



# Shop Order

Carrier Truck Centers  
 O/A Carrier Centers  
 645 Athlone Place  
 Woodstock, ON N4S 7V8

Town of Collingwood  
 Collingwood, ON

**Exp. Date:** 09/30/2019  
**Quote No:** Collingwood, ON-0029  
**Job/Order No:** 21244  
**BODY:** 00-10-15 Metalfab Pumper - ULC 05/13

08/31/2021

PART NO	S	DESCRIPTION	QTY	ID
		<b>== Metalfab Pumper - ULC 05/13 - 0.000 ==</b>	1	MTL
	S	<b>CHANGE ORDER H</b>	1	MTL
00-05-0020	S	<b>Dealer - Carrier Centers Emergency Vehicles - Rod</b>	1	MTL
00-10-1520	U	<b>Metalfab Pumper - Ontario unit</b>	1	
00-20-1000		Company Profile E	1	MTL
00-20-1500		Standard Body Warranty	1	MTL
00-20-1550		Metalfab Limited Ten (10) Year Paint and Corrosion Warranty	1	MTL
00-20-1700		<b>Hale Pump Warranty - 5 years</b>	1	MTL
00-20-1800		Polypropylene Tank Lifetime Warranty	1	MTL
00-20-2000		Plant Visits - unlimited at customer expense	1	MTL
00-20-3000	S	<b>No Bonding Requested</b>	1	MTL
00-20-3500		Certification for Fusion Welding of Aluminum	1	MTL
00-20-4000	S	<b>Quality System registered to ISO 9001:2015</b>	1	MTL
00-20-4500		Fire Apparatus Manufacturers' Association Membership	1	MTL
		<b>GENERAL INFORMATION</b>	1	MTL
10-11-0000		Intent E	1	MTL
10-11-0110		<b>Vehicle data recorder included with chassis</b>	1	MTL
10-11-1101	S	<b>ULC S515-13 and NFPA 1901-2016 Compliance E</b>	1	MTL
		Include applicable NFPA warning labels		
10-11-1500		<b>&gt; ULC Testing - Pumper - Imperial units of measure</b>	1	MTL
		<b>ENG. NOTE:</b> Note in the shop note if the Fire Department wishes to witness the test		
		<b>Tested in Imperial units of measure unless otherwise specified.</b>		
10-11-2100	S	<b>Maximum length - 34' 06" (414")</b>	1	MTL
10-11-2200	S	<b>Maximum height - 10' 02" (122")</b>	1	MTL
10-11-2400		<b>Overall length is 30' or more</b>	1	MTL
10-11-2500		General Construction	1	MTL
10-11-3000		<b>Manuals - two copies</b>	1	MTL
		<b>***Two copies of manuals are required.</b> <b>See also 30-20-2000 - hydrostatic test documentation to be included.</b>		
10-11-3600	S	<b>&gt; Delivery - FOB Fire Department - by CCEV</b>	1	MTL
		<b>ENG. NOTE:</b> Note in the shop note if more than 4 hours of training is required		
10-11-4000	S	<b>Payment Terms - Chassis Net 10 days, Balance Net 30 days upon pickup at Metalfab</b>	1	MTL
10-20-1400	S	<b>&gt; Hose capacity exceeding ULC/NFPA requirements</b>	1	MTL
		<b>ENG. NOTE:</b> Specify the type of hose and quantity of hose to be carried on the vehicle		
		<b>Hose bed capacity for</b>		
		1000' - 4"		
		400' - 2-1/2"		
		400' - 1-3/4"		

PART NO	S	DESCRIPTION	QTY	ID
		Extra weight allowance of 675 lbs		
10-20-2000		Equipment carrying capacity - standard ULC Pumper	1	MTL
		<b>CHASSIS INFORMATION</b>	1	MTL
20-11-1000	S	<b>Chassis supplied by Metalfab - Spartan MetroStar LFD with 10" raised roof</b> 47,000 lb GVWR 20,000 lb front axle 27,000 lb rear axle 210" wheelbase 142.5" cab to axle 100" rear frame overhang Cummins L9 380 HP @ 2000 rpm 2200 governed rpm 1150 ft-lb torque @ 1400 rpm Engine C-brake (activates stop lamps when in operation mode) Allison 3000 FVS automatic transmission 68 MPH vehicle top speed 360 Amp Alternator (Niehoff) Jack shaft for pump 50 US gallon fuel tank SmartDock type SCBA seat backs Four (4) OnScene Talon helmet storage brackets will be supplied and shipped loose for Customer installation. LED headlights PSTANK2 water tank level lights in rear sides of cab with chrome bezels Two antenna bases - one left, one right on cab roof Color is black over red, PPG code FBCH 925903 approved 02.12.2020 by Rod Harris Black is FBCH9000 Spray out approval received from Customer 02.12.2020 ***Per Customer's Purchase Order add/modify the following*** Add code 1506-002 for 10" high stainless trim on lower sides and cab doors Upgrade seat material to Bostrom Durawear Plus Zip Clean Switch Whelen flashers and scene lights to Tecniq equivalent. Chassis was provided with Whelen but flashers on the cab need to be changed to Tecniq as listed in 50-11-6010 and Scene lights need to be changed to Tecniq to match the body scene lights 50-31-6049/6050/6051 Remove the two brow lights and replace with code 5317-158 HiViz FireTech FT-B-72-ML-W LED scene light with integral clearance lights in stalled on the brow of the cab. Change the rear suspension to FireMaxx with disc brakes. Change the lightbar from F4N72QLED to F4N72VLED (to match RFP) Light bar has 10 Red, 4 white lights and an Opticom. Changes on 02.14.2020 - Front bumper compartment to be weatherproof and siren changed to EQ2B	1	MTL
20-11-1500		2013 Emission chassis modifications	1	MTL
20-11-1700	S	<b>Chassis Motor Vehicle Inspection required - by CCEV</b>	1	MTL
20-21-0500		<b>Fluid capacity plate</b>	1	MTL
20-21-0600		<b>Pumping test plate</b>	1	MTL
20-21-1030	S	<b>Maximum riders sign - 5 persons - with Spartan chassis</b>	1	MTL
20-21-1510	S	<b>Seat belt warning labels - 4 door chassis - with Spartan chassis</b>	1	MTL
20-21-1520	S	<b>Helmet warning label - do not wear helmet - with Spartan chassis</b>	1	MTL
