

QUIC-HOLD® HANDS-FREE ELECTRIC BRACKET

MODEL QM-ELB

PARTS AND INSTRUCTION MANUAL



The Electric Bracket ties into an apparatus's electrical system and unlocks upon activation of the parking brake or any other 12v switched source - minimizing response time and keeping firefighters safe.

The Hands-Free Electric Bracket fits most SCBAs with only minor adjustments. Donning the SCBA is fast and easy. Simply slip into the harness, and once released, lean forward. To secure the cylinder, just push it into the unlocked top clamp - no pull releases, straps, levers, or other devices.

Backplate is made of steel to provide a strong backbone, and powder-coated for maximum durability. The top clamp is PVC-coated to prevent damage to the cylinder while in use.

Third party tested to exceed the NFPA 9G standard. Easy to retrofit.

Equipped with a manual emergency release in the case of electrical system failure.

An optional Individual Release Switch provides additional flexibility for firefighters, allowing the Electric Bracket to be released individually at the push of a button (sold separately).

WARNING: Bracket and SCBA harness are not to be used in place of a seat belt.

MODEL	DESCRIPTION	WT./@ IN LBS.
QM-ELB	Electric Bracket	14.3



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	1029-105-101	Top Clamp	1
2	1029-105-103	Upper Bracket	1
3	1045-320-105	Backplate	1
4	1045-320-107	Footplate	1
5	1029-105-905	Serrated Latch Assembly	1
6	1045-320-111	Cyl. Locator/Bumper	1
8	1045-320-106	Footplate Guide	1
10	1029-105-109	Latch Spring	1
11	1029-105-111	Counter Spring, Top Clamp, LH	1
12	1029-105-113	Counter Spring, Top Clamp, RH	1
13	1029-105-115	Solenoid Link	1
14	1029-105-117	Solenoid w/Plunger; 12VDC	1
15	1029-105-119	Solenoid Bracket	1
16	1029-105-121	Solenoid Cover	1
17	1029-105-123	Strain Relief	1
18	1045-320-131	Spacer, Top Clamp Pivot	2
19	9040-101207	Spring Pin, 1/8 x 7/16, ZPS	1
22	1045-320-139	Spacer, 3/8 Alum., 675ODx.423ID, 625LG.	3
24	1045-320-143	Backup Plate, Bumper	1
25	1045-320-183	Spacer/Locator, Bumper	1
26	1029-105-125	Striker Plate	1
27	1029-105-127	Footplate Mounting Block	1
28	1029-105-129	Manual Release Handle	1
29	9014-203100	Lockwasher, 5/16øNOM., Split	4
30	9014-202500	Lockwasher, 5/16ø Split	1
31	9010-162010	Screw, 10-32 x 5/8" Lg., FH 82°, SZP, PHIL	2
32	9010-562516	Screw, 1/4-20x1" RDHD Torx, Bumper Mount	2
33	9018-103116	Screw, 5/16-18 x 1" HH, GR8	2
34	9015-103120	Screw, 5/16-18 x 1-1/4 HH, GR5	2
35	9010-462516	Screw, 1/4-20 x 1 FH, Torx	4
36	9010-241308	Screw, 6-32 x 1/2 Round Head, Phil	2
37	9015-172500	Nut, 1/4-20, Self Lock, GR5	3
38	9114-112500	Plainwasher, 1/4ø SS	2
39	9014-182500	Washer, 1/4ø, GR8, 1/16 Thk., SAE	1

