

This manual is furnished with each new **MINUTEMAN CRV Clean Room Vacuum**. This provides the necessary operating and preventive maintenance instructions. Operators must read and understand this manual before operating or servicing this machine.

This machine was designed to give you excellent performance and efficiency. For best results and minimal cost, please follow the general guidelines below:

- Operate the machine with reasonable care.
- Follow the manufacturers suggested maintenance instructions as provided in this booklet.
- Use original Minuteman supplied parts.

TECHNICAL SPECIFICATIONS

Model	CRV	
Model No.	C80704-01, C80704-02	Stainless (115V)
	C80704-03, C80704-04	Painted (115V)
	C80704-07, C80704-12	Painted (240V)
	C80704-08, C80704-09	Stainless (240V)
Air Flow	99 CFM	(2.8 m ³ /min)
Power	930 Watts	
Tank Size	4 gal	(15 liters)
Capacity	.21 cu. ft	(.006 m ³)
Lift	88"	(2235 mm)
Cord	16-3, 50'	(16-3, 15 m)
Wheels		
Front	3"	(8 cm)
Rear	6"	(15 cm)
Weight (w/wheels)	26 lbs	(12 kg)
Weight (w/out Wheels)	19 lbs	(9 kg)

Table of Contents

Important Safety Instructions	1
Operating Instructions (Model C80704-01, 02, 03, 04)	2
Inspection	2
Electrical - 115 Volt	2
Grounding Instructions	2
Operating Instructions (Model C80704-07, 08, 09, 12)	3
Inspection	3
Electrical - 240 Volt	3
Grounding Instructions	3
User Maintenance Instructions	4
Cloth Bag & Hose Assembly	4
Cord Storage	4
Operation and Filter care Instructions	4
Preparing Vacuum for Use	4
Procedure for Cleaning Vacuum and Replacing Filter	4
Exploded Views	5
Lid Assembly	5
Lid Assembly BOM	6
Tank Assembly	7
Hose Assemblies	8
Bag Assembly	9
Wiring Diagram	9
Minuteman International Made Simple Commercial Limited Warranty	10

IMPORTANT SAFETY INSTRUCTIONS

When using an electrical appliance, basic precautions should always be followed, including the following:

READ ALL INSTRUCTIONS BEFORE USING

WARNING - To reduce the risk of fire, electric shock, or injury:

- Do not leave appliance when plugged in. Unplug from outlet when not in use and before servicing.

WARNING

To reduce the risk of electric shock - Do not expose to rain; store indoors.

- Do not allow to be used as a toy. Close attention is necessary when used by or near children.
- Use only as described in this manual. Use only manufacturer's recommended attachments.
- 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 it to a service center.
- Do not pull or carry by cord, use cord as a handle, close a door on cord, or pull cord around sharp edges or corners. Do not run appliance over cord. Keep cord away from heated surfaces.
- Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
- Do not handle plug or appliance with wet hands.
- Do not put any object into openings. Do not use with any opening blocked; keep free of dust, lint, hair, and anything that may reduce air flow.
- Keep hair, loose clothing, fingers, and all parts of body away from openings and moving parts.
- Do not pick up anything that is burning or smoking, such as cigarettes, matches or hot ashes.
- Do not use without dustbag and/or filters in place.
- Turn off all controls before unplugging.
- Use extra care when cleaning on stairs.
- Do not use to pick up flammable or combustible liquids such as gasoline or use in areas where they may be present.
- Connect to a properly grounded outlet only. See grounding instructions.

SAVE THESE INSTRUCTIONS

OPERATING INSTRUCTIONS (Model C80704-01, 02, 03, 04)

INSPECTION

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

ELECTRICAL - 115 VOLT

This machine is designed to operate on a standard 15 amp, 115 volt, 60 hz, AC circuit. Voltages below 105 volts AC or above 125 volts AC could cause serious damage to the motor.

WARNING

Electric motors can cause explosions when operated near explosive materials or vapors. Do not operate this machine near flammable materials such as solvents, thinners, fuels, grain dust, etc.

