



Lumina 20 Brush Drive Battery Burnisher Parts and Instruction Manual

Technical Specifications

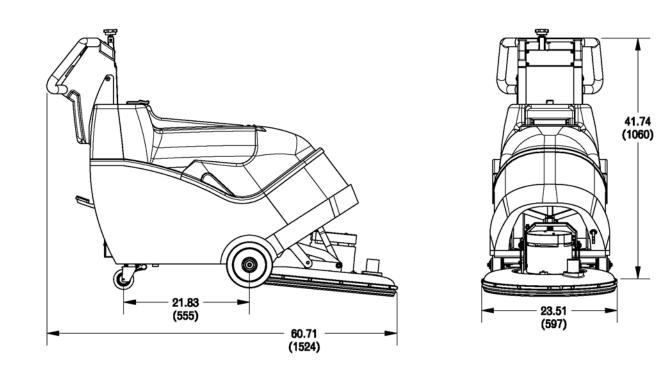


Model

Model No. Brush Speed Motor Voltage, Batteries Battery Capacity Gross Weight

Lumina 20 Brush Drive

M26036QP / M26036CE 2600 RPM 2.5HP 36 volts, 3-12volt 165 AH 916 lbs (415 kg) with batteries 638 lbs (290 kg) without batteries



For Safety When Servicing or Maintaining Machine

- · Stop on level surface.
- Disconnect the power to the machine by pulling the red Battery Connector located under the recovery tank near the batteries.
- Avoid moving parts. Do not wear loose jackets, shirts, or sleeves when working on machine.
- Avoid contact with battery acid. Battery acid can cause burns. When working on or around batteries, wear protective clothing and safety glasses. Remove metal jewelry. Do not lay tools or metal objects on top of batteries.
- Do not clean machine with a pressure washer.
- · Authorized personnel must perform repairs and maintenance. Use Minuteman supplied replacement parts.



- D EG-Konformitätserklärung (entsprechend der EG-Richtlinie 2006/42/EG)
- **GB EC Declaration of Conformity** (according to Directive 2006/42/EC)
- F Déclaration de conformité pour la CEE (conforme à la directive de la CEE 2006/42/CEE)
- I Dichiarazione CE di Conformità (ai sensi della direttiva CEE 2006/42)
- E CEE Declaración de Conformidad (según la normativa de la CEE 2006/42/CE)

Minuteman International, Inc. erklären in alleiniger Verantwortung, daß das Produkt, declare under our sole responsibility, that the product, déclarons sous notre seule responsabilité que le produit, Dichlara sotto la propria responsabilità che il prodotto, declaramos bajo responsibilidad propla que el producto,

Machine Lumina 20 Brush Drive

M26036CE

D auf das sich diese Erklärung bezieht, den einschlägigen grundlegenden Sicherheits- und Gesundheitsanforderungen der EG-Richtlinie 2006/42/EG, sowie den Anforderungen gemäß 2014/30 /EG entspricht. Zur sachgerechten Umsetzung der in den EG-Richtlinien genannten Sicherheits- und Gesundheitsanforderungen wurde(n) folgende Norm(en) und /oder technische Spezifikation(en) herangezogen:

GB to which this declaration relates corresponds to the relevant basic safety and health requirements of the Directive 2006/42/EC, and to the requirements of the other relevant Directives 2014/30 /EC. For the relevant implementation of the safety and health requirements mentioned in the Directives, the following standard(s) and/or technical specification(s) has (have) been respected:

F faisant l'objet de la déclaration est conforme aux prescriptions fondamentales en matière de sécurité et de santé stipulées dans la Directive de la CEE 2006/42/CEE, ainsi qu'aux prescriptions des autres Directives de la CEE établies dans ce domaine 2014/ 30 /CEE. Pour mettre en pratique dans les règles de l'art les prescriptions en matière de sécurité et de santé stipulées dans les Directives de la CEE, il a été tenu compte de la/des norme(s) et/ou de la/des spécification(s) technique(s) suivante(s):

I é conforme ai requisiti essenziali di sicurezza e di tutela della salute di cui alla Direttiva CEE 2006/42 e sue successive modifiche, nonché ai requisiti di cui alle seguenti Direttive CEE 2014/30. Per la verifica della Conformità di cui alle Direttive sopra menzionate, sono state consultate le seguenti, Norme Armonizzate EN:

E al cual se refiere la presente declaración corresponde a las exigencias básicas de la normativa de la CEE 2006/42/CE y referentes a la seguridad y a la sanidad, asi como a las exigencias de la demás normativas de la CEE 2014/30 /CE. Con el fin de realizar de forma adecuada las exigencias referentes a la seguridad y a la sanidad mencionadas en las normativas de la CEE fué(ron) consultada(s) la(s) siguiente(s) normativa(s) y especificación(es) téchicas(s):

EN 60335-1, EN60335-2-72, EN55012, EN55014-2/

Date 04/24/2017

Jack Hill

Managing Director

Name der autorisierten Person, die für Minuteman die technischen Unterlagen zusammenstellt: Name of the person authorized for Minuteman to compile the technical file: Personne chargée du suivi du dossier technique: Nome della persona autorizzata da Minuteman a compilare il file tecnico:

Nombre de la persona autorizada por Minuteman para la creación del fichero técnico: Ludger Luettel

D, GB, F, I, E



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IMPORTANT SAFETY INSTRUCTIONS

CAUTION: Operators must read and understand this manual before operating or maintaining this machine.

