



Electronic Service Manuals

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Serving the Cleaning Industry Since 1922

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Minuteman[®]
Excellence Meets Clean



**Parts and Instruction Manual
Ambassador 20**

This manual is furnished with each new *MINUTEMAN Ambassador™ 20*. 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	<i>Ambassador™ 20</i>
Model No.	C8420-115 / C8420-240
Voltage (AC)	115V 60Hz ; 240V 50/60Hz
Current	12 Amps (115V) ; 7 Amps (240V) (50Hz)
Sound Level	79 dBA @ operator's ear 73.6 dBA @ 3 meters
Brush Speed	1040 RPM
Dimensions (LxWxH)	45 1/8" x 20 3/4" x 38 1-4" (114.6cm x 52.7cm x 97.2cm)
Weight (gross)	234 lbs (106 kg)

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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 electrical shock – Do not expose to rain. Store indoors.

- Do not allow to be used as a toy. Close attention is necessary when used near children.
- Use only as described in this manual. Use only the 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 an authorized service center.
- Do not pull or carry by cord, use cord as handle, close a door on a 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 the cord. To unplug grasp the plug, not the cord.
- Do not handle the appliance with wet hands.
- Do not put any object into the openings. Do not use if any opening is blocked; keep free of dust, lint, hair, and anything that may reduce air flow.
- Keep hair, loose clothing, fingers, and all parts of the 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 dust bag 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

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.

WARNING

- Read Instructions Manual before operating this piece of equipment.
- To reduce the risk of fire use only commercially available floor cleaners and waxes intended for machine application
- Electrical motors and components can cause an explosion when operated near volatile materials and vapors. Do not use this machine near flammable materials such as solvents, thinners, fuels, grain dust, ect.

Electrical – 115V Model C8420-115

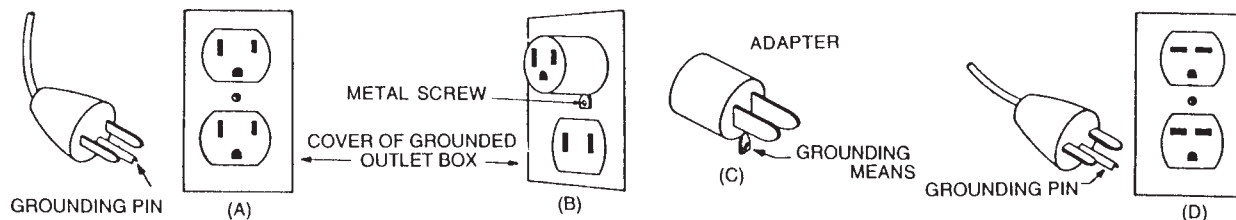
This machine is designed to operate on a standard 15 amp. 120-Volt, 60hz, AC circuit. Voltages below 105-Volt AC or above 125-Volts AC could cause serious damage to the motor.

Electrical – 240V Model C8420-240

This machine is designed to operate on a standard 16 amp. type L fused 230-Volt, 50 Hz, AC circuit. Voltages below 200-Volt AC or above 250-Volts AC could cause serious damage to the motor.

Grounding Instructions

- This floor finishing machine should be grounded while in use to protect the operator from electric shock. The machine is equipped with a three-conductor cord and three prong grounding type attachment plug to fit the proper grounding type receptacle. The green (green and yellow) conductor in the cord is the grounding wire. Never connect this wire to anything other than the grounding blade.
- Floor Finishing Machines Rated Less than 150-Volts – If the machine is provided with an attachment plug, as shown in Sketch A, it is intended for use on a 120-Volt (normal) circuit. If a properly grounded receptacle, as shown in Sketch A, is not available, an adapter as shown in Sketch C, is available and be installed as shown in Sketch B if the outlet box that houses the receptacle is grounded. Be sure to fasten the grounding tab with the faceplate screw.
- Floor Finishing Machines Rated More than 150-Volts – If the machine is provided with attachment plug as shown in Sketch D, it is intended for use in nominal 240-Volt circuit. No adapter is available for this plug.



POUR USAGE COMMERCIAL SEULEMENT MODE D'EMPLOI SECURITAIRE

Minuteman
Excellence Meets Clean

Lorsque l'on utilise un appareil électrique, des précautions de base doivent toujours être suivies telles que:

BIEN LIRE LE MODES D'EMPLOI AVANT USAGE

AVERTISSEMENT - Pour réduire les risques de feu, choc électrique ou blessure:

- Ne pas quitter l'appareil lorsque la prise de courant est branchée. Débrancher de la sortie électrique lorsque la machine n'est pas en usage ou pour en faire le service.

AVERTISSEMENT

Pour réduire le risque de choc électrique - Ne pas exposer à la pluie - Entreposer à l'intérieur.

- Ne jamais laisser des enfants ou des adultes inexpérimentés faire fonctionner cet appareil.
- Garder la zone de fonctionnement libre de toute personne, particulièrement les petits enfants et les animaux. Garder les spectateurs à une distance d'au moins 7,6 mètres (25 pieds) de la zone de fonctionnement.
- Utiliser tel que prescrit dans le livre d'opération et seulement avec les attachements recommandés par le fabricant.
- Ne pas s'en servir avec corde ou prise de courant endommagée. Si l'appareil ne fonctionne pas ou a été échappé, endommagé, entreposé à l'extérieur ou déposé dans l'eau, l'appareil devrait être envoyé à un département de service pour inspection.
- Ne pas tirer ou porter par le câble ou se servir du câble comme poignée. Ne pas fermer de portes sur le câble ou tirer le câble près d'objets pointus. Ne pas conduire l'appareil écrasant le câble et soyez certain de protéger le câble entre toutes surfaces de chauffage.
- Ne pas débrancher en se servant du câble. Pour débrancher tirer sur la prise et non sur le câble.
- Ne pas manipuler la prise ou l'appareil avec les mains mouillées.
- Ne placer aucun objet dans la sortie et ne pas s'en servir si la sortie est obstruée. Eliminer toute poussière, maillon, cheveux ou quoique ce soit qui pourrait réduire le mouvement d'air.
- N'exposer aucun cheveux, vêtement, doigts ou autres aux ouvertures de l'appareil.
- Ne rien ramasser de ce qui brûle ou de fumée tels que cigarettes, allumettes ou cendres en feu.
- Ne pas employer sans filtre de poussière ou autre en position.
- Fermer tous les contrôles après utilisation.
- Soyez très prudent lors du nettoyage d'escaliers.
- Ne pas ramasser de liquide inflammable ou combustible tel que gazoline et ne pas utiliser dans les endroits où ces derniers pourraient être présent.
- Brancher dans une prise avec une prise de terre seulement. Voir références pour prise de terre.

**CONSERVEZ CES RECOMMANDATIONS
DE MODE D'EMPLOI**

INSPECTION

Déballer soigneusement en constatant s'il y a lieu tout dommage apparent. Chacune des pièces d'équipement est entièrement inspectée à l'usine et tout dommage de transit est la responsabilité de la compagnie de transport qui devrait être prévenue immédiatement.

AVERTISSEMENT

- S.V.P. lire le manuel d'instruction avant d'opérer cette pièce d'équipement.
- Pour réduire le risque d'incendie, se servir de ces appareils uniquement pour usage commercial et avec les produits contruits spécifiquement pour usage avec ces appareils.
- Les moteurs électriques peuvent être la cause d'explosion si ils sont utilisés près de matériaux ou de vapeurs explosives. Ne pas opérer près de matériaux inflammables tels que solvant, essence, poussière de grain etc.

ELECTRICITE - 115 Volt Modèles C8420-115

Ces appareils sont conçus pour opérer sur un circuit standard de 15 amp, 120 volt, 60 hz, circuit AC. Tout voltage en bas de 105 volt AC ou au-delà de 125 volts AC pourrait occasionner des dommages au moteur.

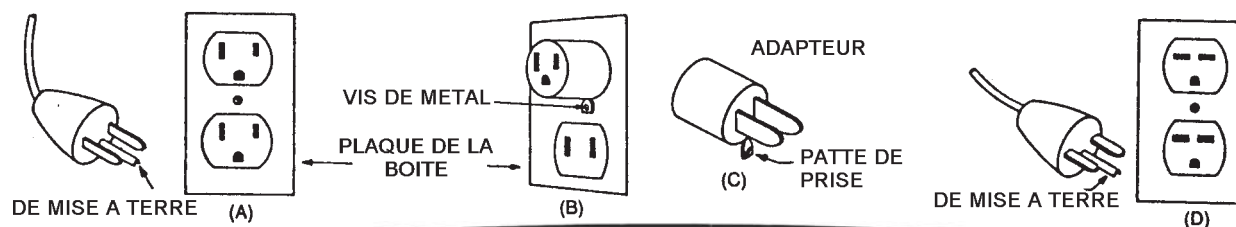
ELECTRICITE - 240 Volt Modèles C8420-240

Ces appareils sont conçus pour opérer sur un circuit standard AC de 16 amp, fusible type L 230 volt, 50 hz. Tout voltage en bas de 200 volt AC ou au-delà de 250 volts AC pourrait occasionner des dommages au moteur.

