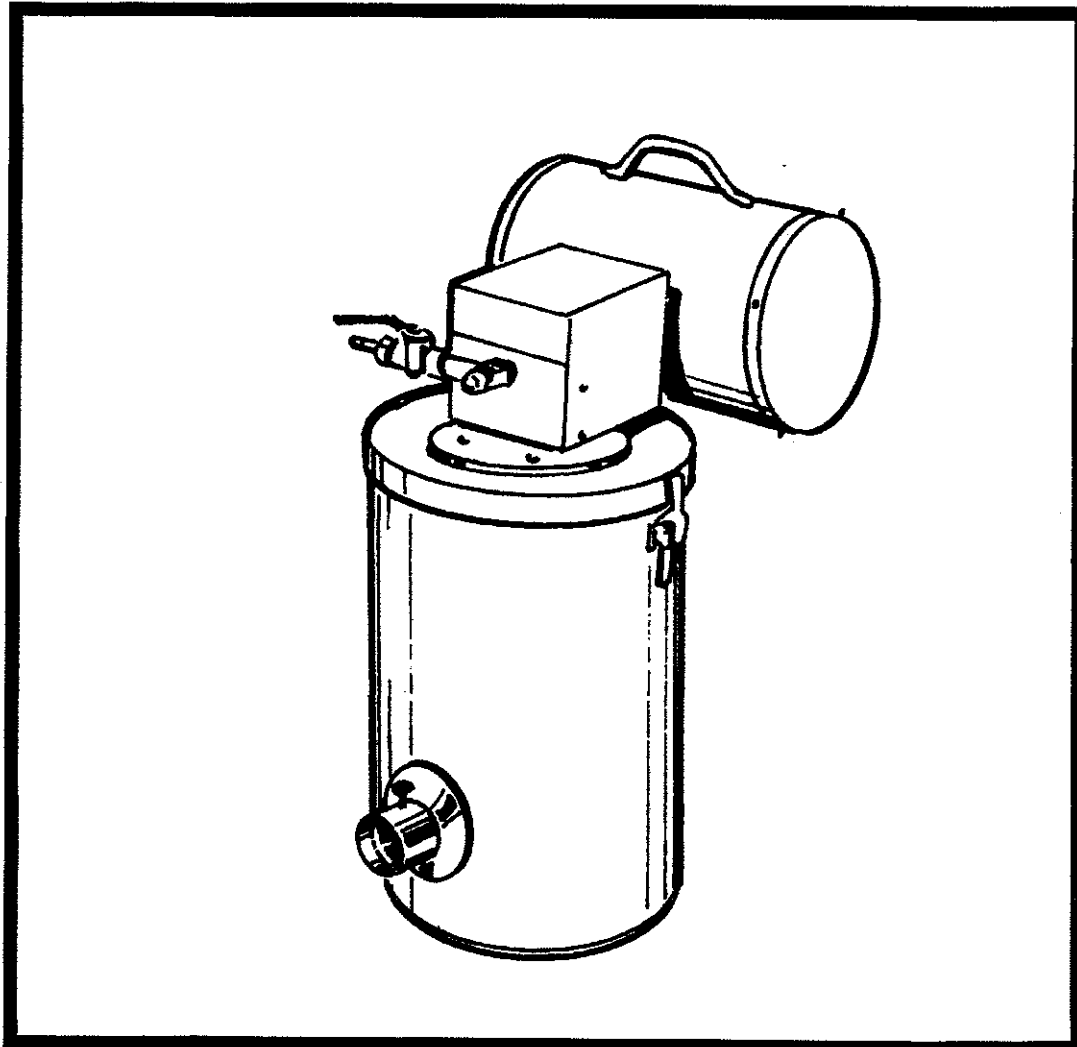


**Air
Operated
Vacuum**

**Model: C87004 (X1700-4)
C87006 (X1700-6)**

■ OPERATION ■ SERVICE ■ PARTS ■ CARE



Revised 6/94

Minuteman[®]

**MODEL X-1700-4 AND X-1700-6 AIR OPERATED VACUUM. DRY RECOVERY ONLY.
EQUIPPED WITH H.E.P.A. FILTER 99.97% EFFICIENT AT 0.3 MICRONS.**

OPERATING INSTRUCTIONS

INSPECTION

Carefully unpack and inspect your machine for shipping damage. Each unit is tested and thoroughly inspected before shipment, therefore, any damage is the responsibility of the delivering carrier who should be notified immediately. Read all instructions carefully before operating.