Keep hands and feet clear of moving parts while machine is in operation.

Disconnect the power to the machine by pressing the Red Emergency Disconnect Button when charging batteries or during installation or removal of pads.

During operation, loose objects on the floor can become dangerous projectiles if struck by the high speed pad. Special attention should be paid in removing or avoiding loose floor tile, electrical cables and telephone connection boxes.

Electrical motors and components can cause an explosion when operated near explosive materials or vapors. Do not operate this machine near flammable materials such as solvents, thinners, fuels, grain dust, etc.

Keep machine moving to reduce the risk of damaging floor finish and floor.

Make sure the Red Emergency Disconnect Button is pressed and the battery connector is unplugged from the machine before performing any maintenance procedures.

Store or park this machine on a level surface only.

These machines are designed for level floor operation only. Do not operate on ramps or inclines.

Battery acid can cause burns. When working on or around batteries, wear protective clothing and safety glasses. Remove metal jewelry. Do not lay tools or metal objects on top of batteries.

Charging batteries generates explosive gases. DO NOT CHARGE BATTERIES WHEN OPEN FLAMES OR SPARKS ARE PRESENT. DO NOT SMOKE. Make sure the charger is turned off before disconnecting it from the machine. Charge the batteries in a well-ventilated area with the battery cover removed completely.

Maintenance and repairs must be performed by authorized personnel.

SAVE THESE INSTRUCTIONS

Operating Instructions



Inspection

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

Electrical

This machine is battery operated and designed to operate on 36 volts DC (3) 12 volt batteries.

Batteries

Burnishers are shipped with batteries. (3 required) Part No. 956701 12V 165AH 20 Hr. Rate (Standard) Part No. 956210 12V 210AH 20 Hr. Rate (Optional) We do not recommend mixing AMP hour capacities. Any alternate battery sets can be used if they equal physical size and capacity. See next page for service and installation.

Operation

Before starting, familiarize yourself with the machine and its controls (see "Machine Overview" and "Dashboard Control Panel" diagrams). To turn the machine ON, do the following:

- 1. Make sure 20" high speed pad is used. Make sure the pad is installed on the machine by following instructions under "Pad Installation."
- 2. Make sure that no battery charger is plugged into the recharge port.
- 3. Lift the red emergency disconnect button so it is in the up position.
- 4. Lower the pad driver assembly by pushing the pedal slightly outward on the machine (unlock it), and then release it slowly.
- 5. Turn the power switch to the ON position. The pad driver will then slowly adjust itself to the floor. Move forward in a straight line, check the reading on the Operating Range Meter and make sure you are in the Green Zone.
- 6. Adjust the pad pressure as needed by turning the knob accordingly. (See Pad Pressure Adjustments.)

After Use

To raise the pad driver, push down until the pedal arm engages into the pedal catch. Turn machine off by turning the key switch on the control panel. Machine can be cleaned with a mild detergent and a damp cloth. Batteries should be charged after each use or when the battery condition meter shows a low charge. Once the battery charger reads 0 amps, the batteries are recharged. This should take approximately 8 hours if the batteries are completely discharged.

Maintenance

Periodically remove batteries from machine. Clean the batteries and battery tray with a solution of baking soda and water. Check all battery cables and wiring for signs of damage and wear. Replace as needed. Grease front wheel and rear caster zerks once a month for best operation.

Floor Seal Strip

When the floor seal strip show signs of excessive wear, seal should be replaced. The strip can be removed by loosening the screw on the retainer strap until the seal can slide off of the pad shroud housing. To install new seal, slip the retainer strap over the new seal strip and pad shroud. Make sure the seal is seated equally around the perimeter and the holes on the floor seal are oriented towards the back portion of the shroud.



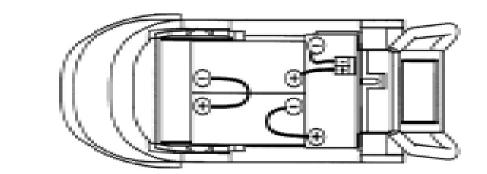
Battery Service and Installation

WARNING: Battery acid can cause burns. When working on or around batteries, wear protective clothing and safety glasses. Remove metal jewelry. Do not lay tools or metal objects on top of batteries.

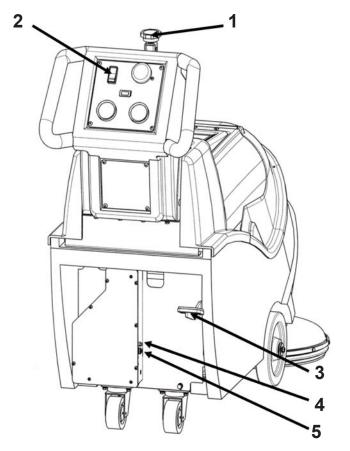
Charging of Batteries

Charging batteries generates explosive gasses. DO NOT CHARGE BATTERIES WHEN OPEN FLAMES OR SPARKS ARE PRESENT. DO NOT SMOKE. Make sure the charger is turned off before disconnecting it from the batteries. Charge the batteries in a well-ventilated area with battery cover removed completely. Fluid levels should be checked before and after charging and maintained at the proper levels. If the burnisher is not used for extended periods of time, batteries should be kept fully charged with a boost charge once a week.

