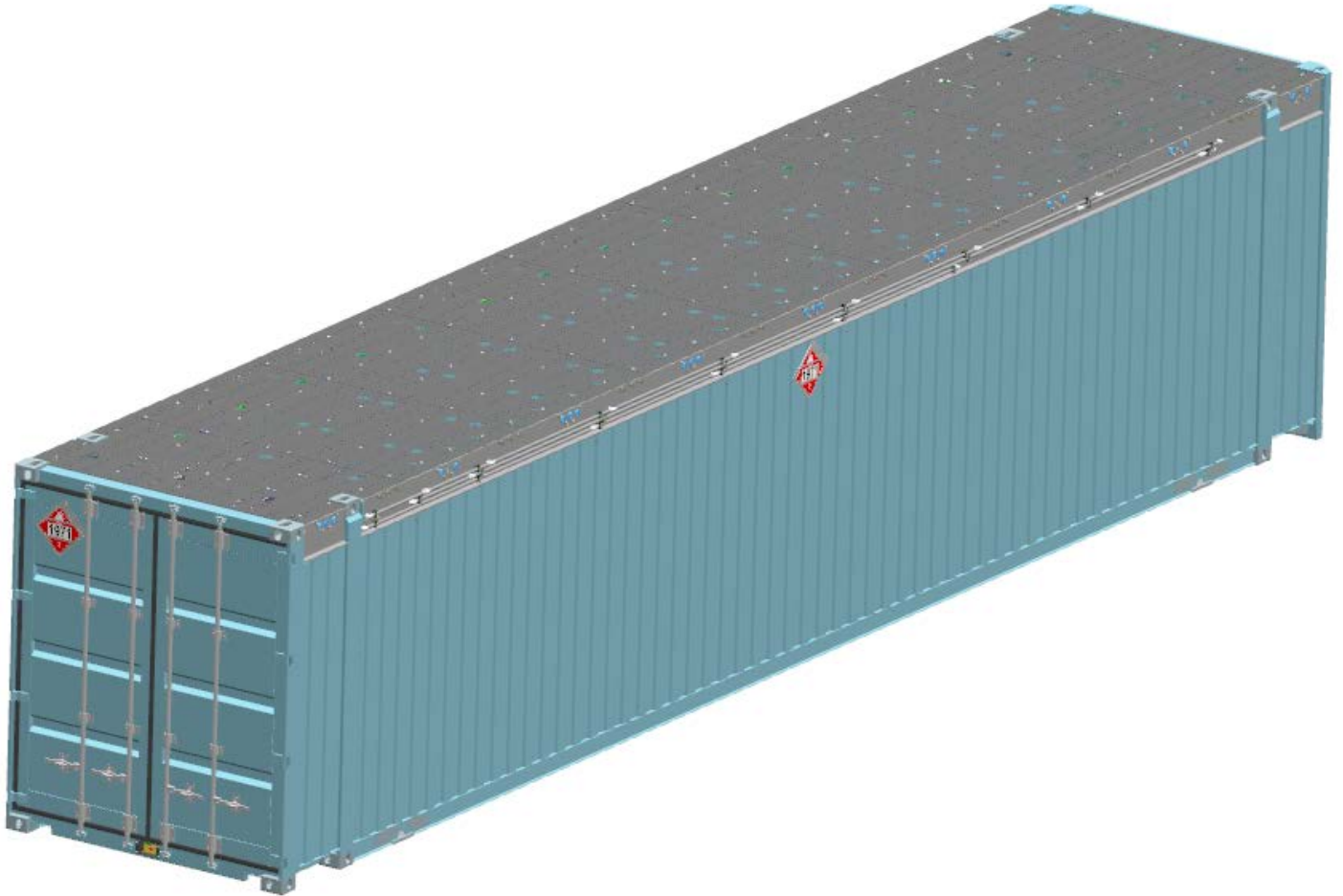


QUANTUM
FUEL SYSTEMS



Virtual Pipeline FSM Parts Manual

Preface

Proper installation, service, and repair are important to the safety of the service technician and the safe, reliable operation of all motor vehicles. If part replacement is necessary, the part must be replaced with one of the same part number or with an equivalent part. Do not use replacement parts of lesser quality.

Accordingly, anyone who intends to use a replacement part which is not in this manual, must first determine neither his safety nor the safe operation of the vehicle will be jeopardized by the replacement part selected.