SPECIAL WARNING:

Air operated equipment can generate static electricity during use. Static dissipating arcing can be generated and occur if equipment and accessories are not grounded. Risk of explosion is possible if operated near explosive materials or vapors. Do not operate this equipment near flammable materials such as solvents, thinners, fuels, grain dust, etc.

AIR PRESSURE AND C.F.M. VOLUME REQUIRED

For maximum performance, operate with 1/2" air pressure line, 80 PSI (max. 100 PSI) and 37 input C.F.M. Air pressure control valve can be regulated to operate with lower pressure and C.F.M. when maximum is not required.

MAINTENANCE AND USAGE

Air supplied to vacuum must be clean and dry to avoid contamination in silencer and to maintain optimum performance.

Empty tank, clean filter bag and replace disposable filters regularly. Clogged filters restrict air flow and results in reduced vacuum performance.

Always shut off main air supply and open air valve at vacuum to relieve pressure before disconnecting air pressure line.

OPERATION AND FILTER CARE INSTRUCTIONS

Your Hako Minuteman vacuum has been specifically designed to clean up fibrous asbestos, asbestos dust and other dry hazardous materials. Special filters reduce the incidence of air-borne dust that would be created by any other method of cleaning.

During the removal of asbestos dust or other hazardous material, do not sweep, scoop, shovel, or in any manner handle other than by vacuuming.

Do not at any time attempt to bypass, remove, substitute, or by any other means change the type of filters used in this vacuum. Use only approved Hako Minuteman vacuum filters and filter bags.

Before attempting to use and before cleaning, be certain you fully understand the instructions given for the setting up and cleaning/changing of filters of this vacuum.

Since each facility has its own individual and unique cleaning problems, it is suggested that you use the following guidelines in determining the length of time between filter changes or cleaning the vacuum tank. Do not allow the disposable collector bag or vacuum tank to become more than 1/4 full before emptying.

ASSEMBLY PROCEDURE FOR X-1700-4

(See Schematic on page 3)

1. Take the paper filter protector #8 and insert into tank. Snap the elastic band around the rim of the tank. Allow two inches to overlap the tank rim.
2. Place cloth filter bag assembly #7 into tank. Center steel frame of filter around tank rim.
3. Place bag frame #6 with ring down into filter bag.
4. Turn vacuum lid assembly #1 upside down on worktable. Center one pink impaction filter #2 onto H.E.P.A. filter #12. Place screen #3 over filter and lock clamp #4 onto filter.
5. Place vacuum lid assembly #1 onto tank #11, center and fasten lid latches.

PROCEDURE FOR REMOVING CONTAMINATED FILTERS AND FOR CLEANING OF CONTAMINATED TANK FOR MODEL X-1700-4

For the benefit of your health, you should always wear a face mask and protective clothing approved and recommended by your Safety Department for the particular hazardous waste material you are working with. Check with your Safety Department or Industrial Hygienist for their instructions before attempting to clean out vacuum.

1. Shut off main air pressure valve feeding air to vacuum. Open air valve on vacuum lid to relieve pressure on line. If equipped with quick coupler, disconnect air pressure line.
2. Carefully and very slowly, remove vacuum lid only. (Be sure you have not accidentally lifted the cloth filter bag at the same time.) Set lid assembly aside.
3. Remove cloth filter bag with bag frame. Check for residue on bag. If required, vacuum clean only, do not shake bag in open atmosphere.
4. Carefully undo the elastic band on the filter protector bag, fold in, and place this filter into proper disposal container.
5. Carefully empty contents of tank into proper disposal container.
6. Using a wiping cloth dampened with water (not soaking wet), wipe down all the exposed surfaces inside the tank; put all wiping material into disposal container.
7. Check pink impaction filter on H.E.P.A. filter. If impact filter shows discoloration due to dust penetration, remove and place in disposal container.
8. Visually check H.E.P.A. filter. If filter shows signs of dust penetration, revise cleaning and filter change procedure to be done more frequently. Be absolutely sure all filters and prefilters are always used and installed properly.
9. **CAUTION:** Hazardous materials must be disposed of properly. Never throw contaminated debris into your usual trash receptacle. Check with your Safety Department or Industrial Hygienist for final disposal requirements.
10. Follow assembly procedure for X-1700-4 as described above.