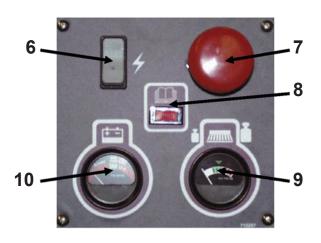
Battery Cable Routing



Machine Overview



Control Panel

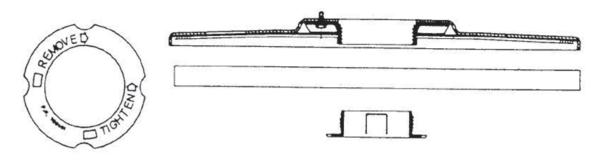


- 1. Pad Pressure Adjust knob
- 2. Dashboard Control Panel
- 3. Foot Pedal
- 4. Circuit Breaker 70 AMP
- 5. Circuit Breaker 3 AMP
- 6. Main Power Switch
- 7. Emergency Button
- 8. Carbon Brush Indicator
- 9. Pad Pressure Gauge
- 10. Battery Gauge



Pad Installation

The red emergency disconnect button and the key switch must be in the OFF position before installation and the pad driver assembly in the RAISED position. Remove center cup locking device by gripping on outer edges and turning clockwise. NOTE: Center cup cannot be pulled out; it must be unscrewed. After removing used pad, place new pad on pad driver assembly using outer flange of pad driver to center the pad. Push centering locking cup through the pad and into the pad driver assembly. The ratchet teeth on the center cup will engage into the pad driver assembly and should be pushed in as far as possible. If further tightening is needed, rotate the center-locking cup counter-clockwise



Pad Pressure Adjustments

The pad pressure adjust knob is located on the top of the control console. Counter-clockwise rotation increases pad pressure, the opposite rotation decreases. Different floors, conditions, and pads produce carrying pad load conditions. Ideal burnishing conditions are maintained while the operating range meter remains in the Green Zone. If the meter reads in the Red Zone decrease the pad pressure. When the machine is operated in the Red Zone for a long period of time motor overload will occur and the 70-amp circuit breaker for the motor will trip. If the motor circuit trips:

- 1. Check pad condition.
- 2. Decrease pad pressure.
- 3. Reset circuit breaker.

Circuit Breaker Protection

70 amp circuit breaker protects pad driver motor from excessive overload conditions. 3.0 amp circuit breaker protects control circuits against possible electrical shorts. If either circuit breaker trips, first determine the cause and correct the condition before resetting the breakers.

Carbon Brush Replacement

Design life of carbon brushes is between 1800-2000 hours. Replace brushes if worn to 3/8" or less, broken, or chipped. All carbon brushes should be replaced when motor is serviced. Four (4) are required, P/N 572003. Red indicator on control panel (above Emergency Disconnect Button, below the Dashboard) will glow when carbon brush service is required.

Carbon Brush Service

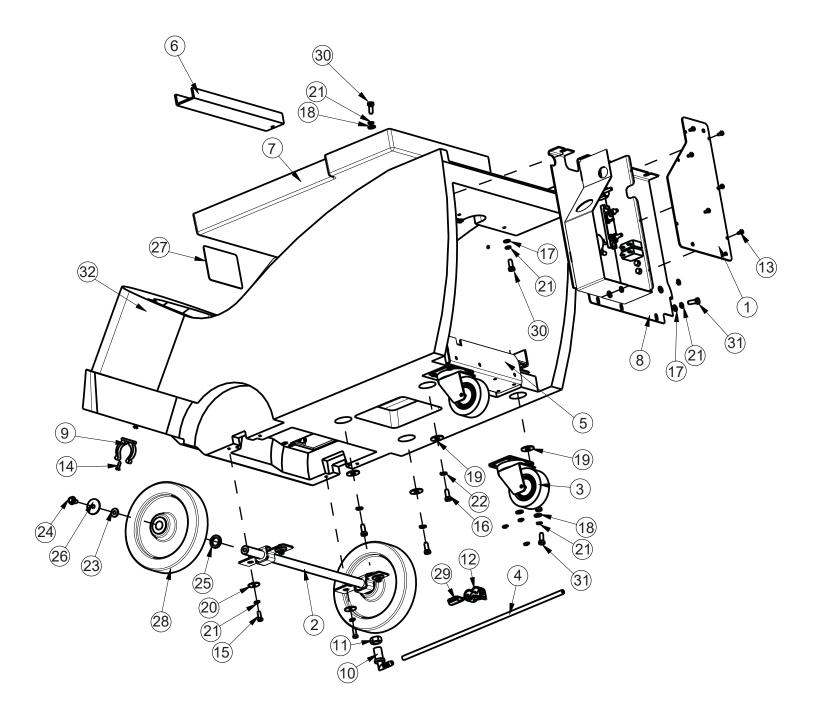
- 1. Disconnect batteries from machine.
- 2. Remove two screws that hold dust control housing and motor cover to motor.
- 3. Blow out top of motor with air line.
- 4. Loosen screw and remove carbon brush lead.
- 5. Slide brush spring off the back of carbon brush and remove brush.
- 6. Reverse order for installation of new carbon brushes.



