

**Minuteman<sup>®</sup>**

*More Than Just Clean*

# Parts and Instruction Manual R100H Rush Carpet Extractor



Minuteman International, Inc.  
A Member of the Hako Group

988756 Rev C 06/23

## TECHNICAL SPECIFICATIONS

### Model R100H (115V and 220V)

Models	Rush 100H
Solution Tank	12 gallon
Recovery Tank	11 gallon
Vacuum Motors	Single 3-stage
Solution Pressure	100 psi
Water Lift	117"
Tank Construction	Polyethylene
Baseplate	¼" aluminum
Rear Wheels	10" non-marking
Casters	4" locking
Power Cord	50 ft. detachable
Dimensions	35"H x 31"L x 18"W
Weight	90 lbs.
Shipping Weight	106 lbs.
Shipping Dimensions	36.5"H x 31.5"L x 19"W
Electrical Draw	18.8 amps
Heater	Detachable – 1000 W
Vacuum/Solution Hose	15'
Carpet Wand	Single Jet – Stainless Steel

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## INSPECTION

**UNPACKING YOUR NEW R100H:** When your package is delivered, check the carton carefully for signs of rough handling. If your R100H is damaged, notify the carrier immediately and request an inspection. Be sure to keep the carton, packing inserts, packing lists and carrier's receipt until the inspector has verified your claim.

MINUTEMAN's liability ceases when the carrier picks up the shipment. However, our customer service staff will be happy to furnish any information needed in connection with the claim and will attempt to expedite a resolution.



### **PLEASE READ BEFORE OPERATING YOUR NEW R100H:**

Read the manual carefully and completely before attempting to operate the unit. This manual has important information for the use and safe operation of the machine. Keep this manual handy at all times.

This equipment has been engineered and manufactured to provide excellent performance and service. To ensure that your equipment will continue to perform as intended:

- Maintain equipment regularly- following the suggested maintenance schedule provided.
- Use only original MINUTEMAN parts when servicing.
- Operate equipment with care.

If additional information is needed, please contact:

**MINUTEMAN INTERNATIONAL 630- 627-6900**

All information and specifications printed in the manual are current at the time of printing; however because of MINUTEMAN's policy of continual product development, we reserve the right to make changes at any time without notice.

## SAFETY INSTRUCTIONS

### FAILURE TO COMPLY WITH THE FOLLOWING WARNINGS AND INSTRUCTIONS WILL VOID THE WARRANTY.

#### WARNING!

- The machine was designed for use on carpet cleaning 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 machine connected to an electrical outlet when unattended.
- Do not immerse or use this machine in standing water. Such use may cause electric shock.
- 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 unit to rain or snow. Store it indoors in a heated location only.
- Do not use the machine for dry vacuuming.
- Use defoamer at all times to prevent damage to the vacuum motor.
- Do not use water in excess of 130°F (54°C) in the solution tank
- 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. Powdered chemical is not recommended. If powdered chemicals are used, premix in a separate container before placing in the solution tank.
- Always read and understand your chemical's MSDS (Material Safety Data Sheet) before use.
- 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 extreme hazardous condition.
- Do not expose machine to freezing temperatures.

- All repairs must be done by an authorized MINUTEMAN repair station.
- Do not use replacement parts other than original MINUTEMAN parts.
- Do not allow your spray stream to remain in one fixed location as surface damage may occur.
- Check that all spray nozzles are securely fastened. Loose nozzles could be ejected from equipment at high speeds.
- This is not a toy. Keep away from children.
- Do not pull by the power or use power cord as a handle. Always unplug by grabbing the plug and pulling, do not unplug by pulling the power cord.
- Inspect cord for damage. Do not use damaged cords. Connect only to properly grounded outlets.
- Keep hair, fingers, loose clothing, and body parts away from moving parts and openings.
- Turn off all controls before disconnecting machine
- Use caution with ejected liquid or chemicals. High pressures and temperatures could be hazardous to nearby people or surroundings.
- Do not run the heater dry. always make sure you have water
- Do not expose heater to freezing temperatures.
- Prevent burns by wearing gloves or using a barrier to remove hot quick disconnects.
- Never leave heater or equipment unattended when connected or powered on.
- The accessory heater was designed for use on R100H extractors for carpet, floor and upholstery extraction applications. Any deviation from its proper use or purpose and the consequential damage that may occur is the sole responsibility of the end user.



## **ELECTRICAL - 115 Volt**

### **Model: R100H**

This machine is designed to operate on a standard 15 amp, 120 volt, 60 Hz, AC circuit. Voltages below 105 volt AC or above 125 volts AC could cause serious damage to the motor.

## **ELECTRICAL - 220 Volt**

### **Model: R100H -220**

This machine is designed to operate on a standard 15 amp, 220 volt, 60 Hz, AC circuit. Voltages below 105 volt AC or above 125 volts AC could cause serious damage to the motor.

## GROUNDING

This piece of equipment must be grounded. Should an electrical malfunction occur, grounding provides a path of least resistance for electrical current- reducing the risk of electric shock. This piece of equipment is furnished with a cord that has a grounding conductor and grounding plug. The grounded plug must only be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

### **WARNING:**

Connecting the equipment to an improperly grounded outlet can result in an increased risk of electric shock. A qualified electrician should be consulted if you are unsure that the outlet is properly grounded. Do not modify the plug provided with the equipment. If it will not fit the outlet, have a proper outlet installed by a qualified electrician.

### **R100H**

This appliance is designed for use on a 120-volt circuit. The grounding plug provided looks like the plug illustrated in Figure 1. Replace the power cord if the grounding pin is damaged or broken.

### **R100H-220**

This appliance is designed for use on a 220-volt circuit. The grounding plug provided looks like the plug illustrated in Figure 1. Replace the power cord if the grounding pin is damaged or broken.

