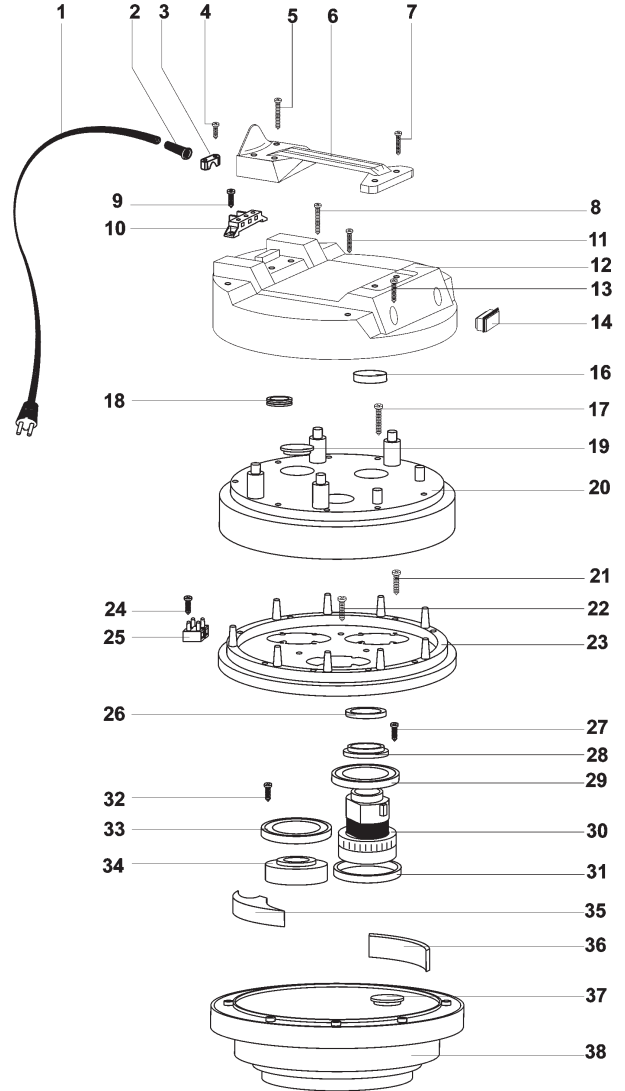
## T708 TANK ASSEMBLY

No.	Part Num.	Description	Qty.
1.	S82599	Tank	1
2.	S81300	Rivet, 5 x 24.5	4
3.	S81847G6	Tank Clamp	2
4.	S81050	Screw, M5 x 35	4
5.	S82846	Gasket	1
6.	S82585AG6BL	Retainer, Tank Adapter, Blue	1
7.	S82608	Spring, Push Button	1
8.	S82593	Tank Deflector	1
9.	S82594BL	Push Button, Two-Piece, Blue	1
10.	S82583AG6BL	Hose Adapter, Blue	1
11.	S80558	Caster	6



