SPENCER TANKER STOCK UNIT #1744

Freightliner 108SD Chassis

Hale QMAX-XS 1500 GPM Pump

3000 Gallon Water Tank

Aluminum Body

SPENCER

CUSTOM BUILT FIRE TRUCKS

1744 – 3000 GALLON TANKER

PROPOSED APPARATUS

Spencer Manufacturing, Inc. of South Haven, MI will furnish the **Fire Department** with the apparatus described in your detailed specifications including all boilerplate items.

The proposed Spencer apparatus will be constructed at our factory in South Haven, MI. Preconstruction and inspection trips outlined will be provided including provisions for periodic unscheduled inspections described in the boilerplate.

Warranty and continuing service will be provided by Spencer Manufacturing via road service or at our factory in South Haven, MI.

Additional service can or will be provided by our dealer network and/or approved service centers.

LIABILITY

Spencer Manufacturing shall defend any and all suits and assume all liability for the use of any patented processes, devices or articles forming a part of the apparatus or any appliance under the contract.

DESIGN

The apparatus combines our time-tested design and construction standards with full consideration given the scope of your specification. Please see our proposal and drawing for full details.

ROAD TEST

The apparatus is road-tested at Spencer Manufacturing, Inc., at completion and will meet the standards set forth in NFPA 1901, current edition.

NFPA REQUIRED ITEMS

The purchaser shall be responsible for providing all equipment items required by NFPA pamphlet that are not otherwise indicated or addressed in these specifications.

COOPERATIVE PURCHASING

The apparatus manufacturer shall honor the specifications and pricing of this proposed build for other agencies that wish to purchase similar apparatus through cooperative purchasing. Changes of chassis, year model, equipment and/or additional change orders shall be reflected in the new contract.

DELIVERY

The completed apparatus will be delivered at the Spencer Manufacturing facility in South Haven, MI. Apparatus review will be provided by factory personnel during the acceptance process.

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SEATING CAPACITY PLATE

A permanent plate indicating seat belt use and occupancy shall be installed in a visible location.

HELMET WARNING PLATE

A permanent plate stating "DO NOT WEAR HELMET" shall be installed in a visible location.

FLUID CAPACITY PLATE

A permanent plate listing all fluids and capacities shall be installed in a visible location.

OVERALL HEIGHT PLATE

A plate indicating overall height, overall length, overall width, and the vehicle GVRW shall be installed in a location visible to the driver.

TAILBOARD PLATE

A permanent plate shall be installed at the rear indicating "DO NOT RIDE ON REAR STEP".

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FREIGHTLINER COMMERCIAL CHASSIS

The following chassis and options shall be provided.

Data Code	Description	Weight Front	Weight Rear
Price Level			
PRL-30D	SD PRL-30D (EFF:MY27 ORDERS)		
Data Version			
DRL-005	SPECPRO21 DATA RELEASE VER 005		
Vehicle Configuration			
001-176	108SD PLUS CONVENTIONAL CHASSIS	6,829	3,748
004-227	2027 MODEL YEAR SPECIFIED		
002-004	SET BACK AXLE - TRUCK		
019-004	STRAIGHT TRUCK PROVISION, NON-TOWING		
003-001	LH PRIMARY STEERING LOCATION		
General Service			
AA1-002	TRUCK CONFIGURATION		
AA6-002	DOMICILED, USA 50 STATES (EPA CLEAN IDLE LABEL OR NO CLEAN IDLE REQUIRED)		
99D-027	EPA CLEAN IDLE LABEL - (INCLUDES 6X4 INCH LABEL ON LOWER FORWARD OF DRIVER DOOR)		
A85-020	FIRE SERVICE		
A84-1EV	EMERGENCY VEHICLES BUSINESS SEGMENT		
AA4-002	LIQUID BULK COMMODITY		
AA5-002	TERRAIN/DUTY: 100% (ALL) OF THE TIME, IN TRANSIT, IS SPENT ON PAVED ROADS		
AB1-008	MAXIMUM 8% EXPECTED GRADE		
AB5-001	SMOOTH CONCRETE OR ASPHALT PAVEMENT - MOST SEVERE IN-TRANSIT (BETWEEN SITES) ROAD SURFACE		
995-1A0	FREIGHTLINER SD VOCATIONAL WARRANTY		
A66-99D	EXPECTED FRONT AXLE(S) LOAD : 18000.0 lbs		
A68-99D	EXPECTED REAR DRIVE AXLE(S) LOAD : 46000.0 lbs		
A63-99D	EXPECTED GROSS VEHICLE WEIGHT CAPACITY : 64000.0 lbs		
Truck Service			
AA3-027	FIRE TANK/PUMPER - MAIN DRIVELINE DRIVEN SPLIT-SHAFT PTO/PUMP		
A88-99D	EXPECTED TRUCK BODY LENGTH : 18.0 ft		
AF3-099	SPENCER MANUFACTURING		
Engine			
101-3B3	CUM L9 400EV HP @ 2200 RPM; 2200 GOV RPM, 1250 LB-FT @ 1200 RPM, R/F/E		
Electronic Parameters			
79A-060	60 MPH ROAD SPEED LIMIT		
79B-000	CRUISE CONTROL SPEED LIMIT SAME AS ROAD SPEED LIMIT		

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Data Code	Description	Weight Front	Weight Rear
79K-009	PTO MODE ENGINE RPM LIMIT - 1200 RPM		
79M-001	PTO ENGINE SPEED CONTROL DEACTIVATED BY SERVICE BRAKE LIGHTLY APPLIED (STATIONARY APPLICATIONS)		
79P-009	PTO RPM WITH CRUISE SET SWITCH - 1200 RPM		
79Q-009	PTO RPM WITH CRUISE RESUME SWITCH - 1200 RPM		
79S-001	PTO MODE CANCEL VEHICLE SPEED - 5 MPH		
79U-007	PTO GOVERNOR RAMP RATE - 250 RPM PER SECOND		
79V-001	FUEL DOSING OF AFTERTREATMENT ENABLED IN PTO MODE-CLEANS HYDROCARBONS AT HIGH TEMPERATURES ONLY		
79W-024	CRUISE CONTROL BUTTON PTO CONTROL		
79X-009	PTO SPEED 1 SETTING - 1200 RPM		
79Y-005	PTO SPEED 2 SETTING - 1200 RPM		
80G-015	PTO MINIMUM RPM - 800		
80H-004	CUMMINS EMERGENCY VEHICLE THROTTLE CONTROL OPTION		
80J-001	REGEN INHIBIT SPEED THRESHOLD - 0 MPH		
80S-001	PTO 1, DASH SWITCH, STATIONARY OPERATION		
80T-001	PTO 2, DASH SWITCH, STATIONARY OPERATION		
80V-001	ENGINE MOUNT PTO, DASH SWTICH ENGAGES PTO MODE, STATIONARY OPERATION		
Engine Equipment			
99C-024	EPA 2010/GHG 2024 CONFIGURATION		
13E-001	STANDARD OIL PAN		
105-001	ENGINE MOUNTED OIL CHECK AND FILL		
014-1BX	SIDE OF HOOD AIR INTAKE WITH NFPA COMPLIANT EMBER SCREEN AND FIRE RETARDANT DONALDSON AIR CLEANER		
124-1G1	DR 12V 300 AMP 40-SI BRUSHLESS PAD MOUNT ALTERNATOR WITH REMOTE BATTERY VOLTAGE SENSE		
292-235	(2) DTNA GENUINE, FLOODED STARTING, MIN 2000CCA, 370RC, THREADED STUD BATTERIES		
290-017	BATTERY BOX FRAME MOUNTED		
281-001	STANDARD BATTERY JUMPERS		
282-001	SINGLE BATTERY BOX FRAME MOUNTED LH SIDE UNDER CAB		
291-017	WIRE GROUND RETURN FOR BATTERY CABLES WITH ADDITIONAL FRAME GROUND RETURN		
289-001	NON-POLISHED BATTERY BOX COVER		
293-060	NON-ESSENTIAL POSITIVE LOAD DISCONNECT, LOCKING IN CAB CONTROL SWITCH MOUNTED OUTBOARD OF DRIVER SEAT	2	
295-029	POSITIVE AND NEGATIVE POSTS FOR JUMPSTART LOCATED ON FRAME NEXT TO STARTER	2	
306-015	PROGRESSIVE LOW VOLTAGE DISCONNECT AT 12.3 VOLTS FOR DESIGNATED CIRCUITS	2	

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Data Code	Description	Weight Front	Weight Rear
107-032	CUMMINS TURBOCHARGED 18.7 CFM AIR COMPRESSOR WITH INTERNAL SAFETY VALVE		
152-039	GVG, FIRE AND EMERGENCY SERVICE VEHICLES ENGINE WARNING		
128-032	C-BRAKE BY JACOBS WITH LOW/OFF/HIGH BRAKING DASH SWITCH	80	
016-1DC	RH OUTBOARD UNDER STEP MOUNTED HORIZONTAL AFTERTREATMENT SYSTEM ASSEMBLY WITH RH HORIZONTAL TAILPIPE EXITING FORWARD OF REAR TIRES	10	5
28F-015	ENGINE AFTERTREATMENT DEVICE, AUTOMATIC OVER THE ROAD ACTIVE REGENERATION AND VIRTUAL REGENERATION REQUEST SWITCH IN CLUSTER AND DASH MOUNTED INHIBIT SWITCH		
239-001	STANDARD EXHAUST SYSTEM LENGTH		
237-022	RH HORIZONTAL TAILPIPE, EXIT FORWARD OF REAR TIRES	20	20
23U-001	6 GALLON DIESEL EXHAUST FLUID TANK	-35	-10
30N-003	100 PERCENT DIESEL EXHAUST FLUID FILL		
23Y-001	STANDARD DIESEL EXHAUST FLUID PUMP MOUNTING		
43X-002	LH MEDIUM DUTY STANDARD DIESEL EXHAUST FLUID TANK LOCATION		
43Y-001	STANDARD DIESEL EXHAUST FLUID TANK CAP		
242-998	NO MUFFLER/TAILPIPE SHIELD	-10	
273-058	AIR POWERED ON/OFF ENGINE FAN CLUTCH		
276-002	AUTOMATIC FAN CONTROL WITH DASH SWITCH AND INDICATOR LIGHT, NON ENGINE MOUNTED		
110-003	CUMMINS SPIN ON FUEL FILTER		
118-008	COMBINATION FULL FLOW/BYPASS OIL FILTER		
266-104	1115 SQUARE INCH ALUMINUM RADIATOR		
103-039	ANTIFREEZE TO -34F, OAT (NITRITE AND SILICATE FREE) EXTENDED LIFE COOLANT		
171-007	GATES BLUE STRIPE COOLANT HOSES OR EQUIVALENT		
172-001	CONSTANT TENSION HOSE CLAMPS FOR COOLANT HOSES		
270-016	RADIATOR DRAIN VALVE		
132-004	ELECTRIC GRID AIR INTAKE WARMER		
155-058	DELCO 12V 38MT HD STARTER WITH INTEGRATED MAGNETIC SWITCH		
Transmission			
342-1KD	ALLISON 3000 EVS AUTOMATIC TRANSMISSION WITH PTO PROVISION		
Transmission Equipment			
343-331	ALLISON VOCATIONAL PACKAGE 198 - AVAILABLE ON 3000/4000 PRODUCT FAMILIES WITH VOCATIONAL MODEL EVS		
84B-003	ALLISON VOCATIONAL RATING FOR FIRE TRUCK/EMERGENCY VEHICLE APPLICATIONS AVAILABLE WITH ALL PRODUCT FAMILIES		

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Data Code	Description	Weight Front	Weight Rear
84C-023	PRIMARY MODE GEARS, LOWEST GEAR 1, START GEAR 1, HIGHEST GEAR 6, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY		
84D-023	SECONDARY MODE GEARS, LOWEST GEAR 1, START GEAR 1, HIGHEST GEAR 6, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY		
84E-000	PRIMARY SHIFT SCHEDULE RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE		
84F-000	SECONDARY SHIFT SCHEDULE RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE		
84G-000	PRIMARY SHIFT SPEED RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE		
84H-000	SECONDARY SHIFT SPEED RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE		
84J-000	ENGINE BRAKE RANGE PRESELECT RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE		
84K-002	2ND GEAR ENGINE BRAKE ALTERNATE PRESELECT WITH MODERATE DOWNSHIFT STRATEGY		
84N-011	NEUTRAL AT STOP ENABLED		
84U-000	DRIVER SWITCH INPUT - DEFAULT - NO SWITCHES		
84V-001	DIRECTION CHANGE ENABLED WITH MULTIPLEXED SERVICE BRAKES - ALLISON 5TH GEN TRANSMISSIONS		
84M-001	PUMP MODE INPUT ENABLED 3RD/4TH LOCKUP WIRED ON TCM INPUT AJ/BQ - ALLISON 5TH GEN TRANSMISSIONS		
85B-004	4TH GEAR AND NEUTRAL INDICATION ON TCM OUTPUT C - ALLISON 5TH GEN TRANSMISSIONS		
353-073	QUICKFIT BODY LIGHTING CONNECTOR UNDER CAB, WITH CAP		
34C-011	ELECTRONIC TRANSMISSION WIRING TO CUSTOMER INTERFACE CONNECTOR		
362-1Y2	(2) CUSTOMER INSTALLED MUNCIE CS10 SERIES PTO'S		
363-011	PTO MOUNTING, LH AND RH SIDES OF MAIN TRANSMISSION		
341-018	MAGNETIC PLUGS, ENGINE DRAIN, TRANSMISSION DRAIN, AXLE(S) FILL AND DRAIN		
345-003	PUSH BUTTON ELECTRONIC SHIFT CONTROL, DASH MOUNTED		
97G-004	TRANSMISSION PROGNOSTICS - ENABLED 2013		
370-015	WATER TO OIL TRANSMISSION COOLER, IN RADIATOR END TANK	15	
346-013	TRANSMISSION OIL CHECK AND FILL WITH CROSSOVER TO CLEAR LH PTO AND DIRECT MOUNT PUMP		
35T-001	ATF-SYNTHETIC AUTOMATIC TRANSMISSION FLUID		