ASSEMBLY PROCEDURE FOR X-1700-6

(See Schematic on page 3)

The only difference between the X-1700-6 and the X-1700-4 air vacuums is the tank size and disposable collector filter bag #9 which is standard on the X-1700-6.

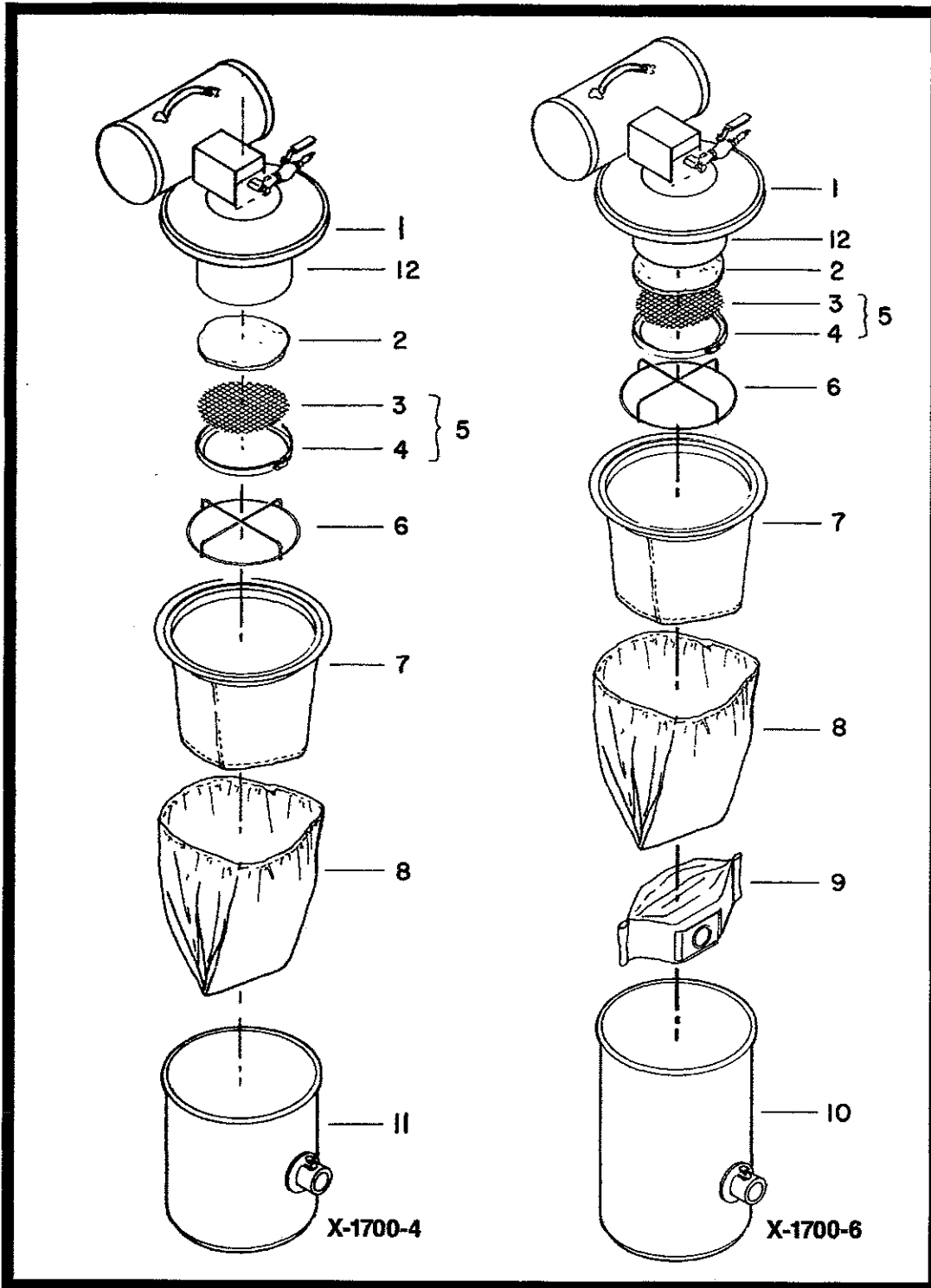
1. Carefully open the folds of the disposable collector bag #9 and insert into tank.
2. Place the cardboard collar onto the intake tube and carefully pull the collar over the tube until the rubber gasket is past the ring on the end of the tube.
3. Follow the same instructions as outlined for the X-1700-4 to complete the assembly.