20-21-1560	U	<b>Tire Pressure Indicators - Single Axle - 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		<b>Front mudflaps provided with chassis E</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 Spartan - Black over red</b> Color is black over red, PPG code FBCH 925903 approved 02.12.2020 by Rod Harris	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
		Black is FBCH9000 Spray out approval received from Customer 02.12.2020		
20-31-7505	U	Rubber glove box holder-dispenser (polished stainless) To be located in cab at a location to be determined at the final inspection as advised by Rod Harris by e-mail on 03.18.2020 Box #1 - _____ Box #2 - _____	2	
20-31-76AA	U	LED light in right side compartment under Officer's seat Install a 12" LED Lumabar switched to come on when officer's door is open. Part#1562518	1	
20-31-88AA	U	I-Pad mounting bracket mounted in cab - Captain's side dash Installed Captain's side dash to match Collingwood Fire Department model. Final location and model to be determined at the Pre-construction meeting Location - Flat dash area in front of officer - see pictures in F:/Data/Jacques/Current Project/Collingwood/Pictures/E-mail pics Model - Havis PKG-DS-APP-142 As advised by Rod Harris by e-mail on 03.18.2020 and 04.27.2020	1	
20-41-0600	S	Intake air shutoff for engine not requested	1	MTL
20-41-0900		Auxiliary braking system disabled when pumping	1	MTL
20-41-1100		Transmission programming - Allison WT	1	MTL
20-41-1500	S	Extend exhaust pipe - RS front of rear wheels 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. Carrier to install a customer supplied controller and puck at delivery. Fire department to advise the amount of room required between the rub rail and the exhaust tip: 1.5" see pictures in F:/Data/Jacques/Current Project/Collingwood/Pictures/E-mail pics As advised by Rod Harris by e-mail on 03.18.2020 and 04.27.2020	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	Fuel fill at LS rear fender well with SCBA style door	1	
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		Master Battery Disconnect included with chassis	1	MTL
20-51-2500		Back up alarm included with chassis	1	MTL
20-51-3100	S	Air inlet (auto eject) - not requested The air inlet was deleted by customer on 11.25.2019	1	MTL
20-51-3400		Protection valve installed for air operated accessories	1	MTL
20-51-6200	S	> 120 volt 20 A shore line connection ENG. NOTE: Requires 20-51-75 120 volt auto eject or 20-51-80 120 volt inlet  Standard 5-20R duplex receptacle, not fused Locations of receptacles to be determined at the Pre-Construction meeting; Receptacle #1 - Inside rear storage box 20-99-10AA - LS storage Receptacle #2 - Inside rear storage box 20-99-10AA - RS storage Receptacle #3 - R1 compartment - 24" above floor towards RS of compartment Receptacle #4 - L3 compartment - upper back wall As advised by Rod Harris by e-mail on 03.18.2020 and 04.27.2020	4	MTL
20-51-6501	S	Battery charger and 12 volt auto eject included with Spartan chassis The Kussmal Auto Charge 40 is located behind the driver seat The 12 Volt air compressor is located behind RH seat.	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
20-51-7102	S	<i>Electric System Management included with chassis - VMUX</i>	1	MTL
20-51-8505		<i>Engine compartment light included with chassis E</i>	1	MTL
20-51-9001	S	<i>Air horns included with chassis - in front bumper</i>	1	MTL
20-52-0010	U	<i>Air horn control on left side pump operators panel Label "AIR HORNS"</i>	1	
20-52-3500		> <i>Chassis steering wheel lined up by Metalfab E</i> ENG. NOTE: Freightliner, Sterling, and Spartan only	1	MTL
20-52-4003	U	<i>Installation of rear view camera (supplied with chassis), complete with shield</i> The rear view camera supplied by Spartan, shall be installed at the rear of the apparatus body. The camera head shall be protected by an aluminum checker plate guard. Camera display will be on VISTA in cab.	1	
20-60-0400		Chassis wheelbase does not change	1	MTL
20-90-1810	U	<i>Extend air tank drain/moisture ejectors to rubrail and tag/label</i>	1	
20-99-05AA	U	<i>12 volt power, 20 amp in the center rear storage compartment in cab</i> A 20 amp, 12 volt power shall be provided in the center rear storage compartment 20-99-10AA. The circuit shall be provided with a protection breaker rated at 20 amps. The wiring shall be rated for 125% of the capacity and shall terminate in a stud type termination strip fitted with a protective cover. SOPT #1030 (reference only)	1	
20-99-10AA	U	<i>Storage compartment in rear of the chassis cab</i> A storage compartment area shall be provided in the rear of the chassis cab. The design shall meet Collingwood Fire Departments spec as viewed at the information meeting. See pictures and sketch in F:/Data/Jacques/Current Projects/Collingwood/Pictures and PDF "Storage Box Sketch" The compartment shall be fabricated out of aluminum and the exterior only will be painted a textured gray finish. There will be a center compartment 42-1/4" wide x 19-1/2" deep and 18-1/2" high with a deck plate hinged cover, gas struts on each side and LED light inside There will be a compartment on the LS 21-1/4" wide x 18-1/4" deep and 18-1/2" high with a tray on top that measures 1-3/8" deep and includes interlocking tile. There will be an opening on the back face with a black color mesh cover to restrain loose equipment. There will be a compartment on the RS 18" wide x 20-1/2" deep and 18-1/2" high with a tray on top that measures 1-3/8" deep and includes interlocking tile. There will be an opening on the back face with a black color mesh cover to restrain loose equipment and an adjustable shelf. As advised by Rod Harris by e-mail on 03.18.2020 and approved by e-mail on 01.28.2021 based on the approval drawing supplied. SOPT #1040 (reference only)	1	
