



Shop Order

Safetek Emergency Vehicles Ltd.
 30686-A Matsqui Place
 Abbotsford, BC V2T 6L4

Township of North Frontenac
 6648 Road 506
 Plevna, ON K0H 2M0

Exp. Date: 06/15/2021
Quote No: North Frontenac, ON-0016
Job/Order No: 22170
BODY: 00-10-31 Metalfab Tanker - ULC 05/13

08/19/2022

Page 1

PART NO	QTY	DESCRIPTION
	1	== Metalfab Tanker - ULC 05/13 - 0.000 ==
	1	CHANGE ORDER E
00-05-0060	1	Dealer - Safetek
00-10-1000	1	Metalfab Tanker
00-20-1000	1	Company Profile
00-20-1500	1	Standard Body Warranty
00-20-1550	1	Metalfab Limited Ten (10) Year Paint and Corrosion Warranty
00-20-1800	1	Polypropylene Tank Lifetime Warranty
00-20-2000	1	Plant Visits - unlimited at customer expense
00-20-3000	1	No Bonding Requested
00-20-3500	1	Certification for Fusion Welding of Steel and Aluminum
00-20-4000	1	Quality System registered to ISO 9001:2015
00-20-4500	1	Fire Apparatus Manufacturers' Association Membership
	1	GENERAL INFORMATION
10-11-0000	1	Intent
10-11-0105	1	Vehicle Data Recorder not requested
10-11-1100	1	ULC S515-13 Compliance
10-11-1600	1	ULC Testing - Tanker with no engine driven pump - Imperial units of measure
		This unit shall be tested by Underwriters' Laboratories of Canada at our Plant in order to ensure compliance with applicable standards. The tests include:
		-a weight test, to ensure that the vehicle is not overweight on either axle or in total
		-a road test, to check acceleration and braking
		-electrical test
		After this test, a plate shall be installed showing the tank capacity, as well as the test date, unit serial number, and no load governed speed of the engine. CMVSS certification and safety mark are also installed.
10-11-2100	1	Maximum length - 28' (336")
10-11-2200	1	Maximum height not specified
10-11-2300	1	Overall length is less than 30'
10-11-2500	1	General Construction

PART NO	QTY	DESCRIPTION
10-11-3000	1	Manuals - two copies - paper and electronic ***Two copies of chassis manuals are required and digital copies where possible (not available for Freightliner chassis).
10-11-3600	1	Delivery - FOB Fire Department - by Safetek
10-11-4200	1	Payment Terms - Chassis Net 10 days and Body COD Terms will be Chassis Net 10 Days and Body COD as discussed at the pre-construction meeting of 07.15.2021
10-20-1200	1	Hose bed capacity - standard ULC Tanker Minimum of 7 cubic feet for Mobile Water Supply Fire Fighting Apparatus Customer confirmed that minimum hose load to be carried and 8" high hose bed as shown on proposal drawing was approved at the pre-construction meeting of 07.15.2021.
10-20-2200	1	Equipment carrying capacity - standard ULC Tanker This vehicle is designed to carry the standard ULC miscellaneous equipment load of 1000 lbs for a Mobile Water Supply Fire Fighting Apparatus
	1	CHASSIS INFORMATION
20-11-1000	1	Chassis supplied by Metalfab - Freightliner M2 112 Wheelbase of 194", Cab to axle of 128.35" and rear overhang of 110" 18,000lbs front axle, 46,000lbs rear axle and 64,000 lbs GVWR Detroit DD13 12.8L, 450hp @ 1625 RPM, 1900 Governed RPM, 1650 lb-ft @ 975 RPM 68 MPH top speed Allison 4000 EVS 6-speed automatic transmission Locking differential with interaxle lock, ESC AM/FM radio Fog lamps under front bumper Groenenveld automatic greasing system installed at dealer LH down view mirror installed at dealer Brake stroke indicators installed at dealer Match paint to previous chassis - Serial # 1FVHG3DV2HHH8270 - See pic in O:/Metalfabphotos/North Frontenac, ON - M22-22170/Precon photos Customer to supply paint code: L2225EY Paint sample approval required: Customer sent approval to Freightliner 11.30.2021 189 litre fuel tank
20-11-11AA	1	Chassis dealership - Nova Truck Centres
20-11-1500	1	2013 Emission chassis modifications
20-11-1700	1	Chassis Motor Vehicle Inspection required - by Safetek
20-21-0500	1	Fluid capacity plate
20-21-1000	1	Maximum riders sign - 2 persons
20-21-1500	1	Seat belt warning labels - 2 door chassis
20-21-1570	1	LED Tire Pressure Indicators - Tandem Axle
20-21-1600	1	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"

