



Electronic Service Manuals

This electronic document is provided as a service to our customers. We do not create the contents of the information contained in this document. Should you have detailed questions pertaining to the information contained in this document, you may contact Michco, or the manufacturer which provided the original information in this electronic deliverable. Michco's only part in this electronic deliverable was the electronic assembly process. By providing this manual online we are not guaranteeing parts availability.

You may contact Michco through the following methods:

Phone (517) 484-9312

2011 N. High St. -- Lansing, Michigan -- 48906

Fax: (517) 484-9836

Email: CustomerService@Michco.com

Website: www.Michco.Com

Order Parts online at:

www.Michco.Com

Directly to Parts & Service:

By Email: **CustomerService@Michco.com**

By Fax: (517) 484-9836

By Voice: (517) 484-9312

Serving the Cleaning Industry Since 1922

Notice: All copyrighted material remains property of original owners, all trademarks are property of respective owners. Manuals are subject to Manufacturer's reproduction limitations. Originals or reproductions were provided by manufacturers through a request. We make no warranty as to the correctness of information provided in this document and you assume all risk. By placing these manuals on line we are not declaring our corporation to be an manufacturer authorized dealer or provider, please check our web site for authorized manufacturers we represent.

E45 – E50
SPARE PARTS MANUAL



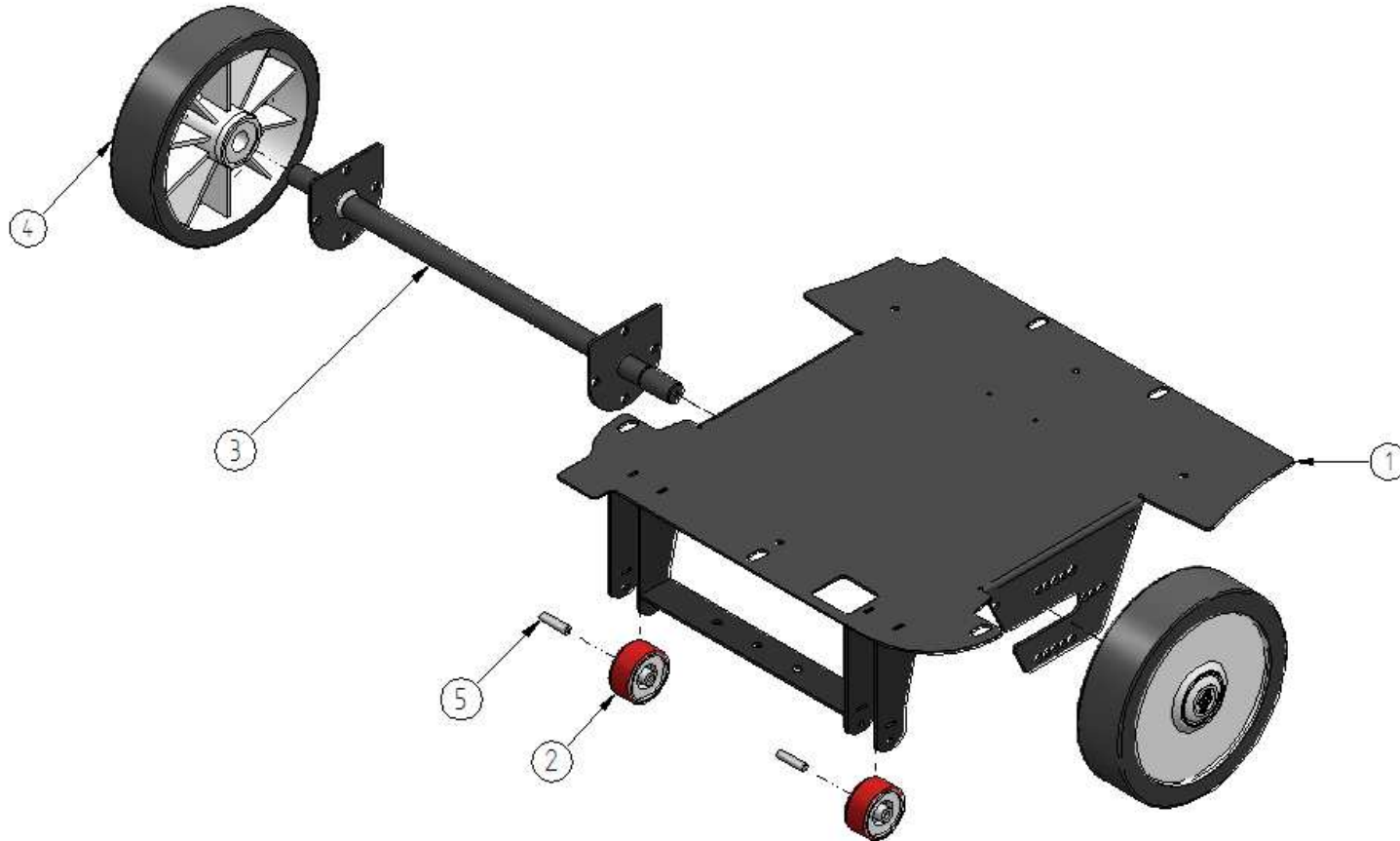
SCRUBBER DRYER MACHINE E45 – E50



SOMMARIO – SUMMARY – RÉSUMÉ – ÜBERSICHT – RESUMEN

1. Gruppo base batterie – Battery base group – Groupe base batteries – Batterie-Basengruppe – Grupo base baterías	2
2. Gruppo serbatoio soluzione – Solution tank group – Groupe réservoir eau propre – Frischwassertank Gruppe – Grupo tanque solución	4
3. Gruppo serbatoio recupero – Recovery tank group – Groupe réservoir eau sale – Schmutzwassertank Gruppe – Grupo tanque recuperación	6
4. Gruppo cupolino – Plastic cover group – Groupe couverture plastique – Deckel Gruppe – Grupo concha en plástico	8
5. Gruppo lavante 450/500 – Scrubber group 450/500 - Groupe de lavage 450/500 – Wäschereinheit 450/500 – Grupo lavador 450/500	10
6. Gruppo manubrio destro – Right Handlebar group – Groupe guidon droit – Rechts Lenker Gruppe – Grupo manubrio derecho.....	12
7. Gruppo manubrio sinistro - Half handler bar group left – Groupe guidon gauche–Links Lenker Gruppe – Grupo manubrio izquierdo	14
8. Cablaggio (Vers. batteria) – Wiring (Battery version)– Câblage (Version batterie) – Verkabelung (Batterie-Version)– Cableado (Version batería)	16
9. Cablaggio (Versione a cavo) – Wiring (Cable version)– Câblage (Câble version) – Verkabelung (Kabel-Version) – Cableado (Cable versión)	18
10.Tiranteria – Rod linkage – Liens – Gestänge – Enlace	20
11.Tergipavimento 650 – Squeegee 650 - Raclette 650 –Saugfuß 650 – Fregador de suelo 650	22
12.Power and signal wiring E45 (Cable version).....	24
13.Power wiring E45B - E50B.....	25
14.Signal wiring E45B - E50B.....	26

