



# Shop Order

Minto Fire Department  
 420 Pleasant Drive  
 Minto, NB E4B 2X4

**Exp. Date:** 09/17/2018  
**Quote No:** Minto, NB-0018  
**Job/Order No:** 20553  
**BODY:** 00-10-15 Metalfab Pumper - ULC 05/13

12/05/2019

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PART NO	S	DESCRIPTION	QTY	ID
		<b>== Metalfab Pumper - ULC 05/13 - 0.000 ==</b>	<b>1</b>	<b>MTL</b>
	S	<b>CHANGE ORDER F</b>	<b>1</b>	<b>MTL</b>
<b>00-00-0020</b>	<b>U</b>	<b>Exceptions to Tender</b>	<b>1</b>	
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
<b>00-20-1700</b>	<b>S</b>	<b>Hale Pump Warranty - 5 years</b>	<b>1</b>	<b>MTL</b>
00-20-1800		Polypropylene Tank Lifetime Warranty	1	MTL
<b>00-20-2100</b>	<b>S</b>	<b>Plant Inspection Visits - three visits, four representatives</b>	<b>1</b>	<b>MTL</b>
		<b>Dates to be determined</b>		
00-20-3000		No Bonding Required	1	MTL
00-20-3500		Certification for Fusion Welding of Aluminum	1	MTL
<b>00-20-4000</b>	<b>S</b>	<b>Quality System registered to ISO 9001:2015</b>	<b>1</b>	<b>MTL</b>
00-20-4500		Fire Apparatus Manufacturers' Association Membership	1	MTL
		<b>GENERAL INFORMATION</b>	<b>1</b>	<b>MTL</b>
10-11-0000		Intent E	1	MTL
<b>10-11-0110</b>		<b>Vehicle data recorder included with chassis</b>	<b>1</b>	<b>MTL</b>
<b>10-11-1100</b>	<b>S</b>	<b>ULC S515-13 Compliance</b>	<b>1</b>	<b>MTL</b>
<b>10-11-1500</b>		<b>&gt; ULC Testing - Pumper</b>	<b>1</b>	<b>MTL</b>
		<b>ENG. NOTE:</b>		
		Note in the shop note if the Fire Department wishes to witness the test		
		<b>Give Department 10 working days notice</b>		
<b>10-11-2100</b>	<b>S</b>	<b>Maximum length - 35' (420")</b>	<b>1</b>	<b>MTL</b>
<b>10-11-2200</b>	<b>S</b>	<b>Maximum height - 14' or 168"</b>	<b>1</b>	<b>MTL</b>
		Confirmed Fire Hall door height at the Pre-construction meeting of 12.18.2018 to be 14' or 168".		
<b>10-11-2400</b>		<b>Overall length is 30' or more</b>	<b>1</b>	<b>MTL</b>
10-11-2500		General Construction	1	MTL
<b>10-11-2600</b>	<b>S</b>	<b>Preconstruction Meeting at the Minto Fire Department</b>	<b>1</b>	<b>MTL</b>
		Pre-construction was held at the Minto Fire Hall 12.18.2018 with Mr. Redden and three (3) representatives from the fire department.		
<b>10-11-3000</b>		<b>Manuals - two copies</b>	<b>1</b>	<b>MTL</b>
		***Two copies of manuals are required.		
		One paper, one electronic format		
<b>10-11-3600</b>	<b>S</b>	<b>&gt; Delivery - FOB Fire Department - Minimum 8 hours of training</b>	<b>1</b>	<b>MTL</b>
		<b>ENG. NOTE:</b>		
		Note in the shop note if more than 4 hours of training is required		
		<b>\$500.00 per week penalty after 14 months</b>		
		<b>8 hours of training</b>		

PART NO	S	DESCRIPTION	QTY	ID
10-11-4000		Payment Terms - Chassis Net 10 days, Balance COD	1	MTL
10-20-1400	S	> <b>Hose capacity exceeding ULC/NFPA requirements</b> <b>ENG. NOTE:</b> Specify the type of hose and quantity of hose to be carried on the vehicle	1	MTL
		<b>The hose bed load expected on this vehicle is:</b> 1200' of 2-1/2" double jacket hose 400' of 1-3/4" double jacket hose 800' of 1-1/2" forestry hose RHS of hose bed. ***Extra weight allowance of 420 pounds***		
10-20-2000		<b>Equipment carrying capacity - standard ULC Pumper</b> This vehicle is designed to carry the standard ULC miscellaneous equipment load of 2000 pounds for a vehicle with less than 250 cubic feet of compartment space.	1	MTL
		<b>CHASSIS INFORMATION</b>		
20-11-1000	S	<b>Chassis supplied by Metalfab - Freightliner M2 112 4 door</b> 47,000 lb GVW 16,000 lb front axle 31,000 lb rear axle Cummins L9 370 HP @ 2000 rpm 2100 governed rpm 1250 lb/ft torque @ 1400 rpm 278" wheelbase 165.21" cab to axle 275 Amp alternator Allison 3000 EVS automatic transmission, 5 speed, LH PTO opening 189 litre fuel tank - right side Safety kit ESC, VDR and seat belt display Two tone paint - Black over red with paint line matching Hebbville M17-19129 with the rear arc ending in line with the back window. The black will be glossy black and the red will be GM Bright Red #72 to match their unit M02-13131.	1	MTL
			1	MTL
20-11-1500		2013 Emission chassis modifications	1	MTL
20-11-1700		<b>Chassis Motor Vehicle Inspection required - NB E</b> 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		<b>Maximum riders sign - 5 persons</b>	1	MTL
20-21-1510		<b>Seat belt warning labels - 4 door chassis</b>	1	MTL