PART NO	QTY	DESCRIPTION
20-21-2000	1	Non removable key
20-21-3500	1	Rear step warning label
20-21-3800	1	Front mudflaps
20-21-4000	1	Rear mudflaps - Metalfab Logo
20-31-0200	1	Fuel fill label -Ultra Low Sulfur Diesel only
20-31-0500	1	Alum tread fuel tank trim, Conv - 2 door Vertical trim only, OEM cab steps remain
20-31-1900	1	Chassis cab painted by chassis OEM
20-31-7500	1	Console in cab Install the following: Dump valve switches 40-31-45AA Siren 50-11-1492 Traffic Advisor 50-11-6617 Rocker switches 50-11-0900 instead of Cencom Radio Provision 50-35-0500 for Kenwood model TK7302H - plate will be cut out to accept the radio. As discussed at the final inspection of 08.17.2022 Shoreline outlet 20-51-6200 towards officer side As discussed at the pre-construction meeting of 07.15.2021 Storage area with hinged cover and lift and turn latch provided at rear of console for books. Gray zolatone finish Layout to be approved by customer prior to build: Approved by Greg Rivers by e-mail on 03.22.2022
20-41-0600	1	Intake air shutoff for engine not requested
20-41-1200	1	Transmission programming not required
20-41-1500	1	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. Customer confirmed at pre-construction meeting of 07.15.2021 that special provision for fire hall ventilation system is not required.
20-41-1900	1	Battery boost terminals with chassis
20-41-2200	1	Chassis batteries relocated to body compartment Batteries to be located in L1 compartment unless otherwise specified
20-41-2510	1	Fuel fill at step fuel tank under cab
20-41-2600	1	Chassis fuel tank remains in OEM location
20-41-5000	1	Rear Tow Hooks - under body *** Flat bar tow hooks under rear step (2)
20-51-0710	1	Master Battery Disconnect included with Freightliner chassis
20-51-2500	1	Back up alarm included with chassis
20-51-3100	1	Air inlet not requested
20-51-3400	1	Protection valve installed for air operated accessories
20-51-5620	1	LED "Hide-Away" flashing light installed in each headlight module Pair of clear flasher supplied and installed Metalfab part # 1571019
20-51-6200	2	120 volt 20 A shore line connection in chassis cab Standard 5-20R duplex receptacle in chassis cab, not fused, minimum 12" from the

PART NO	QTY	DESCRIPTION
		floor to meet ULC
		Location:
		1. On back wall of chassis cab for Kussmaul charger (20-51-6615) to plug in
		2. Officer side of console 20-31-7500
		As discussed at the pre-construction meeting of 07.15.2021
20-51-6615	1	Kussmaul Pump Plus 1200 conditioner/compressor SOPT #547
		Mounted behind driver seat / cab console (20-31-7500) and plugs into shoreline (20-51-6200). 12 VDC Compressor to be installed in L1 compartment unless otherwise specified Metalfab part # 1030897
20-51-7101	1	Electric System Management - VMUX
20-51-7500	1	Super Auto eject for 120 v - 20 A with sealed enclosure - LS chassis step
20-51-8510	1	Engine compartment light LED with chassis - switched with OEM switch on dash
20-51-9001	1	Air horns on hood as supplied with chassis - Lanyard controls
20-52-3500	1	Chassis steering wheel lined up by Metalfab
20-52-40AA	1	Cameras by each dump location with monitor in cab Monitor to be mounted on top of chassis dash. RearView systems STM7000 DTVK with 7" monitor and three (3) cameras
20-60-0400	1	Chassis wheelbase does not change
20-99-05AA	1	Auxiliary driving lights installed under front bumper with chassis
		PUMP AND PLUMBING
30-11-0100	1	Pump not required (no chassis engine driven pump) Customer's Portable Pump only
30-12-01AA	1	Mount Customers CET pump to slide out tray in R1, wire in battery w/quick discon Customer to specify Portable Pump specifications Make: CET Model: GX610 Length: 24" Depth: 21" Height: 22" Suction size: 4" External fuel tank? Yes Make and model of charger to be MotorMaster Trickle Charger 011-1506-6 to match South River Machar M16-18400 *** Portable pump arrived at Metalfab on 07.16.2021
30-20-0501	1	Valves and controls - compartment mounted
30-20-1002	1	Akron valves specified (for connections to the water tank)
30-20-1600	1	Piping stainless steel - general
30-20-1700	1	1-1/2" thread specifications NPSH
30-20-1800	1	2-1/2" thread specifications - CSA
30-20-2000	1	Piping hydrostatic test
30-21-5595	1	Tank to Pump SS 3" Akron to portable pump - control on valve SOPT #1127
		Valve shall be located in front right side compartment and shall be operated at the valve with a manual handle. There shall be a 4" suction line to allow for connection

