

# BRAVO Owner's Manual & Parts List

This equipment is intended for commercial use only



**BRAVO MODELS** 

**300MH** 

#### BEFORE OPERATING THIS MACHINE

Read this manual carefully and completely before attempting to operate this unit. This manual has important information for the use and safe operation of the machine. Keep this manual handy at all times. This machine will assure years of satisfactory service if operated and maintained according to recommendations in this manual. If additional information is needed, please contact EDIC at 1-800-338-EDIC or write to:

#### EDIC 1753 Blake Ave. Los Angeles, CA 90031

#### **WARNING!**

- The machine was designed for use on carpet, floor and upholstery extraction applications as per instructions and recommendations written in this manual. Any deviation from its proper use or purpose and the consequential damage that may occur is the sole responsibility of the end user.
- Disconnect the power cord from the outlet before servicing. Do not leave the machine connected to an electrical
  outlet when unattended.
- Do not immerse or use this machine in standing water. Such use may cause electric shock.
- This equipment is not designed to handle or use combustible/volatile substances such as gasoline or kerosene, in, on, or near the machine. The use of such materials will cause an extremely hazardous condition.
- When using an extension cord, use only a 3-prong conductor grounding cord- 12 gauge wire or heavier.
- To avoid electric shock, do not expose the machine to rain. Store it indoors only.
- Do not use the machine for dry vacuuming, as it is not equipped with a fine dust filter.
- Use a defoamer at all times to prevent damage to the vacuum motors. If defoamer is not used, or not used sufficiently, foam from your chemical or chemical left in the carpet from a previous cleaning may be ingested into and damage your vacuum motors. Failure to use a defoamer may cause water damage to the vacuum system and void warranty.
- Do not use water in excess of 135°F (57°C) in the solution tank as it may damage the solution system.
- To prevent seal damage and chemical build-up to the pump system, run clean water through the solution lines after each day's use.
- Use only commercially available carpet cleaning solutions and defoamer intended for use with machines of this type.
   Do not use dyes, bleaches, ammonia, or other additives. The use of powdered cleaning solution if not diluted properly may result in damage to the pump. If powdered chemicals are used, premix in a separate container according to directions on the container before placing in the solution tank. Monitor and clean intake filters to prevent clogs.
   Replace damaged filters immediately to prevent damage to pump.
- Do not expose the machine to freezing temperatures, or store inside a room or vehicle where the temperature might drop to freezing temperatures.
- For troubleshooting or technical issues, please contact EDIC or the distributor your equipment was purchased from.
- Do not use replacement parts other than those specified on the parts list or recommended by an EDIC representative.

#### FAILURE TO COMPLY WITH ABOVE WARNING INSTRUCTIONS WILL VOID THE WARRANTY

#### **Grounding Instructions**

The 120V A/C and the 220V A/C models have been outfitted with the appropriate grounding connector. Make sure the machine is connected to a grounded outlet having the same configuration as the grounded plug. No adaptor should be used with this machine. Any modification to the connector will void the warranty.

#### PREPARING THE MACHINE

- 1. Unfasten the two latches which hold the recovery tank to the solution tank. Lift the recovery tank off the solution tank.
- 2. Pour clean solution into the solution tank.
- 3. Place the recovery tank back onto the solution tank and fasten the two latches.
- 4. Plug power cord into a grounded power outlet.
- 5. Connect vacuum and solution hoses to the BRAVO. The connection for the vacuum hose is part of the handle on the recovery tank and has an open end where the vacuum hose slides onto it. The connection for the solution line is located at the bottom center of the front of the solution tank.
- 6. **REMEMBER**: Previously shampooed carpets usually have a heavy build-up of old shampoo residue which can cause the vacuum system to ingest foam and result in damage to the vacuum motor. Remember to add recommended amount of defoamer to the recovery tank every time you fill the solution tank.

#### **OPERATING INSTRUCTIONS – CARPET TOOL**

- 1. Turn on the vacuum and solution switches. Slowly pull the tool towards you with solution valve trigger engaged. Do not overwet carpet! Make overlapping passes to prevent streaking.
- 2. When you run out of solution, turn off the switches. Disconnect vacuum hose from recovery tank. Unfasten latches and lift recovery tank off solution tank. Drain recovery tank completely and flush it several times with clean water to remove all dirt and prevent odor build-up.
- 3. When the job is completed, turn the switches off, disconnect the vacuum and solution hoses from the carpet tool and the machine. Drain the recovery tank as in step 2. Tip solution tank upside down over a sink to drain the unused cleaning solution.

#### **CLEANING UPHOLSTERY**

Cleaning upholstery with success requires a good knowledge of the type of fabric you will work on. Look for the cleaning instructions label sewn on the underside of the furniture for the recommended method of cleaning. If it calls for dry-cleaning, do not attempt to clean by wet extraction otherwise damage to the fabric could occur. Extraction works perfectly on most synthetic fabrics including synthetic velvets. Always consult your distributor for information on how to find the proper type of chemical and method for the type of fabric you are cleaning.