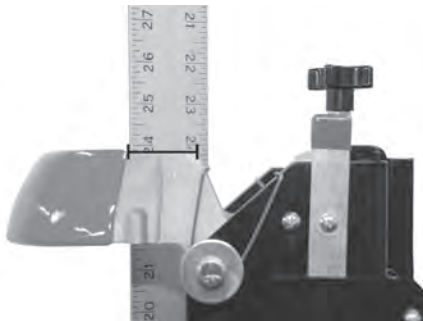
ITEM NO.	PART NO.	DESCRIPTION	QTY.
40	9014-163100	Bar Washer, 5/16NOMx1 1/4 x 1/16 SZP	3
41	9010-221606	Screw, 8-32 x 3/8" Lg., PH, SZP, PHIL	7
42	9014-201700	Lockwasher, Split, #8	5
43	9014-111700	Plainwasher, #8	5
44	9013-251600	Nut, 8-32, Hex, Self Loc	3
45	9010-221616	Screw, 8-32x1"LG., PH, SZP, PHIL	1
46	1029-105-131	Spacer, Solenoid Cover	1
47	1029-105-133	Spacer, Manual Release	1
48	1045-320-171	Spacer, Top Clamp Stop	2
49	9010-222014	Screw, 10-32x7/8"LG., PH, SZP, PHIL	2
50	9013-252000	Nut, 10-32, Hex, Self Loc	7
51	9014-111900	Plainwasher, #10 SZP SAE 1/2" O.D.	4
52	9010-222010	Screw, 10-32x5/8"LG., PH, SZP, PHIL	1
53	1029-105-137	Sleeve, Serrated Latch	1
54	9018-103124	Screw, 5/16-18x 1 1/2" HH, GR 8	1
55	9018-173100	Nut, 5/16-18, Hex, Self Loc, GR8	1
56	9010-332012	Screw, 10-32x3/4"LG., Skt Hd., SZP, Capscrew	2
57	9010-102512	Screw, 1/4-20x3/4" HH, ZPS	2
58	3097-105-130	Washer, Plastic, 1/2 ID x 3/4OD x.062	2
59	1029-105-139	Top Spring Clip	1
60	1090-000-150	Rubber Bumper (ACSR)	1
61	1029-105-903	Sol. Cable Assembly	1
62	9040-101206	Spring Pin, 1/8 x 3/8 ZPS	1
63	1045-320-197	Sleeve, Spacer, Footplate	2
64	1045-320-199	Spacer, Footplate	2
65	1045-320-175	Knob, Footplate Adjustment	1
66	9015-113100	Nut, 5/16-18 Hex	3
67	1045-320-113	Adjustment Rod	1
68	1045-320-137	Spacer	1
69	9114-113100	Flatwasher, Plain, 5/16ø, SZP	2
70	1027-110-109	MSA Extension	1
71	9010-352012	Screw, 10-32 x 3/4 Allen	2
72	1029-105-141	Model # Tag	1

Set-Up Instructions

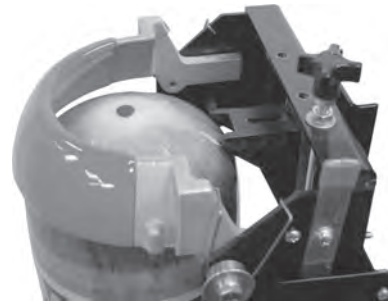
1. If using an MSA air cylinder, see Page 6 before beginning. If required, install the adapter plate using (2) 10-32 x 3/4" Allen hd screws and (2) 10-32 nylon lock nuts.
2. Configure the footplate assembly to allow a 3/8" clearance between the valve and footplate guide.



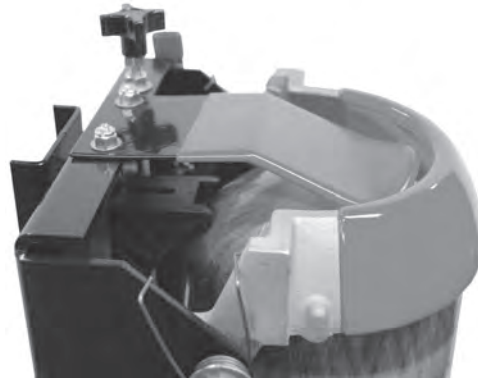
3. Measure the overall length of your air cylinder from the bottom of the valve to the top of the cylinder.
4. Measure the overall distance from the inside of the footplate to the top of the top clamp. By rotating the adjustment knob, adjust the position of the footplate so that this distance is 1/2" longer than the length of the air cylinder. Using the bracket's manual release lever, test both the securing and the removing of the air cylinder. If needed, the footplate can be adjusted 1/8" in either direction to make this process smoother.



5. Loosen the screw holding the cylinder locator bumper. Then place the air cylinder in the bracket and allow the weight of the pack to keep the cylinder pressed up against the top clamp. Slide the cylinder locator down until it makes contact with the air cylinder. If it does not slide down low enough, it may be necessary to switch to one of the lower mounting holes for the cylinder locator. If using a 30 min. 4500 PSI cylinder, it may be necessary to rotate the cylinder locator bumper so that the longer end is protruding outward from the bracket. If using a 30 min. 5500 PSI cylinder, request Locator Bumper Spacer Kit, Model 1045-320-912.

