



Shop Order

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

Municipality of Magnetawan
 PO Box 70, 4304 Hwy 520
 Magnetawan, ON P0A 1P0

Exp. Date: 10/17/2018
Quote No: Magnetawan, ON-0020
Job/Order No: 20515
BODY: 00-10-15 Metalfab Pumper - ULC 05/13

08/08/2019

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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
00-20-1500		Standard Body Warranty	1	MTL
00-20-1550		Metalfab Limited Ten (10) Year Paint and Corrosion Warranty	1	MTL
00-20-1600		Waterous Pump Warranty - 5 years	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	No Bonding Requested	1	MTL
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
10-11-1100	S	ULC S515-13 Compliance	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		
10-11-2100		Maximum length not specified E	1	MTL
10-11-2200	S	Maximum height - 11' 00' (132")	1	MTL
10-11-2400		Overall length is 30' or more	1	MTL
10-11-2500		General Construction	1	MTL
10-11-3000		Manuals - two copies ***Two copies of manuals are required.	1	MTL
10-11-3600	S	> Delivery - FOB Fire Department - by CCEV ENG. NOTE: Note in the shop note if more than 4 hours of training is required	1	MTL
10-11-4300	S	Payment Terms - Chassis and Body NET 30 upon pickup at Metalfab	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	1	MTL
		The hose load expected on this vehicle is: 1000' of 2-1/2" double jacket hose 500' of 4" double jacket high volume hose 400' of 1-1/2" double jacket hose ***Extra weight allowance - minimum 567 pounds***		
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

PART NO	S	DESCRIPTION	QTY	ID
		CHASSIS INFORMATION		
20-11-1000	S	Chassis supplied by Metalfab - Freightliner M2 106 4 door 45,600 lb GVW 14,600 lb front axle 31,000 lb rear axle 250" wheelbase 137.2" cab to axle Cummins L9 350 hp @ 2000 rpm 2200 governed rpm 1000 lb/ft torque @ 1400 rpm 320 amp alternator Allison 3000 EVS automatic transmission 189 litre fuel tank - Left side Safety kit ESC Single color - White and paint code will be L0006EB white as approved 01.04.2019.	1 1	MTL MTL
20-11-1500		2013 Emission chassis modifications	1	MTL
20-11-1700	S	Chassis Motor Vehicle Inspection required - by CCEV	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
20-21-1510		Seat belt warning labels - 4 door chassis	1	MTL
20-21-1530		Tire Pressure Indicators - Single Axle	1	MTL
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
20-31-1100	S	Alum tread fuel tank covers, diamond grip steps, Conv - 4 dr The stock chassis steps will be removed and replaced with custom grip strut steps and the vertical face of the step area will be covered with aluminum deck plate.	1	MTL
20-31-1500	S	> Special compartments in chassis steps ENG. NOTE: Specify any required dimensions, latch type in the shop note There will be a compartment on each side of the chassis steps. The compartment(s) will be as large as possible, have interlocking tiles on the bottom, LED lights inside and the door will be wired to the door ajar system. The left side compartment will not require venting where the driver will be putting their fire fighting helmet in this compartment.	2	MTL
20-31-1900	S	Chassis cab painted single color by chassis OEM	1	MTL
20-31-7500	S	Console in cab Install switch panel (50-11-0900), siren (50-11-1400), Traffic advisor control (50-11-71AA), Radio cutout for Motorola XPR5500 DIN mount provided by Carrier, Power bar (20-51-6200), PTO hour meter (70-21-2100) and PTO pump shift (30-51-1500) in console. There will be a switch for the driving lights 20-99-02AA. Storage area with hinged cover and lift and turn latch provided at rear of console. Gray Zolatone finish	1 1	MTL MTL
20-41-0600	S	Intake air shutoff for engine not requested	1	MTL
20-41-0900		Auxiliary braking system disabled when pumping	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
20-41-1100		Transmission programming - Allison WT ***Includes "Pump Engaged" light next to pump shift on chassis instrument panel.	1	MTL
20-41-1500		Extend exhaust pipe - RS front of rear wheels E 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.	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
20-41-5010	S	Rear Tow Hooks - through rear of body *** Flat bar tow hooks under the dump valve and above the rear step (2). There will be a rubber gasket around the tow eyes with a stainless trim around the outside on the rear of the body.	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
20-51-4000	S	Auto eject for air inlet - LS A Kussmaul auto eject air inlet fitting will be installed near the driver's door to allow an external air compressor to keep the chassis air brake system charged.	1	MTL
