



Lumina 20 Traction Drive Battery Burnisher Parts and Instruction Manual

Technical Specifications

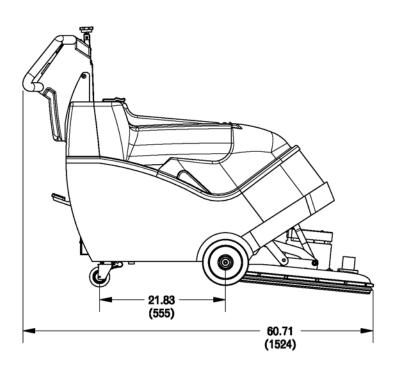


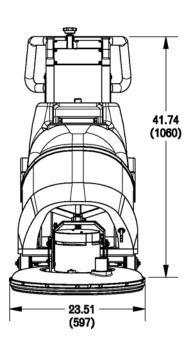
Model

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

Lumina 20 Traction Drive

M26036TDQP / / M26036TDQPIW / M26036TDCE 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.



EC Declaration of Conformity

according to Directives 72/23, 89/392, and 89/336

We, Minuteman International Incorporated, of 111 South Rohlwing Road Addison Illinois 60101 USA, declare under our sole responsibility that the product M26036TDCE, M26036TDQPIW, M26036CE, Lumina Burnisher to which this declaration relates corresponds to the relevant requirements of the EC Directives 72/23, 89/392 and 89/336. The following standards were used to determine compliance with the Directives: EN 292, EN 294, EN 811, EN 55014, EN 55104 and EN 60335-1.

SO	U ND	VIBRATION
73 dB 69dB		$.5 \text{ m/s}^2$
Operator	At 3m	At Operators Handle

Tests were conducted on 11/3/04 with calibrated sound and vibration equipment under the conditions noted below:

General Condition: Indoors Wind: 0 km/hr Temperature: 25°C Humidity: 70%

Barometric Pressure: 29.5

Jeff Pollack, Standards Engineer

Date

Form: EC053C



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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. 956210 12V 210AH 20 Hr. Rate

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 key switch to the ON position. The pad driver will then slowly adjust itself to the floor. Make sure the machine is set to move forward indicated by the light on the dashboard control panel.
- 6. Place hands on the bails and squeeze the bail levers to start the operation of the machine. Move forward in a straight line, check the reading on the Operating Range Meter and make sure you are in the Green Zone.
- 7. Adjust the pad pressure as needed by turning the knob accordingly. (See Pad Pressure Adjustments.)
- 8. Adjust speed as needed by turning the speed control knob accordingly.



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.

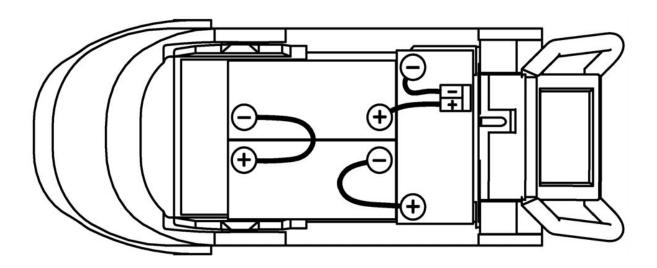
Battery Service and Installation

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.

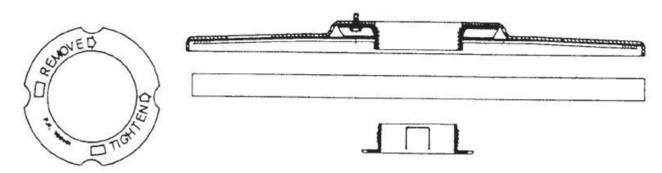
Battery Cable Routing





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:

- 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

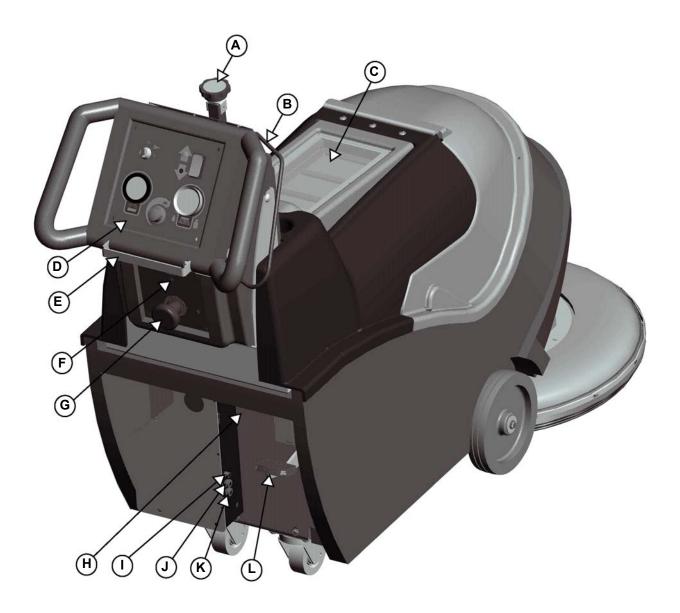
Design life of carbon brushes is between 1800-2000 hours. Replace brushes if worn to 3/8" or less, broken, or chipped. All carbon brushes should be replaced when motor is serviced. Four (4) are required, P/N 572003. Red indicator on control panel (above Emergency Disconnect Button, below the Dashboard)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

