DACO FIRE EQUIPMENT

Custom 4x4

Wildland Fire Trucks

The phot is not actual truck

Small Brush Truck Specifications

For

DACO DEMO SMALL BRUSH TRUCK

Presented by: Mike Henricks

DACO FIRE EQUPMENT
201 AVE R
LUBBOCK, TEXAS 79408

September 29, 2021

Date: 9/29/2021

This contract has been prepared for:

DACO DEMO **SMALL BRUSH TRUCK**

We hereby propose and agree to furnish, after your acceptance of this contract and the proper execution by the Daco Demo and an officer of Daco Fire Equipment, the following apparatus and equipment:

Quantity	Model	
1	BRUSHFIGHTER SMALL BRUSH TRUCK	

All of which are built in accordance with the specifications and clarifications attached, and which are made a part of this agreement and contract for the total sum of:

ONE HUNDRED SIXTY EIGHT THOUSAND FIVE HUNDRED FIFTY THREE DOLLARS

Payment Terms: Final payment for the apparatus and equipment shall be made at time of delivery. Due to insurance liability, the items will not be left at the purchaser's location without full acceptance and payment or prior agreement between purchaser and bidder.

The amount in this contract shall remain firm for a period of 30 days from the date of same.

Respectfully Submitted:
Daco Fire Equipment

We agree to accept the above and enter into contract with signature below

Daco Representative:_____ Date: _____

Customer Representative:_____ Date: _____

FORD CHASSIS

Chassis-cab shall be suitable for subsequent mounting of a modular (containerized); transferable equipped apparatus body conforming to the requirements specified herein.
Cab-chassis shall meet or exceed the minimum requirements of this specification.

Manufacturer - Ford Motor Co.

Model - 2022 F550 regular cab /Chassis 4X4

Trim Level XL

Wheelbase -165"

Cab to Axle -84"

G. V. W.R.- 18,000 lbs

Engine -6.7L Turbo Diesel with block heater 300HP @ 2800 RPM and 600 lb/ft@ 1600 RPM with air cooling package

skid plate

Stainless steel exhaust system (major components)

Transmission -Ford 6-speed TorqShift automatic with SelectShift

Front Axle – 7,000 lb. electronic shift on-the-fly (ESOF) 4-wheel drive system with auto/manual locking hubs, coil spring suspension, 1-3/8” gas type shock absorbers, standard stabilizer bars

Rear Axle – 13,660 lb. wide track type with 4.88 ratio with left suspension, 1-3/8” gas type shock absorbers with stabilizer bar

Shocks -Heavy-duty front and rear

Brakes - Power, self-adjusting, hydraulic with four wheel anti-lock, disc front and rear

Steering - Power assisted steering.

Air Conditioning/Heating -Ford installed with 134 refrigerant

Fuel Tank -Single with minimum 40 gallon capacity.

Wipers -Minimum 2-speed with pause and intermittent feature with standard windshield washer functions

Wheels -Steel disc with six (6) 225/70RI9.5 All Season Tires

Driver and passenger side airbags.

Windows/Glass -Tinted safety glass
Towing package

Instrumentation -Full set of gauges including oil pressure, water temperature and fuel level

Seats -Shall be OEM vinyl split bench seat 40/20/40 covered with color-coordinated fabric upholstery and furnished with shoulder harness and lap belts.

Mirrors -electric Telescoping trailer tow mirrors with 2-way fold and electric glass

Convenience Light Group -Dual head dome light controlled by headlight/parking light switch and door operated switches (driver and passenger); under hood light; Headlight
"ON" audible alert, cruse control

Lights -Halogen headlights with daytime running lights

Dome light front and rear with extended cab

Power points located on instrument panel (2)

Cab Door Windows -OEM electric type on left and right cab doors

Cab Door Locks electric -OEM on left and right cab doors

Radio -A Ford factory installed AM/FM stereo radio with digital clock with four speakers.with **blue tooth.**

Alternator -200 Amp Ford with **inverter and (1) 110 volt outl**et

Battery -Dual 750 cca/78 amp

Color (standard) -Ford Bright Red

Warranty

- 3 year/36,000 mile Bumper to Bumper Coverage
- 5 year/60,000 mile Powertrain Coverage
- 5 year/50,000 mile Safety Restraint Coverage
- 5 year/unlimited mile Corrosion (perforation) Coverage
- 5 year/100,000 mile Power Stroke Diesel Engine

SUSPENSION CONVERSION

The Ford chassis shall have the following suspension conversion installed:

The chassis lift kit shall be a 2.5" heavy duty, off road suspension lift kit with heavy duty off road shocks & sway bar installed on the chassis. The 2.5" lift along with the 20" wheels,, gives the truck approximately 5.5" to 6" overall lift.

The front tires will be 335/80R20, 22 PR for severe service radial all terrain tread. The tire weight rating will match the rim rating.