20-51-5620	U	Hide-a-Blast LED lights installed in front headlight assembly - white SOPT #558 Switched in cab (ref 50-11-0900)	1	
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 One (1) power bar shall be installed in the chassis cab console 20-31-7500. One (1) shall be installed on the back wall of the chassis cab for the Kussmaul Autocharge 20-51-6500. Two (2) standard duplex receptacles with weather proof cover to be installed in L1 and R1 upper. One (1) standard duplex receptacle with weather proof cover will be installed in the upper left corner of the L3 compartment.	5	MTL
20-51-6500	S	Kussmaul Autocharge 1000 battery conditioner w/battery saver A Kussmaul Autocharge 1000 15 A/12 VDC battery charger is installed in the chassis cab behind the rear seat. A 3 amp battery saver power supply is provided to accommodate parasitic loads such as radio and battery chargers. This unit draws 3.5 A/120 VAC maximum.	1	MTL
20-51-7101	S	Electric System Management - VMUX	1	MTL
20-51-7500	S	Super Auto eject for 120 v - 20 A with sealed enclosure The shoreline will power the Kussmaul battery conditioner 20-51-6500 and the outlets 20-51-6200.	1	MTL
20-51-75AA	U	Additional male 120-volt plug - ship loose There will be a second male 120-volt end will be shipped loose with the completed unit.	1	
20-51-8510	S	Engine compartment light LED Switched when park brake is set	1	MTL
20-51-9001	S	Air horns on hood, controlled by lanyards supplied with the chassis The chassis supplied air horns will be controlled by lanyards supplied with the chassis.	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
20-52-3500		> Chassis steering wheel lined up by Metalfab E ENG. NOTE: Freightliner, Sterling, and Spartan only	1	MTL
20-52-4000		Rear View Camera system Rearview Systems STM5600 with 5.6" colour monitor in cab mounted on cab dash.	1	MTL
20-60-0400		Chassis wheelbase does not change	1	MTL
20-99-0010	U	Aluminum plate behind driver seat for helmet bracket There will be an aluminum plate behind the driver seat to mount two (2) helmet brackets 80-99-05AA.	1	
20-99-0020	U	Helmet storage plate over back window There will be a helmet storage plate mounted over the back window like Rosemont. This will allow two (2) Zico UHH-1 bracket 80-99-05BB to be installed on either side of the middle SCBA seat.	1	
20-99-02AA	U	Driving lights There will be a pair of driving lights installed in the front bumper opening and controlled by a switch in the console 20-31-7500.	1	
PUMP AND PLUMBING			1	MTL
30-11-3002		> Waterous CXVPA 1250 PTO driven pump - 1050 IGPM ENG. NOTE: Use LS PTO	1	MTL
30-15-0304		Plumbing - non manifold pump SM SS E	1	MTL
30-20-0500	S	Valves and controls - side mount panel - controls in front left side compartment	1	MTL
30-20-1002	S	Akron valves specified The valves will be from Akron.	1	MTL
30-20-1620		Piping stainless steel - non manifold Pumper	1	MTL
30-20-1700	S	1-1/2" thread specifications - NPSH	1	MTL
30-20-1800	S	2-1/2" thread specifications - CSA	1	MTL
30-20-2000		Piping hydrostatic test	1	MTL
30-20-2510		Anodes in suction and discharge piping - non manifold pump 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
30-21-5520		Tank to Pump SS 3" w/ check valve non manifold pump 4" plumbing	1	MTL
30-22-0520		Tank Fill valve 2" SS	1	MTL
30-31-4020		Suction - 6" not gated each side SS non manifold pump 6" header	1	MTL
30-32-7550		Suction - 2-1/2" left side SS, bleeder, non manifold pump	1	MTL
30-32-8050		Suction - 2-1/2" right side SS, bleeder, non manifold pump	1	MTL
30-40-2025	S	4" right discharge SS, plumbed 3", Waterous non-manifold pump There will be a 4" right side discharge with 3" valve, 30-degree droop and bleeder.	1	MTL
30-41-2040		2-1/2" RS discharge SS, bleeder, non manifold pump	1	MTL
30-41-2540		2-1/2" LS discharge SS, bleeder, non manifold pump	2	MTL
30-43-1520	S	2-1/2" rear discharge SS, plumbed 2-1/2", bleeder Both located on right side of body.	2	MTL
30-44-0520	S	1-1/2" crosslay (each) SS, 2" valve, bleeder The transverse hose beds are equipped with stainless steel rollers on each end. Will carry 200' of 1.75" hose and will be located in the most forward and most rearward position(s). The forward crosslay swivel will be on the LS of the pump house and the rearward swivel will be on the RS of the pump house.	2	MTL
30-44-3520	S	2-1/2" crosslay SS, plumbed 2-1/2", bleeder The transverse hose beds are equipped with stainless steel rollers on each end. It will be located between both 1.5" crosslays 30-44-0520. The swivel will be	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
		located on the LS of the pump house.		
