



Shop Order

Cape Breton Regional Municipality  
 320 Esplande, Suit 104  
 Sydney, NS B1P 7B9

Custom Top Mount Pumper

**Exp. Date:** 11/04/2020  
**Quote No:** CBRM, Spartan Pumper-0016  
**Job/Order No:** 21876  
**BODY:** 00-10-15 Metalfab Pumper - ULC 05/13

07/14/2022

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PART NO	S	DESCRIPTION	QTY	ID
		<b>== Metalfab Pumper - ULC 05/13 - 0.000 ==</b>	<b>1</b>	<b>MTL</b>
	<b>S</b>	<b>Change Order D</b>	<b>1</b>	<b>MTL</b>
00-05-0010		Dealer - Metalfab	1	MTL
00-10-1500		Metalfab Pumper	1	MTL
00-20-1000		Company Profile	1	MTL
00-20-1500		Standard Body Warranty	1	MTL
00-20-1550		Metalfab Limited Ten (10) Year Paint and Corrosion Warranty	1	MTL
<b>00-20-1700</b>		<b>Hale Pump Warranty - 5 years</b>	<b>1</b>	<b>MTL</b>
00-20-1800		Polypropylene Tank Lifetime Warranty	1	MTL
<b>00-20-2100</b>	<b>S</b>	<b>Plant Inspection Visit - Pre-delivery inspection for two people</b>	<b>1</b>	<b>MTL</b>
00-20-3500		Certification for Fusion Welding of Aluminum	1	MTL
<b>00-20-4000</b>	<b>S</b>	<b>Quality System registered to ISO 9001:2015</b>	<b>1</b>	<b>MTL</b>
00-20-4500		Fire Apparatus Manufacturers' Association Membership	1	MTL
		<b>GENERAL INFORMATION</b>	<b>1</b>	<b>MTL</b>
10-11-0000		Intent E	1	MTL
<b>10-11-0110</b>		<b>Vehicle data recorder included with chassis</b>	<b>1</b>	<b>MTL</b>
<b>10-11-1103</b>	<b>U</b>	<b>ULC S515-13 and NFPA 1901-2016 Compliance</b>	<b>1</b>	
10-11-1500		> ULC Testing - Pumper - Imperial units of measure	1	MTL
10-11-2100		Maximum length not specified E	1	MTL
10-11-2200		Maximum height not specified E	1	MTL
<b>10-11-2400</b>		<b>Overall length is 30' or more</b>	<b>1</b>	<b>MTL</b>
10-11-2500		General Construction	1	MTL
10-11-3000		Manuals - two copies	1	MTL
<b>10-11-3600</b>	<b>S</b>	<b>&gt; Delivery - FOB Fire Department</b>	<b>1</b>	<b>MTL</b>
		Deliver to 850 Grand Lake Rd, Sydney unless otherwise specified		
		Delivery to be 12-14 months from signed order		
<b>10-11-4000</b>	<b>S</b>	<b>Payment Terms - Chassis Net 10 days, Balance COD</b>	<b>1</b>	<b>MTL</b>
<b>10-20-1400</b>	<b>S</b>	<b>&gt; Hose capacity exceeding ULC/NFPA requirements</b>	<b>1</b>	<b>MTL</b>
		The hosebed will be setup to carry 1000' of 5" and 400' of 2.5" as discussed at the pre-construction meeting of 02.03.2021		
		Engineering to calculate the additional weight required to be added to the ULC test weights:		

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10-20-2000		Equipment carrying capacity - standard ULC Pumper	1	MTL
		<b>CHASSIS INFORMATION</b>	1	MTL
20-11-1002	U	<b>Chassis supplied by Metalfab - Spartan MetroStar MFD with 10" raised roof</b>	1	
		47,000 lb GVWR 20,000 lb front axle 27,000 lb rear axle		
		Cummins L9 450 hp @ 2100 rpm 2200 governed rpm		
		1250 ft-lb torque @ 1200 rpm		
		Allison 3000 EVS automatic transmission		
		320 Amp alternator		
		1710 Drive line series		
		50 US gallon fuel tank		
		Speed to be 68 MPH to meet NFPA and brake lights will activate with exhaust brake to meet NFPA - as per part #1731-005		
		Pump jack shaft location dimensions to be 115" as provided from Engineering		
		Hose well in front bumper extension required capacity for 200' x 1-3/4" hose and nozzle - full size bumper compartment 2211-035		
		Two tone paint to match existing fleet - white over red		
		Paint break line will be Spartan standard Classic		
		Paint code for White - FBCH 925849		
		Paint code for Red - FBCH 926234		
		Approved paint samples were returned by DC Chris March by mail on 06.01.2021. Paint samples are in truck build binder and approval sent to Spartan		
		Code 1707-130 for FRC InControl wire harness.		
		WB - 218"		
		CA - 164"		
		OH - 60"		
		Helmet mounting locations to be four (4) on back wall of chassis and two (2) shipped loose as discussed at the pre-construction meeting of 02.03.2021		
		Confirmed Siren, air horn and Q2B activation with Customer (re: foot switch controls and location, push button(s), etc.) at the pre-construction meeting of 02.03.2021		
		Confirmed panel layout (rocker switch assignments, siren head location, etc.) in cab with Customer - ref code 5020-002 to allow room on the right side of the center dash for radio installation. As discussed at the pre-construction meeting of 02.03.2021		
		Added the following at the pre-construction meeting of 02.03.2021		
		Zip clean seats (1237-009) with spare seat covers		
		SCBA mask pouches at officer and rear seats		
		Secureall SCBA brackets		
		Right hand camera (5727-002)		
		Active Air Purification (1640-007)		
20-11-1500		2013 Emission chassis modifications	1	MTL
20-11-1700	S	<b>Chassis Motor Vehicle Inspection required - NB</b>	1	MTL
		A New Brunswick Motor Vehicle Inspection will be provided before the unit leaves Metalfab.		
20-21-0500		<b>Fluid capacity plate</b>	1	MTL
20-21-0600		<b>Pumping test plate</b>	1	MTL

