# QUIC-LOCK® MECHANICAL BRACKET Model QLM-U

PARTS AND INSTRUCTION MANUAL

ZICO®
1045PM8

Rev. 3-16-16



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

Model QLM-U

The QUIC-LOCK is a strapless SCBA bracket that utilizes a flip down, PVC-coated top clamp and an adjustable footplate to securely lock an SCBA cylinder by its ends.

To secure the cylinder, place the SCBA valve into the footplate, lower the top clamp around the cylinder, and pull up on the red locking knob to lock into place. The QUIC-LOCK is NFPA compliant and third party tested to exceed the 9G standard.

To release the SCBA, simply pull on the release cord.

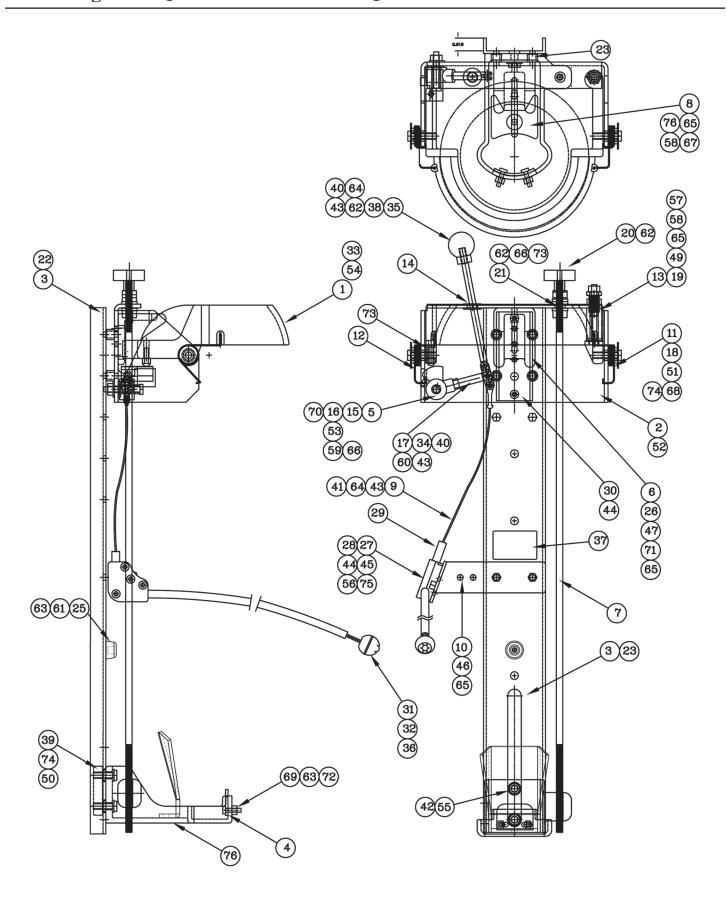
Fits most SCBAs with only minor adjustments.

Easy to retrofit into new or old seats. Works with most center pull releases.



The Quic-Lock Mechanical WALKAWAY Bracket will accommodate the optional pull release, model QLM-U-OR. To order the Quic-Lock with the optional pull release already attached, order QLM-U-OPR.

MODEL	DESCRIPTION	WT./@ IN LBS.
QLM-U	Quic-Lock Mechanical Bracket	14.0
QLM-U-OPR	Quic-Lock Mechanical Bracket with Optional Pull Release	14.1
QLM-U-OR	Optional Pull Release for the Quic-Lock	0.6