Extension cords connected to this machine should be 12 gauge, three-wire cords with three-prong plugs and outlets. DO NOT use extension cords more than 25 feet (7.6 m) long

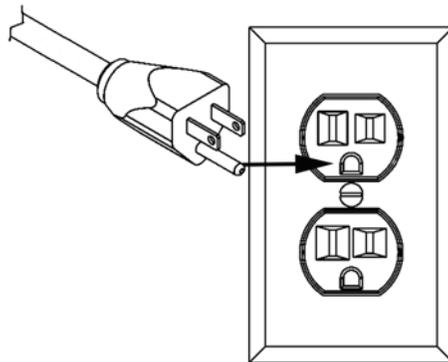


Figure 1

## MAINTENANCE

This R100H has been engineered and built to require minimum 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 life expectancy of the machine.

**CAUTION: Disconnect the power cord from the outlet before doing any clean up or maintenance on the machine**

- Keep the machine clean. Do not allow dust to accumulate on external surfaces or near any moving parts.
- After every job, wipe down the surface of the machine with a clean damp cloth.
- Inspect cord for damage. Do not use machine with a damaged cord.

## PERIODIC MAINTENANCE

- Use only chemicals safe for extractors
- Adhere to the appropriate mix ratios for all chemicals
- For optimal performance, it is suggested that the operator flush the system after every job or at the end of the day.
- Pump seals and valves may need to be replaced at the 1000 hour mark if a loss in pressure is noted

Daily:

1. Always keep the machine clean inside and out.
2. Pour 2 gallons of clean hot water in the solution tank. Turn the pump on and flush the entire system through the wand nozzles for about a minute to prevent alkaline build-up.
3. Remove dirt and lint build-up inside the filter screen in the recovery tank. Lint should be cleaned off so that air flow is not impeded.
4. Check the solution tank strainer in the solution tank. If lint has accumulated in the screen, remove and rinse it in clear running water.

Weekly:

1. Check and clean solution filter
2. Check for obstructions in vacuum pathway

Quarterly:

1. Check pump, plumbing and fittings for leaks
2. Check power cords and hoses for tears

### **CORD STORAGE:**

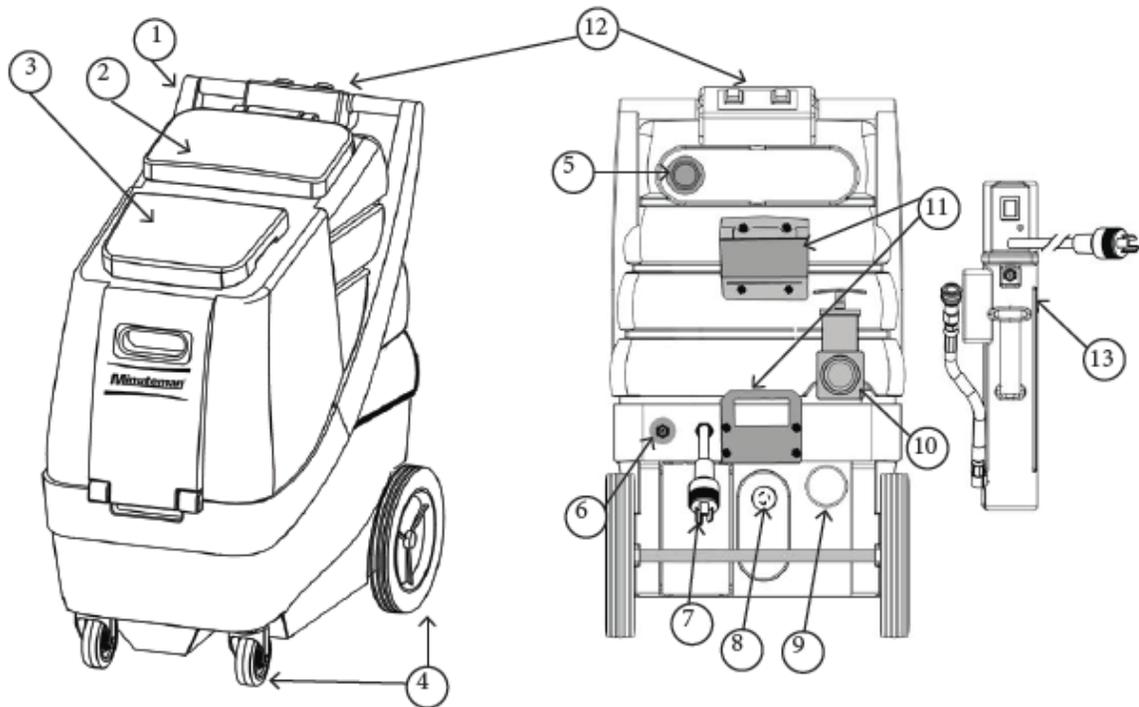
While not in use, storage can be accomplished by winding cord around handle assy. Cord should be completely unwound during operation.

### **CORD SAFETY**

- Do not leave appliance when plugged in. Unplug from outlet when not in use and before servicing
- Do not use with damaged cord or plug. If appliance is not working as it should, has been dropped, damaged, left outdoors, or dropped into water, return to service center for inspection and repair.
- Do not pull or carry by cord, use cord as handle, close a door on cord, or pull cord around sharp edges or corners. Do not run this R100H over cord. Keep cord away from heated surfaces.
- Do not unplug by pulling cord. To unplug, grasp the plug, not the cord.
- Do not handle plug or appliance with wet hands.
- This equipment should be stored indoors and not exposed to rain.