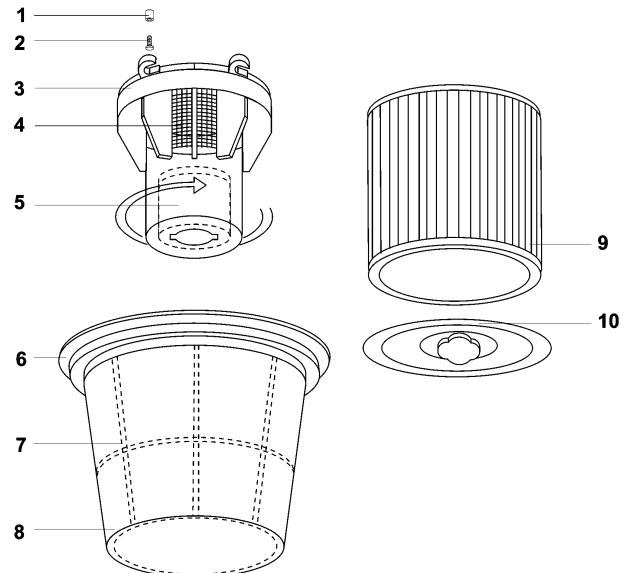
## T716/T720TP VACUUM MOTOR ASSEMBLY

No.	Part Num.	Description	Qty.
1.	S80466	Cord	1
2.	S80138	Strain Relief	1
3.	S80139	Bracket	1
4.	S81006	Screw, 5 x 20	2
5.	S81054	Screw, 5 x 50	4
6.	S86097AUG6	Handle, Gray	1
7.	S81979	Screw, 5 x 25	2
8.	S81054	Screw, 5 x 50	2
9.	S81005	Screw, 5 x 14	2
10.	S80490	Terminal Block	1
11.	S81006	Screw, 5 x 20	2
12.	S86070AUB.LAB	Cover, Blue	1
13.	S81979	Screw, 5 x 25	2
14.	S80326	Switch, On/Off	1
16.	S83937	Filter	1
17.	S81054	Screw, 5 x 50	9
18.	S81502	Gasket	1
19.	S83383	Cap	2
20.	S82957AUG6	Cover, Gray	1
21.	S82627	Screw, 5 x 40	9
22.	S82627	Screw, 5 x 40	3
23.	S82937AUG6	Motor Base, Gray	1
24.	S81004	Screw, 3 x 19	1
25.	S80450	Terminal Block	1
26.	S83969	Gasket	1
27.	S81006	Screw, 5 x 20	4
28.	S80310	Ring	1
29.	S83901	L-Gasket	1
30.	S80314	Motor	1
31.	S83901	L-Gasket	1
32.	S81006	Screw, 5 x 20	8
33.	S83901	L-Gasket	2
34.	S83451	Motor Seal	2
35.	S82454	Filter	3
36.	S83456	Filter	3
37.	S83519	Base Plug	1
38.	S83108GG6	Base	1