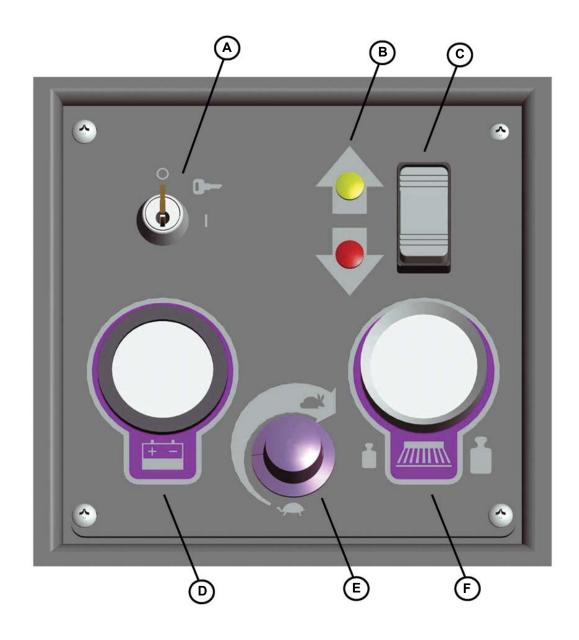
Machine Overview





- A PAD PRESSURE ADJUSTMENT
- B BAIL LEVER
- C DUST BAG
- D DASHBOARD CONTROL PANEL
- **E EMERGENCY BELLY BAR STOP**
- F CARBON BRUSH INDICATOR
- **G EMERGENCY STOP BUTTON**
- H POWER CONNECTOR
- I CIRCUIT BREAKER, 70 AMP
- J CIRCUIT BREAKER, 3 AMP
- K CIRCUIT BREAKER, 18 AMP
- L FOOT PEDAL





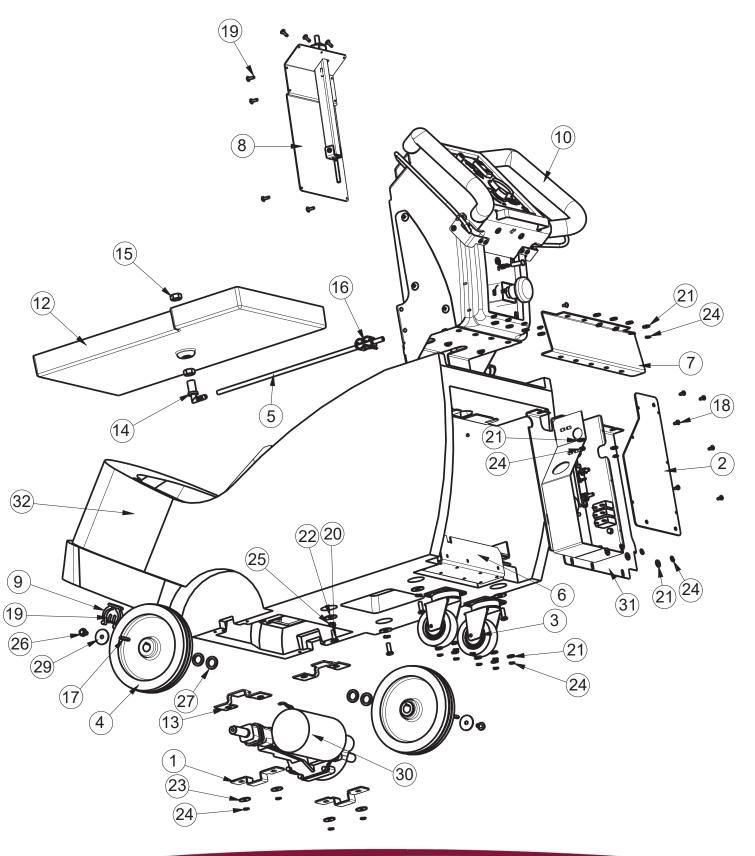
- A ON / OFF KEY SWITCH
- **B TRACTION DRIVE DIRECTION INDICATOR**
- C TRACTION DRIVE DIRECTIONAL SWITCH
- **D BATTERY GUAGE**
- **E TRACTION DRIVE SPEED CONTROL**
- F PAD PRESSURE GUAGE



