# **ADM**





- OPERATION

- CARE

-SERVICE



115V 60 Hz Models

SN 227718 New VACSX

**Model ADM** 



INDUSTRIES, INC.. 1351 W. Stanford Ave.. Englewood, CO 80110 USA • 303/762-1800 • FAX 303/762-0817

#### INSPECTION

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

#### **ELECTRICAL**

This extractor operates on a standard 15 amp 115 volt AC circuit. Voltages below 105 volts or above 125 volts could cause serious damage to motors. Wiring diagram is mounted inside handle control panel of machine.

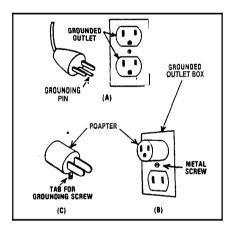
230 volt 50Hz model available.

#### WARNING: To avoid electric shock:

- 1. use indoors only.
- 2 To reduce risk of fire, do not use volatile substances.
- 3. Use only cleaners intended for floor and carpet application.

#### **GROUNDING INSTRUCTIONS**

To protect the operator from electric 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. The vacuum power cord has a plug as shown in Fig. A. If a receptacle connected to the electrical ground as shown in Fig. A is not available use an adapter as shown in Fig. C. The adapter must be connected to an electrical ground in the electrical outlet, using metal screw shown in Fig. B.



#### EXTENSION CORDS .

If an extension cord is used, the wire size must be at least one size larger than the power cord on the machine: The ADM is equipped with a 50 ft. 14/3 power cord.

#### FILLING THE ADM

- Remove clear dome from upper tank. Do not remove the two vacuum hoses. NOTE: Dome can be set securely between handle uprights when handle is in Operating position.
- 2 Lift upper recovery tank from machine and set aside.
- Use a clean bucket to fill solution tank with hot water. Add a nonfoaming concentrate for use in hot water extractors at the proportions noted on the container.

**CAUTION:** To avoid possible distortion of polyethylene solution/recovery tanks, DO NOT USE WATER

## TEMPERATURE THAT EXCEEDS 150°F (65°C)

**NOTE:** Make sure dome is seated correctly to ensure proper vacuum seal.

#### **CHEMICALS**

The internal parts of the pump used in the extractor is suitable for use with most carpet cleaning chemicals. But it is susceptible to chemical attach from some cleaning substances, such as hydrocarbon solvents and chlorinated bleaches. These noncompatible materials are not of the type normally used for carpet cleaning.

#### SUITABLE CHEMICALS

Alkalis
Corox II Bleach'
Defoaming Agents
Detergents
Hydroxides
Oxygen Bleaches
Soaps
Sta-Put Fabric Softener\*
Vinegar
White Monday Bleach'

\*Registered Trademark

## NONCOMPATIBLE CHEMICALS

Aldehydes
Aromatic Hydrocarbons
Butyls
Carbon Tetrachloride
Clorox
Chlorinated Bleaches
Chlorinated Hydrocarbons
Lysol'
Methyls (MEK)
Perchlorethylene (perc)
Phenols
Trichlorethylene

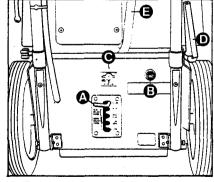
#### **OPERATING THE ADM**

**NOTE:** Vacuum the carpet and make sure it is cleared of surface debris before cleaning with the ADM.

**NOTE:** Attach strain relief/cord retainer to power cord.

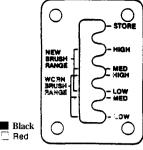
- Make loop in power cord approximately 12" from twist lock receptacle end.
- 2 **Slide** cord loop through slct in retainer and over retainer arm. Pull slack cord back through slot to secure. Attach retainer to handle.
- 3 Release cam-locking device located on lower right of handle and lower handle to comfortable operating position. Re-set cam-lock on handle. NOTE: ADM cleans by pulling backwards over the carpet.

#### Diagram 1



- a Brush adjustment lever
- b. Solution nipple
- c. Solution valve
- d Handle locking lever
- e. Solution tank drain hose
- 4 Adjust brush to proper cleaning position by using lever located at lower back of the motor housing. Start at No. 1 "new brush" (black) position. If more carpet pile agitation is desired, lower brush setting one position at a time. (See Diagram 2)

#### Diagram 2



5 Check to be sure that spray manifold valve is set on "Carpet Spray" position (See Diagram 3) and that brush motor circuit breaker button is in (see Diagram 4).