INSTRUCTIONS POUR PRISSE DE TERRE

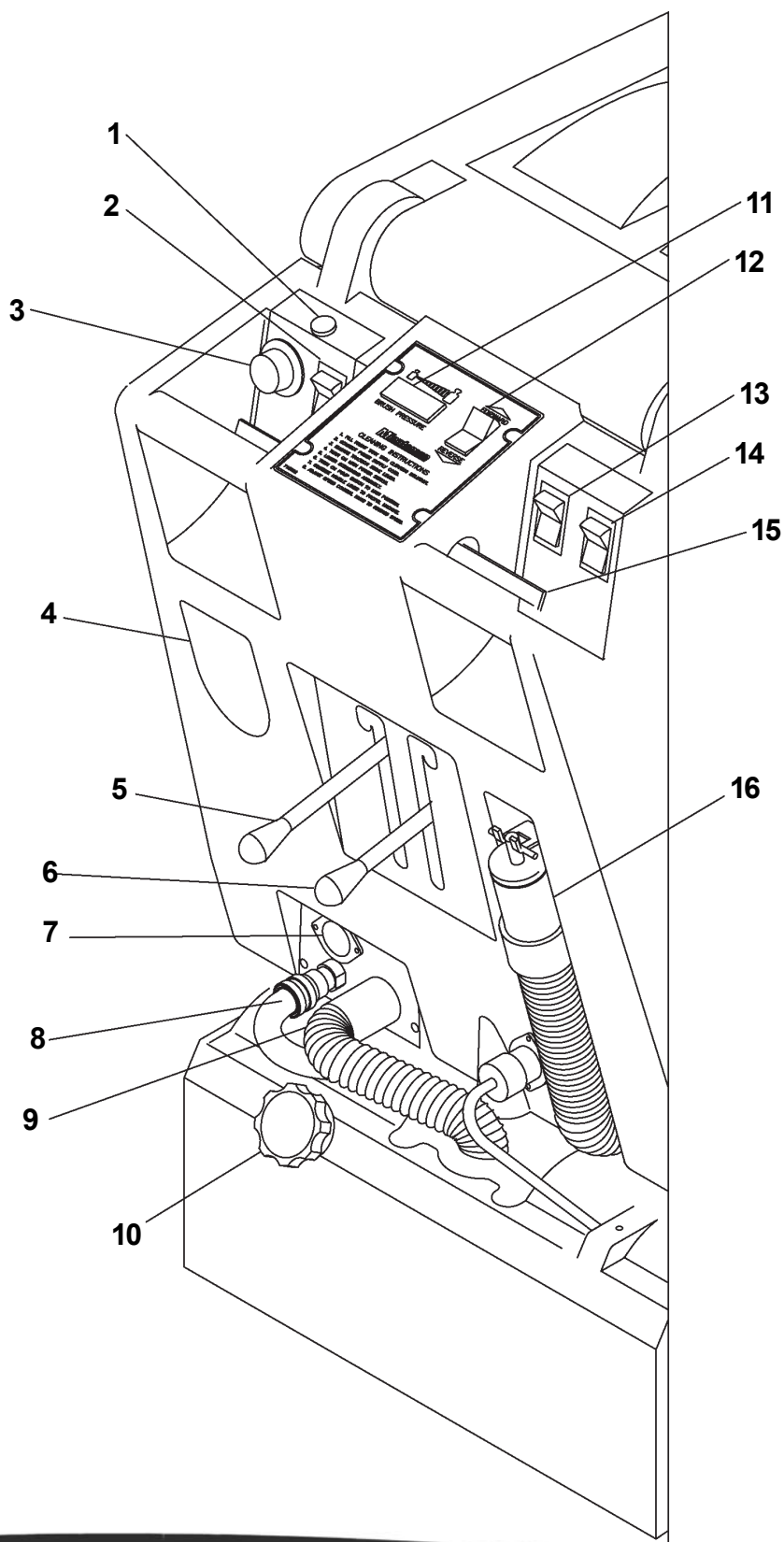
- Ces appareils doivent posséder une prise de mise à terre pour protéger l'opérateur contre les chocs électriques. Cet appareil est muni d'une corde électrique à trois fils et d'un receptacle à trois fourchons et prise de mise à terre pour s'accorder dans un receptacle avec prise de mise à terre réciproque. Le fil conducteur vert (ou vert et jaune) de la corde électrique est le fil designé comme prise de mise à terre. Ne jamais relier ce fil à un fil autre que celui de prise de mise à terre.
- Appareils estimés à moins de 150 volts - Si ces appareils offrent une prise de courant tel que dans le croquis A, ils sont destinés pour utilisation avec un circuit de 120 volts. Si un receptacle avec prise de mise à terre n'est pas disponible tel que montré au croquis A, un adaptateur tel que vu au croquis C est disponible et devrait être installé tel que montré au croquis B si la boîte électrique est munie d'une prise de mise à terre. Assurez-vous de bien relier la patte de prise avec la vis.
- Appareils destinés à plus de 150 volts - Si ces appareils offrent une prise de courant tel que démontré au croquis D, ils doivent être utilisés avec un circuit de 240 volts. Aucun adaptateur n'est disponible pour cette prise.

ADAPTEUR (Non requis au Canada)



Machine Overview

- 1 POWER ON INDICATOR LIGHT
- 2 MAIN POWER SWITCH
- 3 WORKING SPEED DIAL
- 4 120V AC PLUG-IN
- 5 TRACTION DRIVE LOCK LEVER
- 6 BRUSH/VAC SHOE RAISE/LOWER LEVER
- 7 120 VOLT AC AUXILLARY TOOL HOOKUP
- 8 SPRAY JET/AUXILLARY FLOOR TOOL HOOKUP
- 9 VACUUM SCRUB HEAD HOOKUP
- 10 BRUSH PRESSURE ADJUSTMENT KNOB
- 11 BRUSH PRESSURE GAUGE
- 12 FORWARD/REVERSE SWITCH
- 13 PUMP SWITCH, AUTOMATIC AND AUXILLARY
- 14 VACUUM SWITCH
- 15 TRACTION DRIVE CONTROL LEVERS
- 16 DUMP HOSE



Operating Instructions

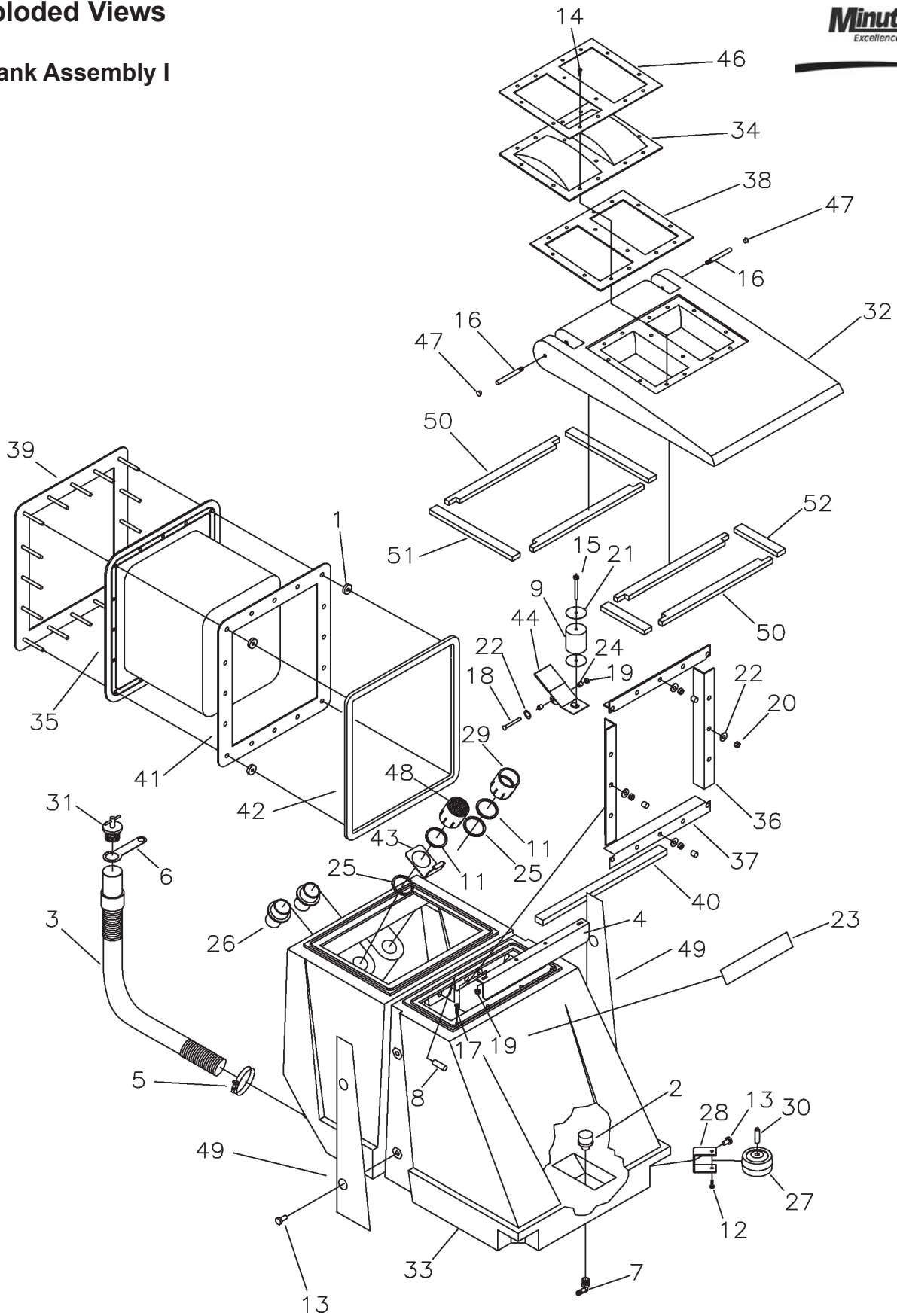
1. Filling: Fill the solution tank with the desired amount of water and add liquid cleaning solution to the proper dilution ratio. DO NOT USE powdered cleaning chemicals. Powders are unlikely to dissolve thoroughly, resulting in clogging the inline solution filter. This can reduce or stop water flow to the pump and spray jets.
2. Connect power supply cord to grounded wall outlet, Item # 4
3. Engage traction drive system, Item #5
4. Turn on main power switch, Item #2
5. Lower scrub head assembly, Item #6
6. Turn on pump switch to automatic, Item #12
7. Turn on vacuum, Item #13
8. Set forward/reverse switch to forward, Item #11
9. Engage traction drive control levers, Item #14
10. Adjust forward speed #3
11. Brush pressure can be adjusted + or – by knob, Item #9, and viewing gauge, Item #10 in green zone