Exploded Views

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Base Assembly



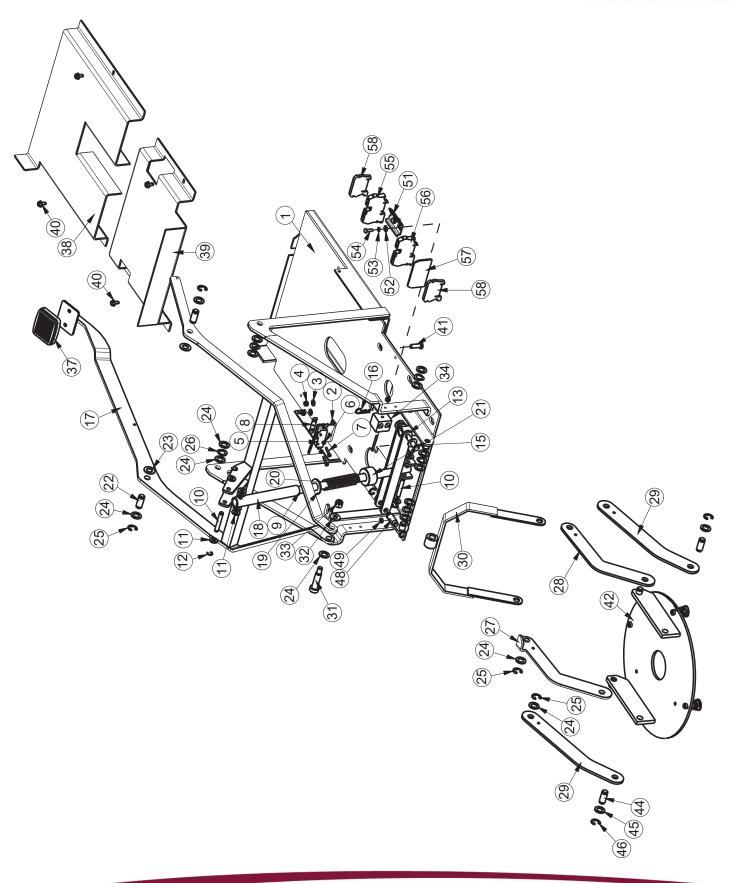


Base Assembly BOM

	BILL OF MATERIAL					
ITEM	PART NO.	QTY	DESCRIPTION			
1	200126	2	TRANSAXLE MOUNT 11GA			
2	200154	1	ELECTRICAL BOX COVER 14GA			
3	172167	2	CASTER, 3 1/2" PU WHEEL			
4	210141	2	WHEEL-8 X 1.5 X .75 BORE			
5	260224	1	DRAIN HOSE 1/4 X 18 SILICONE			
6	260536	1	WELD-PLATE BASE			
7	260541	1	REAR HANDLE BRKT			
8	260549	1	PRESS ADJ ASSY			
9	260579	1	CLIP-TOOL 1.5 INCH HOSE			
10	260583-1	1	CONSOLE ASY, 2600TD SPE BAT GAUGE			
12	260604	1	TRAY, BATTERY			
13	260676	2	SPACER, TRANSAXLE			
14	320271	1	FITTING-PP 90 11/16-16UNC X 3/8HOSE			
15	320272	2	NOZZLE BODY LOCKNUT			
16	320273	1	CLAMP-HOSE SHUT-OFF			
17	361233	2	KEY-SQ 3/16 X 1-1/2			
18	711124	6	SCR-PHSMS 10 X .37 ZP B POINT			
19	711160	11	SCR-HI/LO 10 X .625 BLACK ZINC			
20	711229	4	SCR-HH 5/16-18 X .87 ZP GR 5			
21	711505	23	WASHER-FLAT 1/4 ZP			
22	711507	4	WASHER-FLAT 3/8 X 1.12 X .06			
23	711519	10	WASHER-FLAT 1/4 X 1.00 X .06 ZP			
24	711544	27	WASHER-LOCK 1/4 SPLIT ZP			
25	711545	4	WASHER-LOCK 5/16 SPLIT ZP			
26	712042	2	SCR-HH 5/16-18 X.62 ZP GR 5 FLANGE			
27	712318	4	WASHER-FLAT 3/4 X 1.12 X .12 ZP			
29	712759	2	WASHER-FLAT .31 X 1.37 X .06 SS			
30	743800	1	TRANSAXLE- 36VDC			
31	743831	1	ELEC ASSY, BATTERY BURN W/TD			
32	200102MCH	1	2600 BASE			