**BRUSHSWITCH** 

Diagram 3



CIRCUIT BREAKER INTERMITTENTE SWITCH PANEL

CONTINUOU PUMP SWITC

Diagram 4

Tilt machine back on rear wheels until brush is off the floor. Turn on vacuum and brush motors.

#### NOTES

- Starting the machine with dry brush resting on the carpet may trip brush circuit breaker.
- 2 The vacuum motor is also protected by a circuit breaker. The breaker will only trip under conditions of abuse an over-full recovery tank.
- 7. Lower machine to floor. Dispense solution by using either the "continuous flow" switch for large, open areas or the "intermittent solution" button for cleaning in smaller, more confined areas. Walking backwards, move the extractor over the area to be cleaned. The extractor's brush assistance should allow the machine to be moved quickly and easily over the carpet. Remember to turn solution off about six inches before the end of each cleaning pass.
- 8 As you work, check to see if there is a foam build up in the recovery bucket. If there is, turn the machine off and add the recommended amount of defoaming compound to the recovery tank. Never put defoamer in solution tank!

**WARNING:** An overflow of foam into the vacuum intake can damage the vac motor. Always be aware of the waste water level in the recovery tank. When it is about three-quarters full, turn off the machine, remove the dome and lift off the recovery tank to empty. The tank has a convenient carrying handle and a built-In handgrip on the underside.

- When the extractor runs out of cleaning solution (this can be easily detected by streaking and incomplete cleaning of the carpet, or by looking at spray manifold from side of machine) turn off the machine, remove the dome and recovery bucket, and re-fill the clean solution tank. Replace the recovery tank and dome. Turn the extractor back on and continue cleaning.
- 10. Ventilate area after carpet has been cleaned. Keep children and pets away and do not walk on carpet until it is thoroughly dry.

# OPERATING THE ADM WITH ACCESSORY TOOLS

The ADM is easily adapted for use with the following Windsor accessory tools; DHT-UPH3 - SW - SFW - SWIPRO.

- 1. Turn solution valve to "Accessory Tool" position.
- 2 Remove recovery hose (white cuff) from ADM dome and insert vacuum hose for accessory tool in its place.
- Attach solution hose from accessory tool to brass solution nipple on lower back of ADM chassis. (See "B" in Diagram 1)
- 4 Make sure that solution tank has cleaning solution and that recovery tank and dome are in place and ready for operation.
- Switch on ADM's vacuum and continous solution switches only. Use accessory tools as with any standard extractor.

**WARNING:** Do not switch on brush switch when operating the ADM with accessory tools. Carpet damage may occur.

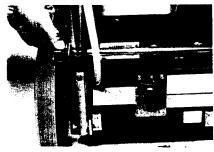
 Make sure that the solution valve is returned to the "Carpet Spray" position before using the ADM, again for self-contained carpet cleaning.

# MAINTENANCE INSTRUCTIONS FOR ADM

**WARNING:** Remove machine power cord from electrical source before making any adjustments or repairs to the machine. Only qualified maintenance personnel are to perform repairs.

To adjust handle locking cam lever

 Loosen cam lever and hand tighten knob on cam lever rod as required.



#### **VAC SHOE**

 Remove allen screws holding parallel arms. Repair or replace vac shoe, parallel arms or spacers as needed. NOTE: When reinstalling vac shoe, make sure the wave washers are floating and not pinched between parallel arm spacers and vac shoe casting.



#### **BRUSH ASSEMBLY/BEARING**

 Remove belt guard and "roll" belt off motor pulley.



Tilt machine back on handle and remove brush pulley guard.



Remove shaft retaining screws and washers from each end of brush shaft. Replace brush or bearings as required.



#### TRANSPORT WHEELS

 Remove screw and hub cap and slide wheel off axle. Before reinstalling wheel, clean axle and apply light coating of silicone lubricant.



#### SUPPORT ROLLER

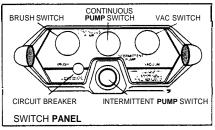
 Tilt machine back on handte. Loosen lock nuts on each end of roller axle and remove roller assembly. Repair as required. Before reinstalling, clean axle and apply a light coating of silicone lubricant.



#### SWITCH CONTROL PANEL

 Remove screws holding rear panel. Repair or replace switches as required.





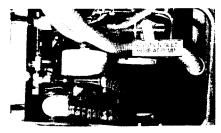
**CAUTION:** When replacing switches, make sure wire leads are connected to proper terminals. Refer to wiring diagram located on back panel (or service manual) for assistance.