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	Data Code	Description	Weight Front	Weight Rear
Front Axle and Equipment				
	400-1BA	DETROIT DA-F-18.0-5 18,000# FL1 71.0 KPI/3.74 DROP SINGLE FRONT AXLE	210	
	402-030	MERITOR 16.5X6 Q+ CAST SPIDER CAM FRONT BRAKES, DOUBLE ANCHOR, FABRICATED SHOES	10	
	403-026	FIRE AND EMERGENCY SEVERE SERVICE, NON-ASBESTOS FRONT LINING		
	419-001	CAST IRON OUTBOARD FRONT BRAKE DRUMS		
	409-006	FRONT OIL SEALS		
	408-001	VENTED FRONT HUB CAPS WITH WINDOW, CENTER AND SIDE PLUGS - OIL		
	416-022	STANDARD SPINDLE NUTS FOR ALL AXLES		
	405-002	MERITOR AUTOMATIC FRONT SLACK ADJUSTERS		
	406-001	STANDARD KING PIN BUSHINGS		
	536-012	TRW TAS-85 POWER STEERING	40	
	539-003	POWER STEERING PUMP		
	534-003	4 QUART POWER STEERING RESERVOIR	5	
	40T-002	CURRENT AVAILABLE SYNTHETIC 75W-90 FRONT AXLE LUBE		
Front Suspension				
	620-005	18,000# FLAT LEAF FRONT SUSPENSION	290	
	619-004	GRAPHITE BRONZE BUSHINGS WITH SEALS - FRONT SUSPENSION		
	410-001	FRONT SHOCK ABSORBERS		
Rear Axle and Equipment				
	420-103	MERITOR RT-46-160 46,000# R-SERIES TANDEM REAR AXLE		2,960
	421-614	6.14 REAR AXLE RATIO		
	424-001	IRON REAR AXLE CARRIER WITH STANDARD AXLE HOUSING		
N	385-004	JACKSHAFT, TEMPORARY DRIVELINE FOR CUSTOMER FURNISHED FIRE PUMP, TEMPORARILY INSTALLED FOR SHIPPING TO CUSTOMER/TEM	40	40
	386-073	MXL 17T MERITOR EXTENDED LUBE MAIN DRIVELINE WITH HALF ROUND YOKES	40	40
	388-073	MXL 17T MERITOR EXTENDED LUBE INTERAXLE DRIVELINE WITH HALF ROUND YOKES		
	452-006	DRIVER CONTROLLED TRACTION DIFFERENTIAL - BOTH TANDEM REAR AXLES		30
	878-022	(1) INTERAXLE LOCK VALVE, (1) DRIVER CONTROLLED DIFFERENTIAL LOCK FORWARD-REAR AXLE VALVE AND (1) REAR-REAR AXLE VALVE		
	87A-017	INDICATOR LIGHT FOR EACH INTERAXLE LOCKOUT SWITCH, DISENGAGE INTERAXLE LOCK WITH IGNITION OFF		
	87B-024	INDICATOR LIGHT FOR EACH DIFFERENTIAL LOCKOUT SWITCH, ENGAGE AT SPEEDS 5 MPH OR LESS, DISENGAGE W/IGN OFF OR SPEEDS EXCEEDING 25 MPH		

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Data Code	Description	Weight Front	Weight Rear
423-019	MERITOR 16.5X8.62 Q+ CAST SPIDER CAM REAR BRAKES, DOUBLE ANCHOR, FABRICATED SHOES		
433-025	FIRE AND EMERGENCY SEVERE SERVICE NON-ASBESTOS REAR BRAKE LINING		
434-011	BRAKE CAMS AND CHAMBERS ON FORWARD SIDE OF DRIVE AXLE(S)		
451-001	CAST IRON OUTBOARD REAR BRAKE DRUMS		-20
440-006	REAR OIL SEALS		
426-1B3	BENDIX EVERSURE LONGSTROKE 2-DRIVE AXLES SPRING PARKING CHAMBERS		20
428-003	HALDEX AUTOMATIC REAR SLACK ADJUSTERS		
41T-002	CURRENT AVAILABLE SYNTHETIC 75W-90 REAR AXLE LUBE		
42T-001	STANDARD REAR AXLE BREATHER(S)		
Rear Suspension			
622-298	TUFTRAC GEN2 46,000# REAR SPRING SUSPENSION		470
621-108	9.5 INCH NOMINAL RIDE HEIGHT (460MM GLOBAL REFERENCE HEIGHT)		
431-003	AXLE CLAMPING GROUP		
624-025	55 INCH AXLE SPACING		
623-006	FORE/AFT AND TRANSVERSE CONTROL RODS		
439-002	REAR SHOCK ABSORBERS - TWO AXLES (TANDEM)		40
Pusher / Tag Equipment			
429-998	NO PUSHER/TAG BRAKE DUST SHIELDS		
Brake System			
490-1AU	WABCO 4S/4M ABS WITH TRACTION CONTROL WITH ATC SHUT OFF SWITCH		
871-001	REINFORCED NYLON, FABRIC BRAID AND WIRE BRAID CHASSIS AIR LINES		
904-001	FIBER BRAID PARKING BRAKE HOSE		
412-001	STANDARD BRAKE SYSTEM VALVES		
46D-002	STANDARD AIR SYSTEM PRESSURE PROTECTION SYSTEM		
413-002	STD U.S. FRONT BRAKE VALVE		
432-003	RELAY VALVE WITH 5-8 PSI CRACK PRESSURE, NO REAR PROPORTIONING VALVE		
480-009	BW AD-9 BRAKE LINE AIR DRYER WITH HEATER	20	
479-015	AIR DRYER FRAME MOUNTED		
460-1AU	STEEL AIR TANKS MOUNTED AFT INSIDE AND/OR BELOW FRAME JUST FORWARD OF REAR SUSPENSION, NO TRIPLE OR TORPEDO TANKS		
477-006	BW DV-2 AUTO DRAIN VALVE WITHOUT HEATER ON ALL TANK(S)		
Trailer Connections			
476-998	NO AIR HOSE HANGER		
30K-027	2-WAY HEAVY DUTY 150 AMP RECEPTACLE WIRED HOT, MOUNTED END OF FRAME		

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	Data Code	Description	Weight Front	Weight Rear
	310-998	NO TRAILER ELECTRICAL CABLE		
Wheelbase & Frame				
	545-625	6250MM (246 INCH) WHEELBASE		
	546-102	7/16X3-9/16X11-1/8 INCH STEEL FRAME (11.11MMX282.6MM/0.437X11.13 INCH) 120KSI	660	160
	547-001	1/4 INCH (6.35MM) C-CHANNEL INNER FRAME REINFORCEMENT	250	430
	552-040	1875MM (74 INCH) REAR FRAME OVERHANG		
	55W-007	FRAME OVERHANG RANGE: 71 INCH TO 80 INCH	-30	130
	AC8-99D	CALC'D BACK OF CAB TO REAR SUSP C/L (CA) : 180.51 in		
	AE8-99D	CALCULATED EFFECTIVE BACK OF CAB TO REAR SUSPENSION C/L (CA) : 177.51 in		
	AE4-99D	CALC'D FRAME LENGTH - OVERALL : 359.23 in		
	FSS-0LH	CALCULATED FRAME SPACE LH SIDE : 103.08 in		
	FSS-0RH	CALCULATED FRAME SPACE RH SIDE : 126.16 in		
	AM6-99D	CALC'D SPACE AVAILABLE FOR DECKPLATE : 0.0 in		
	553-001	SQUARE END OF FRAME		
	550-001	FRONT CLOSING CROSSMEMBER		
	559-003	LIGHTWEIGHT HEAVY DUTY ALUMINUM ENGINE CROSSMEMBER	-12	
*	562-349	STANDARD MIDSHIP #1 CROSSMEMBER MOUNTED 1235MM (49 INCH) FROM BACK OF CAB		
	572-001	STANDARD REARMOST CROSSMEMBER		
	565-002	HEAVY DUTY SUSPENSION CROSSMEMBER		30
Chassis Equipment				
	556-1E6	14 INCH CHROMED STEEL BUMPER		
	558-001	FRONT TOW HOOKS - FRAME MOUNTED	15	
	574-001	BUMPER MOUNTING FOR SINGLE LICENSE PLATE		
	585-998	NO MUDFLAP BRACKETS		
	590-998	NO REAR MUDFLAPS		
	551-007	GRADE 8 THREADED HEX HEADED FRAME FASTENERS		
	44Z-002	EXTERIOR HARNESSES WRAPPED IN ABRASION TAPE		
*	606-2AA	DRLG PREP FOR SPENCER MANU PER DWG ES369DEMO 1610 REV		
	605-103	D15-28195-000 CENTER PUNCH TO MARK CENTERLINE OF REAR SUSPENSION ON TOP FLANGE OF FRAME		
*	601-020	3D STEP VEHICLE MODEL		
	607-001	CLEAR FRAME RAILS FROM BACK OF CAB TO FRONT REAR SUSPENSION BRACKET, BOTH RAILS OUTBOARD		
Fifth Wheel				
	578-998	NO FIFTH WHEEL		

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Data Code	Description	Weight Front	Weight Rear
Fuel Tanks			
204-215	50 GALLON/189 LITER SHORT RECTANGULAR ALUMINUM FUEL TANK - LH	-10	
218-005	RECTANGULAR FUEL TANK(S)		
215-004	POLISHING OF FUEL/HYDRAULIC TANK(S) WITH PAINTED BANDS		
212-007	FUEL TANK(S) FORWARD		
664-002	POLISHED STEP FINISH		
205-002	CHROME FUEL TANK CAP(S)		
122-1J1	DETROIT FUEL/WATER SEPARATOR WITH WATER IN FUEL SENSOR, HAND PRIMER AND 12 VOLT PREHEATER"	-5	
216-020	EQUIFLO INBOARD FUEL SYSTEM		
202-016	HIGH TEMPERATURE REINFORCED NYLON FUEL LINE		
Tires			
093-1RJ	MICHELIN X WORKS Z 315/80R22.5 20 PLY RADIAL FRONT TIRES	100	
094-0GP	MICHELIN XDN2 11R22.5 16 PLY RADIAL REAR TIRES		160
Hubs			
418-060	CONMET PRESET PLUS PREMIUM IRON FRONT HUBS		
450-060	CONMET PRESET PLUS PREMIUM IRON REAR HUBS		
Wheels			
502-664	ALCOA ULTRA ONE 89U63X 22.5X9.00 10-HUB PILOT 3.12 INSET 10-HD ALUMINUM FRONT WHEELS	-44	
505-1HB	ALCOA 88167X 22.5X8.25 10-HUB PILOT ALUMINUM DISC REAR WHEELS		-248
524-022	POLISHED DISC SIDE FRONT WHEELS WITH DURA-BRIGHT FINISH		
525-023	POLISHED OUTER (DISHED SIDE) REAR WHEELS WITH OUTER ONLY DURA-BRIGHT FINISH		
496-011	FRONT WHEEL MOUNTING NUTS		
497-011	REAR WHEEL MOUNTING NUTS		
498-011	NYLON WHEEL GUARDS FRONT AND REAR ALL INTERFACES		
Cab Exterior			
829-1A5	108 INCH BBC FLAT ROOF ALUMINUM CONVENTIONAL CAB		
650-008	AIR CAB MOUNTING		
705-012	CAB ROOF REINFORCEMENTS FOR ROOF MOUNTED COMPONENTS	2	
648-002	NONREMOVABLE BUGSCREEN MOUNTED BEHIND GRILLE		
667-004	FRONT FENDERS SET-BACK AXLE		
754-017	BOLT-ON MOLDED FLEXIBLE FENDER EXTENSIONS	10	