20-21-1520		<b>Helmet warning label - do not wear helmet</b>	4	MTL
20-21-1530		<b>Tire Pressure Indicators - Single Axle</b>	1	MTL
20-21-15AA	U	<b>No Smoking sign to be included on the dashboard</b>	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
20-21-3800		Front mudflaps	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		<b>Alum tread fuel tank trim, Conv - 4 door</b> Vertical trim only, OEM cab steps remain	1	MTL
20-31-1900	S	<b>Chassis cab paint two tone by chassis OEM - Black over red</b> Two tone paint - Black over red with paint line matching Hebbville M17-19129 with the rear arc ending in line with the back window. The black will be glossy black and the red will be GM Bright Red #72 to match their unit M02-13131.	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
20-31-7500	S	<b>Console in cab</b> Install switch panel (50-11-0900), siren (50-11-1400), control for Visibeam (50-21-3010), two radios (50-35-0500 & 50-35-1000) and pump shift (30-51-0500) in console. Storage area with hinged cover and lift and turn latch provided at rear of console. The console will be built in such a manner that it will not interfere with the rear passengers and that a bank of flashlights will be installed between the 2 front seats c/w two 120 volt duplex 5-20R receptacles (ref 20-51-6200) The bank charger is from Streamlight, it measures 18-1/2" x 5" and was given to inventory department 12.19.2018. Gray Zolatone finish ***An approval drawing will be provided prior to build.***	1	MTL
20-41-0500		<b>Intake air shutoff for engine E</b> Control at pump operators position - protective cover required.	1	MTL
20-41-0900		<b>Auxiliary braking system disabled when pumping</b>	1	MTL
20-41-1100		Transmission programming - Allison WT	1	MTL
20-41-1500		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		<b>Rear Tow Hooks - through rear of body E</b> Inside back compartment.	1	MTL
20-41-5200	S	<b>Rear trailer receiver and trailer wiring - Class III/IV, 7 pin connector</b> Class IV Rear trailer hitch with a capacity of 10,000lbs trailer weight and 1,000 pounds tongue weight. Capacity label/tag to be applied adjacent to the receiver. The seven pin connection will be wired to industry standards - no special wiring required	1	MTL
20-41-5210	S	<b>Front receiver</b> Class III Capacity label/tag to be applied adjacent to receiver.	1	MTL
20-41-5250	U	<b>Winch - 10,000 lbs Warn with mount</b> SOPT 141b - Truck specific The winch will be stored in a compartment as per fire department instruction.	1	
20-51-0700		<b>Master Battery Disconnect included with chassis</b>	1	MTL
20-51-2500		<b>Back up alarm included with chassis</b>	1	MTL
20-51-3400		Protection valve installed for air operated accessories	1	MTL
20-51-4000	S	<b>Auto eject for air inlet - LS pump panel</b>	1	MTL
20-51-5600	S	<b>Flashing headlights w/ daytime running lights</b> Included with the chassis	1	MTL
20-51-6200	S	<b>&gt; 120 volt 20 A shore line connection</b> ENG. NOTE: Requires 20-51-75 120 volt auto eject or 20-51-80 120 volt inlet  Standard 5-20R duplex receptacle, not fused One in cab for the battery conditioner to plug into. Two receptacles on the back side of the console for charging accessories One in the L2 body compartment.	4	MTL
20-51-6501	S	<b>Kussmaul Autocharge 2000 battery charger with battery saver</b> SOPT #910 Battery conditioner located in cab behind/under rear seat. Dual system - one leg wired to chassis batteries. Second leg wired to the R1 body compartment.	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
20-51-7101	S	<b>Electric System Management - VMUX</b>	1	MTL
20-51-7500		<b>Super Auto eject for 120 v - 20 A with sealed enclosure</b> Located on left side pump panel	1	MTL
20-51-8510	S	<b>Engine compartment light LED</b> Switched when park brake is set	1	MTL
20-51-9001	S	<b>Air horns on hood controlled by dual lanyards with chassis</b>	1	MTL
20-52-3500		> <b>Chassis steering wheel lined up by Metalfab E</b> <b>ENG. NOTE:</b> Freightliner, Sterling, and Spartan only	1	MTL
20-52-4000		<b>Rear View Camera system</b> Rearview Systems STM5600 with 5.6" colour monitor in cab mounted on dash	1	MTL
20-52-40AA	U	<b>Additional back up camera monitor</b> There will be an additional RearView systems monitor model # STM5600HD supplied and installed on the pump panel. This will be like Caribou, NS M13-16910	1	