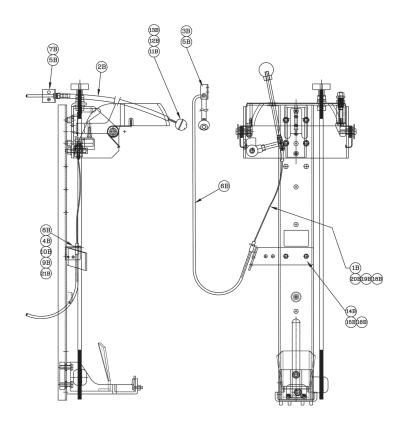


# Parts Breakdown - QUIC-LOCK - Model QLM-U

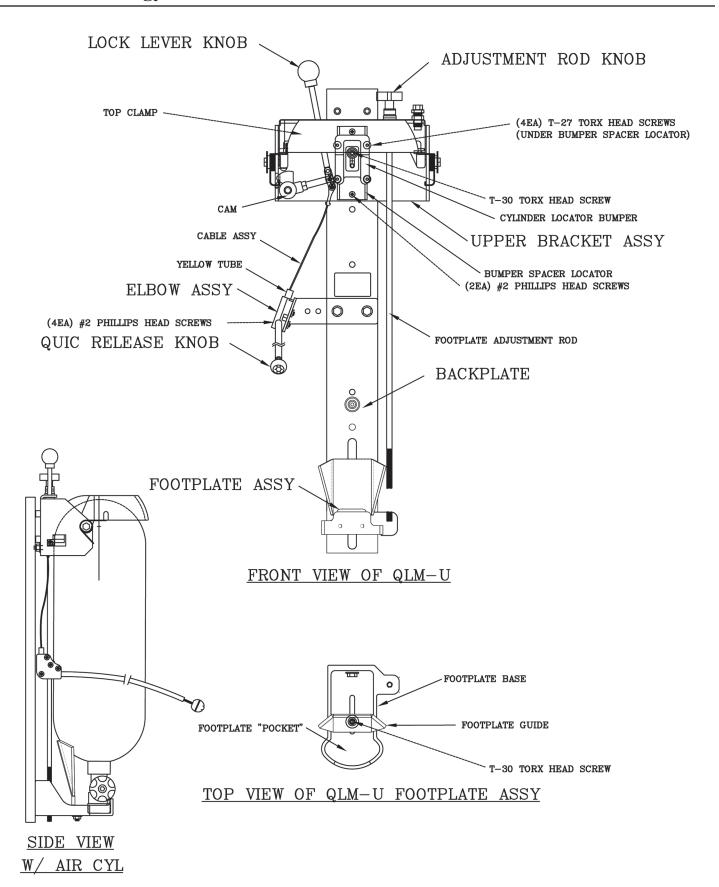
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	1045-320-101	Top Clamp	1
2	1045-320-103	Upper Bracket	1
3	1045-320-105	Backplate	1
4	1045-320-107	Footplate	1
5	1045-320-109	Cam	1
6	1045-320-111	Cyl. Locator/Bumper	1
7	1045-320-113	Adjustment Rod, Footplate	1
8	1045-320-106	Footplate Guide	1
9	1045-320-117	Cable Assembly, Pull Release	1
10	1045-320-135	Bracket, Release Assy.	1
11	1045-320-119	Counter Spring, Top Clamp, LH	1
12	1045-320-121	Counter Spring, Top Clamp, RH	1
13	1045-320-123	Spring, Breakaway	1
15	1045-320-125	Spring, Cam Return	1
16	1045-320-127	Sleeve, Cam Pivot, 1/2OD x 14 GA. x 1.125 LG	1
17	1045-320-129	Cam Handle	1
18	1045-320-131	Spacer, Top Clamp Pivot	2
19	1045-320-187	Adjust Screw, Breakaway Spring	1
20	1045-320-175	Knob, Footplate Adjustment	1
21	1045-320-137	Spacer, Adj. Rod, 1/2OD x 14 GA. (.083) x .281LG STL.	1
22	1045-320-139	Spacer, 3/8 Sched 80 Alum., 675OD x .423ID x .625LG.	2
23	1045-320-189	Nut Inserts, 1/4-20 ZPZ	8
25	1090-000-150	Rubber Bumper	1
26	1045-320-143	Backup Plate, Bumper	1
27	1045-340-101	Elbow, Hex Side	1
28	1045-340-103	Elbow, C'Sink Side	1
29	1045-340-107	Plastic Tubing	1
30	1045-320-183	Spacer/Locator, Bumper	1
31	1045-320-169	Pull Release Knob	1
32	1045-320-185	Stop Sleeve	1
33	1045-320-171	Spacer, 7/16OD x 12GA. (.109) STL. DWG. 1045 320-127	1
34	1045-320-145	Cam Handle Link Plate	1
35	1045-320-149	Cam Release Push Rod	1
36	9010-391603	Setscrew, #8-32x3/16 Flat Point	1
37	1045-320-177	Label, Model #	1