30-44-6520		Piping for monitor SS, plumbed 3", bleeder Centered back of Crosslays for TFT Hurricane RC monitor and riser 80-99-15AA	1	MTL
30-45-10BB	U	4" rear discharge, Storz connection, SS, 3" valve There will be a 4" rear discharge located left of rear dump and it will have a 3" valve and pull control. Bleeder required - located at rear near the discharge.	1	
30-51-0400		Pump shift - PTO Pump and Roll ***Includes "Pump Engaged" indicator lights on chassis instrument panel and on the pump panel ***Includes "Throttle Ready" indicator light on Pump operating panel Includes indicator light showing "OK TO PUMP" when transmission is in neutral, park brake is set, and PTO control energized. The remote electronic throttle will be energized in this mode. Includes indicator light showing "OK TO PUMP AND ROLL" when the transmission is not in neutral, the park brake is not set, and the PTO control is energized. The remote electronic throttle will not be energized in this mode. ***Indicator lights in cab will be located in overhead console over drivers seat.***	1	MTL
30-51-1500		Power shift PTO - Automatic transmission	1	MTL
30-51-1501		> PTO driveshaft E ENG. NOTE: Quantity of 2 for pumps mounted on 4 door cabs due to length	1	MTL
30-51-6640		Class One "TPG Plus" Governor/Throttle	1	MTL
30-51-7002		Suction side relief V/V, non manifold pump	1	MTL
30-51-72AA	U	Relief valve on one (1) discharge There will be a pre-set spring relief valve installed on one (1) discharge to protect the firefighter during a pump and roll situation. The pressure setting will be set prior to delivery at a pressure determined by the fire department. Discharge to be protected: Most forward 1.5" speedlay Pressure setting: 125 psi	1	
30-51-7500		Primer electric vane type 12V with oil tank Waterous Indicator light on panel to show when primer is operating	1	MTL
30-51-76AA	U	Primer Disconnect Switch Located in cab next to master disconnect - properly labeled.	1	
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
30-52-4010	S	Foam System - Hypro FoamPro 1600 The two 1-1/2" Crosslays and 2-1/2" crosslay will be foam solution capable as confirmed by e-mail 10.31.2018.	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	1	MTL
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
40-12-4500		Foam cell - 20 Imperial gallon	1	MTL
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
40-23-1050	S	4" Fireman's Friend connection	1	MTL
40-23-1060		10" Newton dump connection	1	MTL
40-23-1070	S	2-1/2" direct fill connection	1	MTL
40-30-0400		3" plug in sump box	1	MTL
40-30-1000		Water Fill Box front left corner	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
40-31-4500		10" rear Newton dump, painted steel	1	MTL
40-31-4700		Newton dump, top mount manual operation, painted steel Lock open device is required	1	MTL
40-31-5000		Newton dump - 36" telechute painted steel	1	MTL
40-31-5600		> Rotating dump chute for Newton dump painted steel ENG. NOTE: Requires top mount control on dump valve	1	MTL
40-31-5800		Support for rotating dump chute if necessary Engineering to determine if this support is required	1	MTL
40-31-59AA	U <	Dump valve shield, not painted, buffed aluminum There will be a dump valve shield installed between the body and the tank. Truck specific - SOPT	1	
40-31-9000	S	4" Storz rear fill, Fireman's Friend The 4" rear direct tank fill will be a Fireman Friend.	1	MTL
40-31-9001	U	2-1/2" Fireman's friend with CSA thread, plug and chain The 2-1/2" rear direct tank fill will be a Fireman Friend with CSA thread, plug and chain.	1	
ELECTRICAL			1	MTL
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 -HEADLIGHT FLASHERS (ref 20-51-5620) -FLASHING WARNING -LEFT SCENE -RIGHT SCENE -REAR SCENE -RIGHT POLE LIGHT -LEFT POLE LIGHT -Driving Lights 20-99-02AA	1	MTL