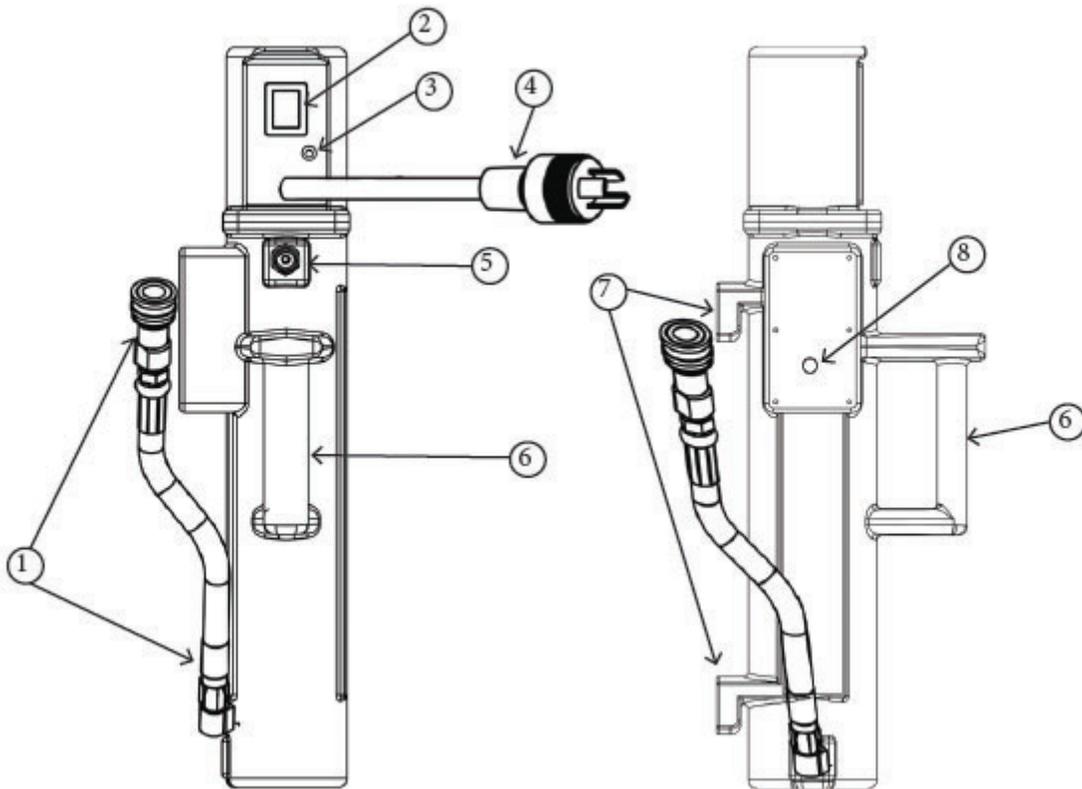
## MACHINE OVERVIEW

1. Handle- Used to maneuver and position the R100H.  
Contains switch box (for switchbox, see #12).
2. Recovery tank and lid- Tank collects recovered waste water. Lid allows access to recovery tank and creates a seal to ensure suction.
3. Solution tank and lid- Tank used to store clean water or solution for your job. Lid allows access to the solution tank and prevents external contamination of solution tank.
4. Non-marking front 4" locking casters and rear 10" wheels.
5. Recovery/vacuum hose inlet barb- connect your recovery vacuum hose to this barb.
6. Solution line Q.D.- Pressurized connection for solution line.
7. Male twist lock pigtail- Connects to 50ft power cord.
8. Female twist lock port for heater.
9. Cool air intake for vacuum.
10. Recovery tank dump valve- Pull up to open.
11. Heater mounting brackets.
12. Switch box- one switch marked "VACUUM" and one switch marked "PUMP". Switches light up when powered on.
13. 1000Watt Heater.



## ACCESSORY HEATER

1. INLET QUICK DISCONNECT AND HOSE- Connects to machine's outlet.
2. POWER SWITCH.
3. LAMP- Indicates when heat element is on and working.
4. TWIST LOCK PIG-TAIL- This connects to the fe- male twistlock plug on the rear of the R100H.
5. OUTLET QUICK DISCONNECT- Connects to working solution line.
6. HANDLE- Used to hold and transport the heater
7. MOUNTING FEET- Used to engage the mounting brackets on an R100H extractor and secure the heater.
8. HIGH TEMP BREAKER ACCESS POINT- Allows access to the breaker switch in the event the unit has been run dry.



**How to use an accessory heater:**

1. Fill the solution tank of your R100H extractor with sufficient water or solution for the task at hand. Do not use water over 130 degrees F.
2. Mount the Heater by lining up the two “legs” (#7 on page 11) to the two mounting brackets on the rear of the machine (#11 on page 10)



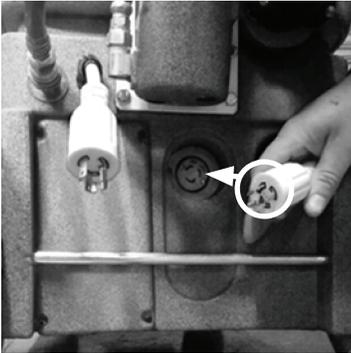
3. Connect your heater's inlet hose (#1 on page 11) to the machine's outlet quick disconnect (#6 on page 10).



4. Connect your 25ft solution hose to outlet quick disconnect (#5 on page 11).



5. Connect the power cord on the heater to the female twistlock plug located on the rear of the R100H.



6. Connect your 50ft power cord to the twist lock pigtail on the back of the machine (#7 on page 10). Plug the cord into a 15amp circuit.
7. Connect your 25ft vacuum hose to the extractor's vacuum inlet barb (#5 on page 10)
8. Connect your vacuum and solution line to a carpet wand or Upholstery attachment
9. Turn the pump switch to the "ON" position using the pump switch on the handle of your R100H. DO NOT turn on your heater until after this step is completed. Pressing the solution valve trigger of your attachment, spray water for 10-15 seconds until you have a steady flow. This ensures the heater is filled with fluid
10. Turn heater on using the power switch (#2 on page 11) and allow up to 3 minutes for the unit to heat up.
11. The heater is ready for use once the green lamp (#3 on page 11) shuts off. Once you start cleaning, the green lamp will turn on and off throughout your job as the thermostats automatically regulate the temperature.