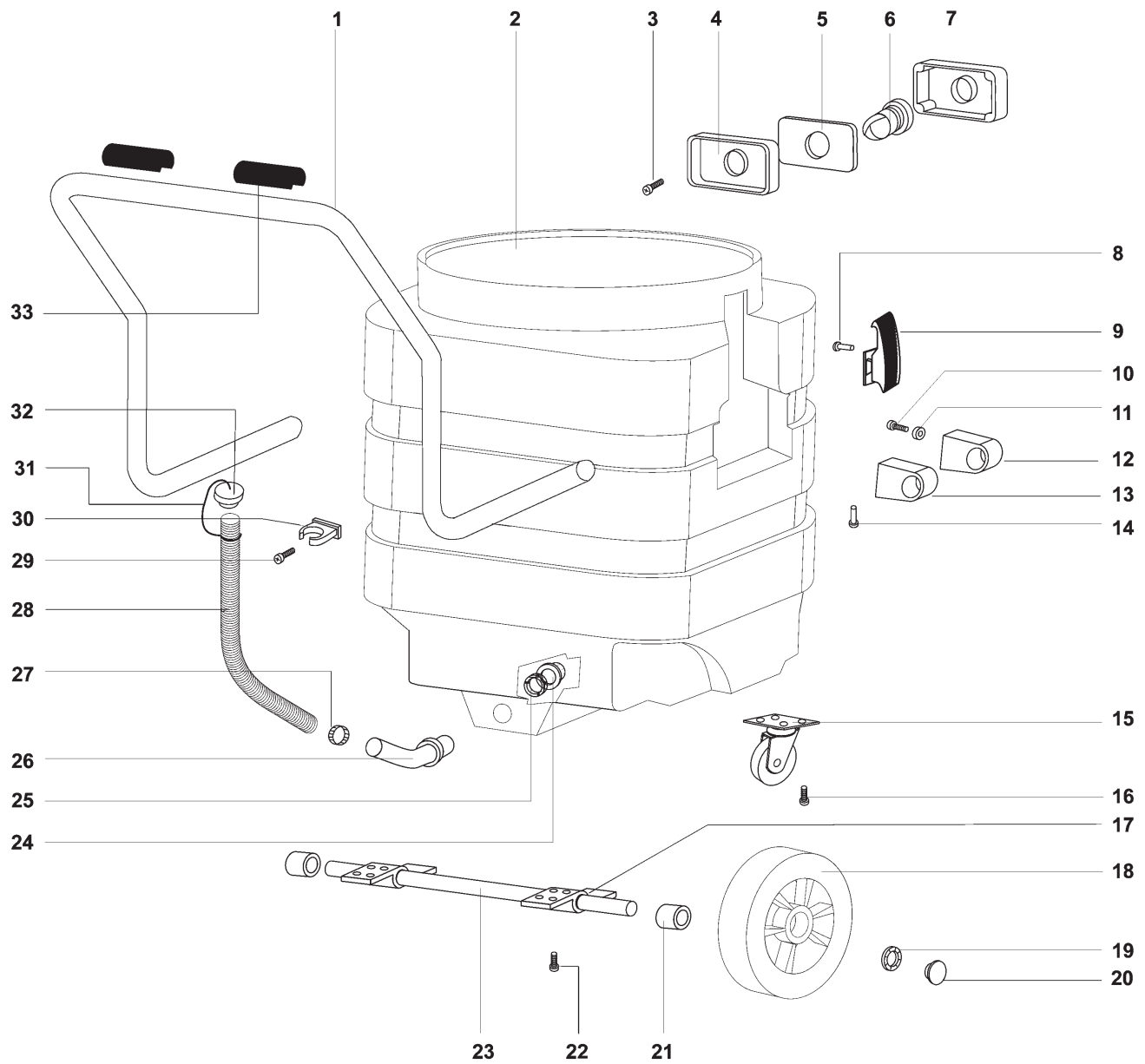
## T716/T720TP FILTER GROUP

No.	Part Num.	Description	Qty.
1.	S83706	Bushing	4
2.	S83724	Screw, 5x25	4
3.	S82823	Body, Filter Support	1
4.	S83117	Strainer	1
5.	S82676	Float	1
6.	S80473	Filter Ring	1
7.	S82845	Filter Bag	1
8.	S82833	Support, Filter	1
9.	S82852	Filter – OPTIONAL	1
10.	S82855	Filter Retainer – OPTIONAL	1