20-99-15AA	U	<i>License plate provision by Metalfab</i> Metalfab will install a license plate provision under the front bumper on a hinge where it was unavailable from Spartan	1	
20-99-20AA	U	<i>Chassis center dash panel changes</i> The EQ2B control head will be installed above the A/C controls to make it more accessible to the driver and officer. The traffic advisor (50-11-6616) will be installed on the upper right portion of the dash beside the EQ2B control head. There will be a Jotto desk plate installed over the hole where the EQ2B control head was originally installed - note that there will be no room to install a communication radio here due to the mounting of the EQ2B amp behind. As noted to Rod Harris by e-mail on 11.09.2020 which included a picture for reference. New layout reference picture in F:/Data/Jacques/Current Project/Collingwood/Pictures/InkedCenter dash_LI As requested by Rod Harris by e-mail on 11.09.2020	1	
<b>PUMP AND PLUMBING</b>			1	MTL
30-11-3800		<i>Hale DSD midship pump - 1050 IGPM</i>	1	MTL
30-15-0304		<i>Plumbing - non manifold pump SM SS E</i>	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
30-20-0500		Valves and controls - side mount panel	1	MTL
30-20-1002		<i>Akron valves specified</i>	1	MTL
30-20-1620		<i>Piping stainless steel - non manifold Pumper</i>	1	MTL
30-20-1650	U	<i>Swing type bleeder handles - Trident</i> All discharges and intakes shall be fitted with Trident brand swing type bleeder handles (1551298). The handles (tag/labels) shall be colour coded to correspond to the associated plumbing.	1	
30-20-1700	S	<i>1-1/2" thread specifications - NPSH</i>	1	MTL
30-20-1800	S	<i>2-1/2" thread specifications - CSA</i>	1	MTL
30-20-2000		<i>Piping hydrostatic test</i> The pump and plumbing shall be hydrostatically tested to a pressure of 250 psi. The Tank Fill and Tank to Pump valves shall be closed; all other inlets and outlets shall be open and capped. This pressure shall be maintained for 3 minutes. -documentation of the hydro static test shall be provided with the delivery documents.	1	MTL
30-20-2510		<i>Anodes in suction and discharge piping - non manifold pump</i> 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
30-21-9510		<i>Tank to Pump 4" Ball valve SS, handwheel control with check valve manifold pump</i> Includes landscape position indicator.	1	MTL
30-22-0520		<i>Tank Fill valve 2" SS</i>	1	MTL
30-31-4020	S	<i>Suction - 6" gated each side SS non manifold pump 6" header</i> Design so that adapters 80-99-05AA or 80-99-10AA can be left mounted on the 6" inlets with the roll up doors closed.	1	MTL
30-31-51AA	U	<i>Suction - 4" SS piping to rear - electric control - 4" storz connection</i> Bleeder required at rear Connection will be 4" 30 degree Storz droop with blind cap.	1	
30-31-7200		> <i>Hale master intake suction valve - electric control</i> <b>ENG. NOTE:</b> Required for top mount panels Show location in Shop Note  Electric valves for the 6" left side, 6" right side and the 4" rear suction intakes. The electric controls will be located on the left side pump operator's panel. The manual over ride for the left side valve will be adjacent to valve. The manual over ride for the right side valve will be adjacent to the valve. The manual override for the rear valve will be either on the left or right pump panel (depending on the plumbing configuration).	3	MTL
30-32-7550		<i>Suction - 2-1/2" left side SS, bleeder, non manifold pump</i>	1	MTL
30-32-8050		<i>Suction - 2-1/2" right side SS, bleeder, non manifold pump</i>	1	MTL
30-40-2006	S	<i>4" right discharge, SS, plumbed 3", non manifold pump, bleeder, slow close</i>	1	MTL
30-41-2040		<i>2-1/2" RS discharge SS, bleeder, non manifold pump</i>	1	MTL
30-41-2540		<i>2-1/2" LS discharge SS, bleeder, non manifold pump</i>	2	MTL
30-43-1520	S	<i>2-1/2" rear discharge SS, plumbed 2-1/2", bleeder</i> In hose bed left side through the front partition as advised by Rod Harris by e-mail on 03.18.2020. Bleeder valve located on pump panel (LS) No 30 degree droop or cap provided unless otherwise specified. There will be a tread plate cover over the plumbing for protection in case of being stepped on. As advised by Rod Harris by e-mail on 01.27.2021	2	MTL
30-44-0720	S	<i>1-1/2" speedlay (each) in pumphouse SS, plumbed 2"</i> One located front of 2-1/2" speedlay (mounted on right side) and the other located rear of the 2-1/2" speedlay (mounted on the LS) as advised by Rod Harris by e-mail on 03.18.2020. The Mattydale swivel to be located outboard of the speedlay, one each side, discharging from the top of the speedlay opening.	2	MTL

PART NO	S	DESCRIPTION	QTY	ID
		Bleeder will be located on same side as Mattydale swivel on pump panel.		