ITEM			
NO.	PART NO.	DESCRIPTION	QTY.
38	1045-320-176	Knob, Cam Lock Red, 1 1/4	1
39	1029-105-127	Footplate Mounting Block	1
40	9070-000608	Cotter Pin, 1/16 x 1/2, ZPS	2
41	9082-001209	Hairpin Cotter	1
42	1045-320-199	Footplate Mounting Spacer	2
43	9080-001808	Clevis Pin, 3/16ø x 1/2" LG.	3
44	9010-162010	Screw, 10-32 x 5/8" LG	4
45	9010-162016	Screw, 10-32 x 1" LG	2
46	9015-102512	Screw, 1/4-20 x 3/4 HH	2
47	9010-562516	Screw, 1/4-20 x 1" RDHD Torx, Bumper Mount	2
49	9015-102544	Screw, 1/4-20 x 2 3/4" HH	1
50	9018-103116	Screw, 5/16-18 x 1" HH, GR 8	2
51	9015-103120	Screw, 5/16-18 x 1 1/4 HH	2
52	9010-462516	Screw, 1/4-20 x 1 FH, Torx	4
53	9015-103128	Screw, 5/16-18 x 1 3/4	1
54	9020-102116	Drive Screw, #12 x 1" LG.	1
55	1045-320-197	Footplate Spacer Sleeve	2
56	9012-102000	Jam Nut, 10-32, 1/8 HT, SZP	4
57	9012-155005	Jam Nut, 1/2-20 Thin, ZPS	1
58	9015-172500	Nut, 1/4-20, Self Lock	2
59	9015-173100	Nut, 5/16-18, Hex, Self Loc	1
60	9015-113700	Nut, 3/8-16 Hex, Plain	1
61	9010-222012	Screw, 10-32 x 3/4 PH SS Phil	1
62	9015-113100	Nut, 5/16-18, Hex, Plain	4
63	9013-252000	Nut, 10-32 Hex, Nylon Lock	1
64	9014-101900	Plainwasher, #10 SZO M/S 7/16" O.D.	2
65	9114-112500	Plainwasher, 1/4ø SS	3
66	9114-113100	Plainwasher, 5/16ø SS	4
67	9014-132500	Washer, 1/4ø, GR8, .1/16 Thk.	2
68	9014-163100	Bar Washer, 5/16 NOM. x 1 1/4x 1/16 SZP	2
70	9114-105000	Washer, 1/2ID x 7/8OD x 1/16 Thk., SS	1
71	9014-202500	Lockwasher, 1/4ø Split	3
73	3097-105-130	Washer, Plastic, 1/2ID x 3/4OD x .062	2
74	9014-203100	Lockwasher, 5/16øNOM., Split	4
75	9014-251900	Lockwasher, Intrnal Tooh, #10 SZP	4

# Parts Diagram & Breakdown - QUIC-LOCK - Model QLM-U-OR



ITEM	PART NO.	DESCRIPTION	QTY.
1B	1045-321-101	Release Cable Assembly	1
2B	1027-105-131	Yellow Tubing 10"	1
3B	1010-175-131	Barbed Fitting	1
4B	1027-105-135	Pull Release Bracket, Upper	1
5B	1027-105-125	Pull Release Bracket, Release End	1
6B	1027-105-129	Conduit with Crimped Fitting	1
7B	9025-172006	10-32 Screw, Hex Hd	2
8B	1027-105-137	Push Nut	1
9B	9013-252000	10-32 Nut, Nylon Lock	1
10B	9020-101-305	#6 x 5/16" Drive Screw	1
11B	1045-320-169	Pull Release Knob	1
12B	1045-320-185	Stop Sleeve	1
13B	9010-391603	#8-32 x 3/16" Set Screw	1
14B	1045-320-135	Release Bracket	1
15B	9015-102512	1/4-20 x 3/4" Screw	2
16B	9114-112500	1/4" Plainwasher	2
18B	9082-001209	Hairpin Cotter	1
19B	9014-111900	#10 Plainwasher	1
20B	9080-001808	3/16" x 1/2" Clevis Pin	1
21B	9010-502010	10-32 x 5/8" Screw	1

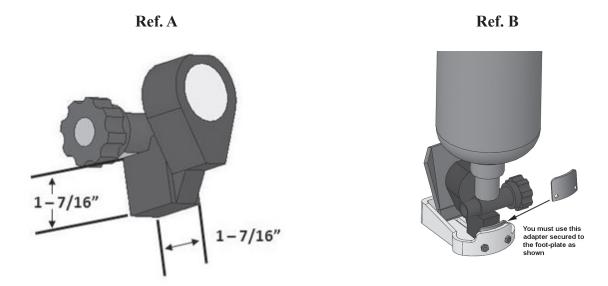


# If using the Quic-Lock with an MSA SCBA cylinder, you must read this important information:

#### 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 cylinder has a smaller gauge guard, this adapter should not be used. Damage may result when using the adapter with a smaller gauge guard.



If your MSA SCBA cylinder 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

#### **Set-Up Instructions - QUIC-LOCK**

- 1. Loosen the T-30 torx head screw holding the Footplate Guide to the Footplate just enough so that the Footplate Guide can slide back and forth on the Footplate. If you are using an MSA cylinder, the MSA footplate extension may need to be installed (see page 6).
- 2. Place the bottom of your SCBA Air Cylinder Valve in the Footplate Assembly. While keeping the Air Cylinder Valve as far forward as it will go in the Footplate "pocket", slide the Footplate Guide so there is approximately 3/8" clearance between the Footplate Guide and the bottom of the Air Cylinder Valve (see Figure 1, below).