1. Gruppo base batterie – Battery base group – Groupe base batteries – Batterie-Basengruppe – Grupo base baterías



**E45 – E50
SPARE PARTS MANUAL**

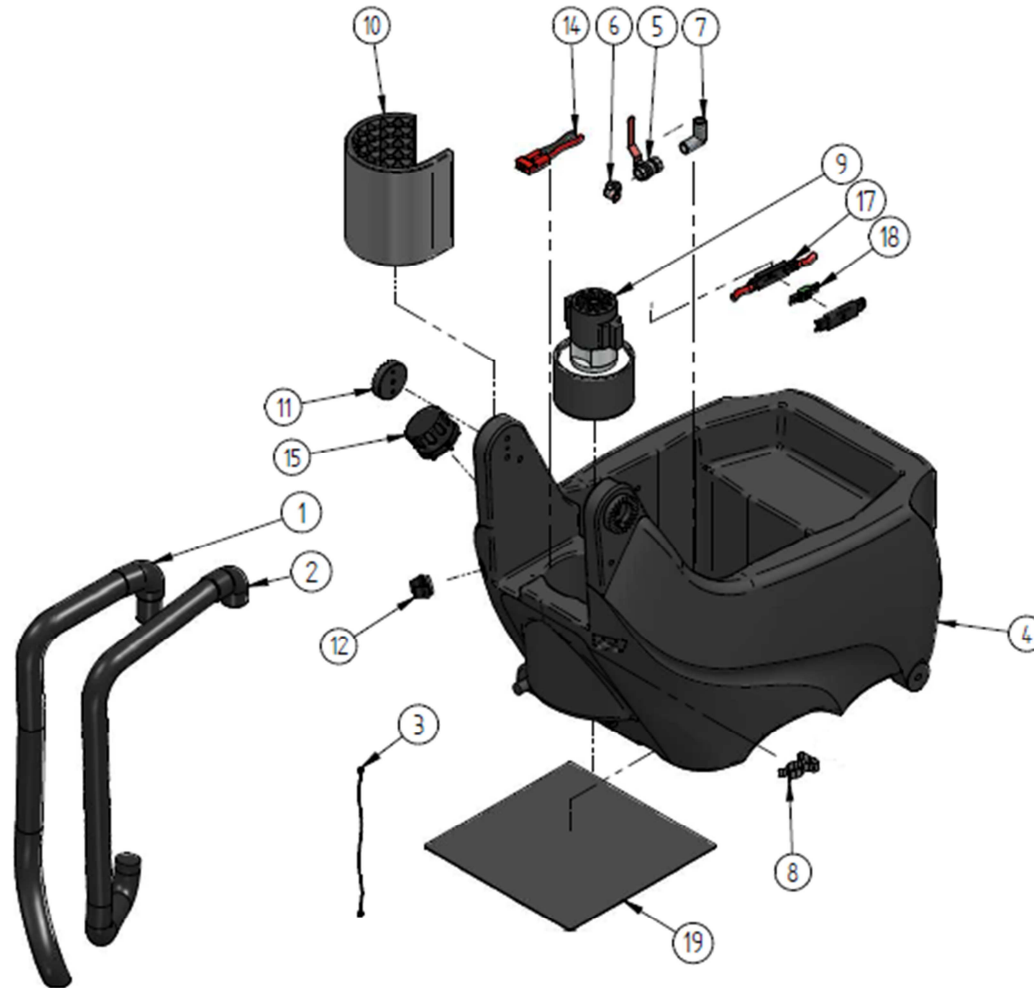


POS.	PART NUMBER	Q.ty	DESCRIZIONE	DENOMINATION	NOMENCLATURE	BEZEICHNUNG	DESCRIPCIÓN
1	3130-0133-0E	1	BASE BATTERIE	BATTERIES BASE	BASE BATTERIES	BATTERIEN UNTERSEITE	BASE BATERÍAS
2	12-0000-000	2	RUOTA Ø50 X 18	WHEEL Ø50 X 18	ROUE Ø50 X 18	RAD Ø50 X 18	RUEDA Ø50 X 22
3	3400-0005-0E	1	ASSE	AXIS	AXE	ACHSE	EJE
4	12-0000-015	2	RUOTA POSTERIORE Ø200 X 50	REAR WHEEL Ø200 X 50	ROUE ARRIÈRE Ø200 X 50	HINTERRAD Ø200 X 50	RUEDA TRASERA Ø200 X 50
5	2221-0007-0	2	BOCCOLA Ø6 Ø8 H=30	BUSHING Ø6 Ø8 H=30	BAGUE Ø6 Ø8 H=30	BUCHSE Ø6 Ø8 H=30	CASQUILLO Ø6 Ø8 H=30

MINUTEMAN INTERNATIONAL INC.

14N845 U.S. Route 20
Pingree Grove, Illinois 60140
www.minutemanintl.com

2. Gruppo serbatoio soluzione – Solution tank group – Groupe réservoir eau propre – Frischwassertank Gruppe – Grupo tanque solución



E45 – E50 SPARE PARTS MANUAL

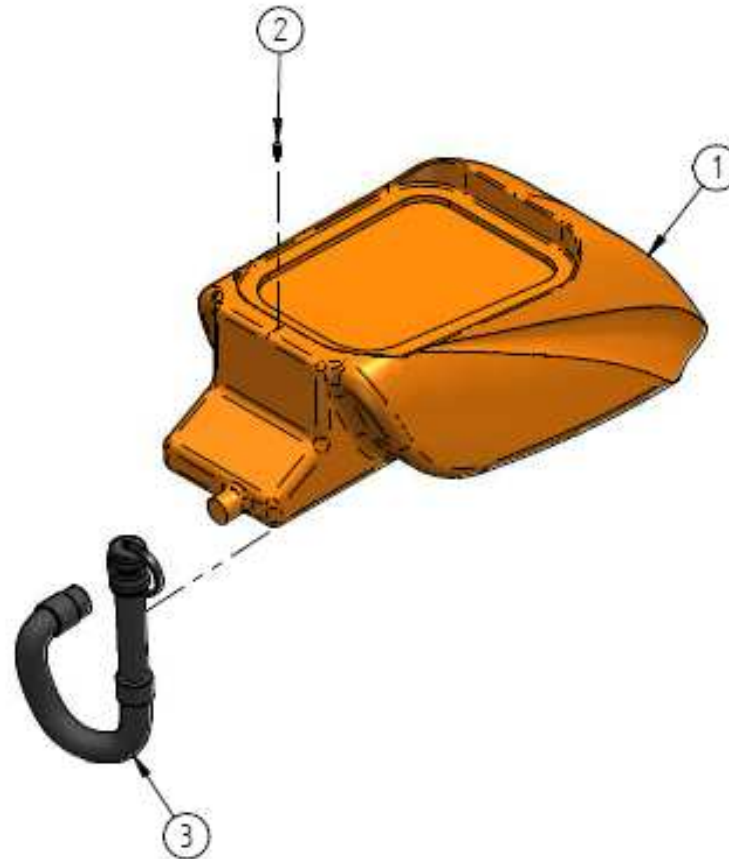


POS.	PART NUMBER	Q.ty	DESCRIZIONE	DENOMINATION	NOMENCLATURE	BEZEICHNUNG	DESCRIPCIÓN
1	2665-0129-0	1	TUBO TERGI-CUPOLINO Ø38	HOSE SQUEEGEE-TANK Ø38	TUYAU SUCEUR-RÉSERVOIR Ø38	SAUGFUß-TANKSCHLAUCH Ø38	MANGUERA SQUEEGEE-TANQUE Ø38
2	2665-0130-0	1	TUBO SERBATOIO-MOTORE Ø38	HOSE TANK-MOTOR Ø38	TUYAU RÉSERVOIR-MOTEUR Ø38	TANK-MOTORSCHLAUCH Ø38	MANGUERA TANQUE-MOTOR Ø38
3	3070-0026-0	1	FUNE Ø2,5 L=535	CABLE Ø2,5 L=535	CÂBLE Ø2,5 L=535	KABEL Ø2,5 L=535	CABLE Ø2,5 L=535
4	2655-0095-0	1	SERBATOIO DETERGENTE (GRIGIO)	SOLUTION TANK (GREY)	RÉSERVOIR EAU PROPRE (GRIS)	FRISCHWASSERTANK (GRAU)	TANQUE DE SOLUCIÓN (GRIS)
5	15-3500-001	1	VALVOLA F - F	COCK F - F	ROBINET F - F	WASSERHAHN W - W	VALVULA F - F
6	15-3363-006	1	RACCORDO 90° M Ø10	CONNECTOR 90° M Ø10	RACCORD 90° M Ø10	VERSCHRAUBUNG 90° M Ø10	CONECTOR 90° M Ø10
7	15-3323-000	1	RACCORDO 90° M - M 1/2"	CONNECTOR 90° M - M 1/2"	RACCORD 90° M - M 1/2"	VERSCHRAUBUNG M - M 1/2"	CONECTOR 90° M - M 1/2"
8	15-0301-011E	1	FORCELLA ELASTICA 2 FORI	ELASTIC FORK 2 HOLES	CHAPPE ÉLASTIQUE 2 FORI	ELASTISCHE GABEL 2 LÖCHER	HORQUILLA ELASTICA 2 AGUIEROS
9	13-1101-007	1	MOTOASPIRATORE 24V 490W	VACUUM MOTOR 24V 490W	MOTEUR D'ASPIRATION 24V 490W	ABSAUGMOTOR 24V 490W	MOTOR DE ASPIRACIÓN 24V 490W
9a	13-1110-006	1	MOTOASPIRATORE 220V 550W (versione a cavo)	VACUUM MOTOR 220V 550W (cable version)	MOTEUR D'ASPIRATION 220V 550W (version à câble)	ABSAUGMOTOR 220V 550W (Kabel Version)	MOTOR DE ASPIRACIÓN 220V 550W (version a cable)
9b	13-1110-011		MOTOASPIRATORE 115V 550W (versione a cavo)	VACUUM MOTOR 115V 550W (cable version)	MOTEUR D'ASPIRATION 115V 550W (version à câble)	ABSAUGMOTOR 115V 550W (Kabel Version)	MOTOR DE ASPIRACIÓN 115V 550W (version a cable)
10	02-0008-000	1	FONO ASSORBENTE	SOUND DEADENING FLAT	INSONORISANT	SCHALLABSORBIERENDEN	MATERIAL FONOABSORBENTE
11	2132-0015-0	2	SUPPORTO FISSO MANUBRIO FORATO	HOLED SETTLED HANDLEBAR SUPPORT	SUPPORT GUIDON FIXE PERFORÉ	GELOCHTE FIXIERTE LENKER HALTERUNG	SUPORTE FIJO MANUBRIO PERFORADO
12	15-0301-005	1	FORCELLA ELASTICA Ø22-24	ELASTIC FORK Ø22-24	CHAPPE ÉLASTIQUE Ø22-24	ELASTISCHE GABEL Ø22-24	HORQUILLA ELASTICA Ø22-24
13	15-3100-005	1	FILTRO CARICO ACQUA	FILLING WATER FILTER	FILTRE CHARGEMENT EAU	FÜLLENDES WASSER FILTER	FILTRO CARGA AGUA
14	14-0108-000	1	CONNETTORE DI POTENZA 24 V	POWER CONNECTOR 24 V	CONNECTEUR DE PUISSANCE 24 V	MACHTVERSCHRAUBUNG 24 V	CONECTOR DE ALIMENTACIÓN 24 V
15	15-1301-019	1	TAPPO RIEMPIMENTO	FILLING TAP	BOUCHON DE REMPLISSAGE	FÜLLSTOPFEN	TAPÓN DE LLENADO
17	14-0002-000	1	PORTAFUSIBILE	FUSEHOLDER	PORTE-FUSIBLE	SICHERUNGSHALTER	PORTAFUSIBLE
18	14-0001-250	1	FUSIBILE 125 A	FUSE 125 A	FUSIBLE 125A	FUSIBLE 125 A	SICHERUNG 125 A
19	2375-0025-0	1	PROTEZIONE BASE BATTERIE	BATTERY BASE PROTECTION	PROTECTION BASE BATTERIES	PROTECCIÓN BASE BATERÍAS	BATTERIE-BASISSCHUTZ

MINUTEMAN INTERNATIONAL INC.

