

# TURBO EXTRACTORS



## INSTRUCTION MANUAL

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▪ OPERATION

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▪ CARE

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▪ SERVICE

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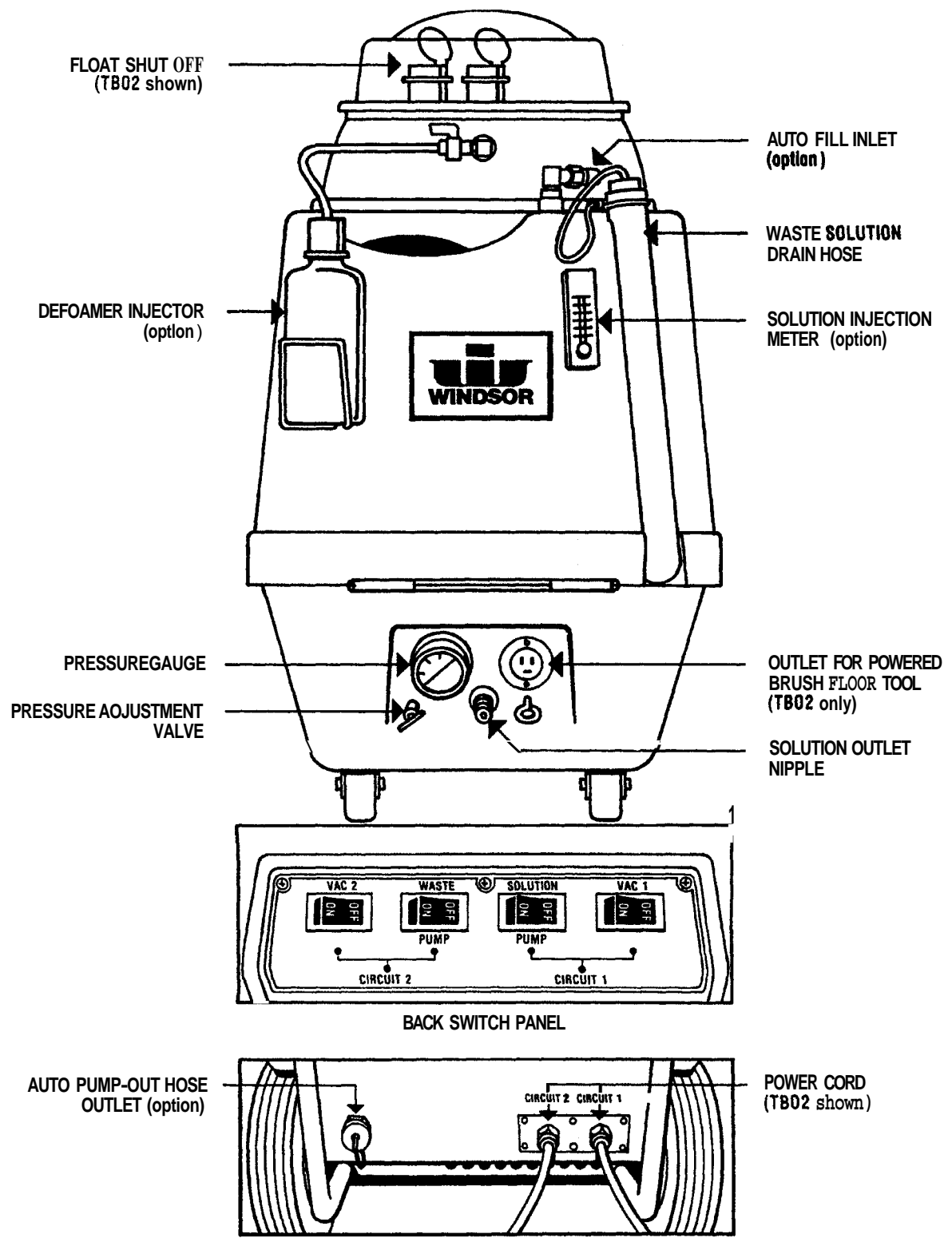
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## Models TB01 & TB02 (Twin Vac)



WINDSOR INDUSTRIES, INC. 1351 W. STANFORD AVE., ENGLEWOOD, CO 80110 • 303/ 762-1800 • TWX 910-931-0565

# TURBO EXTRACTORS



**INSPECTION**

Carefully unpack and inspect your Extractor for shipping damage. Each unit is operated and thoroughly inspected before shipment, and any damage is the responsibility of the delivering carrier, who should be notified immediately.

**ELECTRICAL**

The TURBO ONE (single vac machine) is designed to operate on a standard 20 amp., 115 volt 60 hz household circuit\*.

**NOTE:** The TURBO TWIN (twin vac machine) requires (2) 20 amp., 115 volt circuits for maximum performance.

\*230 volt 50 hz models available.

**GROUNDING INSTRUCTIONS**

To protect the operator from electrical shock, this machine must be grounded while in use. The machine is equipped with an approved three-conductor power cord and three-prong grounding type plug to fit the proper grounding type receptacle.

**WARNING:** To avoid electrical shock, use indoors only.

**EXTENSION CORDS**

If an extension cord is used, the wire size must be at least one size larger than the power cord from the machine and should be limited to 50 feet in length. Extension cord must be three-wire rounded. TB01 is equipped with a 25 ft. 82-3 power cable. TB02 is equipped with (2) 25 ft. 12-3 power cables.

**PREPARING THE TURBO ONE AND TWIN**

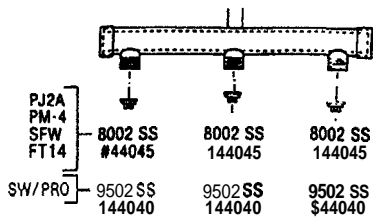
Using a clean bucket, fill solution tank with hot water. The maximum capacity of the TURBO is 17 gallon solution and 15 gallon recovery. Mix in a non-foaming concentrate for use in hot water extraction machines at the proportions as noted on the container for various carpet soil conditions. Liquid detergents are preferred. However, when using a powder cleaner, premix thoroughly in a clean container with a gallon of hot water before adding to solution tank. **UNDISSOLVED POWDER** will cause premature wear of pump piston cups.

**CAUTION:** Do not put defoamer, solvents, spotter or prespray chemicals in the solution tank.

**CAUTION:** When operating the Turbo at maximum pressure (200 PSI), use only floor tools equipped with metal manifolds and solution hoses designed to operate at pressures of 200 PSI or higher.

On floor tools not equipped to operate at above pressures, lower the pressure of the Turbo as required (See Pump Pressure Adjustment).

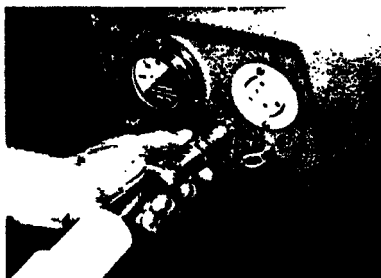
**NOTE:** Correct jet size is very important to the operation of this machine. When operating at maximum PSI, use stainless steel jets on floor tools listed at the top of next column (equipped with metal manifolds as noted above).



**PRIMING PUMP**

If the extractor has been in storage or if the pump has been run dry, it will be necessary to prime the pump before starting the cleaning process.

1. Connect prime adapter to outlet nipple on machine.
2. Connect vac hose from dome to prime adapter.
3. Switch on vac motor and pump and run for 5 to 10 seconds. Disconnect primer adapter from outlet nipple and check pressure gauge for PSI reading (200 PSI) indicating pump has primed.



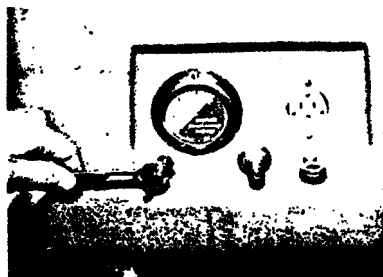
**PUMP PRESSURE ADJUSTMENT**

**CAUTION:** The maximum pump operating pressure of 200 PSI is preset at the factory. Do not operate the machine at higher pressures.