If you need further information or have any questions, please contact:

Quantum Fuel Systems LLC.
25242 Arctic Ocean Drive
Lake Forest, CA 92630
USA

Tel: 949.930.3400

Fax: 949.930.3401

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How to Use This Manual

This parts manual contains information specific to the Quantum Virtual Pipeline (VP) trailers. It does not explain everything you need to know about servicing your equipment.

Ordering Parts

To purchase repair or replacement parts, use the online Parts Request Form. Retail parts pricing and the Parts Request Form are accessible at www.qtww.com or send a request to QTParts@qtww.com.

Technical Assistance

For questions regarding the installation, maintenance, and service for the CNG Fuel Storage Module, contact Quantum Technical Assistance at 800.816.8691.

VP Trailer Identification

All of the VP Trailers will have an identification label on the inside of the left rear door. Use the table below to determine the configuration and features of your particular model.

Virtual Pipeline Trailer Model Numbers:

VP System Part Number	VP Model Number	Number of Cylinders	Working pressure PSI (bar)	Product description
118195	VP-650	51	5000	<ul style="list-style-type: none"> • All Stainless steel cylinder bosses •
118388	VP-Lite	45	3600	<ul style="list-style-type: none"> • 107" cylinders have aluminum bosses •
118636	VP-Lite	45	3600	<ul style="list-style-type: none"> •
118684	VP-Lite	45	3600	<ul style="list-style-type: none"> •
118796	VP-Lite	51	3600	<ul style="list-style-type: none"> • Onboard gas used for actuation supply.
118935	VP-Lite	51	3600	<ul style="list-style-type: none"> • All Aluminum cylinder bosses
119111	VP-Lite	45	3600	<ul style="list-style-type: none"> •

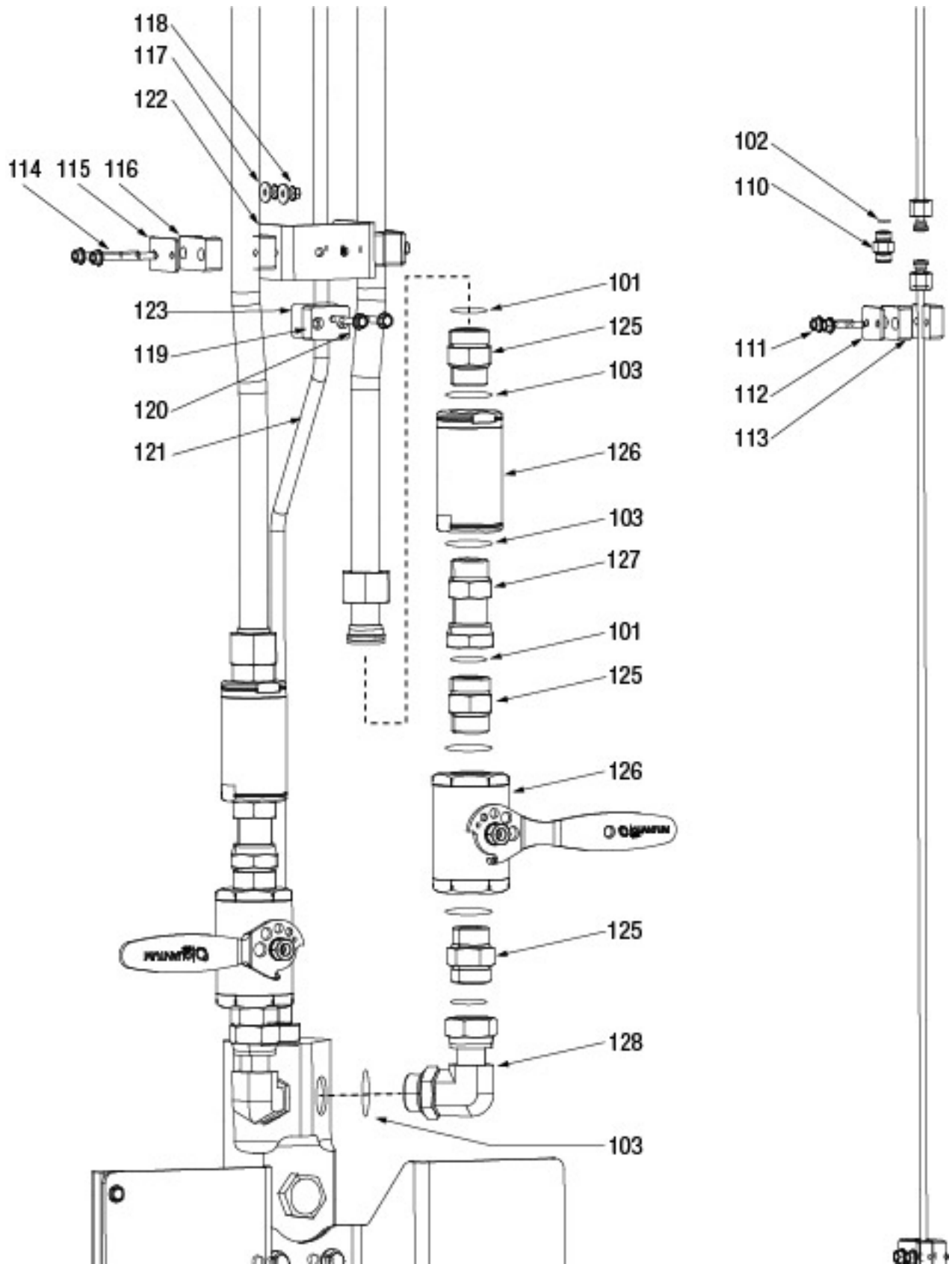
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Virtual Pipeline Trailer