30-44-1021	U	1-1/2" front trash line SS, plumbed 2", hosewell Pre-plumbing to front bumper LH side by Spartan. Hose well and weatherproof cover supplied with the Spartan chassis. Swivel will be on bottom of hose well as requested by customer.	1	
30-44-3525	U	2-1/2" speedlay in pumphouse SS, plumbed 2-1/2", bleeder Located between the 1-1/2" speedlays. The Mattydale swivel to be located outboard of the speedlay, on the right side, discharging from the top of the speedlay opening. Bleeder will be located on the right side pump panel. Will need an adapter #1501242	1	
30-51-0500		Pump shift-Midship air ***Includes "Pump Engaged" and "OK to Pump" indicator lights in cab ***Includes "Throttle Ready" indicator light on Pump operating panel	1	MTL
30-51-0600		Manual over ride for pump shift on pump panel by Metalfab	1	MTL
30-51-6640		Class One "TPG Plus" Governor/Throttle	1	MTL
30-51-7005	U	Suction side relief V/V, non-manifold pump Outboard for each 30-31-7200 MIV	3	
30-51-7714	S	Trident Air Primer 3 barrel 4 location Location #1 - Main pump Location #2 - Left side MIV pre-prime Location #3 - Right side MIV pre-prime Location #4 - Rear MIV pre-prime as requested by Rod Harris by e-mail on 04.28.2020	1	MTL
30-51-7720	S	Additional air tank for air primer system - included with Spartan chassis An additional air tank is provided to improve air primer capacity, plumbed through a pressure protection valve included with Spartan chassis	1	MTL
30-51-8100		Heat exchanger included with chassis	1	MTL
30-51-8500		Pump cooler with control valve, check valve Plumbed to fill box.	1	MTL
30-51-9000		Thermal Relief Valve Plumb discharge hose below frame level.	1	MTL
30-52-1000	S	Master drain V/V, 12 port The master drain will be installed on the left side plumbing panel (not the control panel) as requested by Rod Harris by e-mail on 03.18.2020	1	MTL
30-52-2000		Drain valve for foam system header	1	MTL
30-52-5510		Foam system-Hypro FoamPro 2001 Single Tank Foam system is plumbed to both 1-1/2" speedlays, the 2-1/2" speedlay and the 1-1/2" front bumper trash line discharge.	1	MTL
30-52-8100	S	Electric foam fill pump with panel pickup - Left side panel An electric pump is installed to pump foam from an external source into the foam tank on the truck. A panel mounted pickup connection with valve and a foam pump switch is provided on the LEFT side pump panel or in a customer specified location. The pick up hose is also provided, stored inside the pump house. Accessible through the right side pump access door. Mounted on the left side pump panel as requested by Rod Harris by e-mail on 03.18.2020	1	MTL
30-52-9100		Foam concentrate label at foam tank fill	1	MTL
30-52-9200		Foam System Instruction Plates	1	MTL
30-52-9400		NFPA Foam System certification test	1	MTL
		<b>WATER AND FOAM TANKS</b>	1	MTL
40-11-2100		Polypropylene water tank (Imperial gallons)	1	MTL
40-11-2200		Water tank capacity certification (tank manufacturer)	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
40-11-4500	S	Tank capacity 700 Imperial Gallons	1	MTL
40-12-5000		Foam cell - 30 Imperial gallon	1	MTL
40-13-0100		> Through the tank tunnel - up to 20 cu ft	1	MTL
		ENG. NOTE: Charge 60 per cubic foot of tunnel volume		
40-21-1000		4" tank to pump connection	1	MTL
40-22-0500		2" tank fill connection	1	MTL
40-23-0500		1" water level gauge connection	1	MTL
40-23-1000		1" foam level gauge connection	1	MTL
40-30-0400		3" plug in sump box	1	MTL
40-30-1000		Water Fill Box front left corner	1	MTL
40-31-0400		Rear dump valve not requested E	1	MTL
40-31-6050		Rear fill not requested E	1	MTL
		<b>ELECTRICAL</b>	1	MTL
50-11-0400		Base electrical system - Spartan multiplex	1	MTL
50-11-0600		Warning Light Certification	1	MTL
50-11-0700		Low Voltage Electrical system test	1	MTL
50-11-0800		Low Voltage Electrical System Documents As required by ULC and NFPA standards	1	MTL
50-11-2500	S	Siren and speaker supplied with the Spartan chassis A Federal EQ2B Siren in cab is supplied, complete with a BP200Q in the center of the front bumper as requested by customer. The "Q" type grill supplied from Spartan will be installed and will add 2" to the Overall length as approved by Rod Harris by e-mail on 01.28.2021	1	MTL
50-11-6110	S	Whelen light bar included with chassis - Whelen F4N72VLED 10R4W with opticom	1	MTL
50-11-6616	U	Rear LED Traffic Advisor warning lights - flush mount - TAM83	1	
50-12-8521	S	Front flashers, intersection lights included with chassis, Tecniq K600	1	MTL
50-12-8607	U	Rear LED flashers (pr) - Tecniq LED K900 with integral flasher - red LS, blue RS	1	
50-12-8806	U	Body side inter lts (pr) - Tecniq red LED K600 with integral flasher	1	
50-12-8821	U	Body side upper lts (pr) - Tecniq red LED K900 with integral flasher There will be Tecniq 900 red LED flashers installed on the upper corner's of the side of the body.	2	