Mainframe Assembly



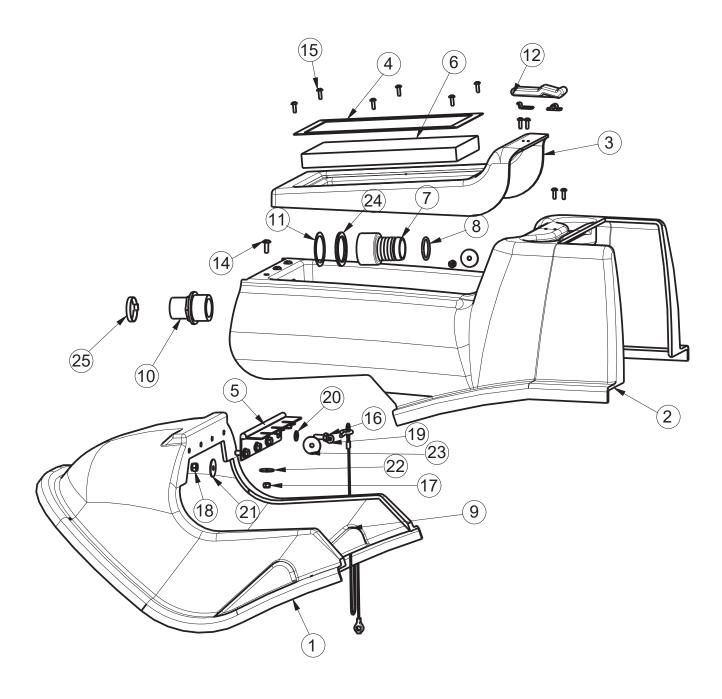






	BILL OF MATERIAL						
ITEM	PART#	QTY	DESCRIPTION	ITEM	PART#	QTY	DESCRIPTION
1	260536	1	WELD-PLATE BASE	28	260528	1	LINK
2	260577-1	1	SWITCH INTERLOCK BRKT NEW	29	260529	2	TRAILING LINK
3	711503	2	WSR-FLAT #10 X .50 ZP	30	260513	1	WELD-LIFT MOTOR
4	711350	2	NUT-NYLOC 10-32 ZP	31	712102	1	BLT-SHLDR 1/2 X 1.5 LG X 3/8-16
5	740830	1	SW-SNAP SPST NO/NC CONTACTS FLAT LEVER	32	712301	1	WSR-FLAT 3/8 X .87 X .06 ZP
6	711501	2	WSR-FLAT #6 X .375 ZP	33	711380	1	NUT-NYLOC 3/8-16 ZP
7	710307	2	SCR-PHMS 6-32 X 1.00 ZP	34	743598	1	TERMINAL BLOCK-2 POS
8	711430	1	NUT-TINNERMAN 6-32	37	210142	1	PEDAL PAD
9	260522	1	SPRING GUIDE	38	260586	1	SUPPORT, BATTERY LOWER
10	670605	2	ROLLER PIN	39	260587	1	SUPPORT, BATTERY UPPER
11	711506	8	WSR-FLAT 5/16 X .688 ZP	40	712139	4	SCR-HH 1/4-20 X .50 ZP THREAD ROLLING
12	711721	4	RET RING-E TYPE .312	41	711229	4	SCR-HH 5/16-18 X .87 ZP GR 5
13	260524	2	ADJUSTMENT LINK	42	260615	1	WELD-PLATE MOTOR NEW
15	831965	1	PIN-CLEVIS 3/8 X 1.63	44	260519	2	PIVOT PIN
16	711808	1	PIN-HAIRPIN COTTER #13	45	712310	12	WSR-FLAT .52 X .87 X .06 ZP
17	260511	1	WELD-UPPER	46	711713	6	RET RING-E EXT .50
18	260521	1	GUIDE TUBE	48	260525	1	ADJUSTMENT NUT
19	711511	1	WSR-FLAT 5/8 X 1.31 X .09 SS	49	712905	1	NUT-HEX 10-24 SS
20	762339	1	SPRING-COMP	51	743644	1	DIN RAIL, CUT- 2"
21	260523	1	SPACER-1.5 X .632 X .84	52	711503	2	WSR-FLAT #10 X .50 ZP
22	260519	2	PIVOT PIN	53	711543	2	WSR-LOCK #10 SPLIT ZP
23	711592	2	WSR-FLAT 1/2 X .90 X .064 NYLON	54	710356	2	SCR-RHMS 10-32 X .62 ZP
24	712310	19	WSR-FLAT .52 X .87 X .06 ZP	55	743640	1	TERMINAL BLOCK-60A RED (SPRING ACTION)
25	711713	6	RET RING-E EXT .50	56	743641	1	TERMINAL BLOCK-60A BLACK (SPRING ACTION)
26	711524	6	WSR-WAVE .52 X .87 X .01	57	743642	1	TERMINAL BLOCK-END PLATE (SPRING ACTION)
27	260576	1	LINK, SWITCH BRKT	58	743643	2	TERM BLOCK-END ANCHOR (SPRING ACTION)



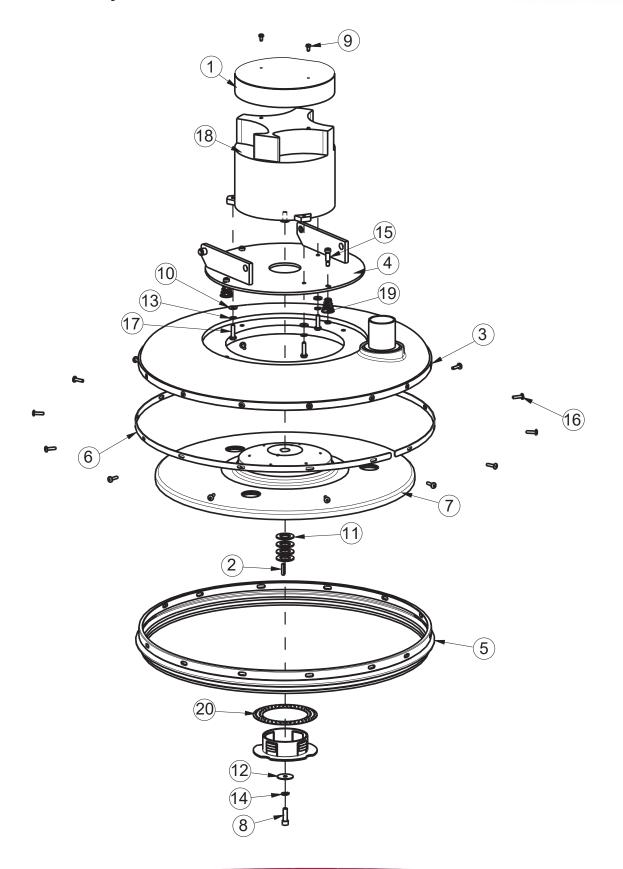




Housing Assembly BOM

	BILL OF MATERIAL					
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	260592	1	EXHAUST FILTER DUST CONTROL			
7	260596	1	INSERT FITTING 1-1/2" PVC FPT FEM ADAP			
8	310008	1	O-RING-BUNA 1.375 ID			
9	320246	1	SOLUTION TNK CABLE			
10	450037	1	ADAPTER MACHINED			
11	450081	1	WASHER-FLAT 1.908 X 2.41 X .03 SS			
12	450207	1	LATCH-SOFT			
14	710180	3	SCR-THMS 1/4-20 X .75 ZP			
15	711160	10	SCR-HI/LO 10 X .625 BLACK ZINC			
16	711228	4	SCR-HH 5/16-18 X .75 ZP GR 5			
17	711373	4	NUT-NYLOC 1/4-20 ZP			
18	711374	4	NUT-NYLOC 5/16-18 ZP			
19	711425	1	NUT-FLANGED WIZZ 1/4-20 ZP			
20	711506	4	WASHER-FLAT 5/16 X .688 ZP			
21	711516	4	WASHER-FLAT 5/16 X 1.25 X .05 ZP			
22	711519	3	WASHER-FLAT 1/4 X 1.00 X .06 ZP			
23	712761	2	WASHER-FENDER 1/4 X 1.25 X .059 SS			
24	828970	1	WSR NEOP 1.87X2.4X.125			
25	831001	1	CLAMP-CRIMP 440R			