Wheels for the front axle will be 20" x 11.00" steel disc, ten (10) hole pattern special order for Military/Government off road application. The weight rating of the rims will be 6,750 lbs. each.

The rear tires will be 335/80R20, 22 PR for severe service radial all terrain tread. The tire weight rating will match the rim rating.

Wheels for the rear axle will be 20" x 11.00" steel disc, ten (10) hole pattern special order for Military/Government off road application. The weight rating of the rims will be 6,750 lbs. each.

A fender flare kit and core support kit shall be installed.

Includes front end alignment.

Tire & wheel size may vary due to chassis make and model, & clearance issues.

Daco Fire Equipment guarantees the upgraded suspension conversion to be free from defects when the apparatus is delivered to the purchaser. It is the responsibility of the owner/Fire Dept to maintain the suspension conversion once it is delivered. The owner/Fire Dept of the apparatus MUST maintain the components of the suspension conversion by checking the torque and lubing all grease zerts during the first 100 miles after delivery and every 500 miles thereafter. Other part warranties, not labor, may be available through the suspension conversion manufacturer, not Daco Fire Equipment. Daco Fire Equipment can be the source for obtaining parts for the suspension conversion after the completed apparatus is delivered.

Due to the nature of the off road lift kit and off road aftermarket wheels & tires, Daco Fire Equipment cannot ensure the factory components will operate as intended by the chassis manufacture. Such components as ABS, ESC, TPMS, speed sensor & etc. may not operate correctly due to the parameters set by the chassis manufactures. Other issues that can be associated with a suspension conversion and larger tires is drivability, including road walk, tire noise & vibration, & much rougher ride quality.

CHASSIS MAKE READY ITEMS

The following items shall be installed on the commercial chassis in preparation for fire/apparatus/rescue application:

Battery cutoff switch- A battery cutoff switch will be installed.

Back up alarm- An electronic back-up alarm shall be supplied. A 97 db alarm shall be wired into the chassis back-up lights to signal when the vehicle is in reverse.

A 2” fuel fill shall be installed on the rear driver side of the deck. Depending on layout of body deck fuel fill can be mounted thru the body or the side of the body.

Rear Mud Flaps- Rear mud flaps shall be installed behind the rear dual wheels.

ELECTRICAL CONSOLE WITH EMERGENCY LIGHT SWITCH PANEL

An electrical console shall be constructed of .125" smooth aluminum material and mounted in the cab of the truck chassis. Console shall be designed and installed between the driver and passenger

seats. The top face of the console shall be designed for a switch panel for all emergency light switches, radio and communication system, tank level gauges, nozzle controls, and etc.

ADJUSTABLE ARMEREST

Two (2) adjustable padded armrest shall be installed on the center console

CAB NERF BARS

A pair of Westin brand E-Series Nerf bars shall be furnished and mounted to the cab. The Nerf bars are painted black, with recessed step pad made of molded polymer. The tubing shall be 0.150 inch thickness.

FENDER FLAIRS FOR FRONT TIRES

A pair of painted fender flairs will be installed with the suspension lift system.

HEAVY DUTY BUMPER

A custom built heavy duty bumper manufactured by DACO will be installed in lieu of the standard OEM bumper. The bumper shall be all steel construction full bumper replacement. The bumper will be a fully custimized bumper to meet the needs of the customer. The bumper will be a sweep back design incoorpating two upright push bars and sweep back grill and eadlight protectors. The headlight protectors are constructed from 2" steel tubing fully welded. The completed bumper is sand blasted and either powder coated or coated with a durable textured coating.

REAR RECEIVER

A rear receiver hitch will be installed under the body below the rear step. Hitch shall be bolted to the chassis frame.

FRONT RECEIVER

A front receiver hitch will be installed in the custom front bumper.

FRONT TOW RINGS

Two (2) tow rings shall be welded to the front custom bumper. The tow ring shall be 1" diamter rings rated at 15,586lbs

APPARATUS BED

The “Brushfighter” heavy-duty truck bed is designed for rugged use. With our use of extruded aluminum you have a professional look, with the strength you need, for the environment the apparatus will be subjected too. Formed aluminum bed’s are not acceptable.

The apparatus flatbed body shall be approximately 96” wide x 108” long. The outer perimeter platform mainframe is a “L” shaped aluminum extrusions 5” high with a 3” flange, with a 3/16” thickness.

The sub-frame crossmembers shall be 3” x 2-1/2” “I”-beam extrusions with a wall thickness of .190 on 16” centers. The crossmembers shall be welded to 4” x 2” C-channel extrusions that are ¼” thick and run full length of the chassis frame rails. Standard “U” bolts are used to secure the bed to the chassis frame.

The standard flooring shall be 3/16” aluminum diamond plate attached to the cross-members and the outer perimeter extrusion.