14N845 U.S. Route 20
Pingree Grove, Illinois 60140
www.minutemanintl.com

3. Gruppo serbatoio recupero – Recovery tank group – Groupe réservoir eau sale – Schmutzwassertank Gruppe – Grupo tanque recuperación



**E45 – E50
SPARE PARTS MANUAL**

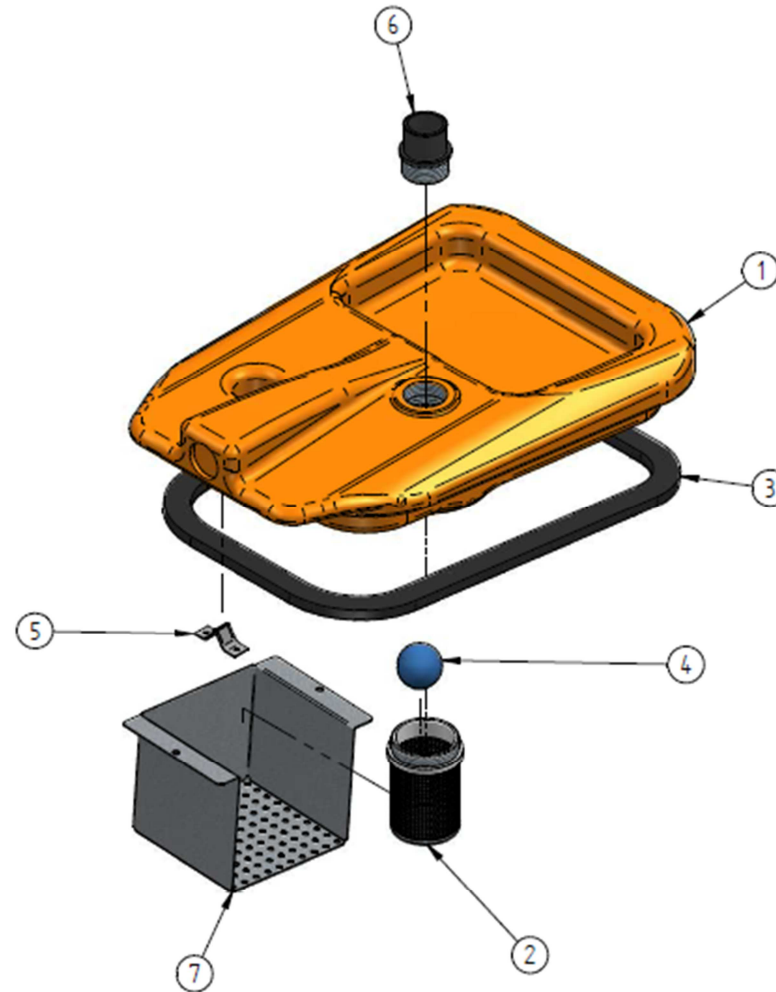


POS.	PART NUMBER	Q.ty	DESCRIZIONE	DENOMINATION	NOMENCLATURE	BEZEICHNUNG	DESCRIPCIÓN
1	2655-0116-0	1	SERBATOIO RECUPERO (BORDEAUX)	RECOVERY TANK (BURGUNDY)	RESERVOIR EAU SALE (BORDEAUX)	SCHMUTZWASSERTANK (BORDEAUX)	TANQUE DE RECUPERACIÓN (BORDEAUX)
2	10-4202-000	1	PERNO M5	PIN M5	PIVOT M5	ZAPFEN M5	PERNO M5
3	2665-0128-0	1	TUBO SCARICO Ø38	DRAIN HOSE Ø38	TUYAU DE VIDANGE Ø38	ABLAUSCHLAUCH Ø38	MANGUERA DE DRENAJE Ø38

MINUTEMAN INTERNATIONAL INC.

14N845 U.S. Route 20
Pingree Grove, Illinois 60140
www.minutemanintl.com

4. Gruppo cupolino – Plastic cover group – Groupe couverture plastique – Deckel Gruppe – Grupo concha en plástico



**E45 – E50
SPARE PARTS MANUAL**

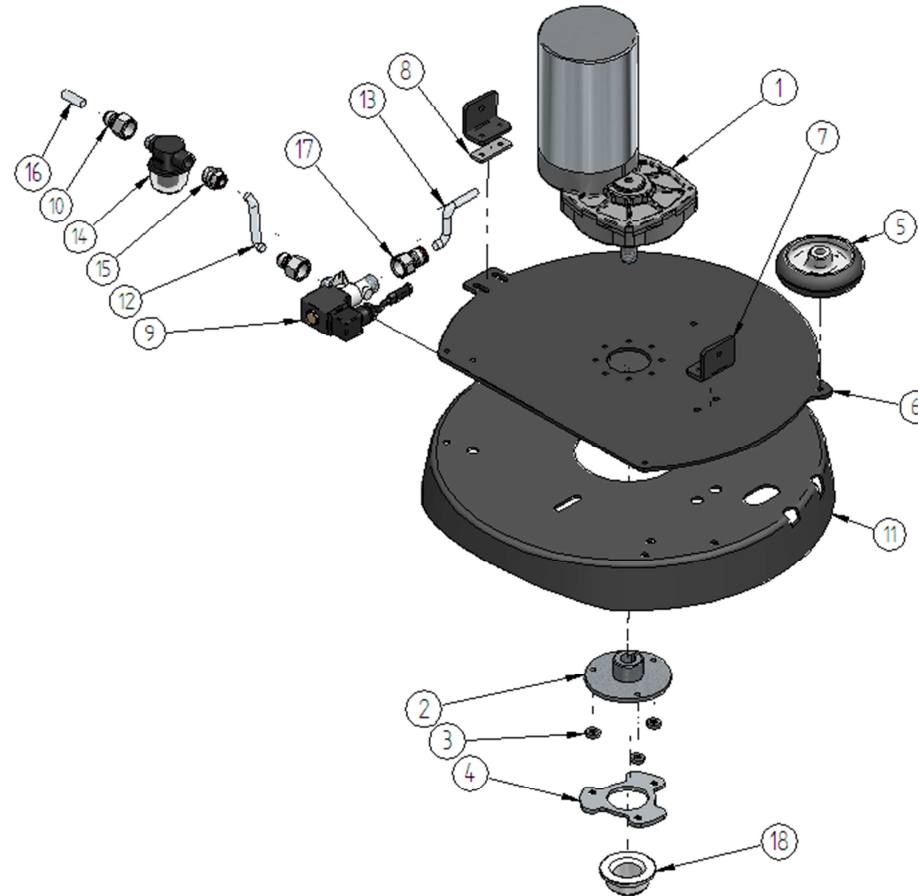


POS.	PART NUMBER	Q.ty	DESCRIZIONE	DENOMINATION	NOMENCLATURE	BEZEICHNUNG	DESCRIPCIÓN
1	2655-0117-0	1	CUPOLINO (BORDEAUX)	PLASTIC COVER (BORDEAUX)	COUVERTURE EN PLASTIQUE (BORDEAUX)	DECKEL (BORDEAUX)	CONCHA (BORDEAUX)
2	15-3100-003	1	FILTRO INOX Ø60, H = 75 MM	STAINLESS STEEL FILTER Ø60, H = 75 MM	FILTRE EN ACIER INOXYDABLE Ø60, H = 75 MM	EDELSTAHL-FILTER Ø60, H = 75 MM	FILTRO EN ACERO Ø60, H = 75 MM
3	2705-0058-0	1	GUARNIZIONE ADESIVA CUPOLINO	PLASTIC ADHESIVE COVER BLADE	JOINT ADHÉSIF COUVERTURE EN PLASTIQUE	ADHESIVE DECKEL DICHTUNG	JUNTA TANQUE RECUPERACIÓN
4	15-3200-003	1	SFERA Ø40	FLOAT Ø40	FLOTTEUR Ø40	KUGEL Ø40	FLOTADOR M 40
5	15-2990-000	1	MOLLA PM501A	SPRING PM501A	RESSORT PM501A	FEDER PM501A	MUELLE PM501A

MINUTEMAN INTERNATIONAL INC.

14N845 U.S. Route 20
Pingree Grove, Illinois 60140
www.minutemanintl.com

5. Gruppo lavante 450/500 – Scrubber group 450/500 - Groupe de lavage 450/500 – Wäschereinheit 450/500 – Grupo lavador 450/500