## TO ACCESS VAC, PUMP and BRUSH MOTOR

- 1. Remove solution from both tanks.
- 2 Remove dome and recovery tank.
- Tilt machine back on handle and remove nuts holding solution tank to base.



4 Return machine to upright position. Raise tank and remove solution inlet hose from pump.

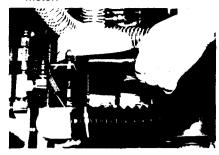


5. Remove (2) vacuum hoses from tube bracket and lay tank aside.

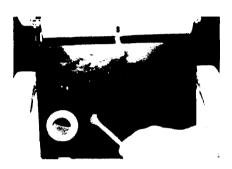


#### **VAC MOTOR**

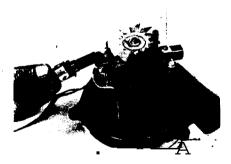
1. Remove hose from exhaust horn on motor.



- Remove (2) screws holding vac exhaust deflector, set aside.
- Tilt machine back on handle. Remove (2) bolts holding vac motor mounting bracket to base. Return machine to upright position. Disconnect wire leads and remove vac motor.



4. To inspect motor brushes, remove brush holder assembly. Brushes should be replaced when worn to 3/8 inch or after about 750 operating hours. After second brush replacement, the armature commutator should be checked for pitting and concentricity. Vac motors can be repaired but such repairs should be made by a qualified motor repair shop.

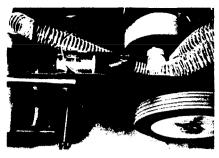


#### **PUMP ASSEMBLY**

Disconnect pump motor leads. Remove (4) screws holding pump to chassis. Disconnect solution hoses from pump head and lift out pump. Refer to pump drawing for replacement parts.

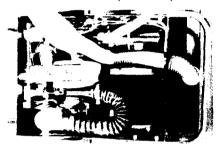
**CAUTION:** When replacing hose-barbs on pump head—DO NOT OVER-TIGHTEN—as this could crack intake and exhaust ports in pump head.

WARNING: The internal solution hoses are encased in an outer hose to protect the electrical component parts in the unlikely event a solution hose should rupture. Replace hoses exactly as originally supplied.



#### **SOLENOID & SOLUTION VALVES**

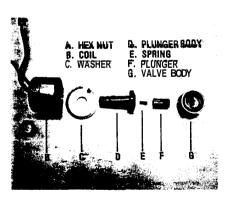
- 1. Remove recovery and solution tanks.
- Remove auxiliary solution outlet nipple.
- 3. Remove solution valve lever.
- Remove (2) screws holding valve clamp chassis.
- Lift out valve asm. and disconnect solution hoses. Repair as required.



NOTE: The solenoid valve can be disassembled for cleaning when positive shut-off is interrupted and valve leaks through tee jets.

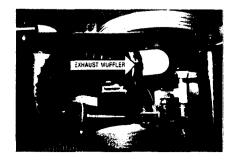
- 6 Remove hex nut at top of valve and lift off coil assembly.
- Use spanner wrench or small punch and hammer to remove plunger body. Remove lint and soap residue from plunger.

**CAUTION:** When re-installing valve make sure arrow is pointed in the direction of solution flow.



#### VAC EXHAUST MUFFLER

Remove exhaust hose from muffler elbow

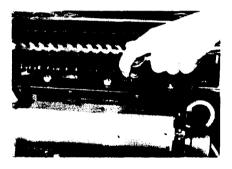


2 Tilt machine back on handle. Remove exhaust deflector and Hex retaining nut from PVC muffler. Repair or replace as required.



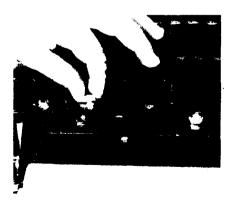
#### MANIFOLD ASSEMBLY

- Remove pump from chassis to access solution outlet hose.
- 2. Remove hose from hosebarb.
- Tilt machine back on handle. Remove (2)screws holding manifold to chassis. Remove manifold and repair as rerequired.



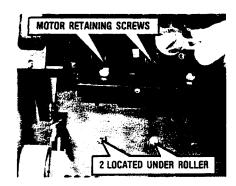
#### **SPRAY JETS**

To prevent clogged jets due to alkaline build-up, the spray system should be flushed with 1 or 2 gallons of clean hot water at the end of each day. The machine is equipped with "quick change" jets that can be easily removed for cleaning. To remove — push jet in and rotate 1/4 turn. Wash jets and blow dry. Do not use pins or wire to remove obstruction as this will change spray pattern.



