

Specifications for a New and Unused One Ton Four Wheel Drive Crew Cab Pickup Truck

The following specifications were developed for the purchase of a new and unused four wheel drive crew cab pickup truck with accessories for the Big Flats Fire District #1. The specifications are designed as a minimum standard and the bidder shall meet or exceed the specifications.

CHASSIS:

The chassis shall be a four wheel drive, conventional, engine forward design, crew cab, with four cab doors, and current model year. The maximum GVWR of 10,000 lbs. The wheelbase shall be a minimum 167 inches.

FRONT BUMPER:

A contour heavy single piece wrap around bumper shall be bolted directly to the frame rails.

TOW HOOKS:

Two painted tow hooks shall be bolted to the frame rails through the front bumper and extend forward.

ENGINE:

The engine shall be a diesel turbocharged engine with the following minimum characteristics:

Size	minimum 6.6 Liter
Number of Cylinders	Eight
Horsepower	397 @ 3000 rpm
Torque	765 lbs. @ 1600 rpm

A full flow spin-on oil filter shall be provided and installed in a location suitable for servicing.

The engine shall be regulated by an electronic engine speed governor that shall limit the speed of the engine under all conditions of operation to the maximum load RPM as recommended by the engine manufacturer.

The engine shall be equipped with an electric engine shut down system, which is incorporated into the ignition switch.

The engine shall include dual 220 amp alternators.

AIR CLEANER:

A dry type air cleaner shall be provided. The size and location shall be as required by the engine manufacturer.

COOLING SYSTEM:

The radiator shall be pressurized and leak tested, and shall be of the tube and fin construction.

The radiator core, tubing, fittings, etc. shall be of brass and copper materials.

The radiator shall be mounted with shock absorbing rubber cushions.

The cooling system shall be adequate to maintain the engine coolant temperature below the engine manufacturers maximum recommended temperature.

All hoses shall be heavy duty for maximum hose life, and corrosion resistance.

FUEL SYSTEM:

A Department of Transportation approved, minimum 36 gallon fuel tank constructed of steel with a bottom drain plug.

The tank shall be vented to prevent fuel fill splash back and shall be located at the rear under the body for ease of service and removal.

A fuel/water separator shall be provided. A primary fuel filter shall be installed.

EXHAUST SYSTEM:

A manufacturer's standard single exhaust pipe shall be provided for the engine.

The exhaust system shall meet the requirements of SAE J-3666 passby test for noise emissions.

TRANSMISSION AND TRANSFER CASE:

The transmission shall be an Allison 1000 6 speed automatic or equivalent.

A manually operated selector lever shall control the transmission. It shall be internally illuminated for night operation.

The transfer case shall be capable of shifting between 2 high, 4 high, and 4 low. It shall include an electronic shift rotary dial or push buttons located on the dashboard

TRANSMISSION COOLER:

An automatic transmission cooler shall be provided as an integral part located in the bottom tank of the radiator. The cooler shall be of sufficient size that it shall maintain the operating temperature within the limits of the manufacturer.

DRIVELINES:

Driveline universal joints shall be Spicer and appropriate for the engine/transmission torque and horsepower outputs.

FRONT SUSPENSION AND AXLE:

The front suspension shall have a 5600lb. GAWR.

The front suspension shall have a minimum rated capacity of 5600 lbs. at ground. An independent front suspension shall be installed. There shall be heavy duty, hydraulic shock absorbers installed.

There shall be automatic locking hubs for the 4X4 drive system.

STEERING:

The steering shall be hydraulic, with an engine driven power steering unit.

The steering wheel rim shall be covered with a padded material to permit a firm and resilient grip.

The steering column shall be the tilting type.

REAR AXLE:

The rear axle shall have a 7050 lb. GAWR with a 3.73 axle gear ratio.

The rear multi-leaf spring suspension shall be minimum rated capacity of 7050 lbs. at ground.

An automatic locking rear differential shall be included.

BRAKES:

The brake system shall meet Federal Motor Vehicle Safety Standard FMVSS- 121. The brake system shall be fully hydraulic.

The brakes shall be a manufacturer recommended braking system for the GVWR and GCWR of the vehicle.

Foot actuated rear parking Brake.

ANTI-LOCK BRAKE SYSTEM:

The chassis shall be equipped with an anti-lock braking system. The braking system shall provide anti-lock braking control on both the front and rear wheels. It is to be a digitally controlled system that utilizes microprocessor technology to control the system.

Each wheel is to be monitored by the system. When any particular wheel begins to lockup, a signal is sent to the control unit. This control unit then will reduce the braking of that wheel for a fraction of a second and then reapply the brake. This anti-lock brake system shall eliminate the lockup of any wheel thus helping to prevent the vehicle from skidding out of control.

FRONT TIRES:

Two (2) front tires shall be 18 inch radial type, tubeless "All terrain" tread.