E45 – E50 SPARE PARTS MANUAL

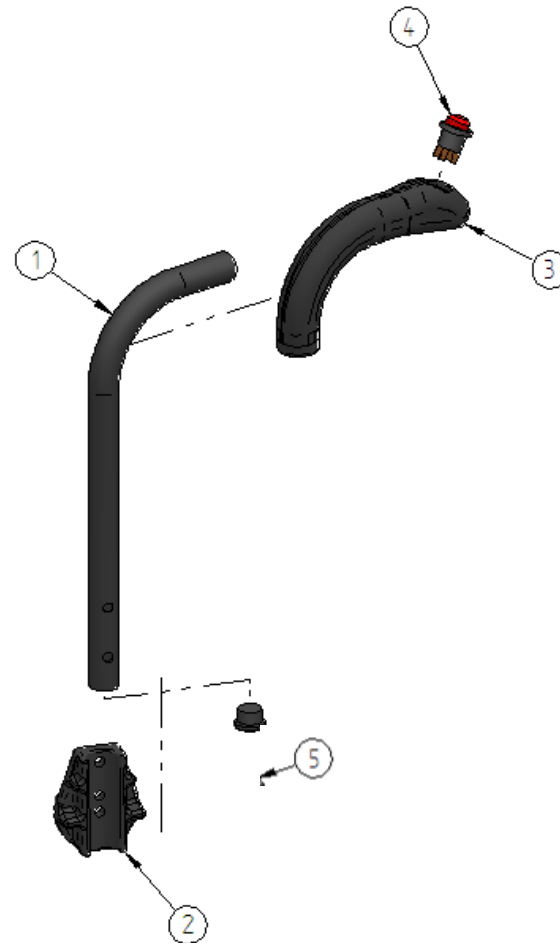


POS.	PART NUMBER	Q.ty	DESCRIZIONE	DENOMINATION	NOMENCLATURE	BEZEICHNUNG	DESCRIPCIÓN
1	13-0001-007	1	MOTORE SPAZZOLE 24V 600W	BRUSH MOTOR 24V 600W	MOTEUR BROSE 24V 600W	BÜRSTE MOTOR 24V 600W	MOTOR CEPILLOS 24V 600W
1a	13-0100-007	1	MOTORE SPAZZOLE 220V 400W (solo per versione a cavo)	BRUSH MOTOR 220V 400W (just for cable version)	MOTEUR BROSE 220V 400W (seulement pour version à câble)	BÜRSTE MOTOR 220V 400W (nur für Kabel Version)	MOTOR CEPILLOS 220V 400W (solo para la versión con cable)
1b	13-0100-008	1	MOTORE SPAZZOLE 115V 400W (solo per versione a cavo)	BRUSH MOTOR 115V 400W (just for cable version)	MOTEUR BROSE 115V 400W (seulement pour version à câble)	BÜRSTE MOTOR 115V 400W (nur für Kabel Version)	MOTOR CEPILLOS 115V 400W (solo para la versión con cable)
2	3401-0005-0	1	MOZZO TRAZIONE SPAZZOLA	BRUSH DRIVING HUB	MOYEU DE TRACTION BROSE	BÜRSTE ANTRIEBSNABE	CONCENTRADOR DE TRACCIÓN CEPILLO
3	2220-0026-0Z	3	DISTANZIALE MOZZO	HUB SPACER	ESPACEUR MOYEAU	NABESTREBE	ESPACIADOR CONCENTRADOR
4	2451-0001-0	1	DISCO GUIDA	GUIDING PLATE	DISQUE GUIDE	LEITPLATTE	DISCO GUIA
5	12-0000-013	1	RUOTA PARACOLPI Ø100 X 30	BUMPER WHEEL Ø100 X 30	ROUE ANTICHOC Ø100 X 30	STOBSTANGE RAD Ø100 X 30	RUEDA PARACHOQUES Ø100 X 30
6	2130-0549-0E	1	SUPPORTO MOTORI TESTA 450	MOTOR SUPPORT OF SCRUBBER GROUP 450	SUPPORT MOTEUR TÊTE DE BROSE 450	MOTOR HALTERUNG DER WÄSCHER GRUPPE 450	SOPORTE MOTOR GRUPO CEPILLOS 450
6a	2130-0576-0E	1	SUPPORTO MOTORI TESTA 500	MOTOR SUPPORT OF SCRUBBER GROUP 500	SUPPORT MOTEUR TÊTE DE BROSE 500	MOTOR HALTERUNG DER WÄSCHER GRUPPE 500	SOPORTE MOTOR GRUPO CEPILLOS 500
7	2130-0550-0E	2	SUPPORTO TESTA 450-550 (versione batteria)	SCRUBBER GROUP 450-550 SUPPORT (battery version)	SUPPORT TÊTE BROSE 450-550 (version à batterie)	HALTERUNG WÄSCHER GRUPPE 450-550 (Batterie Version)	SOPORTE GRUPO CEPILLOS 450-550 (versión batería)
7a	2130-0756-0E	2	SUPPORTO TESTA 450 (versione cavo)	SCRUBBER GROUP 450 SUPPORT (cable version)	SUPPORT TÊTE BROSE 450 (version à câble)	HALTERUNG WÄSCHER GRUPPE 450 (Kabel Version)	SOPORTE GRUPO CEPILLOS 450 (versión à cable)
8	2120-0034-0E	1	SPESSORE SUPPORTO TESTA 450	SCRUBBER GROUP 450 SUPPORT THICKNESS	ÉPAISSEUR SUPPORT TÊTE 450	DICKE DER HALTERUNG DER WÄSCHER GRUPPE 450	ESPESSOR SOPORTE GRUPO CEPILLO 450
9	15-3511-001	1	ELETTROVALVOLA 24V	SOLENOID 24V	ROBINET 24V	MAGNETVENTIL 24V	ELÉCTROVALVULA 24V
9a	15-3511-000	1	ELETTROVALVOLA 220 V (solo per versione a cavo)	SOLENOID 220V (just for cable version)	ROBINET 220V (seulement pour version à câble)	MAGNETVENTIL 220V (nur für Kabel Version)	ELÉCTROVALVULA 220V (solo para la versión con cable)
9b	15-3511-012	1	ELETTROVALVOLA 115 V (solo per versione a cavo)	SOLENOID 115V (just for cable version)	ROBINET 115V (seulement pour version à câble)	MAGNETVENTIL 115V (nur für Kabel Version)	ELÉCTROVALVULA 115V (solo para la versión con cable)
10	15-3363-005	2	RACCORDO DRITTO F Ø10	STRAIGHT CONNECTOR F Ø10	RACCORD DROITE F Ø10	VERSCHRAUBUNG F Ø10	CONECTOR RECTO F Ø10
11	2365-0050-2	1	COPERTURA SPAZZOLA 450	BRUSH COVER 450	COUVERCLE DE BROSE 450	BÜRSTE DECKEL 450	CUBIERTA CEPILLO 450
11a	2365-0051-2	1	COPERTURA SPAZZOLA 500	BRUSH COVER 500	COUVERCLE DE BROSE 500	BÜRSTE DECKEL 500	CUBIERTA CEPILLO 500
12	2665-0131-0	1	TUBO (ENTRATA ELETTROVALVOLA)	WATER PIPE (INLET SOLENOID)	TUYAU (ENTRÉE ROBINET)	SCHLAUCH (EINGANGSMAGNETVENTIL)	MANGUERA (ENTRADA ELECTROVÁLVULA)
13	2665-0132-0	1	TUBO (USCITA ELETTROVALVOLA)	WATER PIPE (OUTLET SOLENOID)	TUYAU (SORTIE SOLENOIDE)	SCHLAUCH (AUSGANGSMAGNETVENTIL)	MANGUERA (SALIDA ELECTROVÁLVULA)
14	15-3100-006	1	FILTRO USCITA ACQUA	WATER FILTER OUTPUT	FILTRE SORTIE EAU	FILTER WASSER AUSGANG	FILTRO DE SALIDA DE AGUA
15	15-3363-007	1	RACCORDO DRITTO M Ø10	STRAIGHT CONNECTOR M Ø10	RACCORD DROITE M Ø10	VERSCHRAUBUNG M Ø10	CONECTOR RECTO M Ø10
16	2665-0135-0	1	TUBO (ENTRATA ELETTROVALVOLA)	WATER PIPE (INLET SOLENOID)	TUYAU (ENTRÉE ROBINET)	SCHLAUCH (EINGANGSMAGNETVENTIL)	MANGUERA (ENTRADA ELECTROVÁLVULA)
17	15-3363-011	1	RACCORDO DRITTO F Ø12	STRAIGHT CONNECTOR F Ø12	RACCORD DROITE F Ø12	VERSCHRAUBUNG F Ø12	CONECTOR RECTO F Ø12
18	2225-0011-0	1	MOZZO SPAZZOLA	BRUSH HUB	MOYEU BROSE	BÜRSTE NABE	CONCENTRADOR CEPILLO

MINUTEMAN INTERNATIONAL INC.

14N845 U.S. Route 20
Pingree Grove, Illinois 60140
www.minutemanintl.com

6. Gruppo manubrio destro – Right Handlebar group – Groupe guidon droit – Rechts Lenker Gruppe – Grupo manubrio derecho



**E45 – E50
SPARE PARTS MANUAL**

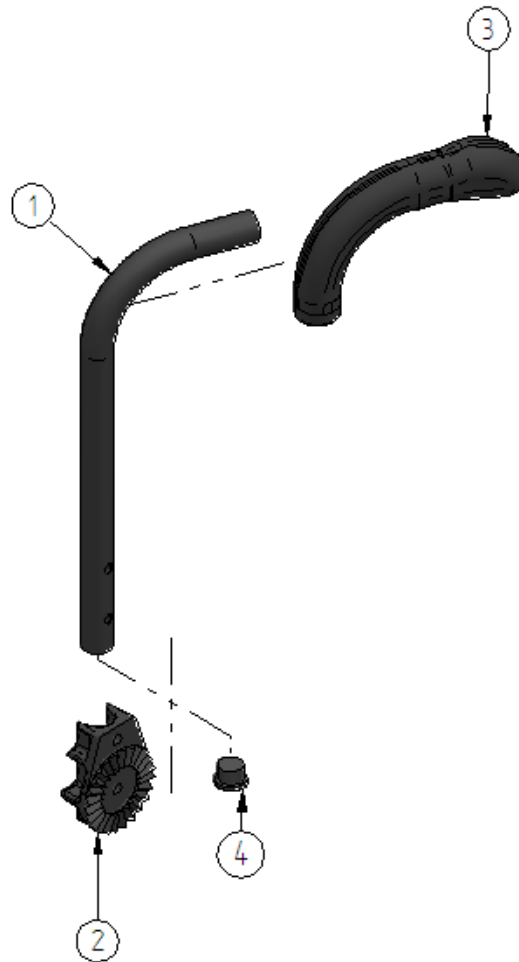


POS.	PART NUMBER	Q.ty	DESCRIZIONE	DENOMINATION	NOMENCLATURE	BEZEICHNUNG	DESCRIPCIÓN
1	2290-0017-0E	1	TUBO DESTRO MANUBRIO	HANDLEBAR RIGHT HOSE	TUYAU DROIT GUIDON	LENKER RECHT SCHLAUCH	MANGUERA DERECHA MANUBRIO
2	2132-0014-0	1	REGOLATORE PER TUBO Ø25 FORATO	HOLED HOSE REGULATOR Ø25	RÉGULATEUR TUYAU Ø25 PERFORÉ	GELOCHTE SCHLAUCH REGLER Ø25	REGULADOR MANGUERA Ø25 PERFORADO
3	2385-0005-0	1	IMPUGNATURA CON 1 PULSANTE	HANDGRIP WITH 1 SWITCH	POIGNÉE AVEC 1 INTERRUPTEUR	HANDGRIFF MIT 1 SCHALTER	AGARRE BOTON SINGLE
4	4053-0109-0	1	PULSANTE INSTABILE CABLATO	WIRED UNSTABLE SWITCH	INTERRUPTEUR CÂBLÉE INSTABLE	VERKABELT INSTABIL SCHALTER	INTERRUPTOR INESTABLE CABLEADO
5	15-1301-000	1	TAPPO CHIUDIFORO Ø25	SEALING CAP Ø25	BOUCHON OBTURANTE Ø25	VERSCHEISSENKAPPE Ø25	TAPÓN DE CIERRE Ø25

MINUTEMAN INTERNATIONAL INC.

