



Shop Order

Fredericton Regional Centre
 Suite 2300
 300 St. Mary's Street
 Fredericton, NB E3A 2S4

Long Reach Fire Department

Exp. Date: 11/16/2018
Quote No: PNB -Long Reach-0021
Job/Order No: 21759
BODY: 00-10-15 Metalfab Pumper - ULC 05/13

03/28/2022

Page 1

PART NO	S	DESCRIPTION	QTY	ID
		== Metalfab Pumper - ULC 05/13 - 0.000 ==	1	MTL
	S	CHANGE ORDER F	1	MTL
00-10-1500		Metalfab Pumper E	1	MTL
00-20-1000		Company Profile E	1	MTL
00-20-1501	S	One year base warranty	1	MTL
		If the vehicle requires repairs at the Manufacturers facility or their Authorized Repair Facility, all costs including transportation costs to and from that facility, shall be the responsibility of the Manufacturer (for the warranty period).		
00-20-1550		Metalfab Limited Ten (10) Year Paint and Corrosion Warranty	1	MTL
00-20-1700		Hale Pump Warranty - 5 years	1	MTL
00-20-1800		Polypropylene Tank Lifetime Warranty	1	MTL
00-20-2100	S	Plant Inspection Visits - five inspection visits for three representatives	1	MTL
		Up to five visits for three representatives - times and dates to be determined.		
00-20-3500		Certification for Fusion Welding of Aluminum	1	MTL
00-20-4000	S	Quality System registered to ISO 9001:2015	1	MTL
00-20-4500		Fire Apparatus Manufacturers' Association Membership	1	MTL
		GENERAL INFORMATION	1	MTL
10-11-0000		Intent E	1	MTL
10-11-0110		Vehicle data recorder included with chassis	1	MTL
10-11-1101	S	ULC S515-13 and NFPA 1901-2016 Compliance E	1	MTL
10-11-1500		> ULC Testing - Pumper	1	MTL
		ENG. NOTE:		
		Note in the shop note if the Fire Department wishes to witness the test		
		Separate flow test shall be taken for the rear suction flow rate. Written test results shall be presented to the Department of Environment and Local Government personnel during final inspection.		
10-11-2100		Maximum length not specified E	1	MTL
10-11-2200	S	Maximum height - 120"	1	MTL
10-11-2400		Overall length is 30' or more	1	MTL
10-11-2500		General Construction	1	MTL
10-11-3000	S	Manuals - three copies - (2 hard copies, 1 electronic)	1	MTL
		Two (2) copies and one (1) electronic copy of complete operation and service manuals will be provided covering the completed apparatus (body and equipment) as delivered and accepted, including the pump, wiring diagrams, lubrication charts, and fire fighting equipment delivered with the apparatus. Chassis manuals are those supplied by the chassis manufacturer. Body manuals are to include a parts list and a recommended service and maintenance schedule. Body manuals shall also contain the following drawings:		
		• All electrical drawings;		
		• Accessory mounting;		
		• All drawings shall be ledger size - 11" x 17".		

PART NO	S	DESCRIPTION	QTY	ID
10-11-3600	S	> Delivery - FOB Fire Department - minimum eight hours training ENG. NOTE: Note in the shop note if more than 4 hours of training is required Roland Caissie requests that a video copy of the orientation be included for department use in the future. As requested at the pre-construction meeting of 11.27.2020	1	MTL
10-11-36AA	U	Orientation video Roland Caissie requests that a video copy of the orientation be included for department use in the future. As requested at the pre-construction meeting of 11.27.2020	1	
10-11-4300	S	Payment Terms - Chassis and Body NET 30 The Change Order A will be invoiced seperately as requested by Roland Caissie by e-mail on 12.30.2020.	1	MTL
10-20-1400	S	> Hose capacity exceeding ULC/NFPA requirements ENG. NOTE: Specify the type of hose and quantity of hose to be carried on the vehicle The hose bed capacity will be: 400' of 1.75" hose 200' of 2.5" hose 1200' of 4" hose An additional 878lbs will be added at the ULC test. As discussed at the pre-construction meeting of 11.27.2020	1	MTL
10-20-2000		Equipment carrying capacity - standard ULC Pumper This vehicle is designed to carry the standard ULC miscellaneous equipment load of 2000 pounds.	1	MTL
		CHASSIS INFORMATION		
20-11-1000	S	Chassis supplied by Metalfab - Freightliner M2 106 - four door Freightliner M2 112, 4 door cab, single rear axle 47,000 lb GVWR 16,000 lb front axle 31,000 lb rear axle 284" wheel base, 170.67" Cab to axle Cummins L9 450 HP @ 2100 rpm 2200 governed rpm 1250 lb-ft torque @ 1400 rpm Cummins engine brake ****(add code to signal brake lights when ordering chassis)**** Allison 3000 EVS automatic transmission, 5 speed, no PTO openings 60 MPH top road speed to meet NFPA 275 Amp alternator 189 litre fuel tank, left side under cab Two 12 volt power points and one USB power point Flashing headlights Cruise control switches located on dash Fixed steering column ESC, VDR and seat belt display Color is L5994EY Harvester Red Elite to match last unit serial # KG6112 Color to be confirmed Add LED headlights Change air horn controls to lanyards As discussed at the pre-construction meeting of 11.27.2020	1	MTL
20-11-1500		2013 Emission chassis modifications	1	MTL
20-11-1700	S	Chassis Motor Vehicle Inspection required - NB Chassis is provided with a New Brunswick Motor Vehicle Inspection dated the month of delivery.	1	MTL
20-21-0500		Fluid capacity plate	1	MTL
20-21-0600		Pumping test plate	1	MTL