Before proceeding, test the fabric for colorfastness. Apply a small amount of cleaning solution on the fabric in an inconspicuous spot. Wait 2 to 3 minutes and rub the area with a white terry cloth towel. If no color comes off the towel, the fabric should be safe to clean. If a little color comes off, there is some risk of colors running when you clean. It may be possible to stabilize colors by cleaning with an acidic rinse.

- Prepare the machine in the same manner as for carpet cleaning (see Preparing the Machine) except attach an upholstery
  tool to the vacuum and solution hose instead of a carpet wand. Pour hot water into the solution tank, not exceeding 135°F.
  Add recommended amount of cleaning concentrate into the solution tank. Turn on the vacuum and pump switches.
- 2. Clean with the upholstery tool using as little solution as possible. Make overlapping passes to prevent streaking. Go over the area you just cleaned without depressing the lever (vacuum only) and gauge the amount of moisture extracted through the view window for dryness. On heavily soiled areas like arm rests, pre-treat with a recommended pre-spray solution.

#### **DAILY MAINTENANCE**

- 1. Always keep the machine clean inside and out.
- 2. Pour 1 gallon of clean, hot water into the solution tank. Turn on and flush the entire system through the wand nozzles for about a minute to prevent mineral or chemical build-up. A periodic use of a 1:3 white vinegar and water solution helps to break down build up, as well.
- 3. Remove dirt and lint build-up inside the circular filter screen located between the recovery and solution tanks. Lint should be cleaned off so that air flow is not impeded.
- 4. Check the solution tank strainers in the solution tank. If lint has accumulated on the screens, remove and rinse them in clear running water or soak it in a 1:3 white vinegar and water solution. Replace as necessary.
- 5. Empty recovery tank and open recovery lid and run your vacuums for 3-5 minutes after every job to remove any excess moisture from the vacuum motors. This is especially important if you have over filled the machine or did not use enough defoamer.

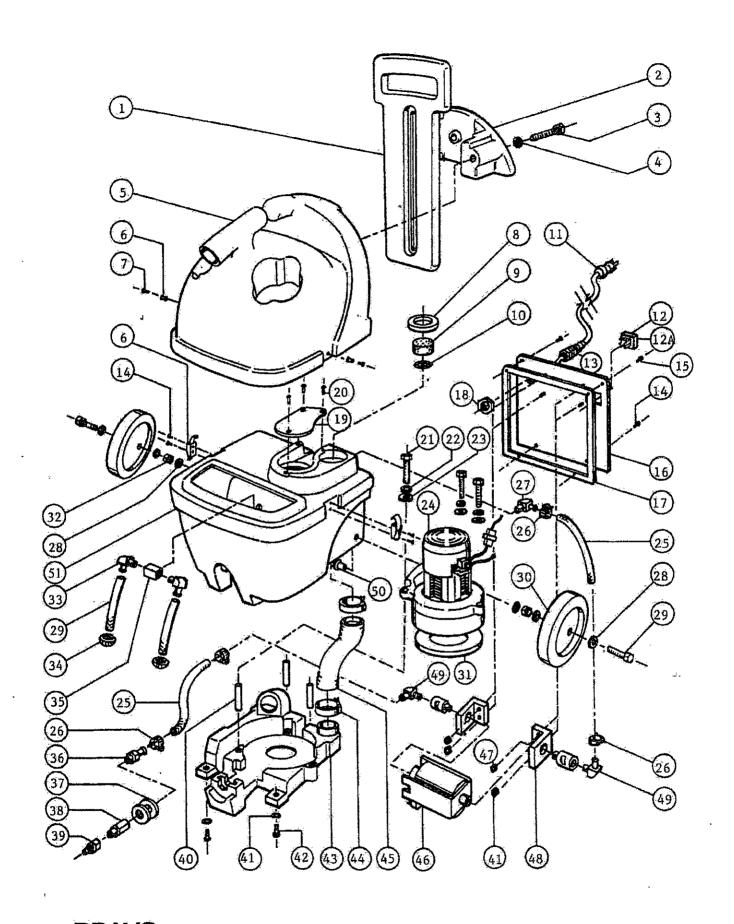
#### **PERIODIC MAINTENANCE**

All EDIC machines are engineered and built to require a minimum amount of maintenance. But like any machine it does require some care to keep it in optimum working condition. Careful attention to these maintenance instructions will give you maximum operating performance and will increase the life expectancy of your machine.

- Solution Lines & Fitting: Flush the machine at least once a month with a solution of 3 parts water with 1 part white vinegar in order to neutralize the alkaline residue left by the cleaning solution.
- Quick Connect Couple: Spray with WD-40 or equivalent lubricant to prevent coupler from sticking.
- Drain Valve: Apply light oil on gate seals. If machine has to be stored for a prolonged period, leave the gate valve open.
- Solution Pump: The same above procedure used on the solution line and fittings applies to the pump.