#### **BRUSH DRIVE MOTOR**

- 1. Remove exhaust hose from vac motor.
- 2. Disconnect motor lead wires.
- Move brush adjustment lever to lowest position and tilt machine back on handle.
- 4. Remove (4) motor retaining bolts.



Return machine to upright position and lift out motor. Repair or replace as required.

**NOTE:** When reinstalling motor, make sure motor pulley is in line with brush pulley. Use straight edge for alignment if needed. After assembly run machine on carpet to check for belt slippage — move motor rearward to tighten belt.

## DAILY/REGULAR MAINTENANCE

**WARNING:** Before making any adjustments or repairs, unplug machine from electrical source.

 Empty unused cleaning solution using clear plastic hose located on lower back of solution tank.

- 2 Inspect and clean filter screen in solution tank.
- 3. Flush pumping system with 1 to 3 gallons of clean, hot water.
- 4. Rinse recovery tank with clean water.
- 5 Check for and remove any lint or debris around brush and vac.shoe.
- Check spray jets and clean solenoid valve if required.

NOTE: Always store ADM with **brush** in "store" position.

#### PERIODIC MAINTENANCE

- Twice a month, flush a white vinegar solution (one quart vinegar to two gallons of water) or anti-browning solution (mixed as directed) through the extractor. This will prevent build up of alkaline residue in the system.
- Check sliding handle lock for excessive looseness, and hand tighten knob on left side of handle as required.
- If spray jets become clogged, remove the spray tips, wash them thoroughly, and blow dry.

**NOTE:** Do not use pins, wire, etc. to clean nozzles as this could destroy spray pattern.

If spray jets drip after the pump is turned off, sclenoid valve may need to be cleaned.

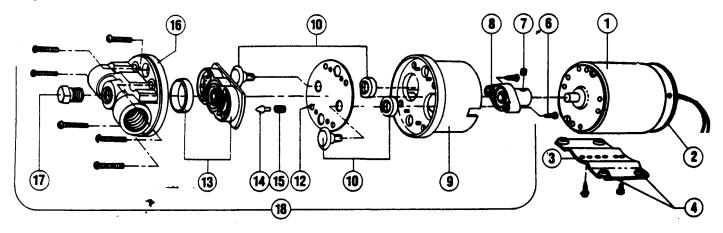
- Apply silicone lubricant to solution nipple.
- ▶ Periodically inspect all hoses, electrical cables, filters and connections on your machine. Frayed or cracked hoses should be repaired or replaced to eliminate vacuum or solution pressure loss. Because the electrical cable will lie on wet carpet at times, 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.

#### PROTECT FROM FREEZING

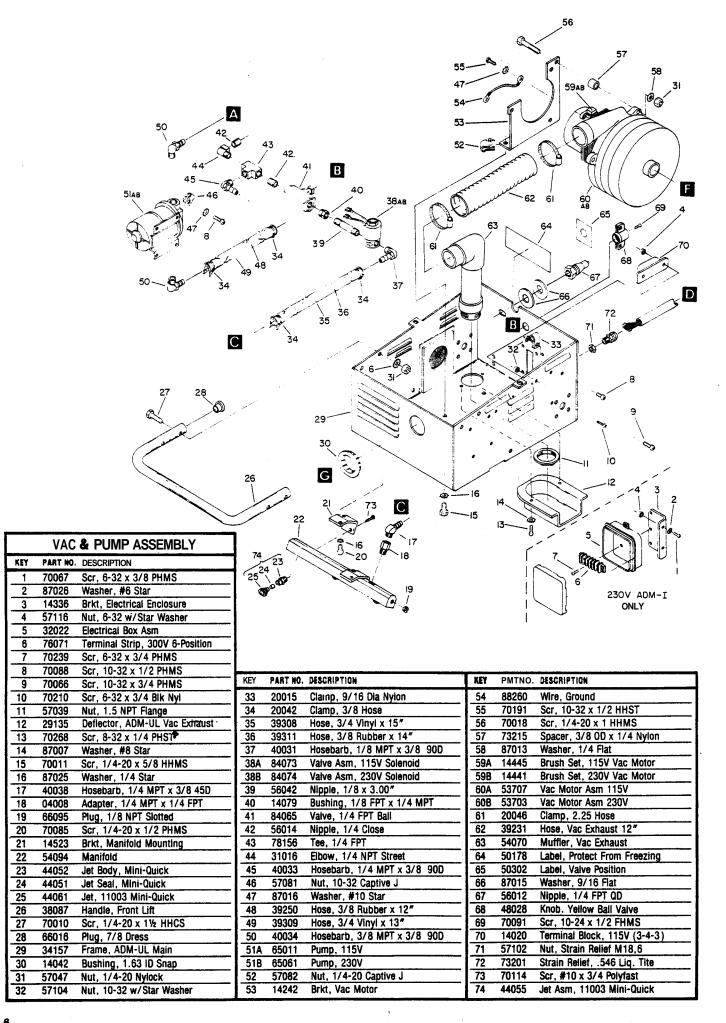
If it becomes necessary to store in temperatures that could drop below 40° F, the pumping system, hoses and valves must be protected from freezing with a methyl hydrate window washer antifreeze solution. Do **not** use ethylene glycol or cooling system antifreezes.