20-21-1030		Maximum riders sign - 5 persons	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
20-21-1510		Seat belt warning labels - 4 door chassis	1	MTL
20-21-1520		Helmet warning label - do not wear helmet	4	MTL
20-21-1560	U	Tire Pressure Indicators - Single Axle - install prior to delivery	1	
20-21-1600		Apparatus Information Label 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
20-21-2000		Non removable key	1	MTL
20-21-2500		Shifter lock not required E	1	MTL
20-21-3500		Rear step warning label	1	MTL
20-21-3810		Front mudflaps provided with chassis E	1	MTL
20-21-4000		Rear mudflaps - Metalfab Logo	1	MTL
20-31-0200		Fuel fill label -Ultra Low Sulfur Diesel only	1	MTL
20-31-1000		Alum tread fuel tank trim, Conv - 4 door Vertical trim only, OEM cab steps remain	1	MTL
20-31-1900	S	Chassis cab single color by chassis OEM	1	MTL
20-31-4700	S	> Extend front bumper, gravel shield with preconnected hosewell ENG. NOTE: Note location of preconnect elbow Note special capacity requirements _____ ***Bumper to be extended to a maximum of 24" ahead of cab by Metalfab, carry 100' of 1.75" hose and a pistol grip nozzle, have a cover with a gas strut and lift / turn latch along with a notch on the right side for the pre-connect hose. The bumper can be shortened as discussed at the pre-construction meeting of 11.27.2020	1	MTL
20-31-7500	S	Console in cab Install switch panel (50-11-0900), siren (50-11-1470), switch for On Spot chains (20-41-5500), Signal Master control (50-11-7600), Q2B momentary switch for officer (50-11-2010), radio provisions (50-35-0500) by way of blank black plates, clip for the wireless Visibeam control (50-21-3088), and pump shift (30-51-0500) in console. Storage area with hinged cover and lift and turn latch provided at rear of console. Gray Zolatone finish ***Layout to match M18-20028 where possible and confirmed at the Pre-construction meeting of 11.27.2020***	1	MTL
20-41-0600	S	No intake air shutoff for engine 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. The department will have a Plymovent system in the hall that will require 2" of space under the rub rail and 4" of tail pipe exposed (similar to Nauwigewauk, NB). As discussed at the pre-construction meeting of 11.27.2020	1	MTL
20-41-1900		Battery boost terminals with chassis E	1	MTL
20-41-2000		Chassis batteries remain in OEM location	1	MTL
20-41-2510		Fuel fill at step fuel tank under cab	1	MTL
20-41-2600		Chassis fuel tank remains in OEM location	1	MTL
20-41-5100		Rear Tow Hook - pintle hook E The pintle hook shall be located in the center of the rear compartment - surface mount on back wall.	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
20-41-5500		ON SPOT Automatic traction chains Control switch to be on the 20-31-7500 console within easy reach of the driver to match M18-20028. Note - it may have to be on the dash if supplied by Freightliner.	1	MTL
20-51-0710		Master Battery Disconnect included with Freightliner chassis	1	MTL
20-51-2500		Back up alarm included with chassis	1	MTL
20-51-3400		Protection valve installed for air operated accessories	1	MTL
20-51-3500		Air outlet A female air outlet fitting will be installed to allow use of chassis air. The air line is plumbed through the air system protection valve to prevent loss of braking air pressure. Located on left side pump panel.	1	MTL
20-51-4000		Auto eject for air inlet - LS Located on LS pump panel	1	MTL
20-51-5600	S	Flashing headlights w/ daytime running lights with chassis	1	MTL
20-51-6200	S	> 120 volt 20 A shore line connection in chassis cab ENG. NOTE: Requires 20-51-75 120 volt auto eject or 20-51-80 120 volt inlet Standard 5-20R duplex receptacle in chassis cab, not fused 1. On back wall of chassis for battery conditioner to plug into, minimum 12" from floor level 2. Upper portion of L1 compartment 3. Upper portion of L1 compartment 4. Upper portion of L3 compartment As requested at the pre-construction meeting of 11.27.2020	4	MTL
20-51-6502	U	Kussmaul Battery Conditioner 1200 with Auto Eject and readout Battery conditioner mounted behind console/drivers seat. Auto Eject and readout located on LS pump panel	1	
20-51-7101	S	Electric System Management - VMUX	1	MTL
20-51-8505		Engine compartment light included with chassis E	1	MTL
20-51-9001	S	Air horns on chassis hood with lanyard controls included with chassis The air horns will be controlled by lanyards at the driver and officer position as requested at the pre-construction meeting of 11.27.2020	1	MTL
20-52-0010	U	Air horn control on pump panel Located on transverse pump operators panel SOPT 475	1	
20-52-3500		> Chassis steering wheel lined up by Metalfab E ENG. NOTE: Freightliner, Sterling, and Spartan only	1	MTL
20-52-4009	U	Pro Vision Video Systems - Front, right, left and rear view camera system - DVR Monitor to be mounted on dash inside cab on a rigid mount Cameras mounted similar to Bath, NB M18-20025 Metalfab p/n 1530928 (ref PO #64470) SOPT #1247 - truck specific	1	