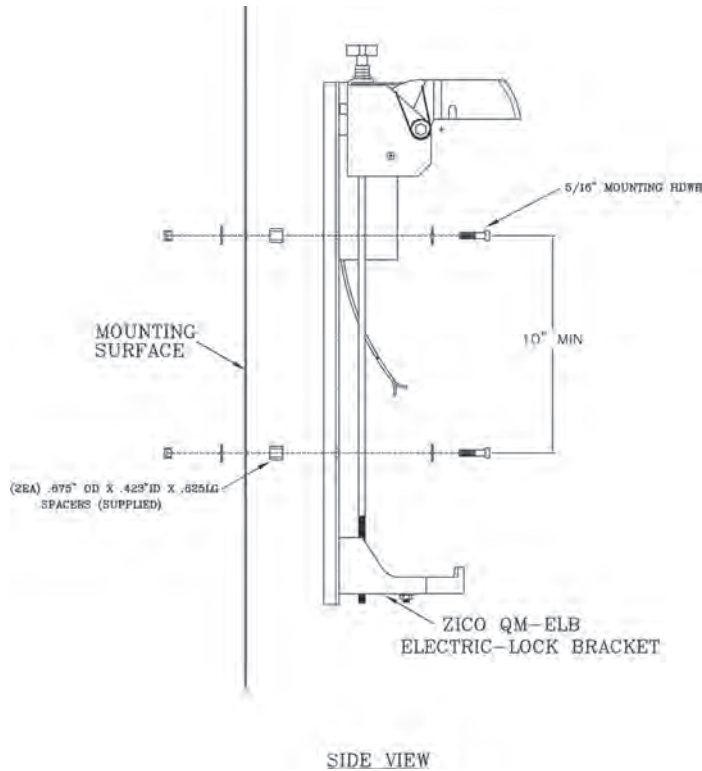


6. Install the top spring clip. The clip is bolted onto the top edge, using (2) 1/4"-20 x 3/4" hex hd screws, (2) 1/4" nylon lock nuts, (2) 1/4" flat washers. Check that all functions are working properly.



Mounting Instructions

The QM-ELB requires a minimum of (2) mounting points at least 10" apart using 5/16" O.D. screws. A spacer (supplied) is required between the QM-ELB backplate and the mounting surface. The mounting surface must be able to withstand a pull-out force of 450 lbs.



Donning Instructions

A departmental procedure should be established for the donning of SCBA enroute to an emergency. Donning procedure may be influenced by the type of seat belts being used.

1. Insert your arms into harness assembly of the SCBA while moving into a sitting position. Snug up on the shoulder straps, but do not pull them tight.
2. Secure your seat belt per manufacturer's recommendation.
3. Upon arrival on the emergency scene, the seat belt may be removed, per departmental procedure.
4. Once the QM-ELB lock has been disengaged, simply stand up.
5. Outside the vehicle, final adjustments may be made to the SCBA straps and the face mask may be attached to the regulator.

Repositioning the SCBA into the Bracket

1. Place the valve assembly end of the air cylinder into the pocket of the footplate.
2. Check to see if the QM-ELB is locked or unlocked. If locked, pull the manual release forward to disengage it.
3. Grasp the SCBA pack with one hand and firmly push it into position. If using the manual release, let go of it and check to make sure that pack is secure.

MSA SCBA Warning

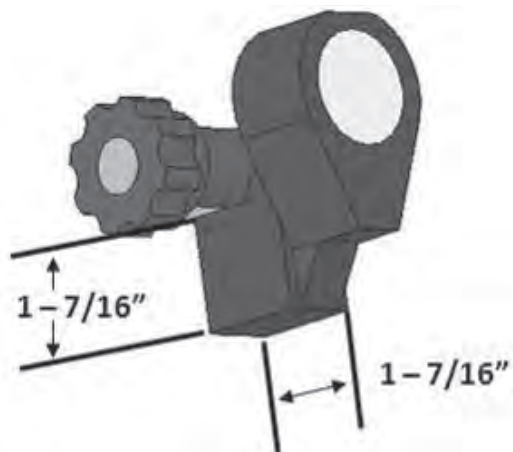
If using the Electric Bracket with an MSA SCBA cylinder, you must read this important safety information:

TO SAFELY SECURE YOUR MSA SCBA

If your MSA SCBA cylinder uses a gauge guard with the approximate dimensions shown in Ref. A, you must use the included adapter plate as shown in Ref. B, secured to the inside of the Footplate as shown.

If your MSA SCBA has a smaller gauge guard, this adapter should not be used. Damage may result when using the adapter with a smaller gauge guard.

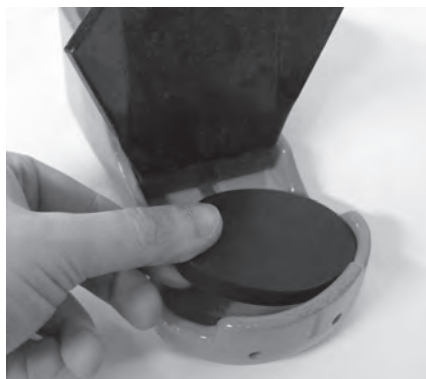
Ref. A



Ref. B



If your MSA SCBA is a Model G1, you must use the included Footplate Riser as shown in Ref. C, secured to the Footplate with double-sided tape (included). The adapter plate should not be used.