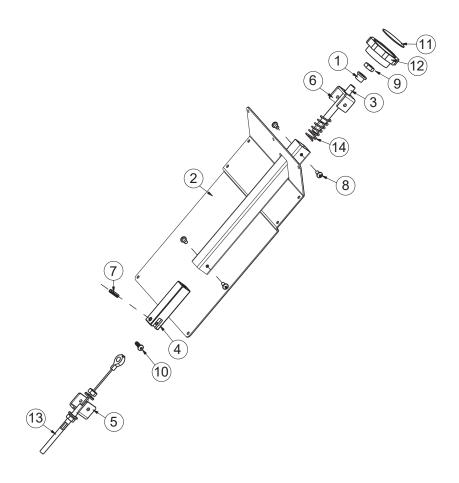




Pad Driver Assembly BOM

	BILL OF MATERIAL - 260610				
ITEM	PART NO.	QTY	DESCRIPTION		
1	260573	1	MOTOR GRILL ASSY		
2	260597	1	KEY, 3/6 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	742461-2	1	MOTOR ASSEMBLY		
19	809857	4	SPRING-CONICAL STL		
20	260581MCH	1	PAD GRABBER, RING MACHINED		

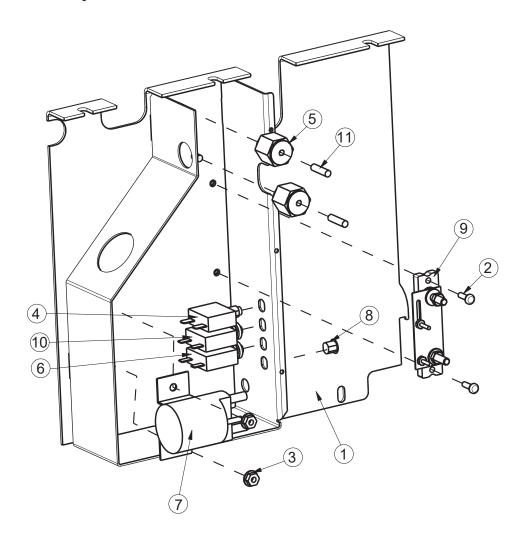




	BILL OF MATERIAL - 260549					
ITEM	PART NO.	QTY	DESCRIPTION			
1	260066	1	BUSHING-FLG .377 X .50 X .31 OILITE			
2	260547	1	WELD-PRESS ADJUST			
3	260554	1	PRESS ADJ SCREW			
4	260557	1	PRESS ADJ SLIDE			
5	260562	1	PRESS ADJ RET BRKT			
6	260563	1	PRESS ADJ RET BRKT			
7	260564	1	PIN-ROLL 3/16 X 3/4			
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	SPRING-KNOB .60 X .73 X 1.75 ZINC			

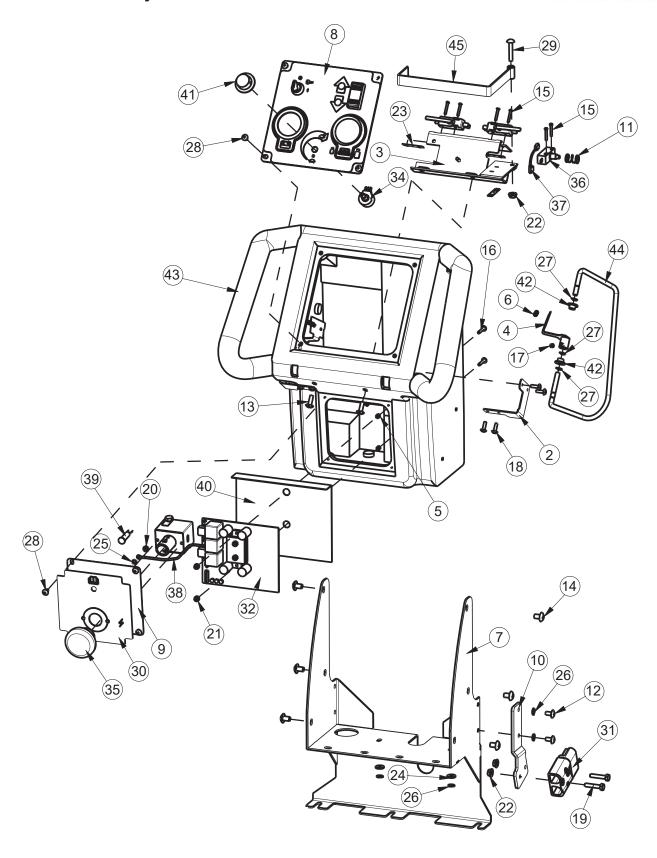
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Electrical Assembly



	BILL OF MATERIAL - 260588				
ITEM	ITEM PART NO. QTY DESCRIPTION				
1	260542	1	WELD-BACK PANEL		
2	710356	2	SCR-RHMS 10-32 X .62 ZP		
3	711425	2	NUT-FLANGED WIZZ 1/4-20 ZP		
4	740131	1	CIRCUIT BREAKER-70AMP PUSH BUTTON		
5	740132	2	INSULATOR (ELECTRICAL)- 1/4-20 INSERT		
6	740238	1	CIRCUIT BREAKER-18AMP PUSH BUTTON		
7	740243	1	CONTACT-36V SPNO 100A CONTINUOUS		
8	742749	1	CIRCUIT BREAKER, HOLE PLUG		
9	743464	1	SHUNT ASSY 100MV X 100A		
10	746006	1	CIRCUIT BREAKER-3.0AMP PUSH BUTTON		
11	833638	2	BRASS STUD- 1/4-20 X 1"		