## CLEANING CARPET

1. Using a dedicated dry vacuum, pre-vacuum the space to be cleaned to remove as much dirt as possible. Do not use the extractor to dry vacuum as it does not have a dry filter.
2. Pre-spray the carpet
3. See steps 1-11 in section “Accessory Heater”
4. Make sure the drain valve (#10 on page 10) is closed by pushing the T-handle all the way in.
5. Always use de-foamer- 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.
6. With the vacuum and pump switches in the “ON” position, slowly pull the tool towards you with the solution valve trigger pressed. Make a dry pass forward and backward over the cleaned area to recover residual dirt and solution.
7. Do not overwet carpet! Make overlapping passes to prevent streaking.
8. If the carpet is heavily soiled, squeeze solution valve trigger on the forward pass as well as backwards, allowing cleaning solution a few seconds longer to work prior to vacuuming. Another method is to raise the wand 8” above the carpet and pre-spray lightly prior to cleaning passes. On extremely soiled carpets, we recommend using a pre-spray solution.
9. When you are close to running out of solution, turn off the pump and the heater. Attach the drain elbow on the drain valve. Place a pail under the downspout and pull up the drain valve T-handle. Dirty solution will pour out until the tank is empty. Close the drain valve. Use a clean bucket when you refill the solution tank so you do not create contamination.
10. When the job is completed, turn the switches off, including the heater, and disconnect the vacuum and solution hoses from the carpet tool and the machine. Drain the recovery tank through the drain valve as before.

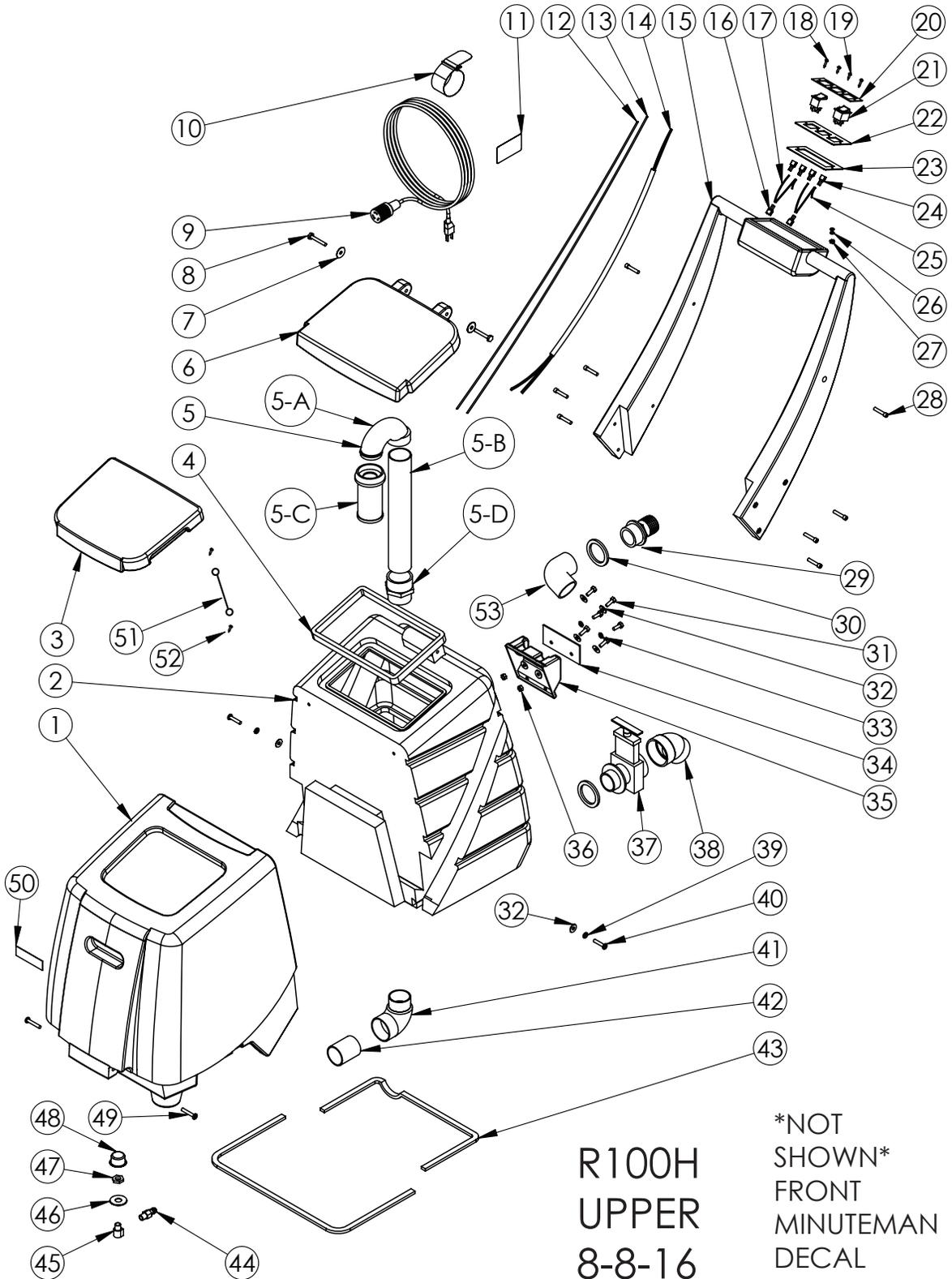
## CLEANING UPHOLSTERY

Cleaning upholstery with success requires a good knowledge of the type of fabric to be worked on. Look for the cleaning instruction label sewn on the underside of the furniture for the recommended method of cleaning the fabric. If it calls for dry cleaning, do not attempt to clean with the wet extraction method. Otherwise, damage to the fabric could occur. Extraction works perfectly on most synthetic fabrics including synthetic velvets.