When using hand tools for cleaning upholstery, stairs and edging, the suggested pressure is 20 to 35 PSI. Higher pressure (35 to 200 PSI) is recommended for carpet cleaning.

The pressure is adjustable (0 to 200 PSI) by means of the pressure relief valve.

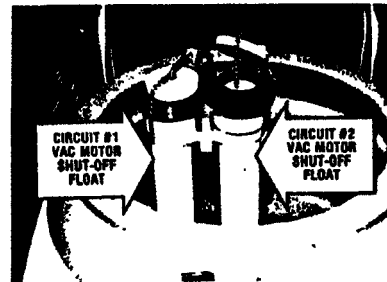
To adjust pressure — Loosen lock nut — turn handle clockwise to increase pressure and counter clockwise to decrease pressure. Retighten nut after adjusting pressure.



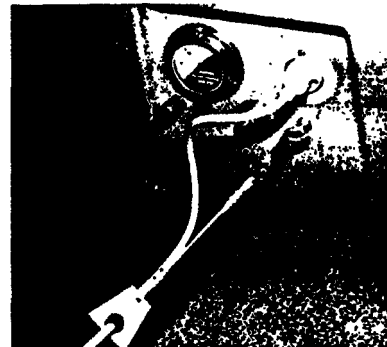
**REQUIRED CIRCUITS:**

The Turbo One is designed to operate on a standard 20 amp circuit — the Turbo

Twin requires (2) 20 amp circuits. However the Twin can be operated on a single 20 amp circuit by connecting circuit 1 power cord to outlet and "locking down" #2 vac float shut-off. The Twin can also be operated on (2) 15 amp circuits (should 20 amp not be available). To do so: Connect each power cord to separate 15 amp circuit, "lock down" #1 vac float shut-off. Switch on pump (only) in circuit #1 and vac in circuit #2.



**NOTE:** The Turbo Twin (only) is equipped with a receptacle for connecting a powered brush floor tool (Pilejogger or Pilemaster). A strain relief kit with instructions for attaching to floor tool power cord is included with Turbo Twin machine.



**CLEANING PROCESS**

Determine precisely what areas you are going to clean. Note problem areas in the carpet or tack strip. Look for loose carpet, heavily damaged areas, discolored stains, or grease spots that will require prespotting. Note the carpet type. Check the availability of hot water, drains, suitable electrical outlets. If the carpet is loose or torn, have it repaired before you start to clean it.

Plan your cleaning route, working from the most remote area toward the exit. Try not to travel over the cleaned areas for water or to dump waste. Furniture should be moved out away from walls before cleaning. If replaced on damp carpet, use foil or plastic protectors under the legs to prevent possible carpet staining. If possible, open all windows and doors to speed carpet drying.

Plug power cable from machine into properly grounded wall outlet.

Turn vacuum motor switch on and off to make sure you have electric power at machine.

Connect vac hose to hose inlet on dome. Connect solution hose to outlet nipple on machine by sliding back knurled collar on female coupler and installing coupler over nipple. Release collar to lock them together. Make sure coupler is secured to avoid leaks.

Start in one corner, depress solution valve lever fully and move backward at a steady pace: 25 to 30 feet per minute, cleaning a path at least half the length of the room. Release solution valve lever approximately 6" before reaching the end of the pass to insure that cleaning solution is extracted from carpet.

Make the next cleaning pass beside the first, overlapping about 1 inch. Continue cleaning until entire width of area has been cleaned.

Reverse direction and clean balance of room.

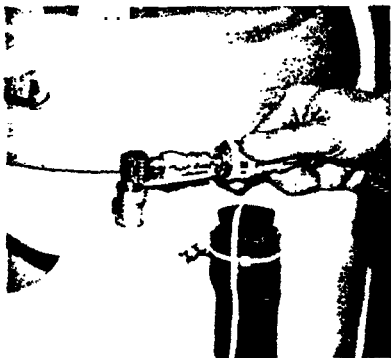
On heavily soiled carpets or on areas of high foot traffic, it may be necessary to use a prespray or traffic lane cleaner applied with a separate sprayer. Do not add presprays to the machine solution tank. If you use a spotter, follow label directions exactly. Remove the spotter with the floor tool when done. Never leave any spotter in a carpet — it may bleach or brown it permanently.

Shag carpets may require several passes from different directions, but be careful not to oversaturate. In these cases, make several vacuum passes without spray to extract as much moisture as possible.

**CAUTION:** As you work, check to see if there is foam buildup in the recovery tank. If there is, remove the vacuum hose from the floor tool and add a little defoaming solution to the hose while the vacuum is running. Defoamer can also be added to the recovery tank, but never to the solution tank.

**OPERATING TURBOS WITH (OPTIONAL) AUTO FILL/PUMP-OUT AND DEFOAMER INJECTOR.**

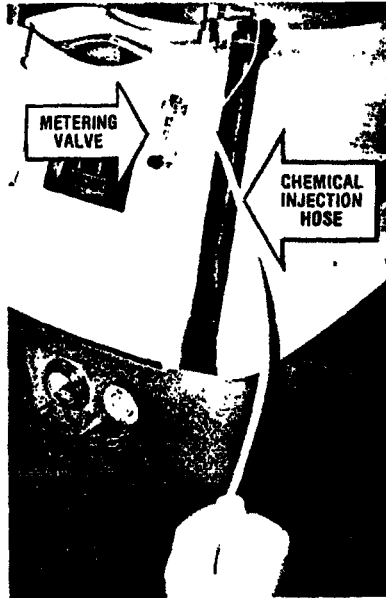
1. Attach auto fill hose (12 ft. nylonbraided hose) to inlet nipple.



The other end of the hose has a standard garden hose connector. Should additional hose be needed to reach water source a standard garden hose can

be used. A faucet adapter kit is included to attach hose to various threaded sink faucets.

2. Place chemical injector hose in detergent bottle. Turn on water source and adjust the floating ball on the metering valve to required ounce of detergent per gallon of water.



3. Connect standard 5/8 I.D. garden hose to pump-out fitting. Secure discharge end of hose to waste water sink or floor drain to prevent dirty water being spilled outside the dumping area.

**CAUTION:** KEEP DRAIN CAP secured to pump-out fitting when discharge hose is disconnected.

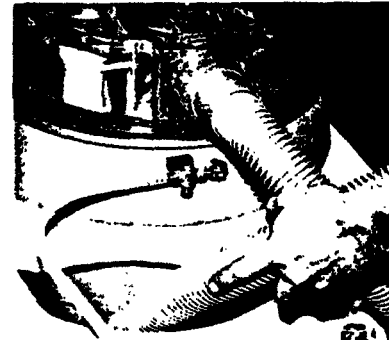


4. The defoamer injector can be used should excessive sudsing occur during cleaning operation. Fill bottle with defoaming agent. With dome in place and vacuum switched on, open petcock valve to allow just enough defoamer to be siphoned into waste water tank to control sudsing.



**CLEANUP AND STORAGE**

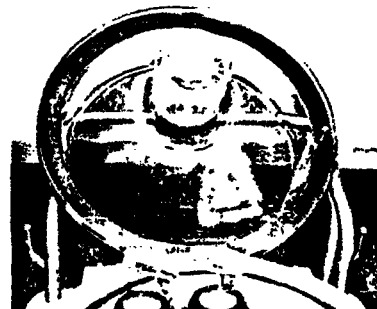
Empty solution tank by detaching vacuum hose at floor tool and placing in solution tank with vac motor switched on.



Empty recovery tank directly into floor drain or bucket for disposal. Flush inside of both tanks with clean water.



Clean exterior of machine with mild soap and warm water. Wipe out recovery dome and store upside down on recovery tank to permit drying of inside of tank.