20-52-41AA	U	Additional ProVision monitor on pump panel There will be a secondary video monitor supplied and installed on the pump panel. It will be wired to the cameras (20-52-4009) and allow the pump operator to view three (3) sides of the unit. The three cameras will be left side, rear and right side as confirmed by the fire department by e-mail on 11.10.2021 As requested at the pre-construction meeting of 11.27.2020 SOPT - same as Florenceville-Bristol M20-20946	1	
20-60-0400		Chassis wheelbase does not change	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
20-99-05AA	U	Deck plate guard on rear chassis floor The elevated edge between the rear and front chassis floor will be protected by a deck plate guard like the chassis provided by Nova. As discussed at the pre-construction meeting of 11.27.2020	1	
PUMP AND PLUMBING			1	MTL
30-11-5600		Hale QFLO Single stage 1050 IGPM	1	MTL
30-12-3300		Mechanical seal for Hale QFLO pump	1	MTL
30-15-0102		Plumbing - Hale manifold pump TM SS E	1	MTL
30-20-1000		Valves and controls - top mount panel	1	MTL
30-20-1003		Elkhart valves specified	1	MTL
30-20-1600		Piping stainless steel - general Schedule 10 stainless steel pipe is acceptable.	1	MTL
30-20-1700	S	1-1/2" thread specifications - NPSH The department uses threaded NPSH as advised at the pre-construction meeting of 11.27.2020	1	MTL
30-20-1800	S	2-1/2" thread specifications - Saint-John Thread - 3x8 BAT The department uses threaded Saint John 3x8 BAT as advised at the pre-construction meeting of 11.27.2020	1	MTL
30-20-18AA	U	Red Head Storz adapters to Customer's threads Adapters shall be supplied for all 2½" discharges and 2½" suction inlets including the SSRV discharges to adapt Red Head Storz fitting to fit Fire Department hoses complete with matching caps. (ref SOPT #46 - truck specific) 2-1/2" adapter for gated wye 80-16-1500 also required. Department shall supply thread specification of their existing hoses.	1	
30-20-2000		Piping hydrostatic test	1	MTL
30-20-2500		Anodes in suction and discharge piping 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
30-21-9515		Tank to Pump 4" Ball valve SS, electric control with check valve manifold pump	1	MTL
30-22-0530		Tank Fill valve 2" TM SS	1	MTL
30-31-4010	S	Suction - 6" gated each side manifold pump	1	MTL
30-31-6028	U	Suction - 5" rear, SS, electric control, bleeder, 6" connection Suction shall be located on the left-hand side of the rear, below the 10" rear dump inside the rear compartment. Bleeder for the suction shall be on the back wall of the back compartment. Control for the electric valve (ref 30-31-7200) shall be on the top pump operators panel. There shall be a minimum of 625 IGPM flow capacity delivered at draft. A flow test shall be taken and written test results shall be presented to the Department of Environment and Local Government personnel during final inspection. SOPT #72 - Truck specific	1	
30-31-7200		> Hale master intake suction valve - electric control ENG. NOTE: Required for top mount panels Show location in Shop Note *** Suction to be gated is left, right and rear. All three electric controls will be located at the transverse pump operators panel. The manual over ride controls will be adjacent to the corresponding valve.	3	MTL
30-32-8530		Suction - 2-1/2" left side SS, TM control, Hale manifold pump Bleeder required - located on corresponding side pump panel	1	MTL
30-32-9030		Suction - 2-1/2" right side SS, TM control, Hale manifold pump Bleeder required - located on corresponding side pump panel	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
30-40-2030		4" right discharge TM SS, plumbed 3", Hale manifold pump Bleeder required - located on corresponding side pump panel	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 *** One (1) each Side	2	MTL
30-44-0530	S	1-1/2" crosslay (each) TM SS, 2" valve, bleeder There will be two (2) crosslays added to the top of the pump house as requested at the pre-construction meeting. They will be plumbed with 2" valves, have hose rollers at each end and carry 200' of 1.75" each. As requested at the pre-construction meeting of 11.27.2020 Note: Discharges will be plumbed to water only	2	MTL
30-44-0730		1-1/2" speedlay (each) front of pumphouse TM SS, plumbed 2" Each hose lay shall have minimum capacity for 200' x 1-3/4" hose and nozzle. Bleeder required - located on corresponding side pump panel.	2	MTL
30-44-1030		> 1-1/2" front trash line TM SS, plumbed 2", hosewell ENG. NOTE: Requires extended front bumper, gravelshield Hose well shall have minimum capacity for 100' x 1-3/4" hose and nozzle and chrome swivel on the upper right side.. Bleeder/drain required - plumbed to lowest part of piping and manual drain under the bumper.	1	MTL
30-44-6530		Piping for monitor TM SS, plumbed 3", bleeder Centered left to right transversally and located forward most in area behind transverse pump panel as shown on the proposal drawing. Piping is capped for future installation of a Customer supplied and installed deck gun/monitor. Bleeder control on the pump panel	1	MTL
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
30-51-0700		Pump Gearbox mounted manual over ride for pump shift E	1	MTL