Figure 1

- 3. Remove the SCBA Air cylinder from the Footplate and re-tighten the T-30 torx head screw holding the Footplate Guide.
- 4. Determine the most accommodating position for your Upper Bracket Assembly using the information from the chart on pages 13-15 and the diagram on page 16. If your QUIC-LOCK was not pre-set for your specific SCBA prior to shipping, it will come standard in the "B" position. If your SCBA is currently in the correct position, skip to step 9.

5. If you need to adjust the Upper Bracket Assembly to a different position, remove the T-30 torx head screw holding the Cylinder Locator Bumper (*see Figure 2, below*) and set the Cylinder Locator Bumper aside. Remove the (2) #2 Phillips head screws holding the Bumper Spacer Locator (*see Figure 3, below*), and set the Bumper Spacer Locator aside.



Figure 2



Figure 3

- 6. Remove the (4) T-27 torx head screws that are holding the Upper Bracket Assembly in place. Be sure not to let the weight of the Upper Bracket hang on the Adjustment Rod before reattaching.
- 7. Reattach the Upper Bracket Assembly in the desired position using the (4) T-27 torx head screws.
- 8. If using this bracket with a 30 min. 5500 PSI air cylinder, refer to page 20 now. Otherwise, reattach the Bumper Spacer Locator to the Upper Bracket Assembly with the (2) #2 Phillips head screws.
- 9. Referring again to the SCBA Reference chart on pages 13-15 and the diagram on page 16, determine the optimal bumper location for the Cylinder Locator Bumper (Note: If using this bracket with a flat-top air cylinder, the standard Cylinder Locator Bumper must be replaced with a modified version, see page 20). Reattach the Cylinder Locator Bumper by inserting the T-30 torx head screw into the appropriate bumper location hole in the Bumper Spacer Locator, leaving the T-30 torx head screw loose enough to allow the Cylinder Locator Bumper to slide up and down. Temporarily slide the Cylinder Locator Bumper as far up as it will go.
- 10. Measure the overall length of your desired air cylinder from bottom of the air cylinder valve to top of the air cylinder (*see Figure 4, below*). Add 1/2" to this measurement.

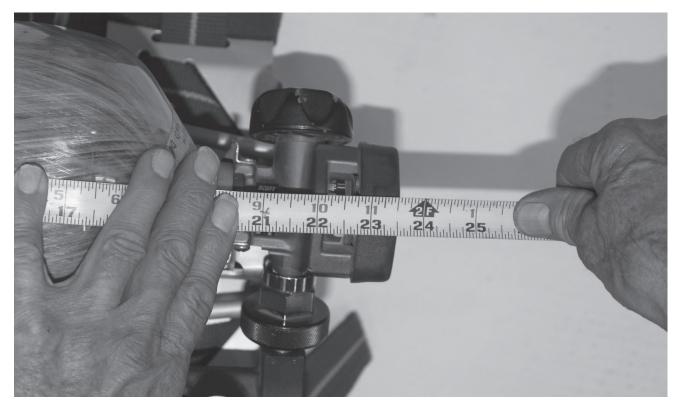


Figure 4

11. Measure the distance from the inside bottom of the Footplate to the inside top of the closed Top Clamp (*see Figure 5, page 10*). This distance should equal your overall length of the air cylinder plus 1/2". Use the Adjustment Rod Knob to turn the Footplate Adjustment Rod and achieve this measurement.

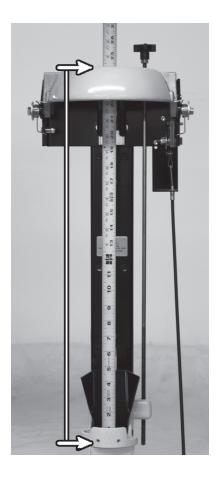


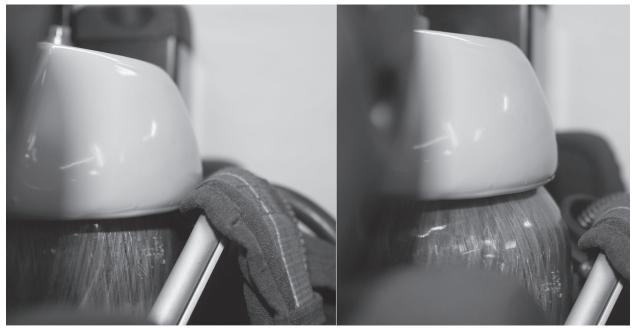
Figure 5

2. Open the Top Clamp. Place the air cylinder valve in the Footplate and move the SCBA into the bracket, closing the Top Clamp as the top of the air cylinder passes the front of the Top Clamp (*see Figure 6*, *below*). Pull the Lock Lever Knob up firmly to lock the SCBA in place.