- Add a gallon or two of window washer antifreeze to the supply tank, turn on pump switch and spray until the antifreeze solution fills the solution lines.
- 2 Drain out the leftover antifreeze from the supply tank. Always allow the unit to reach room temperatures before filling with hot water or operating.

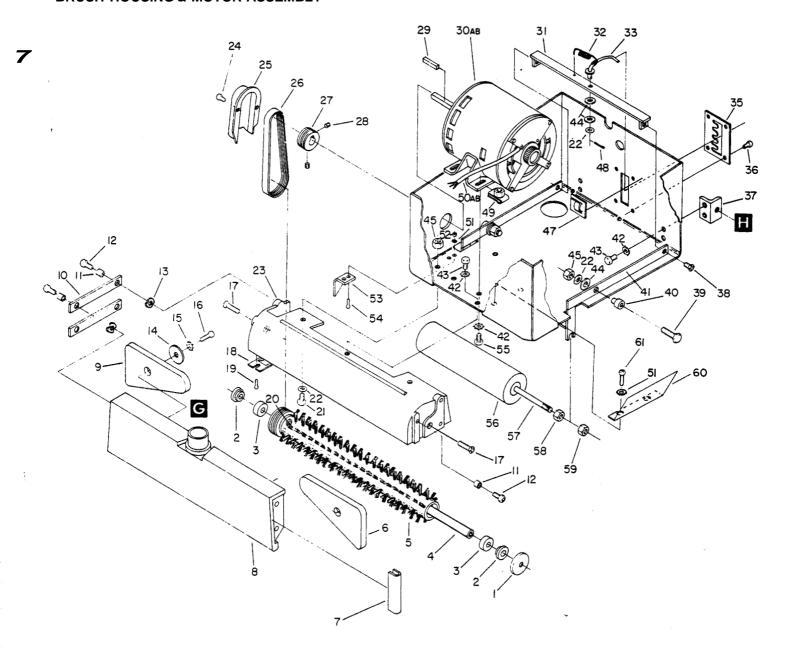
#### **PUMP**



	PUMP	PARTS LIST
KEY	PART NO.	DESCRIPTION
	65011	Pump & Motor 115V
	65061	Pump & Motor 230V
1	53016	Motor 115V
1A	53017	Motor 230V
2	67066	Rectifier/End Bell Asm.
3	62023	Plate, Motor Mounting
4	36006	Grommet (Set of 4)
6-7-8-10 12-13-14-1	47020 5	Kit, Pump Repair
9	27057	Bearing Cover
16	41010	Pump Housing
17	66017	Pipe Plug
18	65019	Pump Complete (2000-549 & 556)