Accessory Attachments

1. Turn master switch off
2. Disconnect vac hose, see item #8, and attach vacuum hose from remote tool.
3. Disconnect solution hose, see item #7, and install remote tool solution hose to the quick disconnect. Turn the pump solution switch, item #13, to auxiliary.
4. Turn on main power switch.
5. Turn on switch #13 to activate vacuum motor.

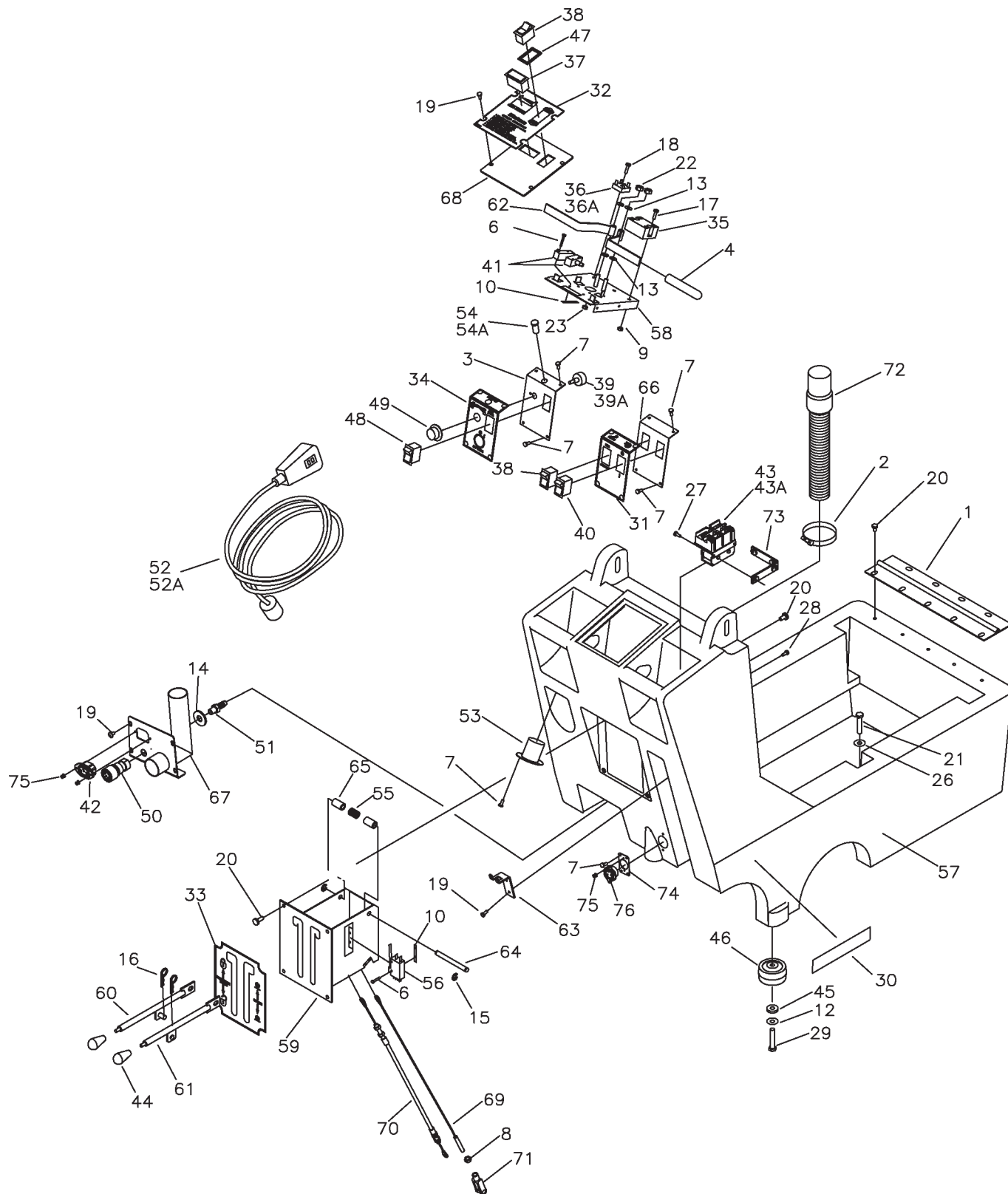
Exploded Views

Tank Assembly I



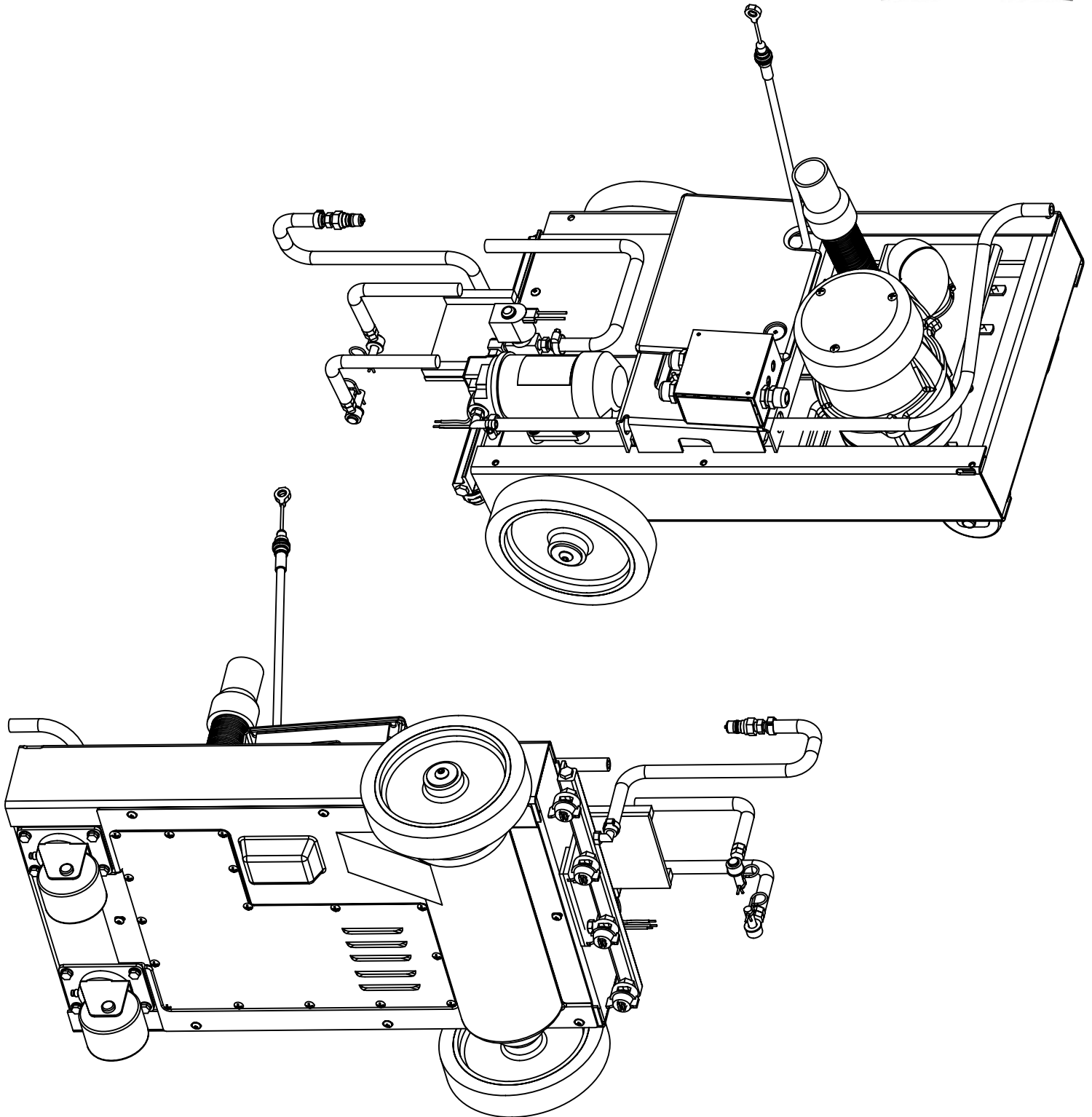
ITEM	PART NO.	QTY.	DESCRIPTION
1	130029	4	GROMMET .75X.31X.25
2	130118	1	STRAINER-SOLUTION
3	210121	1	DUMP HOSE 200 SERIES
4	260184	1	SUPPORT ANGLE
5	260203	1	CLAMP-HOSE 102120 MURRAY
6	320269	1	STRAP, DRAIN PLUG RETAINING
7	320271	1	FITTING-PP 90 3/8MPT 3/8HOSE
8	420013	1	TUBE 1/2 X 3
9	430089	1	FLOAT 17B
11	450081	2	WSR 1.908 X 2.41 X .03 SS
12	710353	2	SCR-MC 10-32 X .37 ZINC
13	710985	6	SC 3/8-16 X .62
14	711118	14	SCR-ST-A 10 X .75 SS
15	712092	1	SCR 1/4-20 X 2.5 NYL
16	712107	2	SCR-SHOULDER 1/4-20x2.87
17	712563	4	SCR-MC 1/4-20 X 1.00 SS
18	712568	1	SCR-MC 1/4-20 X 2.25 SS
19	712667	5	NUT-HEX NYLOC 1/4-20 SS
20	712683	16	NUT-HEX NYLOC 5/16-18 SS
21	712759	2	WSR-FLT .31 X 1.37 X .06 SS
22	712767	26	WSR-FLT .406 X .75 SS
23	715840	1	DECAL - AMBASSADOR 20
24	762384	2	BUSHING-.277 X .375 X .37 SS
25	828970	2	WSR NEOP 1.87X2.4X.125
26	831812	2	FITTING ABS 1.5MPT 1.5HOSE
27	832896	2	WHEEL-GUIDE
28	832949	2	BRACKET BUMPER
29	833160	1	ADAPTER, PVC 1.5 FPT X 1.5 SLI
30	833254	2	BUMPER WHEEL AXLE
31	833316	1	DRAIN PLUG
32	840001	1	LID TANK AMB 20 BURGUNDY
33	840002-1	1	SOLUTION TANK AMB 20 - BURGUNDY
34	840017	1	DOME AIR / WATER
35	840051	1	BLADDER BAG
36	840054	2	ANGLE, BLADDER SIDE
37	840055	2	ANGLE, BLADDER TOP/BOT
38	840061	1	GASKET, DOME
39	840063	1	FRAME BLADDER MOUNT
40	840069	1	POCKET GASKET
41	840070	1	WASHER PLATE ASSEMBLY
42	840071	1	GASKET SOL/REC
43	840074	1	VALVE PIVOT BRACKET
44	840075	1	FLOAT VALVE
46	840087	1	COVER PLATE/DOME
47	840095	2	PLUG DOME - HEYCO .312
48	840104	1	FILTER ASY / VAC MOTOR
49	840113	2	SIDE PANEL
50	840119	4	GASKET, LID F/R, PVC FOAM
51	840120	2	GASKET, LID LONG, PVC FOAM
52	840121	2	GASKET, LID SHORT, PVC FOAM