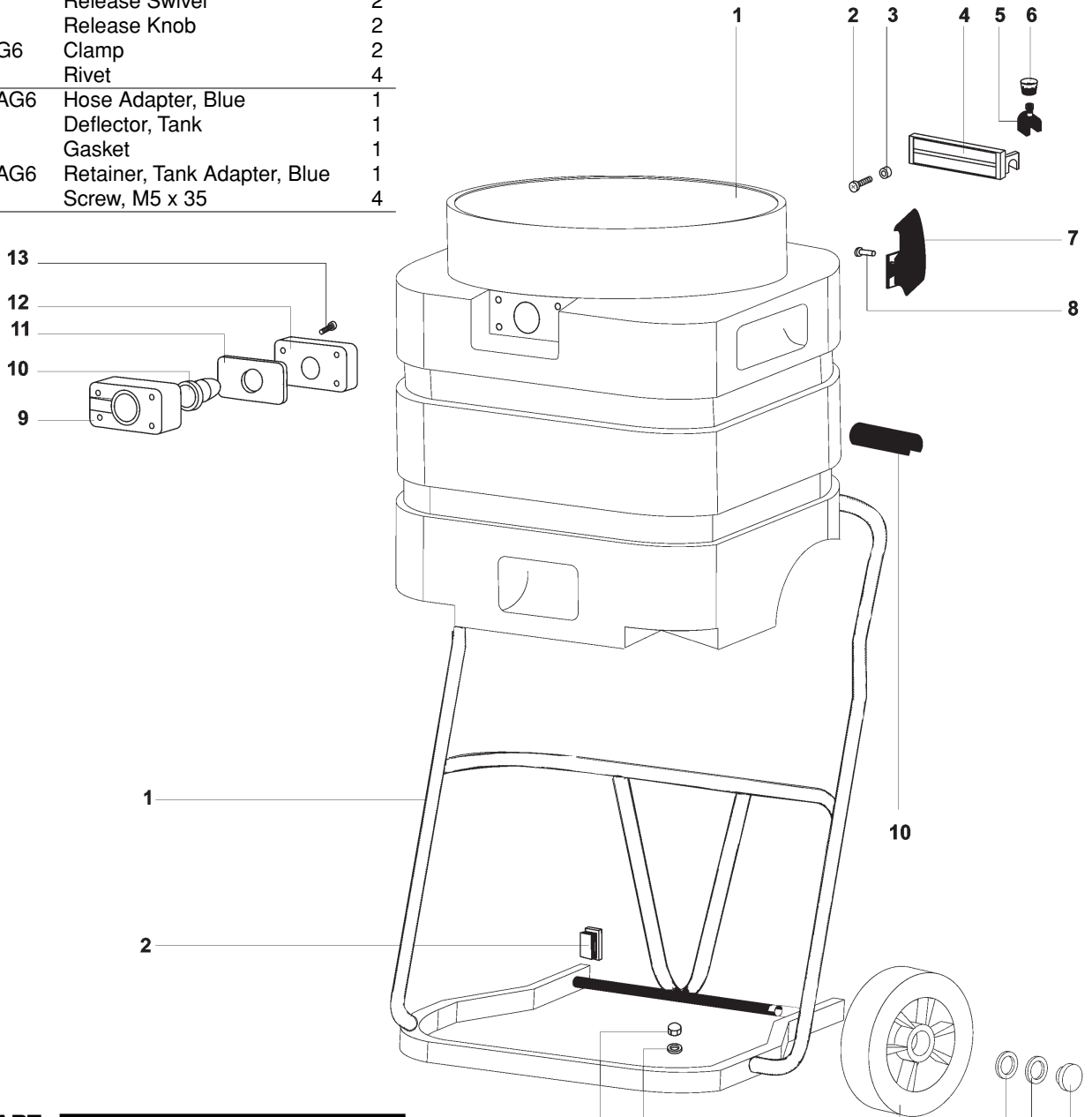
# T716 TANK ASSEMBLY

No.	Part Num.	Description	Qty.	No.	Part Num.	Description	Qty.
1.	S82558V	Handle	1	18.	S80904	Wheel	2
2.	S82637	Tank - 400	1	19.	S82557	Cap, End	2
3.	S82016	Screw, M5x30	4	20.	S83835	Axle Cap	2
4.	S82584AG6	Retainer, Tank, Blue	1	21.	S82607	Spacer, Wheel	2
5.	S82846	Gasket	1	22.	S81006	Screw, M5 x 20	8
6.	S82593	Deflector, Tank	1	23.	S82555	Axle	1
7.	S82652AG6	Adapter, Blue	1	24.	S80834	Nut, Flange, 1-1/4	1
8.	S81300	Rivet, 5 x 24.5	4	25.	S80256	Gasket	1
9.	S81847G6	Clamp	2	26.	S82763	Elbow	1
10.	S81050	Screw, M8 x 15	8	27.	S83308	Clamp	1
11.	S83883	Plastic Washer	8	28.	S82765	Drain Tube	1
12.	S81072	Support, Handle	2	29.	S83156	Screw, M5 x 20	1
13.	S81860	Support	2	30.	S82788	Clip Tube	1
14.	S81302	Rivet, M5 x 19	2	31.	S82812	Tie Rod, Plug	1
15.	S82559	Wheel Caster	2	32.	S82764	Plug, Stopper	1
16.	S82680	Screw, M8 x 15	8	33.	S86250	Handgrip	2
17.	S82556	Support, Axle	2				



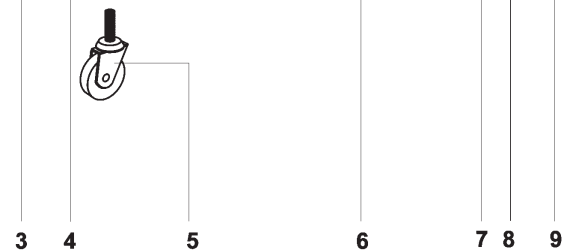
## T720TP TANK ASSEMBLY

No.	Part Num.	Description	Qty.
1.	S82048	Tank – 400	1
2.	S81026	Screw, M5 x 30	4
3.	S83883	Plastic Washer	4
4.	S83028	Hook, Latch	1
5.	S82970	Release Swivel	2
6.	S82969	Release Knob	2
7.	S81847G6	Clamp	2
8.	S81300	Rivet	4
9.	S82652AG6	Hose Adapter, Blue	1
10.	S82593	Deflector, Tank	1
11.	S82846	Gasket	1
12.	S82586AG6	Retainer, Tank Adapter, Blue	1
13.	S81050	Screw, M5 x 35	4