Inspect screens inside of recovery and solution tanks. Remove and clean with soft bristled brush and hot soapy water.

**PERIODIC MAINTENANCE**

At the end of every working day, flush entire pumping system, including floor tool, hand tool, etc. with 1 to 3 gallons of clean hot water.

NOTE: For infrequent use or long periods of storage, flush machine with a neutralizing solution ( 1 qt. white vinegar mixed with 2 gallons hot water) and drain system thoroughly. Solution can be removed from pump and internal plumbing by using the prime adapter. Attach prime adapter to outlet nipple. Connect vac hose from dome to adapter and switch on vac motor. Run vac motor for 2 or 3 minutes.

Lubricate quick disconnect hose fitting with silicone lubricant. Do not use petroleum based lubricants as they will cause damage to the 'O' rings.

Check spray nozzles frequently. If they become clogged, remove them, wash thoroughly and blow dry. Do not use pins, wire, etc. to clean nozzles as this could destroy spray pattern.

Periodically inspect hoses, electrical cables, filters and connections on your machine. Frayed or cracked hoses should be repaired or replaced to eliminate vacuum or solution pressure loss. Because the electrical cable will lie on wet carpet at times, the cable must be well insulated and cable connector screws kept tight. If the cable insulation is broken or frayed, repair or replace it immediately. Don't take chances with an electrical fire or shock.

Lubricate wheel bearings monthly with 3 or 4 drops of #10 oil.



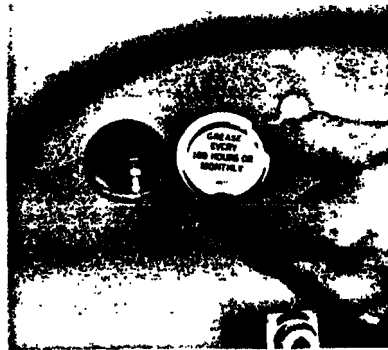
**PUMP LUBRICATION**

Remove left rear wheel to access plug. Remove access plug. Lubricate cam bearing (grease fitting) with moly-lithium No. 2 grease (wheel bearing grease) every 100 hours of operation or monthly (whichever is first).

**CAUTION:** Use a push-type, hand-operated grease gun if available. If using a lever-operated grease gun — work lever VERY slowly to prevent damaging bearing seal.

Very little grease is required. DO NOT use an air-powered grease gun, it develops too much pressure and will blow out the bearing grease seals.

IMPORTANT: Pump cavity should always be clear of excess grease for proper heat dissipation. Wipe out grease — DO NOT wash out.

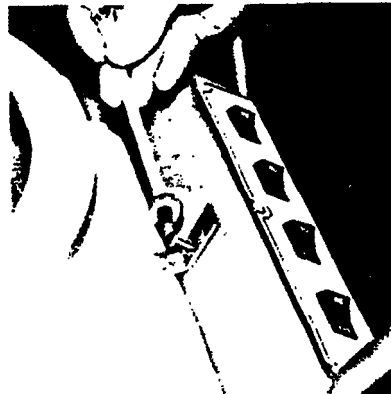


**SERVICING TB01 AND TB02**

**CAUTION:** Do not make repairs or adjustments without disconnecting machine from electrical source.

**TANK REMOVAL**

1. Remove tank hold-down clip.

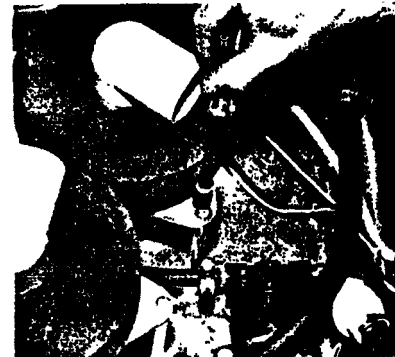


2. Tilt tank forward to expose solution and vac hose connections on bottom of tank. Disconnect hoses from tank. Remove (2) hinge pins and lay tank aside.

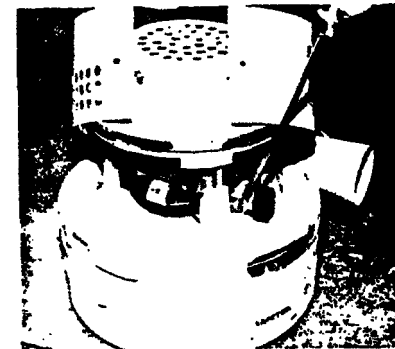


**VAC MOTOR**

1. Disconnect wires, remove screws holding vac motor(s) to base plate.



2. To inspect brushes, remove metal wraparound from the vac motor (one screw). Remove brush hold-downs. New brush length is 1". Brushes should be replaced when they reach 3/8" length, or after 750 operating hours.



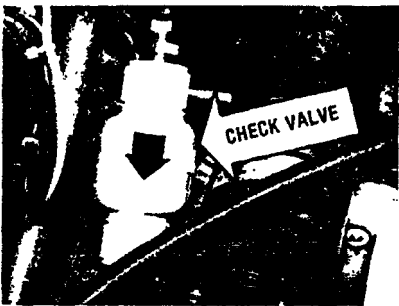
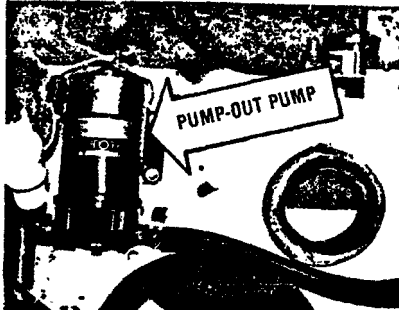
3. Inspect vacuum intake opening for lint. If there are large accumulations, the fan section should be disassembled and cleaned.

**NOTE:** Vacuum motors can usually be repaired, but such repairs should always be done by a qualified vacuum repair shop.

**PUMP-OUT PUMP (option)**

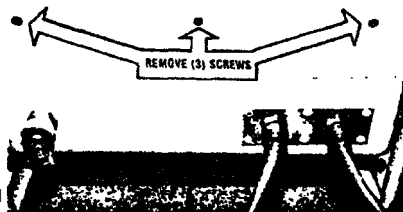
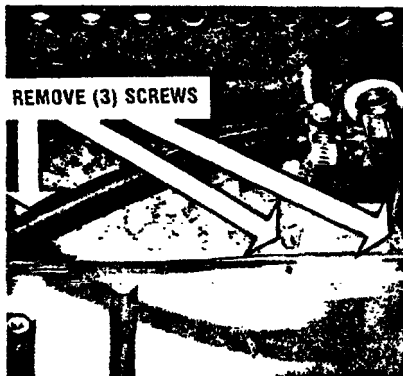
1. Disconnect wiring, remove (4) screws holding pump to base plate. Disconnect hose from pump head. Refer to pump-out parts list for replacement parts.

2. Clean and flush soap residue and lint from check valve. NOTE: When re-installing check valve, make sure arrow on valve is pointed towards pump inlet.

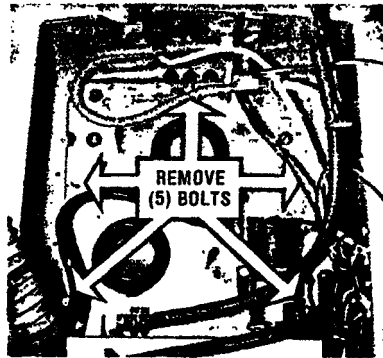


**SOLUTION PUMP**

1. Remove solution and recovery tank.
2. Remove vac motor(s).
3. Remove pump-out pump.
4. Remove pump and motor shroud by removing (6) screws—(3) holding front of shroud to base plate and (3) located at rear of lower housing.