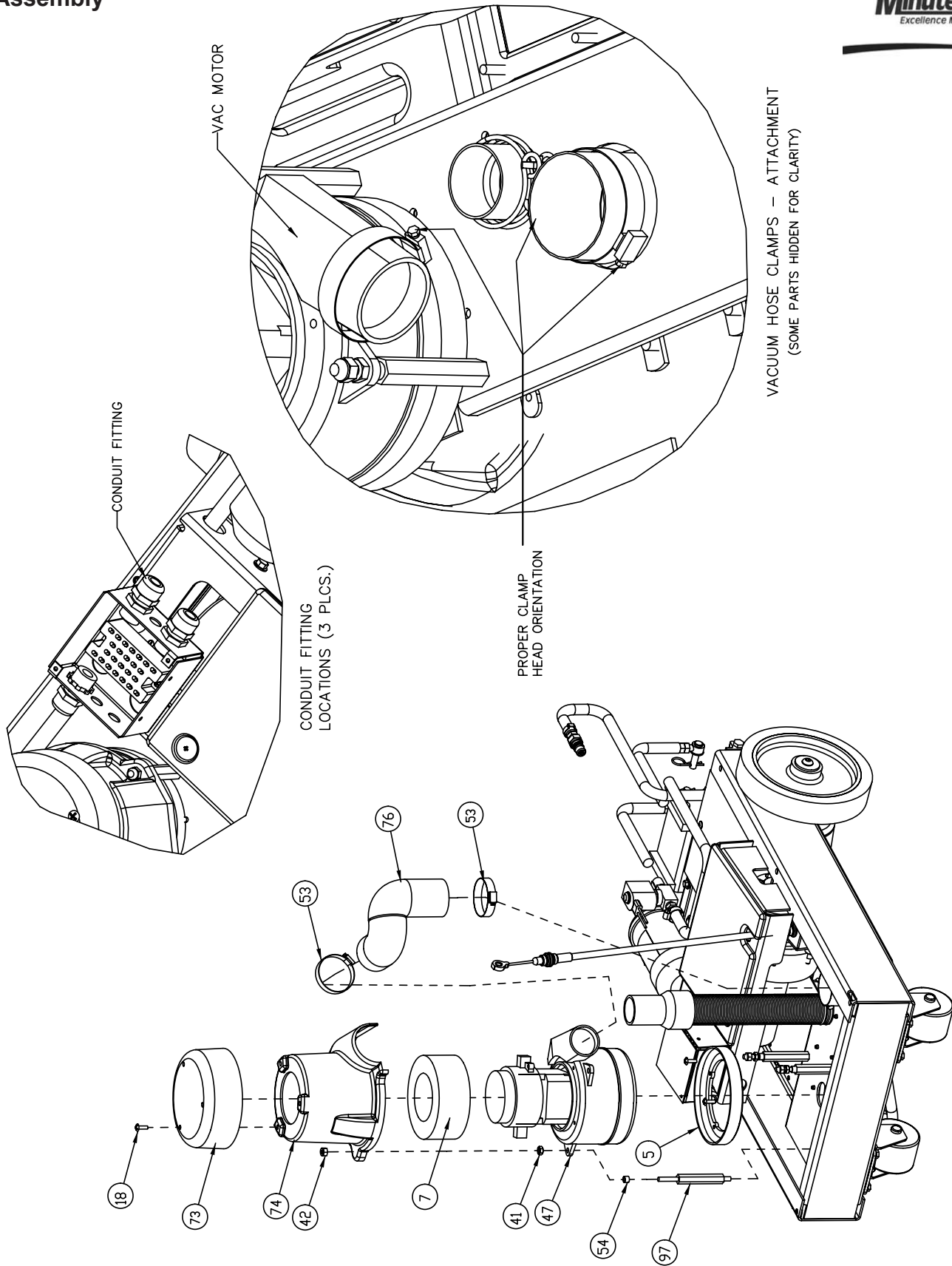
Tank Assembly II

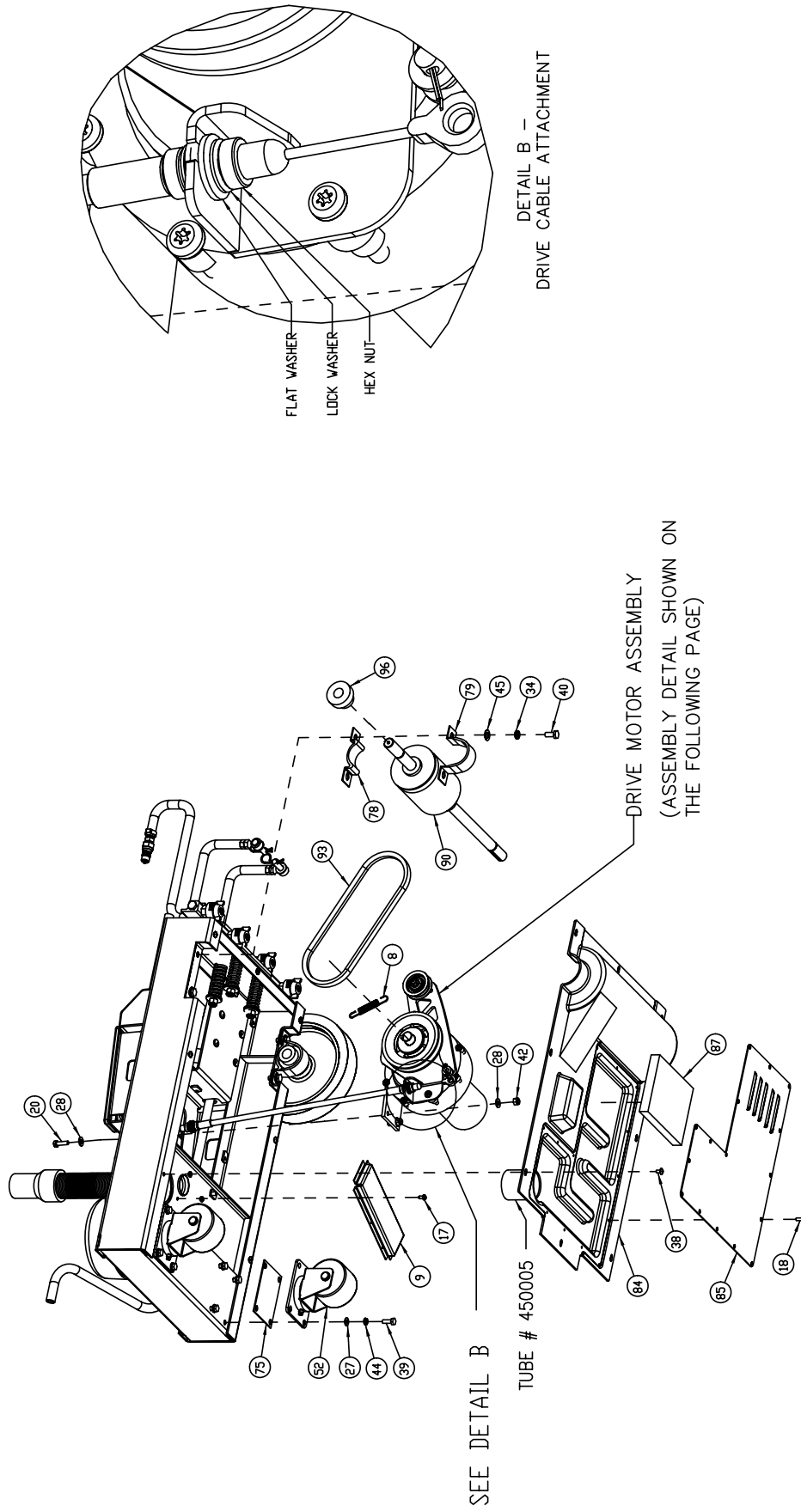


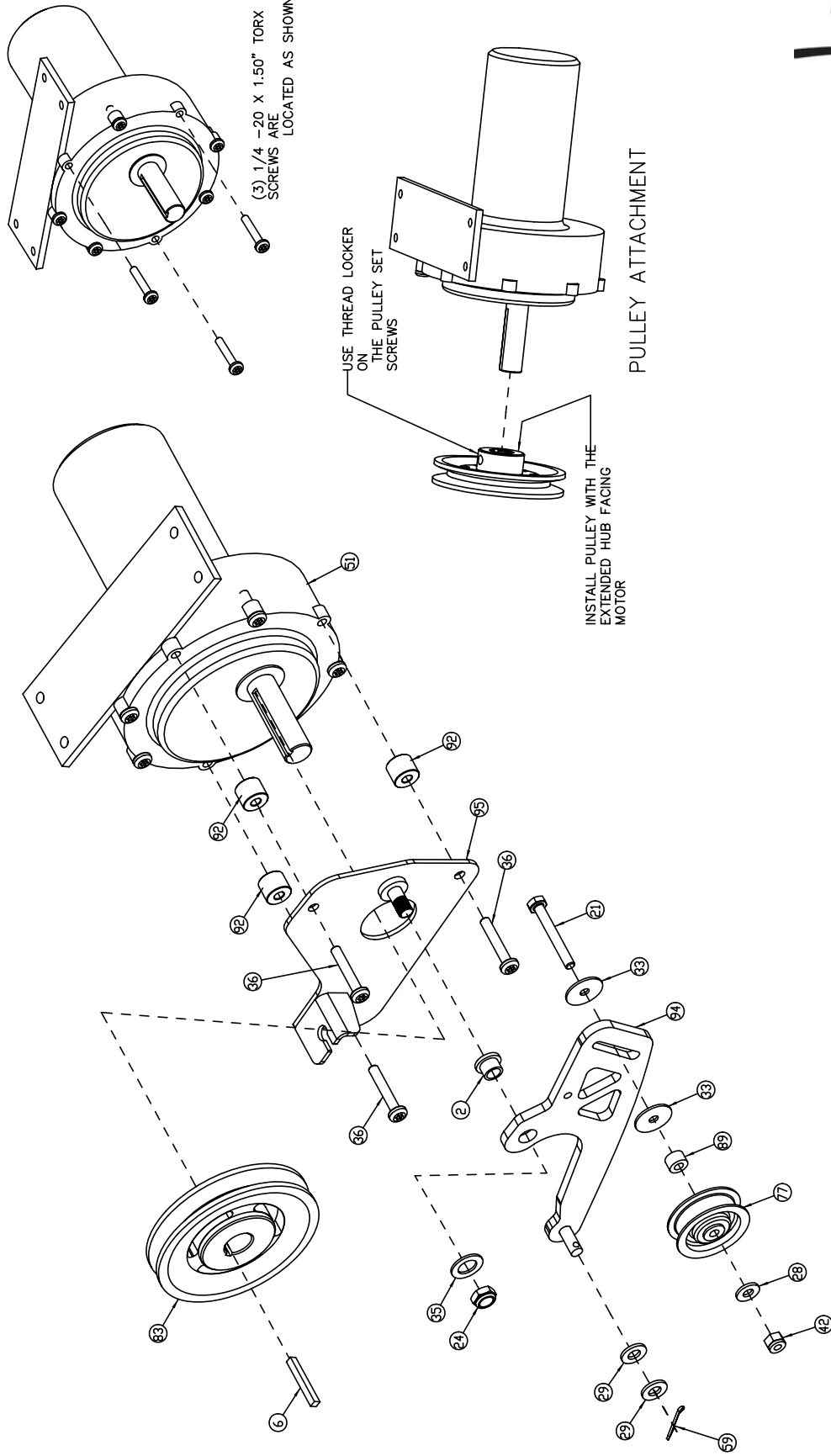
ITEM	PART NO.	REQ'D	DESCRIPTION
1	260087	1	HINGE-15"
2	260203	1	CLAMP-HOSE 102120 MURRAY
3	260255	1	SPEED CONTROL BRACKET 260TD
4	260291	2	HANDLE GRIP 260TD
5	710204	2	SCR-MC 6-32 X .50 ZINC
6	710307	6	SCR-MC 6-32 X 1 ZINC
7	711160	14	SCR-HI/LO #10 X 5/8 ZINC
8	711322	1	NUT-HEX 5/16-24 ST PL
9	711372	2	NUT-NYLOC 8-32
10	711430	3	NUT-TINNERMAN 6-32
11	711506	2	WSR-FLT 5/16 (NARROW) ST PL
12	711523	2	WSR-WAVE .37 X .68 X .08
13	711577	4	WSR-FLT .260 X .50 X .020
14	711578	1	WSR-FLT 1/2 BRS
15	711717	2	RET RING-E EXT .37
16	711808	2	PIN-HAIRPIN COTTER #13
17	712516	2	SC 8-32 X .62 SS
18	712537	6	SCR-TR HD 10-24 X .75 SS