#### TROUBLE SHOOTING

PROBLEM	PROBLEM CAUSE	
ELECTRICAL SYSTEM		
No electrical power	Defective power cord	
	2. House or building circuit breaker tripped.	
Switch is turned on. Power	Faulty electrical cable.	
is intermittent to all motor(s)	2. Defective switches.	
	3. Loose terminal or discolored terminal connections.	
VACUUM SYSTEM		
No vacuum or low vacuum	1. Vacuum filter between tanks is clogged.	
	2. Vacuum hose is not tight onto recovery tank inlet tube.	
	3. Recovery tank is not firmly clamped down onto solution tank.	
	<ol> <li>Vacuum gasket located between the recovery and solution tanks is worn or damaged.</li> </ol>	
SOLUTION SYSTEM		
Pump motor on, no spray	Clogged spray tips.	
through spray tips	2. Clogged solution intake filter screen.	
	3. Plugged female quick disconnect coupler or couplers not fully engaged.	
Uneven or weak spray	1. Clogged or dirty spray tips.	
from tips	2. Accumulated dirt on solution intake filter screen.	
	3. Accumulation of debris inside pump and plumbing.	
	4. Worn nozzles.	



BRAVO PARTS DIAGRAM

### **BRAVO PARTS LIST**

ITEM #	PART#	DESCRIPTION	QTY.
1	F11800	Handle, EDIC, Blue	1
2	F11791	CORDWRAP	1
3	C00314-1	HEX BOLT, ¼-20 X 1	2
4	C00233	WASHER, ¼" FLAT	2
5	F00801	RECOVERY TANK	1
6	D11692	LATCH W/ STRIKER	2
7	C00310-12	SCREW, 8-32 X ½"	2
8	E11044	GASKET, 2.25 OD	1
9	E11045	FOAM DISC, 1.5 OD ½" THICK	1
10	D11043	FILTER SCREEN	1
11	B10719	POWER CORD 16/3, 20', BLACK	1
12	B11751	ROCKER SWITCH, BLACK	1
12A	B00214-2	COVER, SWITCH	1
13	B11199	STRAIN RELIEF	1
14	C00310-38	SCREW, 8-32 X 3/8"	6
15	C11529	SCREW, 10-32 X 3/8"	2
16	D11699	SWITCH PLATE	1
17	E11722	GASKET, VENT PLATE	1
18	B02214	STRAIN RELIEF NUT	1
19	F11711	VAC DUCT	1
20	C00293	SCREW, #8 X ½" PAN BLACK	5
21	C02291	SCREW, 1/2-20 X 2 1/2"	3
22	C00254	½" LOCKWASHER	3
23	C00238	WASHER ¼" FLAT	3
24	G00520-1L	VACUUM MOTOR, 106", 5.7" REVERSE	1
25	J11154-1	SOLUTION HOSE, ¼" WIRE	3 FT.
26	J00651	SCREW CLAMP, 1/4-5/8"	4
27	A00166	90 DEGREE ELBOW, 1/8" FP X ¼" B	1
28	C00252	WASHER, 3/8 X 13/16	7
29	C11701	BOLT, 3/8-16 X 2, ZINC	2
30	G11688	WHEEL, 6"	2
31	E10521	GASKET, VACUUM MOTOR	1
32	C11702	HEX NUT, 3/8 16	2
33	A00130	90 DEGREE ELBOW, 1/8 MP X ¼ B	2
34	D11684	INLET FILTER	2
35	A00152	TEE, 1/8 MP X 1/8 FP X 1/8 FP	1
36	A00132	% MP X % BARB, BRASS	1
37	C00232	WASHER, ½" FLAT	3
38	A00121	¼ MP X ¼ FP BRASS	
39	A00121	QUICK DISCONNECT, ¼" MALE	1
40	K11073	SPACER, ¼-20 X ½ OD X 1 ¾ LONG	3
41	C03251	WASHER, 3/6" ID, BACKUP, .490 OD	4
42	C90007-1	SCREW, 10-32 X 1" PHIL TRUSS HEAD, SS	2
43	F11803	MOTOR BASE	1
44	J00656	HOSE CLAMP, 1 ½"	2
45	J00618-1	VACUUM HOSE, 1 ½", WIRE REINFORCED	10"
46	G11689	PUMP, OSCILLATING	1
47	C00278	NYLON LOCKNUT, 10-32	1
48	E11691	PUMP BRACKET	2
49	A00134	90 DEGREE ELBOW, 1/8 MP X ¼ B	2
50	C11724	3/8-16, WELD NUT	2
51	F11802	SOLUTION TANK	1
ĴΙ	L11007	NOT SHOWN	1

#### **NOT SHOWN**

	52	F11723	CLEAN OUT PORT	1
ſ	53	C02237	SCREW, PHILLIPS (CLEAN OUT PORT)	6

## **NOTES**