<b>PART NO</b>	<b>S</b>	<b>DESCRIPTION</b>	<b>QTY</b>	<b>ID</b>
20-21-1040	S	<b>Maximum riders sign - 6 persons - provided with Spartan Chassis</b>	1	MTL
20-21-1510	S	<b>Seat belt warning labels - 4 door chassis - provided with Spartan Chassis</b>	1	MTL
20-21-1520	S	<b>Helmet warning label - do not wear helmet - provided with Spartan Chassis</b>	1	MTL
20-21-1560	S	<b>LED Tire Pressure Indicators - Single Axle - provided with Spartan Chassis</b>	1	MTL
20-21-1600		<b>Apparatus Information Label</b> An information label is provided in the chassis cab, visible to the driver, stating: "When manufactured, this vehicle was: ** m high ** m long ** kg GVW Changes in height since the apparatus was manufactured shall be noted on this plate by the Fire Department"	1	MTL
20-21-3500		Rear step warning label	1	MTL
20-21-3810	S	<b>Front mudflaps provided with chassis</b>	1	MTL
20-21-4000		Rear mudflaps - Metalfab Logo	1	MTL
20-31-0100		Fuel tank or step covers not required	1	MTL
20-31-0200		Fuel fill label -Ultra Low Sulfur Diesel only	1	MTL
20-31-1900	S	<b>Chassis cab painted by chassis OEM</b> Approved paint samples were returned by DC Chris March by mail on 06.01.2021. Paint samples are in truck build binder	1	MTL
20-41-0900		<b>Auxiliary braking system disabled when pumping</b>	1	MTL
20-41-1100		Transmission programming - Allison WT	1	MTL
20-41-1500	S	<b>Extend exhaust pipe - RS front of rear wheels w/ Nederman provision</b> Engineering to specify exhaust pipe material as required by the chassis manufacturer. Engineering to sign off on the exhaust configuration to make sure it meets the chassis manufacturer's emission specifications. The exhaust will have 2.5" space between the tip and the body to accept a Nederman ventilation connection. The spacing of the Nederman magnet will be 29.5" from the bottom of the exhaust to the bottom of the magnet. See reference pictures in F:/Data/Jacques/Current Projects/CBRM Custom Pumper/Pictures As discussed at the pre-construction meeting of 02.03.2021	1	MTL
20-41-1900		Battery boost terminals with chassis E	1	MTL
20-41-2000		Chassis batteries remain in OEM location	1	MTL
20-41-2561	U	<b>Fuel Fill at LS rear fender well with SCBA style door</b>	1	MTL
20-41-2600		Chassis fuel tank remains in OEM location	1	MTL
20-41-5000		Rear Tow Hooks - under body *** Flat bar tow hooks under rear step (2)	1	MTL
20-51-0700		<b>Master Battery Disconnect included with chassis</b>	1	MTL

<b>PART NO</b>	<b>S</b>	<b>DESCRIPTION</b>	<b>QTY</b>	<b>ID</b>
20-51-2561	U	<b>Back up alarm included with chassis</b>	1	
20-51-3100	S	<b>Air inlet - none required</b> The air inlet on the chassis has been removed where the chassis has a Kussmaul air compressor. As discussed at the pre-construction meeting of 02.03.2021	1	MTL
20-51-3400		Protection valve installed for air operated accessories	1	MTL
20-51-6200	S	> <b>120 volt 20 A shore line connection</b> Standard 5-20R duplex receptacle in body, not fused There will be two (2) ways to power the outlets in 51-31-3020 - from the shoreline at the fire hall or from the inverter (50-31-1700) through the automatic transfer switch (51-31-3100).	2	MTL
20-51-7101	S	<b>Electric System Management - provided with Spartan Chassis</b>	1	MTL
20-51-8505		<b>Engine compartment light included with chassis E</b>	1	MTL
20-51-9001	S	<b>Air horns in bumper - provided with Spartan chassis</b> The horns will be controlled by the steering wheel horn button and a push button on the chassis dash	1	MTL
20-52-3500	S	> <b>Chassis steering wheel lined up by Metalfab</b>	1	MTL
20-52-4003	U	<b>Installation of rear view camera on back of body when supplied by Spartan</b>	1	
20-60-0400		Chassis wheelbase does not change	1	MTL
20-90-1810	U	<b>Extend air tank drain / moisture ejector cables to rubrail and tag / label</b>	1	
		<b>PUMP AND PLUMBING</b>	1	MTL
30-11-8100		<b>Hale QMAX 1250 IGPM single stage pump</b>	1	MTL
30-12-3500		<b>Mechanical seal for Hale QMAX/QTWO pumps</b>	1	MTL
30-15-0102		<b>Plumbing - Hale manifold pump TM SS E</b>	1	MTL
30-20-1000		<b>Valves and controls - top mount panel</b>	1	MTL
30-20-1003		<b>Elkhart valves specified</b>	1	MTL
30-20-1600		<b>Piping stainless steel - general</b>	1	MTL
30-20-1700	S	<b>1-1/2" thread specifications - NPSH</b>	1	MTL
30-20-1800	S	<b>2-1/2" thread specifications - NSZ1</b>	1	MTL
30-20-2000		<b>Piping hydrostatic test</b>	1	MTL
30-20-2500		<b>Anodes in suction and discharge piping</b> Install one anode on discharge side of pump, one anode on suction side of pump - do not use teflon tape or thread sealant. Paint flange silver and mask brass anode before painting for visibility.	1	MTL
30-21-5590		<b>Tank to Pump TM SS 3" w/ check valve manifold pump</b>	1	MTL
30-22-0530		<b>Tank Fill valve 2" TM SS</b>	1	MTL
30-31-4010	S	<b>Suction - 6" each side manifold pump</b> Install adapters 80-99-10AA 6" NHF x 5" Storz with 5" Storz blind caps on LS and RS inlets.	1	MTL
30-31-7200		> <b>Hale master intake suction valve - electric control</b> The left side and right side 6" inlets will be gated and will be ordered with the pump. Electric controls will be located on the transverse pump operators panel.	2	MTL