MODEL	BATTERY P/N	DESCRIPTION			
M26036QP	956701	BATTERY WET 12V 155AH (CR-155)			
M26036QPIW	956701	BATTERY WET 12V 155AH (CR-155)			



Base Assembly



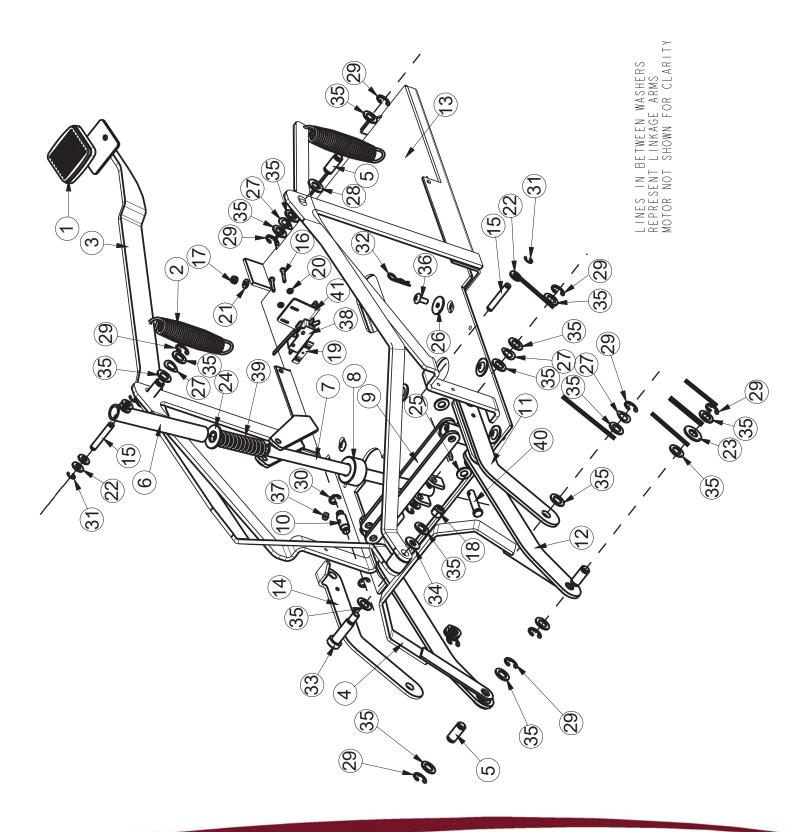


Base Assembly BOM

	BILL OF MATERIAL						
ITEM	ITEM PART NO. QTY DESCRIPTION						
1	200154	1	ELECTRICAL BOX COVER 14GA				
2	200250	1	WELD-AXLE				
3	172167	2	CASTER, 3 1/2" PU WHEEL				
4	260224	1	DRAIN HOSE 1/4 X 18 SILICONE				
5	260536	1	WELD-PLATE BASE				
6	260537	1	BATTERY SPACER, LUMINA				
7	260604	1	TRAY, BATTERY				
8	260570	1	BURN REAR PANEL ASSY				
9	260579	1	CLIP-TOOL 1.5 INCH HOSE				
10	320271	1	FITTING-PP 90 11/16-16UNC X 3/8HOSE				
11	320272	2	NOZZLE BODY LOCKNUT				
12	320273	1	CLAMP-HOSE SHUT-OFF				
13	711124	6	SCR-PHSMS 10 X .37 ZP B POINT				
14	711160	2	SCR-HI/LO 10 X .625 BLACK ZINC				
15	711203	4	SCR-HH 1/4-20 X .62 ZP TAP				
16	711228	4	SCR-HH 5/16-18 X .75 ZP GR 5				
17	711504	6	WASHER-FLAT 1/4 SS				
18	711505	7	WASHER-FLAT 1/4 ZP				
19	711507	4	WASHER-FLAT 3/8 X 1.12 X .06				
20	711519	4	WASHER-FLAT 1/4 X 1.00 X .06 ZP				
21	711544	23	WASHER-LOCK 1/4 SPLIT ZP				
22	711545	4	WASHER-LOCK 5/16 SPLIT ZP				
23	711575	2	WASHER-FLAT 1/4 X .75 X .06 ZP				
24	712042	2	SCR-HH 5/16-18 X.62 ZP GR 5 FLANGE				
25	712318	2	WASHER-FLAT 3/4 X 1.12 X .12 ZP				
26	712759	2	WASHER-FLAT .31 X 1.37 X .06 SS				
27	715430	1	DECAL-BATTERY ROUTING LUMINA 20				
28	762332	2	WHEEL-8 X 2.25 X .75 W/BEARING				
29	809444	1	CLIP-CORD				
30	713003	2	SCR-HH 1/4-20 X 1.00 ZP GR 5				
31	712565	2	SCR-THMS 1/4-20 X .62 SS				
32	200102MCH	1	2600 BASE				