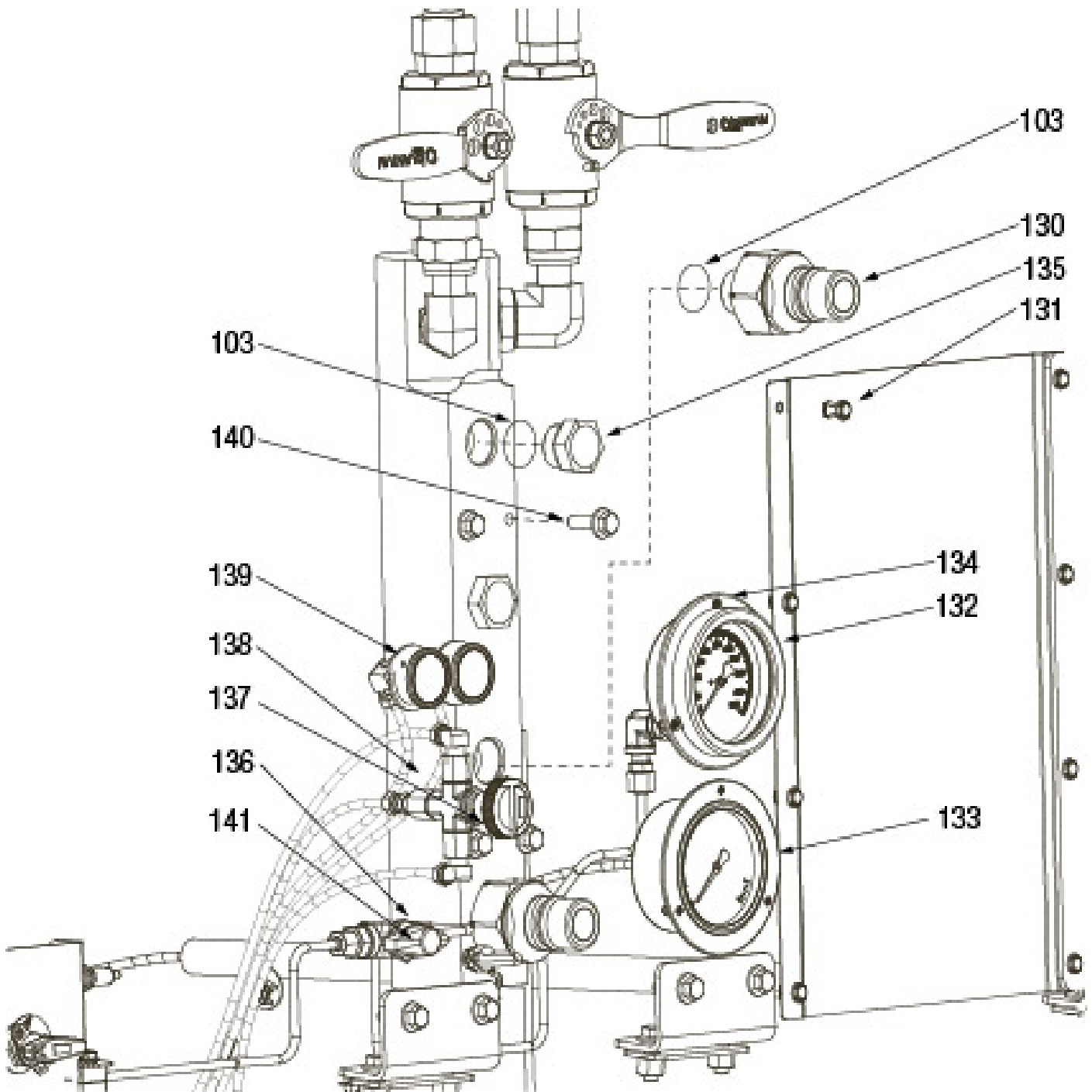
VP Trailer User Interface



VP Trailer User Interface

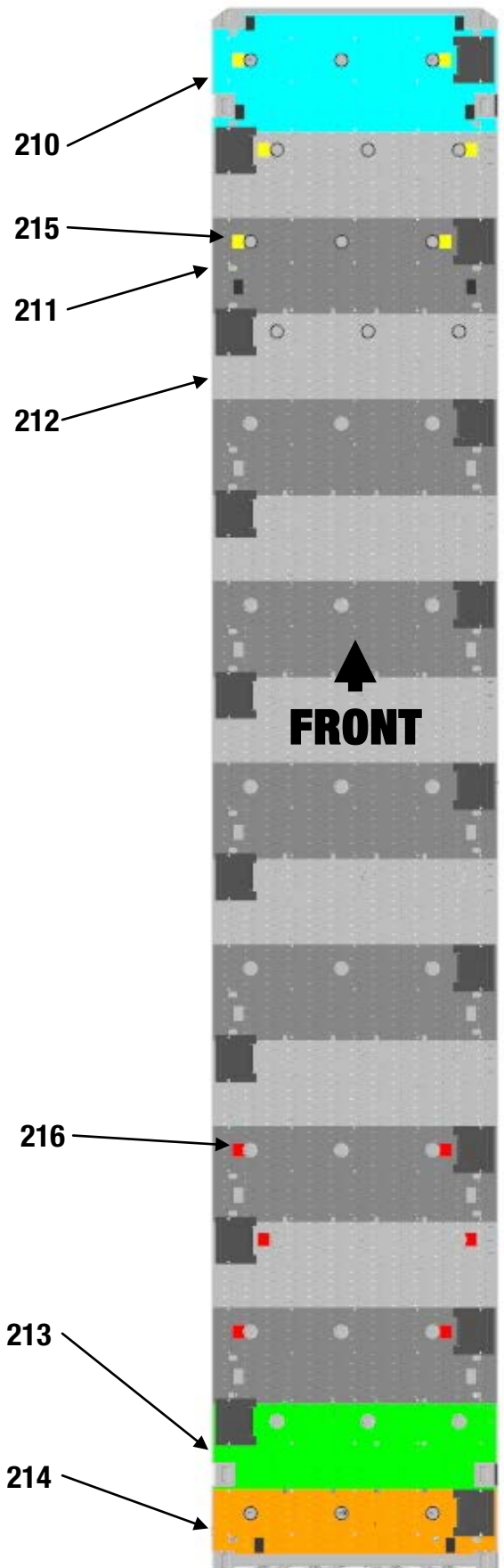
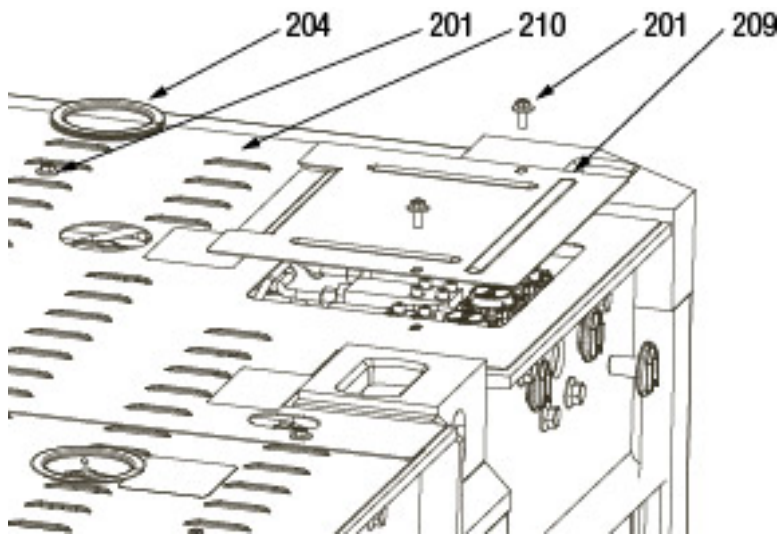
Item	Qty	Quantum Part No.	Description
101	6	117997-021	O-RING-ORFS-16, LOW TEMP
102	2	117997-011	O-RING-ORFS-4, LOW TEMP
103	10	117997-916	O-RING-SAE-16, LOW TEMP
110	1	114061-001	FITTING, UNION, ORFS -4
111	2	S1-20370-018	SCREW, HEX HEAD FLANGE M6 X 35
112	1	118686-001	PLATE- SUPPORT, 1/4" PIPE MOUNT
113	2	118025-001	INSULATOR- SUPPORT, 1/4" PIPE MOUNT
114	4	S1-20370-021	SCREW, HEX HEAD FLANGE M6 X1 60 LG
115	4	118686-003	PLATE- SUPPORT, 1" PIPE MOUNT
116	2	118025-012	INSULATOR- SUPPORT, 1" PIPE MOUNT
117	6	109657-005	WASHER- FLAT, USS, M6
118	6	N1-20300-002	NUT, CRIMP LOCK, HEX FLANGE, M6
119	2	118025-004	INSULATOR- SUPPORT, 1/2" PIPE MOUNT
120	2	S1-20370-020	SCREW, HEX HEAD FLANGE M6X1 50 LG
121	1	119073	PIPE ASM- PRV INLET, NPT PORT
			PIPE ASM- PRV INLET, SAE PORT
122	1	118942	BRACKET- SUPPORT, PRV FUEL LINE
123	1	118686-002	PLATE- SUPPORT, 1/2" PIPE MOUNT
125	4	118226-014	FITTING, UNION SAE TO ORFS
126	1	117938-001	VALVE- MANUAL SHUT OFF, 1", RH
	1	117938-002	VALVE- MANUAL SHUT OFF, 1", LH
128	2	118029-016	FITTING ELBOW ST THEAD SWIVEL