<b>PART NO</b>	<b>S</b>	<b>DESCRIPTION</b>	<b>QTY</b>	<b>ID</b>
		The manual over ride controls will be located on side panels adjacent to the inlet.		
30-32-8530	S	Suction - 2-1/2" left side SS, bleeder, TM control, Hale manifold pump	1	MTL
30-32-9030	S	Suction - 2-1/2" right side SS, bleeder, TM control, Hale manifold pump	1	MTL
30-40-3010	S	5" right discharge SS, bleeder, plumbed 4", handwheel, Hale manifold pump 5" Storz connection	1	MTL
30-41-2030		2-1/2" RS discharge TM SS, bleeder, Hale manifold pump	1	MTL
30-41-2530		2-1/2" LS discharge TM SS, bleeder, Hale manifold pump	2	MTL
30-43-1530		2-1/2" rear discharge TM SS, plumbed 2-1/2", bleeder Right side	1	MTL
30-44-1030	S	> 1-1/2" front trash line TM SS, bleeder, plumbed 2", hosewell Capacity for 200' x 1-3/4" hose in hosewell. The connection swivel will be above the front bumper gravel shield	1	MTL
30-44-3530	S	1-1/2" crosslay TM SS, *** plumbed 2-1/2" *** , bleeder Capacity in each lay for 200' x 1-3/4" hose and nozzle. The crosslay area will be set for dual lays of 1.75" as discussed at the pre-construction meeting of 02.03.2021 Stainless steel rollers are installed at each end of the hose bed. 2-1/2" thread to be Customer thread - part # 1501247 Will require a 2-1/2" female Customer thread x 1-1/2" male NPSH adapter as well. Part # 80-99-20AA / 1501296	2	MTL
30-44-6530	S	Piping for monitor TM SS, plumbed 3", bleeder Piping centered in area behind transverse panel for the 80-16-0500 Akron 3423 monitor. As discussed at the pre-construction meeting of 02.03.2021	1	MTL
30-51-0500	S	Pump shift-Midship air - supplied with Spartan chassis ***Includes "Pump Engaged" and "OK to Pump" indicator lights in cab. ***Includes "Throttle Ready" indicator light on Pump operating panel. Ordered with Spartan (5013-032) - customer advised that preferred location is near the transmission shift. As discussed at pre-construction meeting of 02.03.2021	1	MTL
30-51-0700		Pump Gearbox mounted manual over ride for pump shift E	1	MTL
30-51-6800	S	FRC InControl Governor/Throttle engine display with throttle knob The governor will be an FRC InControl 400 as requested at the pre-construction meeting of 02.03.2021	1	MTL