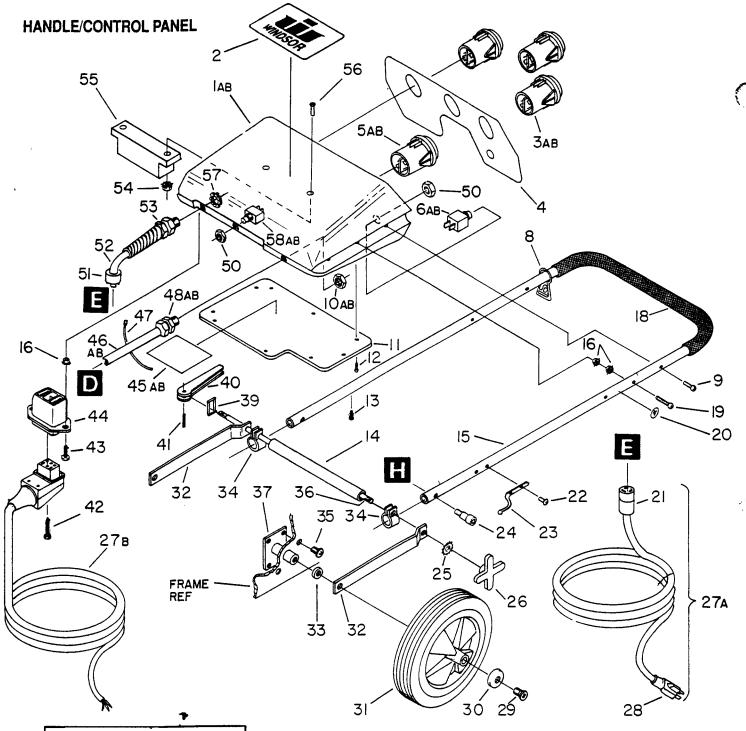
### **BRUSH HOUSING & MOTOR ASSEMBLY**



BRU	SH HOU	SING & MOTOR PARTS LIST
REY	PART NO.	DESCRIPTION
1	36054	Guard, Thread
2	73207	Spacer, Brush
3	09019	Bearing, Brush
4	03033	Axle, Brush
5	14219	Brush, w/Pulley
6		Weight, Vac Shoe LH
7	14310	Bumper, Vac Shoe (2 Required)
8	85005	Vac Shoe
9		Weight, Vac Shoe RH
10	05016	Arm, Vac Shoe
11_	73181	Spacer
12	70190	Scr., 1/4-20 x 1/2 BHCS
	87074	Washer, 3/8 Wave
14		Washer, 1/4 ID x 1.25
	87016	Washer, #10 Star
_	70086	Scr., 10-24 x 1/2 PHMS
_	70201	Scr., 1/4-20 x 3/4 FHMS
	36043	Guard, Brush Pulley
	70127	Scr., 6-32 x 1/4 PHMS
	70177	Scr., 10-32 x 1/2 FHMS
21	70015	Scr., 1/4-20 x 3/4 HHMS

KEY	PART NO.	DESCRIPTION
22	87013	Washer, 1/4 ID x 5/8 OD
23	41109	Housing, Brush
24	70228	Scr., 10-32 x 1/4 PHMS
25	36044	Guard, Beit
26	11015	Belt, Brush Drive
27	64022	Pulley, Brush Motor
28	70074	Set Scr., 10-32 x 1/4 KCP
29	48011	Key, 1/8 x 3/16 x 1
30A	53093	Motor, 115V Brush Drive
308	53098	Motor, 230V Brush Drive
31	14246	Brkt., Roller Adj.
32	73040	Spring
33	51042	Lever, Height Adj.
35	62115	Plate, Height Adj.
	70031	Scr., 10-32 x 1/4 PHMS
37	14241	Brkt., Handle Mounting
38	70166	Scr., 1/4-20 x 1/2 FHMS
	70018	Scr., 1/4-20 x 1.0 HHMS
	73178	Spacer, Roller Bracket
41	14244	Brkt., Roller Mounting

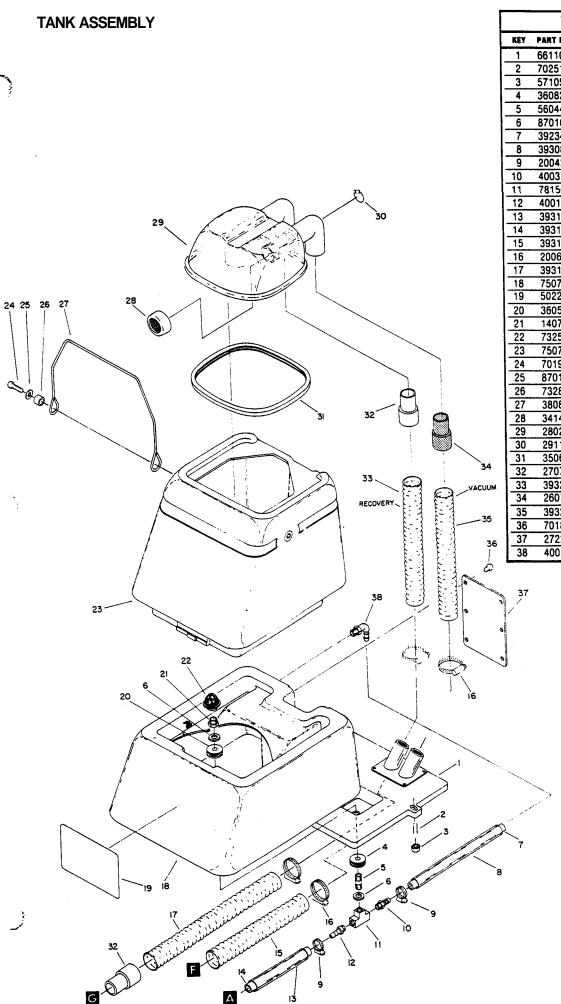
KEY	PART NO.	DESCRIPTION
42	87025	Washer, 1/4 Star
43	70020	Scr., 1/4-20 x 1/2 HHMS
44	87030	Washer, 3/8 ID x 3/4 OD Nylon
45	57047	Nut, 1/4-20 Lock
47	20056	Clamp, 3/8 ID, Self-adhesive
48	66073	Pin, 1/16 x 3/4 Cotter
49	57080	Nut, 1/4-20 Captive
50A	88261	Wire Lead, 115V Brush Motor
50B	88243	Wire Lead, 230V Brush Motor
51	87026	Washer, #6 Star
52	57012	Nut, 6-32 Hex
53	36050	Gusset, Belt Guard
54	70056	Scr., #6-32 x 1/2 PHMS
55	70011	Scr., 1/4-20 x 5/8 HHMS
56	67082	Roller
57	03027	Axle, Roller
58	57085	Nut, 3/8-16 Jam
59	57022	Nut, 3/8-16 Lock
60	62219	Plate, Deflector
61	70059	6-32 x 1/4 HHST