30-51-66AA	U	FRC Total Control TCA100 The governor will be an FRC Total Control TCA100 as approved by Roland Caissie by e-mail on 09.01.2021.	1	
30-51-7005	U	Suction side relief V/V, manifold pump For the 6" left side gated inlet, the 6" right side gated inlet and the 6" rear gated inlet. Red Head Storz adapters required on all three. Include Red Head Storz adapters to Customer's threads (ref 30-20-18AA)	3	
30-51-7714		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	1	MTL
30-51-7720	S	Additional air tank for air primer system included with chassis An additional air tank is provided to improve air primer capacity and is included with the chassis (1350 cu. in.)	1	MTL
30-51-8100		Heat exchanger included with chassis	1	MTL
30-52-1000		Master drain V/V, 12 port	1	MTL
30-52-2000		Drain valve for foam system header	1	MTL
30-52-5510		Foam system-Hypro FoamPro 2001 Single Tank The 1-1/2" speedlays (2), the 2-1/2" right side discharge. front trashline and one 2-1/2" rear (right side only) are to be foam solution capable.	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
30-52-8100		Electric foam fill pump with panel pickup There shall be one (1) pump panel foam pick up connection for the foam tank, located on the right-side pump panel. Control for the foam fill pump shall be located on the right-side pump panel. Included will be a hose with the mating connection to the panel connection to allow filling from a ground level foam pail. The hose shall be stored inside the right-side pump access door on a bracket.	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
		WATER AND FOAM TANKS		
40-11-2100		Polypropylene water tank (Imperial gallons)	1	MTL
40-11-2200		Water tank capacity certification (tank manufacturer)	1	MTL
40-11-5500		Tank capacity 1200 Imperial Gallons	1	MTL
40-12-5000		Foam cell - 30 Imperial gallon	1	MTL
40-13-0100	S	> Through the tank tunnel for portable tank storage ENG. NOTE: Charge 60 per cubic foot of tunnel volume	1	MTL
40-21-1000		4" tank to pump connection	1	MTL
40-22-0500		2" tank fill connection	1	MTL
40-23-0500	S	3/4" water level gauge connection	1	MTL
40-23-1000	S	3/4" foam level gauge connection	1	MTL
40-23-1060		10" Newton dump connection	1	MTL
40-30-0500		Sump drain valve (3" gate valve) with linkage E Located left side of tank so no interference with drive line or exhaust.	1	MTL
40-30-1000		Water Fill Box front left corner	1	MTL
40-31-3500		10" rear Newton dump, stainless steel	1	MTL
40-31-3600		Newton dump - stainless steel 36" telechute	1	MTL
40-31-5510		Electric operator for Newton dump, side mount Switch is locate on the left rear above the tail lights and flashing warning light. Provisions are made to allow manual operation of the dump line in the event of an emergency.	1	MTL
40-31-9010	U	4" Red Head Storz rear fill, Fireman's Friend Right of dump line in rear compartment, bleeder required.	1	
		ELECTRICAL		
50-11-0300		Base electrical system - multiplex E	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
50-11-0900	S	Rocker switch panel with master warning switch ***Rocker switch assignments: MASTER -LIGHT BAR RED -REAR BEACONS -FLASHING WARNING -REAR FLOODS -Control (hooded switch) for traction chains - ref 20-41-5500 if required -Siren brake -Momentary Q2B switch for officer -Ditch lights	1	MTL
50-11-1470	U	Whelen 200 Watt Siren - Model 295SLSC1 P/N 1570997 SOPT #954a	1	
50-11-1630		> Siren speaker, 200 watt, in front bumper ENG. NOTE: 1570615 Federal BP200-EF	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
		Left side (drivers side)		
50-11-2010	S	Federal Q2B mechanical siren - through front bumper Right side (curb side) ***Controlled by foot switch at driver and momentary switch at officer positions (on console 20-31-7500). As requested at pre-construction meeting of 11.27.2020 Interlock with emergency master switch and install a separate master kill switch on the chassis floor near the driver entry door Install at an angle like M18-20028	1	MTL
50-11-2600		Siren to be accessible to driver and officer	1	MTL
50-11-5812	U	Federal LPX53DS-NFPA lightbar Red only - all lights are enabled in both Response and Scene modes - flash pattern to change when park brake is set. SOPT #798 - Metalfab part # 1571015	1	
50-11-58AA	U	Federal Lighting package	1	
50-11-7600		Rear LED Signal Master warning lights Federal Latitude Signal Master - Model SL8S-A-50 Includes 50' cable and Economy controller Signal Master lightbar is located under the intermediate step on rear (60-31-5800). Control will be located in the 20-31-7500 console.	1	MTL
50-11-9015	U	Rear Beacons, Federal NVG10 (pr), both red SOPT #1063 - truck specific	1	
50-12-5028	U	Front LED flashers (pr)-red Federal QL43-RR	1	
50-12-5118	U	Rear LED flashers (pr)-red Federal QL43-RR	1	
50-12-5218	U	Front side inter lts (pr)-red LED Federal QL43-RR	1	
50-12-5318	U	Body side inter lts (pr)-red LED Federal QL43-RR	1	
50-12-5410	S	> Additional body side inter lts (pr)-red LED Federal QL43-RR - on chassis cab ENG. NOTE: Required if distance between front and rear side intersection lights exceeds 25' To be installed between the front and rear chassis entry door as discussed at the pre-construction meeting of 11.27.2020	1	MTL