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Data Code	Description	Weight Front	Weight Rear
678-018	LH AND RH EXTERIOR GRAB HANDLES WITH SINGLE RUBBER INSERT		
645-002	BRIGHT FINISH RADIATOR SHELL/HOOD BEZEL		
646-042	STATIONARY BLACK GRILLE WITH BRIGHT ACCENTS		
65X-003	CHROME HOOD MOUNTED AIR INTAKE GRILLE		
644-004	FIBERGLASS HOOD		
652-001	FREIGHTLINER NAME PLATES		
690-007	HOOD LINER INSULATION WITH SINGLE FIREWALL INSULATION		
727-802	FACTORY PREP DUAL 25 INCH ROUND STUTTER TONE HOOD MOUNTED AIR HORNS WITH DUAL LANYARDS HORNS SHIP LOOSE FOR PDI INSTALL	4	
726-001	SINGLE ELECTRIC HORN		
728-002	DUAL HORN SHIELDS		
575-001	REAR LICENSE PLATE MOUNT END OF FRAME		
312-067	HALOGEN COMPOSITE HEADLAMPS WITH BRIGHT BEZELS		
302-047	LED AERODYNAMIC MARKER LIGHTS		
311-001	DAYTIME RUNNING LIGHTS		
294-046	OMIT STOP/TAIL/BACKUP LIGHTS AND PROVIDE WIRING WITH SEPARATE STOP/TURN WIRES TO 4 FEET BEYOND END OF FRAME		-5
300-015	STANDARD FRONT TURN SIGNAL LAMPS		
469-014	AUTOMATIC ON/OFF, ENGINE COMPARTMENT, HOOD ACTIVATED WORK LIGHT WITH MANUAL OVERRIDE	1	
318-032	SWITCH, INDICATOR LIGHT AND APPROXIMATELY 10 FEET OF WIRE ON CHASSIS RH BACK OF CAB FOR CUSTOMER FURNISHED UTILITY LIGHT(S)		
744-103	DUAL WEST COAST BRIGHT FINISH HEATED MIRRORS WITH LED LIGHTS AND LH AND RH REMOTE		
797-001	DOOR MOUNTED MIRRORS		
796-001	102 INCH EQUIPMENT WIDTH		
743-204	LH AND RH 8 INCH BRIGHT FINISH CONVEX MIRRORS MOUNTED UNDER PRIMARY MIRRORS		
729-001	STANDARD SIDE/REAR REFLECTORS		
677-055	RH AFTERTREATMENT SYSTEM CAB ACCESS WITH POLISHED DIAMOND PLATE COVER		
275-061	PARK BRAKE REMINDER WARNING SYSTEM		
768-043	63X14 INCH TINTED REAR WINDOW		
661-003	TINTED DOOR GLASS LH AND RH WITH TINTED NON-OPERATING WING WINDOWS		
654-011	RH AND LH ELECTRIC POWERED WINDOWS		
663-013	1-PIECE SOLAR GREEN GLASS WINDSHELD		
659-007	8 LITER (2 GAL) WINDSHIELD WASHER RESERVOIR, CAB MOUNTED, WITHOUT FLUID LEVEL INDICATOR		

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Data Code	Description	Weight Front	Weight Rear
Cab Interior			
055-019	RUGGED TRIM PACKAGE		
707-107	GRAY & CARBON VINYL INTERIOR "RUGGED"		
70K-020	CARBON WITH PREMIUM GUNMETAL ACCENT (RUGGED)		
706-013	MOLDED DOOR PANEL		
708-013	MOLDED PLASTIC DOOR PANEL		
772-006	BLACK MATS WITH SINGLE INSULATION		
785-026	(1)DASH MOUNTED 12V POWER OUTLET, (1)DASH MOUNTED DUAL USB-C OUTLET		
691-001	FORWARD ROOF MOUNTED CONSOLE		
693-035	LH AND RH KICKPLATES		
738-021	DIGITAL ALARM CLOCK IN DRIVER DISPLAY		
742-007	(2) CUP HOLDERS LH AND RH DASH		
680-029	M2/SD DASH		
700-002	HEATER, DEFROSTER AND AIR CONDITIONER		
701-008	STANDARD HVAC DUCTING WITH SNOW SHIELD FOR FRESH AIR INTAKE		
703-005	MAIN HVAC CONTROLS WITH RECIRCULATION SWITCH		
170-045	STANDARD HEATER PLUMBING WITH BALL SHUTOFF VALVES AT SUPPLY LINES ONLY		
130-041	VALEO HEAVY DUTY A/C REFRIGERANT COMPRESSOR		
702-002	BINARY CONTROL, R-134A		
739-034	PREMIUM INSULATION		
285-013	SOLID-STATE CIRCUIT PROTECTION AND FUSES		
280-007	12V NEGATIVE GROUND ELECTRICAL SYSTEM		
324-1B2	PREMIUM LED CAB LIGHTING		
787-998	NO SECURITY DEVICE		
657-1AT	ALL UNIT(S) KEYED ALIKE WITH CUSTOMER SPECIFIED KEY NUMBER FT1007		
78G-002	KEY QUANTITY OF 2		
655-028	LH AND RH ELECTRIC DOOR LOCKS WITH AUTO UNLOCK FEATURE WHEN DOOR IS SET FROM OPEN TO CLOSED POSITION		
740-998	NO MATTRESS	-20	-15
756-1E7	SEATS INC 911 UNIVERSAL SERIES HIGH BACK AIR SUSPENSION DRIVER SEAT WITH NFPA 1901-2009/2016 COMPLIANT SEAT SENSOR	50	
760-1E7	SEATS INC 911 UNIVERSAL SERIES HIGH BACK AIR SUSPENSION PASSENGER SEAT WITH NFPA 1901-2009/2016 COMPLIANT SEAT SENSOR	40	15
711-004	LH AND RH INTEGRAL DOOR PANEL ARMRESTS		
758-014	BLACK CORDURA PLUS CLOTH DRIVER SEAT COVER		
761-014	BLACK CORDURA PLUS CLOTH PASSENGER SEAT COVER		
763-105	NFPA 1901-2009 HIGH VISIBILITY ORANGE SEAT BELTS		

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	Data Code	Description	Weight Front	Weight Rear
	532-002	ADJUSTABLE TILT AND TELESCOPING STEERING COLUMN		
	540-070	4-SPOKE 18 INCH (450MM) LEATHER WRAPPED STEERING WHEEL WITH CHROME SWITCH BEZELS		
	765-002	DRIVER AND PASSENGER INTERIOR SUN VISORS		
	67E-006	INTERFACE CONNECTORS AND WIRING FOR CUSTOMER PROVIDED LED STEP LIGHTING		

Instruments & Controls

*	4CH-001	1 EXTRA PROGRAMMABLE SWITCH/INDICATOR		
		$C1B0104ZZ		
	106-002	ELECTRONIC ACCELERATOR CONTROL		
	732-998	NO INSTRUMENT PANEL-DRIVER		
	734-022	FULLY CONFIGURABLE CENTER INSTRUMENT PANELS		
	87L-001	ENGINE REMOTE INTERFACE WITH PARK BRAKE INTERLOCK		
	870-002	BRIGHT ARGENT FINISH GAUGE BEZELS		
	486-001	LOW AIR PRESSURE INDICATOR LIGHT AND AUDIBLE ALARM		
	840-001	DUAL NEEDLE PRIMARY AND SECONDARY AIR PRESSURE GAUGE		
	198-035	ELECTRONIC AIR RESTRICTION INDICATOR DISPLAYED IN DRIVER DISPLAY		
	721-001	97 DB BACKUP ALARM		3
	149-015	ELECTRONIC CRUISE CONTROL WITH CONTROLS ON STEERING WHEEL SPOKES		
	156-020	IGNITION SWITCH WITH NON REMOVABLE KEY		
	811-044	PREMIUM INSTRUMENT CLUSTER WITH 5.0 INCH TFT COLOR DISPLAY		
	81B-004	PANEL LAMP DIMMER SWITCH IN SWITCH PANEL		
	160-038	HEAVY DUTY ONBOARD DIAGNOSTICS INTERFACE CONNECTOR LOCATED BELOW LH DASH		
	844-001	2 INCH ELECTRIC FUEL GAUGE		
	148-072	ENGINE REMOTE INTERFACE WITH ONE OR MORE SET SPEEDS		
	48H-003	QUICKFIT POWERTRAIN INTERFACE CONNECTOR UNDER CAB WITH CAPS		
	48C-003	QUICKFIT PROGRAMMABLE INTERFACE CONNECTOR(S) UNDER CAB WITH CAP		
	163-014	ENGINE REMOTE INTERFACE CONNECTOR AT POWERTRAIN INTERFACE CONNECTOR		
	856-001	ELECTRICAL ENGINE COOLANT TEMPERATURE GAUGE		
	852-002	ELECTRIC ENGINE OIL PRESSURE GAUGE		
	864-001	2 INCH TRANSMISSION OIL TEMPERATURE GAUGE		
	867-004	ELECTRONIC OUTSIDE TEMPERATURE SENSOR DISPLAY IN DRIVER MESSAGE CENTER		

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Data Code	Description	Weight Front	Weight Rear
830-017	ENGINE AND TRIP HOUR METERS INTEGRAL WITHIN DRIVER DISPLAY		
372-123	PTO CONTROLS FOR ENHANCED VEHICLE ELECTRIC/ELECTRONIC ARCHITECTURE		
736-998	NO OBSTACLE DETECTION SYSTEM		
72J-998	NO DR ASSIST SYSTEM		
49B-004	ELECTRONIC STABILITY CONTROL		
73B-998	NO LANE DEPARTURE WARNING SYSTEM		
679-998	NO OVERHEAD INSTRUMENT PANEL		
35M-011	1 QUIKFIT PROGRAMABLE MODULE (QPM/XMC) W/ (4) 20AMP FUSED RELAYS	10	
786-119	NFPA VEHICLE DATA RECORDER AND SEATBELT DISPLAY		
1U1-005	RAM MOUNT OVERHEAD CONSOLE WITHOUT POWER AND GROUND		
746-137	AM/FM/WB WORLD TUNER RADIO WITH BLUETOOTH, USB AND AUXILIARY INPUTS, J1939		
747-001	DASH MOUNTED RADIO		
750-002	(2) RADIO SPEAKERS IN CAB		
753-998	NO AM/FM RADIO ANTENNA		
748-006	POWER AND GROUND WIRING PROVISION OVERHEAD		
749-001	ROOF/OVERHEAD CONSOLE CB RADIO PROVISION		
752-002	CB ANTENNA BRACKET AND LEAD LH MIRROR MOUNTED, NO ANTENNA	2	
75W-002	SHARKFIN MULTI-BAND ANTENNA, RIGHT HAND BIAS ROOF MOUNTING LOCATION: AM/FM/WEATHERBAND, WIFI/BLUETOOTH, SDAR/SIRIUSXM, GNSS/GPS		
78C-998	NO DIGITAL SATELLITE AUDIO RECEIVER ANTENNA		
810-027	ELECTRONIC MPH SPEEDOMETER WITH SECONDARY KPH SCALE, WITHOUT ODOMETER		
817-001	STANDARD VEHICLE SPEED SENSOR		
812-001	ELECTRONIC 3000 RPM TACHOMETER		
813-1C8	DETROIT CONNECT PLATFORM HARDWARE		
8D1-313	3 YEARS DAIMLER CONNECTIVITY BASE PACKAGE ON (FEATURES VARY BY MODEL) POWERED BY DETROIT CONNECT ON CUMMINS ENGINES		
6TS-008	(2) TMC RP1226 ACCESSORY CONNECTORS: (1) LOCATED BEHIND PASSENGER SIDE REMOVABLE DASH PANEL (1) CENTER OF OVERHEAD CONSOLE		
162-002	IGNITION SWITCH CONTROLLED ENGINE STOP		
264-032	(2) OVERHEAD MOUNTED LANYARD CONTROLS: (1) OFFICER AIR HORN AND (1) DRIVER AIR HORN		
883-998	NO TRAILER HAND CONTROL BRAKE VALVE		
842-006	DIGITAL TURBO AIR PRESSURE IN DRIVER DISPLAY		

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Data Code	Description	Weight Front	Weight Rear
836-015	DIGITAL VOLTAGE DISPLAY INTEGRAL WITH DRIVER DISPLAY		
660-008	SINGLE ELECTRIC WINDSHIELD WIPER MOTOR WITH DELAY		
304-030	ROTARY HEADLAMP SWITCH, MARKER LIGHTS/HEADLIGHTS SWITCH WITH PULL OUT FOR OPTIONAL FOG/ROAD LAMPS		
27D-013	ALTERNATING FLASHING (WIG WAG) HIGH BEAM HEADLAMPS WITH DASH SWITCH AND NO PARK BRAKE INTERLOCK		
882-009	ONE VALVE PARKING BRAKE SYSTEM WITH WARNING INDICATOR		
299-020	SELF CANCELING TURN SIGNAL SWITCH WITH DIMMER, HEADLAMP FLASH, WASH/WIPE/INTERMITTENT		
298-046	INTEGRAL ELECTRONIC TURN SIGNAL FLASHER WITH 40 AMP (20 AMP PER SIDE) TRAILER LAMP CAPACITY		
87T-998	NO WRG/SW-OPTL #2,CHAS,AIR		
Design			
065-000	PAINT: ONE SOLID COLOR		
Color			
980-2L5	CAB COLOR A: L1132EY RED ELITE EY		
986-020	BLACK, HIGH SOLIDS POLYURETHANE CHASSIS PAINT		
963-003	STANDARD E COAT/UNDERCOATING		
Certification / Compliance			
996-001	U.S. FMVSS CERTIFICATION, EXCEPT SALES CABS AND GLIDER KITS		
Secondary Factory Options			
998-032	CORPORATE PDI CENTER OPTION INSTALLATION/MODIFICATION ONLY		

Weight Summary

	Weight Front	Weight Rear	Total Weight
Factory Weight+	8593 lbs	8003 lbs	16596 lbs

1744 – 3000 GALLON TANKER

CHASSIS WARRANTY

The chassis shall be warranted by the chassis manufacturer per the terms outlined in the detailed warranty document. The warranty will be provided with the completed apparatus.