50-11-1450		Federal PA300 200 watt siren	1	MTL
50-11-1620		> Siren speaker, 100 watt, in front bumper ENG. NOTE: AS124 speaker 1570860 One right side and one left side	2	MTL
50-11-2600		Siren to be accessible to driver and officer	1	MTL
50-11-5810	S	> Federal lighting package ENG. NOTE: Adds 6.5" to overall height (measuring from roof of chassis)	1	MTL
50-11-5812	U	Federal LPX53DS-NFPA LED lightbar All red flashers Flash pattern will change when park brake is set.	1	
50-11-6615	U	Whelen TAM83 Traffic advisor - surface mount There will be a TAM83 Traffic Advisor surface mounted on the rear of the body.	1	
50-11-8001	S	> No Rear beacons ENG. NOTE: Confirm that necessary lighting for ULC/NFPA is present	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
50-12-5020		Front LED flashers (pr)-red Federal QL64XF-R	1	MTL
50-12-5120	S	Rear LED flashers (pr)-red Federal QL97XF-R - Upper level	1	MTL
50-12-5210		Front side inter lts (pr)-red LED Federal QL64XF-R	1	MTL
50-12-5310		Body side inter lts (pr)-red LED Federal QL64XF-R	1	MTL
50-12-5320	S	Body side warning lights (pr)-red LED Federal QL97XF-R - Upper level	2	MTL
50-12-8000		Additional body side intersection light not required	1	MTL
		Distance between front and rear side intersection light does not exceed 25'		
50-21-25AA	U	FRC Spectra LED 12 Volt Telescoping lights on back of cab-switched in cab(ea) SPA530-SW-SR-NS Installed one each side, on the front of the pump house. The lights shall be switched from the chassis cab console labeled " RIGHT POLE LIGHT " and " LEFT POLE LIGHT ". The lights shall be wired with the door ajar circuit to indicate if the light is not fully stowed for travel. SOPT #395 - truck specific	2	
50-21-5100		> Compartment lighting - LED tube lights in each compartment (rollup doors) ENG. NOTE: Rollup doors only	1	MTL
50-21-5500		Door Ajar warning light 2" flashing 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 2" flashing 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" The HLAS and the hazard switches for the telescoping lights will be wired to this warning light.	1	MTL
50-21-8001	S	Step lights for body steps - LED Switched when park brake is applied.	1	MTL
50-21-8201	S	Step lights for chassis steps - LED Switched when park brake is applied.	1	MTL
50-21-8600		LED clearance lts and reflectors	1	MTL
50-21-8800		LED intermediate turn signal/clearance/reflector length >30'	1	MTL
50-22-0800		Federal 4 QuadraFlare LED tail/brake-turn-backup-warning module (pr)	1	MTL
50-22-08AA	U	TecNiq auxiliary turn signal - brake light There will be a pair of TecNiq T10 auxiliary amber turn signal and red brake light installed on the rear bumper to meet ULC and CMVSS.	1	
50-31-6006	S	> Scene lights (pr) - Federal QL97 LED - right side ENG. NOTE: Specify location Two (2) in the front and rear upper corners of the apparatus body on the right side paired with the warning lights. These lights shall be switched in the chassis console as " RIGHT SCENE " These lights can be managed to shed.	1	MTL
50-31-6007	U	Scene lights (pr) - Federal QL97 LED - left side Two (2) in the front and rear upper corners of the apparatus body on the left side paired with the warning lights. These lights shall be switched in the chassis console as " LEFT SCENE " These lights can be managed to shed.	1	
50-31-6008	U	Scene lights (pr) - Federal QL97 LED - rear facing Two (2) in the front and rear upper corners of the rear face of the apparatus body	1	

PART NO	S	DESCRIPTION	QTY	ID
		on the right side paired with the warning lights. These lights shall be switched in the chassis console as " REAR SCENE ". ***These lights shall also be switched from a second switch location on the rear body face. They will also be interlocked with the reverse gear of the transmission. These lights cannot be managed - required for ULC.		