If the bed is not furnished with a gated work station the headache rack shall be welded to the flat bed. The headache rack shall be constructed of 2” x 2” x .125” wall thickness aluminum tubing. The rear cab glass shall be protected with an aluminum mesh material welded to the center area of the headache rack. The lower 15” area shall be covered with 1/8” aluminum diamond plate. From the floor area to the top of the headache rack shall be approximately 52” depending upon the cab height.

The rear face of the bed shall be 3/16” thick smooth aluminum plate and be approximately 15” deep x full width of the bed. (NOTE: The depth can be adjusted depending up the ground clearance you desire.) The DOT marker lights and 4” diameter LED stop, turn and backup lights shall be mounted in this area. A full width access step shall be furnished fabricated from grip strut aluminum and shall be 12” deep. The rear face shall have an “A” style Chevron applied using diamond grade 3M scotchlite reflective material.

The bidder shall warranty the bed for a period of ten (10) years. A copy of the warranty shall be included in the bid proposal.

The bed shall be built by the bidder. Subcontracted bed’s by a 3rd party are not acceptable, NO EXCEPTIONS.

WORK STATIONS

The work stations and transverse cross walk structure shall be separate and independent of the bed, NO EXCEPTIONS. This separation allows for the bed to flex when the truck is driven in very rough terrain. The cross walk shall be constructed using heavy wall aluminum extrusions, diamond aluminum treadplate and grip strut material.

Each cubicle shall be approximately 30” wide x 25-1/2” deep and have a single hinged gate 42" high from standing surface that pushes inward and returns to the closed position by means of a heavy duty gas shock. The gates shall be constructed of 1” x 2” rectangular aluminum tubing. The gate shall be 40” high x 20-1/8” wide. The push in style gate shall allow the firefighter to access the work station area without climbing up in the center of the cross walk. The work station floor area shall be fabricated from an aluminum grip strut material. The grip strut material allows for ease of cleaning this area with the open grid design.

To support the work station area a 2” x 2” tubing brace shall be furnished on the non-hinge side. Heavy duty stainless steel hinges shall attach the gates to the headache rack.

There shall be a headache rack integrated with the cross walk. The headache rack shall be fabricated from 2” x 2” square tubing and 3” x 2” tubing. The headache rack shall be constructed so that the light bar can be mounted off the front of the assembly. There will be expanded aluminum on the top half to protect the rear cab window. The lower area approximately 15” high shall be covered with aluminum treadplate.

REAR UNDERBODY STORAGE

There shall be a compartment furnished full length of the flat bed between the flat bed deck and the chassis frame rails. The compartment shall be approximately 34” wide x 5” high x full length flat bed with a hinged drop down door at the rear. The door shall be furnished with a positive type latch. This compartment shall be for long handle tools, hard suction hoses or back boards.

COMPARTMENT

Two (2) Aluminum compartment(s) shall be installed on the top side of the apparatus deck. The compartment shall be 72"W X 30"T X 19"D. There shall be one (1) single lift up door within the 72" wide compartment. There shall be compartment lighting installed to come on when the door is open. “T” handle latches shall be installed in the doors.

PAC TRAC MOUNTING

Pac trac “Z” mount, (1) section will be installed in the compartment on the back wall. It shall be the width of the compartment.

COMPARTMENT LIGHT(S)

Two (2) compartment light shall be installed in the compartment. It shall activate when the door is opened. It shall be LED strip lighting type to cast a brighter light in the dark.

GROUND LIGHTS

Three (3) Ground lights shall be mounted under chassis door. Lights shall come on automatically when the door is open. Light shall be installed in a mounting bracket.

CROSSWALK LIGHTING (PAIR)

Two (2) LED deck lights shall be mounted on the ends of the crosswalk headache rack. The lights shall shine down on the crosswalk area. The lights shall be wired to a switch in the cab for operation.

4" LED WORK LIGHTS

A pair of 4" LED work light shall be installed. The light's will have a durable all weather housing and produce 54watts and 4320 lumens.

TAIL LIGHTS

One (1) pair of Whelen M6BTT LED brake/turn/tail lights shall be provided. The rectangular 4"x6" lights shall be red.

WATER TANK

The booster tank shall be rectangular in configuration and shall have a capacity of 500 gallons. All tank sides, top and bottom, shall be constructed of 1/2" black UV stabilized copolymer polypropylene.

The tank shall be constructed utilizing latest thermo plastic welding technology. A clean, hot air controlled temperature process shall ensure that the weld reaches its plasticized state without cold or hot spots.

The tank shall undergo extensive testing prior to installation in the truck. The process shall include an electronic spark and water fill test after both the internal and external tank shell welds are completed.

The tank shall have a combination vent and manual fill tower. The tower shall be located in the left front corner of the tank. The tower shall have a hinged cover and thick polypropylene screen.