EXHAUST MODIFICATION

The chassis exhaust pipe and muffler shall be extended to the front of the right rear wheel and shall be pointed out. Any heat shields required to protect the body and/or compartments from heat shall be installed.

CHASSIS SETUP

The chassis shall have adjustments made to ensure the proper configuration for accepting pumps and/or bodies. This shall include the repositioning air tanks, frame cross members, step adjustments, etc.

CHASSIS STEPS

The chassis cab steps, and polished fuel tanks shall be used. There will be no step trim provided.

WHEEL TRIM PACKAGE

Chrome plated hub and nut covers will be provided and installed on all exterior wheels. The trim will consist of:

- Individual nut covers "acorn" style
- Front hub covers, open center
- "High Hat" style rear axle covers

TIRE PRESSURE MONITORING SYSTEM:

A ten (10) wheel tire monitoring system shall be installed on the chassis. LED valve caps shall be installed on each tire valve stem. The LED cap is self-calibrating during initial installation. The valve cap starts flashing red if the tire pressure drops more than 8 psi. Ultra-bright LED allow for visual checks in daylight.

BATTERY CONDITIONER

A Pro-Power PS1ES single battery conditioner will be installed in a dry, protected area of the apparatus. The maximum output will be 15 amperes, supplied as required to the battery system. When fully charged, the conditioner will shut down.

- The conditioner will be wired to the 120-V shore power inlet.

BATTERY CONDITIONER GAUGE

An LED waterproof charge display shall be installed adjacent to the shore power inlet.

120-V AUXILIARY AIR PUMP

There shall be one (1) KUSSMAUL 110-volt air compressor with auto drain mounted on the apparatus to maintain the chassis air brake system. The unit shall be provided with a 110-volt male receptacle and be located as directed. The compressor shall have a pressure switch that will automatically activate the compressor, when low pressure occurs and turn off when the correct pressure is reached.

1744 – 3000 GALLON TANKER

SHORE POWER RECEPTACLE

A KUSSMAUL 20-amp super auto-eject type receptacle shall be provided. This receptacle shall eject the male shore line from the apparatus when the engine starter switch is energized. The receptacle will be provided with a weather-proof cover. An appropriate end shall be provided.

SHORE POWER LOCATION

The shore power receptacle shall be located in the driver step area.

WEATHER PROOF COVER

The cover for the shore power receptacle shall be Yellow in color.

BACKUP ALARM

There shall be an electronic beeper that makes sounds when the truck is placed in reverse. The beeper shall be heard over all engine noise to warn people on or near the truck.

CONSOLE / STORAGE BOX

A poly or aluminum console will be installed between the driver and officer seats of the commercial chassis. There shall be a storage area towards the back of the top face for books and binders. The bottom portion of the storage area will be removable for access to the apparatus wiring block.

The apparatus switch box, siren and other accessories will be installed on the forward top face of the box. The console exterior shall be black to match the cab interior.

REAR TOW EYES

There shall be two (2) rear tow eyes below the body that will be attached to the rear of the chassis frame.

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PUMP OPERATOR'S PANEL - SIDE MOUNT

The operator's control panel shall be located on the left side of the apparatus. The upper portion of the panel will include the engine function and auxiliary gauges, gauge test panel, pump governor, discharge gauges for secondary discharge lines. It will be hinged to swing open, held at the end with appropriate fasteners.

The center portion of the panel will serve as a structural member and a guide for auxiliary discharge line controls.

The lower portion of the left panel will include all side discharge ports, gauges and drains, pony suction and main suction inlets, primer control and tank to pump lines.

The upper portion of the right pump panel will be a hinged door with an appropriate latch mechanism. This will allow for easy service access to the pump and plumbing.

The lower portion of the right panel will include the right discharges, pony suction (if applicable) and the main suction inlet for the pump.

The apparatus body and pump panel modules shall be constructed as independent structures to allow body flexing and to prevent fatigue from normal chassis movement. There shall be a 1" wide gasket installed between the body and the pump panel module.

PUMP PANELS AND DOORS

The pump panels and pump access doors shall be constructed of brushed stainless steel.

PUMP MODULE RUNNING BOARDS

The pump module running boards will be constructed of 1/8" aluminum polished treaded diamondplate. Module support extrusions will be drilled and tapped for application of stainless steel fasteners to hold the panels in place. The panels are to be easily removable for service.

SIDE MOUNT FIRE PUMP MODULE INSTALLATION

The fire pump, pump assembly, plumbing, intakes, outlets, and accessories shall be installed on the chassis.

PUMP MODULE FACE PACKAGE

The front face of the pump module will be trimmed with 1/8" polished diamondplate aluminum. Module support extrusions will be drilled and tapped for application of stainless steel fasteners to hold the panels in place. The panels are to be easily removable for service.

LEFT PUMP PANEL LIGHT

The left pump panel shall be lit with LED strip lighting. Each strip light shall be mounted under a formed light shield. The lights will be controlled by the parking brake switch.

RIGHT PUMP PANEL LIGHT

The right pump panel shall be lit with LED strip lighting. Each strip light shall be mounted under a formed light shield. The lights will be controlled by the parking brake switch.

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COLOR CODED PUMP PANEL

All valve controls, discharges and drains shall be labeled, and color coded to the customer's specifications.

SINGLE STAGE FIRE PUMP

The pump shall be a Hale QMAX-XS.

At time of delivery pump shall be tested and rated as follows:

- 100% of rated capacity at 150 pounds net pressure.
- 100% or rated capacity at 165 pounds net pressure.
- 70% of rated capacity at 200 pounds net pressure.
- 50% of rated capacity at 250 pounds net pressure.

The entire pump shall be cast, manufactured, and tested at the pump manufacturer's factory.

The pump shall be driven by a drive line from the truck transmission. The engine shall provide sufficient horsepower and RPM to enable pump to meet and exceed its rated performance.

The entire pump, both suction and discharge passages shall be hydrostatically tested to a pressure of 600 psi. The pump shall be fully tested at the pump manufacturer's factory to the performance spots as outlined by the latest NFPA Pamphlet No. 1901. Pump shall be free from objectionable pulsation and vibration.

The pump body and related parts shall be of fine grain alloy cast iron, with minimum tensile strength of 30,000 psi. All moving parts in contact with water shall be of high quality bronze or stainless steel.

The pump body shall be horizontally split, on a single plane, in two sections, for easy removal of entire impeller assembly including wear rings and bearings from beneath the pump without disturbing piping or the mounting of the pump in chassis.

The pump shall have one double suction impeller. The pump body shall have two opposed discharge volute cutwaters to eliminate radial unbalance.

Pump shaft to be rigidly supported by three bearings for minimum deflection. One high lead bronze sleeve bearing shall be located immediately adjacent to the impeller on side opposite the gearbox. The sleeve bearing is to be lubricated by a force fed, automatic oil lubricated design, pressure balanced to exclude foreign material. The remaining bearings shall be heavy duty, deep groove ball bearings in the gearbox and they shall be splash lubricated.

Pump impeller shall be hard, fine grain bronze of the mixed flow design; accurately machined, hand ground, and individually balanced. The vanes of the impeller intake eyes shall be hand ground and polished to a sharp edge, and be of sufficient size and design to provide ample reserve capacity utilizing minimum horsepower.

Impeller clearance rings shall be bronze, easily renewable without replacing impeller or pump volute body, and of wraparound double labyrinth design for maximum efficiency.

The pump shaft shall be heat-treated, electric furnace, corrosion resistant stainless steel, to be super-finished under packing with galvanic corrosion protection (zinc foil separators in packing) for longer shaft life. Pump shaft must be sealed with double-lip oil seal to keep road dirt and water out of gearbox.

PUMP TRANSMISSION

The pump transmission shall be cast and completely manufactured and tested at the pump manufacturer's factory.

Pump transmission shall be of sufficient size to withstand up to 16,000 lbs. Ft. of torque of the engine in both road and pump operating conditions. The drive unit shall be designed of ample capacity for lubrication reserve and to maintain the proper operating temperature.

The transmission drive shafts shall be of heat-treated chrome nickel steel and at least 2 3/4 inches in diameter, on both the input and output drive shafts. They shall withstand the full torque of the engine in both road and pump operating conditions.

All gears, both drive and pump, shall be of highest quality electric furnace chrome nickel steel, Bores shall be ground to size and teeth integrated, crown-shaved, and hardened, to give an extremely accurate gear for long life, smooth, quiet running, and higher load capability. An accurately cut spur design shall be provided to eliminate all possible end thrust.

MECHANICAL SEAL

The pump shall include a mechanical seal.

AKRON VALVES

All suction and discharge valves, including tank to pump lines, will be AKRON brand.

U. L. TEST PLUGS

Two U. L. test plugs shall be pump panel mounted for UL testing of vacuum and pressures.

PUMP TEST - 1500 GPM

The pump will meet and perform the following test.

- 100% of rated capacity at 150 PSI net pump pressure.
- 100% of rated capacity at 165 PSI net pump pressure.
- 75% of rated capacity at 200 PSI net pump pressure.
- 50% of rated capacity at 250 PSI net pump pressure.

PUMP ANODES

Three (3) sacrificial anodes shall be installed in the pump as follows:

- Intake manifold - two (2)
- Discharge manifold - one (1)

The anodes shall be drilled to indicate that they should be replaced when they leak.

FIRE PUMP PRIMING SYSTEM

A Trident Model #31.001.(x) air operated priming system shall be installed. The unit shall be of all brass and stainless steel construction and designed for fire pumps of 1,250 GPM (4,600 LPM) or more. Due to corrosion exposure no aluminum or vanes shall be used in the primer design. The primer shall be three-barrel design with direct connection to the Hale fire pump. The primer shall automatically drain when the panel control actuator is not in operation. The connection to the pump shall have an integral strainer.

Performance, Safety, and NFPA Compliance

The priming system shall be capable to a vertical lift to 22 inches of mercury and shall be fully compliant to applicable NFPA standards for vertical lift. The system shall create vacuum by using air from the chassis air brake system through a three-barrel multi-stage internal “venturi nozzles” within the primer body. The noise level during operation of the primer shall not exceed 75 Db.

Air Flow Requirements

The primer shall require a minimum of 15.6 cubic foot per minute air compressor and shall be capable of meeting drafting requirements at high idle engine speed. The air supply shall be from a chassis supplied ‘protected’ air storage tank with a pressure protection valve. The air supply line shall have a pressure protection valve set between 70 to 80 PSIG.

Primer Control

The primer control shall have a manually operated, panel mounted “push to prime” air valve; which will direct air pressure from the air brake storage tank to the primer body. To prevent freezing, no water shall flow to and from the panel control.

Power Requirements

To reduce the electrical power requirements on the fire apparatus the priming system shall be air powered. The system shall not require annual tear-down and maintenance, an electric motor or solenoid, electrical wiring, lubrication, belt drive, or clutch assembly.

Warranty

The primer shall be covered by a five (5) year parts warranty.

PUMP COOLER

A pump cooler recirculating line and valve shall be installed. It shall be connected to the discharge side of pump to a valve located on pump panel and back to inlet side of pump.

EVACUATION HORN

There shall be an air horn switch installed on the pump panel that shall activate the chassis air horns.

PUMP SHIFT

A power shift shall be installed in a convenient location to engage fire pump. Two indicator lights located next to the pump shift controls shall be installed. One shall indicate that the pump shift has been successfully completed. The other will indicate that the pump is engaged, the chassis transmission is in pump gear, and the parking brake is engaged. A "Throttle Ready" indicator light shall be provided at the pump operator's panel that indicates the apparatus is in "OK to Pump" mode.

PUMP SHIFT INDICATOR

A green light to indicate that the pump is in gear shall be mounted on the cab dash and on the pump panel.

PRESSURE GOVERNOR

Apparatus shall be equipped with a Class1 Sentry Pressure Governor Plus. Operating on the J1939 network, the Sentry is able to monitor engine RPM and other pertinent data directly from the engine ECU. This allows it to react very quickly and accurately to any change in fire pump pressure. The Sentry Pressure Governor System consists of a Sentry display, Twister throttle, pressure transducers and associated wiring. It utilizes Class 1's UltraView technology which is a custom tooled and programmed, 4.3 inch, full color LCD display with 8 buttons. The Sentry is packed with features that make it the most comprehensive and user friendly pressure governor to date. It has state of the art on board diagnostic features and is compatible with most engines.