PART NO	QTY	DESCRIPTION
		<p>of suction hose. There shall also be a flexible Kocheck hose from the valve to the portable pump to allow the pump to slide out on the sliding tray. Plumbing to be 4" Similar layout to South River Machar M16-18400 *** Suction hose to be Kocheck for it's lightweight and flexible properties and will be custom length. Both connections will have a 4" chrome cap included. As discussed at the final inspection of 11.18.2022</p>
30-22-1540	1	<p>Tank Fill valve 2-1/2" Akron, SS, from portable pump to tank - control on valve SOPT #551</p> <p>Valve shall be located in front right side compartment and shall be operated at the valve with a manual handle. There shall also be a flexible pony hose from the valve to the portable pump to allow the pump to slide out on the sliding tray. Similar layout as South River Machar M16-18400</p>
	1	WATER AND FOAM TANKS
40-11-2100	1	Polypropylene water tank (Imperial gallons)
40-11-2200	1	Water tank capacity certification (tank manufacturer)
40-11-7500	1	Tank capacity 2900 Imperial Gallons
40-12-05AA	1	<p>Wet side tank construction Tank will be white plastic painted red job color. There will be an aluminum plate mounted on the rear to allow Chevron installation and mounting of accessories. There will also be an aluminum plate on the front of the tank</p>
40-13-0100	1	<p>Through the tank tunnel - up to 20 cu ft For porta tank storage tube 60-40-9500 for 3000 Imperial Gallon Husky Porta Tank (80-15-1010)</p>
40-21-1000	1	4" tank to pump connection
40-22-1000	1	2-1/2" tank fill connection
40-23-0500	1	3/4" water level gauge connection
40-23-1040	1	4" direct fill connection
40-23-1060	3	10" Newton dump connection
40-23-1070	1	2-1/2" direct fill connection
40-30-0400	1	3" plug in sump box
40-30-1100	1	Water Fill Box middle left side
40-31-45AA	1	<p>Three Newton dumps - electric, with telechutes - controlled in cab and at dump One (1) to be located on center rear of apparatus and one (1) located on each side of apparatus Manual overrides required The extensions and dump valves will be electric controls at each dump valve and in the cab console (20-31-7500). The cab controls will have an indicator light included to show when the dump chutes are deployed. Switches on side of body will be recessed like South River Machar M16-18400 for protection and the side controls will be illuminated Customer requested a physical lock on the switches to prevent accidental activation - as discussed at the pre-construction meeting of 07.15.2021</p>