Mainframe Assembly



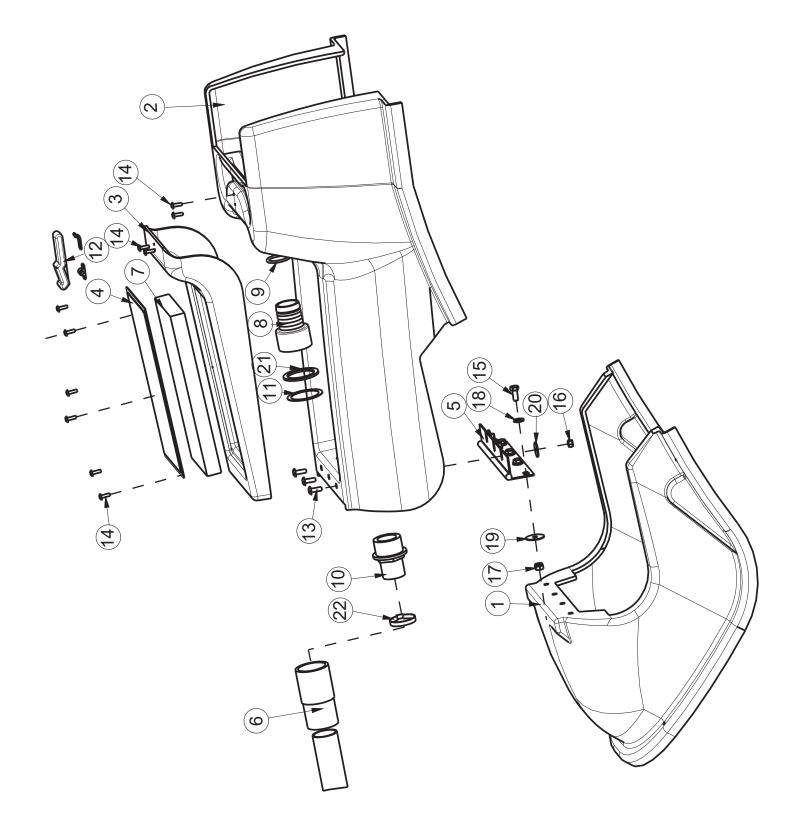




Mainframe Assembly BOM

BILL OF MATERIAL							
ITEM	ITEM PART NO. QTY DESCRIPTION						
1	210142	1	PEDAL PAD				
2	260211	2	HOBBY SPRING				
3	260511	1	UPPER WMT				
4	260513	1	MOTOR LIFT WELDMENT				
5	260519	4	PIVOT PIN				
6	260521	1	GUIDE TUBE				
7	260522	1	SPRING GUIDE				
8	260523	1	SPRING SPACER 1.50 X .632 X .84				
9	260524	2	ADJUSTMENT LINK				
10	260525	1	ADJUSTMENT NUT				
11	260528	1	LINK				
12	260529	2	TRAILING LINK				
13	260536	1	BASE PLATE WELDMENT				
14	260576	1	LINK				
15	670605	2	ROLLER PIN				
16	710307	2	SCR-MC 6-32 X 1.0 ST PL PAN HD				
17	711350	2	NUT NYLOC 10-32				
18	711380	1	NUT-NYLOC 3/8-16 NUT				
19	711430	1	NUT-TINNERMAN TWIN 6-32				
20	711501	2	WSR-FLAT # 6				
21	711503	2	WSR, FLAT#10				
22	711506	8	WSR-FLT .344 X .690 X .062 STL ZINC				
23	711509	2	WSR-FLAT 1/2 (.54X1.082X.087)				
24	711511	1	WSR-FLAT .62 X 1.31 X .09				
25	711515	2	WSR-FLAT .406 X .812 X .0625				
26	711519	6	WSR- FLAT .25 X 1.01 X .06				
27	711524	6	WSR-WAVE .52 X .87 X .01				
28	711592	2	WSR-FLAT .50 X .9 X .075 NYL				
29	711713	14	RETAINING RING - "E" TYPE EXT .500				
30	711717	2	RETAINING RING- E TYPE .37				
31	711721	4	RET RING-E TYPE .312				
32	711808	1	COTTER PIN-HAIR #13				
33	712102	1	BLT- SHLDR 1/2 X 1-1/2				
34	712301	1	WSR-FLAT .87 X .38 X .06				
35	712310	28	WSR- FLAT .52 X .87 X .06 PL				
36	712565	6	SCR-MC 1/4-20X.63 SS TR HD				
37	712905	1	NUT-HEX 10-24 NIPL				
38	740830	1	SWITCH SPST NC CONTACT				
39	762339	1	SPRING COMPRESSION				
40	831965	1	3/8 x 1.63" CLEVIS PIN				
41	260577-1	1	SWITCH INTERLOCK BRACKET				