TWISTER THROTTLE

The Twister throttle is a J1939 CAN based throttle device that communicates directly with the UV-TPG display. It features a robust knob operator that can be configured to operate the engine throttle in either the clock wise or counter clockwise directions. It features a large stationary idle button in the center of the knob. It also provides the operator with "Throttle Ready" and "Throttle Active" LED indicators. The Twister throttle can be mounted away from the UV-TPG Display giving the operator hand control at waist level. This also allows the UV-TPG display to be mounted at eye level assuring that the operator has the most comfortable and ergonomic control possible.

MASTER PRESSURE GAUGE

There shall be one (1) 4-1/2" silicone filled gauge that will have a 316 stainless steel bezel. The gauge will read from -30 to 400 psi and will be accurate to within 1%. The gauge shall be located on the pump panel and placed in a well lighted position for night apparatus operation.

MASTER INTAKE GAUGE

There shall be one (1) 4-1/2" silicone filled gauge that will have a 316 stainless steel bezel. The gauge will read from -30 to 400 psi and will be accurate to within 1%. The gauge shall be located on the pump panel and placed in a well lighted position for night apparatus operation.

STAINLESS PLUMBING

All plumbing shall be either stainless steel or high pressure hose with crimped stainless steel fittings. Any manifolds shall be stainless steel. All valves shall be bronze or stainless steel unless other specified.

STAINLESS PLUMBING WARRANTY - TEN YEARS

The manufacturer warrants to the original purchaser all stainless steel plumbing components installed by them and used in the construction of the apparatus water / foam plumbing systems against defects in workmanship and materials for a period of ten (10) years from delivery.

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TANK TO PUMP

A 4" full flow valve shall be installed between the tank and pump suction.

VALVE

An Akron 8940 4" swing out valve with polymer ball shall be provided and installed for the discharge or intake.

ELECTRIC VALVE ACTUATION

The valve shall be activated with an Akron electric actuator.

ELECTRIC VALVE CONTROLLER

An Akron Brass Style 9327 Navigator Pro Mini Valve Controller shall be provided. The electric controls must be of true position feedback design, requiring no clutches in the motor or current limiting. The unit must be completely sealed with momentary open and close buttons. One additional button shall be available to be used for preset activation. The unit must be capable of being used in conjunction with at least two additional displays to control one valve. The unit must provide position indication through a series of 5 ultra-bright LEDs. It shall have manual adjustment of the brightness in the menus. The unit must carry a five year warranty.

MASTER PUMP DRAIN

The master drain shall have the capacity to drain all lines and main pump at the same time. The master drain will be mounted on the pump panel and will be readily accessible.

LINE DRAINS

All suction and discharge lines (1-1/2" and larger) shall have a lever action quarter turn drain valve installed. Each drain valve shall be arranged adjacent to the valve or in a convenient location on the left and/or right pump panel. Remote drain lines will be clearly marked with color coded tags.

INTAKE RELIEF VALVE

A stainless steel suction relief valve will be installed on the suction port of the main fire pump. The valve will be adjustable from 75-250 PSI. The valve will terminate at a 2-1/2" NST-M flange; a cap will be available for emergency use.

PUMP TO TANK LINE

There shall be a 2" pump to tank fill line installed with a 2" inline valve. The valve shall be controlled from the pump panel.

VALVE

An Akron 8920 2" swing out valve with polymer ball shall be provided and installed for the discharge or intake.

MANUAL VALVE ACTUATION

The manual valve shall be activated with a pump panel mounted push / pull handle.

6" STEAMER INLETS (2)

Two (2) 6" steamer inlets will be provided, one (1) left side and one (1) on right side.

CHROME CAP(S)

6" NST chrome cap(s) with long handles shall be supplied for the inlet(s).

LEFT 2-1/2" SUCTION INTAKE

A 2-1/2" ball-type suction valve shall be installed on the left side pump panel with the valve body mounted behind the pump panel.

VALVE

An Akron 8925 2.5" swing out valve with polymer ball shall be provided and installed for the discharge or intake.

MANUAL VALVE ACTUATION

The manual valve shall be activated with a valve body mounted swing handle.

INLET ADAPTER

The suction valve shall come equipped with a brass inlet strainer and a 2-1/2" NST chrome inlet swivel.

INLET PLUG

The suction valve shall come equipped with a chrome plug with chain.

LEFT SIDE - FORWARD #1 - 2-1/2" DISCHARGE

One (1) 2-1/2" discharge shall be located on the left side pump panel. The valve shall be a quarter turn ball type and fixed pivot design to allow easy operation at all pump pressures, and operated from the panel. The threads on the valve shall be 2-1/2" NST. The discharge shall come equipped with a 3/4" drain valve.

VALVE

An Akron 8925 2.5" swing out valve with polymer ball shall be provided and installed for the discharge or intake.

MANUAL VALVE ACTUATION

The manual valve shall be activated with a pump panel mounted rack and sector style push / pull handle.

DISCHARGE PRESSURE GAUGE

There shall be a 2-1/2" gauge that will have a 316 stainless steel bezel supplied with the discharge. The gauge face will be white and have black markings. The gauge will read 0 to 400 psi and will be accurate to within 1%. The gauge shall be located on the pump panel and placed in a well lighted position for night apparatus operation.

DISCHARGE ELBOW

A chrome 2-1/2" elbow shall be supplied with the discharge.

DISCHARGE CAP

A 2-1/2" chrome cap and chain shall be supplied with the discharge.

LEFT SIDE - REARWARD #2 - 2-1/2" DISCHARGE

One (1) 2-1/2" discharge shall be located on the left side pump panel. The valve shall be a quarter turn ball type and fixed pivot design to allow easy operation at all pump pressures, and operated from the panel. The threads on the valve shall be 2-1/2" NST. The discharge shall come equipped with a 3/4" drain valve.

VALVE

An Akron 8925 2.5" swing out valve with polymer ball shall be provided and installed for the discharge or intake.

MANUAL VALVE ACTUATION

The manual valve shall be activated with a pump panel mounted rack and sector style push / pull handle.

DISCHARGE PRESSURE GAUGE

There shall be a 2-1/2" gauge that will have a 316 stainless steel bezel supplied with the discharge. The gauge face will be white and have black markings. The gauge will read 0 to 400 psi and will be accurate to within 1%. The gauge shall be located on the pump panel and placed in a well lighted position for night apparatus operation.

DISCHARGE ELBOW

A chrome 2-1/2" elbow shall be supplied with the discharge.

DISCHARGE CAP

A 2-1/2" chrome cap and chain shall be supplied with the discharge.

RIGHT SIDE - FORWARD #3 - 4" DISCHARGE - 3" VALVE

There shall be a 4" discharge on the right pump panel. The discharge shall be piped to the discharge side of the pump through a 3" valve that shall be pump panel controlled. A 3/4" quarter turn drain valve shall be installed.

VALVE

An Akron 8930 3" swing out valve with polymer ball shall be provided and installed for the discharge or intake.

MANUAL VALVE ACTUATION

The manual valve shall be activated with a pump panel mounted push / pull handle.

DISCHARGE PRESSURE GAUGE

There shall be a 2-1/2" gauge that will have a 316 stainless steel bezel supplied with the discharge. The gauge face will be white and have black markings. The gauge will read 0 to 400 psi and will be accurate to within 1%. The gauge shall be located on the pump panel and placed in a well lighted position for night apparatus operation.

SLO-CLOSE VALVES

A SLO-CLOSE feature will be installed on all valves over 2-1/2" in size as directed by NFPA. These valves will allow full open and close functions without water hammer.

DISCHARGE CAP

A 4" chrome cap shall be supplied with the discharge.

RIGHT SIDE - REARWARD #4 - 2-1/2" DISCHARGE

One (1) 2-1/2" discharge shall be located on the right side pump panel. The valve shall be a quarter turn ball type and fixed pivot design to allow easy operation at all pump pressures, and operated from the panel. The threads on the valve shall be 2-1/2" NST. The discharge shall come equipped with a 3/4" drain valve.

VALVE

An Akron 8925 2.5" swing out valve with polymer ball shall be provided and installed for the discharge or intake.

MANUAL VALVE ACTUATION

The manual valve shall be activated with a pump panel mounted push / pull handle.

DISCHARGE PRESSURE GAUGE

There shall be a 2-1/2" gauge that will have a 316 stainless steel bezel supplied with the discharge. The gauge face will be white and have black markings. The gauge will read 0 to 400 psi and will be accurate to within 1%. The gauge shall be located on the pump panel and placed in a well lighted position for night apparatus operation.

DISCHARGE ELBOW

A chrome 2-1/2" elbow shall be supplied with the discharge.

DISCHARGE CAP

A 2-1/2" chrome cap and chain shall be supplied with the discharge.

#1 CROSSLAY HOSEBED -1-3/4"

One (1) 1-3/4" crosslay shall be installed on top of the pump house. It shall be capable of holding 200' of 1-3/4" double jacket fire hose. A 2" mechanical swivel hose connector with 1-1/2" NH threads shall be used to provide access of hose in either direction.

VALVE

An Akron 8920 2" swing out valve with polymer ball shall be provided and installed for the discharge or intake.

MANUAL VALVE ACTUATION

The manual valve shall be activated with a pump panel mounted push / pull handle.

DISCHARGE PRESSURE GAUGE

There shall be a 2-1/2" gauge that will have a 316 stainless steel bezel supplied with the discharge. The gauge face will be white and have black markings. The gauge will read 0 to 400 psi and will be accurate to within 1%. The gauge shall be located on the pump panel and placed in a well lighted position for night apparatus operation.

#2 CROSSLAY HOSEBED - 2-1/2"

One (1) 2-1/2" crosslay shall be installed on top of the pump house. It shall be capable of holding 200' of 2-1/2" double jacket fire hose. A 2-1/2" mechanical swivel hose connector with 2-1/2" NH threads shall be used to provide access of hose in either direction.

VALVE

An Akron 8925 2.5" swing out valve with polymer ball shall be provided and installed for the discharge or intake.

MANUAL VALVE ACTUATION

The manual valve shall be activated with a pump panel mounted push / pull handle.

DISCHARGE PRESSURE GAUGE

There shall be a 2-1/2" gauge that will have a 316 stainless steel bezel supplied with the discharge. The gauge face will be white and have black markings. The gauge will read 0 to 400 psi and will be accurate to within 1%. The gauge shall be located on the pump panel and placed in a well lighted position for night apparatus operation.

CROSSLAY(S) HOSEBED COVER

There shall be an aluminum cover for the crosslays. The cover shall be constructed of 1/8" aluminum tread plate and be hinged with a stainless steel knuckle hinge.

CROSSLAY FLAPS

Side flaps for crosslays constructed of 22 ounce hypalon shall be installed to retain hose in the pre-connected beds per NFPA requirements.

Color: Black

2-1/2" FRONT OF HOSEBED DISCHARGE #1

A 2-1/2" front of hosebed discharge shall be provided using a 2-1/2" stainless steel pipe or flexible hose with a chrome 2-1/2" male NST adapter on the outside end. Discharge shall have a 3/4" drain valve.

VALVE

An Akron 8925 2.5" swing out valve with polymer ball shall be provided and installed for the discharge or intake.

MANUAL VALVE ACTUATION

The manual valve shall be activated with a pump panel mounted push / pull handle.

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DISCHARGE PRESSURE GAUGE

There shall be a 2-1/2" gauge that will have a 316 stainless steel bezel supplied with the discharge. The gauge face will be white and have black markings. The gauge will read 0 to 400 psi and will be accurate to within 1%. The gauge shall be located on the pump panel and placed in a well lighted position for night apparatus operation.

NEWTON DUMP W/ SWIVEL

A stainless steel 10" Newton dump valve will be provided with the apparatus. The assembly will swivel manually 180-degrees and "lock" in position.

The valve will be electrically actuated. The swivel and extension operations will be manual.

The unit will consist of the following:

Model 1080 10" Stainless Newton Dump valve
Model 6012-SW-34 Stainless Swivel
Model 4036-34-EXT Stainless extension

DUMP VALVE FLANGE

A dump valve flange and sump shall be installed in the water tank. The sump shall bring the center of the dump valve below the bottom of the tank thereby increasing the flow rate.

REAR DUMP SWITCHING

The rear dump valve shall include a switch in the cab and two (2) on the rear of the body, one each side.

TANK FILL - 4" FIREMAN'S FRIEND - REAR

There shall be a 4" Fireman's Friend semi-automatic fill valve with a 3" NPT-F fitting installed at the rear of the apparatus. The valve is a stainless steel internally mounted check-type fill valve. Inlet adapters are not included with this item.

FIREMANS FRIEND WARNING PLATE

A permanent plate shall be installed near the fireman's friend indicating "DO NOT EXCEED 100 PSI".

FAST FILL DIFFUSER

A fast fill fitting with a diffuser shall be installed in the water tank.

ADAPTER

The following adapter shall be supplied for the rear tank fill:

3" NPT-M x 4" NH-M

TANKER VENT

A 6" vent shall be installed in lieu of standard size.