20-60-0400		Chassis wheelbase does not change	1	MTL
20-99-10AA	U	<b>Deckplate cover on the floor behind the front seats</b> Similar to what Nova Truck Centres supplies on their four door cabs.	1	
<b>PUMP AND PLUMBING</b>			1	MTL
30-11-8600	S	<b>Hale QMAX 1500 IGPM single stage pump</b>	1	MTL
30-12-3500	S	<b>Mechanical seal for Hale QMAX/QTWO pumps</b>	1	MTL
30-15-0102		<b>Plumbing - Hale manifold pump TM SS E</b>	1	MTL
30-20-1000		<b>Valves and controls - top mount panel</b>	1	MTL
30-20-1002		<b>Akron valves specified</b>	1	MTL
30-20-1600		<b>Piping stainless steel - general</b>	1	MTL
30-20-1700	S	<b>1-1/2" thread specifications - NPT</b>	1	MTL
30-20-1800	S	<b>2-1/2" thread specifications - Storz</b>	1	MTL
30-20-2000		Piping hydrostatic test	1	MTL
30-20-25AA	U	<b>Hale AnodePro electronic anode system</b> Three anodes are installed, one in the suction side of the pump and two in the discharge side of the pump to protect the pump and piping from galvanic corrosion. And equipped with electronic monitoring device called "Anode Pro" Hale part number 529-0080-23-0 See SOPT in file	1	
30-21-8515	U	<b>4" Akron air actuated Tank to Pump, SS</b> In order to achieve 100% of pump capacity flow from tank the shall be two (2) air operated tank to pump valves installed on this unit. The two separate controls will be installed on the top mount pump control and the plumbing will be stainless steel. Akron brand Heavy Duty Swing-Out Valves will be used with a Fusion CF Ball with DydroMax. Make and model of valves were approved at the Pre-Construction Meeting of 12.18.2018. See SOPT #832 - truck specific	2	
30-22-0530		<b>Tank Fill valve 2" TM SS</b>	1	MTL
30-31-4010	S	<b>Suction - 6" gated each side manifold pump</b>	1	MTL
30-31-6025	U	<b>6" gated rear suction, 6" SS piping, bleeder</b> SOPT #35	1	
30-31-7200		> <b>Hale master intake suction valve - electric control</b> <b>ENG. NOTE:</b> Required for top mount panels Show location in Shop Note  The 6" left side, right side and rear intake are gated. The electric control is on the top mount panel A manual hand wheel (palm wheel) shall be provided on side panels for use in the event the electric control fails.	3	MTL

PART NO	S	DESCRIPTION	QTY	ID
30-32-8530		Suction - 2-1/2" left side SS, TM control, Hale manifold pump	1	MTL
30-32-9030		Suction - 2-1/2" right side SS, TM control, Hale manifold pump	1	MTL
30-40-3605	U	5" right discharge SS, plumbed 4", handwheel, Hale manifold pump, bleeder	1	
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	2	MTL
		One each side Right hand side labeled "Forestry"		
30-44-0730		1-1/2" speedlay (each) front of pumphouse TM SS, plumbed 2" Capacity of each - 200' of 1-3/4" hose and nozzle. Equipped with dual direction sliding aluminum hose trays (that slide on UHMW) with stainless steel rollers on each end for easier hose removal, and end tarps to hold the hose in place. Bleeder valve provided on pump panel. Location to be as low as possible for easy access (to be confirmed at pre-construction meeting) ***Two additional slide out trays to be shipped loose***	2	MTL
30-51-0500	S	Pump shift-Midship air ***Includes "Pump Engaged" and "OK to Pump" indicator lights on chassis instrument panel ***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 LS pump panel, to match their last unit (M02-13131).	1	MTL
30-51-6800		FRC InControl Governor/Throttle engine display with throttle knob	1	MTL
30-51-7000		Suction side relief V/V, manifold pump For the left side MIV, right side MIV and the rear MIV.	3	MTL
30-51-7719		Trident Automatic Air Primer 3 barrel 4 location with gauge Location #1 - Main pump Location #2 - Left side pre-prime Location #3 - Right side pre-prime Location #4 - Rear pre-prime Note: When installing Air Filter Port, this unit must be installed in an easy access location for servicing.	1	MTL
30-51-7720	S	Additional air tank for air primer system An additional air tank is provided to improve air primer capacity ***Ordered with chassis***	1	MTL
30-51-8100		Heat exchanger included with chassis	1	MTL
30-51-9000		Thermal Relief Valve TRV-120	1	MTL
30-52-1000		Master drain V/V, 12 port	1	MTL
30-52-2000		Drain valve for foam system header	1	MTL