50-21-1505	U	Unity LED rear Floods (pr) Switched in cab and when transmission is placed in reverse. These lights cannot be managed to shed as they are required for ULC. SOPT #255a	1	
50-21-1620	S <	Parking (ditch) lights in rear fenders - LED Tecniq E96 SOPT #160b The ditch lights will be Tecniq to fit the area under the SCBA tubes in the rear fender well. As approved by Roland Caissie by e-mail on 09.15.2021. The lights will be switched in the cab and interlocked with the reverse of transmission as discussed at the pre-construction meeting of 11.27.2020	1	MTL
50-21-2547	U	FRC Telescoping Spectra LED 12-volt flood (ea) SPA530-Q15-SW-NS-H One each side at rear of chassis cab. Lights are switched on the transverse pump operators panel. These lights can be managed to shed. Hazard switch wired to the equipment not stored warning light in cab	2	
50-21-3015	U	Federal Signal Wireless Visibeam P/N 1031564 The rear portion of the light shall be shielded to avoid potential of light shining in driver's eyes. Shield is to be painted to match cab. The wireless control will be located on the console with a clip	1	

PART NO	S	DESCRIPTION	QTY	ID
50-21-5100		> Compartment lighting - LED tube lights in each compartment (rollup doors) ENG. NOTE: Rollup doors only 4" round LED grommet mounted light in front wall of compartment over right side rear wheels	1	MTL
50-21-5500		Door Ajar warning light Located in overhead console over drivers seating position Bilingual warning label in cab to read: "Do Not Move Apparatus when Light is on"	1	MTL
50-21-5550		Equipment rack not stowed warning light Located in overhead console over drivers seating position Bilingual warning label in cab to read: "Do Not Move Apparatus when Light is on" This warning light will be actuated when one or more of the following are not in the stowed position. LAS LS Telescopic light RS Telescopic light	1	MTL
50-21-8001		Step lights for body steps - 4" LED Switched with the park brake	1	MTL
50-21-8110		Step lights for walkway - 4" LED	1	MTL
50-21-8201	S	Step lights for chassis steps - LED	1	MTL
50-21-83AA	U	LED lighting for rear step/platform Switched with the park brake	1	
50-21-8600		LED clearance lts and reflectors	1	MTL
50-21-8800		LED intermediate turn signal/clearance/reflector length >30'	1	MTL
50-22-0700	S	Whelen 64 LED tail/brake-turn-backup module (pr)	1	MTL
50-31-6560		Ground lighting (LED Lumabar) - 4 door chassis	1	MTL
50-31-6580		Ground lighting (LED Lumabar) - top mount body	1	MTL
50-35-0510	U	Provisions for Customer's mobile radio Provision for two (2) customer radios is provided in the chassis console 20-31-7500. 12-Volt power and ground is provided for these radios, powered from the master kill switch and fused for 30A. There will be a signal from the ignition required. The provisions will be a blank black plate to allow any size radio to be installed as approved by the department by e-mail on 10.09.2021	2	
50-35-0600	U	Antenna base only for commercial chassis complete with raincap Cable will be routed to the 20-31-7500 console and properly labeled. Customer to specify any special mounting location or spacing requirements, otherwise antenna base will be installed behind the lightbar one left and one right side.	2	
50-99-10AA	U	Hose bed cover lights - 40" Lumabar Switched with park brake. SOPT 209	1	
		BODY		
60-10-1400		Single axle extruded aluminum body	1	MTL
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 ENG. NOTE: Maximum height of step is 24" from ground	1	MTL
60-10-5430		> Diamondback 19" rear step ENG. NOTE: Maximum height of rear step is 24" from ground	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
60-10-6000		Extruded rub rail	1	MTL
60-11-0300		> Front left side compartments full height E ENG. NOTE: Specify critical dimensions in shop note	1	MTL
60-11-0600		> Front right side compartments intermediate height ENG. NOTE: Specify critical dimensions in shop note	1	MTL
60-11-1000		> Rear left side compartments full height E ENG. NOTE: Specify critical dimensions in shop note	1	MTL
60-11-1300		> Rear right side compartments intermediate height ENG. NOTE: Specify critical dimensions in shop note	1	MTL
60-11-1900	S	> Low side compartment (up to 18") each ENG. NOTE: Specify critical dimensions in shop note Specify type of door Specify flip up or drop down Specify which side of body Over right side rear wheels - compartment to be as tall as possible as requested at the pre-construction meeting of 11.27.2020	1	MTL
60-11-2000		> High side compartment (over 18") each ENG. NOTE: Specify critical dimensions in shop note Specify type of door Specify flip up or drop down Specify which side of body Over left side rear wheel wheel	1	MTL
60-11-3200	S	> Full Height Rear compartment ENG. NOTE: Specify critical dimensions in shop note The rear compartment will be 25" deep to keep the angle of departure shown on the proposal drawing. As approved by Roland Caissie by e-mail on 09.15.2021	1	MTL
60-11-4535	U	Flush mount aluminum door - single with "D" handle - flip up w/gas struts For the compartment over right side rear wheels	1	
