

SPECIFICATIONS – CAB / CHASSIS 50,000 GVWR (DIESEL)

(International Paystar & Workstar, **Peterbilt 567**, Freightliner M2 & M2-112, & SD, Volvo VNL or VHD, Mack MHD, or equal)

EQUIPMENT: The truck-tractor shall be equipped with all standard equipment as specified by the manufacturer for this model, (to include rear window), and shall comply with all EPA Emission Standards and all Motor Vehicle Safety Standards as established by the U.S. Department of Transportation regarding the manufacture of motor vehicles.

DESCRIPTION: The truck shall be a heavy-duty, conventional cab unit with forward tilting hood, suitable for use as a truck-tractor.

INTERIOR: Vinyl

CAPACITY: GVWR shall not be less than 50,000 lb. Optional equipment shall be available with an increased GVWR up to 52,000 lb., and with an increased CA up to 96 inches. Gross combination weight rating (GCWR) shall not be less than 80,000 lb.

CAB OAH: 97-109 inches

BBC: 91-113 inches

CAB TO AXLE: 84" - 96"

WHEELBASE: Minimum 148"

CURB WEIGHT: Minimum of 13,000 lb. (as bid).

ENGINE: The truck engine (diesel) shall be a 12.0L Cummins ISX12, International MaxxForce N-13, Detroit DD-13, Mack MP-8, Paccar MX-13, or Volvo D-13 rated at not less than 425 SAE gross horsepower and minimum 1,550 ft. lbs. torque. The air filter shall be a heavy-duty, dry-type with restriction indicator, and with complete ducting for fresh air intake, with Donaldson the preferred manufacturer. The engine shall be complete with heavy-duty oil filter, heavy-duty fuel filter/water separator governor, muffler, vertical exhaust system, and heavy-duty (maximum) cooling system. The cooling system shall be filled with an extended life coolant suitable for this application. The alternator shall be rated at not less than 130 amps.

TRANSMISSION: Fuller Model ~~FRO-14210C~~ - **Fuller Model FRO-15210C**, 10-speed, manual with standard six (6) bolt SAE PTO opening on right side, and with Eaton Fuller or Spicer 15.5", two-plate ceramic, easy pedal clutch, and with oil cooler.

FRONT AXLE: 12,000 lbs., with heavy duty shocks. The suspension system and springs shall be of adequate capacity to maintain the GVWR and GAWR.

REAR AXLE: Rockwell, Eaton or Spicer heavy duty, single speed, tandem type having a maximum load rating of not less than 40,000 pounds. The gear ratios shall be approximately 3.58 to 1. The suspension system and springs shall be a Hendrickson RTE2-400 extended leaf type or equal, of adequate capacity to maintain the GVWR and GAWR.

FRAME: Frame side members shall have dimensions not less than the following: depth 10.10", width 3.10", thickness 0.30", RBM of not less than 1,595,000 and yield strength of 110,000 psi. The rear of the frame shall be tapered for the truck-tractor application.

STEERING: Power Assist.

BRAKES: The truck shall be provided with full air brake equipment for all wheels, with automatic slack adjusters, and with heavy-duty, non-asbestos lining material. The air compressor shall have a capacity of not less than 12 CFM. In addition to all brake equipment already specified or customarily furnished as standard, the truck shall be equipped with a low air pressure indicator or alarm, automatic type moisture remover(s), a slack adjuster for each wheel, brake dust shields, and dash mounted air pressure gauge, and foot treadle type control method. The truck shall be equipped with a spring set, air release rear wheel parking brake. All brake equipment shall conform to the latest regulations of the ICC, and shall be in full compliance with FMVSS 121. Full anti-lock brake (ABS) system.

FUEL TANK: Two (2) step type, minimum 50 gallon capacity each, located on right and left hand sides. Fuel tank switching, if necessary, shall be controlled from within the cab.

WHEELS: Disc type, steel, tubeless, 10-hole, 11 1/4" bolt circle, 8 23/32" bore, 1 9/32" stud hole, stud pilot, heavy-duty, 22.5" x 8.25" x 7/16", 6.62" off-set (nom.), max. load rating not less than 7,000 lb., color - white, interchangeable at all positions on the vehicle.

TIRES: Front and rear - 11R-22.5, load range G, regular tread, radial, tubeless, Goodyear G159 or equal.

COLOR: Standard Factory Colors

AUXILIARY POWER CONNECTION: (Standard State Specification)

AUXILIARY POWER OUTLET: (Standard State Specification) – May be installed by an upfitter if not available from manufacturer.