GROUNDING INSTRUCTIONS

This appliance must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

DANGER

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the appliance — if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

This appliance is for use on a nominal 120-volt circuit and has a grounding plug that looks like the plug illustrated in sketch A below. Make sure that the appliance is connected to an outlet having the same configuration as the plug. No adapter should be used with this appliance.

OPERATING INSTRUCTIONS (Model C80704-07, 08, 09, 12)

INSPECTION

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

ELECTRICAL - 240 VOLT

This machine is designed to operate on a standard 16 amp. type L fused 230 volt, 50 hz, AC circuit. Voltages below 200 volts AC or above 250 volts AC could cause serious damage to the motor. I.E.C. Class 1.

WARNING

Electric motors can cause explosions when operated near explosive materials or vapors. Do not operate this machine near flammable materials such as solvents, thinners, fuels, grain dust, etc.

GROUNDING INSTRUCTIONS

This appliance must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

DANGER

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the appliance — if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

USER MAINTENANCE INSTRUCTIONS

All service and repair should be performed by a qualified vacuum service representative or electrician. No user serviceable components are employed in the electrical vacuum lid head assembly. No lubrication of the motor is required.

CLOTH BAG & HOSE ASSY

Cloth bag and hose assy. are user maintenance items and can be replaced when worn out. Cloth bags can be maintained by blowing dust off of the bag and then laundered. Cloth bags should be completely dried before re-installing into machine. For optimum performance, empty and clean filter bag regularly. A clogged and dirty bag restricts the flow of air and results in reduced vacuum. The hose assy. can be maintained by wiping off with a dampened cloth of mild liquid soap and water, then allowed to dry.

CORD STORAGE

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

- 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.
- 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 appliance 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.
- Always unplug the machine when removing the head off the tank. This equipment should be stored indoors and not exposed to rain.

OPERATION AND FILTER CARE INSTRUCTIONS

The Minuteman Digital Switching Station Vacuum has been specially designed to reduce the incidence of airborne dust, including carbon dust from motor cooling air, to a level of 99.999% efficiency at .12 micron size particles. This unit is equipped with a red indicator light which will flash on and off while vacuum is in use. When the red indicator remains illuminated, the operator should replace the filter collector bag and clean the cloth filter as required. If indicator light still remains illuminated UHPA filter should be replaced.