H	HANDLE/CONTROL PANEL ASM.		
KEY	PART NO.	DESCRIPTION	
1A	61124	Panel, 115V Switch	
1B	61128	Panel, 230V Switch	
2	50184	Labei, Windsor	
3A	72043	Switch, 115V Round SP PB	
3B	72036	Switch, 230V Round DP PB	
4	50348		
5A	72044		
5 <b>8</b>	72037		
6A	14530		
6B	14279	Circuit Breaker, 4A 230V Thermal	
8	73169	Strain Relief, Cord Hook	
9	70253	Scr., 10-32 x 1.25 PHMS	
10A	57107	Nut, Strain Reilef M22,5	
108	57108	Nut, Strain Relief M20,4	
11	62153		
12	70082	Scr., 6-32 x 1/2 PHMS Nylon	
13	70187	Scr., 10-24 x 1/2 PHST -F-	
14	73180	Spacer, Handle Lock	
15	38121	Handle, Main w/Grip	
16	57104	Nut, 10-32 w/Star Washer	
	36046		
19	70092	Scr., 10-32 x 1.5 PHMS	

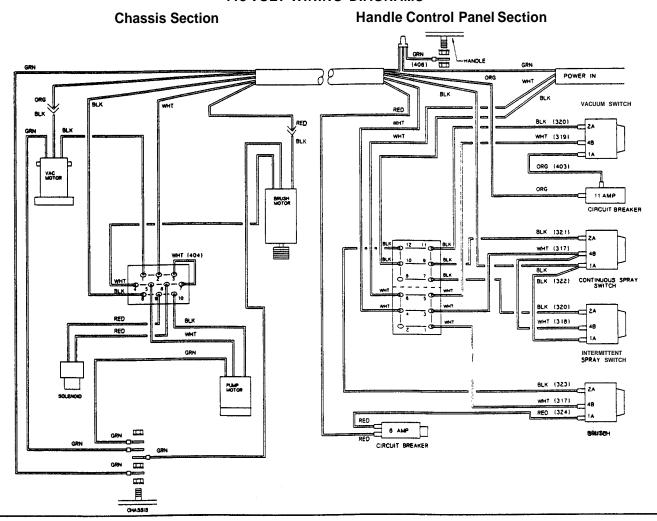
KEY	PART NO.	DESCRIPTION
20	50279	Label, Ground Symbol
21	26009	Cord End, 115V 15A Fem T/L
22	70197	Scr., 1/4-20 x 1/2 PHST -F-
23	41014	Hook, Card
24	70117	Shoulder Bolt, 5/16 0D x 1.0L
25	87067	Washer, 5/16 Star
26	48012	Knob, Handle Lock
27A	23086	Cord Asm., 115V, 14/3 x 50'
27B	23114	Cord Asm., 230V Euro
28	26006	Cord End, 115V 15A 3-wire
29	70085	Scr., 1/4-20 x 1/2 PHMS
30	27266	Cap, Wheel Hub
31	89044	Wheel, 10" Dia.
32	05013	Arm, Handle Parailei
33	73214	Spacer, Wheel
34	20038	Clamp, Handle Adj. Lock
35	70189	Scr., 1/4-20 x 5/16 PHMS
36	67073	Rod, Handle Adj. Lock
37	03028	Axle Asm., Wheel
39	27226	Clip, Handle Lever
40	51039	Lever, Handle Adj. Lock
41	66068	Pin, 1/8 00 x 5/8L Roll