There shall be two (2) standard tank openings; one for the tank to pump suction line with an anti-swirl plate and one for a tank fill line.

Baffles, both longitudinal and latitudinal shall be interlocking and thermo welded to minimize water surge during travel, enhancing road-handling stability.

WATER TANK SIGHT LEVEL GAUGE

One (1) translucent sight level gauge shall be incorporated into the side of the poly water tank, location to be determined by customer.

TANK DRAIN

One (1) 1.5" tank drain with plug shall be installed in the lowest portion of the tank.

FOAM CELL

A 10 gallon internal foam cell shall be installed in the tank. It shall be internally piped to accommodate the foam system. The fill tower shall have a pressure vacuum/vent.

PASS THROUGH

One (1) 1.5" pass through for whiplines

WATER TANK LEVEL GAUGE

An Innovative water level gauge will be installed on the pump panel. The LED gauge shall use a transducer type sensor to determine the water level in the tank. Probe water level gauges shall not be used.

WATER TANK LEVEL GAUGE - REMOTE

An Innovative water level slave gauge will be installed in the cab. The slave gauge will be used in conjunction with the main tank level gauge installed on the pump panel. The LED gauge shall use a transducer type sensor to determine the water level in the tank. Probe water level gauges shall not be used.

AUXILIARY FIRE PUMP-FUEL PICK UP

The auxiliary fire pump will be plumbed the chassis fuel tank to eliminate a separate fuel tank for the fire pump. A fuel shut off valve will be installed in-line for servicing purposes and a check valve will be installed to help prevent fuel from draining back to the fuel tank.

HALE 12V PRIMER

A Hale electric primer system shall be installed under the bed of the apparatus, 501-3090-01-0

WATERAX B2X-D902 PUMP

Pump Performance and Rating

The pump/engine shall perform to the standards of ISO 9(Texas Only) and NFPA 1906 medium pressure rating of 50 GPM. Typical pump performance from 5 foot draft under standard NFPA conditions shall be 110 GPM @ 150 PSI, 220 GPM @ 100 PSI, 250 GPM @ 75PSI, and 274 GPM @ 50 PSI

The pump shall provide a maximum pressure of 180 PSI and a maximum flow of 310 GPM. It shall be capable of operating to a maximum pressure of 400 PSI and be capable of passing a hydrostatic test of 300 PSI for 10 minutes per NFPA 1906 specifications – NO EXCEPTION.

Pump Suction/Discharge Ports:

The pump intake shall be a 3” Female NPT/4” Victaulic combination and be an integral part of the pump intake cover. The pump discharge shall be a 2-1/2” Female NPT/3” Victaulic combination and be an integral part of the pump body. The pump intake and discharge shall be in locations where applicable hose thread adapters can be installed without interference.

Pump:

The pump shall be a 2-stage centrifugal pump with the pump body, diffusers, and impellers made of an anodized corrosive resistance aluminum. The impeller must be aluminum to match the pump body and diffusers in order to prevent galvanic corrosion from taking place betw3een pump components – NO EXCEPTIONS. The inpellers shall be 4.00 inches in diameter

The pump shaft shall be stainless steel supported by two maintenance free bearings and shall not be co-linear to the engine’s drive shaft. A sealed roller bearing shall be located externally from the pump and a sintered bronze bushing shall be located within the pump cover. Both bearings must be maintenance free – NO EXEPTIONS. In addition, the pump seal shall be a mechanical rotary seal, shall be externally pressurized and shall incorporate a blister-resistant carbon seal face, silicon carbide seat, and a fully integrated drive bushing – NO EXEPTIONS.

The pump shall be coupled to a belt driven speed increaser with a quick release clamp capable of being removed by hand and without any additional tools – NO EXCEPTIONS. The quick release clamp system shall allow for the entire pump assembly, pump body with all its internal and external components, to be removable and capable of being serviced at a location away from the diesel engine and fire apparatus upon which it was part of. It shall also allow for the swapping out of the same or different performance pump assemblies within a minute’s time – NO EXCEPTIONS.

The horizontal belt driven speed increaser shall be a low maintenance timing belt and pulley system – NO EXCEPTIONS. The belt shall be a high quality timing belt and the drive pulley shall mount directly on the engine drive shaft through a means of a keyed tapered locking device. The increaser shall be

a1 to 1.88 ratio. In addition, a dampening device shall e provided between the pump shaft and pump shaft pulley.

Both the pump and horizontal speed increaser shall be painted red.

ENGINE:

The engine shall be a 4-cycle liquid cooled naturally aspirated Kubota D902-E4B diesel engine. The engine rating shall be 24.8 HP at 3600 RPM with a maximum torque of 40.6 lb-ft at 2600 rpm. The engine shall have a 2.83 bore, 2.9 inches of stroke, and a displacement of 54.8 cubic inches. The engine shall meet current EPA and CARB emissions standards.