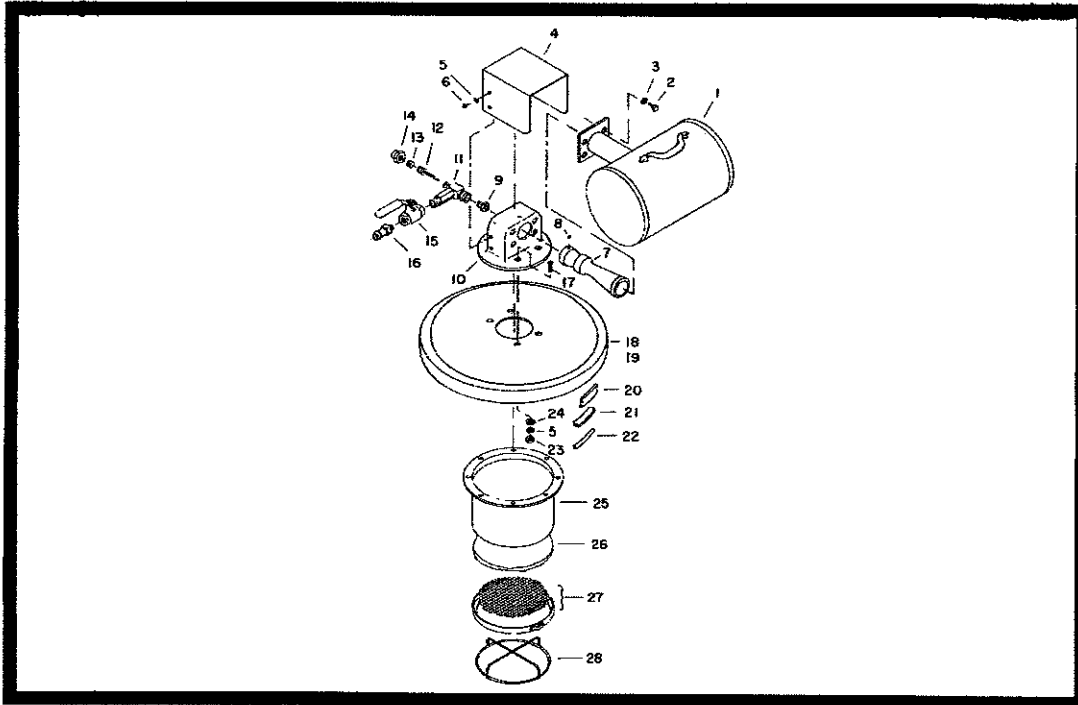
CLEANING AND EMPTYING PROCEDURE FOR MODEL X-1700-6

Follow the same procedure as outlined for X-1700-4 except for step #5.

Step 5 — Reach into tank and gently push the collar of filter bag off the tube, seal bag opening with 2" wide duct tape, and carefully remove collector bag into proper disposal container.