19	712540	10	SCR-MC 10-24 X .37 SS TH
20	712560	13	SCR-MC 1/4-20 X .50 SS NYL
21	713005	6	BLT-HH 1/4-20 X 1.5 SS
22	711373	2	NUT,NYLON 14/20 ZINC
23	712638	2	NUT HEX 10-24 SS NYLOC
24	712665	2	NUT-HEX 1/4-20 SS
25	712759	6	WSR-FLT .31 X 1.37 X .06 SS
26	712761	6	WSR-FLT .28 X 1.25 X .059 SS
27	712811	2	SCR-MC 10-24 X .50 ZINC
28	712813	2	SCR-MC 10-24 X .75 ZINC
29	713048	2	BLT-HH 3/8-16 X 2.50 #5
30	715383	2	DECAL, MINUTEMAN
31	715621	1	DECAL-VAC/PUMP
32	715622	1	DECAL-DASHBOARD
33	715623	1	DECAL-BRUSH/TRACK LIFT
34	715626	1	DECAL-SPEED CONTROL
35	740187	1	CONTROLLER-2SP 115/230V
36	740202	2	RECTIFIER-BRIDGE 50A 600V IMP
36A	740203	2	RECTIFIER-BRIDGE 50A 1000V
37	740229	1	GAUGE BR PRESSURE 0-1.5
38	740736	2	SWITCH-3 POSITION
39	740738	1	WIRE ASSY.
39A	740787	1	WIRE ASSY.