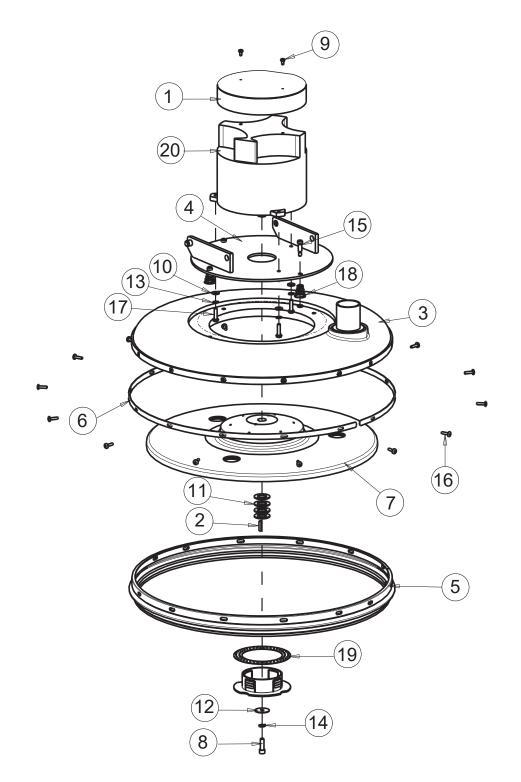






	BILL OF MATERIAL						
ITEM	ITEM PART NO. QTY DESCRIPTION						
1	260501	1	FIXED TOP COVER				
2	260502	1	TOP COVER REAR				
3	260503	1	BAG COVER TOP				
4	260504	1	PLATE-FILTER COVER				
5	260560	1	HINGE-9.75"				
6	260590	1	HOSE ASY DUST CONTROL				
7	260592	1	EXHAUST FILTER DUST CONTROL				
8	260596	1	INSERT FITTING 1-1/2" PVC FPT FEM ADAP				
9	310008	1	O-RING-BUNA 1.375 ID				
10	450037	1	ADAPTER MACHINED				
11	450081	1	WASHER-FLAT 1.908 X 2.41 X .03 SS				
12	450207	1	LATCH-SOFT				
13	710180	3	SCR-THMS 1/4-20 X .75 ZP				
14	711160	10	SCR-HI/LO 10 X .625 BLACK ZINC				
15	711228	4	SCR-HH 5/16-18 X .75 ZP GR 5				
16	711373	3	NUT-NYLOC 1/4-20 ZP				
17	711374	4	NUT-NYLOC 5/16-18 ZP				
18	711506	4	WASHER-FLAT 5/16 X .688 ZP				
19	711516	4	WASHER-FLAT 5/16 X 1.25 X .05 ZP				
20	711519	3	WASHER-FLAT 1/4 X 1.00 X .06 ZP				
21	828970	1	WSR NEOP 1.87X2.4X.125				
22	831001	1	CLAMP-CRIMP 440R				



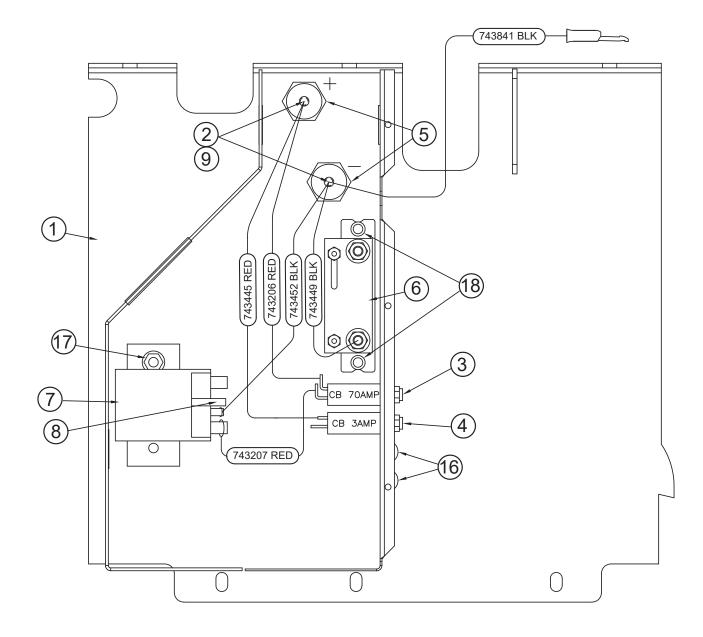




BILL OF MATERIAL - 260610							
ITEM	ITEM PART NO. QTY DESCRIPTION						
1	260573	1	MOTOR GRILL ASSY				
2	260597	1	KEY, 3/16 X .906				
3	260611	1	PAD DRIVER SHROUD - 20"				
4	260615	1	WELD-PLATE MOTOR NEW				
5	260616	1	DUST SKIRT - NEW				
6	260619	2	PAD DRIVER STRAP				
7	670075	1	MULTIFLEX PADRVR ASSY-BATTERY BURNISHER				
8	710857	1	SCR-SHCS 5/16-24 X 1.00 BLL OX				
9	711124	2	SCR-PHSMS 10 X .37 ZP B POINT				
10	711505	3	WASHER-FLAT 1/4 ZP				
11	711512	4	WASHER-FLAT 3/4 X 1.37 X .08 ZP				
12	711516	1	WASHER-FLAT 5/16 X 1.25 X .05 ZP				
13	711544	7	WASHER-LOCK 1/4 SPLIT ZP				
14	711545	1	WASHER-LOCK 5/16 SPLIT ZP				
15	712070	4	BLT-SHOULDER 5/16 X .75 LG X 1/4-20 BLK				
16	712537	14	SCR-THMS 10-24 X .75 SS				
17	713003	3	SCR-HH 1/4-20 X 1.00 ZP GR 5				
18	809857	4	SPRING-CONICAL STL				
19	260581MCH	1	PAD GRABBER, RING MACHINED				
20	742461-2	1	MOTOR ASSEMBLY				