14N845 U.S. Route 20
Pingree Grove, Illinois 60140
www.minutemanintl.com

7. Gruppo manubrio sinistro - Half handler bar group left – Groupe guidon gauche–Links Lenker Gruppe – Grupo manubrio izquierdo



**E45 – E50
SPARE PARTS MANUAL**

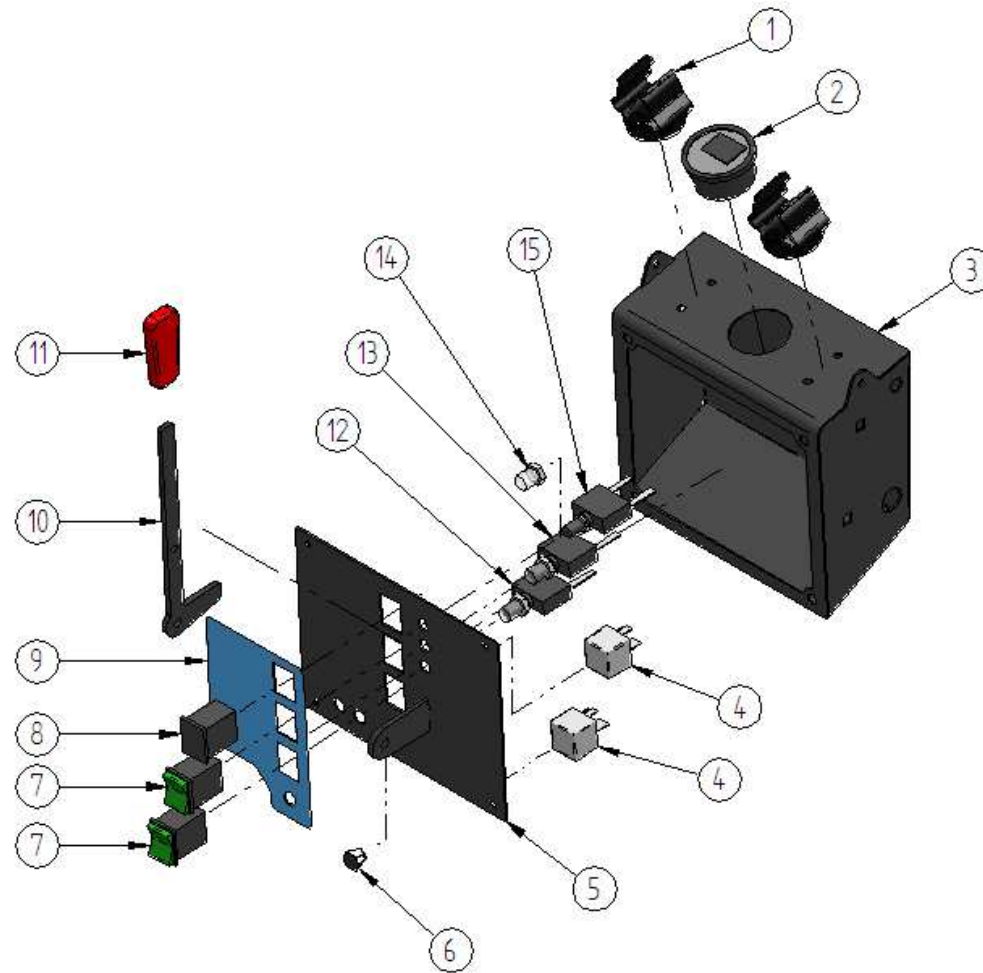


POS.	PART NUMBER	Q.ty	DESCRIZIONE	DENOMINATION	NOMENCLATURE	BEZEICHNUNG	DESCRIPCIÓN
1	2290-0016-0E	1	TUBO SINISTRO MANUBRIO	HANDLEBAR LEFT HOSE	TUYAU GAUCHE GUIDON	LENKER LINKS SCHLAUCH	MANGUERA IZQUIERDA MANUBRIO
2	2132-0014-0	1	REGOLATORE PER TUBO Ø25 FORATO	HOLED HOSE REGULATOR Ø25	RÉGULATEUR TUYAU Ø25 PERFORÉ	GELOCHTE SCHLAUCH REGLER Ø25	RÉGULADOR MANGUERA Ø25 PERFORADO
3	2385-0006-0	1	IMPUGNATURA SENZA PULSANTE	HANDGRIP WITHOUT SWITCH	POIGNÉE SANS INTERRUPTEURS	GRIFF OHNE SCHALTER	AGARRE SIN BOTONES
4	15-1301-000	1	TAPPO CHIUDIFORO Ø25	SEALING CAP Ø25	BOUCHON OBTURANTE Ø25	VERSCHEISSENKAPPE Ø25	TAPÓN DE CIERRE Ø25

MINUTEMAN INTERNATIONAL INC.

14N845 U.S. Route 20
Pingree Grove, Illinois 60140
www.minutemanintl.com

8. Cablaggio (Vers. batteria) – Wiring (Battery version)– Câblage (Version batterie) – Verkabelung (Batterie-Version)– Cableado (Version batería)