Figure 6

13. The Top Clamp should be engaging the SCBA without wedging between the air cylinder and the SCBA harness frame (*see Figure 7, below*).



**WRONG - Catches Pack** 

**WRONG - Too High on Bottle** 



**CORRECT** 

Figure 7

- 14. With the SCBA in the stowed position, slide the Cylinder Locator Bumper up or down until it touches the air cylinder and keeps it held toward the front of the Top Clamp. Leave a slight amount of clearance (up to 1/16") between the top of the air cylinder and the Cylinder Locator Bumper. When positioned correctly, remove the air cylinder and tighten the T-30 torx head screw on the Cylinder Locator Bumper.
- 15. If the air cylinder cannot be held against the front of the Top Clamp by the Cylinder Locator Bumper, it may be necessary to change the location of the T-30 torx head screw holding the Cylinder Locator Bumper to a different bumper location (1, 2, 3 or 4) in order to get the correct fit described in step 16.
- 16. The SCBA should be held firmly in place. If it is not, repeat steps 9-15 and fine-tune until a satisfactory final adjustment is achieved.
- 17. Check that locking and unlocking functions are working properly.

## **SCBA Reference Chart**

		Upper Bracket	Bumper	Bumper
SCBA Brand, Model	AirCyl Type	Location	Location	Position
Draeger Air Boss Evolution Plus PSS 100	30 Min 2216 PSI	A/B	1	S
Draeger Air Boss Evolution Plus PSS 100	30 Min 2216 PSI	A	1	S
	Alum Flat Top*			
Draeger Air Boss Evolution Plus PSS 100	30 Min 4500 PSI	A/B	2	L
Draeger Air Boss Evolution Plus PSS 100	45 Min 4500 PSI	A/B	2	S
Draeger Air Boss Evolution Plus PSS 100	60 Min 4500 PSI	A	2	S
Draeger Air Boss Evolution	30 Min 2216 PSI	A/B	1	S
Draeger Air Boss Evolution	30 Min 2216 PSI	A	1	S
	Alum Flat Top*			
Draeger Air Boss Evolution	30 Min 4500 PSI	A/B	2	L
Draeger Air Boss Evolution	45 Min 4500 PSI	A/B	2	S
Draeger Air Boss Evolution	60 Min 4500 PSI	A	2	S
Draeger PSS 7000	30 Min 2216 PSI	A/B	1	S
Draeger PSS 7000	30 Min 2216 PSI	A	1	S
	Alum Flat Top*			
Draeger PSS 7000	30 Min 4500 PSI	A/B	2	L
Draeger PSS 7000	45 Min 4500 PSI	A/B	2	S
Draeger PSS 7000	60 Min 4500 PSI	A	2	S
Global Safety Pioneer	30 Min 4500 PSI	A/B	2	L
Global Safety Pioneer	45 Min 4500 PSI	A/B	2	S
Global Safety Pioneer	60 Min 4500 PSI	A	1	S
Interspiro Spiromatic S4	30 Min 4500 PSI	A/B	2	L
Interspiro Spiromatic S4	45 Min 4500 PSI	A	2	L
Interspiro Spiromatic S4	60 Min 4500 PSI	A	2	S
ISI Viking DXL	30 Min 4500 PSI	A	3	L
ISI Viking DXL	45 Min 4500 PSI	В	2	S
ISI Viking DXL	60 Min 4500 PSI	A	2	S
Avon-ISI Viking Z-7	30 Min 2216 PSI	В	2	S
Avon-ISI Viking Z-7	30 Min 4500 PSI	В	2	L
Avon-ISI Viking Z-7	45 Min 4500 PSI	A/B	2	L
Avon-ISI Viking Z-7	60 Min 4500 PSI	A	2	S
MSA Firehawk	30 Min 2216 PSI	A/B	2	S
MSA Firehawk	30 Min 2216 PSI	A	1	S
	Alum Flat Top*			
MSA Firehawk	30 Min 3000 PSI	A/B	2	S
MSA Firehawk	30 Min 4500 PSI	A/B	2	L
MSA Firehawk	45 Min 4500 PSI	A/B	2	S
MSA Firehawk	45 Min 4500 PSI	A/B	2	S
	Low Profile			
MSA Firehawk	60 Min 4500 PSI	A	2	S

<sup>\*</sup> Flat top cylinders require an additional Modified Locator Bumper, Model 1045-320-114 (see page 20).