50-31-6010	S	Scene light boxes (pr) - tread plate Right side only. Customer (Carrier) specified the set back of the scene light boxes from the body as shown on drawing FT-11092 by e-mail 04.01.2019	1	MTL
50-31-6560		Ground lighting (LED Lumabar) - 4 door chassis Switched when park brake is applied.	1	MTL
50-31-6570		Ground lighting (LED Lumabar) - side mount body Switched when park brake is applied.	1	MTL
50-35-0500	S	Installation of customer supplied mobile radio components Metalfab will install the radio kit supplied from Carrier which will be a DIN mount for a Motorola XPR5500, a pump panel speaker, pump panel jack, a microphone and a wiring kit. The equipment arrived from Carrier 05.08.2019.	1	MTL
50-35-0560	S	VHF antenna base only - commercial chassis There will be an antenna base installed and cable run to the center console - 20-51-7500 It was supplied by Carrier on 05.08.2019	1	MTL
50-99-10AA	U	Hose bed cover lights - 4 x 40" Lumabars Switched when park brake is applied. SOPT #209 - truck specific	1	
51-31-4500		Dielectric strength test for line voltage system BODY	1	MTL
60-10-1400	S	Single axle extruded aluminum body	1	MTL
60-10-15AA	U	1" drop on lower edge of compartment floor - sweep out design SOPT #1236	1	
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 The running boards will be made of open strut aluminum with non-slip surface. Each step will be rigidly reinforced with a heavy duty support structure. Running boards will not form any part of compartment design.	1	MTL
60-10-5430		> Diamondback 19" rear step ENG. NOTE: Maximum height of rear step is 24" from ground	1	MTL
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
60-11-0700		> Front right side compartments full height E ENG. NOTE: Specify critical dimensions in shop note	1	MTL
60-11-1000	S	> Rear left side compartments full height ENG. NOTE: Specify critical dimensions in shop note	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
		Confirm size at the Pre-construction meeting - differs from RFT. Carrier approved this by e-mail 04.11.2019.		
60-11-1400	S	> Rear right side compartments full height ENG. NOTE: Specify critical dimensions in shop note	1	MTL
		Confirm size at the Pre-construction meeting - differs from RFT. Carrier approved this by e-mail 04.11.2019.		
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	3	MTL
60-11-3100		No rear compartment E	1	MTL
60-11-5500		Rollup door - standard height Natural aluminum finish Includes magnetic door switch, LED tube lights, rubber bumpers to prevent pinch point	3	MTL
60-11-5520		Rollup door - full height Natural aluminum finish Includes magnetic door switch, LED tube lights, rubber bumpers to prevent pinch point	4	MTL
60-31-4100		Extruded aluminum handrails Minimum 2" clearance from handrail to any surface	1	MTL
60-31-5000	S	Zico access Ladder at rear of unit There will be a Zico access ladder installed on the left side rear of the body. Minimum 7" clearance between rung and any obstruction	1	MTL
60-31-5600	S	Grab handles at front of body next to pump panel as required	1	MTL
60-31-5800	S	Inset step in the hose bed There will be a 16" deep stepping surface in the hose bed to act like a step when coming off the Zico access ladder.	1	MTL
60-31-6500	S	Compartment matting-Interlocking tile Each compartment, tray and shelf will be lined with interlocking plastic tiles.	1	MTL
60-31-8003	U	Cast Products Double SCBA bottle holder (ea) Retaining loops required. Door ajar switch required.	4	
60-31-8210	S	> Sliding vertical tool board - open/closed latch ENG. NOTE: Specify location Located in R1 compartment - centered in area behind fixed partition.	1	MTL
60-31-8400	S	Fixed vertical partition Located in the following compartments L1 - To separate pump operators panel from the rest of the compartment - full height L2 - Full height, approximately 6" from front wall of compartment allowing enough room for the accountability board 60-99-0020 R1 - Full height - to separate pump access area from the rest of the compartment which will be 24" from the left side wall.	3	MTL
60-31-8700	S	> Sliding tray (ea) - 400 pound capacity with gas strut ENG. NOTE: Specify location	3	MTL

PART NO	S	DESCRIPTION	QTY	ID
		Located in the following compartments; L3 - at floor level. R1 - at floor level forward of fixed partition. R3 - at floor level. Reflective stripe is applied on the exposed edge for visibility when the compartment door is open.		