E45 – E50 SPARE PARTS MANUAL

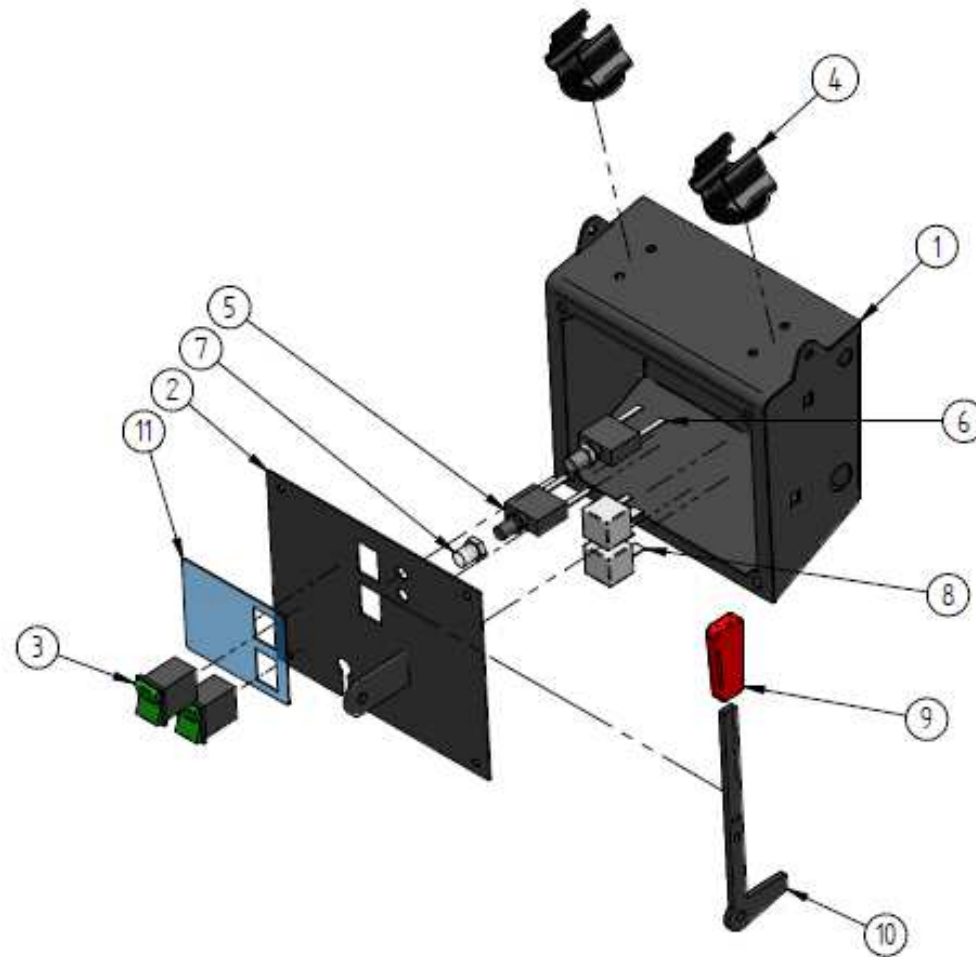


POS.	PART NUMBER	Q.ty	DESCRIZIONE	DENOMINATION	NOMENCLATURE	BEZEICHNUNG	DESCRIPCIÓN
1	15-0301-006	2	FORCELLA ELASTICA Ø39-43	ELASTIC FORK Ø39-43	CHAPPE ÉLASTIQUE Ø39-43	ELASTISCHE GABEL Ø39-43	HORQUILLA ELASTICA Ø39-43
2	14-0500-037	1	MODULO CONTAORE LCD	HOURMETER	COMPTEUR D'HEURES	UHRZÄHLER	CONTADOR HORARIO
3	3540-0013-0E	1	SCATOLA CONSOLLE	CONTROL PANEL	TABLEAU DE COMMANDE	SCHALTAFEL	PANEL DE CONTROL
4	14-9903-002	2	RELÉ 24V	RELAY 24V	RELAIS 24V	RELAIS 24V	RELÉ 24V
5	3500-0020-0E	1	COPERCHIO CONSOLLE	COVER CONSOLE	COUVERCLE CONSOLLE	KONSOLE DECKEL	CONSOLA CUBIERTA
6	15-1301-015	1	TAPPO CHIUDIFORO Ø10	SEALING CAP Ø10	BOUCHON OBTURANTE Ø10	VERSCHEISSENKAPPE Ø10	TAPÓN DE CIERRE Ø10
7	15-0112-031	2	INTERRUTTORE 24V	SWITCH 24V	INTERRUPTEUR 24V	SCHALTER 24V	INTERUPTOR 24V
8	15-1301-004	1	TAPPO CHIUDIFORO	SEALING CAP	BOUCHON OBTURANTE	VERSCHEISSENKAPPE	TAPÓN DE CIERRE
9	8301-0050-0	1	ADESIVO CONSOLLE	CONSOLE STICKER	ADHÉSIF CONSOLE	KONSOLE AUFKLEBER	ADHESIVO CONSOLA
10	2020-0068-0E	1	LEVA SOLLEVAMENTO TERGI	SQUEEGEE LIFTING LEVER	LEVIER DE LEVAGE SUCEUR	SAUGFUß ANLÜFTHEBEL	PALANCA LEVANTAMIENTO FREGASUELO
11	15-0202-002	1	MANOPOLA ROSSA 5MM	RED KNOB 5MM	ROUGE POIGNEE 5MM	ROT HANDGRIFF 5MM	MANDO ROJO 5MM
12	14-0009-132	1	TERMICA 30A	THERMAL CUT-OFF 30A	PROTECTION THERMIQUE 30A	ÜBERSTROMSCHUTZ-SCHALTER 30A	PROTECCIÓN TÉRMICA 30A
13	14-0009-030	1	TERMICA 3A	THERMAL CUT-OFF 3A	PROTECTION THERMIQUE 3A	ÜBERSTROMSCHUTZ-SCHALTER 3A	PROTECCIÓN TÉRMICA 3A
14	14-0009-051	3	CAPPUCCIO DI PROTEZIONE TERMICA	PROTECTION COVER FOR THERMAL CUT-OFF	COUVERTURE DE PROTECTION	SCHUTZDECKER	CUBIERTA DE PROTECCIÒN
15	14-0009-140	1	TERMICA 40A	THERMAL CUT-OFF 40A	PROTECTION THERMIQUE 40A	ÜBERSTROMSCHUTZ-SCHALTER 40A	PROTECCIÓN TÉRMICA 40A

MINUTEMAN INTERNATIONAL INC.

14N845 U.S. Route 20
Pingree Grove, Illinois 60140
www.minutemanintl.com

9. Cablaggio (Versione a cavo) – Wiring (Cable version)– Câblage (Câble version) – Verkabelung (Kabel-Version) – Cableado (Cable versión)



E45 – E50 SPARE PARTS MANUAL

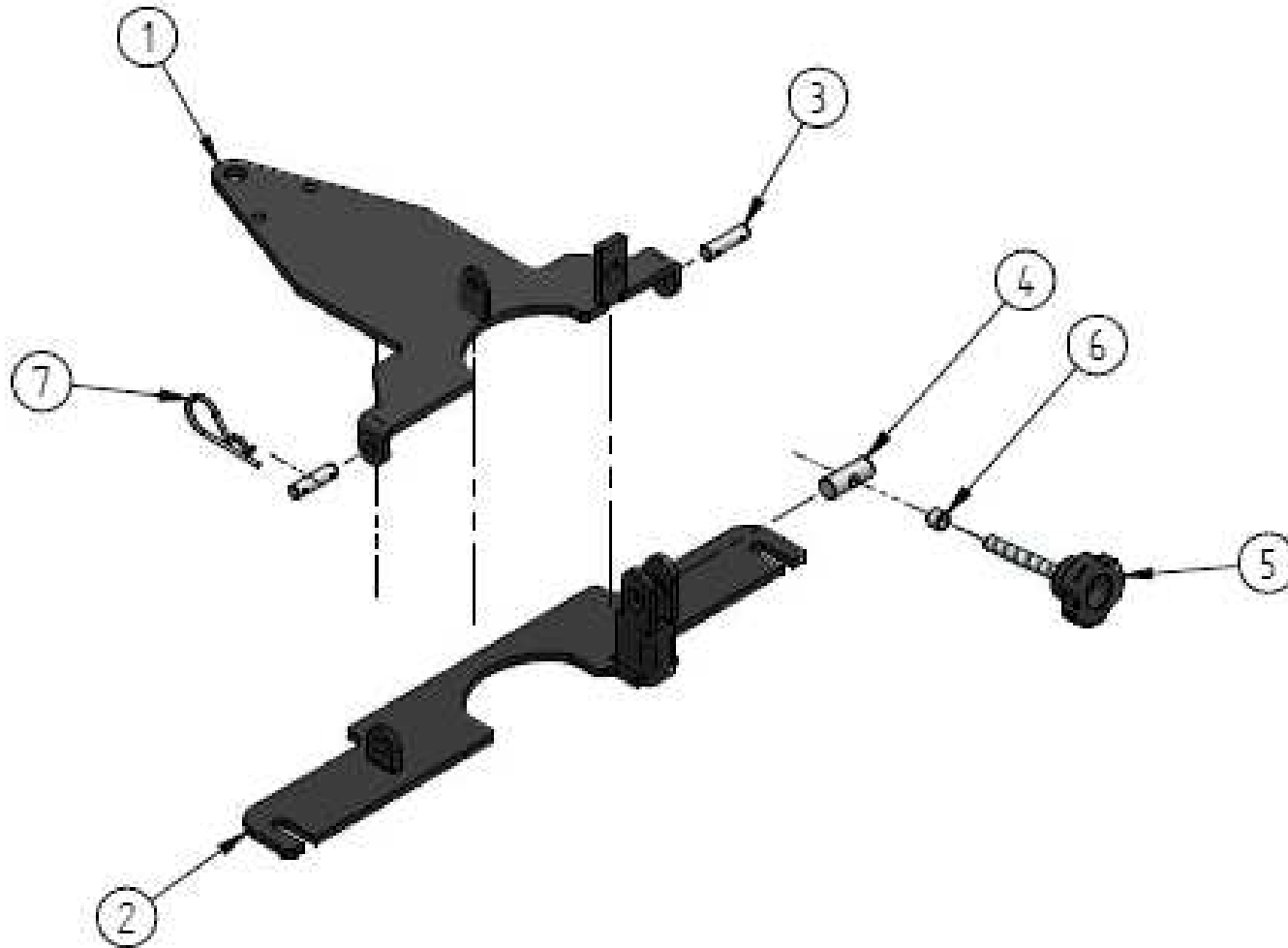


POS.	PART NUMBER	Q.ty	DESCRIZIONE	DENOMINATION	NOMENCLATURE	BEZEICHNUNG	DESCRIPCIÓN
1	3540-0015-0E	1	SCATOLA CONSOLLE (versione cavo)	CONTROL PANEL (cable version)	TABLEAU DE COMMANDE (version à câble)	SCHALTAFEL (Kabel Version)	PANEL DE CONTROL (versión à cable)
2	3500-0021-0E	1	COPERCHIO CONSOLLE (versione cavo)	COVER CONSOLE (cable version)	COUVERCLE CONSOLLE (version à câble)	KONSOLE DECKEL (Kabel Version)	CONSOLA CUBIERTA (versión à cable)
3	15-0112-032	2	INTERRUTTORE 220V	SWITCH 220V	INTERRUPTEUR 220V	SCHALTER 220V	INTERRUPTOR 220V
4	15-0301-006	2	FORCELLA ELASTICA Ø39-43	ELASTIC FORK Ø39-43	CHAPPE ÉLASTIQUE Ø39-43	ELASTISCHE GABEL Ø39-43	HORQUILLA ELASTICA Ø39-43
5	14-0009-030	1	TERMICA 3A	THERMAL CUT-OFF 3A	PROTECTION THERMIQUE 3A	ÜBERSTROMSCHUTZ-SCHALTER 3A	PROTECCIÓN TÉRMICA 3A
6	14-0009-080	1	TERMICA 8A	THERMAL CUT-OFF 8A	PROTECTION THERMIQUE 8A	ÜBERSTROMSCHUTZ-SCHALTER 8A	PROTECCIÓN TÉRMICA 8A
7	14-0009-051	2	CAPPUCCIO DI PROTEZIONE TERMICA	PROTECTION COVER FOR THERMAL CUT-OFF	COUVERTURE DE PROTECTION	SCHUTZDECKER	CUBIERTA DE PROTECCIÓN
8	14-9903-002	2	RELÉ 24V	RELAY 24V	RELAIS 24V	RELAIS 24V	RELÉ 24V
9	15-0202-002	1	MANOPOLA ROSSA 5MM	RED KNOB 5MM	ROUGE POIGNEE 5MM	ROT HANDGRIFF 5MM	MANDO ROJO 5MM
10	2020-0068-0E	1	LEVA SOLLEVAMENTO TERGI	SQUEEGEE LIFTING LEVER	LEVIER DE LEVAGE SUCEUR	SAUGFUß ANLÜFTHEBEL	PALANCA LEVANTAMIENTO FREGASUELO
11	8301-0051-0	1	ADESIVO CONSOLLE	CONSOLE STICKER	ADHÉSIF CONSOLE	KONSOLE AUFKLEBER	ADHESIVO CONSOLA

MINUTEMAN INTERNATIONAL INC.