PREPARING VACUUM FOR USE

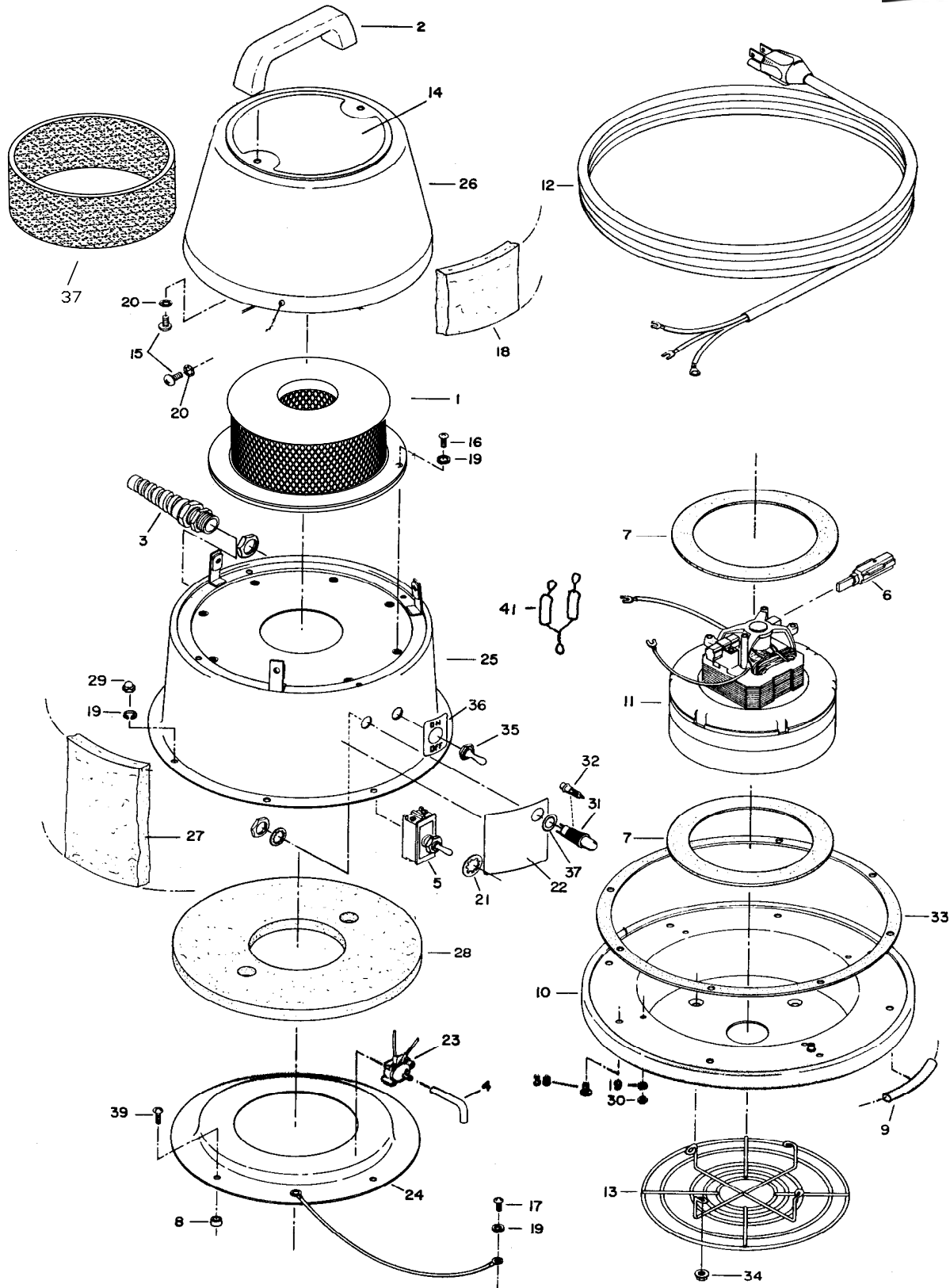
1. Take the paper disposable filter bag with the cardboard collar attached and open the bag by gently pulling the folds apart. 2. Insert the filter bag into the tank and push it to the bottom. 3. Locate the cardboard collar around the intake tube and gently work it past the raised ring that runs around the tube. 4. Place the cloth filter bag onto and into the tank centering the metal ring around the rim of the tank. 5. Position the lid onto the tank and snap on lid latches. Vacuum is ready for use.

PROCEDURE FOR CLEANING VACUUM AND REPLACING FILTER

1. Unplug electric cord from power source. 2. Carefully and slowly release lid latches and remove motor lid only. 3. Gently remove the cloth filter and inspect soil condition. Clean filter by shaking or brushing into trash container. 4. Reach into tank and remove paper disposal filter bag. 5. Clean out vacuum tank of any debris that may have collected. 6. To put vacuum back into service, follow "Preparing" procedure above.