#### **SCBA Reference Chart**

		Upper		
		Bracket	Bumper	Bumper
SCBA Brand, Model	AirCyl Type	Location	Location	Position
MSA Firehawk M-7	30 Min 2216 PSI	A/B	2	S
MSA Firehawk M-7	30 Min 2216 PSI	A	1	S
	Alum Flat Top*			
MSA Firehawk M-7	30 Min 3000 PSI	A/B	2	S
MSA Firehawk M-7	30 Min 4500 PSI	A/B	2	L
MSA Firehawk M-7	45 Min 4500 PSI	A/B	2	S
MSA Firehawk M-7	45 Min 4500 PSI	A/B	2	S
	Low Profile			
MSA Firehawk M-7	60 Min 4500 PSI	A	2	S
MSA Stealth	30 Min 2216 PSI	A/B	2	S
MSA Stealth	30 Min 2216 PSI	A	1	S
	Alum Flat Top*			
MSA Stealth	30 Min 3000 PSI	A/B	2	S
MSA Stealth	30 Min 4500 PSI	A/B	3	L
MSA Stealth	45 Min 4500 PSI	A/B	2	S
MSA Stealth	60 Min 4500 PSI	A	2	S
Scott AP-50	30 Min 2216 PSI	A	2	S
Scott AP-50	30 Min 2216 PSI	A	1	S
	Alum Flat Top*			
Scott AP-50	30 Min 4500 PSI	A/B	3	L
Scott AP-50	45 Min 4500 PSI	A	3	S
	Low Profile			
Scott AP-50	45 Min 4500 PSI	A/B	3	S
Scott AP-50	45 Min 5500 PSI	A/B	3	S
	w/o Prot Cover			
Scott AP-50	45 Min 5500 PSI	A	2	L
	w/Prot Cover			
Scott AP-50	60 Min 4500 PSI	A	2	S
Scott AP-50	75 Min 5500 PSI	A	2	S
Scott AP-75	30 Min 2216 PSI	A	2	S
Scott AP-75	30 Min 2216 PSI	A	1	S
	Alum Flat Top*			
Scott AP-75	30 Min 4500 PSI	A/B	3	L
Scott AP-75	30 Min 5500 PSI†	A/B	3	L
Scott AP-75	45 Min 4500 PSI	A/B	3	S
Scott AP-75	45 Min 4500 PSI	A	3	S
	Low Profile			
Scott AP-75	45 Min 5500 PSI	A/B	3	S
	w/o Prot. Cover			
Scott AP-75	45 Min 5500 PSI	A	2	L
	w/Prot. Cover			
Scott AP-75	60 Min 4500 PSI	A	2	S
Scott AP-75	75 Min 5500 PSI	A	2	S

<sup>\*</sup> Flat top cylinders require an additional Modified Locator Bumper, Model 1045-320-114 (see page 20).

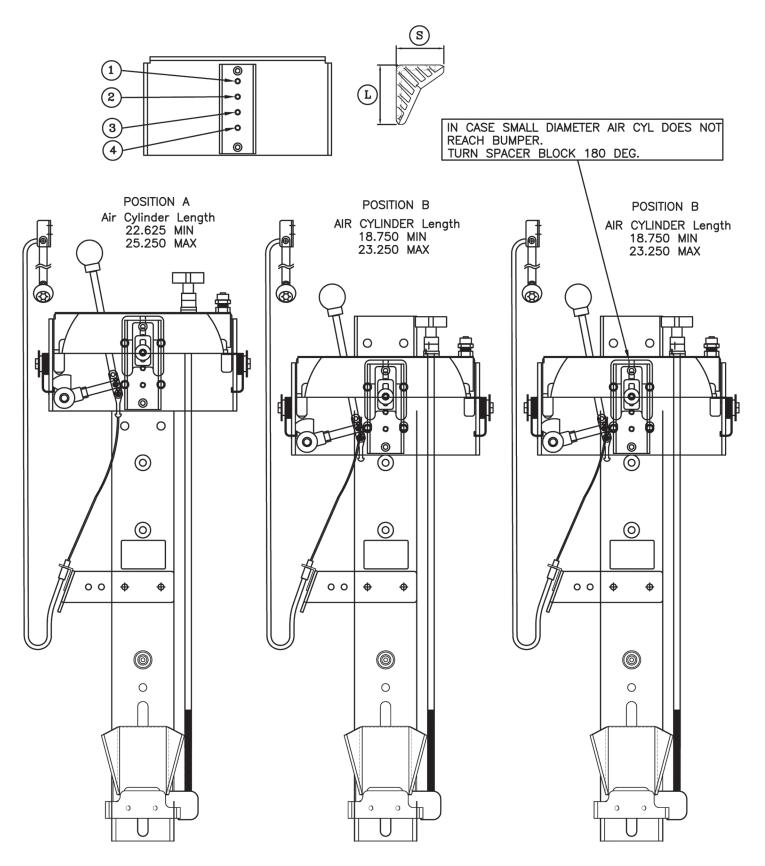
<sup>† 30</sup> Min 5500 PSI air cylinders require an additional Bumper Spacer Kit, Model 1045-320-912 (see page 20).