WARRANTY: All engines shall be warranted against defects in materials and workmanship for a period of not less than sixty (60) months / 6,300 hours / 175,000 miles, whichever occurs first (pro-rating not allowed). Warranty shall include connectors and adapters to the transmission, and the Diesel engine after treatment system. The automatic transmission shall be warranted for a period of not less than twenty four (24) months-50,000 miles (pro-rating not allowed). The warranty start date shall be based on the unit's in-service date as established by its issue from the Department's Equipment Depot to the using field custodian. The unit shall be furnished with a copy of the warranty statement and any necessary cards, booklets, or certificates needed to receive dealership warranty repairs.

~~***The truck vendor shall be the prime contractor for the overall truck warranty and shall serve as the agent for the truck owner to address any problems or warranty claims with the manufacturer. The prime contractor shall also serve as the agent to address any claims with the~~

~~manufacturer of any sub component installed on the truck prior to delivery. The prime contractor shall be responsible for transporting the truck to and from the manufacturer/sub-contractor.~~

Warranty Specifications For:

ALL VEHICLES: When local dealerships are unable to complete warranty repairs, the Offeror shall serve as the facilitator for the vehicle owner to address any problems or warranty claims with the manufacturer. The Offeror shall also serve as the facilitator to address any claims with the manufacturer of any sub component installed on the vehicle prior to delivery. The Offeror shall be responsible for coordinating the necessary warranty issues and repairs with manufacturer/sub-contractor.

FACTORY INSTALLED ITEMS

The following options shall be furnished in addition to, or in place of, the regular standard equipment and will be "Factory Installed", unless otherwise specified.

1. Batteries, heavy-duty, 4 each Group 31, 625 CCA min. each, mounted in enclosed battery box
2. Speedometer, tachometer, oil pressure gauge, ammeter/voltmeter, fuel gauge, water temperature gauge
3. Two (2) West Coast mirrors, 7" x 16", w/auxiliary, min. 5 1/4" convex mirrors mounted below, (may be dealer installed).
4. Dual, 2-speed (minimum) windshield wipers
5. Dual sun visors
6. Heavy-duty, full width front bumper
7. Horns, dual air
8. Fender mounted turn signals, amber front, red rear
9. Bostrom or National hi-back adjustable air-ride suspension driver's seat and Bostrom or National hi-back fixed base passenger seat with 3-point safety belts for both seats
10. Tinted windshield
11. Fifth wheel, 36", installed, for an approximate 49" fifth wheel height, located approximately 6 inches forward of the tandem center
12. Standard 7-way plug and cable, SAE J-560 type, for connection to a trailer
13. Quick disconnect, dual, trailer air connectors, with self-coiling hoses
14. Hand control valve for trailer-only brake application
15. Air filter restriction indicator, dash-mounted
16. Entry assist handles, left and right – **External**
17. Mud flap brackets, pre drilled w/4 ea. 9/16" holes on 6 3/4" centers
18. Deck plate (cat walk) behind cab, expanded metal, safety grating type
19. Trailer hook-up light
20. Air Conditioning
21. AM/FM Stereo Radio
22. Auxiliary Power Connection – (Standard State Specification)

23. Auxiliary Power Outlet – (Standard State Specification) – May be installed by an upfitter if not available from manufacturer.

MAINTENANCE: All replaceable filter elements for air, fuel, hydraulics, and engine oil shall be available from at least one of the following U.S. manufactures: AC, Wix, Donaldson, or Baldwin. Replacement tires and tubes shall be available from at least one of the following U.S. manufactures: Goodyear, Firestone or General. Replacement or replenishment lubricants required throughout the unit (engine oil, transmission fluid, hydraulic fluid, gear oil, brake fluid, power steering fluid, and grease) shall be available from at least one of the following major manufacturers: Shell, Exxon, Texaco, or Citgo. Details concerning the manufacturer and items name or part number for the above maintenance items shall be provided wherever requested on the bid questionnaire.

NON-SKID STEPS: Provide non-skid surface on step treads by application of 3m No-Skid Coating No. EC1420, black, or by another acceptable non-skid surface that is factory installed.

OPTIONAL EQUIPMENT

The following factory installed options may or may not be ordered. Offers must provide a price for all options or offer as part of the base price. If the option item is "STANDARD" enter "STD" on the line provided for price. **ALL ITEMS SHOULD HAVE A DOLLAR PRICE OR "STD" LISTED.** **OFFERS WILL NOT BE CONSIDERED IF THE PRICE LINE IS LEFT BLANK.** Option items marked as "STD" will be listed in the "Equipment Included" section of the contract sheets posted on the MMO web site.