60-31-9600	S	> Adjustable shelf (ea) ENG. NOTE: Specify location Shelf 1 - L1 full depth Shelf 2 - L2 shallow depth Shelf 3 - L3 full depth Shelf 4 - L3 shallow depth Shelf 5 - R1 upper Shelf 6 - R1 full depth Shelf 7 - R2 shallow depth Shelf 8 - R3 shallow depth Shelf 9 - R4 Upper Shelf 10 - R4 full depth Reflective stripe is applied on the exposed edge for visibility when the compartment door is open	10	MTL
60-32-3550	S	Two adjustable hose divider (each) and one fixed to support hose bed covers Hand hold required in end	1	MTL
60-32-7500		Hose bed - aluminum	1	MTL
60-33-0000	S	Paint exterior - Imron Elite *** Paint code and colour WHITE to match cab	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
60-33-1500		Buffed finish compartment interior	1	MTL
60-33-2000		Lettering - no lettering provided	1	MTL
60-33-3200	S	Reflective stripe - 1" gold - 4" maroon reflective 50% of perimeter each side and 25% of perimeter front. The colors will 4" maroon and 1" gold reflective.	1	MTL
60-33-3310		Reflective stripe - red and yellow chevron at rear Minimum 50% of rear vertical surface	1	MTL
60-33-4600		Aluminum cover over crosslays - with end tarps (black) Small tarps with Velcro straps and footman's loops to enclose each end are provided.	1	MTL
60-33-5000		Aluminum cover over hose bed with end tarps - black E Rear flaps with Velcro straps will be provided on the rear of the cover to tie footman's loops. Covers require door ajar switches and wiring to the door ajar warning light in cab.	1	MTL
60-40-5500	S	Suction hose tube (each) with door - high left side, 2 low under tee of tank The two (2) lower tubes shall be installed one each side under the tee of the tank to house the 6" x 10' suction hoses 80-11-5000. Each tube shall be fully enclosed, be fitted with a smooth painted door with lift and turn latch. Door ajar switches required for all three doors. Similar arrangement as SR Machar M17-19690 There will be a storage on the rear upper left side that will be used for blocking - keep the same size as the original proposal that was originally going to be used for 4" suction.	4	MTL

PART NO	S	DESCRIPTION	QTY	ID
60-41-1015	S	Pike Pole tube in suction hose tube (in the lower tubes) To store the 10' pike poles 80-13-2500.	2	MTL
60-41-9500	S	> Zico Horizontal 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 Located on right side of body for storage of the 35' extension ladder 80-14-2000 and 14' roof ladder 80-14-5500. Will also carry the 10' attic ladder Include HLAS-OS optional stop To be wired so only operable when park brake is engaged. Flashing lights and reflective tape required at front and rear to indicate any areas that protrude beyond the body.	1	MTL
60-41-9510		ZICO HLAS switched at rear above tail light Switch is located on same side as electric rack - right side	1	MTL
60-99-0020	U	Pull out drop down accountability board There will be a pull out drop down accountability board installed in L2 like South River Machar 19690	1	
60-99-05AA	U	Backboard Storage in Pumphouse There shall be storage for one backboard in a compartment located rear of the crosslay area (use all the area not used by the speedlays). There shall be a hinged deck plate door for access on each side of the unit. Door ajar switch required. There shall be a secondary restraint installed (Velcro strap) to meet ULC requirements. SOPT in file. Customer to provide dimensions of back board to be stored; Length - _____" Width - _____" Thickness - _____"	1	