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<b>30-51-7003</b>	<b>U</b>	<b>Suction side relief V/V, manifold pump</b> One for left side MIV One for right side MIV	<b>2</b>	
<b>30-51-7716</b>	<b>S</b>	<b>Trident Automatic Air Primer 3 barrel 3 location</b> The primer will change to the Automatic Trident Primer as requested by John Digou at the final inspection of 07.12.2022 Location: 1. Pump 2. Left side pre-prime 3. Right side pre-prime	<b>1</b>	<b>MTL</b>
<b>30-51-8100</b>		<b>Heat exchanger included with chassis</b>	<b>1</b>	<b>MTL</b>
<b>30-52-1000</b>		Master drain V/V, 12 port	<b>1</b>	<b>MTL</b>
<b>30-52-2000</b>		<b>Drain valve for foam system header</b>	<b>1</b>	<b>MTL</b>
<b>30-52-5515</b>	<b>U</b>	<b>Foam system-Hypro FoamPro 2001 Single Tank</b> Foam System is plumbed to the front trashline (30-44-1030) and the two 2-1/2" crosslays (30-44-3530)	<b>1</b>	
<b>30-52-9100</b>		<b>Foam concentrate label at foam tank fill</b>	<b>1</b>	<b>MTL</b>
<b>30-52-9200</b>		<b>Foam System Instruction Plates</b>	<b>1</b>	<b>MTL</b>
<b>30-52-9400</b>		<b>NFPA Foam System certification test</b>	<b>1</b>	<b>MTL</b>
		<b>WATER AND FOAM TANKS</b>	<b>1</b>	<b>MTL</b>
<b>40-11-2100</b>		Polypropylene water tank (Imperial gallons)	<b>1</b>	<b>MTL</b>
<b>40-11-2200</b>		Water tank capacity certification (tank manufacturer)	<b>1</b>	<b>MTL</b>
<b>40-11-4500</b>		<b>Tank capacity 800 Imperial Gallons</b>	<b>1</b>	<b>MTL</b>
<b>40-12-4500</b>		<b>Foam cell - 20 Imperial gallon</b>	<b>1</b>	<b>MTL</b>
<b>40-13-0100</b>	<b>S</b>	<b>&gt; Through the tank ladder tunnel</b> Requires Ladder tube storage 60-40-90 or any other tube mounts necessary	<b>1</b>	<b>MTL</b>
<b>40-21-0500</b>		<b>3" tank to pump connection</b>	<b>1</b>	<b>MTL</b>
<b>40-22-0500</b>		<b>2" tank fill connection</b>	<b>1</b>	<b>MTL</b>
<b>40-23-0500</b>	<b>S</b>	<b>3/4" water level gauge connection</b>	<b>1</b>	<b>MTL</b>
<b>40-23-1000</b>	<b>S</b>	<b>3/4" foam level gauge connection</b>	<b>1</b>	<b>MTL</b>
<b>40-30-0500</b>		<b>Sump drain valve (3" gate valve) with linkage E</b>	<b>1</b>	<b>MTL</b>
<b>40-30-1000</b>		Water Fill Box front left corner	<b>1</b>	<b>MTL</b>
<b>40-31-0400</b>		Rear dump valve not requested E	<b>1</b>	<b>MTL</b>
<b>40-31-6050</b>		Rear fill not requested E	<b>1</b>	<b>MTL</b>
		<b>ELECTRICAL</b>	<b>1</b>	<b>MTL</b>
<b>50-11-0400</b>		<b>Base electrical system - Spartan multiplex</b> Vista display to control warning lights included with Spartan chassis	<b>1</b>	<b>MTL</b>
<b>50-11-0600</b>		<b>Warning Light Certification</b>	<b>1</b>	<b>MTL</b>
<b>50-11-0700</b>		<b>Low Voltage Electrical system test</b>	<b>1</b>	<b>MTL</b>
<b>50-11-0800</b>		<b>Low Voltage Electrical System Documents</b> As required by ULC and NFPA standards	<b>1</b>	<b>MTL</b>
<b>50-11-2500</b>	<b>S</b>	<b>Siren and siren speakers included with chassis</b>	<b>1</b>	<b>MTL</b>
<b>50-11-5990</b>	<b>U</b>	<b>Whelen light bar included with chassis</b> The light bar layout was approved at the pre-construction	<b>1</b>	

PART NO	S	DESCRIPTION	QTY	ID
		meeting of 02.03.2021		
50-11-6600		<b>Rear LED Traffic Advisor warning lights - surface mount</b> Mount control in cab so it is accessible by both driver and officer.	1	MTL
50-11-8640	U	<b>Rear LED beacons - Whelen L31HRFN (pr) - both red</b>	1	
50-12-5170	U	<b>Rear LED flashers (pr) - Whelen red LED C6</b> Lower level - located over tail light modules	1	
50-12-8521	S	<b>Front flashers, intersection lights included with chassis, Whelen C6</b>	1	MTL
50-12-8832	U	<b>Body side inter lts (pr) - Whelen red LED C6</b> Lower level - located in rear fenders	1	
50-21-2562	U	<b>Telescoping light - FRC FCA530-V20-ON-SW-NS-SR-H (ea)</b> Front two located on back of cab. Rear two located as shown on the proposal drawing - the grab handle portion will be 10" and they will be mounted so they can clear the top of the body when deployed All lights will be switched on the Vista Display. The front lights can be managed to shed but the rear ones will be used to meet the ULC requirement at the rear so they will not be able to shed. As requested at the pre-construction meeting of 02.03.2021. All lights will have hazard switches wired to a warning light in cab to indicate when telescoping poles are not stowed properly.	4	
50-21-5100		> Compartment lighting - LED tube lights in each compartment (rollup doors)	1	MTL
50-21-5500	S	<b>Door Ajar warning light included with Spartan chassis</b> Bilingual warning label in cab to read: "Do Not Move Apparatus when Light is on"	1	MTL
50-21-8001	S	<b>Step lights for body steps - LED</b> Switched with park brake.	1	MTL
50-21-8110		<b>Step lights for walkway - 4" LED</b> Switched with park brake.	1	MTL
50-21-8201	S	<b>Step lights for chassis steps - LED - supplied with chassis</b> Switched with park brake.	1	MTL
50-21-83AA	U	<b>LED lighting for rear access ladder</b> Switched with park brake. SOPT 307b - truck specific - reference only	1	
50-21-8600		LED clearance lts and reflectors	1	MTL
50-21-8800		<b>LED intermediate turn signal/clearance/reflector length &gt;30'</b>	1	MTL
50-22-0710	U	<b>Whelen C6 LED tail/brake-turn-backup module (pr)</b>	1	
50-31-1700	U	<b>3000 Watt Power Inverter - Canadian Tire Eliminator</b> ***Installed after ULC and must be wired within 10' of chassis batteries*** Location as directed by Customer - L1 or R1 upper	1	