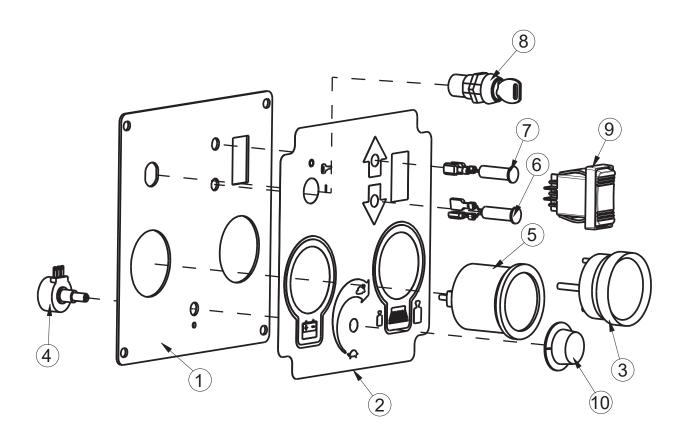
Console Assembly BOM



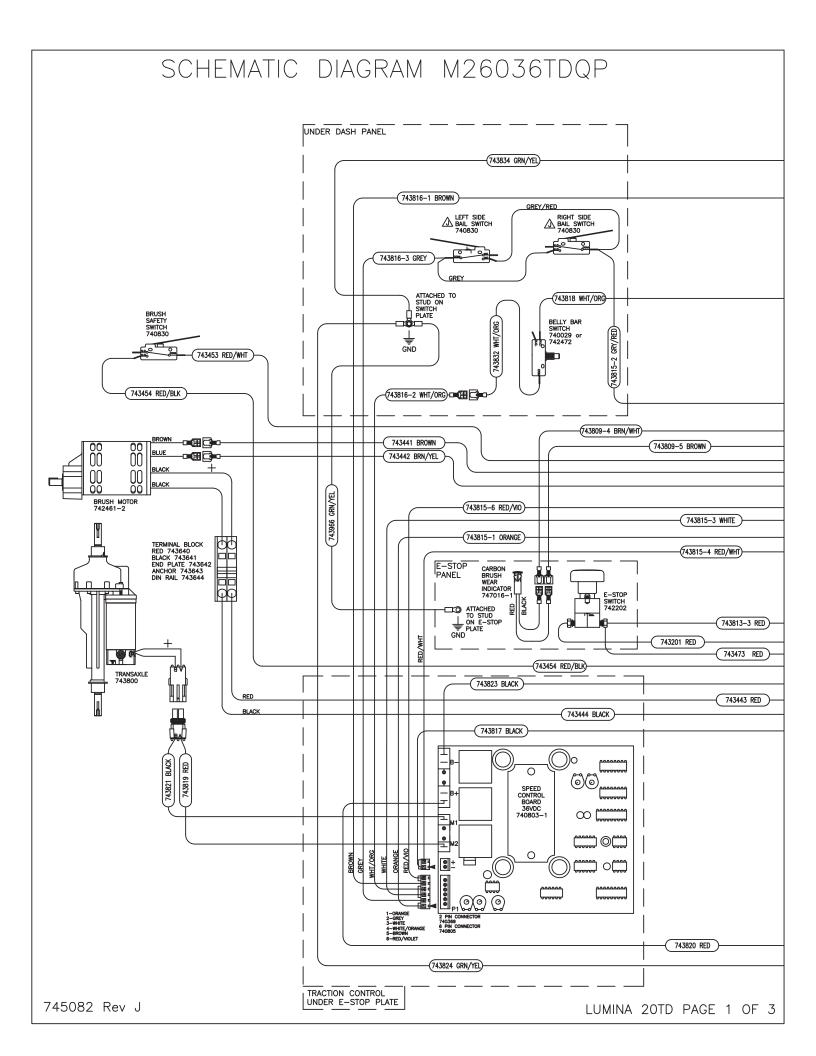
	BILL OF MATERIAL 260583-1						
ITEM	PART#	QTY	DESCRIPTION	ITEM	PART #	QTY	DESCRIPTION
1	200039	1	BAIL STOP LH	24	711505	2	WASHER-FLAT 1/4 ZP
2	200040	1	BAIL STOP RH	25	711534	1	WASHER-EXT LOCK #10 ZP
3	200184	1	WELD-BRACKET SWITCH	26	711544	4	WASHER-LOCK 1/4 SPLIT ZP
4	200338	2	WELD-CAM	27	711721	6	RET RING-E TYPE .312
5	200340	2	SPACER-SCR BOARD	28	712540	8	SCR-THMS 10-24 X .37 SS
6	220324	2	SPRING-EXT 1.125L	29	712569	1	SCR-THMS 1/4-20 X 1.50 SS
7	260538	1	FRONT HANDLE BRACKET WMT	30	715589	1	DECAL-PANEL COVER
8	260584-1	1	DASHBOARD ASSY, SPE BATTERY GAUGE	31	740147	1	CONNECTOR-SB175 GREY HOUSING ONLY
9	260589	1	PANEL, LUMINA 20 E-STOP	32	740803-1	1	CNTRLR-SPD 36V 1203A-304
10	260605	1	LUMINA 20" ANDERSON PLUG BRK'T	33	740830	2	SW-SNAP SPST NO/NC CON- TACTS FLAT LEVER
11	670093	1	SPRING-COMP .502 X .6 X 1 ZINC	34	740946	1	POTENTIOMETER 5K
12	710178	2	SCR-THMS 1/4-20 X .50 ZP	35	742202	1	SWITCH, DISCONNECT- E- STOP 1 POLE 125A
13	710180	2	SCR-THMS 1/4-20 X .75 ZP	36	748151	1	SWITCH, ON-ON DPDT (FWD/ REV)
14	710195	6	SCR-PHMS 5/16-18 X .50 ZP	37	743832	1	WIRE ASSY, WHITE/ORANGE 18GA
15	710207	6	SCR-PHMS 6-32 X .87 ZP	38	743966	1	WIRE ASSY-16G GREEN/ YELLOW 16" B=12
16	710534	2	SCR-THMS 8-32 X 1 SS	39	747016-1	1	LED ASSY, RED 36VDC W/ FEMALE QC
17	711004	2	SCR-SET 1/4-20 X .25 BLK OX CP	40	805637	1	SCR INSULATOR
18	711160	8	SCR-HI/LO 10 X .625 BLACK ZINC	41	809874	1	KNOB-SPEED CONTROL
19	711210	2	SCR-HH 1/4-20 X 1.25 ZP GR 5 FULL THRD	42	829052	4	BUSHING-FLG .312 X .437 X .31 NYL
20	711310	1	NUT-HEX 10-32 ZP	43	200104MCH	1	CONSOLE MACHINED
21	711372	2	NUT-NYLOC 8-32 ZP	44	200181CTD	2	HANDLE, WIRE COATED
22	711425	3	NUT-FLANGED WIZZ 1/4-20 ZP	45	200190CTD	1	LEVER, SWITCH, COATED
23	711430	3	NUT-TINNERMAN 6-32				