The electrical system of the engine shall be 12 VDC. It shall also have a 40 amp regulating alternator and be pre-wired to connect to a mating control harness via an industrial sealed connector.

MUFFLER:

The engine muffler shall be mounted vertically with the option of a forestry approved spark arrestor or rain cap.

PRIMING:

The pump shall provide the following pump priming options: a guzzler type hand primer or a 12 VDC Electric primer

The guzzler hand primer shall have a composite body with aluminum handle and reinforced buna-n diaphragm and flapper valve. It shall have a lift of 12 feet with the capability of approximately 16 feet when a foot valve is used on the pump suction hose. The hand primer shall be capable of handling a maximum pressure of 15 PSI and weigh 1.7 pounds. It shall ship loose with the unit with all the essential hardware items and hose needed to connect it to the pump up to 6 feet away

The electric primer shall be a 12 VDC piston type vacuum pump with 3/8 female NPT intake and discharge ports – NO EXCEPTIONS. The body of the electric primer shall be a corrosive resistant aluminum with bronze sleeves and a composite piston. It shall pull a maximum current of 105 amps and have a vacuum of 22 in0Hg. The electric primer shall weigh 8.1 pounds. It shall ship loose with the unit with all the essential hardware items and hose needed to connect it to the pump up to 6 feet away.

Any priming system offered must be connected to the pump through a ¼ turn ball type shut-off valve to prevent the priming system from being pressurized when the pump is attached to a pressurized water source.

MOUNTING:

The pump/engine shall have four leg mounts.

CONTROL PANEL:

The pump shall have the capability of being supplied with any 2 types of remote control panel options. The panel connector must mate directly to the industrial connector supplied on the engine harness –

NO EXCEPTIONS. The two options hall be a PMSCP-DIESEL (panel mount standard control panel), and a LOFA EP250 Series Control Panel.

1. The PMSCP-DIESEL panel shall be a flush mount flat panel with the following features and controls: push button panel On/Off switch (lit when the panel is on), push button engine start, red LED low oil pressure warning light, red high temperature coolant warning light, liquid filled dual unit 0-600 PSI/0-4000 kilopascals pump discharge pressure gauge, Vernier throttle with red emergency throttle idle push button, low pump pressure protection switch (lit when on), and a cut out for mounting an electric primer chrome momentary toggle switch. The panel shall be wired and the wiring shall terminate with an industr4ial connector. All panel wiring shall be color coded or labeled to directly correspond to the mating engine or extension harness. All electrical components shall be weather resistant.

2. The LOFA panel shall be a face mountable aluminum enclosure with the following features and controls: rotary Off/Run/Start Switch: LED indicators for glow plug preheat, alternator charge failure, low oil pressure, and high coolant temperature; coolant temperature gauge, oil pressure gauge, voltage gauge, tachometer, and hour meter. The panel shall be wired and the wiring shall terminate with an industrial connector

REMOTE IN CAB PUMP CONTROLS

There shall be additional pump controls in the cab. The pump shall be supplied with a remote mounted control panel. This panel shall include an electric throttle control and Off/On/Start switch.

FIRE PUMP COOLING

The fire pump shall be equipped with 3/8" cooling line from the pump to the water tank. This re-circulation line shall be controlled by a pump panel control valve with nameplate label noting it as the "fire pump bypass cooler". There shall be a check valve installed in the pump cooler line to prevent tank water from back flowing into the pump when it is not in use.

BUMPER SWEEP NOZZLES - PAIR

An ELKHART NTS-C .75” ground sweep nozzle will be installed at the specified locations. The nozzle shall be mounted thru an aluminum piece of angle. The nozzle shall be manually adjusted to a fog or straight stream pattern. Customer will determine flow pattern to suit their best needs. An electrically controlled brass water valve FAB1EBV-B shall be installed for each bumper nozzle. PLASTIC AGRICULTRAL VALVES SHALL NOT BE USED. The controls for the brass water valve shall be installed in the cab and operated by the driver of the apparatus. The brass water valve shall be mounted in a safe out of the way position under the bumper. All plumbing from the valve to the nozzle shall use 1" 800 psi hose with stainless steel fittings. Plumbing shall be routed from the discharge manifold under the apparatus body and protected from any hazards that may occur during driving operations.

BUMPER MONITOR

Akron Forestry 3462 monitor,12 volt electrically controlled remote wild land monitor shall be furnished

and installed on the front bumper extension of the apparatus.

The monitor shall have a two (2") inch waterway plumbed to the discharge manifold and be capable of flowing up to 125 gpm with adjustable nozzle or 200 gpm with fixed nozzle.

Controls for the monitor shall be mounted inside the chassis cab with a joy stick. Low flow nozzle shall come standard, adjustable 30, 60, 95 or 125 GPM. Customer shall specify desired flow.

All plumbing shall be routed under the apparatus body and be protected from any hazards that shall occur during operations.