Exploded Views

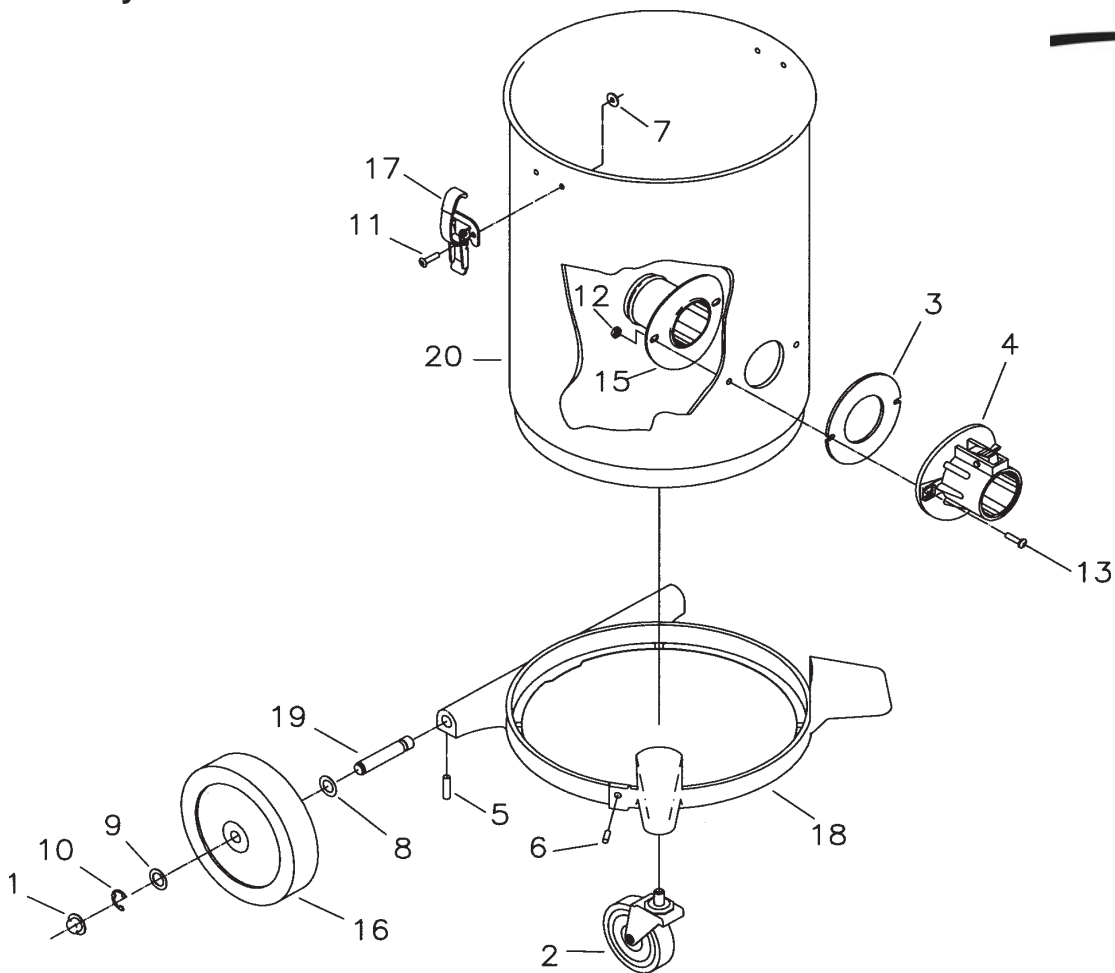
Lid Assembly



Lid Assembly BOM



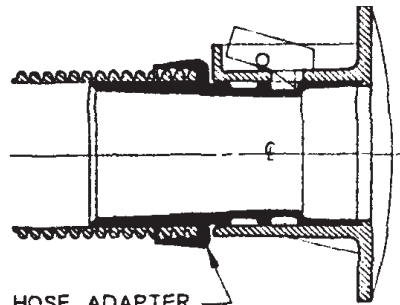
Item	Part No.	Qty.	Description
1	110039	1	ULPA Filter 99.999% at .12 microns
2	130040POL	1	Handle Polished
3	833237	1	Strain Relief
4	250118	1	Hose, Neoprene .19 x .37 x 3
5	380002	1	Switch, Toggle 1.5 HP
6	380028	2	Carbon Brushes
7	290017	2	Molded Vac Motor Gasket
8	380037	4	#10 Spacer x 3/16 Alum
9	380044	1	Lid Gasket 4/6, 40"
10	380066	1	Lid, SS CRV Vac
11	381001	1	Motor, 115V
11a	381044	1	Motor, 230V
12	381020	1	Cord Set 16-3 50'
13	384001PLT	1	Bag Guard New Style
14	715031	1	Decal CRV
15	710177	5	SCR-MC 1/4-20 X .37 ST PL
16	710355	8	SCR-MC 10-32 X .50 ST PL
17	711124	1	SCR-ST-B 10 X .37 NI
18	800046	1	Optional Diffuser
19	711553	17	WSR-Internal Lock #10
20	711554	5	WSR-Internal Lock 1/4 ID
21	711556	1	WSR-Internal Lock 1/2
22	715025	1	Decal Check Filter CRV
23	740224	1	Pressure Switch
24	750000	1	Assy. Motor Hold Down
25	750195	1	Silencer Dome Assy.
26	760281PTD	1	Cover ULPA Filter Painted
27	761289	1	Felt, .4.50 x 26.5
28	761291	1	Felt, .62 x 9.00 x .50
29	711351	8	Acorn Nut 10/32
30	711310	4	Nut-Hex 10-32 ST PL
31	740090	1	Light Socket & Lens
32	740091	1	Light, Neon 115V
33	760291	1	Gasket
34	711373	4	Nut-Nloc 1/4 20
35	760650	1	Hexseal Switch Cover
36	715129	1	Decal On/Off CRV