## **SCBA Reference Chart**

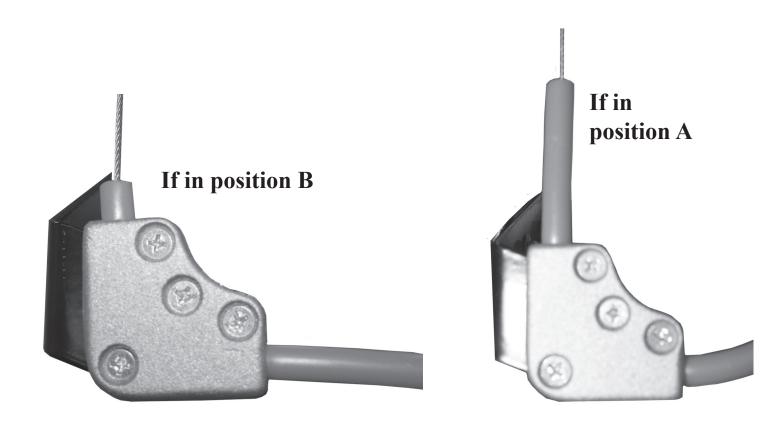
		Upper Bracket	Bumper	Bumper
SCBA Brand, Model	AirCyl Type	Location	Location	Position
Scott NXG2	30 Min 2216 PSI	A	2	S
Scott NXG2	30 Min 2216 PSI	A	1	S
3401111132	Alum Flat Top*		-	
Scott NXG2	30 Min 4500 PSI	A/B	3	L
Scott NXG2	45 Min 4500 PSI	A/B	3	S
Scott NXG2	45 Min 4500 PSI	A	3	S
	Low Profile			
Scott NXG2	45 Min 5500 PSI	A/B	3	S
	w/o Prot. Cover			
Scott NXG2	45 Min 5500 PSI	A	2	L
	w/Prot. Cover			
Scott NXG2	60 Min 4500 PSI	A	2	S
Scott NXG2	75 Min 5500 PSI	A	2	S
Scott NXG7	30 Min 2216 PSI	A	2	S
Scott NXG7	30 Min 2216 PSI	A	1	S
	Alum Flat Top*			
Scott NXG7	30 Min 4500 PSI	A/B	3	L
Scott NXG7	30 Min 5500 PSI†	A/B	3	L
Scott NXG7	45 Min 4500 PSI	A	3	S
	Low Profile			
Scott NXG7	45 Min 4500 PSI	A/B	3	S
Scott NXG7	45 Min 5500 PSI	A/B	3	S
	w/o Prot. Cover			
Scott NXG7	45 Min 5500 PSI	A	2	L
	w/Prot. Cover			
Scott NXG7	60 Min 4500 PSI	A	2	S
Scott NXG7	75 Min 5500 PSI	A	2	S
Survivair Panther	30 Min 2216 PSI	A/B	2	S
Survivair Panther	30 Min 4500 PSI	A/B	2	L
Survivair Panther	45 Min 4500 PSI	A	2	S
	Low Profile			
Survivair Panther	45 Min 4500 PSI	В	2	L
Survivair Panther	60 Min 4500 PSI	A	2	S
Survivair Warrior	30 Min 2216 PSI	A/B	2	S
Survivair Warrior	30 Min 4500 PSI	A	2	Ľ
Survivair Warrior	45 Min 4500 PSI	A/B	2	S
	Low Profile			
Survivair Warrior	45 Min 4500 PSI	A/B	2	S
Survivair Warrior	60 Min 4500 PSI	A	2	S

<sup>\*</sup> Flat top cylinders require an additional Modified Locator Bumper, Model 1045-320-114 (see page 20).

<sup>† 30</sup> Min 5500 PSI air cylinders require an additional Bumper Spacer Kit, Model 1045-320-912 (see page 20).