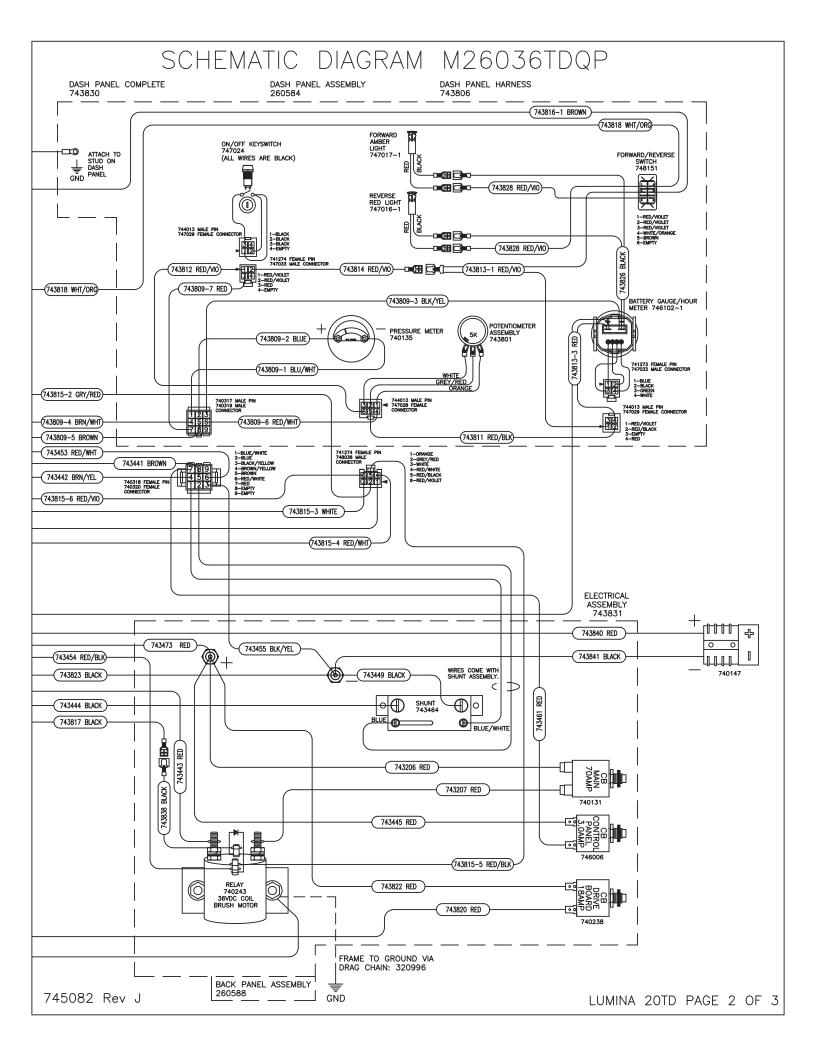


Dashboard Assembly



	BILL OF MATERIAL - 743830-1					
ITEM	PART NO.	QTY	DESCRIPTION			
1	260506-1	1	PLATE, DASHBOARD SPE			
2	715440	1	DECAL-LUMINA 20TD			
3	740135	1	METER-PRESSURE 100A DC			
4	740946	1	POTENTIOMETER 5K			
5	746103	1	GAUGE, BATTERY/HOUR W/RELAY			
6	747016-1	1	LED ASSY, RED 36VDC W/FEMALE QC			
7	747017-1	1	LED ASSY, AMBER 36VDC W/FEMALE QC			
8	747024	1	SW-KEY SPST SOLDER LEADS W/ 4 PIN MOLEX			
9	748151	1	SWITCH, ON-ON DPDT (FWD/REV)			
10	809874	1	KNOB-SPEED CONTROL			