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		compartment preferably Wired to receptacle(s) as directed by Customer - refer 51-31-3020 As discussed at the pre-construction meeting of 02.03.2021 SOPT #405		
<b>50-31-6021</b>	<b>U</b>	<b>Whelen C9SL LED scene lights (pr) - left side upper</b> Located in upper corner of body sides Lights will be switched in cab and will be managed to shed	<b>1</b>	
<b>50-31-6022</b>	<b>U</b>	<b>Whelen C9SL LED scene lights (pr) - rear facing upper</b> Located in upper corners back of body Lights will be switched in cab and when truck is placed in reverse and will be managed to shed	<b>1</b>	
<b>50-31-6023</b>	<b>U</b>	<b>Whelen C9SL LED scene lights (pr) - right side upper</b> Located in upper corner of body sides Lights will be switched in cab and will be managed to shed	<b>1</b>	
<b>50-31-6505</b>	<b>S</b>	<b>Ground lighting included with chassis</b> LED Lumabars as supplied with chassis - activated by park brake, respective side door, Vista and reverse gear of transmission	<b>1</b>	<b>MTL</b>
<b>50-31-6580</b>	<b>S</b>	<b>Ground lighting (LED Lumabar) - top mount body</b> Lights under rear step will be located one (1) each rear corner at 45 degree and one (1) centered under rear step. Switched with park brake and to be activated when truck is placed in reverse.	<b>1</b>	<b>MTL</b>
<b>50-31-6595</b>	<b>S</b>	<b>Ground lighting (LED Lumabar) - under side compartment (ea)</b> There will be additional ground light supplied and installed under the L1, L3, R1 and R3 compartments. As requested by John Digou at the final inspection visit of 07.12.2022	<b>4</b>	<b>MTL</b>
<b>50-35-0500</b>	<b>S</b>	<b>Installation of customer supplied mobile radio</b> Radio information list required The customer will send the VHF and TMR radio to be installed in the right side of center dash panel as discussed at the pre-construction meeting of 02.03.2021 The radios will be powered through the master disconnect switch. The Motorola XTL1500 TMR and Motorola XPR 4550, 2 antenna cables, TMR antenna and 2 power cables were logged into inventory on 03.08.2022. Components not used to be shipped back loose with the completed unit.	<b>2</b>	<b>MTL</b>
<b>50-35-0559</b>	<b>S</b>	<b>Mobile radio antenna provided by Spartan</b> Antennas to be supplied (one VHF and one TMR) and shipped loose with unit.	<b>1</b>	<b>MTL</b>
<b>50-99-25AA</b>	<b>U</b>	<b>LED Lighting for walkway down center of hose bed</b> Switched with park brake. SOPT #560	<b>1</b>	



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<b>51-31-3020</b>	<b>S</b>	<b>&gt; 120 volt wiring for inverter</b> Wiring from Inverter to receptacles - reference 50-31-1700 Customer to provide location details and requirements: There will be an outlet in the L1, L3, R1 and R3 compartments at the compartment depth change, one (1) in the B1 compartment under the ladder tube and one (1) on each side of the chassis dog house. Every outlet will be wired to the auto transfer switch (51-31-3100). As discussed at the pre-construction meeting of 02.03.2021.	<b>1</b>	<b>MTL</b>
<b>51-31-3100</b>	<b>S</b>	<b>&gt; Automatic 110 volt transfer switch</b> There will be an auto transfer switch that will be wired to every outlet wired to the inverter (50-31-1700 and 51-31-3020) that will allow them to be powered from shoreline (20-51-6200) or inverter (50-31-1700) . As discussed at the pre-construction meeting of 02.03.2021	<b>1</b>	<b>MTL</b>
<b>51-31-4500</b>		<b>Dielectric strength test for line voltage system</b>	<b>1</b>	<b>MTL</b>
		<b>BODY</b>	<b>1</b>	<b>MTL</b>
60-10-1400		Single axle extruded aluminum body	1	MTL
<b>60-10-15AA</b>	<b>U</b>	<b>1" drop on lower edge of compartment floors - sweep out design</b>	<b>1</b>	
60-10-4100		No "beavertail" rear step supports	1	MTL
60-10-4600		Painted fender surround E	1	MTL
60-10-4700		Integral aluminum fender trim	1	MTL
60-10-5400		> Diamondback pumphouse steps	1	MTL
60-10-5430		> Diamondback 19" rear step	1	MTL
<b>60-10-6500</b>	<b>S</b>	<b>Bolt on extruded aluminum rub rail w/reflective stripe</b> There will be a white reflective stripe in the rub rail as discussed at the pre-construction meeting of 02.03.2021	<b>1</b>	<b>MTL</b>
<b>60-11-0300</b>		<b>&gt; Front left side compartments full height E</b>	<b>1</b>	<b>MTL</b>
<b>60-11-0700</b>		<b>&gt; Front right side compartments full height E</b>	<b>1</b>	<b>MTL</b>
<b>60-11-1000</b>		<b>&gt; Rear left side compartments full height E</b>	<b>1</b>	<b>MTL</b>
<b>60-11-1400</b>		<b>&gt; Rear right side compartments full height E</b>	<b>1</b>	<b>MTL</b>
<b>60-11-2000</b>		<b>&gt; High side compartment (over 18") each</b>	<b>2</b>	<b>MTL</b>
60-11-3200		> Full Height Rear compartment	1	MTL
<b>60-11-5500</b>		<b>Rollup door - standard height</b> Natural aluminum finish Includes magnetic door switch, LED tube lights, rubber bumpers to prevent pinch point	<b>2</b>	<b>MTL</b>
<b>60-11-5520</b>		<b>Rollup door - full height</b> Natural aluminum finish Includes magnetic door switch, LED tube lights, rubber bumpers to prevent pinch point	<b>5</b>	<b>MTL</b>
<b>60-11-5655</b>	<b>U</b>	<b>Amdor roll up door pull straps - Flex - HD for L2 and R2</b>	<b>2</b>	
<b>60-11-5660</b>	<b>U</b>	<b>Amdor roll up door pull straps - Flex - HD for L1, L3, R1 and R3</b>	<b>4</b>	