30-52-4310		Foam System - Hypro FoamPro 2002 Dual Tank Foam system is plumbed to both speedlays, 2-1/2" rear (left), Monitor and the 5" right side discharge. ***Order with 4" foam manifold***	1	MTL
30-52-6500		FoamPro dual tank selector valve (manual)	1	MTL
30-52-8100	<	Electric foam fill pump with panel pickup Located on right side panel. Pick up tubes to be stored in the pump house, easily accessible through the right side pump access door.	2	MTL
30-52-9100		Foam concentrate label at foam tank fill	2	MTL
30-52-9200		Foam System Instruction Plates	1	MTL
30-52-9400		NFPA Foam System certification test ***Test results to be supplied to the Department upon delivery***	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
30-99-05AA	U	4" Monitor piping, 4" Akron valve and piping, handwheel control, bleeder Akron 3423 monitor (80-16-0500) to be installed on this piping. Centered behind top mount panel. SOPT #956 - truck specific	1	
<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
40-11-5000		Tank capacity 1000 Imperial Gallons	1	MTL
40-12-5000		Foam cell - 30 Imperial gallon	2	MTL
40-13-0100	S	> Through the tank tunnel - up to 20 cu ft ENG. NOTE: Charge 60 per cubic foot of tunnel volume  For portable tank storage tube - ref 60-40-9001	1	MTL
40-21-1000		4" tank to pump connection	2	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	2	MTL
40-23-1040		4" direct fill connection	1	MTL
40-23-1060		10" Newton dump connection	1	MTL
40-23-1070		3" direct fill connection	2	MTL
40-30-0500		Sump drain valve (3" gate valve) with linkage E Locate sump drain connection in sump box left side of tank.	1	MTL
40-30-1000		Water Fill Box front left corner	1	MTL
40-31-3500		10" rear Newton dump, stainless steel To have an electric side mounted operator	1	MTL
40-31-3600		Newton dump - stainless steel 36" telechute	1	MTL
40-31-5500	S	Electric operator for Newton dump Provisions are made to allow manual operation of the dump line in the event of an emergency. ***Ship manual bar loose888	1	MTL
40-31-8000	S	4" direct rear gated fill with 5" Storz connection Left of dump in back compartment. The adaptor 5" to 2.5 80-99-10AA will be mounted on this connection so the rollup door must be able to close with the adapter on.	1	MTL
40-31-99AA	U	3" direct fill w/ 2-1/2" Storz conn on pump panel with push-pull control (ea) 2-1/2" Akron valve - valve to be behind pump panel. 3" piping to tank. One left side, one right side pump panels SOPT in file.	2	
<b>ELECTRICAL</b>			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 -LIGHT BAR CLEAR -REAR BEACONS -FLASHING WARNING -REAR FLOODS	1	MTL
50-11-1400		Federal PA300 100 watt siren	1	MTL
50-11-15AA	U	Siren Tap II feature - controlled by foot switches drivers and officers side There will be foot switches at the driver and officer seating positions to control	1	

PART NO	S	DESCRIPTION	QTY	ID
		the TAP II siren feature. SOPT in file		
50-11-1620		> Siren speaker, 100 watt, in front bumper <b>ENG. NOTE:</b> AS124 speaker 1570860	1	MTL
50-11-2600		<i>Siren to be accessible to driver and officer</i>	1	MTL
50-11-6100	S	<i>Whelen F4N0QLED LED light bar NFPA</i>	1	MTL
50-11-6501	S	<i>No Rear Directional Light</i>	1	MTL
50-11-8600	S	<i>Rear LED beacons-Whelen MCFLED2R (pr) both red</i>	1	MTL
50-12-8510	S	<i>Front LED flashers (pr)-Whelen red LED 400 with integral flasher</i>	1	MTL
50-12-8600	S	<i>Rear LED flashers (pr)-Whelen red LED 400</i>	1	MTL
50-12-8700	S	<i>Front side inter lts (pr) - Whelen red LED 400</i>	1	MTL
50-12-8800	S	<i>Body side inter lts (pr)-Whelen red LED 400</i>	1	MTL
50-12-8900	S	> <i>Add'l body side inter lts (pr)-Whelen red LED 400</i> <b>ENG. NOTE:</b> Required if distance between front and rear side intersection lights exceeds 25'  The flasher will be installed on the chassis cab between the front and rear chassis door. This will be like North River M17-19373.	1	MTL
50-21-1505	U	<i>Unity LED rear floods (pr)</i> Switched in cab and on light head Mounted at rear, top of sides These lights cannot be managed to shed - required for ULC SOPT #255a	1	
50-21-25AA	U	<i>FRC Spectra LED 12 Volt telescoping light - SPA530-Q15-SW-SR-NS (ea)</i> Mounted on back of cab - one each side Individual switches located on pump panel Hazard switch wired to 50-21-5550 Equipment not stowed warning light in cab. These lights can be managed to shed. SOPT #395 - Truck specific	2	