60-11-5500		Rollup door - standard height For the compartment over left side rear wheel wheel Natural aluminum finish Includes magnetic door switch, LED tube lights, rubber bumpers to prevent pinch point	1	MTL
60-11-5510		Rollup door - intermediate height For the right side front and rear compartments Natural aluminum finish Includes magnetic door switch, LED tube lights, rubber bumpers to prevent pinch point	2	MTL
60-11-5520		Rollup door - full height For the left side front and rear compartments and the back compartment. Natural aluminum finish Includes magnetic door switch, LED tube lights, rubber bumpers to prevent pinch point	3	MTL
60-11-5655	U	Amdor pull straps - Flex - HD For L2 compartment	1	

PART NO	S	DESCRIPTION	QTY	ID
60-11-5660	U	Amdor pull straps - Flex - HD For L1, L3 and B1 compartments	3	
60-31-4100		Extruded aluminum handrails Minimum 2" clearance from handrail to any surface	1	MTL
60-31-5500	S	Steps at rear of body (folding) with LED lights Maximum height between steps is 18"	1	MTL
60-31-5600	S	Steps and grab handles at front of body next to pump panel Maximum height between steps is 18" Standard locations will be acceptable as discussed at the Pre-construction meeting of 11.27.2020	1	MTL
60-31-5800	S	Intermediate step over rear compartment Step lights and NFPA delineation markings required	1	MTL
60-31-6500	S	Compartment matting - black plastic interlocking tile	1	MTL
60-31-7900	U	Vertical unistrut tracking in all compartments	1	
60-31-8006	U	SCBA cylinder storage compartment (ea) -fender well There shall be a cushion installed at the base of each compartment tube to protect the bottles. Retaining loops included. Door ajar switch required on right side for LAS interlock. Customer to specify make and model of cylinder to be stored Make - Scott Model - 4500 PSI Diameter of cylinder - 6" Overall length of cylinder - 24" Photo of valve/cap (to ensure retaining loop will fit) saved at F:/Data/Jacques/Current Projects/Long Reach/Pictures As discussed at the pre-construction meeting of 11.27.2020	4	
60-31-8650	S <	Sliding tray (ea) - 500 pound capacity with lock-in, lock-out sliding hardware SOPT #120 Slide out trays are installed in the following compartments at floor level; Tray #1 - Left side rear compartment Tray #2 - Right side rear compartment White reflective stripe is applied on the exposed edge for visibility when the compartment door is open As discussed at the pre-construction meeting of 11.27.2020	2	MTL
60-31-87AA	U	3" lip at bottom of compartment A 3" lip will be bolted at the bottom outside edge of the L1 and R1 compartment floor to prevent loose items from falling out of the compartment. Department has chosen this option instead of a pull out tray - as discussed at the pre-construction meeting of 11.27.2020	2	
60-31-9600	S >	Adjustable shelf (ea) ENG. NOTE: Specify location Reflective stripe is applied on the exposed edge for visibility when the compartment door is open Shelf #1 - L1 shallow Shelf #2 - L1 shallow Shelf #3 - L3 shallow Shelf #4 - L3 shallow Shelf #5 - R1 full depth Shelf #6 - R1 shallow Shelf #7 - R3 full depth Shelf #8 - R3 shallow As requested at the pre-construction meeting of 11.27.2020	8	MTL
60-32-3560	S	Three hose divider (each) 2 adjustable and one fixed in center Hand hold required in end.	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
60-32-7500	S	Hose bed - aluminum The aluminum slats shall also be included in the area around the water and foam fill towers and the front storage area ahead of the front partition. The hose bed capacity will be: 400' of 1.75" hose 200' of 2.5" hose 1200' of 4" hose As discussed at the pre-construction meeting of 11.27.2020	1	MTL
60-33-0000		Paint exterior - Imron Elite *** Paint code and colour to match red on cab Total paint and primer thickness shall be a minimum of 5.0 mi	1	MTL
60-33-0200		Undercoat vehicle with KROWN rust protection	1	MTL
60-33-0600		Chassis wheels not painted Polished Aluminum wheels	1	MTL
60-33-1000		Paint pump and plumbing job colour	1	MTL
60-33-1600		Special paint compartment interior - gray zolatone E The compartment interiors are finished with a gray textured paint for chip resistance. Shelves, trays, unistruts and hardware are left natural aluminum.	1	MTL
60-33-2200	S	Lettering - 80 letters up to 3" tall - 3 colour *** Vinyl letters, Fire Department to provide details on location and text. The department name in the chassis door will be in imitation gold leaf and remainder of lettering will match the last unit - M18-20028. As discussed at the pre-construction meeting of 11.27.2020 Lettering will include: "No.1" between the hood and front chassis doors Door decal on front chassis doors "Pump 1" on rear chassis doors "911" on rear side compartment doors "Keep Back" over "150M" on B1 rollup door "Smoke detectors save lives" on B1 rollup door As shown on the approval drawing that was approved by the customer by e-mail on 10.19.2021	1	MTL
60-33-3000	S	Reflective stripe - 4" white on painted surfaces and red on rollup doors 50% of perimeter each side and 25% of perimeter front. 3M Scotchlite material The stripe is to appear as continuous as possible as requested at the pre-construction meeting of 11.27.2020 The colors will be white on the painted surfaces and red on the rollup doors As approved by customer by e-mail on 10.19.2021	1	MTL