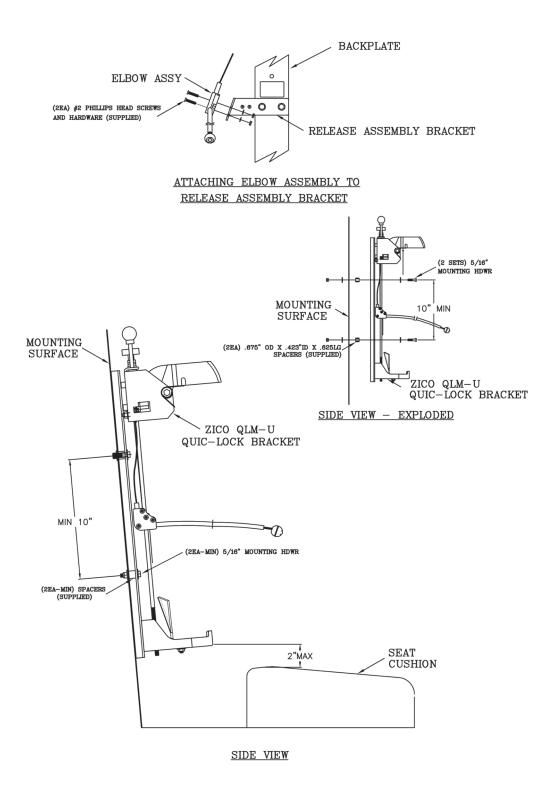


- 1) AIR CYLINDER SHOULD BE FITTED TO BRACKET AS PER INSTRUCTION.
- 2) MOUNT BACK PLATE TO SEAT SO FOOT PLATE IS LEVEL OR CLOSE AS POSSIBLE TO TOP OF SEAT CUSHION.



## **Mounting Requirements - QUIC-LOCK**

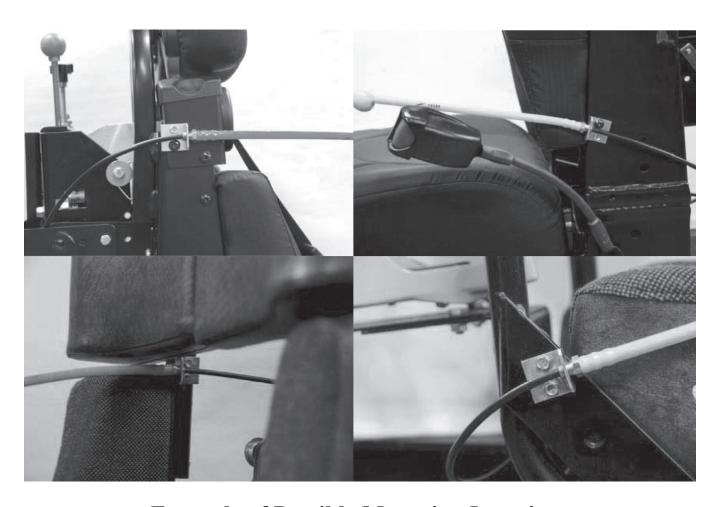
- Minimum of (2) mounting points at least 10" apart using 5/16" O.D. screws.
- Spacer required between Quic-Lock Backplate and mounting surface (provided).
- Mounting surface must be able to withstand a pull-out force of 450 lbs.



Page 18

## **Mounting Instructions - Optional Pull Release**

- 1. Position the Pull Release Bracket, complete with yellow tube and release cable, in the desired location against the Seat Frame.
- 2. Using a #19 drill bit (.166), drill two (2) holes in the seat frame. Thicker seat frames may require a larger bit size, #18 (.169).
- 3. Attach the Pull Release Bracket to the seat frame using two (2) 10-32 x 3/8" thread forming screws (supplied). Be sure to carefully run the cable and conduit around the seat and bracket without causing kinks in the cable or interference with the bracket's functions.



**Example of Possible Mounting Locations** 

#### **Locator Bumper Spacer Kit, Model 1045-320-912**

For use with 30 min. 5500 PSI air cylinders.

Stacks between standard Locator Bumper Spacer and backplate to better accommodate the 5.5 cylinder's thinner shape and achieve maximum locking efficiency.

Note: 45 min. and larger 5.5 cylinders do not require this kit.





#### Spacer Installation Instructions:

- 1. Stack the original spacer on top of your new kit spacer (see left).
- 2. Set these spacers, together, against the Upper Bracket assembly of your SCBA, positioned for your 5.5 cylinder. Secure using the longer Phillips head screws included with this kit.
- 3. Continue with Step 9 of SCBA bracket adjustments.

#### **Modified Locator Bumper for Flat-Top Cylinders, Model 1045-320-112**

For use with flat-top cylinders. Replaces Standard Locator Bumper component to better accommodate the flat-top cylinder shape and achieve maximum locking efficiency.



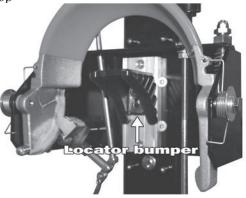
## **Operating Instructions - QUIC-LOCK - Model QLM-U**

These instructions should only be used after the QLM-U has been adjusted for the SCBA that is being used.

1. Place the valve of the SCBA in the Footplate. If the valve does not sit properly in the Footplate, the bracket will not lock safely.



2. Place the air cylinder against the Cylinder Locator Bumper and pull down the top clamp.



3. While applying downward pressure to the Top Clamp, pull up on the red Lock Lever Knob. When the knob is completely up, the SCBA is secured.



Ziamatic Corp.

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