Before proceeding, test the fabric for colorfastness. Apply a small amount of ready-to-use cleaning solution on the fabric in an inconspicuous spot. Wait for 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.

1. Using a dedicated dry vacuum, pre-vacuum the space to be cleaned to remove as much dirt as possible. Do not use the extractor to dry vacuum as it does not have a dry filter.
2. See steps 1-11 in section “Accessory Heater”
3. Make sure the drain valve (#10 on page 10) is closed by pushing the T-handle all the way in.
4. Attach an upholstery tool to the hose set.
5. Always use de-foamer. Previously cleaned upholstery may 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.
6. With the vacuum and pump switches in the “ON” position, slowly pull the tool backward with the solution valve trigger pressed. Make a dry pass forward and backward over the cleaned area to recover residual dirt and solution.
7. Clean using as little solution as possible. Do not overwet the upholstery! Make overlapping passes to prevent streaking.
8. On heavily soiled areas like arm rests, pre-treat with a recommended pre-spray and /or hold the upholstery tool a few inches above the fabric and press lever to spray on the solution before making a pass.

**UPPER ASSEMBLY**



R100H  
UPPER  
8-8-16

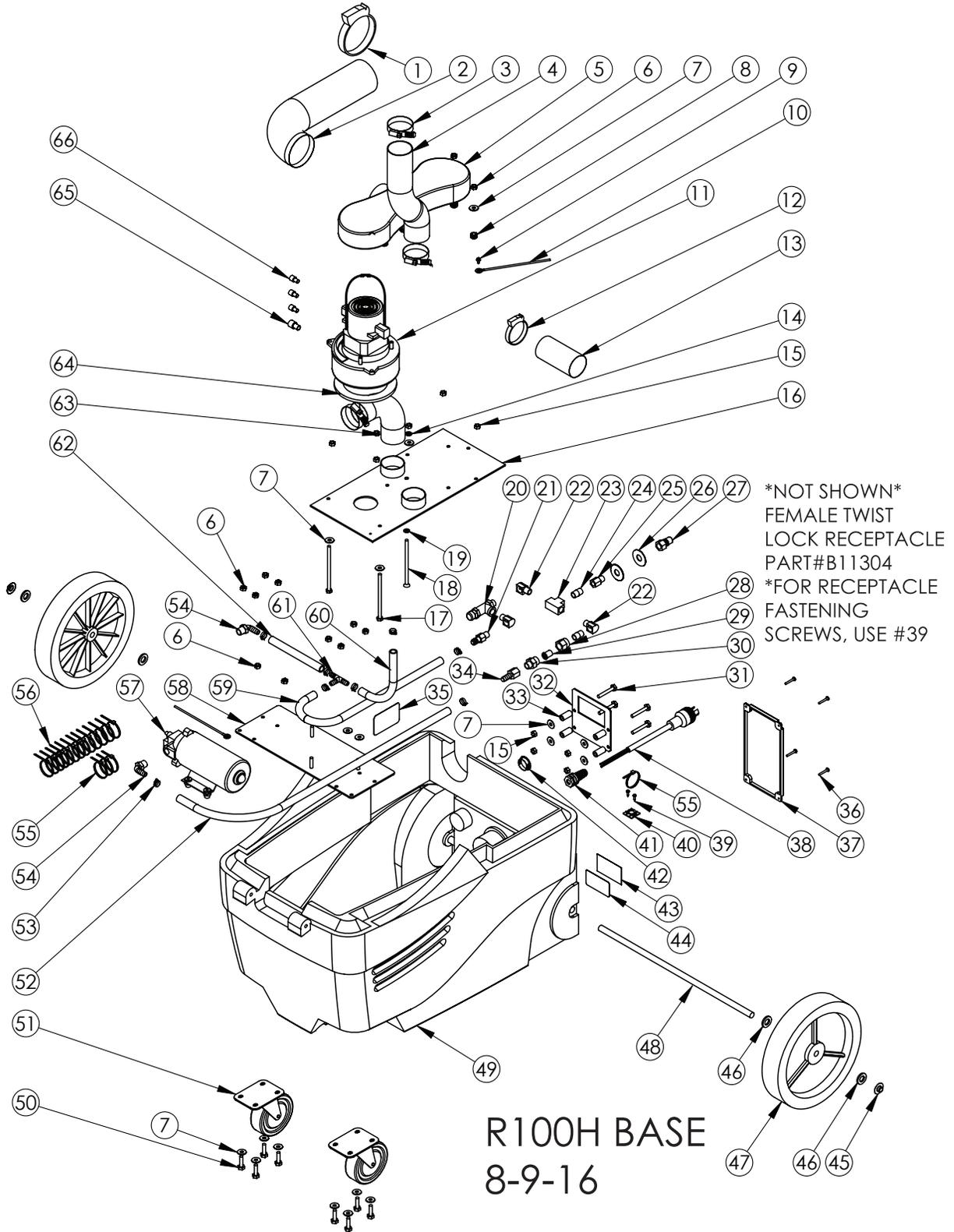
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## UPPER ASSEMBLY BOM