50-20-08BB	U	Tecniq 600 red light to serve as an auxiliary brake light A Tecniq K600 LED warning light shall be installed on the rear of the apparatus body to act as an auxiliary tail brake light. Part#1571086	1	
50-21-5100		> Compartment lighting - LED tube lights in each compartment (rollup doors) ENG. NOTE: Rollup doors only	1	MTL
50-21-5500	S	Door Ajar warning light - with Spartan chassis Bilingual warning label in cab to read: "Do Not Move Apparatus when Light is on"	1	MTL
50-21-8001	S	Step lights for body steps - 4" LED Switched when park brake is set.	1	MTL
50-21-8201	S	Step lights for chassis steps - LED with chassis Switched when park brake is set.	1	MTL
50-21-8600		LED clearance lts and reflectors	1	MTL
50-21-8605	U	Cast Products license plate holder with LED light	1	
50-21-8800		LED intermediate turn signal/clearance/reflector length >30'	1	MTL
50-22-0760	U	Tecniq K600 LED CAST 4V type tail/brake-turn-backup-warning module (pr) Warning light left side to be blue with blue lens, right side to be red with red lens	1	
50-31-6049	U	Tecniq K900 LED scene lights - right side Installed on side of the apparatus body in the upper front and rear corners inboard of the warning lights.	1	

PART NO	S	DESCRIPTION	QTY	ID
		Lights to be switched from the cab Vista as " RIGHT SCENE " These lights can be managed to shed.		
50-31-6050	U	<b>Tecniq K900 LED scene lights - left side</b> Installed on side of the apparatus body in the upper front and rear corners inboard of the warning lights. Lights to be switched from the cab Vista as " LEFT SCENE " These lights can be managed to shed.	1	
50-31-6051	U	<b>Tecniq K900 LED scene lights - rear facing</b> Installed on the rear face of the apparatus body in the upper corners below the warning lights. Lights to be switched from the cab Vista as " REAR SCENE ". Lights shall also activate when transmission is placed in reverse gear. These lights cannot be managed to shed as they are required for ULC.	1	
50-31-6505		<b>Ground lighting included with chassis E</b>	1	MTL
50-31-6570		<b>Ground lighting (LED Lumabar) - side mount body</b> Switched when park brake is set.	1	MTL
50-99-10AA	U	<b>Hose bed cover lights - 40" LED Lumabars</b> Four ( 4 ) 40" LED Lumabar lighting strips shall be installed under the hose bed covers as required by ULC. The lights shall automatically activate when the park brake is set.	1	
50-99-16AA	U	<b>LED lighting for rear access ladder</b> Switched when park brake is set.	1	
50-99-25AA	U	<b>LED lighting for walkway in center of hose bed</b> Switched when park brake is set.	1	
		<b>BODY</b>		
60-10-1400		Single axle extruded aluminum body	1	MTL
60-10-15AA	U	<b>1" drop on lower edge of compartment floor - sweep out type</b>	1	
60-10-4100		No "beavertail" rear step supports	1	MTL
60-10-4600		Painted fender surround E	1	MTL
60-10-4770		<b>Removable stainless steel fender trim - single axle E</b>	1	MTL
60-10-5400		> Diamondback pumphouse steps	1	MTL
		<b>ENG. NOTE:</b> Maximum height of step is 24" from ground		
60-10-5440	S	> <b>Diamondback rear step - minimum 12" deep</b> <b>ENG. NOTE:</b> Maximum height of rear step is 24" from ground	1	MTL
60-10-5452	U	<b>Intermediate step on rear for loading hose bed (over back compartment)</b> Step would be 12" deep, inset type. Requires 1" yellow reflective at rear surface to meet NFPA requirements.	1	
60-10-6500		<b>Bolt on extruded aluminum rub rail E</b> No reflective in rub rails requested.	1	MTL
60-10-6599	U	<b>Red and white reflective stripe in rub rail</b> There will be red and white reflective striping installed in the rub rail (60-10-6500) as requested by Rod Harris by e-mail on 03.18.2020	1	
60-11-0300		> <b>Front left side compartments full height E</b> <b>ENG. NOTE:</b> Specify critical dimensions in shop note	1	MTL
60-11-0700		> <b>Front right side compartments full height E</b> <b>ENG. NOTE:</b> Specify critical dimensions in shop note	1	MTL
60-11-1000		> <b>Rear left side compartments full height E</b> <b>ENG. NOTE:</b>	1	MTL



PART NO	S	DESCRIPTION	QTY	ID
		Specify critical dimensions in shop note		
60-11-1400		> <b>Rear right side compartments full height E</b> <b>ENG. NOTE:</b> Specify critical dimensions in shop note	1	MTL
60-11-2000		> <b>High side compartment (over 18") each</b> <b>ENG. NOTE:</b> Specify critical dimensions in shop note Specify type of door Specify flip up or drop down Specify which side of body	2	MTL
60-11-3200		> Full Height Rear compartment <b>ENG. NOTE:</b> Specify critical dimensions in shop note	1	MTL
60-11-5530	S	<b>Rollup door - to enclose pump panel - Painted job color</b> Natural aluminum finish Includes magnetic door switch, LED tube lights, rubber bumpers to prevent pinch point The rollup doors will change to painted as requested by the customer.	2	MTL
60-11-5600	S	<b>Rollup door - painted job colour - standard height</b> Painted to match body Includes magnetic door switch, LED tube lights, rubber bumpers to prevent pinch point The rollup doors will change to painted as requested by the customer.	2	MTL