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POLYPROPYLENE WATER TANK

The booster tank shall have a capacity of **3000** US gallons.

CONSTRUCTION:

The water tank shall be constructed of polypropylene or Polyrene sheet stock. This material shall be a non-corrosive thermo plastic.

The booster and/or foam tank shall be of a specific configuration and is so designed to be completely independent of the body and compartments. The tank shall be constructed utilizing latest thermo plastic welding technology. The tank shall undergo extensive testing prior to installation in the truck. In addition, the completed tank shall be water pressure tested. Baffles, both longitudinal and latitudinal shall be interlocking and thermo welded to minimize water surge during travel, enhancing road handling stability. Openings in the baffles shall be positioned to allow water flow to NFPA standards during filling or pumping operations. The tank shall be mounted on hard rubber cushions to isolate the tank from road shock and vibrations. The tank shall be mounted according to manufactures recommendations. The tank shall be completely removable without disturbing or dismounting the apparatus body structure. A lifetime manufacturer's statement of Warranty shall warrant each tank to be free from manufacturing defects in material and workmanship for the service life of the vehicle.

FILL TOWER AND COVER:

The tank shall have a combination vent and manual fill tower. The tower shall be located in the left center of the tank. The tower shall have a 1/4" thick removable polypropylene screen and a hinged cover. Inside the fill tower approximately 4" down from the top shall be fastened a combination vent overflow pipe. The vent overflow shall be a minimum of schedule 40 polypropylene pipe with a minimum I. D. of 4" that is designed to run through the tank and shall be piped behind the rear wheels to maximize traction.

SUMP:

There shall be one (1) sump standard per tank. On tanks that require front suction, 4" schedule 40 polypropylene pipe shall be installed that will incorporate a dip tube from the front of the tank to the sump location. The sump shall have a minimum 3" NPT threaded inlet on the bottom for a drain plug. This shall be used as a combination clean out and drain.

OUTLETS:

There will be two (2) standard tank outlets: One for tank to pump suction line which shall be a minimum of 3" NPT coupling; and One for a tank fill line which shall be a minimum of 2" NPT coupling. All tank fill couplings shall be backed with flow deflectors to break up the stream of water entering the tank.

DESIGN:

The tank shall be designed to include the hosebed, storage sleeves and any upper body compartments. The entire hosebed, tank and upper body storage shall be able to be removed with one set of lifting eyes.

POLYPROPYLENE TANK WARRANTY - LIFETIME

The water tank manufacturer shall warrant the booster/foam tank to be free from manufacturing defects in material and workmanship for the service life of the vehicle. The tank must be installed in accordance with tank manufacturer's installation recommendations. A copy of the tank manufacturer's warranty, including terms and limitations will be provided upon delivery of the completed apparatus.

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WATER TANK LEVEL GAUGE

A blue LED Class 1 water tank level display shall be installed on the pump panel. A single transducer will be installed in the water tank. A built-in calibration system allows this unit to be used with any tank configuration or material. A 10 foot harness is standard. The display includes 40 LED lights visible from 180 degrees.

WATER TANK LEVEL GAUGE

There shall be three (3) Whelen PSTANK2 water level LED strip light(s) provided and installed. The light has four LED panels of different colors and operates off the master water level gauge.

Location(s): Upper body sides and rear

TANK LEVEL GAUGE DRIVER

A tank level driver module shall be installed for the additional tank level gauges.

HOSEBED

The hose compartment floor will be constructed from a ribbed co-polymer polypropylene. The hose body floor ends will be slotted to allow for infinite adjustment of the hose bed dividers. The hosebed floor shall be constructed as part of the tank.

HOSEBED COVER

A 22 oz. hose bed cover shall be provided. The cover shall be fire retardant Hypalon material and installed over the hose bed. The cover shall have bungee straps along the sides and awning track on the front edge. The end of the hose bed cover shall be weighted and cover hose bed opening.

The hosebed cover shall be black.

HOSEBED DIVIDER

A hose bed divider shall be manufactured from 3/16" smooth aluminum plate with an extruded aluminum base welded to the bottom. The divider shall have an extruded track to slide in to allow the hose bed to be adjusted for different hose capacities. One end of divider shall have a 3" radius corner with a hand hole cutout provided. The divider shall be sanded as to prevent damage to hose.

DRIP CAP BODY SIDES

1/8" smooth aluminum drip caps shall be supplied on the upper side walls of the body.

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EXTRUDED ALUMINUM BODY SUPERSTRUCTURE

The body subframe is to be entirely welded, constructed of 6061-T6 extruded aluminum tubing with **minimum** dimensions of 3"x3"x3/8", 2"x3"x1/4" and 1"x3" solid. All vertical components are to be reinforced to the substructure with 2"x3"x1/4" 6061-T6 TUBULAR gussets at strategic points to assure structural integrity. The body sides are to be constructed from 2"x3"x1/4" 6061-T6 structural aluminum tubing welded to form a continuous support matrix for the hose body and compartments. The interior components will be welded along perimeter and along each side for additional support.

The upper body side panels shall be constructed with a single sheet to present a seamless construction and maximum corrosion protection.

The tank cradle will be designed to support the bottom of the water tank to prevent movement and structural damage when the unit is loaded and under motion. Reinforced rubber pads with a 60# rating will be installed in the cradle and at the corner angles to cushion the tank; no mechanical attaching devices will protrude through the rubber. Multiple 1-3/4" x 2" solid bar shall be welded into the sub frame for the tank mounting brackets.

Fender liners will be independent from the compartment sides to provide maximum corrosion and impact protection. Wheelwell fastening support angles shall be welded and be made from 1" x 1" x 1/4" angle.

The apparatus body shall be entirely independent from the chassis frame. It is to be attached to the frame over 1/2" x 3" 60# rubber pads running the full length of body. The unit is to be designed so as to be removable from the chassis in the event of future chassis replacement.

EXTRUDED ALUMINUM APPARATUS BODY - DRY-SIDE

The 100" wide apparatus body compartments are to be constructed from 3/16" aluminum alloy. All compartments are to be formed and welded to the substructure and sidewalls. Lower compartment floors are to be fitted with hat section supports to allow for loading of heavy equipment. The back side of the compartments shall be fitted with hat sections to allow for additional support and to act as a spacer for the installation of the water tank.

COMPARTMENTATION:

Each compartment shall be "sweep-out" style. The compartments shall not share a common wall and shall be individually vented. The compartments shall be divided as follows:

	Interior Dimensions			Door Opening	
Compartment	Width	Height	Depth	Width	Height
L1	78	70	14/26	75	66
L2	67.5	35	14	64.5	31
L3	67.5	35	14	64.5	31
R1	78	32	26	75	28

SUPERSTRUCTURE AND BODY WARRANTY - LIFETIME

The manufacturer shall warrant to the original purchaser that the apparatus superstructure and body is structurally sound and free of all structural defects of workmanship and material and further warrants that it will maintain its structural integrity for the life of the apparatus. This warranty shall not pertain to issues of paint finish, hardware, moldings, or accessories. The warranty shall terminate upon transfer of possession or ownership by the original purchaser.

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L1 COMPARTMENT

The following is a description of items included with the compartment.

ROLL UP DOOR - SATIN

ROM series 4 roll-up door will be installed in this compartment. The shutters will be constructed from extruded aluminum with a satin finish. Internally sealed for weather resistance and quiet operation. Rubber seals will be installed on the vertical components. The door will close/lock with a combination handle/locking bar on the exterior at the bottom.

The door will roll-up in the top of the compartment to allow for maximum use of the compartment interior. Lighting will be located on the vertical compartment walls for maximum effectiveness.

ROLL UP DOOR SILLS

An extruded aluminum door sill shall be provided for each roll up door.

DOOR STRAPS

An elastic door strap shall be installed for the door(s) in this compartment to assist in lowering the door(s).

ADJUSTABLE SHELF TRACKING

There shall be tracking installed in one (1) compartment to accommodate the installation of adjustable shelves and/or roll-outs. The tracks shall be installed vertically on the walls of the compartment.

LED COMPARTMENT LIGHTS

Two (2) extruded aluminum LED strip lights shall be installed in the compartment. The strip lights shall be installed in a vertical position and run the full height of the compartment, one (1) each side.

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L2 COMPARTMENT

The following is a description of items included with the compartment.

ROLL UP DOOR - SATIN

ROM series 4 roll-up door will be installed in this compartment. The shutters will be constructed from extruded aluminum with a satin finish. Internally sealed for weather resistance and quiet operation. Rubber seals will be installed on the vertical components. The door will close/lock with a combination handle/locking bar on the exterior at the bottom.

The door will roll-up in the top of the compartment to allow for maximum use of the compartment interior. Lighting will be located on the vertical compartment walls for maximum effectiveness.

ROLL UP DOOR SILLS

An extruded aluminum door sill shall be provided for each roll up door.

DOOR STRAPS

An elastic door strap shall be installed for the door(s) in this compartment to assist in lowering the door(s).

ADJUSTABLE SHELF TRACKING

There shall be tracking installed in one (1) compartment to accommodate the installation of adjustable shelves and/or roll-outs. The tracks shall be installed vertically on the walls of the compartment.

LED COMPARTMENT LIGHTS

Two (2) extruded aluminum LED strip lights shall be installed in the compartment. The strip lights shall be installed in a vertical position and run the full height of the compartment, one (1) each side.

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L3 COMPARTMENT

The following is a description of items included with the compartment.

ROLL UP DOOR - SATIN

ROM series 4 roll-up door will be installed in this compartment. The shutters will be constructed from extruded aluminum with a satin finish. Internally sealed for weather resistance and quiet operation. Rubber seals will be installed on the vertical components. The door will close/lock with a combination handle/locking bar on the exterior at the bottom.

The door will roll-up in the top of the compartment to allow for maximum use of the compartment interior. Lighting will be located on the vertical compartment walls for maximum effectiveness.

ROLL UP DOOR SILLS

An extruded aluminum door sill shall be provided for each roll up door.

DOOR STRAPS

An elastic door strap shall be installed for the door(s) in this compartment to assist in lowering the door(s).

ADJUSTABLE SHELF TRACKING

There shall be tracking installed in one (1) compartment to accommodate the installation of adjustable shelves and/or roll-outs. The tracks shall be installed vertically on the walls of the compartment.

LED COMPARTMENT LIGHTS

Two (2) extruded aluminum LED strip lights shall be installed in the compartment. The strip lights shall be installed in a vertical position and run the full height of the compartment, one (1) each side.

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R1 COMPARTMENT

The following is a description of items included with the compartment.

ROLL UP DOOR - SATIN

ROM series 4 roll-up door will be installed in this compartment. The shutters will be constructed from extruded aluminum with a satin finish. Internally sealed for weather resistance and quiet operation. Rubber seals will be installed on the vertical components. The door will close/lock with a combination handle/locking bar on the exterior at the bottom.

The door will roll-up in the top of the compartment to allow for maximum use of the compartment interior. Lighting will be located on the vertical compartment walls for maximum effectiveness.

ROLL UP DOOR SILLS

An extruded aluminum door sill shall be provided for each roll up door.

ADJUSTABLE SHELF TRACKING

There shall be tracking installed in one (1) compartment to accommodate the installation of adjustable shelves and/or roll-outs. The tracks shall be installed vertically on the walls of the compartment.

LED COMPARTMENT LIGHTS

Two (2) extruded aluminum LED strip lights shall be installed in the compartment. The strip lights shall be installed in a vertical position and run the full height of the compartment, one (1) each side.

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COMPARTMENT INTERIOR FINISH

All lower body exterior compartments of the apparatus will be constructed from fire apparatus quality aluminum material. All exterior seams will be welded and sealed from weather and dust. The interior compartment seams will all be carefully caulked with a gray sealant for further protection and cosmetics.

The apparatus compartment interiors will be polished aluminum diamondplate.

RUBRAILS

Poly rub rails shall be provided along the lower edge of the apparatus body. The rub rail assemblies shall be spaced-out and isolated from the body with non-metallic materials. Each rub rail shall be a minimum of 1" thick and tapered at each end.

BODY FACE PACKAGE

The front face of the apparatus body will be trimmed with 1/8" polished diamondplate aluminum. Body support extrusions will be drilled and tapped for application of stainless steel fasteners to hold the panels in place. The panels are to be easily removable for service.

The rear face of the body will be trimmed with 1/8" smooth plate aluminum to allow easy application of chevron material.

All exterior edges will be sanded and rounded to prevent the catching of equipment or any injuries. The exterior seams shall be carefully caulked for water prevention and cosmetics.

REAR TAILBOARD

An 22" rear tailboard step will be provided. The step will be constructed from 1-1/2" extruded aluminum. Extrusion shall have a non-slip surface with punched holes. Tailboard shall be supported by heavy 2" x 2" x 3/8" angles welded directly to the body superstructure.

REAR WHEELWELL TRIM

The area around the rear wheel openings shall be constructed from aluminum diamondplate. The wheelwells shall be completely removable for ease of service and replacement.

RUBBER FENDERETTES

Rubber fenderettes shall be installed on the rear wheelwells. They shall be bolted so as to be easily removable for service and/or replacement.