PART NO	QTY	DESCRIPTION
40-31-6000	1	2-1/2" rear gtd tank fill Akron 2-1/2" quarter turn valve, 30 degree droop, swivel, plug and bleeder valve
40-31-8000	1	4" Storz rear gtd fill 4" Butterfly valve hand wheel controlled, 30 degree droop, Storz adapter, blind cap and bleeder valve
	1	ELECTRICAL
50-11-0300	1	Base electrical system - multiplex
50-11-0600	1	Warning Light Certification
50-11-0700	1	Low Voltage Electrical system test
50-11-0800	1	Low Voltage Electrical System Documents As required by ULC and NFPA standards
50-11-0900	1	Rocker switch panel with master warning switch ***Rocker switch assignments: MASTER -LIGHT BAR RED -LIGHT BAR CLEAR -FLASHING WARNING -LS SCENE -REAR SCENE -RS SCENE Will be used in place of Cencom unit as discussed at pre-construction meeting of 07.15.2021
50-11-1492	1	Whelen 295SLSA1 100 watt siren with permanent microphone SOPT #16 - Siren - Metalfab Part # 1570957
50-11-1610	1	Siren speaker, 100 watt, in front bumper/grille - Whelen SA314A SOPT #16 - Speaker (truck specific)
50-11-2600	1	Siren to be accessible to driver and officer
50-11-62AA	1	Whelen F4N0QLED light bar NFPA - Red/blue/white - 8 red, 2 blue, 2 white The lights from the left to right starting on the side will be: Red, red, red, red, white, blue, red, red, blue, white, red, red, red. See WECAD in F:/Data/Jacques/Current Projects/North Frontnac As discussed at the pre-construction meeting of 07.15.2021
50-11-6617	1	Rear LED Traffic Advisor warning lights with arrow heads - TA165NF2 SOPT #642 - truck specific Includes TACTL6 controller
50-12-5024	1	Front LED flashers (pr) - Whelen M6, one red, one blue, colored lenses Customer to advise location of flashers: Red: Right Blue: Left SOPT 952a As discussed at the pre-construction meeting of 07.15.2021
50-12-5192	1	Rear LED flashers (pr) - Whelen LED M9 - red with red lens - upper level SOPT #951b

PART NO	QTY	DESCRIPTION
50-12-5280	1	Front side LED flashers (pr) - Whelen LED M6, one red, one blue, colored lenses Customer to advise location of flashers: Red: Left Blue: Right SOPT 952a As discussed at the pre-construction meeting of 07.15.2021
50-12-5371	2	Body side LED flashers (pr) - Whelen LED M9 - red with red lens - upper level SOPT #953b
50-12-8835	1	Body side LED flashers (pr) - Whelen LED M6 - one red, one blue, colored lenses Customer to advise location of flashers: Red: Right Blue: Left SOPT 953a As discussed at the pre-construction meeting of 07.15.2021
50-21-5100	1	Compartment lighting - LED tube lights in each compartment (rollup doors) L1/R1 compartment will be ordered with Amdor Rollup doors L2/L3 compartment will have 4" recessed LED lights
50-21-5500	1	Door Ajar warning light Bilingual Warning label in cab to read: "Do Not Move Apparatus when Light is on" Above driver's seating position
50-21-8001	1	Step lights for body steps - 4" LED To be activated with park brake
50-21-8200	1	Step lights for chassis steps - LED To be activated with park brake
50-21-83AA	1	LED lighting for rear step/platform/access ladder To be activated with park brake. SOPT 307b - truck specific
50-21-8600	1	LED clearance lts and reflectors
50-22-07AA	1	Whelen M6 LED CAST 4V tail/brake-turn-backup-warning modlue (pr) Customer to advise location of flashers: Red: Left Blue: Right There will be an additional Tecniq brake and turn signal module installed in the rub rail due to the Zico Access Ladder (60-31-5500) SOPT 1093 - truck specific As discussed at the pre-construction meeting of 07.15.2021
50-31-6025	1	Combo Scene lights (pr) - Whelen M9 V-Series - one red, one blue right side These will be installed on the upper side corners of the body Customer to advise location of: Red: Forward