60-11-5620	S	<b>Rollup door - painted job colour - full height</b> Painted to match body Includes magnetic door switch, LED tube lights, rubber bumpers to prevent pinch point The rollup doors will change to painted as requested by the customer.	5	MTL
60-11-5655	U	<b>Amdor pull straps - Flex-HD</b> Straps for high side compartments (L2 and R2). Ordered with doors.	2	
60-11-5660	U	<b>Amdor pull straps - Flex-HD</b> Straps for Front left, front right, rear left, rear right, LS pump door and RS pump door Ordered with doors.	6	
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 to be installed and wired to the door ajar indicator in cab Ladder to be 12" wide.	1	MTL
60-31-5500	U	<b>Price Adjustment</b>	1	
60-31-6500	S	<b>Compartment matting - black plastic interlocking tile</b>	1	MTL
60-31-65AA	U	<b>Yellow bevel edge for interlocking tile edge</b> The interlocking tile will have a yellow bevel edge at the outer edge of every compartment as requested by Rod Harris by e-mail on 03.18.2020	1	
60-31-7900	U	<b>Vertical unistrut tracking for compartment (ea)</b>	7	
60-31-8003	U	<b>Double SCBA tube for rear fender well (ea)</b> Two in right side rear fender One in left side rear fender (forward most) Door ajar switch required	3	

PART NO	S	DESCRIPTION	QTY	ID
		Retaining loops included. Customer to specify make and model of cylinder to be stored; Make - Scott Model - 4500 PSI Circumference - 20.5" (6" wide) Overall length - 24" As advised by Rod Harris by e-mail on 03.18.2020 and 04.27.2020 Photo of valve/cap to ensure retaining loop will slip over correctly See pictures: F:/Data/Jacques/Current Projects/Collingwood/Pictures/E-mail pics		
60-31-8210	S	> <b>Sliding vertical tool board - with locking mechanism</b> <b>ENG. NOTE:</b> Specify location  Location and spacing as advised by Rod Harris by e-mail on 04.27.2020 Tool Board #1 - In R3 compartment tight beside vertical partition 60-31-8400 so only one side is usable Tool Board #2 - In R3 compartment in the middle of the useable space left between the Tool Board #1 and the left side wall	2	MTL
60-31-83AA	U	<b>PAC board in L1 upper portion of compartment</b> There will be PAC board installed in the upper right side portion of the L1 compartment that will measure approximately 36" wide x 32" high as requested by Rod Harris by e-mail on 03.18.2020	1	
60-31-8400	S	<b>Fixed vertical partition</b> Location and spacing to be determined at the Pre-construction meeting; Partition #1 - Rearward of the pump panel controls Spacing - At the edge of the pump panel and where the compartment storage starts As advised by Rod Harris by e-mail on 03.18.2020 Partition #2 - L2 compartment over the rear wheels Spacing - In the middle of the compartment - approximately 34" from each side wall As advised by Rod Harris by e-mail on 04.27.2020 Partition #3 - R1 compartment Spacing - 40" from forward (cab side) of compartment wall As advised by Rod Harris by e-mail on 04.27.2020 Partition #4 - R3 compartment Spacing - 12" from forward (cab side) of compartment wall As advised by Rod Harris by e-mail on 04.27.2020	4	MTL
60-31-84AA	U	<b>Slots on pull out tray for 1 hi-vol hose &amp; 4 air bags</b> There will be a 5" wide slot for a customer supplied 4" hi-vol hose and four (4) 2" slots for customer supplied Vetter air bags that will be mounted on the pull out tray (60-31-8700) located in the B1 compartment. As advised by Rod Harris by e-mail on 04.27.2020	1	
60-31-8700	S	> <b>Sliding tray (ea) - 400 pound capacity with open/closed latch</b> <b>ENG. NOTE:</b> Specify location  Reflective stripe is applied on the exposed edge for visibility when the compartment door is open Tray #1 - L1 compartment rearward of fixed divider 60-31-8400 Tray #2 - R1 compartment forward of fixed divider 60-31-8400 Tray #3 - R1 compartment rearward of fixed divider 60-31-8400 Tray #4 adjustable on height - R1 compartment forward of fixed divider 60-31-8400 Tray #5 - B1 compartment As advised by Rod Harris by e-mail on 04.27.2020	5	MTL
60-31-8800	U	<b>Price Adjustment</b>	4	
60-31-88AA	U	<b>Sliding tray (ea) - 600 pound capacity / 100% extension</b> *** Hardware requires 3-1/2" of compartment height Reflective stripe is applied on the exposed edge for visibility when the compartment door is open. Tray #1 - L3 compartment on the bottom of the compartment	1	

PART NO	S	DESCRIPTION	QTY	ID
		As advised by Rod Harris by e-mail on 04.27.2020 and 100 % extension as requested by Rod Harris by e-mail on 06.12.2020		
60-31-9000	U	<b>Price Adjustment</b>	3	
60-31-9600	S	> <b>Adjustable shelf (ea)</b> <b>ENG. NOTE:</b> Specify location	10	MTL