### BILL OF MATERIAL

ITEM	PART NO.	QTY	DESCRIPTION	ITEM	PART NO.	QTY	DESCRIPTION
1	F11787-MM	1	SOLUTION TANK	26	C02315	2	LOCKWASHER, #10 INT. STR, SS
2	F11788-MM	1	RECOVERY TANK	27	C00264	1	NUT, 10-32
3	F11791-MM	1	LID, SOLUTION TANK	28	C11141	8	SCREW, ALLEN HEAD, 10-24 X 1.25 IN
4	E11124	1	GASKET, RECOVERY TANK	29	K00665-1	1	HOSE ADAPTER, 1.5IN, BLACK
5	12904A	1	STAND PIPE ASSEMBLY	30	E11128	2	GASKET, DRAIN VALVE
5-A	K11965	1	ELBOW, 180 DEG. FLOAT BALL	31	C00313	6	HEX BOLT, .25 X 20 X 0.75
5-B	K00672	1	PVC PIPE, 1.5 X 12 IN, SCH 40 WHT	32	C00233	8	WASHER, FLAT, .25 IN
5-C	10989-2A	1	FLOAT BALL SCREEN	33	C02312	2	LOCKWASHER, .25 IN., INTERNAL STAR
5-D	K00741	1	ADAPTER	34	D010283	1	PLATE, HEATER MOUNTING
6	F11785-MM	1	LID, RECOVERY TANK	35	F11804	1	HEATER MOUNT
7	C12039	2	WASHER, 1-4 X 1, SS	36	C00261	2	NUT, .25-20, HEX
8	C02322	2	1/4 X 20 BOLT	37	K00711	1	DRAIN VALVE, BLACK
9	B11769	1	EXTENSION CORD, 12-3 SJTW	38	K00710	1	ELBOW, DRAIN VALVE, BLACK
10	B12915	1	VELCRO STRAP	39	C00254	2	LOCK WASHER, 1-4IN SPLIT
11	H02548-2	1	LABEL, IMPORTANT, CORD	40	C02294	2	SCREW, 1/4 - 20 X 1.25
12	B00185-30	1	WIRES, 73 IN	41	K11185	1	ELBOW, 90, 1.5 IN, MT-MS, PVC
13	B00185-40	1	WIRES, 73 IN	42	K00672-1	1	PVC PIPE, 1.5 X 2.25 IN,
14	B010314	1	WIRE HARNESS	43	E11129	1	GASKET, BASE
15	F11786	1	HANDLE	44	A00060	1	3/8 BARB X 1/4MP, BRASS
16	B00177	2	TERMINAL LUG, FEMALE, QD, 0.25 X .032, 16-14 AWG, FULLY	45	A00052	1	.25 X .375 M-F 90 DEG
17	B00185-40	1	WIRE, 14 GA BLACK, UL1015, 5 IN	46	C11244	1	WASHER, .56 X 1.5 X 0.05
18	C00295-1	2	#10 X .75IN PAN, BLACK SMS, PHILLIPS	47	A00124	1	HEX NUT, .25 NPT BRASS
19	C00293	2	#8 X .5IN PAN, BLACK SMS, PHILLIPS	48	D00373	1	INLET FILTER, .25 NPT
20	D03421	1	COVER, SWITCHPLATE,	49	C11143	2	SCREW, 1/4 - 20 X 1.5 IN, SS
21	B02211-1	2	SWITCH, ROCKER, GREEN LIGHT	50	S11179	1	NON-SKID TAPE, 1 IN. ROLL
22	D010284	1	SWITCHPLATE	51	C00311	2	SCREW, 8-32 X 3/8
23	E010453	1	GASKET, SWITCH BRACKET	52	D13153	1	STAINLESS STEEL LANYARD
24	B00177-1	4	TERMINAL LUG, FEMALE, QD, 0.25 X 0.032	53	K00666	1	90 ELBOW, SCHD 40, 1.5"
25	B00185-30	1	WIRE, 14 GA WHITE, UL1015, 5 IN				