MUDFLAPS

Mud flaps shall be made from black hard rubber and shall be installed on the cab fenders, behind the front tires and on the body fenders, behind the rear tires.

MISCELLANEOUS HARDWARE

One bag of miscellaneous hardware shall be supplied with the finished apparatus. This hardware shall consist of nuts, bolts, screws, washers, etc. used in the manufacture of the apparatus.

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SCBA BOTTLE STORAGE

There shall be four (4) double-tube SCBA bottle compartments located in the rear wheel well area. Each compartment shall have two (2) eight inch diameter poly tubes for air bottle storage. The tubes shall be supported at the front with a molded flange and at the rear with a metal strap. A gasketed stainless steel hinged door shall be installed on each compartment with a positive latch. A webbing loop shall be installed inside the door to secure the bottle in place if the door is ajar.

GROUND LADDER STORAGE

The apparatus shall be equipped with a ground ladder storage compartment configured through the polypropylene tank.

The compartment will be sized to accommodate a standard ladder complement, 24' 2-section, 14' roof, and 10' attic ladder.

Access to the compartment shall be a hinged door, located at the rear of the apparatus.

SUCTION HOSE STORAGE

The apparatus shall be equipped with a suction hose storage compartment configured through the polypropylene tank.

The compartment will be sized to accommodate two (2) lengths of 6" x 10' hard suction hose.

Access to the compartment shall be a hinged door, located at the rear of the apparatus.

PIKE POLE STORAGE

The apparatus shall be equipped with pike pole storage compartments configured through the polypropylene tank.

The compartments will be sized to accommodate two (2) round handle pike poles with up to 10' length.

Access to the compartment shall be a hinged door, located at the rear of the apparatus.

STORAGE COMPARTMENT HINGED DOOR

A horizontally hinged flip up door shall be supplied for the rear equipment storage compartment.

The door shall be 3/16" smooth aluminum with gas shock(s) and a chrome latch.

Chevron striping shall be installed on the exterior of the door to match the rear of the apparatus.

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PORTABLE TANK STORAGE RACK

A Zico Quic-lift PTS-HA portable tank system shall be installed over the low side compartments. System consists of two cast aluminum brackets with electric actuators, one mounted on each end of shelf. Control shall be located in a convenient location as directed.

An indicator light shall be located on the cab instrument panel and illuminated when the rack is not in the stowed position. The light shall be labeled "Rack". In addition, the "Do Not Move Apparatus" light located in the cab shall be activated when the rack is not in the stowed position.

Flashing amber LED lights facing the front and rear shall be provided on the rack and activated whenever the rack is in the down position.

PORTABLE TANK COMPARTMENT

The portable tank rack shall be stored within a body compartment. The compartment floor, top, back and sides shall be made of diamond plate.

PORTABLE TANK STORAGE RACK COVER

An aluminum cover for the folding tank shall be installed with the Zico folding tank lowering mechanism.

The smooth aluminum shall be covered with a waiving American Flag wrap..

LIGHTED FOLDING STEPS - FRONT - DRIVER SIDE

There shall be four (4) cast folding steps mounted as required on the front driver side of the apparatus body. The steps will be NFPA compliant. Each step shall include an LED light to light up the top of the step and another LED light to light up the area below the step. The lights will be activated with the parking brake.

LIGHTED FOLDING STEPS - FRONT - PASSENGER SIDE

There shall be four (4) cast folding steps mounted as required on the front passenger side of the apparatus body. The steps will be NFPA compliant. Each step shall include an LED light to light up the top of the step and another LED light to light up the area below the step. The lights will be activated with the parking brake.

REAR BODY ACCESS LADDER

A rear access ladder shall be made of 100% stainless steel and poly. The ladder will be installed on the back of the apparatus for access to the upper body walkway or hose bed. The ladder shall swing out and fold down for a natural climbing angle. The ladder folds up and stores against the body. The handrails are 1-1/2" poly with NFPA slip resistant testing.

INTERMEDIATE REAR STEP WITH GRAB HANDLES

An intermediate rear step will be provided at the rear of the apparatus for easy access to the top of the body. The step will be constructed from an open grip strut aluminum material or NFPA compliant diamondplate aluminum and bolted to extrusions in the structure of the apparatus body.

The intermediate rear step shall include laser cut hand holes to assist in climbing. The holes shall be large enough for a gloved hand and be located on each side of the step.

REAR BODY HANDRAILS

There shall be one (1) 30" long handrails manufactured from 1-1/4" diameter extruded aluminum with chrome end stanchions. It shall be mounted vertically at the rear of the apparatus body.

In the event there is telescoping scene light, ladder or folding step installed in the same location(s), these items may be substituted in an effort to conserve mounting space on the body.

REAR TOP BODY HANDRAIL

There shall be one (1) 1-1/4" diameter extruded aluminum handrail installed at the top of the apparatus body to assist in entering and exiting the hosebed. The hand rail shall be supported with chrome stanchions.

In the event there is telescoping scene light, ladder or folding step installed in the same location(s), these items may be substituted in an effort to conserve mounting space on the body.

FRONT OF BODY HANDRAILS

There shall be two (2) handrails manufactured from 1-1/4" diameter extruded aluminum with chrome end stanchions. They shall be mounted horizontally at the front of the apparatus body to assist in climbing the front steps.

In the event there is telescoping scene light, ladder or folding step installed in the same location(s), these items may be substituted in an effort to conserve mounting space on the body.

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ALUMINUM BODY PAINT FINISH

All paintable surfaces shall conform to the following procedure, ensuring a durable finish:

- Aluminum body exterior shall not have components mounted to paintable surfaces prior to application of protective anti-corrosion and topcoat refinish materials.

- All paintable aluminum surfaces shall be sanded/ground to remove all burrs, rough edges and other imperfections from the fabrication process.

- All paintable metal surfaces shall have an anti-corrosion coating and an epoxy-based primer applied to them before the application of body fillers.

- After application and finishing of all filler work, any bare metal areas shall be recoated with an anti-corrosion coating and an epoxy-based primer before continuing the refinish process.

- The unit shall be sprayed with a high quality urethane primer-surfacer. The primer-surfacer shall be sanded to provide a smooth appearing surface that will facilitate adhesion of a urethane-based sealer. The urethane-based sealer shall be applied in such a manner to provide a uniform surface for the application of subsequent topcoats. The apparatus body shall be top-coated with basecoat/ clear coat polyurethane paint system. The finished paint surface shall have a high gloss- >85 using a 60° gloss meter.

- Any location where aluminum is penetrated after the refinish process has been completed, shall be treated with a corrosion inhibiting compounds.

PAINT WARRANTY - FIVE YEARS

The paint performance guarantee will cover the areas of the vehicle finished with the specified product for a period of five (5) years beginning the day the vehicle is delivered to the purchaser.

The areas as outlined on the Guarantee Certificate will be covered for the following paint failures:

GUARANTEE INCLUSIONS: FULL APPARATUS BODY MANUFACTURED AND PAINTED BY THE MANUFACTURER:

- Peeling or de lamination of the topcoat and/or other layers of paint.
- Cracking or checking.
- Loss of gloss caused by cracking, checking, or hazing.
- Any paint failure caused by defective finishes which are covered by this guarantee.

All guaranteed exclusions, limitations, and methods of claims are covered in the full certificate provided to the original purchaser.

Not included in the guarantee is paint finish deterioration due to:

- Body corrosion/rust
- Scratches, abrasions, or stone chips
- The use of detergents or waxes not designed for automotive use
- Acid rain, chemicals, industrial fallout or other environmental effects
- Physical damage caused by accidents, vandalism or any negligent acts of the apparatus operators
- Paint or coatings on the vehicle’s undercarriage, interior, or aerial structure
- Applied or painted graphics, reflective material

- Paints or coatings of supplier parts
- Mechanical abrasion or external foreign object damage
- Application of, or removal of, stickers or decals including replacement.
- Body compartment interior coatings, undercarriage and frame
- Bedliner finished or powder coated items

The paint warranty is a full term (non-prorated) warranty.

TOUCH UP PAINT

A container with touch-up paint shall be provided with each truck. The container shall have a small touch-up brush that is attached to the top of the container.

DISSIMILAR METALS

The body and components shall be thoroughly protected against corrosion and/or oxidation caused by contact between dissimilar metals. These areas shall be protected by the use of corrosion resistant primers, gaskets and "ECK" (electrolic corrosion material) or any equivalent material.

BODY UNDERCOATING

Undercoating of the apparatus body shall conform to the following;

- The rubberized undercoating shall be black in color and uniform in texture.
- The underside (chassis frame rails downward) of the apparatus body shall be sprayed with rubberized undercoating.
- The wheel well sections of the apparatus will be undercoated completely (above and below the chassis frame rail).
- The undercoating shall have corrosion-preventative properties.
- The undercoating material shall contain no asbestos.

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LETTERING - SCOTCHLITE - STANDARD SIZE

Scotchlite lettering will be provided and installed by the manufacturer.

2-5" shaded letters / numbers
Sixty (60) character allowance

The lettering can vary in size, depending on location and will be determined by best fit and layout.

Final layout and design shall be determined after the body is painted.

A final proof for approval shall be supplied to the customer prior to application.

LETTERING - SCOTCHLITE - LARGE SIZE

Scotchlite lettering will be provided and installed by the manufacturer.

6-12" shaded letters / numbers
Sixty (60) character allowance

The lettering can vary in size, depending on location and will be determined by best fit and layout.

Final layout and design shall be determined after the body is painted.

A final proof for approval shall be supplied to the customer prior to application.

DEPARTMENT LOGO/EMBLEM

One set of department logo will be supplied with the truck and put on front doors of chassis unless otherwise specified or approved.

Final layout and design shall be determined after the body is painted.

A final proof for approval shall be supplied to the customer prior to application.

NFPA BODY STRIPE

A 6" body stripe of white reflective is to be furnished around the entire apparatus with the exception of the wheel wells, pump panels, grille and rear of the apparatus over the chevron material.

Straight pattern chassis and body

CHEVRON STRIPING - REAR

Chevron striping shall be applied to the entire rear wall of the apparatus body. The chevrons shall consist of 6" wide Diamond Grade reflective striping at 45 degree angles from the tailboard in an inverted "V" pattern. The stripes shall alternate colors. Chevron striping shall not be included on the roll-up door if one is present, unless otherwise noted.

Color A: Red
Color B: Fluorescent lime yellow

CAB DOOR REFLECTIVE

The interior of each door shall include high visibility reflective tape. A white reflective tape that measures 1" in width shall be provided vertically along the outer rear edge of the door.

APPARATUS BODY ELECTRICAL SYSTEM

All electrical equipment installed by the apparatus builder shall conform to current automotive electrical system standards and the latest standards as outlined in NFPA #1901.

All electrical wire installed by the apparatus builder shall be rated to carry 125 percent of the maximum current for which the circuit is protected. A high-temp automotive primary wire that is insulated with chemically cross-linked Polyethylene and withstands prolonged temperatures of up to 350 degrees F. without melting or fusing shall be used. Wire shall be highly resistant to grease, oil, acids, brake fluid and abrasion. Wire shall meet or exceed S.A.E. specifications J1127.

Electrical connections in exposed areas outside of the cab shall be made using heat shrink or weather-proof connections. All connections shall have a corrosion preventative compound applied to them. All weather exposed lights shall have the sockets coated with this same compound.

Wire shall be individually color coded and be labeled every six (6") inches on the insulation. Wiring installed by body builder shall be run in a heat protective loom that is held in place with a rubber coated bracket that is fastened in place with stainless steel screws.

There will be two (2) wire terminal points that will be used as test points and for service. The location of these points will be in the apparatus cab and in an enclosed box recessed into the side or back wall of a rear compartment. All wire connections shall be protected to promote a lasting, corrosion-free connection. All exterior terminal blocks will be installed in a weather resistant box. All wire harnesses will be easily accessible and replaceable. All wires shall be protected by automatic circuit breakers that will reset.

WHELEN CENCOM CORE SYSTEM

The apparatus shall be equipped with a Whelen Cen-Com core electrical control system.

CEM-COM Core is a CAN-based communication system that provides true system synchronization, greater speed capabilities, expanded peripheral add-ons, full support of diagnostics, and is designed for optimal situational awareness programming.
Included features are;

- Supports any combination of 99 WeCanX devices.
- Support for multiple Whelen® peripherals of the same type on the same vehicle.
- All CANport™ signals are configurable as triggerable Events.
- Allows for access to every connector and fuse from the top of the box.
- Supports firmware updates via USB-C with Whelen Command™, our newest programming software.
- 12 logic inputs
- 1 ignition power-up input
- 4 analog inputs
- 2 15A outputs
- 4 10A outputs
- 16 2.5A outputs
- 1 dry contact relay
- Battery voltage senser
- 200W amplifier

The following components shall be included:

1) C399 Core System
1) CCTL6 Siren and Light Control Head

All necessary expansion modules and harnessing shall also be included.

CONTROLLER BRACKET

A flush mount siren / light controller bracket shall be supplied and installed in the center console/dash.