ADDS:

1. Body Installation Fee (Charge based on the dealer arranging for bodies to be installed on this cab & chassis from the State contract vendor)
2. Operator's Manual
3. Shop Manual (for all components – CD or DVD preferred)
4. Cruise Control w/Tilt Steering
5. C/A 96"
6. Engine Compression Brake
7. Air Slide Fifth Wheel
8. Operator Training - (ref. "Training" in Terms & Conditions - Special (VII.B))**
9. Repair Technician Training - (ref. "Training" in Terms & Conditions - Special (VII.B))**

****Section VIIB addresses training as follows**:**

"6. TRAINING: The successful bidder shall furnish training to be conducted by factory authorized trainers in a ratio of one day of training for up to 15 students for each thirty (30) vehicles purchased. This training shall be provided on subjects requested by State Fleet Management and at locations throughout the State. The state will consider other than live, on-site methods of training that the vehicle manufacturer may offer. All training offers are subject to approval by the State Fleet Manager."

DEDUCTS: NONE

Options requiring the additions of other options as well as those which are included as part of another:

STANDARDIZED SPECIFICATIONS (revised 08/15/2013)

The following 14 specifications are applicable if they are listed as "Factory Installed Items" (included in the "Base Price") or "Option Equipment" (Add or Deduct Pricing). If they are not referenced by the spec item name (example: Tow Package) in the individual vehicle spec, they do not apply. Should it be necessary to deviate from a standard spec, the deviation(s) will be expressly stated within the individual vehicle spec. The individual vehicle spec takes precedence over the standardized vehicle spec. Unless stated otherwise in an individual vehicle's specification, the following standardized specifications apply:

IMPORTANT NOTICE: Contractors should review purchase orders carefully for items such as drawbar, pin, clip and shank configuration information as well as anything else needing further description for that order as provided in the contract documents. They should notify the governmental entity when needed information is missing. This office will require delivery of all specified items unless the governmental entity provides specific notice of relief from same in writing. **THESE TYPE ITEMS ARE INCLUDED IN THE CONTRACT PRICES!**

1. **TOW PACKAGE** ****FACTORY INSTALLED****: Factory installed hitch plus all necessary components to match or exceed the maximum rated towing capacity of vehicle are to be included. Wiring will include everything necessary to hook-up both 4 way and 7way wiring harnesses. Contractor to provide (**at no additional charge**) the drawbar, pin, clip, ball, and shank configuration specified by the owner when each order is placed (example: Dept. of Natural Resources standard configuration unless specified otherwise on their purchase order is as follows: Drawbar w/2" drop, pin, clip, and 2" ball w/ 1" solid shank).

NOTE: If the drawbar, pin, clip, and shank configuration is inadvertently left off a purchase order, it does not relieve the contractor of the requirement to provide same as specified in the contract documents.
2. **WINCH:** Electric, Front Mount, 9,000 lb. with Roller Fair Lead (5742) and 125' cable, Grill Guard and Mounting Bracket, Warn model XD9000i. **Mounting bracket must not extend down below the height of the front bumper. (May be installed by Dealer or approved Upfitter)**
3. **RADIO NOISE SUPPRESSION:** The vehicle is to be used as a governmental fleet vehicle and will have an approximate 150-watt mobile (two-way) radio installed, operating on frequencies designated by the FCC for use in the Public Safety Radio Service (47 CFR 90). The vehicle shall be fully compatible with the above radio installation, and vehicle components and equipment shall not interfere with operation (transmitting or receiving) of the mobile radio.
4. **AUXILIARY POWER CONNECTION:** A factory installed two wire power connection shall be provided in the engine compartment. If the specified connection is NOT offered by the manufacturer, said connection may be installed by an upfitter. Documentation of non-availability from the manufacturer is to be obtained from the manufacturer and included in the bid submittal. The circuit shall be a minimum 5 amp fused with a **minimum 14 gauge automotive grade cable**. The circuit shall operate with the ignition switch in the "Accessory" or "On" position and shall include one blue wire for ignition and one red wire for accessory. The power connection will allow installation of additional high amperage accessories.
5. **AUXILIARY POWER OUTLET:** A factory installed 12 volt single port power outlet shall be provided in the dashboard or front console of the vehicle. The power outlet shall operate independently from other electronic components with a minimum 20 amp circuit. The outlet shall operate with the vehicle ignition

switch in the "Off" or "On" position and shall be accessible from the driver's seat position. If not available from the manufacturer, the auxiliary power outlet may be installed by an up-fitter.