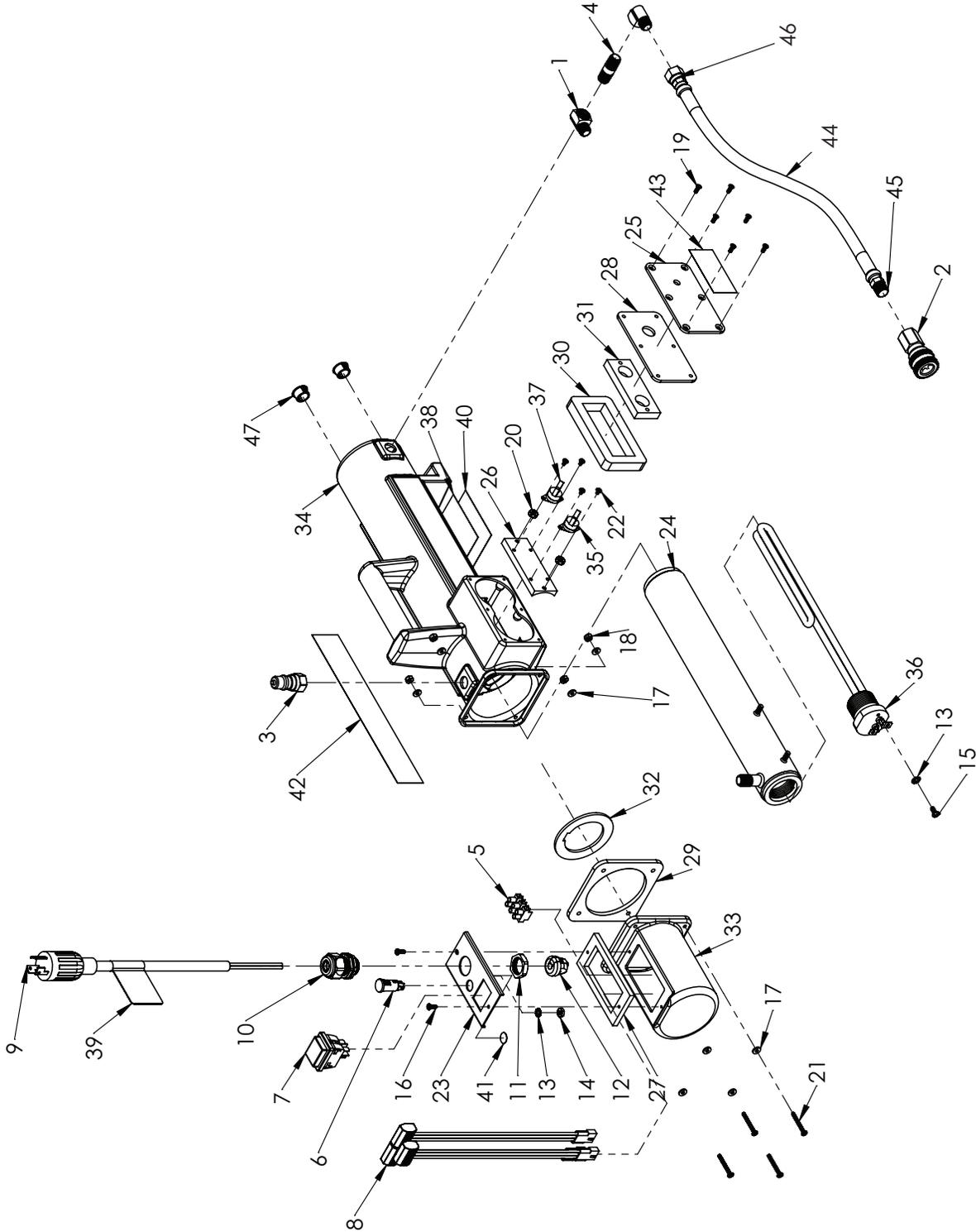
**LOWER ASSEMBLY**



## LOWER ASSEMBLY BOM

BILL OF MATERIAL							
ITEM	PART NO.	QTY	DESCRIPTION	ITEM	PART NO.	QTY	DESCRIPTION
1	J13152	1	DOUBLE GRIP HOSE CLAMP	34	A00061	1	3/8 BARB X 1/4FP, BRASS
2	J11863	1	HOSE, 3 IN	35	H02564-2	1	LABEL, CAUTION, MOTOR HOUSING
3	J00639	3	SCREW CLAMP, 1.63 - 2.43IN.	36	C11165,	4	SCREW, #8 X 1 IN, PAN, BLACK
4	J00618	1	VACUUM HOSE, 2IN GREY, WIRE, 22 IN LG	37	F11790-MM	1	HEATER, TUNNEL COVER
5	F11178-BLK	1	INTERCOOLER, BLACK	38	B11779	1	STUB, 12-3 SJTW YELLOW
6	C00273	16	LOCKNUT, 1/4 X 20, NYLON, SS	39	C00293	4	#8 X .5IN PAN, BLACK SMS, PHILIPS
7	C00233	26	WASHER, FLAT, .25 IN	40	B00192	1	MOUNT, NYLON TIE
8	E00449	6	GROMMET	41	B11606	1	STRAIN RELIEF, PIGTAIL
9	C00284	2	SCREW, 10-32 X .375	42	K10510	1	PLUG, 1.25 IN, BLACK
10	B11150	2	GROUND WIRE	43	H03545	1	COVER, SERIAL # LABEL
11	G02517-1	1	VACUUM MOTOR, 117 IN, <b>115V</b>	44	H00565-5	1	LABEL, SERIAL NUMBER
	G13554		VACUUM MOTOR, 124 IN, <b>220V</b>	45	C02305	2	CAP NUT, .5IN PUSH-ON
12	J00657	1	HOSE CLAMP, 2 INSLDPRT	46	C00240	4	WASHER, SHOULDER, NYLON
13	J00618	1	VACUUM HOSE, 2 IN GREY, WIRE, 4 IN LG	47	G11767	2	WHEEL, 10 IN
14	C00254	1	LOCK WASHER, 1/4IN SPLIT	48	D11170	1	AXLE
15	C00261	10	NUT, .25-20, HEX	49	F11789-MM	1	BASE
16	D11134-1	1	VAC PLATE	50	C00314-1	8	HEX BOLT, 1/4 - 20 X 1IN
17	C11189	5	SCREW, 1/4 - 20 X 4.5 IN,	51	G03518-L	2	LOCKING CASTER, 4 IN
18	C11516	1	SCREW, 1/4 - 20 X 4.5 IN,	52	J00613B	1	SOLUTION HOSE, .375 IN, BLACK
19	C02312	1	LOCKWASHER, .25 IN., INTERNAL STAR	53	J11508	8	SCREW CLAMP #6, 7-16 TO 7- 8IN
20	G11314-1	1	PRESSURE REGULATOR, BRASS	54	A00054	2	ELBOW, 90, .375MP X .375B,
21	A00060	1	3-8 BARB X 1/4MP, BRASS	55	B00191	4	NYLON TIE, 11IN BLACK
22	A00052	3	.25 X .375 M-F 90 DEG	56	B00190	13	NYLON TIE, 4IN
23	A00161	1	TEE, .25 FP, BRASS	57	G13761	1	PUMP, 100 PSI, <b>115V</b>
24	A00111	2	NIPPLE, .25 IN		G13665		PUMP, 170 PSI, <b>230V</b>
25	A00121	1	FITTING, .25 MP X .25 FP,	58	D11194	1	PUMP PLATE
26	C11244	2	WASHER, .5 ID X 1.5 OD	59	J00613B	1	SOLUTION HOSE, .375 X 26 IN, BLACK
27	A00104	1	QD, 1/4 M X 1/4 FP, BRASS	60	J11154	1	SOLUTION HOSE, .375 X 10 IN, WIRE REINFORCED
28	A00097A	1	CAP, INLINE FILTER	61	A11243	1	TEE, .375B X .375B X .375B,
29	A00094E	1	CHECKVALVE, NO STRAINER	62	J11154	1	SOLUTION HOSE, .375 X 6 IN, WIRE REINFORCED
30	A00094C	1	CHECK VALVE BODY	63	J00618	1	VACUUM HOSE, 2 IN GREY, WIRE, 7 IN LG
31	C02322	4	HEX BOLT,1/4 - 20 X 1.75 IN	64	E11169	2	GASKET, VAC MOTOR
32	D010379	1	HEATER MOUNTING PLATE	65	B00179-2	1	CLOSED END CNTR, 16-3
33	C11440	4	SPCR, HEATER MNTING PLATE	66	B00179-1	3	CLOSED END CNTR, 16-3