ITEM	PART NO.	REQ'D	DESCRIPTION
40	740801	1	SWITCH-ROCKER ON/OFF DPDT
41	740806	2	SWITCH-SNAP ACT 20A 1HP
42	741201	1	RECEPTACLE-15A FEMALE SQUARE
43	742145	1	RELAY-MOTOR REVERSE 120V
43A	742146	1	RELAY-MOTOR REVERSE 240V
44	760592	2	KNOB-OVAL TAPERED
45	762295	2	BUSHING-ADJ .375 X .62 X .18 Z
46	762331	2	WHEEL,2.5DX1.28W X.38ID
47	802657	4	SILCONE BOOT /CARLING SW
48	809754	1	SWITCH-ROCKER
49	809874	1	KNOB-SPEED CONTROL
50	828370	1	BH2-60 FEMALE COUPLER
51	828952	1	FITTING PP 1/4MPT 3/8BARB
52	741205-1	1	CORD ASY, 14/3 75' GFCI-FEM LOCK PLUG
52A	740477-2	1	CORD ASY-EURO 250V 50FT BLACK
53	830540	1	RECEPTACLE-FLG MALE 15 A 125
54	832859-1	1	INDICATOR LIGHT 115V ASY
54A	832860-1	1	INDICATOR LIGHT ASY 240V
55	833102	1	SPRING-KNOB .60 X .73 X 1.75 Z
56	833329SA	1	SWITCH-STAGERED ACTION
57	840005-1	1	BASE TANK AMB 20
58	840013	1	PLATE LEVER SWITCH
59	840014	1	LEVER CONTROL BOX
60	840022	1	LEVER BAR ASY BELT TNSN
61	840023	1	LEVER BAR ASY VAC SHOE
62	840024	2	LEVER - SWITCH
63	840027	1	HOSE CLIP
64	840039	1	LEVER PIVOT PIN
65	840040	2	BUSHING-LEVER BOX .396 X .625
66	840057	1	PLATE, SWITCH
67	840079-1	1	AUXILIARY PLATE ASY
68	840080	1	DASH PANEL
69	840091	1	CABLE-LIFT
70	840092	1	CABLE-TENSION
71	840093	1	YOKE
72	840097	1	HOSE GRAY WATER
73	840108	1	BRACKET, RELAY
74	840122	1	PLATE - RECEPTACLE
75	829214	4	RIVET, 1/8 DIA. REFERENCE POP
76	829851	1	RECEPTACLE





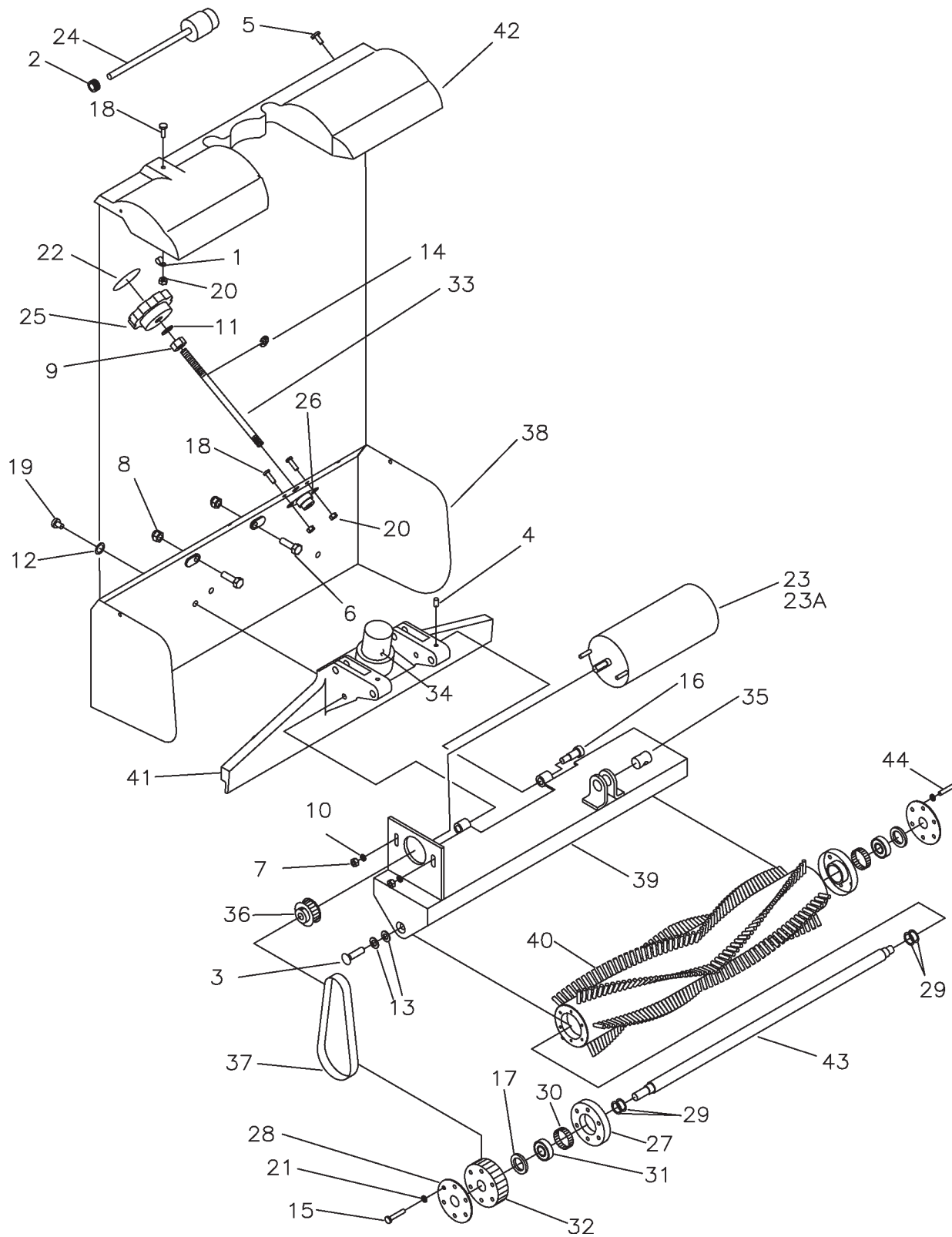




BILL OF MATERIAL - 840200-1

ITEM	PART NO.	REQ'D	DESCRIPTION	ITEM	PART NO.	REQ'D	DESCRIPTION
1	241096	1	HOSE 3/8 x 45" WIRE REINFORCED, SCV 24/26	50	740747	1	WIRE JUMPER (NOT SHOWN)
2	260066_	1	BUSHING-FLG, .375 X .50 X .31	51	740872	1	MOTOR - GEAR, AMB 20, 140V DC
3	260182	1	HOSE 3/8 x 24" WIRE REINFORCED	52	760251	2	CASTER WHEEL, 3" DIA. X 2" WIDE
4	260203	1	WIRE GRIP HOSE CLAMP	53	760859	2	CLAMP, HOSE
5	290017	1	VAC MOTOR GASKET	54	762073	3	BUSHING .259 X .375 X .265
6	361233	3	KEY, 3/16 SQ. X 1.50"	55	762422	2	SPRING, COMPRESSION
7	380064	1	RING, FOAM	56	805634	1	COVER BOX (741012)
8	430051	1	RETURN SPRING-3.00"	57	809148	2	RETAINING RING -"E" TYPE, EXT., 3/4"
9	450004	1	AIR MANIFOLD	58	809226	2	WASHER, FLAT - .40 X 1.50 X .12
10	450023	1	SPRAY BAR ASSEMBLY ACS	59	809311	1	PIN-COTTER 7/64 DIA X 1
11	450050	3	HEYCO 3231 NPT HUB - BLACK	60	809880	2	BUSHING .259 X .375 X .265
12	450059	1	FITTING 1/4MPT BRASS BULKHEAD	61	828368	1	MALE COUPLER
13	450076	2	CLAMP-CRIMP 185R SS	62	828952	2	FITTING PP 1/4" MPT X 3/8" HOSE BARB
14	710154	2	SCR-MC TR HD 10-32 X .625 SS	63	829129	2	CLAMP-HOSE, WORM-DRIVE FOR 8-22MM HOSE DIA.
15	710207	2	SCR-MC 6-32 X .87 ZINC	64	831306	1	FITTING 90 STREET BRASS 1/4x1/4
16	710986	2	SCR-SC 3/8-16 X 1.0 ST PL	65	831965	2	3/8 x 1.63" CLEVIS PIN
17	711124	6	PAN HEAD ST #10 X .37 NI	66	832790	1	HOSE VAC TANK
18	711160	19	#10 X 5/8 HI-LO	67	833067	1	PUMP-100PSI 115V
19	711202	4	BLT-HH 1/4-20 X 0.50 ST PL	68	833302	1	DIE SPRING
20	711206	4	BLT-HH 1/4-20 X .87 STL ZINC	69	833325	1	FITTING NYLON 90 1/4MPT X 3/8HB
21	711214	1	BLT-HH 1/4-20 X 2.00	70	833341-1	2	BLT-EYE 3/8-16 X 2.62
22	711280	1	BLT-HH 3/8-16 X 3.50 #5	71	833374	2	PIN, HAIRPIN COTTER 3/8
23	711371	2	NUT-NYLOC 6-32 STL ZINC	72	840006-1	1	FRAME WELDMENT
24	711375	1	NUT - NYLON LOCK, 3/8-16 HALF NUT	73	840011	1	VAC MOTOR COVER, TOP
25	711380	3	NUT-NYLOC 3/8-16 NUT	74	840012	1	VAC MOTOR COVER, BOTTOM
26	711400	3	NUT-PIPE LOCK 1/2"	75	840018	2	WASHER PLATE
27	711504	16	WSR-FLAT 1/4 ID SS	76	840042	1	HOSE, VAC MOTOR OUTPUT
28	711505	9	1/4 FLAT WASHER, STEEL	77	840044	1	PULLEY, IDLER
29	711506	2	WSR-FLT .344 X .690 X .062, STEEL	78	840049_BASE	2	BEARING BASE
30	711507	6	WSR-FLAT .37 X 1.12 X .06	79	840049_CAP	2	BEARING CAP
31	711512	2	WSR-FLAT .75X1.37X.08	80	840060	1	BRUSH MOUNT ASSY
32	711515	2	WSR-FLAT .406 X .812 X .0625	81	840064-1	1	BRACKET - PUMP MOTOR
33	711519	2	WSR-FLAT .25 X 1.01 X .06	82	840082	1	HOSE 3/8 x 24" WIRE REINFORCED
34	711545	4	WSR-HELICAL 5/16	83	840088	1	PULLEY - V BELT
35	712310	1	WSR-FLAT .52 X .87 X .06 PL	84	840089	1	BAFFLE, EXHAUST
36	712345	3	SCR - TORX PAN HEAD, 1/4-20 X 1.50	85	840090	1	COVER, EXHAUST BAFFLE
37	712537	4	10-24 X .75 SS TRUSS HD SCR	86	840092	1	TENSION CABLE
38	712540	10	SCR-MC TR HD 10-24 X .37 SS	87	840096	1	FILTER, EXHAUST BAFFLE
39	712562	8	BOLT-HH 1/4-20X3/4 SS	88	840105	1	COVER-DRIVE MOTOR
40	712575	4	BLT-HH 5/16-18 X .75 SS	89	840114	1	SPACER, STEEL
41	712665	3	NUT-HEX 1/4-20 SS	90	840115	1	DIFFERENTIAL
42	712667	8	NUT, HEX 1/4-20 NYLOC SS	91	840116	2	WHEEL, 8" X 1.5" W/.75 ID
43	712695	4	NUT-HEX 3/8-16 SS	92	840141	3	SPACER - STEEL, .688 OD X .265 ID
44	712758	8	WSR-HELICAL 1/4 SS	93	840144	1	DRIVE BELT - AMB. 20, 1/2" X 27"
45	712767	4	FLAT WASHER .406 ID X .75 OD X .	94	840151	1	TENSION ARM WELDMENT
46	713049	2	BLT-HH 3/8-16 X 2.75 #5	95	840153	1	TENSION PLATE WELDMENT - AMB 20
47	740089	1	VAC MOTOR 3-STAGE 120V	96	881059	2	BEARING, .75" W/COLLAR
48	740189	1	TERMINAL BLOCK 10471	97	833265PLT	3	THREADED SPACER ZINC PLT
49	740245	1	SOLENOID-WATER 115V				