STAINLESS STEEL MANIFOLD

The discharge manifold shall be constructed of 4" stainless steel square tubing. The stainless tubing shall be constructed out of schedule 10 type 304 stainless steel. The manifold shall be connected to the pump discharge with a 2.5" Victaulic fitting. The Victaulic fitting will allow in the ease of pump maintenance if needed. The manifold shall incorporate all discharge plumbing. The nipples used in the plumbing shall be schedule 40 type 304 stainless. The manifold shall be hydrostatically pressure tested to 400 psi to ensure there will be no leaking of the manifold or valves. The manifold shall be mounted on a rubber square pad to cut down on the vibration. All manifolds will be custom built to the fire department specifications to accommodate all the discharges, re-circulate, and foam valves that will be needed.

1.5" DISCHARGE

A 1.5" NST rear discharge valve will be mounted on the manifold. The valve shall be a brass water valve. There shall be a 1.5" cap and chain installed on the valve.

2.5" DISCHARGE

A 2.5" NST rear discharge valve will be mounted on the manifold. The valve shall be a brass water valve. There shall be a 2.5" cap and chain installed on the valve.

TANK TO PUMP

All plumbing shall be stainless steel schedule 40 pipe. A 2.5" quarter turn ball valve shall be installed at the tank with a victaulic fitting. There shall be a rubber hump style hose installed between the pump intake and 2.5" piping. There shall be custom fabricated aluminum brackets installed to support the plumbing. All pipe plumbing shall be welded to eliminate the need for fittings.

GATED SUCTION INLET

A 2.5"quarter turn ball valve shall be installed on the intake plumbing. There shall be a 2.5" chrome swivel inlet installed on the valve. A 2.5" male plug with chain shall be installed in the inlet.

1" TANK FILL

A 1" tank fill valve shall be installed on the manifold, using 7/8" hose. The tank fill shall be plumbed to the tank with 800 psi hose. The fittings on the hose shall be JIC type fittings.

PRE-CONNECT DISCHARGE

A custom aluminum treadplate hose tray will be inatalled on the rear of the apparatus deck. (UNLESS OTHERWISE SPECIFED BY THE FIRE DEPARTMENT ON LOCATION OF HOSE TRAY). The hose tray shall be able to hold the specified amount of DJ fire hose as instructed by the FIRE DEPARTMENT. The hose tray shall be plumbed to the manifold discharge with 250 psi rubber hsoe. JIC fittings shall be used on the hose. A 1.5" brass water valve shall be installed on the manifold. A brass 1.5" swivel elbow shall be installed in the hsoe tray to allow the fire hose to be bully deployed from the hose tray.

WHIP LINE DISCHARGES

There will be (2) 1" x 7' whip lines installed in the apparatus crosswalk. There shall be a 1.5" brass water valve installed on the stainless steel manifold. From the valve the rubber covered 250 psi hose shall be plumbed thru the tank or under the apparatus body. There shall be a 1.5" stainless steel tee mounted to the tank or crosswalk floor. Two (2) 1" brass water valves shall be installed on the tee with brass reducing adapters. The whip lines shall be installed to the valves for individual control. The whip lines shall be the same booster hose that is used on the electric hose reel. THE FIRE DEPARTMENT WILL DETERMINE THE LENGTH OF THE WHIP LINE.

HOSE REEL

A Hannay electric rewind booster reel shall be installed on the top of the tank. The reel shall be constructed utilizing an all welded base. Reel bushings shall be manufactured from Nylatron to insure maintenance free operation. A 12-volt electrical motor shall be provided and will rewind the reel with a chain and sprocket drive mechanism. The reel shall have a capacity of 100 of 1" booster hose, A, fully shielded rewind switch shall be provided on the body on the same side as the reel. Electrical switch connections shall be coated to protect against moisture. Chrome finish rollers and guides with nylon bushings shall be provided on each side of the reel. Plumbing to the reel shall be a 1" flexible 800 psi hose with the discharge valve located at the operators control panel area.

LIGHTWEIGHT BOOSTER HOSE

One (1) length of 1” x 100 ft. lightweight boosterhose shall be installed on the hose reel. The lightweight hose shall have 1" NST aluminum couplings.

SCOTTY FOAM SYSTEM

A SCOTTY 4171 Class “A” foam system shall be installed. The controls for the foam system shall be incorporated in the pump panel. The plumbing shall use stainless steel, brass, and rubber hose fittings. When unit is turned on it shall produce foam at all discharges.

SIREN

Whelen single unit siren with 9-switch light control and standard switching will be installed in the cab console.

SPEAKER

A Whelen Model SA315P 100 watt composite speaker shall be mounted behind front bumper.

LEGACY LIGHTBAR

A Whelen Legacy 54" LED light bar shall be installed on the roof of the vehicle. The light bar shall have four (4) LED corner lights, six (6) DUO LED red/red on the front and eight (8) amber/red on the rear. The lightbar shall have two (2) LED alley on each end.