14N845 U.S. Route 20
Pingree Grove, Illinois 60140
www.minutemanintl.com

10. Tiranteria – Rod linkage – Liens – Gestänge – Enlace



**E45 – E50
SPARE PARTS MANUAL**

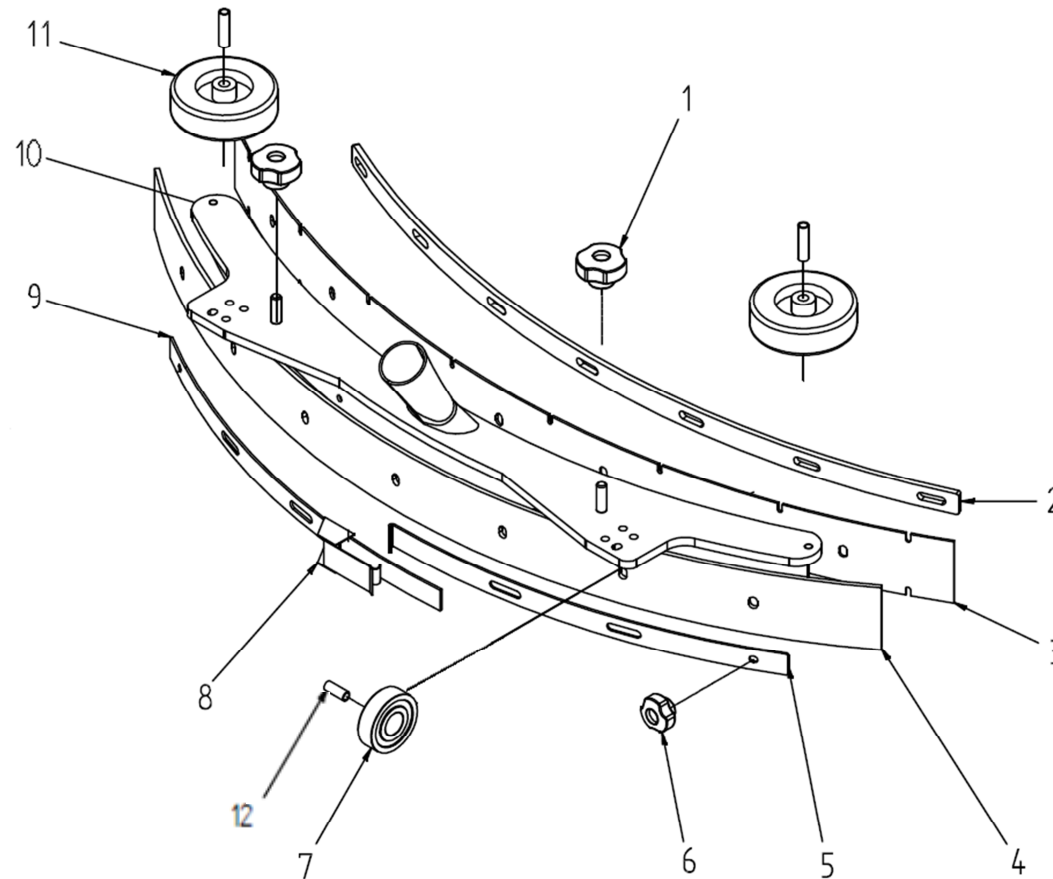


POS.	PART NUMBER	Q.ty	DESCRIZIONE	DENOMINATION	NOMENCLATURE	BEZEICHNUNG	DESCRIPCIÓN
1	3610-0022-0E	1	1° TIRANTE TERGI	1st ARM SQUEEGEE	1ERE BRAS SUCEUR	1. SAUGFUß DÜSENARM	1° TIRANTE FREGASUELO
2	3610-0004-1E	1	2° TIRANTE TERGI	2nd ARM SQUEEGEE	2IEME BRAS SUCEUR	2. SAUGFUß DÜSENARM	2° TIRANTE FREGASUELO
3	2211-0003-0	2	PERNO TERGIPAVIMENTO	SQUEEGEE PIN	PIVOT SUCEUR	SAUGFUß ZAPFEN	PERNO FREGASUELO
4	2220-0019-0Z	1	BOCCOLA	BUSHING	BAGUE	BUCHSE	CASQUILLO
5	10-6204-004	1	VOLANTINO M 8 CON PERNO FILETTATO	HANDWHEEL M 8 WITH SCREW PIN	VOLANT M 8 AVEC VIS	DREHGRIFF M 8 MIT SCHRAUBE	PALOMETA M 8 CON PIVOTE
6	2220-0018-0	1	BOCCOLA	BUSHING	BAGUE	BUCHSE	CASQUILLO
7	10-4500-000	4	COPIGLIA A "R" Ø1,8	SPLIT "R" Ø1,8	GOUPILLE "R" Ø1,8	SPLINT "R" Ø1,8	CHAVETA "R" Ø1,8

MINUTEMAN INTERNATIONAL INC.

14N845 U.S. Route 20
Pingree Grove, Illinois 60140
www.minutemanintl.com

11. Tergipavimento 650 – Squeegee 650 - Raclette 650 –Saugfuß 650 – Fregador de suelo 650



**E45 – E50
SPARE PARTS MANUAL**

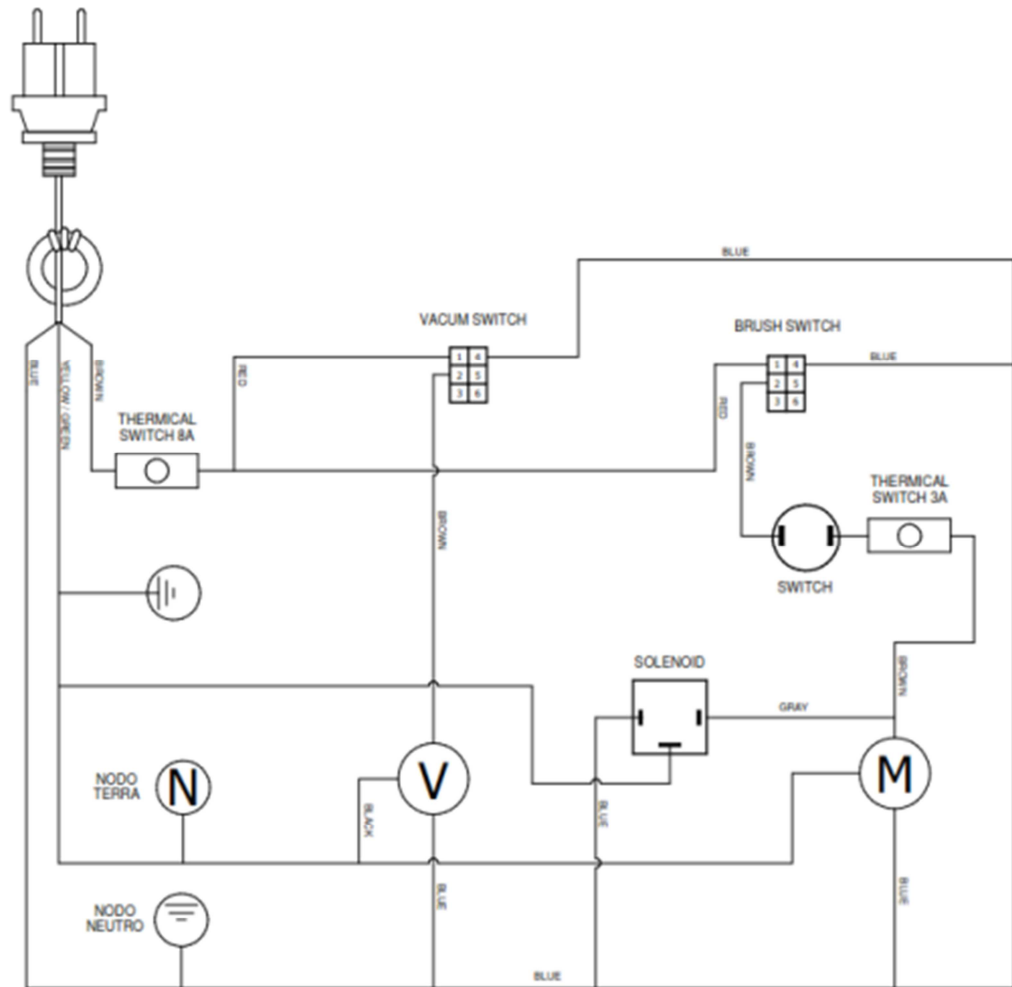


POS.	PART NUMBER	Q.ty	DESCRIZIONE	DENOMINATION	NOMENCLATURE	BEZEICHNUNG	DESCRIPCIÓN
1	10-6204-003	2	VOLANTINO M 8 FORO PASSANTE	OPEN M 8 HANDWHEEL	VOLANT M 8 OUVERT	DREHGRIFF M 8 GEÖFFNET	PALOMETA M 8 ABIERTO
2	2260-0050-1E	1	FERMO 650	RETAINER SEAL 650	PLAQUETTE 650	LEISTE 650	CERRADURA 650
3	2705-0031-0	1	GUARNIZIONE INTERNA 650 - 2	BLADE 650 - 2	JOINT 650 - 2	DICHTUNG 650 - 2	JUNTA 650 - 2
4	2705-0032-0	1	GUARNIZIONE ESTERNA 650 - 4	BLADE 650 - 4	JOINT 650 - 4	DICHTUNG 650 - 4	JUNTA 650 - 4
5	2260-0051-1E	1	FERMO 650	RETAINER SEAL 650	PLAQUETTE 650	LEISTE 650	CERRADURA 650
6	10-6203-001	2	VOLANTINO M 6 FORO PASSANTE	OPEN M 6 HANDWHEEL	VOLANT M 6 OUVERT	DREHGRIFF M 6 GEÖFFNET	PALOMETA M 6 ABIERTO
7	12-0000-000	2	RUOTA DI SCORRIMENTO FOLLE Ø50 X 22	WHEEL Ø50 X 22	ROUE Ø50 X 22	RAD Ø50 X 22	RUEDA Ø50 X 22
8	05-0401-001	1	CHIUSURA A LEVA	LOCK	ECLUSE	SPANNBÜGEL	CERRADURA
9	2260-0052-1E	1	FERMO 650	RETAINER SEAL 650	PLAQUETTE 650	LEISTE 650	CERRADURA 650
10	3920-0044-0E	1	TERGIPAVIMENTO 650	SQUEEGEE 650	SUCEUR 650	SAUGFUSS 650	FREGASUELO 650
11	12-0000-013	2	RUOTA DI SCORRIMENTO FOLLE Ø100 X 30	WHEEL Ø100 X 30	ROUE Ø100 X 30	RAD Ø100 X 30	RUEDA Ø100 X 30
12	2221-0007-0	2	BOCCOLA Ø6 Ø8 H=30	BUSHING Ø6 Ø8 H=30	BAGUE Ø6 Ø8 H=30	BUCHSE Ø6 Ø8 H=30	CASQUILLO Ø6 Ø8 H=30

MINUTEMAN INTERNATIONAL INC.