37	110030pkg	1	PREFILTER SLEEVE, 829/839, PKG OF 6
38	760247	1	O-Ring .312 ID x .442 x .065
39	710153	8	SCR-MC 10-32 x .37 ST PL
40	740219	1	Resistor 39K 2 Watt (230V only)
****	800049		Lid Assembly Complete 115V
****	800052		Lid Assembly Complete 230V



Item	Part No.	Qty.	Description
1	130032	2	Cap Retainer
2	280016	2	Caster
3	390087	1	Gasket Diecut
4	390110	1	Intake Assy Aluminum
5	711005	4	SCR-SK 1/4-20 x .31
6	711006	3	SCR-SK 1/4-20 x .62
7	711503	4	WSR-Flat #10
8	711524	2	WSR-Wave .52 x .87 x .01
9	711594	2	WSR-Flat .56 x .88 x .03 NI
10	711713	2	Retaining Ring-E
11	711915	4	Rivet .19 x .28 x .37 HD STNI
12	712638	2	Nut Hex 10-24 SS Nyloc
13	712824	2	SCR-THMS 10-24 x .75 STPL
14	715383	1	Decal, Minuteman
15	750118	1	Intake Assy Tube
16	760083	2	Wheel 6"
17	761054	2	Latch
18	900055PTD	1	Bracket, Wheel
19	900066	2	Axle, Plated
20	900085	1	Tank, 4 Gal. PTD
20A	900109	1	Tank, 4 Gal. SS Low Intake

HOSE ASSEMBLY COMPLETE

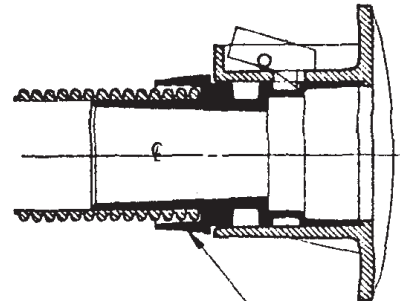
- 800322 2" X 10' CRUSH PROOF
- 800323 2" X 15' CRUSH PROOF
- 800329 2" X 25' CRUSH PROOF



390019 - 2" HOSE ADAPTER

HOSE ASSEMBLY COMPLETE

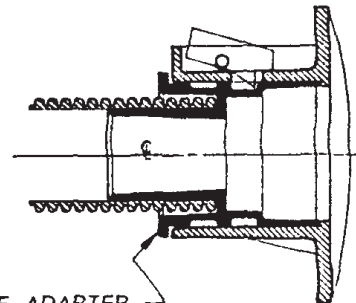
- 800317 1-1/2" X 10' CRUSH PROOF
- 800318 1-1/2" X 15' CRUSH PROOF
- 800319 1-1/2" X 25' CRUSH PROOF
- 800320 1-1/2" X 10' NEOPRENE
- 800321 1-1/2" X 15' NEOPRENE
- 800325 1-1/2" X 25' NEOPRENE