SCHEMATIC DIAGRAM M26036TDQP

FROM KEY SWITCH: 747024

PIN #	COLOR	FUNCTION
1	BLACK	TOGETHER WITH 2
2	BLACK	TOGETHER WITH 1
3	BLACK	ONE WIRE FROM 9 PIN:7 FROM 3A CB
4	EMPTY	_

TO KEY SWITCH

PIN	# HARNESS COLOR	FUNCTION
1	RED/VIOLET	POSITIVE TO 6 PIN:6 TO TRACTION BOARD
2	RED/VIOLET	POSITIVE TO FOR LEDS TO REV SWITCH
3	RED	POSITIVE FROM 9 PIN:7 FROM 3A CB
4	EMPTY	-

FROM BATTERY GAUGE: 746102-1

PIN #	COLOR	FUNCTION
1	BLUE	KEY SWITCH ON/OFF LED
2	BLACK	START HOUR METER
3	GREEN	24V SYSTEM
4	WHITE	36V SYSTEM

TO BATTERY GAUGE: 743813

PIN #	COLOR	FUNCTION
1	RED/VIOLET	KEY SWITCH ON/OFF LED
2	RED/BLACK	START HOUR METER
3	EMPTY	_
4	RED	36V SYSTEM

REVERSE SWITCH: 748000

PIN #	COLOR	FUNCTION
1	RED/VIOLET	REVERSE LED POSITIVE(RED)
2	RED/VIOLET	KEY SWITCH ON/OFF
3	RED/VIOLET	FORWARD LED POSITIVE(RED)
4	WHITE/ORANGE	BELLY SWITCH-CONTROL 6 PIN:4/REVERSE TRACTION
5	BROWN	CONTROL 6 PIN:5/REVERSE TRACTION
6	EMPTY	1

6 PIN CONNECTOR: DASH SIDE 743809

PIN #	COLOR	FUNCTION
1	ORANGE	SPEED POTENTIOMETER
2	GREY/RED	SPEED POTENTIOMETER
3	WHITE	SPEED POTENTIOMETER
4	RED/WHITE	9 PIN: 6
5	RED/BLACK	BATTERY 4 PIN: 2
6	RED/VIOLET	KEY SWITCH 4 PIN: 1

6 PIN CONNECTOR: SPEED CONTOL BOARD

PIN #	COLOR	FUNCTION
1	ORANGE	CONTROL 6 PIN: 1
2	GREY	CONTROL 6 PIN: 2
3	WHITE	CONTROL 6 PIN: 3
4	RED/WHITE	CONTROL 2 PIN: 2 + BRAKE
5	RED/BLACK	BRUSH MOTOR SOLENOID: COIL
6	RED/VIOLET	CONTROL 6 PIN:6

9 PIN CONNECTOR: DASH SIDE

PIN #	COLOR	FUNCTION
1	BLUE/WHITE	- ON PRESSURE METER
2	BLUE	+ ON PRESSURE METER
3	BLACK/YELLOW	- ON BATTERY GAUGE/HOUR METER
4	BROWN/WHITE	BRUSH WEAR INDICTOR LED NEGATIVE(BLACK)
5	BROWN	BRUSH WEAR INDICTOR LED POSITIVE(RED)
6	RED/WHITE	6 PIN:4/POSITIVE TO TURN ON MOTOR SOLENOID
7	RED	KEY SWITCH 4 PIN: 3/ POWER ON
8	EMPTY	=
9	EMPTY	=

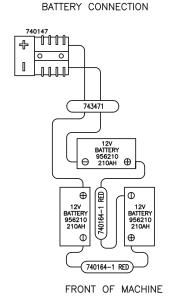
9 PIN CONNECTOR

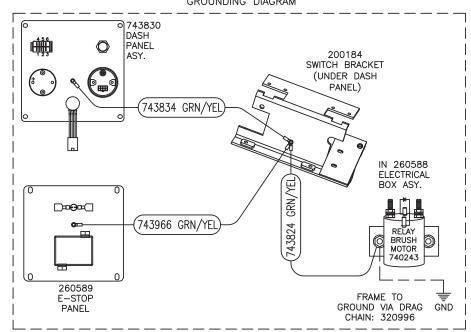
PIN ₁	COLOR	FUNCTION
1	BLUE/WHITE	SHUNT
2	BLUE	SHUNT
3	BLACK/YELLOW	OVDC POST
4	BROWN/YELLOW	BLUE ON MOTOR/BRUSH IN MOTOR 'WEAR INDICATE'
5	BROWN	BROWN ON MOTOR/BRUSH IN MOTOR 'WEAR INDICATE'
6	RED/WHITE	BRUSH SAFETY SWITCH
7	RED	3.0 AMP CIRCUIT BREAKER/ POWER TO KEY
8	EMPTY	-
9	EMPTY	-

6 PIN CONNECTOR: SPEED CONTROL BOARD

PIN #	COLOR	FUNCTION
1	ORANGE	SPEED POTENTIOMETER/ CONTROL SPEED
2	GREY	BAIL HANDLE SWITCHES/ TURNS ON TRANSAXLE
3	WHITE	SPEED POTENTIOMETER/ CONTROL SPEED
4	WHITE/ORANGE	REVERSE SWITCH:5/ FORWARD OR REVERSE
5	BROWN	REVERSE SWITCH 6:/ FORWARD OR REVERSE
6	RED/VIOLET	KEY SWITCH ON/ ENABLES TRANSAXLE BOARD

GROUNDING DIAGRAM







Minuteman International Made Simple Commercial Limited Warranty

REVISION O EFFECTIVE 4/1/2016

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 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.



Model	Parts	Labor	Poly	Travel**
Cord Electric Group	5yrs	3yrs	12yrs	90 days
Battery Operated Group	5yrs	3yrs	12yrs	90 days

Exceptions......

Model	Parts	Labor	Poly	Travel**
Port A Scrub, all models	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
	•	*	*Travel, 2 h	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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