VP Trailer User Interface (Cont)



VP Trailer Covers

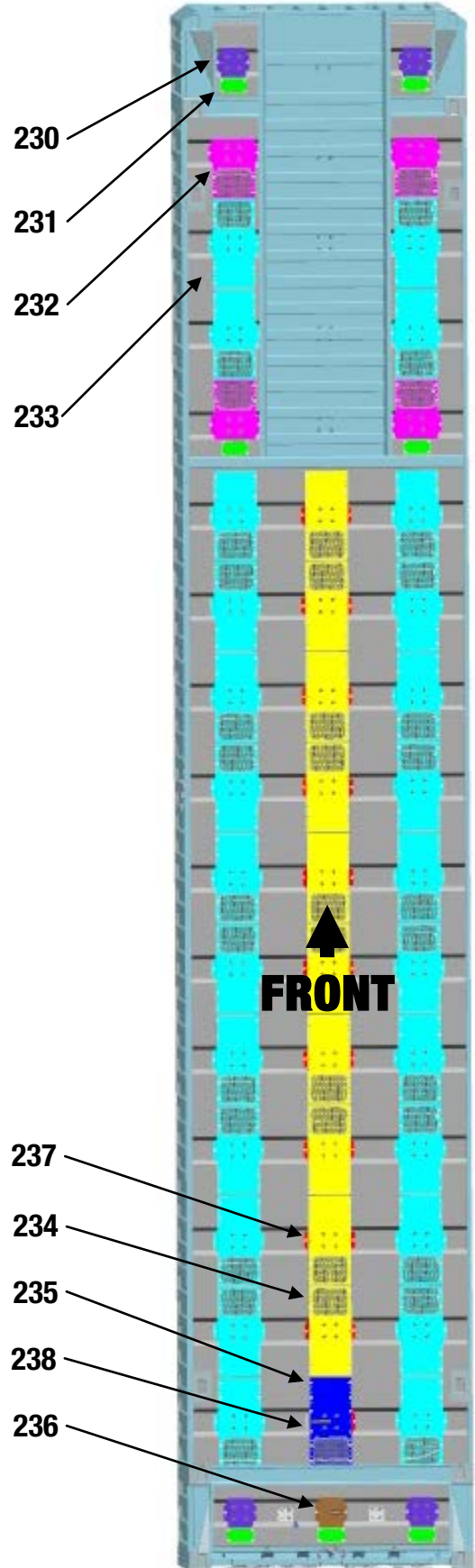
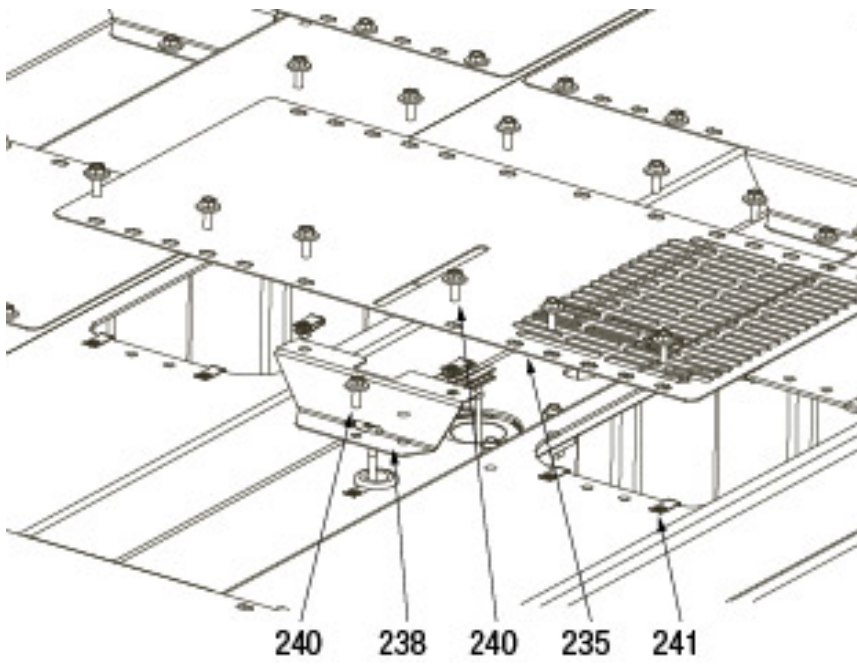
Roof Covers



VP Trailer Covers (Cont)

Item	Qty	Quantum Part No.	Description
201	654	S1-20381-008	SCREW, HEX HEAD, CONICAL WASH, M8 X 25
204	51	119119-001	EDGING- PANEL, 13.25"
209	17	118852	PANEL- INSPECTION ACCESS, VP
210	1	118847	PANEL- ROOF, ROW 1, W/ INSP ACCESS, SILVER
		118492	PANEL- ROOF, ROW 1, W/O INSP ACCESS, BLACK
211	7	118849	PANEL- ROOF, ROWS 3-15 ODD, W/ INSP ACCESS, SILVER
		117634	PANEL- ROOF, ROW 2-15, W/O INSP ACCESS, BLACK
212	7	118848	PANEL- ROOF, ROWS 2-14 EVEN, W/ INSP ACCESS, SILVER
		117634	PANEL- ROOF, ROW 2-15, W/O INSP ACCESS, BLACK
213	1	118850	PANEL- ROOF, ROW 16, W/ INSP ACCESS, SILVER
		118052	PANEL- ROOF, ROW 16, W/O INSP ACCESS, BLACK
214	1	119045	PANEL- ROOF, ROW 17, W/ INSP ACCESS, SILVER
		118051	PANEL- ROOF, ROW 17, W/O INSP ACCESS, BLACK
215	6	119076	LABEL- LOAD ADJUST, FRONT
216	6	119078	LABEL- LOAD ADJUST, REAR