390014 - 1-1/2" HOSE ADAPTER

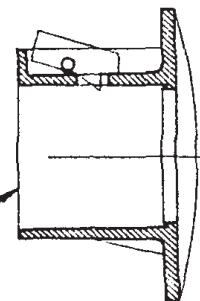
HOSE ASSEMBLY COMPLETE

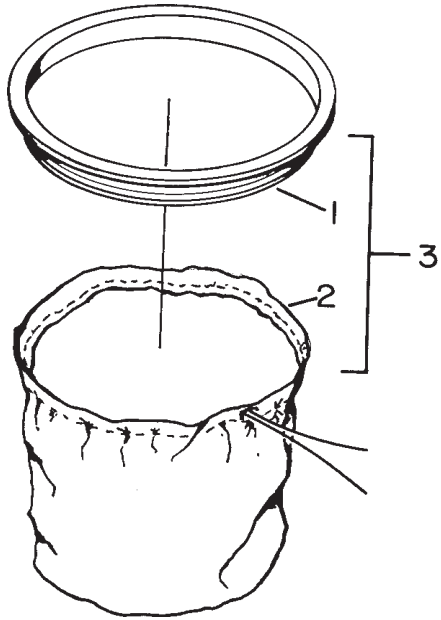
- 800326 1-1/4" X 10' CRUSH PROOF



390013 - 1-1/4" HOSE ADAPTER

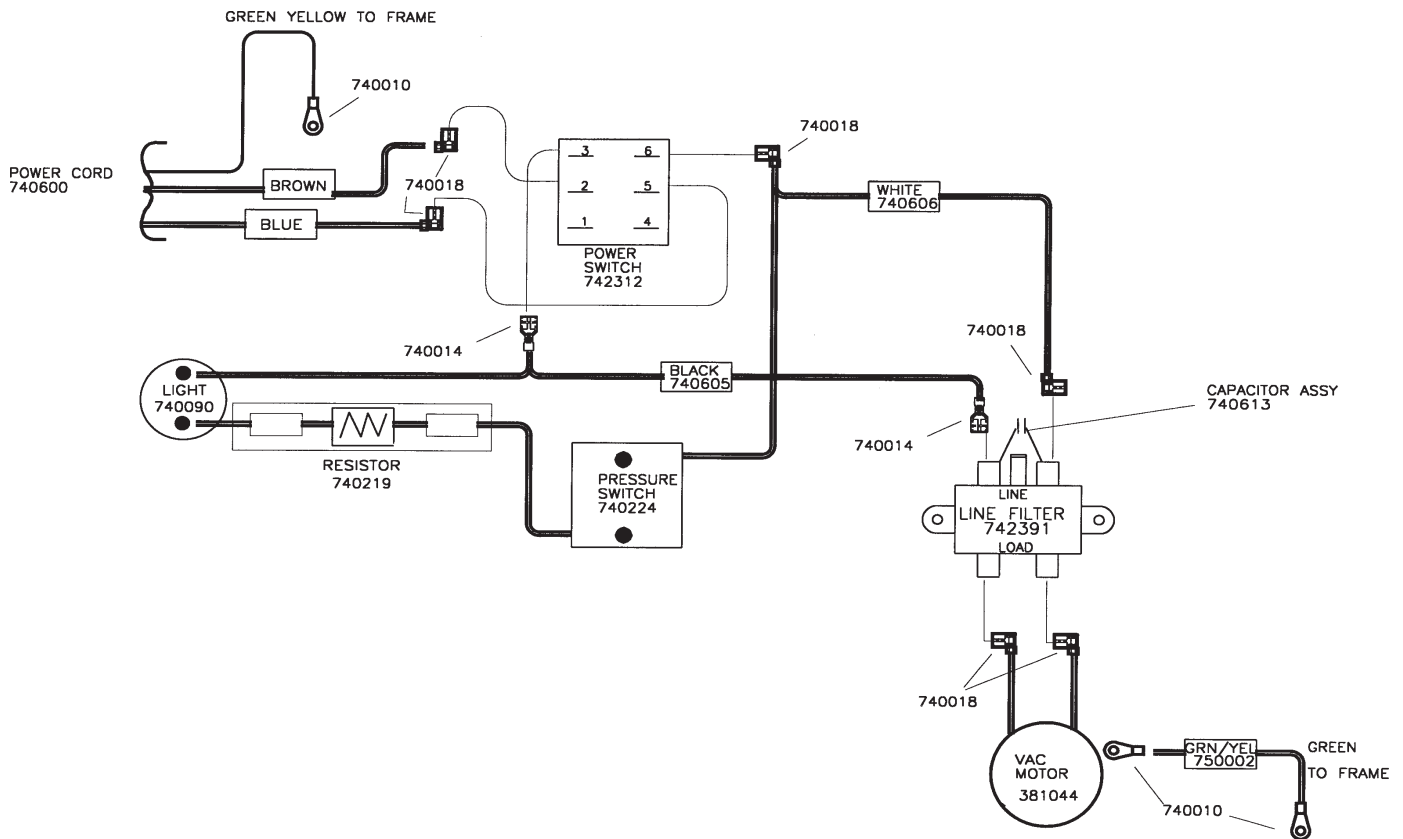
390110 Aluminum
INTAKE COMPLETE
WITH PINS