Brush Assembly



ITEM	PART NO.	REQ'D	DESCRIPTION
1	670669	1	CLAMP-P 3/8 ID
2	700287	1	GROMMET
3	710923	2	SC 5/16-18 X .62 ZINC
4	711018	2	SK 10-32 X .37
5	711160	5	SCR-HI/LO #10 X 5/8 ZINC
6	711232	2	BLT-HH 5/16-18 X 1.50
7	711350	2	NUT-NYLOC 10-32
8	711353	2	NUT-ACORN 5/16-18 ST PL
9	711391	1	NUT-HEX JAM 3/8-16 ST PL
10	711504	2	WSR-FLT 1/4 SS
11	711539	1	WSR-EXT LOCK 3/8
12	711554	11	WSR-INT LOCK 1/4
13	711558	2	WSR-INT LOCK 5/16
14	711717	1	RET RING-E EXT .37
15	712066	12	SCR-ST-PAN HD-AB 10 X 1.25 ZIN
16	712081	2	BLT-SHOULDER 5/16-18 X .75 X .
17	712318	2	WSR-FLT .75 X 1.12 X .12 PL
18	712536	3	SCR-MC 10-24 X .62 SS
19	712560	11	SCR-MC 1/4-20 X .50 SS NYL
20	712638	3	NUT HEX 10-24 SS NYLOC
21	712757	12	WSR-HELICAL #10 SS
22	715090	1	DECAL-BRUSH PRESSURE
23	740740	1	MOTOR BRUSH 120VDC
23A	740785	1	MOTOR BRUSH 240VDC
24	740739	1	CORD ASSY
25	760034	1	KNOB-ADJ 3/8-16 THREAD
26	760035	1	BEARING-FLG MOUNTED
27	827894	2	CUP BEARING
28	827896	2	COVER BEARING
29	827903	4	WAVE WASHER
30	828145	2	RET RING
31	828588	2	BEARING-.500 X 1.125 X .312
32	832903	1	BR PULLEY 3-40GR 5MM
33	833281	1	THREADED ROD ADJ SS
34	833326	1	VAC TUBE
35	833342	1	SHAFT PIVOT SS
36	833357	1	PULLEY MTR 20TOOTH 5MM
37	833376	1	BELT-HTD 375-5M-09
38	840007-1	1	VAC SHOE PLTE 12SS
39	840019	1	BRUSH BRACKET
40	840052	1	BRUSH
41	840062-1	1	VAC SHOE 20"
42	840065	1	COVER-BRUSH SPLASH
43	840081	1	AXLE
44	711106	6	SCR - #10-24 X .75, TYPE A

Trouble Shooting Guide

Use this guide to pinpoint problem areas that may arise with the use of your Ambassador 20.

CAUTION! Unplug supply cord before servicing machine components.

Solution System

I. No water dispensed from spray jets

- A. The hose connection at the pump for the spray tube may not be tight. Disconnect, then reconnect the fitting, to ensure the fittings snap together securely.
- B. The solution pump diaphragm may be damaged. Inspect by removing the diaphragm from the pump and inspect the diaphragm for cracks. Replace if required.

II. Spray intermittent or streaked

- A. Solution hoses may be clogged. Replace kinked hoses if found.
- B. The filter strainer in the solution tank may be clogged. Clean the strainer thoroughly.
- C. The spray jets may be clogged. Remove the end plug from the spray tube and flush by turning the pump on. Remove the spray jets from the tube and clean as required. Do not clean out the hole in the jet with a pin or wire. This may cause permanent streaking.

Solution Recovery

I. Solution recovery is reduced.

- A. Vacuum filter maybe clogged. First check filter recovery tank. Clean if required.
- B. Check the vacuum hoses for secure fit over the vacuum fittings. Tighten clamps where used. Also check hoses for cracks, kinks or clogging.
- C. Check the seals on the tank covers for damage. Replace if needed. Make sure cover closes freely without restrictions.
- D. Make sure the drain hose on the back of the tank is sealed.
- E. Check the vacuum slot on the scrub head for clogging. Clean out the slot if required.
- F. Vacuum motor brushes could be worn. Inspect and replace. If motor has run through two sets of brushes, replace the motor.

Electrical System A.C.

Solution Recovery (cont'd)

II. Pump motor does not run.

- A. Check pressure switch for short circuit. By-pass the pressure switch by connecting the two black leads to the switch to one another, if the motor then runs, replace the pressure switch.