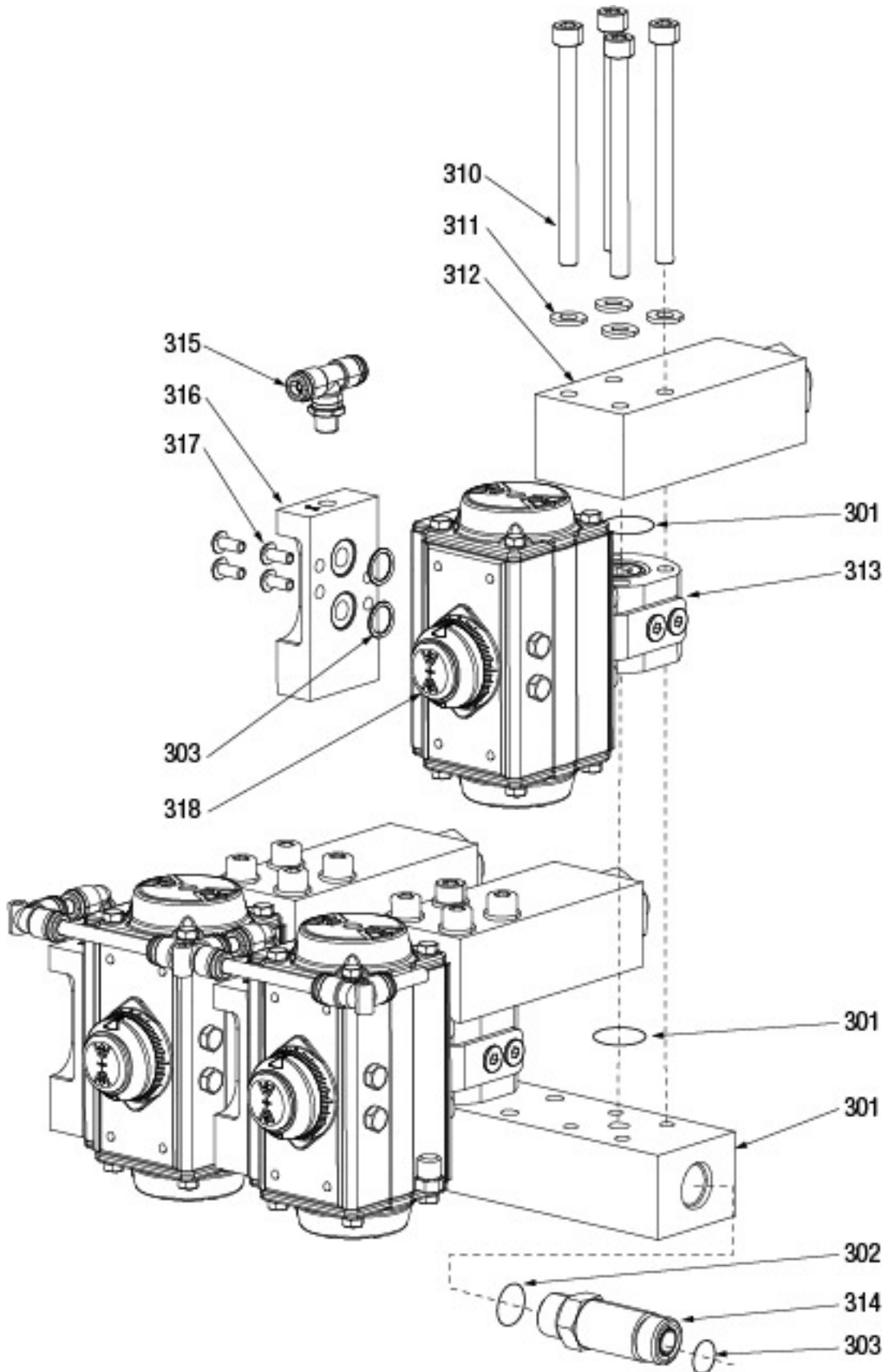
VP Trailer Covers (Cont)
Bottom Covers



VP Trailer Covers (Cont)**Bottom Covers**

Item	Qty	Quantum Part No.	Description
230	4	118333	SHIELD- HEAT, OUTER, END
231	7	118332	PANEL- CLOSE OUT, END
232	4	118328	SHIELD- HEAT, OUTER, ROW 2
233	26	118304	SHIELD- HEAT, OUTER
234	10	118530	SHIELD- HEAT, CENTER
235	1	118743	SHIELD- HEAT, CENTER, ROW 16
236	1	118742	SHIELD- HEAT, CENTER, ROW 17
237	21	118334	BRACKET- CENTER HEAT SHIELD SUPPORT
238	1	118744	BRACKET- ROW 16, CENTER HEAT SHLD
240	654	S1-20381-008	SCREW, HEX HEAD, CONICAL WASH, M8 X 25
241	476	N1-20301-003	NUT, U-SHAPE, M8, LONG