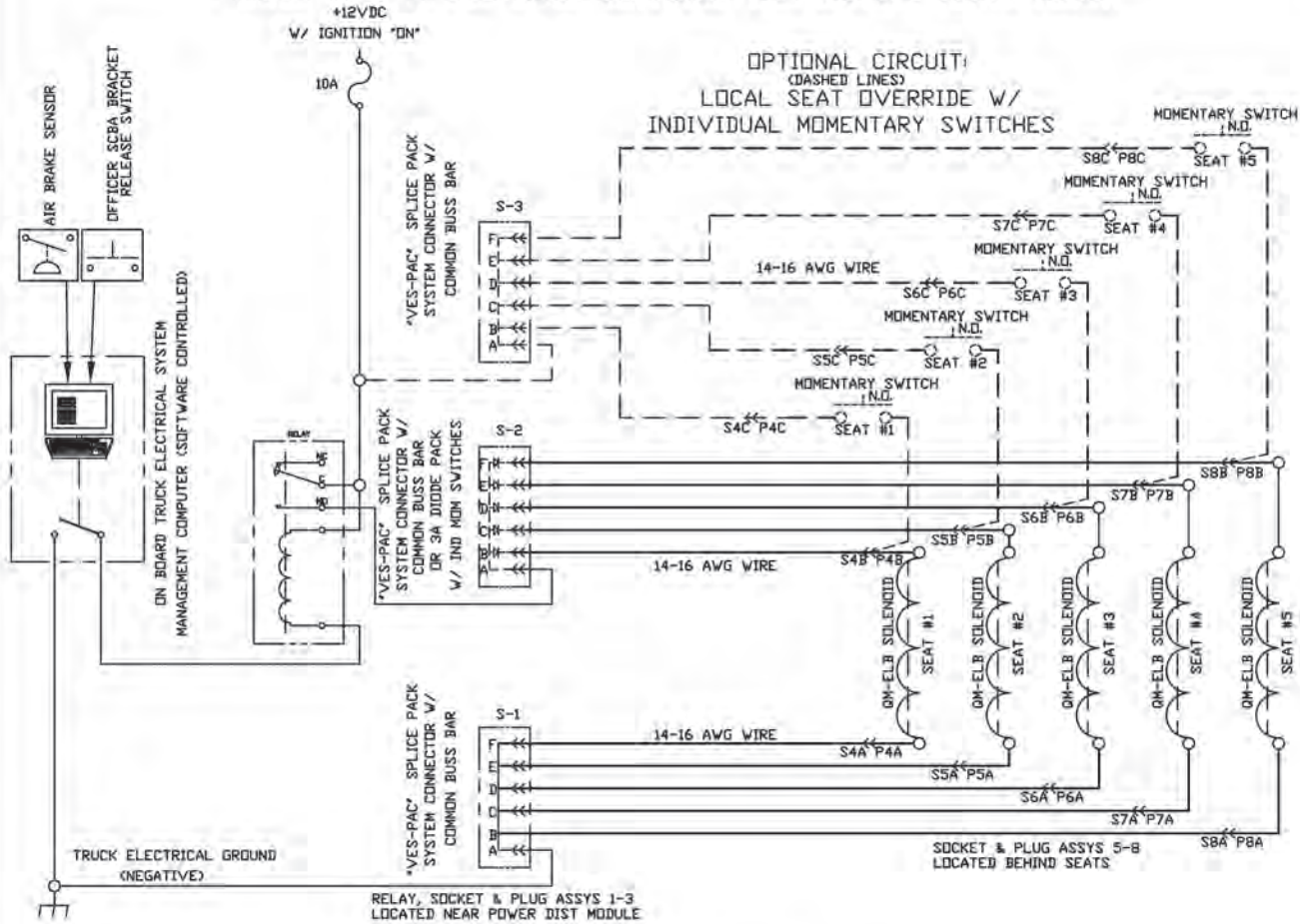
Ref. C

There are numerous ways the QM-ELB brackets can be connected electrically in a fire truck. Here are two of the most common ways to connect them:



TYPICAL WIRING USING AN ON-BOARD ELECTRICAL SYSTEM MANAGEMENT COMPUTER TO CONTROL ZICO ELB SCBA BRACKET RELEASE

- SHOWN W/ A TYPICAL LOCAL INDIVIDUAL SEAT RELEASE SWITCH CIRCUIT



PROGRAMMING SUGGESTIONS:

PROGRAM TO SWITCH RELAY "ON" WHEN:

EITHER

A.) IGNITION SWITCH IS "ON" & PARKING BRAKE IS "ON"
OR

B.) IGNITION SWITCH IS "ON" & OFFICER OVER-RIDE
MOMENTARY SWITCH IS "ON"



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