<b>PART NO</b>	<b>S</b>	<b>DESCRIPTION</b>	<b>QTY</b>	<b>ID</b>
60-31-4100		Extruded aluminum handrails Minimum 2" clearance from handrail to any surface	1	MTL
60-31-5000		<b>Zico access Ladder at rear of unit</b> Minimum 7" clearance between rung and any obstruction. Switch required for warning light in cab to indicate ladder is not stowed properly.	1	MTL
60-31-5500	S	<b>Steps at rear of body (folding) with LED lights - RS only</b> Maximum height between steps is 18" There will be sufficient amount of steps required for the available amount of space to assist in reaching the rear right side portion of the hose bed. As discussed at the pre-construction meeting of 02.03.2021	1	MTL
60-31-5610	U	<b>Steps and grab handles at front of body next to pump panel</b> Maximum height between steps is 18"	1	
60-31-5700	S	<b>Pull out step under pump panel running board (each)</b> One under left side pump panel step and one right side. Switch required for warning light in cab to indicate step is not stowed properly. White reflective stripe is applied on the exposed edge for visibility when the step is pulled out.	2	MTL
60-31-6500	S	<b>Compartment matting - black plastic interlocking tile</b>	1	MTL
60-31-8004	S <	<b>BA bottle compartment (ea) - fender well - triple tube type with SS door</b> SOPT #1148  There will be three (3) triple SCBA bottle holders installed in the rear fender well - one (1) in the forward left side and two (2) on the right side. Switch required for door ajar warning light in cab Restraining loop for the bottle neck in every tube as a secondary restraint to be included As discussed at the pre-construction meeting of 02.03.2021.	3	MTL
60-31-8400	S	<b>Adjustable vertical partition - on a slide out tray for mounting E-draulic tools</b> E-draulic mounts (ref 80-99-05AA) will be mounted on the partition on the tray in the R1 compartment as discussed at the pre-construction meeting of 02.03.2021. The board will be adjustable from left to right to allow different size tools to be mounted. As discussed at the accessories review meeting.	1	MTL
60-31-8800	S >	<b>Sliding tray (ea) - 600 pound capacity</b> ***Hardware requires 3-1/2" of compartment height White reflective stripe is applied on the exposed edge for visibility when the compartment door is open 100% extension - model # AM3 Roll out trays installed at floor level in the following compartments;	5	MTL

PART NO	S	DESCRIPTION	QTY	ID
		Tray #1 - Left side front compartment		
		Tray #2 - Left side rear compartment		
		Tray #3 - Right side front compartment		
		Tray #4 - Right side rear compartment		
		Tray #5 - Back compartment		
		As discussed at the pre-construction meeting of 02.03.2021		
<b>60-31-9600</b>	<b>S</b>	<b>&gt; Adjustable shelf (ea)</b>	<b>15</b>	<b>MTL</b>
		White reflective stripe is applied on the exposed edge for visibility when the compartment door is open		
		***Tracking for shelves is required in all compartments***		
		Seven (7) adjustable full depth shelves, and eight (8) half depth shelf will be supplied and installed as directed by the Customer.		
		Shelf #1 - R1 Depth - Shallow		
		Shelf #2 - R1 Depth - Shallow		
		Shelf #3 - R2 Depth - Full		
		Shelf #4 - R2 Depth - Full		
		Shelf #5 - R3 Depth - Full		
		Shelf #6 - R3 Depth - Shallow		
		Shelf #7 - R3 Depth - Shallow		
		Shelf #8 - L1 Depth - Shallow		
		Shelf #9 - L1 Depth - Shallow		
		Shelf #10 - L1 Depth - Full		
		Shelf #11 - L2 Depth - Full		
		Shelf #12 - L2 Depth - Full		
		Shelf #13 - L3 Depth - Shallow		
		Shelf #14 - L3 Depth - Shallow		
		Shelf #15 - B1 Depth - Full		
		As discussed at the pre-construction meeting of 02.03.2021		
<b>60-32-3550</b>	<b>S</b>	<b>Two adjustable hose divider (each) and two fixed for walkway</b>	<b>1</b>	<b>MTL</b>
		Hand hold required in end.		
		Two (2) fixed to be spaced 18" apart in center of hose bed to allow walkway up center of hose bed.		
60-32-7500		Hose bed - aluminum	1	MTL
<b>60-33-0000</b>		<b>Paint exterior - Imron Elite</b>	<b>1</b>	<b>MTL</b>
		*** Paint code and colour red to match red on cab		
60-33-0200		Undercoat vehicle with KROWN rust protection	1	MTL
<b>60-33-0600</b>		<b>Chassis wheels not painted</b>	<b>1</b>	<b>MTL</b>
		Wheels are polished aluminum as supplied by Spartan chassis and are not painted.		
60-33-1000		Paint pump and plumbing job colour	1	MTL
60-33-1500		Buffed finish compartment interior	1	MTL
60-33-2000		Lettering - no lettering provided	1	MTL
<b>60-33-3200</b>	<b>S</b>	<b>Reflective stripe - 1" - 4" - 1" white</b>	<b>1</b>	<b>MTL</b>
		50% of perimeter each side and 25% of perimeter front		
		3M Scotchlite material		
		Stripes to be 1" - 4" - 1" white with a "hockey-stick" pattern in the L1/R1 compartment with the pattern straight above the rear axles.		