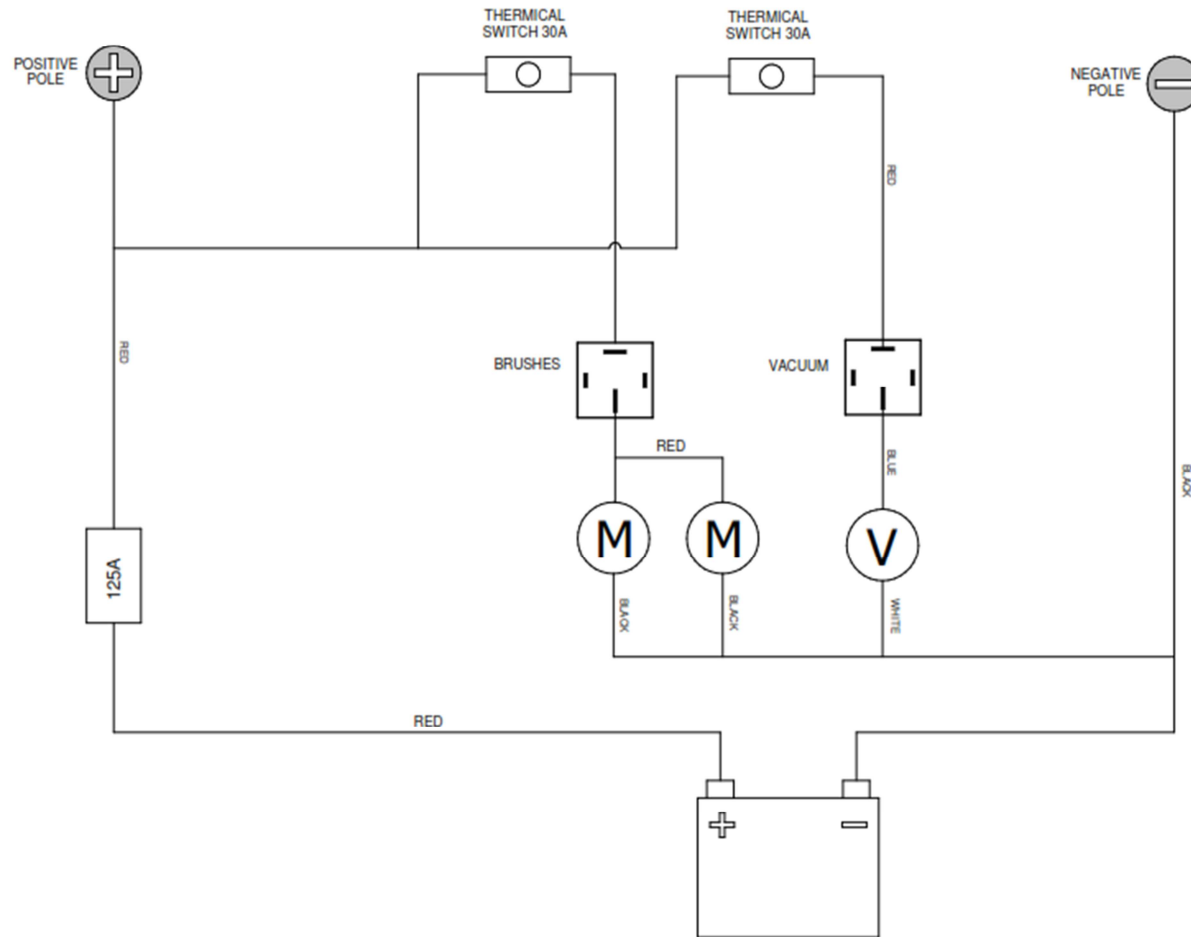
14N845 U.S. Route 20
Pingree Grove, Illinois 60140
www.minutemanintl.com

12. Power and signal wiring E45 (Cable version)

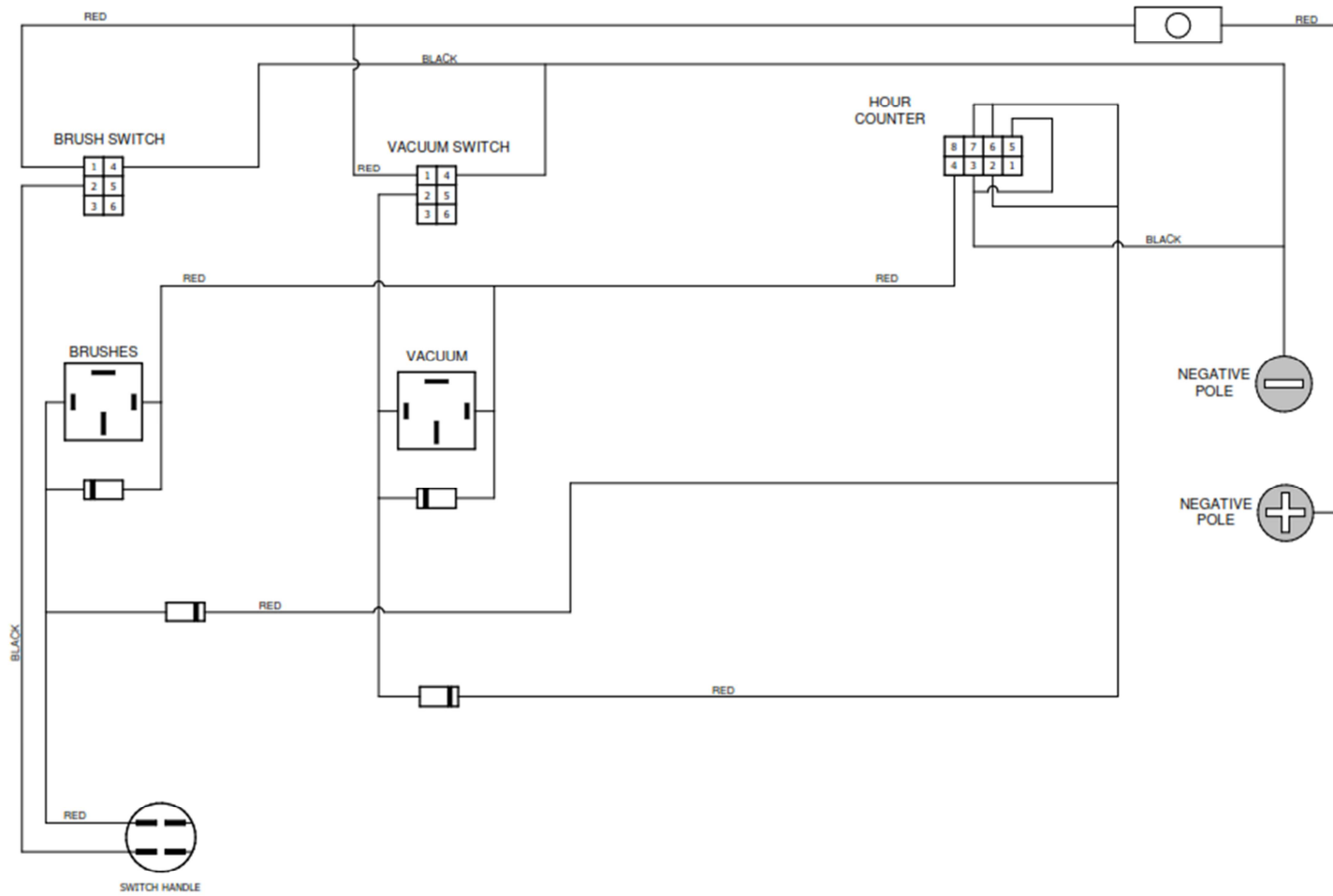




13. Power wiring E45B - E50B



14. Signal wiring E45B - E50B





Le descrizioni contenute nella presente pubblicazione non si intendono impegnative. La Ditta pertanto si riserva il diritto di apportare in qualunque momento le eventuali modifiche ad organi, dettagli, forniture di accessori, che essa ritiene convenienti per un miglioramento o per qualsiasi esigenza di carattere costruttivo o commerciale.

La riproduzione anche parziale dei testi e dei disegni contenuti nel presente catalogo è vietata ai sensi di legge.

The descriptions and illustrations contained in the present publication are understood to be non-binding. The Manufacturer thus reserves the rights to effect, at any time, any such alterations to items, component parts and accessory supplies as it may deem necessary for the purposes of improvement or in order to meet any demand of constructional or commercial nature.

Reproduction of either text or drawings, in full or in part, other than with the prior written consent of the manufacturer, is expressly forbidden.

Les descriptions et les illustrations contenues dans la présente publication n'engagent pas le constructeur. Le Fabricant se réserve le droit de modifier à tout moment les organes, détails et fournitures d'accessoires nécessaires à une amélioration technique ou commerciale des machines.

La reproduction même partielle des textes et illustrations contenus dans ce catalogue est illégale, tout contrairement elle pourra être pénalement poursuivie.

Die in dieser Anleitung enthaltenen Beschreibungen und Abbildungen sind unverbindlich. Die Firma behält sich das Recht vor, eventuelle Änderungen an Elementen, Einzelteilen und Lieferungen von Zubehörteilen ohne Ankündigung vorzunehmen, welche sich im Hinblick auf konstruktive Verbesserungen ergeben.

Der Nachdruck der Texte und Zeichnungen, die in diesem Katalog enthalten sind, auch teilweise, ist laut Gesetz untersagt.

Las descripciones contenidas en esa publicación no son vinculantes. Por consiguiente la Empresa se reserva el derecho de modificar eventualmente en cualquier momento las piezas, los detalles y los suministros de piezas de repuesto, de la manera que considera útil para lograr mejoras o por cualquier exigencia de tipo constructivo o comercial.

La reproducción aún parcial de los textos y de los dibujos contenidos en este catálogo queda prohibida con arreglo a la ley.



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.

MINUTEMAN INTERNATIONAL INC.

14N845 U.S. Route 20
Pingree Grove, Illinois 60140
www.minutemanintl.com

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 hours max				

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

MINUTEMAN INTERNATIONAL INC.

14N845 U.S. Route 20
 Pingree Grove, Illinois 60140
 www.minutemanintl.com