50-21-3010	S	> <i>Remote control electric spot (ea) Visibeam</i> <b>ENG. NOTE:</b> Specify location of light and location of control panel in cab.  An electric spot light is installed on the chassis roof cab above the light bar with a remote control mounted in the chassis cab console 20-31-7500 as directed by the Fire Department. Location as shown on the drawing was approved at the Pre-construction meeting 12.18.2018.	1	MTL
50-21-5100		> Compartment lighting - LED tube lights in each compartment (rollup doors) <b>ENG. NOTE:</b> Rollup doors only	1	MTL
50-21-5500		<i>Door Ajar warning light</i> Located in overhead console over drivers seat Bilingual warning label in cab to read: "Do Not Move Apparatus when Light is on"	1	MTL
50-21-5550	S	<i>Equipment rack not stowed warning light</i> Located in overhead console over drivers seat Bilingual warning label in cab to read: "Do Not Move Apparatus when Light is on" One for HLAS, One to indicate when the Telelights are extended.	2	MTL
50-21-8001		<i>Step lights for body steps - 4" LED</i> Switched when park brake is set.	1	MTL
50-21-8110	S	<i>Step lights for walkway - LED - 4" grommet mounted</i> Switched when park brake is set.	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
50-21-8201	S	<b>Step lights for chassis steps - LED</b> Switched when park brake is set.	1	MTL
50-21-8600		LED clearance lts and reflectors	1	MTL
50-21-8800		<b>LED intermediate turn signal/clearance/reflector length &gt;30'</b>	1	MTL
50-22-0600	S	<b>Whelen 64 tail/brake-turn-backup module (pr)</b> Incandescent lighting - Customer request. The Weldon tail light modules for Minto are their part number LH 3884-0100-01 and the RH 3884-0100-02. These are halogen lights.	1	MTL
50-31-6560	S	<b>Ground lighting (LED Lumabar) - 4 door chassis</b> Switched when the park brake is applied.	1	MTL
50-31-6580	S	<b>Ground lighting (LED Lumabar) - top mount body</b> Switched when the park brake is applied.	1	MTL
50-31-65AA	U	<b>Hose bed lighting - LED on front partition</b> Switched when park brake is set. SOPT #958	1	
50-35-0500	S	<b>Installation of customer supplied mobile radio</b> Radio information list required Metalfab will install a customer supplied VHF radio and TMR radio.	2	MTL
50-35-0560		<b>VHF antenna with base - commercial chassis</b> Specify any special mounting locations or spacing requirements, otherwise will be mounted on cab roof behind the lightbar left side.	1	MTL
50-35-0590		<b>Cellular/TMR antenna with base - commercial chassis</b> Specify any special mounting locations or spacing requirements, otherwise will be mounted on cab roof behind the lightbar right side.	1	MTL
50-41-5260	U	<b>12-volt power point for portable winch (initial)</b> For the rear receiver SOPT #283a - Truck specific	1	
50-41-5265	U	<b>12-volt power point for portable winch (additional)</b> For the front receiver SOPT #283a - Truck specific	1	
		<b>BODY</b>		
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 <b>ENG. NOTE:</b> Maximum height of step is 24" from ground	1	MTL
60-10-5430		> Diamondback 19" rear step <b>ENG. NOTE:</b> Maximum height of rear step is 24" from ground	1	MTL
60-10-6000		Extruded rub rail	1	MTL
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> Specify critical dimensions in shop note	1	MTL



PART NO	S	DESCRIPTION	QTY	ID
60-11-1400		> <b>Rear right side compartments full height E</b> ENG. NOTE: Specify critical dimensions in shop note	1	MTL
60-11-2000		> <b>High side compartment (over 18") each</b> ENG. NOTE: Specify critical dimensions in shop note Specify type of door Specify flip up or drop down Specify which side of body  <b>One left side, two right side.</b>	3	MTL
60-11-3200		> Full Height Rear compartment ENG. NOTE: Specify critical dimensions in shop note	1	MTL
60-11-5500		<b>Rollup door - standard height</b> Natural aluminum finish Includes magnetic door switch, LED tube lights, rubber bumpers to prevent pinch point	3	MTL
60-11-5520		<b>Rollup door - full height</b> Natural aluminum finish Includes magnetic door switch, LED tube lights, rubber bumpers to prevent pinch point	5	MTL
60-11-5655	U	<b>Amdor pull straps - Flex-HD for L2, R2 and R3</b> Order with doors SOPT #1114	3	
60-11-5660	U	<b>Amdor pull straps - Flex-HD for L1, L3, R1, R4 and B1</b> Order with doors SOPT #1114	5	