PART NO	S	DESCRIPTION	QTY	ID
		Layout was approved by John Digou by e-mail on 03.07.2022		
60-33-3310		<i>Reflective stripe - red and yellow chevron at rear</i> Minimum 50% of rear vertical surface Printed 3M Scotchlite material	1	MTL
60-33-3500	S	<i>Tarp over hose bed - black</i> Two long and narrow tarps to allow walkway up center with no Velcro as discussed at the pre-construction meeting of 02.03.2021 There will be a weighted flap at the front, the outside edge will be fastened fix, the center edge and the rear flap will have shock cord / J-hooks. As approved by John Digou.	1	MTL
60-33-4600		<i>Aluminum cover over crosslays - with end tarps (black)</i> End tarps with velcro loops similar to M20-21058 will be provided. The cover restraints will be butterfly latches like M20-21058	1	MTL
60-40-5500	S	<i>Suction hose tube (each) with door</i> Smooth painted doors with completely enclosed tubes. Door ajar switch required Tubes to store two 6" x 10' customer supplied suction hoses: Make: _____ Lenght: _____ Dimension at the widest part - handle to handle: _____	2	MTL
60-40-9000	S	> <i>Tube mount for ladders</i> Tube to be partitioned to store the customer supplied 24' extension ladder, customer supplied 14' roof ladder and the customer supplied 10' folding attic ladder There will be a pocket for a customer supplied Spine Board that measures 72" long x 18" wide x 3" thick. As discussed at the pre-construction meeting of 02.03.2021 Ladder information: 24' 2-section: Make and model: _____ OAL: _____ Width: _____ Thickness: _____ 14' Roof ladder Make and model: _____ OAL: _____ Width: _____ Thickness: _____ 10' Attic Make and model: _____ OAL: _____ Width: _____ Thickness: _____	1	MTL
60-41-1015	S	<i>Pike Pole tube in suction hose tube</i> For storage of customer supplied pike poles. Tube diameter to be 2" inside	2	MTL

<b>PART NO</b>	<b>S</b>	<b>DESCRIPTION</b>	<b>QTY</b>	<b>ID</b>
<b>60-99-35AA</b>	<b>U</b>	<b>Walkway with non slip overlays down center of main hose bed</b> 18" wide as shown on the proposal drawing. Embossed non slip type treadplate will be installed in the walkway area. Confirm with Customer this is what they are expecting...the walkway was added to meet requirement of dection S.3. of Tender which reads "Top hose bed to be designed for safe access for reloading of hose on both sides of the bed." Layout was approved by customer at the pre-construction meeting of 02.03.2021	<b>1</b>	
<b>INSTRUMENTATION</b>			<b>1</b>	<b>MTL</b>
<b>70-11-0000</b>		<b>Warning Label on Pump Operator's Panel</b>	<b>1</b>	<b>MTL</b>
<b>70-11-1500</b>		<b>Stainless steel instrument panels</b> No gauge or visual display can be higher than 84" above the operator's standing position Midpoint of any control cannot be higher than 72" above the operator's standing position	<b>1</b>	<b>MTL</b>
<b>70-11-2000</b>	<b>S</b>	<b>Top mount instrument panel</b> No gauge or visual display can be higher than 84" above the operator's standing position Midpoint of any control cannot be higher than 72" above the operator's standing position Customer has approved Metalfab's standard cable arrangement for the valve controls. As discussed at the pre-construction meeting of 02.03.2021 The top mount panel layout was reviewed and approved by John Digou on 03.07.2022	<b>1</b>	<b>MTL</b>
<b>70-11-2500</b>	<b>S</b>	<b>Transverse walkway</b> The walkway will have LED lights (50-21-8001) mounted at each end to illuminate the steps to access the walkway The 27" wide shown on the proposal drawing was approved at the pre-construction meeting of 02.03.2021	<b>1</b>	<b>MTL</b>
<b>70-11-2600</b>	<b>S</b>	<b>Tread plate overlay on back of chassis cab with Spartan chassis</b> The Spartan chassis will be ordered with the deck plate option on the back of the cab for full coverage (1507-002) - as discussed at the pre-construction meeting of 02.03.2021	<b>1</b>	<b>MTL</b>
<b>70-11-3000</b>	<b>S</b>	<b>Mansaver bars - for transverse walkway</b> Engineering to specify required length to Purchasing 20" = 1520597 16" = 1562698	<b>1</b>	<b>MTL</b>
<b>70-11-3200</b>		<b>Colour coded tags</b>	<b>1</b>	<b>MTL</b>
<b>70-11-4506</b>	<b>U</b>	<b>Diamondback grip type panel hood step right side</b>	<b>1</b>	
<b>70-11-4606</b>	<b>U</b>	<b>Diamondback grip type panel hood step left side</b>	<b>1</b>	
<b>70-11-5500</b>	<b>S</b>	<b>Right side tread plate pump access door</b> No opening dimension less than 18" - door will be hinged	<b>1</b>	<b>MTL</b>