60-33-3310		Reflective stripe - red and yellow chevron at rear Minimum 50% of rear vertical surface. Printed 3M Scotchlite material.	1	MTL
60-33-3600		Reflective stripe - inside entry doors 96 square inches minimum inside each cab and crew cab entry door	1	MTL
60-33-4000	S	End tarps at end of speedlays - black	1	MTL
60-33-4600	S	Aluminum cover over crosslays - with end tarps (black) There will be a deck plate cover with end tarps installed over the crosslays (30-44-0530) and there will be end tarps at each end. As requested at the pre-construction meeting of 11.27.2020	1	MTL
60-33-5000		Aluminum cover over hose bed with end tarps - black E Door ajar switches required	1	MTL
60-40-5000	S	6" Hose tray - top mount (ea) A suction hose tray will be supplied and installed on the LS fender top to carry a 3rd length of 6"x13' suction hose (80-11-5026) as requested at the pre-construction meeting of 11.27.2020	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
60-40-5500		Suction hose tube (each) with door To store the 6" x 13' suction hoses 80-11-5020. Located under the tee of the water tank with rear access doors with lift and turn latches. Tubes will be completely enclosed and door ajar switch required.	2	MTL
60-40-8500		> Tail light box Fire Extinguisher tubes (pr) ENG. NOTE: Specify size/dimensions of Fire extinguishers to be stored For storage of the ABC fire extinguisher 80-17-0500 and the C02 fire extinguisher 80-17-1000. PAC 1006-B Adjusta-mount straps will be installed to secure extinguishers in the tubes	2	MTL
60-40-9001	S	> Tube mount for portable tank, through tank ENG. NOTE: Specify location, ladders to be installed in this tube, complete dimensions of ladders if user supplied To store the 1500 Imperial gallon portable tank 80-15-0500 Include a fastening system to hold the portable tank in place. There shall be rollers installed to facilitate the loading and unloading of the tank.	1	MTL
60-41-1000		Pike Pole tube with door To store the 10' pike pole 80-13-2500 and the 6' pike pole 80-13-2510. Located under the right side fender top with a rear access stainless steel door with lift and turn latch. There will be a label to show the location of each pike pole due to the different lengths	1	MTL
60-41-1500	S	Attic ladder tube with rear door The attic ladder tube will be under the right side fender top for the attic ladder 80-14-8500 as discussed at the pre-construction meeting of 11.27.2020	1	MTL
60-41-9001	S	> Zico hydraulic Ladder Access system ENG. NOTE: Specify mounting location desired. If ladder(s) are customer supplied, specify overall length and width, width between side rails, rung spacing; also specify ladder brand and model Right side - for the storage of the 24' 2 section extension ladder 80-14-0500 and the 14' roof ladder 80-14-5500. To be wired so only operable when park brake is engaged, the compartment door over the right rear wheels is closed and the SCBA compartment doors are closed. Flashing lights and reflective tape required at front and rear to indicate any areas that protrude beyond the body. The ladder will be mounted as high as possible to allow the R2 compartment (60-11-1900) to be as tall as possible. As requested at the pre-construction meeting of 11.27.2020	1	MTL
60-41-9010		ZICO LAS switched at rear above tail light E Switch is located on same side as electric rack - right side	1	MTL
60-91-0800	U	Swing out tool board There will be a swing out tool board supplied and installed in the L2 compartment. It will have a peg board design and reflective striping on the outer edges to meet U.L.C. As requested at the pre-construction meeting of 11.27.2020 SOPT 123b	1	
		INSTRUMENTATION	1	MTL
70-11-0000		Warning Label on Pump Operator's Panel	1	MTL
70-11-1510	U	Stainless steel instrument panels 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	1	

PART NO	S	DESCRIPTION	QTY	ID
		position		
70-11-2000		Top mount instrument panel 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
70-11-2500		Transverse walkway	1	MTL
70-11-2600		Tread plate overlay on back of chassis cab	1	MTL
70-11-3000	S	Mansaver bars Engineering to advise Purchasing the length required for the Mansaver bars.	1	MTL
70-11-3200	S	Colour coded tags Department to review pump panel print to verify colors of tags prior to build. As requested at the pre-construction meeting of 11.27.2020 Pump panel print was sent and reviewed by fire department on 11.17.2021. Approved by Chief Randy Gowlett by e-mail on 11.17.2021	1	MTL
70-11-4500		Diamondback grip type panel hood step right side Delineation markings required to meet NFPA	1	MTL
70-11-4600		Diamondback grip type panel hood step left side Delineation markings required to meet NFPA	1	MTL
70-11-5500		Right side tread plate pump access door No opening dimension less than 18"	1	MTL
70-11-5600		Left side tread plate pump access door No opening dimension less than 18"	1	MTL