5. To remove base plate (with pump and motor attached) remove (6) bolts — (5) located inside of base housing and (1) located at rear underside of housing,

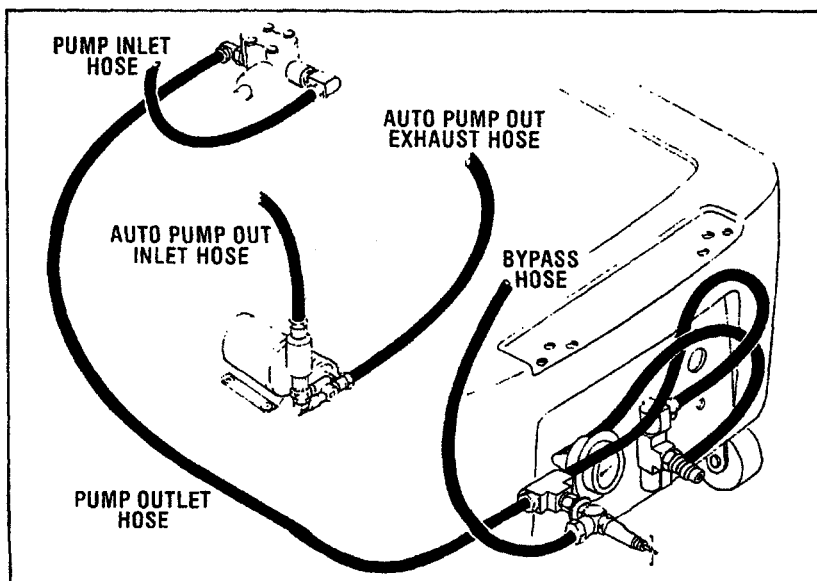
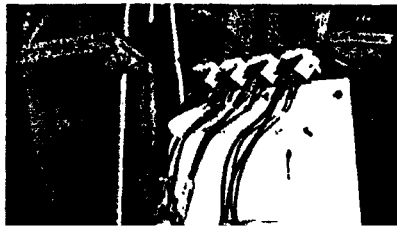
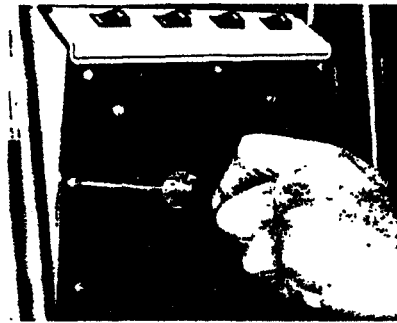


6. To remove pump from motor — remove (2) set screws holding pump collar to motor shaft. Refer to manufacturer's service manual for cup replacement and service.



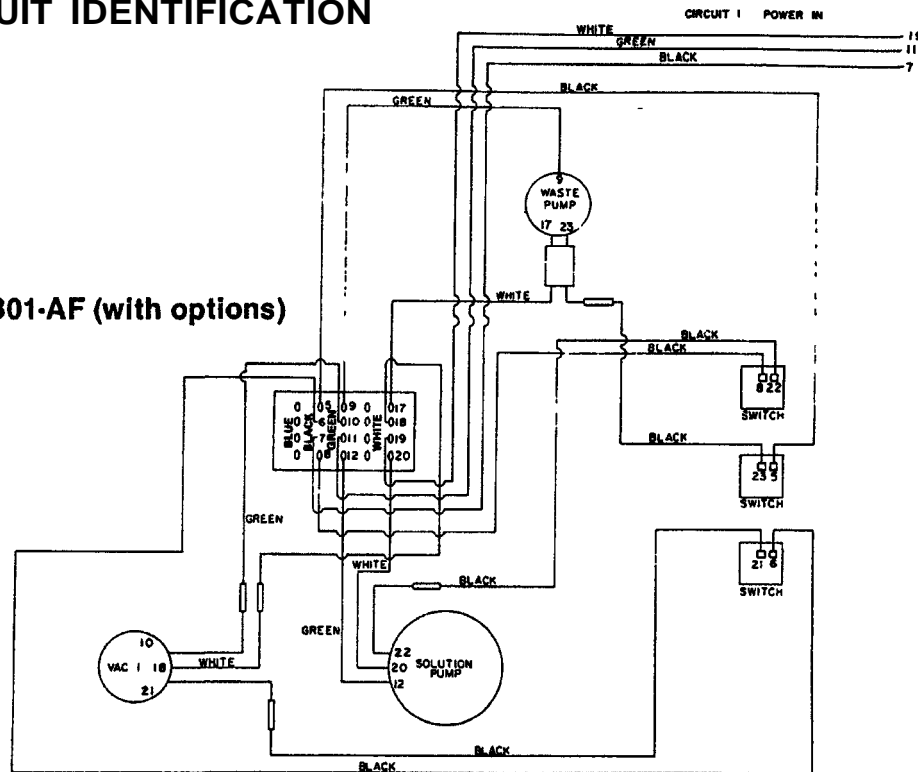
**SWITCH CONTROL PANEL/MUFFLER REPLACEMENT**

1. Remove screws holding rear panel. Lift out panel to access switches and muffler. Replace switch(es) as required. Inspect acoustical foam in muffler for lint build-up or deterioration — replace muffler assembly as required.