PART NO	QTY	DESCRIPTION
		Blue: Rear As discussed at the pre-construction meeting of 07.15.2021
50-31-6026	1	Combo Scene lights (pr) - Whelen M9 V-Series - one red, one blue left side These will be installed on the upper side corners of the body Customer to advise location of: Red: Rear Blue: Forward As discussed at the pre-construction meeting of 07.15.2021
50-31-6027	1	Combo Scene lights (pr) - Whelen M9 V-Series - one red, one blue at rear These will be installed on the upper rear corners of the body. The lights will be controlled by a switch in the cab, one on the rear of the body and interlock with the reverse of the transmission. Customer to advise location of: Red: Right Blue: Left As discussed at the pre-construction meeting of 07.15.2021
50-31-6550	1	Ground lighting (LED Lumabar) - 2 door chassis To be activated with park brake
50-31-6570	1	Ground lighting (LED Lumabar) - side mount body To be activated with park brake
50-35-0500	1	Provisions (power, ground, cutout) for customer supplied and installed radio Powered from master switch Jotto desk plate unless radio sheet is provided Radio will be a Kenwood TK7302H as discussed at the pre-construction meeting of 07.15.2021
50-35-0560	1	VHF antenna with base - commercial chassis Customer advised at pre-construction meeting of 07.15.2021 that no special installation instructions are required.
50-99-20AA	1	Hose bed lights There will be LED tube lights installed on the front of the hose bed to meet ULC. To be activated with park brake.
	1	BODY
60-10-15AA	1	1" drop on lower edge of compartment floor - sweep out type
60-10-1600	1	Tandem axle extruded aluminum body
60-10-4100	1	No "beavertail" rear step supports
60-10-4600	1	Painted fender surround
60-10-4700	1	Integral aluminum fender trim
60-10-5430	1	Diamondback 19" rear step
60-10-6000	1	Extruded rub rail
60-11-0200	1	Front left side compartments intermediate height
60-11-0600	1	Front right side compartments intermediate height
60-11-1700	1	No rear left side compartments
60-11-1800	1	No rear right side compartments
60-11-1900	2	Low side compartment (up to 18") each The compartments will both be located over the left side rear chassis wheels.

PART NO	QTY	DESCRIPTION
60-11-3100	1	No rear compartment
60-11-4535	2	Flush mount aluminum door - single with "D" handle - L2/L3 Compartment doors will be flip up as per proposal drawing
60-11-5510	2	Rollup door - intermediate height - L1/R1 Natural aluminum finish Includes magnetic door switch, LED tube lights, rubber bumpers to prevent pinch point
60-11-5654	2	Amdor pull strap not requested
60-31-4100	1	Extruded aluminum handrails Minimum 2" clearance from handrail to any surface
60-31-5000	1	Zico access Ladder at rear of unit Minimum 7" clearance between rung and any obstruction There will be a switch wired to the Door Ajar Warning (50-21-5500) in the cab to show when the ladder is not stored Tank mounting provision required.
60-31-6510	1	Compartment matting - black "Turtle Tile" brand SOPT #1206 - truck specific
60-31-8006	4	BA bottle compt (ea)-fender well There will be loops included as secondary restraint. Customer to advise: Make: MSA Model: G1 Length: 21" Diameter: 7" Photo of valve/cap (to ensure retaining loop will fit) saved at O:/Metalfabphotos/North Frontnac, ON - M22-22170/Precon photos As discussed at the pre-construction meeting of 07.15.2021
60-31-8400	1	Fixed vertical partition To be installed in the middle of the L1 compartment unless otherwise specified
60-31-8700	1	Sliding tray (ea) - 400 pound capacity with gas strut and latch White Reflective stripe is applied on the exposed edge for visibility when the compartment door is open To be located in R1 compartment for customer supplied CET Portable pump that arrived at Metalfab on 07.16.2021 Customer to advise size of pump: Length: 24" Height: 22" Depth: 21"
60-31-9600	2	Adjustable shelf (ea) White Reflective stripe is applied on the exposed edge for visibility when the compartment door is open Location: 1. L1 compartment - right of fixed vertical partition 60-31-8400 - full depth 2. L1 compartment - left of fixed vertical partition 60-31-8400 - full depth As shown on the proposal drawing and approved at the pre-construction meeting of 07.15.2021