CORE PHOTOCELL

A Whelen LCPHOTO photocell for use with the CenCom Core system shall be supplied and installed to automatically dim the lights. A manual override button shall be located on the controller.

CAB MOUNTED SWITCH PANEL

A Whelen CCTL6 switch panel, designed for the specified chassis and body will be provided and mounted in the center console. Backlighting will glow at low intensity with the ignition on and at high intensity when the circuit is activated.

Each switch label will be specifically identified.

12-V NFPA TEST

The following NFPA 9-14 test requirements shall be performed:

- Reserve capacity test
- Alternator test at idle
- Alternator test at full load
- Low voltage alarm test

CLEARANCE LIGHTS AND REFLECTORS

Clearance lights and reflectors shall be installed to meet current DOT standards and include:

- Two (2) Red LED marker lights
- Four (4) Red reflectors
- Two (2) Amber reflectors
- One (1) Red LED three-light cluster under the rear step.

AUXILIARY TURN / RUNNING LIGHT

Two (2) auxiliary LED amber marker/turn lights shall be mounted just forward of rear axle, in the rear wheel well area. The lights shall be wired into the chassis light system and shall be flush mounted within a rubber grommet.

STOP/TAIL, TURN AND BACKUP LIGHTS

Whelen M6 series lights shall be installed at the rear of the apparatus as follows:

- Red LED stop/tail light, one (1) each side
- Amber LED turn light, one (1) each side
- Clear LED backup light, one (1) each side

Each shall be installed inside a one-piece housing, one each side. The lower rear warning light shall be included in the 4 light housing.

REAR LOWER LIGHTS BEZEL COLOR

The surface mounted lower stop/tail/turn and back up lights shall include chrome bezels.

REAR LOWER LIGHTS LENS COLOR

The surface mounted lower stop/tail/turn and back up lights shall include colored lenses to match the light color.

LICENSE LIGHT AND BRACKET

A polished aluminum LED license plate light and bracket shall be installed on the rear of the vehicle.

LED CAB GROUND LIGHTS (2)

Under body lighting will be provided for the apparatus cab doors. Two (2) LED strip lights with clear lenses will be mounted below the apparatus cab, one (1) under each cab door. The lights will be controlled by the parking brake switch.

LED PUMP GROUND LIGHTS (2)

Under body lighting will be provided for the apparatus pump module. Two (2) LED strip lights with clear lenses will be mounted below the runningboards, one (1) each side. The lights will be controlled by the parking brake switch.

LED BODY GROUND LIGHTS (4)

Under body lighting will be provided for the apparatus body sides. Four (4) LED strip lights with clear lenses will be mounted below the apparatus body, one (1) under each compartment. The lights will be controlled by the parking brake switch.

LED REAR TAILBOARD / BUMPER GROUND LIGHTS (2)

Under tailboard/bumper lighting will be provided for the rear of the apparatus. Two (2) LED strip lights with clear lenses will be angle mounted below the rear tailboard/bumper. The lights will be controlled by the parking brake switch.

RECESSED STEP LIGHTS - LED

There shall be LED recessed step lights mounted in such a manner as to light the area around the runningboards, tailboard, walkway, and rear intermediate step, if applicable.

ACCESS LADDER STEP LIGHTS - LED

There shall be three (3) Whelen LED step lights mounted in such a manner as to light the area around the access ladder. The light shall be recess mounted in a rubber grommet or surface mounted in a chrome bezel.

PUMP SERVICE LIGHT

There shall be an LED light with clear lens mounted inside the pump compartment to provide sufficient lighting.

ENGINE SERVICE LIGHT

There shall be an LED light with clear lens mounted inside the engine compartment to provide sufficient lighting.

COMPARTMENT DOOR SWITCHES

All exterior compartment doors will be provided with a door switch that shall activate the "Door Ajar" indicator light. The switch shall be installed not to interfere with loading or unloading the equipment stored within the compartment.

DOOR AJAR INDICATOR

There shall be a red flashing door-ajar indicator located on the cab in easy view of the driver. The light shall be illuminated automatically whenever the apparatus parking brake is released and the following conditions exist:

- Any passenger or equipment door is open.
- Any ladder or equipment rack is not in the stowed position.
- Powered light tower is extended.
- Any other device is opened, extended or deployed that creates a hazard, or is likely to cause damage to the apparatus if it is moved.

HOSEBED LIGHT

A LED strip light shall be installed to light the hosebed. The light shall be activated by the park brake switch. The light shall be protected and be mounted at the front of the hosebed.

FRONT SCENE LIGHT

The front of the cab shall include one (1) Whelen model Summit 30" brow style scene light installed on the brow of the cab. The light shall include brackets to allow it to be mounted to the lightbar if applicable.

Optics: Spot / Flood
Color: Black

SIDE SCENE LIGHTS

The front upper sides of the body shall include two (2) Whelen M9 EZ scene lights, one (1) each side which shall be surface mounted.

SIDE SCENE LIGHTS

The rear upper sides of the body shall include two (2) Whelen M9 EZ scene lights, one (1) each side which shall be surface mounted.

REAR SCENE LIGHTS

The rear of the body shall include two (2) Whelen M9 EZ scene lights, one (1) each side which shall be surface mounted.

SCENE LIGHTING BEZEL COLOR

The surface mounted scene lights shall include chrome bezels.

SCENE LIGHTING SWITCHING

The body and/or cab mounted scene lights shall include switches in the cab. Each side of the apparatus will include its own switch if applicable.

SCENELIGHT BACKUP RELAY

A relay will be provided in the rear scene light circuit to allow automatic use of the lights when the vehicle is placed in reverse.

POWER AND GROUND STUDS - RADIO WIRING

An auxiliary set of power and ground studs shall be provided and installed in the console.

Both 12V constant hot and 12V master power shall be provided.

Radio installation not included unless otherwise noted.

ANTENNA WIRING (2)

The apparatus shall have two (2) antenna bases and cables supplied and installed as directed. The whip shall be customer supplied. The antennas cables shall be ran to the cab console.

BACKUP CAMERA

A back-up camera with color monitor shall be installed on the apparatus. The monitor shall be a minimum 7" color LCD display and be on the dash, center console or in place of the rear view mirror. A waterproof I/R camera shall be mounted on the rear of the apparatus. The camera shall provide not less than 270 pixel resolution. The system shall automatically activate when the vehicle is placed in reverse. An on/automatic selector switch shall be mounted on the chassis dash.

NFPA WARNING LIGHTS

The optical warning system on the fire apparatus shall be capable of two separate signaling modes during emergency operations. One mode shall signal that the apparatus is responding to an emergency and is calling for the right of way. The other mode shall signal that the apparatus is stopped and is blocking the right of way.

The switching for the two different modes shall be through switches and relays that sense the position of the parking brake.

CAB FRONT LIGHTBAR

The lightbar provisions shall be for one (1) Whelen brand Freedom K420QLR WeCanX lightbar mounted centered on the front of the cab roof. The lightbar shall be 60.00 inches in length. The lightbar shall feature six (6) red LED lights and two (2) clear LED lights. The lightbar shall include an integrated photocell and vehicle-to-vehicle sync module. The clear lights shall be disabled with park brake engaged. The cable shall exit the lightbar on the right side of the cab.

INBOARD FRONT WARNING LIGHTS

The front grille shall include two (2) Whelen M6 Super LED warning lights, one (1) on each side. The lights shall feature multiple flash patterns including steady burn. The lights shall be mounted to the grille within a bezel.

The warning lights shall be red.

INTERSECTION WARNING LIGHTS

The front bumper tail or the corner of a commercial cab hood shall include two (2) Whelen M6 series Super LED warning lights, one (1) on each side. The lights shall feature multiple flash patterns including steady burn for solid colors and multiple flash patterns for split colors. The lights shall be mounted to the sides of the apparatus within a bezel.

The warning lights shall be red.

REAR WHEEL WELL WARNING LIGHTS

The rear wheel wells shall include two (2) Whelen M6 Super LED warning lights, one (1) on each side. The lights shall feature multiple flash patterns including steady burn. The lights shall be mounted to the sides of the body within a bezel.

The warning lights shall be red.

REAR TAILBOARD SIDE WARNING LIGHTS

The rear tailboard shall include two (2) Whelen M6 Super LED warning lights, one (1) on each side. The lights shall feature multiple flash patterns including steady burn. The lights shall be mounted within a cast housing located on the top of the tailboard sides.

The warning lights shall be red.

FRONT UPPER BODY SIDE WARNING LIGHTS

The front upper body sides shall include two (2) Whelen M9 Super LED warning lights, one (1) on each side. The lights shall feature multiple flash patterns including steady burn for solid colors and multiple flash patterns for split colors. The lights shall be mounted to the sides of the apparatus within a bezel.

The warning lights shall be red.

REAR UPPER BODY SIDE WARNING LIGHTS

The rear upper body sides shall include two (2) Whelen M9 Super LED warning lights, one (1) on each side. The lights shall feature multiple flash patterns including steady burn for solid colors and multiple flash patterns for split colors. The lights shall be mounted to the sides of the apparatus within a bezel.

The warning lights shall be red.

UPPER REAR WARNING LIGHTS

The upper rear of the apparatus shall include two (2) Whelen M9 Super LED warning lights, one (1) on each side. The lights shall feature multiple flash patterns including steady burn for solid colors and multiple flash patterns for split colors. The lights shall be mounted to the apparatus within a bezel.

The warning lights shall be red.

LOWER REAR WARNING LIGHTS

The lower rear of the apparatus shall include two (2) Whelen M6 Super LED warning lights, one (1) on each side. The lights shall feature multiple flash patterns including steady burn for solid colors and multiple flash patterns for split colors. The lights shall be mounted to the apparatus within a bezel.

The warning lights shall be red.

WARNING LIGHTING BEZEL COLOR

The body and/or cab surface mounted warning lights shall include chrome bezels.

WARNING LIGHTING LENS COLOR

The body and/or cab surface mounted warning lights shall include colored lenses to match the warning light color.

WARNING LIGHTING SWITCHING

The body and/or cab mounted warning lights shall include switches in the cab. Each side of the apparatus will include its own switch if applicable.

A master warning light switch shall also be included.

TRAFFIC ADVISOR

A Whelen WX2230F LED traffic advisor shall be installed on the rear of the apparatus, as high as is practical. The light is a six (6) head LED bar with dual-color red/amber lights and will be controlled by the Whelen control head.

The light shall be mounted within and protected by an intermediate step.

SIREN CONTROL HEAD

The siren shall be controlled by the Whelen Core system along with the CCTL6 controller.

ELECTRONIC SIREN SPEAKER

The bumper shall include one (1) Whelen Engineering Inc. model SP123BMC, 100 watt cast aluminum speaker which shall be recess mounted within the bumper fascia. The speaker shall measure 4.44 inches tall X 7.44 inches wide X 5.18 inches deep. The speaker shall include a polished aluminum grille.

APPARATUS WARRANTY - ONE YEAR

The completed apparatus shall be warranted to be free from defects in workmanship and materials under normal use and service for a period of one (1) year from the date of delivery to the Fire Department. This warranty shall cover the costs for parts and labor for this period of time.

1744 – 3000 GALLON TANKER

ROOF LADDER

One (1) Duo Safety Model 775-A, 14 foot aluminum roof ladder shall be provided on the apparatus. The ladder shall be equipped with folding steel roof hooks on one end and steel spikes on the other end. The ladder shall meet or exceed all latest NFPA Standards.

EXTENSION LADDER

One (1) Duo-Safety Model 900-A, 24 foot two-section aluminum extension ladder shall be provided on the apparatus. The ladder shall meet or exceed all the latest NFPA standards.

FOLDING LADDER

One (1) Duo Safety Model 585-A, 10 foot folding aluminum ladder shall be provided on the apparatus. The ladder shall meet or exceed all the latest NFPA Standards.

PIKE POLE

One (1) Duo Safety 6' pike pole with round handle shall be provided on the apparatus. The pike pole shall be of fiberglass construction.

PIKE POLE

One (1) Duo Safety 8' pike pole with round handle shall be provided on the apparatus. The pike pole shall be of fiberglass construction.

SUCTION HOSE

Two (2) 6" x 10 foot lengths of AWG flexible suction hose shall be provided and equipped with lightweight couplings.

FOLDING PORTABLE WATER TANK

One (1) 3000 gallon Fol-da-Tank hypalon, portable water tank shall be provided on the apparatus. The tank shall include an aluminum support frame.

WHEEL CHOCKS

One (1) pair of Worden model HWG Grip-Lock aluminum wheel chocks shall be mounted on the apparatus. They shall be mounted in model U815 slide-out brackets.

WHEEL CHOCKS LOCATION

The wheel chocks shall be mounted fore of the rear axle on bottom side of the lower compartments.

PURCHASER'S RESPONSIBILITY

These specifications are as complete, accurate and up to date as possible; however, it is the purchaser’s responsibility for the safe, legal operation and maintenance of this apparatus and equipment.

DELIVERY PREP

The apparatus shall be detailed and cleaned prior to delivery.

All metal edges shall be carefully sanded and rounded. All compartment and exterior sheeting seams shall be carefully caulked. Any loose equipment shall be stored on the truck.