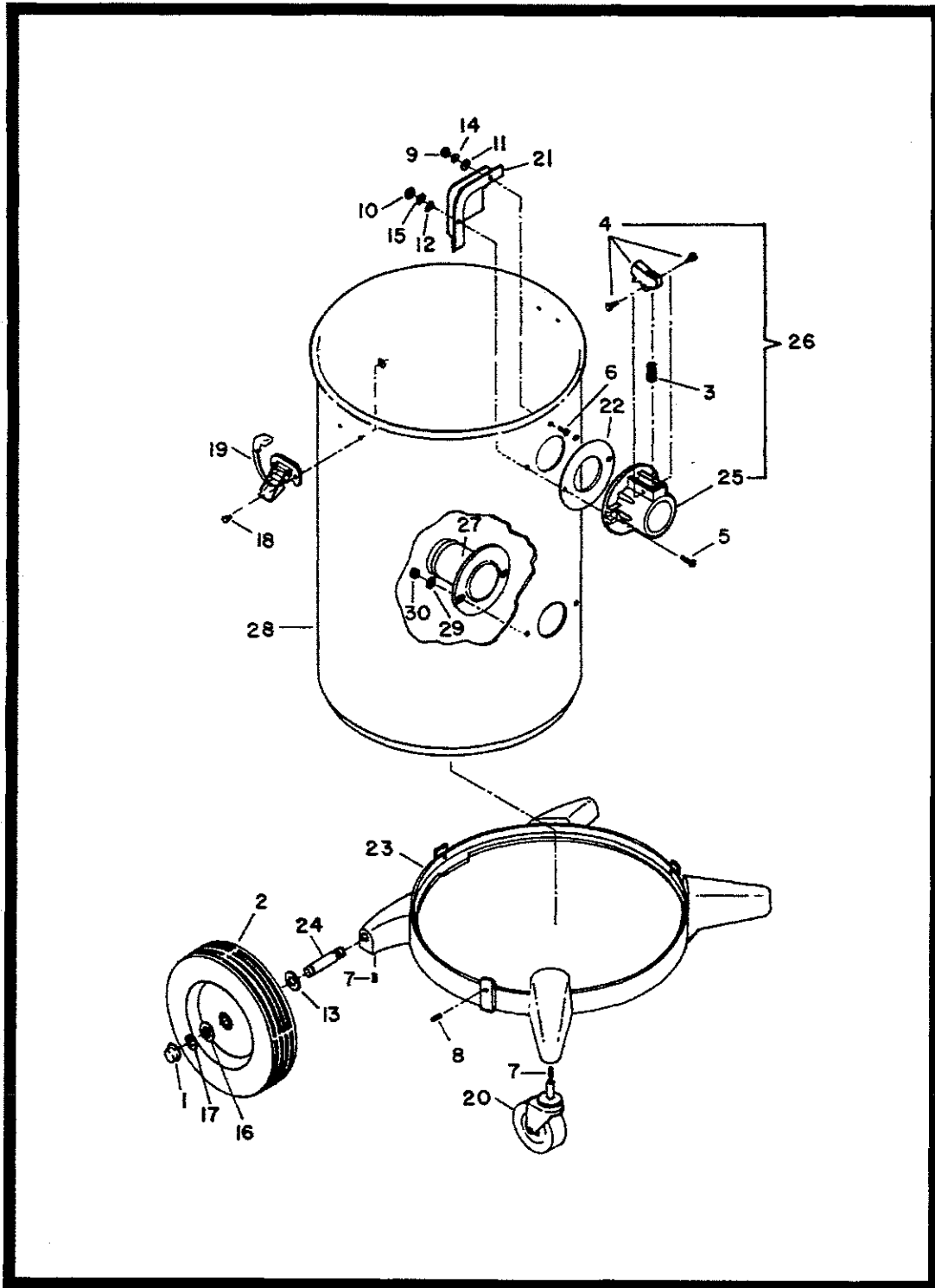
Follow steps 6 through 10 for balance of cleanup and assembly procedures.