<b>PART NO</b>	<b>S</b>	<b>DESCRIPTION</b>	<b>QTY</b>	<b>ID</b>
70-11-5600		<b>Left side tread plate pump access door</b> No opening dimension less than 18" - door will be hinged	1	MTL
70-11-5700		<b>Transverse tread plate pump access door</b> No opening dimension less than 18" - door will be removable	1	MTL
70-11-7500		<b>Heat pan-aluminum</b>	1	MTL
70-11-8000	S	<b>Heater in pump compartment</b> Heater control switch located on transverse pump operators panel.	1	MTL
70-11-8200		<b>Rubber seal around suction and discharge openings on side pump panels</b> There will be rubber seals around the openings on the pump panel to meet the requirement in section O.3	1	MTL
70-20-1120	U	<b>4-1/2" compound gauge - dual face 0-400</b> To be within 8" of each other - edge to edge	2	
70-20-2171	U	<b>2-1/2" pressure gauge - dual face 0-400</b> Gauge to be no more than 6" from edge of the gauge to the center of the control. ***Pressure gauge color trim rings to match discharge handle/label colors***	9	
70-20-2500	S	<b>Primer control - Automatic Trident</b> The primer will change to the Automatic Trident Primer as requested by John Digou at the final inspection of 07.12.2022	1	MTL
70-20-2501	S	<b>Additional Trident Pre-primer control</b> The primer will change to the Automatic Trident Primer as requested by John Digou at the final inspection of 07.12.2022	2	MTL
70-20-3300	S	<b>FRC InControl Governor Control</b> Throttle can be no lower than 42" and no higher than 72" from operator's standing position. The governor will be an FRC InControl 400 as requested at the pre-construction meeting of 02.03.2021	1	MTL
70-20-3500		Electric water level gauge on pump panel, Class One	1	MTL
70-20-6500		Test gauge panel Mount below the compound gauges for proper draining	1	MTL
70-20-7500		<b>Heat exchanger control valve</b>	1	MTL
70-21-1500		<b>Electric Foam Level gauge</b> Include access to and room for sender in front of body and back of pump house	1	MTL
71-21-3500		<b>Headset compartment</b> For storage of headset referenced in 71-21-3520	1	MTL
71-21-3520	U	<b>Supply and install radio headset installed on pump panel</b> Radio headset supplied and installed on pump panel for TMR radio system.	1	

PART NO	S	DESCRIPTION	QTY	ID
		<b>SOPT #894</b>		
		David Clarke Style H3442 headset will be supplied and connection will be inside the headset compartment 71-21-3500 unless otherwise specified.		
		Customer to confirm if this is compatible with their radio system and should provide radio for testing purposes.		
		<b>ACCESSORIES</b>		
<b>80-16-0500</b>	<b>S</b>	<b>Akron 3423 Portable/deck monitor with stacked tips</b>	<b>1</b>	<b>MTL</b>
		The monitor will be an Akron 3423 removable monitor with dual 2.5" inlet ground base, stream straightner and stacked tips. As discussed at the pre-construction meeting of 02.03.2021	<b>1</b>	<b>MTL</b>
<b>80-19-0500</b>		<b>Large folding wheel chock - aluminum (ea) not mounted</b>	<b>2</b>	<b>MTL</b>
<b>80-19-0600</b>	<b>S</b>	<b>&gt; Horizontal bracket for folding wheel chock (ea)</b>	<b>2</b>	<b>MTL</b>
		Mounted under the L1 compartment as discussed at the pre-construction meeting of 02.03.2021		
<b>80-99-05AA</b>	<b>U</b>	<b>Supply and install mounting brackets for 4 E-draulic tools - location R1</b>	<b>1</b>	
		Mounting for four (4) E-draulic tools in the R1 compartment, cutter, spreader, combo tool, and ram. As discussed at the pre-construction meeting of 02.03.2021		
		PAC brackets		
		Three K5035FL-OR brackets for the cutter, spreader and combo.		
		One K1022FL-OR bracket of the ram		
		Brackets will be mounted as directed by the Customer, otherwise will be shipped loose with mounting fasteners.		
<b>80-99-10AA</b>	<b>U</b>	<b>6" NHF x 5" Storz adapter and cap for side 6" inlet (ea) - Harrington brand</b>	<b>2</b>	
		Harrington brand model # H30E-50-60 NPSH/cap (with suction gasket) - SOPT #880		
		Installed on the 6" LS and RS suction inlets.		
		As discussed at the pre-construction meeting of 02.03.2021		
<b>80-99-20AA</b>	<b>U</b>	<b>2.5" female to 1.5" male reducer for crosslays</b>	<b>2</b>	
		The crosslays 30-44-3530 will have 2.5" female NSZ1 to 1.5" Male NPSH reducers supplied and installed.		
		Part # 1501296		