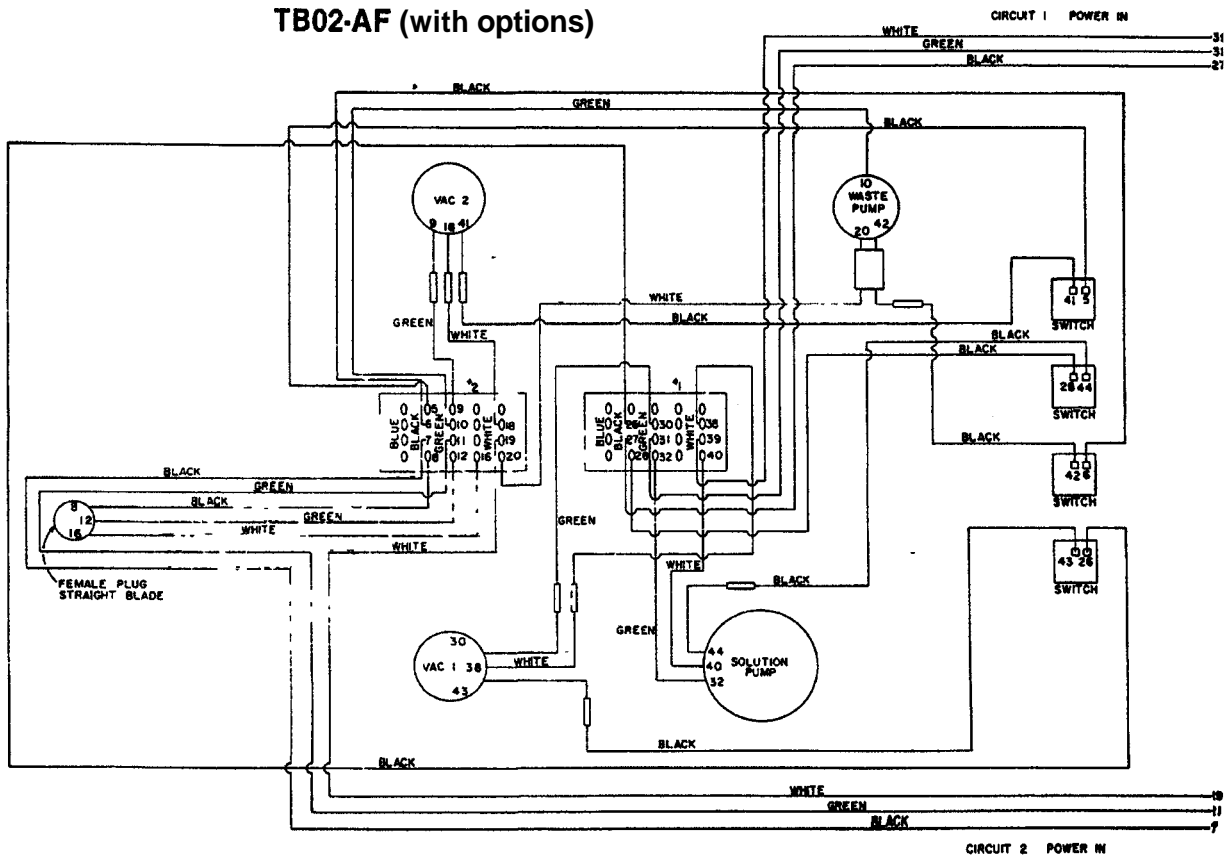


### ELECTRICAL CIRCUIT IDENTIFICATION

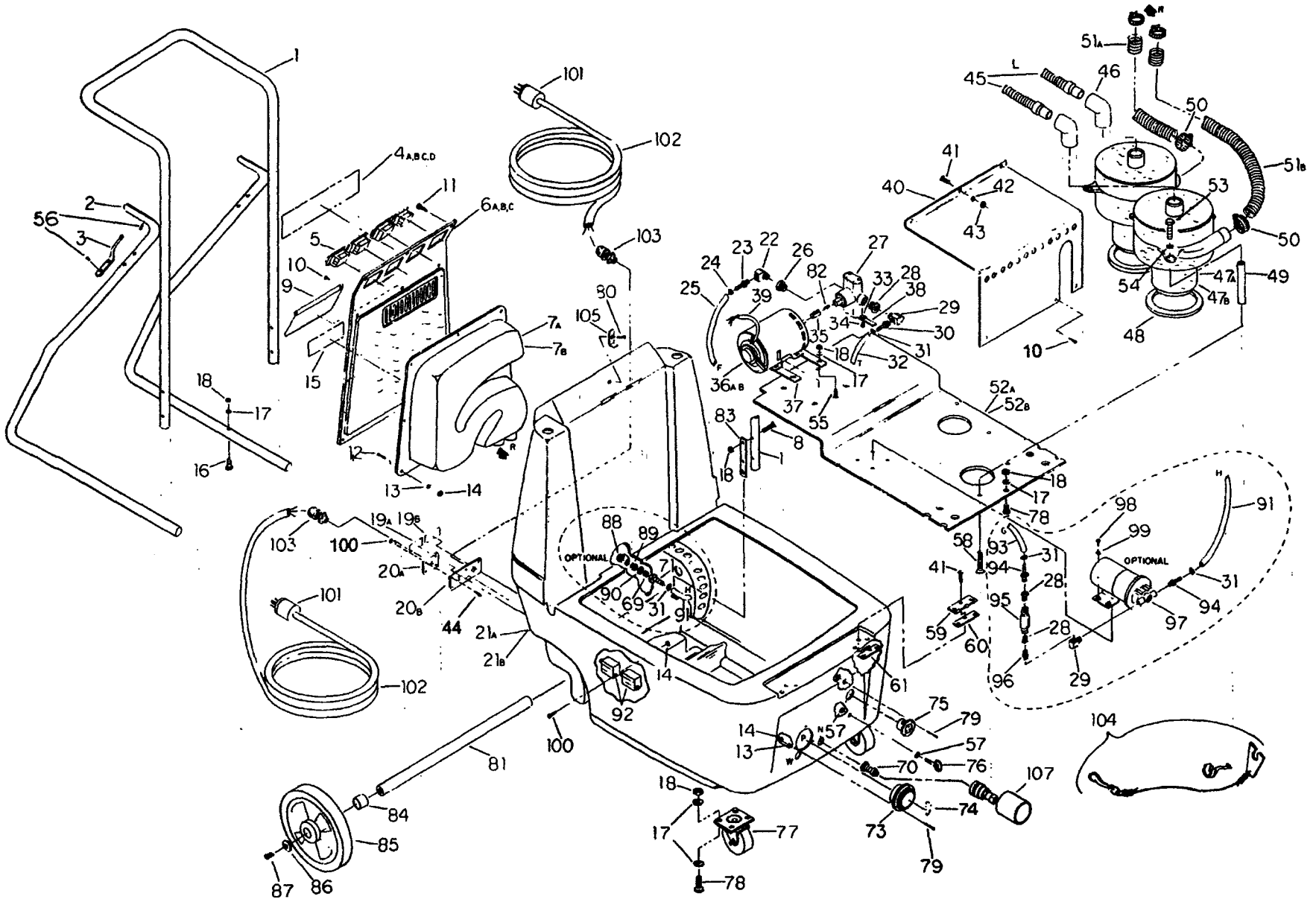
TB01-AF (with options)



TB02-AF (with options)