III. Machine fails to run when handle switch is activated.

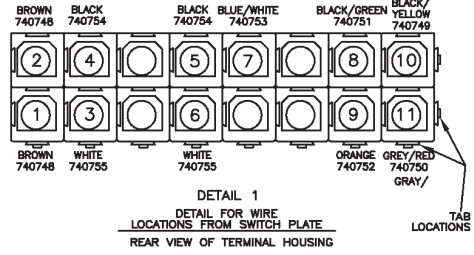
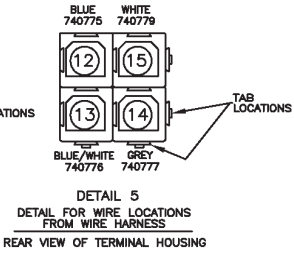
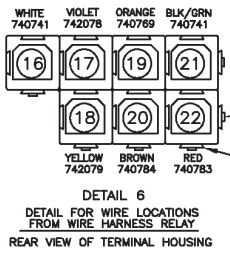
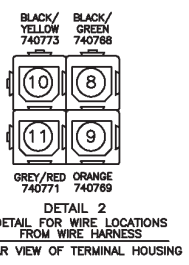
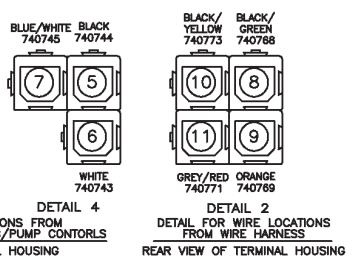
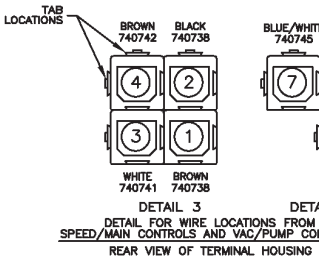
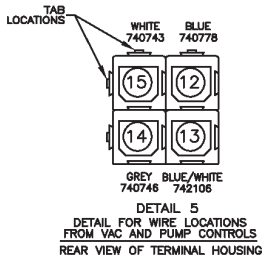
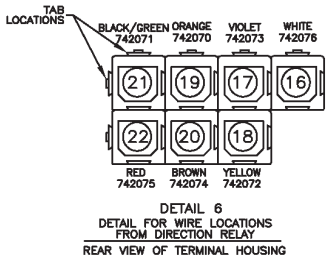
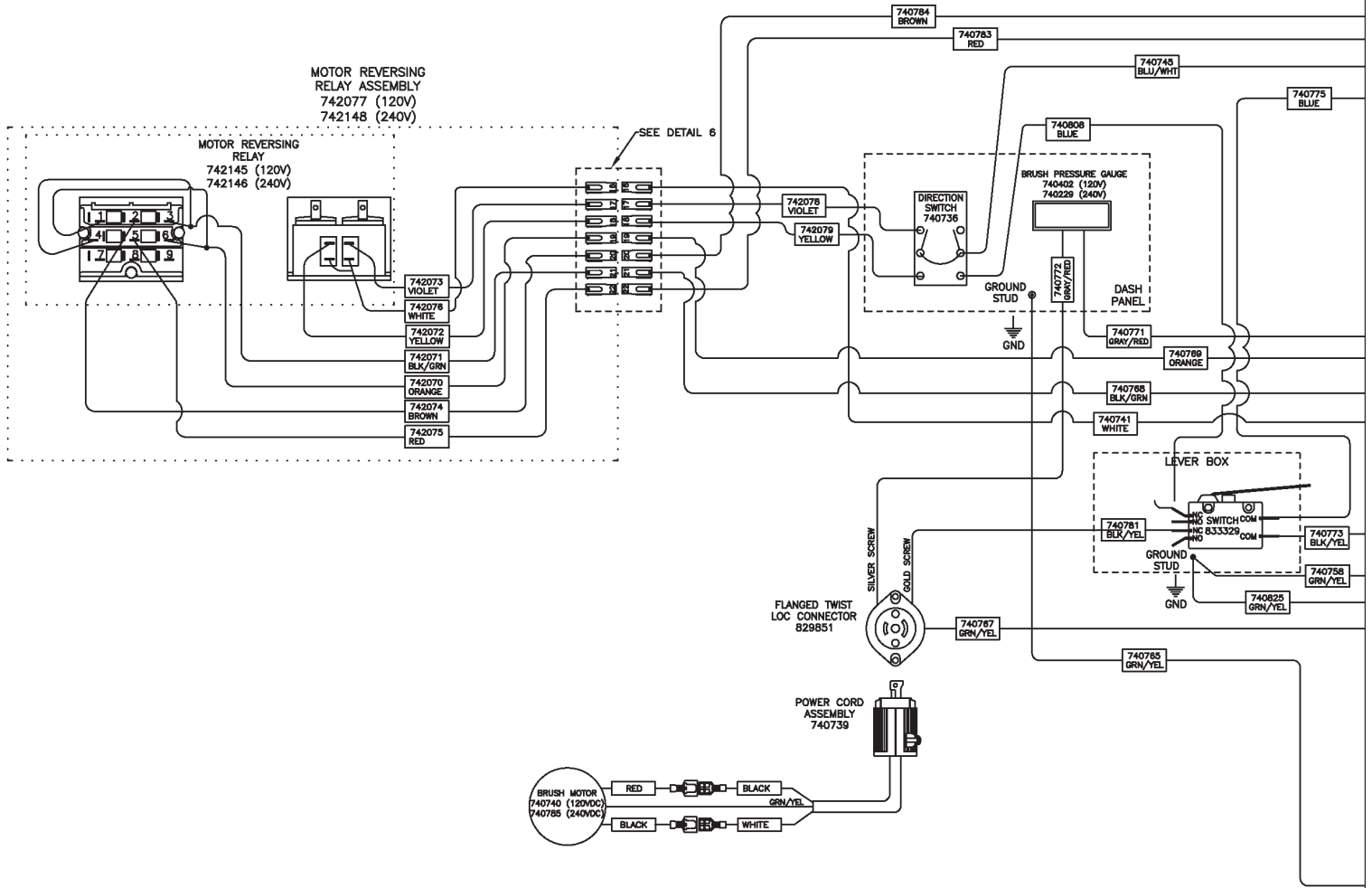
- A. Speed control maybe shorted out.
- B. Speed control potentiometer may be defective.

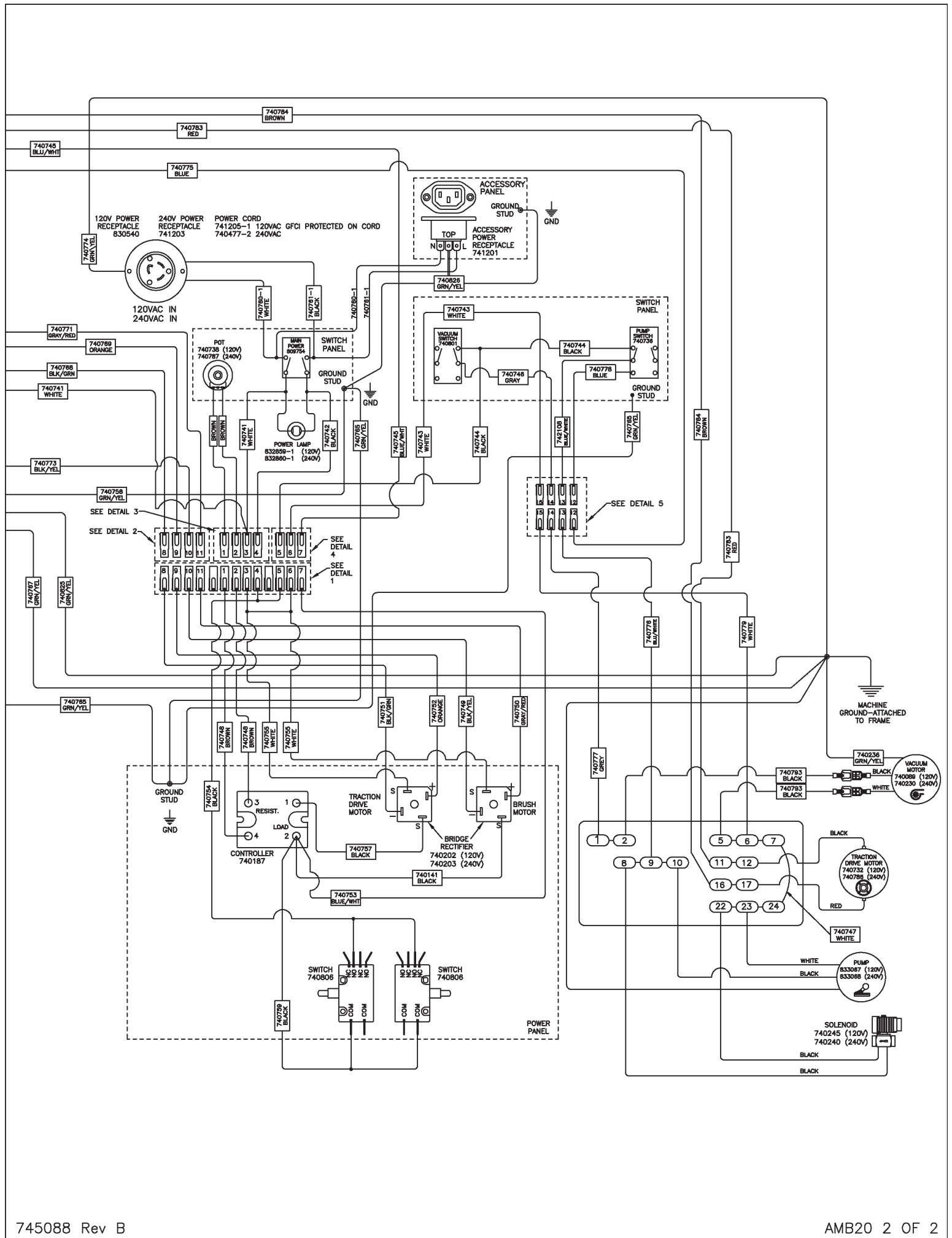
I. Vacuum motor does not start.

- A. Inspect the micro switch lever inside the electrical enclosure to make sure it is functioning properly. As the scrub head is lowered the lever should activate the switch. Bend the switch lever to adjust function if required.
- B. Check motor carbon brush.
- C. Check plugs on power cord.

FOR ALL THE ABOVE MAKE SURE ALL THE ELECTRICAL CONNECTIONS ARE SECURE. MAKE SURE THE CORD TO THE WALL OUTLET IS SECURE. MAKE SURE THE GFCI IS NOT TRIPPED IF THE UNIT IS EQUIPPED WITH ONE (LOCATED ON POWER CORD).

Wiring Diagram





Minuteman International Made Simple Commercial Limited Warranty



REVISION F
EFFECTIVE 6/1/2009

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 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.....

Model	Parts	Labor	Poly	Travel
Port A Scrub	1yr	6months	10yrs	0
MPV 13	1yr	0	0	0
MPV 14 & 18	2yrs	1yr	0	0
V Series Upright Vacuums	1yr	1yr	0	0
Rapid Air Blower	1yr	1yr	10yrs	0
Explosion Proof Vacuum	1yr	1yr	0	0
X12, X12H & TRS 14	1yr	1yr	10yrs	0
E17 & E20 Electric Scrubbers	1yr	6month	10yrs	0
Pneumatic Vacuums	3yr	1yr	0	0

Description	Parts	Labor	Poly	Travel
Battery Operated Group	3yrs	2yrs	10	90 days
Sweepers	1yr	1yr	10	90 days
Internal Combustion Group	1yr	1yr	10	90 days

Not to exceed two hours

Exception: PAS 14B **1yr** **1yr** **10yr** **0**

Battery Chargers:

Replacement Parts:

Batteries:

Polyethylene Plastic Tanks:

One year replacement

Ninety days

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

Tanks have 10yr warranty, no additional labor