70-11-5700		Transverse tread plate pump access door No opening dimension less than 18"	1	MTL
70-11-7500		Heat pan-aluminum	1	MTL
70-11-8000		Heater in pump compartment Switch located on the transverse pump operators panel	1	MTL
70-20-2161	U	2-1/2" pressure gauge - dual face 0-400 Thuemling control rod assembly with 2-1/2" 0-400 dual scale pressure gauge/bezel assembly (colored bezel)	12	
70-20-2500	S	Primer control - Trident for the main pump	1	MTL
70-20-2501	S	Additional Primer control - Trident For the three pre-primers - ref 30-51-7714	3	MTL
70-20-31AA	U	FRC Total Control TCA100 The governor will be an FRC Total Control TCA100 as approved by Roland Caissie by e-mail on 09.01.2021.	1	
70-20-3500		Electric water level gauge on pump panel, Class One	1	MTL
70-20-3610	S	Remote PSTANK2 water level indicators each side, rear with driver One each side at the front corner of body, and one on the rear left side upper corner Interlock with park brake so powered only when the park brake is set.	1	MTL
70-20-6500		Test gauge panel	1	MTL
70-20-7500		Heat exchanger control valve	1	MTL
70-21-1500	S	Electric Foam Level gauge on pump panel, Class One	1	MTL
		ACCESSORIES	1	MTL
80-11-5026	U	6" x 13' suction hoses Two (2) suction hoses will be tube mounted (60-40-5500) and the last suction hose will be mounted in the tray (60-40-5000) as requested at the pre-construction meeting of 11.27.2020	3	

PART NO	S	DESCRIPTION	QTY	ID
80-12-2500	S	6" barrel strainer To be shipped loose with the mounting plate 80-12-2510 as discussed at the Pre-construction meeting of 11.27.2020.	1	MTL
80-12-2510	U	Mount for 6" barrel strainer P/N 1501175 - SOPT #51 Mount to be shipped loose as determined at the Pre-construction meeting of 11.27.2020.	1	
80-12-4502	U	TFT A03HNX-JET Low Level strainer - 6" with Storz on jet (Red Head) To achieve pump capacity through the low level strainer P/N 1500702 SOPT #394 P/N 1501019 and 1501492 Red Head Storz fittings will be installed on the venturi Mount in the B1 compartment as determined at the Pre-Construction meeting of 11.27.2020.	1	
80-13-0500	S	Rubber mallet - with fibreglass handle Mounted with the Toolok 80-13-0510 on the side wall of the L1 compartment as determined at the Pre-construction meeting of 11.27.2020.	1	MTL
80-13-0510	U	PAC Toolok 1003 for mounting rubber mallet P/N 1562258 - SOPT #319 Location to be the side wall of the L1 compartment as determined at the Pre-construction meeting of 11.27.2020.	1	
80-13-1200		Clare hose wrenches (double) with holder Mounted on left side pump panel, right side pump panel and on rear of body where room permits.	3	MTL
80-13-1500		Bar with bracket Mounted horizontally under the rear compartment roll up door bottom fascia.	1	MTL
80-13-2500		Pike pole, fibreglass handle - 10' long Tube mounted.	1	MTL
80-13-2510		Pike pole, fibreglass handle - 6' long Tube mounted.	1	MTL
80-13-4000	S	Axe, pick head, yellow fibreglass handle and bracket ***Non slip hand hold*** P/N 1520133 Mounting location to be on the side walls of the B1 compartment as determined at the Pre-construction meeting of 11.27.2020.	2	MTL
80-14-0500		24' 2 section extension ladder PEL 24 Mounted on LAS Provide test documents as per 80-99-60AA	1	MTL
80-14-5500		14' aluminum roof ladder PRL-14 Mounted on LAS Provide test documents as per 80-99-60AA	1	MTL
80-14-7500		Padded ladder boot - 2 section and roof ladder Sized to fit nested 24' two section extension ladder and 14' roof ladder.	1	MTL
80-14-8500	S	10' aluminum folding attic ladder FL-10 Stored in the 60-41-1500 attic ladder tube as discussed at the pre-construction meeting of 11.27.2020 Provide test documents as per 80-99-60AA	1	MTL
80-14-9100	U	Air chuck with 25' of 3/8" air hose Shipped loose. Fittings to be compatible with air outlet 20-51-3500	1	

PART NO	S	DESCRIPTION	QTY	ID
80-15-0500		1500 l gallon portable tank - Husky Two (2) drain sleeves required. Liner is yellow in color. Tube mounted.	1	MTL
80-16-1500		Akron 2581 gated wye A 2½" gated wye, 2½" Red Head Storz swivel to two (2) gated 1½" male NPSH with Red Head Storz adapters, pyrolite construction shall be supplied. Shipped loose, not mounted. Customer will mount.	1	MTL
80-17-0500	S	20# dry chemical fire extinguisher Tube mounted.	1	MTL
80-17-1000	S	15# CO2 fire extinguisher Tube mounted.	1	MTL
80-17-1500	S	2.5 gallon water extinguisher with mount Ship loose as determined at the Pre-construction meeting of 11.27.2020.	1	MTL
80-18-0600		SCBA brkt w/strap - ZICO ULLH - crew cab mount	4	MTL
80-19-0500		Large folding wheel chock - aluminum (ea) not mounted Shipped loose, not mounted. Customer will mount.	2	MTL
80-19-0600	S	> Horizontal bracket for folding wheel chock (ea) ENG. NOTE: Specify location, otherwise ship loose Mounting location to be under the L1 compartment as determined at the Pre-construction meeting of 11.27.2020.	2	MTL
80-99-60AA	U	Ground ladder tests to meet NFPA 1932 (2015 Edition) All ladders shall be manufactured in current year and shall, prior to delivery, be tested as per NFPA-1932 (2015 or latest edition) within six months of date of delivery. A copy of the tests shall be provided at final inspection. SOPT in file.	1	