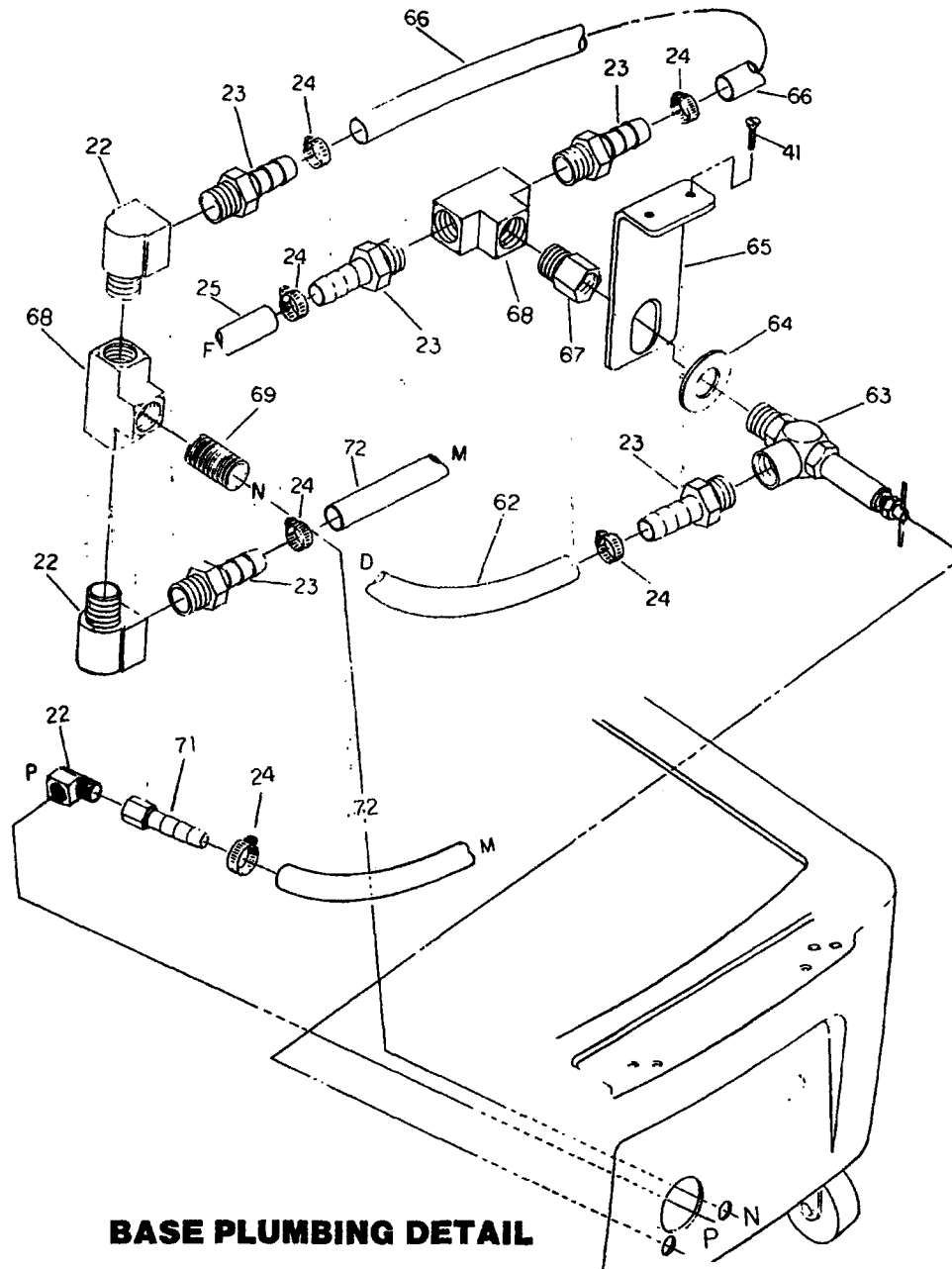
# TBO BASE ASSEMBLY



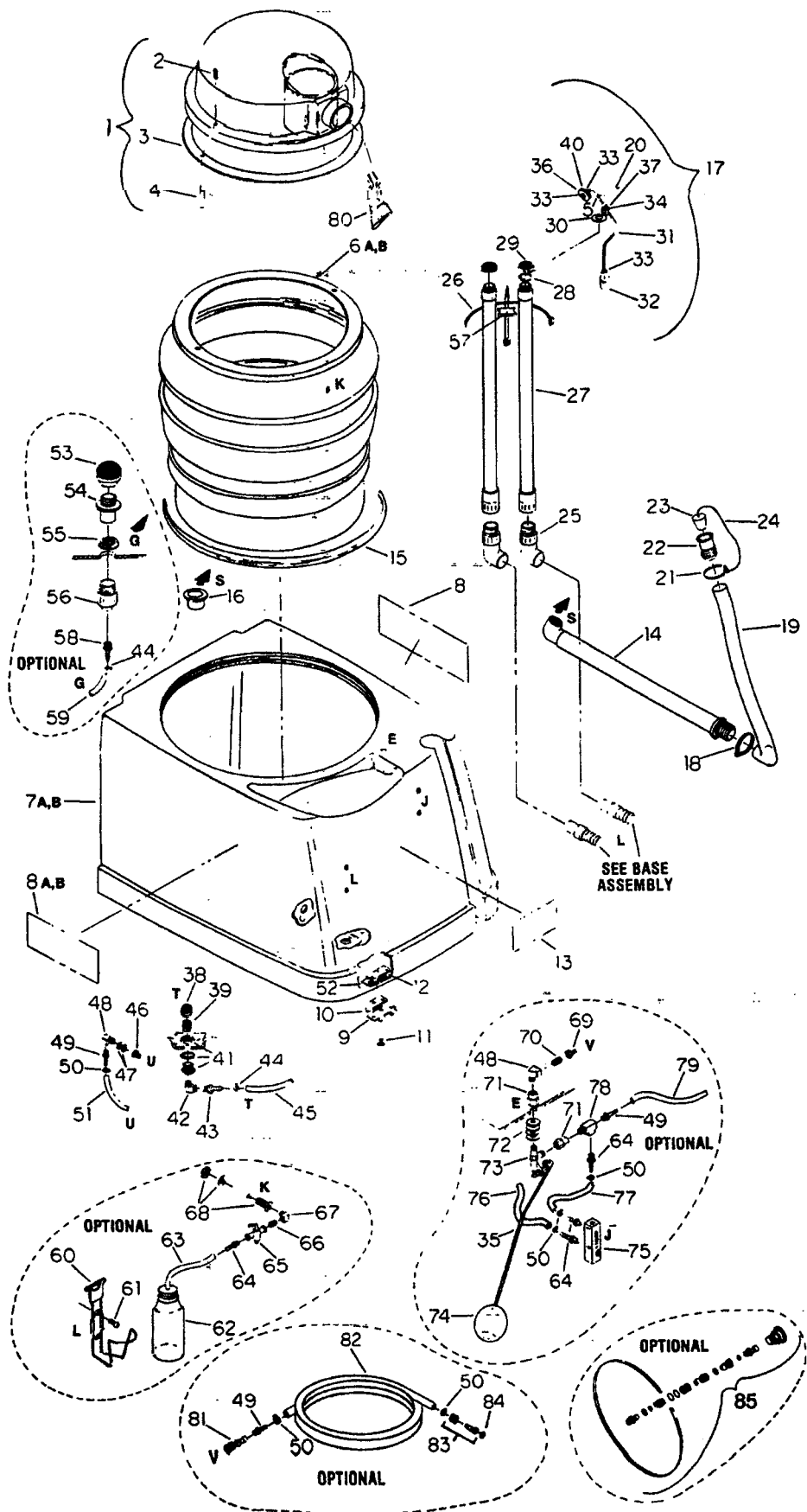


### TBO BASE ASSEMBLY

KEY	PART NO.	DESCRIPTION	KEY	PART NO.	DESCRIPTION
1	38068	Handle, Turbo Upper Main	50	20019	Hoseclamp, 1 7/8" Dia Hose
2	38069	Handle, TBO Lower Skid	51A	39180	Hose, Turbo Exhaust Long, 34"
3	41014	Hook, Cord	51B	39179	Hose, Turbo Exhaust Short, 19"
4A	50194	Label, TBO1 Control Panel	52A	82093	Plate, TBO1 Vac/Pump Replacement
4B	50195	Label, TBO1-AF Control Panel	52B	82094	Plate, TBO2 Vac/Pump Replacement
4C	50196	Label, TBO2 Control Panel	53	70015	Screw, 1/4-20 x 3/4" HHMS
4D	50197	Label, TBO2-AF Control Panel	54	87025	Washer, 1/4 Ext. Tooth Lock
5	72008	Switch, Rocker	55	70168	Screw, 1/4-20 x 3/4" FHMS
6A	82095	Plate, TBO1 Muffler Replacement	56	67004	Rivet, 3/16" O.D. x 1/8" - 1/4
6B	82096	Plate, TBO1-AF/TBO2 Muffler Replcmnt	57	57065	Nut, 1/4-20 Hex Jam
6C	82097	Plate, TBO2-AF Muffler Replacement	58	70166	Screw, 1/4-20 x 1/2" FHMS
7A	54061	Muffler, TBO1 Replacement	59	41012	Hinge, 3 x 3 Butt Plate
7B	54062	Muffler, TBO2 Replacement	60	82090	Plate, Turbo Hinge Spacer
8	70165	Screw, 1/4-20 x 1.75" FHMS	61	82089	Plate, Turbo Hinge Nut
9	82088	Plate, TBO Exh Deflector PTD	62	39178	Hose, TBO Pump Bypass
10	70024	Screw #8 x 1/2" SHH	63	84027	Valve, 0-300 PSI Needle
11	70114	Screw #10 x 3/4" Polyfast	64	87010	Washer 9/16" I.D. x 1.25" O.D.
12	70163	Screw, 6-32 x 5/8" FHMS	65	14175	Bracket, TBO Valve Mounting
13	87026	Washer, #6 Ext. Tooth Lock	66	39177	Hose, Turbo Solution Outlet
14	57012	Nut, 6-32 Hex	67	04008	Adapter, 1/4" MPT x 1/4" FPT
15	50198	Label, Combined Warning & Caution	68	78027	Tee, 1/4" FPT
16	70022	Screw, 1/4-20 x 2" HHMS	69	56014	Nipple, 1/4" Close
17	87013	Washer, 1/4" I.D. Flat	70	56012	Nipple, 1/4" FPT Quick Disc.
18	57047	Nut, 1/4-20 Lock	71	40015	Hosebarb, 1/4 FPT x 3/8" HB
19A	50199	Label, Circuit 1	72	39175	Hose, Pressure Gauge 17.5"
19B	50202	Label, Circuit 2	73	36024	Gauge, 0-300 Pressure
20A	82079	Plate, TBO1 Strain Relief	74	50170	Label, Caution Max Pump
20B	82080	Plate, TBO2 Strain Relief	75	26025	Receptacle (TBO2 Option)
21A	08026	Base, TBO Machined	76	70004	Eye Bolt (TBO2 Option)
21B	08029	Base, TBO2 Machined	77	18015	Caster, 4" Dia. Swivel
22	31016	Elbow, 1/4" MPT x 1/4" FPT	78	70018	Screw, 1/4-20 x 1" HHMS
23	40014	Hosebarb, 1/4" MPT x 3/8" HB	79	70016	Screw, 6-32 x 3/4" PHMS
24	20018	Clamp, 1/2 Dia. Hose	80	70171	Screw, 10-24 x 1/2" HHMS
25	39173	Hose, Pump Outlet 37 75"	81	03022	Axle, Turbo Pt
26	14075	Bushing, 1/2" MPT x 1/4" FPT Hex	82	48011	Key Replacement
27	65047	Pump, Hypro Twin Piston	83	14185	Bracket, TBO Axle Handle
28	14074	Bushing, 1/2" MPT x 3/8" FPT Hex	84	73131	Spacer, TBO Axle/Wheel
29	31026	Elbow, 3/8" MPT x 3/8" FPT	85	89030	Wheel, TBO Main Transport
30	40013	Hosebarb, 3/8" MPT x 1/2" HB	86	87064	Washer, TBO Axle
31	20018	Clamp, 3/4" Dia. Hose	87	70166	Screw, 1/4-20 x 1/2" FHMS
32	39174	Hose, Turbo Pump Inlet 23"	88	27194	Cap Asm., TB-AF Pump Out
33	14168	Bracket, Pump Stabilizing	89	34028	Fitting, 78 GH-12-4 Hose
34	14169	Bumper, Pump Bracket	90	87033	Washer, 9/16" I.D. x 1.25" O.D. x .043
35	14154	Bushing, Hypro Twin Pump	91	39210	Hose, TB-AF Pump Out Outlet 35"
36A	53093	Motor, 115 V G.E. 1/3 HP	92	14017	Block, 115 V Terminal