LOWER WARNING LIGHTS

A total of ten (10) Whelen LED 5V3R series light with chrome bezel, lighting shall be mounted as follows:

Zone A - Two (2) Whelen LED 5V3R series light with chrome bezel on the front of the apparatus facing forward

Zone B - Two (2) Whelen LED 5V3R series light with chrome bezel on the forward most point each side

Zone C - Two (2) Whelen LED 5V3R series light with chrome bezel on side of apparatus deck each side

Zone D - Two (2) Whelen LED 5V3R series light with chrome bezel on the rear of the apparatus.

ADDITIONAL SWITCH

Three (3) additional on/off switch shall be installed at the pump control panel for the scene lights.

12 VOLT POWER OUTLET

One (1) USB outlet shall be installed as per customer request
Three (3) Power ports

NOZZLE AKRON 1"

Three (3) Akron Provenger 1.0" NH, selectable nozzle, 5, 10, 20, 40 GPM @ 100 PSI with pistol grip shall be supplied

REFLECTIVE STRIPE

A single reflective stripe shall be installed on the side of the cab and side of the body, up to 4" wide. Customer will determine the color of the striping. Stripes on the cab will be 4" wide reflective material & 2" wide reflective material on the body.

CHEVRON STRIPING

The entire rear portion of the body shall have Diamond Grade reflective red and lime yellow striping installed. The chevron style striping shall be applied at a 45-degree upward angle pointing towards the center upper portion of the rear panel.

WARRANTY

We warrant each new motorized fire apparatus manufactured by Daco Fire EQUIPMENT, for a period of ONE YEAR from the date of delivery, except for chassis and other components noted herein.

Under this warranty we agree to furnish any parts to replace those that have failed due to defective material or workmanship where there is no indication of abuse, neglect, unusual or other than normal service providing that such parts are, at the option of DACO FIRE EQUIPMENT, made available for our inspection at our request, returned to our factory or other location designated by us with transportation prepaid within thirty days after the date of failure or within one year from the date of delivery of the apparatus to the original purchaser, whichever occurs first, and inspection indicates the failure was attributed to defective material or workmanship.

The warranty on the chassis and chassis supplied components, storage batteries, generators, electrical lamps and other devices subject to deterioration is limited to the warranty of the manufacturer thereof and adjustments for the same are to be made directly with the manufacturer by the customer.

This warranty will not apply to any fire apparatus that has been repaired or altered outside our factory in any way, which in our opinion might affect its stability or reliability.

This warranty shall not apply to those items that are usually considered normal maintenance and upkeep services: including, but not limited to, normal lubrication or proper adjustment of minor auxiliary pumps or reels.

This warranty is in lieu of all other warranties, expressed or implied, and all other obligations or liabilities on our part. We neither assume nor authorize any person to assume for us any liability in connection with the sales of our apparatus unless made in writing by Daco Fire Equipment.

DACO STAINLESS STEEL PLUMBING WARRANTY

Subject to the provisions, limitations and conditions set forth in this warranty, Daco Fire Equipment inc. (hereby referred to as "seller"), hereby warrants to each original purchaser only that stainless steel plumbing components and ancillary brass fittings used in the construction of the water/foam plumbing system shall be warranted for a period of ten (10) years. This covers structural failures caused by defective design or workmanship, or perforation caused by corrosion, provided the apparatus is used in a normal and reasonable manner. This warranty is extended only to the original purchaser for a period of ten years from the date of the delivery and shall terminate upon the transfer of possession or ownership by original purchaser.

This warranty is conditioned upon normal use and reasonable maintenance of such plumbing; prompt written notice of all defects to seller or one of the seller's then authorized dealers in the area; no repair or additions there to except by seller or authorized by it; said defect not resulting from misuse, negligence, accident, remount, overloading beyond applicable weight rating by customer or third parties. If any such conditions are not complied with, this warranty shall become void and unenforceable.

Should repairs become necessary under the terms or the warranty, the extent of that repair shall be determined solely by the seller and shall be performed solely at Daco Fire Equipment inc. or a repair facility designated by the seller. The expense of any transportation to or from such repair facility shall be that of the purchaser and is not an item covered by this warranty.

Seller reserves the unrestricted right at any time from time to time to make changes in the design of and/or improvements on its products without thereby imposing any obligation on itself to make corresponding changes or improvements in or on its products theretofore manufactured.