Item	Part No.	Qty.	Description
1	760244	1	Molded Bag Ring
2	805043	1	Cloth Filter 4 Gallon
2a	805040	1	Cloth Filter 6 Gallon
3	805044	1	Bag Assy. Complete 4 Gallon
3a	805041	1	Bag Assy Complete 6 Gallon

Wiring Diagram



Minuteman International Made Simple Commercial Limited Warranty

Minuteman International, Inc. warrants to the original purchaser/user that the product is free from defects in workmanship and materials under normal use. Minuteman will, at its option, repair or replace without charge, parts that fail under normal use and service when operated and maintained in accordance with the applicable operation and instruction manuals. All warranty claims must be submitted through and approved by factory authorized repair stations.

This warranty does not apply to normal wear, or to items whose life is dependent on their use and care, such as belts, cords, switches, hoses, rubber parts, electrical motor components or adjustments. Parts not manufactured by Minuteman are covered by and subject to the warranties and/or guarantees of their manufacturers. Please contact Minuteman for procedures in warranty claims against these manufacturers.

Special warning to purchaser -- Use of replacement filters and/or prefilters not manufactured by Minuteman or its designated licensees, will void all warranties expressed or implied. A potential health hazard exists without original equipment replacement.

All warranted items become the sole property of Minuteman or its original manufacturer, whichever the case may be.

Minuteman disclaims any implied warranty, including the warranty of merchantability and the warranty of fitness for a particular purpose. Minuteman assumes no responsibility for any special, incidental or consequential damages.

This limited warranty is applicable only in the U.S.A. and Canada, and is extended only to the original user/purchaser of this product. Customers outside the U.S.A. and Canada should contact their local distributor for export warranty policies. Minuteman is not responsible for costs or repairs performed by persons other than those specifically authorized by Minuteman. 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 malfunctions of the product.

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

This warranty gives you specific legal rights, and you may have other rights which vary from state to state. Some states do not allow the exclusion or limitation of special, incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions and limitations may not apply to you.

Cord Electric Group..... Three years parts, two years labor, ninety days travel (Not to exceed two hours)

Exceptions..... Port-A-Scrub, one year parts, six months labor
MPV 13, one year parts
MPV 14 and 18, two years parts, one year labor
RapidAir blower, one year parts, one year labor
Explosion-Proof Vacuum, one year parts, one year labor
Pneumatic Vacuums, three years parts, one year labor

Battery Operated Group..... Three years parts, two years labor, ninety days travel
(Not to exceed two hours)

Exceptions..... Sweepers, one year parts, one year labor, ninety days travel
(Not to exceed two hours)

Internal Combustion Group....One year parts, one year labor, ninety day travel
(Not to exceed two hours)

Replacement Parts.....Ninety days

Batteries.....0-3 months replacement, 4-12 months pro-rate

Polypropylene Plastic Tanks...Ten years, no additional labor