		<b>White reflective stripe is applied on the exposed edge for visibility when the compartment door is open</b> <b>Locations to be determined at the Pre-construction meeting;</b> <b>Shelf #1 - L1 compartment, rearward of vertical partition 60-31-8400 and below PAC board 60-31-83AA</b> <b>Shelf #2 - L2 compartment ahead of vertical partition 60-31-8400</b> <b>Shelf #3 - L2 compartment rearward of vertical partition 60-31-8400</b> <b>Shelf #4 - L3 compartment</b> <b>Shelf #5 - L3 compartment</b> <b>Shelf #6 - R1 compartment at top of compartment forward of vertical partition 60-31-8400</b> <b>Shelf #7 - R1 compartment rearward of vertical partition 60-31-8400</b> <b>Shelf #8 - R1 compartment rearward of vertical partition 60-31-8400</b> <b>Shelf #9 - R1 compartment rearward of vertical partition 60-31-8400</b> <b>Shelf #10 - R2 compartment</b> <b>As advised by Rod Harris by e-mail on 04.27.2020</b>		
60-31-96AA	U	<b>Fixed shelf</b> There will be fixed shelves with 1" reflective strip on the edge located: Fixed Shelf #1 - R3 compartment forward of fixed vertical partition 60-31-8400 and 55" from compartment floor Fixed shelf #2 - B1 compartment between side wall and plumbing blister 32" above compartment floor As advised by Rod Harris by e-mail on 04.27.2020	2	
60-31-97AA	U	<b>Pull out accountability board</b> There will be a pullout accountability board mounted towards the right side of the L1 compartment which will measure approximately 32" high by the depth of the compartment. There will be white board on each side of the pull out board and the slide will have lock in / lock out hardware. As requested by Rod Harris by e-mail on 03.18.2020	1	
60-32-3550	S	<b>Two adjustable hose dividers and two fixed to support hose bed covers</b> Hand hold required in end	1	MTL
60-32-3580	U	<b>Non-slip walkway up center of hose bed</b> The hosebed shall incorporate a center walkway for safety. The walkway shall be minimum of 12" wide and sided by two fixed dividers that will also act as hosebed cover supports. Non slip overlays shall be provided in the walkway part of hosebed. SOPT in file.	1	
60-32-7500		<b>Hose bed - aluminum</b> Hose bed capacity for 1000' - 4" 400' - 2-1/2" 400' - 1-3/4"	1	MTL
60-33-0100	S	<b>Paint exterior - Imron Elite and clearcoat - Black over Red</b> *** The body will be painted black over red as requested by the customer.	1	MTL
60-33-0200		Undercoat vehicle with KROWN rust protection	1	MTL
60-33-0600		<b>Chassis wheels not painted</b> Polished aluminum wheels	1	MTL
60-33-1000		Paint pump and plumbing job colour	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
60-33-1600		<b>Special paint compartment interior - gray zolatone E</b> The compartment interiors are finished with a gray textured paint for chip resistance. Shelves, trays and hardware are left natural aluminum.	1	MTL
60-33-2000	S	<b>Lettering - no lettering provided</b> The lettering was deleted as requested by Rod Harris by e-mail on 01.26.2021.	1	MTL
60-33-2300	U	<b>Price Adjustment</b>	1	
60-33-3200	S	<b>Reflective stripe - 4" black reflective stripe</b> 4" black reflective stripe with "hockey stick" pattern on the L1/R1 compartment door. There will be room left for customer installed 1/2" stripe above and below which will be done after delivery. There will be Canadian flags in the crew window. As approved by Rod Harris by e-mail on 01.26.2021	1	MTL
60-33-3310	S	<b>Reflective stripe - red and yellow chevron at rear - 3M Diamond Grade</b> Minimum 50% of rear vertical surface	1	MTL
60-33-5000		<b>Aluminum cover over hose bed with end tarps - black E</b> Doors to have switches wired to door ajar warning light in cab. Rear flaps shall be secured along the back vertical lip of the cover with twist grommets. The lower half of the flap shall be secured to the body with shock cord and loops.	1	MTL
60-40-5500	S	<b>Suction hose tube (each) with door</b> To house the 80-11-5000 6" x 10' suction hoses only - no additional length required where barrel strainer will not remain attached. As advised by Rod Harris by e-mail on 03.18.2020 . Fully enclosed. Door ajar switch required. Stainless steel scuff plate to be installed around the door openings.	2	MTL
60-40-9000	S	<b>&gt; Tube mount for ladders - through the tank</b> <b>ENG. NOTE:</b> Specify location, ladders to be installed in this tube, complete dimensions of ladders if user supplied  For storage of the 24' two section ladder 80-14-0500, 14' roof ladder 80-14-5500, 10' folding attic ladder 80-14-8500 (see also 60-41-1500) and the 6' pike pole with "D" handle 80-13-2520 (see also 60-41-1000). To be configured so any one of the above can be removed easily with out interference.	1	MTL
60-41-1000	S	<b>Pike Pole tube with rear access integral with 60-40-9000</b> For storage of the 6' pike pole with "D" handle 80-13-2520	1	MTL
60-41-1015		<b>Pike Pole tube in suction hose tube</b> For storage of the 10' pike pole 80-13-2500 and the 12' pike pole 80-13-2516	2	MTL
60-41-1500	S	<b>Attic ladder tube with rear access integral with 60-40-9000</b> For storage of the 10' folding attic ladder 80-14-8500.	1	MTL
60-41-9700	U	<b>Price Adjustment</b>	2	