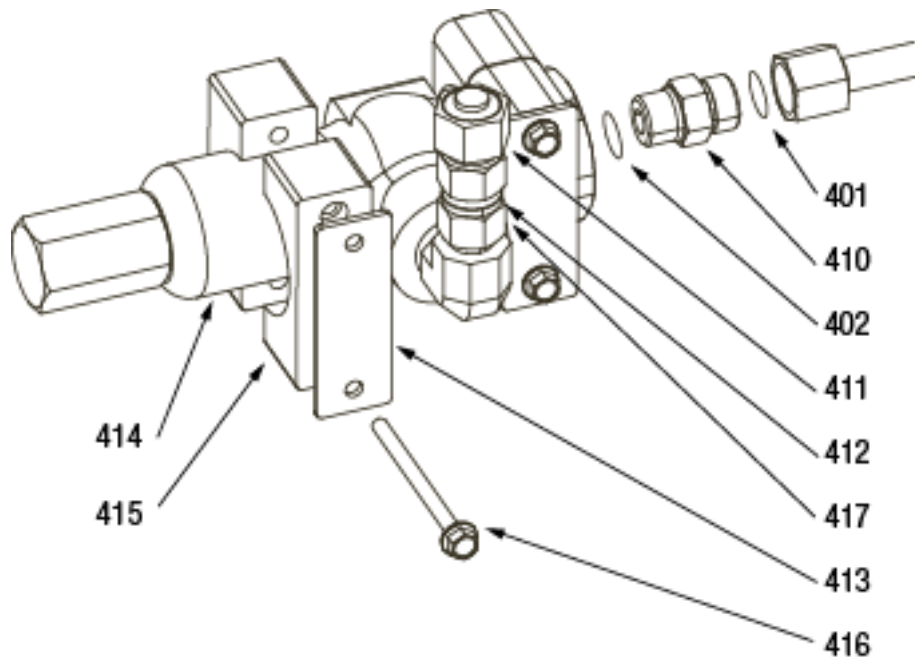
VP Trailer Actuation Control



VP Trailer Actuation Control

Item	Qty	Quantum Part No.	Description
301		117997-022	O-RING-PNEU VLV, LOW TEMP
302		117997-908	O-RING-SAE-8, LOW TEMP
303		117997-014	O-RING-ORFS-8, LOW TEMP
310		118285-001	BOLT- SOCKET HEAD, M8 X 100
311		118286-003	WASHER- USS FLAT, M8
312		117996	VALVE ASM- CHECK, OUTLET
313		118123	VALVE ASM- CYLINDER ISOLATION, PNEUMATIC
314		118124-008	FITTING- OUTLET, SAE TO ORFS, -8
315		118206-001	FITTING- TEE, NPT TO PTC
316		117971	MANIFOLD, CYLINDER ISOLATION VALVE
317		118363-001	SCREW- CYL ISOLATION VLV MANIFOLD
318		118074	INDICATOR - VALVE POISITION, VP

VP Pressure and Temperature Relief



VP Pressure and Temperature Relief (Cont)

Item	Qty	Quantum Part No.	Description
401	1	117997-014	O-RING-ORFS-8, LOW TEMP
402	1	117997-908	O-RING-SAE-8, LOW TEMP
410	1	118226-003	FITTING- UNION, SAE TO ORFS, -8
411	1	116941	CAP- VENT OPENING, 1/2"
412	2	115776-003	NUT AND FERRULE SET, 1/2"
413	2	118686-006	PLATE- SUPPORT, PRV ASM MOUNT
			PLATE- SUPPORT, PRV ASM MOUNT, SPECIAL
414	1	119071	PRV ASM- FILL, NPT
			PRV ASM- FILL, SAE
415	4	118025-019	INSULATOR- SUPPORT, PRV ASM MOUNT
416	4	S1-20370-024	BOLT- HEX FLANGE, M6 X 80
417	1	103976-002	FITTING, PORT CONNECTOR 1/2"

Coming Soon

Fuel Storage Support Brackets

Coming Soon

Fuel Storage Support Brackets (Cont)

Item	Qty	Quantum	Description
500			

VP Container Labels

Coming Soon

VP Container Labels (Cont)

Item	Qty	Quantum Part No.	Description
600			

Accessories and Maintenance Parts

Item	Qty	Quantum Part No.	Description
900	1	119127	O-RING KIT, VP TRAILERS

Revision History

Revision A – 2/9/18 Initial Release.

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