Parts Listing

ITEM NO.	PART NO.	QUANTITY	DESCRIPTION
1	700007	1	Muffler 700 series
2	711229	4	Bit-HH 5/16-18x.87 St
3	711545	4	Wsr, Helical Spr Loc 5/16
4	700009	1	Cover
5	711543	5	WSR, Helical SPR LOC #10
6	710353	4	SCR-MC 10-32 x .37 ST PL
7	700002	1	Horn, Venturi
8	711005	1	SCR-SK 1/4-20 x .31
9	701029	1	Orifice, Hex
10	707702	1	Housing
11	750653	1	Var. Orifice Hsg Inlet Assy
12	750641	1	Needle Assy
13	711229	1	SCR-SK 3/8-24 x .25
14	711357	1	Nut-Acorn 5/8-11 ST PL
15	701009	1	Valve, .50
16	701010	1	Coupler, Male .50
17	710357	4	SCR-MC 10/32 x .75 ST PL
18	707701	1	Lid
22	380044	1	Lid Gasket 4/6, 40"
23	711310	4	Nut-Hex 10-32 ST PL
24	711503	4	WSR, Flat No. 10
25	110010	1	HEPA Filter SM Round
26	110121PKG	1	Impact Filtr Sm Rd Pkg
27	750006	1	Retainer Impact Assy Comp
28	380049PLT	1	Frame, Dust Bag Plated
29	701007	1	Var. Orifice Assy Complete includes 9, 11, 12, 13, 14



PARTS LISTING

ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	130032	2	Cap, Retainer
2	170047	2	Wheel 6"
3	390002	1	Spring .275 O.D.
4	390001	1	Trigger with Pins
5	712824	2	SCR-MC 10-24 x .75 ST PL
6	710530	1	SCR-MC 8-32 x .50 Brass
7	711005	4	SCR-SK 1/4-20 x .31
8	711006	3	SCR-MC 1/4-20 x .62
9	711304	1	Nut-Hex 8-32 ST PL
10	711310	2	Nut-Hex 10-32 ST PL
11	711502	1	WSR-Flat #8
12	711503	1	WSR-Flat #10
13	711582	2	WSR-Wave .50 x .75 x .02
14	711542	1	WSR, Lock #8
15	711543	2	WSR, Helical Lock #10
16	711594	2	WSR, Flat .56 x .88 x .03 NI
17	711713	2	Retaining, Ring-E Ext. .50
18	711915	4	Rivet .19 x .28 x .37 HD STNI
19	761054	2	Latch
20	900033	2	Caster, Swivel
21	900035	1	Deflector, Intake
22	390087	1	Gasket
23	900055PTD	1	Bracket, Wheel 4/6 Gal.
24	900066	2	Axle, Plated
25	390000	1	Intake, Injection Molded
26	390100	1	Intake, Injection Molded Comp.
27	750118	1	Tube Assy.
28A	900107	1	Tank, 4 Gal. SS High Intake
28B	900083	1	Tank, 4 Gal. PTD High Intake
28C	900093	1	Tank, 6 Gal. SS Low Intake
28D	900092	1	Tank, 6 Gal. PTD Low Intake
29	712320	2	WSR-Nylon .22 x .45 x .04
30	712638	2	Nut-Nyloc 10-24
***	805041	1	Cloth Filter 6 Gal.
***	805044	1	Cloth Filter 4 Gal.
***	761177PKG	1	Paper Filter Protector (12)
***	384003PKG	1	Disposable Paper Bag (10)
***	380049PLT	1	Bag Frame

LIMITED WARRANTY

Minuteman International, Inc. 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 two years from date of purchase. In addition, Minuteman International, Inc. will, at its option, honor labor warranty claims for the first 12 months from date of sale, provided such claims are submitted through and approved by factory authorized repair stations. Minuteman International, Inc. 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 belts, cords, switches, hoses, rubber parts, electrical motor components or adjustments. Parts not manufactured by Minuteman International, Inc. such as engines, batteries, battery chargers, hydraulic pumps, and tires are covered by and subject to the warranties and/or guarantees of their manufacturers. Please contact Minuteman International, Inc. for procedures in warranty claims against these manufacturers.

Special warning to purchaser -- Use of replacement filters and/or prefilters not manufactured by Minuteman International, Inc. or its designated licensees, will void all warranties expressed or implied.

A potential health hazard exists without exact original equipment replacement.

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

Minuteman International, Inc. disclaims any implied warranty, including the warranty of merchantability and the warranty of fitness for a particular purpose. Minuteman International, Inc. 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 International, Inc. is not responsible for costs or repairs performed by persons other than those specifically authorized by Minuteman International, Inc. 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.

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