60-31-4100		Extruded aluminum handrails Minimum 2" clearance from handrail to any surface	1	MTL
60-31-5500	S	<b>Steps at rear of body (folding) with LED lights</b> Maximum height between steps is 18"	1	MTL
60-31-5600		Steps and grab handles at front of body next to pump panel Maximum height between steps is 18"	1	MTL
60-31-6500	S	<b>Compartment matting - plastic interlocking tile</b>	1	MTL
60-31-8006	U	<b>BA bottle compt (ea)-fender well</b> Cast Products with retaining loop.	4	
60-31-8800		> <b>Sliding tray (ea) - 600 pound capacity</b> ENG. NOTE: Specify location  Located at the following locations, floor level; Tray #1 - Left side front compartment Tray #2 - Left side rear compartment Tray #3 - Right side front compartment Tray #4 - Right side rear compartment ***Hardware requires 3-1/2" of compartment height Reflective stripe is applied on the exposed edge for visibility when the compartment door is open	4	MTL
60-31-9600	S	> <b>Adjustable shelf (ea)</b> ENG. NOTE: Specify location  Customer to specify shelf locations and if full depth or shallow depth at the first	8	MTL

PART NO	S	DESCRIPTION	QTY	ID
		shop visit;		
		Shelf #1 - Left side front compartment Depth - Shallow		
		Shelf #2 - Left side front compartment Depth - Shallow		
		Shelf #3 - Left side over chassis wheels Depth - Shallow		
		Shelf #4 - Rear left side compartment Depth - Shallow		
		Shelf #5 - Front right side compartment Depth - Shallow		
		Shelf #6 - Front right side compartment Depth - Shallow		
		Shelf #7 - Rear right side compartment Depth - Shallow		
		Shelf #8 - Rear right side compartment Depth - Shallow		
		Reflective stripe is applied on the exposed edge for visibility when the compartment door is open		
60-32-3560		<b>Three adjustable hose divider (each)</b> Hand hold required in end	1	MTL
60-32-7500		<b>Hose bed - aluminum</b> The hose bed load expected on this vehicle is: 1200' of 2-1/2" double jacket hose 400' of 1-3/4 double jacket hose 800' of 1-1/2" forestry hose RHS of hose bed.	1	MTL
60-33-0000		<b>Paint exterior - Imron Elite</b> *** Paint code and colour red to match cab	1	MTL
60-33-0200		Undercoat vehicle with KROWN rust protection	1	MTL
60-33-0500		Paint chassis wheels job colour with silver trim E	1	MTL
60-33-1000		Paint pump and plumbing job colour	1	MTL
60-33-1500		Buffed finish compartment interior	1	MTL
60-33-2200		<b>Lettering - 80 letters up to 3" tall - 3 colour</b> *** Vinyl letters, Fire Department to provide details on location and text.	1	MTL
60-33-22AA	U	<b>Updated door decal</b> The door decal will be upgraded to the new village logo as supplied by Wendy Flowers on 10.29.2019.	1	
60-33-3000		<b>Reflective stripe - 4" white</b> 50% of perimeter each side and 25% of perimeter front	1	MTL
60-33-3310		<b>Reflective stripe - red and yellow chevron at rear</b> Minimum 50% of rear vertical surface Printed on 3M Scotchlite material	1	MTL
60-33-3500		<b>Tarp over hose bed - black</b> A hosebed cover will be provided and secured to top body flanges by quarter turn snaps at front of hosebed and Velcro on each side edge of the cover. A weighted flap will be furnished at the front of the cover, and Velcro straps will be provided on the rear of the cover to tie around the rear handrail. Color to be black.	1	MTL
60-33-4600	S	<b>End tarps (black) for speedlays</b> Small tarps with Velcro straps to wrap around the hose rollers	1	MTL
60-40-2000	S	<b>4" Hose tray - top mount (ea)</b> Left side of hose bed - For Customers 4" x 10' suction hoses. A Velcro strap shall be installed at the rear open end of the trays to hold hose in place. Customer specified overall length of suction hoses - end of coupling to end of coupling measures 120-1/2" and the diameter of the Camlocks fitting are 7".	2	MTL
60-40-5500		<b>Suction hose tube (each) with door</b> Under tee of tank to store the 6" x 10 suction hose 80-11-5000. Door ajar switch required.	2	MTL
60-40-8500		> <b>Tail light box Fire Extinguisher tubes (pr)</b> ENG. NOTE: Specify size/dimensions of Fire extinguishers to be stored	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
		To house the 20 pound ABC extinguisher 80-17-0500 and the 15 pound C02 extinguisher. To be sealed at the bottom from the elements however they need one way drain holes. PAC Adjustamount strap shall be installed to secure the fire extinguisher in the tube.		