60-99-15AA	U	<b>Hose bed cover locks</b> Similar hose bed locking devices as installed on Georgina, ON SOPT in file	1	
<b>INSTRUMENTATION</b>			1	MTL
70-11-0000		<b>Warning Label on Pump Operator's Panel</b>	1	MTL
70-11-0500	S	<b>Side mount instrument panel with roll up door - right side and left side</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.	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
		Include 1" drop in floor (ref 60-10-15AA) The bottom portion of the left side pump panel will extend to the chassis frame rail to provide storage space. As requested by Rod Harris by e-mail on 03.18.2020		
70-11-0600	U	<b>Linkage controls in left front compartment - HEAT style design</b>	1	
70-11-1500		<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	1	MTL
70-11-3200		<b>Colour coded tags</b> Tags will be in imperial units unless and otherwise specified.	1	MTL
70-11-4002	U	<b>Price Adjustment</b>	1	
70-11-4102	U	<b>Price Adjustment</b>	1	
70-11-5000	U	<b>Price Adjustment</b>	1	
70-11-5200	U	<b>Hinged top cover for dunnage over pump house</b> The area above the speedlays shall incorporate a storage area. The dunnage pan shall be accessible from the top only. The top shall be fitted with a forward hinged aluminum checker plate door with lift handle and latches, gas shocks and retention chain and will be wired integral to the door ajar circuit. The pan shall be fitted with LED strip lighting, tile matting and a drain hole plumbed to below the frame level	1	
70-11-5500	S	<b>Right side plate pump access door in R1 back wall</b> No opening dimension less than 18". It is a smooth plate door (Zolatoned)	1	MTL
70-11-5700	S	<b>Transverse tread plate pump access door</b> Cab has to be tilted for access. No opening dimension less than 18"	1	MTL
70-11-7501	U	<b>Heat pan - aluminum - two (2) pieces</b> The heat pan will be seperated in 2 pieces - half the pan will be removable from each side of the unit. As requested by Rod Harris by e-mail on 03.18.2020	1	
70-11-8000		<b>Heater in pump compartment</b> Switch for heater located on left side pump operator's panel.	1	MTL
70-11-8200	U	<b>Rubber seal around suction and discharge openings on panel</b>	1	
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	
70-20-2130	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.	10	
70-20-2500	S	<b>Primer control - Trident</b> There will be a Trident primer control installed on the pump panel.	1	MTL
70-20-2501	S	<b>Additional Primer control - Trident</b> For left, right and rear suction pre-prime as requested by Rod Harris by e-mail on 04.28.2020	3	MTL
70-20-3100		<b>Class One Governor Control</b> Throttle can be no lower than 42" and no higher than 72" from operator's standing position.	1	MTL
70-20-3670	U	<b>FRC WLA300-A00 water level gauge on pump operators panel</b>	1	
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
70-20-7600		<b>Pump cooler control valve</b>	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
70-21-1650	U	FRC WLA360-A00 foam level gauge on pump operators panel	1	
70-99-05AA	U	Whelen PSTANK2 with chrome bezel level indicator for tank on rear face of body PSTANK2 to match the Spartan supplied ones on cab. Wired to be disabled when park brake is released.	1	
<b>ACCESSORIES</b>			1	MTL
80-11-1010	U	2-1/2" x 10' lightweight suction hose (ea) Stored inside the 6" tube mounted suction hoses 80-11-5000. With CSA threads and rocker lug couplings.	2	
80-11-5000		6" x 10' lightweight suction hose (ea) Tube mounted	2	MTL
80-12-11AA	U	Price Adjustment	8	
80-13-2500		Pike pole, fibreglass handle - 10' long Tube mounted.	1	MTL
80-13-2516	U	Pike pole, fibreglass handle - 12' long Tube mounted.	1	
80-13-2520		Pike pole, fibreglass handle - 6' long - "D" handle Tube mounted.	1	MTL
80-14-0500		24' 2 section extension ladder PEL 24 Tube mounted.	1	MTL
80-14-5500		14' aluminum roof ladder PRL-14 Tube mounted.	1	MTL
80-14-8500		10' aluminum folding attic ladder FL-10 Tube mounted.	1	MTL
80-30-05AA	U	NFPA compliant rubber wheel chock (ea) Part number 1562398 - Yellow chocks The wheel chocks will be shipped loose as requested by Rod Harris by e-mail on 02.08.2021	2	
80-99-05AA	U	6" NHF long handle full time swivel by 4" Storz 30 degree elbow - SKE4T6L SKE4T6L (part number 1501827) 4" blind Storz cap (part number 1500650) See 80-12-11AA for mounting. Ensure that the adapters can be left mounted on the 6" inlets with the roll up doors closed.	2	
80-99-10AA	U	6" FNH by 4" Storz adapter and cap - Kocheck S37S46 S37S46 (part number 1501034) 4" blind Storz cap (part number 1500650) See 80-12-11AA for mounting. Ensure that the adapters can be left mounted on the 6" inlets with the roll up doors closed.	2	
80-99-15AA	U	Bank Charger and five (5) yellow Survivor flashlights There will be a 90400 Streamlight bank charger and five (5) 90510 yellow Survivor flash lights supplied and installed on the left side console in the cab (20-99-10AA). As requested by Rod Harris by e-mail on 03.18.2020	1	