**HEATER**



**HEATER BOM**

BILL OF MATERIAL - 702HR-MM							
ITEM	PART NO.	QTY	DESCRIPTION	ITEM	PART NO.	QTY	DESCRIPTION
1	REF	2	90 DEGREE ELBOW, .25" MP X .25" FP	25	D11254	1	COVER, THERMOSTAT
2	A00102	1	QUICK DISCONNECT, .25" F, .25" FP, BRASS	26	D13725	1	THERMOSTAT BASE
3	A00104	1	QD, .25" M X .25" FP, BRASS	27	E10941	1	GASKET, SWITCH PLATE
4	REF	1	NIPPLE, .25" NPT, 1.5" L, BRASS	28	E11256	1	GASKET, THERMOSTAT COVER
5	B02190	1	TERMINAL BLOCK, 3-POLE	29	E13427	1	GASKET, HEATER, SBR
6	B02196-1	1	INDICATOR LIGHT	30	E14045	1	PARTITION PAD, HEATER
7	B02211-1	1	ROCKER SWITCH	31	E14076	1	GASKET, THERMOSTAT, HEATER
8	B10933	1	WIRE HARNESS, 12GA TEFLON	32	F10956	1	PARTITION, PVC, HEATER
9	B11779	1	POWER CORD, 12/3, SJTW, 9" L	33	F11795-MM	1	CAP, HEATER
10	B11821	1	STRAIN RELIEF	34	REF	1	HOUSING
11	B11832	1	STRAIN RELIEF NUT	35	G10964-1	1	THERMOSTAT, 170DEG
12	B13291	1	CORD GRIP, SNAP-IN, 12/3	36	G13442	1	HEATER ELEMENT, 1000W, 115V
13	C00256	2	LOCKWASHER, #10, EXT. STAR	37	G11258-1	1	THERMOSTAT WITH BREAKER
14	C00264	1	HEX NUT, 10-32, SS	38	H00565-5	1	LABEL, SERIAL #, STANDARD
15	C00310-38	1	#8-32 X 3/8" SCREW, BLACK OXIDE	39	H010237	1	LABEL, CAUTION, HEATER
16	C00324-38	2	#6-32 X 3/8" SCREW RH	40	H03545	1	COVER, SERIAL # LABEL
17	C02265	8	WASHER #6 SAE FLAT	41	H10911	1	LABEL, GROUND
18	C02274	4	LOCKNUT, NYLON, #6-32	42	H10960	1	WARNING LABEL
19	C11435	6	SCREW, 6-32 x .375", BO, SS	43	H13135	1	WARNING LABEL, FREEZING
20	C13025	2	HEX NUT, 10-32 WITH EXT. LOCK WASHER	44	J00580	1	HIGH PRESSURE/TEMP HOSE .25" X 18"
21	C13474	4	#6-32 X 1" SCREW RH SS	45	J00659	1	SWAGE FITTING, .25" MP
22	C14091	4	SCREW, #5-40 x .1875", RH, ZP	46	J00660	1	SWAGE FITTING, .25" FP
23	D11227	1	SWITCH PLATE	47	K02715	2	PLUG, .625"
24	REF	1	TANK				



## TROUBLESHOOTING

### ELECTRICAL SYSTEM

PROBLEM	SOLUTION
NO ELECTRICAL POWER	<ol style="list-style-type: none"> <li>1. Defective power cord.</li> <li>2. House or building circuit breaker tripped</li> </ol>
POWER IS INTERMITTENT TO ONE OR ALL MOTORS	<ol style="list-style-type: none"> <li>1. Faulty electrical cable.</li> <li>2. Defective switches.</li> <li>3. Loose terminal or discolored terminal connections.</li> </ol>

### VACUUM SYSTEM

PROBLEM	SOLUTION
NO VACUUM SUCTION	<ol style="list-style-type: none"> <li>1. Drain Valve open.</li> <li>2. Vacuum lid is not sealed against tank.</li> <li>3. Loose vacuum hose, vacuum connection</li> </ol>
LOW VACUUM SUCTION	<ol style="list-style-type: none"> <li>1. Accumulated dirt on lid screen.</li> <li>2. Worn out vacuum lid gasket.</li> <li>3. Lint &amp; dirt build-up on wand head.</li> <li>4. Defective vacuum hose.</li> <li>5. Loose connection in the vacuum motor(s).</li> </ol>

### SOLUTION SYSTEM

PROBLEM	SOLUTION
PUMP MOTOR RUNS BUT NO SPRAY THROUGH SPRAY TIPS	<ol style="list-style-type: none"> <li>1. Clogged spray tips.</li> <li>2. Clogged solution intake filter screen.</li> <li>3. Clogged female quick disconnect coupler.</li> <li>4. Quick disconnects not fully connected</li> <li>5. Dirty or damaged pump head valves.</li> <li>6. Defective pump check valve.</li> <li>7. Crack in pump housing.</li> <li>8. Lost Prime.</li> </ol>
UNEVEN OR WEAK SPRAY FOR SPRAY TIPS	<ol style="list-style-type: none"> <li>1. Clogged or dirty spray tips.</li> <li>2. Accumulated dirt on solution intake filter screen.</li> <li>3. Accumulation of debris inside pump and plumbing.</li> <li>4. Worn pump bearing (excessive noise).</li> <li>5. Punctured pump diaphragm.</li> <li>6. Defective rectifier or motor.</li> <li>7. Worn nozzles.</li> </ol>
ERRATIC PRESSURE	<ol style="list-style-type: none"> <li>1. Pump check valves defective or dirty</li> <li>2. Lost prime.</li> </ol>

***“More Than Just Clean”***

**Minuteman is a Full Line Manufacturer of Sweepers and Scrubbers,  
for Industrial Facilities.**