REAR TIRES:

Two (2) rear tires shall be 18 inch radial type, tubeless "All Terrain" tread.

WHEELS:

The front and rear wheels shall be 18 inch

SPARE TIRE AND WHEEL:

A spare shall be shipped with the chassis, of which shall have the same type of tire and wheel specifications

BATTERIES:

There shall be two heavy duty 730 cold cranking amps batteries.

WIRING AND DEVICES:

All wiring shall be number coded and shall run in 250 degree heat resistant flexible loom.

The electrical system shall be protected by thermal reset circuit breakers located in an easily accessible area of the cab. The chassis wiring harness shall be separate from the body wiring.

The following electrical equipment shall be included:

Single halogen headlights with high and low beams.

An ICC four way flasher switch with indicator lights.

One clear dome light in the cab with a light activated switch, and a cab door jamb switch.

Dual note electric horn.

CAB INSTRUMENTS AND GAUGES:

The cab instruments and controls shall include the following:

An electronic tachometer,

A electronic speedometer with odometer,

A voltmeter,

A fuel gauge,

An engine oil pressure gauge with a low pressure warning light and alarm,

An engine coolant temperature gauge with a high temperature warning light and alarm

Inside hood release,

Cruise control,

Auxiliary power point,

One ignition switch,

One headlight high beam indicator light,

Windshield wiper/washer controls with intermittent delay,

Two turn signal indicator lights,

Headlight switch and dimmer control,

Parking brake indicator light,

Clock,

Electric traffic horn control button in the center of the steering wheel,

Gauges are to include an engine hour meter.

SEATING POSITION:

The front seat shall be a 40/20/40 split bench.

The rear seat shall be a bench seat with a folding back.

All seating positions shall utilize heavy duty, long wearing, grey or tan vinyl upholstery.

All seating positions shall be equipped with metal to metal, lap type heavy duty seat belts with the outside seating positions having the addition of a shoulder harness. These seat belts shall be retractable to prevent tripping, injury, or damages.

CAB GLASS:

Safety glass shall be used in the windshield, with tempered glass being provided for all door glass.

Additionally, the windshields and door glass shall have integral glass manufacturing tinting; aftermarket add on tinting shall not be acceptable. All fixed windows shall be triple sealed and locked in place.

CAB INTERIOR:

The cab interior shall have the following features:

Integral modular gauge panel.

The cab and crew cab floor covering shall be black vinyl.

Removable sound absorbing headliner, single piece, secured to the cab and crew cab ceiling and easily removable for ease of maintenance.

Molded cab and crew cab ABS door panels.

Two (2) sunvisors, one each side.

A combination heater and air conditioning assembly with fresh air intakes and multi-directional air diffusers, two stationary windshield defrosters, and an air blower

fan.

Right side glove box.

Grab handles mounted over rear doors.

Front passenger assists handle.

Driver/front passenger airbag supplemental restraint system.

Cigarette lighter/power outlet.

CAB EXTERIOR:

The cab shall be four door, crew cab, and engine forward style, constructed of steel.

The cab front skin, side panels, roof, cab and crew cab doors shall be steel.

Each cab door shall be fully adjustable with two recessed and hidden steel hinges. The door shall be fitted into steel door frames.

Each door shall have a paddle type door latch and flush paddle type interior latches built into the door pull assembly.

Two (2) foldaway type, remote controlled tow mirrors.

Shall include electric powered panoramic windshield wipers and a single control switch for both wipers. An intermittent/delay wiper motor control shall be integrated into the wiper motor system.

The wiper system shall have electrically operated wet arm type washers.

ENGINE HOOD ASSEMBLY

The engine hood assembly shall lift from the front and have hood hold open devices for basic engine and component access.

One underhood service light.

CARGO BOX MINIMUM DIMENSIONS

Cargo Box (Area)	21.2
Height	2 in
Cargo Box Length @	97.7
Floor	6 in

BATTERY MOUNTING:

The batteries shall be securely mounted to protect against physical injury and vibration. The batteries shall be installed to prevent water spray or engine exhaust heat from damaging the batteries and to allow for adequate ventilation.

PREP PACKAGE:

The factory trailer tow package shall be included. The package shall contain a two inch hitch platform, 7 way trailer wiring, 4 way trailer wiring, and an integral electric brake controller, foldaway type, remote controlled tow mirrors.

A convenience package that includes electric powered window openers for all four doors, power adjustable mirrors, power door locks, 110 volt AC power outlet, and remote keyless entry shall be included.

A factory installed rear view camera system shall be installed.

All weather floor mats shall be included

Front and rear molded splash guards shall be installed.

A six inch rectangular assist step shall be installed on cab.

Underbody shields shall be included to protect the oil pan, transmission, and transfer case.

COLOR:

The chassis exterior color shall be a bright red.

The interior color shall be black or gray.

MANUAL:

One service manual/owner's manual shall be provided with the chassis.

WARRANTIES:

All warranties shall be supplied in writing.