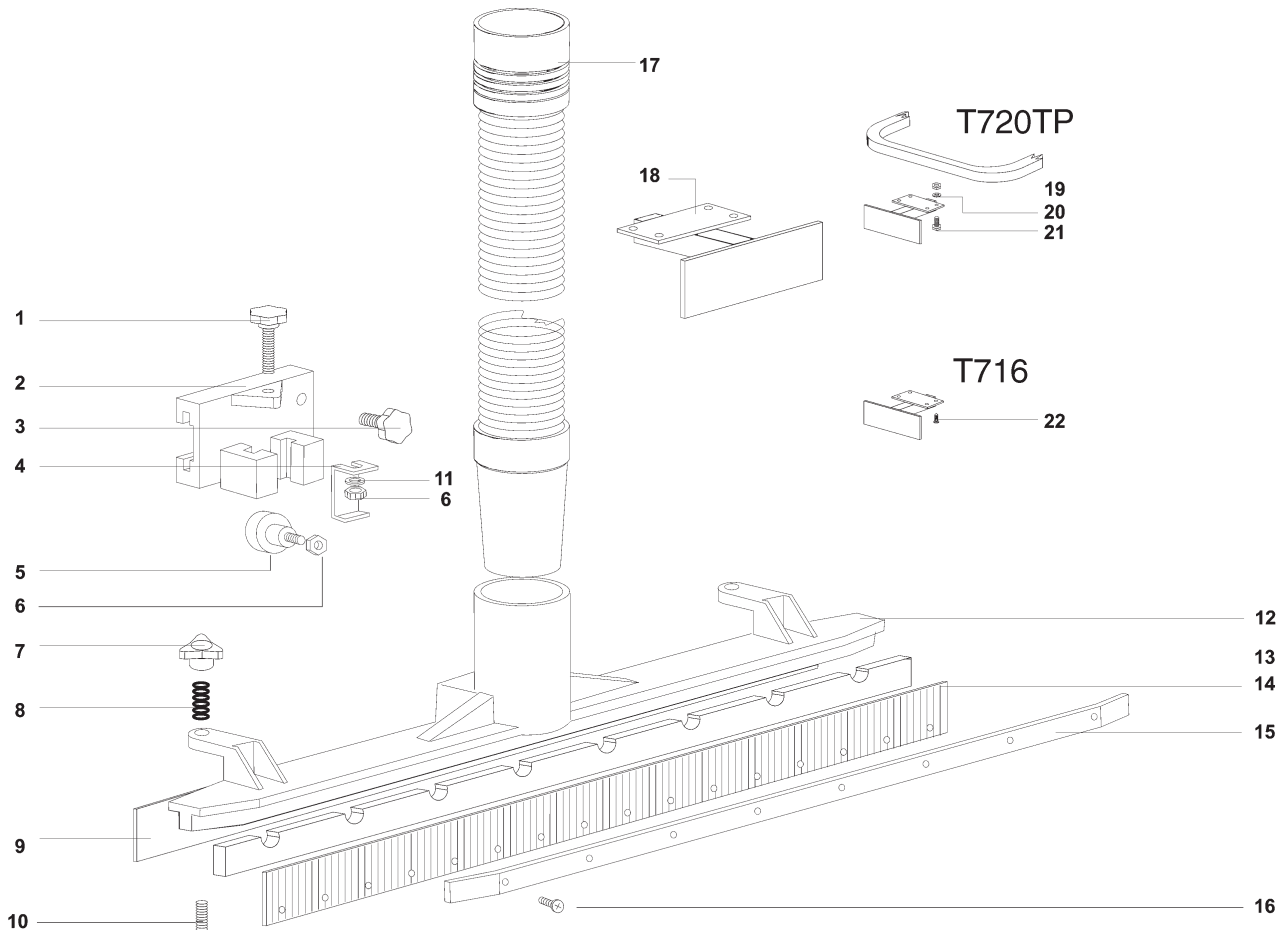


## T720TP CART

No.	Part Num.	Description	Qty.
1.	S82185	Base	1
2.	S80976	Plastic Pad	2
3.	S80478	Nut, M10	2
4.	S81012	Washer, M10	2
5.	S80479	Wheel, Caster	2
6.	S82896	Wheel	2
7.	S82922	Washer	2
8.	S83607	Plastic Retainer	2
9.	S82972	Axle Cap	2
10.	S86250	Hand Grip	2



## TSQ FRONT-MOUNTED SQUEEGEE



No.	Part Num.	Description	Qty.	No.	Part Num.	Description	Qty.
1.	S82164	Handwheel, M8 x 45	1	12.	S82177	Body, Wet Fix Tool	1
2.	S82187	Small Block, Fixed	1	13.	S82198	Spacer	2
3.	S82163	Handwheel, M6 x 25	1	14.	S82196	Front Squeegee	1
4.	S83115	Plate, Adjustment	1	15.	S82197	Bracket, Squeegee	2
5.	S82189	Driver Pivot	1	16.	S81856	Screw, M4 x16	16
6.	S81033	Nut, M8	2	17.	S80010	Hose, Wet Fix Tool	1
7.	S81732	Adjustment Knob	2	18.	S82297	Mounting Bracket	1
8.	S86137	Spring, Ø40	2	19.	S81035	Nut, M5	4
9.	S82245	Rear Squeegee	1	20.	S81036	Washer, M5	4
10.	S86138	Wheel, AIF, Ø40	2	21.	S81755	Screw, M5 x 16	4
11.	S81034	Washer, Plain, M8	1	22.	S81006	Screw, M5 x 20	4