36B	53109	Motor, 230 V G.E. 1/3 HP	93	39209	Hose, TB-AF Pump Out Inlet 22"
37	27183	Cushion, G.E. Motor Mounting	94	40010	Hosebarb, 3/8" Male x 3/8" HB
38	27182	Cushion, Hypro Pump	95	84036	Valve, 1/2" FPT Check
39	88153	Wire Lead Asm., Turbo Pump Motor	96	56013	Nipple, 3/8" MPT Hex
40	32012	Enclosure, TBO Pump & Motor	97	85011	Pump, FLOJET 2000-549 MPU 115V
41	70068	Screw, 10-32 x 3/4" FHMS	98	70047	Screw, #8 x 3/4" HHST
42	87016	Washer, #10 Ext. Tooth Lock	99	87018	Washer, 3/16" I.D. x 9/16" O.D. #10 Flat
43	57014	Nut, 10-32 Hex	100	70164	Screw, 6-32 x 1" FHMS PLTD
44	57030	Nut, 10-32 Lock w/NY ins. Ptd.	101	26006	Cord End, 115 V 3 wire
45	39194	Hose Asm., TBO Tank to Vac	102	23054	Cord Asm., 25' 12/3 Black
46	31038	Elbow, Machined	103	73134	Strain Relief, 12/3 LIQ TITE
47A	53101	Motor Asm., 115 V 3 Stage Turbo Vac w/Foam	104	73137	Strain Relief Asm., TBO2 Cord Only
47B	53108	Motor Asm., 230 V 3 Stage Turbo Vac w/Foam	105	51034	Lock, TBO/TB2 Tank
48	35055	Gasket, 1/2" Wide x 1/4" Thick x 1.166 fl.	106	42009	Insert, 10-24
49	73130	Spacer, Turbo Vacuum Motor	107	04044	Adapter, Hypro Pump Priming
			108	70025	Screw, 10-32 Hex



**BASE PLUMBING DETAIL**



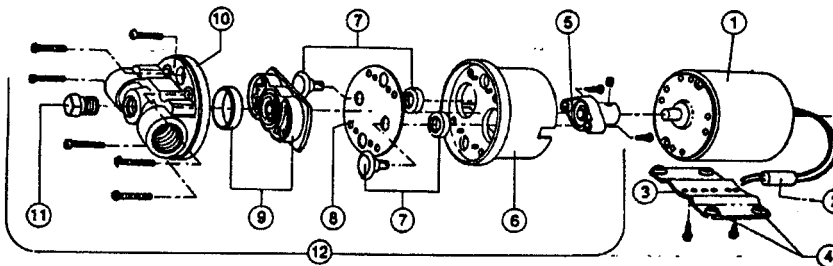
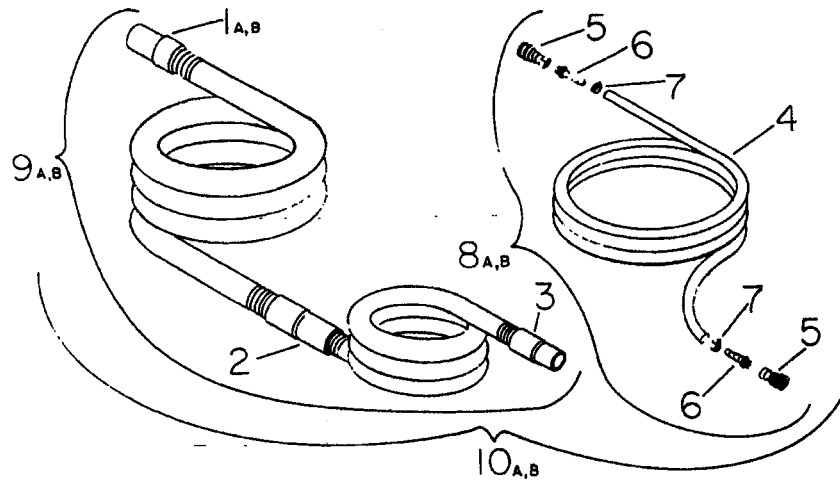
**TBO TANK W/OPTIONS**

KEY	PART NO.	DESCRIPTION
1	28023	Dome Asm., TBO and TBZ (Includes Nos. 2, 3, 4, 5)
2	70053	Screw, 10-32 x 1/2" RHMS SS
3	99816	Foam Gasket 1" x 1/4" 1.5 ADH (Requires 4 ft.)
4	73132	Stud, Turbo Dome
5	22028	Coupler, Bead Chain
6A	75062	Tank TBO Recovery
6B	75069	Tank TBO2 Recovery
7A	75061	Tank TBO Solution MCHD
7B	75068	Tank TBO2 Solution MCHD
8A	50190	Label, Turbo One Main
8B	50191	Label, Turbo Twin Main
9	41012	Hinge, 3 x 3 Butt Plate
10	82090	Plate, TBO Hinge Spacer
11	70068	Screw, 10-32 x 3/4" FHMS
12	82089	Plate, TBO Hinge Nut
13	50188	Label, Large-W-Blue/Silver/Blk
14	78081	Tube Asm., TBO Tank Drain Rp/cmnt
15	35016	Gasket, Dome
16	29116	Drain, Turbo Recovery Tank
17	73139	Shut-Off Asm., TBO Vac Stack
18	20019	Clamp 1 7/8" Dia. Hose
19	39181	Hose, Turbo Rubber Drain 18"
20	22029	Chain, TB Vac Shut-Off Lock
21	27049	Cable Tie, 7"
22	40019	Hosebarb, 1.5 Double
23	68051	Plug, Turbo Rubber Dump Hose
24	27188	Card Asm., TBO Drain Hose Plug
25	31039	Elbow Asm., TBO Vac Replacement
26	27196	Cable Tie, .375 x 17.5
27	78076	Tube Asm., Turbo Vac Stack
28	57039	Nut, 1.5 Flange
29	34013	Filter Asm., Vacuum Intake
30	14179	Drkt, TBO Vac Stack Shut-Off
31	67050	Float Rod Asm., Block & Rod (Service)
32	34098	Float, TBO Vac Stack Shut-Off
33	57065	Nut, 1/4-20 SS Jam
34	68052	Pin, 1245 x 1" SS Roll
35	67049	Rod, TBO Vac Stack Shut-Off (Auto Fill Option)
36	73128	Seal, Vacuum Stack Shut-Off
37	70167	Screw, 8-32 x 3/16 SS Set
38	73068	Strainer, 3/8" FPT 80 Mesh
39	58010	Nipple, 3/8" Close
40	29117	Disc, TBO Vac Shut-Off
41	14007	Bushing w/Nut & Washer, 3/8 FPT x 1 MPT
42	31026	Elbow, 3/8 ST
43	40013	Hosebarb, 3/8" MPT x 1/2" HB
44	20018	Clamp, 3/4 Dia. Hose
45	39174	Hose, Turbo Dump Inlet 23 x 1/2
46	14074	Bushing, 1/2 x 3/8 Hex BR
47	87015	Washer, 9/16" ID x 1 1/16" OD Flat
48	31026	Elbow, 3/8 ST
49	40013	Hosebarb, 3/8 M x 1/2
50	20016	Clamp, 1/2 Dia. Hose
51	39178	Hose, Turbo Pump By Pass 21 5"
52	35054	Gasket, TBO Tank Hinge