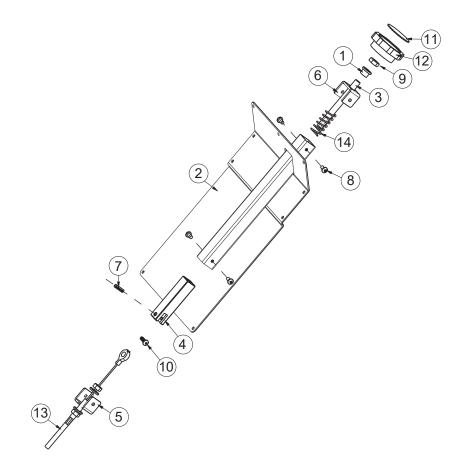




	BILL OF MATERIAL - 260570							
ITEM	ITEM PART NO. QTY DESCRIPTION							
1	260542	1	WELD-BACK PANEL					
2	711368	2	NUT-WING 1/4-20 ZP NYLOC					
3	740131	1	CIRCUIT BREAKER-70AMP PUSH BUTTON					
4	746006	1	CIRCUIT BREAKER-3.0AMP PUSH BUTTON					
5	740132	2	INSULATOR (ELECTRICAL)- 1/4-20 INSERT					
6	743464	1	SHUNT ASSY 100MV X 100A					
7	740243	1	CONTACT-36V SPNO 100A CONTINUOUS					
8	742000	1	DIODE ASY 24/26/32/38/AC					
9	833638	2	BRASS STUD- 1/4-20 X 1"					
10	743841	1	WIRE ASY, BLACK 6G					
11	743206	1	8G RED 8.00"					
12	743207	1	8G RED 4.50"					
13	743445	1	18G RED 13.00" B=26					
14	743449	1	8G BLACK 8.00"					
15	743452	1	18G BLACK 8.00" B=4					
16	742749	2	CIRCUIT BREAKER, HOLE PLUG					
17	711425	1	NUT-FLANGED WIZZ 1/4-20 ZP					
18	710356	2	SCR-RHMS 10-32 X .62 ZP					



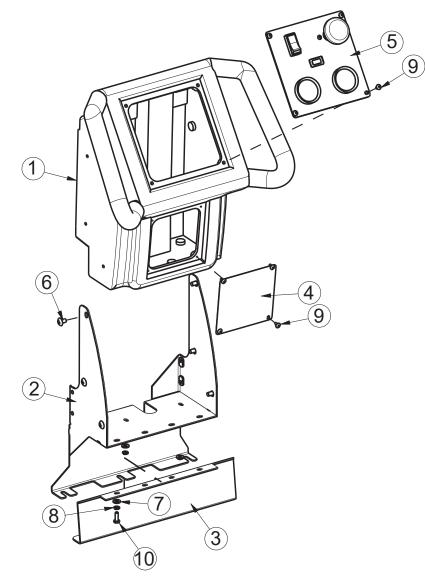




BILL OF MATERIAL - 260549							
ITEM	ITEM PART NO. QTY DESCRIPTION						
1	260066	1	BUSHING-FLG .377 X .50 X .31 OILITE				
2	260547	1	WELD-PRESS ADJUST				
3	260554	1	PRESS ADJ SCREW				
4	260557	1	PRESS ADJ SLIDE				
5	260562	1	PRESS ADJ RET BRKT				
6	260563	1	PRESS ADJ RET BRKT				
7	260564	1	PIN-ROLL 3/16 X 3/4				
8	710353	4	SCR-PHMS 10-32 X .37 ZP				
9	711391	1	NUT-JAM 3/8-16 ZP				
10	712536	1	SCR-THMS 10-24 X .62 SS				
11	715038	1	DECAL-PAD PRESSURE				
12	760034	1	KNOB-ADJ 3/8-16 THREAD				
13	762253	1	CABLE-PRESSURE ADJ ASSY				
14	833102	1	1 SPRING-KNOB .60 X .73 X 1.75 ZINC				

Console Assembly

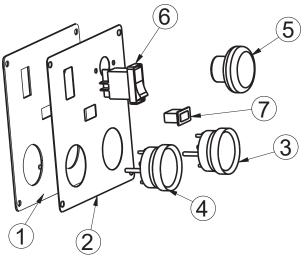




	BILL OF MATERIAL - 260568						
ITEM	ITEM PART NO. QTY DESCRIPTION						
1	200104	1	CONSOLE, HANDLE				
2	260538	1	FRONT HANDLE BRACKET WMT				
3	260541	1	REAR HANDLE BRKT				
4	260544	1	PANEL COVER				
5	260569	1	1 BURN DASH ASSY				
6	710195	6	6 SCR-PHMS 5/16-18 X .50 ZP				
7	711505	6	WASHER-FLAT 1/4 ZP				
8	711544	6	WASHER-LOCK 1/4 SPLIT ZP				
9	712540	8	SCR-THMS 10-24 X .37 SS				
10	713002	1	SCR-HH 1/4-20 X .75 ZP 5				



Dashboard Assembly



	BILL OF MATERIAL - 260569							
ITEM	ITEM PART NO. QTY DESCRIPTION							
1	260546	1	BURN DASHBOARD					
2	715297	1	DECAL-DASHBOARD 2600					
3	740135	1	1 METER-PRESSURE 100A DC					
4	740136	1	1 METER-VOLT 22V 45V (BATT)					
5	742202	1	SWITCH, DISCONNECT- E-STOP 1 POLE 125A					
6	809754	1	SWITCH-ROCKER					
7	746100-1	1	LIGHT ASSY					