60-40-9001	S	> <b>Tube mount for portable tank through 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 2000 gallon portable tank 80-15-1000 Roller to be installed full width of opening	1	MTL
60-41-1015		<b>Pike Pole tube in suction hose tube</b> For the 10' pike poles 80-13-2500	2	MTL
60-41-9500		> <b>Zico Horizontal Ladder Access system</b> <b>ENG. NOTE:</b> 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 24' extension ladder 80-14-0500, 14' roof ladder 80-14-5500 and 10' attic ladder 80-14-8500. 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. ***Wire so back up alarm sounds when rack is in motion***	1	MTL
60-41-9510		<b>ZICO HLAS switched at rear above tail light</b> Switch is located on same side as electric rack - right side	1	MTL
		<b>INSTRUMENTATION</b>	1	MTL
70-11-0000		Warning Label on Pump Operator's Panel	1	MTL
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
70-11-2000		<b>Top mount instrument panel</b> No gauge or visual display can be higher than 84" above the operator's standing position Midpoint of any control cannot be higher than 72" above the operator's standing position ***LED lighting must extend the full width of the pump panel***	1	MTL
70-11-2500		<b>Transverse walkway</b> Include tread plate filler between walkway and cab. A fixed step is provided each side to access walkway. Lights for the steps will be provided to meet ULC.	1	MTL
70-11-2600		<b>Tread plate overlay on back of chassis cab</b>	1	MTL
70-11-3000	S	<b>Mansaver bars - length TBD</b>	1	MTL
70-11-3200		<b>Colour coded tags</b> ***Speedlay colors to be green and white ***Sign to be supplied on center of pump panel "Wheel chocks are to be used when pumping" bold print and visible to the pump operator.	1	MTL
70-11-3501	S	<b>No compartments in ends of walkway</b>	1	MTL
70-11-4500		<b>Diamondback grip type panel hood step right side</b>	1	MTL
70-11-4600		<b>Diamondback grip type panel hood step left side</b>	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
70-11-5100	S	Open storage at rear top of pump house Turtle tile on floor LED lighting required to meet ULC requirements.	1	MTL
70-11-5500		Right side tread plate pump access door No opening dimension less than 18" ***To have as large an opening as possible***	1	MTL
70-11-5600		Left side tread plate pump access door No opening dimension less than 18" ***To have as large an opening as possible***	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 for heater located on top mount pump operators panel.	1	MTL
70-20-05AA	U	6" compound gauge - dual face -30-0-400 PSI/KPA See SOPT #999 - truck specific	2	
70-20-1500	S	2-1/2" pressure gauge - dual face 0-300 Gauge to be no more than 6" from edge of the gauge to the center of the control. ***All pressure gauges are to be calibrated, with documentation and also be liquid filled.	9	MTL
70-20-2500		Primer control	1	MTL
70-20-2501		Additional Primer control For the pre-primers	3	MTL
70-20-3300		FRC InControl Governor Control Throttle can be no lower than 42" and no higher than 72" from operator's standing position.	1	MTL
70-20-35AA	U	Electric water level gauge on pump panel - ITL-40M SOPT #33	1	
70-20-3610		Remote PSTANK water level indicators each side, rear with driver E Interlocked with park brake so powered only when the park brake is set. All to be vertically mounted.	1	MTL
70-20-6500		Test gauge panel Mount below the compound gauges for proper draining ***Tender also requested a rpm counter - order this when ordering the pump if still available.	1	MTL
70-20-7500		Heat exchanger control valve	1	MTL
70-21-15AA	U	Electric foam level gauge on pump panel ITLF-40M SOPT #32	2	
70-21-5500		Panel readout for Battery Conditioner Located on left side pump panel	1	MTL
71-21-3500		Headset compartment Locate at pump operators location	1	MTL
71-21-3520	U	Head set for pump operator, TMR compatible SOPT #894 David Clark H3340 (1520514) - Confirm this is TMR compatible before ordering	1	
ACCESSORIES			1	MTL
80-11-5000	S	6" x 10' lightweight suction hose (ea) Harrington brand hose Tube mounted	2	MTL

PART NO	S	DESCRIPTION	QTY	ID
80-12-2500	S	<b>6" barrel strainer</b> Shipped loose, not mounted. Customer will mount with Customers bracket(s).	1	MTL
80-12-4502	U	<b>6" low level strainer TFT A03HNXJET</b> To be mounted in the rear compartment between the tow eyes 20-41-5010. SOPT #394 - truck specific Thread on jet siphon to be NPT (ref 30-20-1700).	1	