**AUTO FILL OPTIONS**

KEY	PART NO.	DESCRIPTION
53	73133	Strainer, 1.5 FPT x 80 Mesh
54	04048	Adapter, TB-AF 1.5 MPT x Slip Strainer
55	57039	Nut, 1.5 Flange
56	14193	Bushing, Asm., TBO-AF Rp/cmnt
57	73138	Spacer, TBO2/TB2 Vac Stack
58	40010	Hosebarb, 3/8 MPT x 3/8 HB
59	39209	Hose, TB-AF Inlet
60	27195	Cage, TB-AF Defoamer Bottle
61	70114	Screw, #10 x 3/4 Polyfast
62	14098	Bottle Defoamer w/Cap
63	39211	Hose, TB-AF Defoamer Inl 21"
64	40011	Hosebarb, 1/8 M x 1/4 HB
65	84037	Valve, 1/8 FPT Pet Cock
66	58032	Nipple, 1/8 Close
67	31022	Elbow, 1/8 MPT x 1/8 FPT
68	14184	Bushing, 1/8 FPT x 3/8 MPT w/Nut and Washer
69	58012	Nipple, 1/4 FPT Quick Disc
70	58014	Nipple, 1/4 MPT x Close
71	2202C	Coupler, 1/2 FPT x 1/4 FPT
72	87033	Washer, 5/8" I.D. x 1 1/2 O.D.
73	84031	Valve, TBO Auto Fill Float
74	34099	Float, TBO Auto Fill
75	36029	Gauge, Auto Fill Sol. Injector
76	39205	Hose, TB-AF Sol. Soap Bottle 57"
77	39206	Hose, TB-AF Venturi Fee 1/4 x 8"
78	78082	Tee Asm., Auto Fill Venturi
79	39207	Hose, TB-AF Tank Fill 3/8 x 16"
80	34002	Filter, Dome Intake (Auto Fill Machines Only)
81	22015	Coupler, Quick Disc
82	99201	Hose, 3/8 Nylonbraed 12 ft
83	34029	Fitting, 90 GH-12-6 Hose
84	87036	Washer, 3/4 Hose
85	47048	Kit, Faucet Adapter

TBO HOSE ASSEMBLIES		
KEY	PART NO.	DESCRIPTION
1A	04047	Adapter, 1.5" x 2" Cuff (TBO1)
1B	04050	Adapter, 2" TBO2 Cuff
2	04049	Adapter, 1.5" Cuff to 2" Cuff
3	27167	Cuff, 1.5 Smooth Bor White
4	99225	Hose, .25 I.D. x 250 PSI Blue (Specify Length)
5	22015	Coupler, Quick Disc
6	40009	Hosebarb, 1/4" MPT x 1/4" HB
7	20016	Hoseclamp
8A	39184	Hose Asm., 25', 250 PSI Blue Sol. (TBO1)
8B	39202	Hose Asm., 35', 250 PSI Blue Sol. (TBO2)
9A	39221	Hose Asm., 25', Vac TBO1 Replacement
9B	39201	Hose Asm., 35', 2" x 1 1/2" S-Bor
10A	39183	Hose Asm., TBO1 25' Vac & Sol.
10B	39189	Hose Asm., TBO2 35', 2" x 1 1/2" Vac & Sol.
11	14182	Accessory Bag



PUMP-OUT PUMP PARTS LIST		
KEY	PART NO.	DESCRIPTION
	65011	Pump & Motor
1	53016	Motor - 115 Volt
2	67003	Rectifier
3	62023	Plate, Motor Housing
4	36006	Grommet (set of 4)
5-7-8-9	47020	Kit, Pump Repair
6	27057	Bearing Cover
10	41010	Pump Housing
11	66017	Pipe Plug, 1/4" Brass
12	65019	Pump Complete (2000-549)

### TROUBLE SHOOTING GUIDE

PROBLEM	POSSIBLE CAUSE	SOLUTION
No power to machine.	Dead electrical circuit	Check building circuit breaker or fuse box
	Power switch failure	Replace
Electrical shock.	Faulty electrical cable	Replace
	Equipment not grounded	On 3 pronged adapter be sure ground wire is secured
Motor speed varies or doesn't run.	Motor worn-out	Replace
Loss of vacuum.	Loose vacuum dome	Center and seal dome over tank
	Crack in dome or defective glue joint	Replace or resal using plastic cement only
	Lint or dirt clogging vacuum screen.	With power off clean screen
	Loose cuffs on vacuum hose	Tighten cuffs turning counterclockwise
	Vacuum motor seals leaking	Replace
	Floor tool vacuum chamber plugged	Wash out with hose Pick lint out with wire
	Broken vac hose	Replace
Hose quick disconnect hard to insert.	Damaged dome gasket	Replace
	Worn-out vac motor	Replace
	Corrosion on fittings	Clean fittings with steel wool Soak in vinegar solution Lubricate tightly with silicon lube
Not getting carpet clean.	Severe soil conditions	Make more than one pass at right angle to first pass
Carpet too wet.	(See listings under loss of vacuum heading)	
Carpet browning	Leaving carpet too wet	Check vacuum system for loss of vacuum
	Too much chemical in solution.	Reduce amount of chemical Check label directions in proper concentration
Solution problems.	Light carpet with no brown prevention	Go over carpet with browning prevent solution only
	Solution hose quick disconnects.	Faulty or plugged Remove and examine Replace if necessary
Solution won't shut off.	Defective or worn-out pump	Repair or replace.
	Faulty floor tool solution valve	Repair or replace

### LIMITED WARRANTY

WINDSOR warrants to the original purchaser/user that this product is free from defects in workmanship and materials under normal use and service for a period of one year from date of purchase. WINDSOR will, at its option, repair or replace without charge, except for transportation costs, parts that fail under normal use and service when operated and maintained in accordance with the applicable operation and instruction manuals. This warranty does not apply to normal wear, or to items whose life is dependent on their use and care, such as cords, switches, hoses, rubber parts, electric motor parts, etc.

This limited warranty is in lieu of all other warranties, expressed or implied, and releases WINDSOR from all other obligations and liabilities. It is applicable only in the U.S.A. and Canada, and is extended only to the original user/purchaser of this product. WINDSOR is not responsible for costs for repairs performed by persons other than those specifically authorized by WINDSOR. This warranty does not apply to damage from transportation, alterations by unauthorized persons, misuse or abuse of the equipment, use of non-compatible chemicals, or damage to property, or loss of income due to malfunctioning of the product.

If a difficulty develops with this machine, you should contact the dealer from whom it was purchased.