PART NO	QTY	DESCRIPTION
60-32-3550	1	Two adjustable hose divider (each) Hand hold required in end and to be full length of hose bed like South River Machar M16-18400
60-32-7500	1	Hose bed - aluminum Tank mounting provisions required (mounting blocks)
60-33-0000	1	Paint exterior - Imron Elite *** Paint code and colour to match chassis cab. Body and tank to be painted
60-33-0200	1	Undercoat vehicle with KROWN rust protection
60-33-0600	1	Chassis wheels not painted
60-33-1500	1	Buffed finish compartment interior
60-33-2200	1	Lettering - 80 letters up to 3" tall - 3 colour *** Vinyl letters, Fire Department to provide details on location and text. Lettering shall include: Customer supplied Door decal which is "Township of North Frontnac with Leaf" which will be installed on chassis door - arrived at Metalfab on 07.16.2021 Customer supplied logo which will be installed on the L1/R1 compartment door - arrived at Metalfab on 07.16.2021 "Tanker 531" 3" high on side of body, front fenders and back of body Color and font: White reflective and black shadow as per customer supplied photos "Keep Back 150M" Color and font: White reflective and black shadow Photos saved at O:/Metalfabphotos/North Frontnac, ON - M22-22170/Precon photos As discussed at the pre-construction meeting of 07.15.2021 Colin Darling approved layout by e-mail on 04.25.2022
60-33-3200	1	Reflective stripe - 1" - 4" -1" white 60% of perimeter each side and 40% of perimeter front 3M Scotchlite The stripe will start at bottom of L1 compartment door and angle up to go through the L2/L3 compartment doors. The mirror image will be installed on the right side of the body. As discussed at the pre-construction meeting of 07.15.2021
60-33-3310	1	Reflective stripe - red and yellow chevron at rear Entire rear of body - 3M Scotchlite
60-33-3500	1	Tarp over hose bed - black Tarp will be affixed at the front of the hose bed and velcro straps will be provided on the rear of the cover to tie around the rear handrail. Color to be black. Same as South River Machar M16-18400
60-40-5500	2	Suction hose tube (each) with door For customer supplied hoses Customer to supply: Make: Northline Hose size: 4" Length: 126-1/2" Dimension at widest part of coupling: 11" As discussed at the pre-construction meeting of 07.15.2021 Both tubes will be the same length and the barrel strainer will be carried loose in a compartment. As advised by Greg Rivers by e-mail on 11.05.2021

PART NO	QTY	DESCRIPTION
60-40-9500	1	Tube for portable tank storage, with rear door For 3000 Imperial Gallon porta tank 80-15-1010 Flip up door with keep open device
60-41-1015	2	Pike Pole tube in suction hose tube For customer supplied pike pole. Tube diameter to be 2" To be located in suction hose tube 60-40-5500
	1	INSTRUMENTATION
70-11-3200	1	Colour coded tags
70-20-3500	1	Electric water level gauge on rear, Class One
70-20-3640	1	Mini water level gauge in the cab There will be a miniature water level gauge installed in the chassis cab console (20-31-7500) as discussed at the final inspection of 08.17.2022
70-21-5500	1	Readout for Battery Conditioner - location in left cab step area
	1	ACCESSORIES
80-13-0500	1	Rubber mallet
80-13-0510	1	PAC Toolok bracket 1003-HD-Y for mounting rubber mallet SOPT #319 To be mounted in R1 compartment where space permits
80-13-1100	1	Hose wrenches (triple) with holder To be mounted in R1 compartment where space permits
80-13-4000	1	Axe, pick head, fibreglass handle and bracket To be mounted in the upper part of the L1 compartment as discussed at the inspection visit of 08.17.2022
80-13-4500	1	Axe, flat head, fibreglass handle and bracket To be mounted in the upper part of the L1 compartment as discussed at the inspection visit of 08.17.2022
80-15-1010	1	3000 l gallon portable tank - Husky Tube mounted 60-40-9500 Liner to be yellow in color
80-16-15AA	1	Akron 2581 gated wye 2.5 CSA female swivel to dual 1.5" male NPSH To be mounted in R1 compartment where space permits SOPT 563 truck specific, Metalfab part # 1551296
80-16-2600	3	Spring loaded nozzle or adapter mount 1-1/2" To be mounted in R1 compartment in the rear left side corner - one above the other. As discussed at the final inspection of 08.17.2022
80-18-0500	2	SCBA bracket with strap - compt mount To be mounted in L1 compartment between the chassis batteries and vertical partition 60-31-8400 and under the adjustable shelf 60-31-9600. As discussed at the pre-construction meeting of 07.15.2021
80-19-0500	2	Large folding wheel chock - aluminum (ea) not mounted