Replacement Parts

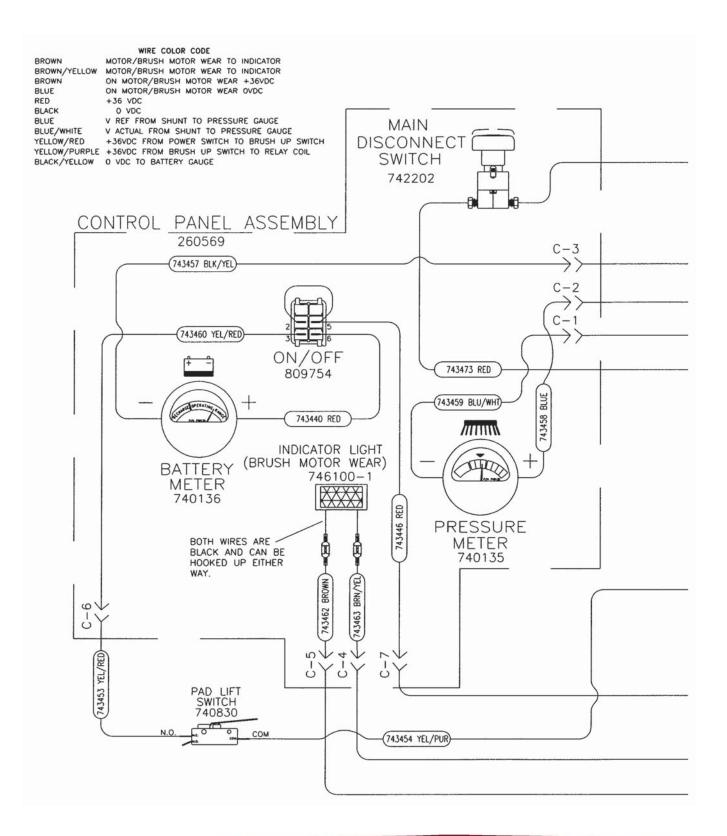
\bigcirc	DUST SKIRT P/N 260595
	CARBON BRUSH REPLACEMENTS P/N 572003 (QTY 4)
6000 000 000 000 000 000 000 000 000 00	210 AMP HOUR BATTERY (OPTIONAL) P/N 956210
	PAPER BAG REPLACEMENTS P/N 370202PKG

Notes

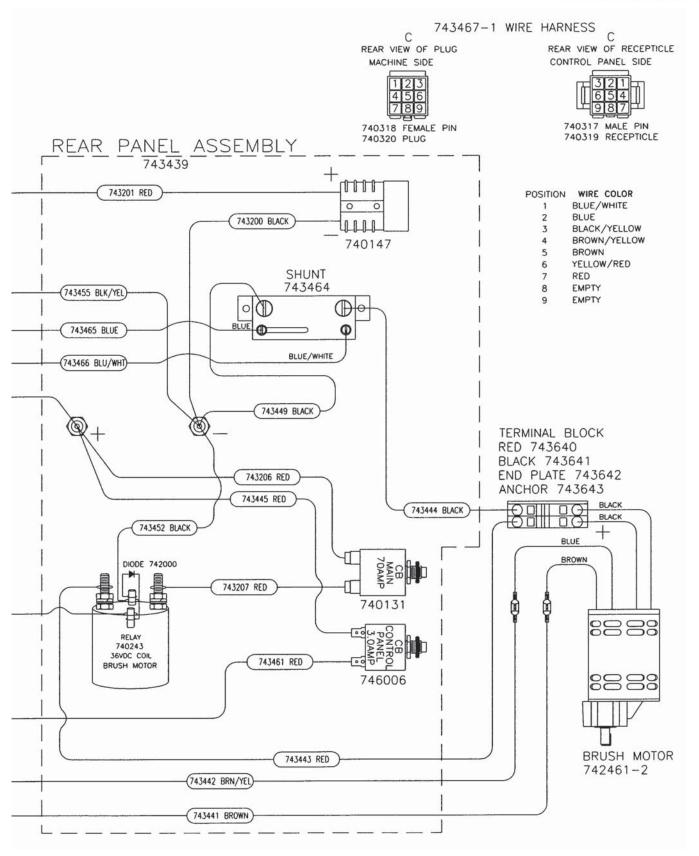


Wiring Diagram











Minuteman International Made Simple Commercial Limited Warranty

REVISION P EFFECTIVE 5/1/2017

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, brushes, 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 pre-filters 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.

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Model	Parts	Labor	Poly	Travel**
Cord Electric Group	5yrs	3yrs	12yrs	90 days
Battery Auto Scrubbers (incl. on board charger)	5yrs	3yrs	12yrs	90 days
Battery and Manual Sweepers	3yrs	3yrs	12yrs	90 days

Exceptions......

Model	Parts	Labor	Poly	Travel**
Port A Scrub, all models (incl. on board charger)	1yr	6months	12yrs	90 days
A3S Blower	1yr	1yr	0	0
Phenom Dual Motor Upright Vacuums	2yrs	2yrs	0	0
Explosion Proof Vacuum	1yr	1yr	0	0
Propane Burnisher	1yr	1yr	0	90 days
E14BQP and E14115 scrubber	1yr	1yr	12yrs	90 days
	•	*	*Travel, 2 ł	nours max

Stand-alone Battery Chargers:	One year
Replacement Parts:	Ninety days
Batteries:	0-3 months full replacement, 4-12 months pro-rate
Polypropylene Plastic Tanks:	12yr warranty, no additional labor



"Excellence Meets Clean"

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

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Lumina 20 Brush Drive Battery Burnisher 988170 Rev G 05/17