INSTRUMENTATION				
70-11-0000		Warning Label on Pump Operator's Panel	1	MTL
70-11-0500		Side 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
70-11-0600	U	Linkage controls in left front compartment - HEAT style design	1	
70-11-1500		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 position	1	MTL
70-11-3205	U	Vision Mark colour coded tags SOPT #180a - truck specific	1	
70-11-4000		Stainless steel side panel hood right side	1	MTL
70-11-4100		Stainless steel side panel hood left side	1	MTL
70-11-5000		Standard cover over rear top of pump house - no storage	1	MTL
70-11-5500	S	Right side smooth pump access door - buffed finish to match compartment interior No opening dimension less than 18" Slot required for Primer level viewing	1	MTL
70-11-75AA	U	Extreme weather type heat pan - fully enclosed SOPT #575 To enclose the underside of the pump enclosure and pump module area	1	
70-11-8000		Heater in pump compartment Switch for heater is located on left side pump operators panel	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
70-11-8200	U	Rubber seal around suction and discharge openings on side panels	1	
70-20-0500	S	4-1/2" compound gauge - dual face 0-400 To be within 8" of each other - edge to edge	2	MTL
70-20-1500	S	2-1/2" pressure gauge - dual face 0-400 Gauge to be no more than 6" from edge of the gauge to the center of the control.	11	MTL
70-20-2500		Primer control	1	MTL
70-20-3100		Class One Governor Control Throttle can be no lower than 42" and no higher than 72" from operator's standing position.	1	MTL
70-20-3510		Electric water level gauge on pump panel and at rear, Class One	1	MTL
70-20-6500		Test gauge panel Mount below the compound gauges for proper draining	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
70-21-2100		> PTO Hourmeter ENG. NOTE: Specify location in shop note	1	MTL
		Located in cab console 20-31-7500		
70-21-5500	S	Panel readout for Battery Conditioner	1	MTL
71-21-3500	S	Headset compartment Wiring shall be provided from the pump panel and terminate in the console area wired to the radio. The wire was provided by Carrier on 05.08.2019.	1	MTL
		ACCESSORIES	1	MTL
80-11-1000	S	2-1/2" x 10' lightweight suction hose (ea) There will be two (2) 2.5" suction hoses supplied and stored in the 6" suction hoses 80-11-5000 in the body tubes.	2	MTL
80-11-5000		6" x 10' lightweight suction hose (ea) Tube mounted.	2	MTL
80-13-2500		Pike pole, fibreglass handle - 10' long Tube mounted.	2	MTL
80-14-2000		35' 2 section extension ladder PEL-35 Stored on HLAS.	1	MTL
80-14-5500		14' aluminum roof ladder PRL-14 Stored on HLAS.	1	MTL
80-14-8500		10' aluminum folding attic ladder FL-10 Tube mounted.	1	MTL
80-14-9000	S	Attic ladder bracket (Zico) To be installed on the HLAS 60-41-9500	1	MTL
80-19-0500	S	Large folding wheel chock - aluminum (ea) not mounted Large folding wheel chocks will be supplied and shipped loose.	2	MTL
80-99-05BB	U	Zico UHH-1 helmet holder - mounted (ea) There will be two (2) Zico UHH-1 helmet holders supplied and installed on the plate 20-99-0010 behind the driver seat and two (2) on the plate on the back window.	4	
80-99-15AA	U	TFT Hurricane RC Monitor, panel control, riser, 1250 GPM nozzle Install on monitor piping 30-44-6520 XFIH-E**A Hurricane RC monitor - Engineering to confirm Model number Y4E-RP panel mount operator M-ERP1250NJ Master stream nozzle - Engineering to confirm number XGA38VL-RL Extend-a-gun - Engineering to confirm number SBG-33 Saddle bracket for above Extend-a-gun	1	