KEY	PART NO.	DESCRIPTION
42	70198	Scr., M4.8 x 16 PHST
43	70211	Scr., 10-32 x 3 x 4 PHMS Nylon
44	26032	Cord Receptacle, 240V Male
45A	50369	Label, 115V Wiring Diagram
458	50273	Label, 230V Wiring Diagram
46A	88397	Wire Asm., 115V 16/5
46B	88242	Wire Asm., 230V 16/7
47	27049	Cable Tie, 7"
48A	73201	Strain Reilef, 115V 16/5
488	73168	Strain Relief, 230V 16/7
50	57109	Nut, 7/16-28 Panel
51	26015	Cord End, 125V 15A Male T/L
52	88325	Wire Asm., 115V Pigtail
53	73200	Strain Relief, Flexible 1/2 NPT
54	57106	Nut, 8-32 w/Star Washer
55	14022	Terminal Block, 115V (6-6)
56	70252	Scr., 8-32 x 1" FHMS Nylon
57	57040	Nut, 1/2 NPT
58A	14542	Circuit Breaker, 11A 115V
588	14543	Circuit Breaker, 4A 230V

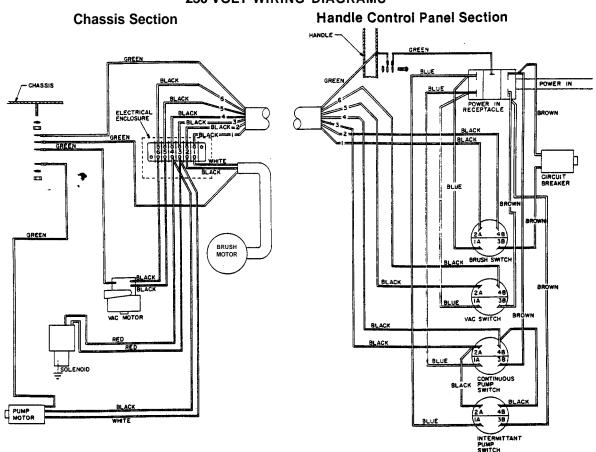


KEY	PART NO.	DESCRIPTION
1	66110	Pan, Solution Tank
2	70251	Set Scr., 1/4-20 x 1.0
3	57105	Nut, 1/4-20 w/Star Washer
4	36082	Grommet, 1/2 ID x 1/8 Groove
5	56044	Nipple, 1/4 NPT x 1.25
6	87010	Washer, 9/16 x 1,25 0D
7	39234	Hose, 1/2" Clear Drain x 20"
8	39308	Hose, 3/4 Vinyl x 14"
9	20042	Clamp, 3/8 Hose
10	40037	Hosebarb, 1/4 MPT x 1/2 Nylon
11	78156	Tee, 1/4 FPT
12	40014	Hosebarb, 1/4 MPT x 3/8
13	39310	Hose, 3/4 Vinyl x 10"
14	39312	Hose, 3/8 Wire Bound x 10"
15	39314	Hose, 1.5 BluVac x 11"
16	20063	Clamp, 1.75 Worm Gear
17	39317	Hose w/Cuff, 1.5 BluVac x 28"
18	75079	Tank, Solution
19	50226	Label, ADM Main
20	36055	Grommet, 1/2 ID x 1/4 Groove
21	14076	Bushing, 3/8 MPT x 1/4 FPT Hex
22	73250	Strainer, 80 Mesh Solution
23	75078	Tank, Recovery
24	70194	Scr., 1/4-20 x 5/8 BHCS
25	87013	Washer, 1/4 ID x 5/8 0D
26	73280	Spacer, Handle
27	38088	Handle, Tank
28	34140	Filter, Vacuum Intake
29	28026	Dome Asm., w/o Gasket
30	29118	Dot, Blue
31	35060	Gasket, Dome
32	27079	Cuff, Wht. Hose
33	39328	Hose w/Cuff, 1.5 Blu x 20"
34	26073	Cuff, Blu Hose
35	39327	Hose w/Cuff, 1.5 Blu x 19"
36	70189	Scr., 1/4-20 x 5/16 PHMS
37	27228	Cover, Vac Hoses
38	40027	Hosebarb, 3/8 MPT x 1/2 90D Nylo

#### 115 VOLT WIRING DIAGRAMS



#### 230 VOLT WIRING DIAGRAMS



#### **WINDSOR** LIMITEDWARRANTY

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 noncompatible 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 Durchased.