80-13-0500	S	<b>Rubber mallet</b> The rubber mallet will be mounted on the side wall of the L1 compartment with the PAC Toolok 1003 bracket 80-13-0513.	1	MTL
80-13-0513	U	<b>Rubber Mallet Mount PAC Toolok 1003</b> The rubber mallet will be mounted on the side wall of the L1 compartment with a PAC Toolok 1003 bracket.	1	
80-13-1000	S	<b>Hose wrenches (double) with holder</b> There will be one set of wrenches installed in each of the following locations: L1 compartment, R1 compartment and rear compartment.	3	MTL
80-13-1500		<b>Bar with bracket</b> Mounted on/above rear step (under back door opening).	1	MTL
80-13-2500		<b>Pike pole, fibreglass handle - 10' long</b> Tube mounted	2	MTL
80-13-2520	S	<b>Pike pole, fibreglass handle - 6' long - "D" handle</b> Mounting location will be on the rear of the chassis cab as determined at the pre-construction meeting of 12.18.2018.	2	MTL
80-13-3000		<b>Pike pole bracket</b> For the 80-13-2520 pike pole	2	MTL
80-13-4000	S	<b>Axe, pick head, fibreglass handle and bracket</b> Mounted on the side wall of the back compartment as discussed at the pre-construction meeting of 12.18.2018	2	MTL
80-13-4500	S	<b>Axe, flat head, fibreglass handle and bracket</b> Mounted on the side wall of the back compartment as discussed at the pre-construction meeting of 12.18.2018	1	MTL
80-14-0500		<b>24' 2 section extension ladder PEL 24</b> Stored on the HLAS	1	MTL
80-14-5500		<b>14' aluminum roof ladder PRL-14</b> Stored on the HLAS	1	MTL
80-14-8500		<b>10' aluminum folding attic ladder FL-10</b> Stored on the HLAS	1	MTL
80-14-9000		<b>Attic ladder bracket (Zico)</b> For the 80-14-8500 attic ladder.	1	MTL
80-15-1000		<b>2000 l gallon portable tank - Husky</b> 2000 imperial gallon folding portable tank with aluminum frame, two drain sleeves will be supplied with the completed unit. Drain sleeves to be mounted in the interior of the tank with strap attachments on the outside of the unit and sleeve to line up center of aluminum housing so it doesn't interfere with the up-rite post. Special option with Husky. Tube mounted.	1	MTL
80-16-0500		<b>Akron 3423 Portable/deck monitor with stacked tips</b> Ground base to have 2-1/2" storz inlets.	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
80-16-1500		<b>Akron 2581 gated wye</b> 2-1/2" Storz to two (2) quarter turn 1-1/2" forestry hose connections (Merlug - quote in file). Shipped loose, not mounted. Customer will mount with Customers bracket(s).	1	MTL
80-17-0500	S	<b>20# dry chemical fire extinguisher</b> Stored in Tail light boxes	1	MTL
80-17-1000	S	<b>15# CO2 fire extinguisher</b> Stored in Tail light boxes	1	MTL
80-18-0600		<b>SCBA brkt w/strap - ZICO ULLH - crew cab mount</b>	4	MTL
80-30-05AA	U	<b>Rubber wheel chock (ea)</b> Shipped loose, not mounted. Customer will mount with Customers bracket(s). P/n 1562398 SOPT #13	2	
80-99-05AA	U	<b>6" NHF x 5" Storz adapter with long handle complete with 5" Storz cap</b> Mount in the L1 compartment with with Kocheck mount MM601 80-99-85AA SOPT #881 - truck specific	2	
80-99-10AA	U	<b>5" Storz to 2.5" Sotrz reducer and cap</b> These will be mounted on the right side discharge 30-40-3605 and direct tank fill 40-31-8000. SOPT #1089 - Truck specific	2	
80-99-11AA	U	<b>1-3/4" hose x 50' lengths</b> 8 green, 8 white SOPT in file	16	
80-99-12AA	U	<b>2-1/2" hose x 50' with Storz couplings</b> White in colour SOPT in file	24	
80-99-13AA	U	<b>Akron 1-1/2" ProVenger Nozzle 4116 with pistol grip</b> Shipped loose, not mounted. Customer will mount with Customers bracket(s). SOPT #226 - truck specific	2	
80-99-14AA	U	<b>Akron 2-1/2" ProVenger Nozzle 1615 w/out pistol grip - Storz inlet</b> Shipped loose, not mounted. Customer will mount with Customers bracket(s). SOPT #226 - truck specific	1	
80-99-15AA	U	<b>6' fibreglass step ladder</b> To be installed in open storage above pump house. Uline model H5626. SOPT in file.	1	
80-99-16AA	U	<b>5" Hasbra hose clamp - Model 228-5</b> Model 228-5 Installed on rear tail board as directed by the Fire Department at the first shop visit. Quote and SOPT in file	1	
80-99-20AA	U	<b>Dixon Northline Storz hose wrenches SWB-2</b> P/N 1520179 Located where space permits - one on right side pump panel and one on rear of body SOPT #344	2	
80-99-85AA	U	<b>6" Male threaded mounting plate Kocheck MM601</b> Mount in the L1 compartment for the adapter 80-99-05AA SOPT #138a	2	