EXCLUSIONS AND LIMITATIONS: THIS MANUFACTURER'S WARRANTY IS PROVIDED IN PLACE OF ANY AND ALL OTHER REPRESENTATIONS OR IMPLIED WARRANTIES. NO PERSON IS AUTHORIZED TO MAKE ANY REPRESENTATIONS OR WARRANTY ON BEHALF OF DACO FIRE EQUIPMENT INC. OR ANY OF ITS DISTRIBUTORS OTHER THAN SET FORTH IN THIS MANUFACTURER'S WARRANTY. YOUR RIGHT TO SERVICE AND REPLACEMENT OF PARTS ON THE TERMS EXPRESSLY SET FORTH HERIN ARE YOUR EXCLUSIVE REMEDIES AND NEITHER THE MANUFACTURER NOR ANY OF ITS DISTRIBUTORS SHALL BE LIABLE FOR DAMAGES, WHETHER ORDINARY, INCIDENTAL OR CONSEQUENTIAL.

BODY WARRANTY

We warrant each new motorized fire apparatus body manufactured by Daco Fire EQUIPMENT, for a period of TEN YEARS from the date of delivery,.

Under this warranty we agree to furnish any parts to replace those that have failed due to defective material or workmanship where there is no indication of abuse, neglect, unusual or other than normal service providing that such parts are, at the option of DACO FIRE EQUIPMENT, made available for our inspection at our request, returned to our factory or other location designated by us with transportation prepaid within thirty days after the date of failure or within one year from the date of delivery of the apparatus to the original purchaser, whichever occurs first, and inspection indicates the failure was attributed to defective material or workmanship.

The warranty on the components, storage batteries, generators, electrical lamps and other devices subject to deterioration is limited to the warranty of the manufacturer thereof and adjustments for the same are to be made directly with the manufacturer by the customer.

This warranty will not apply to any fire apparatus bodies that has been repaired or altered outside our factory in any way, which in our opinion might affect its stability or reliability.

This warranty shall not apply to those items that are usually considered normal maintenance and upkeep services: including, but not limited to, normal lubrication or proper adjustment of minor auxiliary pumps or reels.

This warranty is in lieu of all other warranties, expressed or implied, and all other obligations or liabilities on our part. We neither assume nor authorize any person to assume for us any liability in connection with the sales of our apparatus unless made in writing by Daco Fire Equipment.

BOOSTER TANK

Custom Composites LLC, herein referred to as the Seller, warranties that tanks manufactured by Seller will be free from defects in materials and workmanship for a period of time equal to the service life of the original vehicle on which tank was installed. Original vehicle must be in active fire suppression for warranty to be in full effect.

Notification should be made to Seller by calling toll free 1-877-912-6297 as soon as defect is discovered so that repair procedure can be carried out quickly. Please include photographs, documentation, serial numbers, contact number and name, and any other pertinent information.

Seller's obligation under this warranty is solely limited to repairing and or replacing, at Seller's discretion, F.O.B. manufacturing plant, tanks manufactured by Seller found to be defective. Seller is not liable for incidental or consequential damage including loss of profit, or any other type of damage which may be caused in whole or part by any failure, defect or other problem of the tanks manufactured by Seller. Alteration made to tanks without approval will void warranty.

This warranty does not apply to tanks damaged by misuse, neglect, accident or improper installation. User will be responsible for cost to repair tank found to be not caused by defect. Reasonable costs to remove and or reinstall defective product must be agreed upon by both parties prior to beginning repair and will be paid by Seller. Seller makes no other warranties expressed or implied.

PUMP WARRANTY

Hale Products, Inc., herein referred to as "Hale", warrants products of its manufacture to be free from defects in material and workmanship, under normal use and service, for a period of two years or 2000 hours of usage, whichever comes first. Products used for rental or contracting purposes are warranted for a period of six months or 2000 hours of usage, whichever comes first. This limited warranty is effective only if the equipment or apparatus is used as directed, is not subjected to misuse, negligence or accident, and is not altered, treated or repaired by someone other than Hale or its designee. Items not manufactured by Hale shall bear only the limited warranties offered by their respective manufacturers.

The exclusive remedy for breach of this warranty shall be to give Hale written notice thereof and to request a Returned Goods Authorization. Upon receipt of the Returned Goods Authorization, the buyer will return the non-conforming material to Hale F.O.B. its plant within thirty days after the buyer has received the Returned Goods Authorization. Thereupon Hale at its own election shall repair or replace the same or repay the price thereof. No proximate, incidental, consequential or other damages shall be recoverable.

Hale shall not be liable for consequential damages or contingent liabilities including; but not limited to, loss of life, personal injury, loss of crops, loss due to fire or water property damage, and consequential trade or other commercial loss arising out of the failure of Manufacturer's product.

HALE MAKES NO WARRANTIES OF FREEDOM FROM PATENT INFRINGEMENT, OF MERCHANTABILITY, OF FITNESS FOR A PARTICULAR PURPOSE OR ARISING FROM A COURSE OF DEALING OR USAGE OF TRADE OR OTHER LIKE OR DIFFERENT EXPRESS OR IMPLIED WARRANTIES EXCEPT AS MADE ABOVE.