6. **STEP BAR – ENTRY / EGRESS:** On level ground, where the vertical clearance from the ground to door threshold (place where the driver and passenger(s) place their foot when entering the cab) exceeds nineteen inches, a 3 inch diameter step bar shall be installed on both sides of the vehicle so the ground clearance to the bar does not exceed nineteen inches. For vehicles with extended, quad, or crew cabs, an extended or double step bar shall be installed that services entry to and egress from all doors. In all cases, overall manufacturer desired vehicle ground clearance must be maintained. The bar shall be the type customarily manufactured and marked for this purpose. It may be factory, dealer, or approved up-fitter installed. The step bar shall be a BULLY single, extended, or double step bar, or equal. **For vans and utilities (SUV's)** with steps that exceed nineteen inches, a full running board type step with a platform measuring no less than six inches deep must be installed to allow entry and egress from all side doors (including all doors mounted on drivers side.) A step is not required for rear door access.

Step Bar Color: Black Powder Coated

OEM molded plastic running boards are acceptable (black).

7. **4 x 4 WHEEL DRIVE PACKAGE** - The following items are included:

- a. Transfer Case with Auto Locking Hubs (operator can lock in hubs without leaving the cab)
- b. Factory Skid Plates (minimum set includes transfer case and fuel cell protection)
- c. Locking or Limited Slip Differential, or Electronic Traction Control
- d. Suspension – all changes recommended by the manufacturer for 4 x 4 operation
- e. All Terrain Tires

IMPORTANT DISTINCTION: The State does NOT consider All Wheel Drive (AWD) to be equivalent to Four Wheel Drive (4 x 4). Therefore, AWD will NOT be accepted as a substitute for 4 x 4.

8. **DAYTIME RUNNING LIGHTS:** If standard equipment, daytime running lights are to be made inoperable prior to delivery on vehicles purchased by law enforcement entities.

9. **MIRRORS – EXTENDED, BREAKAWAY:** The primary mirror will be a minimum of 6" x 14". The convex mirror will be a minimum of 5". The purpose of the mirror is to improve the driver's view to the rear when towing and backing.

10. **TIRES:** Tires will be mounted with black walls turned to the outside. All tire walls with contrasting colors such a white walls, red walls, raised white letters, etc. will be turned to the inside. The buying governmental entity may reject delivery if black walls are not turned to the outside.

11. **THREE (3) KEYS:** Three (3) complete sets of keys are to be provided for each vehicle delivered. The cost for same is included in the base price. This requirement applies to all types of key systems (traditional 2 key sets, traditional 1 key, programmable 1 key, etc.). Does not apply to keyless entry remote unless integrated into the key. All systems of the vehicle must function with the third key with the exception of remote entry.

12. **FLOOR MATS:** Unless stated otherwise in the individual vehicle specifications the following applies:

- a. **When floor mats are available through the manufacturer, the mats provided will be either the manufacturer's mats or equal. The equal must meet or exceed the manufacturer's mat fit and quality characteristics. This applies to both carpeted and rubber/vinyl mats. If an equal is being offered, it will be identified in the offer as a dealer installed item.**
- b. Vehicles with carpeted interiors will include high grade factory carpeted floor mats or equal.
- c. Vehicles that do not have carpeted interiors will include high quality, heavy duty rubber/vinyl floor mats.
- d. In the event required floor mats (listed as a factory installed item in the individual vehicle specification) are not available through the manufacturer; high quality, heavy duty floor mats will be offered and identified in the offer as a dealer installed item. The floor mat type will be the same as that listed in the individual vehicle specification (rubber/vinyl or carpeted).

NOTE: Should a vehicle with carpeted interior specify rubber or vinyl floor mats, the mats will be high quality, heavy duty rubber/vinyl mats. Item A (above) applies.

13. ENGINES – GASOLINE / UNLEADED / E10:

For gasoline powered vehicles and equipment, fuel system components and gasoline engines shall be compatible with E10 ethanol blends, minimum. These engines are to perform as follows:

- a. No noticeable degradation in vehicle drivability,
- b. Minimal impact on vehicle operating efficiency (defined to be no more than 10% decrease in fuel economy)
- c. Maintenance sensors and warning systems are to display normally (example: use of E10 is not to cause the check engine light to display)

NOTICE: The State has transitioned to the E10 Unleaded Fuel Blend. The fuel contracts reflect same.

14. FUEL SYSTEM: For Diesel powered vehicles and equipment, fuel system components and Diesel engines shall be compatible with B20 bio-diesel blends, minimum.

15. HEAD RESTRAINTS: All outboard seating positions shall have factory installed head restraints via head rests or high back seats. The head restraints shall meet all requirements of U. S. Department of Transportation National Highway Traffic Safety Administration and Federal Motor Vehicle Standards.

NOTE: If head restraints are not available, the contactor shall provide each ordering governmental entity notification from the manufacturer verifying that head restraints are not available. If head restraints are available from the manufacturer as either a standard or option item, they must be included in the offer and incorporated into the base price of the vehicle.

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