## ACCESSORIES

- TSQ Front Mounted Squeegee, for models T708 and T720TP
- S72741 Paper Bag
- S82860 Filter Bag, Standard for 708 Model
- S82845 Filter Bag, Standard for T716 and T720TP
- S82852\* Filter Cartridge, Paper, Optional for T716 and T720TP
- S76061\* Filter Cartridge, Washable Paper, Optional for T716 and T720P
- S82995\* Filter Cartridge, HEPA Equivalent, Optional for T716 and T720TP
- S82881 Filter Cartridge, HEPA Equivalent, Optional for T708
- S82855 Cartridge Filter Retainer, for T716 and T720TP

*\*also order S82855 Retainer with Filter*

## RECOMMENDED SPARE PARTS

- S8TOEG845 . . . . . Motor Brush
- S80326 . . . . . Switch, On/Off
- S82860 . . . . . Polyester Filter, T708
- S82845 . . . . . Polyester Filter, T716 and T720TP
- S83117 . . . . . Strainer



## **LIMITED WARRANTY**

Windsor Industries, Inc. warrants new machines against defects in material and workmanship under normal use and service to the original purchaser. The warranty period is subject to the conditions stated below.

### **3 YEARS FOR PARTS AND 1 YEAR FOR SERVICE LABOR**

Exceptions: Rotationally molded polyethylene tanks carry a **6 year** parts and 1 year service labor warranty. VERSAMATIC® models carry a 3 year warranty on brush motors, vacuum motors, and belts, and a 1 year service labor warranty. SENSOR® models carry a 2 year warranty on vacuum motors and belts, and a 1 year service labor warranty. Extractor brush motors, pump motors, pc boards and electronics, vac motors (other than VERSAMATIC® and SENSOR®), pumps, and FLEXSOL™ diaphragms, all RADIUS™, all AXCESS™ and TITAN™1 carry a 1 year parts and service labor warranty. Propane equipment has a 1 year parts and service warranty. The Onan® engines have a 3 year manufacturers' warranty. The Honda® engines have a 2 year manufacturers' warranty. The engine warranty is administered through the engine manufacturer and must be repaired at an authorized service center.

Normal wear items including, but not limited to, belts, brushes, capacitors, carbon brushes, casters, clutches, cords, filters, finishes, gaskets, hoses, light bulbs, rectifiers, switches, squeegees, bearings, pulleys, relays, actuating cables, tires and wheels will be warranted for manufacturing defects for 90 days from the purchase date.

The warranty commences on the purchase date by the original end user from an authorized Windsor Agent, subject to proof of purchase. The Machine Registration Card must be completed and returned immediately at the time of purchase. If proof of purchase cannot be identified, the warranty start date is 90 days after date of sale to an authorized Windsor distributor. Parts replaced or repaired under warranty are guaranteed for the remainder of the original warranty period.

### **90 DAY WARRANTY EXTENSION AVAILABLE**

Upon receipt of the Machine Registration Card, Windsor will extend the warranty period an additional 90 days from the purchase date. Does not include items warranted 90 days for manufacturing defects.

### **STATED WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED.**

Any statutory implied warranties, including any warranty of merchantability or fitness for a particular purpose, are expressly limited to the duration of this written warranty. Windsor will not be liable for any other damages, including but not limited to indirect or special consequential damages arising out of or in connection with the furnishing; performance, use or inability to use the machine. This remedy shall be the exclusive remedy of the buyer.

This warranty shall not apply to: 1.damage in transit; 2.misuse or abuse(including the use of incompatible or corrosive chemicals or overloading of capacity); 3. failure due to lack of proper maintenance and care (including cleaning); 4.any design alterations performed by an organization not authorized or specified by Windsor; 5.batteries and chargers. 6. high pressure washing. 7.electrical components exposed to moisture.

If difficulty develops during the warranty period, contact the authorized Windsor Agent from whom the product was purchased. Windsor, Inc. may elect to require the return of components to validate a claim. Any defective part to be returned must be shipped freight pre-paid to an authorized Windsor Distributor/Service Center or to the Windsor factory.

### **USE OF PARTS NOT APPROVED BY WINDSOR, INC. WILL VOID ALL WARRANTIES.**

This warranty is valid only for all products sold after July 1, 1995. A product sold before that date shall be covered by the limited Warranty in effect at the date of sale to the original purchaser.



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